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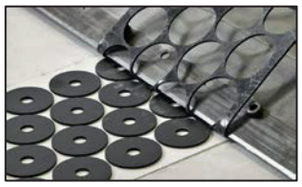

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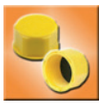
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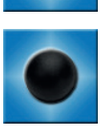
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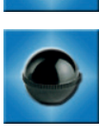
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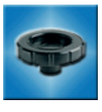
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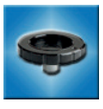
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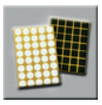
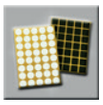
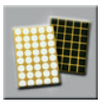
 Adhesive felt pads, round Page 118

 Adhesive felt pads, square Page 119

 Adhesive felt pads, rectangular Page 118

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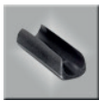 type 447 Page 123

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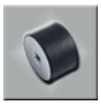
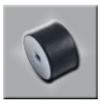
 female/female thread Page 130

 female thread Page 131

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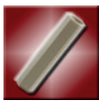 Hexagonal PEEK / FF threaded Page 220

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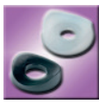
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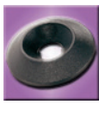

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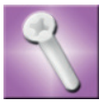 Countersunk screws with cross slot ~DIN 965 PA Page 279

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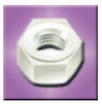
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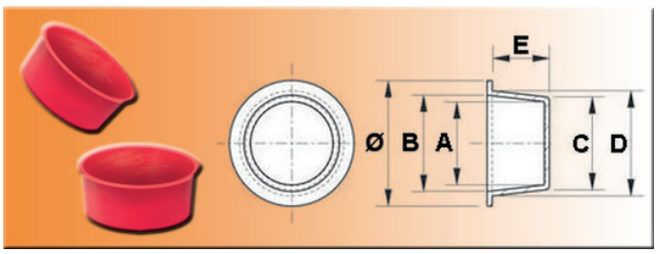


The tapered series can either be used as a cap or a plug - depending on the application.
It is perfectly suited for the protection of threads or to shield conduits und pipes from dirt and moisture.
Many different dimensions for a lot of different types of threads.

Please note:
Tolerance = 0.3 - 0.8 mm

Used as a plug the stem diameter should exceed the bore hole by 0.2 - 0.8 mm.
Used as a cap the inner diameter should be 0.2 - 0.8 mm smaller than the outer diameter you want to protect.

Material: LDPE
Colour: red
* = with pull-tab
+ = colour: natural

Part no.	A	B	C	D	E	Ø
0040030	1,3	3,0	2,9	4,6	9,5	7,9
0040040	2,8	4,5	4,4	6,1	9,5	9,5
0040050	2,5	5,7	4,7	8,5	22,5	11,7
0040052	4,0	5,4	5,6	7,0	8,0	10,4
0040060	5,0	5,9	6,2	7,6	9,5	11,1
0040075	6,3	7,7	7,7	9,3	9,5	12,7
0040082	6,9	8,2	8,4	10,0	9,5	13,5
0040095	7,5	8,8	9,0	10,7	11,5	13,9
0040097	8,5	10,0	10,0	11,8	9,5	15,0
0040099	8,6	10,0	10,6	12,2	9,8	15,6
0040104*	-	-	9,5	10,8	9,5	14,0
0040105	9,1	10,7	10,9	12,3	9,3	15,9
0040106	9,1	10,7	10,7	12,3	9,5	22,0
0040112	10,0	11,5	11,5	13,0	9,5	16,7
0040118	10,5	12,0	12,0	14,8	11,0	17,5
0040125	10,7	13,2	12,8	15,1	23,1	18,5
0040133	12,1	13,7	13,6	15,3	11,2	19,0
0040142	12,7	14,4	14,2	16,0	12,1	19,0
0040152	13,4	15,0	15,5	17,1	8,5	20,6
0040160	14,5	15,5	16,1	17,6	8,5	21,0
0040164	14,3	15,4	16,4	17,2	4,7	21,9
0040165	14,3	16,9	16,4	18,3	12,3	22,2
0040166	14,5	16,5	16,6	18,5	13,0	21,9
0040167	15,5	18,0	17,2	20,2	18,0	24,2
0040172	15,2	17,3	17,7	19,6	12,7	22,2
0040173*	-	-	17,8	20,0	13,7	23,8
0040175	16,4	19,3	18,3	21,4	17,5	25,4

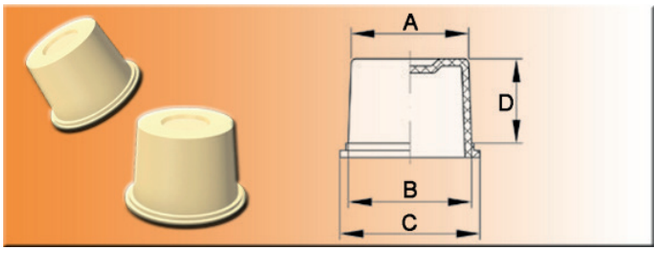
Part no.	A	B	C	D	E	Ø
0040176	17,1	19,3	18,5	20,9	14,3	24,6
0040186	17,6	19,7	19,0	21,5	14,3	25,8
0040187	17,6	19,9	19,1	21,5	14,3	38,1
0040194	18,0	21,3	19,4	22,5	19,0	26,5
0040203	18,5	21,2	20,5	23,2	17,5	27,2
0040212	20,0	23,3	22,5	25,5	17,8	28,9
0040225	20,5	23,0	22,0	25,0	15,9	28,5
0040232	20,8	22,7	22,7	24,9	12,0	27,0
0040235	21,9	25,0	24,0	26,9	18,0	31,0
0040240	22,5	27,5	24,6	29,5	27,5	34,0
0040250	23,2	26,1	24,7	27,7	19,0	32,0
0040251*	-	-	24,7	27,7	19,0	32,0
0040252	23,7	27,7	25,2	29,2	19,0	33,0
0040262	24,4	27,3	26,2	28,5	15,6	31,7
0040272	26,5	29,0	28,0	30,9	19,0	35,3
0040307	27,5	30,7	30,0	32,6	15,2	36,7
0040308	28,4	31,1	30,5	33,3	14,5	37,0
0040315	29,8	32,8	31,1	34,4	19,0	38,1
0040334	31,7	35,6	33,3	37,2	22,2	41,6
0040345	31,9	36,5	33,9	38,3	24,5	42,3
0040346	33,1	35,2	34,9	36,4	8,2	42,7
0040378	35,8	39,0	37,8	41,0	17,5	44,2
0040387	35,0	39,0	36,9	40,6	22,5	44,0
0040392	37,1	39,0	38,6	40,6	12,7	44,5
0040398	38,2	41,1	39,6	42,7	18,5	47,6
0040399	37,7	41,8	40,8	44,7	24,5	49,0
0040420	39,7	43,0	41,4	44,8	19,0	49,2

Caps and plugs

Part no.	A	B	C	D	E	Ø
0040425	44,3	45,0	45,9	46,3	9,5	50,8
0040442	42,8	45,7	44,1	46,7	18,4	49,8
0040452	43,7	47,0	45,2	49,0	24,5	53,4
0040486	46,7	48,9	48,6	51,2	18,7	55,5
0040487	46,3	50,7	48,0	52,7	25,4	57,1
0040489	47,5	52,0	49,8	54,0	24,3	58,0
0040492	47,7	52,0	51,1	54,4	25,0	57,0
0040497	49,6	52,0	51,5	54,1	18,5	58,3
0040512	51,2	55,3	53,5	57,0	25,1	62,4
0040525	55,2	56,1	57,5	57,6	12,8	63,6
0040540	53,7	57,2	55,4	58,8	25,1	65,0
0040550	52,2	59,0	55,0	61,0	25,0	65,0
0040585	57,0	61,0	59,6	62,6	24,6	66,7
0040589	62,1	65,6	64,5	67,3	15,8	70,6
0040591	56,7	64,1	59,3	67,3	31,7	70,3
0040600	61,5	67,8	63,3	69,8	25,4	73,0
0040610	59,0	64,3	62,0	66,4	28,0	71,0
0040655	66,3	69,3	68,1	70,9	19,0	74,6
0040713	68,1	74,0	70,0	75,8	25,4	79,4
0040714	71,5	73,9	74,0	77,0	18,7	82,5
0040724	70,8	74,1	72,4	75,7	19,0	83,0

Part no.	A	B	C	D	E	Ø
0040740	74,8	78,2	77,1	80,7	19,0	85,7
0040745	74,8	80,8	76,8	82,2	25,4	85,7
0040790	77,5	82,0	80,0	86,1	25,1	89,8
0040835	82,9	85,5	85,3	88,0	19,0	92,0
0040845	82,4	85,7	84,5	87,8	19,0	92,0
0040850	80,2	88,3	84,2	90,8	28,0	94,5
0040890	84,3	90,5	87,5	93,6	34,3	96,7
0040900	85,1	89,9	88,1	93,3	28,6	96,5
0040910	88,3	94,0	92,1	97,0	32,0	100,0
0040950	91,0	97,0	94,5	100,6	34,5	103,6
0040965+	94,0	101,0	96,5	102,0	31,0	110,0
0040990	95,0	99,0	98,2	103,3	28,8	106,0
0041050	98,0	103,0	101,9	107,5	28,6	109,0
0041090	101,5	107,4	106,7	111,7	28,6	113,3
0041100	105,0	109,0	110,0	115,0	28,0	118,5
0041240	121,0	125,0	124,0	128,0	23,0	134,0
0041290	124,0	132,0	129,0	135,1	36,5	139,5
0041330	130,2	134,2	133,0	137,0	22,0	143,0
0041395	135,0	140,0	139,5	145,6	36,5	150,0
0041460	142,8	148,6	146,8	152,6	33,0	159,5
0041590	152,0	160,0	157,0	163,0	36,5	167,5

Tapered caps / plugs | Tapered plugs



The tapered series can either be used as a cap or a plug - depending on the application.
It is perfectly suited for the protection of threads or to shield conduits und pipes from dirt and moisture.
Many different dimensions for a lot of different types of threads.

Please note:
Tolerance = 0.3 - 0.8 mm

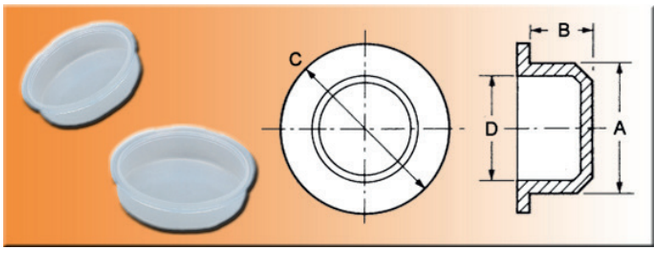
Used as a plug the stem diameter should exceed the bore hole by 0.2 - 0.8 mm.
Used as a cap the inner diameter should be 0.2 - 0.8 mm smaller than the outer diameter you want to protect.

Material: PE-LLD
Colour: natural (yellow RAL 1016 on written request - minimum order quantity: 20,000 pcs.)

DIN1 = thread DIN 13
DIN2 = Withworth pipe thread DIN 259

Part no.	A	B	C	D	DIN1	DIN2
4040044	4,4	6,1	10	10	M7	M6x0,5
4040060	6,0	7,7	11	10	M9	-
4040076	7,6	9,3	13	10	-	M10x0,75
4040084	8,4	10,1	14	10	-	M11x1
4040092	9,2	10,9	14	10	-	M12x1,25
4040099	9,9	11,6	15	10	-	-
4040106	10,6	12,3	16	10	M14	-
4040112	11,2	13,0	17	10	-	M14x1
4040120	12,0	14,1	18	12	-	M15x1
4040125	12,5	14,6	18	12	-	M16x1,5
4040134	13,4	15,5	19	12	-	-
4040140	14,0	16,1	19	12	-	M17x1/M18x2
4040147	14,7	17,0	21	13	-	M18x1
4040163	16,3	18,6	22	13	M20	M20x1,5
4040170	17,0	19,5	22	13	M22	-
4040175	17,5	20,0	24	15	-	M22x2
4040185	18,5	21,0	25	15	M24	M22x1

Part no.	A	B	C	D	DIN1	DIN2
4040190	19,0	21,5	25	15	-	-
4040205	20,5	23,3	27	16	-	M24x0,75/M25x2
4040207	20,7	23,5	28	16	-	M25x1,5
4040220	22,0	24,8	29	16	-	-
4040231	23,1	26,4	30	18	M30	M28x1,5
4040244	24,4	27,7	32	19	-	-
4040264	26,4	29,2	33	19	M33	M30x1
4040277	27,7	31,2	35	19	-	M33x2
4040298	29,8	32,6	37	16	-	M34x1,5
4040313	31,3	35,0	38	21	-	-
4040333	33,3	37,1	41	22	-	M39x2/M40x3
4040367	36,7	40,5	45	22	M45	M42x1,5
4040390	39,0	42,5	48	23	-	-
4040396	39,6	42,9	48	19	M48	M45x2
4040414	41,4	44,7	49	19	-	-
4040443	44,3	46,9	51	19	-	M50x3



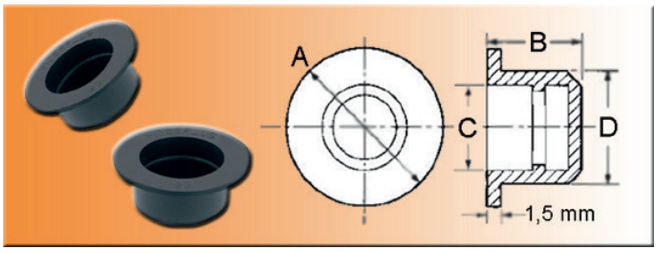
Cylindrical plug with collar for the protection of pipes, threaded holes etc.

Material: LDPE
Colour: natural

Part no.	A	B	C	D
0610053	5,3	5,0	8,3	3,9
0610057	5,7	5,0	8,7	4,1
0610063	6,3	5,0	9,3	5,2
0610067	6,7	5,0	9,7	5,2
0610077	7,7	6,3	10,7	6,1
0610081	8,1	6,3	11,1	7,0
0610085	8,5	6,3	11,5	7,0
0610091	9,1	6,5	12,9	7,9
0610101	9,2	10,1	12,9	7,9
0610104	10,4	6,9	14,3	9,3
0610108	10,8	6,9	14,7	9,3
0610112	11,2	6,9	15,2	10,3
0610117	11,7	6,9	15,7	10,3
0610121	12,1	7,0	15,9	11,0
0610125	12,5	7,0	16,4	11,0
0610130	13,0	7,7	16,9	11,9
0610140	14,0	7,7	17,8	12,4
0610145	14,5	7,5	18,4	13,3
0610150	15,0	7,5	19,0	13,3
0610153	15,3	11,0	19,3	13,8
0610154	15,3	11,0	25,5	13,8
0610155	15,5	7,7	19,1	14,4
0610160	16,0	7,7	19,6	14,9
0610165	16,5	7,7	19,7	14,9
0610171	17,1	7,7	20,9	16,1
0610178	17,8	7,7	21,4	16,7
0610182	18,2	7,7	21,8	16,7
0610190	19,0	11,0	29,7	17,8
0610196	19,6	8,3	23,3	18,5
0610207	20,7	8,5	24,7	19,6
0610217	21,7	8,5	25,7	20,6

Part no.	A	B	C	D
0610223	22,3	8,5	26,2	20,6
0610245	24,5	8,5	28,2	23,4
0610251	25,1	8,5	28,8	23,9
0610260	26,0	8,5	30,0	24,7
0610266	26,6	8,5	30,6	24,7
0610272	27,2	8,5	31,2	26,0
0610277	27,7	8,5	31,6	26,0
0610289	28,9	8,5	32,8	27,8
0610300	30,0	8,5	34,0	28,8
0610311	31,1	8,5	35,0	29,9
0610314	31,4	8,5	35,5	30,2
0610318	31,8	8,5	35,8	30,2
0610332	33,2	8,5	37,2	31,7
0610360	36,0	8,5	40,2	34,4
0610391	39,1	8,5	43,1	37,5
0610395	39,5	8,8	46,2	38,0
0610401	40,1	8,6	41,6	38,9
0610405	40,5	9,6	54,0	38,3
0610407	40,7	8,7	47,5	39,1
0610426	42,6	4,0	46,4	41,4
0610461	46,1	8,5	52,7	44,5
0610466	46,6	5,8	50,3	45,1
0610511	51,1	8,7	60,0	49,5
0610582	58,2	8,7	67,0	56,6
0610600	60,0	10,2	61,7	58,8
0610662	66,2	8,7	75,2	64,6
0610736	73,6	8,7	82,5	71,8
0610812	81,2	8,7	90,2	79,4
0610851	85,1	8,7	93,8	83,2
0610866	86,6	9,0	98,6	84,6
0611018	101,8	9,0	113,8	99,5

Quick-fit plugs | Parallel protection plugs PVC



Extremely abrasion-resistant and therefore recommendable for threaded holes.

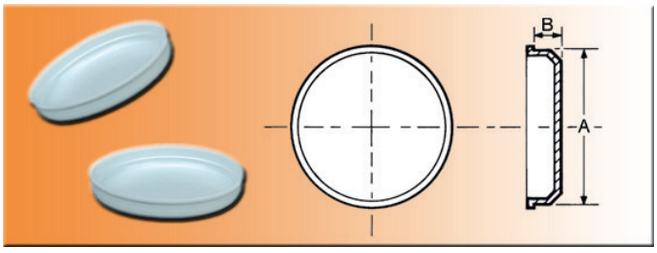
Material: PVC
Colour: black

Material TPG see page 50.

Part no.	A	B	C	D
1900003	no longer available!			
1900005	11	12	3,2	5,0
1900006	12	12	3,1	6,0
1900007	13	12	4,5	7,0
1900008	14	12	4,9	8,0
1900009	no longer available!			
1900010	no longer available!			
1900011	17	12	8,2	11,0
1900012	no longer available!			
1900013	no longer available!			
1900014	no longer available!			
1900015	23	14	12,2	15,0
1900016	24	14	12,9	16,0
1900017	27	14	14,0	17,0
1900018	no longer available!			

Part no.	A	B	C	D
1900019	no longer available!			
1900020	no longer available!			
1900021	31	14	18,3	21,0
1900022	no longer available!			
1900023	33	14	20,1	23,0
1900024	34	16	21,6	24,0
1900025	35	16	22,2	25,0
1900026	36	16	23,5	26,0
1900027	37	16	23,6	27,0
1900028	38	16	25,2	28,0
1900029	no longer available!			
1900030	40	16	27,9	30,0
1900040	no longer available!			
1900047	57	22	43,2	47,0

Quick-fit plugs | Pipe end plugs | without finger grip



- without finger grips -
For closing of round cartons, clear plastic tubes etc.

Material: LDPE
Colour: white

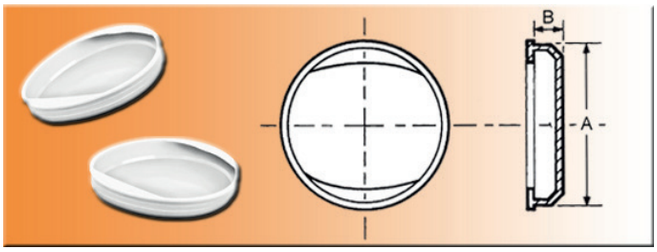
Further types on written request!

Part no.	A	B
1740040	40	10,8
1740050	50	10,8

Part no.	A	B
1740060	60	10,7
1740070	70	10,5

Part no.	A	B
1740080	80	12,5
1740100	100	12,5

Quick-fit plugs | Pipe end plugs | with finger grip, white



- with finger grips -
For closing of round cartons, clear plastic tubes etc.

Material: LDPE
Colour: white

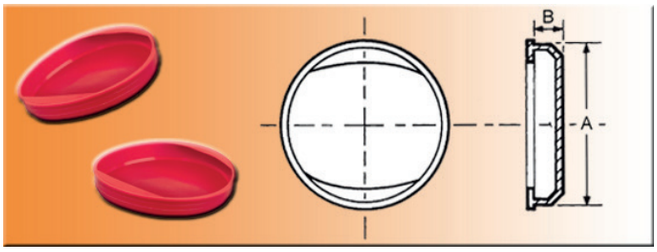
Further types on written request!

Part no.	A	B
1742030	30	7,8
1742040	40	10,8
1742050	50	10,8
1742060	60	10,7

Part no.	A	B
1742070	70	10,5
1742080	80	12,5
1742090	90	12,5
1742100	100	12,5

Part no.	A	B
1742110	110	12,8
1742120	120	12,2

Quick-fit plugs | Pipe end plugs | with finger grip, red



- with finger grips -
For closing of round cartons, clear plastic tubes etc.

Material: LDPE
Colour: red

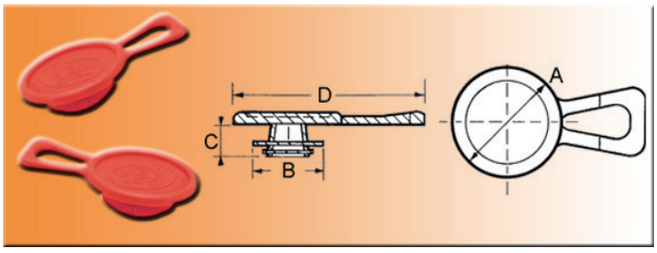
Further types on written request!

Part no.	A	B
1741030	30	7,8
1741040	40	10,8
1741050	50	10,8
1741060	60	10,7

Part no.	A	B
1741070	70	10,5
1741080	80	12,5
1741090	90	12,5
1741100	100	12,5

Part no.	A	B
1741110	110	12,8
1741120	120	12,2

Quick-fit plugs | Ezeplugs



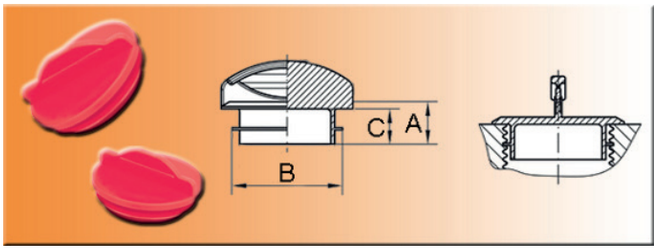
Patented design, suitable for a series of threads and links.
Five sizes for 24 different types of thread.

Material: LDPE
Colour: red

G1 = for metric thread
G2 = for thread UNF/JIC (Inch)
G3 = for thread BSP/GAS (Inch)

Part no.	A	B	C	D	G1	G2	G3
1791000	19,0	13,2	6,0	34,0	M10, M12	7/16	1/8
1792000	22,7	16,5	7,0	40,0	M14, M16	½, 5/8, 9/16	¼
1793000	30,0	19,5	8,0	47,0	M18, M20	¾	3/8
1794000	34,4	23,8	9,5	51,4	M22, M24	7/8	½, 5/8
1795000	40,0	27,6	9,5	57,0	M26, M28	1 1/16, 1 1/8	¾
1796000	45,0	34,5	10,0	62,0	M30, M36	1¼, 1 3/8	1

Quick-fit plugs | Snap-in plugs



Alternative to thread plugs; for quick mounting.
Simply push in and tighten with a turn.
* = shackle not as shown

Material: LDPE
Colour: red

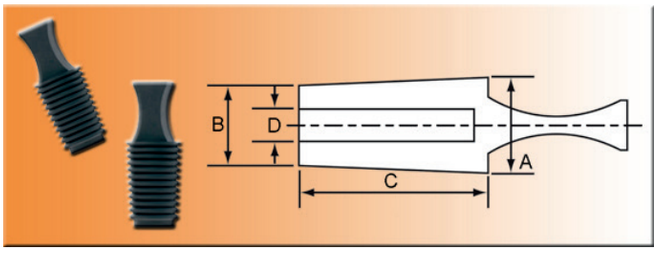
G1 = for metric thread
G2 = for thread UNF/JIC (Inch)
G3 = for thread BSP/GAS (Inch)

Part no.	A	B	C	G1	G2	G3
1821000	6	9,8	4	M10	1/8	7/16
1821214	7	13,1	5	M12 - M14	¼	½
1821600	7	16,5	5	M16	3/8	5/8
1822000	9	21,3	7	M20	½	-
1822200	9	22,4	7	M22	5/8	7/8
1822400	9	23,5	7	M24	-	-

Part no.	A	B	C	G1	G2	G3
1822526	9	25,5	7	M25, M26	¾	1 1/16
1823000	9	27,9	7	M28	7/8	1 1/8
1823200	9	32,0	7	M32	1	1 5/16
1823600	9	35,7	7	M36	1 1/8	1½ - 1 3/8
1824042*	9	41,5	7	M40, M42	1¼	1 5/8

Caps and plugs

Quick-fit plugs | Plugs without flange PVC



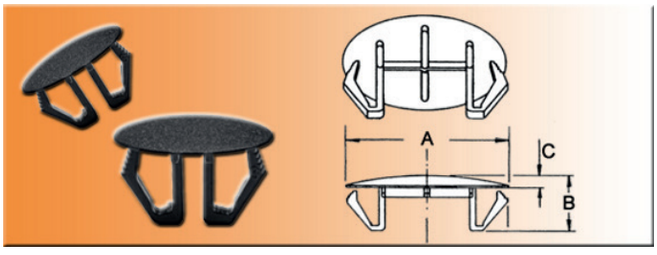
Ribbed plug without flange.
Because of its conical design each plug can be used for several thread sizes.

Material: PVC
Colour: black

Part no.	A	B	C	D
1910004PVC	8,0	6,0	25	2,5
1910005PVC	10,0	8,0	25	4,0
1910006PVC	12,0	10,0	25	6,0

Part no.	A	B	C	D
1910007PVC	14,0	12,0	25	8,0
1910008PVC	16,0	14,0	25	10,0
1910009PVC	18,0	16,0	25	12,0

Quick-fit plugs | Universal plugs



Universal plugs for covering of supplementary bores that are not required.
Only 8 sizes for hole diameters between 9.5 and 49.0 mm. Quick and easy to mount - the plugs snap into the mounting hole by the press of a finger.
Stepped latching pins adjust to different sheet thichnesses up to 3.2 mm and guarantee a tight fit.

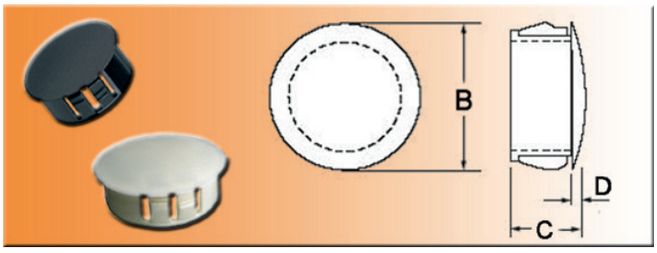
Material: ABS
Colour: black

Ø1 = min. hole diameter
Ø2 = max. hole diameter
S = sheet thickness

Part no.	Ø1	Ø2	S	A	B	C
1581095	9,5	11,0	0,8-3,2	16,0	13,0	2,0
1581115	12,7	14,5	0,8-3,2	18,5	12,4	2,0
1581150	15,0	17,5	0,8-3,2	21,5	12,4	2,0
1581184	18,4	20,5	0,8-3,2	25,0	12,4	2,0

Part no.	Ø1	Ø2	S	A	B	C
1581220	22,0	25,5	0,8-3,2	32,5	13,5	2,0
1581270	27,0	32,5	0,8-3,2	35,0	13,5	2,0
1581350	35,5	40,0	0,8-3,2	43,0	13,5	2,0
1581445	44,5	49,0	0,8-3,2	53,0	13,5	2,0

Quick-fit plugs | Plugs for sheets



These plugs enable an easy, quick and economic covering of non-required mounting holes.
Available in 27 sizes for mounting holes of Ø 4.8 -101.6 mm.
A tight fit is guaranteed in wall thicknesses up to 6.4 mm. The convex head ends in a thin border and offers a proper cover.
The bigger the head diameter, the smaller the concavity of the head.

Material: PA 6.6 (flammability rating: UL 94V-2)
Colour:
without last digits = black
last digits 500 = white

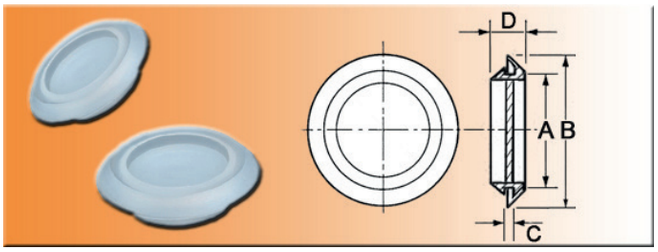
Ø = hole diameter
S = max. wall thickness

Part no.	Ø	S	B	C	D
1220048	4,7	1,6	6,4	5,9	1,1
1220048500	4,7	1,6	6,4	5,9	1,1
1220064	6,4	1,6	7,9	7,9	1,6
1220064500	6,4	1,6	7,9	7,9	1,6
1220080	7,9	1,6	9,5	7,9	1,6
1220080500	7,9	1,6	9,5	7,9	1,6
1220095	9,5	3,2	11,9	10,3	1,6
1220095500	9,5	3,2	11,9	10,3	1,6
1220110	11,1	3,2	13,5	10,3	1,6
1220110500	11,1	3,2	13,5	10,3	1,6
1220127	12,7	3,2	14,7	10,3	1,6
1220127500	12,7	3,2	14,7	10,3	1,6
1220143	14,3	3,2	16,7	10,3	1,6
1220143500	14,3	3,2	16,7	10,3	1,6
1220150	15,9	3,2	18,2	10,3	1,6
1220150500	15,9	3,2	18,2	10,3	1,6
1220175	17,4	3,2	19,8	10,3	1,6
1220175500	17,4	3,2	19,8	10,3	1,6
1220190	19,1	3,2	23,4	10,3	1,6
1220190500	19,1	3,2	23,4	10,3	1,6
1220206	20,6	3,2	25,1	10,3	1,6
1220206500	20,6	3,2	25,1	10,3	1,6
1220222	22,2	3,2	25,8	11,5	1,6
1220222500	22,2	3,2	25,8	11,5	1,6

Part no.	Ø	S	B	C	D
1220255	25,4	3,2	30,6	11,5	1,6
1220255500	25,4	3,2	30,6	11,5	1,6
1220280	28,0	3,2	30,9	11,5	1,6
1220280500	28,0	3,2	30,9	11,5	1,6
1220300	30,1	3,2	33,3	11,5	1,6
1220300500	30,1	3,2	33,3	11,5	1,6
1220320	31,8	3,2	34,9	11,5	1,6
1220350	34,9	3,2	38,1	11,5	1,6
1220350500	34,9	3,2	38,1	11,5	1,6
1220380	38,1	3,2	42,4	11,5	1,6
1220380500	38,1	3,2	42,4	11,5	1,6
1220450	44,5	3,2	48,4	11,5	1,6
1220450500	44,5	3,2	48,4	11,5	1,6
1220510	50,8	3,2	55,1	12,2	2,3
1220510500	50,8	3,2	55,1	12,2	2,3
1220540	53,2	6,4	59,5	19,1	2,8
1220572	57,2	6,4	61,5	19,1	2,8
1220640	63,5	6,4	69,0	19,1	2,8
1220640500	63,5	6,4	69,0	19,1	2,8
1220762	76,2	6,4	80,5	19,1	2,8
1220857	85,7	6,4	92,9	19,1	2,8
1220889	88,9	6,4	92,9	19,1	2,8
1221016	101,6	6,4	105,6	19,1	2,8

Caps and plugs

Quick-fit plugs | Snap-in blind plugs | type 1



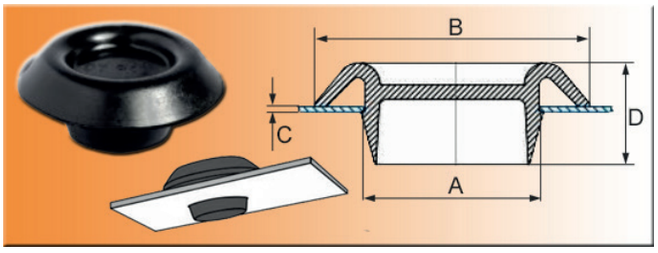
Perfect for covering bores and holes in metal sheets up to 2.5 mm thickness.
Snap into position properly.

Material: LDPE
Colour: natural

Part no.	A	B	C	D
1920001	9,5	20,0	3	8,5
1920002	12,5	24,0	3	10,0
1920003	14,0	27,0	3	10,0
1920004	16,0	27,5	3	10,0
1920006	20,0	31,5	3	10,0
1920007	22,0	33,5	3	10,0
1920008	25,0	36,5	3	10,0

Part no.	A	B	C	D
1920009	28,0	39,5	3	10,0
1920010	31,5	41,0	3	9,0
1920011	38,0	49,5	3	10,0
1920012	47,5	59,0	3	10,0
1920013	50,0	61,5	3	10,0
1920014	51,0	62,5	3	9,5

Quick-fit plugs | Snap-in blind plugs | type 2



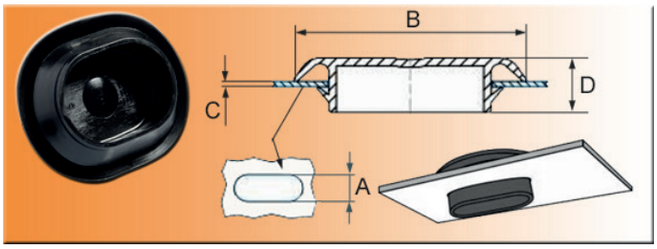
Seal round holes and avoid ingress of water, moisture and dust.

Material and colour: see X

Part no.	A	B	C	D	X
1921007	6,5	10,5	0,6	5,0	TPG, black
1921001	no longer available!				
1921002	no longer available!				
1921010	14	24,1	0,7-2,5	13,5	TPG, black
1921004	18	30	0,5-2,5	9,0	LDPE, white
1921003	no longer available!				

Part no.	A	B	C	D	X
1921006	20,5	29,6	0,5-3,0	6,1	LDPE, white
1921005	20,5	29,6	0,5-3,0	6,1	LDPE, black
1921011	no longer available!				
1921012	24,5-25	34	3,0	10,0	PP/EPDM, black
1921009	no longer available!				
1921008	28	39,5	0,6-2,0	10,0	LDPE, black

Quick-fit plugs | Snap-in blind plugs | type 3



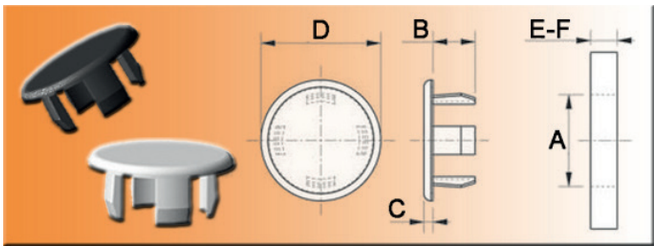
Seal oval holes and avoid ingress of water, moisture and dust.

Material: see X
Colour: black

Part no.	A	B	C	D	X
1922006	16,7x13,1	26,7x23,1	3,0	14,0	PP/EPDM
1922007	22,3x16,3	31,3x25,3	5,0	15,2	TPG
1922001	22,0x16,0	30,0x23,9	0,7-0,9	7,0	PE
1922002	no longer available!				

Part no.	A	B	C	D	X
1922004	50,0x30,0	62,0x42,0	1,0-1,2	6,7	PVC
1922005	60,0x48,0	75,6x63,7	1,0-4,3	13,7	PP/EPDM
1922003	70,0x30,0	74,0x34,0	0,8-1,5	9,0	PE

Quick-fit plugs | Sheet covering plugs



Destined to cover holes in sheets. Very easy to mount and dismount. Proper covering of the constructions lying behind. Self-locking, no tools necessary.

Large field of application: for sheet thicknesses between 0.8 to 3.8 mm.

Material: PA 6.6
Colours:
without last digits = beige ~RAL 1013
last digits 113 = white ~RAL 9003
last digits 270 = grey ~RAL 9006
last digits 599 = black ~RAL 9005

Part no.	A	B	C	D	E	F
2610040	4,0	6	1,1	7,0	0,8	3,8
2610040113	4,0	6	1,1	7,0	0,8	3,8
2610040270	4,0	6	1,1	7,0	0,8	3,8
2610040599	4,0	6	1,1	7,0	0,8	3,8
2610060	6,0	6	1,1	10,4	0,8	3,8
2610060113	6,0	6	1,1	10,4	0,8	3,8
2610060270	6,0	6	1,1	10,4	0,8	3,8
2610060599	6,0	6	1,1	10,4	0,8	3,8
2610064	6,4	6	1,1	10,4	0,8	3,8
2610064113	6,4	6	1,1	10,4	0,8	3,8
2610064270	6,4	6	1,1	10,4	0,8	3,8
2610064599	6,4	6	1,1	10,4	0,8	3,8
2610080	8,0	6	1,2	12,0	0,8	3,8
2610080113	8,0	6	1,2	12,0	0,8	3,8
2610080270	8,0	6	1,2	12,0	0,8	3,8

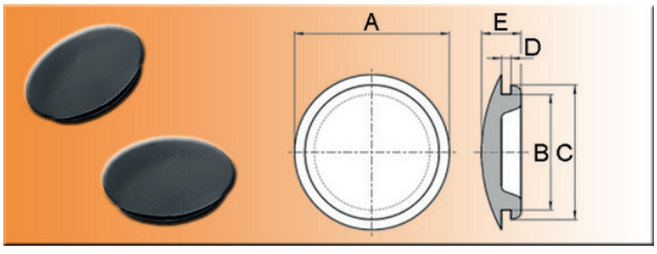
Part no.	A	B	C	D	E	F
2610080599	8,0	6	1,2	12,0	0,8	3,8
2610095	9,5	6	1,2	13,5	0,8	3,8
2610095113	9,5	6	1,2	13,5	0,8	3,8
2610095270	9,5	6	1,2	13,5	0,8	3,8
2610095599	9,5	6	1,2	13,5	0,8	3,8
2610100	10,0	6	1,2	14,0	0,8	3,8
2610100113	10,0	6	1,2	14,0	0,8	3,8
2610100270	10,0	6	1,2	14,0	0,8	3,8
2610100599	10,0	6	1,2	14,0	0,8	3,8
2610120	12,0	6	1,3	16,0	0,8	3,8
2610120113	12,0	6	1,3	16,0	0,8	3,8
2610120270	12,0	6	1,3	16,0	0,8	3,8
2610120599	12,0	6	1,3	16,0	0,8	3,8
2610127	12,7	6	1,3	17,1	0,8	3,8
2610127113	12,7	6	1,3	17,1	0,8	3,8

Caps and plugs

Part no.	A	B	C	D	E	F
2610127270	12,7	6	1,3	17,1	0,8	3,8
2610127599	12,7	6	1,3	17,1	0,8	3,8
2610140	14,0	6	1,4	18,7	0,8	3,8
2610140113	14,0	6	1,4	18,7	0,8	3,8
2610140270	14,0	6	1,4	18,7	0,8	3,8
2610140599	14,0	6	1,4	18,7	0,8	3,8
2610143	14,3	6	1,4	18,7	0,8	3,8
2610143113	14,3	6	1,4	18,7	0,8	3,8
2610143270	14,3	6	1,4	18,7	0,8	3,8
2610143599	14,3	6	1,4	18,7	0,8	3,8
2610159	15,9	6	1,4	20,4	0,8	3,8
2610159113	15,9	6	1,4	20,4	0,8	3,8
2610159270	15,9	6	1,4	20,4	0,8	3,8
2610159599	15,9	6	1,4	20,4	0,8	3,8
2610180	18,0	6	1,5	22,8	0,8	3,8
2610180113	18,0	6	1,5	22,8	0,8	3,8
2610180270	18,0	6	1,5	22,8	0,8	3,8
2610180599	18,0	6	1,5	22,8	0,8	3,8
2610191	19,1	6	1,5	24,0	0,8	3,8

Part no.	A	B	C	D	E	F
2610191113	19,1	6	1,5	24,0	0,8	3,8
2610191270	19,1	6	1,5	24,0	0,8	3,8
2610191599	19,1	6	1,5	24,0	0,8	3,8
2610200	20,0	6	1,5	24,8	0,8	3,8
2610200113	20,0	6	1,5	24,8	0,8	3,8
2610200270	20,0	6	1,5	24,8	0,8	3,8
2610200599	20,0	6	1,5	24,8	0,8	3,8
2610222	22,2	6	1,6	27,4	0,8	3,8
2610222113	22,2	6	1,6	27,4	0,8	3,8
2610222270	22,2	6	1,6	27,4	0,8	3,8
2610222599	22,2	6	1,6	27,4	0,8	3,8
2610240	24,0	6	1,6	29,2	0,8	3,8
2610240113	24,0	6	1,6	29,2	0,8	3,8
2610240270	24,0	6	1,6	29,2	0,8	3,8
2610240599	24,0	6	1,6	29,2	0,8	3,8
2610254	25,4	6	1,6	30,6	0,8	3,8
2610254113	25,4	6	1,6	30,6	0,8	3,8
2610254270	25,4	6	1,6	30,6	0,8	3,8
2610254599	25,4	6	1,6	30,6	0,8	3,8

Quick-fit plugs | Blind plugs PVC



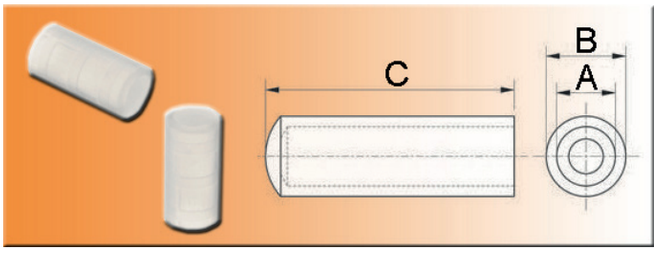
These plugs serve for covering holes in metal sheets.

Material: PVC
Colour: black

Part no.	A	B	C	D	E
1830930	9,3	4,7	9,3	1,6	4,6
1830950	9,5	6,4	9,5	1,6	5,0
1831421	14,2	8,0	10,6	0,8	4,7
1831422	14,2	8,0	10,6	1,6	5,0
1831540	15,4	9,5	12,8	1,6	7,3
1831700	17,0	11,5	15,5	1,6	7,0
1831750	17,5	11,9	15,9	1,2	7,1
1831770	17,7	11,2	12,8	1,6	6,2
1831870	18,7	12,7	15,5	1,6	5,6
1831900 = 1870011	19,0	12,0	13,1	0,8	6,5
1832000	20,0	14,9	18,4	1,3	7,0
1832200	22,0	15,5	19,0	1,6	7,5

Part no.	A	B	C	D	E
1832500	25,0	20,0	22,5	1,6	6,7
1832550	25,5	19,0	22,1	1,6	6,5
1832850	28,5	22,0	26,6	2,4	8,2
1832851	28,5	22,5	27,0	1,6	9,3
1833000	30,0	24,5	27,5	2,4	8,7
1833200	32,0	25,4	28,3	1,6	9,0
1833201	32,0	25,4	28,3	2,4	9,0
1833820	38,2	32,0	35,4	3,1	9,0
1833821	38,2	31,5	35,4	0,8	7,0
1833822	38,2	31,5	35,4	1,6	7,5
1834370	43,7	38,2	43,0	1,6	8,2
1835750	57,5	51,5	52,6	1,6	12,4

Quick-fit caps | Protection caps



Protection against damage, dirt, moisture und corrosion.
Particularly suitable as protective element for threads, shafts etc.
- easy to mount by hand.

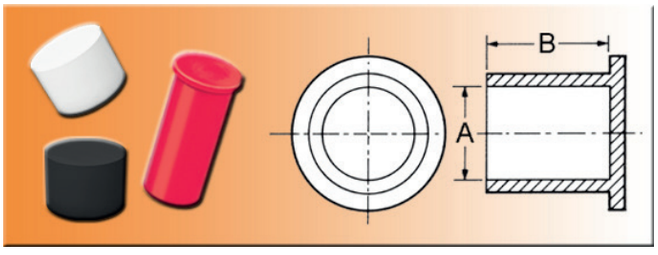
Material: LDPE
Colour: transparent

Part no.	A	B	C
1180322	3,5	5	22
1180423	4,0	6	22
1180515	4,7	7	15

Part no.	A	B	C
1180524	5,0	7	22
1180625	6,0	8	22
1180725	7,0	9	25

Part no.	A	B	C
1180825	8,0	10	22
1181025	10,0	12	22

Quick-fit caps | Stud protection caps



Ideal for the protection of exposed bolts and threads.

When choosing the caps please note that the inner diameter should be 0.2 - 0.8 mm smaller than the outer diameter you want to protect.

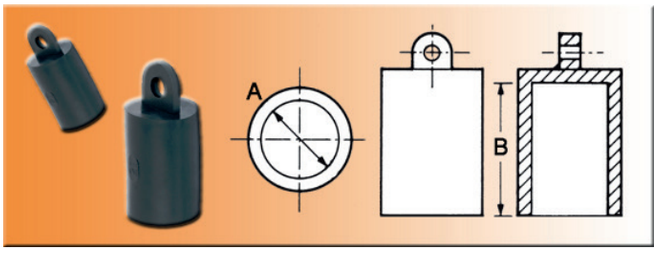
Material and colour: see X

Material „thermoplastic rubber“ on written request.

Part no.	A	B	X
0622501	4,8	12,7	PVC, black
0622401	5,0	13,0	PE, natural
0622403	6,0	10,0	PE, natural
0622503	6,4	41,3	PVC, black
0622505	7,5	38,1	PE, red
0622504	7,9	19,1	PE, red
0622404	8,0	10,0	PE, natural
0622405	8,0	16,0	PE, natural
0622506	8,7	22,2	PE, red
0622507	9,1	27,2	PE, red
0622508	11,1	23,8	PE, red
0622509	11,9	22,2	PE, red

Part no.	A	B	X
0622510	11,9	28,6	PE, red
0622511	12,7	27,3	PE, red
0622512	12,7	46,0	PE, red
0622407	12,8	20,2	PE, natural
0622408	14,0	20,0	PE, natural
0622513	14,3	19,0	PE, red
0622514	14,3	33,6	PE, red
0622515	15,9	23,8	PE, red
0622516	15,9	71,8	PE, red
0622409	16,0	15,0	PE, natural
0622410	16,0	20,0	PE, natural
0622517	19,0	33,6	PE, red

Part no.	A	B	X
0622411	20,0	15,0	PE, natural
0622412	20,0	20,0	PE, natural
0622518	20,6	36,5	PE, red
0622413	22,0	18,0	PE, natural
0622519	22,2	77,8	PE, red
0622520	23,8	50,8	PE, red
0622414	24,0	18,0	PE, natural
0622521	25,4	55,6	PE, red
0622522	28,6	55,6	PE, red
0622523	32,0	58,5	PE, red
0622524	38,1	44,5	PE, red



Extremely resistant to abrasion! Perfect for thread applications.

Material / Colour:
without last digits = PVC, black
last digits GR = Vinyle, green

Black PVC is extremely abrasion-resistant and therefore recommendable for thread applications.
Green vinyle is resistant to most liquid oils, is tear-resistant and therefore recommendable for applications with oil and lubricants.

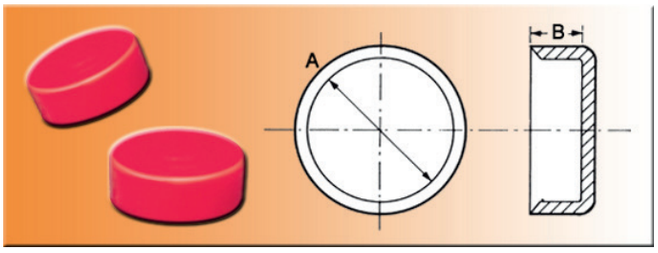
The design of the eye is subject to differ.

Part no.	A	B
1630005	5	23,5
1630005GR	5	23,5
1630006	6	25,0
1630006GR	6	25,0
1630007GR	7	24,0
1630008GR	8	24,5
1630009	9	25,0
1630009GR	9	25,0
1630010	10	29,5
1630010GR	10	29,5
1630011	11	29,0
1630011GR	11	29,0
1630012	12	29,0
1630012GR	12	29,0
1630013	13	29,0
1630013GR	13	29,0
1630014	14	29,0

Part no.	A	B
1630014GR	14	29,0
1630015	15	29,5
1630015GR	15	29,5
1630016	16	28,0
1630016GR	16	28,0
1630017	17	29,5
1630017GR	17	29,5
1630018	18	28,5
1630018GR	18	28,5
1630019	19	29,5
1630019GR	19	29,5
1630020	20	28,5
1630020GR	20	28,5
1630021	21	34,5
1630021GR	21	34,5
1630022	22	34,0
1630022GR	22	34,0

Part no.	A	B
1630023	23	34,5
1630023GR	23	34,5
1630024	24	34,0
1630024GR	24	34,0
1630025	25	34,5
1630025GR	25	34,5
1630026	26	34,5
1630026GR	26	34,5
1630027	27	33,5
1630027GR	27	33,5
1630028	28	33,5
1630028GR	28	33,5
1630029	29	35,0
1630029GR	29	35,0
1630030	30	34,5
1630030GR	30	34,5

Quick-fit caps | Pipe end caps



This multifunctional cap is available in a wide range of sizes.

Material: LDPE
Colour: red

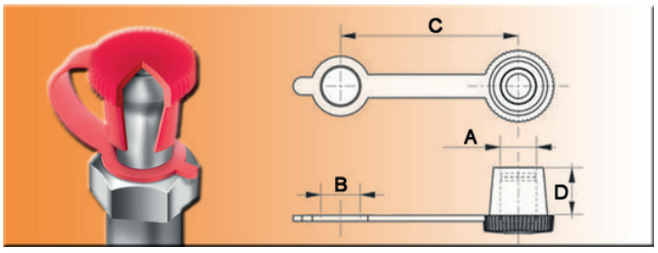
Part no. 2100009 = PVC, black

Part no.	A	B
2100009	8,9	8,0
2100019	19,0	13,0
2100022	22,1	11,0
2100025	25,5	13,1
2100028	28,5	13,3
2100032	31,7	12,8
2100035	34,7	12,5
2100038	38,0	12,2

Part no.	A	B
2100041	41,2	12,8
2100044	44,5	12,4
2100047	47,0	12,4
2100050	50,3	11,7
2100054	53,5	12,3
2100057	57,5	12,5
2100060	59,9	12,5
2100063	63,0	12,6

Part no.	A	B
2100066	66,4	11,0
2100070	69,8	12,1
2100073	72,5	12,6
2100075	75,5	12,3
2100079	79,4	12,7
2100082	82,0	12,3
2100085	85,0	12,2

Quick-fit caps | Grease nipple caps



An effective and economic method to protect grease nipples. The caps protect against damage and dirt and mark greasing points. Easy to mount and dismount.

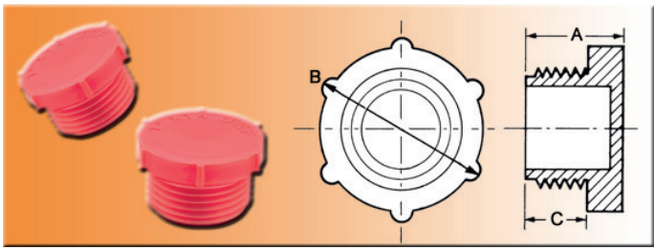
Material: LDPE
Colour: red (last digits 291 = yellow)

Part no.	A	B	C	D
1720060	6,0	6,4	29,5	8,3
1720060291	6,0	6,4	30,0	8,3

Part no.	A	B	C	D
1720063	6,3	6,2	11,6	5,2

Caps and plugs

Thread protection plugs | Threaded protection plugs, metric



Thread protection plugs for a wide range of applications. With long thread for a tight fit. They offer an optimum protection against dirt, moisture and corrosion.

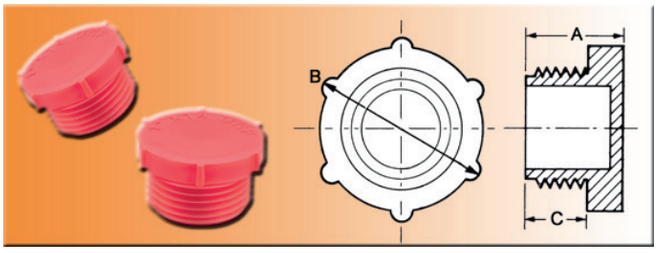
Material: LDPE
Colour: red

Further types on written request.

Part no.	M	A	B	C
1751001	M8x1	14,3	12,3	9,5
1751002	M10x1	14,6	15,3	10,4
1751003	M12x1	16,7	18,5	10,7
1751005	M12x1,5	16,3	16,7	8,7
1751006	M14x1,5	17,2	18,5	9,5
1751007	M16x1,5	17,2	22,0	12,5
1751008	M18x1,5	18,3	24,4	13,7

Part no.	M	A	B	C
1751010	M20x1,5	18,2	26,3	14,0
1751011	M22x1,5	18,3	28,2	13,7
1751012	M24x1,5	18,5	31,3	13,8
1751013	M25x1,5	18,5	31,3	14,0
1751014	M26x1,5	18,7	32,7	13,8
1751015	M52x1,5	21,5	63,7	15,5

Thread protection plugs | Threaded protection plugs, UNF



Thread protection plugs for a wide range of applications. With long thread for a tight fit. They offer an optimum protection against dirt, moisture and corrosion.

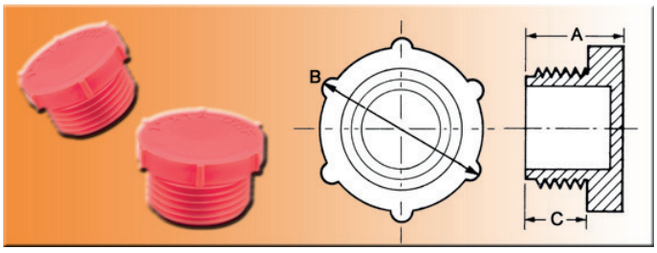
Material: LDPE
Colour: red

Further types on written request.

Part no.	M	A	B	C
1750009	3/8“x24	14,0	13,7	9,5
1750005	5/16“x18	12,0	14,5	7,4
1750011	5/16“x24	12,3	14,8	7,4
1750012	7/16“x20	16,1	17,4	11,0
1750017	7/16“x24	12,1	17,8	7,1
1750010	½“x20	15,3	18,5	10,5
1750018	9/16“x24	13,6	18,9	9,0
1750024	5/8“x24	14,8	20,7	10,0
1750013	5/8“x18	14,8	21,0	10,0
1750007	9/16“x18	15,4	22,6	10,7
1750022	11/16“x16	18,1	25,6	13,5

Part no.	M	A	B	C
1750023	13/16“x16	18,1	26,7	13,5
1750006	¾“x16	18,7	27,0	13,8
1750003	7/8“x14	18,5	28,8	13,6
1750021	1“x14	17,8	32,0	13,2
1750020	1 1/16“x14	18,3	33,3	13,7
1750004	1 1/16“x12	18,4	33,4	13,8
1750014	1 3/16“x12	18,3	36,8	13,5
1750008	1 5/16“x12	16,3	39,3	11,0
1750015	1 5/8“x12	17,3	50,6	12,9
1750016	1 7/8“x12	22,5	58,4	16,7
1750019	2½“x12	20,6	73,6	15,0

Thread protection plugs | Threaded protection plugs, BSP



Thread protection plugs for a wide range of applications. With long thread for a tight fit. They offer an optimum protection against dirt, moisture and corrosion.

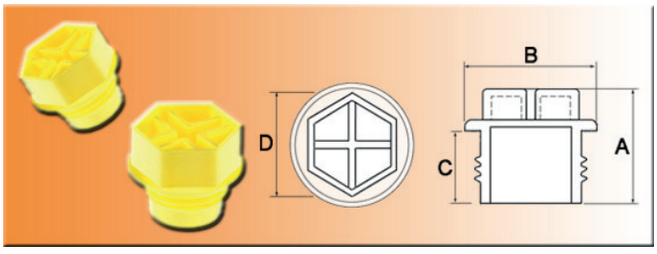
Material: LDPE
Colour: red

Further types on written request.

Part no.	M	A	B	C
1752001	1/8“x28	10,5	16,4	4,2
1752002	¼“x19	12,8	18,8	6,5
1752003	3/8“x19	12,0	22,9	5,5
1752004	½“x14	17,3	28,0	10,3
1752005	5/8“x14	18,4	31,3	13,9
1752006	¾“x14	17,0	32,3	11,0

Part no.	M	A	B	C
1752007	7/8“x14	18,1	38,0	13,5
1752013	1“x11	16,9	39,8	10,8
1752012	1¼“x11	20,9	49,9	15,0
1752010	1½“x11	16,9	55,2	10,8
1752011	2“x11	17,5	73,7	10,7
1752008	3“x11	16,5	105,0	11,3

Thread protection plugs | Slottex plugs



Screw plugs with a short metric thread for quick mounting and dismounting. Assembling and disassembling with screwdriver, screw-wrench or socket wrench by hand or with electric tools.

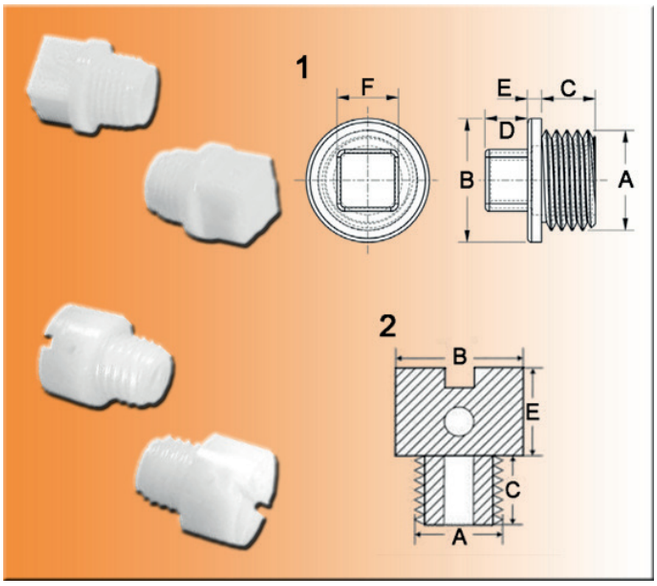
Material: HDPE
Colour: yellow

Further types on written request.

Part no.	A	B	C	D	M
1960081	14	12	7	10	M8x1
1960101	16	14	9	12	M10x1
1960121	16	16	9	13	M12x1
1960125	17	16	9	13	M12x1,5

Part no.	A	B	C	D	M
1960145	17	19	9	16	M14x1,5
1960165	19	21	10	18	M16x1,5
1960185	19	24	10	20	M18x1,5
1960205	21	26	12	22	M20x1,5

Thread protection plugs | Lock screws DIN 158

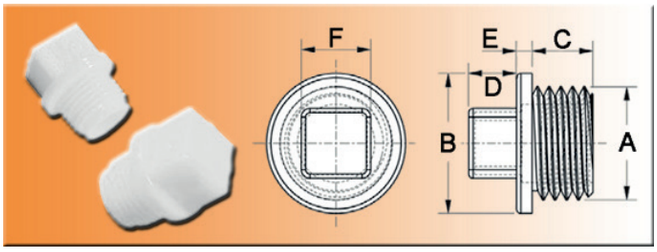


Material: PA
Colour: natural

Head type (X):
1 = with external square
2 = with longitudinal slot

Part no.	A	B	C	D	E	F	X
0750800	M8	13	6	-	8	-	2
0751200	M12	17	10	-	10	-	2
0751415	M14x1,5	19	7	6,0	2	11	1
0752210	M22x1	27	7	8,0	2	14	1
0752215	M22x1,5	27	7	8,0	2	14	1

Thread protection plugs | Lock screws DIN 2999

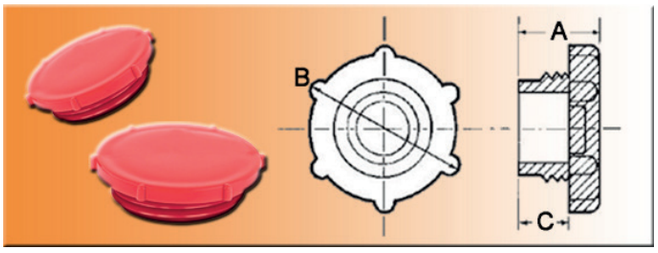


Material: PA
Colour: natural

Head type (X):
1 = with external square

Part no.	A	B	C	D	E	F	X
0750125	R1/8	13	7	6	2,2	9	1
0750250	R¼	16	7	6	2,0	11	1
0750375	R3/8	21	8	7	2,0	14	1
0750500	R½	27	9	8	2,0	14	1
0750750	R¾	34	11	8	2,0	17	1
0751000	R1	41	11	8	2,0	19	1
0751250	R1¼	53	11	8	2,8	24	1

Thread protection plugs | Quick-fit threaded plugs, metric



These plugs have only two or three thread turns and are therefore easy and quick to mount and dismount.

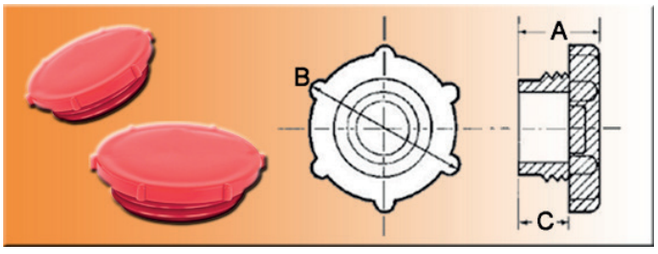
Material: LDPE
Colour: red

Further thread sizes on written request.

Part no.	M	A	B	C
1811415	M14x1,5	12,5	21,5	8,0
1811615	M16x1,5	12,5	23,6	8,0
1812015	M20x1,5	13,0	26,0	8,0
1813020	M30x2	14,6	39,9	9,8

Part no.	M	A	B	C
1813620	M36x2	21,5	45,6	10,5
1814220	M42x2	21,2	64,7	15,5
1814520	M45x2	18,5	57,8	12,7

Thread protection plugs | Quick-fit threaded plugs, BSP/Gas



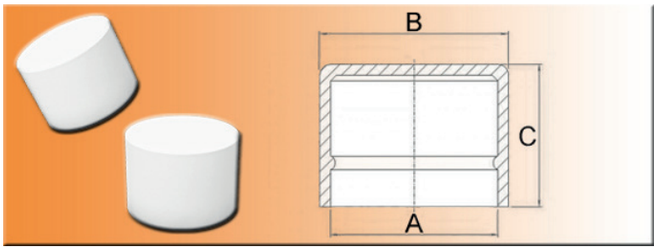
These plugs have only two or three thread turns and are therefore easy and quick to mount and dismount.

Material: LDPE
Colour: red

Further thread sizes on written request.

Part no.	M	A	B	C
1810101	¼“x19BSP/GAS	9,2	20,5	6,0
1810102	3/8“x19BSP/GAS	9,6	24,1	6,2
1810105	no longer available!			

Part no.	M	A	B	C
1810103	½“x14BSP/GAS	9,2	30,4	6,1
1810106	¾“x14BSP/GAS	9,1	34,0	6,1
1810107	1“x11BSP/GAS	9,0	40,2	5,7



When choosing the caps please note that the inner diameter should be 0.2 - 0.8 mm smaller than the outer diameter you want to protect.

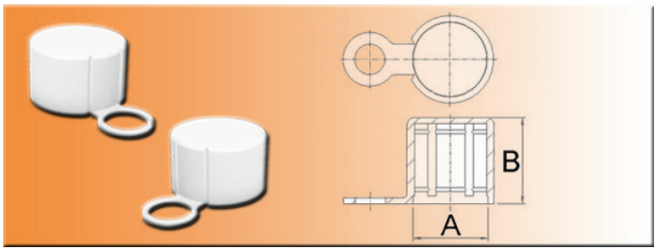
Material: LDPE
Colour: natural

DIN1 = metric ISO thread according to DIN 13 standard metric thread
DIN2 = Whitworth pipe thread according to DIN 259
DIN3 = steel pipe according to DIN 2448 and 2458

Part no.	A	B	C	DIN1	DIN2	DIN3
0620060	5,7	7,4	12,0	M6	-	-
0620063	5,8	8,0	13,0	-	-	-
0620080	7,8	9,4	14,3	M8	-	5/16
0620088	8,3	10,8	9,5	-	R1/8	-
0620100	9,8	11,3	11,0	M10	R1/8	13/32
0620102	10,2	11,8	8,0	-	-	-
0620105	10,5	12,0	8,0	-	-	-
0620120	11,5	13,7	12,0	M12	-	15/32
0620130	12,7	14,9	13,5	-	R¼	-
0620135	13,5	15,0	13,5	M14	-	17/32
0620142	13,3	16,3	16,0	-	-	-
0620160	15,7	17,0	15,0	M16	-	5/8
0620170	15,9	18,8	14,0	-	R3/8	11/16
0620164	15,7	18,2	20,0	-	R3/8	-
0620180	17,7	19,8	15,0	M18	-	23/32
0620184	17,6	20,5	20,0	-	-	-
0620195	19,7	22,1	14,0	M25	11,7	---
0620200	19,7	21,5	14,0	M20	-	25/32
0620207	20,6	22,9	15,0	-	R½	27/32
0620213	21,3	23,8	15,5	M22	R5/8	7/8
0620220	20,8	23,5	21,0	-	-	-
0620240	23,5	25,6	18,5	M24	-	15/16
0620243	23,4	25,7	18,0	-	-	-
0620244	23,8	26,2	27,0	-	-	-
0620260	25,4	27,7	17,5	M26	-	-
0620273	26,2	28,5	18,5	-	R¾	1 1/16
0620280	26,8	29,5	27,0	-	-	-
0620300	29,3	31,5	18,0	M30	-	-
0620301	29,4	31,5	27,0	-	-	-
0620318	31,2	32,2	27,0	-	-	-
0620324	32,4	34,5	16,0	-	R1	-
0620343	32,5	35,8	22,5	-	R1	1 11/32

Part no.	A	B	C	DIN1	DIN2	DIN3
0620344	32,5	35,8	45,0	-	R1	1 11/32
0620348	34,8	36,0	25,0	-	-	-
0620360	35,7	37,4	14,0	-	-	-
0620380	37,5	39,3	20,0	-	-	1½
0620382	37,4	39,8	50,0	-	-	-
0620400	39,4	42,5	27,0	-	-	-
0620421	41,0	43,5	28,0	-	R1¼	1 11/16
0620449	44,4	47,0	35,0	-	R1 3/8	-
0620484	47,8	50,5	29,5	-	R1½	1 19/32
0620483	47,6	49,5	35,0	-	-	-
0620510	50,6	53,0	30,0	-	-	-
0620520	51,6	53,8	16,0	-	-	-
0620530	52,5	55,7	30,0	-	R1¾	-
0620542	53,7	56,4	35,0	-	-	-
0620550	54,7	57,0	18,2	-	-	-
0620573	56,7	59,0	19,0	-	-	2¼
0620606	58,4	62,0	30,0	-	R2	2 3/8
0620603	58,7	61,5	17,6	-	R2	-
0620700	69,8	74,0	25,0	-	-	2¾
0620716	75,5	79,0	35,0	-	R2½	-
0620765	75,8	78,5	18,0	-	-	3
0620762	75,0	75,5	34,5	-	R2½	-
0620800	79,8	84,0	25,0	-	-	-
0620850	83,5	86,5	80,0	-	-	-
0620892	88,4	90,0	36,0	-	R3	-
0620900	89,5	91,5	72,0	-	-	-
0621000	98,5	101,5	70,0	-	-	-
0621018	101,8	104,0	23,8	-	-	4
0621008	106,8	109,5	35,0	-	-	-
0621143	111,8	116,0	35,0	---	R4	---
0621683	168,5	170,0	40,0	-	-	-

Thread protection caps | Protection caps with pull-off strap



These caps have been developed for quick mounting on threads.
Their design enables an easy dismounting by tearing at the ring.

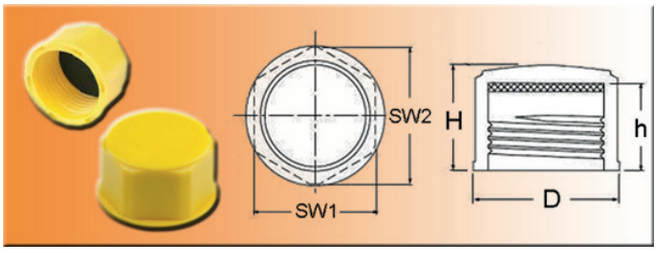
Material: LDPE
Colour: natural

DIN1 = Whitworth pipe thread DIN 259
DIN2 = steel pipe DIN 2448/2458

Part no.	A	B	M	DIN1	DIN2
1732098	9,8	11,25	M10	R1/8“	13/32“
1732115	11,5	12,0	M12	-	15/32“
1732131	13,1	13,5	-	R¼“	-
1732135	13,5	13,5	M14	-	17/32“
1732157	15,7	15,0	M16	-	5/8“
1732168	16,8	14,8	-	R3/8“	11/16“
1732176	17,65	14,5	M18	-	23/32“

Part no.	A	B	M	DIN1	DIN2
1732203	20,3	15,0	-	R½“	27/32“
1732213	21,3	15,5	M22	R5/8“	7/8“
1732235	23,5	18,5	M24	-	15/16“
1732249	24,9	19,0	-	-	1“
1732263	26,2	18,5	-	R¾“	-
1732334	33,4	22,5	-	R1“	1 11/32“

Thread protection caps | Sealing caps metrical



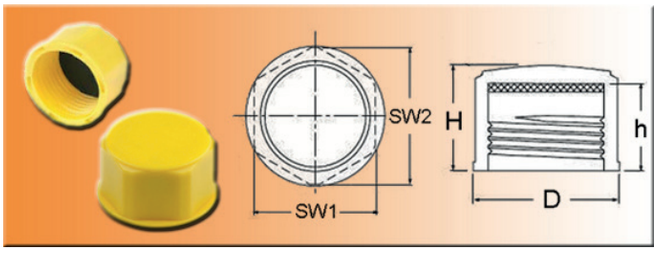
Low abrasion because of robust HDPE. Inner neoprene sealing prevents leakage of liquids.
Hand mounting is recommended! Additional external hexagon, appropriate for tools with low torque.

Material: HDPE
Colour: yellow

Part no.	M	D	H	h	SW1	SW2
2777033	M8x1	12,0	13,0	11,0	10	11,0
2777034	M10x1	14,2	13,0	11,0	12	13,2
2777035	M12x1	16,5	13,0	11,0	14	15,4
2777036	M12x1,5	16,5	15,0	13,0	14	15,4
2777037	M14x1,5	18,5	15,0	13,0	16	17,5
2777038	M16x1,5	21,0	15,0	13,0	18	19,7
2777039	M18x1,5	23,0	15,0	13,0	20	21,9
2777040	M20x1,5	25,0	15,0	13,0	22	24,1
2777041	M22x1,5	27,5	15,0	13,0	24	26,3
2777042	M24x1,5	30,0	15,0	13,0	26	28,5
2777043	M25x1,5	31,0	15,0	13,0	27	29,6

Part no.	M	D	H	h	SW1	SW2
2777044	M26x1,5	32,0	15,0	13,0	28	30,7
2777045	M28x1,5	34,0	15,0	13,0	30	32,9
2777046	M30x1,5	36,5	15,0	13,0	32	35,1
2777047	M30x2	36,5	17,0	15,0	32	35,1
2777048	M36x1,5	44,5	16,0	14,0	39	42,8
2777049	M36x2	44,5	18,0	16,0	39	42,8
2777050	M42x2	51,0	18,5	16,0	45	49,4
2777051	M42x1,5	54,5	16,5	14,0	48	52,6
2777052	M45x2	54,5	18,5	16,0	48	52,6
2777053	M52x2	62,0	18,5	16,0	55	60,3

Thread protection caps | Sealing caps UNF



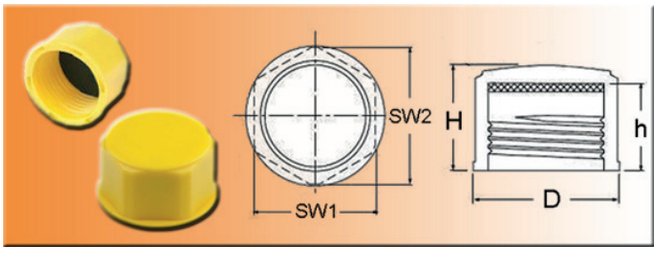
Low abrasion because of robust HDPE. Inner neoprene sealing prevents leakage of liquids.
Hand mounting is recommended! Additional external hexagon, appropriate for tools with low torque.

Material: HDPE
Colour: yellow

Part no.	M	D	H	h	SW1	SW2
2777054	¼“x28	10,0	13,5	11,5	8	8,8
2777055	3/8“x24	13,0	14,5	12,5	11	12,1
2777056	7/16“x24	15,5	14,5	12,5	13	14,3
2777057	7/16“x20	15,5	15,0	13,0	13	14,3
2777058	¼“x28	17,5	15,0	13,0	15	16,5
2777059	9/16“x18	18,5	15,5	13,5	16	17,5
2777060	5/8“x18	21,0	15,5	13,5	18	19,7
2777061	¾“x16	24,0	16,5	14,5	21	23,0
2777062	13/16“x16	26,5	16,5	14,5	23	25,2
2777063	7/8“x18	27,5	15,5	13,5	24	26,3

Part no.	M	D	H	h	SW1	SW2
2777064	7/8“x14	27,5	17,5	15,5	24	26,3
2777065	1“x14	31,0	17,5	15,5	27	29,6
2777066	1 1/16“x12	34,5	18,5	16,5	30	32,9
2777067	1 3/16“x12	36,5	18,5	16,5	32	35,1
2777068	1 5/16“x12	41,0	18,5	16,5	36	39,5
2777069	1 3/8“x12	43,0	18,5	16,5	38	41,7
2777070	1 7/16“x12	45,5	18,5	16,5	40	43,9
2777071	1 5/8“x12	51,0	19,0	16,5	45	49,4
2777072	1¾“x16	54,5	17,0	14,5	48	52,6
2777073	1 7/8“x12	59,0	19,0	16,5	52	57,0

Thread protection caps | Sealing caps BSP



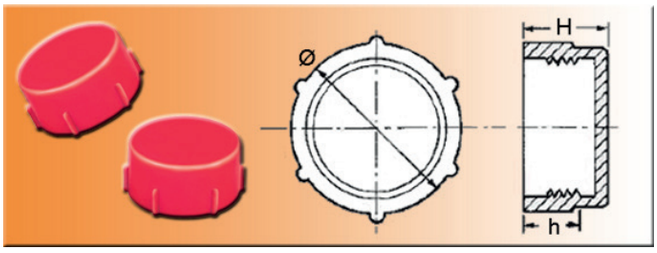
Low abrasion because of robust HDPE. Inner neoprene sealing prevents leakage of liquids.
Hand mounting is recommended! Additional external hexagon, appropriate for tools with low torque.

Material: HDPE
Colour: yellow

Part no.	M	D	H	h	SW1	SW2
2777074	1/8“x28	14,0	13,0	11,0	12	13,2
2777075	¼“x19	17,5	15,0	13,0	15	16,5
2777076	3/8“x19	22,0	15,0	13,0	19	20,8
2777077	½“x14	25,0	17,0	15,0	22	24,1
2777078	5/8“x14	29,0	17,0	15,0	25	27,4
2777079	¾“x14	32,0	17,0	15,0	28	30,7
2777080	7/8“x14	36,0	17,0	15,0	32	35,1

Part no.	M	D	H	h	SW1	SW2
2777081	1“x11	41,0	19,0	17,0	36	39,5
2777082	1 ¼“x11	51,0	19,0	17,0	45	49,4
2777083	1 ½“x11	56,0	19,5	17,0	50	54,8
2777084	2“x11	71,0	19,5	17,0	63	69,1
2777085	2 ¼“x11	80,0	19,5	17,0	70	76,8
2777086	2 ½“x11	90,0	19,5	17,0	80	87,7

Thread protection caps | Threaded caps metrical



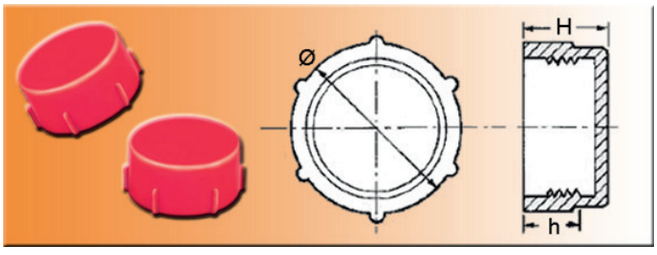
Protection of components against dirt, dust, moisture and damage during production, storage and transport.

Material: LDPE
Colour: red

Part no.	M	Ø	H	h
1770810	M8x1	9,9	10,0	7,0
1771010	M10x1	11,9	10,0	7,5
1771210	M12x1	13,8	12,0	9,5
1771215	M12x1,5	14,0	12,0	9,5
1771410	M14x1,5	15,9	12,0	9,5
1771415	M14x1,5	16,0	20,6	9,2
1771615	M16x1,5	17,9	12,0	9,5
1771616	M16x1,5	18,0	21,0	9,0
1771815	M18x1,5	19,7	14,0	9,5
1772015	M20x1,5	21,9	14,0	9,5

Part no.	M	Ø	H	h
1772215	M22x1,5	24,3	13,8	11,5
1772216	M22x1,5	24,4	24,5	17,5
1772415	M24x1,5	26,2	14,0	11,5
1772515	M25x1,5	27,2	14,0	11,5
1772615	M26x1,5	28,3	14,0	11,5
1772815	M28x1,5	32,0	14,0	12,4
1773020	M30x2	34,0	14,0	11,5
1773620	M36x2	38,8	16,0	13,5
1774220	M42x2	44,5	16,0	13,5

Thread protection caps | Threaded caps UNF/JIC

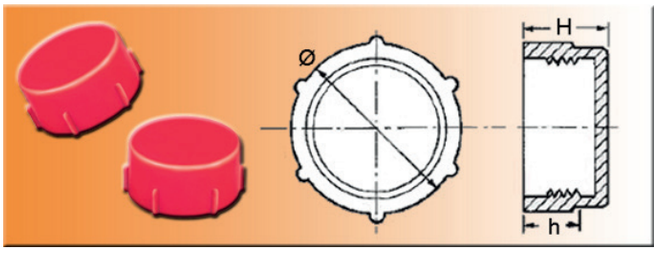


Protection of components against dirt, dust, moisture and damage during production, storage and transport.

Material: LDPE
Colour: red

Part no.	M	Ø	H	h
1775001	3/8“x24UNF/JIC	11,0	8,3	4,0
1775003	7/16“x20UNF/JIC	13,3	12,9	8,0
1775002	7/16“x24UNF/JIC	13,3	13,7	7,8
1775004	½“x20UNF/JIC	14,5	13,5	9,5
1775005	9/16“x18UNF/JIC	16,5	13,5	9,5
1775006	5/8“x18UNF/JIC	18,2	15,6	7,5
1775007	¾“x16UNF/JIC	21,7	13,8	9,5
1775008	13/16“x16UNF/JIC	23,3	15,3	9,3
1775009	7/8“x14UNF/JIC	24,9	20,2	14,4

Part no.	M	Ø	H	h
1775010	7/8“x18UNF/JIC	25,3	20,0	14,0
1775011	1“x14UNF/JIC	27,6	17,2	12,0
1775012	1 1/16“x12UNF/JIC	29,4	19,0	11,0
1775013	1 3/16“x12UNF/JIC	32,7	19,1	13,0
1775014	1 5/16“x12UNF/JIC	36,4	22,2	14,5
1775015	1 3/8“x12UNF/JIC	37,4	24,5	10,5
1775016	1 7/16“x12UNF/JIC	38,9	21,7	15,2
1775017	1 5/8“x12UNF/JIC	44,8	22,0	14,0
1775018	1 7/8“x12UNF/JIC	50,3	25,0	15,0



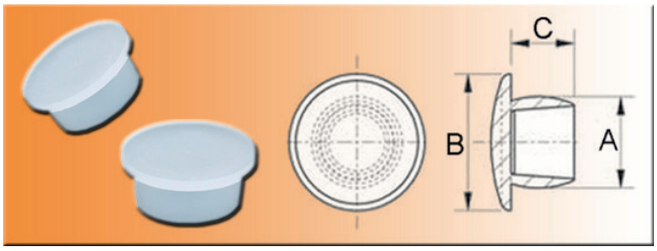
Protection of components against dirt, dust, moisture and damage during production, storage and transport.

Material: LDPE
Colour: red

Part no.	M	Ø	H	h
1779001	1/8“x28BSP/GAS	11,8	12,0	6,5
1779002	¼“x19BSP/GAS	14,8	11,0	8,0
1779003	3/8“x19BSP/GAS	18,7	11,3	7,4
1779004	½“x14BSP/GAS	23,2	13,5	7,0
1779005	5/8“x14BSP/GAS	25,4	15,7	10,0
1779006	¾“x14BSP/GAS	29,4	17,7	11,2
1779007	7/8“x14BSP/GAS	32,4	19,5	12,5

Part no.	M	Ø	H	h
1779008	1“x11BSP/GAS	36,0	19,0	14,5
1779009	1¼“x11BSP/GAS	44,4	19,8	13,0
1779010	1½“x11BSP/GAS	50,3	20,5	14,0
1779011	2“x11BSP/GAS	61,9	21,0	15,0
1779012	2¼“x11BSP/GAS	71,5	25,0	17,5
1779013	2½“x11BSP/GAS	77,9	27,6	19,0

Plugs for round pipes | Barrel plugs natural



When choosing the plugs please note that the stem diameter (A) should exceed the bore hole by 0.2 to 0.8 mm.
* = with head hole

Material: LDPE
Colour: natural

DIN1 = metric ISO thread according to DIN 13 standard metric thread
DIN2 = metric ISO thread according to DIN 13 metric fine thread
DIN3 = Whitworth pipe thread according to DIN 259 (inch)
DIN4 = armoured thread according to DIN 40430

Special colours (RAL-colours) on request
(minimum order quantity between 5,000 - 20,000 pcs. [depending on dimensions])

Part no.	A	B	C	DIN1	DIN2	DIN3	DIN4
0550021	2,0	3,5	7,0	M2,5	M2,2x0,25	-	-
0550032	3,0	12,8	5,0	M3,5	M3,5x0,35	-	-
0550042*	4,2	9,0	4,5	M5	-	-	-
0550044	4,4	9,0	5,5	M5	-	-	-
0550047	4,6	7,0	5,0	-	M5x0,5	-	-
0550052	5,2	11,0	6,0	M6	M6x0,75	-	-
0550054	5,4	12,0	7,5	M6	M6x0,75	-	-
0550060	6,0	11,0	7,0	M7	-	-	-
0550063	6,3	9,6	4,0		-	-	-
0550066	6,6	7,5	5,0	-	-	-	-
0550070	7,0	11,0	6,5	M8	M8x1	-	-
0550073	7,3	11,0	6,0	M8	M8x0,75	-	-
0550075	7,5	11,0	4,5	-	M8x0,75	-	-
0550080	8,0	12,0	7,5	M9	M9x1	-	-
0550085	8,5	12,0	8,0	M10	-	-	-
0550088	8,8	11,5	8,0	M10	M10x1,25	R1/8	-
0550093	9,3	12,0	9,0	-	M10x0,75	R1/8	-
0550101	10,0	12,0	4,0	M11	M11x1	-	-
0550100	10,0	15,0	9,0	M11	M11x1	-	-
0550106	10,6	14,4	5,5	M12	M12x1,5	-	-
0550107	10,7	15,0	9,0	M12	M12x1,25	-	-
0550113	11,3	14,4	5,5	-	M12x1,25	-	-
0550119	11,9	14,9	8,0	M14	-	R¼	Pg7
0550125	12,6	17,5	9,0	M14	M14x1,5	-	-
0550132	13,2	17,5	8,0	-	M14x1	-	-
0550136	13,8	19,5	8,5	-	M14x0,5	-	-
0550140	14,0	18,7	7,0	M16	M16x1,5	-	-
0550142	14,4	18,7	7,0	-	-	-	-

Caps and plugs

Part no.	A	B	C	DIN1	DIN2	DIN3	DIN4
0550143	14,8	18,5	9,0	M16	M16x1,5	-	-
0550150	15,0	18,7	7,0		M16x1,5		-
0550154	15,4	19,5	8,5	M18	M16x0,75	R 3/8	-
0550158	15,8	18,7	7,0	M18	M16x1		-
0550157	16,0	19,0	8,5	M18	M16x0,75	R 3/8	-
0550165	16,5	18,7	7,0		M18x2		-
0550168	16,8	20,0	9,0	-	M18x1,5	-	-
0550172	17,2	23,0	9,5	-	M18x0,75	-	-
0550178	17,8	24,6	9,0	-	-	-	-
0550185	18,5	24,6	9,0	-	M20x1,5	-	-
0550183	18,9	21,5	9,2	-	M20x2	-	-
0550192	19,2	24,6	3,8				
0550196	19,6	25,5	9,3	M22	M20x0,75	R½	Pg13,5
0550201	20,1	24,6	9,0	M22	M22x1,5		
0550200	20,5	25,5	9,0	M22	M22x2	-	-
0550210	21,0	26,0	13,0	M24	M22x1-1,5	R5/8	-
0550217	21,7	24,5	9,0	M24	-	-	-
0550223	22,7	29,0	9,0	-	M24x2	-	-
0550230	23,0	27,4	19,6	-	M24x1	-	-
0550236	23,6	28,5	9,0	-		-	-
0550240	24,0	27,0	12,5	M27	M25x1	-	-
0550255	25,0	31,1	6,0	-	-	-	-
0550245	25,0	32,0	13,0	M27	M26x1	R¾	-
0550261	25,5	28,5	9,0	-	M27x2	R¾	-
0550260	26,0	31,5	12,0	-	M28x2	-	-
0550265	26,5	28,5	9,0	M30		-	-
0550272	27,1	29,6	15,0	M30	M28x1	-	Pg21
0550275	27,5	34,8	12,0		M30x3	-	
0550288	28,8	34,8	12,0	-	-	-	-
0550286	29,0	34,5	15,0	-	M30x1,5	R7/8	-
0550305	30,5	34,8	12,0	-	-	R1	-
0550312	31,2	38,0	13,0	M33	M32x1,5	R1	-
0550318	31,8	36,0	10,0	-	-	-	-
0550326	32,6	34,8	12,0	-	-	-	-
0550335	33,5	41,0	12,1	-	M35x1,5	-	-
0550340	34,0	40,0	20,0	-	M36x2	-	-
0550346	34,6	40,4	12,0	M39	M36x2	-	-
0550356	35,5	47,0	14,5	M39	-	-	-
0550365	36,5	47,0	18,0	-	M38x1,5	R1 1/8	-
0550376	37,6	40,4	12,0	M39	M39x3		-
0550390	39,0	49,3	18,0	M42	-	-	-



Part no.	A	B	C	DIN1	DIN2	DIN3	DIN4
0550395	39,7	46,0	16,0	-	M42x3	R1¼	-
0550407	40,7	49,3	16,0	-	-	-	-
0550420	42,0	44,5	12,8	-	M45x3	-	-
0550425	42,5	49,3	16,0	M48	M45x3	-	-
0550433	43,3	50,5	14,5	M48	M45x2	-	-
0550455	45,5	51,0	16,0	-	M48x3	-	-
0550458	46,0	51,5	16,5	-	-	R1½	Pg36
0550462	46,2	58,7	18,0	-	M48x2	-	-
0550505	51,3	57,0	15,5	M56	M52x1,5	R1¾	-
0550515	51,5	58,7	18,0	-	-	-	-
0550520	52,3	60,0	16,0	-	M55x3	R1¾	-
0550541	54,1	58,7	18,0	M60	M56x2	R1¾	Pg42
0550553	55,3	59,5	19,5	M60	M58x3	-	-
0550555	55,5	58,6	15,6	M60	M58x3	-	-
0550580	57,2	62,3	19,8	-	M60x2	R2	Pg48
0550596	59,6	73,5	18,0	-	-	-	-
0550615	61,5	74,7	20,0	M68	M64x3	-	-
0550700	70,0	80,0	18,0	-	M72x3	-	-
0550737	73,7	82,3	17,4	-	M75x1,5	R2½	-
0550808	80,8	92,5	17,4	-	M80x4	R2¾	-
0550850	85,0	95,0	18,0	-	-	-	-
0550865	86,5	99,3	17,4	-	-	-	-
0550988	98,8	112,0	17,4	-	-	-	-
0551100	110,0	130,0	17,5	-	-	R4	-
0551117	111,7	123,0	17,4	-	-	-	-



When choosing the plugs please note that the stem diameter (A) should exceed the bore hole by 0.2 to 0.3 mm.

Material: LDPE
Colour: last digits 699 = black
last digits 600 = white

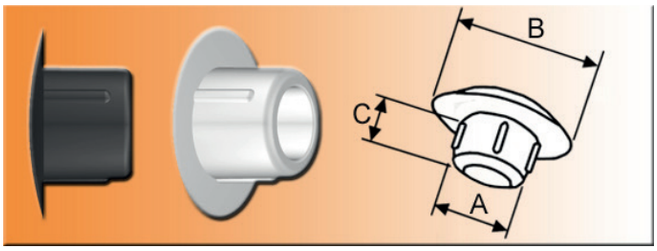
Ø = bore hole diameter
DIN1 = metric ISO thread according to DIN 13 standard metric thread
DIN2 = metric ISO thread according to DIN 13 metric fine thread

Special colours (RAL-colours) on request
(minimum order quantity between 5,000 - 20,000 pcs. [depending on dimensions])

Part no.	A	B	C	Ø	DIN 1	DIN 2
0540449600	4,4	9	5,5	4,2	M5	-
0540449699	4,4	9	5,5	4,2	M5	-
0540477600	4,7	7	5,0	4,5	-	M5x0,5
0540477699	4,7	7	5,0	4,5	-	M5x0,5
0540542600	5,4	12	7,5	5,2	M6	M6x0,75
0540542699	5,4	12	7,5	5,2	M6	M6x0,75
0540545600	5,4	15	7,5	5,2	M6	M6x0,75
0540545699	5,4	15	7,5	5,2	M6	M6x0,75
0540601600	6,0	11	7,0	5,8	M7	-
0540601699	6,0	11	7,0	5,8	M7	-
0540602600	6,0	12	7,0	5,8	M7	-
0540602699	6,0	12	7,0	5,8	M7	-
0540605600	6,0	15	7,0	5,8	M7	-
0540605699	6,0	15	7,0	5,8	M7	-
0540701600	7,2	11	6,5	6,8	M8	M8x1
0540701699	7,2	11	6,5	6,8	M8	M8x1
0540702600	7,2	12	6,5	6,8	M8	M8x1
0540702699	7,2	12	6,5	6,8	M8	M8x1
0540705600	7,2	15	6,5	6,8	M8	M8x1

Part no.	A	B	C	Ø	DIN 1	DIN 2
0540705699	7,2	15	6,5	6,8	M8	M8x1
0540802600	8,0	12	7,0	7,8	M9	M9x1
0540802699	8,0	12	7,0	7,8	M9	M9x1
0540805600	8,0	15	7,0	7,8	M9	M9x1
0540805699	8,0	15	7,0	7,8	M9	M9x1
0540852600	8,5	12	8,0	8,3	M10	-
0540852699	8,5	12	8,0	8,3	M10	-
0540855600	8,5	15	8,0	8,3	M10	-
0540855699	8,5	15	8,0	8,3	M10	-
0541002600	10,0	12	9,0	9,8	M11	M11x1
0541002699	10,0	12	9,0	9,8	M11	M11x1
0541003600	10,0	12	4,0	9,8	M11	M11x1
0541003699	10,0	12	4,0	9,8	M11	M11x1
0541005600	10,0	15	9,0	9,8	M11	M11x1
0541005699	10,0	15	9,0	9,8	M11	M11x1
0541198600	11,9	18	8,0	11,6	M14	-
0541198699	11,9	18	8,0	11,6	M14	-
0541549600	15,4	19	8,5	15,2	M18	M16x0,75
0541549699	15,4	19	8,5	15,2	M18	M16x0,75

Plugs for round pipes | Blind plugs white / black



Material: LDPE
Colours:
without last digits = black ~RAL 9005
last digits 600 = white ~RAL 9010

Minimum order quantity: 500 pcs. per order and dimension

Dimension A including bars! * = version WITHOUT bars
Tolerance +0.3 mm

Production according to RAL and NCS possible from 5,000 pcs.

Part no.	A	B	C
1800001	4,0	6,4	5,3
1800001600	4,0	6,4	5,3
1800002	5,0	6,6	5,5
1800002600	5,0	6,6	5,5
1800003	5,0	8,0	5,0
1800003600	5,0	8,0	5,0
1800004	5,0	10,0	5,5
1800004600	5,0	10,0	5,5
1800005	5,0	13,0	5,5
1800005600	5,0	13,0	5,5
1800006	5,0	15,0	5,5
1800006600	5,0	15,0	5,5
1800007*	5,4	8,0	7,4
1800007600*	5,4	8,0	7,4
1800008*	5,4	10,0	7,4
1800008600*	5,4	10,0	7,4
1800009*	5,4	13,0	7,4
1800009600*	5,4	13,0	7,4
1800010*	5,4	15,0	7,4
1800010600*	5,4	15,0	7,4
1800011	5,5	8,0	5,6
1800011600	5,5	8,0	5,6
1800057	5,5	10,0	5,6
1800057600	5,5	10,0	5,6
1800012	6,0	8,0	5,4
1800012600	6,0	8,0	5,4
1800013	6,0	10,0	5,4
1800013600	6,0	10,0	5,4
1800014	6,0	13,0	5,4
1800014600	6,0	13,0	5,4
1800015	6,0	15,0	5,4

Part no.	A	B	C
1800015600	6,0	15,0	5,4
1800016*	6,6	13,0	7,0
1800016600*	6,6	13,0	7,0
1800017*	6,6	15,0	7,0
1800017600*	6,6	15,0	7,0
1800018	7,0	10,0	6,5
1800018600	7,0	10,0	6,5
1800019	7,0	13,0	6,5
1800019600	7,0	13,0	6,5
1800020	7,0	15,0	6,5
1800020600	7,0	15,0	6,5
1800021	7,0	16,0	6,5
1800021600	7,0	16,0	6,5
1800022	8,0	10,0	6,3
1800022600	8,0	10,0	6,3
1800023	8,0	13,0	6,3
1800023600	8,0	13,0	6,3
1800024	8,0	15,0	6,3
1800024600	8,0	15,0	6,3
1800025	8,0	16,0	6,3
1800025600	8,0	16,0	6,3
1800026	8,5	13,0	6,9
1800026600	8,5	13,0	6,9
1800027	8,5	15,0	6,9
1800027600	8,5	15,0	6,9
1800028	8,5	16,0	6,9
1800028600	8,5	16,0	6,9
1800029	9,0	13,0	6,4
1800029600	9,0	13,0	6,4
1800030	9,0	15,0	6,4
1800030600	9,0	15,0	6,4

Part no.	A	B	C
1800031	9,0	16,0	6,4
1800031600	9,0	16,0	6,4
1800032	10,0	13,0	3,0
1800032600	10,0	13,0	3,0
1800033	10,0	13,0	6,7
1800033600	10,0	13,0	6,7
1800034	10,0	15,0	6,7
1800034600	10,0	15,0	6,7
1800035	10,0	16,0	6,7
1800035600	10,0	16,0	6,7
1800036*	10,5	13,0	4,0
1800036600*	10,5	13,0	4,0
1800037	11,0	13,0	5,0
1800037600	11,0	13,0	5,0
1800038	11,0	15,0	5,0
1800038600	11,0	15,0	5,0
1800039	11,0	16,0	5,0
1800039600	11,0	16,0	5,0
1800040	12,0	15,0	8,4
1800040600	12,0	15,0	8,4
1800041*	12,0	16,0	3,0
1800041600*	12,0	16,0	3,0
1800042	12,0	18,0	8,4
1800042600	12,0	18,0	8,4
1800043	13,0	16,0	8,5
1800043600	13,0	16,0	8,5
1800044	13,0	17,0	8,5
1800044600	13,0	17,0	8,5
1800046	14,0	18,0	7,0
1800046600	14,0	18,0	7,0
1800047*	15,0	17,0	9,0

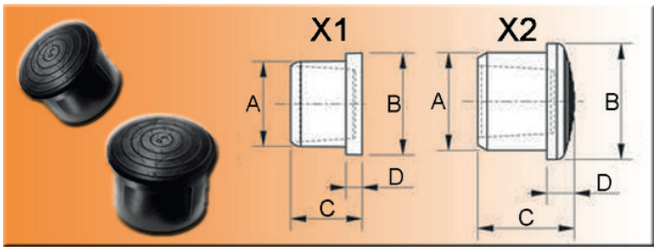
Caps and plugs

Part no.	A	B	C
1800047600*	15,0	17,0	9,0
1800048	15,0	19,0	9,0
1800048600	15,0	19,0	9,0
1800049	15,0	20,0	4,0
1800049600	15,0	20,0	4,0
1800050	15,5	19,0	4,5
1800050600	15,5	19,0	4,5

Part no.	A	B	C
1800051	17,0	24,5	5,8
1800051600	17,0	24,5	5,8
1800052*	20,0	23,0	10,0
1800052600*	20,0	23,0	10,0
1800053*	20,4	28,0	4,8
1800053600*	20,4	28,0	4,8
1800054*	20,8	28,0	4,8

Part no.	A	B	C
1800054600*	20,8	28,0	4,8
1800055	25,0	30,0	4,7
1800055600	25,0	30,0	4,7
1800056*	18,3	28,0	6,0
1800056600*	18,3	28,0	6,0

Plugs for round pipes | Plugs for steel pipes



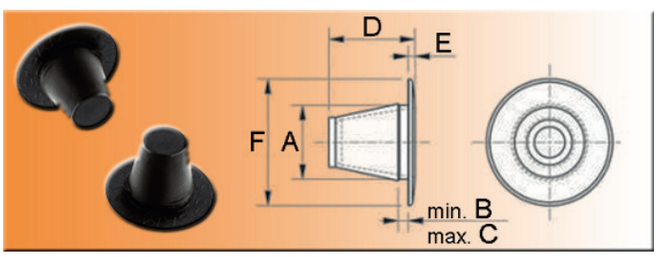
For the protection of pipes, threaded bars, shafts etc.
(Alternative: round ribbed inserts, product group 085, see page 138.

Material: see X
Colour: black

Part no.	A	B	C	D	X
0450800	8	11	8	2,5	LDPE
0451000	10	13	8	2,5	LDPE
0451200	12	15	10	3,0	LDPE
0451300	13	16	10	3,0	LDPE
0451400	14	17	10	3,0	LDPE
0451500	15	18	10	3,0	LDPE
0451600	16	19	12	3,5	LDPE
0451700	17	20	12	3,5	LDPE
0451800	18	22	12	3,5	LDPE
0451900	19	25	20	6,0	PVC
0452000	20	25	20	7,0	PVC

Part no.	A	B	C	D	X
0452100	21	26	20	7,0	PVC
0452200	22	27	20	7,0	PVC
0452300	23	29	20	7,0	PVC
0452400	24	29	20	8,0	PVC
0452500	25	30	20	8,0	PVC
0452600	26	32	20	9,0	PVC
0452700	27	31	20	9,0	PVC
0452800	28	35	22	9,0	PVC
0452900	29	36	22	7,0	PVC
0454000	40	45	25	9,0	PVC

Plugs for round pipes | Sealing plugs



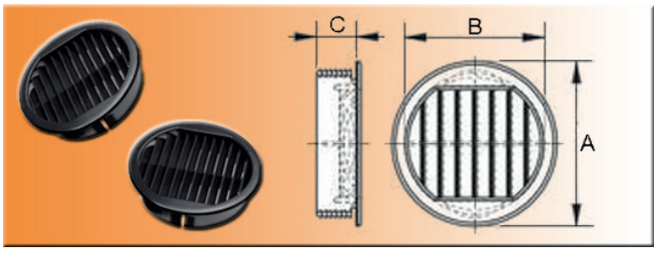
Sealing plugs for sheet thicknesses between 0.5 and 1.2 mm.

Material: LDPE
Colour: black

Part no.	A	B	C	D	E	F
0100080	8	0,5	1,2	12	0,6	15

Part no.	A	B	C	D	E	F
0100100	10	0,5	1,2	12	0,8	17

Plugs for round pipes | Vent plugs with louvres



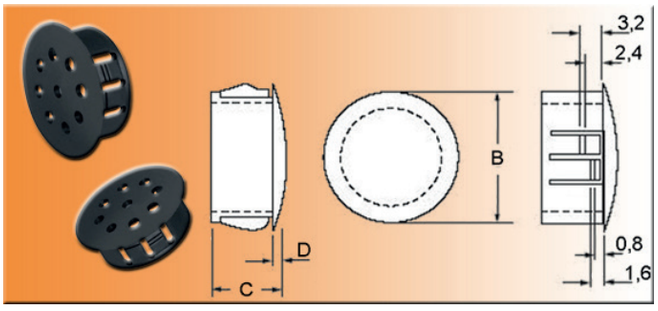
For ventilation of parts. The perfect vent plug for control cabinets, machine housings and cladding panels. Impermeable to splash-water and vermin. Additional cogging for set up in sheet material.

Material: PA 6
Colour: see X

Part no.	A	B	C	X
1231025002	30	25	10,0	grey
1231025500	30	25	10,0	white
1231025599	30	25	10,0	black
1231043002	50	43	12,0	grey
1231043500	50	43	12,0	white

Part no.	A	B	C	X
1231043599	50	43	12,0	black
1231070002	80	70	15,5	grey
1231070500	80	70	15,5	white
1231070599	80	70	15,5	black

Plugs for round pipes | Vent plugs with holes



These plugs offer a particular possibility of ventilation as well as prevention of hot spots. The convex head ends in a thin border and offers a proper cover. A tight fit is guaranteed in wall thicknesses up to 6.4 mm. Quick and easy mounting.

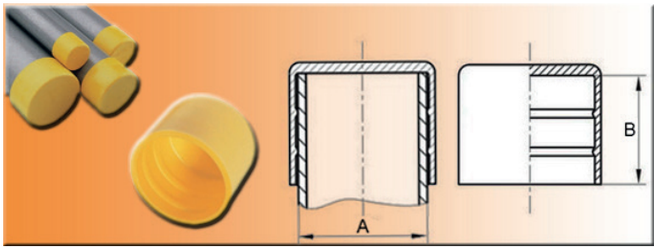
Material: PA 6.6
Colour: black

Ø1 = mounting hole diameter
Ø2 = ventilation hole diameter
S = max. wall thickness
L = number of ventilation holes

Part no.	Ø1	S	L	Ø2	B	C	D
1230012	12,7	3,2	4	2,4	14,7	10,3	1,6
1230015	15,8	3,2	5	2,4	18,7	10,3	1,6
1230019	19,0	3,2	8	2,4	23,0	10,3	1,6
1230022	22,2	3,2	9	2,4	25,8	11,5	1,6
1230025699	25,4	3,2	9	3,2	30,6	11,5	1,6
1230028	27,8-28,6	3,2	9	3,2	30,9	11,5	1,6
1230031	31,8	3,2	10	3,2	34,9	11,5	1,6
1230034	34,9	3,2	11	3,2	38,1	11,5	1,6
1230038	38,1	3,2	13	3,2	42,4	11,5	1,6
1230044	44,5	3,2	13	3,2	48,8	11,5	1,6
1230050	50,8	3,2	19	3,2	54,4	11,9	2,0

Caps and plugs

Caps for round pipes | Pipe protection caps



These caps are easy to assemble and offer a complete protection for pipes without threads.
They protect pipe edges, female and male threads, and minimize rusting and fouling.
The inner bars provide an additional fit and enable the leakage of air pressure.

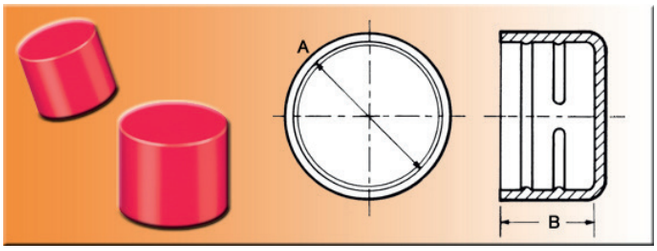
Material: LDPE
Colour: yellow

Part no.	A	B	Ø
2090015	21,3	20	DN15 ½“
2090020	26,9	25	DN20 ¾“
2090025	33,7	30	DN25 1“
2090032	42,4	28	DN32 1¼“
2090040	48,3	30	DN40 1½“
2090050	60,3	30	DN50 2“

Part no.	A	B	Ø
2090065	76,1	35	DN65 2½“
2090080	88,9	36	DN80 3“
2090090	101,6	40	DN90 3½“
2090100	114,3	40	DN100 4“
2090125	139,7	40	DN125 5“
2090150	168,3	40	DN150 6“

Part no.	A	B	Ø
2090200	219,0	40	DN200 8“
2090250	273,0	45	DN250 10“
2090300	323,9	50	DN300 12“
2090350	355,6	57	DN350 14“

Caps for round pipes | Ribbed caps



These caps are easy to assemble and offer a complete protection for pipes. They protect pipe edges, female and male threads, and minimize rusting and fouling. The inner bars provide an additional fit and enable the leakage of air pressure.

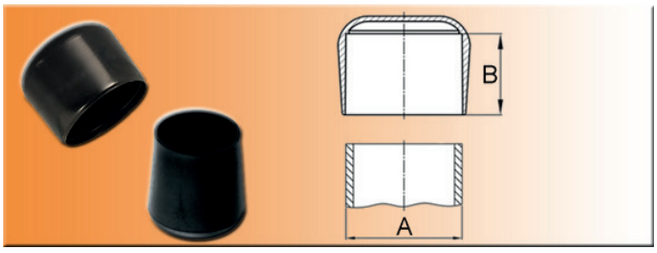
Material: LDPE
Colour: red (part no. 2130110 = yellow)

Part no.	A	B
2130010	10,2	16,0
2130012	12,0	16,0
2130015	15,0	19,5
2130016	16,0	20,0
2130018	18,0	20,0

Part no.	A	B
2130020	20,0	20,0
2130022	22,0	20,0
2130025	25,0	20,0
2130028	28,0	26,5
2130030	30,0	26,5

Part no.	A	B
2130035	35,0	26,5
2130038	38,0	27,0
2130054	54,0	27,8
2130110	110,0	34,6

Caps for round pipes | Pipe caps



For the protection of pipes, threaded bars, shafts etc.

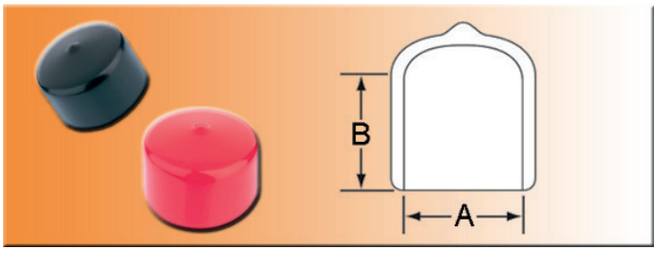
Material: see X
Colour: black

Further types on written request.
Alternative: Round caps PVC, product group 161, see page 35.

Part no.	A	B	X
0090030	2,9	7,9	PE
0090033	no longer available!		
0090035	3,5	7,2	PE
0090040	3,9	8,0	PE
0090050	5,0	6,7	PE
0090060	5,9	9,5	PE
0090061	6,0	11,0	PVC
0090065	6,4	8,0	PE
0090070	6,9	8,0	PE
0090080	8,0	12,0	PE
0090100	10,0	12,5	PE
0090110	10,9	13,2	PE
0090120	12,0-13,0	15,0	PE
0090141	13,7	13,2	PE
0090150	14,8	13,4	PE

Part no.	A	B	X
0090160	16,0	19,5	PE
0090180	18,0	21,0	PE
0090190	19,0	20,5	PE
0090200	20,0	20,5	PE
0090210	21,0	22,5	PVC
0090220	22,0	23,5	PE
0090240	23,7	21,1	PE
0090250	25,0	23,5	PE
0090260	26,0	25,3	PE
0090270	27,0	25,5	PVC
0090280	28,0 - 29,0	24,5	PVC
0090300	30,0 - 31,0	26,0	PVC
0090320	32,0 - 33,0	26,0	PVC
0090340	34,0	25,0	PVC
0090350	35,0 - 36,0	25,0	PVC

Part no.	A	B	X
0090380	38,0 - 39,0	25,0	PVC
0090400	40,0 - 41,0	23,5	PVC
0090420	42,0	24,5	PVC
0090430	43,0 - 44,0	24,0	PVC
0090450	45,0 - 46,0	25,5	PVC
0090480	48,0	24,0	PVC
0090490	49,0 - 51,0	24,0	PVC
0090540	54,0 - 55,0	28,0	PVC
0090590	59,0 - 60,0	27,5	PVC
0090630	63,0 - 64,0	27,5	PVC
0090690	69,0- 70,0	27,0	PVC
0090750	75,0 - 76,0	27,5	PVC
0090900	90,0 - 91,0	31,0	PVC



Material: PVC approx. 68° Shore A (other hardness grades and special versions on request)
Colour: black ~RAL 9005
Nearly all dimensions also possible in:
~RAL 1021 rape yellow
~RAL 3000 flame red
~RAL 5017 traffic blue
~RAL 6002 leaf green
~RAL 7001 silver grey
~RAL 9010 pure white
~RAL 1026 luminous yellow

Tolerance:
length ±2.0 mm / wall thickness ±0.25 mm

B = possible lengths / min. - max.

C = minimum order quantity
(The indicated minimum quantities are binding. If available from stock, also smaller quantities are possible.)

XXX (B) = length in mm
Example: Ø 10.0 length 10.0 = 1610100-010

Part no.	A	B	C
1610015-XXX	1,5	5-30	5.000
1610016-XXX	1,6	5-20	5.000
1610018-XXX	1,8	5-30	5.000
1610020-XXX	2,0	5-50	5.000
1610022-XXX	2,2	5-25	5.000
1610025-XXX	2,5	5-30	5.000
1610028-XXX	2,8	5-30	5.000
1610030-XXX	3,0	5-90	5.000
1610035-XXX	3,5	5-90	5.000
1610038-XXX	3,8	5-30	5.000
1610040-XXX	4,0	5-60	3.000
1610045-XXX	4,5	5-165	3.000
1610047-XXX	4,7	5-60	3.000
1610050-XXX	5,0	5-200	3.000
1610055-XXX	5,5	5-120	3.000
1610060-XXX	6,0	5-130	3.000
1610065-XXX	6,5	5-200	1.000
1610070-XXX	7,0	5-120	1.000
1610075-XXX	7,5	5-160	1.000
1610080-XXX	8,0	5-330	1.000
1610085-XXX	8,5	5-120	1.000
1610090-XXX	9,0	10-120	1.000
1610095-XXX	9,5	10-350	1.000

Part no.	A	B	C
1610100-XXX	10,0	10-350	1.000
1610120-XXX	12,0	5-350	1.000
1610125-XXX	12,5	10-220	1.000
1610130-XXX	13,0	5-200	1.000
1610135-XXX	13,5	10-220	1.000
1610140-XXX	14,0	10-350	1.000
1610145-XXX	14,5	10-130	1.000
1610150-XXX	15,0	10-400	1.000
1610155-XXX	15,5	10-90	500
1610160-XXX	16,0	10-350	500
1610170-XXX	17,0	10-180	500
1610180-XXX	18,0	5-350	500
1610190-XXX	19,0	5-125	500
1610200-XXX	20,0	10-350	500
1610210-XXX	21,0	10-120	300
1610220-XXX	22,0	10-400	300
1610230-XXX	23,0	5-410	300
1610240-XXX	24,0	5-200	300
1610250-XXX	25,0	5-380	300
1610260-XXX	26,0	10-400	300
1610270-XXX	27,0	10-400	300
1610280-XXX	28,0	10-270	300
1610290-XXX	29,0	5-400	300

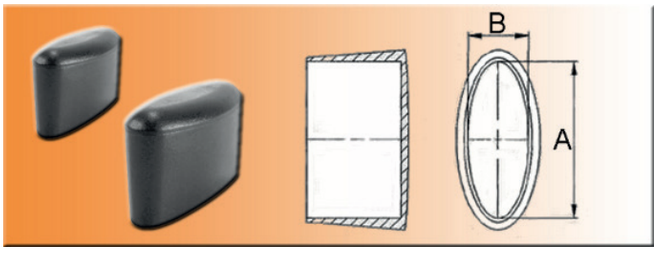
Part no.	A	B	C
1610300-XXX	30,0	10-400	300
1610310-XXX	31,0	10-130	300
1610320-XXX	32,0	10-420	300
1610330-XXX	33,0	15-400	300
1610340-XXX	34,0	10-230	300
1610350-XXX	35,0	10-400	300
1610360-XXX	36,0	10-350	200
1610370-XXX	37,0	15-220	200
1610380-XXX	38,0	10-390	200
1610400-XXX	40,0	10-350	200
1610410-XXX	41,0	10-350	200
1610420-XXX	42,0	10-400	200
1610430-XXX	43,0	10-220	200
1610440-XXX	44,0	10-130	200
1610450-XXX	45,0	10-210	200
1610455-XXX	45,5	20-100	200
1610460-XXX	46,0	10-200	200
1610470-XXX	47,0	25-430	200
1610480-XXX	48,0	15-200	200
1610490-XXX	49,0	15-400	200
1610500-XXX	50,0	10-120	200
1610510-XXX	51,0	20-400	100
1610520-XXX	52,0	15-120	100

Part no.	A	B	C
1610530-XXX	53,0	15-400	100
1610540-XXX	54,0	10-350	100
1610550-XXX	55,0	10-120	100
1610555-XXX	55,5	15-120	100
1610570-XXX	57,0	15-400	100
1610580-XXX	58,0	20-400	100
1610590-XXX	59,0	20-120	100
1610600-XXX	60,0	10-120	100
1610620-XXX	62,0	10-200	100
1610630-XXX	63,0	15-80	100
1610640-XXX	64,0	15-120	100
1610650-XXX	65,0	10-170	100
1610660-XXX	66,0	10-120	100
1610680-XXX	68,0	10-130	100
1610700-XXX	70,0	10-160	100
1610720-XXX	72,0	10-125	75
1610740-XXX	74,0	20-200	75

Part no.	A	B	C
1610750-XXX	75,0	10-200	75
1610760-XXX	76,0	10-120	75
1610780-XXX	78,0	10-120	75
1610800-XXX	80,0	10-330	75
1610840-XXX	84,0	20-140	75
1610850-XXX	85,0	10-180	75
1610880-XXX	88,0	20-80	75
1610900-XXX	90,0	15-360	75
1610930-XXX	93,0	10-120	75
1611000-XXX	100,0	15-200	75
1611030-XXX	103,0	15-120	75
1611040-XXX	104,0	15-120	75
1611060-XXX	106,0	15-80	75
1611080-XXX	108,0	20-155	75
1611100-XXX	110,0	25-120	75
1611140-XXX	114,0	15-120	75
1611200-XXX	120,0	10-170	75

Part no.	A	B	C
1611230-XXX	123,0	20-135	50
1611250-XXX	125,0	25-110	50
1611300-XXX	130,0	10-265	50
1611330-XXX	133,0	10-120	50
1611340-XXX	134,0	20-120	50
1611400-XXX	140,0	25-135	50
1611420-XXX	142,0	20-120	50
1611500-XXX	150,0	20-150	50
1611600-XXX	160,0	10-120	50
1611680-XXX	168,0	20-135	50
1611700-XXX	170,0	30-120	50
1611800-XXX	180,0	10-80	50
1611940-XXX	194,0	10-135	50
1612000-XXX	200,0	25-140	50
1612230-XXX	223,0	20-140	50
1612440-XXX	244,0	10-170	50
1612480-XXX	248,0	10-80	50

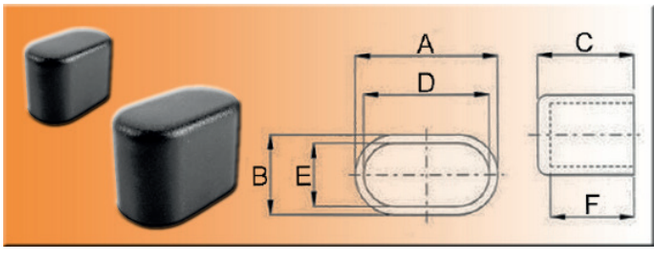
Caps for round pipes | Caps for elliptical tubes



Material: PE
Colour: black

Part no.	A	B
0144116	41	16

Caps for round pipes | Caps for oval tubes

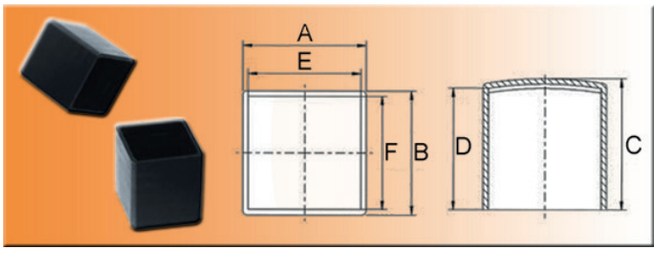


Material: PE
Colour: black

Ø = pipe dimensions

Part no.	AxB	C	DxE	F	Ø
0143015	32,0x19,0	23	28,3x15,0	20,5	30x15

Part no.	AxB	C	DxE	F	Ø
0143820	41,0x23,3	24	37,5x19,0	19,0	38x20



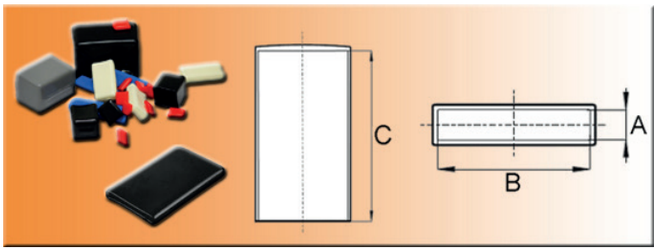
Material: PE
Colour: black

A = pipe dimensions
Alternative: Rectangular caps PVC, product group 162,
see page 38.

Part no.	A	AxB	C	D	ExF
1940200	20x20	24,2x24,2	26,5	24,0	20,7x20,7
1940250	25x25	29,8x29,8	26,9	23,6	25,1x25,1
1943015	30x15	32,1x17,9	24,4	22,3	29,3x14,6
1940300	30x30	33,5x33,5	32,4	27,9	29,6x29,6
1944020	40x20	42,4x23,3	10,2	7,4	39,7x20,1

Part no.	A	AxB	C	D	ExF
1944025	no longer available!				
1944030	40x30	45,1x35,1	53,6	49,4	40,7x30,6
1940400	40x40	43,5x43,5	31,7	28,0	39,7x39,7
1940450	no longer available!				
1940500	50x50	53,3x53,5	31,7	27,5	49,9x49,7

Caps for square pipes | Rectangular caps



Material: PVC approx. 68° Shore A (other hardness grades and special versions on request)
Colour: black ~RAL 9005
Nearly all dimensions also possible in:
~RAL 1021 rape yellow
~RAL 3000 flame red
~RAL 5017 traffic blue
~RAL 6002 leaf green
~RAL 7001 silver grey
~RAL 9010 pure white
~RAL 1026 luminous yellow

Tolerance:
length ±2.0 mm / wall thickness ±0.25 mm

C = possible lengths / min. - max.

D = minimum order quantity
(The indicated minimum quantities are binding. If available from stock, also smaller quantities are possible.)

XXX (C) = length in mm

Example: 2 x 20 length 10.0 = 1620220-010

Part no.	AxB	C	D
1620110-XXX	1,5x10	10-30	3.000
1620115-XXX	1,5x15	10-40	3.000
1620207-XXX	2x7	10-40	3.000
1620208-XXX	2x8	10-30	3.000
1620211-XXX	2x11	10-50	3.000
1620213-XXX	2x13,5	10-35	3.000
1620214-XXX	2x14	10-50	3.000
1620216-XXX	2x16	10-60	3.000
1620218-XXX	2x18	5-40	3.000
1620219-XXX	2x19	20-60	3.000
1620220-XXX	2x20	15-120	2.000
1620222-XXX	2x22,5	15-130	2.000
1620223-XXX	2x23,5	20-25	2.000
1620224-XXX	2x24	10-30	2.000
1620225-XXX	no longer available!		
1620228-XXX	2x28,5	10-55	2.000
1620230-XXX	2x30	10-120	2.000
1620234-XXX	2x34	20	2.000
1620238-XXX	2x38	10-80	2.000
1620239-XXX	2x39	20-40	2.000
1620246-XXX	2x46,5	20-60	1.000
1620248-XXX	2x48	10-50	1.000
1620257-XXX	2x57	20-50	1.000

Part no.	AxB	C	D
1620276-XXX	2x76	10-60	1.000
16202,513-XXX	2,5x13	10-80	3.000
16202,519-XXX	no longer available!		
1620310-XXX	3x10	10-75	3.000
1620312-XXX	3x12	10-60	3.000
1620315-XXX	3x15	10-85	2.000
1620318-XXX	3x18	10-100	2.000
1620320-XXX	3x20	10-120	2.000
1620325-XXX	3x25	10-130	2.000
1620330-XXX	3x30	20-130	1.000
1620338-XXX	3x38	10-120	1.000
1620340-XXX	3x40	10-100	1.000
1620344-XXX	3x44	10-35	1.000
1620408-XXX	4x8	5-35	3.000
1620412-XXX	4x12	10-70	2.000
1620416-XXX	4x16	10-110	2.000
1620418-XXX	4x18	10-120	2.000
1620420-XXX	4x20	10-125	2.000
1620423-XXX	4x23	20-65	1.000
1620425-XXX	4x25	10-150	1.000
1620428-XXX	4x28	10-45	1.000
1620430-XXX	4x30	10-140	1.000
1620435-XXX	4x35	20-60	1.000

Part no.	AxB	C	D
1620440-XXX	4x40	25-120	1.000
1620450-XXX	4x50	15-90	1.000
1620513-XXX	5x13	15-85	2.000
1620520-XXX	5x20	20-120	1.000
1620522-XXX	5x22	15-120	1.000
1620524-XXX	5x24	10-140	1.000
1620525-XXX	5x25	10-145	1.000
1620529-XXX	5x29	10-125	1.000
1620530-XXX	5x30	10-125	1.000
1620535-XXX	5x35	25-120	1.000
1620548-XXX	no longer available!		
1620550-XXX	5x50	10-250	1.000
1620560-XXX	5x60	5-60	1.000
1620612-XXX	6x12	10-60	2.000
1620615-XXX	6x15	10-85	1.000
1620620-XXX	6x20	10-180	1.000
1620630-XXX	6x30	5-140	1.000
1620635-XXX	6x35	10-130	1.000
16207,619-XXX	no longer available!		
1620810-XXX	8x10	10-120	2.000
1620814-XXX	8x14	20-135	1.000
1620815-XXX	8x15	15-140	1.000
1620818-XXX	8x18	15-120	1.000

Caps and plugs

Part no.	AxB	C	D
1620819-XXX	no longer available!		
1620820-XXX	8x20	10-180	1.000
1620823-XXX	8x23	25-110	1.000
1620825-XXX	8x25	5-195	1.000
1620830-XXX	8x30	10-200	1.000
1620835-XXX	8x35	5-140	1.000
1620840-XXX	8x40	5-150	1.000
1620844-XXX	8x44	15-45	500
1620845-XXX	8x45	25-130	500
1621010-XXX	10x10	10-95	1.000
1621020-XXX	10x20	10-100	1.000
1621025-XXX	10x25	10-120	1.000
1621030-XXX	10x30	10-100	1.000
1621035-XXX	10x35	10-120	500
1621040-XXX	10x40	10-130	500
1621050-XXX	10x50	10-80	500
1621060-XXX	10x60	20-120	200
1621212-XXX	12x12	10-115	1.000
1621230-XXX	12x30	15-130	500
1621250-XXX	12x50	15-120	200
1621255-XXX	12x55	20-120	200
1621425-XXX	14x25	15-45	500
16214,523-XXX	no longer available!		
1621515-XXX	15x15	15-75	1.000

Part no.	AxB	C	D
1621525-XXX	15x25	10-130	500
1621530-XXX	15x30	10-120	500
1621560-XXX	15x60	15-60	200
1621663-XXX	16x63	40	100
1621719-XXX	17x19	15-20	1.000
1621818-XXX	18x18	10-90	1.000
1621880-XXX	18x80	20-40	100
1622020-XXX	20x20	10-215	500
1622030-XXX	20x30	10-210	200
1622037-XXX	20x37	30-40	200
1622040-XXX	20x40	10-120	200
1622445-XXX	24x45	20-60	100
1622525-XXX	25x25	10-70	200
1622530-XXX	25x30	20-60	200
1622535-XXX	25x35	30-90	200
1622550-XXX	25x50	10-60	100
16225126-XXX	25x126	45-80	25
1623030-XXX	30x30	10-120	200
1623040-XXX	30x40	10-60	100
1623045-XXX	30x45	20-50	100
1623050-XXX	30x50	10-80	100
1623060-XXX	30x60	10-50	100
1623070-XXX	30x70	20-80	50
1623535-XXX	35x35	10-150	100

Part no.	AxB	C	D
1623555-XXX	35x55	20-80	50
1623737-XXX	37x37	25-45	100
1624040-XXX	40x40	10-300	100
1624050-XXX	40x50	20-80	50
1624060-XXX	40x60	10-80	50
1624070-XXX	40x70	20-80	50
1624080-XXX	40x80	15-55	25
16240120-XXX	40x120	20	25
1624545-XXX	45x45	20-50	50
1624578-XXX	45x78	25-60	25
1625050-XXX	50x50	10-80	50
1625090-XXX	50x90	10-60	25
16250100-XXX	50x100	20-60	25
1625555-XXX	55x55	10-60	25
1625997,5-XXX	no longer available!		
1626060-XXX	60x60	10-60	25
1626080-XXX	60x80	15-80	25
16260100-XXX	60x100	10-60	25
1626565-XXX	65x65	20-60	25
1626868-XXX	68x68	10-60	25
1628080-XXX	80x80	20-60	25
16280140-XXX	80x140	30-45	25
16281121-XXX	81x121	45	25
162100100-XXX	100x100	10-80	25



Hydraulic | Pneumatic
High temperature masking products

Hydraulic | Pneumatic
High temperature masking products



Protection caps Page 42



Protection plugs Page 44

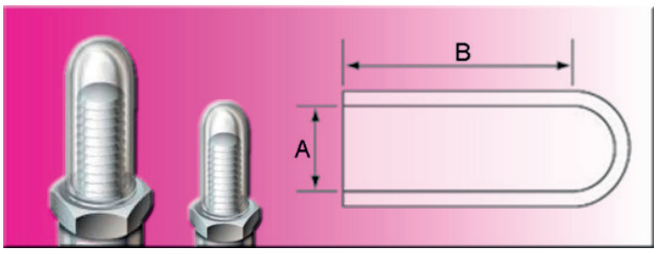


O-rings and O-ring sets Page 51



Hose clamps Page 53

Protection caps | Protection caps silicone



These caps are applicable at continuous operation up to +200°C and short-time up to +300°C.
General wall thickness approx. 1.4 mm, tolerances +/- 0.25 mm

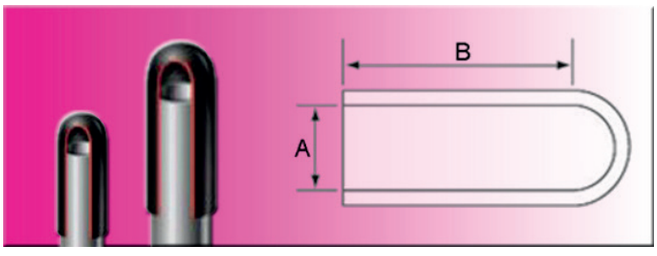
Material: silicone
Colour: natural

Part no.	A	B
1670001	2,4	19,1
1670002	2,8	19,1
1670003	3,2	25,4
1670004	3,5	25,4
1670005	4,0	25,4
1671006	4,4	12,7
1670006	4,4	25,4
1670007	4,8	25,4
1670008	5,9	25,4

Part no.	A	B
1670026	5,9	38,1
1670009	6,4	25,4
1670010	7,1	25,4
1670011	7,9	25,4
1670027	7,9	38,1
1670012	9,5	25,4
1670013	9,5	38,1
1670015	11,1	25,4
1670016	11,9	25,4

Part no.	A	B
1670017	12,7	38,1
1670018	13,6	38,1
1670019	14,3	38,1
1670020	15,9	38,1
1670021	19,1	38,1
1670022	20,6	38,1
1670023	22,2	38,1
1670024	25,4	38,1
1670025	28,6	38,1

Protection caps | Protection caps EPDM



These caps are applicable at continuous operation up to +150°C and short-time up to +200°C.
Tolerances +/- 0.25 mm

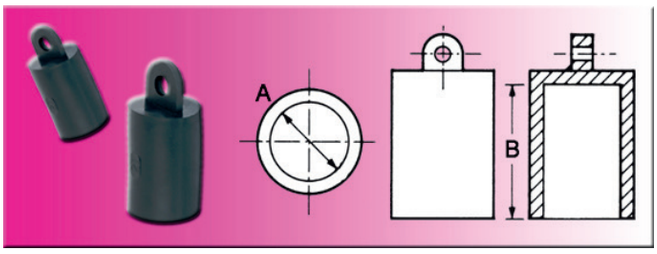
Material: EPDM
Colour: black

Part no.	A	B
1670001EPDM	2,4	19,1
1670002EPDM	2,8	19,1
1670003EPDM	3,2	25,24
1670004EPDM	3,5	25,4
1670005EPDM	4,0	25,4
1671006EPDM	4,4	12,7
1670006EPDM	4,4	25,4
1670007EPDM	4,8	25,4
1670008EPDM	5,9	25,4

Part no.	A	B
1670026EPDM	5,9	38,1
1670009EPDM	6,4	25,4
1670010EPDM	7,1	25,4
1670011EPDM	7,9	25,4
1670027EPDM	7,9	38,1
1670012EPDM	9,5	25,4
1670013EPDM	9,5	38,1
1670015EPDM	11,1	25,4
1670016EPDM	11,9	25,4

Part no.	A	B
1670017EPDM	12,7	38,1
1670018EPDM	13,6	38,1
1670019EPDM	14,3	38,1
1670020EPDM	15,9	38,1
1670021EPDM	19,1	38,1
1670022EPDM	20,6	38,1
1670023EPDM	22,2	38,1
1670024EPDM	25,4	38,1
1670025EPDM	28,6	38,1

Protection caps | Eye caps TPG



These caps are used where resistance against acids is required or where extreme operation temperatures occur; from -40°C up to +135°C at continuous operation and short-time up to +150°C.

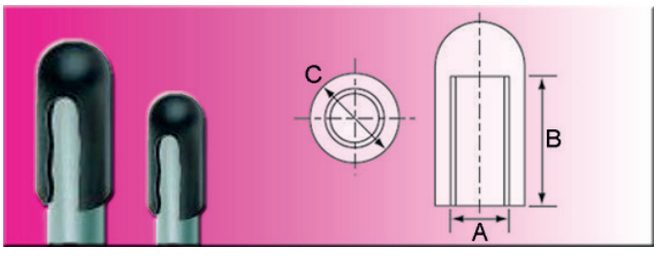
Material: thermoplastic rubber (TPG)
Colour: black

Part no.	A	B
1630005TPG	5	23,5
1630006TPG	6	25,0
1630007TPG	7	24,0
1630009TPG	9	25,0
1630010TPG	10	29,5
1630011TPG	11	29,0
1630012TPG	12	29,0
1630013TPG	13	29,0
1630014TPG	14	29,5

Part no.	A	B
1630015TPG	15	29,5
1630016TPG	16	28,0
1630017TPG	17	29,5
1630018TPG	18	28,5
1630019TPG	19	29,5
1630020TPG	20	28,5
1630021TPG	21	34,5
1630022TPG	22	34,0
1630023TPG	23	34,5

Part no.	A	B
1630024TPG	24	34,0
1630025TPG	25	34,5
1630026TPG	26	34,5
1630027TPG	27	33,5
1630028TPG	28	33,5
1630029TPG	29	35,0
1630030TPG	30	34,5

Protection caps | End caps TPG



These multifunctional end caps offer protection for diverse fields of application.
They are used where resistance against acids is required or where extreme operation temperatures occur; from -40°C up to +135°C at continuous operation and short-time up to +150°C.

Material: thermoplastic rubber (TPG)
Colour: black
* = version with flat head

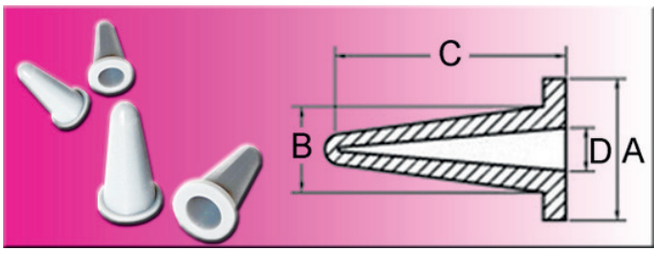
Further types on written request.

Part no.	A	B	C
1660000	2,4	6,6	5,6
1660001	2,4	12,2	6,3
1660002	3,2	5,3	5,5
1660003	3,2	14,2	7,0
1660004	3,2	9,2	5,5
1660005	4,0	13,4	6,3

Part no.	A	B	C
1660007	4,8	14,2	7,0
1660008	5,0	20,3	7,9
1660009	6,0	11,0	8,5
1660010	6,3	15,5	8,7
1660011*	6,4	10,4	7,9
1660012*	6,4	13,2	9,5

Part no.	A	B	C
1660013	7,0	18,0	9,8
1660014	7,6	17,0	11,0
1660015*	7,9	13,2	9,5
1660017	8,0	24,2	10,5
1660018*	9,5	13,3	11,1

Protection plugs | Tapered caps/plugs silicone



Heat-resistant tapered caps/plugs
Multifunctional due to dual use:
Used as a cap, it masks e.g. exposed threaded pins
Used as a plug, it covers open bore holes

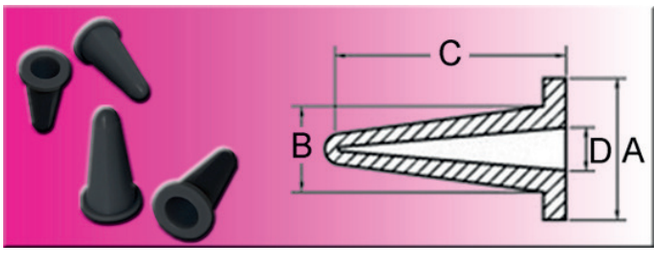
Material: silicone
Colour: see X

Tolerances: A +-0.3 mm / B +-0.2 mm / C +-0.5 mm / D +-0.2 mm

Part no.	A	B	C	D	X
4120001	12,5	6,5	23,0	3,3	natural
4120002	16,0	8,5	25,0	4,5	black
4120003	16,5	10,0	28,0	5,0	yellow

Part no.	A	B	C	D	X
4120004	19,0	14,2	36,0	8,0	blue
4120005	25,0	17,5	38,0	11,5	red
4120006	25,4	20,8	49,0	14,8	grey

Protection plugs | Tapered caps/plugs EPDM



Heat-resistant tapered caps/plugs
Multifunctional due to dual use:
Used as a cap, it masks e.g. exposed threaded pins
Used as a plug, it covers open bore holes

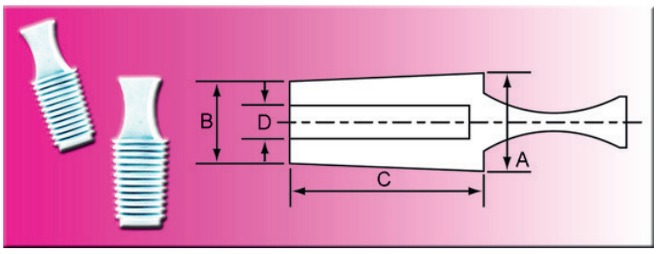
Material: EPDM
Colour: black

Tolerances: A +-0.3 mm / B +-0.2 mm / C +-0.5 mm / D +-0.2 mm

Part no.	A	B	C	D
4120001EPDM	12,5	6,5	23,0	3,3
4120002EPDM	16,0	8,5	25,0	4,5
4120003EPDM	16,5	10,0	28,0	5,0

Part no.	A	B	C	D
4120004EPDM	19,0	14,2	36,0	8,0
4120005EPDM	25,0	17,5	38,0	11,5
4120006EPDM	25,4	20,8	49,0	14,8

Protection plugs | Plugs without flange silicone



Ribbed plug without flange. Due to its conical design every plug can be used for several thread sizes.

Material: silicone
Colour: see X

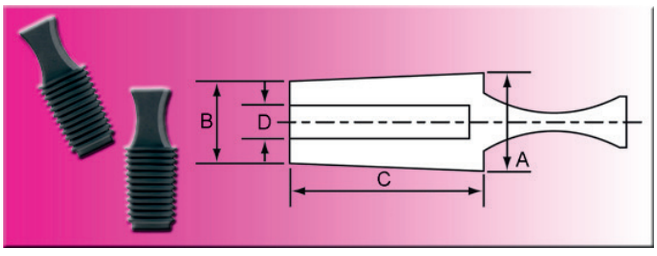
Silicone is long-term heat resistant at dry heat up to approx. +200°C, temporarily up to approx. +300°C. Flexible at cold temperatures down to approx. -60°C. Recommended for powder coating, paintwork, plating and anodising. Reusable!

Tolerances: A +-0.6 mm / B +-0.25 mm / C +-0.25 mm

Part no.	A	B	C	D	X
1911001	5,8	4,0	25,4	-	natur
1911002	8,0	5,6	25,4	-	black
1911003	9,7	8,0	25,4	-	yellow
1911004	11,9	9,7	25,4	-	natural
1911005	14,6	12,2	25,4	-	light blue
1911006	16,0	14,2	25,4	-	purple red

Part no.	A	B	C	D	X
1911007	18,0	16,0	25,4	-	rust-red
1911008	20,0	18,0	25,4	-	lime-green
1911009	22,0	20,0	25,4	-	grey
1911010	24,0	22,0	25,4	-	natural
1911011	26,0	24,0	25,4	-	black
1911012	28,0	26,0	25,4	-	darkgreen

Protection plugs | Plugs without flange EPDM



Ribbed plug without flange. Due to its conical design every plug can be used for several thread sizes.

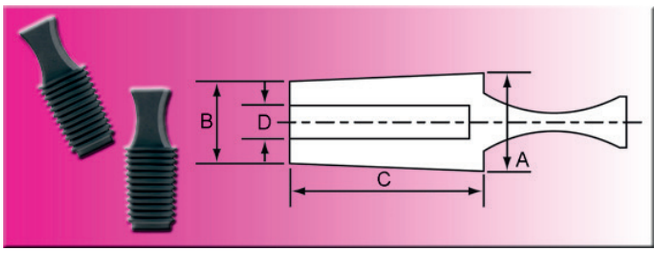
Material: EPDM
Colour: black

Tolerances: A +-0.6 mm / B +-0.25 mm / C +-0.25 mm

Part no.	A	B	C	D
1911001EPDM	5,8	4,0	25,4	-
1911002EPDM	8,0	5,6	25,4	-
1911003EPDM	9,7	8,0	25,4	-
1911004EPDM	11,9	9,7	25,4	-
1911005EPDM	14,6	12,2	25,4	-
1911006EPDM	16,0	14,2	25,4	-

Part no.	A	B	C	D
1911007EPDM	18,0	16,0	25,4	-
1911008EPDM	20,0	18,0	25,4	-
1911009EPDM	22,0	20,0	25,4	-
1911010EPDM	24,0	22,0	25,4	-
1911011EPDM	26,0	24,0	25,4	-
1911012EPDM	28,0	26,0	25,4	-

Protection plugs | Plugs without flange TPG



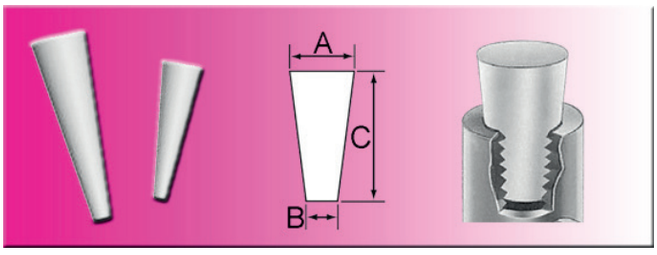
Ribbed plug without flange. Due to its conical design every plug can be used for several thread sizes.

Material: thermoplastic rubber (TPG)
Colour: black

Part no.	A	B	C	D
1910001	3,2	1,5	15	---
1910003	6,0	4,0	25	---
1910004	8,0	6,0	25	2,5
1910005	10,0	8,0	25	4,0

Part no.	A	B	C	D
1910006	12,0	10,0	25	6,0
1910007	14,0	12,0	25	8,0
1910008	16,0	14,0	25	10,0
1910009	18,0	16,0	25	12,0

Protection plugs | Tapered protection plugs silicone



Silicone is long-term heat resistant at dry heat up to approx. +200°C, temporarily up to approx. +300°C. Flexible at cold temperatures down to approx. -60°C. Recommended for powder coating, paintwork, plating and anodising. Reusable!

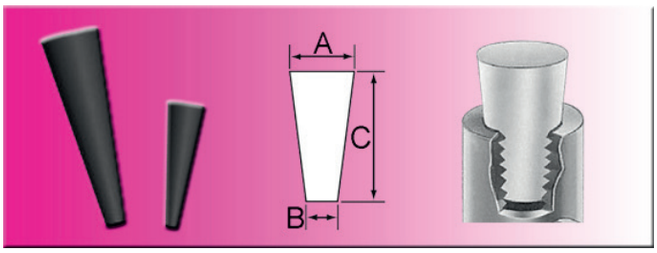
Material: Silicone
Colour: natural

Part no.	A	B	C
1680001	3,2	0,8	15,9
1680002	3,2	1,6	15,9
1680003	4,8	1,6	15,9
1680023	4,8	1,6	19,1
1680004	6,4	3,2	19,1
1680005	8,7	4,8	15,9
1680006	11,1	6,3	25,4

Part no.	A	B	C
1680008	15,1	10,3	25,4
1680009	16,7	12,7	25,4
1680010	19,1	14,3	25,4
1680011	19,8	15,9	25,4
1680012	23,8	18,3	25,4
1680013	25,4	19,1	25,4
1680014	27,0	23,0	25,4

Part no.	A	B	C
1680016	31,8	26,2	25,4
1680017	34,1	27,0	25,4
1680018	38,1	30,2	25,4
1680019	42,9	35,7	25,4
1680020	46,1	38,1	25,4
1680021	52,8	44,5	25,4
1680022	62,7	50,8	25,4

Protection plugs | Tapered protection plugs EPDM



Recommended for applications up to +150°C at continuous operation, short-time up to +300°C.

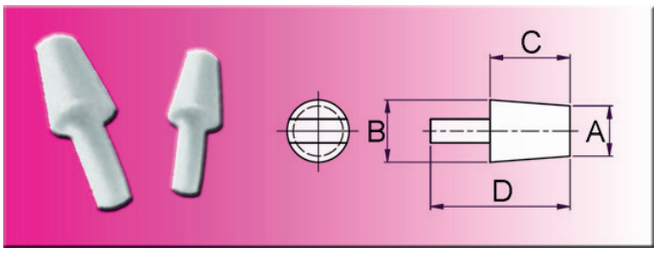
Material: EPDM
Colour: black

Part no.	A	B	C
1680001EPDM	3,2	0,8	15,9
1680002EPDM	3,2	1,6	15,9
1680003EPDM	4,8	1,6	15,9
1680023EPDM	4,8	1,6	19,1
1680004EPDM	6,4	3,2	19,1
1680005EPDM	8,7	4,8	15,9
1680006EPDM	11,1	6,3	25,4

Part no.	A	B	C
1680008EPDM	15,1	10,3	25,4
1680009EPDM	16,7	12,7	25,4
1680010EPDM	19,1	14,3	25,4
1680011EPDM	19,8	15,9	25,4
1680012EPDM	23,8	18,3	25,4
1680013EPDM	25,4	19,1	25,4
1680014EPDM	27,0	23,0	25,4

Part no.	A	B	C
1680016EPDM	31,8	26,2	25,4
1680017EPDM	34,1	27,0	25,4
1680018EPDM	38,1	30,2	25,4
1680019EPDM	42,9	35,7	25,4
1680020EPDM	46,1	38,1	25,4
1680021EPDM	52,8	44,5	25,4
1680022EPDM	62,7	50,8	25,4

Protection plugs | Grip plugs silicone



Heat-resistant tapered grip plugs

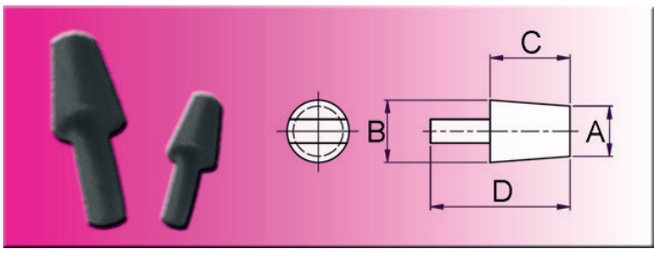
Material: silicone
Colour: see X

Tolerance: A +-0.2 mm; B +-0.25 mm; C +-0.4 mm; D +-0.8 mm

Part no.	A	B	C	D	X
4110001	1,6	3,2	15,9	25,4	lime green
4110002	1,6	4,8	15,9	28,7	pink
4110003	3,2	6,6	19,1	31,8	black
4110004	4,8	8,7	15,9	28,7	red
4110005	6,4	9,5	19,1	31,8	yellow

Part no.	A	B	C	D	X
4110006	6,4	9,5	12,7	25,4	white
4110007	11,1	15,9	22,2	41,3	lime green
4110008	15,9	19,8	25,4	44,5	red
4110009	18,3	23,8	25,4	44,5	yellow
4110010	19,1	25,4	25,4	44,5	natural

Protection plugs | Grip plugs EPDM



Heat-resistant tapered grip plugs

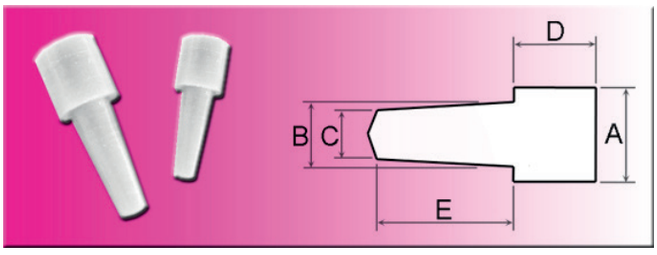
Material: EPDM
Colour: black

Tolerance: A +-0.2 mm; B +-0.25 mm; C +-0.4 mm; D +-0.8 mm

Part no.	A	B	C	D
4110001EPDM	1,6	3,2	15,9	25,4
4110002EPDM	1,6	4,8	15,9	28,7
4110003EPDM	no longer available!			
4110004EPDM	4,8	8,7	15,9	28,7
4110005EPDM	6,4	9,5	19,1	31,8

Part no.	A	B	C	D
4110006EPDM	6,4	9,5	12,7	25,4
4110007EPDM	11,1	15,9	22,2	41,3
4110008EPDM	15,9	19,8	25,4	44,5
4110009EPDM	18,3	23,8	25,4	44,5
4110010EPDM	19,1	25,4	25,4	44,5

Protection plugs | Grip plugs with flange silicone



Heat-resistant grip plugs with flange

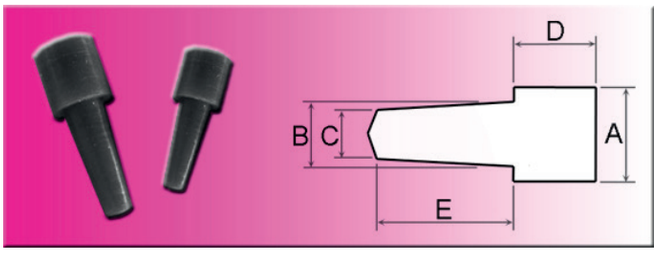
Material: silicone
Colour: see X

Tolerance: A +-0.2 mm / B +-0.2 mm / C +-0.2 mm / D +-0.25 mm / E +-0.4 mm

Part no.	A	B	C	D	E	X
4100001	7,0	3,0	2,4	7,0	13,0	blue
4100002	8,0	5,0	2,8	8,0	14,0	green
4100003	9,0	6,0	3,9	9,0	16,0	red

Part no.	A	B	C	D	E	X
4100004	10,2	6,4	4,8	10,2	16,8	black
4100005	12,4	8,5	5,9	9,8	17,3	white

Protection plugs | Grip plugs with flange EPDM



Heat-resistant grip plugs with flange

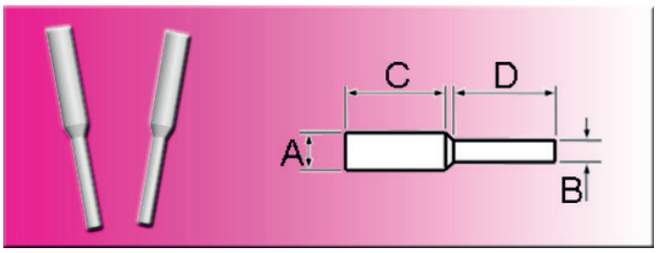
Material: EPDM
Colour: black

Tolerance: A +-0.2 mm / B +-0.2 mm / C +-0.2 mm / D +-0.25 mm / E +-0.4 mm

Part no.	A	B	C	D	E
4100001EPDM	7,0	3,0	2,4	7,0	13,0
4100002EPDM	8,0	5,0	2,8	8,0	14,0
4100003EPDM	9,0	6,0	3,9	9,0	16,0

Part no.	A	B	C	D	E
4100004EPDM	10,2	6,4	4,8	10,2	16,8
4100005EPDM	12,4	8,5	5,9	9,8	17,3

Protection plugs | Pull plugs



These pull plugs are appropriate for masking of bore holes with or without thread.

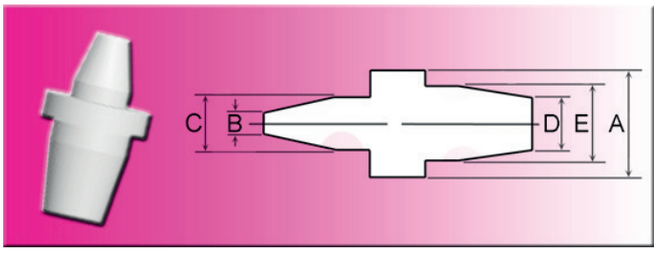
Material: silicone
Colour: natural

Silicone is long-term heat resistant at dry heat up to approx. +200°C, temporarily up to approx. +300°C.
Flexible at cold temperatures down to approx. -60°C.
Recommended for powder coating, paintwork, plating and anodising. Reusable!

Part no.	A	B	C	D
1690001	1,9	1,2	15,5	15,0
1690002	2,4	1,3	17,8	17,8
1690003	3,3	2,4	16,5	17,8
1690004	4,1	2,4	15,9	14,8
1690005	5,0	2,8	15,9	15,9
1690006	5,5	3,3	25,4	25,4

Part no.	A	B	C	D
1690007	7,0	3,2	23,8	23,4
1690008	8,9	4,9	22,4	23,5
1690009	10,2	4,0	25,4	25,4
1690010	11,9	6,4	25,4	25,4
1690011	13,5	6,4	25,4	25,4

Protection plugs | Pull plugs with flange



These plugs seal bore holes with and without thread, and cover the surrounding surface at the same time. The integration of plug and flange in one unit redundantizes time-consuming cover operations consisting of two worksteps.

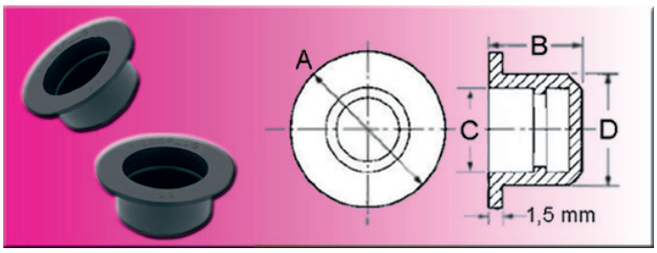
Material: silicone
Colour: natural

Silicone is long-term heat resistant at dry heat up to approx. +200°C, temporarily up to approx. +300°C.
Flexible at cold temperatures down to approx. -60°C.
Recommended for powder coating, paintwork, plating and anodising. Reusable!

G1 = for metric bores
G2 = for UNF bores (inch)
G3 = for BSP bores (inch)

Part no.	A	B	C	D	E	G1	G2	G3
1710001	6,4	1,7	4,0	3,7	6,0	M3	¼	-
1710002	7,9	2,3	3,6	3,0	4,6	M4, M5	-	-
1710003	9,5	3,3	5,1	4,0	7,0	M6, M8	5/16	1/16
1710004	12,7	4,0	7,0	7,3	9,5	M7, M9	5/16	1/16
1710005	12,7	7,3	9,9	8,1	11,5	M10, M12	3/8, ½	1/8, ¼

Protection plugs | Parallel protection plugs TPG



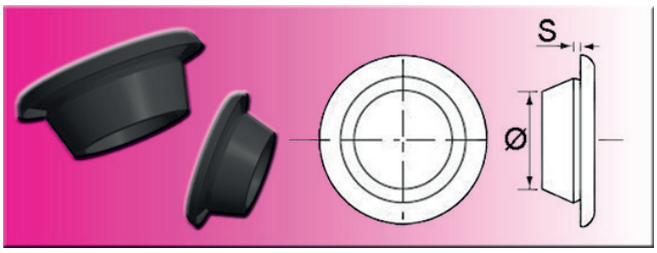
Highly abrasion-resistant and therefore recommendable for threaded holes. The plugs of TPG (thermoplastic rubber) are resistant to acids and temperatures from -40°C up to +135°C, temporarily up to +150°C.

Material: TPG (thermoplastic rubber)
Colour: black

Part no.	A	B	C	D
1900003TPG	no longer available!			
1900005TPG	no longer available!			
1900006TPG	12	12	3,1	6,0
1900007TPG	13	12	4,5	7,0
1900008TPG	no longer available!			
1900009TPG	no longer available!			
1900010TPG	16	12	7,2	10,0
1900011TPG	17	12	8,2	11,0
1900012TPG	20	12	9,2	12,0
1900013TPG	no longer available!			
1900014TPG	no longer available!			
1900015TPG	no longer available!			
1900016TPG	24	14	12,9	16,0
1900017TPG	no longer available!			
1900018TPG	no longer available!			

Part no.	A	B	C	D
1900019TPG	no longer available!			
1900020TPG	no longer available!			
1900021TPG	no longer available!			
1900022TPG	no longer available!			
1900023TPG	no longer available!			
1900024TPG	no longer available!			
1900025TPG	no longer available!			
1900026TPG	no longer available!			
1900027TPG	no longer available!			
1900028TPG	no longer available!			
1900029TPG	no longer available!			
1900030TPG	40	16	27,9	30,0
1900040TPG	no longer available!			
1900047TPG	no longer available!			

Protection plugs | Car body plugs TPG



Avoid the ingress of dirt and moisture. The design permits covering of different wall thicknesses.

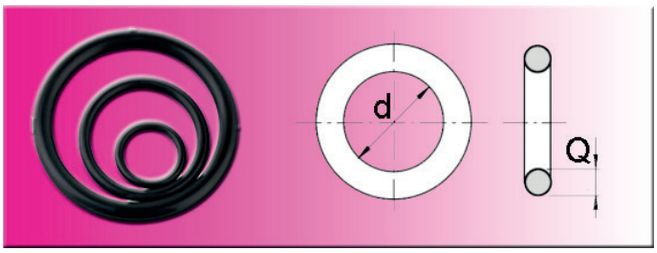
Material: TPG (thermoplastic rubber)
Colour: black

Part no.	Ø	S
1841000	10	0,8-2
1841200	12	0,8-2
1841400	14	0,8-2
1841600	16	0,8-2

Part no.	Ø	S
1841800	18	0,8-2
1842000	20	0,8-2
1842200	22	0,8-2
1842500	25	0,8-2

Part no.	Ø	S
1843000	30	0,8-2
1844500	45	0,8-2

O-rings and O-ring sets | O-rings nitrile (NBR) | in inch size

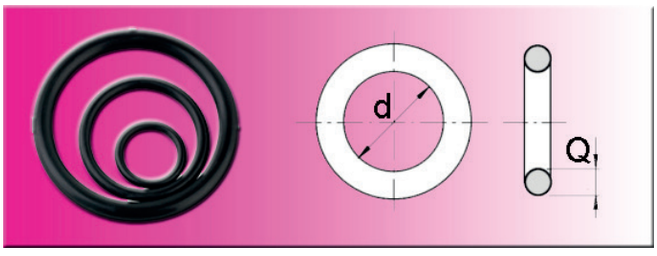


Material: Nitrile (NBR) approx. 70° Shore
Colour: black

NBR is often used in the field of sanitation.

Part no.	d	Q	Part no.	d	Q	Part no.	d	Q
0790635	2,9	1,78	**0790645**	13,95	2,62	**0790655**	28,17	3,53
0790636	3,68	1,78	**0790646**	15,94	2,62	**0790656**	29,75	3,53
0790637	4,48	1,78	**0790647**	17,13	2,62	**0790657**	31,34	3,53
0790638	5,28	1,78	**0790648**	18,72	2,62	**0790658**	32,92	3,53
0790639	6,07	1,78	**0790649**	18,64	3,53	**0790659**	34,52	3,53
0790640	7,66	1,78	**0790650**	20,22	3,53	**0790660**	36,1	3,53
0790641	9,25	1,78	**0790651**	21,82	3,53	**0790661**	37,69	3,53
0790642	9,19	2,62	**0790652**	23,4	3,53	**0790662**	37,47	5,33
0790643	10,78	2,62	**0790653**	24,99	3,53	**0790663**	40,65	5,33
0790644	12,37	2,62	**0790654**	26,58	3,53	**0790664**	43,82	5,33

O-rings and O-ring sets | O-rings FPM | in inch size



Material: FPM approx. 75° Shore
Colour: black

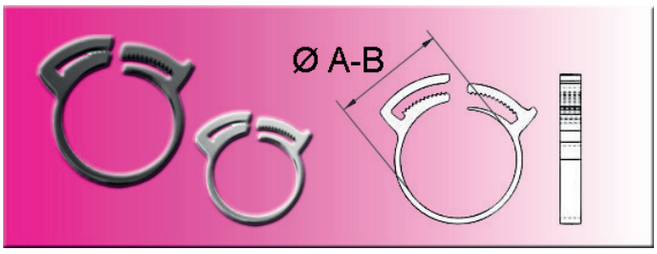
FPM is more resistant to acids and chemicals than NBR.

Part no.	d	Q	Part no.	d	Q	Part no.	d	Q
0790665	2,9	1,78	**0790675**	13,95	2,62	**0790685**	28,17	3,53
0790666	3,68	1,78	**0790676**	15,94	2,62	**0790686**	29,75	3,53
0790667	4,48	1,78	**0790677**	17,13	2,62	**0790687**	31,34	3,53
0790668	5,28	1,78	**0790678**	18,72	2,62	**0790688**	32,92	3,53
0790669	6,07	1,78	**0790679**	18,64	3,53	**0790689**	34,52	3,53
0790670	7,66	1,78	**0790680**	20,22	3,53	**0790690**	36,1	3,53
0790671	9,25	1,78	**0790681**	21,82	3,53	**0790691**	37,69	3,53
0790672	9,19	2,62	**0790682**	23,4	3,53	**0790692**	37,47	5,33
0790673	10,78	2,62	**0790683**	24,99	3,53	**0790693**	40,65	5,33
0790674	12,37	2,62	**0790684**	26,58	3,53	**0790694**	43,82	5,33



NO LONGER AVAILABLE!

NO LONGER AVAILABLE!



Quick and easy mounting by using a usual pincer. High clamping effectiveness, easy to dismount. Reusable!
Pressure resistance: 10 bar

Material: PA 6.6
Colour:
without last digits = black ~RAL 9005
last digits 113 = white ~RAL 9003

Grey ~RAL 7000 on written request.

Part no.	A-B
1350101	6,6-8,0
1350101113	6,6-8,0
1350102	8,0-9,2
1350102113	8,0-9,2
1350103	9,2-10,5
1350103113	9,2-10,5
1350104	10,2-12,0
1350104113	10,2-12,0
1350105	12,0-13,5
1350105113	12,0-13,5
1350106	12,8-15,0
1350106113	12,8-15,0
1350107	15,0-17,2
1350107113	15,0-17,2
1350108	17,0-18,5
1350108113	17,0-18,5
1350109	18,2-20,5
1350109113	18,2-20,5
1350110	20,5-23,0

Part no.	A-B
1350110113	20,5-23,0
1350111	22,0-25,0
1350111113	22,0-25,0
1350112	25,0-28,0
1350112113	25,0-28,0
1350113	27,0-30,0
1350113113	27,0-30,0
1350114	29,5-32,5
1350114113	29,5-32,5
1350115	32,5-35,5
1350115113	32,5-35,5
1350116	35,0-38,5
1350116113	35,0-38,5
1350117	38,0-41,5
1350117113	38,0-41,5
1350118	41,0-44,5
1350118113	41,0-44,5
1350119	44,0-47,5
1350119113	44,0-47,5

Part no.	A-B
1350120	47,0-50,0
1350120113	47,0-50,0
1350121	50,0-53,5
1350121113	50,0-53,5
1350122	53,0-57,0
1350122113	53,0-57,0
1350123	56,5-60,5
1350123113	56,5-60,5
1350124	60,0-65,0
1350124113	60,0-65,0
1350125	65,0-70,0
1350125113	65,0-70,0
1350126	70,0-75,0
1350126113	70,0-75,0
1350127	75,0-80,0
1350127113	75,0-80,0
1350128	80,0-85,0
1350128113	80,0-85,0



Control elements | Grips

Control elements | Grips



Hand grips Page 56



Clamp levers Page 68



Ball knobs Page 72



Star grip nuts & screws Page 77

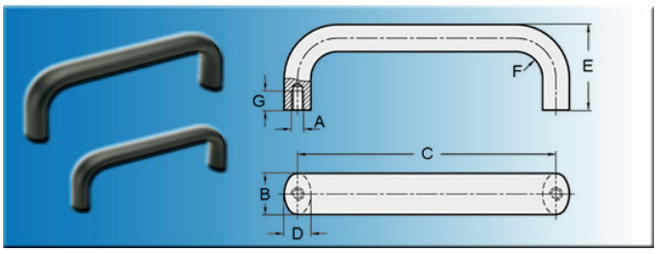


Handwheels Page 88



Knurled knobs, nuts & screws Page 93

Hand grips / bow-type handles | Aluminium



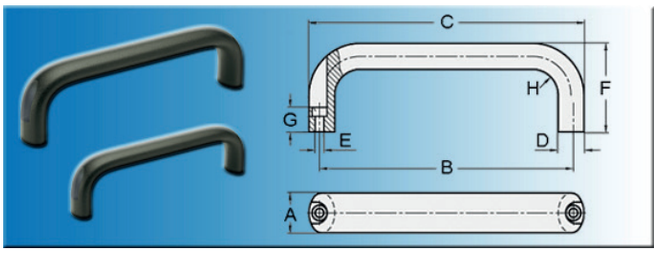
Made of drawn aluminium profile these handles feature stability and a smooth surface. The plastic coat provides an additional grip.

Material: aluminium, plastic-coated
Colours:
B = blank, surface treated by vibratory grinding
S = black, textured matt, plastic-coated
E = anodised, natural colour
R = red RAL 3000

Stainless steel type on written request.

NO LONGER AVAILABLE!

Hand grips / bow-type handles | Aluminium, mountable from operator side



These bow-type handles are a further development of series 2031...
They allow mounting from the operator side.

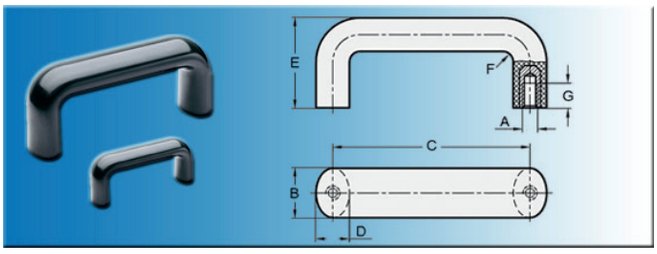
Material: aluminium, plastic-coated
Colours:
B = blank, surface treated by vibratory grinding
S = black, textured matt, plastic-coated
E = anodised, natural colour

Stainless steel type on written request.

The handles can be fixed with screws DIN 912, M6.

NO LONGER AVAILABLE!

Hand grips / bow-type handles | Plastic, thermoset material

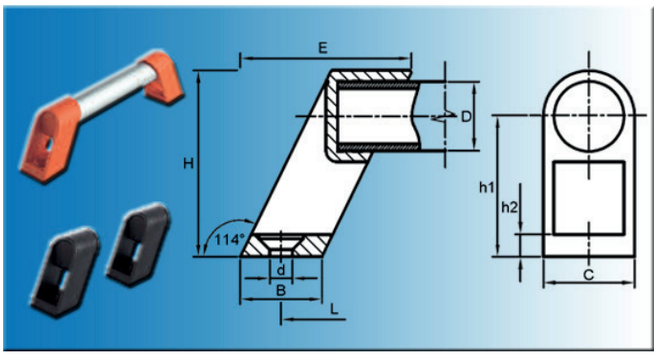


Plastic bow-type handles, temperature-resistant up to ~130°C

Material: thermoset material FS 31
Colour: black, glossy
Bush: brass

NO LONGER AVAILABLE!

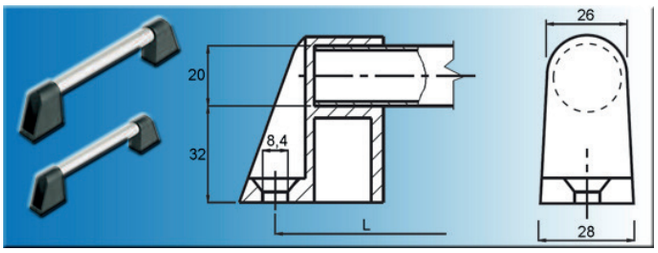
Hand grips / bow-type handles | PA-Aluminium



Material: handle brackets of PA-glass fibre reinforced bar of aluminium
Colours (F):
colour code 0 = black ~RAL 9005
colour code 4 = orange ~RAL 2004

Part no.	F	D	L	E	B	C	H	h1	h2	d
6115620101	0	25	200±1	56	29	32	60	43	8	8,4
6115620141	4	25	200±1	56	29	32	60	43	8	8,4
6115620201	0	20	200±1	47	23	26	53	40	6	8,4
6115620241	4	20	200±1	47	23	26	53	40	6	8,4
6115630101	0	25	300±1	56	29	32	60	43	8	8,4
6115630141	4	25	300±1	56	29	32	60	43	8	8,4
6115630201	0	20	300±1	47	23	26	53	40	6	8,4
6115630241	4	20	300±1	47	23	26	53	40	6	8,4
6115640101	0	25	400±1	56	29	32	60	43	8	8,4
6115640141	4	25	400±1	56	29	32	60	43	8	8,4
6115640201	0	20	400±1	47	23	26	53	40	6	8,4
6115640241	4	20	400±1	47	23	26	53	40	6	8,4
6115650101	0	25	500±1	56	29	32	60	43	8	8,4
6115650141	4	25	500±1	56	29	32	60	43	8	8,4
6115650201	0	20	500±1	47	23	26	53	40	6	8,4
6115650241	4	20	500±1	47	23	26	53	40	6	8,4
6115670101	0	25	700±1	56	29	32	60	43	8	8,4
6115670141	4	25	700±1	56	29	32	60	43	8	8,4
6115670201	0	20	700±1	47	23	26	53	40	6	8,4
6115670241	4	20	700±1	47	23	26	53	40	6	8,4

Hand grips / bow-type handles | Polymer-Aluminium



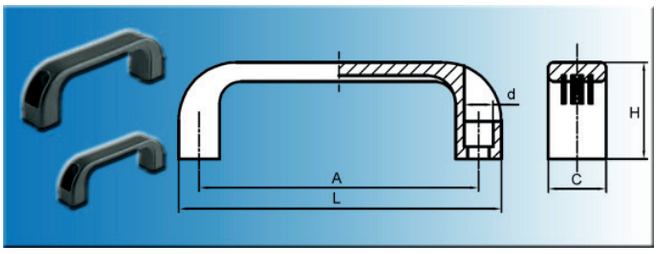
Material: handle brackets of technopolymer
bar of aluminium
Colour: black

Part no.	L
6116020101	200±1
6116030101	300±1

Part no.	L
6116040101	400±1
6116050101	500±1

Part no.	L
6116070101	700±1

Hand grips / bow-type handles | PA-glass fibre

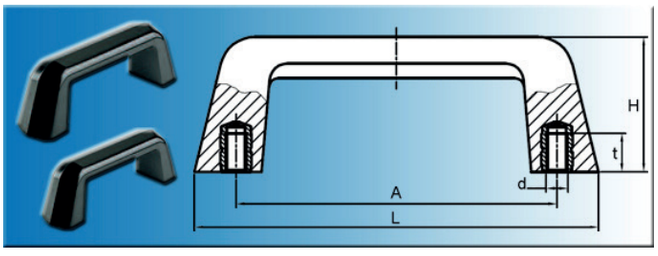


Material: PA-glass fibre reinforced
Colour: black

Part no.	L	A	H	C	d
6115711200	110	94±1	37	21	6,5
6115713200	133	116±1	40	24	9,0
6115713201	139	120±1	40	24	8,5

Part no.	L	A	H	C	d
6115714200	151	132±1	43	26	8,5
6115718200	200	180±1	50	28	8,5
6115723200	260	235±1	54	32	10,5

Hand grips / bow-type handles | Thermoset material

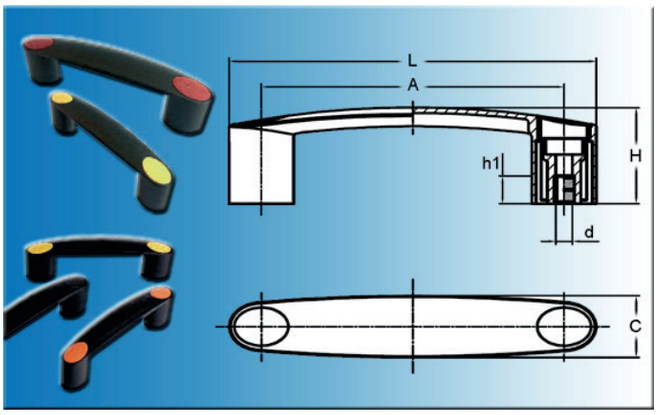


Material: thermoset material FS 31 DIN 7708
insert of brass
Colour: black

Part no.	L	d	A	H	t
6116113301	130	M6	109±1	43	10

Part no.	L	d	A	H	t
6116116301	165	M8	131±1	55	14

Hand grips / bow-type handles | PA-glass fibre / coloured



Bow-type handles with through-hole and covering caps

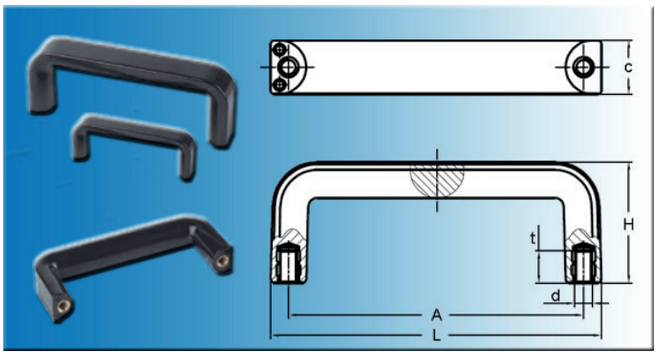
Material: PA-glass fibre reinforced
Colour: black

Possible cap colours:
colour code (F):
black RAL 7021
blue RAL 5005
yellow RAL 1021
orange RAL 2004
red RAL 3001
silver RAL 9006

Part no.	A	L	H	d	C	h1	F
6115509210	93±1	116	35	6,5	20	20	black
6115509220	93±1	116	35	6,5	20	20	blue
6115509230	93±1	116	35	6,5	20	20	yellow
6115509240	93±1	116	35	6,5	20	20	orange
6115509250	93±1	116	35	6,5	20	20	red
6115509290	93±1	116	35	6,5	20	20	silver
6115510210	109±1	141	42	8,5	25	20	black
6115510220	109±1	141	42	8,5	25	20	blue
6115510230	109±1	141	42	8,5	25	20	yellow
6115510240	109±1	141	42	8,5	25	20	orange
6115510250	109±1	141	42	8,5	25	20	red
6115510290	109±1	141	42	8,5	25	20	silver
6115511210	117±1	141	42	8,5	25	20	black
6115511220	117±1	141	42	8,5	25	20	blue
6115511230	117±1	141	42	8,5	25	20	yellow
6115511240	117±1	141	42	8,5	25	20	orange
6115511250	117±1	141	42	8,5	25	20	red
6115511290	117±1	141	42	8,5	25	20	silver
6115513210	132±1	163	45	8,5	29	22	black
6115513220	132±1	163	45	8,5	29	22	blue
6115513230	132±1	163	45	8,5	29	22	yellow
6115513240	132±1	163	45	8,5	29	22	orange
6115513250	132±1	163	45	8,5	29	22	red
6115513290	132±1	163	45	8,5	29	22	silver
6115515210	150±1	181	48	8,5	31	25	black
6115515220	150±1	181	48	8,5	31	25	blue
6115515230	150±1	181	48	8,5	31	25	yellow
6115515240	150±1	181	48	8,5	31	25	orange

Part no.	A	L	H	d	C	h1	F
6115515250	150±1	181	48	8,5	31	25	red
6115515290	150±1	181	48	8,5	31	25	silver

Hand grips / bow-type handles | Hard plastic bow-type handles

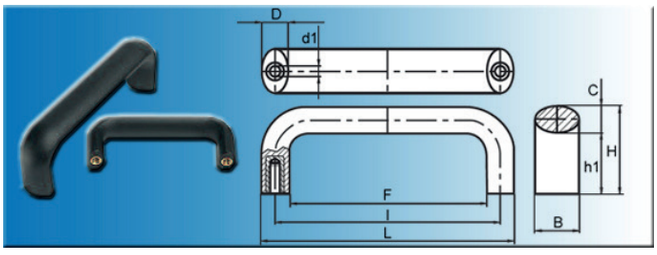


Material: thermoset material FS 31 DIN 7708
insert of brass
Colour: black

Part no.	L	A	H	c	d	t
6115312301	124	109±0,5	45	21	M6	13

Part no.	L	A	H	c	d	t
6115314301	148	132±0,5	54	24	M8	13

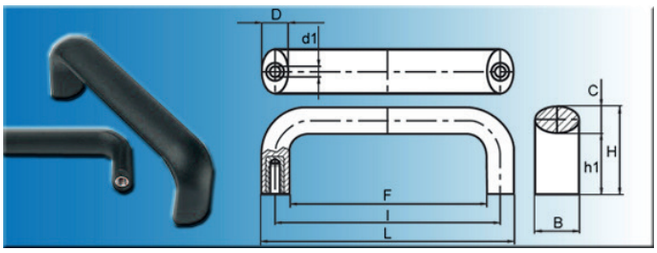
Hand grips / bow-type handles | with brass insert



Material: PA-glass fibre reinforced
insert of brass
Colour: black

Part no.	L	l	F	B	H	h1	C	D	d1
6470509301	98,5	86±1	73,5	20	40,0	28	12,5	12,5	M6
6470510301	106,5	94±1	81,5	20	40,5	28	12,5	12,5	M6
6470513301	134,0	117±1	102,0	25	50,0	34	16,0	16,0	M6
6470514301	148,0	132±1	116,0	25	50,0	34	16,0	16,0	M8
6470516301	168,0	150±1	132,0	29	58,0	40	18,0	18,0	M8
6470519301	197,0	179±1	161,0	29	58,0	40	18,0	18,0	M8

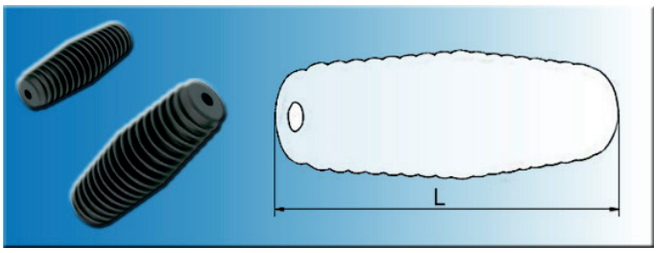
Hand grips / bow-type handles | with stainless steel insert



Material: PA-glass fibre reinforced
insert of stainless steel
Colour: black

Part no.	L	l	F	B	H	h1	C	D	d1
6470509351	98,5	86±1	73,5	20	40	28	12,5	12,5	M6
6470510351	106,5	94±1	81,5	20	40,5	28	12,5	12,5	M6
6470513351	134	117±1	102	25	50	34	16	16	M6
6470514351	148	132±1	116	25	50	34	16	16	M8
6470516351	168	150±1	132	29	58	40	18	18	M8
6470519351	197	179±1	161	29	58	40	18	18	M8

Hand grips / hand grips | for pipes



Provides a safe grip in the most different applications. The hand grips are flexible and therefore easy to mount. Resistant to weathering, moisture and a lot of chemicals.

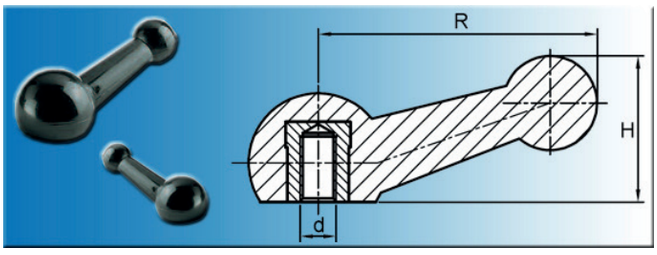
Material: PVC
Colour: black

Ø1 = pipe diameter in mm
Ø2 = pipe diameter in inch

Further types on written request.

Part no.	Ø1	Ø2	L
1640001	22,2	7/8	105

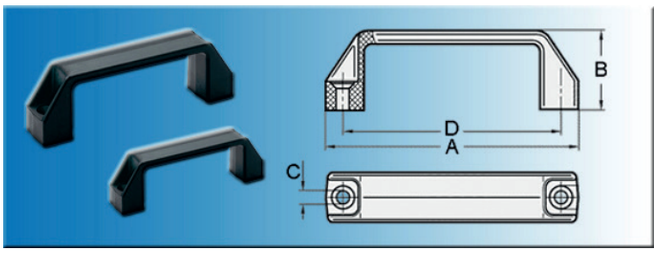
Hand grips / hand grips | Locking handles



Material: PA 6
with insert of treated steel
Colour: black

Part no.	R	H	d
6113008302	77	40	M10

Hand grips / solid grips | type 1 - with bore Ø 4.3 mm



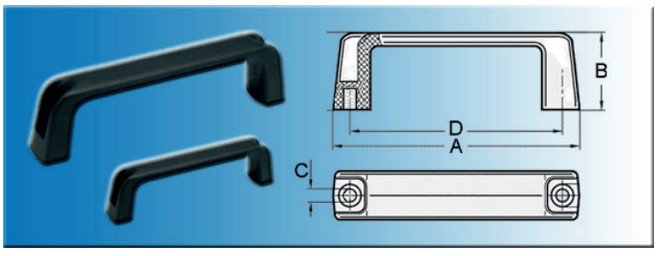
Max. tensile load per grip 980 N.
The grips must not get in contact with chemicals that could affect the material.

With bore Ø 4.3 mm, countersunk.

Material: PA 6-glass fibre reinforced
Colour: black

Part no.	A	B	C	D
1090001	144	39	4,3	120

Hand grips / solid grips | type 2 - with brass insert



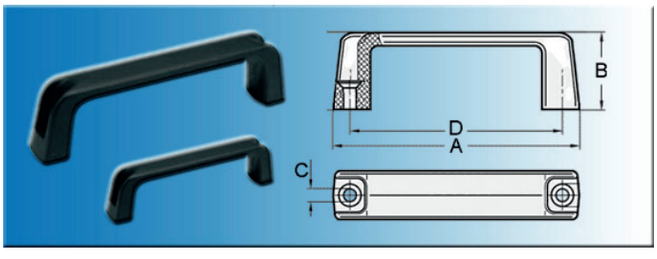
Max. tensile load per grip 980 N.
The grips must not get in contact with chemicals that could affect the material.

With threaded brass insert M6.

Material: PA 6-glass fibre reinforced
Colour: black

Part no.	A	B	C	D
1090002	181	46	M6	160

Hand grips / solid grips | type 3 - with bore Ø 4.3 mm



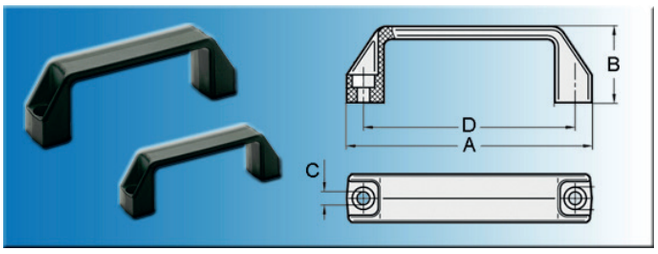
Max. tensile load per grip 980 N.
The grips must not get in contact with chemicals that could affect the material.

With bore Ø 4.3 mm, countersunk.

Material: PA 6-glass fibre reinforced
Colour: black

Part no.	A	B	C	D
1090003	135	39	4	120

Hand grips / solid grips | type 4 - bore for DIN 912



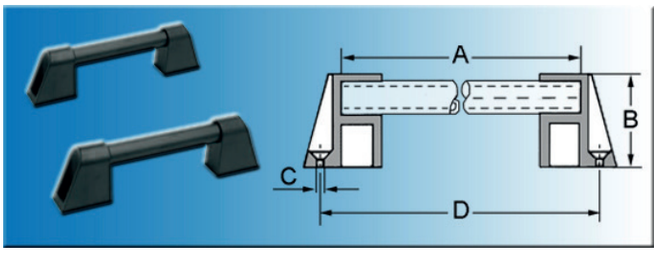
Max. tensile load per grip 980 N.
The grips must not get in contact with chemicals that could affect the material.

Bore for cylinder head screw DIN 912.

Material: PA
Colour: black

Part no.	A	B	C	D
1090004	134	41	8,5	117

Hand grips / end caps for aluminium pipe Ø 20 mm | type 1



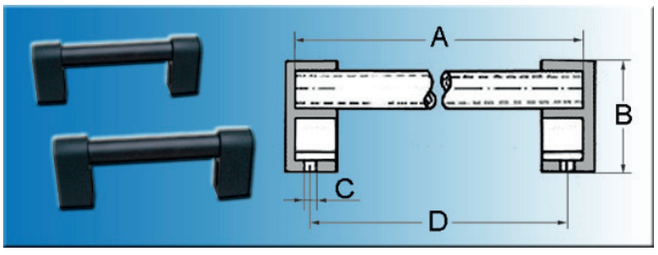
By taking 2 end caps and one aluminium tube (Ø 20 mm) you can build your handles yourself.
- can be screwed from the outside -
The required pipe is 28 mm shorter than the assembly dimension D.
The aluminium pipe is **not** included in the scope of delivery.

Material: PA
Colour: black

Max. tensile load per grip 980 N. The grips must not get in contact with chemicals that could aff ect the material.

Part no.	A	B	C	D
1100001	130-700	55	8,5	A+28

Hand grips / end caps for aluminium pipe Ø 20 mm | type 2



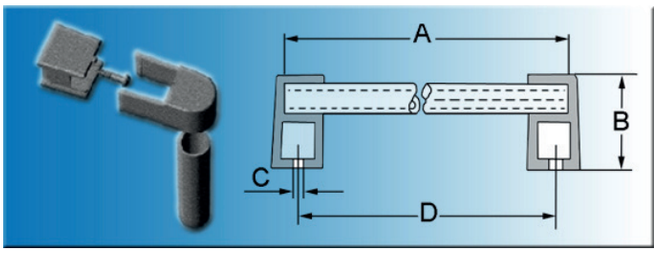
By taking 2 end caps and one aluminium tube (Ø 20 mm) you can build your handles yourself.
The required pipe is 18 mm longer than the assembly dimension D.
The aluminium pipe is **not** included in the scope of delivery.

Material: PA
Colour: black

Max. tensile load per grip 980 N. The grips must not get in contact with chemicals that could affect the material.

Part no.	A	B	C	D
1100002	130-700	55	8	A-18

Hand grips / end caps for aluminium pipe Ø 20 mm | type 3

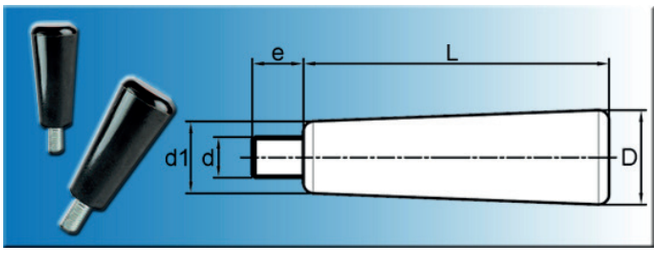


By taking 2 end caps and one aluminium tube (Ø 20 mm) you can build your handles yourself.
The required pipe is 22 mm longer than the assembly dimension D.
The aluminium pipe is **not** included in the scope of delivery.

Material: PA 6-GF 30
Colour: black

Part no.	A	B	C	D
1100003	130-700	56	4,2	A-22

Hand grips / tapered grips | Fixed grips with male thread

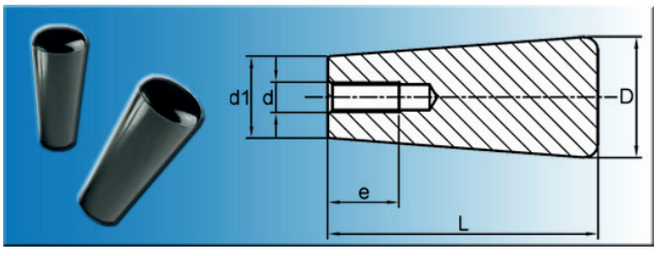


Material: thermoset material FS 31 DIN 7708
thread of treated steel
Colour: black

Part no.	d	D	d1	L	e
6113620501	M6	20	130	45	15
6113624501	M8	24	16	53	15

Part no.	d	D	d1	L	e
6113625501	M10	25	19	76	15
6113628501	M12	28	21	92	15

Hand grips / tapered grips | Fixed grips with female thread

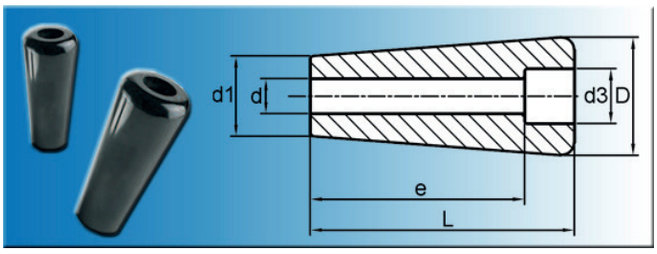


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	d	D	L	e	d1
6114410101	5/32"W	10	85	10	8,0
6114413101	M5	13	30	10	10,0
6114420101	M6	20	45	14	13,0
6114424101	M6	24	53	14	16,0

Part no.	d	D	L	e	d1
6114425101	M8	25	76	18	19,0
6114428101	M10	28	92	22	21,0
6114430101	M12	30	132	25	23,5

Hand grips / tapered grips | Fixed grips with female thread & clearance hole

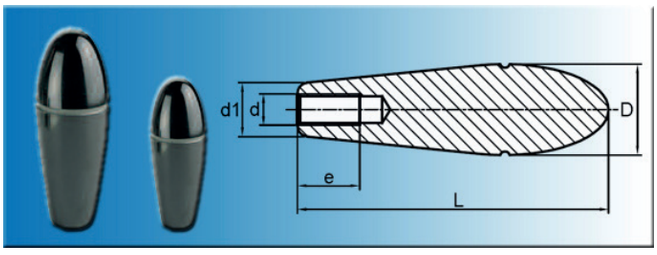


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	d	D	L	e	d1	d3
6114413201	5	13	30	23,2	10,0	8,5
6114415201	6	15	50	40,0	12,0	8,8
6114420201	6	20	45	37,5	13,0	9,7
6114424201	7	24	53	43,0	16,0	11,0

Part no.	d	D	L	e	d1	d3
6114417201	8	17	60	48,0	14,0	10,0
6114421201	8	20	70	56,0	16,0	10,8
6114423201	10	23	80	65,0	18,5	14,0

Hand grips / tapered grips | Fixed grips

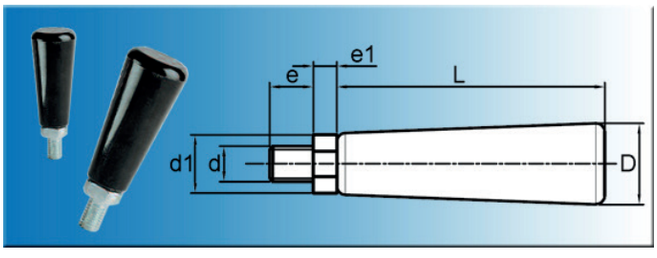


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	d	D	L	e	d1
6114535101	M12	35	95	24	20

Part no.	d	D	L	e	d1
6114539101	M12	35	120	24	20

Hand grips / tapered grips | Swivelling grips with male thread

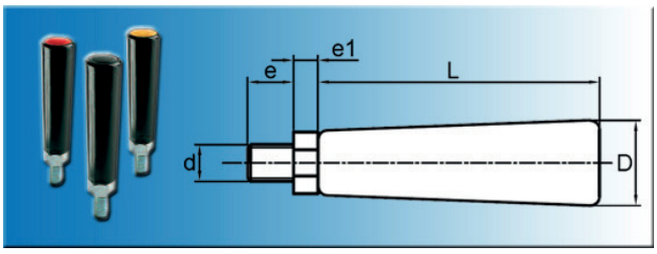


Material: thermoset material FS 31 DIN 7708
thread of treated steel
Colour: black

Part no.	d	D	d1	L	e	e1
6113720501	M6	20	13	45	12	5,0
6113724501	M8	24	16	53	15	5,5

Part no.	d	D	d1	L	e	e1
6113725501	M10	25	19	76	15	6,5
6113728501	M12	28	21	92	15	7,0

Hand grips / tapered grips | Swivelling grips with male thread PP



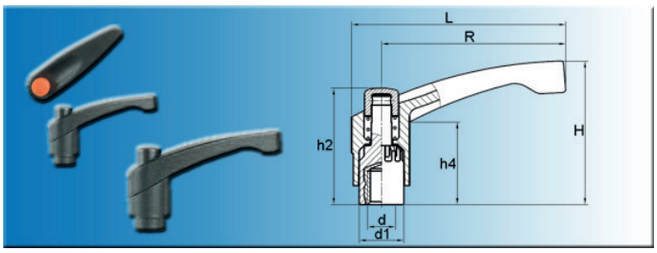
Material: PP
thread of treated steel
Colour: black

Further colours on written request.

Part no.	d	D	L	e	e1
6114115501	M6	15	50	11	5
6114117501	M8	17	60	13	6

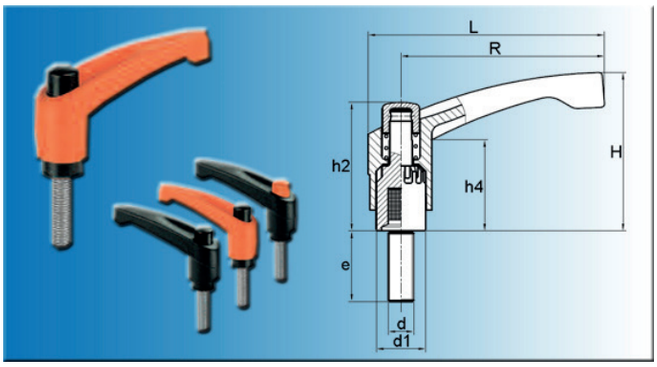
Part no.	d	D	L	e	e1
6114120501	M10	20	70	18	7
6114123501	M12	23	80	19	8

Clamp levers | with brass insert



Clamp levers, adjustable with plastic push button
Material: PA 6, glass fibre reinforced
brass insert
Colours (F):
Colour code 1 = Handle black, button black ~RAL7021
Colour code 2 = Handle black, button orange ~RAL 7021 + ~RAL 2004
Colour code 3 = Handle orange, button black ~RAL 2004 + ~RAL 7021

Part no.	R	L	h2	d1	h4	d	H	F
6119841301	43	51	33	13	23	M4	38	1
6119841302	43	51	33	13	23	M5	38	1
6119841303	43	51	33	13	23	M6	38	1
6119842301	43	51	33	13	23	M4	38	2
6119842302	43	51	33	13	23	M5	38	2
6119842303	43	51	33	13	23	M6	38	2
6119843301	43	51	33	13	23	M4	38	3
6119843302	43	51	33	13	23	M5	38	3
6119843303	43	51	33	13	23	M6	38	3
6119861301	65	75	42	16	26	M6	48	1
6119861302	65	75	42	16	26	M8	48	1
6119861303	65	75	42	16	26	M10	48	1
6119862301	65	75	42	16	26	M6	48	2
6119862302	65	75	42	16	26	M8	48	2
6119862303	65	75	42	16	26	M10	48	2
6119863301	65	75	42	16	26	M6	48	3
6119863302	65	75	42	16	26	M8	48	3
6119863303	65	75	42	16	26	M10	48	3
6119881301	85	98	50	18	34	M8	63	1
6119881302	85	98	50	18	34	M10	63	1
6119881303	85	98	50	18	34	M12	63	1
6119882301	85	98	50	18	34	M8	63	2
6119882302	85	98	50	18	34	M10	63	2
6119882303	85	98	50	18	34	M12	63	2
6119883301	85	98	50	18	34	M8	63	3
6119883302	85	98	50	18	34	M10	63	3
6119883303	85	98	50	18	34	M12	63	3



Clamp levers, adjustable with plastic push button
Material: PA 6, glass fibre reinforced
thread of zinc-plated steel
Colours (F):
Colour code 1 = Handle black, button black ~RAL7021
Colour code 2 = Handle black, button orange ~RAL 7021 + ~RAL 2004
Colour code 3 = Handle orange, button black ~RAL 2004 + ~RAL 7021

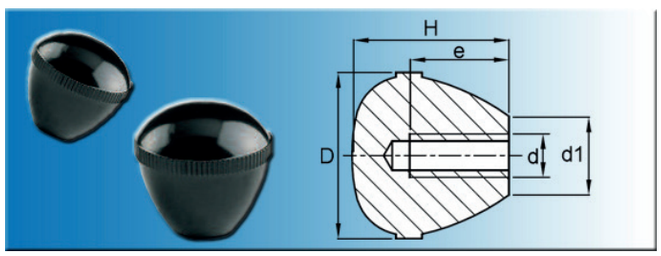
Part no.	R	L	H	h2	d1	h4	d	e	F
6119841503	43	51	38	33	13	23	M5	10	1
6119841504	43	51	38	33	13	23	M5	20	1
6119841505	43	51	38	33	13	23	M6	15	1
6119841506	43	51	38	33	13	23	M6	25	1
6119841507	43	51	38	33	13	23	M6	40	1
6119842503	43	51	38	33	13	23	M5	10	2
6119842504	43	51	38	33	13	23	M5	20	2
6119842505	43	51	38	33	13	23	M6	15	2
6119842506	43	51	38	33	13	23	M6	25	2
6119842507	43	51	38	33	13	23	M6	40	2
6119843503	43	51	38	33	13	23	M5	10	3
6119843504	43	51	38	33	13	23	M5	20	3
6119843505	43	51	38	33	13	23	M6	15	3
6119843506	43	51	38	33	13	23	M6	25	3
6119843507	43	51	38	33	13	23	M6	40	3
6119861501	65	75	48	42	16	26	M6	15	1
6119861502	65	75	48	42	16	26	M6	20	1
6119861503	65	75	48	42	16	26	M6	30	1
6119861504	65	75	48	42	16	26	M6	40	1
6119861506	65	75	48	42	16	26	M8	20	1
6119861507	65	75	48	42	16	26	M8	33	1
6119861508	65	75	48	42	16	26	M8	47	1
6119861511	65	75	48	42	16	26	M10	20	1
6119861512	65	75	48	42	16	26	M10	30	1
6119861513	65	75	48	42	16	26	M10	40	1
6119861523	65	75	48	42	16	26	M8	15	1
6119862501	65	75	48	42	16	26	M6	15	2
6119862502	65	75	48	42	16	26	M6	20	2
6119862503	65	75	48	42	16	26	M6	30	2
6119862504	65	75	48	42	16	26	M6	40	2



Part no.	R	L	H	h2	d1	h4	d	e	F
6119862506	65	75	48	42	16	26	M8	20	2
6119862507	65	75	48	42	16	26	M8	33	2
6119862508	65	75	48	42	16	26	M8	47	2
6119862511	65	75	48	42	16	26	M10	20	2
6119862512	65	75	48	42	16	26	M10	30	2
6119862513	65	75	48	42	16	26	M10	40	2
6119862523	65	75	48	42	16	26	M8	15	2
6119863501	65	75	48	42	16	26	M6	15	3
6119863502	65	75	48	42	16	26	M6	20	3
6119863503	65	75	48	42	16	26	M6	30	3
6119863504	65	75	48	42	16	26	M6	40	3
6119863506	65	75	48	42	16	26	M8	20	3
6119863507	65	75	48	42	16	26	M8	33	3
6119863508	65	75	48	42	16	26	M8	47	3
6119863511	65	75	48	42	16	26	M10	20	3
6119863512	65	75	48	42	16	26	M10	30	3
6119863513	65	75	48	42	16	26	M10	30	3
6119863523	65	75	48	42	16	26	M8	15	3
6119881501	85	98	63	50	18	34	M8	20	1
6119881502	85	98	63	50	18	34	M8	33	1
6119881503	85	98	63	50	18	34	M8	47	1
6119881504	85	98	63	50	18	34	M10	20	1
6119881505	85	98	63	50	18	34	M10	30	1
6119881506	85	98	63	50	18	34	M10	40	1
6119881507	85	98	63	50	18	34	M12	30	1
6119881508	85	98	63	50	18	34	M12	40	1
6119881509	85	98	63	50	18	34	M12	60	1
6119882501	85	98	63	50	18	34	M8	20	2
6119882502	85	98	63	50	18	34	M8	33	2
6119882503	85	98	63	50	18	34	M8	47	2
6119882504	85	98	63	50	18	34	M10	20	2
6119882505	85	98	63	50	18	34	M10	30	2
6119882506	85	98	63	50	18	34	M10	40	2
6119882507	85	98	63	50	18	34	M12	30	2
6119882508	85	98	63	50	18	34	M12	40	2
6119882509	85	98	63	50	18	34	M12	60	2
6119883501	85	98	63	50	18	34	M8	20	3
6119883502	85	98	63	50	18	34	M8	33	3
6119883503	85	98	63	50	18	34	M8	47	3
6119883504	85	98	63	50	18	34	M10	20	3
6119883505	85	98	63	50	18	34	M10	30	3

Part no.	R	L	H	h2	d1	h4	d	e	F
6119883506	85	98	63	50	18	34	M10	40	3
6119883507	85	98	63	50	18	34	M12	30	3
6119883508	85	98	63	50	18	34	M12	40	3
6119883509	85	98	63	50	18	34	M12	60	3

Ball knobs / tapered | knurled

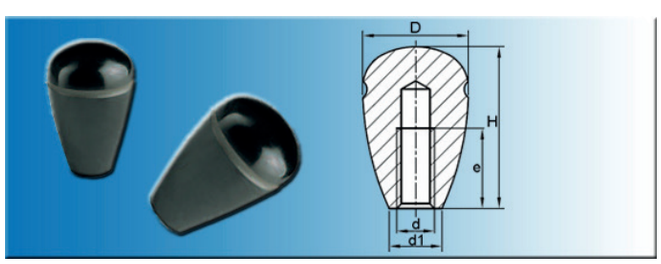


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	H	d	d1	e
6111219101	19	18	M5	9	8
6111223101	23	23	M6	11	14
6111226101	26	25	M6	12	14
6111231101	31	29	M8	14	16

Part no.	D	H	d	d1	e
6111235101	35	35	M10	16	20
6111241101	41	39	M10	18	20
6111248101	48	48	M12	21	24

Ball knobs / tapered | with slot

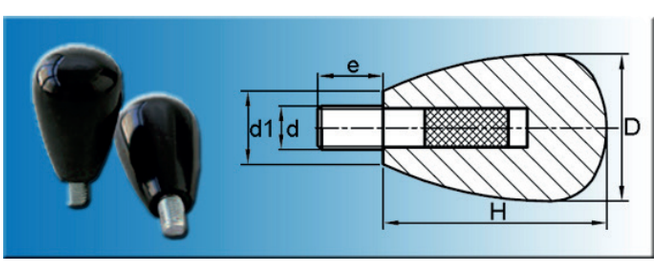


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	H	d	d1	e
6110519101	19	30	M5	10	15
6110522101	22	34	M6	13	19
6110529101	29	44	M8	15	23

Part no.	D	H	d	d1	e
6110535101	35	51	M10	16	25
6110537101	37	58	M10	17	25

Ball knobs / tapered | with threaded pin

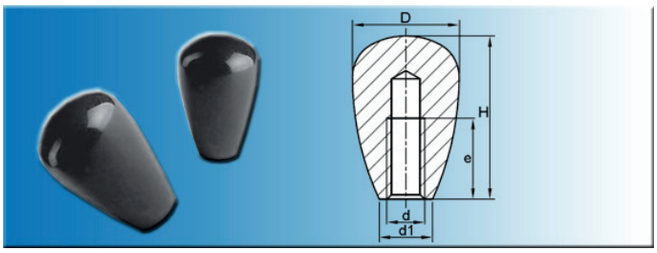


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	e	H
6110622501	22	M6	13	15	34
6110629501	29	M8	15	15	44

Part no.	D	d	d1	e	H
6110635501	35	M10	16	15	51
6110637501	37	M10	17	15	58

Ball knobs / tapered | glossy



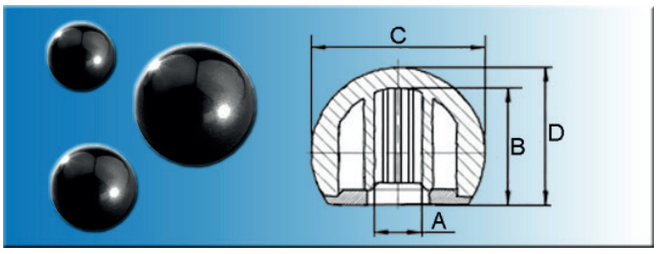
Material: thermoset material FS 31 DIN 7708
Colour: black

Red colour on written request.

Part no.	D	H	d	d1	e
6110619101	19	30	M5	10	15
6110622101	22	34	M6	13	19
6110629101	29	44	M8	15	23

Part no.	D	H	d	d1	e
6110635101	35	51	M10	16	25
6110637101	37	58	M10	17	25

Ball knobs / round | with covering plate



Ball knobs with covering plate

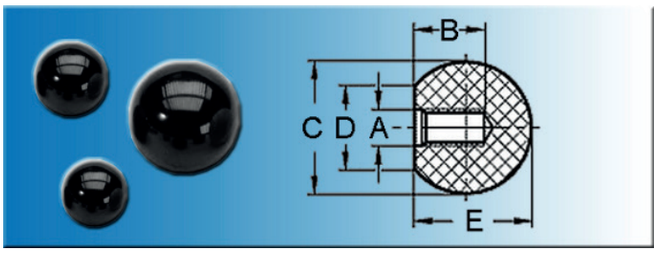
Material: impact-resistant ABS
Colour: black, glossy

Also available in chrome or gold - metallised or galvanised - as well as in all RAL colours.

Part no.	A	B	C	D
1070520-A	M5	15,5	20	18,0
1070620-A	M6	15,5	20	18,0
1070625-A	M6	20,0	25	22,5
1070632-A	M6	26,5	32	29,0
1070825-A	M8	20,0	25	22,5

Part no.	A	B	C	D
1070832-A	no longer available!			
1070840-A	M8	34,5	40	37,0
1071032-A	M10	26,5	32	29,0
1071040-A	M10	34,5	40	37,0
1071240-A	M12	34,5	40	37,0

Ball knobs / round | DIN 319 C glossy



Universal use for shifters and handles.

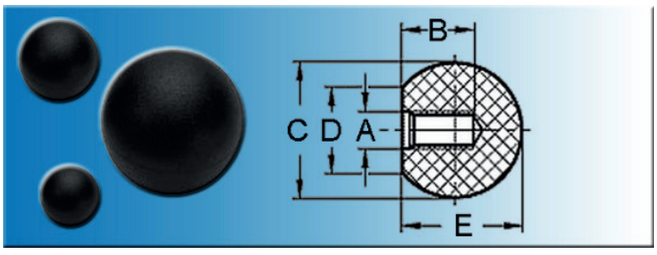
Material: Bakelite - scratch-resistant and isolating
Colour: black, glossy

Further types on written request.

Part no.	A	B	C	D	E
1070412	M4	5	12	6	11,0
1070416	M4	7	16	8	15,0
1070520	M5	9	20	12	18,0
1070616	M6	10	16	9	15,0
1070625	M6	11	25	15	22,5

Part no.	A	B	C	D	E
1070632	M6	14	32	18	29,0
1070832	M8	14	32	18	29,0
1071040	M10	18	40	22	37,0
1071250	M12	21	50	28	46,0
1071650	M16	21	50	28	46,0

Ball knobs / round | DIN 319 C matt



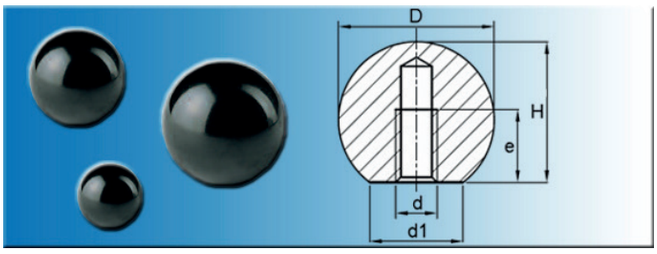
These ball knobs fulfil the functional criteria of the comparable execution according to DIN 319, but come with a modern matt surface.

Material: PA-glass fibre reinforced
Colour: black, matt

Part no.	A	B	C	D	E
1070416-M	M4	7,2	16	8	15,0
1070520-M	M5	9,1	20	12	18,0
1070625-M	M6	11,0	25	15	22,5

Part no.	A	B	C	D	E
1070832-M	M8	14,5	32	18	29,0
1071040-M	M10	18,0	40	22	37,0

Ball knobs / round | glossy, with threaded hole

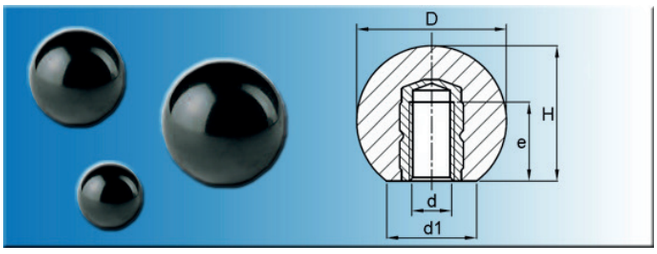


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	e	H
6110212101	12	M4	5	7	11
6110216101	16	M4	8	9	15
6110220101	20	M5	12	13	18
6110225101	25	M6	15	16	23
6110230101	30	M8	15	19	27

Part no.	D	d	d1	e	H
6110235101	35	M10	18	24	32
6110240101	40	M10	22	26	37
6110245101	45	M12	22	31	43
6110250101	50	M12	27	34	47

Ball knobs / round | glossy, with brass insert

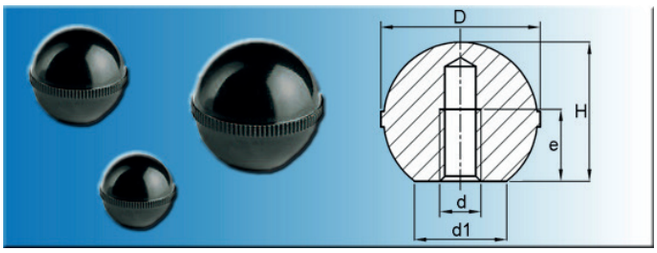


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	e	H
6110216301	16	M4	8	6	15
6110220301	20	M5	12	8	18
6110225301	25	M6	15	10	23
6110230301	30	M8	15	14	27

Part no.	D	d	d1	e	H
6110235301	35	M10	18	10	32
6110240301	40	M10	22	16	37
6110245301	45	M12	22	18	43
6110250301	50	M12	27	18	47

Ball knobs / round | knurled, with threaded hole

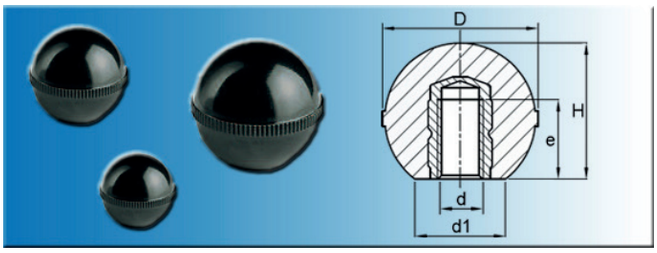


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	e	H
6111120101	20	M5	12	8	18
6111125101	25	M6	15	10	23
6111130101	30	M8	16	14	27
6111135101	35	M10	19	16	32

Part no.	D	d	d1	e	H
6111140101	40	M10	22	16	37
6111145101	45	M12	20	18	43
6111150101	50	M12	20	18	47
6111155101	55	M12	20	18	53

Ball knobs / round | knurled, with brass insert

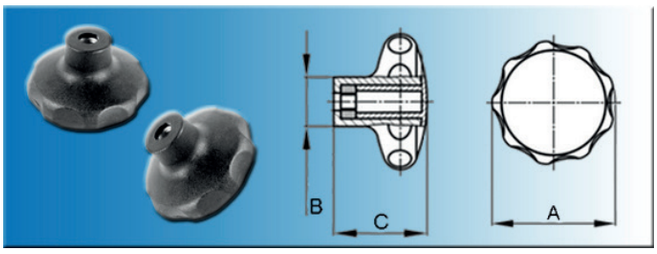


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	e	H
6111120301	20	M5	12	9	18
6111125301	25	M6	15	10	23
6111130301	30	M8	16	14	27
6111135301	35	M10	19	17	32

Part no.	D	d	d1	e	H
6111140301	40	M10	22	17	37
6111145301	45	M12	20	19	43
6111150301	50	M12	20	19	47
6111155301	55	M12	20	19	53

Star grip nuts | Star grip nuts, composite



Two-part head (base and cap), nut DIN 934 zinc-plated pressed-in. Threepart, very tight fit.

Material: PA 6
Colour: black

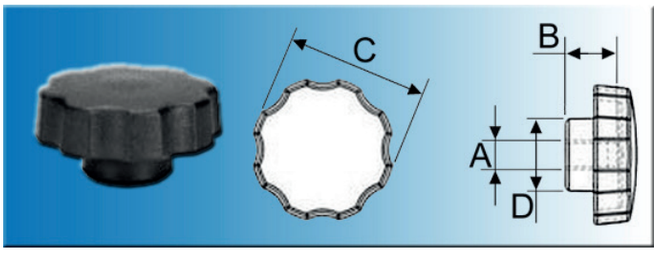
N = usable depth

Further dimensions, special colours, bicoloured and stainless steel types on written request.

Part no.	M	N	A	B	C
2040600	M6	22	40	18,0	26
2040601	M6	-	40	17,0	22
2040800	M8	22	40	18,0	26
2040801	M8	-	40	17,6	22
2050801	M8	-	50	22,0	23
2051000	M10	30	50	23,0	34

Part no.	M	N	A	B	C
2051001	M10	-	50	22,0	23
2060800	M8	36	63	23,0	40
2061000	M10	36	63	23,0	40
2081000	M10	48	80	25,0	52
2081200	M12	48	80	25,0	52

Star grip nuts | PA, with brass insert - light version



Knurled nuts with female thread of brass.

Material: PA 6
Colour: black

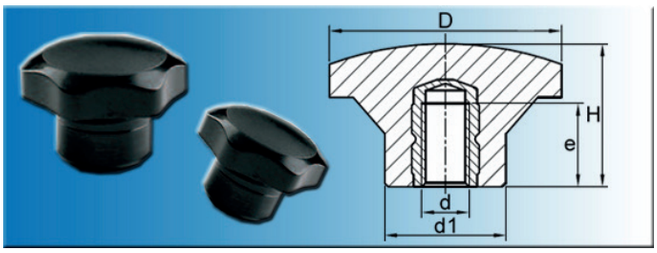
E = stem length

Further dimensions, special colours, bicoloured and stainless steel types on written request.

Part no.	A	B	C	D	E
1060630	M6	15	30	16	4
1060840	M8	21	40	20	10

Part no.	A	B	C	D	E
1061050	M10	22	50	20	10

Star grip nuts | Star grip nuts - threaded insert of brass



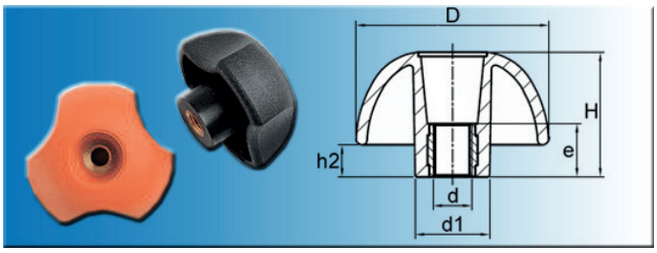
Material: thermoset material FS 31 DIN 7708
Colour: black

Threaded insert of brass

Part no.	D	d1	d	e	H
6111822303	22	12	M5	9	19
6111822302	22	12	M6	10	19
6111833303	33	19	M8	14	24
6111833304	33	19	M6	10	24
6111844303	44	23	M8	14	27

Part no.	D	d1	d	e	H
6111844305	44	23	M10	17	27
6111855306	55	25	M8	14	34
6111855308	55	25	M10	17	34
6111866302	66	30	M12	19	42
6111877303	77	30	M12	19	46

Star grip nuts | Star grip nuts with threaded through-hole



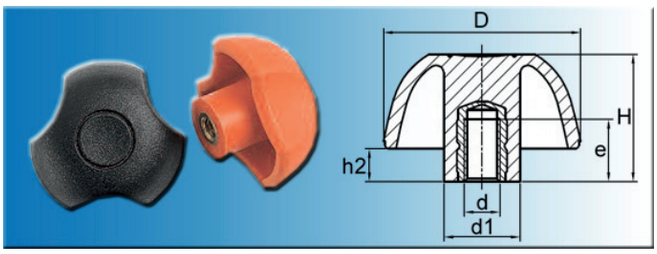
Material: PA-glass fibre reinforced
threaded brass insert

Colours (F):
black RAL 7021
orange RAL 2004

Part no.	d	D	H	d1	h2	e	F
6113825401	M6	25	17	12	5	11,5	black
6113825441	M6	25	17	12	5	11,5	orange
6113832401	M6	32	20	14	6	11,5	black
6113832441	M6	32	20	14	6	11,5	orange
6113840401	M6	40	25	17	7	11,5	black
6113840441	M6	40	25	17	7	11,5	orange
6113840403	M8	40	25	17	7	13,8	black
6113840443	M8	40	25	17	7	13,8	orange
6113840402	M10	40	25	17	7	13,8	black
6113840442	M10	40	25	17	7	13,8	orange
6113850401	M8	50	32	19	8	13,8	black
6113850441	M8	50	32	19	8	13,8	orange
6113850402	M10	50	32	19	8	13,8	black
6113850443	M10	50	32	19	8	13,8	orange
6113863401	M10	63	40	23	11	13,8	black
6113863441	M10	63	40	23	11	13,8	orange

Part no.	d	D	H	d1	h2	e	F
6113863402	M12	63	40	23	11	13,8	black
6113863442	M12	63	40	23	11	13,8	orange

Star grip nuts | Star grip nuts PA-glass fibre reinforced

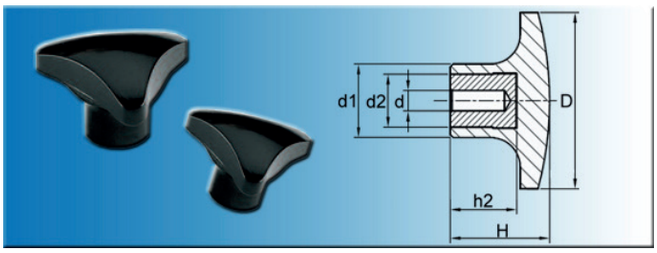


Material: PA-glass fibre reinforced
threaded brass insert

Colours (F):
black RAL 7021
orange RAL 2004

Part no.	d	D	H	d1	e	h2	F
6113825302	M4	25	17	12	8,5	6	black
6113825342	M4	25	17	12	8,5	6	orange
6113825303	M5	25	17	12	9,0	6	black
6113825343	M5	25	17	12	9,0	6	orange
6113825301	M6	25	17	12	10,0	6	black
6113825341	M6	25	17	12	10,0	6	orange
6113832303	M5	32	20	14	9,0	6	black
6113832343	M5	32	20	14	9,0	6	orange
6113832301	M6	32	20	14	10,0	6	black
6113832341	M6	32	20	14	10,0	6	orange
6113840301	M6	40	25	17	10,0	7	black
6113840341	M6	40	25	17	10,0	7	orange
6113840302	M8	40	25	17	14,0	7	black
6113840342	M8	40	25	17	14,0	7	orange
6113840303	M10	40	25	17	17,0	7	black
6113840343	M10	40	25	17	17,0	7	orange
6113850301	M8	50	32	19	14,0	8	black
6113850341	M8	50	32	19	14,0	8	orange
6113850302	M10	50	32	19	17,0	8	black
6113850342	M10	50	32	19	17,0	8	orange
6113850308	M12	50	32	19	19,0	8	black
6113850345	M12	50	32	19	19,0	8	orange
6113863301	M10	63	40	23	17,0	11	black
6113863341	M10	63	40	23	17,0	11	orange
6113863302	M12	63	40	23	19,0	11	black
6113863342	M12	63	40	23	19,0	11	orange
6113863306	M16	63	40	23	27,0	11	black
6113863344	M16	63	40	23	27,0	11	orange

Star grip nuts | 3-star grip nuts

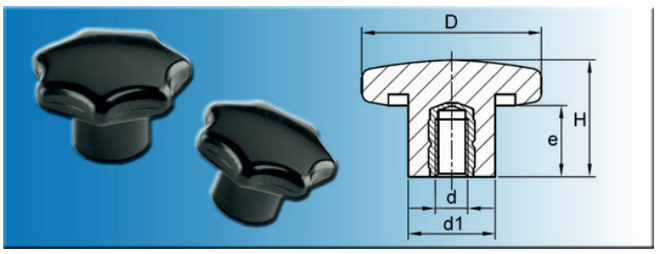


Material:
thermoset material FS 31 DIN 7708, black
Insert of treated steel

Part no.	D	H	h2	d	d1	d2
6113330305	30	17	12	5,25	11	8
6113340305	40	22	14	5,25	15	10

Part no.	D	H	h2	d	d1	d2
6113350305	50	26	17	5,25	20	14
6113360305	60	30	21	5,25	25	16

Star grip nuts | similar to DIN 6336



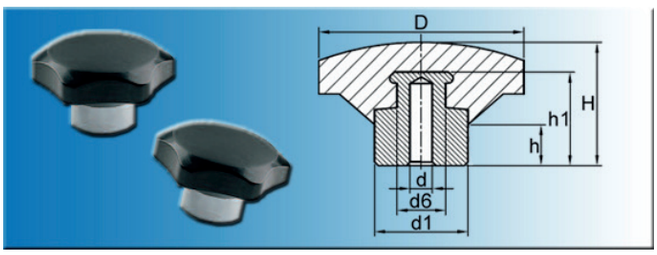
Material: thermoset material FS 31 DIN 7708
Colour: black

Threaded brass insert

Part no.	D	H	d	e	d1
6112620301	20	13	M4	8,5	10
6112625301	25	16	M5	9,0	12
6112632301	32	20	M6	10,0	13
6112640301	40	25	M8	14,0	19

Part no.	D	H	d	e	d1
6112650301	50	32	M10	17,0	20
6112663301	63	40	M12	19,0	23
6112680301	80	50	M16	27,0	30

Star grip nuts | Star grip nuts with blind hole, zinc-plated stem

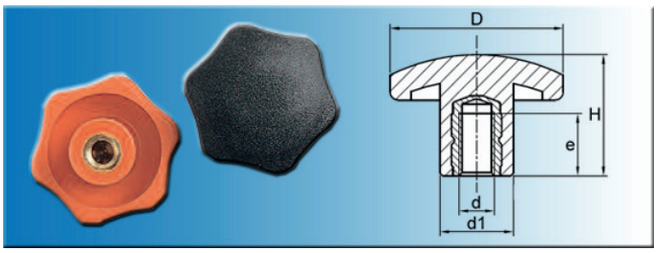


Material: thermoset material FS 31 DIN 7708
Colour: black

With blind hole and stem of zinc-plated steel.

Part no.	d	d6	d1	h	h1	D	H
6111844601	5,25	19	23	10	20	44	26
6111855601	5,25	19	25	11	29	55	32
6111866601	5,25	18	30	16	26	66	41
6111877601	5,25	18	30	16	26	77	43

Star grip nuts | Star grip nuts PA-glass fibre reinforced



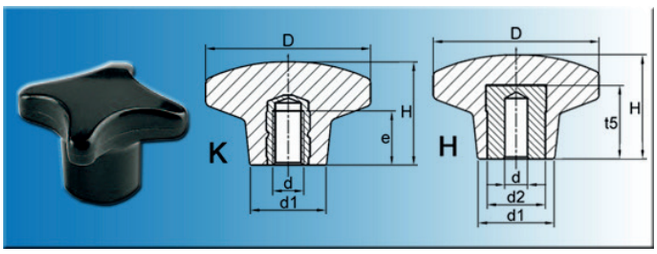
Material: PA-glass fibre reinforced
brass insert

Colours (F):
Colour code 0 = black RAL 7021
Colour code 4 = orange RAL 2004

Part no.	d	D	H	e	d1	F
6113933301	M6	33	22	10	14	0
6113933341	M6	33	22	10	14	4

Part no.	d	D	H	e	d1	F
6113933302	M8	33	22	14	14	0
6113933342	M8	33	22	14	14	4

Star grip nuts | Star grip nuts similar to DIN 6335

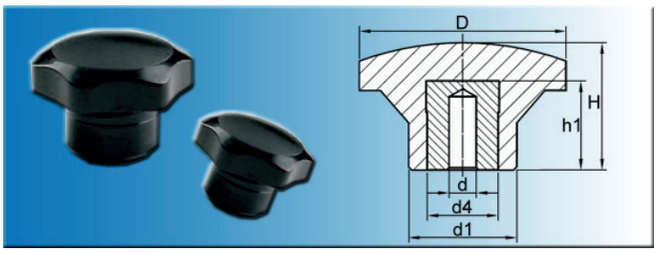


Material: thermoset material FS 31 DIN 7708
Colour: black

type (X):
- K: threaded brass insert
- H: with blind hole, steel insert

Part no.	D	d2	d	d1	H	e	t5	X
6112120301	20	-	M4	10	14	8	-	K
6112125301	25	-	M5	12	15	9	-	K
6112132301	32	-	M6	14	20	10	-	K
6112140301	40	-	M8	18	26	14	-	K
6112150301	50	-	M10	22	32	17	-	K
6112163301	63	-	M12	26	38	19	-	K
6112180301	80	-	M16	32	50	27	-	K
6112140302	40	12	5,25	18	26	-	15	H
6112150302	50	14	5,25	22	32	-	17	H
6112163302	63	18	5,25	26	38	-	22	H
6112180302	80	18	5,25	32	50	-	22	H

Star grip nuts | Star grip nuts with blind hole, insert of steel



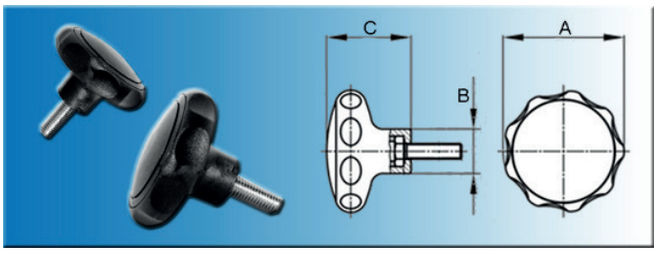
Material: thermoset material FS 31 DIN 7708
Colour: black

With blind hole, steel insert.

Part no.	D	H	d	d1	d4	h1
6111822301	22	19	5,25	12	8	12
6111833301	33	24	5,25	19	14	17
6111844301	44	27	5,25	23	18	22

Part no.	D	H	d	d1	d4	h1
6111855301	55	34	5,25	25	18	22
6111866301	66	42	5,25	30	18	22
6111877301	77	46	5,25	30	18	22

Star grip screws | Star grip screws, composite



Two-part head (base and cap), screw DIN 933 zinc-plated pressed-in. Threepart, very tight fit.

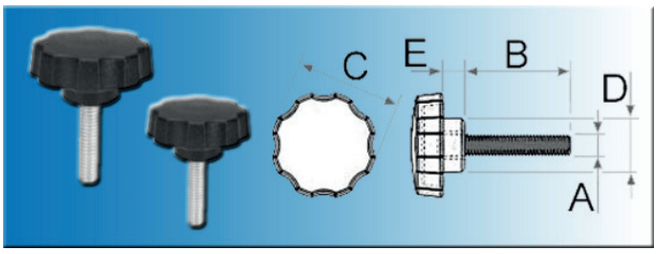
Material: PA 6
Colour: black

Further dimensions, special colours, bicoloured and stainless steel types on written request.

Part no.	M	L	A	B	C
2040614	M6	13/14	40	17	22
2040616	M6	16	40	18	26
2040618	M6	17/18	40	17	22
2040620	M6	20	40	18	26
2040628	M6	27/28	40	17	22
2040630	M6	30	40	18	26
2040638	M6	37/38	40	17	22
2040640	M6	40	40	18	26
2040650	M6	50	40	18	26
2040660	M6	60	40	18	26
2040670	M6	70	40	18	26
2040680	M6	80	40	18	26
2040814	M8	13/14	40	17	22
2040816	M8	16	40	18	26
2040820	M8	20	40	18	26

Part no.	M	L	A	B	C
2040828	M8	27/28	40	17	22
2040830	M8	30	40	18	26
2040838	M8	37/38	40	17	22
2040840	M8	40	40	18	26
2040843	M8	42/43	40	17	22
2040850	M8	50	40	18	26
2040890	M8	90	40	18	26
2051016	M10	16	50	23	34
2051020	M10	20	50	23	34
2051028	M10	27/28	50	22	23
2051030	M10	30	50	23	34
2051038	M10	37/38	50	22	23
2051040	M10	40	50	23	34
2051050	M10	46	50	23	34

Star grip screws | PA with steel thread, light version



Due to their extra large head diameter these star grips offer a very good handling. With zinc-plated steel screw.

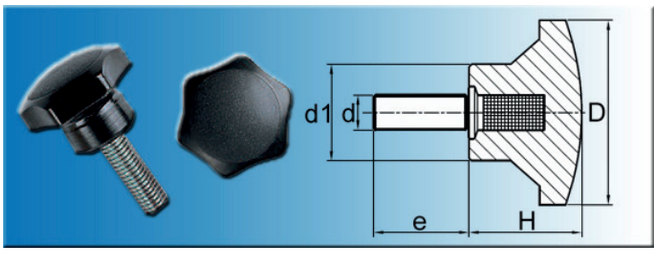
Material: PA 6
Colour: black

Further dimensions, special colours, bicoloured and stainless steel types on written request.

Part no.	A	B	C	D	E
1050615	M6	15	30	16	4
1050620	M6	20	30	16	4
1050630	M6	30	30	16	4
1050640	M6	40	30	16	4
1050650	M6	50	30	16	4
1050820	M8	20	40	20	10
1050830	M8	30	40	20	10
1050840	M8	40	40	20	10

Part no.	A	B	C	D	E
1050850	M8	50	40	20	10
1050860	M8	60	40	20	10
1051020	M10	20	50	20	10
1051030	M10	30	50	20	10
1051040	M10	40	50	20	10
1051050	M10	50	50	20	10
1051060	M10	60	50	20	10

Star grip screws | Star grip screws - thread of treated steel



Material: thermoset material FS 31 DIN 7708
Colour: black

Thread of treated steel

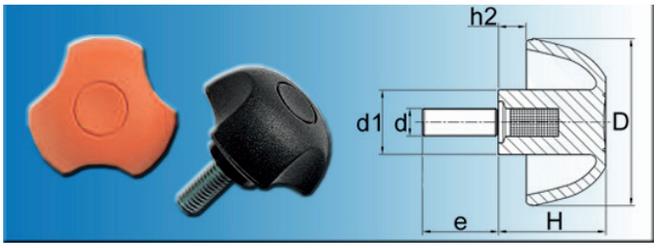
Part no.	D	H	d	e	d1
6111822513	22	19	M5	10	12
6111822502	22	19	M5	20	12
6111822511	22	19	M6	10	12
6111822501	22	19	M6	20	12
6111822514	22	19	M6	30	12
6111833502	33	24	M6	15	19
6111833538	33	24	M6	20	19
6111833539	33	24	M6	25	19
6111833505	33	24	M6	30	19
6111833520	33	24	M6	40	19
6111833501	33	24	M8	27	19
6111833512	33	24	M8	20	19
6111833540	33	24	M8	33	19
6111833541	33	24	M8	40	19

Part no.	D	H	d	e	d1
6111844504	44	27	M8	15	23
6111844502	44	27	M8	27	23
6111844513	33	27	M8	33	23
6111844516	44	27	M8	40	23
6111844523	44	27	M8	47	23
6111844508	44	27	M10	20	23
6111844501	44	27	M10	33	23
6111844524	44	27	M10	44	23
6111844525	44	27	M10	64	23
6111855511	55	34	M10	20	25
6111855502	55	34	M10	33	25
6111855512	55	34	M10	44	25
6111855513	55	34	M10	64	25
6111855501	55	34	M12	40	25

Part no.	D	H	d	e	d1
6111866508	66	42	M12	40	30
6111866507	66	42	M12	60	30

Part no.	D	H	d	e	d1
6111877502	77	46	M12	40	30

Star grip screws | Star grip screws PA-glass fibre reinforced



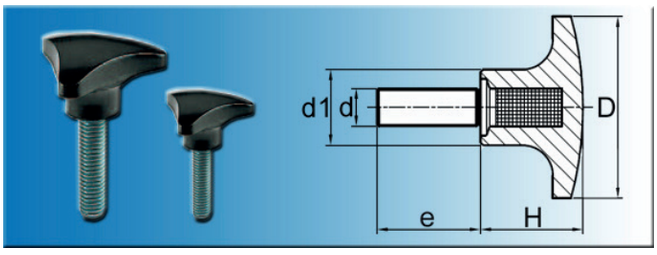
Material: PA-glass fibre reinforced
thread of zinc-plated steel

Colours (F):
black RAL 7021
orange RAL 2004

Part no.	d	D	H	d1	e	h2	F
6113825502	M4	25	16	13	15	5	black
6113825542	M4	25	16	13	15	5	orange
6113825503	M5	25	16	13	18	5	black
6113825543	M5	25	16	13	18	5	orange
6113825501	M6	25	16	13	20	5	black
6113825541	M6	25	16	13	20	5	orange
6113832503	M6	32	20	15	10	6	black
6113832543	M6	32	20	15	10	6	orange
6113832501	M6	32	20	15	20	6	black
6113832541	M6	32	20	15	20	6	orange
6113832504	M6	32	20	15	30	6	black
6113832544	M6	32	20	15	30	6	orange
6113832502	M8	32	20	15	27	6	black
6113832542	M8	32	20	15	27	6	orange
6113840511	M6	40	25	16	15	8	black
6113840552	M6	40	25	16	15	8	orange
6113840501	M6	40	25	16	20	8	black
6113840541	M6	40	25	16	20	8	orange
6113840504	M6	40	25	16	30	8	black
6113840544	M6	40	25	16	30	8	orange
6113840505	M6	40	25	16	40	8	black
6113840545	M6	40	25	16	40	8	orange
6113840515	M8	40	25	16	15	8	black
6113840553	M8	40	25	16	15	8	orange
6113840506	M8	40	25	16	20	8	black
6113840546	M8	40	25	16	20	8	orange
6113840507	M8	40	25	16	33	8	black
6113840547	M8	40	25	16	33	8	orange

Part no.	d	D	H	d1	e	h2	F
6113840508	M8	40	25	16	47	8	black
6113840548	M8	40	25	16	47	8	orange
6113840509	M10	40	25	16	20	8	black
6113840549	M10	40	25	16	20	8	orange
6113840503	M10	40	25	16	33	8	black
6113840543	M10	40	25	16	33	8	orange
6113840510	M10	40	25	16	44	8	black
6113840542	M10	40	25	16	44	8	orange
6113850505	M8	50	31	21	15	9	black
6113850547	M8	50	31	21	15	9	orange
6113850502	M8	50	31	21	27	9	black
6113850542	M8	50	31	21	27	9	orange
6113850501	M8	50	31	21	40	9	black
6113850541	M8	50	31	21	40	9	orange
6113850503	M10	50	31	21	33	9	black
6113850543	M10	50	31	21	33	9	orange
6113850504	M10	50	31	21	50	9	black
6113850544	M10	50	31	21	50	9	orange
6113863503	M10	63	39	26	33	12	black
6113863543	M10	63	39	26	33	12	orange
6113863504	M12	63	39	26	40	12	black
6113863544	M12	63	39	26	40	12	orange

Star grip screws | 3-star grip screws



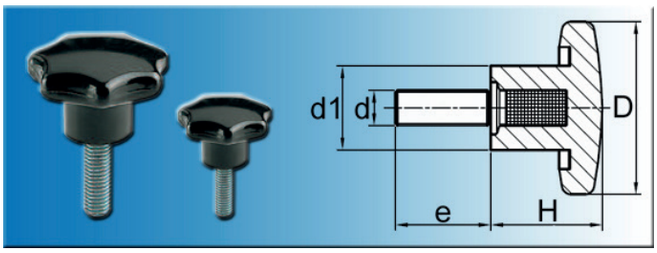
Material: thermoset material FS 31 DIN 7708
Colour: black

Thread of treated steel

Part no.	d	D	H	e	d1
6113330501	M6	30	17	25	11
6113340511	M8	40	22	33	15

Part no.	d	D	H	e	d1
6113350525	M10	50	26	33	20
6113360525	M12	60	30	40	25

Star grip screws | similar to DIN 6336



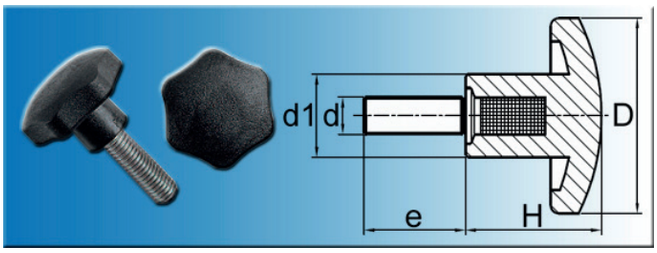
Material: thermoset material FS 31 DIN 7708
Colour: black

Thread of zinc-plated steel

Part no.	d	D	H	e	d1
6112620501	M4	20	13	15	10
6112625501	M5	25	16	20	12
6112632501	M6	32	20	20	13
6112632502	M6	32	20	40	13
6112640501	M8	40	25	27	19
6112640502	M8	40	25	47	19

Part no.	d	D	H	e	d1
6112650501	M10	50	32	44	20
6112650502	M10	50	32	64	20
6112663501	M12	63	40	40	23
6112663502	M12	63	40	60	23
6112680501	M16	80	50	55	30
6112680502	M16	80	50	75	30

Star grip screws | Star grip screws PA-glass fibre reinforced

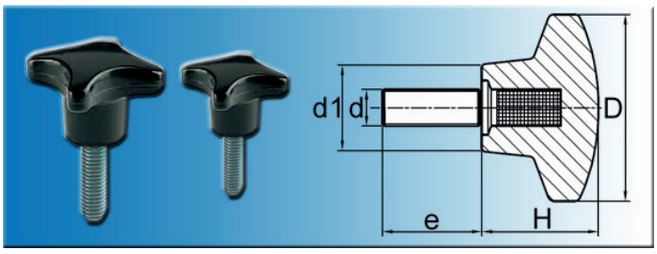


Material: PA-glass fibre reinforced
thread of zinc-plated steel

Colours (F):
Colour code 0 = black RAL 7021
Colour code 4 = orange RAL 2004

Part no.	d	D	H	e	d1	F
6113933504	M6	33	22	15	14	0
6113933544	M6	33	22	15	14	4
6113933501	M6	33	22	20	14	0
6113933541	M6	33	22	20	14	4
6113933505	M6	33	22	30	14	0
6113933545	M6	33	22	30	14	4
6113933506	M6	33	22	40	14	0

Part no.	d	D	H	e	d1	F
6113933546	M6	33	22	40	14	4
6113933507	M8	33	22	20	14	0
6113933547	M8	33	22	20	14	4
6113933502	M8	33	22	27	14	0
6113933542	M8	33	22	27	14	4
6113933508	M8	33	22	47	14	0
6113933548	M8	33	22	47	14	4



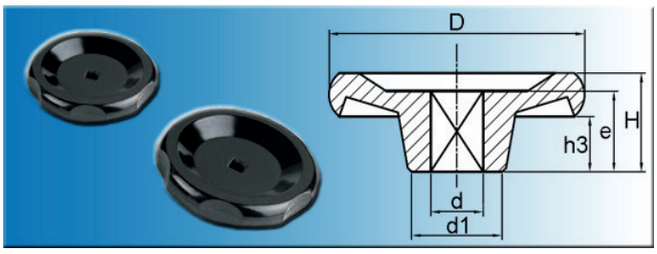
Material: thermoset material FS 31 DIN 7708
Colour: black

Thread of zinc-plated steel

Part no.	d	D	H	e	d1
6112120501	M4	20	14	15	10
6112120522	M5	20	14	20	10
6112125501	M5	25	15	20	12
6112132501	M6	32	20	20	14
6112132502	M6	32	20	40	14
6112140522	M6	40	26	20	18
6112140501	M8	40	26	27	18
6112140502	M8	40	26	47	18
6112150522	M8	50	32	33	22

Part no.	d	D	H	e	d1
6112150501	M10	50	32	44	22
6112150502	M10	50	32	64	22
6112163522	M10	63	38	33	26
6112163501	M12	63	38	40	26
6112163502	M12	63	38	60	26
6112180522	M12	80	50	40	32
6112180501	M16	80	50	55	32
6112180502	M16	80	50	75	32

Handwheels | smooth with square drive

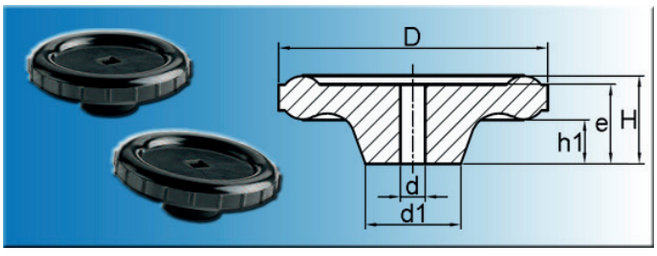


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	H	h3	e
6113206401	65	10	26	20	11	15
6113208401	80	10	34	21	9	15
6113210401	100	10	44	23	5	15

Part no.	D	d	d1	H	h3	e
6113212401	125	12	40	31	10	21
6113215401	150	12	50	32	7	21

Handwheels | knurled with square drive

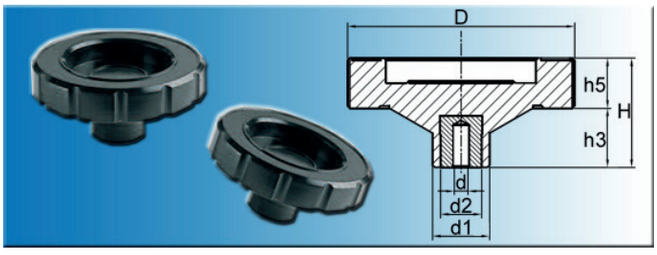


Material: thermoset material FS 31 DIN 7708
Colour: black

Part no.	D	d	d1	h1	H	e
6117335201	35	5	13	9	15	13
6117350201	50	7	21	10	22	17
6117361201	61	7	21	10	20	18

Part no.	D	d	d1	h1	H	e
6117371201	71	7	27	12	24	22
6117386203	86	8	31	15	28	24

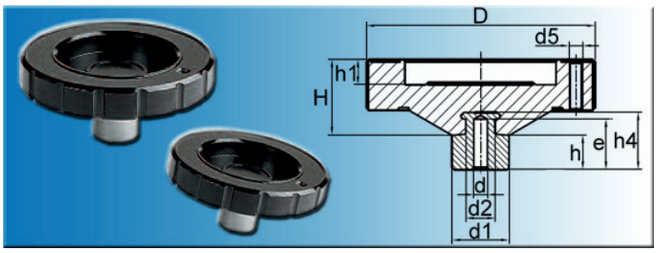
Handwheels | type H



Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Part no.	d	D	H	d2	d1	h3	h5
6118306301	5,25	65	36	18	25	22	15
6118308301	5,25	80	38	18	25	22	16

Handwheels | type A

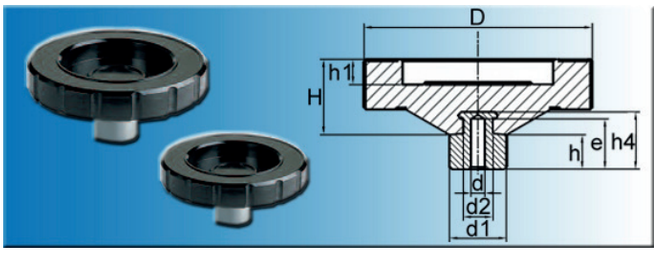


Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Optionally you can combine type A with tapered knobs from product group 61141 (page 67), 61136 (page 65) or 61137 (page 66).

Part no.	d5	d	D	h4	d2	d1	h	e	H	h1
6118310651	M6	5,25	100	29	19	25	15	15	33	11
6118313651	M8	5,25	130	36	20	30	25	24	33	11

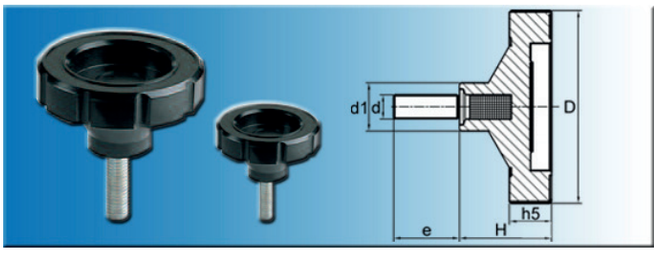
Handwheels | type N



Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Part no.	d	D	h4	d2	d1	h	H	h1	e
6118306601	5,25	65	29	19	25	25	30	10	15
6118308601	5,25	80	29	19	25	15	30	10	15
6118310601	5,25	100	29	19	25	15	33	11	15
6118313601	5,25	130	36	20	30	25	33	11	24

Handwheels | type T

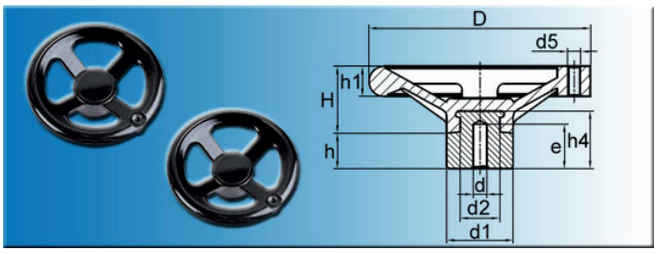


Material: thermoset material FS 31 DIN 7708
Thread of treated steel
Colour: black

Part no.	d	D	e	H	h5	d1
6118306501	M10	65	33	37	15	25

Part no.	d	D	e	H	h5	d1
6118308502	M12	80	40	38	16	25

4-spoke handwheels | type A

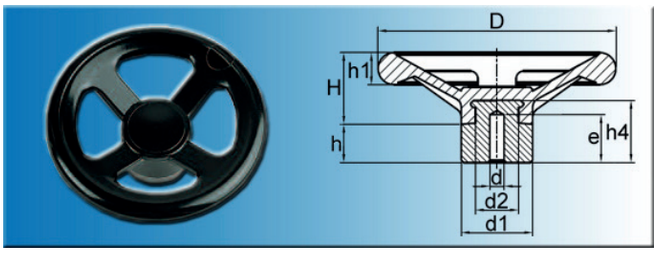


Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Optionally you can combine type A with tapered knobs from product group 61141 (page 67), 61136 (page 65) or 61137 (page 66).

Part no.	d	d5	D	H	h	d2	h4	d1	e	h1
6113110651	5,25	M6	100	30	20	18	26	30	16	15
6113112651	8,00	M6	125	28	25	28	32	40	22	14
6113115651	10,00	M8	150	48	30	30	55	50	30	18
6113117651	10,00	M10	175	49	30	30	55	50	30	20
6113120651	10,00	M12	200	70	30	30	55	50	30	26

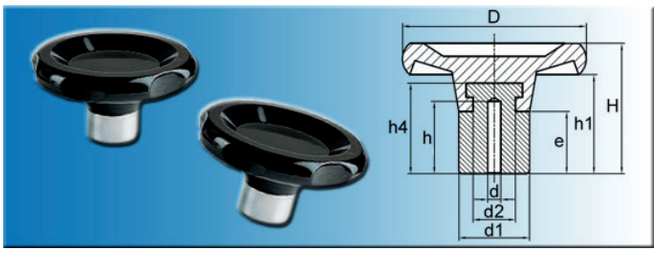
4-spoke handwheels | type N



Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Part no.	d	D	H	h	d2	h4	d1	e	h1
6113110601	5,25	100	30	20	18	26	30	16	15
6113112601	8,00	125	28	25	28	32	40	22	14
6113115601	10,00	150	48	30	30	55	50	30	18
6113117601	10,00	175	49	30	30	55	50	30	20
6113120601	10,00	200	70	30	30	55	50	30	26
6113130601	10,00	300	86	30	34	60	60	18	30

Disc handwheels | type N



Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Part no.	D	H	h	h1	h4	e	d	d1	d2
6113204601	45	33	18	21	20	11	5,25	20	11
6113206601	65	39	22	28	29	22	5,25	25	19
6113208601	80	43	20	31	26	25	5,25	30	18
6113210601	100	52	25	34	32	25	8,00	35	28
6113212601	125	64	25	43	32	25	8,00	40	28
6113215601	150	82	30	57	50	30	10,00	50	35
6113217601	175	84	30	64	50	30	10,00	50	35
6113220601	200	86	30	64	50	30	10,00	50	35

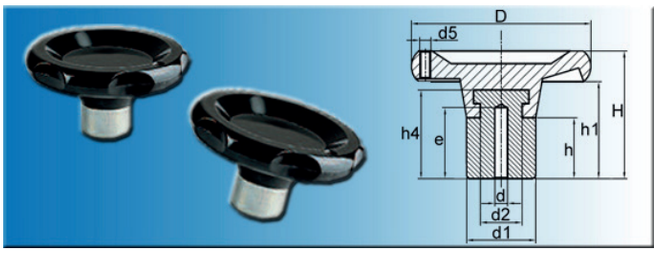
Disc handwheels | type H



Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Part no.	D	H1	h2	h6	d1	d	d4
6113204301	45	26	17	17	20	5,25	14
6113206302	65	30	19	21	25	5,25	16
6113208302	80	37	24	22	30	5,25	18

Disc handwheels | type A

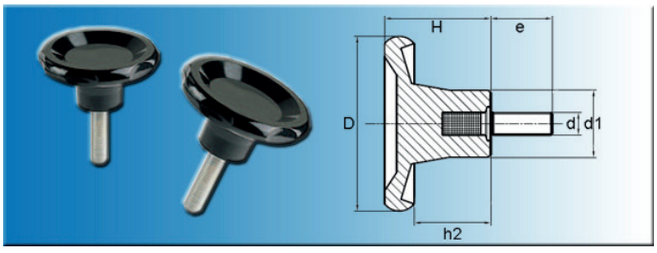


Material: thermoset material FS 31 DIN 7708
Insert of treated steel
Colour: black

Optionally you can combine type A with tapered knobs from product group 61141 (page 67), 61136 (page 65) or 61137 (page 66).

Part no.	D	d5	H	h	h1	h4	e	d	d1	d2
6113210651	100	M6	52	25	34	32	25	8	35	28
6113212651	125	M8	64	25	43	32	25	8	40	28
6113215651	150	M10	82	30	57	50	30	10	50	35
6113217651	175	M10	84	30	64	50	30	10	50	35
6113220651	200	M12	86	30	64	50	30	10	50	35

Disc handwheels | type T

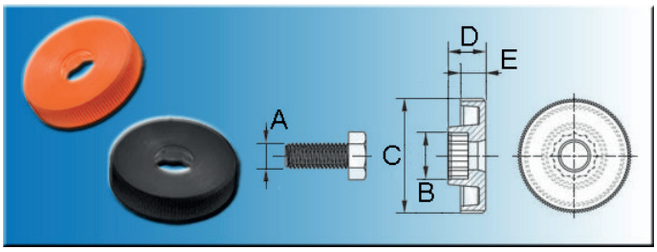


Material: thermoset material FS 31 DIN 7708
Thread of treated steel
Colour: black

Part no.	D	H	d	e	d1	h2
6113204501	45	26	M8	27	20	16
6113206506	65	30	M10	33	25	19

Part no.	D	H	d	e	d1	h2
6113208502	80	37	M12	40	30	24

Knurled knobs | Flat type



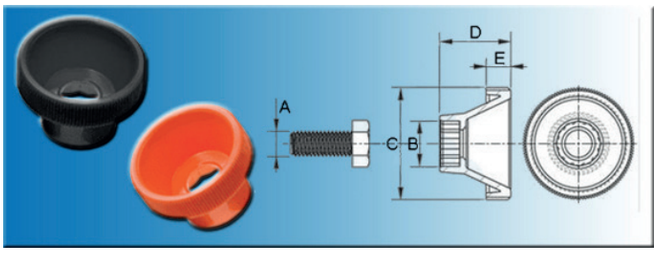
You can produce your own knurled screws and nuts with help of these knobs.
Easy assembly on bolts and nuts with only one hammer stroke.

Material: POM
Colours:
last digits 599 = black
last digits 009 = orange

Part no.	A	B	C	D	E
0370400009	M4	7	13	4,5	3,5
0370400599	M4	7	13	4,5	3,5
0370402009	M4	7	17	5,5	4,5
0370402599	M4	7	17	5,5	4,5
0370500009	M5	8	17	5,5	4,5
0370500599	M5	8	17	5,5	4,5
0370502009	M5	8	20	6,5	5,0
0370502599	M5	8	20	6,5	5,0
0370600009	M6	10	20	6,5	5,0

Part no.	A	B	C	D	E
0370600599	M6	10	20	6,5	5,0
0370602009	M6	10	25	8,0	6,0
0370602599	M6	10	25	8,0	6,0
0370800009	M8	13	25	8,0	6,0
0370800599	M8	13	25	8,0	6,0
0370802009	M8	13	36	10,0	8,0
0370802599	M8	13	36	10,0	8,0
0371000009	M10	17	36	10,0	8,0
0371000599	M10	17	36	10,0	8,0

Knurled knobs | Tall type



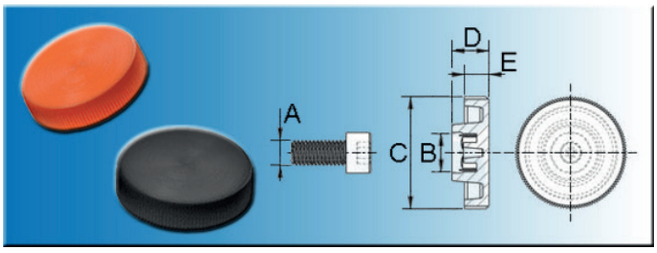
You can produce your own knurled screws and nuts with help of these knobs.
Easy assembly on bolts and nuts with only one hammer stroke.

Material: POM
Colours:
last digits 599 = black
last digits 009 = orange

Part no.	A	B	C	D	E
0370401009	M4	7	13	9,5	3,5
0370401599	M4	7	13	9,5	3,5
0370403009	M4	7	17	11,5	4,5
0370403599	M4	7	17	11,5	4,5
0370501009	M5	8	17	11,5	4,5
0370501599	M5	8	17	11,5	4,5
0370503009	M5	8	20	15,0	5,0
0370503599	M5	8	20	15,0	5,0
0370601009	M6	10	20	15,0	5,0

Part no.	A	B	C	D	E
0370601599	M6	10	20	15,0	5,0
0370603009	M6	10	25	18,0	6,0
0370603599	M6	10	25	18,0	6,0
0370801009	M8	13	25	18,0	6,0
0370801599	M8	13	25	18,0	6,0
0370803009	M8	13	36	23,0	8,0
0370803599	M8	13	36	23,0	8,0
0371001009	M10	17	36	23,0	8,0
0371001599	M10	17	36	23,0	8,0

Knurled knobs | with hexagon socket



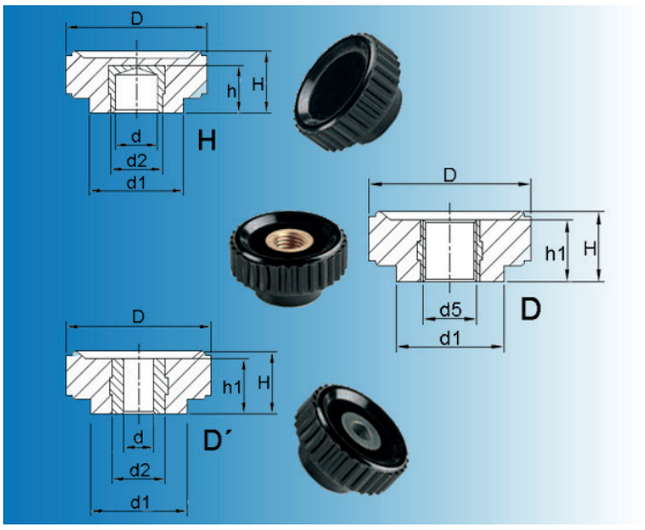
You can produce your own knurled screws and nuts with help of these knobs.
Easy assembly on bolts and nuts with only one hammer stroke.

Material: POM
Colours:
last digits 599 = black
last digits 009 = orange

Part no.	A	B	C	D	E
0380300009	M3	5,5	11	4,5	3,0
0380300599	M3	5,5	11	4,5	3,0
0380400009	M4	7,0	13	5,5	3,5
0380400599	M4	7,0	13	5,5	3,5
0380401009	M4	7,0	17	5,5	4,5
0380401599	M4	7,0	17	5,5	4,5
0380500009	M5	8,5	17	6,5	4,5
0380500599	M5	8,5	17	6,5	4,5
0380501009	M5	8,5	20	6,5	5,0
0380501599	M5	8,5	20	6,5	5,0

Part no.	A	B	C	D	E
0380600009	M6	10,0	20	7,5	5,0
0380600599	M6	10,0	20	7,5	5,0
0380601009	M6	10,0	25	7,5	6,0
0380601599	M6	10,0	25	7,5	6,0
0380800009	M8	13,0	25	9,5	6,0
0380800599	M8	13,0	25	9,5	6,0
0380801009	M8	13,0	36	8,5	8,0
0380801599	M8	13,0	36	9,5	8,0
0381000009	M10	16,0	36	12,0	8,0
0381000599	M10	16,0	36	12,0	8,0

Knurled nuts | black

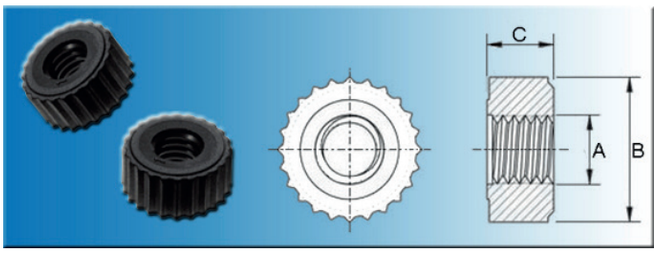


Material: thermoset material FS 31 DIN 7708
Colour: black

type (F):
H and D´ = insert of treated steel
D = threaded insert of brass

Part no.	D	H	d	d5	h	h1	d1	d2	F
6119524301	24	13	5,25	-	8	-	14	10	H
6119530301	30	15	5,25	-	12	-	20	12	H
6119524407	24	13	-	M6	-	11,5	14	-	D
6119530405	30	15	-	M10	-	13,8	20	-	D
6119530409	30	15	-	M8	-	13,8	20	-	D
6119524401	24	13	5,25	-	-	11,5	14	10	D´
6119530401	30	15	5,25	-	-	13,8	20	12	D´

Knurled nuts | PA 6.6-glass fibre reinforced black



All-plastic knurled nuts

Material: PA 6.6-glass fibre reinforced
Colour: black

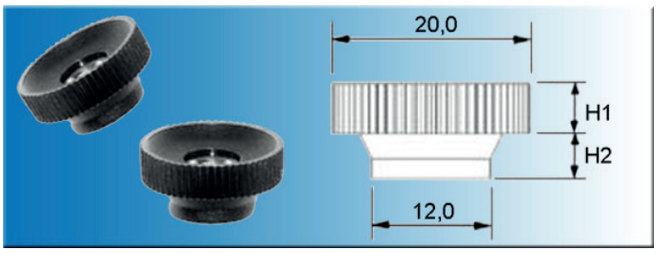
Further types on written request.

Part no.	A	B	C
1410030	M3	8,0	3,5
1410040	M4	10,0	4,2

Part no.	A	B	C
1410050	M5	13,0	5,2
1410060	M6	12,5	6,0

Part no.	A	B	C
1410080	M8	17,5	8,3
1410100	M10	21,5	10,0

Knurled nuts | black with stem



Plastic head with fine knurling and steel nut DIN 934, continuous thread.

Material: PA
Colour: black

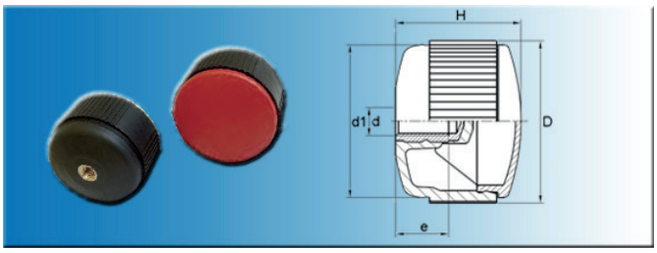
Further types on written request.

Part no.	M	H1	H2
2430040	M4	5	4,5

Part no.	M	H1	H2
2430050	M5	5	4,5

Part no.	M	H1	H2
2430060	M6	5	4,5

Knurled nuts | coloured

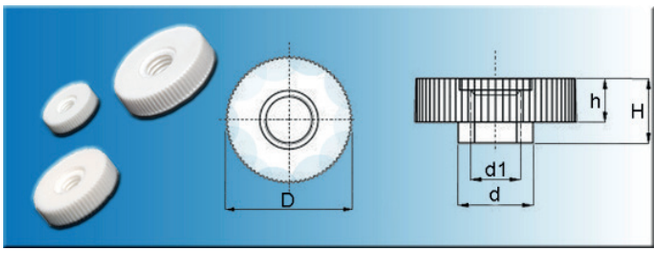


Material: reinforced PA
Thread: brass
Colours (F):
1 = black RAL 7021
2 = blue RAL 5005
3 = yellow RAL 1021
4 = orange RAL 2004
5 = red RAL 3001
9 = silver RAL 9006

Part no.	D	H	d1	d	e	F
6119641301	40	28	37	M6	10	1
6119642301	40	28	37	M6	10	2
6119643301	40	28	37	M6	10	3
6119644301	40	28	37	M6	10	4
6119645301	40	28	37	M6	10	5
6119649301	40	28	37	M6	10	9
6119641302	40	28	37	M8	14	1
6119642302	40	28	37	M8	14	2
6119643302	40	28	37	M8	14	3

Part no.	D	H	d1	d	e	F
6119644302	40	28	37	M8	14	4
6119645302	40	28	37	M8	14	5
6119649302	40	28	37	M8	14	9
6119641303	40	28	37	M10	17	1
6119642303	40	28	37	M10	17	2
6119643303	40	28	37	M10	17	3
6119644303	40	28	37	M10	17	4
6119645303	40	28	37	M10	17	5
6119649303	40	28	37	M10	17	9

Knurled nuts | DIN 467 flat



Non-corroding, resistant to moisture, steam and seawater.
Electrically isolating, stable to creepage.
High mechanical strength, up to 600 kg/cm².
Frost and heat resistant: -30°C up to +120°C.

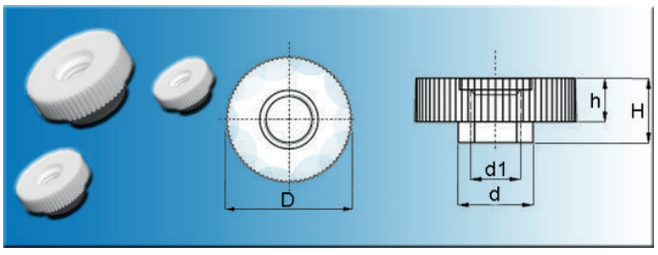
Knurling 1 = fine / knurling 2 = raw (R = knurling type)

Material: PA 6.6
Colour: white ~RAL 9010

Part no.	d1	D	H	h	d	R
0720312	M3	12	5,0	3,5	8,5	1
0720414	M4	14	5,0	3,5	8,5	1
0720416	M4	16	6,0	4,5	10,0	1
0720516	M5	16	6,0	4,5	10,0	1
0720519	M5	19	7,5	6,0	10,0	1
0720616	M6	16	6,0	4,5	10,0	1
0720619	M6	19	7,5	6,0	10,0	1
0720800	M8	24	7,5	6,0	13,0	1

Part no.	d1	D	H	h	d	R
0721416	M4	16	6,0	4,5	10,0	2
0721420	M4	20	6,5	5,0	10,0	2
0721516	M5	16	6,0	4,5	10,0	2
0721520	M5	20	6,5	5,0	10,0	2
0721524	M5	24	7,5	5,7	10,0	2
0721616	M6	16	6,0	4,5	10,0	2
0721620	M6	20	6,5	5,0	10,0	2
0721624	M6	24	7,5	5,7	10,0	2

Knurled nuts | DIN 466 tall



Non-corroding, resistant to moisture, steam and seawater.
Electrically isolating, stable to creepage.
High mechanical strength, up to 600 kg/cm².
Frost and heat resistant: -30°C up to +120°C.

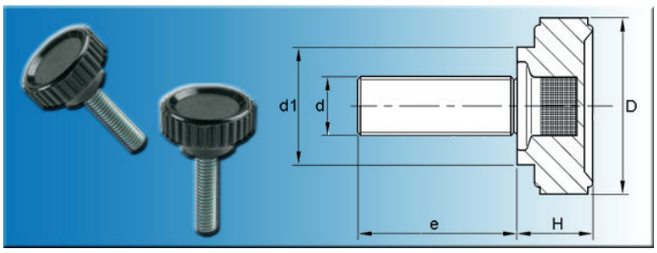
Knurling 1 = fine / knurling 2 = raw (R = knurling type)

Material: PA 6.6
Colour: white ~RAL 9010

Part no.	d1	D	H	h	d	R
0730300	M3	12	7,0	3,5	7,0	1
0730400	M4	16	8,0	4,5	9,5	1
0730412	M4	12	7,0	3,5	7,0	1
0730500	M5	20	11,0	6,0	13,0	1
0730514	M5	14	7,0	3,5	8,8	1
0730516	M5	16	8,0	4,5	9,5	1

Part no.	d1	D	H	h	d	R
0730600	M6	20	11,0	6,0	13,0	1
0730616	M6	15	8,0	4,5	9,5	1
0731416	M4	16	8,0	4,5	9,5	2
0731516	M5	16	8,6	4,8	9,5	2
0731616	M6	16	8,0	4,5	9,5	2
0731624	M6	24	11,0	6,0	13,0	2

Knurled screws | black



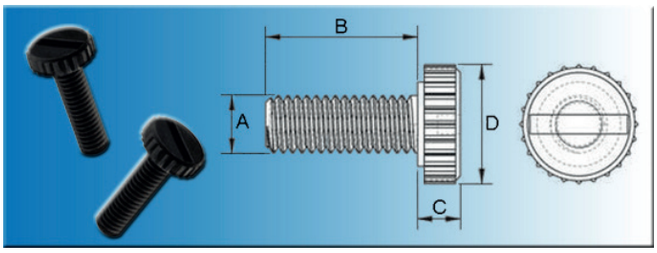
Material: thermoset material FS 31 DIN 7708
Colour: black

Thread: zinc-plated steel

Part no.	D	H	d	e	d1
6119524501	24	13	M6	25	14

Part no.	D	H	d	e	d1
6119530501	30	15	M10	13	20

Knurled screws | PA black



All-plastic knurled screws

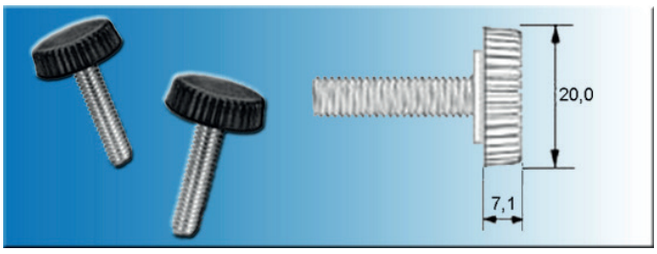
Material: PA
Colour: black

Further types on written request.

Part no.	A	B	C	D
1400406	M4	6	4,0	13,0
1400410	M4	10	4,0	13,0
1400415	M4	15	4,0	13,0
1400420	M4	20	4,0	13,0
1400510	M5	10	3,8	13,0
1400515	M5	16	3,8	13,0
1400520	M5	20	3,8	13,0
1400610	M6	10	3,8	13,0
1400615	M6	16	3,8	13,0

Part no.	A	B	C	D
1400620	M6	20	3,8	13,0
1400625	no longer available!			
1400810	M8	10	3,8	13,0
1400816	M8	16	3,8	13,0
1400820	M8	20	3,8	13,0
1401010	M10	10	3,8	13,0
1401016	M10	16	3,8	13,0
1401020	M10	20	3,8	13,0

Knurled screws | black with metal thread



Plastic head with fine knurling, zinc-plated steel screw.

Material: PA
Colour: black

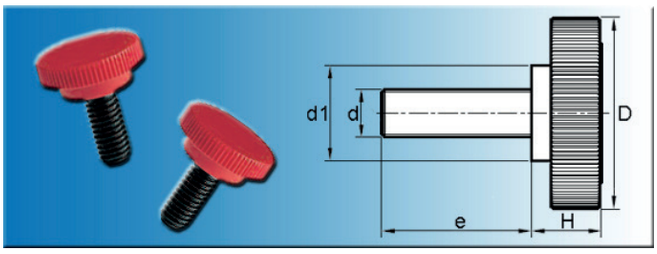
Further types on written request.

Part no.	M	M-L
2430408	M4	8/9
2430410	M4	10/11
2430412	M4	12/13
2430415	M4	15/16
2430425	M4	25/26
2430510	M5	10/11
2430515	M5	15/16
2430519	M5	19/20

Part no.	M	M-L
2430524	M5	24/25
2430529	M5	29/30
2430534	M5	34/35
2430539	M5	39/40
2430549	M5	49/50
2430610	M6	10/11
2430614	M6	14/15
2430617	M6	17/18

Part no.	M	M-L
2430620	M6	20/21
2430628	M6	28/29
2430633	M6	34/35
2430638	M6	38/39
2430643	M6	43/44
2430648	M6	48/50
2430658	M6	58/60
2430664	M6	64/66

Knurled screws | black | red | grey

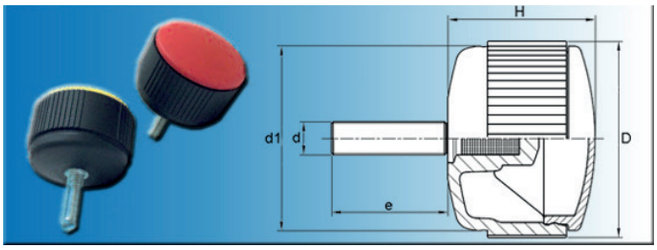


Material: POM
Thread: coated steel

Colours (F):
Colour code 1 = black
Colour code 4 = red
Colour code 7 = grey

Part no.	d	D	H	d1	e	F
6111509108	M3	9,5	5	8	8	1
6111509408	M3	9,5	5	8	8	4
6111509708	M3	9,5	5	8	8	7
6111509110	M3	9,5	5	8	10	1
6111509410	M3	9,5	5	8	10	4
6111509710	M3	9,5	5	8	10	7
6111509112	M3	9,5	5	8	12	1
6111509412	M3	9,5	5	8	12	4
6111509712	M3	9,5	5	8	12	7
6111513110	M4	13,0	6	10	10	1
6111513410	M4	13,0	6	10	10	4
6111513710	M4	13,0	6	10	10	7
6111513112	M4	13,0	6	10	12	1
6111513412	M4	13,0	6	10	12	4
6111513712	M4	13,0	6	10	12	7
6111513114	M4	13,0	6	10	14	1
6111513414	M4	13,0	6	10	14	4
6111513714	M4	13,0	6	10	14	7
6111516112	M5	16,0	7	12	12	1
6111516412	M5	16,0	7	12	12	4
6111516712	M5	16,0	7	12	12	7
6111516114	M5	16,0	7	12	14	1
6111516414	M5	16,0	7	12	14	4
6111516714	M5	16,0	7	12	14	7
6111516116	M5	16,0	7	12	16	1
6111516416	M5	16,0	7	12	16	4
6111516716	M5	16,0	7	12	16	7

Part no.	d	D	H	d1	e	F
6111519114	M6	19,0	7	13	14	1
6111519414	M6	19,0	7	13	14	4
6111519714	M6	19,0	7	13	14	7
6111519116	M6	19,0	7	13	16	1
6111519416	M6	19,0	7	13	16	4
6111519716	M6	19,0	7	13	16	7
6111519120	M6	19,0	7	13	20	1
6111519420	M6	19,0	7	13	20	4
6111519720	M6	19,0	7	13	20	7
6111526114	M6	26,0	9	16	14	1
6111526414	M6	26,0	9	16	14	4
6111526714	M6	26,0	9	16	14	7
6111526116	M6	26,0	9	16	16	1
6111526416	M6	26,0	9	16	16	4
6111526716	M6	26,0	9	16	16	7
6111526120	M6	26,0	9	16	20	1
6111526420	M6	26,0	9	16	20	4
6111526720	M6	26,0	9	16	20	7
6111527116	M8	26,0	9	16	16	1
6111527416	M8	26,0	9	16	16	4
6111527716	M8	26,0	9	16	16	7
6111527120	M8	26,0	9	16	20	1
6111527420	M8	26,0	9	16	20	4
6111527720	M8	26,0	9	16	20	7
6111527125	M8	26,0	9	16	25	1
6111527425	M8	26,0	9	16	25	4
6111527725	M8	26,0	9	16	25	7



Material: PA reinforced
Thread: zinc-plated steel

Colours (F):
Colour code 1 = black RAL 7021
Colour code 2 = blue RAL 5005
Colour code 3 = yellow RAL 1021
Colour code 4 = orange RAL 2004
Colour code 5 = red RAL 3001
Colour code 9 = silver RAL 9006

Part no.	d	D	H	d1	e	F
6119641501	M6	40	28	37	15	1
6119642501	M6	40	28	37	15	2
6119643501	M6	40	28	37	15	3
6119644501	M6	40	28	37	15	4
6119645501	M6	40	28	37	15	5
6119649501	M6	40	28	37	15	9
6119641503	M6	40	28	37	30	1
6119642503	M6	40	28	37	30	2
6119643503	M6	40	28	37	30	3
6119644503	M6	40	28	37	30	4
6119645503	M6	40	28	37	30	5
6119649503	M6	40	28	37	30	9
6119641504	M6	40	28	37	40	1
6119642504	M6	40	28	37	40	2
6119643504	M6	40	28	37	40	3
6119644504	M6	40	28	37	40	4
6119645504	M6	40	28	37	40	5
6119649504	M6	40	28	37	40	9
6119641505	M8	40	28	37	15	1
6119642505	M8	40	28	37	15	2
6119643505	M8	40	28	37	15	3
6119644505	M8	40	28	37	15	4
6119645505	M8	40	28	37	15	5
6119649505	M8	40	28	37	15	9
6119641507	M8	40	28	37	30	1
6119642507	M8	40	28	37	30	2
6119643507	M8	40	28	37	30	3

Part no.	d	D	H	d1	e	F
6119644507	M8	40	28	37	30	4
6119645507	M8	40	28	37	30	5
6119649507	M8	40	28	37	30	9
6119641509	M8	40	28	37	47	1
6119642509	M8	40	28	37	47	2
6119643509	M8	40	28	37	47	3
6119644509	M8	40	28	37	47	4
6119645509	M8	40	28	37	47	5
6119649509	M8	40	28	37	47	9
6119641510	M10	40	28	37	20	1
6119642510	M10	40	28	37	20	2
6119643510	M10	40	28	37	20	3
6119644510	M10	40	28	37	20	4
6119645510	M10	40	28	37	20	5
6119649510	M10	40	28	37	20	9
6119641511	M10	40	28	37	30	1
6119642511	M10	40	28	37	30	2
6119643511	M10	40	28	37	30	3
6119644511	M10	40	28	37	30	4
6119645511	M10	40	28	37	30	5
6119649511	M10	40	28	37	30	9
6119641512	M10	40	28	37	40	1
6119642512	M10	40	28	37	40	2
6119643512	M10	40	28	37	40	3
6119644512	M10	40	28	37	40	4
6119645512	M10	40	28	37	40	5
6119649512	M10	40	28	37	40	9



Installation feet
Buffers & Supports

Installation feet
Buffers & Supports



Adjustable feet & machine feet **Page 104**



Adjustable plugs & tube application **Page 114**

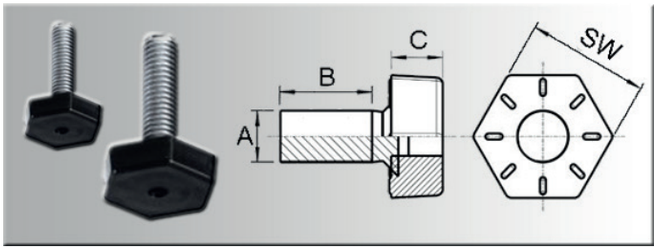


Adhesive & screw feet | buffers **Page 118**



Rubber-metal buffers **Page 128**

Adjustable feet & machine feet | Adjustable hexagonal feet



Hexagon, with zinc-plated metal screw.

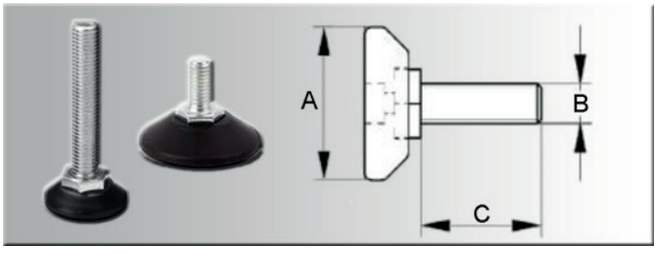
Material: PE
Colour: black

Further types on written request.

Part no.	SW	A	B	C
1531916	no longer available!			
1532016	20	M8x20	16	8
1532026	20	M8x30	26	8
1532036	20	M8x40	36	8
1532046	20	M8x50	46	8
1532516	25	M8x20	16	8
1532526	25	M8x30	26	8
1532536	25	M8x40	36	8
1532546	25	M8x50	46	8
1532615	25	M10x20	15	8
1532625	25	M10x30	25	8

Part no.	SW	A	B	C
1532635	25	M10x40	35	8
1532645	25	M10x50	45	8
1533016	30	M8x20	16	8
1533026	30	M8x30	26	8
1533036	30	M8x40	36	8
1533046	30	M8x50	46	8
1533115	30	M10x20	15	8
1533125	30	M10x30	25	8
1533135	30	M10x40	35	8
1533145	30	M10x50	45	8

Adjustable feet & machine feet | Adjustable feet



Usable as support and height regulator for machines, devices, cupboards and furniture. The plate consists of solid plastic, the thread of zinc-plated steel.

Plate height: approx. 10 mm
Loading capacity:
M8 up to 400 kg / M10 up to 550 kg

Material: PP
Colour: black

Also available as swivelling type! Further types on written request.

Part no.	A	B	C
1483801	38	M8	16
1483802	38	M8	20
1483803	38	M8	30
1483804	38	M8	40
1483805	38	M8	50
1483806	38	M8	60
1483807	38	M8	70
1483808	38	M8	80
1483809	38	M8	90

Part no.	A	B	C
1483810	38	M8	100
1483812	38	M8	120
1483001	38	M10	16
1483002	38	M10	20
1483003	38	M10	30
1483004	38	M10	40
1483005	38	M10	50
1483006	38	M10	60
1483007	38	M10	70

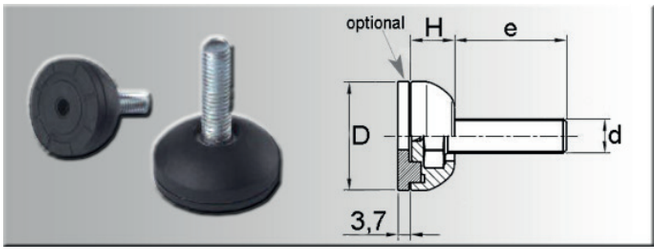
Part no.	A	B	C
1483008	38	M10	80
1483009	38	M10	90
1483010	38	M10	100
1483012	38	M10	120
1484801	48	M8	16
1484802	48	M8	20
1484803	48	M8	30
1484804	48	M8	40
1484805	48	M8	50

Part no.	A	B	C
1484806	48	M8	60
1484807	48	M8	70
1484808	48	M8	80
1484809	48	M8	90
1484810	48	M8	100
1484001	48	M10	16

Part no.	A	B	C
1484002	48	M10	20
1484003	48	M10	30
1484004	48	M10	40
1484005	48	M10	50
1484006	48	M10	60
1484007	48	M10	70

Part no.	A	B	C
1484008	48	M10	80
1484009	48	M10	90
1484010	48	M10	100
1484012	48	M10	120

Adjustable feet & machine feet | Machine feet technopolymer



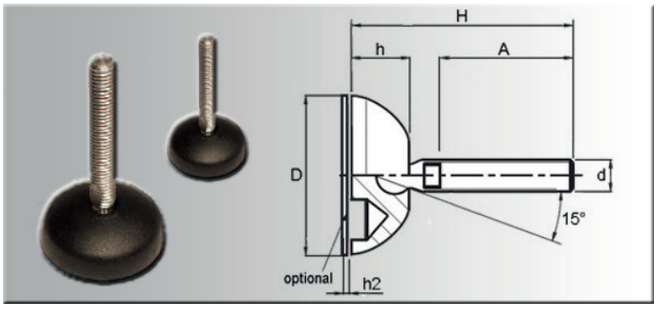
Material: technopolymer
Colour: black
Thread of treated steel
* = max. loading capacity

Optional: rubber NBR 70 Shore A anti-slip (page 112)
Ø 32 = 6118800903
Ø 40 = 6118800904

Part no.	D	H	d	e	kg*
6118832533	32	13	M8	26	800
6118832534	32	13	M10	23	800

Part no.	D	H	d	e	kg*
6118840533	40	13	M8	36	800
6118840534	40	13	M10	33	800

Adjustable feet & machine feet | Adjustable feet stainless steel bolt



Adjustable feet with stainless steel bolt

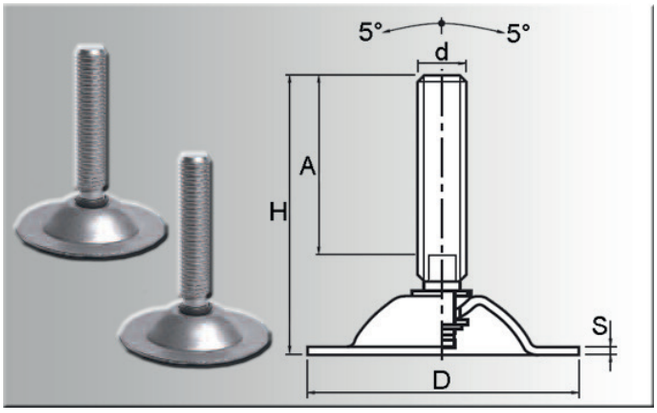
Material:
Plate of black, reinforced PA 6
Bolt of stainless steel (AISI 304)

*max. static load on vertical axis

Part no.	D	h	d	A	H	kg*
6420104550	40	13	M8	45	68	1.000
6420104551	40	13	M8	65	88	1.000
6420104552	40	13	M10	35	60	1.100
6420104553	40	13	M10	70	95	1.100
6420105550	50	13	M8	45	68	1.100

Part no.	D	h	d	A	H	kg*
6420105551	50	13	M8	65	88	1.100
6420105552	50	13	M10	35	60	1.200
6420105553	50	13	M10	70	95	1.200
6420105554	50	13	M12	43	70	1.300
6420105555	50	13	M12	63	90	1.300

Adjustable feet & machine feet | Adjustable feet steel/stainless steel



Adjustable feet
*max. static load on vertical axis

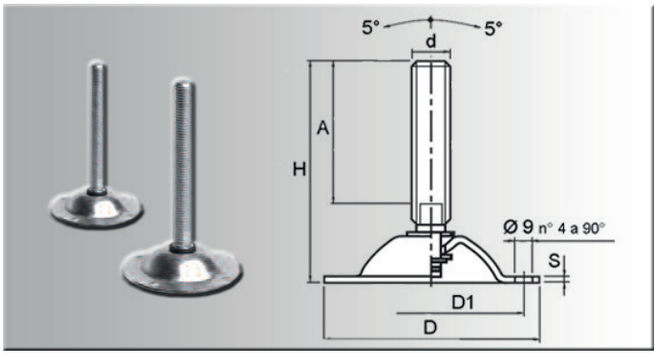
Material: optional
zinc-plated steel (penultimate digit = 3, such as 6420511530) or stainless steel (AISI 304) (penultimate digit = 5, such as 6420511550)

S = 3.5 mm for zinc-plated steel
S = 3.0 mm for stainless steel

Part no.	D	H	d	A	max. kg*
6420511530	113	100	M16	58	1.500
6420511550	113	100	M16	58	1.000
6420511531	113	187	M16	145	1.500
6420511551	113	187	M16	145	1.000
6420511532	113	152	M20	107	1.500
6420511552	113	152	M20	107	1.000
6420511533	113	202	M20	157	1.500

Part no.	D	H	d	A	max. kg*
6420511553	113	202	M20	157	1.000
6420511534	113	138	M24	90	1.500
6420511554	113	138	M24	90	1.000
6420511535	113	210	M24	162	1.500
6420511555	113	210	M24	162	1.000
6420511536	113	173	M30	125	1.500
6420511556	113	173	M30	125	1.000

Adjustable feet & machine feet | Adjustable feet steel/stainless steel & fixing hole



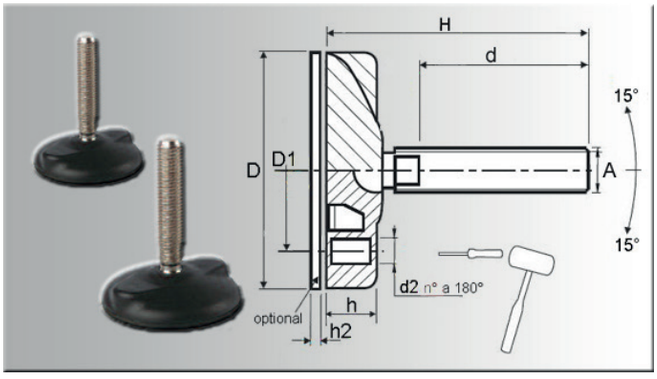
Adjustable feet - plate with fixing holes
*max. static load on vertical axis

Material: optional
zinc-plated steel (penultimate digit = 3, such as 6420611530) or stainless steel (AISI 304) (penultimate digit = 5, such as 6420611550)

S = 3.5 mm for zinc-plated steel
S = 3.0 mm for stainless steel

Part no.	D	H	d	A	D1	max. kg*
6420611530	113	100	M16	58	95	1.500
6420611550	113	100	M16	58	95	1.000
6420611531	113	187	M16	145	95	1.500
6420611551	113	187	M16	145	95	1.000
6420611532	113	152	M20	107	95	1.500
6420611552	113	152	M20	107	95	1.000
6420611533	113	202	M20	157	95	1.500

Part no.	D	H	d	A	D1	max. kg*
6420611553	113	202	M20	157	95	1.000
6420611534	113	138	M24	90	95	1.500
6420611554	113	138	M24	90	95	1.000
6420611535	113	210	M24	162	95	1.500
6420611555	113	210	M24	162	95	1.000
6420611536	113	173	M30	125	95	1.000
6420611556	113	173	M30	125	95	1.000



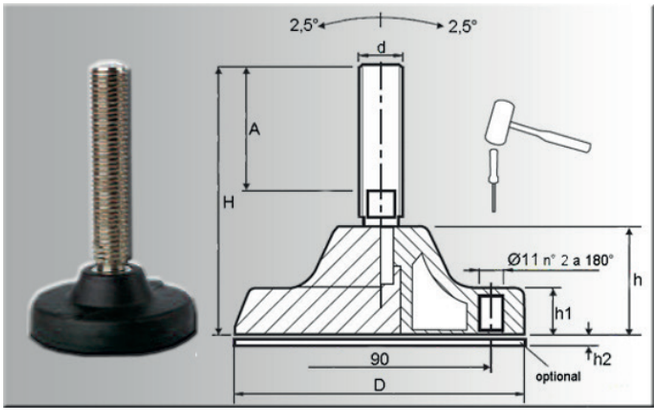
Adjustable feet with steel or stainless steel bolt

Material:
Plate of black, reinforced PA 6
Bolt of either
zinc-plated steel (penultimate digit = 3, e.g. 6420110530) or
stainless steel (AISI 304) (penultimate digit = 5, e.g. 6420108550)

*max. static load on vertical axis
If necessary, open pre-cut holes with a hammer in order to fix the feet on the floor.

Part no.	D	D1	h	A	d	H	d2	kg*
6420108550	80	54	17	M8	45	74	9,0	1.200
6420108551	80	54	17	M8	65	94	9,0	1.200
6420108552	80	54	17	M10	35	66	9,0	1.400
6420108553	80	54	17	M10	70	101	9,0	1.400
6420108554	80	54	17	M12	43	76	9,0	1.500
6420108555	80	54	17	M12	77	111	9,0	1.500
6420108556	80	54	17	M16	60	97	9,0	1.900
6420108557	80	54	17	M16	125	162	9,0	1.900
6420108558	80	54	17	M20	116	157	9,0	2.100
6420110530	102	74	20	M16	90	130	10,5	2.200
6420110531	102	74	20	M16	125	165	10,5	2.200
6420110532	102	74	20	M16	165	205	10,5	2.200
6420110533	102	74	20	M20	116	160	10,5	2.400
6420110534	102	74	20	M20	206	250	10,5	2.400
6420110550	102	74	20	M16	90	130	10,5	2.200
6420110551	102	74	20	M16	125	165	10,5	2.200
6420110552	102	74	20	M16	165	205	10,5	2.200
6420110553	102	74	20	M20	116	160	10,5	2.400
6420110554	102	74	20	M20	206	250	10,5	2.400
6420112530	124	94	24	M16	90	134	10,5	2.500
6420112531	124	94	24	M16	125	169	10,5	2.500
6420112532	124	94	24	M16	165	209	10,5	2.500
6420112533	124	94	24	M20	116	164	10,5	2.700
6420112534	124	94	24	M20	206	254	10,5	2.700
6420112550	124	94	24	M16	90	134	10,5	2.500
6420112551	124	94	24	M16	125	169	10,5	2.500
6420112552	124	94	24	M16	165	209	10,5	2.500
6420112553	124	94	24	M20	116	164	10,5	2.700
6420112554	124	94	24	M20	206	254	10,5	2.700

Adjustable feet & machine feet | Adjustable feet for heavy loads



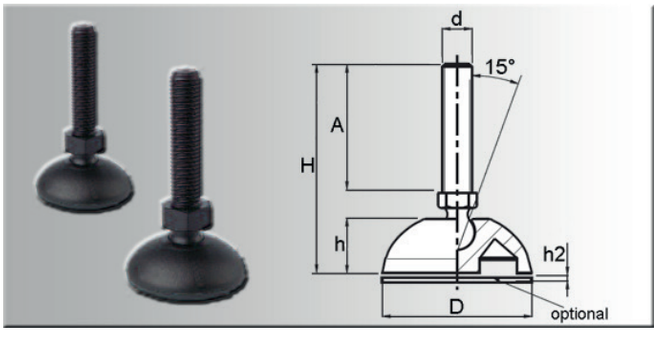
Adjustable feet for heavy loads

Material:
Plate of black, reinforced PA 6
Bolt of either
zinc-plated steel (penultimate digit = 3, e.g. 6420212530) or
stainless steel (AISI 304) (penultimate digit = 5, e.g. 6420212550)

*max. static load on vertical axis
If necessary, open pre-cut holes with a hammer in order to fix the feet on the floor.

Part no.	D	h	h1	d	A	H	max. kg*
6420212530	124	45	20	M16	119	180	4.300
6420212550	124	45	20	M16	119	180	4.300
6420212531	124	45	20	M16	201	262	4.300
6420212551	124	45	20	M16	201	262	4.300
6420212532	124	45	20	M20	107	171	4.500
6420212552	124	45	20	M20	107	171	4.500
6420212533	124	45	20	M20	157	221	4.500
6420212553	124	45	20	M20	157	221	4.500
6420212534	124	45	20	M24	162	229	4.700
6420212554	124	45	20	M24	162	229	4.700

Adjustable feet & machine feet | Adjustable feet PA



Adjustable feet with plate and bolt of polyamide

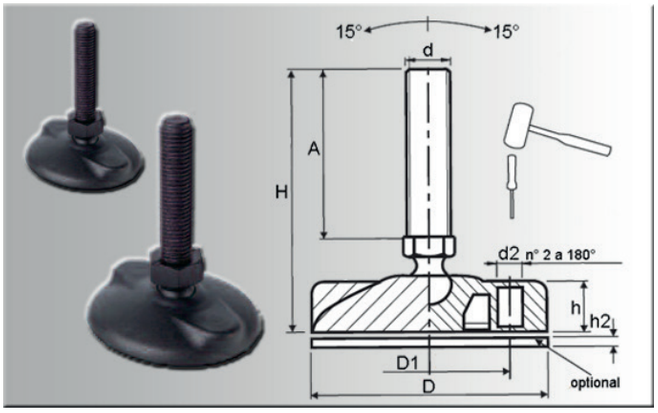
Material:
plate and bolt of black, reinforced polyamide

*max. static load on vertical axis

Part no.	D	h	d	A	H	kg*
6420406501	60	17	M16	67	101	700

Part no.	D	h	d	A	H	kg*
6420406502	60	17	M20	140	174	750

Adjustable feet & machine feet | Adjustable feet PA & fixing hole



Adjustable feet with plate and bolt of polyamide

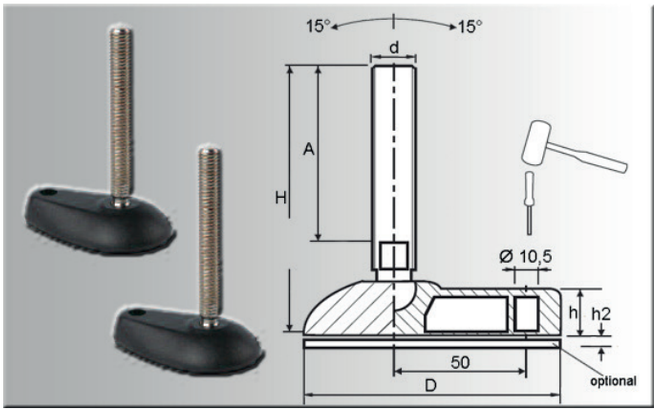
Material:
plate and bolt of black, reinforced polyamide

*max. static load on vertical axis

If necessary, open pre-cut holes with a hammer in order to fix the feet on the floor.

Part no.	D	D1	h	d	A	H	d2	kg*
6420408501	80	54	17	M16	67	104	9,0	700
6420408502	80	54	17	M20	140	177	9,0	750
6420410501	102	74	20	M16	67	107	10,5	700
6420410502	102	74	20	M20	140	180	10,5	750

Adjustable feet & machine feet | Adjustable feet with asymmetrical plate



Adjustable feet with asymmetrical plate

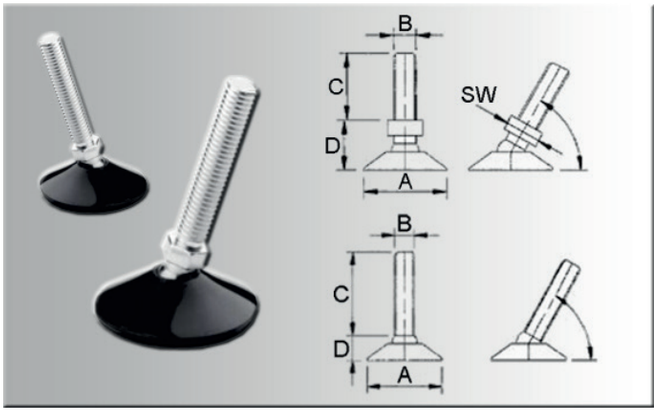
Material:
Plate of black, reinforced PA 6
Bolt of either
zinc-plated steel (penultimate digit = 3, e.g. 6420309530) or
stainless steel (AISI 304) (penultimate digit = 5, e.g. 6420309550)

*max. static load on vertical axis
If necessary, open pre-cut holes with a hammer in order to fix the feet on the floor.

Part no.	d	A	H	kg*	D	h
6420309530	M8	45	72	1.200	95	15
6420309550	M8	45	72	1.200	95	15
6420309531	M8	65	92	1.200	95	15
6420309551	M8	65	92	1.200	95	15
6420309532	M10	70	99	1.300	95	15
6420309552	M10	70	99	1.300	95	15
6420309533	M12	43	74	1.400	95	15
6420309553	M12	43	74	1.400	95	15

Part no.	d	A	H	kg*	D	h
6420309534	M12	93	124	1.400	95	15
6420309554	M12	93	124	1.400	95	15
6420309535	M16	90	125	1.700	95	15
6420309555	M16	90	125	1.700	95	15
6420309536	M16	125	160	1.700	95	15
6420309556	M16	125	160	1.700	95	15
6420309537	M16	165	200	1.700	95	15
6420309557	M16	165	200	1.700	95	15

Adjustable feet & machine feet | Adjustable feet with ball joint

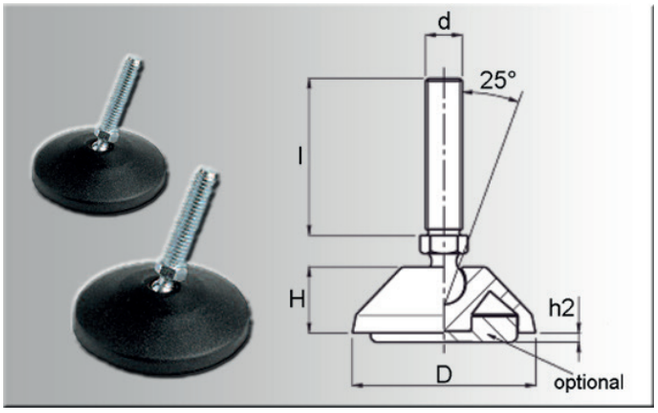


Adjustable feet with ball joint - width across flats 12 - inclination angle: 15°
* = without hexagon

Material: PA, zinc-plated steel thread
Colour: black

Part no.	A	B	C	D
1442827*	26	M8	27	11
1443827*	30	M8	27	12
1443045	30	M10	45	21
1443062	30	M10	60	21
1443072	30	M10	72	21
1443100	30	M10	100	21
1444045	40	M10	45	21
1444052	40	M10	52	21
1444062	40	M10	62	21
1444072	40	M10	72	21
1444100	40	M10	100	21
1444827*	47	M8	27	14

Part no.	A	B	C	D
1444745	47	M10	45	21
1444752	47	M10	52	21
1444762	47	M10	62	21
1444772	47	M10	72	21
1444710	47	M10	100	21
1445825*	55	M10	25	15
1445045	55	M10	45	21
1445052	55	M10	52	21
1445062	55	M10	62	21
1445072	55	M10	70	21
1445100	55	M10	100	21



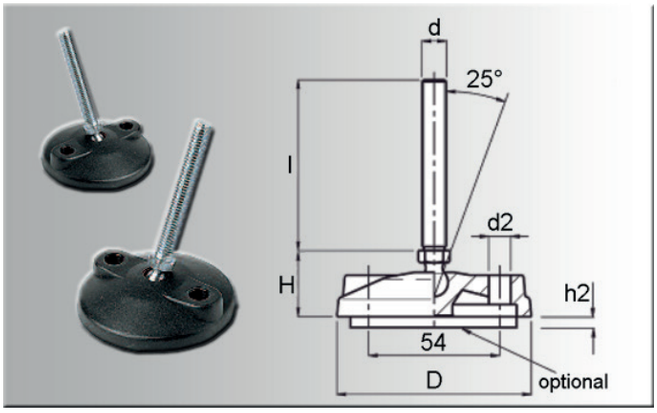
Material: PA 6
Colour: black
thread of zinc-plated steel
max. static load on vertical axis: 1,000 kg

Optional: Rubber NBR 70 Shore A anti-slip (page 112)
Ø 32 = 6118800903
Ø 40 = 6118800904
Ø 50 = 6118900905
Ø 80 = 6118900907

Part no.	D	H	d	l	h2
6118903851	32	13	M8	45	2
6118903852	32	13	M8	70	2
6118903853	32	13	M10	45	2
6118903854	32	13	M10	70	2
6118904851	40	22	M8	45	3
6118904852	40	22	M8	70	3
6118904853	40	22	M10	45	3
6118904854	40	22	M10	70	3
6118905851	50	27	M10	45	2
6118905852	50	27	M10	70	2
6118905853	50	27	M12	45	2
6118905854	50	27	M12	70	2
6118905856	50	27	M8	45	2

Part no.	D	H	d	l	h2
6118905857	50	27	M8	70	2
6118908851	80	27	M12	45	2
6118908852	80	27	M12	70	2
6118908853	80	27	M10	45	2
6118908854	80	27	M10	70	2
6118908855	80	27	M16	70	2
6118908856	80	27	M16	120	2
6118908857	80	27	M20	100	2
6118908861	80	27	M8	45	2
6118908862	80	27	M8	70	2
6118908863	80	27	M14	70	2
6118908864	80	27	M14	120	2

Adjustable feet & machine feet | Machine feet with ball joint & fixing hole



Adjustable feet with fixing holes

Material: PA 6
Thread of zinc-plated steel
Colour: black

Part no.	D	H	d	l	h2	d2
6119008851	80	27	M12	45	2	9
6119008852	80	27	M12	70	2	9
6119008853	80	27	M10	45	2	9
6119008854	80	27	M10	70	2	9
6119008855	80	27	M16	70	2	9
6119008856	80	27	M16	120	2	9

Part no.	D	H	d	l	h2	d2
6119008857	80	27	M20	100	2	9
6119008858	80	27	M8	45	2	9
6119008859	80	27	M8	70	2	9
6119008860	80	27	M14	70	2	9
6119008861	80	27	M14	120	2	9

Adjustable feet & machine feet accessories | Rubber

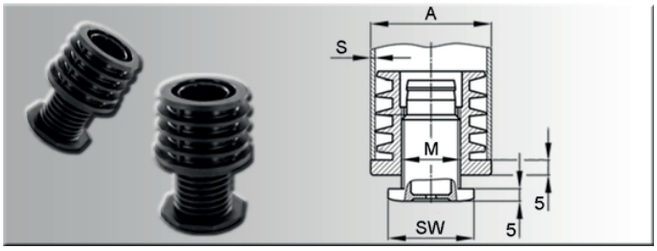


Rubber NBR 70 Shore A anti-slip

Part no.	Ø
6118800903	32
6118800904	40

Part no.	Ø
6118900905	50
6118900907	80

Adjustable plugs | Adjustable plugs, round



One-piece external body with injection-moulded thread.
Octagonal screw head
Axial load capacity: up to max. 300 kg.
Load capacity:
- The adjustment of the feet has to be effected unloaded
- The axial static load indicated refers to a screw that is unscrewed by 10 mm, and is seated on plane ground
- The adjustable plugs are unsuitable to be used as load gliders
- The adjustable plugs are not suitable for dynamic load

Material: PA
Colour: black

A x S = external pipe diameter x wall thickness

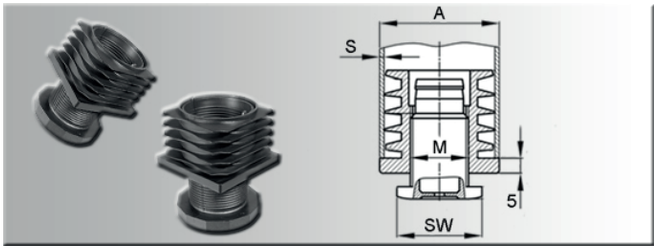
Further types on written request.

Part no.	AxS	MxL	SW
0600320	32x1,5-2	M22x25	28
0600350	35x1,5-2	M22x25	28
0600380	38x1,5-2	M22x25	28

Part no.	AxS	MxL	SW
0600400	40x1,5-2	M22x25	28
0600420	42x1,5-2	M30x30	41
0600450	45x1,5-2	M30x30	41

Part no.	AxS	MxL	SW
0600480	48x1,5-2	M22x25	28
0600500	50x1,5-2	M30x30	41

Adjustable plugs | Adjustable plugs, square



One-piece external body with injection-moulded thread.
Octagonal screw head (except 0602020 + 0602222, hexagonal)
Axial load capacity: M10 = approx. 100 kg / M16 = approx. 150 kg / >M22 = approx. 300 kg
Load capacity:
- The adjustment of the feet has to be eff ected unloaded
- The axial static load indicated refers to a screw that is unscrewed by 10 mm and is seated on plane ground
- The adjustable plugs are unsuitable to be used as load gliders
- The adjustable plugs are not suitable for dynamic load

Material: PA
Colour: black

A x S = external pipe diameter x wall thickness

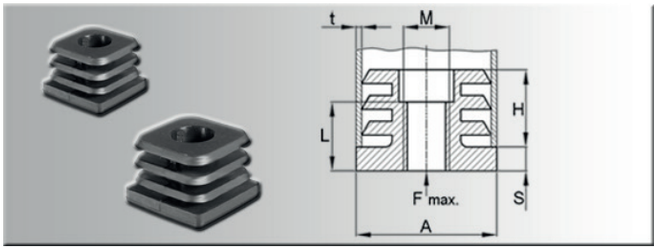
Further types on written request.

Part no.	AxS	MxL	SW
0602020	20x20x1,5-2	M10x25	20
0602222	22x22x1,5-2	M10x25	20
0602525	25x25x1,5-2	M16x25	28
0603030	30x30x1,5-2	M22x25	28

Part no.	AxS	MxL	SW
0603031	30x30x1,5-2	M22x60	28
0603535	35x35x1,5-2	M22x25	28
0604040	40x40x1,5-2	M22x25	28
0604545	45x45x1,5-2	M30x30	41

Part no.	AxS	MxL	SW
0605050	50x50x1,5-2	M30x30	41
0606060	60x60x1,5-2	M42x40	58

Plugs with thread | Threaded plugs, square



Combinable with adjustable feet of product group 148 (page 104)
Axial load capacity: up to 300 kg max.

Material: PA
Colour: black

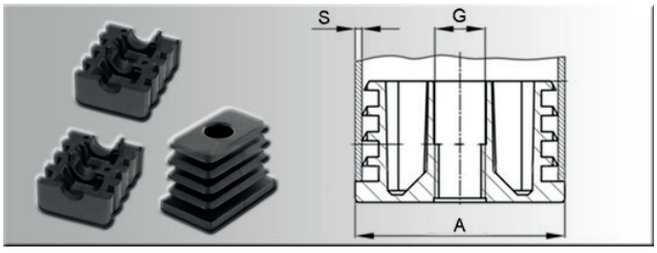
A x t = external pipe diameter x wall thickness
H = height / S = collar thickness

Further types on written request.

Part no.	Axt	H	MxL	S
1592008	20x20x1,5-2	16,5	M8x14,5	5
1592010	20x20x1,5-2	16,5	M10x14,5	5
1592208	22x22x1,5-2	16,5	M8x14,5	5
1592210	22x22x1,5-2	16,5	M10x14,5	5
1592508	25x25x1,5-2	16,5	M8x14,5	5
1592510	25x25x1,5-2	16,5	M10x14,5	5
1592512	25x25x1,5-2	16,5	M12x14,5	5

Part no.	Axt	H	MxL	S
1593008	30x30x1,5-2	16,5	M8x14,5	5
1593010	30x30x1,5-2	16,5	M10x14,5	5
1593012	30x30x1,5-2	16,5	M12x14,5	5
1593508	35x35x1,5-2	24,0	M8x14,5	5
1593510	35x35x1,5-2	24,0	M10x14,5	5
1593512	35x35x1,5-2	24,0	M12x14,5	5
1594010	40x40x1,5-2	24,0	M10x14,5	5

Plugs with thread | Threaded plugs, rectangular - two-part



Combinable with adjustable feet of product group 148 (page 104)
Axial load capacity: up to 300 kg max.

Material: PA
Colour: black - two-part
* = with inserted metal nut

A x S = external pipe diameter x wall thickness
G = female thread

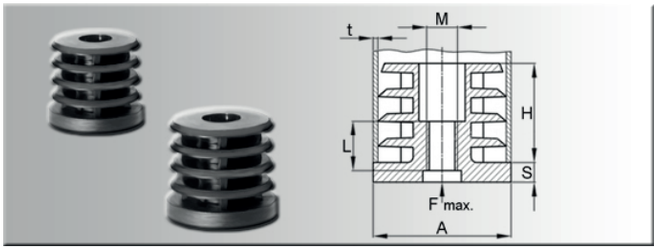
Further types on written request.

Part no.	AxS	G
0262015	20x15x1,5	M8
0262017	20x15x2,0	M8
0262517	*no longer available*	
0262520	25x20x1,5-2,0	M8
0262521	25x20x1,5-2,0	M10
0262522	25x20x1,5-2,0	M12
0263015	30x15x1,5-2,0	M8
0263016	30x15x1,5-2,0	M10
0263020	30x20x1,5-2,0	M8

Part no.	AxS	G
0263021	30x20x1,0-1,5	M10
0263022	30x20x2,0	M10
0263023	30x20x1,5	M12
0263520	35x20x1,5-2,0	M6
0263521	no longer available!	
0264020	40x20x1,5	M6
0264021	40x20x1,5-2,0	M8
0264022	40x20x1,5-2,0	M10
0264024	40x20x2,0	M12

Part no.	AxS	G
0264025	40x25x2,0	M10
0264030	40x30x1,5-2,0	M10
0264031	40x30x2,0	M10
0264525*	45x25x1,5-2,0	M10
0265020	50x20x1,5-2,0	M10
0265021	50x20x1,5-2,0	M12
0266040	60x40x1,5-2,0	M10

Plugs with thread | Threaded plugs, round



Combinable with adjustable feet of product group 148 (page 104)
Axial load capacity: up to 300 kg max.

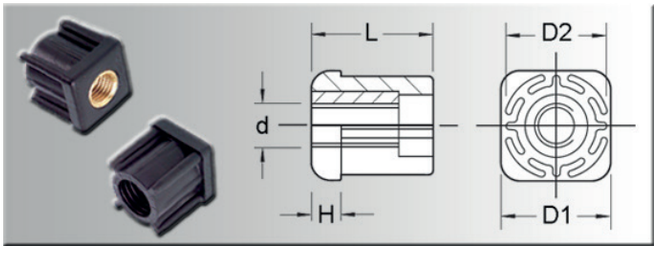
Material: PA
Colour: black
* = two-part

Further types on written request.

Part no.	Axt	H	MxL	S
1602008*	20x0,5	32,3	M8x32,3	5
1602208	22x1,5-2	16,5	M8x14,5	5
1602210	22x1,5-2	16,5	M10x14,5	5
1602508	25x1,5-2	16,5	M8x14,5	5
1602510	25x1,5-2	16,5	M10x14,5	5
1602512	25x1,5-2	16,5	M12x14,5	5
1602808	28x1,5-2	16,5	M8x14,5	5
1602810	28x1,5-2	16,5	M10x14,5	5
1602812	28x1,5-2	16,5	M12x14,5	5
1603008	30x1,5-2	16,5	M8x14,5	5
1603010	30x1,5-2	16,5	M10x14,5	5
1603012	30x1,5-2	16,5	M12x14,5	5
1603208	32x1,5-2	24,0	M8x14,5	5
1603210	32x1,5-2	24,0	M10x14,5	5

Part no.	Axt	H	MxL	S
1603212	32x1,5-2	24,0	M12x14,5	5
1603508	35x1,5-2	24,0	M8x14,5	5
1603510	35x1,5-2	24,0	M10x14,5	5
1603512	35x1,5-2	24,0	M12x14,5	5
1603808	38x1,5-2	24,0	M8x14,5	5
1603810	38x1,5-2	24,0	M10x14,5	5
1603812	38x1,5-2	24,0	M12x14,5	5
1604008	40x1,5-2	24,0	M8x14,5	5
1604010	40x1,5-2	24,0	M10x14,5	5
1604012	40x1,5-2	24,0	M12x14,5	5
1604208	42x1,5-2	24,0	M8x14,5	5
1604210	42x1,5-2	24,0	M10x14,5	5
1604212	42x1,5-2	24,0	M12x14,5	5

Plugs with thread | Threaded plugs, square with brass insert



Square threaded plugs

Material: PA 6
Colour: black

with brass insert
max. kg = max. load capacity

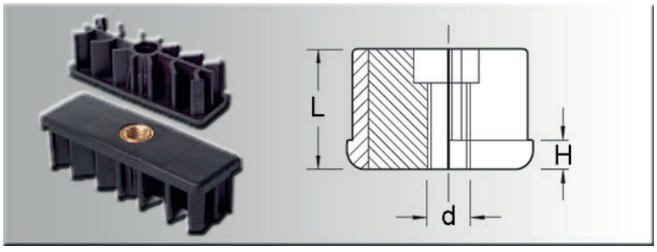
Part no.	D1	D2	d	H	L	max.kg
6426820208	20x20x1,5	17	M8	5	23	450
6426825208	25x25x1,5	22	M8	6	26	450
6426825210	25x25x1,5	22	M10	6	26	500
6426825212	25x25x1,5	22	M12	6	26	550
6426830210	30x30x1,5	27	M10	6	31	500
6426830212	30x30x1,5	27	M12	6	31	550
6426830214	30x30x1,5	27	M14	6	31	600
6426830216	30x30x1,5	27	M16	6	31	650

Part no.	D1	D2	d	H	L	max.kg
6426835210	35x35x1,5	32	M10	8	38	700
6426835212	35x35x1,5	32	M12	8	38	750
6426835214	35x35x1,5	32	M14	8	38	800
6426835216	35x35x1,5	32	M16	8	38	850
6426835220	35x35x1,5	32	M20	8	38	900
6426840210	40x40x1,5	37	M10	8	38	750
6426840212	40x40x1,5	37	M12	8	38	800
6426840214	40x40x1,5	37	M14	8	38	850

Part no.	D1	D2	d	H	L	max.kg
6426840216	40x40x1,5	37	M16	8	38	900
6426840220	40x40x1,5	37	M20	8	38	950
6426840310	40x40x2	36	M10	8	38	750
6426840312	40x40x2	36	M12	8	38	800
6426840314	40x40x2	36	M14	8	38	850
6426840316	40x40x2	36	M16	8	38	900
6426840320	40x40x2	36	M20	8	38	950
6426850212	50x50x1,5	47	M12	10	45	800

Part no.	D1	D2	d	H	L	max.kg
6426850214	50x50x1,5	47	M14	10	45	850
6426850216	50x50x1,5	47	M16	10	45	900
6426850220	50x50x1,5	47	M20	10	45	950
6426850312	50x50x2	46	M12	10	45	800
6426850314	50x50x2	46	M14	10	45	850
6426850316	50x50x2	46	M16	10	45	900
6426850320	50x50x2	46	M20	10	45	950

Plugs with thread | Threaded plugs, rectangular with brass insert



Rectangular threaded plug

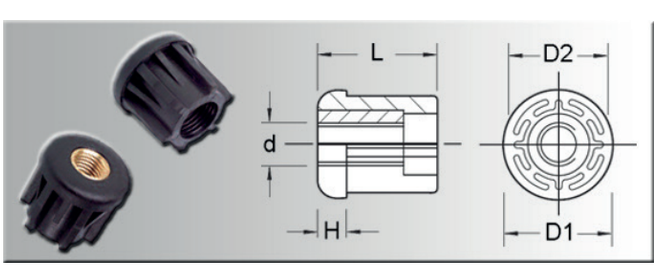
Material: PA 6
Colour: black

with brass insert
max. kg = max. load capacity

Part no.	AxS	d	H	L	max.kg
6428220308	20x50x2	M8	5	28	450
6428230308	30x60x2,5	M8	8	38	450
6428230310	30x60x2,5	M10	8	38	500
6428230312	30x60x2,5	M12	8	38	550
6428230316	30x60x2,5	M16	8	38	650
6428240316	40x80x2	M16	10	45	900
6428240320	40x80x2	M20	10	45	950
6428250302	50x100x2	M16	10	45	900

Part no.	AxS	d	H	L	max.kg
6428250303	50x100x2	M20	10	45	950
6428250305	50x100x3	M16	10	45	900
6428250306	50x100x3	M20	10	45	950
6428250316	50x150x3	M16	10	45	900
6428250320	50x150x3	M20	10	45	950
6428260316	60x120x3	M16	10	45	900
6428260320	60x120x3	M20	10	45	950

Plugs with thread | Threaded plugs, round with brass insert



Round threaded plugs

Material: PA 6
Colour: black

with brass insert
max. kg = max. load capacity

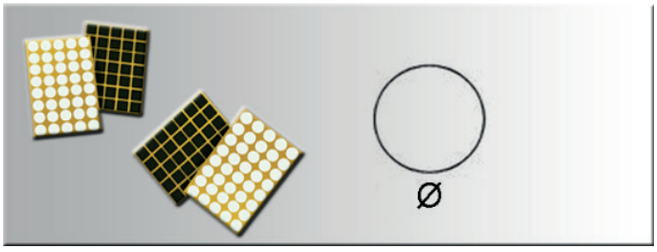
Part no.	D1	D2	d	H	L	max.kg
6426430108	30,0	28,0	M8	6	31	450
6426430110	30,0	28,0	M10	6	31	500
6426430112	30,0	28,0	M12	6	31	550
6426430114	30,0	28,0	M14	6	31	600

Part no.	D1	D2	d	H	L	max.kg
6426430116	30,0	28,0	M16	6	31	650
6426438210	38,0	35,0	M10	8	38	500
6426438212	38,0	35,0	M12	8	38	550
6426438214	38,0	35,0	M14	8	38	600

Part no.	D1	D2	d	H	L	max.kg
6426438216	38,0	35,0	M16	8	38	650
6426442210	42,4	39,4	M10	8	38	700
6426442212	42,4	39,4	M12	8	38	750
6426442214	42,4	39,4	M14	8	38	800
6426442216	42,4	39,4	M16	8	38	850
6426442220	42,4	39,4	M20	8	38	900
6426448212	48,3	45,3	M12	10	45	800
6426448214	48,3	45,3	M14	10	45	850
6426448216	48,3	45,3	M16	10	45	900
6426448220	48,3	45,3	M20	10	45	950
6426460410	60,3	55,3	M10	12	52	750

Part no.	D1	D2	d	H	L	max.kg
6426460412	60,3	55,3	M12	12	52	800
6426460414	60,3	55,3	M14	12	52	850
6426460416	60,3	55,3	M16	12	52	900
6426460420	60,3	55,3	M20	12	52	950
6426460424	60,3	55,3	M24	12	52	1000
6426460310	60,3	56,3	M10	12	52	750
6426460312	60,3	56,3	M12	12	52	800
6426460314	60,3	56,3	M14	12	52	850
6426460316	60,3	56,3	M16	12	52	900
6426460320	60,3	56,3	M20	12	52	950
6426460324	60,3	56,3	M24	12	52	1000

Felt pads | Adhesive felt pads, round



Adhesive felt pads, round.
Can be used on the base of feet or inserts for smooth movement over floor surfaces.

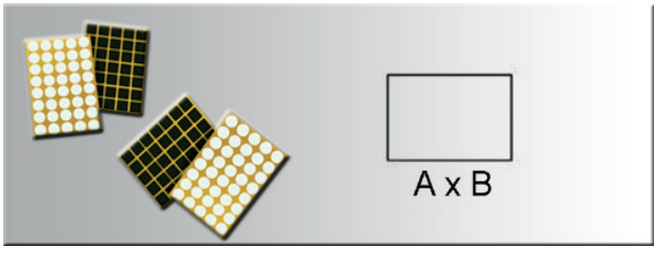
Colours:
Last digits 076 = brown
Last digits 500 = white

Part no.	Ø
3171001076	10
3171001500	10
3171002076	14
3171002500	14
3171003076	16
3171003500	16
3171004076	18
3171004500	18
3171005076	20
3171005500	20
3171006076	22
3171006500	22

Part no.	Ø
3171007076	24
3171007500	24
3171008076	26
3171008500	26
3171009076	28
3171009500	28
3171010076	30
3171010500	30
3171011076	32
3171011500	32
3171012076	36
3171012500	36

Part no.	Ø
3171013076	40
3171013500	40
3171014076	45
3171014500	45
3171015076	50
3171015500	50
3171016076	60
3171016500	60
3171017076	70
3171017500	70

Felt pads | Adhesive felt pads, rectangular



Adhesive felt pads, rectangular.
Can be used on the base of feet or inserts for smooth movement over floor surfaces.

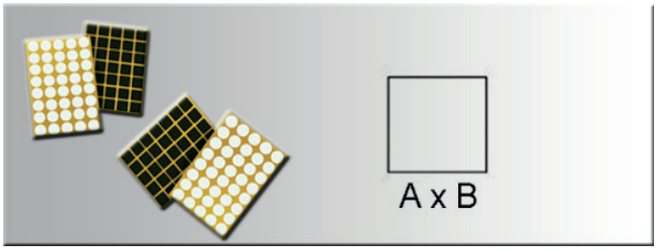
Colours:
Last digits 076 = brown
Last digits 500 = white

Part no.	AxB
3172001076	20x30
3172001500	20x30
3172002076	20x40

Part no.	AxB
3172002500	20x40
3172003076	25x35
3172003500	25x35

Part no.	AxB
3172004076	25x50
3172004500	25x50

Felt pads | Adhesive felt pads, square



Adhesive felt pads, square.
Can be used on the base of feet or inserts for smooth movement over floor surfaces.

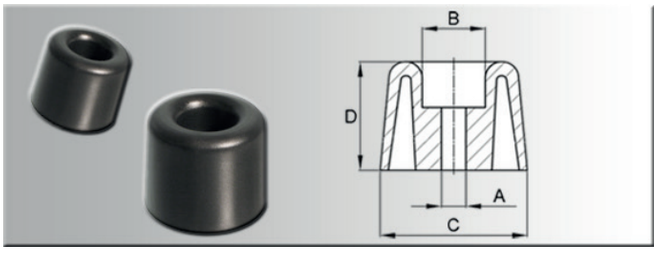
Colours:
Last digits 076 = brown
Last digits 500 = white

Part no.	AxB
3173001076	20x20
3173001500	20x20
3173002076	25x25
3173002500	25x25
3173003076	30x30
3173003500	30x30

Part no.	AxB
3173004076	34x34
3173004500	34x34
3173005076	40x40
3173005500	40x40
3173006076	45x45
3173006500	45x45

Part no.	AxB
3173007076	50x50
3173007500	50x50
3173008076	100x100
3173008500	100x100

Buffers | Door bumpers



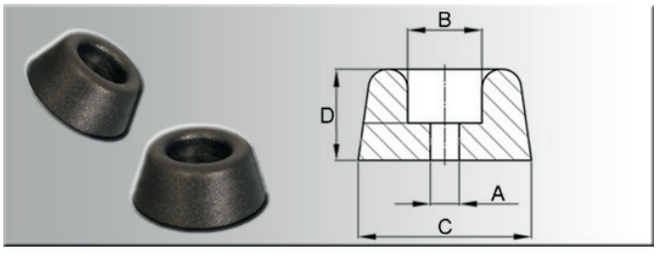
Easy to fix with screws or nails.
For mounting at door fittings, sliding doors etc.

Material: PVC
Colour: black

Part no.	A	B	C	D
0660200	4,1	11	20	23
0660250	5,1	11	25	24

Part no.	A	B	C	D
0660300	6,5	14	29	25
0660301	7,5	12	31	25

Buffers | Buffers



Secure hold by means of screwing. Low stack height and plain, clean surface.

Material: PVC / * = PE / + = TPG
Colours:
Last digits 114 = black
Last digits 113 = white

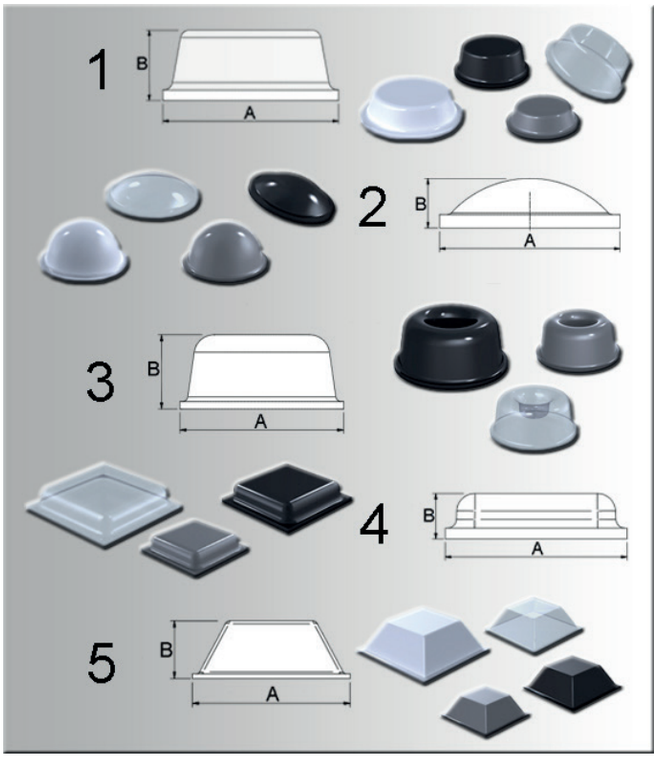
Part no.	A	B	C	D
0480015113	3,2	6,0	15,0	7,5
0480015114	3,2	6,0	15,0	7,5
0480020113	4,3	8,0	20,0	10,0
0480020114	4,3	8,0	20,0	10,0

Part no.	A	B	C	D
0480025113	4,3	10,0	25,0	12,5
0480025114	4,3	10,0	25,0	12,5
0480030113	5,3	12,0	30,0	15,0
0480030114	5,3	12,0	30,0	15,0

Part no.	A	B	C	D
0481500113	no longer available!			
0481500114	2,5	6,0	13,0	6,6
0481700114*	4,0	7,5	17,5	9,3
0482000113	4,0	9,0	19,0	10,2
0482000114	4,0	9,0	19,0	10,2
0482013114	4,0	9,0	19,0	13,0

Part no.	A	B	C	D
0482014114+	4,7	9,5	19,8	11,6
0482500113	no longer available!			
0482500114	2,0	9,5	24,0	10,3
0483000113	5,3	13,5	29,0	12,0
0483000114	5,3	13,5	29,0	12,0

Buffers | Adhesive bumpers



Anti-slip and abrasion-proof. Heat-proof up to approx. 65°C.
The surface to be glued on has to be free of dust and grease, and must be even and dry.
The optimal sticking temperature is between +18°C and +25°C.

Material: plasticised PVC / polyurethane
Colours:
without last digits = black
last digits 000 = transparent
last digits 002 = grey
last digits 500 = white

X = type
C = quantity of bumpers per card

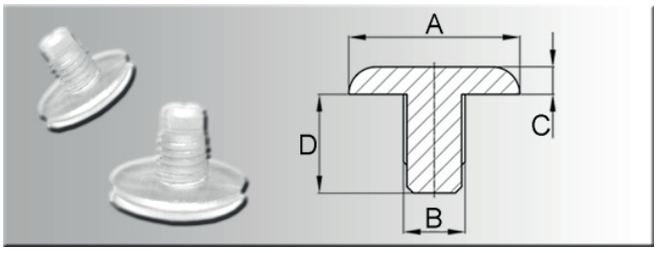
Part no.	A	B	X	C
1172006000	6,4	1,9	2	561
1172079	7,9	2,5	2	392
1172079000	7,9	2,5	2	392
1172816000	8,0	1,6	2	420
1172008	8,0	2,1	2	392
1170012000	8,0	2,2	2	392
1170017	8,0	2,8	1	56
1172075	8,0	3,0	1	288
1172075000	8,0	3,0	1	288
1170020000	9,5	3,8	2	48
1172100000	10,0	2,5	5	242
1172100002	10,0	2,5	5	242

Part no.	A	B	X	C
1172010	10,0	3,1	2	288
1172010000	10,0	3,1	2	288
1172010002	10,0	3,1	2	288
1172104	10,0	4,0	1	242
1172104000	10,0	4,0	1	242
1172120	10,1	1,8	1	288
1172120000	10,1	1,8	1	288
1172100	10,1	2,5	5	242
1170022	10,2	2,5	4	54
1170004	11,0	5,0	2	50
1172115	11,1	5,0	2	242
1172115000	11,1	5,0	2	242

Part no.	A	B	X	C
1172115002	11,1	5,0	2	242
1172115500	11,1	5,0	2	242
1172126	12,6	5,7	5	200
1172126000	12,6	5,7	5	200
1172126002	12,6	5,7	5	200
1170001	12,7	1,5	1	200
1172122	12,7	1,8	1	200
1172122000	12,7	1,8	1	200
1170013	12,7	3,1	4	80
1172127	12,7	3,1	5	200
1172127000	12,7	3,1	5	200
1172127002	12,7	3,1	5	200
1172127500	no longer available!			
1172125	12,7	3,5	1	200
1172125000	12,7	3,5	1	200
1172125002	12,7	3,5	1	200
1172125500	12,7	3,5	1	200
1170014	12,7	5,8	5	25
1170003	no longer available!			
1172014	14,0	4,5	1	128
1172014000	14,0	4,5	1	128
1172014002	14,0	4,5	1	128
1172150	16,0	7,9	2	128
1172150000	16,0	7,9	2	128
1172150002	16,0	7,9	2	128
1172150500	16,0	7,9	2	128
1172164	16,5	10,2	1	128

Part no.	A	B	X	C
1172164000	16,5	10,2	1	128
1173216	no longer available!			
1173216000	no longer available!			
1173216002	no longer available!			
1172191	19,0	1,9	1	98
1172191000	19,0	1,9	1	98
1172024	19,0	4,0	1	84
1172024002	19,0	4,0	1	84
1172019	19,0	6,0	1	84
1172019000	19,0	6,0	1	84
1172190	19,0	9,5	2	98
1172190000	19,0	9,5	2	98
1172190002	19,0	9,5	2	98
1172204	19,7	3,0	1	84
1172204000	19,7	3,0	1	84
1172204002	19,7	3,0	1	84
1170019	20,0	5,0	1	84
1172020	20,0	6,2	1	84
1172205	20,5	7,5	5	78
1172205000	20,5	7,5	5	78
1172205002	20,5	7,5	5	78
1172205500	20,5	7,5	5	78
1172005*	no longer available!			
1170006	22,22	12,6	3	36
1172210	22,3	10,1	3	72
1172210000	22,3	10,1	3	72
1172210002	22,3	10,1	3	72

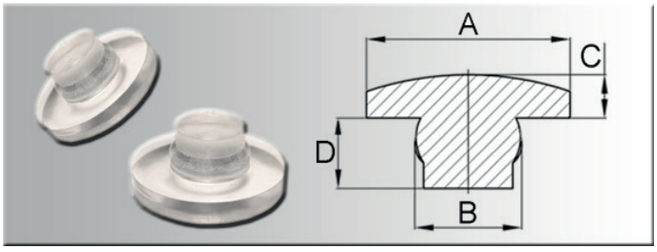
Glass buffers | convex



Material: plasticised PVC
Colour: transparent

Part no.	A	B	C	D
0700120	12	4,2	2	7

Glass buffers | concave



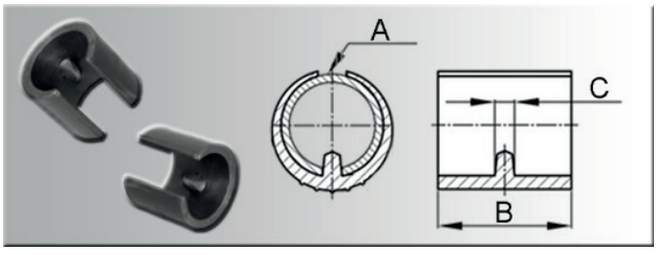
Material: plasticised PVC
Colour: transparent

(* = without bead)

Part no.	A	B	C	D
0690080*	8	4	2,5	6,0
0690140	14	8	3,0	7,0

Part no.	A	B	C	D
0690160	16	8	2,7	5,5

Saddle feet | type 147



Protection for floors etc., easy to mount without tools.

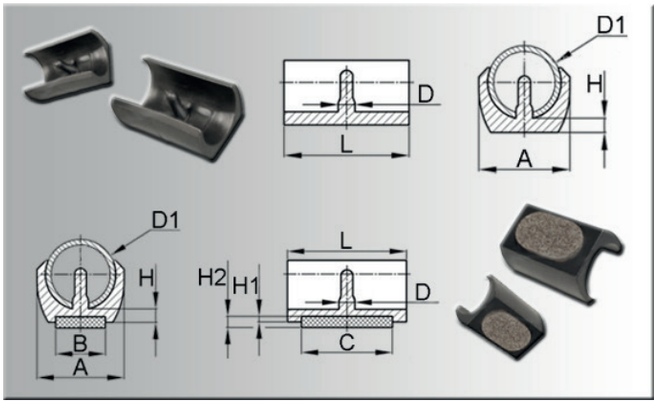
Material: PE
Colours:
Last digits 699 = black
Last digits 600 = white

Part no.	A	B	C
1470150600	14-16	20	5,5
1470150699	14-16	20	5,5
1470170600	16-18	20	5,5
1470170699	16-18	20	5,5

Part no.	A	B	C
1470190600	18-20	20	5,5
1470190699	18-20	20	5,5
1470210600	20-22	20	5,5
1470210699	20-22	20	5,5

Part no.	A	B	C
1470250600	24-26	25	5,5
1470250699	24-26	25	5,5
1470290600	28-30	30	7,5
1470290699	28-30	30	7,5

Saddle feet | type 347



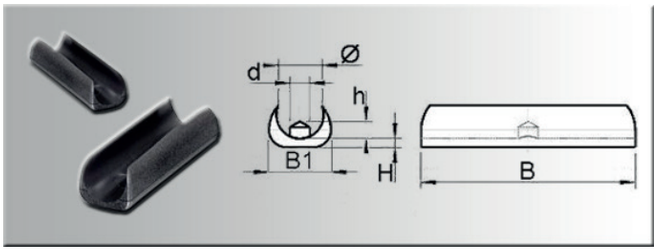
Saddle feet
Material: PE
Colour: black - white and natural on request

Saddle feet with felt
last digit F = with welded felt
Material: PA 6
Colour: black - natural on request

Prices for special colours, different dimensions or larger quantities on written request!

Part no.	A	B	C	D	D1	L	H	H1	H2
3470001	17,0	-	-	0	8	24	4,0	-	-
3470002	19,5	-	-	0	10	30	4,5	-	-
3470003	20,0	-	-	5,0	14	26	3,5	-	-
3470004	23,5	-	-	5,7	18-20	30	4,5	-	-
3470005	25,5	-	-	5,7	20-22	30	5,0	-	-
3470006F	26,5	15	25	5,6	21-22	30	4,0	2	4
3470007	28,0	-	-	5,7	23-25	45	5,0	-	-
3470008F	29,5	17	31	5,6	24-25	42	5,0	2	4
3470009	32,5	-	-	5,7	28-30	45	5,0	-	-

Saddle feet | type 447



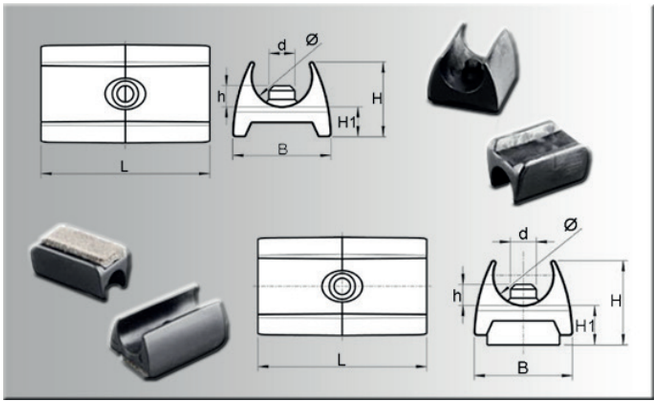
Material: PP
Colour: black - natural on request
last digit F = with welded felt

Prices for special colours, different dimensions or larger quantities on written request!

Part no.	B	B1	d	h	H	Ø
4470001	50	13	3,8	2,5	3	10-11
4470001F	50	13	3,8	2,5	4	10-11
4470002	50	13	4,5	2,5	3	12-13
4470002F	50	13	4,5	2,5	4	12-13

Part no.	B	B1	d	h	H	Ø
4470003	50	13	4,5	2,5	3	13-14
4470003F	50	13	4,5	2,5	4	13-14
4470004	50	13	4,5	2,5	3	15-16
4470004F	50	13	4,5	2,5	4	15-16

Saddle feet | type 547

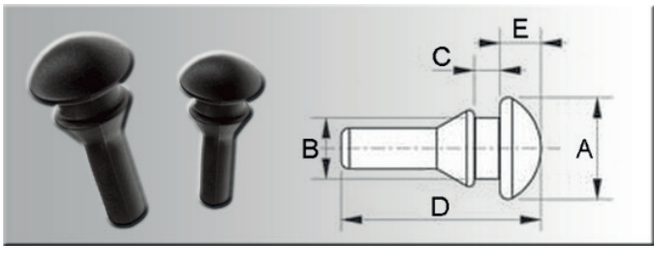


Material: PP
Colour: black - natural on request
last digit F = with welded felt

Prices for special colours, different dimensions or larger quantities on written request!

Part no.	L	B	H	H1	d	h	Ø
5470001	28	16,5	12,5	5	4,3	3,5	10-11
5470001F	28	16,5	12,5	6	4,3	3,5	10-11
5470002	28	20,0	15,0	6	4,9	4,0	12-13
5470002F	28	20,0	15,0	7	4,9	4,0	12-13
5470003	28	23,0	18,0	7	4,9	4,2	14-15
5470003F	28	23,0	18,0	8	4,9	4,2	14-15
5470004	28	26,0	20,0	8	5,8	4,6	15-16
5470004F	28	26,0	20,0	9	5,8	4,6	15-16

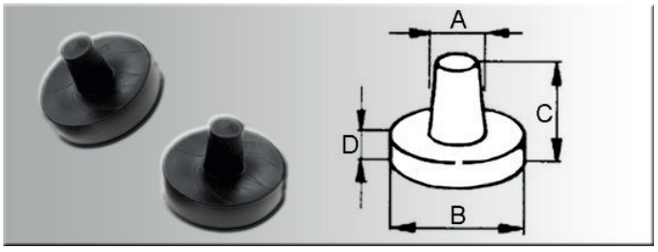
Plug-in feet | PVC black



Material: plasticised PVC
Colour: black

Part no.	A	B	C	D	E
0470600	10	6	4	19,5	4

Plug-in feet | conical

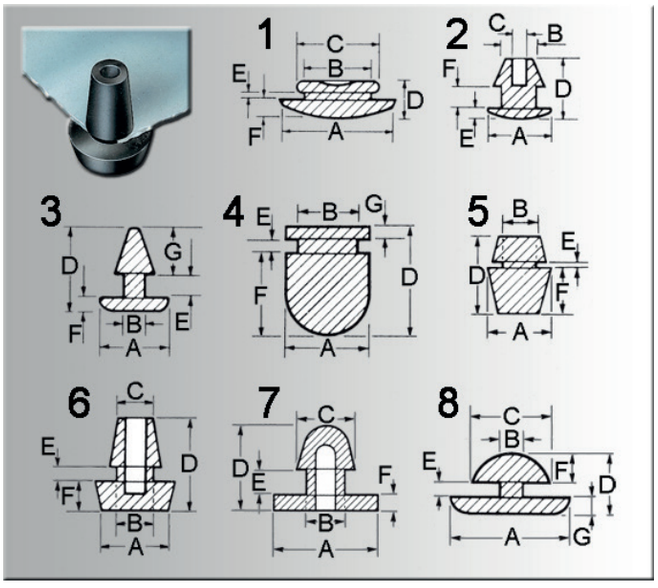


Material: PVC
Colour: black

Part no.	A	B	C	D
0490800	3	8	10	3
0491200	4	12	10	3

Part no.	A	B	C	D
0491300	5	13	13	3
0491600	5	16	10	4

Plug-in feet | Grommet feet



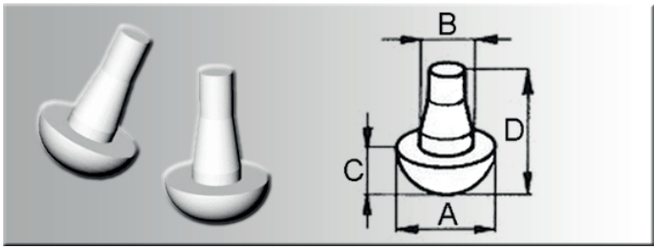
Appropriate for mounting in metal and plastic cases. Easy to fit by hand: simply push into punched or drilled holes.

X = type

Material: PVC
Colour: black

Part no.	X	A	B	C	D	E	F	G
1870041	3	7,9	3,7	-	7,0	1,6	2,4	3,0
1870032	3	7,9	3,2	-	8,3	3,2	1,6	3,5
1870021	2	10,3	4,5	2,2	7,6	1,6	2,0	-
1870061	5	10,9	6,9	-	12,8	0,7	8,1	-
1870062	6	12,0	6,0	5,8	15,2	2,1	4,6	-
1870051	no longer available!							
1870012	1	15,4	9,8	12,7	7,0	1,6	2,7	-
1870031	2	15,8	6,8	4,0	9,7	1,5	5,0	-
1870081	8	17,5	11,1	13,3	10,0	2,6	4,0	4,0
1870011	1	19,0	12,0	13,1	6,5	0,8	3,2	-
1870013	1	19,0	12,8	15,9	7,5	1,6	3,2	-
1870071	7	25,3	12,5	15,3	20,0	5,0	4,0	-

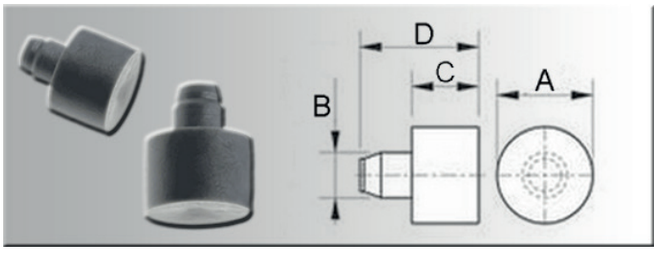
Plug-in feet | plasticised PVC



Material: plasticised PVC
Colour: natural

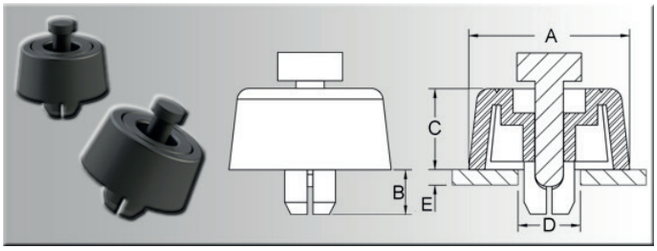
Part no.	A	B	C	D
0491000	9	4,2	3,5	13

Plug-in feet | LDPE



Material: LDPE
Colour: grey

Part no.	A	B	C	D
0680100	10	4,7	7	12

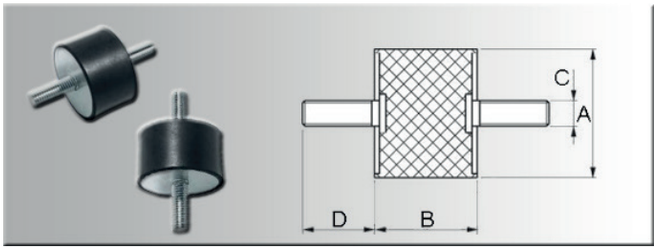


Reduction of assembly costs due to a rational mounting. Made of solid polyamide with a support surface of soft EVA. A high coefficient of friction avoids slippling.

Material: see table
Colour: black

Part no.	A	B	C	D	E	Mat.	Colour
1200412	12,0	5,0	4,0	6,0-6,2	0,8-2,0	PA6+EVA	black
1200007	12,7	4,1	4,4	5	1,0-2,0	TPR/PP	black
1200024	14,0	4,8	5,8	6	1,0-2,5	TPR/PP	black
1200008	15,7	4,1	4,4	5	1,0-2,0	TPR/PP	black
1200716	17,0	7,0	7,0	7,0-7,2	1,5-3,0	PA6+EVA	black
1200816	no longer avaiable						
1201316	no longer available						
1201117	17,0	4,0	11,0	7,0-7,1	1,0-2,5	PS	black
1200017	19,2	4,2	7,9	8	0,8-1,2	TPR/PP	black
1200014	19,5	5,5	5,0	8	0,8-2,0	TPR/PP	black
1200009	20,0	3,0	4,0	8	1,0-2,0	TPR/PP	black
1200022	20,0	3,5	10,0	8	0,8-2,0	TPR/PP	black
1200002	20,0	5,4	10,0	8	1,0-2,5	TPR/PP	black
1200012	20,0	5,8	15,0	8	1,0-3,0	TPR/PP	black
1200013	20,0	6,3	18,0	8	0,8-1,0	TPR/PP	black
1200016	20,0	5,1	20,5	8	0,8-2,0	TPR/PP	black
1200001	20,8	5,4	6,4	8	1,0-2,5	TPR/PP	black
1201521	21,0	7,0	15,0	7,7-7,8	0,8-4,0	PA6+EVA	black
1200020	22,0	7,0	3,5	8	1,0-3,0	TPR/PP	black
1200025	22,0	7,0	3,5	8	1,0-3,0	TPR/PP	black
1200018	23,0	5,3	8,0	8	0,8-2,0	TPR/PP	black
1200003	23,7	5,5	13,7	8	1,0-2,5	TPR/PP	black
1200010	23,8	5,0	5,0	8	1,0-2,5	TPR/PP	black
1200019	24,0	5,3	10,5	8	0,8-2,0	TPR/PP	black
1200004	25,0	6,0	6,5	8	1,0-2,5	TPR/PP	black
1200021	26,7	5,0	16,0	8	1,0-3,0	TPR/PP	black
1200023	27,0	5,1	6,9	10	0,8-2,0	TPR/PP	black
1200006	28,5	5,8	8,2	10	1,0-3,5	TPR/PP	black
1200015	29,4	8,0	15,0	10	1,0-3,5	TPR/PP	black
1200005	30,0	6,0	12,8	8	1,0-2,5	TPR/PP	black
1200011	31,5	5,8	7,8	10	1,0-3,5	TPR/PP	black

Rubber-metal-buffers | male/male thread



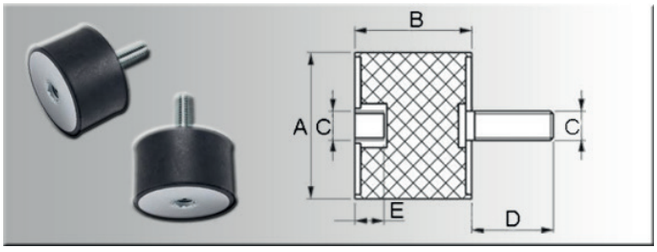
Rubber-metal-buffers, with male thread (both-sided)
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
21908081	8	8	M3	6
21910101	10	10	M4	10
21915071	15	7	M4	10
21915081	15	8	M4	10
21915101	15	10	M4	10
21915151	15	15	M4	10
21915151/S	15	15	M5	8
21915201	15	20	M4	13
21920081	20	8	M6	18
21920101	20	10	M6	18
21920151	20	15	M6	18
21920201	20	20	M6	18
21920251	20	25	M6	18
21925101	25	10	M6	18
21925151	25	15	M6	18
21925201	25	20	M6	18
21925251	25	25	M6	18
21925301	25	30	M6	18
21930151	30	15	M8	20
21930201	30	20	M8	20
21930251	30	25	M8	20
21930301	30	30	M8	20
21930401	30	40	M8	20
21940151	40	15	M8	20
21940251	40	25	M8	23

Part no.	A	B	C	D
21940251/S	40	25	M10	28
21940301	40	30	M8	23
21940301/S	40	30	M10	28
21940401	40	40	M8	23
21950201	50	20	M10	28
21950301	50	30	M10	28
21950401	50	40	M10	28
21950451	50	45	M10	33
21950501	50	50	M10	28
21960401	60	40	M10	28
21960401/S	60	40	M12	33
21970451	70	45	M10	28
21975251	75	25	M12	37
21975401	75	40	M12	37
21975501	75	50	M12	37
21975551	75	55	M12	37
219100401	100	40	M16	41
219100501	100	50	M16	41
219100551	100	55	M16	41
219100601	100	60	M16	41
219100751	100	75	M16	41
219150501	150	50	M16	41
219150551	150	55	M16	41
219150751	150	75	M16	41

Rubber-metal-buffers | female/male thread



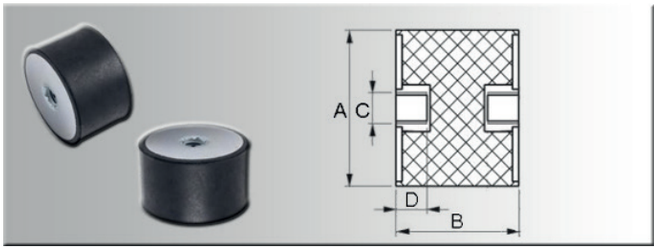
Rubber-metal-buffers, with male and female thread
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D	E
22008082	8	8	M3	6	3
22010102	10	10	M4	10	4
22010152	10	15	M4	10	4
22015152	15	15	M4	10	6
22015152/S	15	15	M5	8	6
22015202	15	20	M4	10	5
22015302	15	30	M4	15	6
22020152	20	15	M6	18	6
22020202	20	20	M6	18	6
22020252	20	25	M6	18	6
22025152	25	15	M6	18	6
22025202	25	20	M6	18	6
22025252	25	25	M6	18	6
22025302	25	30	M6	18	6
22030152	30	15	M8	20	8
22030202	30	20	M8	20	8
22030252	30	25	M8	20	8
22030302	30	30	M8	20	8
22030402	30	40	M8	20	8
22040252	40	25	M8	23	8
22040302	40	30	M8	23	8
22040302/S	40	30	M10	28	10
22040402	40	40	M8	23	8

Part no.	A	B	C	D	E
22050202	50	20	M10	28	10
22050252	50	25	M10	28	10
22050302	50	30	M10	28	10
22050402	50	40	M10	28	10
22050452	50	45	M10	33	10
22050502	50	50	M10	28	10
22060402	60	40	M10	28	10
22060402/S	60	40	M12	33	12
22070452	70	45	M10	28	10
22075252	75	25	M12	37	12
22075402	75	40	M12	37	12
22075452	75	45	M12	37	12
22075502	75	50	M12	37	12
22075552	75	55	M12	37	12
220100402	100	40	M16	41	16
220100502	100	50	M16	41	16
220100552	100	55	M16	41	16
220100602	100	60	M16	41	16
220100752	100	75	M16	41	16
220150502	150	50	M16	41	16
220150552	150	55	M16	41	16
220150752	150	75	M16	41	16

Rubber-metal-buffers | female/female thread

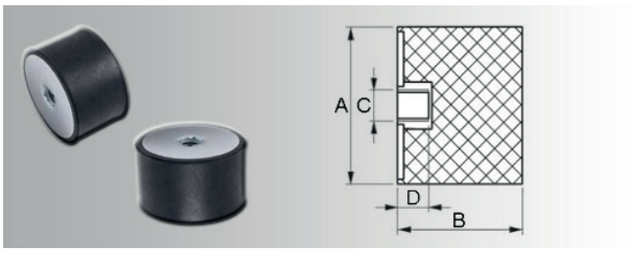


Rubber-metal-buffers, with female thread (both-sided)
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
22108083	8	8	M3	3
22110103	10	10	M4	4
22110153	10	15	M4	4
22115153	15	15	M4	5
22115153/S	15	15	M5	5
22115203	15	20	M4	5
22120153	20	15	M6	6
22120203	20	20	M6	6
22120253	20	25	M6	6
22125203	25	20	M6	6
22125253	25	25	M6	6
22125303	25	30	M6	6
22130203	30	20	M8	8
22130253	30	25	M8	8
22130303	30	30	M8	8
22130403	30	40	M8	8
22140303	40	30	M8	8
22140303/S	40	30	M10	10
22140403	40	40	M8	8
22150303	50	30	M10	10
22150403	50	40	M10	10

Part no.	A	B	C	D
22150453	50	45	M10	10
22150503	50	50	M10	10
22160403	60	40	M10	10
22160403/S	60	40	M12	12
22170453	70	45	M10	10
22175403	75	40	M12	12
22175503	75	50	M12	12
22175553	75	55	M12	12
221100403	100	40	M16	16
221100503	100	50	M16	16
221100553	100	55	M16	16
221100603	100	60	M16	16
221100753	100	75	M16	16
221150503	150	50	M16	16
221150503/S	150	50	M20	18
221150553	150	55	M16	16
221150553/S	150	55	M20	18
221150753	150	75	M16	16
221150753/S	150	75	M20	18
2212001003	200	100	M20	18



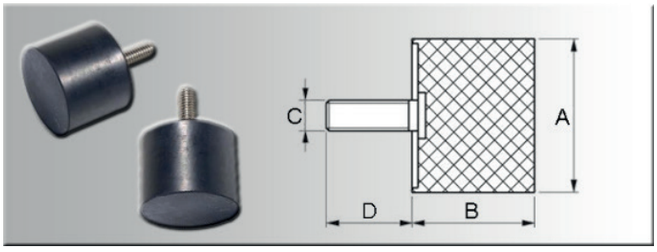
Rubber-metal-buffers, with female thread (one-sided)
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
22310105	10	10	M4	4
22310155	10	15	M4	4
22315155	15	15	M4	5
22320115	20	11	M6	6
22320155	20	15	M6	6
22320205	20	20	M6	6
22320255	20	25	M6	6
22325105	25	10	M6	6
22325155	25	15	M6	6
22325205	25	20	M6	6
22325255	25	25	M6	6
22325305	25	30	M6	6
22330155	30	15	M8	8
22330175	30	17	M8	8
22330205	30	20	M8	8
22330255	30	25	M8	8
22330305	30	30	M8	8
22340305	40	30	M8	8
22340305/S	40	30	M10	10
22340405	40	40	M8	8
22350205	50	20	M10	10

Part no.	A	B	C	D
22350305	50	30	M10	10
22350405	50	40	M10	10
22350455	50	45	M10	10
22350505	50	50	M10	10
22360405	60	40	M10	10
22360405/S	60	40	M12	12
22370455	70	45	M10	10
22375255	75	25	M12	12
22375405	75	40	M12	12
22375505	75	50	M12	12
22375555	75	55	M12	12
223100405	100	40	M16	16
223100505	100	50	M16	16
223100555	100	55	M16	16
223100605	100	60	M16	16
223100755	100	75	M16	16
223150455	150	45	M16	16
223150505	150	50	M16	16
223150555	150	55	M16	16
223150605	150	60	M16	16
223150755	150	75	M16	16

Rubber-metal-buffers | male thread



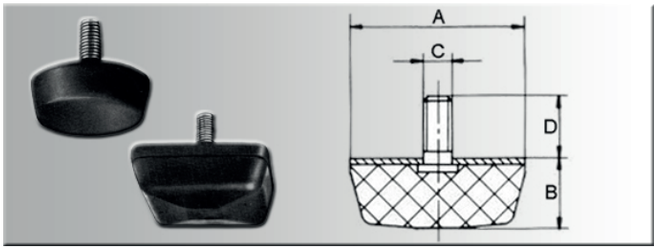
Rubber-metal-buffers, with male thread (one-sided)
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
22210104	10	10	M4	10
22210154	10	15	M4	10
22215084	15	8	M4	10
22215104	15	10	M4	10
22215154	15	15	M4	10
22220054	20	5	M6	18
22220114	20	11	M6	18
22220154	20	15	M6	18
22220204	20	20	M6	18
22220254	20	25	M6	18
22225084	25	8	M6	18
22225104	25	10	M6	18
22225154	25	15	M6	18
22225204	25	20	M6	18
22225254	25	25	M6	18
22225304	25	30	M6	18
22230154	30	15	M8	20
22230204	30	20	M8	20
22230254	30	25	M8	20
22230304	30	30	M8	20
22230404	30	40	M8	20
22240204	40	20	M8	23
22240304	40	30	M8	23

Part no.	A	B	C	D
22240304/S	40	30	M10	28
22240404	40	40	M8	23
22250204	50	20	M10	28
22250304	50	30	M10	28
22250404	50	40	M10	28
22250454	50	45	M10	28
22250504	50	50	M10	28
22260404	60	40	M10	28
22260404/S	60	40	M12	33
22270254	70	25	M10	28
22270454	70	45	M10	28
22275254	75	25	M12	37
22275404	75	40	M12	37
22275504	75	50	M12	37
22275554	75	55	M12	37
222100404	100	40	M16	41
222100504	100	50	M16	41
222100554	100	55	M16	41
222100604	100	60	M16	41
222100754	100	75	M16	41
222150504	150	50	M16	41
222150604	150	60	M16	41
222150754	150	75	M16	41

Rubber-metal-buffers | conical shape



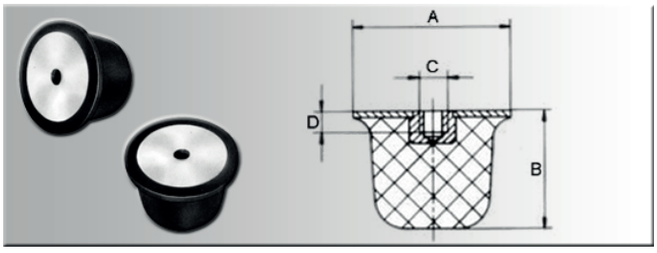
Rubber-metal-buffers, conical shape (round resp. square)
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
23125170	25	17	M6	18
23150180	50	18	M10	28
23150200	50x50	20	M10	24

Part no.	A	B	C	D
23180300	80x80	30	M12	35
23112545	125	45	M16	45

Rubber-metal-buffers | spherical shape



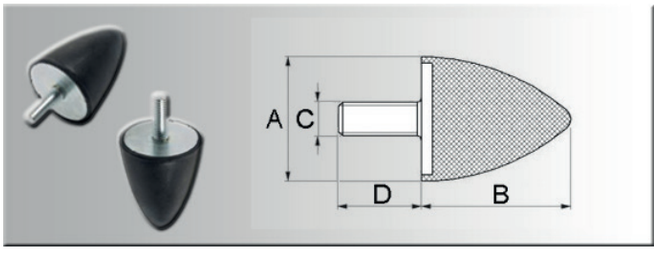
Rubber-metal-buffers, with female thread, spherical shape
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
23350350	50	35	M10	10
23380600	80	60	M12	12

Part no.	A	B	C	D
23312590	125	90	M16	16

Rubber-metal-buffers | parabolic shape



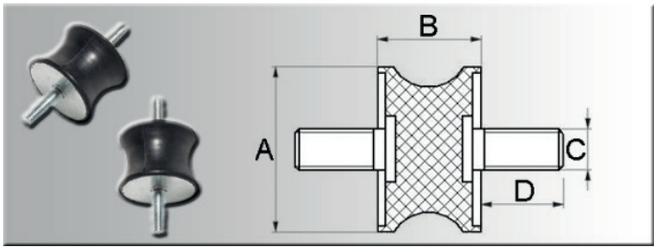
Rubber-metal-buffers, parabolic shape
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
23010100	10	10	M5	12
23020150	20	15	M6	18
23020240	20	24	M6	18
23025200	25	20	M6	18
23030300	30	30	M8	20
23030360	30	36	M8	20
23035400	35	40	M8	23
23050500	50	50	M8	23

Part no.	A	B	C	D
23050580	50	58	M10	28
23050610	50	61	M8	26
23050670	50	67	M8	36
23072580	70	58	M12	37
23075890	75	89	M12	37
23095800	95	80	M16	41
230115136	115	136	M16	43
23011877	118	77	M16	41

Rubber-metal-buffers | waisted with male/male thread



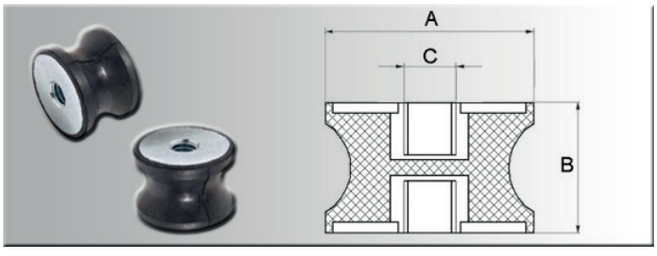
Rubber-metal-buffers, waisted shape with both-sided male thread
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
23510100	10	10	M4	10
23520150	20	15	M6	18
23520190	20	19	M6	18
23520300	20	30	M6	18
23520400	20	40	M6	12
23525200	25	20	M6	18
23530200	30	20	M8	20
23530250	30	25	M8	20

Part no.	A	B	C	D
23540280	40	28	M10	20
23540300	40	30	M8	23
23540480	40	48	M8	23
23546250	46	25	M10	20
23550300	50	30	M10	33
23575400	75	40	M12	37
23510055	100	55	M16	43

Rubber-metal-buffers | waisted with female/female thread



Rubber-metal-buffers, waisted shape with both-sided female thread
NK 55 +/-5 Shore A

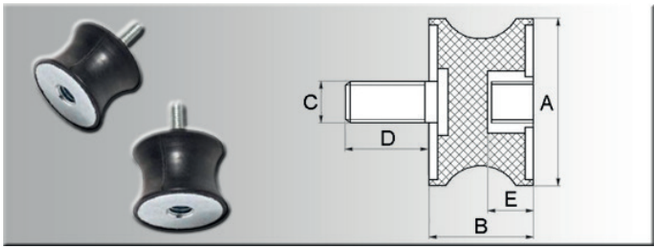
Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C
23710100	10	10	M4
23720300	20	30	M6
23730200	30	20	M8

Part no.	A	B	C
23740300	40	30	M8
23740480	40	48	M8
23750300	50	30	M10

Part no.	A	B	C
23775400	75	40	M12
23710055	100	55	M16

Rubber-metal-buffers | waisted with female/male thread



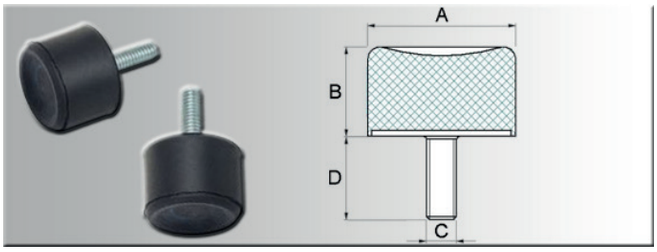
Rubber-metal-buffers, waisted shape with female and male thread
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D	E
23610100	10	10	M4	10	4
23620150	20	15	M6	18	6
23620190	20	15	M6	18	6
23625200	25	20	M6	18	6

Part no.	A	B	C	D	E
23630200	30	20	M8	20	8
23640300	40	30	M10	20	10
23655450	55	45	M10	20	10
23660600	60	60	M10	20	10

Rubber-metal-buffers | Suction buffers



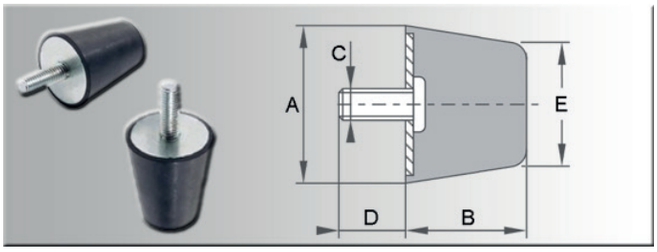
Rubber-metal suction buffers
NK 55 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D
23215140	15	14,0	M4	13
23220235	20	23,5	M6	18
23225185	25	18,5	M6	18
23230285	30	28,5	M8	20
23240285	40	28,5	M8	23

Part no.	A	B	C	D
23250280	50	28,0	M10	33
23270430	70	43,0	M10	30
23275370	75	37,0	M12	37
23210050	100	50,0	M16	45

Rubber-metal-buffers | Bumper stops

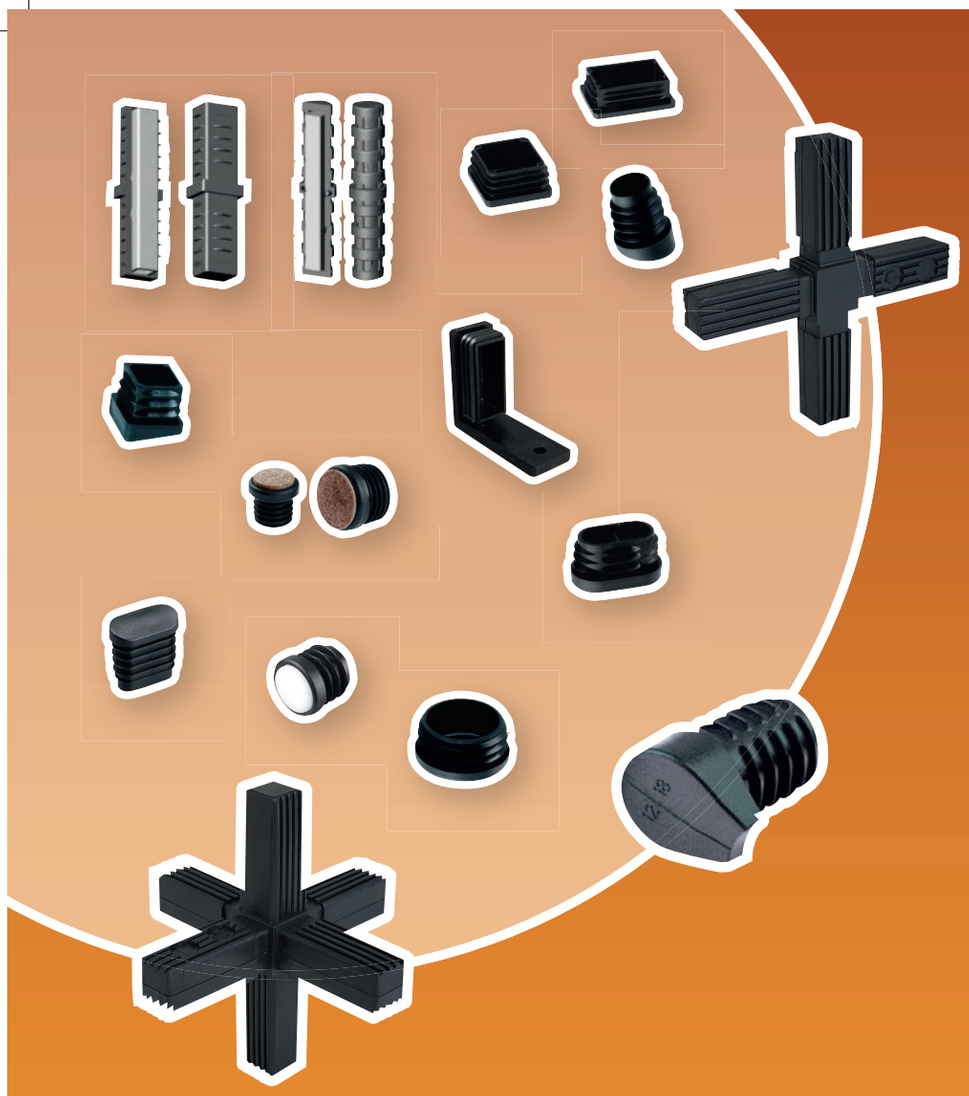


Conical rubber-metal-buffers, applicable as bumper stop or impact buffer
NK 70 +/-5 Shore A

Metal parts: ST 37 zinc-plated in white

Part no.	A	B	C	D	E
23438350	38	35	M10	27	30
23443350	43	35	M10	27	30

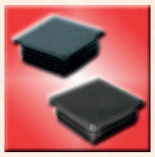
Part no.	A	B	C	D	E
23443500	43	50	M10	25	30



Ribbed inserts
Tube inserts & connectors

Ribbed inserts
Tube inserts & connectors


Round ribbed inserts Page 138


Square ribbed inserts Page 146


Rectangular ribbed inserts Page 149


Angular ribbed inserts Page 155

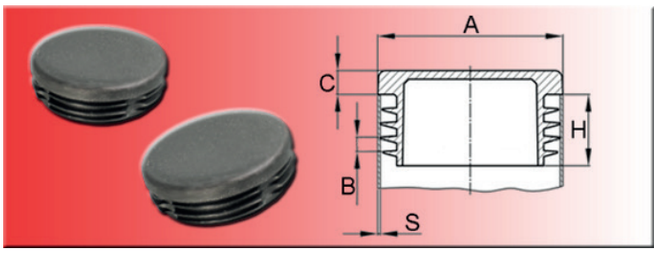

Oval ribbed inserts Page 160


Angled slides with ribs Page 161


Tube connectors Page 162


Tube connectors for square pipes Page 164

Round ribbed inserts | for round pipes



The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure. The ribs are not suitable for sealing against liquids.
The ribs are continuous or discontinuous.

Material: PE
Colour: black (without final digits)
grey ~RAL 7042 (final digits 002)
white ~RAL 9003/9010 (final digits 500)
* = version with heavily domed surface

Part no.	AxS	H	B	C
0850100	10x1-2,5	12,0	-	3,0
0850100002	10x0,8-1,5	11,5	2,0	3,5
0850100500	10x0,8-1,5	11,5	2,0	3,5
0850120	12x0,8-2	11,5	2,5	3,5
0850120002	12x0,8-2	11,5	2,5	3,5
0850120500	12x0,8-2	11,5	2,5	3,5
0850130	13x0,8-2	11,5	3,0	4,0
0850130002	13x0,8-2	11,5	3,0	4,0
0850130500	13x0,8-2	11,5	3,0	4,0
0850140	14x0,8-2	11,5	3,0	5,0
0850140002	14x0,8-2	11,5	3,0	5,0
0850140500	14x0,8-2	11,5	3,0	5,0
0850150	15x0,8-2	11,5	3,0	3,0
0850150002	15x0,8-2	11,5	3,0	3,0
0850150500	15x0,8-2	11,5	3,0	3,0
0850160	16x0,8-2	11,5	3,0	5,0
0850160002	16x0,8-2	11,5	3,0	5,0
0850160500	16x0,8-2	11,5	3,0	5,0
0850163	16x1,5-2,5	20,0	3,0	8,0
0850163002	16x1,5-2,5	20,0	3,0	8,0
0850163500	16x1,5-2,5	20,0	3,0	8,0
0850180	18x0,8-2,5	11,5	3,0	5,0
0850180002	18x0,8-2,5	11,5	3,0	5,0
0850180500	18x0,8-2,5	11,5	3,0	5,0
0850181	No longer available!			
0850181002	No longer available!			
0850181500	No longer available!			
0850182	18x2,5-3,5	11,5	3,0	5,0
0850182002	18x2,5-3,5	11,5	3,0	5,0
0850182500	18x2,5-3,5	11,5	3,0	5,0
0850190	19x0,8-2,5	11,5	3,0	5,0
0850190002	19x0,8-2,5	11,5	3,0	5,0

Part no.	AxS	H	B	C
0850190500	19x0,8-2,5	11,5	3,0	5,0
0850200	20x0,8-2,5	11,5	3,0	5,0
0850200002	20x0,8-2,5	11,5	3,0	5,0
0850200500	20x0,8-2,5	11,5	3,0	5,0
0850210	21x0,8-2,5	11,5	3,0	5,0
0850210002	21x0,8-2,5	11,5	3,0	5,0
0850210500	21x0,8-2,5	11,5	3,0	5,0
0850222	22x0,8-3	11,5	3,0	5,0
0850222002	22x0,8-3	11,5	3,0	5,0
0850222500	22x0,8-3	11,5	3,0	5,0
0850223	22,2x2-4	11,5	3,0	5,0
0850223002	22,2x2-4	11,5	3,0	5,0
0850223500	22,2x2-4	11,5	3,0	5,0
0850230	23x0,8-3,0	11,5	3,0	5,0
0850230002	23x0,8-3,0	11,5	3,0	5,0
0850230500	23x0,8-3,0	11,5	3,0	5,0
0850240	24x0,8-2,5	11,5	3,0	5,0
0850240002	24x0,8-2,5	11,5	3,0	5,0
0850240500	24x0,8-2,5	11,5	3,0	5,0
0850252	25x1-3	11,5	3,0	5,0
0850252002	25x1-3	11,5	3,0	5,0
0850252500	25x1-3	11,5	3,0	5,0
0850253	25x3-5	11,5	3,0	5,0
0850253002	25x3-5	11,5	3,0	5,0
0850253500	25x3-5	11,5	3,0	5,0
0850258	25,4x1,2-3,2	11,5	3,0	5,0
0850258002	25,4x1,2-3,2	11,5	3,0	5,0
0850258500	25,4x1,2-3,2	11,5	3,0	5,0
0850260	26x0,8-3	11,5	3,0	5,0
0850260002	26x0,8-3	11,5	3,0	5,0
0850260500	26x0,8-3	11,5	3,0	5,0
0850270	27x0,8-3	11,5	3,0	5,0

Part no.	AxS	H	B	C
0850270002	27x0,8-3	11,5	3,0	5,0
0850270500	27x0,8-3	11,5	3,0	5,0
0850280	28x0,8-2,5(3)	11,5	3,0	5,0
0850280002	28x0,8-2,5(3)	11,5	3,0	5,0
0850280500	28x0,8-2,5(3)	11,5	3,0	5,0
0850300	30x0,8-2,5	11,5	3,0	5,0
0850300002	30x0,8-2,5	11,5	3,0	5,0
0850300500	30x0,8-2,5	11,5	3,0	5,0
0850302	30x2,5-4,5	11,5	3,0	5,0
0850302002	30x2,5-4,5	11,5	3,0	5,0
0850302500	30x2,5-4,5	11,5	3,0	5,0
0850320	32x0,8-3	11,5	3,0	5,0
0850320002	32x0,8-3	11,5	3,0	5,0
0850320500	32x0,8-3	11,5	3,0	5,0
0850322	32x2,5-4,5	11,5	3,0	5,0
0850322002	32x2,5-4,5	11,5	3,0	5,0
0850322500	32x2,5-4,5	11,5	3,0	5,0
0850340	34x0,8-3	11,5	3,0	5,0
0850340002	34x0,8-3	11,5	3,0	5,0
0850340500	34x0,8-3	11,5	3,0	5,0
0850344	34x3,5-4(3-5)	11,5	3,0	5,0
0850344002	34x3,5-4(3-5)	11,5	3,0	5,0
0850344500	34x3,5-4(3-5)	11,5	3,0	5,0
0850350	35x1-3	11,5	3,0	5,0
0850350002	35x1-3	11,5	3,0	5,0
0850350500	35x1-3	11,5	3,0	5,0
0850352	35x3-5	11,5	3,0	5,0
0850352002	35x3-5	11,5	3,0	5,0
0850352500	35x3-5	11,5	3,0	5,0
0850360	36x1-3	11,5	3,0	5,0
0850360002	36x1-3	11,5	3,0	5,0
0850360500	36x1-3	11,5	3,0	5,0
0850370	37x1-3	11,5	3,0	5,0
0850370002	37x1-3	11,5	3,0	5,0
0850370500	37x1-3	11,5	3,0	5,0
0850380	38x1-3	11,5	3,0	5,0
0850380002	38x1-3	11,5	3,0	5,0
0850380500	38x1-3	11,5	3,0	5,0
0850382	38x3-5	11,5	3,0	5,0
0850382002	38x3-5	11,5	3,0	5,0
0850382500	38x3-5	11,5	3,0	5,0

Part no.	AxS	H	B	C
0850400	40x1-3	11,5	3,0	5,0
0850400002	40x1-3	11,5	3,0	5,0
0850400500	40x1-3	11,5	3,0	5,0
0850402	40x3-5	11,5	3,0	5,0
0850402002	40x3-5	11,5	3,0	5,0
0850402500	40-3-5	11,5	3,0	5,0
0850420	42x0,8-2,5	11,5	3,0	5,0
0850420002	42x0,8-2,5	11,5	3,0	5,0
0850420500	42x0,8-2,5	11,5	3,0	5,0
0850425	42x2,5-5	11,5	3,0	5,0
0850425002	42x2,5-5	11,5	3,0	5,0
0850425500	42x2,5-5	11,5	3,0	5,0
0850430	43x2-2,5	11,5	3,0	5,0
0850430002	43x2-2,5	11,5	3,0	5,0
0850430500	43x2-2,5	11,5	3,0	5,0
0850433	43x3-3,5	11,5	3,0	5,0
0850433002	43x3-3,5	11,5	3,0	5,0
0850433500	43x3-3,5	11,5	3,0	5,0
0850445	44,5x1,2-3,2	11,5	3,0	5,0
0850445002	44,5x1,2-3,2	11,5	3,0	5,0
0850445500	44,5x1,2-3,2	11,5	3,0	5,0
0850450	45x0,8-3,0	11,5	3,0	5,0
0850450002	45x0,8-3,0	11,5	3,0	5,0
0850450500	45x0,8-3,0	11,5	3,0	5,0
0850455	45x3-5	11,5	3,0	5,0
0850455002	45x3-5	11,5	3,0	5,0
0850455500	45x3-5	11,5	3,0	5,0
0850460	46x1,5-3,5	11,5	3,0	5,0
0850460002	46x1,5-3,5	11,5	3,0	5,0
0850460500	46x1,5-3,5	11,5	3,0	5,0
0850480	48,4x1,2-3,6	11,5	3,0	6,0
0850480002	48,4x1,2-3,6	11,5	3,0	6,0
0850480500	48,4x1,2-3,6	11,5	3,0	6,0
0850485	48,3x2,5-5,2	11,5	3,0	6,0
0850485002	48,3x2,5-5,2	11,5	3,0	6,0
0850485500	48,3x2,5-5,2	11,5	3,0	6,0
0850500	50x1-2,5	11,5	3,0	5,0
0850500002	50x1-2,5	11,5	3,0	5,0
0850500500	50x1-2,5	11,5	3,0	5,0
0850502	50x2,5-4,5	11,5	3,0	5,0
0850502002	50x2,5-4,5	11,5	3,0	5,0



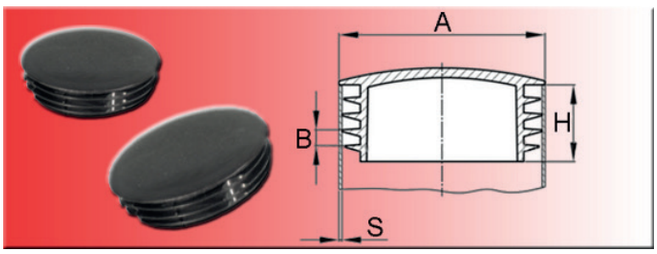
Part no.	AxS	H	B	C
0850502500	50x2,5-4,5	11,5	3,0	5,0
0850505	50x4,5-6,5	11,5	3,0	5,0
0850505002	50x4,5-6,5	11,5	3,0	5,0
0850505500	50x4,5-6,5	11,5	3,0	5,0
0850508	50,8x1,2-3	11,5	3,0	5,0
0850508002	50,8x1,2-3	11,5	3,0	5,0
0850508500	50,8x1,2-3	11,5	3,0	5,0
0850520	52x1,5-3,5	14,5	3,0	5,0
0850520002	52x1,5-3,5	14,5	3,0	5,0
0850520500	52x1,5-3,5	14,5	3,0	5,0
0850550	55x1-3	14,5	3,0	5,0
0850550002	55x1-3	14,5	3,0	5,0
0850550500	55x1-3	14,5	3,0	5,0
0850552	55x3-5	14,5	3,0	5,0
0850552002	55x3-5	14,5	3,0	5,0
0850552500	55x3-5	14,5	3,0	5,0
0850572	57,2x1,2-2,7	14,5	3,0	5,0
0850572002	57,2x1,2-2,7	14,5	3,0	5,0
0850572500	57,2x1,2-2,7	14,5	3,0	5,0
0850600	60x1-3	18,0	4,0	5,0
0850600002	60x1-3	18,0	4,0	5,0
0850600500	60x1-3	18,0	4,0	5,0
0850603	60x3-5	18,0	3,0	5,0
0850603002	60x3-5	18,0	3,0	5,0
0850603500	60x3-5	18,0	3,0	5,0
0850635	63,5x1,5-3,5	21,0	4,5	5,0
0850635002	63,5x1,5-3,5	21,0	4,5	5,0
0850635500	63,5x1,5-3,5	21,0	4,5	5,0
0850650	65x1,5-3,5	21,0	4,5	5,0
0850650002	65x1,5-3,5	21,0	4,5	5,0
0850650500	65x1,5-3,5	21,0	4,5	5,0
0850652	65x3-5	21,0	4,5	5,0
0850652002	65x3-5	21,0	4,5	5,0
0850652500	65x3-5	21,0	4,5	5,0
0850700	70x2-4,5	21,0	-	5,3
0850700002	70x2-4,5	21,0	4,0	5,0
0850700500	70x2-4,5	21,0	4,0	5,0
0850701	70x1-3,5	21,0	4,5	5,0
0850701002	70x1-3,5	21,0	4,5	5,0
0850701500	70x1-3,5	21,0	4,5	5,0
0850750	75x1-3,5	21,0	4,5	6,0

Part no.	AxS	H	B	C
0850750002	75x1-3,5	21,0	4,5	6,0
0850750500	75x1-3,5	21,0	4,5	6,0
0850752	75x3-5	21,0	5,0	6,0
0850752002	75x3-5	21,0	5,0	6,0
0850752500	75x3-5	21,0	5,0	6,0
0850760	76,2x1,5-4	21,0	4,5	6,0
0850760002	76,2x1,5-4	21,0	4,5	6,0
0850760500	76,2x1,5-4	21,0	4,5	6,0
0850762	76,2x3,5-6	21,0	4,5	6,0
0850762002	76,2x3,5-6	21,0	4,5	6,0
0850762500	76,2x3,5-6	21,0	4,5	6,0
0850800	80x1,5-3	21,0	5,0	4,0
0850800002	80x1,5-3	21,0	5,0	4,0
0850800500	80x1,5-3	21,0	5,0	4,0
0850805	80x3-5,5	21,0	-	6,0
0850805002	80x3-5,5	21,0	5,0	6,0
0850805500	80x3-5,5	21,0	5,0	6,0
0850826	82,6x2-4,5	21,0	5,0	6,0
0850826002	82,6x2-4,5	21,0	5,0	6,0
0850826500	82,6x2-4,5	21,0	5,0	6,0
0850801	85x1,5-4	21,0	4,5	6,0
0850801002	85x1,5-4	21,0	4,5	6,0
0850801500	85x1,5-4	21,0	4,5	6,0
0850802	85x3,5-6	21,0	4,5	6,0
0850802002	85x3,5-6	21,0	4,5	6,0
0850802500	85x3,5-6	21,0	4,5	6,0
0850880	88,9x1,8-4	21,0	4,5	6,0
0850880002	88,9x1,8-4	21,0	4,5	6,0
0850880500	88,9x1,8-4	21,0	4,5	6,0
0850889*	88,9x3,5-6	21,0	4,5	6,0
0850889002*	88,9x3,5-6	21,0	4,5	6,0
0850889500*	88,9x3,5-6	21,0	4,5	6,0
0850900	90x2,5-5	20,0	-	5,0
0850900002	90x2,5-5	20,0	-	5,0
0850900500	90x2,5-5	20,0	-	5,0
0850901	90x1,5-4	21,0	4,5	6,0
0850901002	90x1,5-4	21,0	4,5	6,0
0850901500	90x1,5-4	21,0	4,5	6,0
0850950	95x1,5-4	21,0	4,5	6,0
0850950002	95x1,5-4	21,0	4,5	6,0
0850950500	95x1,5-4	21,0	4,5	6,0

Part no.	AxS	H	B	C
0851000	100x1,5-4,0	28,0	5,0	6,0
0851000002	100x1,5-4,0	28,0	5,0	6,0
0851000500	100x1,5-4,0	28,0	5,0	6,0
0851004	100x4-6,5	28,0	5,0	6,0
0851004002	100x4-6,5	28,0	5,0	6,0
0851004500	100x4-6,5	28,0	5,0	6,0
0851016	101,6x3,6-6	28,0	5,0	6,0
0851016002	101,6x3,6-6	28,0	5,0	6,0
0851016500	101,6x3,6-6	28,0	5,0	6,0
0851020	102x2-4	20,0	6,0	5,0
0851020002	102x2-4	20,0	6,0	5,0
0851020500	102x2-4	20,0	6,0	5,0
0851050	105x2-4,5	28,0	5,0	6,0
0851050002	105x2-4,5	28,0	5,0	6,0
0851050500	105x2-4,5	28,0	5,0	6,0
0851080	108x2,5-4,5	28,0	5,0	6,0
0851080002	108x2,5-4,5	28,0	5,0	6,0
0851080500	108x2,5-4,5	28,0	5,0	6,0
0851100	110x2-4,5	28,0	5,0	6,0
0851100002	110x2-4,5	28,0	5,0	6,0
0851100500	110x2-4,5	28,0	5,0	6,0
0851140	114,3x3,2-5,5	28,0	5,0	6,0
0851140002	114,3x3,2-5,5	28,0	5,0	6,0
0851140500	114,3x3,2-5,5	28,0	5,0	6,0
0851200	120x2-4	28,0	-	5,6
0851200002	120x2-4	28,0	5,0	6,0
0851200500	120x2-4	28,0	5,0	6,0
0851250	no longer available!			
0851250002	no longer available!			
0851250500	no longer available!			
0851270	127x3,2-7	34,0	6,0	6,0
0851270002	127x3,2-7	34,0	6,0	6,0
0851270500	127x3,2-7	34,0	6,0	6,0

Part no.	AxS	H	B	C
0851300	130x2-6	34,0	6,0	6,0
0851300002	130x2-6	34,0	6,0	6,0
0851300500	130x2-6	34,0	6,0	6,0
0851330	133x2-6	34,0	6,0	6,0
0851330002	133x2-6	34,0	6,0	6,0
0851330500	133x2-6	34,0	6,0	6,0
0851400	140x2-6,5	34,0	6,0	6,0
0851400002	140x2-6,5	34,0	6,0	6,0
0851400500	140x2-6,5	34,0	6,0	6,0
0851500	150x2-7	34,0	6,0	6,0
0851500002	150x2-7	34,0	6,0	6,0
0851500500	150x2-7	34,0	6,0	6,0
0851520	152,4x3,2-7,5	34,0	6,0	6,0
0851520002	152,4x3,2-7,5	34,0	6,0	6,0
0851520500	152,4x3,2-7,5	34,0	6,0	6,0
0851590	159x2-6,5	34,0	6,0	6,0
0851590002	159x2-6,5	34,0	6,0	6,0
0851590500	159x2-6,5	34,0	6,0	6,0
0851600	160x2,5-7	34,0	6,0	6,0
0851600002	160x2,5-7	34,0	6,0	6,0
0851600500	160x2,5-7	34,0	6,0	6,0
0851650	165,1x3,2-7,5	34,0	6,0	6,0
0851650002	165,1x3,2-7,5	34,0	6,0	6,0
0851650500	165,1x3,2-7,5	34,0	6,0	6,0
0851680	168,3x2-6,5	34,0	6,0	6,0
0851680002	168,3x2-6,5	34,0	6,0	6,0
0851680500	168,3x2-6,5	34,0	6,0	6,0
0851770	177,8x3,2-8	34,0	6,0	6,0
0851770002	177,8x3,2-8	34,0	6,0	6,0
0851770500	177,8x3,2-8	34,0	6,0	6,0
0851930	193,7x2,9-8	34,0	6,0	6,0
0851930002	193,7x2,9-8	34,0	6,0	6,0
0851930500	193,7x2,9-8	34,0	6,0	6,0

Round ribbed inserts | with slightly domed bottom



Ribbed inserts with slightly domed bottom (not appropriate to be used as slide).
The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure.
The ribs are continuous or discontinuous.

Material: PE
Colours: black (without final digits)
grey ~RAL 7042 (final digits 002)
white ~RAL 9003 (final digits 500)

Part no.	AxS	H	B
4850100	10x0,8-1,5	11,5	2,0
4850100002	10x0,8-1,5	11,5	2,0
4850100500	10x0,8-1,5	11,5	2,0
4850120	12x0,8-1,5	11,5	2,0
4850120002	12x0,8-1,5	11,5	2,0
4850120500	12x0,8-1,5	11,5	2,0
4850130	13x0,8-2	11,5	3,0
4850130002	13x0,8-2	11,5	3,0
4850130500	13x0,8-2	11,5	3,0
4850140	14x0,8-2	11,5	3,0
4850140002	14x0,8-2	11,5	3,0
4850140500	14x0,8-2	11,5	3,0
4850150	15x0,8-2	11,5	3,0
4850150002	15x0,8-2	11,5	3,0
4850150500	15x0,8-2	11,5	3,0
4850160	16x0,8-2	11,5	3,0
4850160002	16x0,8-2	11,5	3,0
4850160500	16x0,8-2	11,5	3,0
4850180	18x0,8-2	11,5	3,0
4850180002	18x0,8-2	11,5	3,0
4850180500	18x0,8-2	11,5	3,0
4850181	18x0,25-1,5	11,5	3,0
4850181002	18x0,25-1,5	11,5	3,0
4850181500	18x0,25-1,5	11,5	3,0
4850182	18x2,5-3,5	11,5	3,0
4850182002	18x2,5-3,5	11,5	3,0
4850182500	18x2,5-3,5	11,5	3,0
4850183	no longer available!		
4850183002	no longer available!		
4850183500	no longer available!		
4850190	19x0,8-2,5	11,5	3,0
4850190002	19x0,8-2,5	11,5	3,0
4850190500	19x0,8-2,5	11,5	3,0
4850191	no longer available!		
4850191002	no longer available!		
4850191500	no longer available!		
4850200	20x0,8-2,5	11,5	3,0
4850200002	20x0,8-2,5	11,5	3,0
4850200500	20x0,8-2,5	11,5	3,0
4850202	20x1,5	5,0	1,5
4850202002	20x1,5	5,0	1,5
4850202500	20x1,5	5,0	1,5
4850210	21x0,8-2,5	11,5	3,0
4850210002	21x0,8-2,5	11,5	3,0
4850210500	21x0,8-2,5	11,5	3,0
4850220	22x0,8-3	11,5	3,0
4850220002	22x0,8-3	11,5	3,0
4850220500	22x0,8-3	11,5	3,0
4850221	22x1,8-3,5	11,5	3,0
4850221002	22x1,8-3,5	11,5	3,0
4850221500	22x1,8-3,5	11,5	3,0
4850222	no longer available!		
4850222002	no longer available!		
4850222500	no longer available!		
4850230	23x0,8-3	11,5	3,0
4850230002	23x0,8-3	11,5	3,0
4850230500	23x0,8-3	11,5	3,0
4850240	24x0,8-2,5	11,5	3,0
4850240002	24x0,8-2,5	11,5	3,0
4850240500	24x0,8-2,5	11,5	3,0
4850250	25x1-2,5	11,5	3,0
4850250002	25x1-2,5	11,5	3,0
4850250500	25x1-2,5	11,5	3,0
4850251	25x3-5	11,5	3,0
4850251002	25x3-5	11,5	3,0
4850251500	25x3-5	11,5	3,0
4850254	25,4x1,2-3,2	11,5	3,0
4850254002	25,4x1,2-3,2	11,5	3,0
4850254500	25,4x1,2-3,2	11,5	3,0
4850260	26x0,8-3	11,5	3,0
4850260002	26x0,8-3	11,5	3,0
4850260500	26x0,8-3	11,5	3,0
4850270	27x0,8-3	11,5	3,0
4850270002	27x0,8-3	11,5	3,0
4850270500	27x0,8-3	11,5	3,0
4850280	28x0,8-2,5	11,5	3,0
4850280002	28x0,8-2,5	11,5	3,0
4850280500	28x0,8-2,5	11,5	3,0
4850300	30x0,8-2,5	11,5	3,0
4850300002	30x0,8-2,5	11,5	3,0
4850300500	30x0,8-2,5	11,5	3,0
4850301	30x2,5-4,5	11,5	3,0
4850301002	30x2,5-4,5	11,5	3,0
4850301500	30x2,5-4,5	11,5	3,0
4850320	32x0,8-2,5	11,5	3,0
4850320002	32x0,8-2,5	11,5	3,0
4850320500	32x0,8-2,5	11,5	3,0
4850321	32x2,5-4,5	11,5	3,0
4850321002	32x2,5-4,5	11,5	3,0
4850321500	32x2,5-4,5	11,5	3,0
4850340	34x0,8-3	11,5	3,0
4850340002	34x0,8-3	11,5	3,0
4850340500	34x0,8-3	11,5	3,0
4850350	35x1-3	11,5	3,0
4850350002	35x1-3	11,5	3,0
4850350500	35x1-3	11,5	3,0

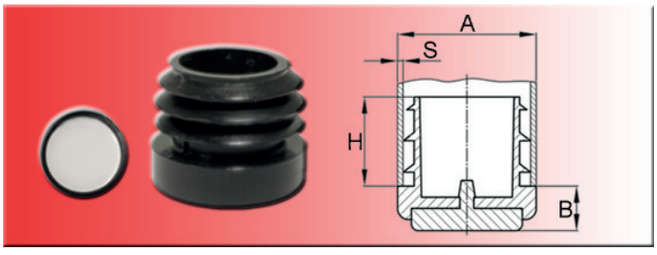
Ribbed inserts | tube connectors

Part no.	AxS	H	B
4850380	38x1-3	11,5	3,0
4850380002	38x1-3	11,5	3,0
4850380500	38x1-3	11,5	3,0
4850400	40x1-3	11,5	3,0
4850400002	40x1-3	11,5	3,0
4850400500	40x1-3	11,5	3,0
4850420	42x0,8-2,5	11,5	3,0
4850420002	42x0,8-2,5	11,5	3,0
4850420500	42x0,8-2,5	11,5	3,0
4850445	44,5x1,2-2,7	11,5	3,0
4850445002	44,5x1,2-2,7	11,5	3,0
4850445500	44,5x1,2-2,7	11,5	3,0
4850450	45x0,8-2,5	11,5	3,0
4850450002	45x0,8-2,5	11,5	3,0
4850450500	45x0,8-2,5	11,5	3,0
4850484	48,4x1,2-3	11,5	3,0
4850484002	48,4x1,2-3	11,5	3,0

Part no.	AxS	H	B
4850484500	48,4x1,2-3	11,5	3,0
4850500	50x1-2,5	11,5	3,0
4850500002	50x1-2,5	11,5	3,0
4850500500	50x1-2,5	11,5	3,0
4850550	55x1-2,5	11,5	3,0
4850550002	55x1-2,5	11,5	3,0
4850550500	55x1-2,5	11,5	3,0
4850572	57,2x1,2-2,7	14,5	3,0
4850572002	57,2x1,2-2,7	14,5	3,0
4850572500	57,2x1,2-2,7	14,5	3,0
4850600	60x1-2	18,0	4,0
4850600002	60x1-2	18,0	4,0
4850600500	60x1-2	18,0	4,0
4850650	65x1,5-3,5	21,0	4,5
4850650002	65x1,5-3,5	21,0	4,5
4850650500	65x1,5-3,5	21,0	4,5
4850700	70x1-3	21,0	4,5

Part no.	AxS	H	B
4850700002	70x1-3	21,0	4,5
4850700500	70x1-3	21,0	4,5
4850750	75x1-2,5	21,0	4,5
4850750002	75x1-2,5	21,0	4,5
4850750500	75x1-2,5	21,0	4,5
4850762	76,2x1,5-3,5	21,0	4,5
4850762002	76,2x1,5-3,5	21,0	4,5
4850762500	76,2x1,5-3,5	21,0	4,5
4850800	80x1-3	21,0	4,5
4850800002	80x1-3	21,0	4,5
4850800500	80x1-3	21,0	4,5
4850850	85x1,5-3	21,0	4,5
4850850002	85x1,5-3	21,0	4,5
4850850500	85x1,5-3	21,0	4,5
4850889	88,9x1,8-3,5	21,0	4,5
4850889002	88,9x1,8-3,5	21,0	4,5
4850889500	88,9x1,8-3,5	21,0	4,5

Round ribbed inserts | with PA slip surface



Ribbed inserts for round pipes with PA slip surface.

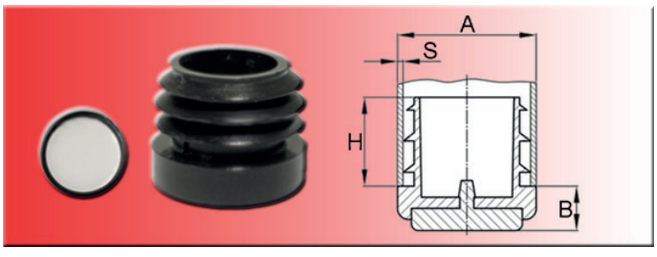
Material: PE / slip surface: PA 6
Colour: black

Part no.	AxS	H	B
0850160PA	16x1,5-2	-	8
0850180PA	18x1,5-2	13,3	8

Part no.	AxS	H	B
0850190PA	no longer available!		
0850200PA	20x1,5-2	12,0	8

Part no.	AxS	H	B
0850220PA	no longer available!		
0850250PA	25x1,5-2	11,8	8

Round ribbed inserts | with POM/PTFE slip surface



Ribbed inserts for round pipes with POM/PTFE slip surface.

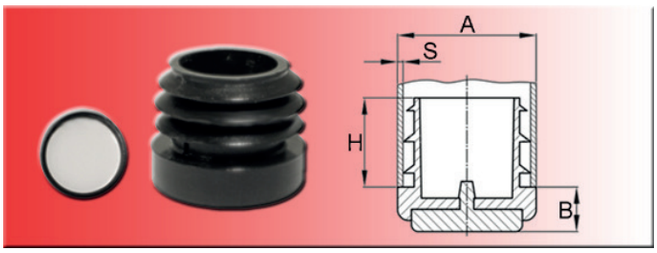
Material: PE / slip surface: POM/PTFE
Colour: black

Part no.	AxS	H	B
0850160POM	16x1,5-2	-	8
0850180POM	18x1,5-2	12,0	8

Part no.	AxS	H	B
0850190POM	no longer available!		
0850200POM	20x1,5-2	12,0	8

Part no.	AxS	H	B
0850220POM	22x1,5-2	11,8	8
0850250POM	25x1,5-2	11,8	8

Round ribbed inserts | with PTFE slip surface



Furniture glides with PTFE slip surface.

- very well silencing due to rubber buffer inside the slip insert
- minimum soil friction because of PTFE slip surface

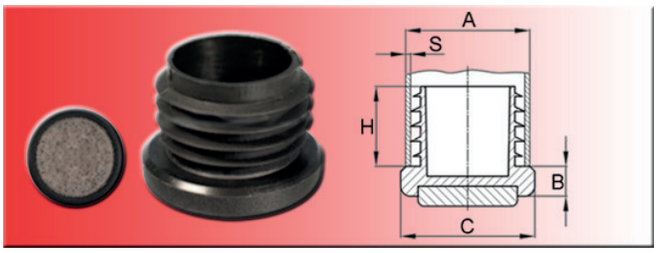
Material: PP / slip surface: PTFE
Colour: black

Part no.	AxS	H	B
0850220UG	22x1,5-2,5	19	6

Part no.	AxS	H	B
0850250UG	25x1,5-2,5	19	6

Part no.	AxS	H	B
0850280UG	28x1,5-2,5	19	6

Round ribbed inserts | with felt



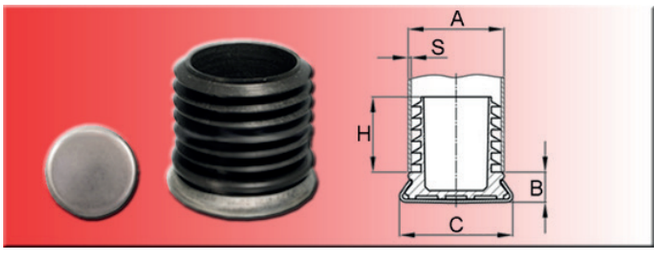
Ribbed inserts for round pipes with welded felt.

Material: PE / slip surface: felt (height: 3 mm)
Colour: black

Part no.	AxS	H	B	C
0850150F	15x1,5-2	9,6	7	15
0850160F	16x1,5-2	10,0	7	16
0850180F	18x1,5-2	13,3	7	18
0850190F	19x1,5-2	11,0	7	19
0850200F	20x1,5-2	15,1	7	20

Part no.	AxS	H	B	C
0850220F	22x1,5-2	15,8	7	22
0850250F	25x1,5-2	18,8	8	25
0850280F	28x1,5-2	21,5	8	28
0850300F	30x1,5-2	23,4	8	30
0850320F	32x1,5-2	26,3	8	32

Round ribbed inserts | with metal slip surface



Ribbed inserts for round pipes with metal cap.

Material: PE
Colour: black

last digits ME = stainless metal cap
last digits MN = nickel-plated steel cap

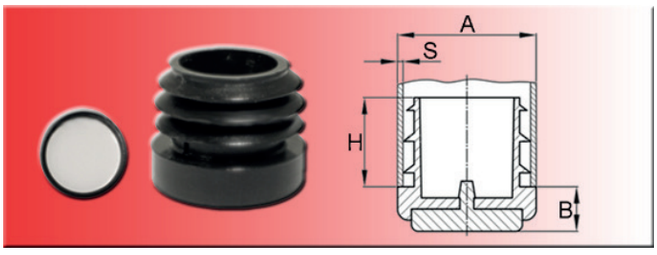
Part no.	AxS	H	B	C
0850150ME	15x1,5-2	8,0	5,0	18
0850160ME	16x1,5-2	10,0	5,0	18
0850180ME	18x1,5-2	13,3	5,0	20
0850190ME	19x1,5-2	14,2	5,5	22

Part no.	AxS	H	B	C
0850190MN	19x1,5-2,5	19,0	8,0	22
0850200ME	20x1,5-2	15,1	6,0	22
0850200MN	20x1,5-2,5	19,0	8,0	22
0850220ME	22x1,5-2	15,8	5,0	25

Part no.	AxS	H	B	C
0850220MN	22x1,5-2,5	19,0	8,0	22
0850250ME	25x1,0-2	18,8	6,0	30
0850250MN	25x1,0-2,5	19,0	8,0	30
0850270ME	27x1,5-2	21,3	6,0	30
0850280ME	28x1,5-2	21,5	6,0	30
0850280MN	no longer available!			

Part no.	AxS	H	B	C
0850300ME	30x1,5-2	23,4	6,0	35
0850300MN	30x1,0-2,5	19,0	8,0	35
0850320ME	32x1,5-2	26,3	6,0	35
0850320MN	32x1,0-2,5	19,0	8,0	35
0850380ME	38x1,5-2	31,2	6,0	42
0850400ME	40x1,5-2	33,5	6,0	42

Round ribbed inserts | with anti-slip surface (TPU)



Ribbed inserts for round pipes with anti-slip surface TPU.

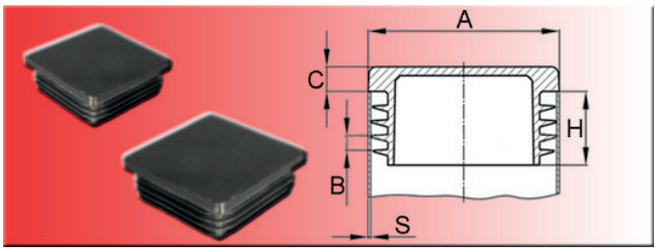
Material: PE / anti-slip surface: TPU
Colour: black

Part no.	AxS	H	B
0850160PU	no longer available!		
0850180PU	no longer available!		

Part no.	AxS	H	B
0850190PU	no longer available!		
0850200PU	no longer available!		

Part no.	AxS	H	B
0850220PU	no longer available!		
0850250PU	no longer available!		

Square ribbed inserts | for square pipes



The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure. The ribs are not suitable for sealing against liquids.

Material: PE
Colour: black (without final digits)
grey ~RAL7042 (final digits 002)
white ~RAL9003 (final digits 500)

Further types on written request.

Part no.	AxS	H	B	C
0560100	no longer available!			
0560120	12x12x0,5-2	11,5	3,0	4,0
0560120002	12x12x0,5-2	11,5	3,0	4,0
0560120500	12x12x0,5-2	11,5	3,0	4,0
0560130	13x13x0,5-2	11,5	3,0	4,0
0560130002	13x13x0,5-2	11,5	3,0	4,0
0560130500	13x13x0,5-2	11,5	3,0	4,0
0560150	15x15x0,8-2	11,5	3,0	3,0
0560150002	15x15x0,8-2	11,5	3,0	3,0
0560150500	15x15x0,8-2	11,5	3,0	3,0
0560160	16x16x0,8-2	11,5	3,0	5,0
0560160002	16x16x0,8-2	11,5	3,0	5,0
0560160500	16x16x0,8-2	11,5	3,0	5,0
0560180	18x18x1,5-3	11,5	3,0	5,0
0560180002	18x18x1,5-3	11,5	3,0	5,0
0560180500	18x18x1,5-3	11,5	3,0	5,0
0560190	19,1x19,1x1,2-2,9	11,5	3,0	5,0
0560190002	19,1x19,1x1,2-2,9	11,5	3,0	5,0
0560190500	19,1x19,1x1,2-2,9	11,5	3,0	5,0
0560200	20x20x0,8-3	11,5	3,0	5,0
0560200002	20x20x0,8-3	11,5	3,0	5,0
0560200500	20x20x0,8-3	11,5	3,0	5,0
0560220	22x22x1-3,5	11,5	3,0	5,0
0560220002	22x22x1-3,5	11,5	3,0	5,0
0560220500	22x22x1-3,5	11,5	3,0	5,0
0560250	25x25x1-3	11,5	3,0	5,0
0560250002	25x25x1-3	11,5	3,0	5,0
0560250500	25x25x1-3	11,5	3,0	5,0
0560257	25,4x25,4x1,2-3,2	11,5	3,0	5,0
0560257002	25,4x25,4x1,2-3,2	11,5	3,0	5,0
0560257500	25,4x25,4x1,2-3,2	11,5	3,0	5,0
0560270	27x27x1-2	15,0	-	5,0

Part no.	AxS	H	B	C
0560280	28x28x1-3	11,5	3,0	5,0
0560280002	28x28x1-3	11,5	3,0	5,0
0560280500	28x28x1-3	11,5	3,0	5,0
0560300	30x30x1-2,5	11,5	3,0	5,0
0560300002	30x30x1-2,5	11,5	3,0	5,0
0560300500	30x30x1-2,5	11,5	3,0	5,0
0560304	30x30x2,5-5	11,5	3,0	5,0
0560304002	30x30x2,5-5	11,5	3,0	5,0
0560304500	30x30x2,5-5	11,5	3,0	5,0
0560320	32x32x1-3,5	11,5	3,0	5,0
0560320002	32x32x1-3,5	11,5	3,0	5,0
0560320500	32x32x1-3,5	11,5	3,0	5,0
0560340	34x34x1-3	14,5	3,0	5,0
0560340002	34x34x1-3	14,5	3,0	5,0
0560340500	34x34x1-3	14,5	3,0	5,0
0560350	35x35x1-3	14,5	3,0	5,0
0560350002	35x35x1-3	14,5	3,0	5,0
0560350500	35x35x1-3	14,5	3,0	5,0
0560355	35x35x2,5-5	11,9	3,0	5,0
0560355002	35x35x3-5	14,5	3,0	5,0
0560355500	35x35x2,5-5	11,9	3,0	5,0
0560380	38x38x1-3,5	14,5	3,0	5,0
0560380002	38x38x1-3,5	14,5	3,0	5,0
0560380500	38x38x1-3,5	14,5	3,0	5,0
0560400	40x40x1-3	14,5	3,0	5,0
0560400002	40x40x1-3	14,5	3,0	5,0
0560400500	40x40x1-3	14,5	3,0	5,0
0560403	40x40x3-5	14,5	3,0	5,0
0560403002	40x40x3-5	14,5	3,0	5,0
0560403500	40x40x3-5	14,5	3,0	5,0
0560450	45x45x1-3	14,5	3,0	5,0
0560450002	45x45x1-3	14,5	3,0	5,0

Part no.	AxS	H	B	C
0560450500	45x45x1-3	14,5	3,0	5,0
0560454	45x45x3-5	14,5	3,0	5,0
0560454002	45x45x3-5	14,5	3,0	5,0
0560454500	45x45x3-5	14,5	3,0	5,0
0560480	48x48x1-2,5	14,5	3,0	5,0
0560480002	48x48x1-2,5	14,5	3,0	5,0
0560480500	48x48x1-2,5	14,5	3,0	5,0
0560484	48x48x2,5-4,5	14,5	3,0	5,0
0560484002	48x48x2,5-4,5	14,5	3,0	5,0
0560484500	48x48x2,5-4,5	14,5	3,0	5,0
0560500	50x50x0,8-3	14,5	3,0	5,0
0560500002	50x50x0,8-3	14,5	3,0	5,0
0560500500	50x50x0,8-3	14,5	3,0	5,0
0560504	50x50x2,6-5	19,0	-	5,0
0560504002	50x50x2,6-5	19,0	-	5,0
0560504500	50x50x2,6-4	24,5	6,5	6,5
0560505	50x50x3-5	14,5	3,0	5,0
0560505002	50x50x3-5	14,5	3,0	5,0
0560505500	50x50x3-5	14,5	3,0	5,0
0560508	50,8x50,8x1,2-3,2	14,5	3,0	5,0
0560508002	50,8x50,8x1,2-3,2	14,5	3,0	5,0
0560508500	50,8x50,8x1,2-3,2	14,5	3,0	5,0
0560520	52x52x1,5-3,5	14,5	3,0	5,0
0560520002	52x52x1,5-3,5	14,5	3,0	5,0
0560520500	52x52x1,5-3,5	14,5	3,0	5,0
0560550	55x55x2-4,5	14,5	3,0	5,0
0560550002	55x55x2-4,5	14,5	3,0	5,0
0560550500	55x55x2-4,5	14,5	3,0	5,0
0560572	no longer available!			
0560572002	no longer available!			
0560572500	no longer available!			
0560600	60x60x1,5-4	21,0	4,5	5,0
0560600002	60x60x1,5-4	21,0	4,5	5,0
0560600500	60x60x1,5-4	21,0	4,5	5,0
0560604	60x60x2,6-4	17,5	6,0	6,5
0560604002	60x60x2,6-4	17,5	6,0	6,5
0560604500	60x60x2,6-4	17,5	6,0	6,5
0560606	60x60x4-6	21,0	3,0	5,0
0560606002	60x60x4-6	21,0	3,0	5,0
0560606500	60x60x4-6	21,0	3,0	5,0
0560630	no longer available!			

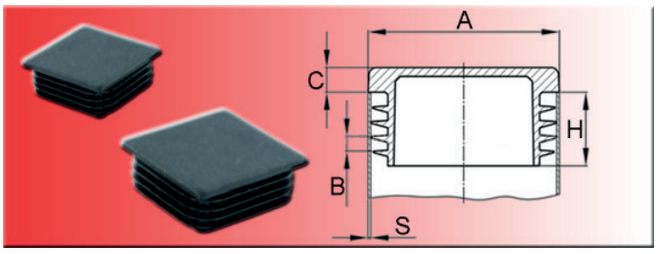
Part no.	AxS	H	B	C
0560630002	no longer available!			
0560630500	no longer available!			
0560650	65x65x2-4,5	21,0	3,0	5,0
0560650002	65x65x2-4,5	21,0	3,0	5,0
0560650500	65x65x2-4,5	21,0	3,0	5,0
0560700	70x70x2-4	18,7	4,0	5,0
0560700002	On request!			
0560700500	On request!			
0560702	70x70x2-4,5	18,7	5,0	5,0
0560702002	70x70x2-4,5	18,7	5,0	5,0
0560702500	70x70x2-4,5	18,7	5,0	5,0
0560705	70x70x3,6-5	20,0	6,0	8,0
0560705002	70x70x3,6-5	20,0	6,0	8,0
0560705500	70x70x3,6-5	20,0	6,0	8,0
0560750	75x75x2-4,5	21,2	-	6,0
0560750002	75x75x2-4,5	21,0	4,5	6,0
0560750500	75x75x2-4,5	21,0	4,5	6,0
0560762	76,2x76,2x2,5-5	21,0	4,5	6,0
0560762002	76,2x76,2x2,5-5	21,0	4,5	6,0
0560762500	76,2x76,2x2,5-5	21,0	4,5	6,0
0560800-1	80x80x1,5-2,5	17,0	-	6,0
0560800	80x80x2,9-5	24,0	4,0	8,0
0560800002	80x80x2,9-5	24,0	4,0	8,0
0560800500	80x80x2,9-5	24,0	4,0	8,0
0560802	80x80x2-4,5	21,0	4,5	6,0
0560802002	80x80x2-4,5	21,0	4,5	6,0
0560802500	80x80x2-4,5	21,0	4,5	6,0
0560804	80x80x3-4	17,0	-	5,0
0560805	80x80x4-7	21,0	4,5	6,0
0560805002	80x80x4-7	21,0	4,5	6,0
0560805500	80x80x4-7	21,0	4,5	6,0
0560820	82,6x82,6x2-4,5	21,0	4,5	6,0
0560820002	82,6x82,6x2-4,5	21,0	4,5	6,0
0560820500	82,6x82,6x2-4,5	21,0	4,5	6,0
0560880	88,9x88,9x2-4	21,0	5,0	6,0
0560880002	88,9x88,9x2-4	21,0	5,0	6,0
0560880500	88,9x88,9x2-4	21,0	5,0	6,0
0560900	90x90x2-5	25,0	-	5,0
0560900002	90x90x3-5	21,0	4,5	6,0
0560900500	90x90x3-5	21,0	4,5	6,0
0560950	95x95x3,5-5,5	21,0	4,0	6,0



Part no.	AxS	H	B	C
0560950002	95x95x3,5-5,5	21,0	4,0	6,0
0560950500	95x95x3,5-5,5	21,0	4,0	6,0
0561004	100x100x1-4	24,0	7,0	7,0
0561004002	100x100x1-4	24,0	7,0	7,0
0561004500	100x100x1-4	24,0	7,0	7,0
0561006	100x100x3-6	23,0	-	5,0
0561008	100x100x5-8	24,0	8,5	7,0
0561008002	100x100x5-8	24,0	8,5	7,0
0561008500	100x100x5-8	24,0	8,5	7,0
0561010	101,6x101,6x2,5-5,5	24,0	5,0	6,0
0561010002	101,6x101,6x2,5-5,5	24,0	5,0	6,0
0561010500	101,6x101,6x2,5-5,5	24,0	5,0	6,0
0561100	110x110x3-5	24,5	-	6,0
0561100002	110x110x3-5	24,5	4,5	6,0
0561100500	110x110x3-5	24,5	4,5	6,0

Part no.	AxS	H	B	C
0561140	114,3x114,3x2,5-5,5	24,0	5,0	6,0
0561140002	114,3x114,3x2,5-5,5	24,0	5,0	6,0
0561140500	114,3x114,3x2,5-5,5	24,0	5,0	6,0
0561200	120x120x2,5-5	25,0	-	5,0
0561200002	120x120x2,5-5	25,0	-	5,0
0561200500	120x120x2,5-5	25,0	-	5,0
0561250	125x125x3-6	24,5	4,5	6,0
0561250002	125x125x3-6	24,5	4,5	6,0
0561250500	125x125x3-6	24,5	4,5	6,0
0561400	140x140x4-7	35,0	6,0	6,0
0561400002	140x140x4-7	35,0	6,0	6,0
0561400500	140x140x4-7	35,0	6,0	6,0
0561508	150x150x5-8	27,0	7,0	8,0
0561508002	150x150x5-8	27,0	7,0	8,0
0561508500	150x150x5-8	27,0	7,0	8,0

Square ribbed inserts | with thin cover plate



- with thin cover plate (approx. 2 mm) -

The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure.
The ribs (continuous or discontinuous) are not suitable for sealing against liquids.

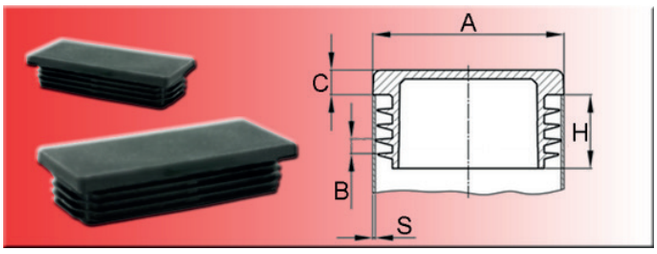
Material: PE
Colour: black

Further types and colours on written request.

Part no.	AxS	H	B	C
4560200	20x20x0,8-3	11,5	3	2
4560250	25x25x0,8-2,5	11,5	3	2
4560300	30x30x1-2,5	11,5	3	2
4560350	35x35x0,8-2,5	14,5	3	2

Part no.	AxS	H	B	C
4560400	40x40x1-2,5	14,5	3	2
4560450	45x45x1-2,5	14,5	3	2
4560500	50x50x1-2,5	14,5	3	2

Rectangular ribbed inserts | for rectangular pipes



The surface of the sliders has - at the discretion of the manufacturer - a smooth or a spark-erosion structure.
The ribs (continuous or discontinuous) are not suitable for sealing against liquids.

Material: PE
Colour: black (without final digits)
grey ~RAL 7042 (final digits 002)
white ~RAL 9003 (final digits 500)

Further types on written request.

Part no.	AxS	H	B	C
0572010	20x10x0,8-2	11,5	3,0	3,0
0572010002	20x10x0,8-2	11,5	3,0	3,0
0572010500	20x10x0,8-2	11,5	3,0	3,0
0572015	20x15x1-2,5	11,5	3,0	5,0
0572015002	20x15x1-2	11,5	3,0	5,0
0572015500	20x15x1-2	11,5	3,0	5,0
0572016	20x16x1-2,5	11,5	3,0	5,0
0572016002	20x16x0,8-2,5	11,5	3,0	5,0
0572016500	20x16x0,8-2,5	11,5	3,0	5,0
0572510	25x10x0,8-2	11,5	3,0	4,0
0572510002	25x10x0,8-2	11,5	3,0	4,0
0572510500	25x10x0,8-2	11,5	3,0	4,0
0572512	25x12x1-2	10,5	-	5,0
0572515	25x15x0,8-2,5	11,5	3,0	5,0
0572515002	25x15x0,8-2,5	11,5	3,0	5,0
0572515500	25x15x0,8-2,5	11,5	3,0	5,0
0572520	25x20x1-3	11,5	3,0	5,0
0572520002	25x20x1-3	11,5	3,0	5,0
0572520500	25x20x1-3	11,5	3,0	5,0
0573010	30x10x0,8-2	11,5	3,0	3,0
0573010002	30x10x0,8-2	11,5	3,0	3,0
0573010500	30x10x0,8-2	11,5	3,0	3,0
0573015	30x15x0,8-2,5	11,5	3,0	5,0
0573015002	30x15x0,8-2,5	11,5	3,0	5,0
0573015500	30x15x0,8-2,5	11,5	3,0	5,0
0573020	30x20x1-3	11,5	3,0	5,0
0573020002	30x20x1-3	11,5	3,0	5,0
0573020500	30x20x1-3	11,5	3,0	5,0
0573025	30x25x0,8-3	11,5	3,0	5,0
0573025002	30x25x0,8-3	11,5	3,0	5,0
0573025500	30x25x0,8-3	11,5	3,0	5,0
0573510	35x10x0,8-2	10,0	2,0	5,0

Part no.	AxS	H	B	C
0573510002	35x10x0,8-2	10,0	2,0	5,0
0573510500	35x10x0,8-2	10,0	2,0	5,0
0573515	35x15x1-3	11,5	3,0	5,0
0573515002	35x15x1-3	11,5	3,0	5,0
0573515500	35x15x1-3	11,5	3,0	5,0
0573520	35x20x0,8-3	11,5	3,0	5,0
0573520002	35x20x0,8-3	11,5	3,0	5,0
0573520500	35x20x0,8-3	11,5	3,0	5,0
0573525	35x25x0,8-3	11,5	3,0	5,0
0573525002	35x25x0,8-3	11,5	3,0	5,0
0573525500	35x25x0,8-3	11,5	3,0	5,0
0573530	35x30x1-2	14,5	-	5,0
0573819	38,1x19,1x0,8-2	11,5	3,0	5,0
0573819002	38,1x19,1x0,8-2	11,5	3,0	5,0
0573819500	38,1x19,1x0,8-2	11,5	3,0	5,0
0573825	38,1x25,4x0,8-3	11,5	3,0	5,0
0573825002	38,1x25,4x0,8-3	11,5	3,0	5,0
0573825500	38,1x25,4x0,8-3	11,5	3,0	5,0
0574010	40x10x1-2	11,0	-	5,0
0574010002	40x10x1,5-2	11,0	3,0	5,0
0574010500	40x10x1,5-2	11,0	3,0	5,0
0574015	40x15x1-2	11,7	-	5,0
0574015002	40x15x1-2	11,7	3,0	5,0
0574021	40x20x0,8-3	11,5	3,0	5,0
0574021002	40x20x0,8-3	11,5	3,0	5,0
0574021500	40x20x0,8-3	11,5	3,0	5,0
0574023	40x20x3	13,0	-	5,0
0574023002	40x20x3	13,0	3,5	5,0
0574023500	40x20x3	13,0	3,5	5,0
0574025	40x25x1-3,5	11,5	3,0	5,0
0574025002	40x25x1-3,5	11,5	3,0	5,0
0574025500	40x25x1-3,5	11,5	3,0	5,0



Part no.	AxS	H	B	C
0574026	40x25x3-5	11,5	3,0	5,0
0574026002	40x25x3-5	11,5	3,0	5,0
0574026500	40x25x3-5	11,5	3,0	5,0
0574030	40x30x1-3	11,5	3,0	5,0
0574030002	40x30x1-3	11,5	3,0	5,0
0574030500	40x30x1-3	11,5	3,0	5,0
0574032	40x30x3-5	11,5	3,0	5,0
0574032002	40x30x3-5	11,5	3,0	5,0
0574032500	40x30x3-5	11,5	3,0	5,0
0574035	40x35x1-3	11,5	-	5,0
0574035002	40x35x1-3	11,5	3,0	5,0
0574035500	40x35x1-3	11,5	3,0	5,0
0574515	45x15x1-2	11,1	-	4,8
0574515002	45x15x1-2	11,0	3,0	5,0
0574515500	45x15x1-2	11,0	3,0	5,0
0574520	45x20x1-3	11,5	3,0	5,0
0574520002	45x20x1-3	11,5	3,0	5,0
0574520500	45x20x1-3	11,5	3,0	5,0
0574525	45x25x1-2,5	11,5	3,0	5,0
0574525002	45x25x0,8-3	11,0	3,0	5,0
0574525500	45x25x0,8-3	11,0	3,0	5,0
0574526	45x25x3-5	11,5	3,0	5,0
0574526002	45x25x3-5	11,5	3,0	5,0
0574526500	45x25x3-5	11,5	3,0	5,0
0574530	45x30x0,8-3	11,5	3,0	5,0
0574530002	45x30x0,8-3	11,5	3,0	5,0
0574530500	45x30x0,8-3	11,5	3,0	5,0
0574531	45x30x3-5	11,5	3,0	5,0
0574531002	45x30x3-5	11,5	3,0	5,0
0574531500	45x30x3-5	11,5	3,0	5,0
0574535	45x35x1-3,5	11,5	3,0	5,0
0574535002	45x35x1-3,5	11,5	3,0	5,0
0574535500	45x35x1-3,5	11,5	3,0	5,0
0574540	45x40x2-3	12,5	-	5,2
0574838	48x38x1-2	14,3	-	4,9
0575010	50x10x0,8-2	11,5	3,0	3,5
0575010002	50x10x0,8-2	11,5	3,0	3,5
0575010500	50x10x0,8-2	11,5	3,0	3,5
0575015	50x15x1-2	13,6	-	4,7
0575020	50x20x0,8-3	14,5	3,0	5,0
0575020002	50x20x0,8-3	14,5	3,0	5,0

Part no.	AxS	H	B	C
0575020500	50x20x0,8-3	14,5	3,0	5,0
0575024	50x25x0,8-3	14,5	3,0	5,0
0575024002	50x25x0,8-3	14,5	3,0	5,0
0575024500	50x25x0,8-3	14,5	3,0	5,0
0575026	50x25x3-4,5	14,5	3,0	5,0
0575026002	50x25x3-4,5	14,5	3,0	5,0
0575026500	50x25x3-4,5	14,5	3,0	5,0
0575030	50x30x1-3	14,5	3,0	5,0
0575030002	50x30x1-3	14,5	3,0	5,0
0575030500	50x30x1-3	14,5	3,0	5,0
0575031	50x30x3-5	14,5	3,0	5,0
0575031002	50x30x3-5	14,5	3,0	5,0
0575031500	50x30x3-5	14,5	3,0	5,0
0575033	50x30x3	13,9	-	4,9
0575033002	no longer available!			
0575033500	no longer available!			
0575034	50x34x1-3,5	14,5	-	5,0
0575034002	50x34x1-3,5	14,5	3,0	5,0
0575034500	50x34x1-3,5	14,5	3,0	5,0
0575035	50x35x1-3,5	14,5	-	5,0
0575035002	50x35x1-3,5	14,5	3,0	5,0
0575035500	50x35x1-3,5	14,5	3,0	5,0
0575038	50,8x38,1x1-3	14,5	3,0	5,0
0575038002	50,8x38,1x1-3	14,5	3,0	5,0
0575038500	50,8x38,1x1-3	14,5	3,0	5,0
0575041	50x40x0,8-3	15,0	3,0	5,0
0575041002	50x40x0,8-3	14,5	3,0	5,0
0575041500	50x40x0,8-3	14,5	3,0	5,0
0575044	50x40x3-4	12,6	-	5,5
0575044002	50x40x3-4	12,6	3,5	5,0
0575044500	50x40x3-4	12,6	-	5,5
0575534	55x34x1,5-4	14,5	3,0	5,0
0575534002	55x34x1,5-4	14,5	3,0	5,0
0575534500	55x34x1,5-4	14,5	3,0	5,0
0575535	55x35x1-2	13,2	-	4,5
0575540	55x40x1,5-4	14,5	-	5,0
0575540002	55x40x1,5-4	14,5	3,0	5,0
0575540500	55x40x1,5-4	14,5	3,0	5,0
0576015	60x15x1-2	14,5	3,0	5,0
0576015002	60x15x1-2	14,5	3,0	5,0
0576015500	60x15x1-2	14,5	3,0	5,0

Part no.	AxS	H	B	C
0576020	60x20x1-2,5	14,5	3,0	5,0
0576020002	60x20x1-3	14,5	3,0	5,0
0576020500	60x20x1-3	14,5	3,0	5,0
0576025	60x25x1-2,5	14,5	3,0	5,0
0576025002	60x25x0,8-3	14,5	3,0	5,0
0576025500	60x25x0,8-3	14,5	3,0	5,0
0576030	60x30x1-2,5	14,5	3,0	5,0
0576030002	60x30x1-3	14,5	3,0	5,0
0576030500	60x30x1-3	14,5	3,0	5,0
0576032	60x30x3-5	14,5	3,0	5,0
0576032002	60x30x3-5	14,5	3,0	5,0
0576032500	60x30x3-5	14,5	3,0	5,0
0576033	60x33x1,5-3,5	14,5	-	5,0
0576033002	60x33x1,5-3,5	14,5	3,0	5,0
0576033500	60x33x1,5-3,5	14,5	3,0	5,0
0576035	60x35x1,5-3,5	14,5	3,0	5,0
0576035002	60x35x1,5-3,5	14,5	3,0	5,0
0576035500	60x35x1,5-3,5	14,5	3,0	5,0
0576042	60x40x3-5	14,5	3,0	5,0
0576042002	60x40x3-5	14,5	3,0	5,0
0576042500	60x40x3-5	14,5	3,0	5,0
0576043	60x40x1-3	14,5	3,0	5,0
0576043002	60x40x1-3	14,5	3,0	5,0
0576043500	60x40x1-3	14,5	3,0	5,0
0576045	60x45x1,5-4	14,9	-	5,0
0576045002	60x45x1,5-4	14,5	3,0	5,0
0576045500	60x45x1,5-4	14,5	3,0	5,0
0576050	60x50x1,5-3,5	14,5	3,0	5,0
0576050002	60x50x1,5-3,5	14,5	3,0	5,0
0576050500	60x50x1,5-3,5	14,5	3,0	5,0
0576325	63,5x25,4x1-3	14,5	3,0	5,0
0576325002	63,5x25,4x1-3	14,5	3,0	5,0
0576325500	63,5x25,4x1-3	14,5	3,0	5,0
0576338	no longer available!			
0576338002	no longer available!			
0576338500	no longer available!			
0576535	65x35x1-3	14,5	3,0	5,0
0576535002	65x35x1-3	14,5	3,0	5,0
0576535500	65x35x1-3	14,5	3,0	5,0
0577020	70x20x1-2	19,5	-	5,1
0577020002	70x20x1-2	18,8	5,0	5,0

Part no.	AxS	H	B	C
0577020500	70x20x1-2	18,8	5,0	5,0
0577025	70x25x1-2	17,0	-	5,1
0577025002	70x25x1-2	17,0	4,0	5,0
0577025500	70x25x1-2	17,0	4,0	5,0
0577030	70x30x1-2,5	17,0	-	5,0
0577030002	70x30x1-2,5	17,0	-	5,0
0577030500	70x30x1-2,5	17,0	-	5,0
0577031	70x30x1-3	14,5	3,0	5,0
0577031002	70x30x1-3	14,5	3,0	5,0
0577031500	70x30x1-3	14,5	3,0	5,0
0577035	70x35x1,5-3,5	14,2	-	5,0
0577035002	70x35x1,5-3,5	14,5	3,0	5,0
0577035500	70x35x1,5-3,5	14,5	3,0	5,0
0577043	70x40x1-3	14,5	3,0	5,0
0577043002	70x40x1-3	14,5	3,0	5,0
0577043500	70x40x1-3	14,5	3,0	5,0
0577044	70x40x4	17,9	-	5,7
0577044002	70x40x4	17,5	4,5	5,5
0577044500	70x40x4	17,5	4,5	5,5
0577050	70x50x2-5	14,5	-	5,0
0577050002	70x50x2-4	14,5	3,0	5,0
0577050500	70x50x2-5	14,5	-	5,0
0577525	75x25x1-3	14,5	3,0	5,0
0577525002	75x25x1-3	14,5	3,0	5,0
0577525500	75x25x1-3	14,5	3,0	5,0
0577550	75x50x2-4	14,5	3,0	5,0
0577550002	75x50x2-4	14,5	3,0	5,0
0577550500	75x50x2-4	14,5	3,0	5,0
0577625	76,2x25,4x1,5-3,5	14,5	3,0	5,0
0577625002	76,2x25,4x1,5-3,5	14,5	3,0	5,0
0577625500	76,2x25,4x1,5-3,5	14,5	3,0	5,0
0577650	76,2x50,8x2,5-4,5	14,5	3,0	5,0
0577650002	76,2x50,8x2,5-4,5	14,5	3,0	5,0
0577650500	76,2x50,8x2,5-4,5	14,5	3,0	5,0
0578020	80x20x1-2	18,2	-	5,0
0578020002	no longer available!			
0578020500	80x20x1-2	17,6	5,0	6,0
0578025	80x25x1,5-3	18,0	-	5,0
0578025002	80x25x1-3	14,5	3,0	5,0
0578025500	80x25x1-3	14,5	3,0	5,0
0578030	80x30x1-2,5	14,5	3,0	5,0



Part no.	AxS	H	B	C
0578030002	80x30x1-2,5	14,5	3,0	5,0
0578030500	80x30x1-2,5	14,5	3,0	5,0
0578034	80x30x2,5-4,5	14,5	3,0	5,0
0578034002	80x30x2,5-4,5	14,5	3,0	5,0
0578034500	80x30x2,5-4,5	14,5	3,0	5,0
0578040	80x40x1-3	14,5	3,0	5,0
0578040002	80x40x1-3	14,5	3,0	5,0
0578040500	80x40x1-3	14,5	3,0	5,0
0578041	80x45x1,5-3,5	14,5	3,0	5,0
0578041002	80x45x1,5-3,5	14,5	3,0	5,0
0578041500	80x45x1,5-3,5	14,5	3,0	5,0
0578044	80x40x2-4	23,5	-	6,5
0578045	80x40x3-5	14,5	3,0	5,0
0578045002	80x40x3-5	14,5	3,0	5,0
0578045500	80x40x3-5	14,5	3,0	5,0
0578050	80x50x2-4	24,1	-	4,9
0578050002	80x50x2-4	24,5	4,5	5,0
0578050500	80x50x2-4	24,5	4,5	5,0
0578051	80x50x1,5-3,5	21,5	4,5	5,0
0578051002	80x50x1,5-3,5	21,5	4,5	5,0
0578051500	80x50x1,5-3,5	21,5	4,5	5,0
0578060	80x60x1,5-4,5	24,0	3,0	5,0
0578060002	80x60x1,5-4,5	24,0	3,0	5,0
0578060500	80x60x1,5-4,5	24,0	3,0	5,0
0578064	80x60x4-6	24,0	3,0	5,0
0578064002	80x60x4-6	24,0	3,0	5,0
0578064500	80x60x4-6	24,0	3,0	5,0
0579020	90x20x1-2,5	14,5	3,0	5,0
0579020002	90x20x1-2,5	14,5	3,0	5,0
0579020500	90x20x1-2,5	14,5	3,0	5,0
0579040	90x40x2-4	14,5	3,0	5,0
0579040002	90x40x2-4	14,5	3,0	5,0
0579040500	90x40x2-4	14,5	3,0	5,0
0579045	90x45x2-4	14,5	3,0	5,0
0579045002	90x45x2-4	14,5	3,0	5,0
0579045500	90x45x2-4	14,5	3,0	5,0
0579050	90x50x2-4,5	21,5	-	6,0
0579050002	90x50x2-4,5	21,5	4,5	5,0
0579050500	90x50x2-4,5	21,5	4,5	5,0
0579070	90x70x3-5,5	21,5	-	6,0
0579070002	90x70x3-5,5	21,5	4,5	6,0

Part no.	AxS	H	B	C
0579070500	90x70x3-5,5	21,5	4,5	6,0
0571025	100x25x1,5-3	14,5	3,0	5,0
0571025002	100x25x1,5-3	14,5	3,0	5,0
0571025500	100x25x1,5-3	14,5	3,0	5,0
0571030	100x30x1,5-3,5	14,5	3,0	5,0
0571030002	100x30x1,5-3,5	14,5	3,0	5,0
0571030500	100x30x1,5-3,5	14,5	3,0	5,0
0571044	100x40x1,5-3,5	14,5	3,0	5,0
0571044002	100x40x1,5-3,5	14,5	3,0	5,0
0571044500	100x40x1,5-3,5	14,5	3,0	5,0
0571050	100x50x2-3	24,2	-	5,0
0571050002	no longer available!			
0571050500	no longer available!			
0571055	100x50x3,2-6	23,6	-	6,3
0571055002	100x50x3,2-6	25,0	8,0	6,0
0571055500	100x50x3,2-6	25,0	-	6,0
0571060	100x60x2,5-4,5	24,5	4,0	6,0
0571060002	100x60x2,5-4,5	24,5	4,0	6,0
0571060500	100x60x2,5-4,5	24,5	4,0	6,0
0571080	100x80x3-5,5	24,5	-	6,0
0571080002	100x80x3-5,5	24,0	4,5	6,0
0571080500	100x80x3-5,5	24,5	-	6,0
0571086	100x80x4-6	18,5	-	6,5
0571086002	100x80x4-6	18,5	-	6,5
0571086500	100x80x4-6	18,5	-	6,5
0571130	110x30x2-4	14,5	-	5,0
0571130002	110x30x2-4	14,5	3,0	5,0
0571130500	110x30x2-4	14,5	3,0	5,0
0571160	110x60x3,5-5,5	24,5	-	6,0
0571160002	110x60x3,5-5,3	24,0	4,5	6,0
0571160500	110x60x3,5-5,3	24,0	4,5	6,0
0571170	110x70x3-5	24,5	-	6,0
0571170002	110x70x3-5	24,0	4,5	6,0
0571170500	110x70x3-5	24,0	4,5	6,0
0571210	120x100x3,5-6	24,0	-	6,0
0571210002	120x100x3,5-6	24,0	4,5	6,0
0571210500	120x100x3,5-6	24,0	4,5	6,0
0571230	120x30x1-2,5	14,5	3,0	5,0
0571230002	120x30x1-2,5	14,5	3,0	5,0
0571230500	120x30x1-2,5	14,5	3,0	5,0
0571240	120x40x3-5	-	-	-

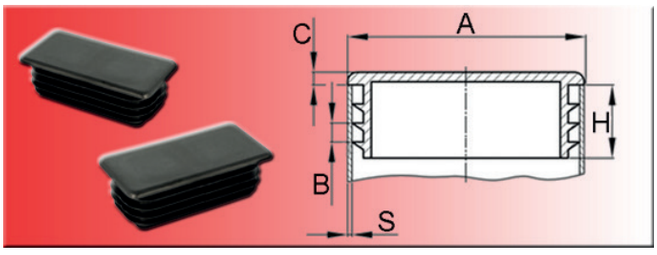
Part no.	AxS	H	B	C
0571240002	120x40x3-5	-	-	-
0571240500	120x40x3-5	-	-	-
0571241	120x40x1,5-2	-	-	-
0571241002	no longer available!			
0571241500	no longer available!			
0571250	120x50x3-5,5	21,7	-	6,0
0571250002	120x50x3-5,5	21,5	4,5	6,0
0571250500	120x50x3-5,5	21,5	4,5	6,0
0571260	120x60x1,5-4	24,5	5,0	5,0
0571260002	120x60x1,5-4	24,5	5,0	5,0
0571260500	120x60x1,5-4	24,5	5,0	5,0
0571265	120x60x5	17,5	-	5,0
0571265002	120x60x5	18,0	5,0	5,0
0571265500	no longer available!			
0571275	125x75x2-5	24,0	-	6,0
0571275002	125x75x2-5	24,0	-	6,0
0571275500	125x75x2-5	24,0	-	6,0
0571285	120x80x2-5,5	24,5	5,0	6,0
0571285002	120x80x2-5,5	-	5,0	6,0
0571285500	120x80x2-5,5	24,5	5,0	6,0
0571288	120x80x5-8	25,0	-	7,0
0571288002	120x80x5-8	25,0	-	7,0
0571288500	120x80x5-8	25,0	-	7,0
0571410	140x100x3-6	24,5	5,0	6,0
0571410002	140x100x3-6	24,5	5,0	6,0
0571410500	140x100x3-6	24,5	5,0	6,0
0571440	140x40x2-4,5	21,5	5,0	6,0
0571440002	140x40x2-4,5	21,5	5,0	6,0
0571440500	140x40x2-4,5	21,5	5,0	6,0
0571450	140x50x2-5,0	21,5	4,5	6,0
0571450002	140x50x2-5,0	21,5	4,5	6,0
0571450500	140x50x2-5,0	21,5	4,5	6,0
0571460	140x60x2-4,5	24,5	4,5	6,0
0571460002	140x60x2-4,5	24,5	4,5	6,0
0571460500	140x60x2-4,5	24,5	4,5	6,0
0571470	140x70x2,5-5,5	24,5	5,0	6,0
0571470002	140x70x2,5-5,5	24,5	5,0	6,0
0571470500	140x70x2,5-5,5	24,5	5,0	6,0
0571476	140x70x4-6,5	24,5	5,0	6,0
0571476002	140x70x4-6,5	24,5	5,0	6,0
0571476500	140x70x4-6,5	24,5	5,0	6,0

Part no.	AxS	H	B	C
0571480	140x80x2-4,5	24,5	4,5	5,0
0571480002	140x80x2-4,5	24,5	4,5	5,0
0571480500	140x80x2-4,5	24,5	4,5	5,0
0571501	150x100x1,5-4,5	24,5	5,0	6,0
0571501002	150x100x1,5-4,5	24,5	5,0	6,0
0571501500	150x100x1,5-4,5	24,5	5,0	6,0
0571503	= 0571510			
0571503002	= 0571510002			
0571503500	= 0571510500			
0571505	150x50x2-4	28,0	8,0	6,0
0571505002	150x50x2-4	28,0	8,0	6,0
0571505500	150x50x2-4	28,0	8,0	6,0
0571506	150x60x2,5-5	21,5	5,0	6,0
0571506002	150x60x2,5-5	21,5	5,0	6,0
0571506500	150x60x2,5-5	21,5	5,0	6,0
0571507	150x50x4-7	21,5	4,5	6,0
0571507002	150x50x4-7	21,5	4,5	6,0
0571507500	150x50x4-7	21,5	4,5	6,0
0571510	150x100x3-5,5	27,5	7,0	7,0
0571510002	150x100x3-5,5	27,5	7,0	7,0
0571510500	150x100x3-5,5	27,5	7,0	7,0
0571518	150x75x2,5-5,5	21,5	5,0	6,0
0571518002	150x75x2,5-5,5	21,5	5,0	6,0
0571518500	150x75x2,5-5,5	21,5	5,0	6,0
0571519	150x75x5,5-8,5	21,5	5,0	6,0
0571519002	150x75x5,5-8,5	21,5	5,0	6,0
0571519500	150x75x5,5-8,5	21,5	5,0	6,0
0571525	152,4x50,8x3-6	21,5	5,0	6,0
0571525002	152,4x50,8x3-6	21,5	5,0	6,0
0571525500	152,4x50,8x3-6	21,5	5,0	6,0
0571530	150x30x1,5-3	21,5	5,0	6,0
0571530002	150x30x1,5-3	21,5	5,0	6,0
0571530500	150x30x1,5-3	21,5	5,0	6,0
0571540	150x40x2-4,5	21,5	5,0	6,0
0571540002	150x40x2-4,5	21,5	5,0	6,0
0571540500	150x40x2-4,5	21,5	5,0	6,0
0571605	160x50x2,5-5,5	21,5	5,0	6,0
0571605002	160x50x2,5-5,5	21,5	5,0	6,0
0571605500	160x50x2,5-5,5	21,5	5,0	6,0
0571606	160X60X2,5-5	21,5	5,0	6,0
0571606002	160X60X2,5-5	21,5	5,0	6,0

Part no.	AxS	H	B	C
0571606500	160X60X2,5-5	21,5	5,0	6,0
0571608	160X80X3-5,5	21,5	5,0	6,0
0571608002	160X80X3-5,5	21,5	5,0	6,0
0571608500	160X80X3-5,5	21,5	5,0	6,0

Part no.	AxS	H	B	C
0572001	200x120 x 6,3-9	30,5	5,5	6,0
0572001002	200x120 x 6,3-9	30,5	5,5	6,0
0572001500	200x120 x 6,3-9	30,5	5,5	6,0

Rectangular ribbed inserts | with thin cover plate



- with thin cover plate (approx. 2 mm) -

The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure.
The ribs (continuous or discontinuous) are not suitable for sealing against liquids.

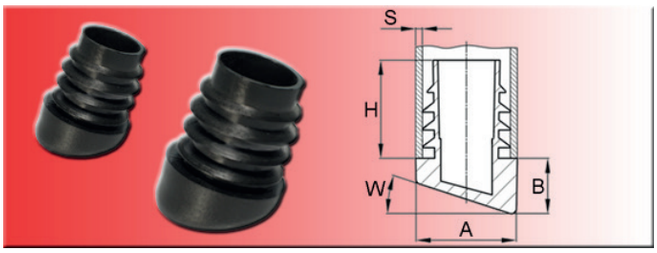
Material: PE
Colour: black

Further types and colours on written request.

Part no.	AxS	H	B	C
2572015	20x15x1-2	11,5	3	2
2572520	25x20x1-2,5	11,5	3	2
2573015	30x15x0,8-2,5	11,5	3	2
2573020	30x20x0,8-3	11,5	3	2
2573025	30x25x0,8-3	11,5	3	2
2573520	35x20x0,8-2,5	11,5	3	2
2573525	35x25x0,8-2,5	11,5	3	2
2574020	40x20x0,8-2,5	11,5	3	2
2574025	40x25x1-3	11,5	3	2
2574030	40x30x1-2,5	11,5	3	2
2574525	45x25x0,8-2,5	11,5	3	2

Part no.	AxS	H	B	C
2574530	45x30x0,8-2,5	11,5	3	2
2575020	50x20x0,8-2,5	14,5	3	2
2575025	50x25x0,8-2,5	14,5	3	2
2575030	50x30x1-2,5	14,5	3	2
2575040	50x40x0,8-2,5	14,5	3	2
2576020	60x20x1-2,5	14,5	3	2
2576025	60x25x0,8-2,5	14,5	3	2
2576030	60x30x1-2,5	14,5	3	2
2576040	60x40x1-2,5	14,5	3	2
2571020	100x20x1,5-2,5	14,5	3	2
2571220	120x20x1,5-2,5	14,5	3	2

Angular ribbed inserts | for round pipes



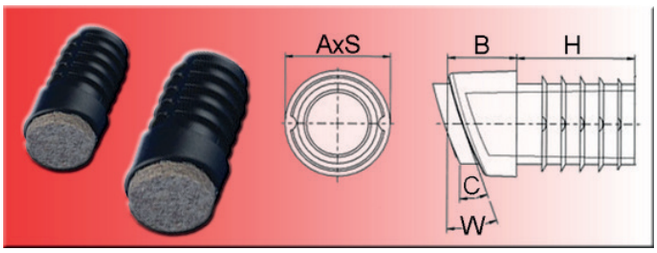
Angular ribbed inserts for round pipes.

Material: PE
Colour: black

Part no.	AxS	W°	H	B
0361600	16x2-2,5	6	20	6,5
0361601	16x2-2,5	9	20	6,8
0361602	16x2-2,5	12	20	7,2
0361603	16x2-2,5	15	20	7,9
0361604	16x2-2,5	18	20	9,5
0361605	16x2-2,5	21	20	9,7
0361606	16x2-2,5	24	20	10,4
0361800	18x1,5-2	6	20	6,5
0361801	18x1,5-2	9	20	6,7
0361802	18x1,5	12	20	8,5
0361803	18x1,5-2	15	20	9,0
0361804	18x1,5-2	18	20	9,3
0361805	18x1,5-2	21	20	11,0
0361806	18x1,5-2	24	20	11,4
0361900	19x1,5-2	6	20	6,7
0361901	19x2-2,5	6	20	6,7
0361902	19x1,5-2	9	20	7,0
0361903	19x2-2,5	9	20	7,0
0361904	19x1,5-2	12	20	7,5
0361905	19x2-2,5	12	20	7,5
0361906	19x1,5-2	15	20	9,2
0361907	19x2-2,5	15	20	9,2
0361908	19x1,5-2	18	20	9,6
0361909	19x2-2,5	18	20	9,6
0361910	19x1,5-2	21	20	11,0
0361911	19x2-2,5	21	20	11,0
0361912	19x1-2,5	24	20	11,5
0361913	19x2-2,5	24	20	11,5
0362000	20x1,5-2	6	20	7,0
0362001	20x2-2,5	6	20	7,0
0362002	20x1,5-2	9	20	7,0
0362003	20x2-2,5	9	20	7,0
0362004	20x1,5-2	12	20	9,0

Part no.	AxS	W°	H	B
0362005	20x2-2,5	12	20	9,0
0362006	20x1,5-2	15	20	10,0
0362007	20x2-2,5	15	20	10,0
0362008	20x1,5-2	18	20	11,3
0362009	20x2-2,5	18	20	11,0
0362010	20x1,5-2	21	20	11,8
0362011	20x2-2,5	21	20	11,8
0362012	20x1,5-2	24	20	12,0
0362013	20x2-2,5	24	20	12,0
0362200	22x1,2-2	6	20	7,0
0362201	22x2-2,5	6	20	7,0
0362202	22x1,2-2	9	20	7,8
0362203	22x2-2,5	9	20	7,8
0362204	22x1,2-2	12	20	8,0
0362205	22x2-2,5	12	20	8,0
0362206	22x1,2-2	15	20	10,0
0362207	22x2-2,5	15	20	10,0
0362209	22x1,2-2	18	20	10,0
0362210	22x2-2,5	18	20	10,0
0362211	22x1,2-2	21	20	11,5
0362212	22x2-2,5	21	20	11,5
0362213	22x1,2-2	24	20	12,0
0362214	22x2-2,5	24	20	12,0
0362500	25x1,5-2	6	20	7,2
0362501	25x2-2,5	6	20	7,2
0362502	25x1,5-2	9	20	8,5
0362503	25x1,5-2	12	20	9,5
0362504	25x1,5-2	15	20	12,0
0362505	25x1,5-2	18	20	12,0
0362506	25x1,5-2	21	20	12,7
0362507	25x2-2,5	21	20	12,7
0362508	25x1,5-2	24	20	13,5
0362509	25x2-2,5	24	20	13,5

Angular ribbed inserts | for round pipes with felt



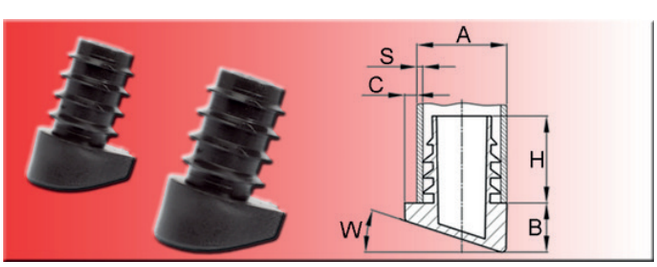
Angular ribbed inserts for round pipes with welded felt.

Material: PE / slip surface: felt (height: 3 mm)
Colours: black (white & grey on request)

Part no.	AxS	W°	H	B	C
0361601F	16x2-2,5	9	20	6,8	3,5
0361603F	16x2-2,5	18	20	9,5	3,5
0361802F	18x1,5-2	18	21	11,4	3,0
0361803F	18x1,5-2	9	20	6,7	3,5
0361805F	18x1,5-2	18	20	9,3	3,5
0361901F	19x1,5-2	12	20	7,5	3,5
0362001F	20x1,5-2	9	20	7,0	3,5
0362002F	20x1,5-2	18	20	11,0	3,5

Part no.	AxS	W°	H	B	C
0362004F	20x1,5-2	18	23	12,1	3,0
0362005F	20x2-2,5	15	20	10,0	3,5
0362201F	22x1,2-2	12	20	8,0	3,5
0362202F	22x1,2-2	18	20	10,0	3,5
0362204F	22x1,5-2	18	25	12,9	3,0
0362209F	22x1,5-2	22	25	15,3	3,0
0362501F	25x1,5-2	12	20	9,5	3,5
0362502F	25x1,5-2	18	20	12,0	3,5

Angular ribbed inserts | for round pipes with pack protection



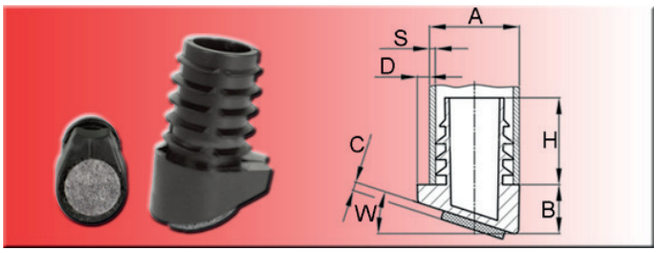
Angular ribbed inserts for round pipes with stacking protection.
Stack protection height: 3 mm

Material: PE
Colours: black (white on request)

Part no.	AxS	W°	H	B	C
0361802G	18x1,5-2	12-18	21	11,4	3
0361804G	18x1,5-2	18-22	21	13,7	3
0362004G	20x1,5-2	12-18	23	12,1	3
0362008G	20x1,2-2	18-22	23	14,5	3

Part no.	AxS	W°	H	B	C
0362204G	22x1,5-2	12-18	25	12,9	3
0362209G	22x1,5-2	18-22	25	15,3	3
0362503G	25x1,5-2	12-18	28	13,8	3
0362505G	25x1,5-2	18-22	28	16,3	3

Angular ribbed inserts | for round pipes with pack protection and felt



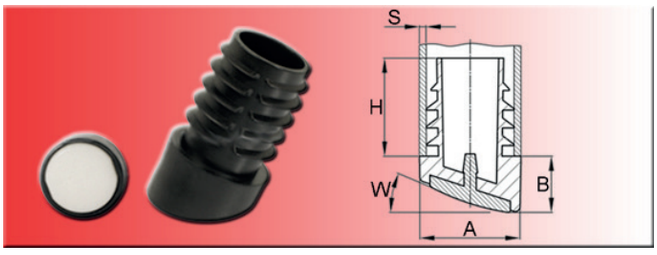
Angular ribbed inserts for round pipes with stacking protection and welded felt.
Stack protection height: 3 mm

Material: PE / slip surface: felt (height: 3 mm)
Colours: black (white & grey on request)

Part no.	AxS	W°	H	B	C	D
0361802GF	18x1,5-2	12-18	21	11,4	3	3
0361804GF	18x1,5-2	18-22	21	13,7	3	-
0362004GF	20x1,5-2	12-18	23	12,1	3	-
0362008GF	20x1,2x2	18-22	23	14,5	3	3

Part no.	AxS	W°	H	B	C	D
0362204GF	22x1,5-2	12-18	25	12,9	3	3
0362209GF	22x1,5-2	18-22	25	15,3	3	3
0362503GF	25x1,5-2	12-18	28	13,8	3	3
0362505GF	25x1,5-2	18-22	28	16,3	3	3

Angular ribbed inserts | for round pipes with PA slip surface



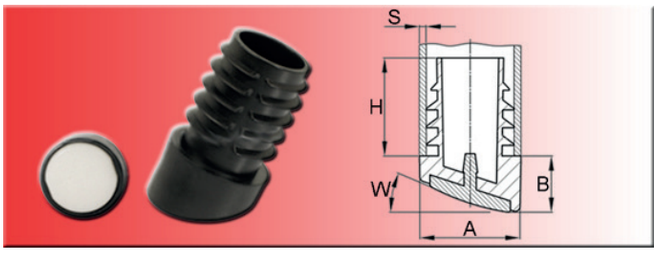
Angular ribbed inserts for round pipes.

Material: PE / slip surface: PA 6
Colours: black (white, grey & natural on request)

Part no.	AxS	W°	H	B
0361802PA	18x1,5-2	12-18	21	13,1
0361804PA	18x1,5-2	18-22	21	15,4
0362004PA	20x1,5-2	12-18	23	13,8
0362008PA	20x1,5-2	18-22	23	16,2

Part no.	AxS	W°	H	B
0362204PA	22x1,5-2	12-18	25	14,6
0362209PA	22x1,5-2	18-22	25	17,0
0362503PA	25x1,5-2	12-18	28	15,5
0362505PA	25x1,5-2	18-22	28	18,0

Angular ribbed inserts | for round pipes with POM/PTFE slip surface



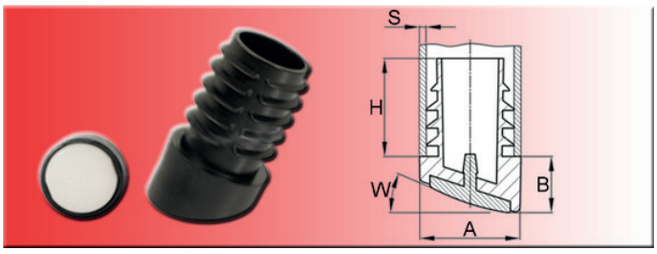
Angular ribbed inserts for round pipes with slip surface.

Material: PE / slip surface: POM/PTFE
Colours: black (white, grey & natural on request)

Part no.	AxS	W°	H	B
0361802POM	18x1,5-2	12-18	21	13,1
0361804POM	18x1,5-2	18-22	21	15,4
0362004POM	20x1,5-2	12-18	23	13,8
0362008POM	20x1,5-2	18-22	23	16,2

Part no.	AxS	W°	H	B
0362204POM	22x1,5-2	12-18	25	14,6
0362209POM	22x1,5-2	18-22	25	17,0
0362503POM	25x1,5-2	12-18	28	15,5
0362505POM	25x1,5-2	18-22	28	18,0

Angular ribbed inserts | for round pipes with anti-slip surface (PUR)



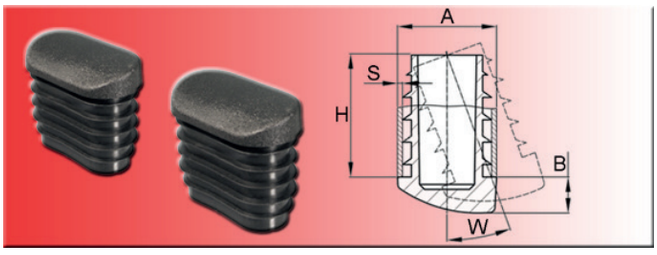
Angular ribbed inserts for round pipes with anti-slip surface.

Material: PE / anti-slip surface: PUR
Colours: black (white, grey & natural on request)

Part no.	AxS	W°	H	B
0361802PUR	18x1,5-2	12-18	21	13,1
0361804PUR	18x1,5-2	18-22	21	15,4
0362004PUR	20x1,5-2	12-18	23	13,8
0362008PUR	20x1,5-2	18-22	23	16,2

Part no.	AxS	W°	H	B
0362204PUR	22x1,5-2	12-18	25	14,6
0362209PUR	22x1,5-2	18-22	25	17,0
0362503PUR	25x1,5-2	12-18	28	15,5
0362505PUR	25x1,5-2	18-22	28	18,0

Angular ribbed inserts | for oval pipes



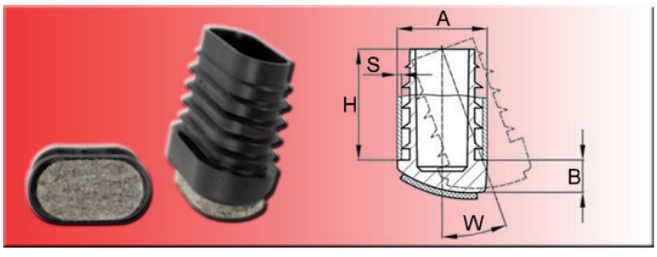
Ribbed inserts with angular surface

Material: PE
Colours: black (white on request)

Part no.	AxS	W°	H	B
0673015	30x15x1-2	0-20	25	6
0673820	38x20x1-2	0-20	25	8

Part no.	AxS	W°	H	B
0674020	40x20x1-2	0-20	25	8
0674820	48x20x1-2	0-20	25	8

Angular ribbed inserts | for oval pipes with felt



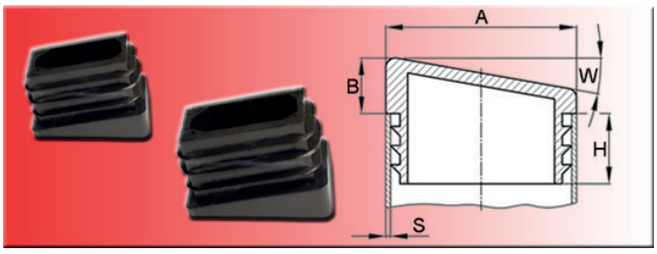
Ribbed inserts with angular surface and welded felt

Material: PE
Colours: black (white on request)

Part no.	AxS	W°	H	B
0673015F	30x15x2	0-20	25	9
0673820F	38x20x2	0-20	25	11

Part no.	AxS	W°	H	B
0674020F	40x20x2	0-20	25	11

Angular ribbed inserts | for rectangular pipes



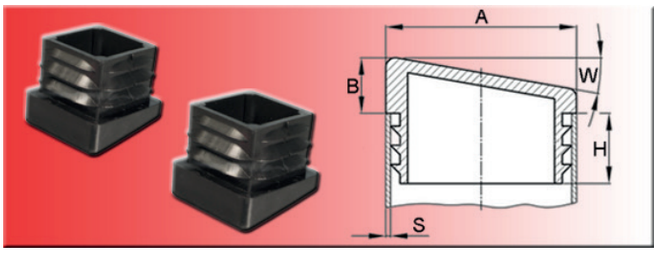
Ribbed inserts for rectangular pipes - surface 10° angled

Material: PE
Colour: black

Part no.	AxS	W°	H	B
0302015	20x15x1-2	10°	12,0	9,3
0302515	25x15x1-2	10°	12,0	7,0

Part no.	AxS	W°	H	B
0303015	30x15x1-2	10°	12,0	8,3
0303020	30x20x1-2	10°	14,5	8,5

Angular ribbed inserts | for square pipes



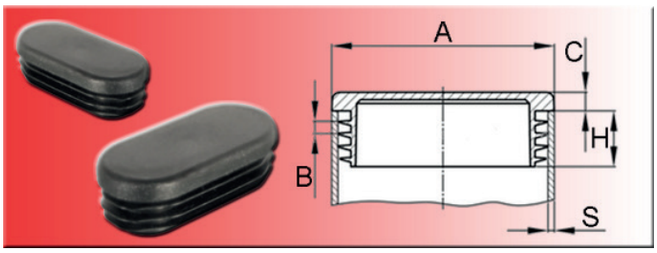
Ribbed inserts for square pipes - surface 10° angled

Material: PE
Colour: black

Part no.	AxS	W°	H	B
0290150	15x15x1-2	10°	11,5	7,2
0290180	18x18x1-2	10°	12,0	7,8

Part no.	AxS	W°	H	B
0290200	20x20x1-2	10°	12,0	8,0
0290250	25x25x1-2	10°	14,0	8,5

Oval ribbed inserts | for oval pipes



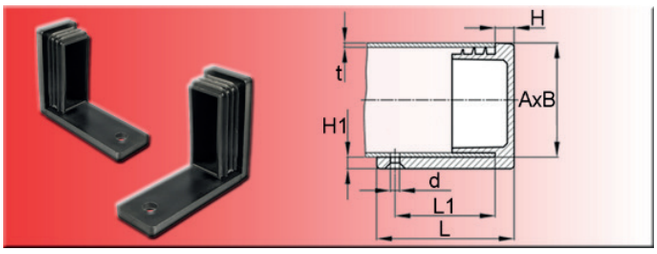
The surface of the inserts has - at the discretion of the manufacturer - a smooth or a spark-erosion structure. The ribs are not suitable for sealing against liquids.

Material: PE
Colour: black (without final digits)
grey ~RAL7042 (final digits 002)
white ~RAL9003 (final digits 500)

Further types on written request.

Part no.	AxS	H	B	C
1452010	20x10x2	10,5	-	3,0
1453015	30x15x1-2,5	11,5	3,0	5,0
1453015002	30x15x1-2,5	11,5	3,0	5,0
1453015500	30x15x1-2,5	11,5	3,0	5,0
1453515	35x15x0,8-2,5	11,5	3,5	5,5
1453515002	35x15x0,8-2,5	11,5	3,5	5,5
1453515500	35x15x0,8-2,5	11,5	3,5	5,5
1453520	35x20x1-3	11,5	3,0	5,0
1453520002	35x20x1-3	11,5	3,0	5,0
1453520500	35x20x1-3	11,5	3,0	5,0
1453820	38x20x1-3	11,5	3,0	5,0
1453820002	38x20x1,3	11,5	3,0	5,0
1453820500	38x20x1,3	11,5	3,0	5,0
1454020	40x20x0,8-3	11,5	3,0	5,0
1454020002	40x20x1-2,5	11,5	3,0	5,0
1454020500	40x20x1-2,5	11,5	3,0	5,0
1454025	40x25x1-3	11,5	3,0	5,0
1454025002	40x25x1-3	11,5	3,0	5,0
1454025500	40x25x1-3	11,5	3,0	5,0
1454517	45x17x1-2,5	11,5	3,0	5,0
1454518	45x18x1,5-3	11,5	3,0	5,0
1454518002	45x18x1,5-3	11,5	3,0	5,0
1454518500	45x18x1,5-3	11,5	3,0	5,0
1454520	45x20x1,5-3	11,5	3,0	5,0
1454520002	45x20x1,5-3	11,5	3,0	5,0
1454520500	45x20x1,5-3	11,5	3,0	5,0
1454820	48x20x1-2,5	11,5	3,0	5,0
1454820002	48x20x1-2,5	11,5	3,0	5,0
1454820500	48x20x1-2,5	11,5	3,0	5,0
1455015	50x15x1-2,5	11,5	3,0	5,0

Part no.	AxS	H	B	C
1455015002	50x15x1-2,5	11,5	3,0	5,0
1455015500	50x15x1-2,5	11,5	3,0	5,0
1455020	50x20x1-3	11,5	3,0	5,0
1455020002	50x20x1-3	11,5	3,0	5,0
1455020500	50x20x1-3	11,5	3,0	5,0
1455025	50x25x1-2,5	11,5	3,0	3,0
1455025002	50x25x1-2,5	11,5	3,0	3,0
1455025500	50x25x1-2,5	11,5	3,0	3,0
1455030	50x30x1-2,5	11,5	3,0	5,0
1455030002	50x30x1-2,5	11,5	3,0	5,0
1455030500	50x30x1-2,5	11,5	3,0	5,0
1456020	60x20x1-2	14,0	4,0	5,0
1456020002	60x20x1-2	14,0	4,0	5,0
1456020500	60x20x1-2	14,0	4,0	5,0
1456025	60x25x1,5-3	14,5	3,0	5,0
1456025002	60x25x1,5-3	14,5	3,0	5,0
1456025500	60x25x1,5-3	14,5	3,0	5,0
1456030	60x30x1-2	13,0	4,5	5,0
1456030002	no longer available!			
1456030500	no longer available!			
1457040	70x40x1-3	14,5	3,0	5,0
1457040002	70x40x1-3	14,5	3,0	5,0
1457040500	70x40x1-3	14,5	3,0	5,0
1458025	80x25x1,2-2,5	14,5	3,0	5,0
1458025002	80x25x1,2-2,5	14,5	3,0	5,0
1458025500	80x25x1,2-2,5	14,5	3,0	5,0
1458040	80x40x1,2-3	14,5	3,0	5,0
1458040002	80x40x1,2-3	14,5	3,0	5,0
1458040500	80x40x1,2-3	14,5	3,0	5,0



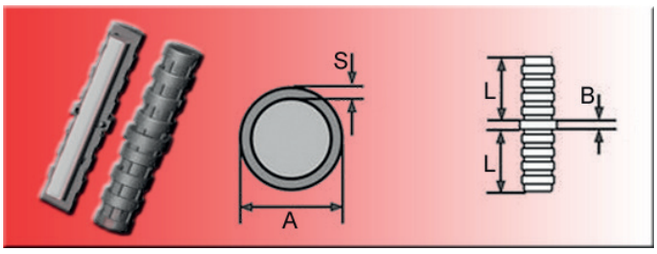
Furniture glides - angled slides with ribs

Material: PE
Colour: black

Further types on written request.

Part no.	A	B	t	d	H	H1	L	L1
0592020	20	20	1-2	5,2	5	5	28,5	24,5
0592525	25	25	1,5-2	M5/90	5	5	27,0	14,0
0593015	30	15	1-2	5,0	3	7	40,0	19,5
0593020	30	20	1,5-2	M5/90	5	5	39,0	17,0
0593030	30	30	1-2	5,5	5	5	39,0	24,5
0594020	40	20	1,5-2	M5/90	5	5	55,0	41,0
0595025	50	25	1-2	5,2	5	8	54,0	40,0
0595030	50	30	1-2	5,2	5	7	40,0	25,5

Tube connectors | Tube extensions for round pipes



Tube extensions for round pipes - with steel core.
* = cylindrical shape, no contour as pictured

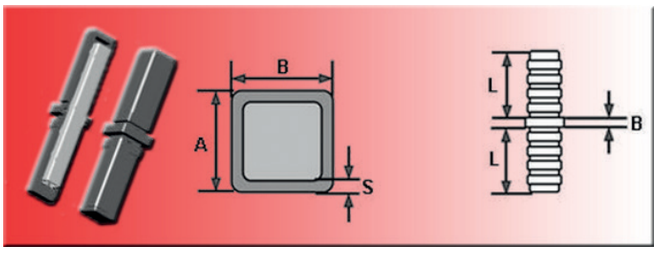
Material: PA
Colour: black

Further types on written request.

Part no.	A	S	B	L
3850019*	19	1,0	5	43/43
3850022	22	1,0	5	36/36
3850025	25	1,5	5	38/38
3850028	28	1,5	5	49/49
3850036	36	2,0	5	48/48
3850038	38	2,0	2	49/49
3850048	48	4,0	5	50/50
3850301	30	1,0	5	49/49
3850302	30	2,0	5	49/49

Part no.	A	S	B	L
3850321	32	1,5	5	50/50
3850322	32	2,0	5	50/50
3850325	32	2,5	5	49/49
3850401	40	1,5	5	60/60
3850402	40	2,0	5	60/60
3850501	50	1,5	5	47/47
3850502	50	2,0	5	48/48
3850602	60	2,0	5	38/38
3850604*	60	4,0	5	44/44

Tube connectors | Tube extensions for square pipes



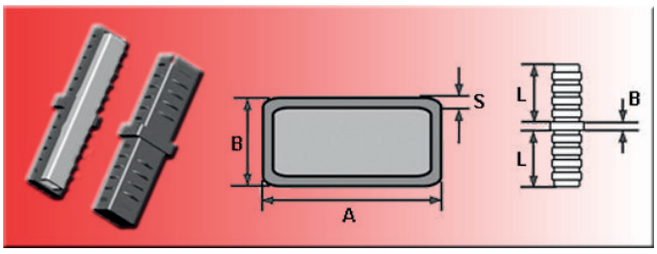
Tube connectors for square tubes - with steel core.

Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	B	L
3561515	15x15	1,5	5	35/50
3562020	20x20	1,5	5	43/43

Part no.	AxB	S	B	L
3562525	25x25	1,5	5	54/54
3563030	30x30	2,0	5	46/46



Tube connectors for rectangular tubes - with steel core.

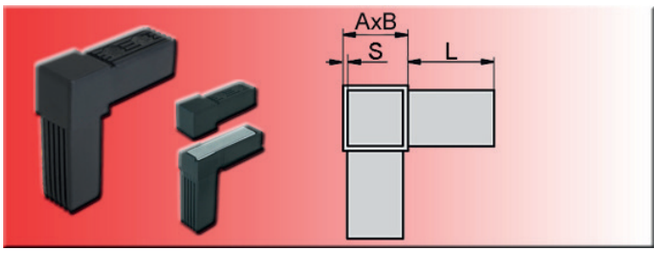
Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	B	L
3572015	20x15	1,5	5	38/38
3573015	30x15	1,5	5	38/38
3573020	30x20	2,0	5	40/40
3574020	40x20	1,5	5	38/38

Part no.	AxB	S	B	L
3576020	60x20	2,0	5	38/38
3576030	60x30	2,0	5	34/34
3576040	60x40	1,5	5	49/49

Tube connectors | Tube connectors type: „L“



Tube connectors for square tubes, right angle - with steel core

Material: PA
Colour: black

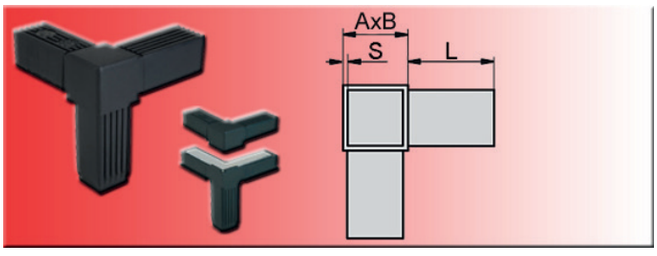
Further types on written request.

Part no.	AxB	S	L
3552021R	20x20	1,5	36

Part no.	AxB	S	L
3552022R	20x20	2,0	36

Part no.	AxB	S	L
3553032R	30x30	2,0	47

Tube connectors | Tube connectors type: 3-way corner



Tube connectors for square tubes, 3-way corner - with steel core

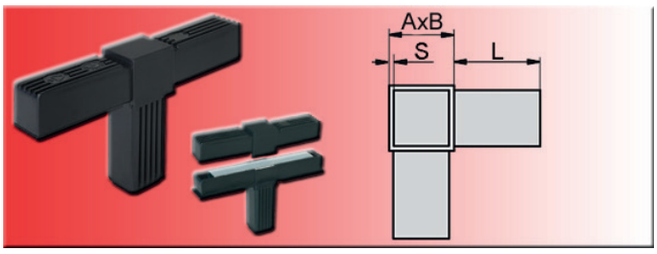
Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021W	20x20	1,5	36

Part no.	AxB	S	L
3553032W	30x30	2,0	47

Tube connectors | Tube connectors type: „T“



Tube connectors for square tubes, type T - with steel core

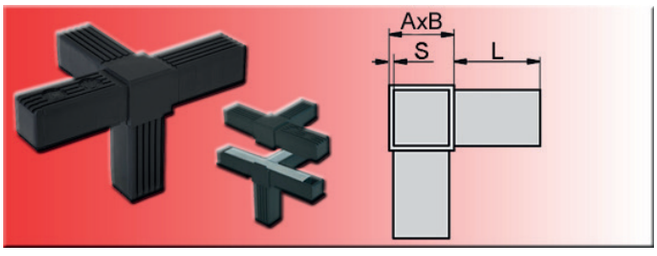
Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021T	20x20	1,5	36

Part no.	AxB	S	L
3553032T	30x30	2,0	47

Tube connectors | Tube connectors type: 4-way corner



Tube connectors for square tubes, 4-way corner - with steel core

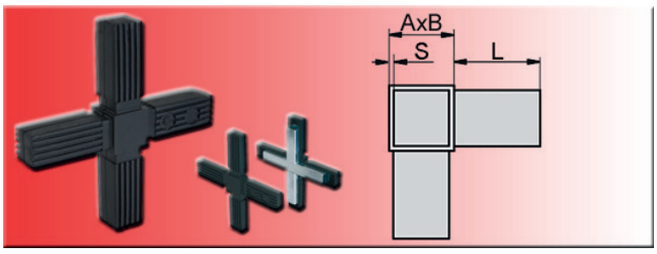
Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021TA	20x20	1,5	36

Part no.	AxB	S	L
3553032TA	30x30	2,0	47

Tube connectors | Tube connectors type: cross



Tube connectors for square tubes, cross - with steel core

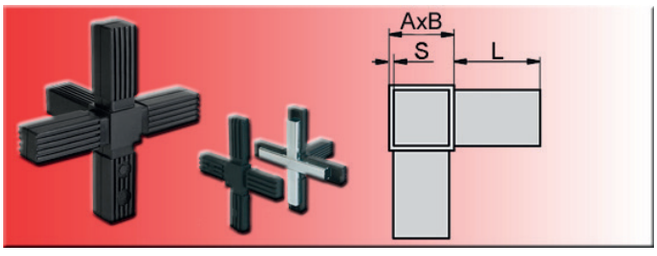
Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021K	20x20	1,5	36

Part no.	AxB	S	L
3553032K	30x30	2,0	47

Tube connectors | Tube connectors type: 5-way corner



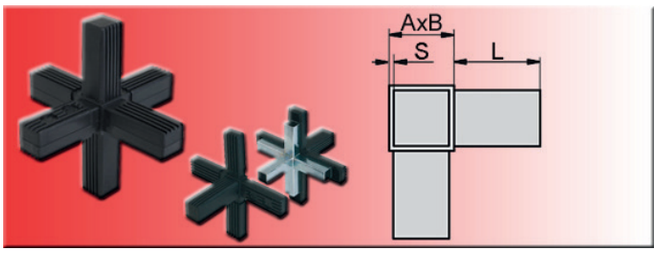
Tube connectors for square tubes, 5-way corner - with steel core

Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021KA	20x20	1,5	36

Part no.	AxB	S	L
3553032KA	30x30	2,0	47



Tube connectors for square tubes, star - with steel core

Material: PA
Colour: black

Further types on written request.

Part no.	AxB	S	L
3552021S	20x20	1,5	36

Part no.	AxB	S	L
3553032S	30x30	2,0	47



Cable accessories

Cable accessories



Cable ties Page 170



Cable holders Page 174



Cable clamps Page 180



Twist ties Page 183



Cable tie mounts Page 184

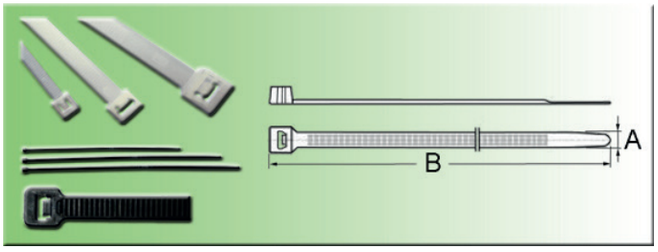


Cable grommets Page 186



Cable glands DIN EN 62444 Page 194

Cable ties | Cable ties



Easy mounting, minimum traction and high holding force.
Temperature-stable between -40°C and +80°C, UV-resistant.

Ø = bundle diameter

Material: PA 6.6
Colours:
last digits 000 = natural
last digits 699 = black

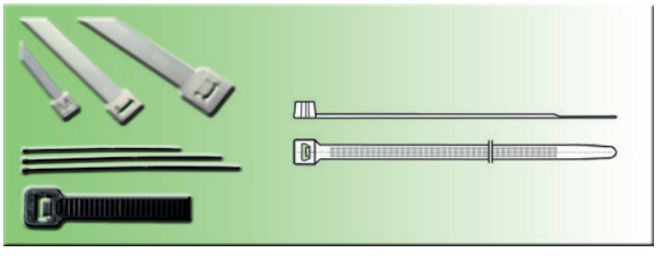
Further types on written request.

Part no.	A	B	Ø
0972075000	2,5	80	15
0972075699	2,5	80	15
0972100000	2,5	100	24
0972100699	2,5	100	24
0972200000	2,5	200	52
0972200699	2,5	200	52
0973140000	3,6	140	35
0973140699	3,6	140	35
0973200000	3,6	200	55
0973200699	3,6	200	55
0973290000	3,6	280	80
0973290699	3,6	280	80

Part no.	A	B	Ø
0973300000	3,6	300	84
0973300699	3,6	300	84
0974200000	4,8	200	50
0974200699	4,8	200	50
0974250000	4,8	250	73
0974250699	4,8	250	73
0974300000	4,8	300	76
0974300699	4,8	300	76
0974360000	4,8	360	102
0974360699	4,8	360	102
0977280000	7,6	280	80
0977280699	7,6	280	80

Part no.	A	B	Ø
0977300000	7,6	300	82
0977300699	7,6	300	82
0977360000	7,6	365	102
0977360699	7,6	365	102
0977380000	7,6	380	108
0977380699	7,6	380	108
0977450000	7,6	450	130
0977450699	7,6	450	130
0977545000	8,0	550	158
0977545699	8,0	550	158

Cable ties & accessories | Cable tie assortment



Easy mounting, minimum traction and high holding force.
Temperature-stable between -40°C and +80°C, UV-resistant.

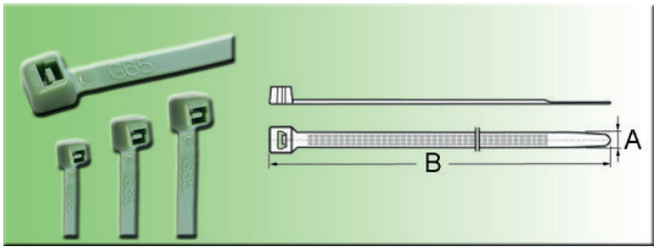
Material: PA 6.6
Colours:
last digit N = natural
last digit S = black

Part no.	1000x	1000x	1000x
097-N	4,8x200 mm	3,6x140 mm	2,5x100 mm

Part no.	1000x	1000x	1000x
097-S	4,8x200 mm	3,6x140 mm	2,5x100 mm

Cable accessories

Cable ties & accessories | Cable ties PP



Acid-resistant cable ties - especially developed for chemical applications.

Material: PP
Colour: green

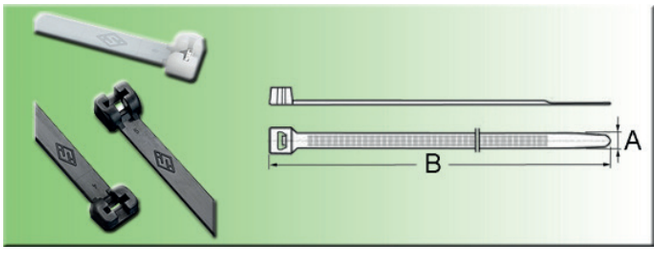
Temperature range: -40°C to +85°C
Inflammability: UL 94 HB

Part no.	A	B	Fz
3972100	2,5	100	~5,0kg
3973140	3,6	140	~8,15kg

Part no.	A	B	Fz
3974200	4,8	200	~14,25kg
3974300	4,8	300	~14,25kg

Part no.	A	B	Fz
3974370	4,8	370	~14,25kg
3977370	7,6	370	~22,4kg

Cable ties & accessories | Cable ties with steel latch



Material: PA 6.6
Colour:
final digits 699 = black
final digits 000 = natural

Temperature range: -40°C to +85°C (self-extinguishing)

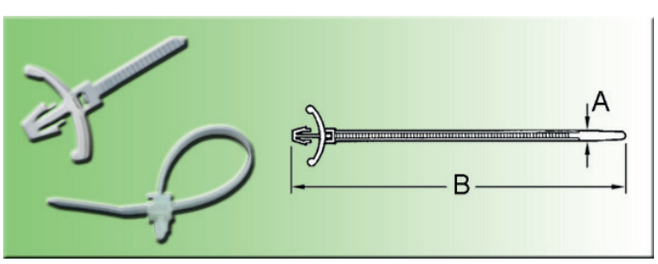
Fz = tensile force

Part no.	A	B	Fz
4972100000	2,4	92	~8,0kg
4972100699	2,4	92	~8,0kg
4972200000	2,4	203	~8,0kg
4972200699	2,4	203	~8,0kg
4973140000	3,6	140	~8,0kg
4973140699	3,6	140	~8,0kg

Part no.	A	B	Fz
4973280000	3,6	284	~13,0kg
4973280699	3,6	284	~13,0kg
4974200000	4,8	186	~22,0kg
4974200699	4,8	186	~22,0kg
4974290000	4,8	290	~22,0kg
4974290699	4,8	290	~22,0kg

Part no.	A	B	Fz
4974360000	4,8	360	~22,0kg
4974360699	4,8	360	~22,0kg
4977240000	6,9	222	~54,0kg
4977240699	6,9	222	~54,0kg
4977360000	7,0	340	~54,0kg
4977360699	7,0	340	~54,0kg

Cable ties & accessories | Cable ties with expansion anchor



Cable ties with expansion anchor - for a wall thickness of approx. 2.4 mm.

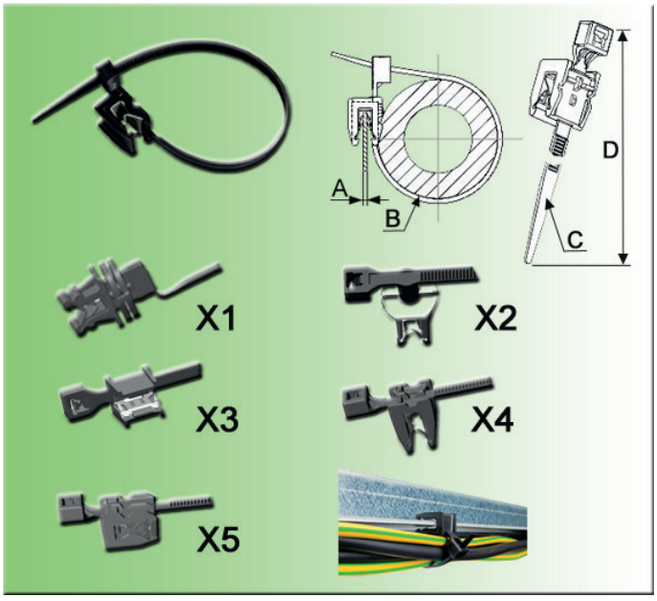
Material: PA 6.6 UL 94V-2
Colour: natural

Ø1 = bundle diameter
Ø2 = hole diameter

Further types on written request.

Part no.	A	B	Ø1	Ø2
0972110000	2,5	110	18	4,8

Cable ties & accessories | Cable ties for mounting on edges



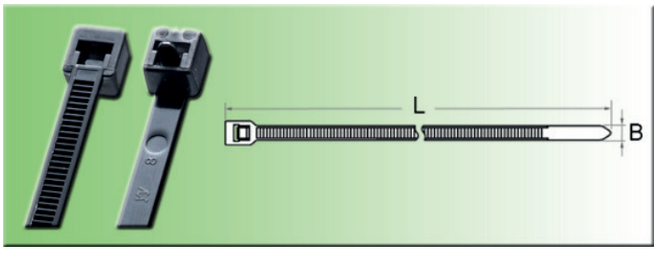
Cable tie with fastener for fixing on edges.
The fastener is equipped with a material for best effectiveness.
Available in different versions (=X) for numerous fixing situations.
Some parts contain a swivelling system (=E).

Material: PA 6.6
Color: black

Part no.	A	B	C	D	E	X
0970001699	0,7-2,5	1,5-40	4,8	182,5	+	1
0970002699	no longer available!					
0970005699	1,5-3,5	1,5-43	4,5	180	-	4

Part no.	A	B	C	D	E	X
0970006699	1,5-3,5	1,5-43	4,5	186	-	5
0970004699	1,5-3,5	1,5-43	4,6	191	-	3
0970003699	2-4	8-33	7	140	+	2

Cable ties & accessories | Releasable cable ties



The fastest way of temporary fastening and positioning of nearly all things.
Easy to release manually, no tools necessary - therefore reusable several times .
Temperature-resistant from -40°C until +85°C.
Approvals: MIL, UL 94 V-2

Material: PA 6.6, free of halogen
Colours:
last digits 000 = natural
last digits 699 = black

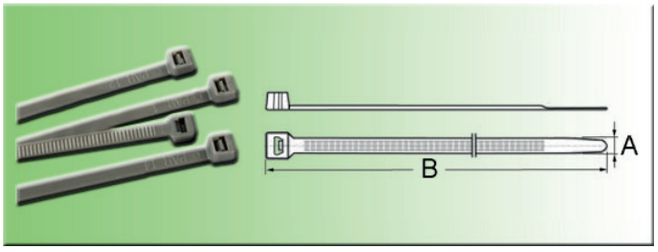
X = capacity
Ø = bundle diameter

Part no.	BxL	X	Ø
0993100000	3,6x100	180	25
0993100599	3,6x100	180	25
0994150000	4,7x150	220	39
0994150599	4,7x150	220	39

Part no.	BxL	X	Ø
0994200000	4,7x200	220	55
0994200599	4,7x200	220	55
0994300000	4,8x300	220	88
0994300599	4,8x300	220	88

Part no.	BxL	X	Ø
0994370000	4,8x370	220	102
0994370599	4,8x370	220	102

Cable ties & accessories | Electroconductive cable ties



Electroconductive cable ties - silver-plated
For earthing of cables, respectively earth connection of shields on housings, top hat rails, chassis etc.
Temperature-resistant from -40° up to +85°C.

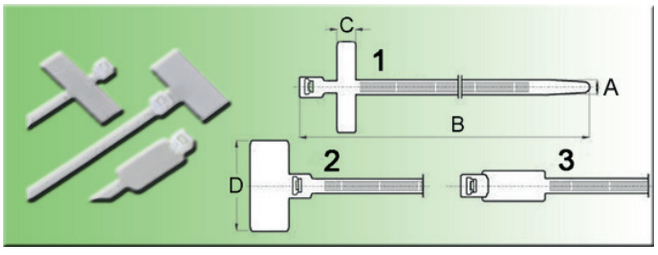
Material: PA 6.6, UL94-V2
Colour: silver-plated

Part no.	A	B
2973140	3,6	140
2974200	4,8	200
2974290	4,8	290

Part no.	A	B
2974430	4,8	430
2977240	7,8	240
2977300	7,8	300

Part no.	A	B
2977365	7,8	365

Cable ties & accessories | Cable ties with title block



Cable ties with a useful tag. For quick binding and marking of wires, cables, tubes, hoses etc. - very resistant.

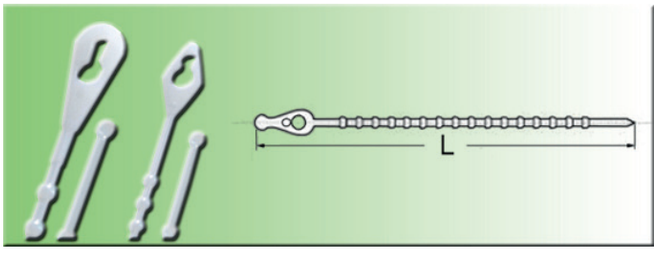
X = type

Material: PA 6.6
Colour: natural

Part no.	A	B	C	D	Ø	X
0901100000	2,5	100	8,0	25	20	1
0901200000	2,5	200	8,0	25	50	1
0902110000	2,5	110	9,0	20	20	2
0902210000	2,5	210	9,0	20	50	2

Part no.	A	B	C	D	Ø	X
0903190000	4,8	190	27,3	13	45	3
0903270000	4,8	270	27,3	13	68	3
0903345000	4,8	345	27,3	13	92	3

Cable ties & accessories | Ball cable ties



Easy to open and reusable ball cable ties. Especially suitable for closing of bags and sacks.

Material: PA 6.6, UL 94 V-2
Colour: natural

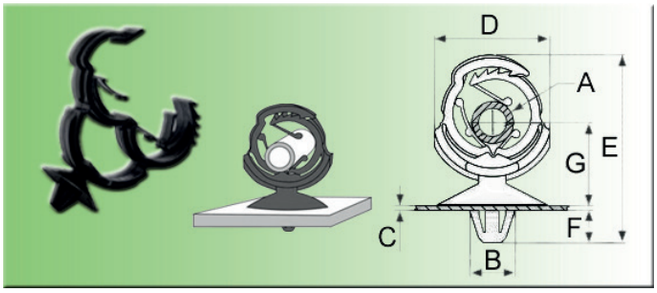
Ø = max. bundle diameter
K / N = tensile strength

Further types on written request.

Part no.	L	Ø	K	N
2150100	100	25	8	78
2150120	120	30	8	78
2150150	150	39	14	137

Part no.	L	Ø	K	N
2150180	180	49	18	176
2150226	226	63	18	176
2150280	280	75	22	215

Pluggable cable holders | universal

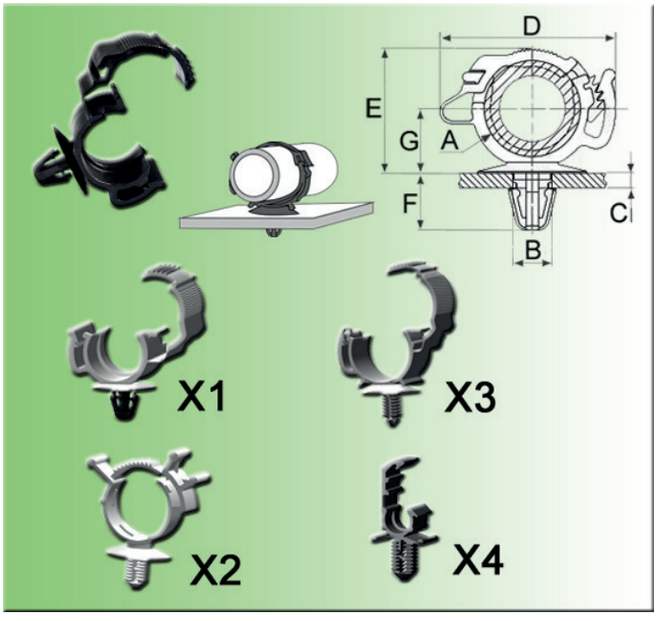


For mounting of a pipe/cable on an element with holes
Self-adapting: for numerous pipe/cable diameters
Self-locking: the holder locks when mounting the pipe

Material: see X
Colour: black

Part no.	A	B	C	D	E	F	G	X
1434002	no longer available!							
1434000	no longer available!							
1434001	no longer available!							
1434003	no longer available!							

Pluggable cable holders | manual

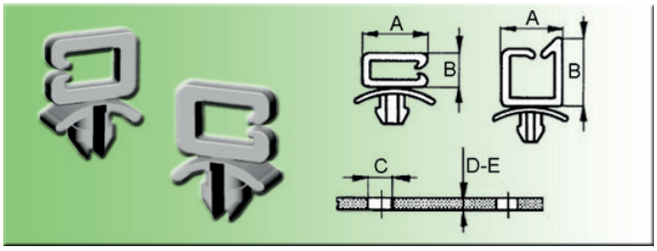


For mounting of a pipe/cable on an element with holes
Available with different coupling systems for various hole depths
With adjustable closing cap

Material: PA
Colour: black

Part no.	A	B	C	D	E	F	G	X
1434108	9,6-10,2	6,5-6,7	1-6	15x15	17	10,4	5,7	4
1434107	6,8-7,4	6,5-6,7	1-6	15x10	10	10,4	5,7	4
1434103	15,5-16,1	6,5-6,7	2,5	25,5x20	20,5	9,3	11	1
1434104	16-18,5	6,5	0,8-6	20x10	34,2	10,5	15,8	2
1434100	20,6-21,4	6,5-6,7	0,8-2,5	31x20	28	8,4	13,2-14,9	1
1434105	**no longer available!**							
1434101	25,1-25,9	6,5-6,7	0,8-2,5	37x20	32,5	8,4	15,45-17,15	1
1434106	25,1-25,9	6,5-6,7	1-6	37,5x20	31	10,5	16,55	3
1434102	33-35	6,5-6,7	0,8-2,5	45,3x20	40,5	7	23,2-24,9	1

Pluggable cable holders | with opening



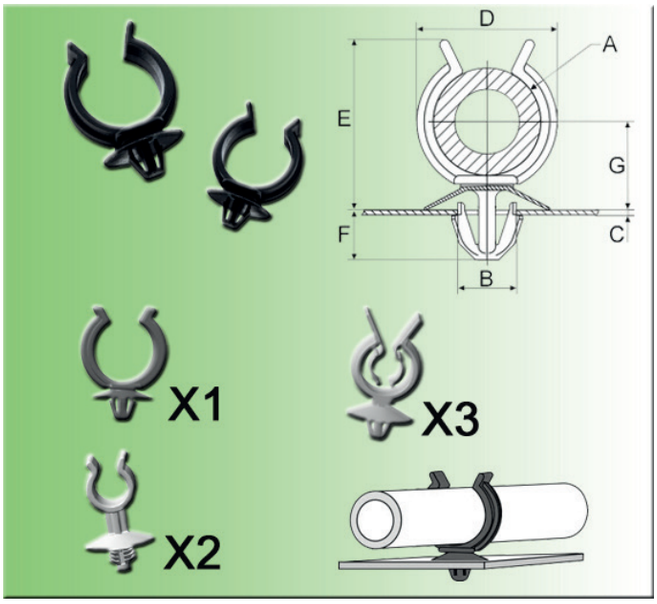
Material: PA 6.6
Colour: natural

1430001 = lateral opening
1430002 = top opening

Part no.	A	B	C	D-E
1430001	12	13	4,8	0,4-1,8

Part no.	A	B	C	D-E
1430002	11	13	4,8	0,4-1,5

Pluggable cable holders | with top opening

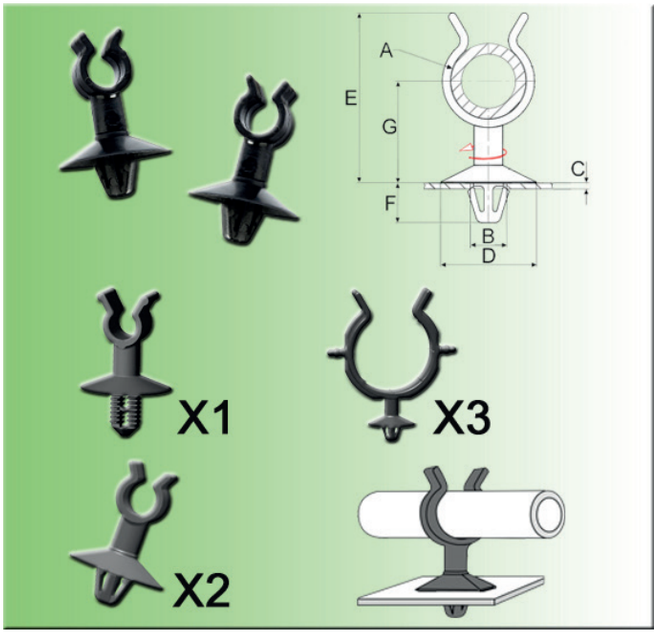


For mounting of a pipe/cable on an element with holes.
Available with different coupling systems for various hole depths.

Material: POM (* = PA)
Colour: black

Part no.	A	B	C	D	E	F	G	X
1433000	no longer available!							
1433001*	no longer available!							
1433002	9-12	8,2	0,7-2,0	15,7x10	18,5	9,0	11,0	1
1433003	17-21	6,5-6,7	0,7-2,0	24x12	32,0	6,5	13-17,3	1
1433004*	21-23	6,5-6,7	0,7-2,0	28,5x12	30,2	6,0	17,0	1
1433005*	23-24	5,0-5,2	0,7-3,2	30x10	35,0	8,2-10,7	19,0	1
1433006*	10-12	6,5-6,7	0,8-4,0	14x10	26,0	8,5	17,0	2
1433007	16	6,5-6,7	1,6-6,0	19x10	23,0	10,0	11,0	2
1433008	10-12	6,2x8,2	0,7-2,0	20,5x12	37,5	7,0	15,0	3

Pluggable cable holders | with top opening, swivelling



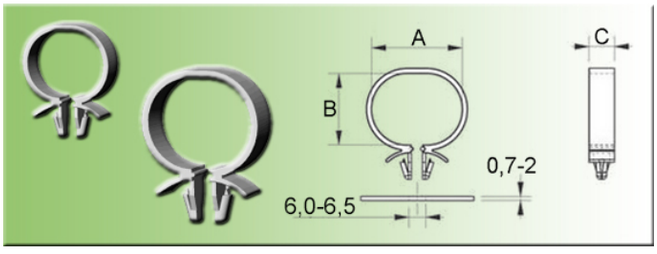
For mounting of a pipe/cable on an element with holes.
With integrated swivelling system.

Available with different coupling systems for various hole depths.

Material: POM / PA
Colour: black

Part no.	A	B	C	D	E	F	G	X
1433100	no longer available!							
1433103*	7,2-7,5	6,5	0,5-3	21,0	23,8	6,8	16,8	2
1433107	10-12	6,5	0,8-2	20,0	28,0	6,5	-	2
1433104*	13-14	6,5	0,5-3	21,0	32,2	6,8	20,2	2
1433105+	16-18	6,5	0,5-3	21,0	35,2	6,8	21,7	2
1433101	18-20	6,5	0,8-6	20,5	36,3	10,3	22,3	1
1433102	25-27	6,5	0,8-6	20,0	44,9	10,5	25,4	1
1433108	28-30	6,5	0,8-2	20,0	51,0	6,5	28,5	2
1433109	29-33	6,5	0,8-2	20,0	51,4	6,5	27,2	2
1433110	34-36	6,5	0,8-2	20,0	56,9	6,5	30,9	3
1433106	35-38	6,5	0,7-2	20,0	57,5	6,5	31,5	2

Pluggable cable holders | with loop



Suitable for a quick assembly of wires, cables, tubes, pipes etc.; no tools required. High resilience, easy to open and reusable several times.

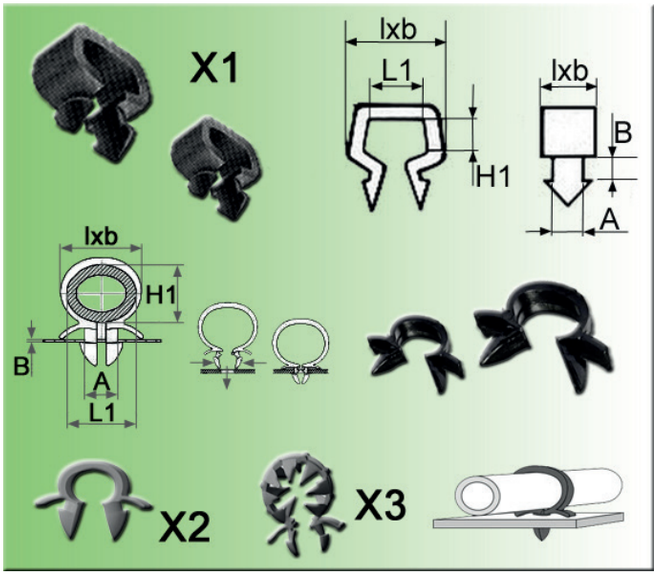
Material: PA 6.6
Colour: grey

Part no.	A	B	C
1010100	10,5	8,0	7

Part no.	A	B	C
1010210	21,5	19,5	8

Part no.	A	B	C
1010300	30,0	25,0	9

Pluggable cable holders | black



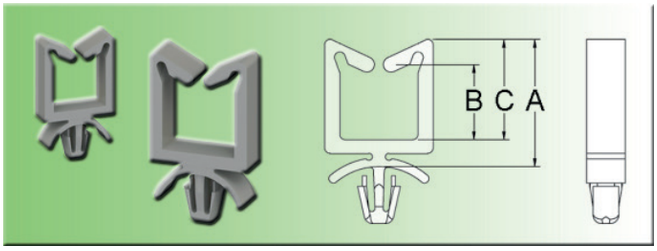
For mounting of a pipe/cable on an element with holes.
The cable holders are positioned around the tube/cable BEFORE pushing the clip foot into the element's hole.

Material: PA
Colour: black

Part no.	A	B	L1xH1	lxb	X
1011095	4,0	1,6	6,0x3,0	9,5x5,0	1
1011104	6,5	1,0-3,0	8,0x6,0	12,5x8,0	2
1011102	6,5-6,7	0,7-2,0	10,8x8,2	13,8x8,0	2
1011107	6,5	2,7-4,0	10,8x7,8	15,3x8,0	2
1011101	6,5-6,7	0,7-2,0	16,8x13,5	17,5x8,0	2

Part no.	A	B	L1xH1	lxb	X
1011106	6,5	1,5-3,0	15,8x8,6	20,8x8,0	2
1011100	6,5-6,7	0,5-3,0	16,8x13,5	21,0x8,0	2
1011108	6,5-6,7	0,7-3,0	18,0x20,7	21,6x24,0	3
1011105	6,5	1,0-3,0	16,8x13,5	22,0x8,0	2
1011103	6,5-6,7	0,7-2,0	25,0x22,0	30,5x8,0	2

Pluggable cable holders | without locking



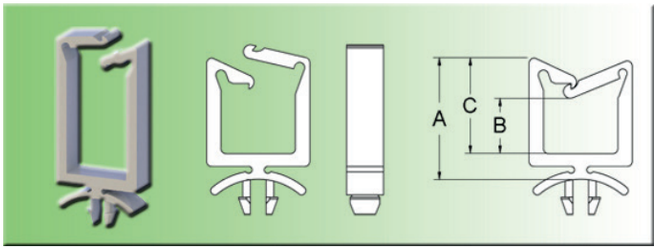
Material: PA 6.6 - UL 94V-2
Colour: natural

Ø = mounting hole diameter

Part no.	A	B	C	Ø
1431001	12,3	4,4	8,7	4,8
1431002	18,2	9,9	14,7	4,8

Part no.	A	B	C	Ø
1431003	27,0	19,0	23,8	4,8
1431004	35,0	27,0	31,7	4,8

Pluggable cable holders | with locking



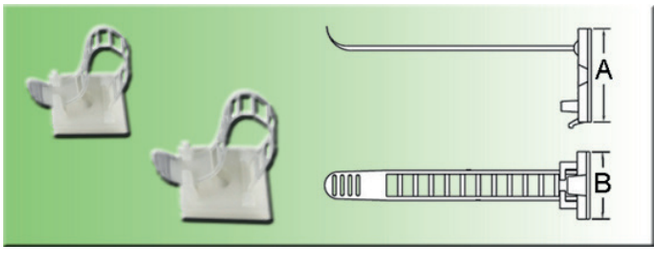
Material: PA 6.6
Colour: natural

Ø = mounting hole diameter

Part no.	A	B	C	Ø
1432001	12,3	3,6	8,7	4,8
1432002	18,2	9,1	14,7	4,8

Part no.	A	B	C	Ø
1432003	27,0	18,2	23,8	4,8
1432004	35,0	26,2	31,7	4,8

Adhesive cable holders | Adjustable cable ties



Adhesive cable holder with a variable bundling diameter. Strong adhesion for a quick and easy installation.

Material: PA 6.6.
Colour: natural
Flammability rating UL94 V2

Ø = bundle diameter

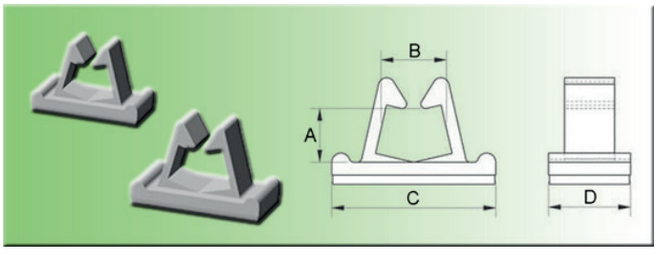
The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between +18°C and +25°C.

Part no.	Ø	AxB
0982025	7-25	30,5x21,0

Part no.	Ø	AxB
0982022	5-22	30,5x21,0

Part no.	Ø	AxB
0982017	3-17	25,0x18,0

Adhesive cable holders | Mini cable clip



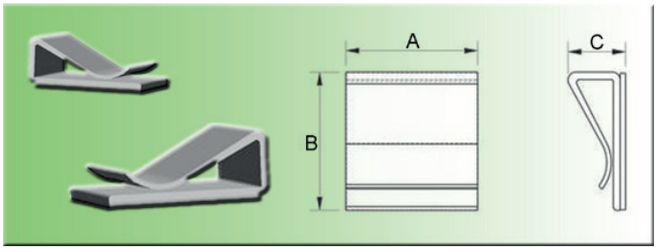
Strong adhesion for a quick and easy bundling and installation of wires, cables and cable looms. Also suitable for heavy cables.

Material: PA, PE adhesive film up to 65°C (high initial adhesion)
Colour: natural

The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between +18°C and +25°C.

Part no.	A	B	C	D
1150001	6	7	18	9

Adhesive cable holders | Ribbon cable holders



For a fast mounting of 1 to 4 layers of ribbon cable. Can hold round cables of up to 6 mm.
For a universal use, adhesive (on plain surfaces).

Material: PA
Colour: light grey

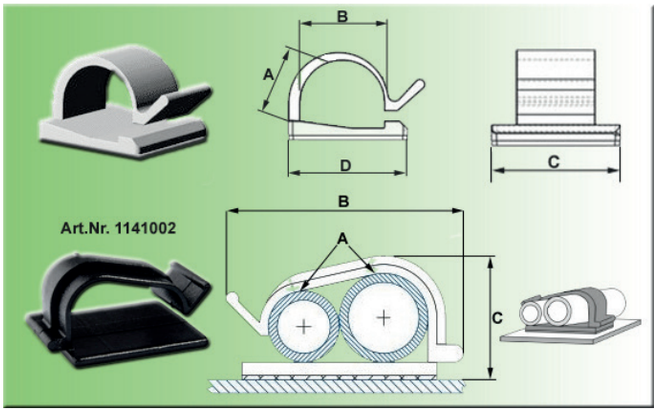
The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between +18°C and +25°C.

Part no.	A	B	C
1510200	20	26	9,6

Part no.	A	B	C
1510250	25	26	9,6

Part no.	A	B	C
1510300	30	26	9,6

Adhesive cable holders | Cable clamps



Strong, adhesive cable clamp for a quick and easy bundling and installation of wires, cables and cable looms. Also suitable for heavy cables.

Material: PA 6.6, PE adhesive film up to 65°C (high initial adhesion)
Colour: natural (* = black)

The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between +18°C and +25°C.

Part no.	A	B	C	D
1141001	4,5	4,5	15,9	15,9
1140004	5,0	4,9	19,0	19,0
1140002	8,0	12,3	26,0	26,0

Part no.	A	B	C	D
1141002*	8/10	27x22	15,0	22,0
1140006	15,0	18,0	26,0	26,0

Cable clamps | Clamps with snap-in lock



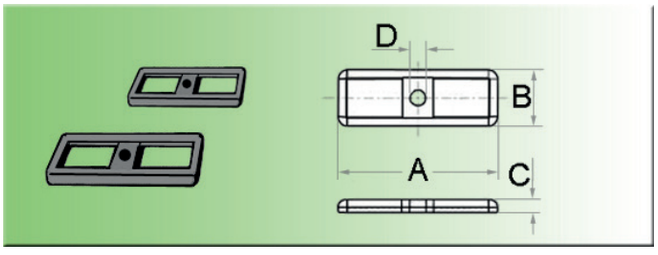
Screw-on cable clamps with snap-in lock for mounting of pipes and cables.

Material: PA 6
Colour: grey

Part no.	A	B
0120120	12	14

Part no.	A	B
0120150	15	17

Cable clamps | Adapter for snap-in clamps

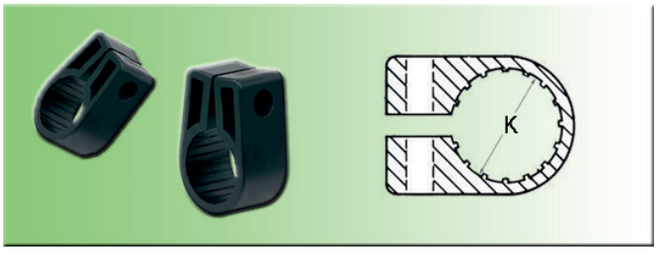


Adapter for cable clamps series 012

Material: PA 6
Colour: grey

Part no.	A	B	C	D
0120100	52,5	18,2	4	5,2

Cable clamps | Standard cable cleats



For mounting of cables, tubes and hoses. Fixing by means of screw or rivet.

Material: LDPE
Colour: black

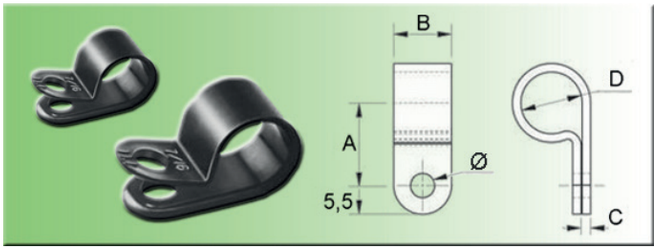
K = cable dimensions
Ø = fixing diameter (hole diameter)

Further types on written request.

Part no.	K	Ø
2890003	7,6	6,0 mm (1/4“)
2890004	10,1	6,0 mm (1/4“)
2890005	12,7	6,0 mm (1/4“)
2890006	15,2	6,0 mm (1/4“)
2890007	17,8	6,0 mm (1/4“)

Part no.	K	Ø
2890008	20,3	6,0 mm (1/4“)
2890009	22,8	6,0 mm (1/4“)
2890010	25,4	6,0 mm (1/4“)
2890011	27,9	9,6 mm (3/8“)
2890012	30,0	10,0 mm (3/8“)

Part no.	K	Ø
2890014	35,6	10,0 mm (3/8“)
2890016	40,6	10,0 mm (3/8“)
2890018	45,7	10,0 mm (3/8“)
2890020	50,4	10,0 mm (3/8“)



Ideal for mounting of cables, tubes and hoses. Also usable as a light strain relief. Fixing by means of a screw or rivet.

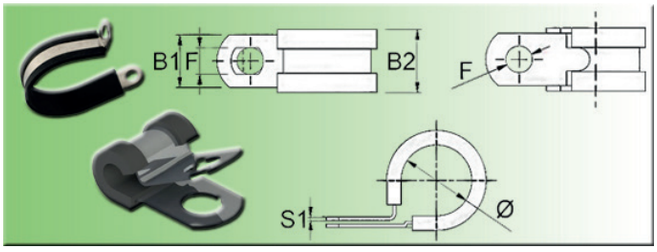
Max. service temperature: +85°C
Flammability: UL 94V-2

Material: PA 6.6
Colours:
without last digits = natural
last digits 699 = black

Part no.	A	B	C	D	Ø
1890001	8,7	9,5	1,3	3,2	4,3
1890001699	8,7	9,5	1,3	3,2	4,3
1890002	8,7	9,5	1,3	3,2	5,2
1890002699	8,7	9,5	1,3	3,2	5,2
1890003	9,6	9,5	1,3	4,8	4,3
1890003699	9,6	9,5	1,3	4,8	4,3
1890004	9,6	9,5	1,3	4,8	5,2
1890004699	9,6	9,5	1,3	4,8	5,2
1890005	10,7	9,5	1,3	6,4	4,3
1890005699	10,7	9,5	1,3	6,4	4,3
1890006	10,7	9,5	1,3	6,4	5,2
1890006699	10,7	9,5	1,3	6,4	5,2
1890007	11,2	9,5	1,3	7,9	4,3
1890007699	11,2	9,5	1,3	7,9	4,3
1890008	11,2	9,5	1,3	7,9	5,2
1890008699	11,2	9,5	1,3	7,9	5,2
1890009	11,8	9,5	1,3	9,5	4,3
1890009699	11,8	9,5	1,3	9,5	4,3
1890010	11,8	9,5	1,3	9,5	5,2
1890010699	11,8	9,5	1,3	9,5	5,2
1890012	12,7	9,5	1,3	11,1	5,2
1890013	12,7	9,5	1,1	11,5	4,3
1890013699	no longer available!				
1890014	13,5	9,5	1,3	12,7	5,2
1890014699	13,5	9,5	1,3	12,7	5,2
1890016	10,7	12,7	1,5	4,8	5,2
1890016699	10,7	12,7	1,5	4,8	5,2
1890017	11,1	12,7	1,3	6,4	5,2
1890017699	11,1	12,7	1,3	6,4	5,2
1890018	12,0	12,7	1,3	7,9	5,2

Part no.	A	B	C	D	Ø
1890018699	12,0	12,7	1,3	7,9	5,2
1890019	12,7	12,7	1,3	9,5	5,2
1890019699	12,7	12,7	1,3	9,5	5,2
1890020	13,5	12,7	1,3	11,1	5,2
1890020699	13,5	12,7	1,3	11,1	5,2
1890021	14,1	12,7	1,3	12,7	5,2
1890021699	14,1	12,7	1,3	12,7	5,2
1890022	15,3	12,7	1,3	14,3	5,2
1890022699	15,3	12,7	1,3	14,3	5,2
1890023	15,9	12,7	1,3	15,9	5,2
1890023699	15,9	12,7	1,3	15,9	5,2
1890024	16,9	12,7	1,3	17,4	5,2
1890024699	16,9	12,7	1,3	17,4	5,2
1890025	17,8	12,7	1,3	19,1	5,2
1890025699	17,8	12,7	1,3	19,1	5,2
1890026	19,9	12,7	1,3	20,6	5,2
1890026699	19,9	12,7	1,3	20,6	5,2
1890027	20,9	12,7	1,3	25,4	5,2
1890027699	20,9	12,7	1,3	25,4	5,2
1890028	20,2	12,7	1,3	22,2	5,2
1890028699	no longer available!				
1890029	23,8	12,7	1,3	28,6	5,2
1890029699	no longer available!				
1890030	no longer available!				
1890030699	no longer available!				
1890031	24,9	12,7	1,3	31,8	5,2
1890031699	no longer available!				
1890033	28,3	12,7	1,5	38,1	5,2
1890033699	no longer available!				

Cable clamps | Steel clamps

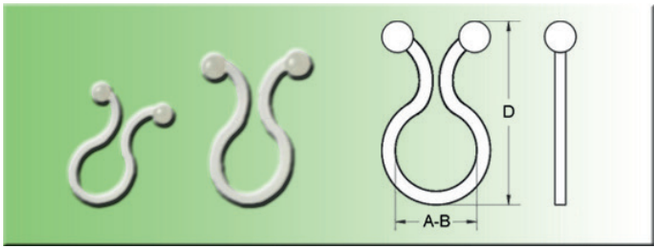


For the mounting of cables, tubes and hoses.

Material: steel sheet zinc-plated, cushion EPDM
Colour: black

NO LONGER AVAILABLE!

Twist ties | standard



An ingenious mounting aid for all fields of application where quickness is required:
One twist is enough to release the fixing.
Also suitable for several cables with different diameters.
Not suitable for fields of application where high tensions occur.

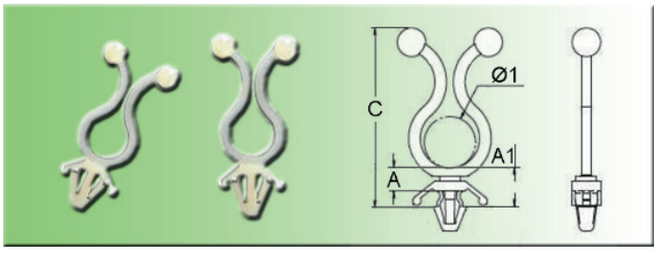
Material: PA
Colour: natural

Part no.	A-B	D
0580051	4,0-7,0	20,6
0580081	7,0-10,0	25,4
0580113	10,0-13,0	29,3

Part no.	A-B	D
0580130	11,0-15,0	32,0
0580151	13,0-16,5	34,0
0580150	14,0-16,0	35,0

Part no.	A-B	D
0580186	16,5-20,0	40,0
0580180	17,0-20,0	40,0
0580261	20,0-26,0	46,0

Twist ties | with snap-in foot



Quick and easy solution for bundling and mounting of cables. Also suitable for several cables with variable diameters.

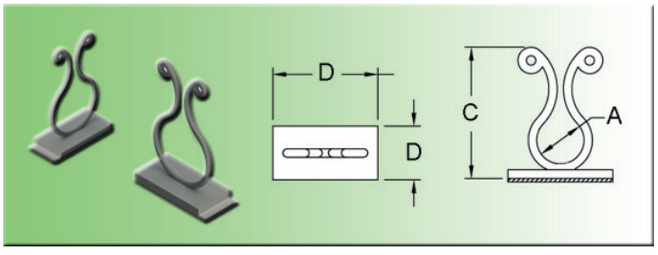
Material: PA
Colour: natural

Ø1 = bundle diameter
Ø2 = hole diameter
S = thickness

Part no.	Ø1	A	A1	C	S	Ø2
0582048	10,0-12,5	2,0	7,7	35,7	0,3-2,3	4,6-4,8
0582038	10,0-12,5	3,8	5,7	34,2	0,8	6,3

Part no.	Ø1	A	A1	C	S	Ø2
0582081	10,2-12,7	8,0	10,8	35,7	0,8-2,0	6,0
0582049	17,8-20,3	3,8	6,5	44,0	0,8-2,0	4,8-5,0

Twist ties | adhesive



Quick and easy solution for bundling and mounting of cables. Also suitable for several cables with variable diameters.

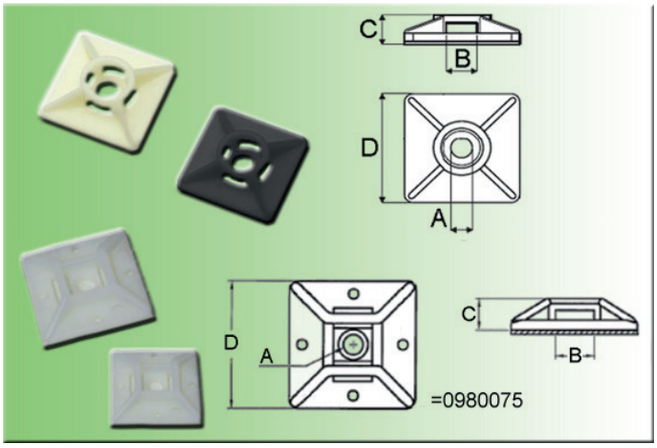
Material: PA
Colour: natural

The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between + 18°C and + 25°C.

Part no.	A	C	D
0581081	7,0-9,0	28	13x25

Part no.	A	C	D
0581110	10,0-12,5	30	16x21

Cable tie mounts | natural & black



Temperature adhesive film: max. 50 °C. Panel hole for optional screw fixing.

Material: PA 6.6 + PE glue
Colour:
without last digits = natural
last digits 699 = black

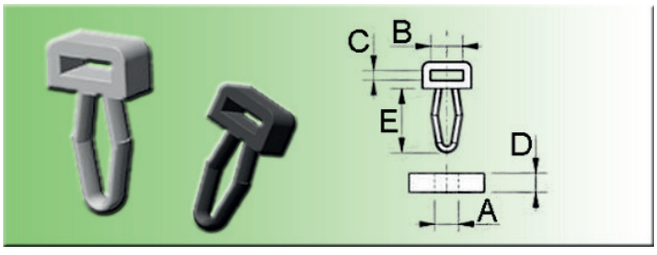
Y = cable tie width

The surface to be glued on has to be free of dust and fat, and must be even and dry. The optimal sticking temperature is between + 18°C and + 25°C.

Part no.	A	B	C	D	Y
0981040	4,1	4	5,0	19	3,6
0981040699	4,1	4	5,0	19	3,6
0980048	4,8	6	6,5	27	4,8

Part no.	A	B	C	D	Y
0980048699	4,8	6	6,5	27	4,8
0980075	4,1	8,1	6,2	25,3	7,5
0980090	-	9,0	-	38	8,0
0980090699	-	9,0	-	38	8,0

Cable tie mounts | Plug-in mounts for cable ties



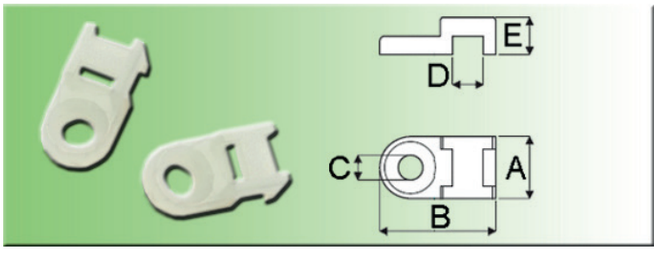
Can be mounted with a simple push similar to drive fasteners. Adapted for serial production and for predrilled holes in sheets of different thicknesses.

Material: PA 6.6
Colours:
without last digits = natural
last digits 699 = black

Part no.	A	B	C	D	E
1420040	3,2	4,0	1,5	1-4	13
1420040699	3,2	4,0	1,5	1-4	13
1420050	3,9	5,0	2,0	1-5	14

Part no.	A	B	C	D	E
1420050699	3,9	5,0	2,0	1-5	14
1420080	6,4	8,5	2,5	2-6	17
1420080699	6,4	8,5	2,5	2-6	17

Cable tie mounts | Cable mounts flat

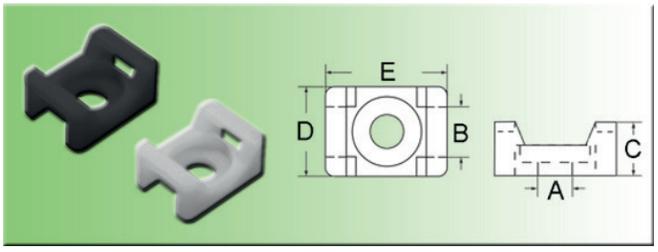


Material: PA
Colour: natural

Y = cable tie width

Part no.	Y	A	B	C	D	E
1421048	4,8	10	20	4,3	5	6

Cable tie mounts | Cable mounts



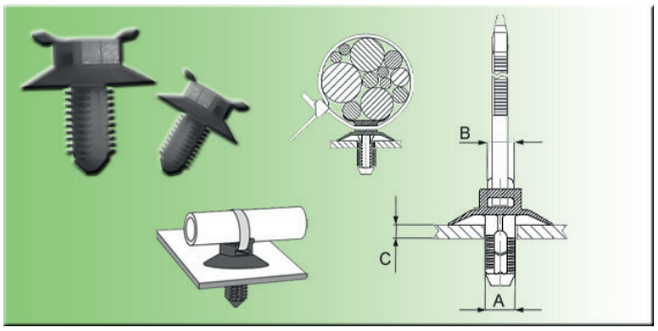
Screw-on, solid cable tie mount. For a fast fixing of wires, cables and cable looms on every type of surface.

Material: PA 6.6
Colours:
without last digits = natural
last digits 699 = black

Part no.	A	B	C	D	E
1160004	3,5	5,0	7	8,5	15,0
1160004699	3,5	5,0	7	8,5	15,0
1160006	4,2	5,0	7	10,0	15,0
1160006699	4,2	5,0	7	10,0	15,0

Part no.	A	B	C	D	E
1160009	5,0	9,3	11	14,6	22,5
1160009699	5,0	9,3	11	14,6	22,5
1160019	6,2	9,0	10	16,0	23,0
1160019699	6,2	9,0	10	16,0	23,0

Cable tie mounts | Plug-in mounts for cable ties



Cable tie mount for the insertion into a component hole.
Can be used with standard or releasable cable ties.

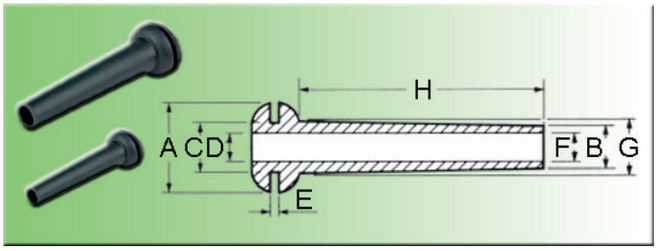
Material: PA 6.6 (* = POM)
Colour: black

Part no.	A	B	C
1422003	6,3-7,0	5 (4,8)	0,5-3,0
1422002	6,3-7,0	5 (4,8)	0,5-6,0

Part no.	A	B	C
1422004	6,5 ±0,2	5 (4,8)	0,7-2,0
1422001*	no longer available!		

Part no.	A	B	C
1422005	6,5 ±0,2	5 (4,8)	2,0-3,5

Cable grommets | Sleeved grommets type 1

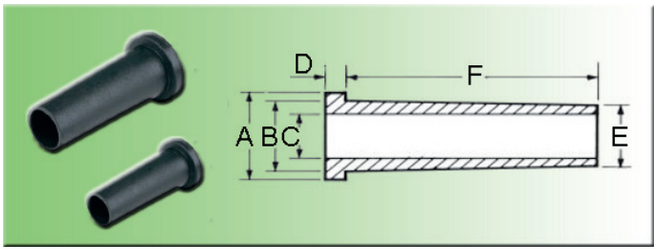


Provide extra support and protection for cables and wires passing through panels and housings.

Material: PVC
Colour: black

Part no.	A	B	C	D	E	F	G	H
1861001	14,2	7,9	7,6	6,1	3,8	5,5	8,2	31,7
1861002	14,3	7,1	8,7	5,1	1,6	5,1	8,7	42,9
1861003	14,2	7,9	9,5	6,4	2,4	6,4	9,5	14,3
1861004	14,0	7,9	9,5	6,4	2,6	6,4	9,5	23,0

Cable grommets | Sleeved grommets type 2



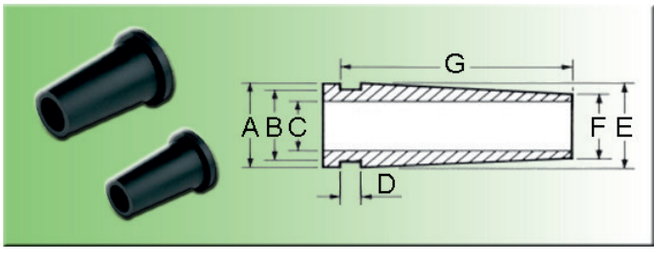
Provide extra support and protection for cables and wires passing through panels and housings.

Material: PVC
Colour: black

Part no.	A	B	C	D	E	F
1862001	9,5	7,0	4,0	3,2	5,0	22,2
1862002	10,5	7,5	4,0	2,4	5,6	39,0
1862003	11,5	9,5	7,0	1,6	9,5	36,0

Part no.	A	B	C	D	E	F
1862004	14,0	9,5	6,0	1,6	8,0	41,5
1862005	14,3	11,3	7,9	3,2	10,5	38,1
1862006	19,0	14,0	10,3	3,2	12,5	38,0

Cable grommets | Sleeved grommets type 3

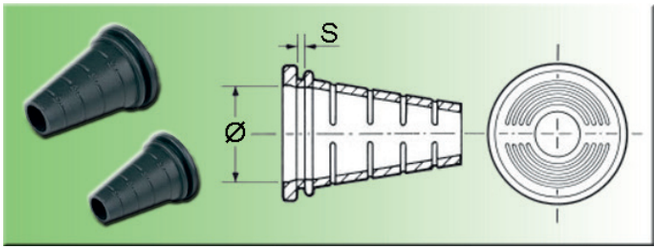


Provide extra support and protection for cables and wires passing through panels and housings.

Material: PVC
Colour: black

Part no.	A	B	C	D	E	F	G
1863001	15	12,5	9,5	3,2	14,5	12,0	35,5
1863002	19	12,5	9,5	0,8	15,0	12,2	26,8

Cable grommets | Sleeved grommets type 4



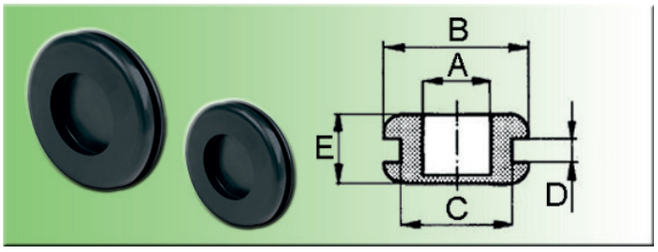
Provide extra support and protection for cables and wires passing through panels and housings. A universal item for a bore hole diameter of 20 mm.
The graduated sleeve can be cut to requirements between 8 mm and 17 mm.

Material: PVC
Colour: black

K = cable dimensions

Part no.	Ø	S	K
1864001	20	1,6	8-17

Cable grommets | One-sided membrane grommets

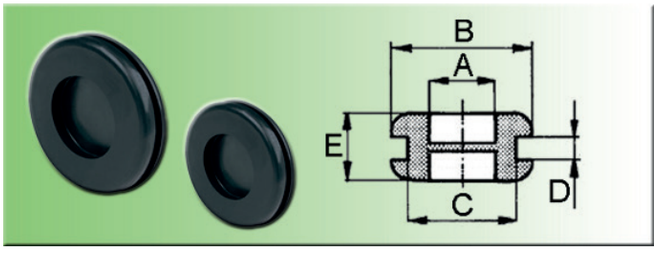


Material: plasticised PVC
Colour: black

Part no.	A	B	C	D	E
1280060	6,4	12,7	9,9	1,5	6,7
1280080	8,0	17,5	11,0	1,5	8,0
1280090	9,5	15,7	12,5	1,5	6,4
1280110	11,0	19,0	16,0	1,5	8,0

Part no.	A	B	C	D	E
1280120	16,0	25,5	19,0	1,5	7,0
1280170	18,8	25,5	22,0	1,5	8,0
1280190	16,0	25,5	20,0	1,5	7,0
1280200	20,5	30,0	25,5	1,5	8,0

Cable grommets | Centre membrane grommets

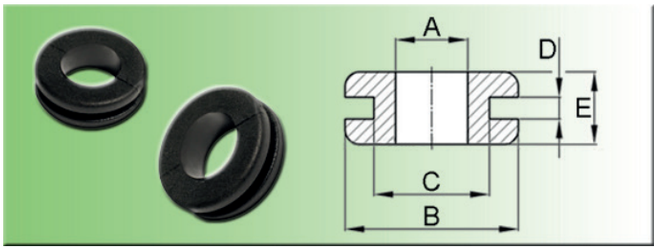


Material: plasticised PVC
Colour: black

Part no.	E	A	B	C	D
1281110	5,8	11,0	19,0	16,0	1,5
1281125	8,0	12,5	21,5	16,0	2,4
1281140	8,0	15,5	25,5	19,0	1,5
1281142	8,8	15,5	25,5	19,0	2,4
1281143	9,5	15,5	25,5	19,0	3,0

Part no.	E	A	B	C	D
1281144	8,0	15,5	25,5	20,0	1,5
1281150	7,9	15,9	25,4	19,0	2,0
1281190	8,4	19,0	36,5	25,5	2,4
1281250	8,0	25,5	38,0	32,0	2,4
1281254	9,5	25,5	38,0	32,0	4,0

Cable grommets | Grommets



Material: plasticised PVC / TPG (see article no.)
Colour: black

TPG (thermoplastic rubber) is recommended for applications where oil and fat resistance are required or where extreme temperatures occur. These grommets of thermoplastic rubber can withstand temperatures from -40°C up to +150°C for a short time.

Version for article 0421002 similar to quick-fit grommets p. 192 (dimension B only one-sided)

Further types on written request.

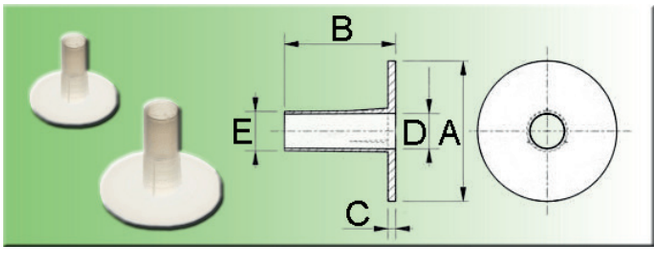
Part no.	A	B	C	D	E
0420250	2,7	8,0	4,8	0,8	4,7
0420250TPG	2,7	8,0	4,8	0,8	4,7
0420300	3,0	9,0	6,0	0,6	4,6
0420301	3,2	8,0	4,8	1,6	6,4
0420301TPG	3,2	8,0	4,8	1,6	6,4
0420302	3,0	11,0	8,0	3,0	8,0
0420400	4,5	9,5	6,4	1,2	6,0
0420401	4,0	9,5	6,4	1,6	6,4
0420401TPG	4,0	9,5	6,4	1,6	6,4
0420402	4,0	9,5	6,4	3,0	8,0
0420402TPG	4,0	9,5	6,4	3,0	8,0
0420403	4,0	9,5	6,5	0,8	4,0
0420403TPG	4,0	9,5	6,5	0,8	4,0
0420404	4,0	15,9	9,5	3,2	6,5
0420500	4,8	9,5	6,4	1,6	7,0
0420500TPG	4,8	9,5	6,4	1,6	7,0
0420501	5,0	11,0	8,0	1,5	6,0
0420502	5,0	11,0	8,0	3,0	8,0
0420503	5,5	11,0	8,0	1,6	5,5
0420503TPG	5,5	11,0	8,0	1,6	5,5
0420504	4,8	12,5	9,5	1,6	7,0
0420504TPG	4,8	12,5	9,5	1,6	7,0
0420600	6,0	11,5	9,0	1,5	6,0
0420601	6,4	14,0	9,5	2,4	7,0
0420601TPG	6,4	14,0	9,5	2,4	7,0
0420602	6,4	14,2	9,5	1,6	4,9
0420603	6,4	16,0	12,5	1,6	8,0
0420603TPG	6,4	16,0	12,5	1,6	8,0
0420700	8,0	14,0	10,0	1,5	8,0
0420701	7,0	13,5	10,0	5,9	9,7
0420705	10,0	18,0	12,0	1,2	8,0

Part no.	A	B	C	D	E
0420706	10,0	18,0	13,0	1,0	6,0
0420800	8,0	18,0	14,0	1,0	6,0
0420802	8,0	14,0	11,0	1,6	8,0
0420802TPG	8,0	14,0	11,0	1,6	8,0
0420803	8,0	16,0	12,5	3,0	8,0
0420803TPG	8,0	16,0	12,5	3,0	8,0
0420804	8,0	14,2	9,5	1,6	5,0
0420804TPG	8,0	14,2	9,5	1,6	5,0
0420805	8,0	14,2	9,5	1,6	8,0
0420805TPG	8,0	14,2	9,5	1,6	8,0
0420900	9,0	16,0	12,0	1,5	6,5
0420901	9,5	17,0	12,5	3,0	8,8
0420901TPG	9,5	17,0	12,5	3,0	8,8
0420903	9,5	17,0	12,5	1,6	7,0
0420903TPG	9,5	17,0	12,5	1,6	7,0
0421000	10,0	18,0	12,0	2,0	7,0
0421001	9,6	23,0	13,5	4,0	8,8
0421002	10,0	18,0	14,0	6,0	10,0
0421004	10,0	18,0	12,0	4,0	11,0
0421100	11,0	20,0	12,5	1,6	5,5
0421100TPG	11,0	20,0	12,5	1,6	5,5
0421101	11,0	19,0	14,2	1,6	6,4
0421101TPG	11,0	19,0	14,0	1,6	6,4
0421102	11,1	19,0	16,0	0,8	9,5
0421103	9,5	19,0	13,5	3,2	9,5
0421200	12,0	19,5	15,0	2,0	7,0
0421201	12,5	20,5	16,0	1,2	7,0
0421201TPG	12,5	20,5	16,0	1,2	7,0
0421202	12,5	22,0	17,5	1,6	6,4
0421202TPG	12,5	22,0	17,5	1,6	6,5
0421300	13,0	21,0	16,0	1,5	7,0

Part no.	A	B	C	D	E
0421400	14,0	23,0	18,0	2,0	8,0
0421401	14,0	22,0	17,5	1,6	4,7
0421500	15,5	24,0	20,0	1,6	7,5
0421500TPG	15,5	24,0	20,0	1,6	7,5
0421501	15,0	25,0	18,0	2,0	9,0
0421600	16,0	28,0	20,0	2,0	8,0
0421601	16,0	24,0	19,0	1,6	6,4
0421601TPG	16,0	24,0	19,0	1,6	6,4
0421602	16,0	22,0	19,0	1,6	5,5
0421602TPG	no longer available!				
0421800	18,0	30,0	23,0	2,0	8,0
0421801	18,5	31,5	25,0	1,6	8,0
0421801TPG	18,5	31,5	25,0	1,6	8,0
0421802	18,5	31,5	25,0	1,2	7,5
0422001	22,0	35,0	26,0	2,0	8,5
0422200	22,0	30,0	25,5	1,6	8,0

Part no.	A	B	C	D	E
0422200TPG	22,0	30,0	25,5	1,6	8,0
0422300	23,0	33,0	28,0	2,0	8,0
0422301	23,0	39,0	29,0	3,0	10,0
0422500	25,0	35,0	30,0	3,0	9,0
0422501	25,0	38,0	31,0	1,6	7,8
0422501TPG	25,0	38,0	31,0	1,6	7,8
0422502	25,5	44,5	30,5	3,2	10,0
0422503	25,5	44,5	32,0	0,8	6,5
0422503TPG	25,5	44,5	32,0	0,8	6,5
0423200	32,0	46,0	38,0	1,6	9,5
0423200TPG	32,0	46,0	38,0	1,6	9,5
0423201	32,0	46,0	38,0	3,0	11,0
0423201TPG	32,0	46,0	38,0	3,0	11,0
0424500	45,0	60,0	50,0	1,6	10,0
0424500TPG	45,0	60,0	50,0	1,6	10,0

Cable grommets | End grommets for lamp sockets

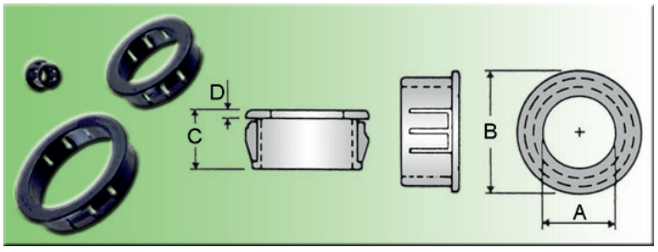


Material: PA 6
Colour: natural

Part no.	A	B	C	D	E
0171160	16	20	1,5	6	7-8

Part no.	A	B	C	D	E
0171250	25	20	1,5	6	7-8

Cable grommets | Snap-fit bushes



For the mounting in drilled or stamped holes. Withstand a pull-out strength up to 155N. Protect cables and hoses. Easy, quick and safe.

Max. service temperature: +105°C
Flammability: UL 94V-2

Material: PA 6.6
Colour: black

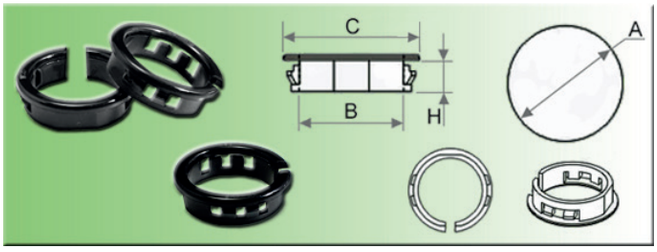
Ø = mounting hole diameter
S = max. wall thickness
Colour white on written request.

Part no.	A	B	C	D	Ø	S
0400001	3,2	7,9	7,9	1,6	6,4	1,6
0400002	4,8	9,5	7,9	1,6	7,9	1,6
0400003	4,8	11,9	10,3	1,6	9,5	3,2
0400004	6,4	11,9	10,3	1,6	9,5	3,2
0400005	7,1	11,9	10,3	1,6	9,5	4,3
0400006	6,4	13,5	10,3	1,6	11,1	3,2
0400007	7,9	13,5	10,3	1,6	11,1	3,2
0400008	6,4	14,7	10,3	1,6	12,7	3,2
0400009	7,9	14,7	10,3	1,6	12,7	3,2
0400011	7,9	16,7	10,3	1,6	14,3	3,2
0400010	9,5	14,7	10,3	1,6	12,7	3,2
0400012	9,5	16,7	10,3	1,6	14,3	3,2
0400013	11,1	16,7	10,3	1,6	14,3	3,2
0400014	11,1	18,2	10,3	1,6	15,9	3,2
0400026	11,1	24,2	11,5	1,6	22,2	3,2
0400015	12,7	18,2	10,3	1,6	15,9	3,2
0400016	12,7	17,9	13,5	1,6	15,9	6,4
0400017	12,7	19,8	10,3	1,6	17,4	3,2
0400019	12,7	21,4	10,3	1,6	19,1	3,2
0400027	12,7	24,2	11,5	1,6	22,2	3,2
0400018	14,3	19,8	10,3	1,6	17,4	3,2
0400020	14,3	21,4	10,3	1,6	19,1	3,2
0400023	14,3	22,6	10,3	1,6	20,6	3,2

Part no.	A	B	C	D	Ø	S
0400021	15,5	21,4	10,3	1,6	19,1	3,2
0400022	15,9	21,0	13,5	1,6	19,1	6,4
0400024	15,9	22,6	10,3	1,6	20,6	3,2
0400029	15,9	24,2	11,5	1,6	22,2	3,2
0400030	17,4	24,2	11,5	1,6	22,2	3,2
0400031	19,1	28,6	11,5	1,6	25,4	3,2
0400032	20,6	30,9	11,5	1,6	28,0	3,2
0400033	22,2	30,9	11,5	1,6	28,0	3,2
0400034	23,8	30,9	11,5	1,6	28,0	3,2
0400035	23,8	33,3	11,5	1,6	30,1	3,2
0400036	23,8	34,5	11,5	1,6	31,8	3,2
0400037	25,4	34,5	11,5	1,6	31,8	3,2
0400038	25,4	37,3	11,5	1,6	34,9	3,2
0400039	27,0	40,9	11,5	1,6	38,1	3,2
0400040	28,6	40,9	11,5	1,6	38,1	3,2
0400041	33,3	40,9	11,5	1,6	38,1	3,2
0400042	34,9	47,6	11,5	1,6	44,5	3,2
0400043	41,3	54,0	11,5	1,6	50,8	3,2
0400044	47,1	63,1	18,3	1,6	57,2	6,4
0400045	50,0	67,5	18,3	1,6	63,5	6,4
0400046	62,7	80,2	18,3	1,6	76,2	6,4
0400047	88,4	105,9	18,3	1,6	101,6	6,4

Cable accessories

Cable grommets | Snap-fit bushes, lateral opening



- Simple unilateral finger print assembly
- Protects cables and hoses from damage
- Suitable for installation in holes with previously mounted cables
- Ideal for installation of cables with pre-assembled plug

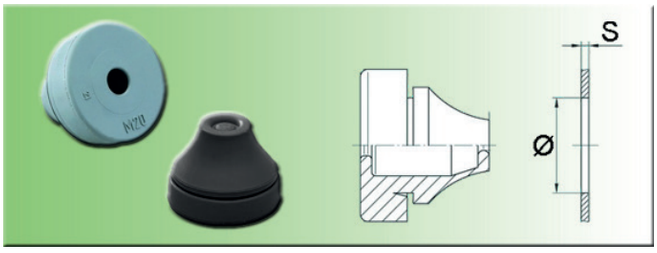
Fits wall thickness from 0,8 - 1,6 mm

Material: PA 6.6 - UL94-V2
Color: black

Part no.	A	B	C	H
0401007	7,0	6,0	10,4	4,8
0401012	12,7	10,8	16,2	5,2
0401016	16,0	13,0	19,3	5,2
0401019	19,0	15,6	22,9	5,5
0401021	21,0	19,0	25,0	5,6
0401022	22,0	19,3	25,8	5,5

Part no.	A	B	C	H
0401023	23,0	20,4	26,4	5,5
0401024	24,0	20,8	27,0	5,3
0401027	27,0	22,0	34,6	6,0
0401029	29,0	26,3	34,0	7,0
0401030	30,0	28,0	36,3	7,0
0401032	32,0	30,0	36,9	6,7

Cable grommets | Grommets IP67



These grommets provide a dustproof and watertight seal.
They act as a blind plug until the cable installation is required.
Particularly designed for outdoor applications. Conform to IP67 standard. Quick and easy to install.

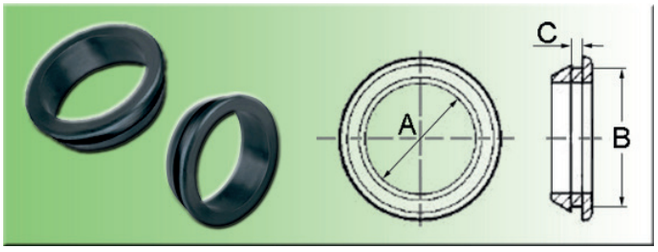
Material: EPDM (* = chloroprene rubber (CR))
Colours:
without last digits = grey
last digits 699 = black

K = cable dimensions

Part no.	M/PG	Ø	S	K
1850012	M12/PG7	13,0	0,5-2	3-5
1850012699*	M12/PG7	13,0	0,5-2,0	3-5
1850016	M16/PG9	16,0	1,0-4,0	5-7
1850016699*	M16/PG9	16,0	1,0-4,0	5-7
1850019	PG11	19,0	1,0-4,0	7-10
1850019699*	PG11	19,0	1,0-4,0	7-10
1850020	M20	20,5	1,0-4,0	8-12
1850020699*	M20	20,5	1,0-4,0	8-12
1850023	PG16	23,0	1,0-4,0	10-14
1850023699*	PG16	23,0	1,0-4,0	10-14
1850025	M25	25,5	1,0-4,0	8-12

Part no.	M/PG	Ø	S	K
1850025699*	M25	25,5	1,0-4,0	8-12
1850029	PG21	29,0	1,0-4,0	14-20
1850029699	PG21	29,0	1,0-4,0	14-20
1850032	M32	32,5	1,0-4,0	15-20
1850032699*	M32	32,5	1,0-4,0	15-20
1850036	PG36	48,0	1,0-4,0	26-35
1850036699	PG36	48,0	1,0-4,0	26-35
1850038	PG29	38,0	1,0-4,0	20-26
1850038699	PG29	38,0	1,0-4,0	20-26
1850040	M40	40,5	1,0-4,0	15-20
1850040699*	M40	40,5	1,0-4,0	15-20

Cable grommets | Quick-fit grommets type 1



These grommets are especially designed to snap into position properly and quickly.

C = sheet thickness in mm

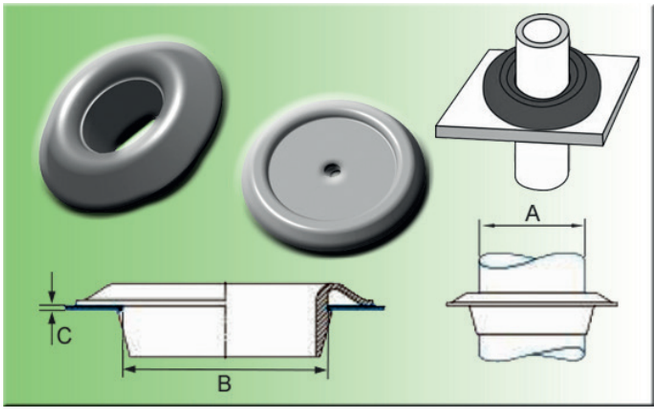
Material: PVC
Colour: black

Part no.	A	B	C
1290200	6	10	1,5
1290210	6	10	2,0
1290220	6	10	3,0
1290201	7	11	1,5
1290211	7	11	2,0
1290221	7	11	3,0
1290202	8	12	1,5
1290212	8	12	2,0
1290222	8	12	3,0
1290203	10	14	1,5

Part no.	A	B	C
1290213	10	14	2,0
1290223	10	14	3,0
1290204	12	16	1,5
1290214	12	16	2,0
1290224	12	16	3,0
1290205	14	18	1,5
1290215	14	18	2,0
1290225	14	18	3,0
1290206	16	20	1,5
1290216	16	20	2,0

Part no.	A	B	C
1290226	16	20	3,0
1290207	18	22	1,5
1290217	18	22	2,0
1290227	18	22	3,0
1290208	22	26	1,5
1290218	22	26	2,0
1290228	22	26	3,0
1290209	24	28	1,5
1290219	24	28	2,0
1290229	24	28	3,0

Cable grommets | Quick-fit grommets type 2



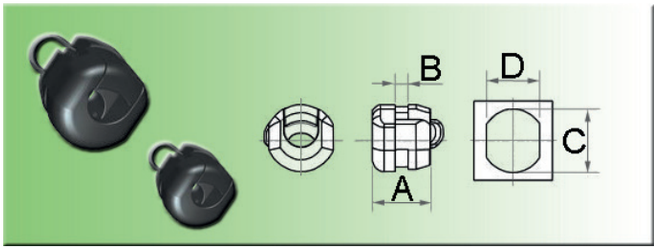
These grommets prevent cables/pipes from being damaged when passing them through a component hole.
Furthermore, they avoid ingress of water and dust if they correspond to the diameter of the cable/pipe.

Material: see X
Colour: black (* = natural)

Part no.	A	B	C	X
1291006	4,8-5,1	40	1,0-1,5	PP/EPDM
1291004	7,0	28	0,5-2,0	PE
1291001	7,2-7,8	10	0,5-1,5	PE
1291003*	12,0	16	0,5-2,5	PE

Part no.	A	B	C	X
1291005	14,0	28	0,5-2,0	PE
1291007	18,0	30	1,2	TPG
1291002*	25,0	28	0,5-2,0	PE

Cable grommets | Cable strain reliefs



Quick and easy mounting by means of hand or pneumatic tools. Fixing, isolation and protection of electric cables at the housing outlet. All types are UL and CSA approved.

Flammability rating: UL 94V-2
Max. service temperature: +105°C

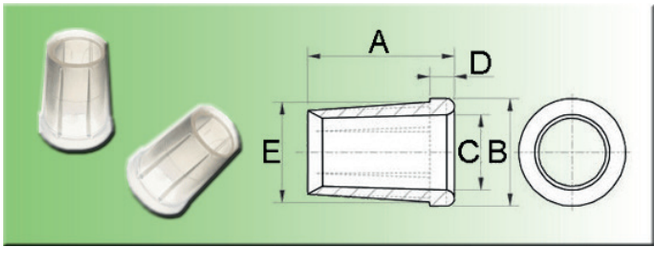
Material: PA 6.6
Colour: black

K = cable dimensions
Further types on written request.

Part no.	K	A	B	C	D
1210001	2,8x5,3	10,3	1,6	9,5	8,8
1210002	3,0x5,6	10,3	1,6	11,1	9,9
1210003	2,8x5,3	10,3	3,2	9,5	8,8
1210004	3,0x5,6	10,3	2,5	11,1	9,9
1210005	3,8x7,6	10,3	1,6	12,7	11,8
1210006	4,1x8,6	12,7	2,4	12,7-13,1	11,7
1210007	5,0x10,4	15,5	1,6	14,3	13,5
1210008	5,0x10,4	15,5	3,2	14,3	13,5
1210009	6,4x7,4	11,1	1,6	12,7-13,1	11,4

Part no.	K	A	B	C	D
1210010	6,4x7,4	11,1	2,5	12,7-13,1	11,4
1210011	Ø 7,6	11,1	2,3	12,7	11,8
1210012	Ø 7,6	14,7	1,6	15,9	14,0
1210013	Ø 7,6	14,7	3,2	15,9	14,0
1210014	8,3x9,1	14,7	1,6	15,9	14,0
1210015	8,3x9,1	14,7	3,2	15,9	14,0
1210016	9,1x10,9	19,0	3,2	19,0-19,8	16,8
1210017	10,8x12,1	20,6	3,2	22,2	21,3
1210018	15,2x16,3	25,4	7,1	27,7-28,6	25,4

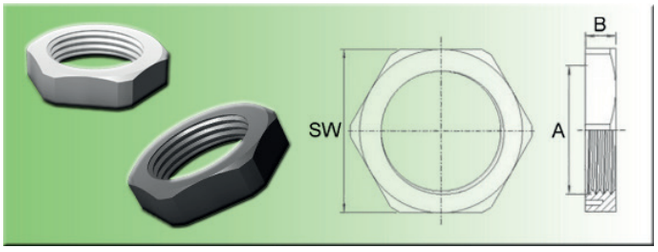
Cable grommets | Cable protection grommets



Material: LDPE
Colour: natural

Part no.	A	B	C	D	E
0170070	12	8,5	6	2	7-8

Cable glands DIN EN 62444 | Locknuts



Without collar. Together with our cable gland according to DIN EN 62444.

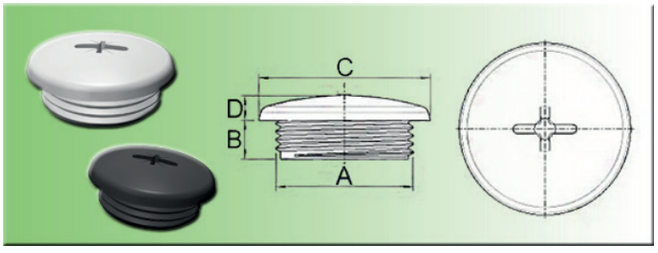
Material: PA 6 30% glass fibre reinforced
Colours:
without last digits = grey ~RAL 7035
last digits 599 = black ~RAL 9005

Part no.	A	B	SW
1261200	M12x1,5	5	17
1261200599	M12x1,5	5	17
1261600	M16x1,5	5	22
1261600599	M16x1,5	5	22
1262000	M20x1,5	6	26
1262000599	M20x1,5	6	26

Part no.	A	B	SW
1262500	M25x1,5	6	32
1262500599	M25x1,5	6	32
1263200	M32x1,5	7	41
1263200599	M32x1,5	7	41
1264000	M40x1,5	7	50
1264000599	M40x1,5	7	50

Part no.	A	B	SW
1265000	M50x1,5	8	60
1265000599	M50x1,5	8	60
1266300	M63x1,5	8	75
1266300599	M63x1,5	8	75

Cable glands DIN EN 62444 | Locking screws

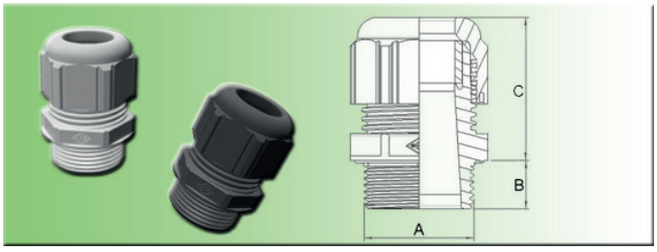


Material: PA
Colours:
without last digits = grey ~RAL 7035
last digits 699 = black ~RAL 9005

Part no.	A	B	C	D
1271200	M12x1,5	6	17	3,0
1271200699	M12x1,5	6	17	3,0
1271600	M16x1,5	6	22	4,0
1271600699	M16x1,5	6	22	4,0
1272000	M20x1,5	6	25	4,0
1272000699	M20x1,5	6	25	4,0
1272500	M25x1,5	7	31	4,5
1272500699	M25x1,5	7	31	4,5

Part no.	A	B	C	D
1273200	M32x1,5	8	38	5,0
1273200699	M32x1,5	8	38	5,0
1274000	M40x1,5	9	48	5,0
1274000699	M40x1,5	9	48	5,0
1275000	M50x1,5	10	60	5,0
1275000699	M50x1,5	10	60	5,0
1276300	M63x1,5	12	75	6,0
1276300699	M63x1,5	12	75	6,0

Cable glands DIN EN 62444 | Cable glands



IP 68 - 5 bar. Waterproof, self-locking.
Operating temperature range: -25°C until +100°C

Material: PA 6.6
Colour:
without last digits = grey ~RAL 7035
last digits 599 = black ~RAL 9005

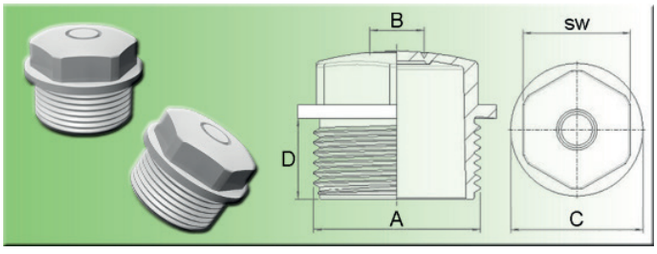
Kb = Clamping range

Colour RAL 7001 on written request.

Part no.	A	B	C	Kb	Nm	SW
1240012	M12x1,5	8	20	2-6,5	2,0	15
1240012599	M12x1,5	8	20	2-6,5	2,0	15
1240016	M16x1,5	8	23	4-10	2,5	20
1240016599	M16x1,5	8	23	4-10	2,5	20
1240020	M20x1,5	9	27	6-12	4,0	24
1240020599	M20x1,5	9	27	6-12	4,0	24
1240021	M20x1,5	9	28	7-14	4,0	27
1240021599	M20x1,5	9	28	7-14	4,0	27
1240025	M25x1,5	11	33	9-16	6,0	28

Part no.	A	B	C	Kb	Nm	SW
1240025599	M25x1,5	11	33	9-16	6,0	28
1240032	M32x1,5	11	39	10-21	7,0	36
1240032599	M32x1,5	11	39	10-21	7,0	36
1240040	M40x1,5	11	43	16-28	7,5	46
1240040599	M40x1,5	11	43	16-28	7,5	46
1240050	M50x1,5	13	50	21-34,5	8,0	53
1240050599	M50x1,5	13	50	21-34,5	8,0	53
1240063	M63x1,5	17	55	30-44,5	9,0	65
1240063599	M63x1,5	17	55	30-44,5	9,0	65

Cable glands DIN EN 62444 | Hex head plugs



Material: LDPE
Colour: grey ~RAL 7035

Some sizes are available in two types:
without hole (last digits 00)
with hole (last digits 01)

Part no.	A	B	C	D	SW
1251600	M16x1,5	4,5	20,0	10,0	15
1251601	M16x1,5	4,5	20,0	10,0	15
1252000	M20x1,5	7,5	24,0	12,0	19
1252001	M20x1,5	7,5	24,0	12,0	19
1252500	M25x1,5	8,0	29,5	12,0	24

Part no.	A	B	C	D	SW
1252501	M25x1,5	8,0	29,5	12,0	24
1253200	M32x1,5	9,0	37,5	14,0	30
1254000	M40x1,5	15,0	45,5	16,0	37
1255000	M50x1,5	20+28	55,5	17,5	46
1256300	M63x1,5	22+33	68,5	20,0	56



PCB Products

PCB Products



PCB supports with female thread Page 198



PCB supports with male thread Page 205



Pluggable PCB supports Page 210



PCB supports - accessories Page 215

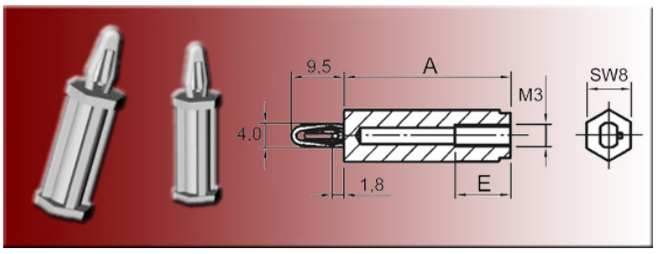


Threaded spacers, plastic Page 216



Threaded spacers, steel zinc-plated Page 222

PCB supports with female thread | M3 AF8 | for sheet 1.6 mm



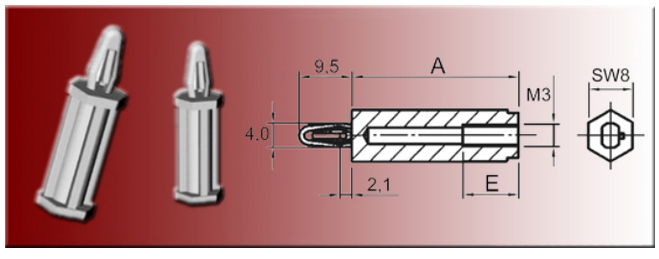
PCB supports with female thread M3, width across flats 8 - pluggable, for conductor plates of 1.6 mm thickness

Material: PA, temperature-resistant until approx. 110°C
Colour: black

Part no.	A	B	C	D	E	F	S
1005105	5	4	M3	9,5	3	1,8	1,6
1005106	6	4	M3	9,5	4	1,8	1,6
1005107	7	4	M3	9,5	5	1,8	1,6
1005108	8	4	M3	9,5	6	1,8	1,6
1005109	9	4	M3	9,5	7	1,8	1,6
1005110	10	4	M3	9,5	8	1,8	1,6
1005111	11	4	M3	9,5	9	1,8	1,6
1005112	12	4	M3	9,5	10	1,8	1,6
1005113	13	4	M3	9,5	10	1,8	1,6
1005114	14	4	M3	9,5	10	1,8	1,6
1005115	15	4	M3	9,5	10	1,8	1,6
1005116	16	4	M3	9,5	10	1,8	1,6
1005117	17	4	M3	9,5	10	1,8	1,6
1005118	18	4	M3	9,5	10	1,8	1,6
1005119	19	4	M3	9,5	10	1,8	1,6
1005120	20	4	M3	9,5	10	1,8	1,6
1005121	21	4	M3	9,5	10	1,8	1,6
1005122	22	4	M3	9,5	10	1,8	1,6
1005123	23	4	M3	9,5	10	1,8	1,6
1005124	24	4	M3	9,5	10	1,8	1,6
1005125	25	4	M3	9,5	10	1,8	1,6
1005126	26	4	M3	9,5	10	1,8	1,6
1005127	27	4	M3	9,5	10	1,8	1,6
1005128	28	4	M3	9,5	10	1,8	1,6
1005129	29	4	M3	9,5	10	1,8	1,6
1005130	30	4	M3	9,5	10	1,8	1,6
1005131	31	4	M3	9,5	10	1,8	1,6
1005132	32	4	M3	9,5	10	1,8	1,6
1005133	33	4	M3	9,5	10	1,8	1,6
1005134	34	4	M3	9,5	10	1,8	1,6
1005135	35	4	M3	9,5	10	1,8	1,6
1005136	36	4	M3	9,5	10	1,8	1,6
1005137	37	4	M3	9,5	10	1,8	1,6

Part no.	A	B	C	D	E	F	S
1005138	38	4	M3	9,5	10	1,8	1,6
1005139	39	4	M3	9,5	10	1,8	1,6
1005140	40	4	M3	9,5	10	1,8	1,6
1005141	41	4	M3	9,5	10	1,8	1,6
1005142	42	4	M3	9,5	10	1,8	1,6
1005143	43	4	M3	9,5	10	1,8	1,6
1005144	44	4	M3	9,5	10	1,8	1,6
1005145	45	4	M3	9,5	10	1,8	1,6
1005146	46	4	M3	9,5	10	1,8	1,6
1005147	47	4	M3	9,5	10	1,8	1,6
1005148	48	4	M3	9,5	10	1,8	1,6
1005149	49	4	M3	9,5	10	1,8	1,6
1005150	50	4	M3	9,5	10	1,8	1,6
1005151	51	4	M3	9,5	10	1,8	1,6
1005152	52	4	M3	9,5	10	1,8	1,6
1005153	53	4	M3	9,5	10	1,8	1,6
1005154	54	4	M3	9,5	10	1,8	1,6
1005155	55	4	M3	9,5	10	1,8	1,6
1005156	56	4	M3	9,5	10	1,8	1,6
1005157	57	4	M3	9,5	10	1,8	1,6
1005158	58	4	M3	9,5	10	1,8	1,6
1005159	59	4	M3	9,5	10	1,8	1,6
1005160	60	4	M3	9,5	10	1,8	1,6
1005161	61	4	M3	9,5	10	1,8	1,6

PCB supports with female thread | M3 AF8 | for sheet 2.0 mm



PCB supports with female thread M3, width across flats 8 - pluggable, for conductor plates of 2.0 mm thickness

Material: PA, temperature-resistant until approx. 110°C
Colour: black

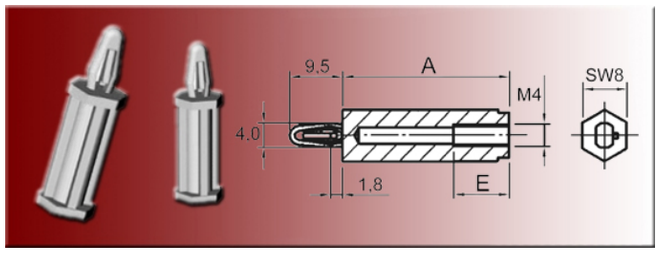
Part no.	A	B	C	D	E	F	S
1005205	5	4	M3	9,5	3	2,1	2
1005206	6	4	M3	9,5	4	2,1	2
1005207	7	4	M3	9,5	5	2,1	2
1005208	8	4	M3	9,5	6	2,1	2
1005209	9	4	M3	9,5	7	2,1	2
1005210	10	4	M3	9,5	8	2,1	2



Part no.	A	B	C	D	E	F	S
1005211	11	4	M3	9,5	9	2,1	2
1005212	12	4	M3	9,5	10	2,1	2
1005213	13	4	M3	9,5	10	2,1	2
1005214	14	4	M3	9,5	10	2,1	2
1005215	15	4	M3	9,5	10	2,1	2
1005216	16	4	M3	9,5	10	2,1	2
1005217	17	4	M3	9,5	10	2,1	2
1005218	18	4	M3	9,5	10	2,1	2
1005219	19	4	M3	9,5	10	2,1	2
1005220	20	4	M3	9,5	10	2,1	2
1005221	21	4	M3	9,5	10	2,1	2
1005222	22	4	M3	9,5	10	2,1	2
1005223	23	4	M3	9,5	10	2,1	2
1005224	24	4	M3	9,5	10	2,1	2
1005225	25	4	M3	9,5	10	2,1	2
1005226	26	4	M3	9,5	10	2,1	2
1005227	27	4	M3	9,5	10	2,1	2
1005228	28	4	M3	9,5	10	2,1	2
1005229	29	4	M3	9,5	10	2,1	2
1005230	30	4	M3	9,5	10	2,1	2
1005231	31	4	M3	9,5	10	2,1	2
1005232	32	4	M3	9,5	10	2,1	2
1005233	33	4	M3	9,5	10	2,1	2
1005234	34	4	M3	9,5	10	2,1	2
1005235	35	4	M3	9,5	10	2,1	2
1005236	36	4	M3	9,5	10	2,1	2
1005237	37	4	M3	9,5	10	2,1	2
1005238	38	4	M3	9,5	10	2,1	2
1005239	39	4	M3	9,5	10	2,1	2
1005240	40	4	M3	9,5	10	2,1	2
1005241	41	4	M3	9,5	10	2,1	2
1005242	42	4	M3	9,5	10	2,1	2
1005243	43	4	M3	9,5	10	2,1	2
1005244	44	4	M3	9,5	10	2,1	2
1005245	45	4	M3	9,5	10	2,1	2
1005246	46	4	M3	9,5	10	2,1	2
1005247	47	4	M3	9,5	10	2,1	2
1005248	48	4	M3	9,5	10	2,1	2
1005249	49	4	M3	9,5	10	2,1	2
1005250	50	4	M3	9,5	10	2,1	2
1005251	51	4	M3	9,5	10	2,1	2

Part no.	A	B	C	D	E	F	S
1005252	52	4	M3	9,5	10	2,1	2
1005253	53	4	M3	9,5	10	2,1	2
1005254	54	4	M3	9,5	10	2,1	2
1005255	55	4	M3	9,5	10	2,1	2
1005256	56	4	M3	9,5	10	2,1	2
1005257	57	4	M3	9,5	10	2,1	2
1005258	58	4	M3	9,5	10	2,1	2
1005259	59	4	M3	9,5	10	2,1	2
1005260	60	4	M3	9,5	10	2,1	2
1005261	61	4	M3	9,5	10	2,1	2

PCB supports with female thread | M4 AF8 | for sheet 1.6 mm



PCB supports with female thread M4, width across flats 8 - pluggable, for conductor plates of 1.6 mm thickness

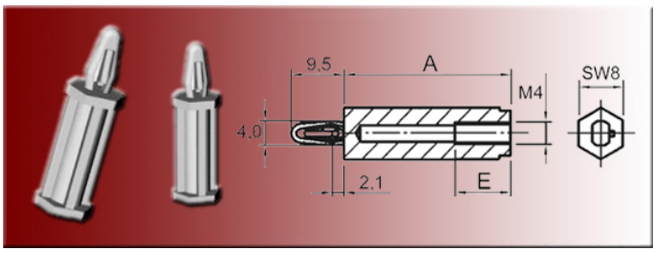
Material: PA, temperature-resistant until approx. 110°C
Colour: black

Part no.	A	B	C	D	E	F	S
1006105	5	4	M4	9,5	3	1,8	1,6
1006106	6	4	M4	9,5	4	1,8	1,6
1006107	7	4	M4	9,5	5	1,8	1,6
1006108	8	4	M4	9,5	6	1,8	1,6
1006109	9	4	M4	9,5	7	1,8	1,6
1006110	10	4	M4	9,5	8	1,8	1,6
1006111	11	4	M4	9,5	9	1,8	1,6
1006112	12	4	M4	9,5	10	1,8	1,6
1006113	13	4	M4	9,5	10	1,8	1,6
1006114	14	4	M4	9,5	10	1,8	1,6
1006115	15	4	M4	9,5	10	1,8	1,6
1006116	16	4	M4	9,5	10	1,8	1,6
1006117	17	4	M4	9,5	10	1,8	1,6
1006118	18	4	M4	9,5	10	1,8	1,6
1006119	19	4	M4	9,5	10	1,8	1,6
1006120	20	4	M4	9,5	10	1,8	1,6
1006121	21	4	M4	9,5	10	1,8	1,6
1006122	22	4	M4	9,5	10	1,8	1,6
1006123	23	4	M4	9,5	10	1,8	1,6
1006124	24	4	M4	9,5	10	1,8	1,6



Part no.	A	B	C	D	E	F	S
1006125	25	4	M4	9,5	10	1,8	1,6
1006126	26	4	M4	9,5	10	1,8	1,6
1006127	27	4	M4	9,5	10	1,8	1,6
1006128	28	4	M4	9,5	10	1,8	1,6
1006129	29	4	M4	9,5	10	1,8	1,6
1006130	30	4	M4	9,5	10	1,8	1,6
1006131	31	4	M4	9,5	10	1,8	1,6
1006132	32	4	M4	9,5	10	1,8	1,6
1006133	33	4	M4	9,5	10	1,8	1,6
1006134	34	4	M4	9,5	10	1,8	1,6
1006135	35	4	M4	9,5	10	1,8	1,6
1006136	36	4	M4	9,5	10	1,8	1,6
1006137	37	4	M4	9,5	10	1,8	1,6
1006138	38	4	M4	9,5	10	1,8	1,6
1006139	39	4	M4	9,5	10	1,8	1,6
1006140	40	4	M4	9,5	10	1,8	1,6
1006141	41	4	M4	9,5	10	1,8	1,6
1006142	42	4	M4	9,5	10	1,8	1,6
1006143	43	4	M4	9,5	10	1,8	1,6
1006144	44	4	M4	9,5	10	1,8	1,6
1006145	45	4	M4	9,5	10	1,8	1,6
1006146	46	4	M4	9,5	10	1,8	1,6
1006147	47	4	M4	9,5	10	1,8	1,6
1006148	48	4	M4	9,5	10	1,8	1,6
1006149	49	4	M4	9,5	10	1,8	1,6
1006150	50	4	M4	9,5	10	1,8	1,6
1006151	51	4	M4	9,5	10	1,8	1,6
1006152	52	4	M4	9,5	10	1,8	1,6
1006153	53	4	M4	9,5	10	1,8	1,6
1006154	54	4	M4	9,5	10	1,8	1,6
1006155	55	4	M4	9,5	10	1,8	1,6
1006156	56	4	M4	9,5	10	1,8	1,6
1006157	57	4	M4	9,5	10	1,8	1,6
1006158	58	4	M4	9,5	10	1,8	1,6
1006159	59	4	M4	9,5	10	1,8	1,6
1006160	60	4	M4	9,5	10	1,8	1,6
1006161	61	4	M4	9,5	10	1,8	1,6

PCB supports with female thread | M4 AF8 | for sheet 2.0 mm



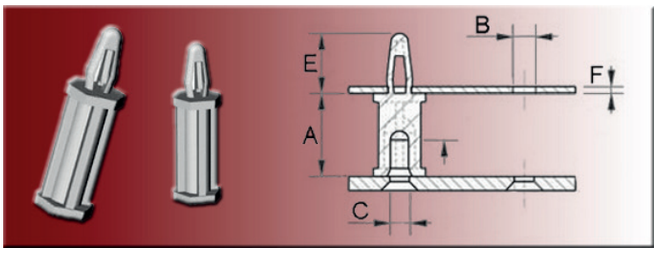
PCB supports with female thread M4, width across flats 8 - pluggable, for conductor plates of 2.0 mm thickness

Material: PA, temperature-resistant until approx. 110°C
Colour: black

Part no.	A	B	C	D	E	F	S
1006205	5	4	M4	9,5	3	2,1	2
1006206	6	4	M4	9,5	4	2,1	2
1006207	7	4	M4	9,5	5	2,1	2
1006208	8	4	M4	9,5	6	2,1	2
1006209	9	4	M4	9,5	7	2,1	2
1006210	10	4	M4	9,5	8	2,1	2
1006211	11	4	M4	9,5	9	2,1	2
1006212	12	4	M4	9,5	10	2,1	2
1006213	13	4	M4	9,5	10	2,1	2
1006214	14	4	M4	9,5	10	2,1	2
1006215	15	4	M4	9,5	10	2,1	2
1006216	16	4	M4	9,5	10	2,1	2
1006217	17	4	M4	9,5	10	2,1	2
1006218	18	4	M4	9,5	10	2,1	2
1006219	19	4	M4	9,5	10	2,1	2
1006220	20	4	M4	9,5	10	2,1	2
1006221	21	4	M4	9,5	10	2,1	2
1006222	22	4	M4	9,5	10	2,1	2
1006223	23	4	M4	9,5	10	2,1	2
1006224	24	4	M4	9,5	10	2,1	2
1006225	25	4	M4	9,5	10	2,1	2
1006226	26	4	M4	9,5	10	2,1	2
1006227	27	4	M4	9,5	10	2,1	2
1006228	28	4	M4	9,5	10	2,1	2
1006229	29	4	M4	9,5	10	2,1	2
1006230	30	4	M4	9,5	10	2,1	2
1006231	31	4	M4	9,5	10	2,1	2
1006232	32	4	M4	9,5	10	2,1	2
1006233	33	4	M4	9,5	10	2,1	2
1006234	34	4	M4	9,5	10	2,1	2
1006235	35	4	M4	9,5	10	2,1	2
1006236	36	4	M4	9,5	10	2,1	2
1006237	37	4	M4	9,5	10	2,1	2

Part no.	A	B	C	D	E	F	S
1006238	38	4	M4	9,5	10	2,1	2
1006239	39	4	M4	9,5	10	2,1	2
1006240	40	4	M4	9,5	10	2,1	2
1006241	41	4	M4	9,5	10	2,1	2
1006242	42	4	M4	9,5	10	2,1	2
1006243	43	4	M4	9,5	10	2,1	2
1006244	44	4	M4	9,5	10	2,1	2
1006245	45	4	M4	9,5	10	2,1	2
1006246	46	4	M4	9,5	10	2,1	2
1006247	47	4	M4	9,5	10	2,1	2
1006248	48	4	M4	9,5	10	2,1	2
1006249	49	4	M4	9,5	10	2,1	2
1006250	50	4	M4	9,5	10	2,1	2
1006251	51	4	M4	9,5	10	2,1	2
1006252	52	4	M4	9,5	10	2,1	2
1006253	53	4	M4	9,5	10	2,1	2
1006254	54	4	M4	9,5	10	2,1	2
1006255	55	4	M4	9,5	10	2,1	2
1006256	56	4	M4	9,5	10	2,1	2
1006257	57	4	M4	9,5	10	2,1	2
1006258	58	4	M4	9,5	10	2,1	2
1006259	59	4	M4	9,5	10	2,1	2
1006260	60	4	M4	9,5	10	2,1	2
1006261	61	4	M4	9,5	10	2,1	2

PCB supports with female thread | with fixing hole



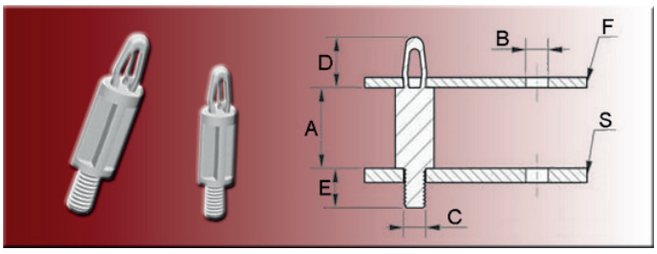
With fixing hole for assembly with self-tapping screws. A solid mounting part, though easy to dismount.

Material: PA 6.6
Colour: natural

Part no.	A	B	C	E	F
1002060	6,4	4	3,5	10,2	1,0-1,7
1002090	9,4	4	3,5	10,2	1,0-1,7
1002130	12,7	4	3,5	10,2	1,0-1,7
1002160	15,9	4	3,5	10,2	1,0-1,7

Part no.	A	B	C	E	F
1002190	19,1	4	3,5	10,2	1,0-1,7
1002220	22,2	4	3,5	10,2	1,0-1,7
1002250	25,4	4	3,5	10,2	1,0-1,7
1002290	28,6	4	3,5	10,2	1,0-1,7

PCB supports with male thread | M3 AF8 | for sheet 2.0 mm



PCB supports with male thread M3, width across flats 8 - pluggable, for conductor plates of 2.0 mm thickness

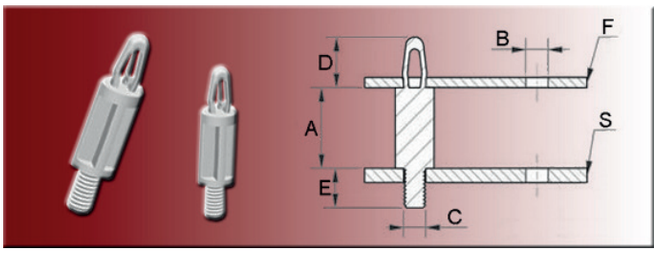
Material: PA, temperature-resistant until approx. 110°C
Colour: black

Part no.	A	B	C	D	E	F	S	SW
1004303	3	4	M3	9,4	6	2,1	2	8
1004304	4	4	M3	9,4	6	2,1	2	8
1004305	5	4	M3	9,4	6	2,1	2	8
1004306	6	4	M3	9,4	6	2,1	2	8
1004307	7	4	M3	9,4	6	2,1	2	8
1004308	8	4	M3	9,4	6	2,1	2	8
1004309	9	4	M3	9,4	6	2,1	2	8
1004310	10	4	M3	9,4	6	2,1	2	8
1004311	11	4	M3	9,4	6	2,1	2	8
1004312	12	4	M3	9,4	6	2,1	2	8
1004313	13	4	M3	9,4	6	2,1	2	8
1004314	14	4	M3	9,4	6	2,1	2	8
1004315	15	4	M3	9,4	6	2,1	2	8
1004316	16	4	M3	9,4	6	2,1	2	8
1004317	17	4	M3	9,4	6	2,1	2	8
1004318	18	4	M3	9,4	6	2,1	2	8
1004319	19	4	M3	9,4	6	2,1	2	8
1004320	20	4	M3	9,4	6	2,1	2	8
1004321	21	4	M3	9,4	6	2,1	2	8
1004322	22	4	M3	9,4	6	2,1	2	8
1004323	23	4	M3	9,4	6	2,1	2	8
1004324	24	4	M3	9,4	6	2,1	2	8
1004325	25	4	M3	9,4	6	2,1	2	8
1004326	26	4	M3	9,4	6	2,1	2	8
1004327	27	4	M3	9,4	6	2,1	2	8
1004328	28	4	M3	9,4	6	2,1	2	8
1004329	29	4	M3	9,4	6	2,1	2	8
1004330	30	4	M3	9,4	6	2,1	2	8
1004331	31	4	M3	9,4	6	2,1	2	8
1004332	32	4	M3	9,4	6	2,1	2	8
1004333	33	4	M3	9,4	6	2,1	2	8
1004334	34	4	M3	9,4	6	2,1	2	8
1004335	35	4	M3	9,4	6	2,1	2	8



Part no.	A	B	C	D	E	F	S	SW
1004336	36	4	M3	9,4	6	2,1	2	8
1004337	37	4	M3	9,4	6	2,1	2	8
1004338	38	4	M3	9,4	6	2,1	2	8
1004339	39	4	M3	9,4	6	2,1	2	8
1004340	40	4	M3	9,4	6	2,1	2	8
1004341	41	4	M3	9,4	6	2,1	2	8
1004342	42	4	M3	9,4	6	2,1	2	8
1004343	43	4	M3	9,4	6	2,1	2	8
1004344	44	4	M3	9,4	6	2,1	2	8
1004345	45	4	M3	9,4	6	2,1	2	8
1004346	46	4	M3	9,4	6	2,1	2	8
1004347	47	4	M3	9,4	6	2,1	2	8
1004348	48	4	M3	9,4	6	2,1	2	8
1004349	49	4	M3	9,4	6	2,1	2	8
1004350	50	4	M3	9,4	6	2,1	2	8
1004351	51	4	M3	9,4	6	2,1	2	8
1004352	52	4	M3	9,4	6	2,1	2	8
1004353	53	4	M3	9,4	6	2,1	2	8
1004354	54	4	M3	9,4	6	2,1	2	8
1004355	55	4	M3	9,4	6	2,1	2	8
1004356	56	4	M3	9,4	6	2,1	2	8
1004357	57	4	M3	9,4	6	2,1	2	8
1004358	58	4	M3	9,4	6	2,1	2	8
1004359	59	4	M3	9,4	6	2,1	2	8
1004360	60	4	M3	9,4	6	2,1	2	8
1004361	61	4	M3	9,4	6	2,1	2	8
1004362	62	4	M3	9,4	6	2,1	2	8
1004363	63	4	M3	9,4	6	2,1	2	8
1004364	64	4	M3	9,4	6	2,1	2	8
1004365	65	4	M3	9,4	6	2,1	2	8

PCB supports with male thread | M4 AF8 | for sheet 2.0 mm



PCB supports with male thread M4, width across flats 8 - pluggable, for conductor plates of 2.0 mm thickness

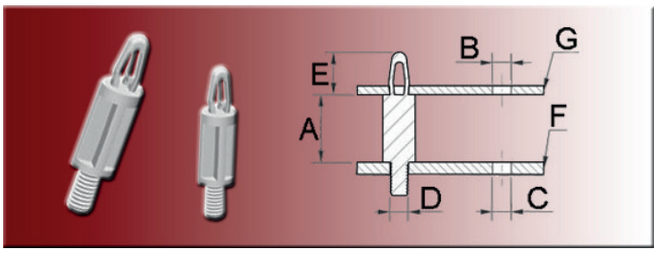
Material: PA, temperature-resistant until approx. 110°C
Colour: black

Part no.	A	B	C	D	E	F	S	SW
1004403	3	4	M4	9,4	6,4	2,1	2	8
1004404	4	4	M4	9,4	6,4	2,1	2	8
1004405	5	4	M4	9,4	6,4	2,1	2	8
1004406	6	4	M4	9,4	6,4	2,1	2	8
1004407	7	4	M4	9,4	6,4	2,1	2	8
1004408	8	4	M4	9,4	6,4	2,1	2	8
1004409	9	4	M4	9,4	6,4	2,1	2	8
1004410	10	4	M4	9,4	6,4	2,1	2	8
1004411	11	4	M4	9,4	6,4	2,1	2	8
1004412	12	4	M4	9,4	6,4	2,1	2	8
1004413	13	4	M4	9,4	6,4	2,1	2	8
1004414	14	4	M4	9,4	6,4	2,1	2	8
1004415	15	4	M4	9,4	6,4	2,1	2	8
1004416	16	4	M4	9,4	6,4	2,1	2	8
1004417	17	4	M4	9,4	6,4	2,1	2	8
1004418	18	4	M4	9,4	6,4	2,1	2	8
1004419	19	4	M4	9,4	6,4	2,1	2	8
1004420	20	4	M4	9,4	6,4	2,1	2	8
1004421	21	4	M4	9,4	6,4	2,1	2	8
1004422	22	4	M4	9,4	6,4	2,1	2	8
1004423	23	4	M4	9,4	6,4	2,1	2	8
1004424	24	4	M4	9,4	6,4	2,1	2	8
1004425	25	4	M4	9,4	6,4	2,1	2	8
1004426	26	4	M4	9,4	6,4	2,1	2	8
1004427	27	4	M4	9,4	6,4	2,1	2	8
1004428	28	4	M4	9,4	6,4	2,1	2	8
1004429	29	4	M4	9,4	6,4	2,1	2	8
1004430	30	4	M4	9,4	6,4	2,1	2	8
1004431	31	4	M4	9,4	6,4	2,1	2	8
1004432	32	4	M4	9,4	6,4	2,1	2	8
1004433	33	4	M4	9,4	6,4	2,1	2	8
1004434	34	4	M4	9,4	6,4	2,1	2	8
1004435	35	4	M4	9,4	6,4	2,1	2	8



Part no.	A	B	C	D	E	F	S	SW
1004436	36	4	M4	9,4	6,4	2,1	2	8
1004437	37	4	M4	9,4	6,4	2,1	2	8
1004438	38	4	M4	9,4	6,4	2,1	2	8
1004439	39	4	M4	9,4	6,4	2,1	2	8
1004440	40	4	M4	9,4	6,4	2,1	2	8
1004441	41	4	M4	9,4	6,4	2,1	2	8
1004442	42	4	M4	9,4	6,4	2,1	2	8
1004443	43	4	M4	9,4	6,4	2,1	2	8
1004444	44	4	M4	9,4	6,4	2,1	2	8
1004445	45	4	M4	9,4	6,4	2,1	2	8
1004446	46	4	M4	9,4	6,4	2,1	2	8
1004447	47	4	M4	9,4	6,4	2,1	2	8
1004448	48	4	M4	9,4	6,4	2,1	2	8
1004449	49	4	M4	9,4	6,4	2,1	2	8
1004450	50	4	M4	9,4	6,4	2,1	2	8
1004451	51	4	M4	9,4	6,4	2,1	2	8
1004452	52	4	M4	9,4	6,4	2,1	2	8
1004453	53	4	M4	9,4	6,4	2,1	2	8
1004454	54	4	M4	9,4	6,4	2,1	2	8
1004455	55	4	M4	9,4	6,4	2,1	2	8
1004456	56	4	M4	9,4	6,4	2,1	2	8
1004457	57	4	M4	9,4	6,4	2,1	2	8
1004458	58	4	M4	9,4	6,4	2,1	2	8
1004459	59	4	M4	9,4	6,4	2,1	2	8
1004460	60	4	M4	9,4	6,4	2,1	2	8
1004461	61	4	M4	9,4	6,4	2,1	2	8
1004462	62	4	M4	9,4	6,4	2,1	2	8
1004463	63	4	M4	9,4	6,4	2,1	2	8
1004464	64	4	M4	9,4	6,4	2,1	2	8
1004465	65	4	M4	9,4	6,4	2,1	2	8

PCB supports with male thread | M4

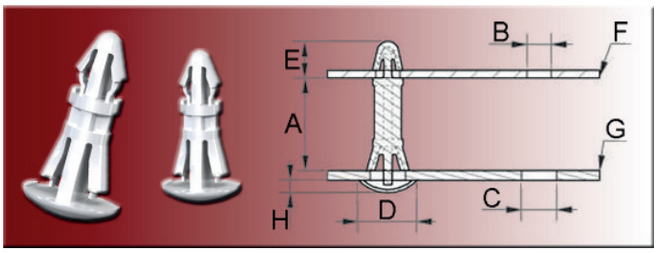


M4 thread on one side for mounting with a screw nut.
Also combinable with PCB spacers type 138, see page 215.

Material: PA 6.6
Colour: natural

Part no.	A	B	C	D	E	F	G
1001048	4,8	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001060	6,4	4	4,0	M4	10,2	0,4-3,0	1,0-2,0
1001079	7,9	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001090	9,5	4	4,0	M4	10,2	0,4-3,0	1,0-2,0
1001111	11,1	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001127	12,7	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001143	14,3	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001159	15,9	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001175	17,5	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001191	19,1	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001220	20,6	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001222	22,2	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001238	23,8	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001254	25,4	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001270	27,0	4	4,2	M4	9,0	0,5-3,0	1,0-1,8
1001286	28,6	4	4,2	M4	9,0	0,5-3,0	1,0-1,8

Pluggable PCB supports | with head | for sheet 1.0 mm



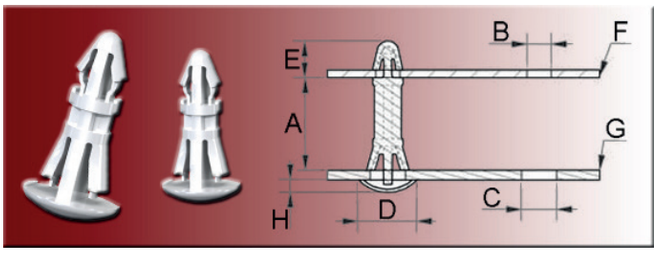
No screws or nuts necessary - simple „snap-on assembly“ for sheet thickness 1 mm.

Material: PA
Colour: black

Part no.	A	B	C	D	E	F	G	H
1003003	3,2	3,2	5	9	9,8	1,5	1	1,7
1003004	4,0	3,2	5	9	9,8	1,5	1	1,7
1003005	5,0	3,2	5	9	9,8	1,5	1	1,7
1003006	6,0	3,2	5	9	9,8	1,5	1	1,7
1003007	7,0	3,2	5	9	9,8	1,5	1	1,7
1003008	8,0	3,2	5	9	9,8	1,5	1	1,7
1003009	9,0	3,2	5	9	9,8	1,5	1	1,7
1003010	10,0	3,2	5	9	9,8	1,5	1	1,7
1003011	11,0	3,2	5	9	9,8	1,5	1	1,7
1003012	12,0	3,2	5	9	9,8	1,5	1	1,7
1003013	13,0	3,2	5	9	9,8	1,5	1	1,7
1003014	14,0	3,2	5	9	9,8	1,5	1	1,7
1003015	15,0	3,2	5	9	9,8	1,5	1	1,7
1003016	16,0	3,2	5	9	9,8	1,5	1	1,7
1003017	17,0	3,2	5	9	9,8	1,5	1	1,7
1003018	18,0	3,2	5	9	9,8	1,5	1	1,7
1003019	19,0	3,2	5	9	9,8	1,5	1	1,7
1003020	20,0	3,2	5	9	9,8	1,5	1	1,7
1003021	21,0	3,2	5	9	9,8	1,5	1	1,7
1003022	22,0	3,2	5	9	9,8	1,5	1	1,7
1003023	23,0	3,2	5	9	9,8	1,5	1	1,7
1003024	24,0	3,2	5	9	9,8	1,5	1	1,7
1003025	25,0	3,2	5	9	9,8	1,5	1	1,7
1003026	26,0	3,2	5	9	9,8	1,5	1	1,7
1003027	27,0	3,2	5	9	9,8	1,5	1	1,7
1003028	28,0	3,2	5	9	9,8	1,5	1	1,7
1003029	29,0	3,2	5	9	9,8	1,5	1	1,7
1003030	30,0	3,2	5	9	9,8	1,5	1	1,7
1003031	31,0	3,2	5	9	9,8	1,5	1	1,7
1003032	32,0	3,2	5	9	9,8	1,5	1	1,7
1003033	33,0	3,2	5	9	9,8	1,5	1	1,7
1003034	34,0	3,2	5	9	9,8	1,5	1	1,7

Part no.	A	B	C	D	E	F	G	H
1003035	35,0	3,2	5	9	9,8	1,5	1	1,7
1003036	36,0	3,2	5	9	9,8	1,5	1	1,7

Pluggable PCB supports | with head | for sheet 2.0 mm



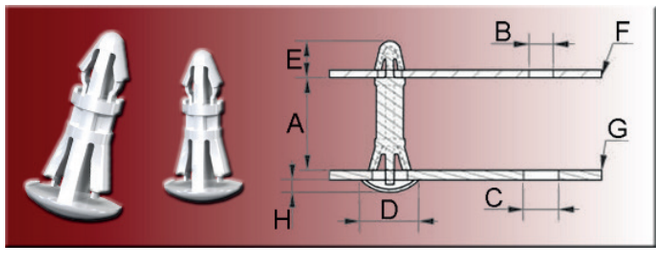
No screws or nuts necessary - simple „snap-on assembly“ for sheet thickness 2 mm.

Material: PA
Colour: black

Part no.	A	B	C	D	E	F	G	H
1003103	3,2	3,2	5	9	9,8	1,5	2	1,7
1003104	4,0	3,2	5	9	9,8	1,5	2	1,7
1003105	5,0	3,2	5	9	9,8	1,5	2	1,7
1003106	6,0	3,2	5	9	9,8	1,5	2	1,7
1003107	7,0	3,2	5	9	9,8	1,5	2	1,7
1003108	8,0	3,2	5	9	9,8	1,5	2	1,7
1003109	9,0	3,2	5	9	9,8	1,5	2	1,7
1003110	10,0	3,2	5	9	9,8	1,5	2	1,7
1003111	11,0	3,2	5	9	9,8	1,5	2	1,7
1003112	12,0	3,2	5	9	9,8	1,5	2	1,7
1003113	13,0	3,2	5	9	9,8	1,5	2	1,7
1003114	14,0	3,2	5	9	9,8	1,5	2	1,7
1003115	15,0	3,2	5	9	9,8	1,5	2	1,7
1003116	16,0	3,2	5	9	9,8	1,5	2	1,7
1003117	17,0	3,2	5	9	9,8	1,5	2	1,7
1003118	18,0	3,2	5	9	9,8	1,5	2	1,7
1003119	19,0	3,2	5	9	9,8	1,5	2	1,7
1003120	20,0	3,2	5	9	9,8	1,5	2	1,7
1003121	21,0	3,2	5	9	9,8	1,5	2	1,7
1003122	22,0	3,2	5	9	9,8	1,5	2	1,7
1003123	23,0	3,2	5	9	9,8	1,5	2	1,7
1003124	24,0	3,2	5	9	9,8	1,5	2	1,7
1003125	25,0	3,2	5	9	9,8	1,5	2	1,7
1003126	26,0	3,2	5	9	9,8	1,5	2	1,7
1003127	27,0	3,2	5	9	9,8	1,5	2	1,7
1003128	28,0	3,2	5	9	9,8	1,5	2	1,7
1003129	29,0	3,2	5	9	9,8	1,5	2	1,7

Part no.	A	B	C	D	E	F	G	H
1003130	30,0	3,2	5	9	9,8	1,5	2	1,7
1003131	31,0	3,2	5	9	9,8	1,5	2	1,7
1003132	32,0	3,2	5	9	9,8	1,5	2	1,7
1003133	33,0	3,2	5	9	9,8	1,5	2	1,7
1003134	34,0	3,2	5	9	9,8	1,5	2	1,7
1003135	35,0	3,2	5	9	9,8	1,5	2	1,7
1003136	36,0	3,2	5	9	9,8	1,5	2	1,7

Pluggable PCB supports | with head | for sheet 2.5 mm



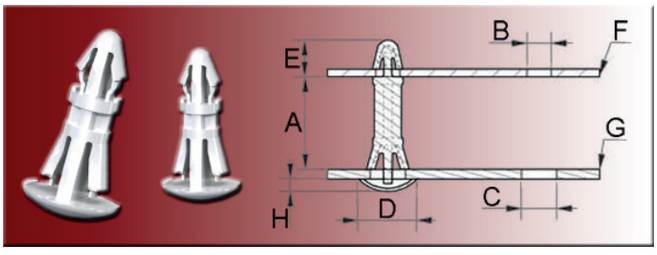
No screws or nuts necessary - simple „snap-on assembly“ for sheet thickness 2.5 mm.

Material: PA
Colour: black

Part no.	A	B	C	D	E	F	G	H
1003203	3,2	3,2	5	9	9,8	1,5	2,5	1,7
1003204	4,0	3,2	5	9	9,8	1,5	2,5	1,7
1003205	5,0	3,2	5	9	9,8	1,5	2,5	1,7
1003206	6,0	3,2	5	9	9,8	1,5	2,5	1,7
1003207	7,0	3,2	5	9	9,8	1,5	2,5	1,7
1003208	8,0	3,2	5	9	9,8	1,5	2,5	1,7
1003209	9,0	3,2	5	9	9,8	1,5	2,5	1,7
1003210	10,0	3,2	5	9	9,8	1,5	2,5	1,7
1003211	11,0	3,2	5	9	9,8	1,5	2,5	1,7
1003212	12,0	3,2	5	9	9,8	1,5	2,5	1,7
1003213	13,0	3,2	5	9	9,8	1,5	2,5	1,7
1003214	14,0	3,2	5	9	9,8	1,5	2,5	1,7
1003215	15,0	3,2	5	9	9,8	1,5	2,5	1,7
1003216	16,0	3,2	5	9	9,8	1,5	2,5	1,7
1003217	17,0	3,2	5	9	9,8	1,5	2,5	1,7
1003218	18,0	3,2	5	9	9,8	1,5	2,5	1,7
1003219	19,0	3,2	5	9	9,8	1,5	2,5	1,7
1003220	20,0	3,2	5	9	9,8	1,5	2,5	1,7
1003221	21,0	3,2	5	9	9,8	1,5	2,5	1,7
1003222	22,0	3,2	5	9	9,8	1,5	2,5	1,7
1003223	23,0	3,2	5	9	9,8	1,5	2,5	1,7
1003224	24,0	3,2	5	9	9,8	1,5	2,5	1,7
1003225	25,0	3,2	5	9	9,8	1,5	2,5	1,7

Part no.	A	B	C	D	E	F	G	H
1003226	26,0	3,2	5	9	9,8	1,5	2,5	1,7
1003227	27,0	3,2	5	9	9,8	1,5	2,5	1,7
1003228	28,0	3,2	5	9	9,8	1,5	2,5	1,7
1003229	29,0	3,2	5	9	9,8	1,5	2,5	1,7
1003230	30,0	3,2	5	9	9,8	1,5	2,5	1,7
1003231	31,0	3,2	5	9	9,8	1,5	2,5	1,7
1003232	32,0	3,2	5	9	9,8	1,5	2,5	1,7
1003233	33,0	3,2	5	9	9,8	1,5	2,5	1,7
1003234	34,0	3,2	5	9	9,8	1,5	2,5	1,7
1003235	35,0	3,2	5	9	9,8	1,5	2,5	1,7
1003236	36,0	3,2	5	9	9,8	1,5	2,5	1,7

Pluggable PCB supports | with head | for sheet 3.0 mm



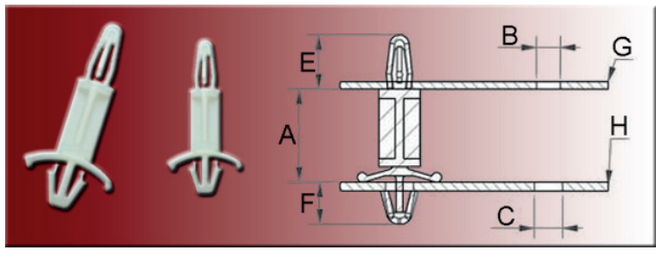
No screws or nuts necessary - simple „snap-on assembly“ for sheet thickness 3 mm.

Material: PA
Colour: black

Part no.	A	B	C	D	E	F	G	H
1003303	3,2	3,2	5	9	9,8	1,5	3	1,7
1003304	4,0	3,2	5	9	9,8	1,5	3	1,7
1003305	5,0	3,2	5	9	9,8	1,5	3	1,7
1003306	6,0	3,2	5	9	9,8	1,5	3	1,7
1003307	7,0	3,2	5	9	9,8	1,5	3	1,7
1003308	8,0	3,2	5	9	9,8	1,5	3	1,7
1003309	9,0	3,2	5	9	9,8	1,5	3	1,7
1003310	10,0	3,2	5	9	9,8	1,5	3	1,7
1003311	11,0	3,2	5	9	9,8	1,5	3	1,7
1003312	12,0	3,2	5	9	9,8	1,5	3	1,7
1003313	13,0	3,2	5	9	9,8	1,5	3	1,7
1003314	14,0	3,2	5	9	9,8	1,5	3	1,7
1003315	15,0	3,2	5	9	9,8	1,5	3	1,7
1003316	16,0	3,2	5	9	9,8	1,5	3	1,7
1003317	17,0	3,2	5	9	9,8	1,5	3	1,7
1003318	18,0	3,2	5	9	9,8	1,5	3	1,7
1003319	19,0	3,2	5	9	9,8	1,5	3	1,7
1003320	20,0	3,2	5	9	9,8	1,5	3	1,7
1003321	21,0	3,2	5	9	9,8	1,5	3	1,7

Part no.	A	B	C	D	E	F	G	H
1003322	22,0	3,2	5	9	9,8	1,5	3	1,7
1003323	23,0	3,2	5	9	9,8	1,5	3	1,7
1003324	24,0	3,2	5	9	9,8	1,5	3	1,7
1003325	25,0	3,2	5	9	9,8	1,5	3	1,7
1003326	26,0	3,2	5	9	9,8	1,5	3	1,7
1003327	27,0	3,2	5	9	9,8	1,5	3	1,7
1003328	28,0	3,2	5	9	9,8	1,5	3	1,7
1003329	29,0	3,2	5	9	9,8	1,5	3	1,7
1003330	30,0	3,2	5	9	9,8	1,5	3	1,7
1003331	31,0	3,2	5	9	9,8	1,5	3	1,7
1003332	32,0	3,2	5	9	9,8	1,5	3	1,7
1003333	33,0	3,2	5	9	9,8	1,5	3	1,7
1003334	34,0	3,2	5	9	9,8	1,5	3	1,7
1003335	35,0	3,2	5	9	9,8	1,5	3	1,7
1003336	36,0	3,2	5	9	9,8	1,5	3	1,7

Pluggable PCB supports | with snap-on connection

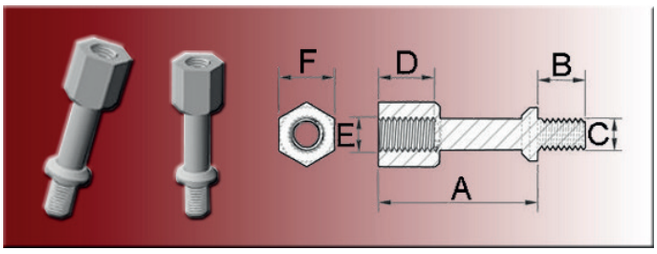


No screws or nuts necessary, simple „snap-on assembly“.

Material: PA 6.6
Colour: natural

Part no.	A	B	C	D	E	F	G	H
1000050	4,8	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000060	6,4	4	4,8	14	10	8	1,4-1,8	0,4-2,0
1000080	8,0	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000100	9,5	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000110	11,4	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000120	12,7	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000150	15,8	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000170	17,5	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000190	19,0	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000210	20,6	4	4,7	14	9	8	1,4-1,8	0,4-2,0
1000230	23,8	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000250	25,4	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000270	27,0	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000300	30,0	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000372	22,2	4	4,8	14	9	8	1,4-1,8	0,4-2,0
1000380	28,6	4	4,8	14	9	8	1,4-1,8	0,4-2,0

PCB supports accessories | PCB spacers - screwable



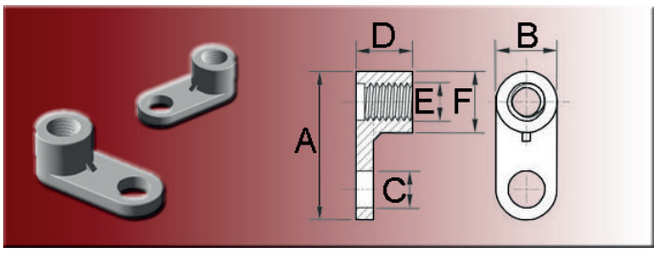
PCB connector, screwable - enables the connection of several conductor plates. By means of PCB fastening feet type 139 (page 215) a pre-assembly of PC board bundles is possible. Can also be combined with spacers type 005 (page 238 ff) or PCB supports type 1001 (page 209).

Material: PA 6 + 30% glass fibre reinforced
Colour: natural

Part no.	A	B	C	D	E	F
1380050	10	5	M3	5,5	M3	5,5
1380060	15	5	M3	5,5	M3	5,5
1380070	20	5	M3	5,5	M3	5,5
1380080	25	5	M3	5,5	M3	5,5
1380090	30	5	M3	5,5	M3	5,5

Part no.	A	B	C	D	E	F
1380100	10	6	M4	6,5	M4	7,0
1380150	15	6	M4	6,5	M4	7,0
1380200	20	6	M4	6,5	M4	7,0
1380250	25	6	M4	6,5	M4	7,0
1380300	30	6	M4	6,5	M4	7,0

PCB supports accessories | Fastening feet - screwable



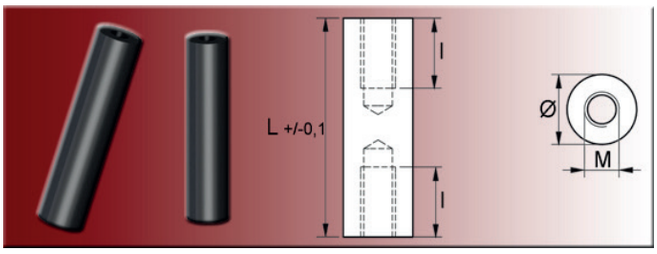
PCB fastening feet - screwable

Material: PA 6.6
Colour: natural

Part no.	A	B	C	D	E	F
1390300	17	7	4	5,5	M3	7

Part no.	A	B	C	D	E	F
1390400	17	7	4	6,5	M4	7

Threaded spacers of plastic | Round PA / FF threaded



Spacer bolts with female thread, round

Material: PA-glass fibre reinforced, temperature-resistant until 110°C
Colour: black

Thread length l = continuous (if L </= 15 mm)
Thread length l = 10 mm (if L >/= 21 mm)
if L = 16-20 mm --> 1 mm centre bar.

Further dimensions or metal versions on written request!

Part no.	M	L	Ø
0021005	M3	5	6
0021006	M3	6	6
0021007	M3	7	6
0021008	M3	8	6
0021009	M3	9	6
0021010	M3	10	6
0021011	M3	11	6
0021012	M3	12	6
0021013	M3	13	6
0021014	M3	14	6
0021015	M3	15	6
0021016	M3	16	6
0021017	M3	17	6
0021018	M3	18	6
0021019	M3	19	6
0021020	M3	20	6
0021021	M3	21	6
0021022	M3	22	6
0021023	M3	23	6
0021024	M3	24	6
0021025	M3	25	6
0021026	M3	26	6
0021027	M3	27	6
0021028	M3	28	6
0021029	M3	29	6
0021030	M3	30	6
0021031	M3	31	6
0021032	M3	32	6
0021033	M3	33	6
0021034	M3	34	6
0021035	M3	35	6

Part no.	M	L	Ø
0021036	M3	36	6
0021037	M3	37	6
0021038	M3	38	6
0021039	M3	39	6
0021040	M3	40	6
0021041	M3	41	6
0021042	M3	42	6
0021043	M3	43	6
0021044	M3	44	6
0021045	M3	45	6
0021046	M3	46	6
0021047	M3	47	6
0021048	M3	48	6
0021049	M3	49	6
0021050	M3	50	6
0021051	M3	51	6
0021052	M3	52	6
0021053	M3	53	6
0021054	M3	54	6
0021055	M3	55	6
0021056	M3	56	6
0021057	M3	57	6
0021058	M3	58	6
0021059	M3	59	6
0021060	M3	60	6
0021105	M4	5	8
0021106	M4	6	8
0021107	M4	7	8
0021108	M4	8	8
0021109	M4	9	8
0021110	M4	10	8

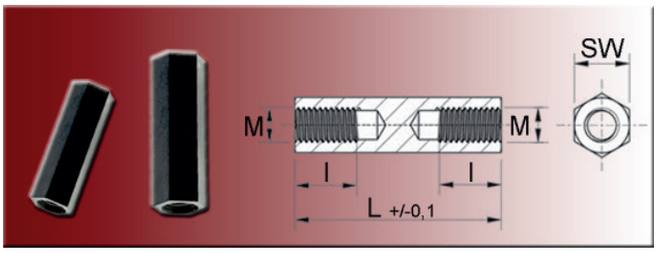
Part no.	M	L	Ø
0021111	M4	11	8
0021112	M4	12	8
0021113	M4	13	8
0021114	M4	14	8
0021115	M4	15	8
0021116	M4	16	8
0021117	M4	17	8
0021118	M4	18	8
0021119	M4	19	8
0021120	M4	20	8
0021121	M4	21	8
0021122	M4	22	8
0021123	M4	23	8
0021124	M4	24	8
0021125	M4	25	8
0021126	M4	26	8
0021127	M4	27	8
0021128	M4	28	8
0021129	M4	29	8
0021130	M4	30	8
0021131	M4	31	8
0021132	M4	32	8
0021133	M4	33	8
0021134	M4	34	8
0021135	M4	35	8
0021136	M4	36	8
0021137	M4	37	8
0021138	M4	38	8
0021139	M4	39	8
0021140	M4	40	8
0021141	M4	41	8

Part no.	M	L	Ø
0021142	M4	42	8
0021143	M4	43	8
0021144	M4	44	8
0021145	M4	45	8
0021146	M4	46	8
0021147	M4	47	8
0021148	M4	48	8
0021149	M4	49	8

Part no.	M	L	Ø
0021150	M4	50	8
0021151	M4	51	8
0021152	M4	52	8
0021153	M4	53	8
0021154	M4	54	8
0021155	M4	55	8
0021156	M4	56	8
0021157	M4	57	8

Part no.	M	L	Ø
0021158	M4	58	8
0021159	M4	59	8
0021160	M4	60	8
0021161	M4	61	8
0021162	M4	62	8
0021163	M4	63	8
0021164	M4	64	8
0021165	M4	65	8

Threaded spacers of plastic | Hexagonal PA-GFR / FF threaded



Spacer bolts with female thread, hexagonal

Material: PA-glass fibre reinforced, temperature-resistant until 110°C
Colour: black

Thread length l = continuous (if L </= 15 mm)
Thread length l = 10 mm (if L >/= 21 mm)
if L = 16-20 mm --> 1 mm centre bar.

Further dimensions or metal versions on written request!

Part no.	SW	M	L
0020704	5	M2,5	4
0020705	5	M2,5	5
0020706	5	M2,5	6
0020707	5	M2,5	7
0020708	5	M2,5	8
0020709	5	M2,5	9
0020710	5	M2,5	10
0020711	5	M2,5	11
0020712	5	M2,5	12
0020713	5	M2,5	13
0020714	5	M2,5	14
0020715	5	M2,5	15
0020716	5	M2,5	16
0020717	5	M2,5	17
0020718	5	M2,5	18
0020719	5	M2,5	19
0020720	5	M2,5	20
0020721	5	M2,5	21
0020722	5	M2,5	22
0020723	5	M2,5	23
0020724	5	M2,5	24

Part no.	SW	M	L
0020725	5	M2,5	25
0020726	5	M2,5	26
0020727	5	M2,5	27
0020728	5	M2,5	28
0020729	5	M2,5	29
0020730	5	M2,5	30
0020731	5	M2,5	31
0020732	5	M2,5	32
0020733	5	M2,5	33
0020734	5	M2,5	34
0020735	5	M2,5	35
0020736	5	M2,5	36
0020737	5	M2,5	37
0020738	5	M2,5	38
0020739	5	M2,5	39
0020740	5	M2,5	40
0020741	5	M2,5	41
0020742	5	M2,5	42
0020743	5	M2,5	43
0020744	5	M2,5	44
0020745	5	M2,5	45

Part no.	SW	M	L
0020746	5	M2,5	46
0020747	5	M2,5	47
0020748	5	M2,5	48
0020749	5	M2,5	49
0020750	5	M2,5	50
0020751	5	M2,5	51
0020752	5	M2,5	52
0020753	5	M2,5	53
0020754	5	M2,5	54
0020755	5	M2,5	55
0021704	6	M2,5	4
0021705	6	M2,5	5
0021706	6	M2,5	6
0021707	6	M2,5	7
0021708	6	M2,5	8
0021709	6	M2,5	9
0021710	6	M2,5	10
0021711	6	M2,5	11
0021712	6	M2,5	12
0021714	6	M2,5	14
0021715	6	M2,5	15



Part no.	SW	M	L
0021716	6	M2,5	16
0021717	6	M2,5	17
0021718	6	M2,5	18
0021719	6	M2,5	19
0021720	6	M2,5	20
0021721	6	M2,5	21
0021722	6	M2,5	22
0021723	6	M2,5	23
0021724	6	M2,5	24
0021725	6	M2,5	25
0021726	6	M2,5	26
0021727	6	M2,5	27
0021728	6	M2,5	28
0021729	6	M2,5	29
0021730	6	M2,5	30
0021731	6	M2,5	31
0021732	6	M2,5	32
0021733	6	M2,5	33
0021734	6	M2,5	34
0021735	6	M2,5	35
0021736	6	M2,5	36
0021737	6	M2,5	37
0021738	6	M2,5	38
0021739	6	M2,5	39
0021740	6	M2,5	40
0021741	6	M2,5	41
0021742	6	M2,5	42
0021743	6	M2,5	43
0021744	6	M2,5	44
0021745	6	M2,5	45
0021746	6	M2,5	46
0021747	6	M2,5	47
0021748	6	M2,5	48
0021749	6	M2,5	49
0021750	6	M2,5	50
0021751	6	M2,5	51
0021752	6	M2,5	52
0021753	6	M2,5	53
0021754	6	M2,5	54
0021755	6	M2,5	55
0021205	6	M3	5

Part no.	SW	M	L
0021206	6	M3	6
0021207	6	M3	7
0021208	6	M3	8
0021209	6	M3	9
0021210	6	M3	10
0021211	6	M3	11
0021212	6	M3	12
0021213	6	M3	13
0021214	6	M3	14
0021215	6	M3	15
0021216	6	M3	16
0021217	6	M3	17
0021218	6	M3	18
0021219	6	M3	19
0021220	6	M3	20
0021221	6	M3	21
0021222	6	M3	22
0021223	6	M3	23
0021224	6	M3	24
0021225	6	M3	25
0021226	6	M3	26
0021227	6	M3	27
0021228	6	M3	28
0021229	6	M3	29
0021230	6	M3	30
0021231	6	M3	31
0021232	6	M3	32
0021233	6	M3	33
0021234	6	M3	34
0021235	6	M3	35
0021236	6	M3	36
0021237	6	M3	37
0021238	6	M3	38
0021239	6	M3	39
0021240	6	M3	40
0021241	6	M3	41
0021242	6	M3	42
0021243	6	M3	43
0021244	6	M3	44
0021245	6	M3	45
0021246	6	M3	46

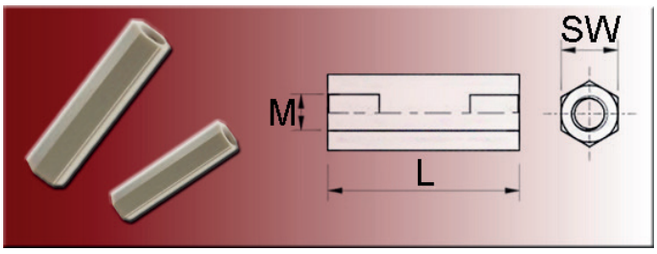
Part no.	SW	M	L
0021247	6	M3	47
0021248	6	M3	48
0021249	6	M3	49
0021250	6	M3	50
0021251	6	M3	51
0021252	6	M3	52
0021253	6	M3	53
0021254	6	M3	54
0021255	6	M3	55
0021256	6	M3	56
0021257	6	M3	57
0021258	6	M3	58
0021259	6	M3	59
0021260	6	M3	60
0021261	6	M3	61
0021262	6	M3	62
0021263	6	M3	63
0021264	6	M3	64
0021265	6	M3	65
0021305	8	M4	5
0021306	8	M4	6
0021307	8	M4	7
0021308	8	M4	8
0021309	8	M4	9
0021310	8	M4	10
0021311	8	M4	11
0021312	8	M4	12
0021313	8	M4	13
0021314	8	M4	14
0021315	8	M4	15
0021316	8	M4	16
0021317	8	M4	17
0021318	8	M4	18
0021319	8	M4	19
0021320	8	M4	20
0021321	8	M4	21
0021322	8	M4	22
0021323	8	M4	23
0021324	8	M4	24
0021325	8	M4	25
0021326	8	M4	26

Part no.	SW	M	L
0021327	8	M4	27
0021328	8	M4	28
0021329	8	M4	29
0021330	8	M4	30
0021331	8	M4	31
0021332	8	M4	32
0021333	8	M4	33
0021334	8	M4	34
0021335	8	M4	35
0021336	8	M4	36
0021337	8	M4	37
0021338	8	M4	38
0021339	8	M4	39
0021340	8	M4	40
0021341	8	M4	41
0021342	8	M4	42
0021343	8	M4	43
0021344	8	M4	44
0021345	8	M4	45
0021346	8	M4	46
0021347	8	M4	47
0021348	8	M4	48
0021349	8	M4	49
0021350	8	M4	50
0021351	8	M4	51
0021352	8	M4	52
0021353	8	M4	53
0021354	8	M4	54
0021355	8	M4	55
0021356	8	M4	56
0021357	8	M4	57
0021359	8	M4	59
0021360	8	M4	60
0021361	8	M4	61

Part no.	SW	M	L
0021362	8	M4	62
0021363	8	M4	63
0021364	8	M4	64
0021365	8	M4	65
0021366	8	M4	66
0021367	8	M4	67
0021368	8	M4	68
0021405	10	M5	5
0021406	10	M5	6
0021407	10	M5	7
0021408	10	M5	8
0021409	10	M5	9
0021410	10	M5	10
0021411	10	M5	11
0021412	10	M5	12
0021413	10	M5	13
0021414	10	M5	14
0021415	10	M5	15
0021416	10	M5	16
0021417	10	M5	17
0021418	10	M5	18
0021419	10	M5	19
0021420	10	M5	20
0021421	10	M5	21
0021422	10	M5	22
0021423	10	M5	23
0021424	10	M5	24
0021425	10	M5	25
0021426	10	M5	26
0021427	10	M5	27
0021428	10	M5	28
0021429	10	M5	29
0021430	10	M5	30
0021431	10	M5	31

Part no.	SW	M	L
0021432	10	M5	32
0021433	10	M5	33
0021434	10	M5	34
0021435	10	M5	35
0021436	10	M5	36
0021437	10	M5	37
0021438	10	M5	38
0021439	10	M5	39
0021440	10	M5	40
0021441	10	M5	41
0021442	10	M5	42
0021443	10	M5	43
0021444	10	M5	44
0021445	10	M5	45
0021446	10	M5	36
0021447	10	M5	47
0021448	10	M5	48
0021449	10	M5	49
0021450	10	M5	50
0021451	10	M5	51
0021452	10	M5	52
0021453	10	M5	53
0021454	10	M5	54
0021455	10	M5	55
0021456	10	M5	56
0021457	10	M5	57
0021458	10	M5	58
0021459	10	M5	59
0021460	10	M5	60
0021461	10	M5	61
0021462	10	M5	62
0021463	10	M5	63
0021464	10	M5	64
0021465	10	M5	65

Threaded spacers of plastic | Hexagonal PEEK / FF threaded



Material: PEEK
Colour: light brown

Temperature: max. 180°C
High-strength and excellent form stability
High modulus of elasticity and excellent creep resistance
Resistant to many chemicals
Flammability rating: UL94 V0

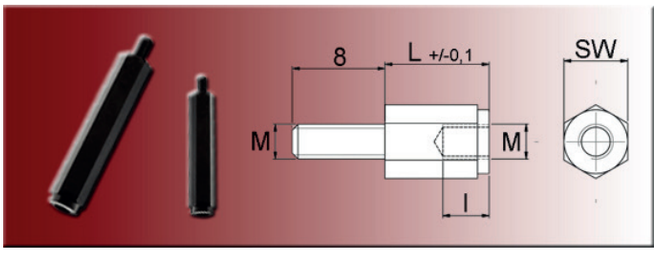
Further PEEK products: series 280 to series 285 and 386

Part no.	L	M	SW
3020304	4	M3	6
3020305	5	M3	6
3020306	6	M3	6
3020308	8	M3	6
3020310	10	M3	6
3020312	12	M3	6
3020315	15	M3	6
3020318	18	M3	6
3020320	20	M3	6
3020325	25	M3	6
3020330	30	M3	6
3020405	5	M4	7
3020406	6	M4	7
3020408	8	M4	7
3020410	10	M4	7
3020412	12	M4	7

Part no.	L	M	SW
3020415	15	M4	7
3020418	18	M4	7
3020420	20	M4	7
3020425	25	M4	7
3020430	30	M4	7
3020435	35	M4	7
3020506	6	M5	8
3020508	8	M5	8
3020510	10	M5	8
3020512	12	M5	8
3020515	15	M5	8
3020518	18	M5	8
3020520	20	M5	8
3020525	25	M5	8
3020530	30	M5	8
3020535	35	M5	8

Part no.	L	M	SW
3020540	40	M5	8
3020615	15	M6	10
3020618	18	M6	10
3020620	20	M6	10
3020625	25	M6	10
3020630	30	M6	10
3020635	35	M6	10
3020640	40	M6	10
3020650	50	M6	10
3020820	20	M8	13
3020825	25	M8	13
3020830	30	M8	13
3020835	35	M8	13
3020840	40	M8	13
3020850	50	M8	13

Threaded spacers of plastic | Hexagonal PA / FM threaded



Spacer bolts with female and male thread.

Material: PA 6.6
Colour: black

Further dimensions or materials on written request.

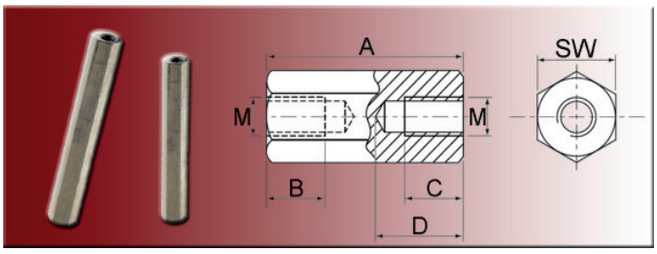
Part no.	SW	M	L
0021505	6	M3	5
0021506	6	M3	6
0021507	6	M3	7
0021508	6	M3	8
0021509	6	M3	9

Part no.	SW	M	L
0021510	6	M3	10
0021511	6	M3	11
0021512	6	M3	12
0021513	6	M3	13
0021514	6	M3	14

Part no.	SW	M	L
0021515	6	M3	15
0021516	6	M3	16
0021517	6	M3	17
0021518	6	M3	18
0021519	6	M3	19

Part no.	SW	M	L
0021520	6	M3	20
0021521	6	M3	21
0021522	6	M3	22
0021523	6	M3	23
0021524	6	M3	24
0021525	6	M3	25
0021526	6	M3	26
0021527	6	M3	27
0021528	6	M3	28
0021529	6	M3	29
0021530	6	M3	30
0021531	6	M3	31
0021532	6	M3	32
0021533	6	M3	33
0021534	6	M3	34
0021535	6	M3	35
0021536	6	M3	36
0021537	6	M3	37
0021538	6	M3	38
0021539	6	M3	39
0021540	6	M3	40
0021541	6	M3	41
0021542	6	M3	42
0021543	6	M3	43
0021544	6	M3	44
0021545	6	M3	45
0021546	6	M3	46
0021547	6	M3	47
0021548	6	M3	48
0021549	6	M3	49
0021550	6	M3	50
0021551	6	M3	51
0021552	6	M3	52
0021553	6	M3	53
0021554	6	M3	54
0021555	6	M3	55
0021556	6	M3	56
0021557	6	M3	57
0021558	6	M3	58
0021559	6	M3	59
0021560	6	M3	60
0021561	6	M3	61
0021605	8	M4	5
0021606	8	M4	6
0021607	8	M4	7
0021608	8	M4	8
0021609	8	M4	9
0021610	8	M4	10
0021611	8	M4	11
0021612	8	M4	12
0021613	8	M4	13
0021614	8	M4	14
0021615	8	M4	15
0021616	8	M4	16
0021617	8	M4	17
0021618	8	M4	18
0021619	8	M4	19
0021620	8	M4	20
0021621	8	M4	21
0021622	8	M4	22
0021623	8	M4	23
0021624	8	M4	24
0021625	8	M4	25
0021626	8	M4	26
0021627	8	M4	27
0021628	8	M4	28
0021629	8	M4	29
0021630	8	M4	30
0021631	8	M4	31
0021632	8	M4	32
0021633	8	M4	33
0021634	8	M4	34
0021635	8	M4	35
0021636	8	M4	36
0021637	8	M4	37
0021638	8	M4	38
0021639	8	M4	39
0021640	8	M4	40
0021641	8	M4	41
0021642	8	M4	42
0021643	8	M4	43
0021644	8	M4	44
0021645	8	M4	45
0021646	8	M4	46
0021647	8	M4	47
0021648	8	M4	48
0021649	8	M4	49
0021650	8	M4	50
0021651	8	M4	51
0021652	8	M4	52
0021653	8	M4	53
0021654	8	M4	54
0021655	8	M4	55
0021656	8	M4	56
0021657	8	M4	57
0021658	8	M4	58
0021659	8	M4	59
0021660	8	M4	60
0021661	8	M4	61

Threaded spacers of zinc-plated steel | Hexagonal / FF threaded



Spacers with female thread, hexagonal

Material: steel (S300Pb), zinc-plated

Further dimensions and materials on written request!

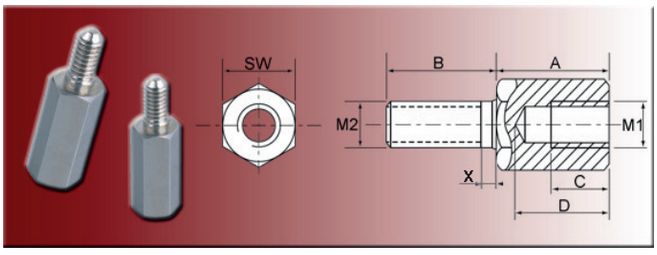
Part no.	SW	M	A	B	C	D
301205041152	5,0	M2,5	5	5	-	5
301208041152	5,0	M2,5	8	8	-	8
301210041152	5,0	M2,5	10	10	-	10
301212041152	5,0	M2,5	12	12	-	12
301215041152	5,0	M2,5	15	15	-	15
301218041152	5,0	M2,5	18	18	-	18
301220041152	5,0	M2,5	20	20	-	20
301225041152	5,0	M2,5	25	10	10	25
301230041152	5,0	M2,5	30	10	10	30
301235041152	5,0	M2,5	35	10	10	15
301240041152	5,0	M2,5	40	10	10	15
301245041152	5,0	M2,5	45	10	10	15
301250041152	5,0	M2,5	50	10	10	15
301305041152	5,0	M3	5	5	-	5
301305141152	5,5	M3	5	5	-	5
301308041152	5,0	M3	8	8	-	8
301308141152	5,5	M3	8	8	-	8
301310041152	5,0	M3	10	10	-	10
301310141152	5,5	M3	10	10	-	10
301312041152	5,0	M3	12	12	-	12
301312141152	5,5	M3	12	12	-	12
301315041152	5,0	M3	15	15	-	15
301315141152	5,5	M3	15	15	-	15
301318041152	5,0	M3	18	18	-	18
301318141152	5,5	M3	18	18	-	18
301320041152	5,0	M3	20	20	-	20
301320141152	5,5	M3	20	20	-	20
301325041152	5,0	M3	25	10	10	25
301325141152	5,5	M3	25	10	10	25
301330041152	5,0	M3	30	10	10	30
301330141152	5,5	M3	30	10	10	30
301335041152	5,0	M3	35	10	10	15
301335141152	5,5	M3	35	10	10	15

Part no.	SW	M	A	B	C	D
301340041152	5,0	M3	40	10	10	15
301340141152	5,5	M3	40	10	10	15
301345041152	5,0	M3	45	10	10	15
301345141152	5,5	M3	45	10	10	15
301350041152	5,0	M3	50	10	10	15
301350141152	5,5	M3	50	10	10	15
301355041152	5,0	M3	55	10	10	15
301355141152	5,5	M3	55	10	10	15
301360041152	5,0	M3	60	10	10	15
301360141152	5,5	M3	60	10	10	15
301405041152	7,0	M4	5	5	-	5
301408041152	7,0	M4	8	8	-	8
301410041152	7,0	M4	10	10	-	10
301412041152	7,0	M4	12	12	-	12
301415041152	7,0	M4	15	15	-	15
301418041152	7,0	M4	18	18	-	18
301420041152	7,0	M4	20	20	-	20
301425041152	7,0	M4	25	10	10	25
301430041152	7,0	M4	30	10	10	30
301435041152	7,0	M4	35	10	10	15
301440041152	7,0	M4	40	10	10	15
301445041152	7,0	M4	45	10	10	15
301450041152	7,0	M4	50	10	10	15
301455041152	7,0	M4	55	10	10	15
301460041152	7,0	M4	60	10	10	15
301470041152	7,0	M4	70	10	10	15
301480041152	7,0	M4	80	10	10	15
301510041152	8,0	M5	10	10	-	10
301512041152	8,0	M5	12	12	-	12
301515041152	8,0	M5	15	15	-	15
301518041152	8,0	M5	18	18	-	18
301520041152	8,0	M5	20	10	10	20
301525041152	8,0	M5	25	10	10	25

Part no.	SW	M	A	B	C	D
301530041152	8,0	M5	30	10	10	30
301535041152	8,0	M5	35	10	10	15
301540041152	8,0	M5	40	10	10	15
301545041152	8,0	M5	45	10	10	15
301550041152	8,0	M5	50	10	10	15
301555041152	8,0	M5	55	10	10	15
301560041152	8,0	M5	60	10	10	15
301570041152	8,0	M5	70	10	10	15
301610041152	10,0	M6	10	10	-	10
301612041152	10,0	M6	12	12	-	12
301615041152	10,0	M6	15	15	-	15
301618041152	10,0	M6	18	18	-	18

Part no.	SW	M	A	B	C	D
301620041152	10,0	M6	20	20	-	20
301625041152	10,0	M6	25	25	-	25
301630041152	10,0	M6	30	13	13	30
301635041152	10,0	M6	35	13	13	35
301640041152	10,0	M6	40	13	13	18
301645041152	10,0	M6	45	13	13	18
301650041152	10,0	M6	50	13	13	18
301655041152	10,0	M6	55	13	13	18
301660041152	10,0	M6	60	13	13	18
301670041152	10,0	M6	70	13	13	18
301825041152	11,0	M8	25	-	-	-

Threaded spacers of zinc-plated steel | Hexagonal / FM threaded



Spacers with female/male thread, hexagonal
* = version without recess

Material: steel (S300Pb)

x = max. 1 mm if SW = 5 or 5,5
x = max. 1.4 mm if SW =7
x = max. 1.6 mm if SW = 8
x = max. 2 mm if SW = 10

Further types on written request.

Part no.	SW	M1	M2	A	B	C	D
304305041152	5,0	M3	M3	5	8	3	4
304305141152	5,5	M3	M3	5	8	3	4
304306041152*	5,0	M3	M3	6	8	3	4
304307041152	5,0	M3	M3	7	8	3	4
304308041152	5,0	M3	M3	8	8	4	6
304308141152	5,5	M3	M3	8	8	4	6
304310041152	5,0	M3	M3	10	8	6	8
304310141152	5,5	M3	M3	10	8	6	8
304312041152	5,0	M3	M3	12	8	8	10
304312141152	5,5	M3	M3	12	8	8	10
304315041152	5,0	M3	M3	15	8	8	13
304315141152	5,5	M3	M3	15	8	8	13
304318041152	5,0	M3	M3	18	8	8	15
304318141152	5,5	M3	M3	18	8	8	15
304320041152	5,0	M3	M3	20	8	8	15
304320141152	5,5	M3	M3	20	8	8	15
304325041152	5,0	M3	M3	25	10	10	15



Part no.	SW	M1	M2	A	B	C	D
304325141152	5,5	M3	M3	25	10	10	15
304330041152	5,0	M3	M3	30	10	10	15
304330141152	5,5	M3	M3	30	10	10	15
304335041152	5,0	M3	M3	35	10	10	15
304335141152	5,5	M3	M3	35	10	10	15
304340041152	5,0	M3	M3	40	10	10	15
304340141152	5,5	M3	M3	40	10	10	15
304345041152	5,0	M3	M3	45	10	10	15
304345141152	5,5	M3	M3	45	10	10	15
304350041152	5,0	M3	M3	50	10	10	15
304350141152	5,5	M3	M3	50	10	10	15
304355041152	5,0	M3	M3	55	10	10	15
304355141152	5,5	M3	M3	55	10	10	15
304360041152	5,0	M3	M3	60	10	10	15
304360141152	5,5	M3	M3	60	10	10	15
304405041152	7,0	M4	M4	5	8	3	4
304408041152	7,0	M4	M4	8	8	4	6
304410041152	7,0	M4	M4	10	8	6	8
304412041152	7,0	M4	M4	12	8	8	10
304415041152	7,0	M4	M4	15	8	8	13
304418041152	7,0	M4	M4	18	8	8	15
304420041152	7,0	M4	M4	20	8	8	15
304425041152	7,0	M4	M4	25	10	10	15
304430041152	7,0	M4	M4	30	10	10	15
304435041152	7,0	M4	M4	35	10	10	15
304440041152	7,0	M4	M4	40	10	10	15
304445041152	7,0	M4	M4	45	10	10	15
304450041152	7,0	M4	M4	50	10	10	15
304455041152	7,0	M4	M4	55	10	10	15
304460041152	7,0	M4	M4	60	10	10	15
304470041152	7,0	M4	M4	70	10	10	15
304480041152	7,0	M4	M4	80	10	10	15
304510041152	8,0	M5	M5	10	8	6	8
304512041152	8,0	M5	M5	12	8	8	10
304515041152	8,0	M5	M5	15	8	8	13
304518041152	8,0	M5	M5	18	8	8	15
304520041152	8,0	M5	M5	20	8	8	15
304525041152	8,0	M5	M5	25	10	10	15
304530041152	8,0	M5	M5	30	10	10	15
304535041152	8,0	M5	M5	35	10	10	15
304540041152	8,0	M5	M5	40	10	10	15

Part no.	SW	M1	M2	A	B	C	D
304545041152	8,0	M5	M5	45	10	10	15
304550041152	8,0	M5	M5	50	10	10	15
304555041152	8,0	M5	M5	55	10	10	15
304560041152	8,0	M5	M5	60	10	10	15
304570041152	8,0	M5	M5	70	10	10	15
304610341152	10,0	M6	M6	10	12	6	8
304612341152	10,0	M6	M6	12	12	8	10
304615341152	10,0	M6	M6	15	12	8	13
304618341152	10,0	M6	M6	18	12	12	16
304620341152	10,0	M6	M6	20	12	13	18
304625341152	10,0	M6	M6	25	12	13	18
304630341152	10,0	M6	M6	30	12	13	18
304635341152	10,0	M6	M6	35	12	13	18
304640341152	10,0	M6	M6	40	12	13	18
304645341152	10,0	M6	M6	45	12	13	18
304650341152	10,0	M6	M6	50	12	13	18
304655341152	10,0	M6	M6	55	12	13	18
304660341152	10,0	M6	M6	60	12	13	18
304670341152	10,0	M6	M6	70	12	13	18
304680341152	10,0	M6	M6	80	12	13	18
304690341152	10,0	M6	M6	90	12	13	18



Connecting & fixing elements

Connecting & fixing elements



Washers | Spacers | Bushings Page 228



Screws & nuts Page 265



Protective caps for screws & nuts Page 304

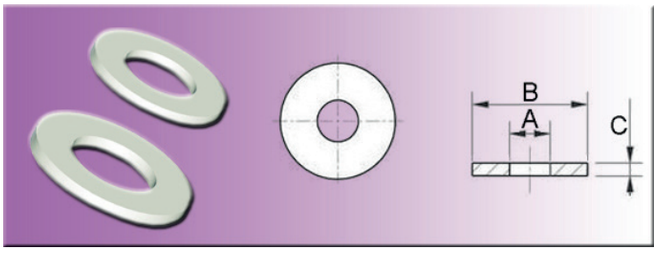


Drive fasteners & rivets Page 320



Studs & snap-in nuts Page 332

Washers according to DIN plastic | DIN 125 | PA



Flat washers ~DIN 125 (~DIN EN ISO 7089)

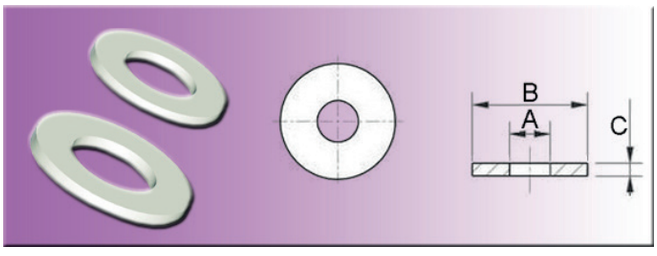
Material: PA
Colour: natural

Part no.	A	B	C
0030106	1,7	4,0	0,3
0030107	1,8	4,5	0,3
0030200	2,2	5,0	0,3
0030201	2,5	6,0	0,5
0030249	2,7	6,0	0,5
0030252	2,8	7,0	0,5
0030305	3,2	7,0	0,5
0030307	3,7	8,0	0,5
0030407	4,3	9,0	0,8

Part no.	A	B	C
0030503	5,3	10,0	1,0
0030600	6,4	12,0	1,6
0030700	7,4	14,0	1,6
0030803	8,4	16,0	1,6
0031002	10,5	20,0	2,0
0031200	13,0	24,0	2,5
0031400	15,0	28,0	2,5
0031600	17,0	30,0	3,0
0031800	19,0	34,0	3,0

Part no.	A	B	C
0032000	21,0	37,0	3,0
0032202	23,0	39,0	3,0
0032505	25,0	44,0	4,0
0032700	28,0	50,0	4,0
0033000	31,0	56,0	4,0
0033300	34,0	60,0	5,0
0033600	37,0	66,0	5,0
0033900	40,0	72,0	6,0

Washers according to DIN plastic | DIN 125 | PP



Flat washers ~DIN 125 (~DIN EN ISO 7089)

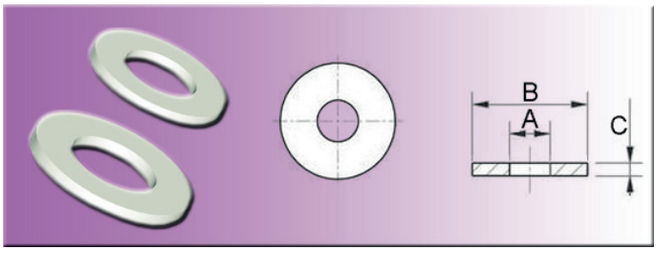
Material: PP
Colour: natural

Part no.	A	B	C
0030407PP	4,3	9	0,8
0030503PP	5,3	10	1,0

Part no.	A	B	C
0030600PP	6,4	12	1,6
0030803PP	8,4	16	1,6

Part no.	A	B	C
0031002PP	10,5	20	2,0
0031200PP	13,0	24	2,5

Washers according to DIN plastic | DIN 125 | PVDF



Flat washers ~DIN 125 (~DIN EN ISO 7089)

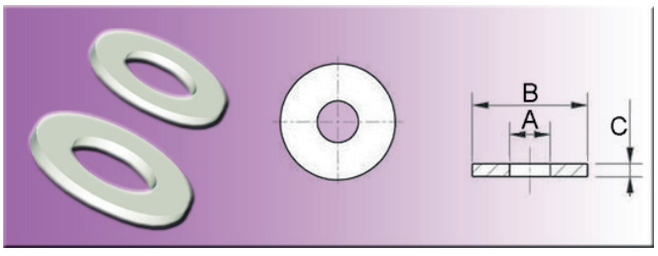
Material: PVDF
Colour: natural

Part no.	A	B	C
0030407PVDF	4,3	9	0,8
0030503PVDF	5,3	10	1,0
0030600PVDF	6,4	12	1,6

Part no.	A	B	C
0030803PVDF	8,4	16	1,6
0031002PVDF	10,5	20	2,0
0031200PVDF	13,0	24	2,5

Part no.	A	B	C
0031600PVDF	17,0	30	3,0

Washers according to DIN plastic | DIN 433 | PA



Flat washers ~DIN 433 (~DIN EN ISO 7092)
* = version with anti-loss protection

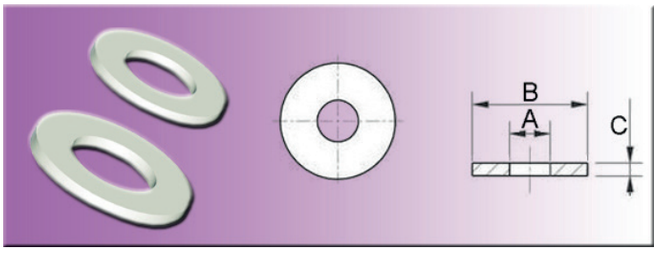
Material: PA
Colour: natural

Part no.	A	B	C
0410251	2,7	5,0	0,5
0410250*	2,7	5,0	1,0
0410301	3,2	6,0	0,5
0410300*	3,2	6,0	1,0
0410302	3,7	7,0	0,5
0410401	4,3	8,0	0,5

Part no.	A	B	C
0410400*	4,3	8,0	1,0
0410501	5,3	9,5	1,0
0410600	6,4	11,0	1,6
0410800*	8,4	15,0	1,5
0410801	8,8	15,0	1,6
0411001	no longer available!		

Part no.	A	B	C
0411000	10,5	18,0	1,6
0411200	13,0	20,0	2,0
0411400	15,0	24,0	2,5
0411600	17,0	28,0	2,5
0411800	19,0	30,0	2,5
0412000	21,0	34,0	3,0

Washers according to DIN plastic | DIN 9021 | PA



Flat washers ~DIN 9021 (~DIN 34816)

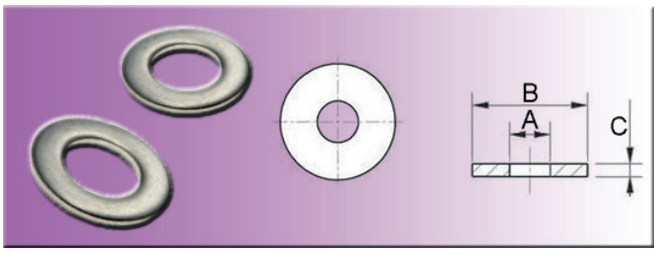
Material: PA
Colour: natural

Part no.	A	B	C
0320200	2,7	8,0	0,8
032030100001	3,2	9,0	0,8
0320302	3,7	11,0	0,8
032040000001	4,3	12,0	1,5
032040100001	4,3	12,0	1,0

Part no.	A	B	C
032050000001	5,3	15,0	1,2
032060000001	6,4	18,0	1,6
0320700	7,4	22,0	2,0
0320802	8,4	24,0	2,0
0321001	10,5	30,0	2,5

Part no.	A	B	C
0321202	13,0	37,0	3,0
0321400	15,0	44,0	3,0
0321600	17,0	50,0	3,0
0321800	20,0	56,0	4,0
0322000	22,0	60,0	4,0

Washers according to DIN metal | DIN 125

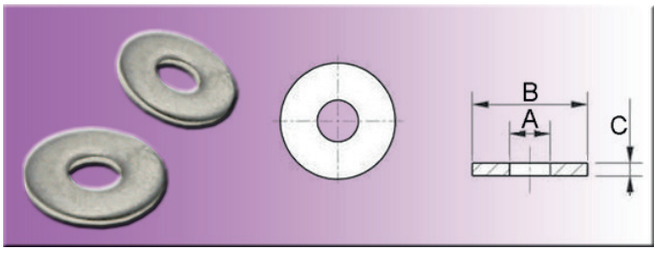


Flat washers ~DIN 125 (~DIN EN ISO 7089) form A

Material:
zinc-plated steel (final digits 52)
stainless steel (final digits 53)

NO LONGER AVAILABLE!

Washers according to DIN metal | DIN 9021

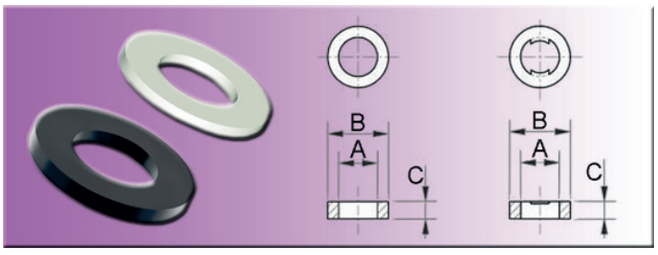


Flat washers ~DIN 9021 (~DIN EN ISO 7093)
Washer's outer diameter = 3x screw diameter

Material:
zinc-plated steel (final digits 52)
stainless steel (final digits 53)

NO LONGER AVAILABLE!

Washers without DIN plastic | PA | PVC



* = version with anti-loss protection
without final digits = PA 6, natural
final digits 000 01 = PA 6.6, natural
final digits 599 = PA 6, black
final digits 114 07 = plasticised PVC, black

Part no.	A	B	C
0030202	2,5	8,0	1,0
0310250*	2,7	5,0	1,5
0030251	2,7	6,5	0,5
0030250	2,7	6,8	1,1
0010301599	3,0	9,0	0,8
0310301	3,2	5,5	2,2
0310300*	3,2	5,5	2,2
0030306	3,2	7,0	1,0
0030300	3,2	7,0	1,4
0030308*	3,2	7,0	1,4
0030301	3,2	8,0	1,5
032030000001*	3,2	9,0	1,5
032030011407*	3,2	9,0	1,5
033030000001*	3,2	15,0	1,5
033030011407*	3,2	15,0	1,5
0030304	3,4	5,7	0,6
0030303	3,5	8,0	1,0
0030401	4,1	10,0	1,0

Part no.	A	B	C
0010401599	4,2	9,0	0,7
0010405599	4,2	9,0	1,2
0010404599	4,2	12,0	2,0
0010402599	4,2	16,0	2,0
0310401	4,3	7,0	2,3
0310400*	4,3	7,0	2,3
0030408	no longer available!		
0030400*	4,3	9,0	1,4
0010403599	4,3	9,0	2,5
032040011407*	4,3	12,0	1,5
033040000001	4,3	18,0	2,0
033040011407*	4,3	18,0	2,0
0030404	4,9	9,5	1,4
0030402	4,9	12,7	1,4
0030405	4,9	12,7	3,2
0030403	4,9	15,9	2,5
0030406	4,9	22,2	1,0
0010502599	5,1	12,0	1,8

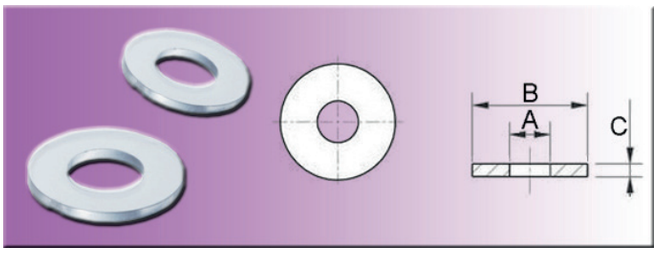
Part no.	A	B	C
0010505599	5,2	12,0	5,0
0010503599	5,2	20,0	3,0
0010504599	5,2	20,0	4,0
0310501	5,3	8,5	2,8
0310500*	5,3	8,5	2,8
0030500*	5,3	11,5	1,4
032050011407*	5,3	15,0	1,2
033050000001	5,3	25,0	2,5
033050011407	5,3	25,0	2,5
0030504	5,4	12,0	1,5
0010501599	5,5	8,0	1,0
0010601599	5,5	8,0	1,4
0010602599	5,8	8,0	1,5
0310600*	6,4	10,0	2,5
0310601	no longer available!		
032060100001	6,4	18,0	2,0
032060011407*	6,4	18,0	2,0
033060000001	6,4	30,0	3,0

Part no.	A	B	C
033060011407*	6,4	30,0	3,0
0030601	6,5	12,0	1,5
0030606	6,5	14,0	1,2
0030608	6,6	14,3	1,4
0030812	8,1	14,0	1,0
0310801	8,4	13,0	2,8
0310800*	8,4	13,0	2,8
0030801	8,4	17,0	1,6
0030800	8,4	17,0	2,0
032080000001	8,4	25,0	2,0
0320801	8,4	25,0	2,5
032080011407	8,4	25,0	2,5
033080000001	8,4	40,0	3,0
033080011407*	8,4	40,0	3,0
0030802	8,6	17,0	2,0
0010903599	9,0	11,0	2,5
0010901599	9,0	14,0	1,0
0010902599	9,0	14,0	2,0

Part no.	A	B	C
0011002599	9,5	14,0	2,0
0030813	9,6	18,0	1,2
0011001599	9,9	13,0	1,0
0011004599	10,2	27,6	4,0
0011000599	10,2	13,0	0,6
0031001	10,2	17,0	2,0
0031003	10,5	21,0	2,0
032100000001	10,5	30,0	3,0
032100011407*	10,5	30,0	3,0
0031000	10,6	21,0	2,5
0011003599	10,7	23,0	2,9
0011101599	10,7	23,2	1,0
0031007	11,2	18,0	1,2
0031204	12,2	24,0	1,3
032120000001	no longer available!		
032120011407*	13,0	40,0	3,0
0031205	13,2	24,0	1,3
0011303599	13,5	25,0	3,0

Part no.	A	B	C
0011304599	13,5	25,0	4,5
0011401599	14,5	20,0	0,5
0031403	15,2	26,0	1,4
0031601	16,2	32,3	2,0
0031602	17,0	28,0	2,0
0031605	17,2	26,0	1,4
0011802599	18,0	25,0	2,0
0031805	19,2	34,0	1,5
0032003	21,2	34,0	1,5
0032203	22,2	34,0	1,5
0032204	23,2	38,0	1,7
0032504	25,2	40,0	1,7
0032600	27,0	50,0	4,0
0032800	29,0	50,0	4,0
0033200	33,0	60,0	5,0
0033800	39,0	72,0	6,0
0034000	41,0	72,0	6,0

Washers without DIN plastic | PC



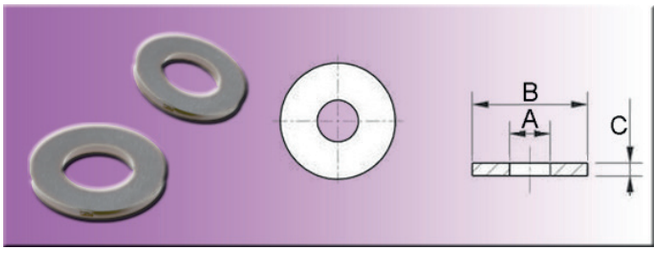
Material: PC
Colour: transparent

Part no.	A	B	C
2680002	2,1	4	0,5
2680026	2,7	6	0,5
2680003	3,3	8	0,8

Part no.	A	B	C
2680004	4,5	10	0,8
2680005	5,5	12	0,8
2680006	6,5	13	1,0

Part no.	A	B	C
2680008	8,5	18	1,6

Washers without DIN plastic | PEEK



Material: PEEK
Colour: light brown

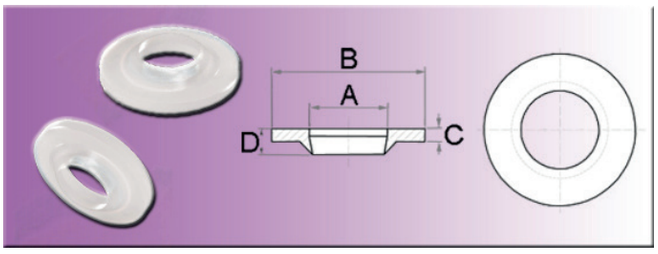
- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285 and series 386

Part no.	A	B	C
2850200	no longer available!		
2850300	3,2	7,0	0,5
2850400	4,3	9,0	0,8

Part no.	A	B	C
2850500	5,3	10,0	1,0
2850600	6,4	12,5	1,6
2850800	8,4	17,0	1,6

Part no.	A	B	C
2851000	10,5	21,0	2,0

Retaining washers of plastic | Anti-loss washers



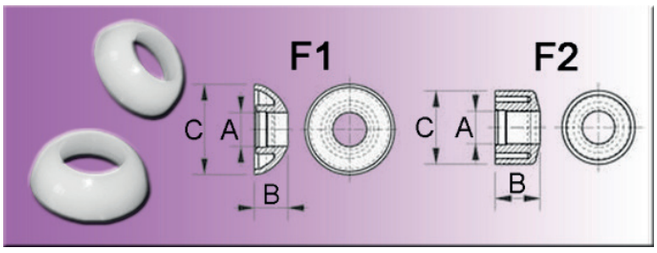
These rings were specially developed to use a screw (even sheet metal screws) as a captive connecting element, to protect surfaces of sensitive instruments, to construct temporary connections without nuts or to attach washers to screws captively before using a automatic screw driver.

Material: polyamide
Colour: natural

Part no.	M	A	B	C	D
0240003	M3,5	3,6	9,15	1,2	2,7
0240004	M4/3,8	3,9-4,2	9,0	1,5	--
0240005	M5	4,8	10,0	1,6	3,65
0240006	M6	6,3	12,5	1,5	2,75
0240008	M8	8,25	16,2	1,65	3,5

Part no.	M	A	B	C	D
0240010	M10	10,5	15,0	2,1	4,3
0240012	R¼“	13,2	18,9	2,6	4,5
0240016	R3/8“	17,7	23,0	2,15	4,5
0240020	R½“	21,5	27,6	2,1	4,2

Retaining washers of plastic | Quick-locking rings



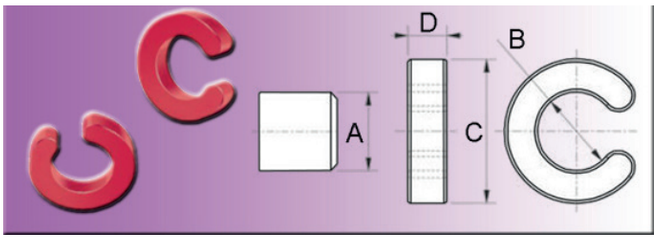
For plane shafts and bolts. Easy to mount. Replace screws and split pins.

Material: POM
Colour: natural

Part no.	A	B	C	F
0110030	3	5,0	12,5	1
0110040	4	5,5	14,5	1
0110050	5	5,1	14,5	1
0110061	6	8,0	13,0	2
0110060	6	6,0	16,0	1

Part no.	A	B	C	F
0110071	7	8,0	13,0	2
0110080	8	5,5	16,0	1
0110100	10	7,5	21,0	1
0110120	12	7,5	21,0	1

Retaining washers of plastic | Centre fixing rings



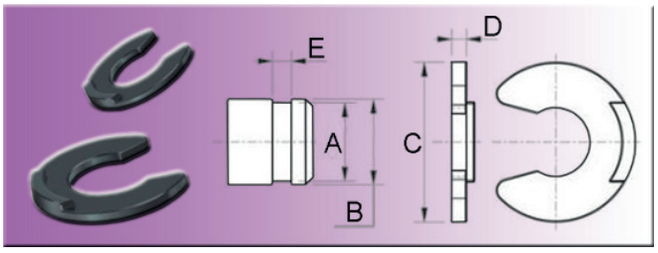
Excellent for retaining lightweight objects e.g. paper rolls, knurls, spools etc.
Easy to mount and adjust - constant clamping effect.

Material: POM
Colour: red

Part no.	A	B	C	D
0111030	3	2,5	6,0	2,0
0111040	4	3,5	7,5	2,5
0111050	5	4,5	9,0	2,5
0111060	6	5,3	11,0	3,0

Part no.	A	B	C	D
0111080	8	7,0	13,0	3,0
0111100	10	9,0	16,0	3,5
0111120	12	11,0	19,0	4,0

Retaining washers of plastic | Retaining rings



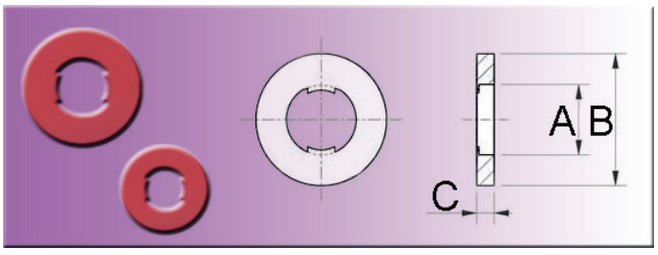
For shafts and bolts with groove. Easy to mount without tools.
Resistant to high axial pressure!

Material: POM
Colour: black

Part no.	A	B	C	D	E
0112023	2,3	3-4	6,0	1,0	1,05
0112032	3,2	4-5	7,0	1,0	1,05
0112040	4,0	5-7	9,0	1,1	1,15
0112050	5,0	6-8	11,0	1,1	1,15

Part no.	A	B	C	D	E
0112060	6,0	7-11	14,0	1,3	1,35
0112070	7,0	8-11	14,0	1,3	1,35
0112090	9,0	10-14	18,5	1,4	1,5
0112120	12,0	13-18	23,0	1,6	1,7

Retaining washers of plastic | Captive washers red



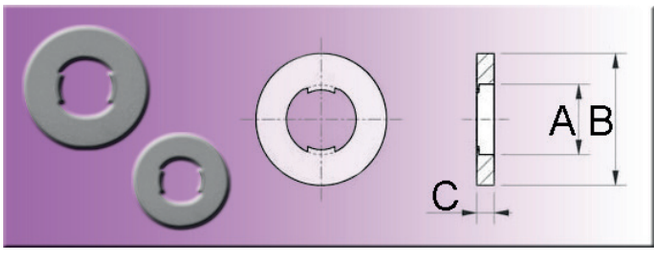
Specially developed for retaining screws and bolts during the assembly.
Suitable for the pre-assembly of bolts without nuts.

Material: LDPE
Colour: red

Part no.	A	B	C	M	WW
0150025	2,7	6,5	1,1	2,5	3/32“
0150030	3,2	7,0	1,4	3,0	1/8“
0150040	4,3	9,0	1,1	4,0	5/32“

Part no.	A	B	C	M	WW
0150050	5,3	11,0	1,3	5,0	3/16“
0150060	6,4	12,0	1,6	6,0	¼“
0150080	8,4	17,0	2,0	8,0	5/16“

Retaining washers of plastic | Captive washers grey



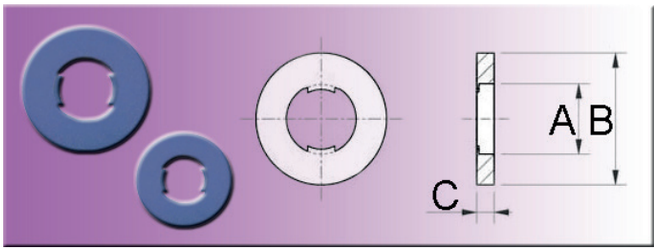
Specially developed for retaining screws and bolts during the assembly.
Suitable for the pre-assembly of bolts without nuts.

Material: LDPE
Colour: grey

Part no.	A	B	C	M	WW
0151025	2,7	5,0	1,5	2,5	3/32“
0151030	3,2	5,5	2,1	3,0	1/8“
0151040	4,3	7,0	2,2	4,0	5/32“

Part no.	A	B	C	M	WW
0151050	5,3	8,5	2,7	5,0	3/16“
0151060	6,4	10,0	2,7	6,0	¼“
0151080	8,4	13,0	2,7	8,0	5/16“

Retaining washers of plastic | Captive washers blue



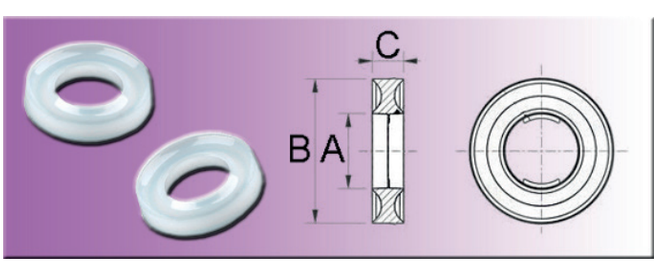
Specially developed for retaining screws and bolts during the assembly.
Suitable for the pre-assembly of bolts without nuts.

Material: LDPE
Colour: blue

Part no.	A	B	C	M	WW
0152025	2,7	5	1,0	2,5	3/32“
0152030	3,2	6	1,0	3,0	1/8“
0152040	4,3	8	1,0	4,0	5/32“
0152050	5,3	10	1,0	5,0	3/16“

Part no.	A	B	C	M	WW
0152060	6,4	11	1,5	6,0	¼“
0152080	8,4	15	1,5	8,0	5/16“
0152100	10,5	18	1,5	10,0	3/8“

Retaining washers of plastic | Screw retaining washers - for hexagon socket screws



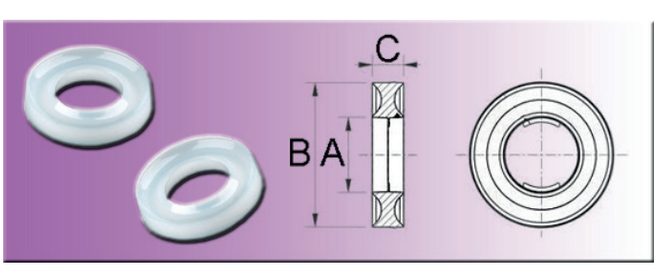
Appropriate for retaining screws and bolts.
Avoid rust and corrosion damage due to perfect sealing and insulation.

Material: PA
Colour: natural

Part no.	A	B	C	M	WW
0161040	4,2	8,0	2,5	4	5/32“
0161050	5,2	10,0	2,8	5	3/16“
0161060	6,2	10,7	3,0	6	-
0161080	8,2	14,0	3,7	8	5/16“

Part no.	A	B	C	M	WW
0161100	10,2	16,0	4,2	10	3/8“
0161120	12,2	20,0	5,0	12	7/16“
0161140	*NO LONGER AVAILABLE!*				
0161160	16,2	25,0	6,0	16	5/8“

Retaining washers of plastic | Screw retaining washers - for hexagon head screws



Appropriate for retaining screws and bolts.
Avoid rust and corrosion damage due to perfect sealing and insulation.

Material: PA
Colour: natural

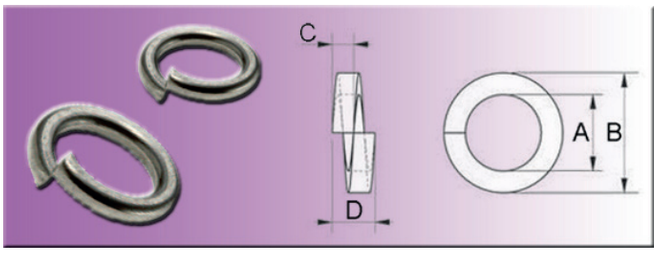
Part no.	A	B	C	M	WW
0160020	2,1	5,0	2,0	2,0	5/64“
0160025	2,6	6,0	2,2	2,5	3/32“
0160030	3,1	8,0	2,5	3,0	1/8“
0160040	4,2	10,0	2,8	4,0	5/32“

Part no.	A	B	C	M	WW
0160050	5,2	10,7	3,0	5,0	3/16“
0160060	6,2	12,7	3,8	6,0	-
0160080	8,2	16,2	4,2	8,0	5/16“
0160100	10,2	20,0	5,0	10,0	3/8“

Part no.	A	B	C	M	WW
0160120	12,2	24,0	5,2	12,0	7/16“
0160140	14,2	26,0	5,6	14,0	-

Part no.	A	B	C	M	WW
0160160	16,2	30,0	5,9	16,0	5/8“
0160200	20,3	36,0	6,8	20,0	¾“

Retaining washers of metal | Snap rings DIN 7980

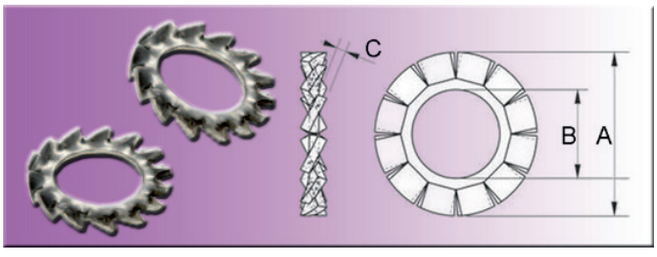


Snap rings for cylinder head screws ~DIN 7980

Material:
steel zinc-plated (final digits 52)
stainless steel (final digits 53)

NO LONGER AVAILABLE!

Retaining washers of metal | Retaining rings

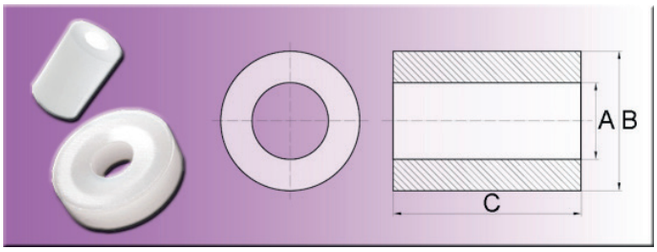


Locking washers - metal
Developed for securing screws, bolts and nuts

Material:
machining steel (final digits 52)
stainless steel (final digits 53)

NO LONGER AVAILABLE!

Spacers | bushings | PA



Material: PA
Colour: natural

Further types on written request.

Part no.	A	B	C
0052000	2,6	4	2,0
0052030	2,6	4	3,0
0052060	2,6	4	5,0
0052090	2,6	4	7,5
0052120	2,6	4	10,0
0052150	2,6	4	15,0
0052180	2,6	4	20,0
0052210	2,6	4	25,0
0052240	2,6	4	30,0
0052370	2,6	5	2,0
0052400	2,6	5	3,0
0052430	2,6	5	5,0
0052520	no longer available!		
0052550	2,6	5	20,0
0052580	2,6	5	25,0
0052610	2,6	5	30,0
0052740	3,2	5	2,0
0052770	3,2	5	3,0
0052800	3,2	5	5,0
0052830	3,1	5	7,5
0052860	3,2	5	10,0
0052890	3,2	5	15,0
0052920	3,2	5	20,0
0052950	3,2	5	25,0
0052980	3,2	5	30,0
0053110	3,2	6	2,0
0053140	3,2	6	3,0
0053155	3,2	6	4,0
0053170	3,2	6	5,0
0053182	3,2	6	6,0
0053200	3,2	6	7,5
0053206	3,2	6	8,0
0053230	3,2	6	10,0

Part no.	A	B	C
0053242	3,2	6	12,0
0053260	3,2	6	15,0
0053278	3,2	6	18,0
0053290	3,2	6	20,0
0053320	3,2	6	25,0
0053350	3,1	6	30,0
0053480	3,2	8	3,0
0053510	3,2	8	5,0
0053540	3,2	8	7,5
0053570	3,2	8	10,0
0053600	3,2	8	15,0
0053630	3,2	8	20,0
0053660	3,2	8	25,0
0053690	3,2	8	30,0
0053820	3,6	6	2,0
0053850	3,6	6	3,0
0053865	3,6	6	4,0
0053880	3,6	6	5,0
0053910	3,6	6	7,5
0053916	3,6	6	8,0
0053940	3,6	6	10,0
0053952	3,6	6	12,0
0053970	3,6	6	15,0
0053988	3,6	6	18,0
0054000	3,6	6	20,0
0054030	3,6	6	25,0
0054060	3,6	6	30,0
0054190	4,3	8	3,0
0054205	4,3	8	4,0
0054220	4,3	8	5,0
0054232	4,3	8	6,0
0054250	4,2	8	7,5
0054256	4,3	8	8,0

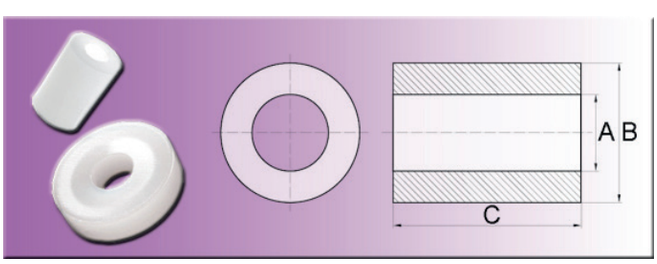
Part no.	A	B	C
0054280	4,2	8	10,0
0054292	4,3	8	12,0
0054310	4,2	8	15,0
0054328	4,3	8	18,0
0054340	4,3	8	20,0
0054370	4,2	8	25,0
0054400	4,2	8	30,0
0054410	4,2	8	35,0
0054420	4,2	8	40,0
0054530	5,3	10	3,0
0054545	5,3	10	4,0
0054560	5,3	10	5,0
0054590	5,3	10	7,5
0054596	5,3	10	8,0
0054620	5,3	10	10,0
0054632	5,3	10	12,0
0054650	5,3	10	15,0
0054668	5,3	10	18,0
0054680	5,3	10	20,0
0054710	5,3	10	25,0
0054740	5,3	10	30,0
0054870	6,4	10	3,0
0054900	6,4	10	5,0
0054930	6,4	10	7,5
0054960	6,4	10	10,0
0054990	6,4	10	15,0
0055020	6,4	10	20,0
0055050	6,4	10	25,0
0055080	6,4	10	30,0
0055210	6,4	15	3,0
0055240	6,4	15	5,0
0055270	6,4	15	7,5
0055300	6,4	15	10,0

Part no.	A	B	C
0055330	6,4	15	15,0
0055360	6,4	15	20,0
0055390	6,4	15	25,0
0055420	6,4	15	30,0
0055550	8,2	12	3,0
0055580	8,2	12	5,0
0055610	8,2	12	7,5
0055640	8,2	12	10,0
0055670	8,2	12	15,0
0055700	8,2	12	20,0
0055730	8,2	12	25,0
0055760	8,2	12	30,0
0055780	8,2	12	35,0
0055800	8,2	12	40,0
0055890	8,4	18	3,0
0055920	8,4	18	5,0
0055950	8,4	18	8,0
0055980	8,4	18	10,0
0056010	8,4	18	15,0
0056040	8,4	18	20,0
0056070	8,4	18	25,0
0056100	8,4	18	30,0
0056110	8,2	18	40,0
0056230	10,5	15	3,0
0056260	10,4	15	5,0

Part no.	A	B	C
0056290	10,5	15	7,5
0056320	10,5	15	10,0
0056350	10,5	15	15,0
0056380	10,5	15	20,0
0056410	10,5	15	25,0
0056440	10,5	15	30,0
0056460	10,3	15	40,0
0056600	10,5	22	5,0
0056630	10,5	22	10,0
0056690	10,5	22	15,0
0056710	10,5	22	20,0
0056750	10,5	22	25,0
0056780	10,5	22	30,0
0056810	10,5	22	35,0
0056840	10,6	22	40,0
0056870	10,3	22	45,0
0056900	10,6	22	50,0
0057030	12,8	18	3,0
0057060	12,8	18	5,0
0057090	12,8	18	7,5
0057120	12,8	18	10,0
0057150	12,8	18	15,0
0057180	12,8	18	20,0
0057210	12,8	18	25,0
0057240	12,8	18	30,0

Part no.	A	B	C
0057400	12,6	25	5,0
0057430	12,6	25	10,0
0057460	12,6	25	15,0
0057490	12,6	25	20,0
0057520	12,6	25	25,0
0057550	12,6	25	30,0
0057580	12,6	25	35,0
0057610	12,6	25	40,0
0057640	12,6	25	45,0
0057670	12,5	25	50,0
0058196	16,5	25	5,0
0058216	16,5	25	10,0
0058236	16,5	25	15,0
0058256	16,5	25	20,0
0058276	16,5	25	25,0
0058296	16,5	25	30,0
0058316	16,5	25	35,0
0058336	16,5	25	40,0
0058356	16,5	25	45,0
0058376	16,5	25	50,0
0058396	16,5	25	55,0
0058416	16,5	25	60,0
0058436	16,5	25	65,0

Spacers | bushings | POM



Material: POM
Colour: natural

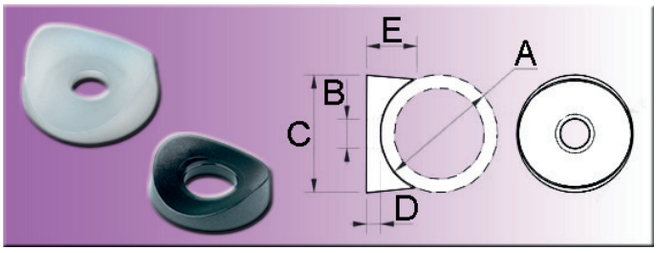
Further types on written request.

Part no.	A	B	C
0051500	no longer available		
0051506	2,2	4	3,0
0051512	2,2	4	4,0
0051518	2,2	4	5,0
0051536	2,2	4	8,0

Part no.	A	B	C
0051548	2,2	4	10,0
0051560	2,2	4	12,0
0051578	2,2	4	15,0
0051596	2,2	4	18,0
0051608	2,2	4	20,0

Part no.	A	B	C
0051638	2,2	4	25,0
0051668	2,2	4	30,0
0052460	2,6	5	7,5
0052490	2,6	5	10,0

Spacers | bushings | Saddle washers



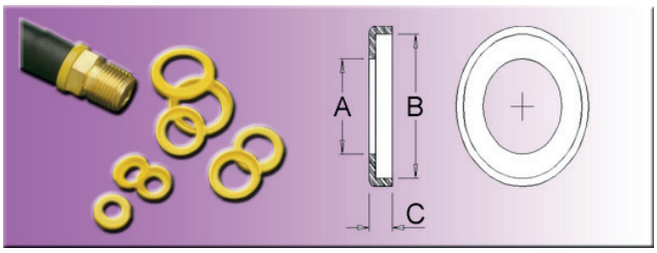
Self-lubricating polyamide, ideal for pivotal points.

Material: PA 6
Colour:
without last digits = natural
last digits 599 = black

Part no.	A	B	C	D	E
1020110	9-11	3,3	10,0	2,0	4,2
1020110599	9-11	3,3	10,0	2,0	4,2
1020130	12-14	4,2	13,0	2,2	5,5
1020130599	12-14	4,2	13,0	2,2	5,5
1020140	12-14	5,2	13,0	2,2	5,5
1020140599	12-14	5,2	13,0	2,2	5,5
1020160	15-17	5,0	16,0	2,4	6,8
1020160599	15-17	5,0	16,0	2,4	6,8
1020190	18-20	5,2	19,0	2,7	8,0
1020190599	18-20	5,2	19,0	2,7	8,0
1020200	18-20	6,2	19,0	2,7	8,0
1020200599	18-20	6,2	19,0	2,7	8,0
1020220	21-23	5,2	22,0	3,0	9,0
1020220599	21-23	5,2	22,0	3,0	9,0
1020230	21-23	6,2	22,0	3,0	9,0
1020230599	21-23	6,2	22,0	3,0	9,0
1020240	21-23	8,2	22,0	3,0	9,0
1020240599	21-23	8,2	22,0	3,0	9,0

Part no.	A	B	C	D	E
1020250	24-26	6,2	25,0	3,1	10,0
1020250599	24-26	6,2	25,0	3,1	10,0
1020260	24-26	8,3	25,0	3,1	10,0
1020260599	24-26	8,3	25,0	3,1	10,0
1020280	27-29	6,2	28,0	3,3	11,0
1020280599	27-29	6,2	28,0	3,3	11,0
1020290	27-29	8,3	28,0	3,3	11,0
1020290599	27-29	8,3	28,0	3,3	11,0
1020320	30-34	8,3	32,0	3,4	12,0
1020320599	30-34	8,3	32,0	3,4	12,0
1020330	30-34	10,4	32,0	3,4	12,0
1020330599	30-34	10,4	32,0	3,4	12,0
1020550	50-60	6,6	40,0	5,0	12,0
1020550599	50-60	6,6	40,0	5,0	12,0
1020560	50-60	16,5	40,0	5,0	12,0
1020560599	50-60	16,5	40,0	5,0	12,0
1020570	50-60	10,4	40,0	5,0	12,0
1020570599	50-60	10,4	40,0	5,0	12,0

Spacers | bushings | Coding rings with flange



Washers with flange

Wall thickness: 8.13 mm
Material: LDPE
Colour: yellow

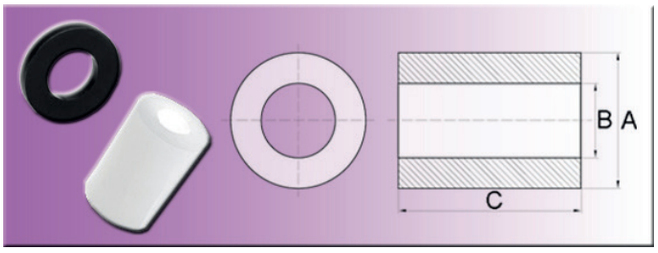
Discontinued item - available
as long as stocks last!

Part no.	A	B	C
0840006	8,23	14,86	4,37
0840007	no longer available!		

Part no.	A	B	C
0840008	11,43	19,69	4,37
0840010	14,74	22,23	4,37

Part no.	A	B	C
0840013	no longer available!		
0840015	no longer available!		

Spacers of PA | with outer Ø 10 mm

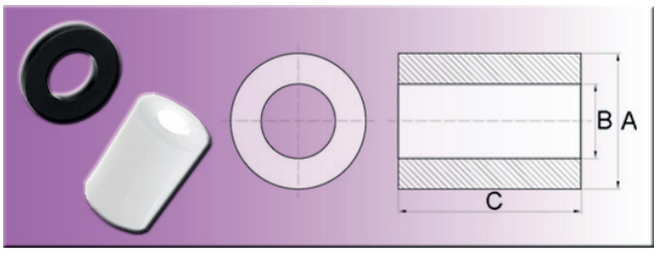


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-10-4,4-X	10	4,4	1-35
05-10-5,3-X	10	5,3	1-35

Part no.	A	B	C
05-10-6,4-X	10	6,4	1-35
05-10-8,4-X	10	8,4	1-35

Spacers of PA | with outer Ø 12 mm

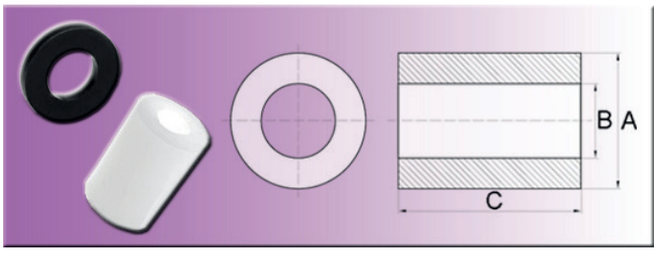


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-12-4,4-X	12	4,4	1-35
05-12-5,3-X	12	5,3	1-35

Part no.	A	B	C
05-12-6,4-X	12	6,4	1-35
05-12-8,4-X	12	8,4	1-35

Spacers of PA | with outer Ø 15.5 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

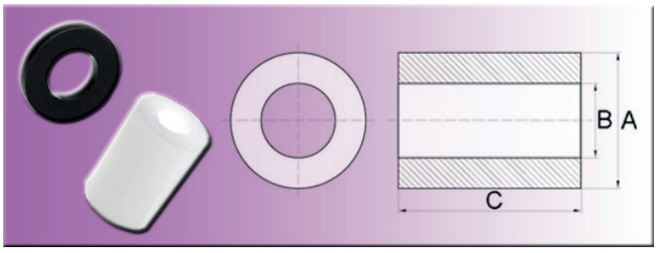
A production as concave discs is possible on request!

Part no.	A	B	C
05-15,5-5,3-X	15,5	5,3	1-35
05-15,5-6,4-X	15,5	6,4	1-35

Part no.	A	B	C
05-15,5-7,3-X	15,5	7,3	1-35
05-15,5-8,4-X	15,5	8,4	1-35

Part no.	A	B	C
05-15,5-10,5-X	15,5	10,5	1-35

Spacers of PA | with outer Ø 16 mm

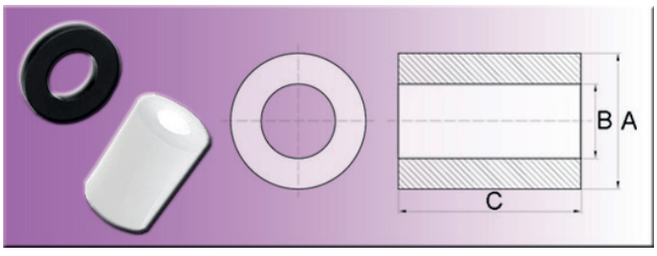


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-16-5,3-X	16	5,3	1-35

Part no.	A	B	C
05-16-6,4-X	16	6,4	1-35

Spacers of PA | with outer Ø 18 mm

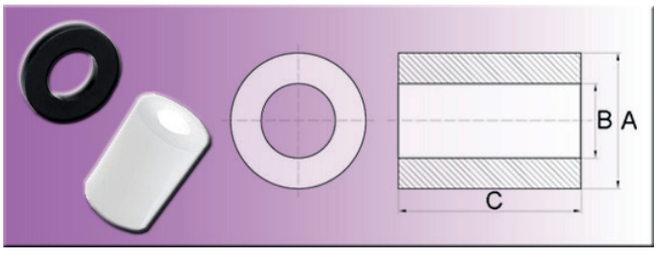


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-18-5,3-X	18	5,3	1-35
05-18-6,4-X	18	6,4	1-35

Part no.	A	B	C
05-18-8,4-X	18	8,4	1-35
05-18-10,5-X	18	10,5	1-35

Spacers of PA | with outer Ø 20 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

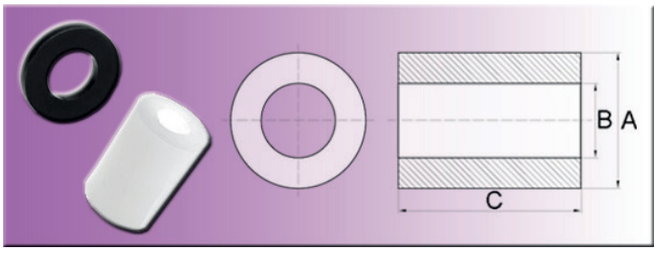
A production as concave discs is possible on request!

Part no.	A	B	C
05-20-5,3-X	20	5,3	1-35
05-20-6,4-X	20	6,4	1-35
05-20-7,3-X	20	7,3	1-35

Part no.	A	B	C
05-20-8,4-X	20	8,4	1-35
05-20-10,5-X	20	10,5	1-35
05-20-11,3-X	20	11,3	1-35

Part no.	A	B	C
05-20-12,5-X	20	12,6	1-35

Spacers of PA | with outer Ø 22 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

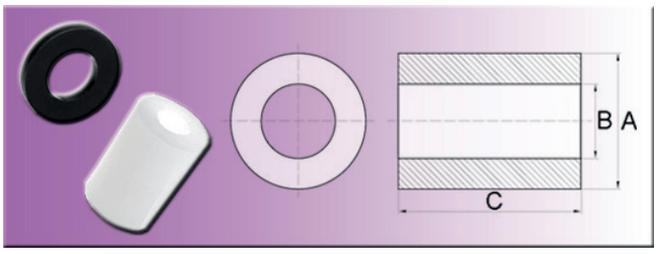
A production as concave discs is possible on request!

Part no.	A	B	C
05-22-5,3-X	22	5,3	1-35
05-22-6,4-X	22	6,4	1-35

Part no.	A	B	C
05-22-8,4-X	22	8,4	1-35
05-22-10,5-X	22	10,5	1-35

Part no.	A	B	C
05-22-12,5-X	22	12,6	1-35
05-22-15,5-X	22	15,6	1-35

Spacers of PA | with outer Ø 24 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

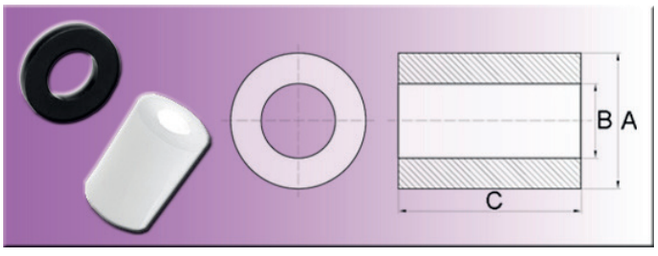
A production as concave discs is possible on request!

Part no.	A	B	C
05-24-5,3-X	24	5,3	1-35
05-24-6,4-X	24	6,4	1-35
05-24-8,4-X	24	8,4	1-35

Part no.	A	B	C
05-24-10,5-X	24	10,5	1-35
05-24-12,5-X	24	12,6	1-35
05-24-13,5-X	24	13,6	1-35

Part no.	A	B	C
05-24-14,5-X	24	14,6	1-35
05-24-16,5-X	24	16,5	1-35

Spacers of PA | with outer Ø 26 mm

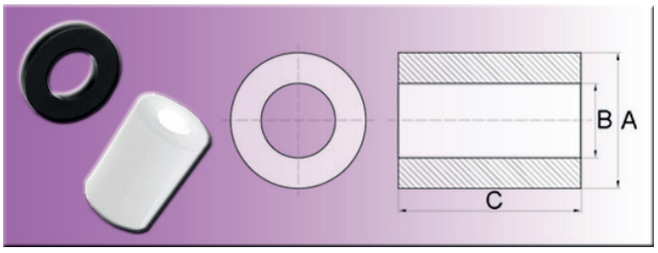


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-26-11,3-X	26	11,3	1-35
05-26-12,6-X	26	12,6	1-35

Part no.	A	B	C
05-26-16,5-X	26	16,5	1-35
05-26-17,3-X	26	17,3	1-35

Spacers of PA | with outer Ø 28 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

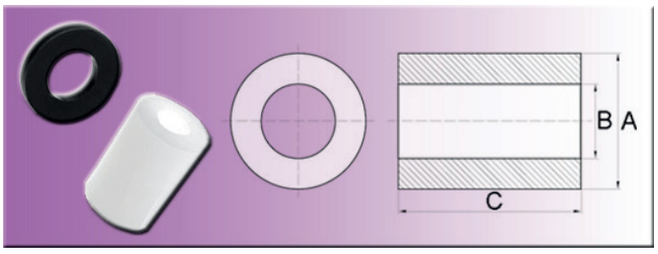
A production as concave discs is possible on request!

Part no.	A	B	C
05-28-5,3-X	28	5,3	1-35
05-28-6,4-X	28	6,4	1-35
05-28-8,4-X	28	8,4	1-35

Part no.	A	B	C
05-28-10,5-X	28	10,5	1-35
05-28-11,3-X	28	11,3	1-35
05-28-12,5-X	28	12,6	1-35

Part no.	A	B	C
05-28-14,6-X	28	14,6	1-35
05-28-21-X	28	21,0	1-35

Spacers of PA | with outer Ø 30 mm

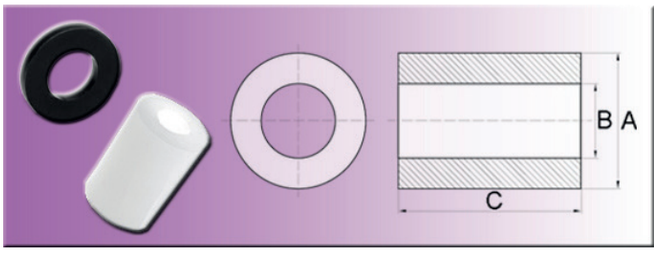


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-30-14,6-X	30	14,6	1-35

Part no.	A	B	C
05-30-21-X	30	21,0	1-35

Spacers of PA | with outer Ø 32 mm

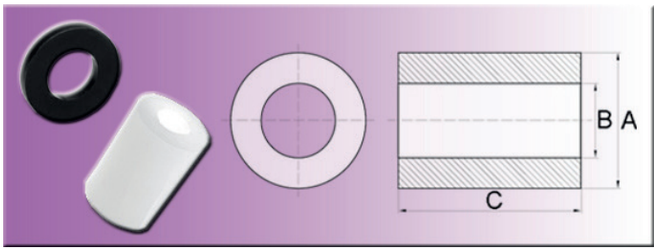


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-32-8,4-X	32	8,4	1-35

Part no.	A	B	C
05-32-10,5-X	32	10,5	1-35

Spacers of PA | with outer Ø 40 mm

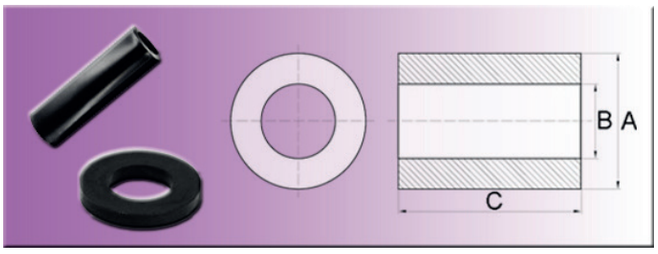


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA 6
Colour: natural / black / white (please mention in case of order)
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

Part no.	A	B	C
05-40-8,4-X	40	8,4	1-35
05-40-25,5-X	40	25,5	1-35

Part no.	A	B	C
05-40-28,4-X	40	28,4	1-35
05-40-30,4-X	40	30,4	1-35

Spacers of PA-glass fibre reinforced | with outer Ø 4 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

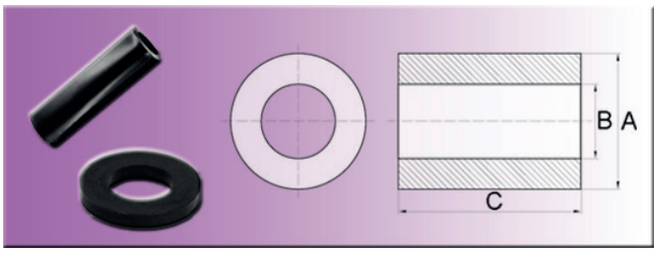
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-4-1-X	4	1,0	2-5

Part no.	A	B	C
002-4-2,2-X	4	2,2	2-40

Part no.	A	B	C
002-4-3-X	4	3,0	2-19

Spacers of PA-glass fibre reinforced | with outer Ø 5 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

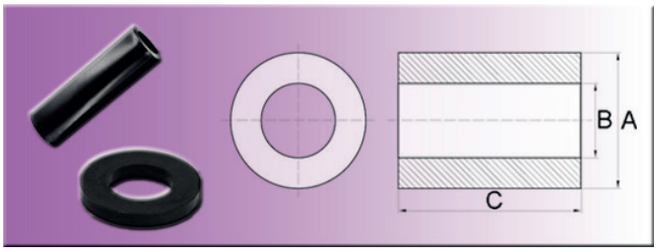
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-5-2,2-X	5	2,2	2-45

Part no.	A	B	C
002-5-2,7-X	5	2,7	2-40

Part no.	A	B	C
002-5-3,2-X	5	3,2	2-40

Spacers of PA-glass fibre reinforced | with outer Ø 6 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

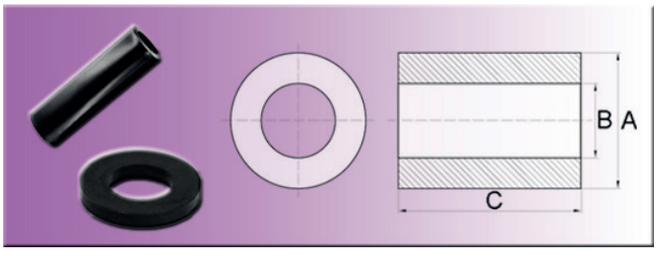
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-6-2,2-X	6	2,2	2-50
002-6-2,7-X	6	2,7	2-50

Part no.	A	B	C
002-6-3,2-X	6	3,2	2-50
002-6-3,4-X	6	3,4	2-50

Part no.	A	B	C
002-6-4,1-X	6	4,1	2-50
002-6-4,7-X	6	4,7	2-45

Spacers of PA-glass fibre reinforced | with outer Ø 7 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

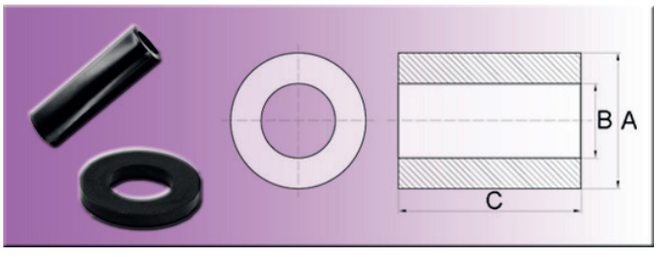
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-7-3,4-X	7	3,4	2-50

Part no.	A	B	C
002-7-4,5-X	7	4,5	2-55

Part no.	A	B	C
002-7-5,0-X	7	5,0	2-53

Spacers of PA-glass fibre reinforced | with outer Ø 8 mm



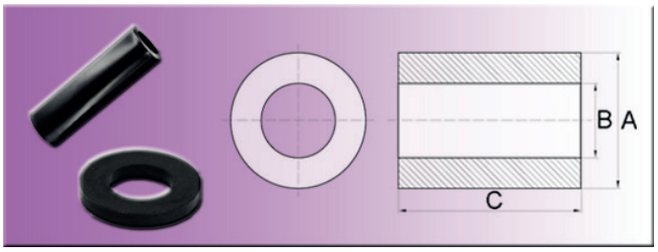
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-8-3,5-X	8	3,5	2-50
002-8-4,2-X	8	4,2	2-50

Part no.	A	B	C
002-8-6,2-X	8	6,2	2-60
002-8-6,4-X	8	6,4	2-59

Spacers of PA-glass fibre reinforced | with outer Ø 9 mm

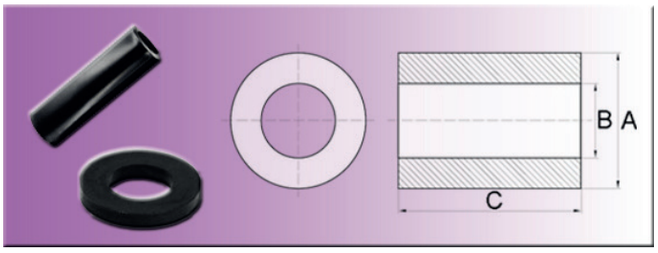


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-9-6,2-X	9	6,2	2-25

Spacers of PA-glass fibre reinforced | with outer Ø 10 mm



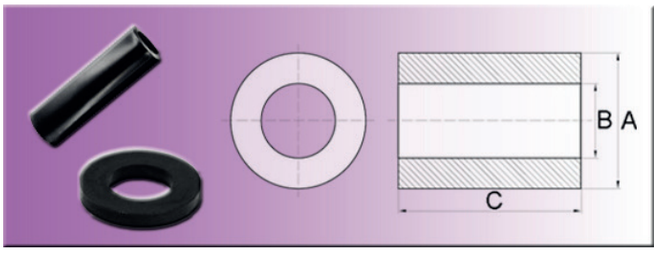
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-10-3,2-X	10	3,2	2-18
002-10-5,2-X	10	5,2	2-57

Part no.	A	B	C
002-10-6,2-X	10	6,2	2-50
002-10-8,2-X	10	8,2	2-45

Spacers of PA-glass fibre reinforced | with outer Ø 12 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

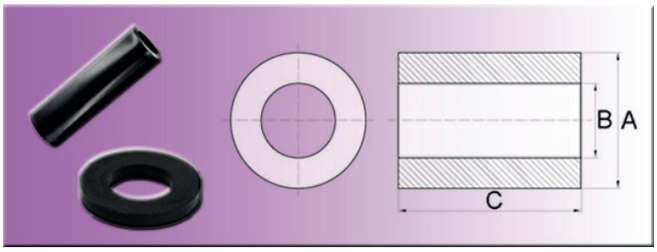
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-12-5,2-X	12	5,2	2-50
002-12-6,2-X	12	6,2	2-50

Part no.	A	B	C
002-12-8,2-X	12	8,2	2-50
002-12-9,1-X	12	9,1	2-65

Part no.	A	B	C
002-12-9,6-X	12	9,6	2-50

Spacers of PA-glass fibre reinforced | with outer Ø 14 mm

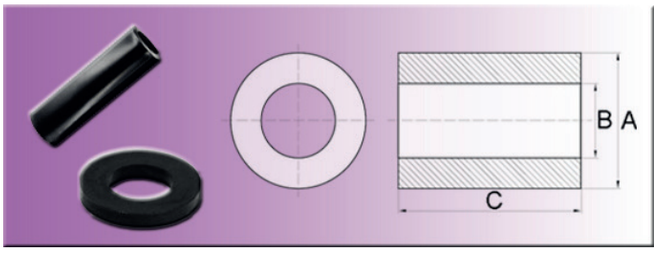


X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-14-8,2-X	14	8,2	2-50

Spacers of PA-glass fibre reinforced | with outer Ø 16 mm



X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black
Minimum order quantity: 1,000 pcs per order and dimension
Manufacturing time: approx. 10 workdays

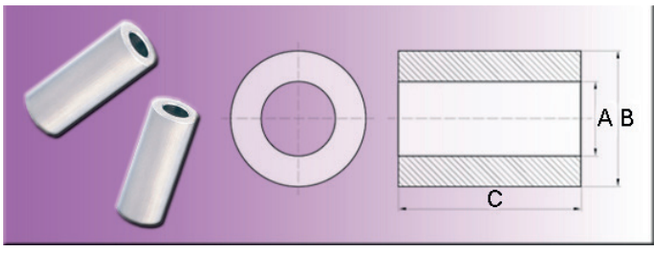
All spacers can also be supplied in polystyrene (natural) and PA-GV (white) on request!

Part no.	A	B	C
002-16-6,2-X	16	6,2	3-20

Part no.	A	B	C
002-16-10,5-X	16	10,5	2-50

Part no.	A	B	C
002-16-12,5-X	16	12,4	2-50

Spacers of brass | with outer Ø 4 mm



Material: brass (CuZn40Pb3) nickel-plated (Ni3bk)

Further dimensions or materials on request!

Part no.	A	B	C
311220140050	2,2	4	1
311220240050	2,2	4	2
311220340050	2,2	4	3
311220440050	2,2	4	4
311220540050	2,2	4	5
311220640050	2,2	4	6

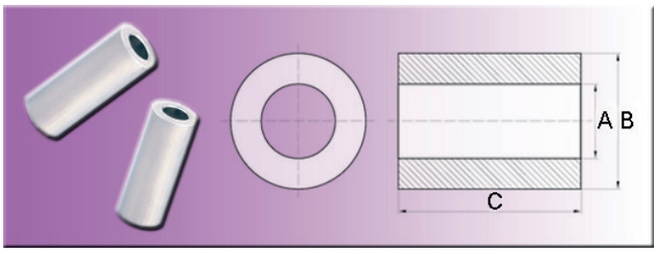
Part no.	A	B	C
311220740050	2,2	4	7
311220840050	2,2	4	8
311220940050	2,2	4	9
311221040050	2,2	4	10
311221140050	2,2	4	11
311221240050	2,2	4	12

Part no.	A	B	C
311221340050	2,2	4	13
311221440050	2,2	4	14
311221540050	2,2	4	15
311221640050	2,2	4	16
311221740050	2,2	4	17
311221840050	2,2	4	18

Part no.	A	B	C
311221940050	2,2	4	19
311222040050	2,2	4	20

Part no.	A	B	C
311222540050	2,2	4	25
311223040050	2,2	4	30

Spacers of brass | with outer Ø 5 mm



Material: brass (CuZn40Pb3) nickel-plated (Ni3bk)

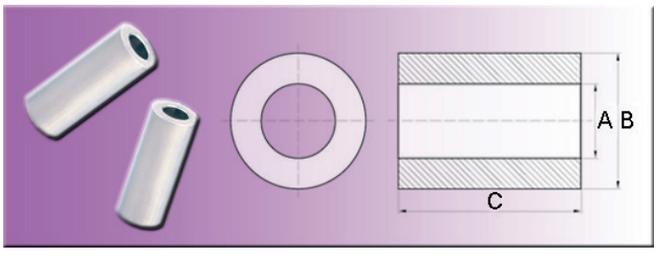
Further dimensions or materials on request!

Part no.	A	B	C
311250140050	2,5	5	1
311250240050	2,5	5	2
311250340050	2,5	5	3
311250440050	2,5	5	4
311250540050	2,5	5	5
311250640050	2,5	5	6
311250740050	2,5	5	7
311250840050	2,5	5	8

Part no.	A	B	C
311250940050	2,5	5	9
311251040050	2,5	5	10
311251140050	2,5	5	11
311251240050	2,5	5	12
311251340050	2,5	5	13
311251440050	2,5	5	14
311251540050	2,5	5	15
311251640050	2,5	5	16

Part no.	A	B	C
311251740050	2,5	5	17
311251840050	2,5	5	18
311251940050	2,5	5	19
311252040050	2,5	5	20
311252540050	2,5	5	25
311253040050	2,5	5	30

Spacers of brass | with outer Ø 6 mm



Material: brass (CuZn40Pb3) nickel-plated (Ni3bk)

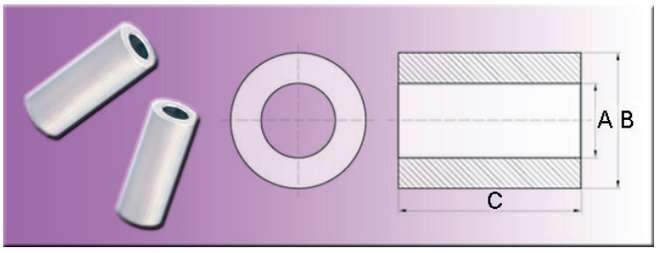
Further dimensions or materials on request!

Part no.	A	B	C
311320140050	3,2	6	1
311320240050	3,2	6	2
311320340050	3,2	6	3
311320440050	3,2	6	4
311320540050	3,2	6	5
311320640050	3,2	6	6
311320740050	3,2	6	7
311320840050	3,2	6	8
311320940050	3,2	6	9

Part no.	A	B	C
311321040050	3,2	6	10
311321140050	3,2	6	11
311321240050	3,2	6	12
311321340050	3,2	6	13
311321440050	3,2	6	14
311321540050	3,2	6	15
311321640050	3,2	6	16
311321740050	3,2	6	17
311321840050	3,2	6	18

Part no.	A	B	C
311321940050	3,2	6	19
311322040050	3,2	6	20
311322540050	3,2	6	25
311323040050	3,2	6	30
311323540050	3,2	6	35
311324040050	3,2	6	40
311324540050	no longer available!		
311325040050	no longer available!		

Spacers of brass | with outer Ø 8 mm



Material: brass (CuZn40Pb3) nickel-plated (Ni3bk)

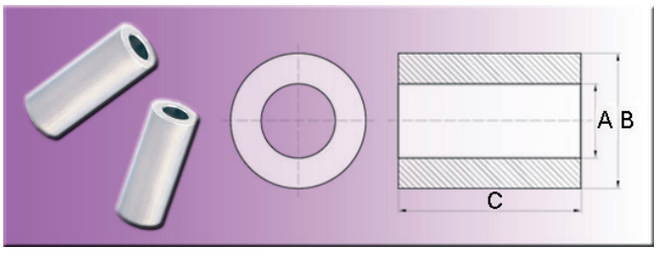
Further dimensions or materials on request!

Part no.	A	B	C
311430140050	4,3	8	1
311430240050	4,3	8	2
311430340050	4,3	8	3
311430440050	4,3	8	4
311430540050	4,3	8	5
311430640050	4,3	8	6
311430740050	4,3	8	7
311430840050	4,3	8	8
311430940050	4,3	8	9

Part no.	A	B	C
311431040050	4,3	8	10
311431140050	4,3	8	11
311431240050	4,3	8	12
311431340050	4,3	8	13
311431440050	4,3	8	14
311431540050	4,3	8	15
311431640050	4,3	8	16
311431740050	4,3	8	17
311431840050	4,3	8	18

Part no.	A	B	C
311431940050	4,3	8	19
311432040050	4,3	8	20
311432540050	4,3	8	25
311433040050	4,3	8	30
311433540050	4,3	8	35
311434040050	4,3	8	40
311434540050	no longer available!		
311435040050	no longer available!		

Spacers of brass | with outer Ø 10 mm



Material: brass (CuZn40Pb3) nickel-plated (Ni3bk)

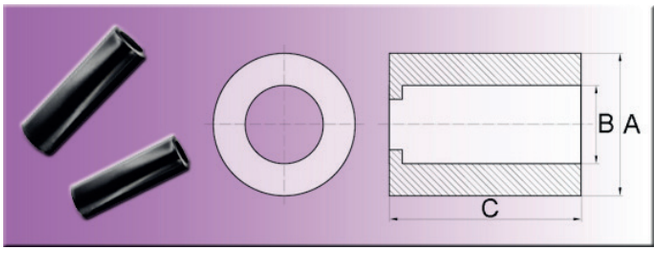
Further dimensions or materials on request!

Part no.	A	B	C
311530140050	5,3	10	1
311530240050	5,3	10	2
311530340050	5,3	10	3
311530440050	5,3	10	4
311530540050	5,3	10	5
311530640050	5,3	10	6
311530740050	5,3	10	7
311530840050	5,3	10	8

Part no.	A	B	C
311530940050	5,3	10	9
311531040050	5,3	10	10
311531140050	5,3	10	11
311531240050	5,3	10	12
311531340050	5,3	10	13
311531440050	5,3	10	14
311531540050	5,3	10	15
311531640050	5,3	10	16

Part no.	A	B	C
311531740050	5,3	10	17
311531840050	5,3	10	18
311531940050	5,3	10	19
311532040050	5,3	10	20
311532540050	5,3	10	25
311533040050	5,3	10	30
311533540050	5,3	10	35
311534040050	5,3	10	40

Spacers with anti-loss protection | with outer Ø 4 mm



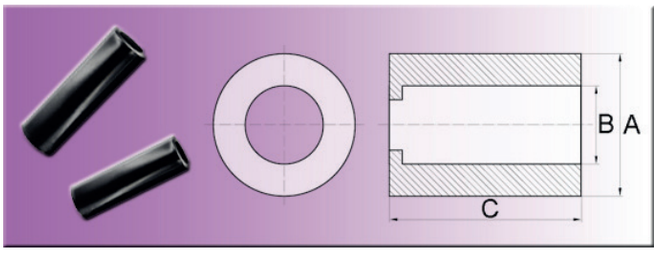
With anti-loss protection.
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.

Material: PA 6.6
Colour: black

Minimum order quantity: 1,000 pcs per order and dimension

Part no.	A	B	C
022-4-2,2-X	4	2,2	2-40

Spacers with anti-loss protection | with outer Ø 5 mm



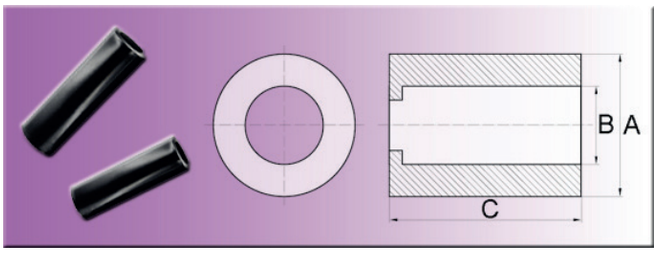
With anti-loss protection.
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.

Material: PA 6.6
Colour: black

Minimum order quantity: 1,000 pcs per order and dimension

Part no.	A	B	C
022-5-2,7-X	5	2,7	2-55

Spacers with anti-loss protection | with outer Ø 6 mm



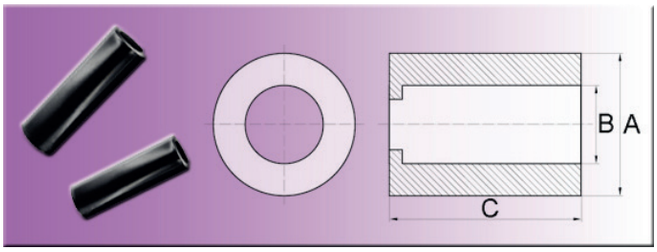
With anti-loss protection.
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.

Material: PA 6.6
Colour: black

Minimum order quantity: 1,000 pcs per order and dimension

Part no.	A	B	C
022-6-3,4-X	6	3,4	2-45

Spacers with anti-loss protection | with outer Ø 8 mm



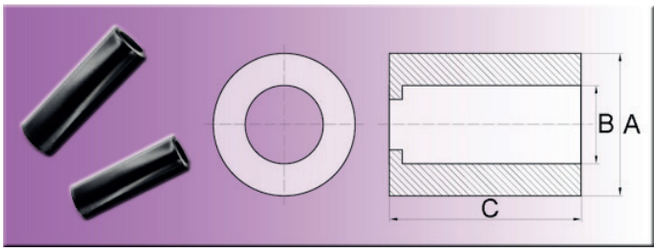
With anti-loss protection.
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.

Material: PA 6.6
Colour: black

Minimum order quantity: 1,000 pcs per order and dimension

Part no.	A	B	C
022-8-4,2-X	8	4,2	2-50

Spacers with anti-loss protection | with outer Ø 10 mm



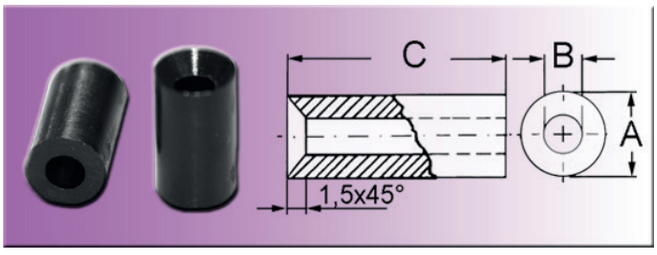
With anti-loss protection.
X = length (see column C)
Manufacturing range in steps of 1 mm. Please indicate the desired length as X.

Material: PA 6.6
Colour: black

Minimum order quantity: 1,000 pcs per order and dimension

Part no.	A	B	C
022-10-6,2-X	10	6,2	2-55

Spacers with sinking | Onesided chamfer



Round spacers with sinking und onesided chamfer.

Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black

Part no.	A	B	C
0231003	16	6,2	3
0231004	16	6,2	4
0231005	16	6,2	5
0231006	16	6,2	6
0231007	16	6,2	7
0231008	16	6,2	8
0231009	16	6,2	9
0231010	16	6,2	10

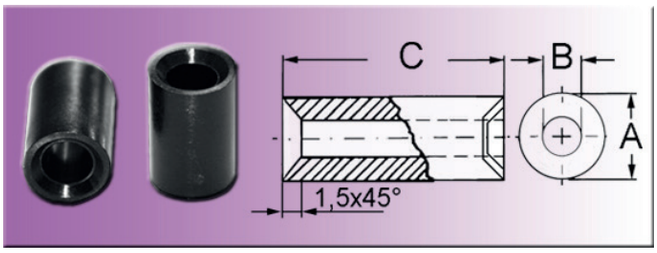
Part no.	A	B	C
0231011	16	6,2	11
0231012	16	6,2	12
0231013	16	6,2	13
0231014	16	6,2	14
0231015	16	6,2	15
0231016	16	6,2	16
0231017	16	6,2	17
0231018	16	6,2	18

Part no.	A	B	C
0231019	16	6,2	19
0231020	16	6,2	20
0231021	16	6,2	21
0231022	16	6,2	22
0231023	16	6,2	23
0231024	16	6,2	24
0231025	16	6,2	25
0231026	16	6,2	26

Part no.	A	B	C
0231027	16	6,2	27
0231028	16	6,2	28

Part no.	A	B	C
0231029	16	6,2	29
0231030	16	6,2	30

Spacers with sinking | Both-sided chamfer



Round spacers with sinking und both-sided chamfer.

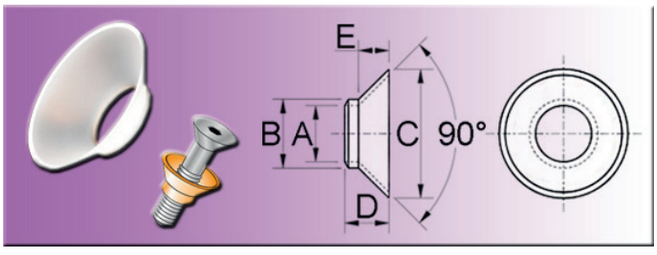
Material: PA-GV (glass fibre reinforced), temperature-resistant up to approx. 110°C
Colour: black

Part no.	A	B	C
0232004	16	6,2	4
0232005	16	6,2	5
0232006	16	6,2	6
0232007	16	6,2	7
0232008	16	6,2	8
0232009	16	6,2	9

Part no.	A	B	C
0232010	16	6,2	10
0232011	16	6,2	11
0232012	16	6,2	12
0232013	16	6,2	13
0232014	16	6,2	14
0232015	16	6,2	15

Part no.	A	B	C
0232016	16	6,2	16
0232017	16	6,2	17
0232018	16	6,2	18
0232019	16	6,2	19
0232020	16	6,2	20

Insulating cases | PA 6 natural - tapered



Prevent electrolytic corrosion of screws with counter-sunk heads.
Frequently applied in the lighting and electrotechnical industry.
Compulsory by law in many countries.
Furthermore a good protection for countersunk screws. Absorb vibrations.

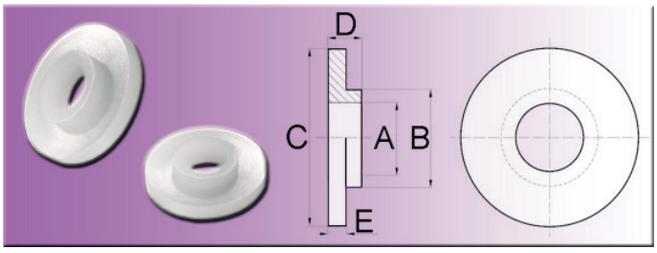
Material: PA 6
Colour: natural

Further types on written request.

Part no.	A	B	C	D	E
0830302	3,1	4,9	8,2	3,7	1,7
0830402	4,1	5,9	10,4	4,3	2,3
0830502	5,1	6,9	12,4	4,8	2,8
0830602	6,1	7,9	12,62	4,9	3,5

Part no.	A	B	C	D	E
0830802	8,1	9,9	18,6	6,4	4,4
0831005	10,1	12,4	22,2	10,0	5,0
0831202	12,1	13,9	28,8	8,5	6,5

Insulating cases | PA 6 natural



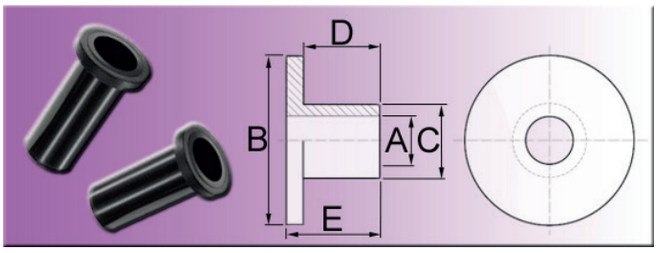
Protection of transformers, installations, lighting fixtures etc.

Material: PA 6
Colour: natural

Further types on written request.

Part no.	A	B	C	D	E
0180200	2,1	3,3	6	2,5	1,0
0180250	2,6	3,9	10	3,0	1,3
0180300	3,1	3,9	10	3,0	1,3
0180301	3,1	4,9	10	3,0	1,3
0180302	3,1	5,9	10	3,0	1,3
0180303	3,1	6,9	15	3,5	1,5
0180304	3,1	7,9	15	3,5	1,5
0180305	3,1	8,9	15	3,5	1,5
0180306	3,1	9,9	15	3,5	1,5
0180307	3,1	10,9	18	3,5	1,5
0180400	4,2	4,9	10	3,0	1,3
0180401	4,2	5,9	10	3,0	1,3
0180402	4,2	6,9	15	3,5	1,5
0180403	4,2	7,9	15	3,5	1,5
0180404	4,2	8,9	15	3,5	1,5
0180405	4,2	9,9	15	3,5	1,5
0180406	4,2	10,9	18	3,5	1,5
0180407	4,2	11,9	18	3,5	1,5
0180500	5,2	5,9	10	3,0	1,3
0180501	5,2	6,9	15	3,5	1,5
0180502	5,2	7,9	15	3,5	1,5
0180503	5,2	8,9	15	3,5	1,5
0180504	5,2	9,9	15	3,5	1,5
0180505	5,2	10,9	18	3,5	1,5

Part no.	A	B	C	D	E
0180506	5,2	11,9	18	3,5	1,5
0180600	6,2	6,9	15	3,5	1,5
0180601	6,2	7,9	15	3,5	1,5
0180602	6,2	8,9	15	3,5	1,5
0180603	6,2	9,9	15	3,5	1,5
0180604	6,2	10,9	18	3,5	1,5
0180605	6,2	11,9	18	3,5	1,5
0180800	8,2	8,9	15	3,5	1,5
0180801	8,2	9,9	15	3,5	1,5
0180802	8,2	10,9	18	3,5	1,5
0180803	8,2	11,9	18	3,5	1,5
0181000	10,2	10,9	18	3,5	1,5
0181001	10,2	11,9	18	3,5	1,5
0181002	10,2	12,9	19	3,5	1,5
0181200	12,2	13,8	25	4,0	2,0
0181201	no longer available!				
0181202	12,2	15,8	25	4,0	2,0
0181203	12,2	17,8	25	4,0	2,0
0181400	14,2	15,8	25	4,0	2,0
0181401	14,2	17,8	25	4,0	2,0
0181600	16,2	17,8	25	4,0	2,0
0181801	18,2	21,8	36	6,0	3,0
0182000	20,1	21,8	36	6,0	3,0



These insulating cases combine electrical insulation with high mechanical strength.
As they are resistant to electrolytic corrosion, they are essential for connections between incompatible metals.

Material: PA-glass fibre reinforced
Colour: black

Colour white on written request.

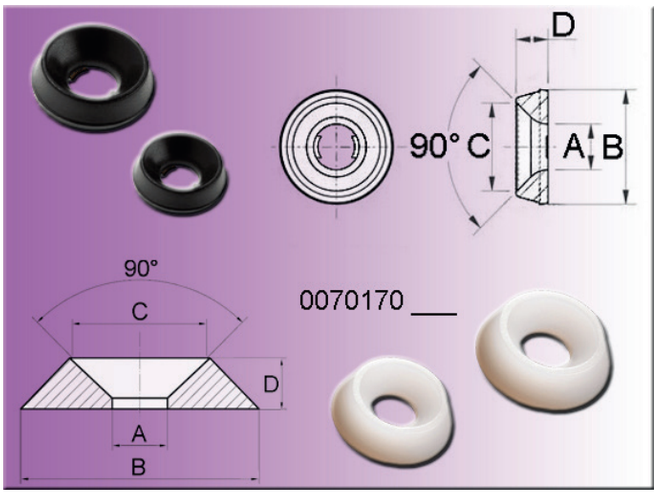
Part no.	A	B	C	D	E
3120832599	2,1	8,0	4,5	4,5	5,5
3120891599	2,2	5,0	4,2	4,0	5,0
3120865599	2,5	6,0	3,0	3,5	5,0
3120886599	2,6	6,0	3,5	1,3	2,3
3120839599	2,6	8,0	4,5	1,6	4,2
3120802599	2,6	8,0	4,8	1,1	2,1
3120102599	2,7	5,0	3,15	1,4	1,9
3120833599	2,7	5,0	3,15	1,4	2,4
3120812599	3,0	5,5	3,5	2,5	3,5
3120849599	3,0	5,9	3,5	0,6	1,8
3120859599	3,0	5,9	3,5	0,6	2,6
3120860599	3,0	5,9	3,5	1,2	2,5
3120870599	3,0	6,5	3,6	2,5	3,5
3120869599	3,0	6,5	3,6	2,5	4,5
3120884599	3,0	8,0	3,6	1,5	4,5
3120843599	3,1	10,0	3,4	8,0	9,0
3120871599	3,1	10,0	4,1	1,6	3,0
3120846599	3,1	10,0	4,2	8,0	10,0
3120896599	3,1	10,0	4,2	8,0	12,0
3120852599	3,1	10,0	6,4	1,3	2,8
3120867599	3,1	6,0	3,5	1,1	2,1
3120836599	3,1	6,0	3,5	1,3	2,3
3120893599	3,1	6,0	3,5	1,3	3,7
3120866599	3,1	6,0	3,5	3,0	5,0
3120890599	3,1	6,0	3,5	3,5	6,0
3120887599	3,1	6,0	3,7	3,0	5,0
3120862599	3,1	6,0	3,8	3,3	4,4
3120863599	3,1	6,0	3,8	5,2	6,4
3120819599	3,1	7,5	3,5	1,3	2,3
3120894599	3,1	7,5	3,5	1,3	4,3
3120801599	3,1	7,5	3,5	2,5	3,5
3120810599	3,1	7,5	3,5	2,5	6,5
3120885599	3,1	7,5	3,5	2,5	7,5

Part no.	A	B	C	D	E
3120853599	3,1	7,5	3,9	2,0	4,0
3120838599	3,1	7,5	3,9	3,5	4,5
3120895599	3,1	7,5	3,9	3,5	5,5
3120851599	3,1	7,5	3,9	4,0	6,0
3120814599	3,1	7,5	3,9	4,5	6,0
3120877599	3,1	7,6	6,0	1,0	2,0
3120809599	3,5	7,0	4,9	7,4	8,2
3120806599	3,5	7,0	5,1	2,2	3,0
3120858599	3,5	9,0	6,3	2,0	4,0
3120842599	4,0	10,0	4,4	8,0	9,0
3120850599	4,0	9,3	6,3	1,3	2,5
3120847599	4,1	10,0	5,2	10,0	12,0
3120876599	4,1	10,0	7,0	1,0	2,0
3120855599	4,1	8,0	5,0	3,0	7,0
3120883599	4,1	8,0	5,6	6,5	10,5
3120897599	4,2	10,0	5,2	10,0	14,0
3120888599	4,2	11,9	7,8	6,3	7,9
3120892599	4,5	15,7	9,7	1,7	5,7
3120861599	4,5	15,7	9,7	6,5	11,5
3120804599	4,5	15,7	9,7	8,0	13,0
3120831599	4,5	8,0	6,0	3,2	4,0
3120879599	5,0	10,1	6,3	2,24	3,05
3120828599	5,1	12,0	5,5	2,0	3,0
3120808599	5,1	12,0	5,5	4,0	5,0
3120821599	5,1	12,0	6,4	15,0	16,0
3120844599	5,1	12,0	6,4	15,0	17,0
3120875599	5,2	10,0	6,2	1,5	2,5
3120857599	5,2	10,0	6,2	1,5	4,0
3120864599	5,2	12,0	5,5	3,5	5,0
3120826599	5,2	12,0	6,2	10,0	11,0
3120898599	5,2	12,0	6,4	15,0	20,0
3120816599	5,2	12,0	6,9	8,0	11,0
3120873599	5,2	12,0	7,0	0,8	2,8

Part no.	A	B	C	D	E
3120878599	6,1	10,0	8,5	3,1	6,0
3120807599	6,1	12,0	6,5	4,0	5,0
3120880599	6,1	12,0	7,6	15,0	16,0
3120881599	6,1	12,0	7,6	15,0	17,0
3120845599	6,1	12,0	7,8	15,0	17,0
3120825599	6,1	12,0	7,9	1,0	2,0
3120817599	6,2	12,0	6,5	2,0	3,0
3120811599	6,2	12,0	6,5	4,0	4,5
3120827599	6,2	12,0	7,2	10,0	11,0
3120899599	6,2	12,0	7,2	10,0	13,0
3120820599	6,2	12,0	7,8	15,0	16,0
3120100599	6,2	12,0	7,8	15,0	20,0
3120824599	6,2	12,0	7,9	2,0	4,0
3120815599	6,2	12,0	7,9	8,0	11,0
3120818599	6,4	16,0	10,0	2,3	3,5
3120834599	6,5	13,0	9,6	1,3	1,9
3120854599	6,5	25,0	13,0	3,5	8,0
3120805599	6,5	25,0	13,0	6,0	10,5

Part no.	A	B	C	D	E
3120813599	6,5	25,0	13,0	8,5	13,0
3120872599	8,2	14,0	10,9	16,0	18,0
3120823599	8,2	14,0	9,9	16,0	18,0
3120101599	8,2	14,0	9,9	16,0	21,0
3120882599	8,2	18,0	9,9	20,0	23,0
3120835599	8,2	19,0	9,35	1,7	2,5
3120822599	8,5	25,0	12,8	9,0	13,5
3120803599	8,5	25,0	13,0	6,0	10,5
3120856599	8,5	25,0	17,5	2,5	5,5
3120837599	10,2	16,0	11,0	1,0	2,0
3120874599	10,2	16,0	11,0	2,0	3,0
3120829599	10,2	28,0	12,5	2,5	3,7
3120840599	10,2	28,0	17,5	2,5	6,5
3120889599	10,3	18,6	14,0	5,2	7,2
3120841599	10,5	21,0	14,5	32,0	35,0
3120830599	12,2	20,0	16,0	1,0	2,0
3120848599	12,5	21,0	14,5	32,5	35,5

Metric finishing washers | Type 0



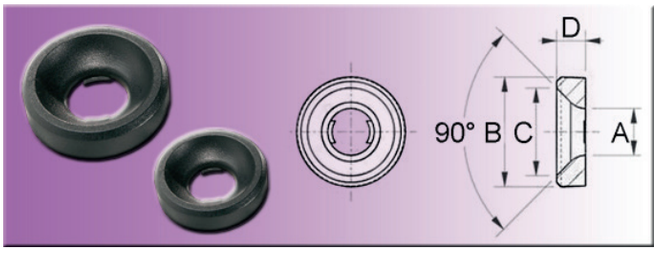
For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	M	WW
0070090500	3,2	10,5	7,0	3,0	3	1/8“
0070090599	3,2	10,5	7,0	3,0	3	1/8“
0070110500	4,3	12,5	9,0	3,0	4	5/32“
0070110599	4,3	12,5	9,0	3,0	4	5/32“
0070130500	5,3	14,0	11,0	3,8	5	3/16“

Part no.	A	B	C	D	M	WW
0070130599	5,3	14,0	11,0	3,8	5	3/16“
0070150500	6,4	16,0	13,0	4,5	6	¼“
0070150599	6,4	16,0	13,0	4,5	6	¼“
0070170500	8,0	22,3	14,3	5,9	8	-
0070170599	8,0	22,3	14,3	5,9	8	-

Metric finishing washers | Type 1



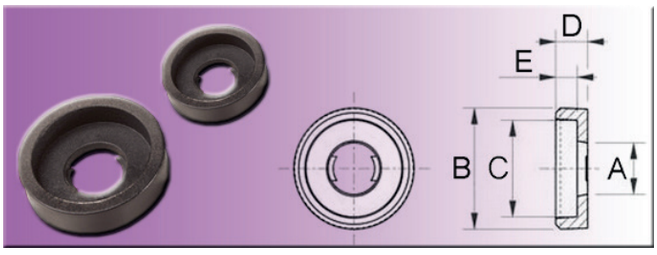
For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	M	WW
0071025500	2,7	6,8	5	2,0	2,5	3/32“
0071025599	2,7	6,8	5	2,0	2,5	3/32“
0071030500	3,2	8,5	6	2,2	3	1/8“
0071030599	3,2	8,5	6	2,2	3	1/8“
0071040500	4,3	10,5	8	2,8	4	5/32“
0071040599	4,3	10,5	8	2,8	4	5/32“

Part no.	A	B	C	D	M	WW
0071050500	5,3	12,7	10	3,4	5	3/16“
0071050599	5,3	12,7	10	3,4	5	3/16“
0071060500	6,4	15	12	4,0	6	¼“
0071060599	6,4	15	12	4,0	6	¼“
0071080500	8,4	20,0	16	5,0	8	5/16“
0071080599	8,4	20,0	16	5,0	8	5/16“

Metric finishing washers | Type 2

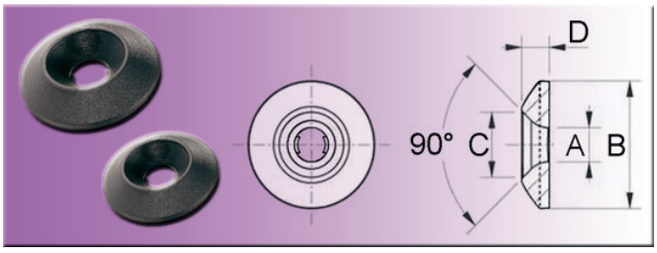


For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	E	M	WW
0072025500	2,7	6,8	5	2,0	1,0	2,5	3/32“
0072025599	2,7	6,8	5	2,0	1,0	2,5	3/32“
0072030500	3,2	8,5	6	2,2	1,2	3	1/8“
0072030599	3,2	8,5	6	2,2	1,2	3	1/8“
0072040500	4,3	10,5	8	2,8	1,7	4	5/32“
0072040599	4,3	10,5	8	2,8	1,7	4	5/32“
0072050500	5,3	12,7	10	3,4	2,2	5	3/16“
0072050599	5,3	12,7	10	3,4	2,2	5	3/16“
0072060500	6,4	15,0	12	4,0	2,7	6	¼“
0072060599	6,4	15,0	12	4,0	2,7	6	¼“
0072080500	8,4	20,0	16	5,0	3,5	8	5/16“
0072080599	8,4	20,0	16	5,0	3,5	8	5/16“

Metric finishing washers | Type 3



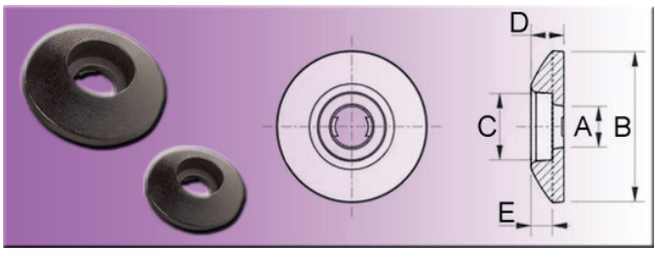
For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	M	WW
0073030500	3,2	14	7	2,9	3	1/8“
0073030599	3,2	14	7	2,9	3	1/8“
0073040500	4,3	16	9	3,5	4	5/32“
0073040599	4,3	16	9	3,5	4	5/32“

Part no.	A	B	C	D	M	WW
0073050500	5,3	18	11	3,8	5	3/16“
0073050599	5,3	18	11	3,8	5	3/16“
0073060500	6,4	22	13	4,5	6	¼“
0073060599	6,4	22	13	4,5	6	¼“

Metric finishing washers | Type 4

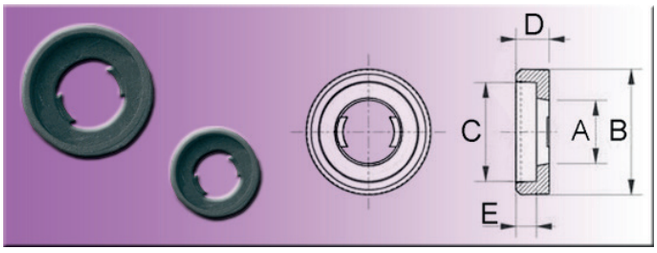


For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	E	M	WW
0074030500	3,2	14,0	5,5	2,8	1,7	3	1/8“
0074030599	3,2	14,0	5,5	2,8	1,7	3	1/8“
0074040500	4,3	16,0	7,0	3,5	2,3	4	5/32“
0074040599	4,3	16,0	7,0	3,5	2,3	4	5/32“
0074050500	5,3	18,0	8,5	4,0	2,7	5	3/16“
0074050599	5,3	18,0	8,5	4,0	2,7	5	3/16“
0074060500	6,4	22,0	10,0	4,9	3,5	6	¼“
0074060599	6,4	22,0	10,0	4,9	3,5	6	¼“

Metric finishing washers | Type 5

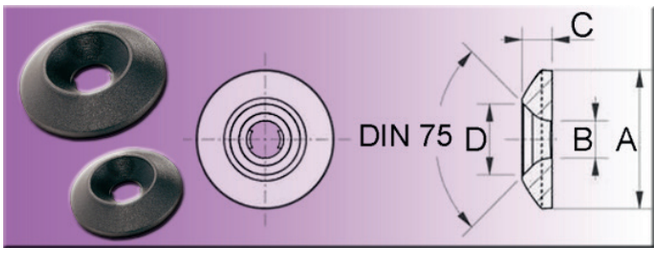


For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour:
Last digits 599 = black
Last digits 500 = white

Part no.	A	B	C	D	E	M	WW
0075030500	3,2	6,5	5,5	2,0	1,1	3	1/8“
0075030599	3,2	6,5	5,5	2,0	1,1	3	1/8“
0075040500	4,3	8,5	7,0	2,2	1,2	4	5/32“
0075040599	4,3	8,5	7,0	2,2	1,2	4	5/32“
0075050500	5,3	10,5	8,5	2,8	1,6	5	3/16“
0075050599	5,3	10,5	8,5	2,8	1,6	5	3/16“
0075060500	6,4	12,7	10,0	3,4	2,1	6	¼“
0075060599	6,4	12,7	10,0	3,4	2,1	6	¼“
0075080500	8,4	15,0	13,0	4,0	2,6	8	5/16“
0075080599	8,4	15,0	13,0	4,0	2,6	8	5/16“

Metric finishing washers | Type 6



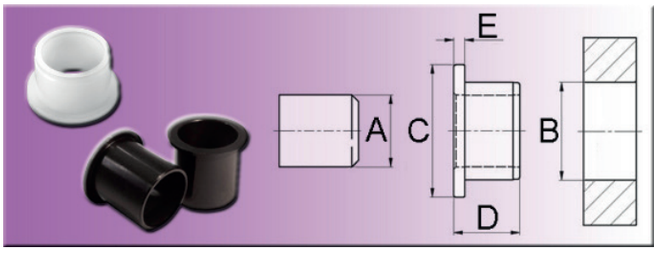
For the protection of surfaces like enamel, paint, textile, glass, ceramic etc.
Also suitable for decoration purposes.

Material: PA 6
Colour: black

Part no.	A	B	C	D	M
0076025	7,0	2,7	1,5	5,0	2,5
0076030	7,5	3,1	1,5	5,4	3

Part no.	A	B	C	D	M
0076040	12,0	4,1	3,0	7,0	4
0076060	16,0	6,2	3,3	13,0	6

Bush bearings | with collar



Suitable for all rotating and moving parts. Ideal for silent hinges and low-speed machines. Electrical insulation between shaft and bearing housing.

Material: PA 6.6
Colour: natural

Due to its gliding properties and high wear resistance, polyamide is also very applicable during dry running. Resistant to fouling, atmospheric influences and to the majority of chemicals. After assembly the bearing clearance is approx. 1% of the shaft diameter.

Further types or materials, e. g. black colour, on written request.

Part no.	A	B	C	D	E
0080300	3,0	5	8,0	7,0	2,0
0080300599	no longer available!				
0080400	4,0	6	9,0	8,0	2,0
0080400599	Black colour only on request!				
0080500	5,0	8	11,0	10,0	2,0
0080500599	Black colour only on request!				
0080601	6,0	8	10,0	10,0	2,0
0080601599	Black colour only on request!				
0080610	6,0	9	12,0	6,0	2,0
0080610599	Black colour only on request!				
0080600	6,0	9	12,0	11,0	2,0
0080600599	Black colour only on request!				
0080609	6,0	10	15,0	8,0	1,5
0080609599	Black colour only on request!				
0080603	6,0	10	15,0	10,0	1,5
0080603599	Black colour only on request!				
0080811	8,0	11	16,0	7,0	2,0
0080811599	Black colour only on request!				
0080800	8,0	11	16,0	13,0	2,0
0080800599	Black colour only on request!				
0080809	8,0	12	16,0	6,0	2,0
0080809599	Black colour only on request!				
0080812	8,0	12	16,0	12,0	2,0
0080812599	Black colour only on request!				
0080810	8,0	14	20,0	10,0	2,0
0080810599	Black colour only on request!				
0080813	8,0	14	20,0	12,0	2,0
0080813599	Black colour only on request!				
0081010	10,0	12	16,0	6,0	2,0

Part no.	A	B	C	D	E
0081010599	Black colour only on request!				
0081009	10,0	12	16,0	12,0	2,0
0081009599	Black colour only on request!				
0081014	10,0	13	18,0	8,0	2,0
0081014599	Black colour only on request!				
0081000	10,0	13	18,0	15,0	3,0
0081000599	Black colour only on request!				
0081016	10,0	13	21,0	16,0	3,0
0081016599	Black colour only on request!				
0081011	10,0	14	20,0	10,0	2,0
0081011599	Black colour only on request!				
0081013	10,0	14	20,0	12,0	2,0
0081013599	Black colour only on request!				
0081015	10,0	16	20,0	10,0	2,0
0081015599	Black colour only on request!				
0081012	10,0	16	21,0	10,0	2,0
0081012599	Black colour only on request!				
0081017	10,0	16	20,0	12,0	2,0
0081017599	Black colour only on request!				
0081018	10,0	18	24,0	20,0	4,0
0081018599	Black colour only on request!				
0081206	12,0	14	20,0	10,0	2,0
0081206599	Black colour only on request!				
0081208	12,0	14	20,0	12,0	2,0
0081208599	Black colour only on request!				
0081201	12,0	16	20,0	10,0	2,0
0081201599	Black colour only on request!				
0081207	12,0	16	21,0	10,0	2,0
0081207599	Black colour only on request!				

Part no.	A	B	C	D	E
0081202	12,0	16	20,0	12,0	2,0
0081202599	Black colour only on request!				
0081200	12,0	16	21,0	19,0	3,0
0081200599	Black colour only on request!				
0081203	12,0	18	24,0	20,0	4,0
0081203599	Black colour only on request!				
0081204	12,0	22	30,0	20,0	4,0
0081204599	Black colour only on request!				
0081300	13,0	17	24,0	20,0	4,0
0081300599	Black colour only on request!				
0081301	13,0	20	28,0	20,0	4,0
0081301599	Black colour only on request!				
0081401	14,0	17	24,0	20,0	4,0
0081401599	Black colour only on request!				
0081400	14,0	18	28,0	21,0	3,0
0081400599	Black colour only on request!				
0081402	14,0	20	28,0	20,0	4,0
0081402599	Black colour only on request!				
0081403	14,0	20	30,0	20,0	4,0
0081403599	Black colour only on request!				
0081404	14,0	20	30,0	24,0	2,0
0081404599	Black colour only on request!				
0081405	14,0	22	30,0	20,0	4,0
0081405599	Black colour only on request!				
0081406	14,0	24	30,0	20,0	4,0
0081406599	Black colour only on request!				
0081500	15,0	20	28,0	20,0	4,0
0081500599	Black colour only on request!				
0081501	15,0	20	30,0	20,0	4,0
0081501599	Black colour only on request!				
0081502	15,0	22	30,0	20,0	4,0
0081502599	Black colour only on request!				
0081503	15,0	25	30,0	20,0	4,0
0081503599	Black colour only on request!				
0081603	16,0	20	28,0	15,0	2,0
0081603599	Black colour only on request!				
0081602	16,0	20	28,0	20,0	4,0
0081602599	Black colour only on request!				
0081605	16,0	20	30,0	20,0	4,0
0081605599	Black colour only on request!				
0081600	16,0	20	28,0	22,0	2,0

Part no.	A	B	C	D	E
0081600599	Black colour only on request!				
0081604	16,0	22	30,0	15,0	2,0
0081604599	Black colour only on request!				
0081606	16,0	22	30,0	20,0	4,0
0081606599	Black colour only on request!				
0081607	16,0	24	30,0	15,0	2,0
0081607599	Black colour only on request!				
0081608	16,0	24	30,0	20,0	4,0
0081608599	Black colour only on request!				
0081609	16,0	25	30,0	20,0	4,0
0081609599	Black colour only on request!				
0081610	16,0	26	30,0	20,0	4,0
0081610599	Black colour only on request!				
0081611	16,0	26	32,0	20,0	4,0
0081611599	Black colour only on request!				
0081801	18,0	22	30,0	20,0	4,0
0081801599	Black colour only on request!				
0081800	18,0	22	30,0	25,0	2,5
0081800599	Black colour only on request!				
0081804	18,0	24	30,0	20,0	4,0
0081804599	Black colour only on request!				
0081805	18,0	25	30,0	20,0	4,0
0081805599	Black colour only on request!				
0081806	18,0	26	30,0	20,0	4,0
0081806599	Black colour only on request!				
0081807	18,0	26	32,0	20,0	4,0
0081807599	Black colour only on request!				
0081803	18,5	20	23,5	7,5	1,4
0081803599	Black colour only on request!				
0082002	20,0	24	30,0	15,0	2,0
0082002599	Black colour only on request!				
0082001	20,0	24	30,0	20,0	4,0
0082001599	Black colour only on request!				
0082000	20,0	24	30,0	26,0	3,0
0082000599	Black colour only on request!				
0082003	20,0	25	30,0	15,0	2,0
0082003599	Black colour only on request!				
0082005	20,0	25	30,0	20,0	4,0
0082005599	Black colour only on request!				
0082006	20,0	26	30,0	12,0	2,0
0082006599	Black colour only on request!				



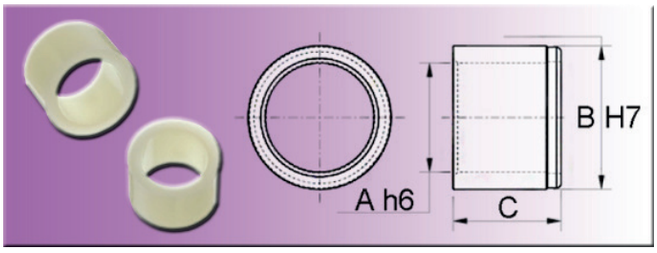
Part no.	A	B	C	D	E
0082004	20,0	26	32,0	15,0	2,0
0082004599	Black colour only on request!				
0082007	20,0	26	30,0	20,0	4,0
0082007599	Black colour only on request!				
0082008	20,0	26	32,0	20,0	3,0
0082008599	Black colour only on request!				
0082009	20,0	28	34,0	20,0	4,0
0082009599	Black colour only on request!				
0082010	20,0	30	36,0	20,0	3,0
0082010599	Black colour only on request!				
0082011	20,0	30	36,0	24,0	4,0
0082011599	Black colour only on request!				
0082200	22,0	25	30,0	20,0	4,0
0082200599	Black colour only on request!				
0082201	22,0	26	30,0	20,0	4,0
0082201599	Black colour only on request!				
0082202	22,0	26	32,0	20,0	4,0
0082202599	Black colour only on request!				
0082203	22,0	28	34,0	20,0	4,0
0082203599	Black colour only on request!				
0082204	22,0	30	36,0	24,0	4,0
0082204599	Black colour only on request!				
0082205	22,0	32	40,0	24,0	4,0
0082205599	Black colour only on request!				
0082401	24,0	30	36,0	24,0	4,0
0082401599	Black colour only on request!				
0082400	24,0	30	37,0	30,0	3,0
0082400599	Black colour only on request!				
0082402	24,0	32	40,0	24,0	4,0
0082402599	Black colour only on request!				
0082403	24,0	35	45,0	24,0	4,0
0082403599	Black colour only on request!				
0082501	25,0	30	36,0	20,0	3,0
0082501599	Black colour only on request!				
0082502	25,0	30	36,0	24,0	4,0
0082502599	Black colour only on request!				
0082500	25,0	30	37,0	30,0	2,5
0082500599	Black colour only on request!				
0082503	25,0	32	40,0	20,0	3,0
0082503599	Black colour only on request!				
0082504	25,0	32	40,0	24,0	4,0

Part no.	A	B	C	D	E
0082504599	Black colour only on request!				
0082505	25,0	35	45,0	20,0	3,0
0082505599	Black colour only on request!				
0082506	25,0	35	45,0	24,0	4,0
0082506599	Black colour only on request!				
0082508	25,0	36	45,0	24,0	4,0
0082508599	Black colour only on request!				
0082507	25,0	35	45,0	30,0	4,0
0082507599	Black colour only on request!				
0082600	26,0	32	40,0	24,0	4,0
0082600599	Black colour only on request!				
0082601	26,0	35	45,0	24,0	4,0
0082601599	Black colour only on request!				
0082602	26,0	36	45,0	24,0	4,0
0082602599	Black colour only on request!				
0082603	26,0	38	48,0	24,0	4,0
0082603599	Black colour only on request!				
0082802	no longer available!				
0082802599	Black colour only on request!				
0082803	28,0	32	40,0	30,0	4,0
0082803599	Black colour only on request!				
0082800	28,0	33	40,0	33,0	2,5
0082800599	Black colour only on request!				
0082804	28,0	35	45,0	24,0	4,0
0082804599	Black colour only on request!				
0082805	28,0	35	45,0	30,0	4,0
0082805599	Black colour only on request!				
0082806	28,0	36	45,0	24,0	4,0
0082806599	Black colour only on request!				
0082807	28,0	38	48,0	24,0	4,0
0082807599	Black colour only on request!				
0082808	28,0	38	48,0	30,0	4,0
0082808599	Black colour only on request!				
0082801	28,0	40	50,0	24,0	4,0
0082801599	Black colour only on request!				
0083001	30,0	32	40,0	24,0	4,0
0083001599	Black colour only on request!				
0083002	30,0	32	40,0	30,0	4,0
0083002599	Black colour only on request!				
0083000	30,0	35	42,0	35,0	2,5
0083000599	Black colour only on request!				

Part no.	A	B	C	D	E
0083007	30,0	35	45,0	30,0	4,0
0083007599	Black colour only on request!				
0083003	30,0	36	45,0	24,0	4,0
0083003599	Black colour only on request!				
0083004	30,0	38	48,0	24,0	4,0
0083004599	Black colour only on request!				
0083005	30,0	38	48,0	30,0	4,0
0083005599	Black colour only on request!				
0083006	30,0	40	50,0	24,0	4,0
0083006599	Black colour only on request!				
0083201	32,0	35	45,0	24,0	4,0
0083201599	Black colour only on request!				
0083202	32,0	35	45,0	30,0	4,0
0083202599	Black colour only on request!				
0083203	32,0	36	45,0	24,0	4,0
0083203599	Black colour only on request!				
0083200	no longer available!				
0083200599	no longer available!				
0083204	32,0	38	48,0	24,0	4,0
0083204599	Black colour only on request!				
0083205	32,0	38	48,0	30,0	4,0
0083205599	Black colour only on request!				
0083206	32,0	40	50,0	24,0	4,0
0083206599	Black colour only on request!				
0083207	32,0	40	50,0	30,0	4,0
0083207599	Black colour only on request!				
0083208	32,0	44	54,0	40,0	5,0
0083208599	Black colour only on request!				
0083300	33,0	40	50,0	24,0	4,0
0083300599	Black colour only on request!				
0083301	no longer available!				
0083301599	Black colour only on request!				
0083302	33,0	44	54,0	40,0	5,0
0083302599	Black colour only on request!				
0083601	36,0	44	54,0	40,0	5,0
0083601599	Black colour only on request!				
0083602	36,0	48	58,0	40,0	5,0
0083602599	Black colour only on request!				
0083800	38,0	44	54,0	40,0	5,0
0083800599	Black colour only on request!				

Part no.	A	B	C	D	E
0083801	38,0	48	58,0	40,0	5,0
0083801599	Black colour only on request!				
0083802	38,0	50	60,0	40,0	5,0
0083802599	Black colour only on request!				
0084001	40,0	44	54,0	40,0	5,0
0084001599	Black colour only on request!				
0084000	40,0	46	55,0	46,0	3,0
0084000599	Black colour only on request!				
0084002	40,0	48	58,0	40,0	5,0
0084002599	Black colour only on request!				
0084003	40,0	50	60,0	40,0	5,0
0084003599	Black colour only on request!				
0084004	40,0	56	70,0	40,0	5,0
0084004599	Black colour only on request!				
0084200	42,0	48	58,0	40,0	5,0
0084200599	Black colour only on request!				
0084201	42,0	50	60,0	40,0	5,0
0084201599	Black colour only on request!				
0084202	42,0	56	70,0	40,0	5,0
0084202599	Black colour only on request!				
0084500	45,0	56	70,0	40,0	5,0
0084500599	Black colour only on request!				
0084501	45,0	60	70,0	40,0	5,0
0084501599	Black colour only on request!				
0084800	48,0	56	70,0	40,0	5,0
0084800599	Black colour only on request!				
0084801	48,0	60	70,0	40,0	5,0
0084801599	Black colour only on request!				
0085000	50,0	56	67,0	50,0	3,5
0085000599	Black colour only on request!				
0085001	50,0	56	70,0	40,0	5,0
0085001599	Black colour only on request!				
0085002	50,0	56	70,0	50,0	5,0
0085002599	Black colour only on request!				
0085003	50,0	60	70,0	40,0	5,0
0085003599	Black colour only on request!				
0085004	50,0	60	70,0	50,0	5,0
0085004599	Black colour only on request!				
0086000	60,0	68	81,0	50,0	4,0
0086000599	Black colour only on request!				

Bush bearings | without collar



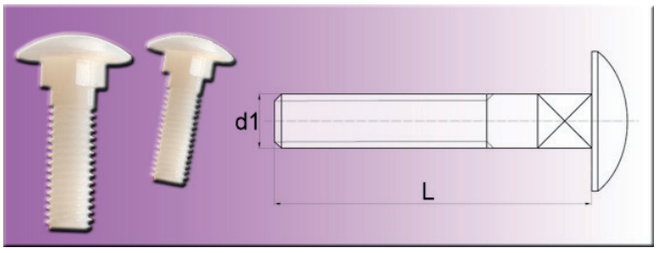
Suitable for all rotating and moving parts. Ideal for silent hinges and low-speed machines. Electrical insulation between shaft and bearing housing.

Material: PA 6.6
Colour: natural

Due to its gliding properties and high wear resistance, polyamide is also very applicable during dry running. Resistant to fouling, atmospheric influences and to the majority of chemicals. After assembly the bearing clearance is approx. 1% of the shaft diameter.

NO LONGER AVAILABLE!

Screws according to DIN of plastic | Mushroom head bolts ~DIN 603 PA



Mushroom head bolts ~DIN 603

Minimum order quantity: 1,000 pcs. per dimension and order

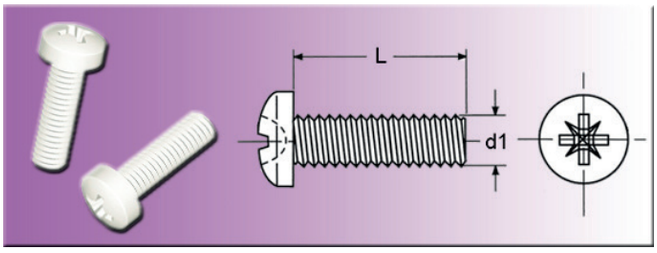
Material: PA 6.6
Colour: natural

Part no.	d1 x L
2450509	M5 x 9
2450510	M5 x 10
2450511	M5 x 11
2450512	M5 x 12
2450513	M5 x 13
2450514	M5 x 14
2450515	M5 x 15
2450517	M5 x 17
2450518	M5 x 18
2450519	M5 x 19
2450520	M5 x 20
2450521	M5 x 21
2450522	M5 x 22
2450523	M5 x 23
2450524	M5 x 24
2450525	M5 x 25
2450528	M5 x 28
2450530	M5 x 30
2450533	M5 x 33
2450535	M5 x 35
2450540	M5 x 40
2450545	M5 x 45
2450550	M5 x 50
2450555	M5 x 55
2450609	M6 x 9
2450610	M6 x 10

Part no.	d1 x L
2450611	M6 x 11
2450612	M6 x 12
2450615	M6 x 15
2450616	M6 x 16
2450618	M6 x 18
2450619	M6 x 19
2450620	M6 x 20
2450621	M6 x 21
2450624	M6 x 24
2450625	M6 x 25
2450629	M6 x 29
2450630	M6 x 30
2450634	M6 x 34
2450639	M6 x 39
2450644	M6 x 44
2450649	M6 x 49
2450654	M6 x 54
2450664	M6 x 64
2450810	M8 x 10
2450811	M8 x 11
2450812	M8 x 12
2450813	M8 x 13
2450814	M8 x 14
2450815	M8 x 15
2450816	M8 x 16
2450817	M8 x 17

Part no.	d1 x L
2450818	M8 x 18
2450819	M8 x 19
2450820	M8 x 20
2450821	M8 x 21
2450822	M8 x 22
2450823	M8 x 23
2450825	M8 x 25
2450828	M8 x 28
2450830	M8 x 30
2450835	M8 x 35
2450840	M8 x 40
2450845	M8 x 45
2450850	M8 x 50
2450855	M8 x 55
2450860	M8 x 60
2450865	M8 x 65
2450870	M8 x 70
2450875	M8 x 75
2450880	M8 x 80
2450885	M8 x 85
2450890	M8 x 90
2450895	M8 x 95
24508100	M8 x 100
24508120	M8 x 120

Screws according to DIN of plastic | Raised head screws ~DIN 7985 PA



Raised head screws ~DIN 7985 (~DIN 34812)

Minimum order quantity: 1,000 pcs. per dimension and order

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2490304	M3 x 4
2490305	M3 x 5
2490306	M3 x 6
2490308	M3 x 8
2490310	M3 x 10
2490312	M3 x 12
2490314	M3 x 14
2490315	M3 x 15
2490316	M3 x 16
2490318	M3 x 18
2490320	M3 x 20
2490322	M3 x 22
2490325	M3 x 25
2490328	M3 x 28
2490330	M3 x 30
2490333	M3 x 33
2490335	M3 x 35
2490340	M3 x 40
2490345	M3 x 45
2490404	M4 x 4
2490405	M4 x 5
2490406	M4 x 6
2490408	M4 x 8
2490410	M4 x 10
2490412	M4 x 12
2490413	M4 x 13
2490414	M4 x 14
2490415	M4 x 15
2490416	M4 x 16
2490418	M4 x 18
2490420	M4 x 20
2490423	M4 x 23
2490425	M4 x 25

Part no.	d1 x L
2490428	M4 x 28
2490430	M4 x 30
2490435	M4 x 35
2490440	M4 x 40
2490445	M4 x 45
2490450	M4 x 50
2490455	M4 x 55
2490460	M4 x 60
2490470	M4 x 70
2490504	M5 x 4
2490506	M5 x 6
2490507	M5 x 7
2490508	M5 x 8
2490509	M5 x 9
2490510	M5 x 10
2490512	M5 x 12
2490513	M5 x 13
2490514	M5 x 14
2490515	M5 x 15
2490516	M5 x 16
2490517	M5 x 17
2490518	M5 x 18
2490520	M5 x 20
2490525	M5 x 25
2490530	M5 x 30
2490535	M5 x 35
2490540	M5 x 40
2490545	M5 x 45
2490550	M5 x 50
2490560	M5 x 60
2490565	M5 x 65
2490570	M5 x 70
2490580	M5 x 80

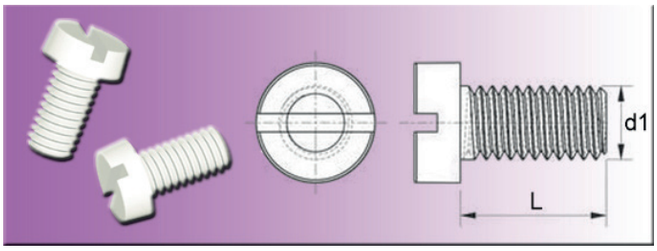
Part no.	d1 x L
2490605	M6 x 5
2490606	M6 x 6
2490607	M6 x 7
2490608	M6 x 8
2490610	M6 x 10
2490612	M6 x 12
2490615	M6 x 15
2490616	M6 x 16
2490617	M6 x 17
2490620	M6 x 20
2490625	M6 x 25
2490630	M6 x 30
2490635	M6 x 35
2490640	M6 x 40
2490645	M6 x 45
2490650	M6 x 50
2490655	M6 x 55
2490660	M6 x 60
2490670	M6 x 70
2490675	M6 x 75
2490680	M6 x 80
2490690	M6 x 90
2490804	M8 x 4
2490805	M8 x 5
2490806	M8 x 6
2490807	M8 x 7
2490808	M8 x 8
2490809	M8 x 9
2490810	M8 x 10
2490811	M8 x 11
2490812	M8 x 12
2490813	M8 x 13
2490815	M8 x 15

Part no.	d1 x L
2490816	M8 x 16
2490817	M8 x 17
2490818	M8 x 18
2490820	M8 x 20
2490823	M8 x 23
2490825	M8 x 25
2490826	M8 x 26

Part no.	d1 x L
2490830	M8 x 30
2490835	M8 x 35
2490840	M8 x 40
2490845	M8 x 45
2490850	M8 x 50
2490855	M8 x 55
2490860	M8 x 60

Part no.	d1 x L
2490865	M8 x 65
2490870	M8 x 70
2490875	M8 x 75
2490880	M8 x 80
2490890	M8 x 90

Screws according to DIN of plastic | Slotted head screws ~DIN 84 PA



Slotted head screws ~DIN 84 (~DIN EN ISO 1207)

Minimum order quantity:
500 pcs. for M3
200 pcs. for M4, M5 + M6
100 pcs. from M8 upwards

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2500304	M3 x 4
2500305	M3 x 5
2500306	M3 x 6
2500308	M3 x 8
2500310	M3 x 10
2500312	M3 x 12
2500314	M3 x 14
2500315	M3 x 15
2500316	M3 x 16
2500318	M3 x 18
2500320	M3 x 20
2500322	M3 x 22
2500325	M3 x 25
2500328	M3 x 28
2500330	M3 x 30
2500333	M3 x 33
2500335	M3 x 35
2500340	M3 x 40
2500345	M3 x 45
2500404	M4 x 4
2500405	M4 x 5
2500406	M4 x 6
2500408	M4 x 8

Part no.	d1 x L
2500410	M4 x 10
2500412	M4 x 12
2500413	M4 x 13
2500414	M4 x 14
2500415	M4 x 15
2500416	M4 x 16
2500418	M4 x 18
2500420	M4 x 20
2500423	M4 x 23
2500425	M4 x 25
2500428	M4 x 28
2500430	M4 x 30
2500435	M4 x 35
2500440	M4 x 40
2500445	M4 x 45
2500450	M4 x 50
2500455	M4 x 55
2500460	M4 x 60
2500470	M4 x 70
2500504	M5 x 4
2500506	M5 x 6
2500507	M5 x 7
2500508	M5 x 8

Part no.	d1 x L
2500509	M5 x 9
2500510	M5 x 10
2500512	M5 x 12
2500513	M5 x 13
2500514	M5 x 14
2500515	M5 x 15
2500516	M5 x 16
2500517	M5 x 17
2500518	M5 x 18
2500520	M5 x 20
2500525	M5 x 25
2500530	M5 x 30
2500535	M5 x 35
2500540	M5 x 40
2500545	M5 x 45
2500550	M5 x 50
2500560	M5 x 60
2500565	M5 x 65
2500570	M5 x 70
2500580	M5 x 80
2500605	M6 x 5
2500606	M6 x 6
2500607	M6 x 7

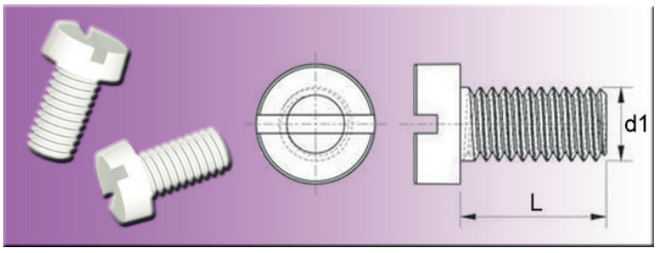


Part no.	d1 x L
2500608	M6 x 8
2500610	M6 x 10
2500612	M6 x 12
2500614	M6 x 14
2500615	M6 x 15
2500616	M6 x 16
2500617	M6 x 17
2500620	M6 x 20
2500625	M6 x 25
2500630	M6 x 30
2500635	M6 x 35
2500640	M6 x 40
2500645	M6 x 45
2500650	M6 x 50
2500655	M6 x 55
2500660	M6 x 60
2500670	M6 x 70
2500675	M6 x 75
2500680	M6 x 80
2500690	M6 x 90
2500804	M8 x 4
2500805	M8 x 5
2500806	M8 x 6
2500807	M8 x 7
2500808	M8 x 8
2500809	M8 x 9
2500810	M8 x 10
2500811	M8 x 11
2500812	M8 x 12
2500813	M8 x 13

Part no.	d1 x L
2500815	M8 x 15
2500816	M8 x 16
2500817	M8 x 17
2500818	M8 x 18
2500820	M8 x 20
2500823	M8 x 23
2500825	M8 x 25
2500830	M8 x 30
2500835	M8 x 35
2500840	M8 x 40
2500845	M8 x 45
2500850	M8 x 50
2500855	M8 x 55
2500860	M8 x 60
2500865	M8 x 65
2500870	M8 x 70
2500875	M8 x 75
2500880	M8 x 80
2500890	M8 x 90
2501004	M10 x 4
2501006	M10 x 6
2501007	M10 x 7
2501008	M10 x 8
2501010	M10 x 10
2501012	M10 x 12
2501013	M10 x 13
2501014	M10 x 14
2501015	M10 x 15
2501016	M10 x 16
2501020	M10 x 20

Part no.	d1 x L
2501025	M10 x 25
2501030	M10 x 30
2501035	M10 x 35
2501040	M10 x 40
2501045	M10 x 45
2501050	M10 x 50
2501055	M10 x 55
2501060	M10 x 60
2501065	M10 x 65
2501070	M10 x 70
2501080	M10 x 80
2501090	M10 x 90
25010100	M10 x 100
2501209	M12 x 9
2501210	M12 x 10
2501211	M12 x 11
2501212	M12 x 12
2501215	M12 x 15
2501220	M12 x 20
2501225	M12 x 25
2501230	M12 x 30
2501235	M12 x 35
2501240	M12 x 40
2501245	M12 x 45
2501250	M12 x 50
2501260	M12 x 60
2501270	M12 x 70
2501275	M12 x 75
2501280	M12 x 80

Screws according to DIN of plastic | Slotted head screws ~DIN 84 PP



Slotted head screws ~DIN 84 (~DIN EN ISO 1207)

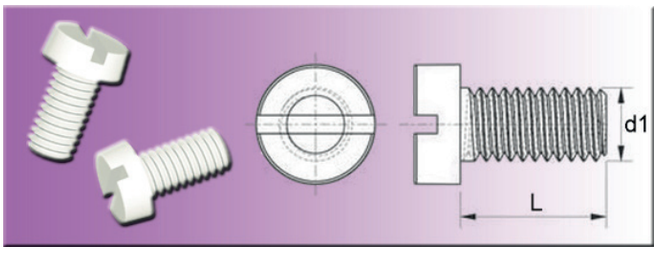
Material: PP
Colour: natural

Part no.	d1 x L
2500310PP	M3 x 10
2500316PP	M3 x 16
2500320PP	M8 x 30
2500406PP	M4 x 6
2500410PP	M4 x 10
2500416PP	M4 x 16
2500420PP	M4 x 20
2500430PP	M4 x 30
2500510PP	M5 x 10

Part no.	d1 x L
2500516PP	M5 x 16
2500520PP	M5 x 20
2500525PP	M5 x 25
2500530PP	M5 x 30
2500540PP	M5 x 40
2500608PP	M6 x 8
2500610PP	M6 x 10
2500616PP	M6 x 16
2500620PP	M6 x 20

Part no.	d1 x L
2500625PP	M6 x 25
2500630PP	M6 x 30
2500810PP	M8 x 10
2500816PP	M8 x 16
2500820PP	M8 x 20
2500830PP	M8 x 30
2500840PP	M8 x 40
2501020PP	M10 x 20
2501040PP	M10 x 40

Screws according to DIN of plastic | Slotted head screws ~DIN 84 PVDF



Slotted head screws ~DIN 84 (~DIN EN ISO 1207)

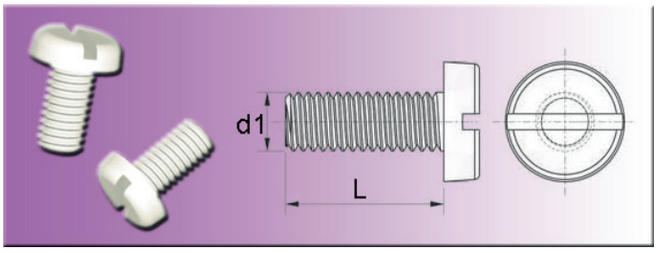
Material: PVDF
Colour: natural

Part no.	d1 x L
2500310PVDF	M3 x 10
2500316PVDF	M3 x 16
2500320PVDF	M3 x 20
2500406PVDF	M4 x 6
2500410PVDF	M4 x 10
2500416PVDF	M4 x 16
2500420PVDF	M4 x 20

Part no.	d1 x L
2500430PVDF	M4 x 30
2500510PVDF	M5 x 10
2500516PVDF	M5 x 16
2500520PVDF	M5 x 20
2500525PVDF	M5 x 25
2500530PVDF	M5 x 30
2500540PVDF	M5 x 40

Part no.	d1 x L
2500608PVDF	M6 x 8
2500610PVDF	M6 x 10
2500616PVDF	M6 x 16
2500620PVDF	M6 x 20
2500625PVDF	M6 x 25
2500630PVDF	M6 x 30

Screws according to DIN of plastic | Flat head screws ~DIN 85 PA



Flat head screws ~DIN 85 (~DIN EN ISO 1580)

Minimum order quantity:
500 pcs. for M3
200 pcs. for M4, M5 + M6
100 pcs. from M8 upwards

Material: PA 6.6
Colour: natural

Part no.	d1 x L
0500304	M3 x 4
0500305	M3 x 5
0500306	M3 x 6
0500308	M3 x 8
0500310	M3 x 10
0500312	M3 x 12
0500315	M3 x 15
0500316	M3 x 16
0500318	M3 x 18
0500320	M3 x 20
0500322	M3 x 22
0500325	M3 x 25
0500330	M3 x 30
0500333	M3 x 33
0500335	M3 x 35
0500340	M3 x 40
0500345	M3 x 45
0500404	M4 x 4
0500405	M4 x 5
0500406	M4 x 6
0500408	M4 x 8
0500410	M4 x 10
0500412	M4 x 12
0500413	M4 x 13
0500414	M4 x 14
0500415	M4 x 15
0500416	M4 x 16
0500418	M4 x 18
0500420	M4 x 20
0500423	M4 x 23
0500425	M4 x 25
0500428	M4 x 28
0500430	M4 x 30

Part no.	d1 x L
0500435	M4 x 35
0500440	M4 x 40
0500445	M4 x 45
0500450	M4 x 50
0500455	M4 x 55
0500460	M4 x 60
0500470	M4 x 70
0500504	M5 x 4
0500506	M5 x 6
0500507	M5 x 7
0500508	M5 x 8
0500509	M5 x 9
0500510	M5 x 10
0500512	M5 x 12
0500513	M5 x 13
0500514	M5 x 14
0500515	M5 x 15
0500516	M5 x 16
0500517	M5 x 17
0500520	M5 x 20
0500525	M5 x 25
0500530	M5 x 30
0500535	M5 x 35
0500540	M5 x 40
0500545	M5 x 45
0500550	M5 x 50
0500560	M5 x 60
0500565	M5 x 65
0500570	M5 x 70
0500580	M5 x 80
0500605	M6 x 5
0500606	M6 x 6
0500607	M6 x 7

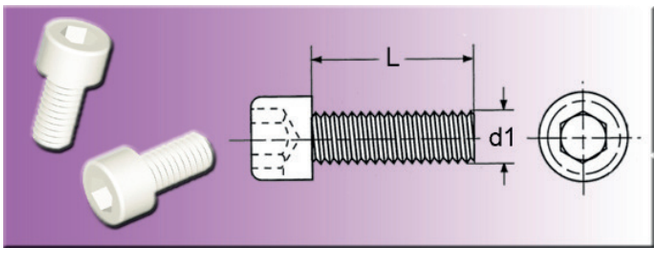
Part no.	d1 x L
0500608	M6 x 8
0500610	M6 x 10
0500612	M6 x 12
0500614	M6 x 14
0500615	M6 x 15
0500616	M6 x 16
0500617	M6 x 17
0500620	M6 x 20
0500625	M6 x 25
0500630	M6 x 30
0500635	M6 x 35
0500640	M6 x 40
0500645	M6 x 45
0500650	M6 x 50
0500655	M6 x 55
0500660	M6 x 60
0500670	M6 x 70
0500675	M6 x 75
0500680	M6 x 80
0500690	M6 x 90
0500804	M8 x 4
0500805	M8 x 5
0500806	M8 x 6
0500807	M8 x 7
0500808	M8 x 8
0500809	M8 x 9
0500810	M8 x 10
0500811	M8 x 11
0500812	M8 x 12
0500813	M8 x 13
0500815	M8 x 15
0500816	M8 x 16
0500817	M8 x 17

Part no.	d1 x L
0500818	M8 x 18
0500820	M8 x 20
0500823	M8 x 23
0500825	M8 x 25
0500826	M8 x 26
0500830	M8 x 30
0500835	M8 x 35
0500840	M8 x 40
0500845	M8 x 45
0500850	M8 x 50
0500855	M8 x 55
0500860	M8 x 60
0500865	M8 x 65
0500870	M8 x 70
0500875	M8 x 75
0500880	M8 x 80
0500890	M8 x 90

Part no.	d1 x L
0501004	M10 x 4
0501006	M10 x 6
0501007	M10 x 7
0501008	M10 x 8
0501010	M10 x 10
0501012	M10 x 12
0501014	M10 x 14
0501015	M10 x 15
0501020	M10 x 20
0501025	M10 x 25
0501030	M10 x 30
0501035	M10 x 35
0501040	M10 x 40
0501045	M10 x 45
0501050	M10 x 50
0501055	M10 x 55
0501060	M10 x 60

Part no.	d1 x L
0501065	M10 x 65
0501070	M10 x 70
0501080	M10 x 80
0501090	M10 x 90
0501209	M12 x 9
0501210	M12 x 10
0501211	M12 x 11
0501215	M12 x 15
0501220	M12 x 20
0501225	M12 x 25
0501230	M12 x 30
0501235	M12 x 35
0501240	M12 x 40
0501245	M12 x 45
0501250	M12 x 50
0501260	M12 x 60

Screws according to DIN of plastic | Socket head screws ~DIN 912 PA



Socket head screws ~DIN 912 (~DIN EN ISO 4762)

Minimum order quantity: 1,000 pcs. per dimension and order

Material: PA 6.6
Colour: natural

Part no.	
2520304	M3 x 4
2520305	M3 x 5
2520306	M3 x 6
2520308	M3 x 8
2520310	M3 x 10
2520312	M3 x 12
2520314	M3 x 14
2520315	M3 x 15
2520316	M3 x 16
2520318	M3 x 18
2520320	M3 x 20
2520322	M3 x 22
2520325	M3 x 25

Part no.	
2520328	M3 x 28
2520330	M3 x 30
2520333	M3 x 33
2520335	M3 x 35
2520340	M3 x 40
2520345	M3 x 45
2520404	M4 x 4
2520405	M4 x 5
2520406	M4 x 6
2520408	M4 x 8
2520410	M4 x 10
2520412	M4 x 12
2520413	M4 x 13

Part no.	
2520414	M4 x 14
2520415	M4 x 15
2520416	M4 x 16
2520418	M4 x 18
2520420	M4 x 20
2520423	M4 x 23
2520425	M4 x 25
2520428	M4 x 28
2520430	M4 x 30
2520435	M4 x 35
2520440	M4 x 40
2520445	M4 x 45
2520450	M4 x 50

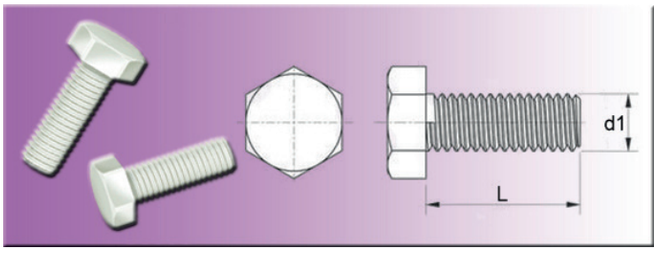


Part no.	
2520455	M4 x 55
2520460	M4 x 60
2520470	M4 x 70
2520504	M5 x 4
2520506	M5 x 6
2520507	M5 x 7
2520508	M5 x 8
2520509	M5 x 9
2520510	M5 x 10
2520512	M5 x 12
2520513	M5 x 13
2520514	M5 x 14
2520515	M5 x 15
2520516	M5 x 16
2520517	M5 x 17
2520518	no longer available!
2520520	M5 x 20
2520525	M5 x 25
2520530	M5 x 30
2520535	M5 x 35
2520540	M5 x 40
2520545	M5 x 45
2520550	M5 x 50
2520555	M5 x 55
2520560	M5 x 60
2520565	M5 x 65
2520570	M5 x 70
2520580	M5 x 80
2520605	M6 x 5
2520606	M6 x 6
2520607	M6 x 7
2520608	M6 x 8
2520610	M6 x 10
2520612	M6 x 12
2520615	M6 x 15
2520616	M6 x 16
2520617	M6 x 17
2520620	M6 x 20
2520625	M6 x 25

Part no.	
2520630	M6 x 30
2520635	M6 x 35
2520640	M6 x 40
2520645	M6 x 45
2520650	M6 x 50
2520655	M6 x 55
2520660	M6 x 60
2520665	M6 x 65
2520670	M6 x 70
2520675	M6 x 75
2520680	M6 x 80
2520690	M6 x 90
2520805	M8 x 5
2520806	M8 x 6
2520807	M8 x 7
2520808	M8 x 8
2520809	M8 x 9
2520810	M8 x 10
2520811	M8 x 11
2520812	M8 x 12
2520813	M8 x 13
2520815	M8 x 15
2520816	M8 x 16
2520817	M8 x 17
2520820	M8 x 20
2520823	M8 x 23
2520825	M8 x 25
2520826	M8 x 26
2520830	M8 x 30
2520835	M8 x 35
2520840	M8 x 40
2520845	M8 x 45
2520850	M8 x 50
2520855	M8 x 55
2520860	M8 x 60
2520865	M8 x 65
2520870	M8 x 70
2520875	M8 x 75
2520880	M8 x 80

Part no.	
2520890	M8 x 90
2521004	M10 x 4
2521006	M10 x 6
2521007	M10 x 7
2521008	M10 x 8
2521010	M10 x 10
2521012	M10 x 12
2521013	M10 x 13
2521014	M10 x 14
2521015	M10 x 15
2521016	M10 x 16
2521020	M10 x 20
2521025	M10 x 25
2521030	M10 x 30
2521035	M10 x 35
2521040	M10 x 40
2521045	M10 x 45
2521050	M10 x 50
2521055	M10 x 55
2521060	M10 x 60
2521065	M10 x 65
2521070	M10 x 70
2521080	M10 x 80
2521090	M10 x 90
2521200	M12 x 100
2521209	M12 x 9
2521210	M12 x 10
2521211	M12 x 11
2521215	M12 x 15
2521220	M12 x 20
2521225	M12 x 25
2521230	M12 x 30
2521235	M12 x 35
2521240	M12 x 40
2521245	M12 x 45
2521250	M12 x 50
2521260	M12 x 60
2521270	M12 x 70
2521280	M12 x 80

Screws according to DIN of plastic | Hexagon head screws ~DIN 933/931 PA



Hexagon head screws ~DIN 933/931 (~DIN 34810)

Minimum order quantity:
500 pcs. for M3
200 pcs. for M4, M5 + M6
100 pcs. from M8 upwards

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2510304	M3 x 4
2510305	M3 x 5
2510306	M3 x 6
2510308	M3 x 8
2510310	M3 x 10
2510312	M3 x 12
2510315	M3 x 15
2510316	M3 x 16
2510318	M3 x 18
2510320	M3 x 20
2510325	M3 x 25
2510330	M3 x 30
2510333	M3 x 33
2510404	M4 x 4
2510405	M4 x 5
2510406	M4 x 6
2510408	M4 x 8
2510410	M4 x 10
2510412	M4 x 12
2510413	M4 x 13
2510414	M4 x 14
2510415	M4 x 15
2510416	M4 x 16
2510418	M4 x 18
2510420	M4 x 20
2510423	M4 x 23
2510425	M4 x 25
2510428	M4 x 28
2510430	M4 x 30
2510435	M4 x 35
2510440	M4 x 40
2510460	M4 x 60
2510470	M4 x 70

Part no.	d1 x L
2510504	M5 x 4
2510506	M5 x 6
2510507	M5 x 7
2510508	M5 x 8
2510509	M5 x 9
2510510	M5 x 10
2510512	M5 x 12
2510513	M5 x 13
2510514	M5 x 14
2510515	M5 x 15
2510516	M5 x 16
2510517	M5 x 17
2510520	M5 x 20
2510525	M5 x 25
2510530	M5 x 30
2510535	M5 x 35
2510540	M5 x 40
2510545	M5 x 45
2510550	M5 x 50
2510555	M5 x 50
2510560	M5 x 60
2510570	M5 x 70
2510575	M5 x 75
2510580	M5 x 80
2510590	M5 x 90
25105100	M5 x 100
25105110	M5 x 110
25105120	M5 x 120
2510605	M6 x 5
2510606	M6 x 6
2510607	M6 x 7
2510608	M6 x 8
2510610	M6 x 10

Part no.	d1 x L
2510612	M6 x 12
2510615	M6 x 15
2510616	M6 x 16
2510617	M6 x 17
2510620	M6 x 20
2510625	M6 x 25
2510630	M6 x 30
2510635	M6 x 35
2510640	M6 x 40
2510645	M6 x 45
2510650	M6 x 50
2510660	M6 x 60
2510670	M6 x 70
2510675	M6 x 75
2510680	M6 x 80
2510690	M6 x 90
2510695	M6 x 95
25106100	M6 x 100
25106110	M6 x 110
25106120	M6 x 120
25106130	M6 x 130
2510804	M8 x 4
2510805	M8 x 5
2510806	M8 x 6
2510807	M8 x 7
2510808	M8 x 8
2510809	M8 x 9
2510810	M8 x 10
2510812	M8 x 12
2510813	M8 x 13
2510815	M8 x 15
2510816	M8 x 16
2510817	M8 x 17

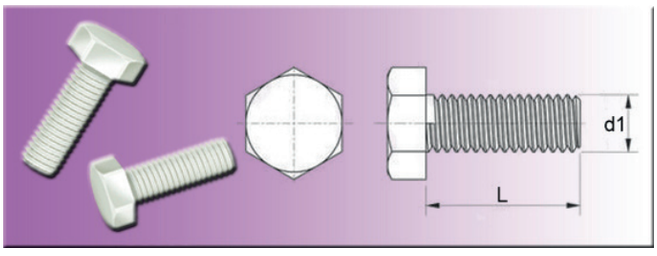


Part no.	d1 x L
2510820	M8 x 20
2510823	M8 x 23
2510825	M8 x 25
2510826	M8 x 26
2510830	M8 x 30
2510835	M8 x 35
2510840	M8 x 40
2510845	M8 x 45
2510850	M8 x 50
2510860	M8 x 60
2510865	M8 x 65
2510870	M8 x 70
2510875	M8 x 75
2510880	M8 x 80
2510885	M8 x 85
2510890	M8 x 90
2510895	M8 x 95
25108100	M8 x 100
25108110	M8 x 110
25108120	M8 x 120
25108130	M8 x 130
2511004	M10 x 4
2511006	M10 x 6
2511007	M10 x 7

Part no.	d1 x L
2511008	M10 x 8
2511010	M10 x 10
2511012	M10 x 12
2511015	M10 x 15
2511020	M10 x 20
2511025	M10 x 25
2511030	M10 x 30
2511035	M10 x 35
2511040	M10 x 40
2511045	M10 x 45
2511050	M10 x 50
2511060	M10 x 60
2511070	M10 x 70
2511075	M10 x 75
2511080	M10 x 80
2511085	M10 x 85
2511090	M10 x 90
2511095	M10 x 95
25110100	M10 x 100
25110110	M10 x 110
25110120	M10 x 120
25110130	M10 x 130
2511209	M12 x 9
2511210	M12 x 10

Part no.	d1 x L
2511211	M12 x 11
2511212	M12 x 12
2511215	M12 x 15
2511216	M12 x 16
2511220	M12 x 20
2511225	M12 x 25
2511230	M12 x 30
2511235	M12 x 35
2511240	M12 x 40
2511245	M12 x 45
2511250	M12 x 50
2511260	M12 x 60
2511270	M12 x 70
2511275	M12 x 75
2511280	M12 x 80
2511285	M12 x 85
2511290	M12 x 90
2511295	M12 x 95
25112100	M12 x 100
25112110	M12 x 110
25112120	M12 x 120
25112130	M12 x 130
2511680	M 16 x 80

Screws according to DIN of plastic | Hexagon head screws ~DIN 933 PP



Hexagon head screws ~DIN 933 (~DIN 34810)

Material: PP
Colour: natural

Part no.	d1 x L
2510310PP	M3 x 10
2510316PP	M3 x 16
2510320PP	M8 x 30
2510410PP	M4 x 10
2510416PP	M4 x 16
2510420PP	M4 x 20

Part no.	d1 x L
2510512PP	M5 x 12
2510516PP	M5 x 16
2510520PP	M5 x 20
2510525PP	M5 x 25
2510530PP	M5 x 30
2510616PP	M6 x 16

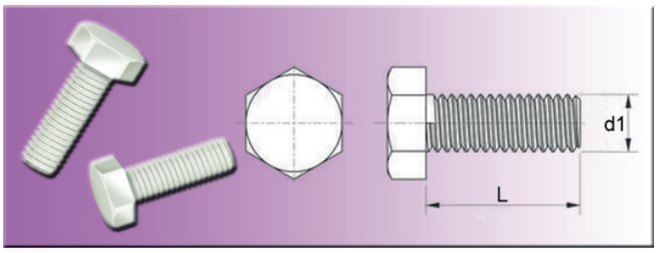
Part no.	d1 x L
2510620PP	M6 x 20
2510625PP	M6 x 25
2510640PP	M6 x 40
2510820PP	M8 x 20
2510830PP	M8 x 30
2510840PP	M8 x 40

Part no.	d1 x L
2510860PP	M8 x 60
2511020PP	M10 x 20

Part no.	d1 x L
2511060PP	M10 x 60
2511240PP	M12 x 40

Part no.	d1 x L
2511260PP	M12 x 60

Screws according to DIN of plastic | Hexagon head screws ~DIN 933 PVDF



Hexagon head screws ~DIN 933 (~DIN 34810)

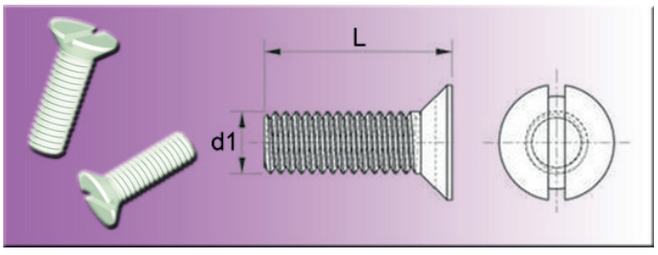
Material: PVDF
Colour: natural

Part no.	d1 x L
2510310PVDF	M3 x 10
2510316PVDF	M3 x 16
2510320PVDF	M3 x 20
2510410PVDF	M4 x 10
2510416PVDF	M4 x 16
2510420PVDF	M4 x 20

Part no.	d1 x L
2510430PVDF	M4 x 30
2510512PVDF	M5 x 12
2510516PVDF	M5 x 16
2510520PVDF	M5 x 20
2510525PVDF	M5 x 25
2510530PVDF	M5 x 30

Part no.	d1 x L
2510610PVDF	M6 x 10
2510612PVDF	M6 x 12
2510616PVDF	M6 x 16
2510620PVDF	M6 x 20
2510625PVDF	M6 x 25
2510640PVDF	M6 x 40

Screws according to DIN of plastic | Countersunk head screws with slot ~DIN 963 PA



Countersunk head screws with slot ~DIN 963 (~DIN EN ISO 2009)

Minimum order quantity:
500 pcs. for M3
200 pcs. for M4, M5 + M6
100 pcs. from M8 upwards

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2480305	M3 x 5
2480306	M3 x 6
2480308	M3 x 8
2480310	M3 x 10
2480312	M3 x 12
2480314	M3 x 14
2480315	M3 x 15
2480316	M3 x 16
2480317	M3 x 17
2480318	M3 x 18
2480319	M3 x 19

Part no.	d1 x L
2480320	M3 x 20
2480322	M3 x 22
2480324	M3 x 24
2480325	M3 x 25
2480327	M3 x 27
2480329	M3 x 29
2480330	M3 x 30
2480332	M3 x 32
2480334	M3 x 34
2480335	M3 x 35
2480337	M3 x 37

Part no.	d1 x L
2480342	M3 x 42
2480344	M3 x 44
2480404	M4 x 4
2480406	M4 x 6
2480407	M4 x 7
2480408	M4 x 8
2480410	M4 x 10
2480412	M4 x 12
2480414	M4 x 14
2480415	M4 x 15
2480416	M4 x 16

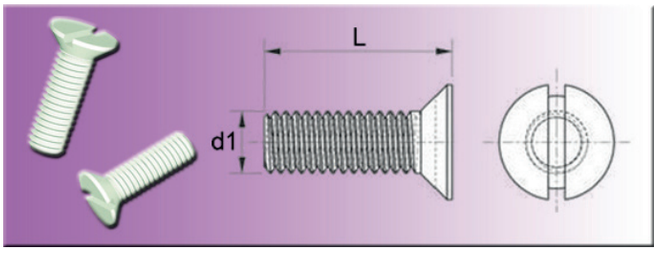


Part no.	d1 x L
2480417	M4 x 17
2480418	M4 x 18
2480420	M4 x 20
2480422	M4 x 22
2480425	M4 x 25
2480427	M4 x 27
2480430	M4 x 30
2480432	M4 x 32
2480435	M4 x 35
2480440	M4 x 40
2480442	M4 x 42
2480472	M4 x 72
2480507	M5 x 7
2480508	M5 x 8
2480509	M5 x 9
2480510	M5 x 10
2480511	M5 x 11
2480512	M5 x 12
2480513	M5 x 13
2480514	M5 x 14
2480515	M5 x 15
2480516	M5 x 16
2480517	M5 x 17
2480518	M5 x 18
2480519	M5 x 19
2480520	M5 x 20
2480521	M5 x 21
2480522	M5 x 22
2480523	M5 x 23
2480525	M5 x 25
2480530	M5 x 30
2480533	M5 x 33
2480535	M5 x 35
2480538	M5 x 38
2480540	M5 x 40
2480543	M5 x 43
2480545	M5 x 45

Part no.	d1 x L
2480548	M5 x 48
2480550	M5 x 50
2480553	M5 x 53
2480555	M5 x 55
2480563	M5 x 63
2480583	M5 x 83
2480608	M6 x 8
2480610	M6 x 10
2480611	M6 x 11
2480612	M6 x 12
2480613	M6 x 13
2480615	M6 x 15
2480616	M6 x 16
2480617	M6 x 17
2480619	M6 x 19
2480620	M6 x 20
2480621	M6 x 21
2480622	M6 x 22
2480624	M6 x 24
2480625	M6 x 25
2480630	M6 x 30
2480635	M6 x 35
2480640	M6 x 40
2480645	M6 x 45
2480650	M6 x 50
2480655	M6 x 55
2480660	M6 x 60
2480665	M6 x 65
2480675	M6 x 75
2480680	M6 x 80
2480685	M6 x 85
2480810	M8 x 10
2480812	M8 x 12
2480813	M8 x 13
2480814	M8 x 14
2480815	M8 x 15
2480816	M8 x 16

Part no.	d1 x L
2480817	M8 x 17
2480818	M8 x 18
2480820	M8 x 20
2480821	M8 x 21
2480822	M8 x 22
2480825	M8 x 25
2480828	M8 x 28
2480830	M8 x 30
2480835	M8 x 35
2480840	M8 x 40
2480845	M8 x 45
2480850	M8 x 50
2480855	M8 x 55
2480860	M8 x 60
2480865	M8 x 65
2480870	M8 x 70
2480875	M8 x 75
2480880	M8 x 80
2481010	M10 x 10
2481011	M10 x 11
2481012	M10 x 12
2481013	M10 x 13
2481015	M10 x 15
2481016	M10 x 16
2481018	M10 x 18
2481020	M10 x 20
2481025	M10 x 25
2481030	M10 x 30
2481035	M10 x 35
2481040	M10 x 40
2481045	M10 x 45
2481050	M10 x 50
2481055	M10 x 55
2481060	M10 x 60
2481065	M10 x 65
2481070	M10 x 70
2481080	M10 x 80

Screws according to DIN of plastic | Countersunk head screws with slot ~DIN 963 PP



Countersunk head screws with slot ~DIN 963 (~DIN EN ISO 2009)

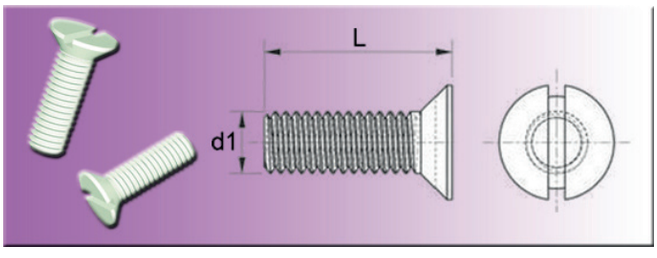
Material: PP
Colour: natural

Part no.	d1 x L
2480316PP	M3 x 16
2480320PP	M3 x 20
2480410PP	M4 x 10
2480412PP	M4 x 12
2480416PP	M4 x 16
2480420PP	M4 x 20
2480425PP	M4 x 25
2480510PP	M5 x 10
2480516PP	M5 x 16

Part no.	d1 x L
2480520PP	M5 x 20
2480525PP	M5 x 25
2480530PP	M5 x 30
2480540PP	M5 x 40
2480610PP	M6 x 10
2480616PP	M6 x 16
2480620PP	M6 x 20
2480625PP	M6 x 25
2480630PP	M6 x 30

Part no.	d1 x L
2480640PP	M6 x 40
2480660PP	M6 x 60
2480816PP	M8 x 16
2480820PP	M8 x 20
2480825PP	M8 x 25
2480830PP	M8 x 30
2481040PP	M10 x 40

Screws according to DIN of plastic | Countersunk head screws with slot ~DIN 963 PVDF



Countersunk head screws with slot ~DIN 963 (~DIN EN ISO 2009)

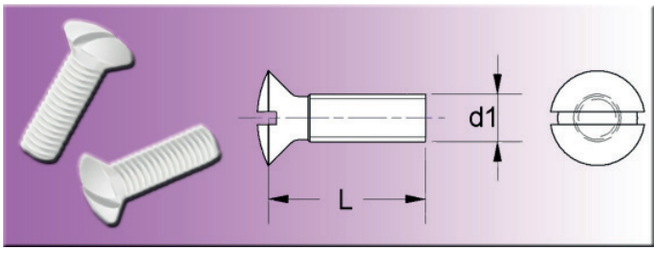
Material: PVDF
Colour: natural

Part no.	d1 x L
2480309PVDF	M3 x 9
2480310PVDF	M3 x 10
2480312PVDF	M3 x 12
2480316PVDF	M3 x 16
2480320PVDF	M3 x 20
2480410PVDF	M4 x 10
2480412PVDF	M4 x 12
2480416PVDF	M4 x 16

Part no.	d1 x L
2480420PVDF	M4 x 20
2480425PVDF	M4 x 25
2480510PVDF	M5 x 10
2480516PVDF	M5 x 16
2480520PVDF	M5 x 20
2480525PVDF	M5 x 25
2480530PVDF	M5 x 30
2480540PVDF	M5 x 40

Part no.	d1 x L
2480610PVDF	M6 x 10
2480612PVDF	M6 x 12
2480616PVDF	M6 x 16
2480620PVDF	M6 x 20
2480625PVDF	M6 x 25
2480630PVDF	M6 x 30
2480640PVDF	M6 x 40
2480660PVDF	M6 x 60

Screws according to DIN of plastic | Raised countersunk screws ~DIN 964 PA



Raised countersunk screws ~DIN 964 (~DIN EN ISO 2010)

Minimum order quantity: 1,000 pcs. per dimension and order

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2470305	M3 x 5
2470306	M3 x 6
2470308	M3 x 8
2470310	M3 x 10
2470312	M3 x 12
2470314	M3 x 14
2470316	M3 x 16
2470317	M3 x 17
2470318	M3 x 18
2470319	M3 x 19
2470320	M3 x 20
2470322	M3 x 22
2470324	M3 x 24
2470325	M3 x 25
2470327	M3 x 27
2470329	M3 x 29
2470330	M3 x 30
2470332	M3 x 32
2470334	M3 x 34
2470335	M3 x 35
2470337	M3 x 37
2470342	M3 x 42
2470344	M3 x 44
2470404	M4 x 4
2470406	M4 x 6
2470407	M4 x 7
2470408	M4 x 8
2470410	M4 x 10
2470412	M4 x 12
2470414	M4 x 14
2470415	M4 x 15
2470416	M4 x 16
2470417	M4 x 17

Part no.	d1 x L
2470418	M4 x 18
2470420	M4 x 20
2470422	M4 x 22
2470425	M4 x 25
2470427	M4 x 27
2470430	M4 x 30
2470432	M4 x 32
2470435	M4 x 35
2470440	M4 x 40
2470442	M4 x 42
2470472	M4 x 72
2470507	M5 x 7
2470508	M5 x 8
2470509	M5 x 9
2470510	M5 x 10
2470511	M5 x 11
2470512	M5 x 12
2470513	M5 x 13
2470514	M5 x 14
2470515	M5 x 15
2470516	M5 x 16
2470517	M5 x 17
2470518	M5 x 18
2470519	M5 x 19
2470520	M5 x 20
2470521	M5 x 21
2470522	M5 x 22
2470523	M5 x 23
2470525	M5 x 25
2470530	M5 x 30
2470533	M5 x 33
2470535	M5 x 35
2470538	M5 x 38

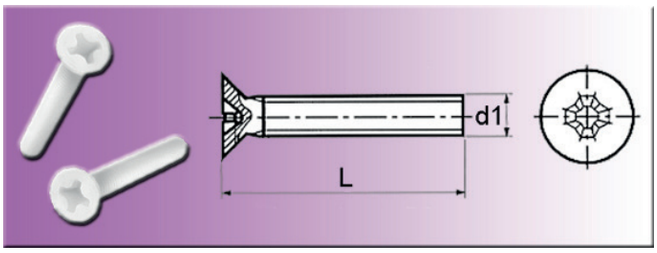
Part no.	d1 x L
2470540	M5 x 40
2470543	M5 x 43
2470545	M5 x 45
2470548	M5 x 48
2470550	M5 x 50
2470553	M5 x 53
2470555	M5 x 55
2470563	M5 x 63
2470583	M5 x 83
2470608	M6 x 8
2470610	M6 x 10
2470611	M6 x 11
2470612	M6 x 12
2470613	M6 x 13
2470615	M6 x 15
2470616	M6 x 16
2470617	M6 x 17
2470619	M6 x 19
2470620	M6 x 20
2470621	M6 x 21
2470622	M6 x 22
2470625	M6 x 25
2470630	M6 x 30
2470635	M6 x 35
2470640	M6 x 40
2470645	M6 x 45
2470650	M6 x 50
2470655	M6 x 55
2470660	M6 x 60
2470665	M6 x 65
2470675	M6 x 75
2470680	M6 x 80
2470685	M6 x 85

Part no.	d1 x L
2470810	M8 x 10
2470812	M8 x 12
2470813	M8 x 13
2470814	M8 x 14
2470815	M8 x 15
2470816	M8 x 16
2470817	M8 x 17
2470818	M8 x 18

Part no.	d1 x L
2470820	M8 x 20
2470821	M8 x 21
2470822	M8 x 22
2470825	M8 x 25
2470828	M8 x 28
2470830	M8 x 30
2470835	M8 x 35
2470840	M8 x 40

Part no.	d1 x L
2470845	M8 x 45
2470850	M8 x 50
2470855	M8 x 55
2470860	M8 x 60
2470865	M8 x 65
2470870	M8 x 70
2470875	M8 x 75
2470880	M8 x 80

Screws according to DIN of plastic | Countersunk screws with cross slot ~DIN 965 PA



Countersunk screws with cross slot ~DIN 965 (~DIN 34811)

Minimum order quantity: 1,000 pcs. per dimension and order

Material: PA 6.6
Colour: natural

Part no.	d1 x L
2460305	M3 x 5
2460306	M3 x 6
2460308	M3 x 8
2460310	M3 x 10
2460312	M3 x 12
2460314	M3 x 14
2460316	M3 x 16
2460317	M3 x 17
2460318	M3 x 18
2460319	M3 x 19
2460320	M3 x 20
2460322	M3 x 22
2460324	M3 x 24
2460325	M3 x 25
2460327	M3 x 27
2460329	M3 x 29
2460330	M3 x 30
2460332	M3 x 32
2460334	M3 x 34
2460335	M3 x 35
2460337	M3 x 37
2460342	M3 x 42

Part no.	d1 x L
2460344	M3 x 44
2460404	M4 x 4
2460406	M4 x 6
2460407	M4 x 7
2460408	M4 x 8
2460410	M4 x 10
2460412	M4 x 12
2460414	M4 x 14
2460415	M4 x 15
2460416	M4 x 16
2460417	M4 x 17
2460418	M4 x 18
2460420	M4 x 20
2460422	M4 x 22
2460425	M4 x 25
2460427	M4 x 27
2460430	M4 x 30
2460432	M4 x 32
2460435	M4 x 35
2460440	M4 x 40
2460442	M4 x 42
2460472	M4 x 72

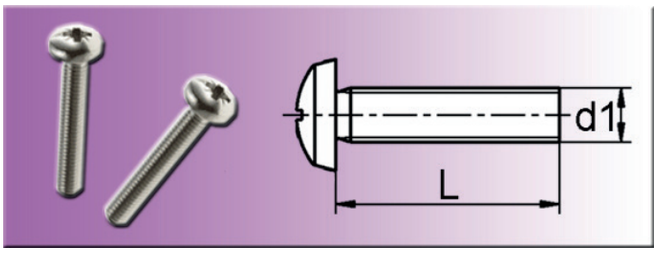
Part no.	d1 x L
2460507	M5 x 7
2460508	M5 x 8
2460509	M5 x 9
2460510	M5 x 10
2460511	M5 x 11
2460512	M5 x 12
2460513	M5 x 13
2460514	M5 x 14
2460515	M5 x 15
2460516	M5 x 16
2460517	M5 x 17
2460518	M5 x 18
2460519	M5 x 19
2460520	M5 x 20
2460521	M5 x 21
2460522	M5 x 22
2460523	M5 x 23
2460525	M5 x 25
2460530	M5 x 30
2460533	M5 x 33
2460535	M5 x 35
2460538	M5 x 38

Part no.	d1 x L
2460540	M5 x 40
2460543	M5 x 43
2460545	M5 x 45
2460548	M5 x 48
2460550	M5 x 50
2460553	M5 x 53
2460555	M5 x 55
2460563	M5 x 63
2460565	M5 x 65
2460583	M5 x 83
2460608	M6 x 8
2460610	M6 x 10
2460611	M6 x 11
2460612	M6 x 12
2460613	M6 x 13
2460615	M6 x 15
2460616	M6 x 16
2460617	M6 x 17
2460619	M6 x 19
2460620	M6 x 20

Part no.	d1 x L
2460621	M6 x 21
2460622	M6 x 22
2460624	M6 x 24
2460625	M6 x 25
2460630	M6 x 30
2460635	M6 x 35
2460640	M6 x 40
2460645	M6 x 45
2460650	M6 x 50
2460655	M6 x 55
2460660	M6 x 60
2460665	M6 x 65
2460675	M6 x 75
2460680	M6 x 80
2460685	M6 x 85
2460810	M8 x 10
2460812	M8 x 12
2460813	M8 x 13
2460814	M8 x 14
2460815	M8 x 15

Part no.	d1 x L
2460816	M8 x 16
2460817	M8 x 17
2460818	M8 x 18
2460820	M8 x 20
2460821	M8 x 21
2460822	M8 x 22
2460825	M8 x 25
2460828	M8 x 28
2460830	M8 x 30
2460835	M8 x 35
2460840	M8 x 40
2460845	M8 x 45
2460850	M8 x 50
2460855	M8 x 55
2460860	M8 x 60
2460865	M8 x 65
2460870	M8 x 70
2460875	M8 x 75
2460880	M8 x 80

Screws according to DIN of metal | Lens head screws ~DIN 7985 stainless steel

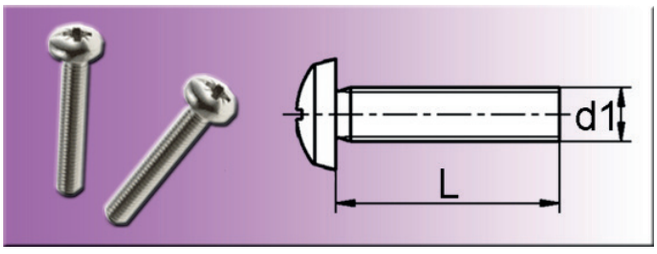


Lens head screws - metal, cross slot
~DIN 7985 (~DIN EN ISO 7045 - form H)

Material: stainless steel A2

NO LONGER AVAILABLE!

Screws according to DIN of metal | Lens head screws ~DIN 7985 machining steel

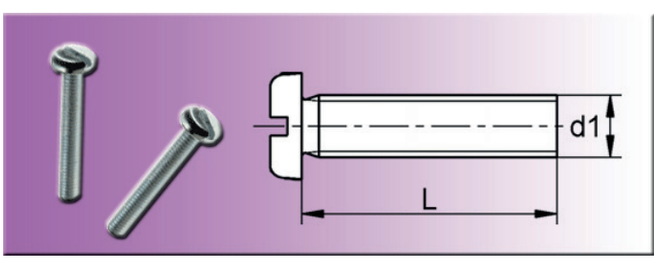


Lens head screws - metal, cross slot
~DIN 7985 (~DIN EN ISO 7045 - form H)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Screws according to DIN of metal | Pan head screws ~DIN 85 stainless steel

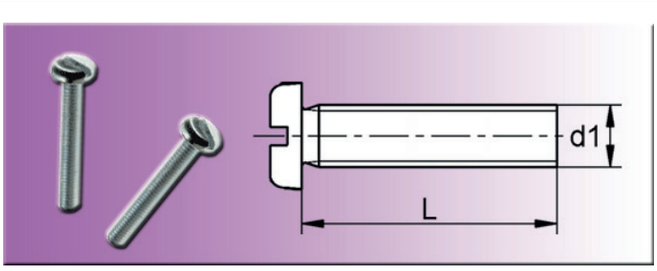


Pan head screws - metal
~DIN 85 (~DIN EN ISO 1580)

Material: stainless steel A2

NO LONGER AVAILABLE!

Screws according to DIN of metal | Pan head screws ~DIN 85 machining steel

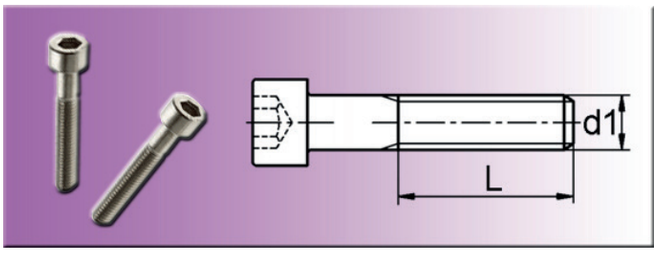


Pan head screws - metal
~DIN 85 (~DIN EN ISO 1580)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Screws according to DIN of metal | Cylinder head screws ~DIN 912 stainless steel

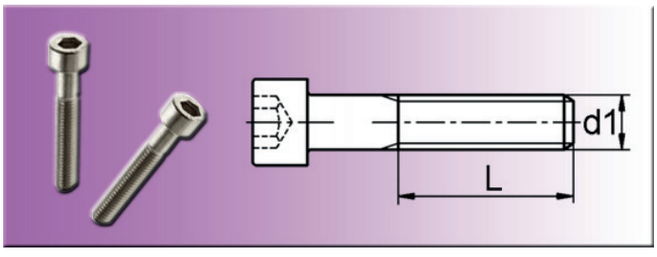


Cylinder head screws - metal, internal hexagon
~DIN 912 (~DIN EN ISO 4762)

Material: stainless steel A2

NO LONGER AVAILABLE!

Screws according to DIN of metal | Cylinder head screws ~DIN 912 machining steel

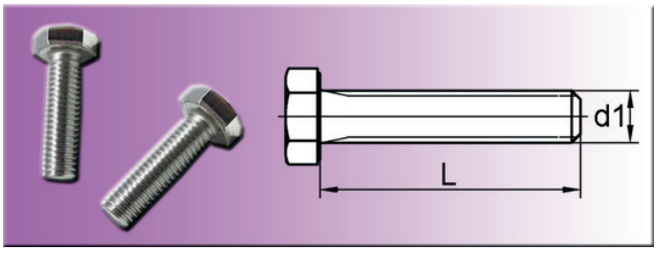


Cylinder head screws - metal, internal hexagon
~DIN 912 (~DIN EN ISO 4762)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Screws according to DIN of metal | Hexagon head screws ~DIN 933 stainless steel

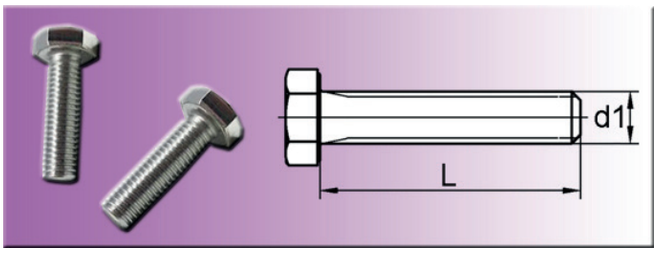


Hexagon head screws - metal
~DIN 933 (~DIN EN ISO 4017, threaded to head)

Material: stainless steel A2

NO LONGER AVAILABLE!

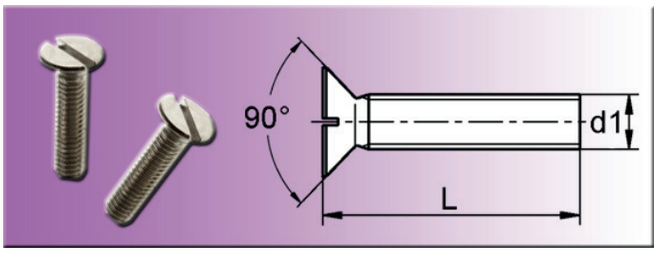
Screws according to DIN of metal | Hexagon head screws ~DIN 933 machining steel



Hexagon head screws - metal
~DIN 933 (~DIN EN ISO 4017, fully threaded)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

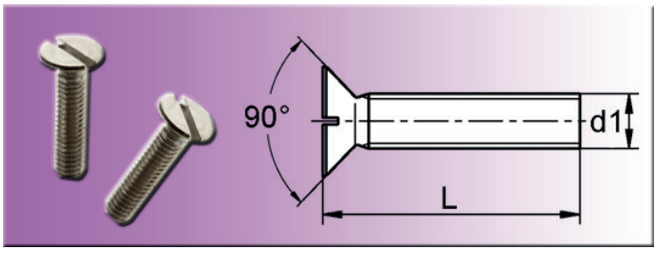


Countersunk screws - metal
~DIN 963 (~DIN EN ISO 2009)

Material: stainless steel A2

NO LONGER AVAILABLE!

Screws according to DIN of metal | Countersunk screws ~DIN 963 machining steel

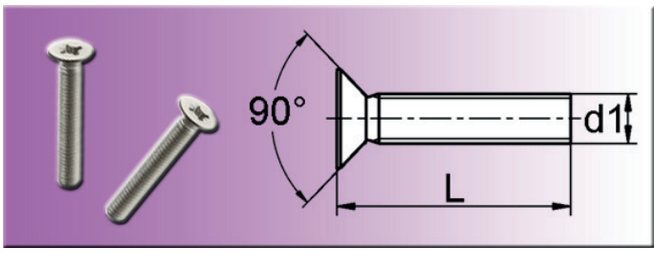


Countersunk screws - metal
~DIN 963 (~DIN EN ISO 2009)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Screws according to DIN of metal | Countersunk screws ~DIN 965 stainless steel

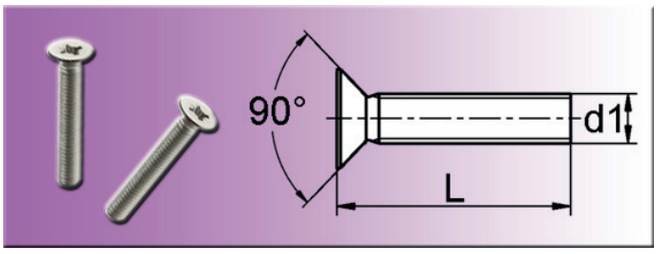


Countersunk screws - metal, cross slot
~DIN 965 (~DIN EN ISO 7046)

Material: stainless steel A2

NO LONGER AVAILABLE!

Screws according to DIN of metal | Countersunk screws ~DIN 965 machining steel

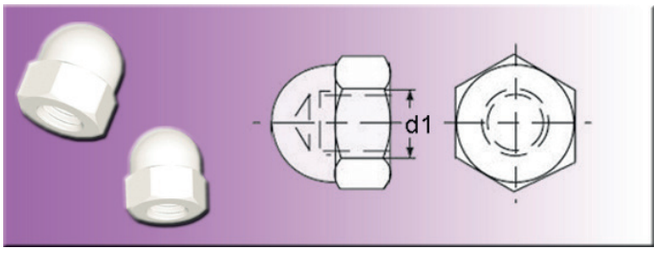


Countersunk screws - metal, cross slot
~DIN 965 (~DIN EN ISO 7046)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Nuts according to DIN of plastic | Hexagon cap nuts ~DIN 1587 PA



Hexagon cap nuts, tall type ~DIN 1587

Material: PA 6.6
Colour: natural

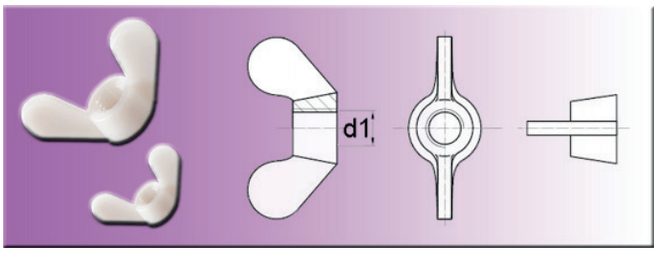
Further types on written request.

Part no.	d1
0520300	M3
0520400	M4
0520500	M5

Part no.	d1
0520600	M6
0520800	M8
0521000	M10

Part no.	d1
0521200	M12

Nuts according to DIN of plastic | Wing nuts ~DIN 315 PA



Wing nuts with round wings ~DIN 315

Material: PA 6.6
Colour: natural

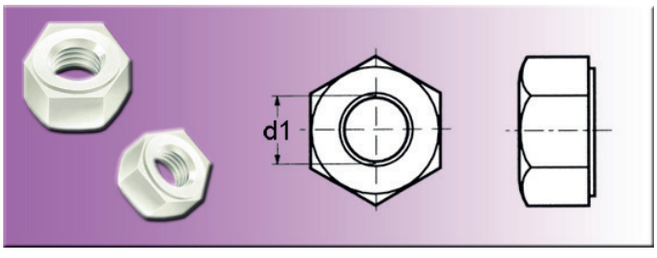
Further types on written request.

Part no.	d1
0530401	M4
0530501	M5

Part no.	d1
0530601	M6
0530801	M8

Part no.	d1
0531001	M10

Nuts according to DIN of plastic | Hexagon nuts ~DIN 934 PA



Hexagon nuts ~DIN 934 (~DIN 34814)

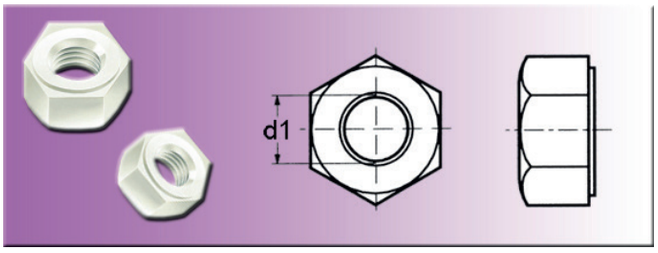
Material: PA 6.6
Colour: natural

Part no.	d1
0510300	M3
0510400	M4
0510500	M5

Part no.	d1
0510600	M6
0510800	M8
0511000	M10

Part no.	d1
0511200	M12
0511400	M14
0511600	M16

Nuts according to DIN of plastic | Hexagon nuts ~DIN 934 PP



Hexagon nuts ~DIN 934 (~DIN 34814)

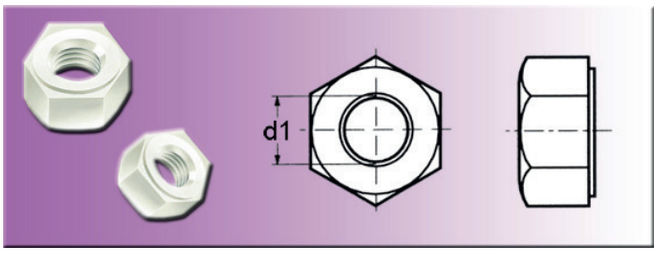
Material: PP
Colour: natural

Part no.	d1
0510400PP	M4
0510500PP	M5
0510600PP	M6

Part no.	d1
0510800PP	M8
0511000PP	M10
0511200PP	M12

Part no.	d1
0511600PP	M16

Nuts according to DIN of plastic | Hexagon nuts ~DIN 934 PVDF



Hexagon nuts ~DIN 934 (~DIN 34814)

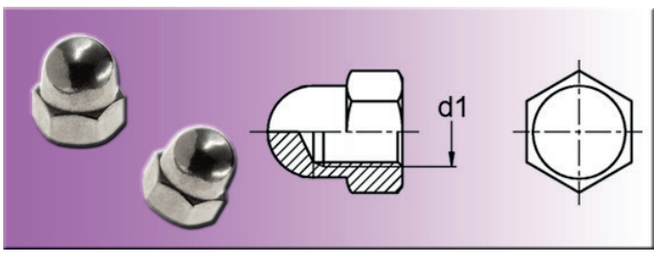
Material: PVDF
Colour: natural

Part no.	d1
0510300PVDF	no longer available!
0510400PVDF	M4
0510500PVDF	M5

Part no.	d1
0510600PVDF	M6
0510800PVDF	M8
0511000PVDF	M10

Part no.	d1
0511200PVDF	M12
0511600PVDF	M16

Nuts according to DIN of metal | Hexagon cap nuts ~DIN 1587 stainless steel

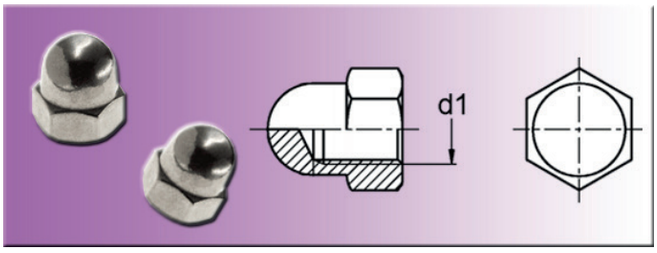


Hexagon cap nuts - metal
~DIN 1587

Material: stainless steel A2

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon cap nuts ~DIN 1587 machining steel

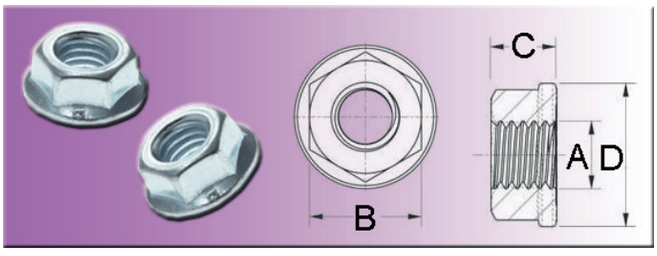


Hexagon cap nuts - metal
~DIN 1587

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon nuts ~ DIN 6923 machining steel

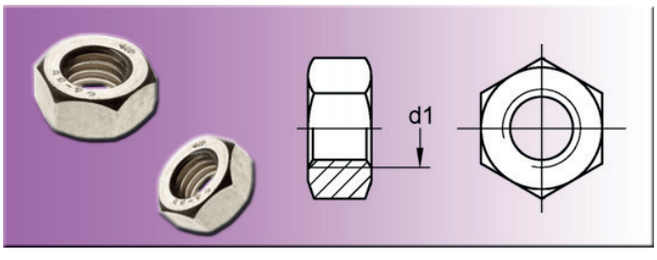


Hexagon nuts with flange - metal
~DIN 6923 without lock toothing (~DIN EN 1661)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon nuts ~DIN 934 stainless steel

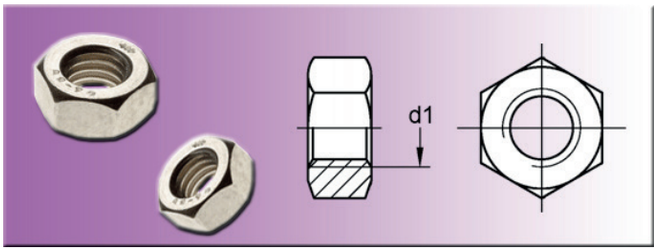


Hexagon nuts - metal
~DIN 934 (~DIN EN ISO 4032)

Material: stainless steel A2

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon nuts ~DIN 934 machining steel

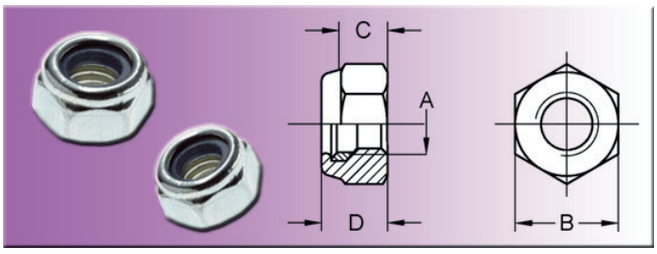


Hexagon nuts - metal
~DIN 934 (~DIN EN ISO 4032)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon nuts ~DIN 985 stainless steel

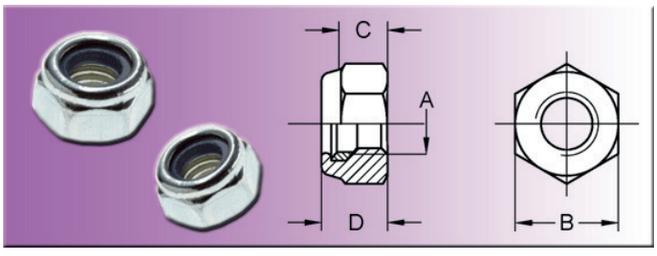


Hexagon nuts, self-locking
~DIN 985 low type (with non-metallic insert) (~DIN EN ISO 10511)

Material: stainless steel A2

NO LONGER AVAILABLE!

Nuts according to DIN of metal | Hexagon nuts ~DIN 985 machining steel

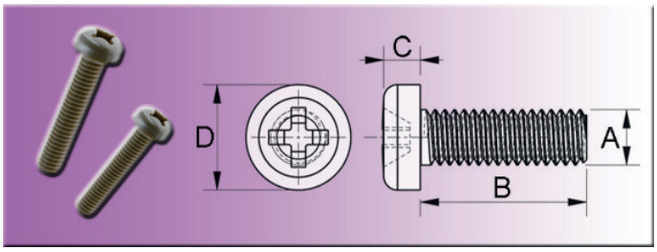


Hexagon nuts, self-locking
~DIN 985 low type (with non-metallic insert) (~DIN EN ISO 10511)

Material: machining steel 4.8 zinc-plated

NO LONGER AVAILABLE!

Screws without DIN of plastic | Pan head screws PEEK



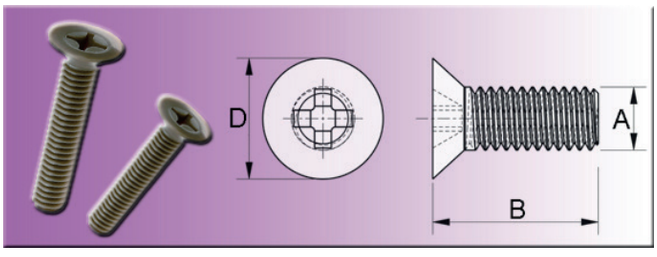
Material: PEEK
Colour: light brown

- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285

Part no.	A	B	C	D
2800306	M3	6,0	2,0	5,5
2800308	M3	8,0	2,0	5,5
2800310	M3	10,0	2,0	5,5
2800312	M3	12,0	2,0	5,5
2800316	M3	16,0	2,0	5,5
2800320	M3	20,0	2,0	5,5
2800325	M3	25,0	2,0	5,5
2800406	M4	6,0	2,6	7,0
2800408	M4	8,0	2,6	7,0
2800410	M4	10,0	2,6	7,0
2800412	M4	12,0	2,6	7,0
2800416	M4	16,0	2,6	7,0
2800420	M4	20,0	2,6	7,0

Part no.	A	B	C	D
2800425	M4	25,0	2,6	7,0
2800508	M5	8,0	3,3	9,0
2800510	M5	10,0	3,3	9,0
2800512	M5	12,0	3,3	9,0
2800516	M5	16,0	3,3	9,0
2800520	M5	20,0	3,3	9,0
2800525	M5	25,0	3,3	9,0
2800610	M6	10,0	3,9	10,5
2800612	M6	12,0	3,9	10,5
2800616	M6	16,0	3,9	10,5
2800620	M6	20,0	3,9	10,5
2800625	M6	25,0	3,9	10,5
2800630	M6	30,0	3,9	10,5

Screws without DIN of plastic | Countersunk screws PEEK



Material: PEEK
Colour: light brown

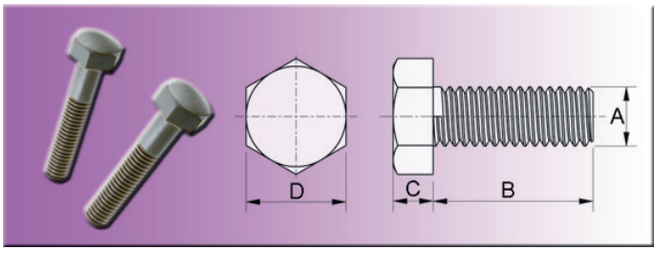
- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285

Part no.	A	B	D
2810306	M3	6,0	6,0
2810308	M3	8,0	6,0
2810310	M3	10,0	6,0
2810312	M3	12,0	6,0
2810316	M3	16,0	6,0
2810320	M3	20,0	6,0
2810325	M3	25,0	6,0
2810406	M4	6,0	8,0

Part no.	A	B	D
2810408	M4	8,0	8,0
2810410	M4	10,0	8,0
2810412	M4	12,0	8,0
2810416	M4	16,0	8,0
2810420	M4	20,0	8,0
2810425	M4	25,0	8,0
2810508	M5	8,0	10,0
2810510	M5	10,0	10,0

Part no.	A	B	D
2810512	M5	12,0	10,0
2810515	M5	15,0	10,0
2810520	M5	20,0	10,0
2810525	M5	25,0	10,0
2810610	M6	10,0	12,0
2810615	M6	15,0	12,0
2810620	M6	20,0	12,0
2810630	M6	30,0	12,0

Screws without DIN of plastic | Hexagon head screws PEEK



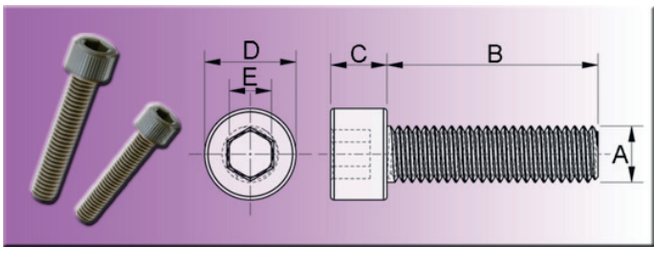
Material: PEEK
Colour: light brown

- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285

Part no.	A	B	C	D
2820510	M5	10,0	3,5	8,0
2820512	M5	12,0	3,5	8,0
2820515	M5	15,0	3,5	8,0
2820520	M5	20,0	3,5	8,0
2820525	M5	25,0	3,5	8,0
2820530	M5	30,0	3,5	8,0
2820610	M6	10,0	4,0	10,0
2820612	M6	12,0	4,0	10,0
2820615	M6	15,0	4,0	10,0
2820620	M6	20,0	4,0	10,0
2820625	M6	25,0	4,0	10,0
2820630	M6	30,0	4,0	10,0
2820635	M6	35,0	4,0	10,0
2820640	M6	40,0	4,0	10,0
2820645	M6	45,0	4,0	10,0
2820650	M6	50,0	4,0	10,0
2820810	M8	10,0	5,5	13,0

Part no.	A	B	C	D
2820812	M8	12,0	5,5	13,0
2820815	M8	15,0	5,5	13,0
2820820	M8	20,0	5,5	13,0
2820825	M8	25,0	5,5	13,0
2820830	M8	30,0	5,5	13,0
2820835	M8	35,0	5,5	13,0
2820840	M8	40,0	5,5	13,0
2820845	M8	45,0	5,5	13,0
2820850	M8	50,0	5,5	13,0
2821015	M10	15,0	7,0	17,0
2821020	M10	20,0	7,0	17,0
2821025	M10	25,0	7,0	17,0
2821030	M10	30,0	7,0	17,0
2821035	M10	35,0	7,0	17,0
2821040	M10	40,0	7,0	17,0
2821045	M10	45,0	7,0	17,0
2821050	M10	50,0	7,0	17,0

Screws without DIN of plastic | Socket head screws PEEK



Material: PEEK
Colour: light brown

- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285

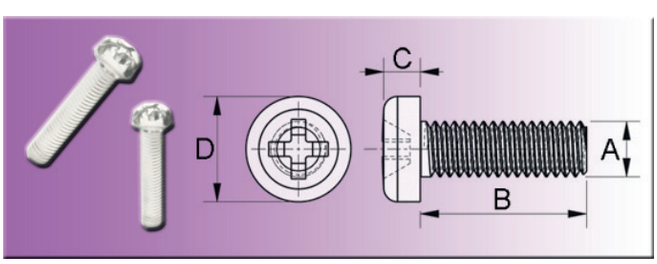
Part no.	A	B	C	D	E
2830308	M3	8,0	3,0	5,5	2,5
2830310	M3	10,0	3,0	5,5	2,5
2830312	M3	12,0	3,0	5,5	2,5
2830315	M3	15,0	3,0	5,5	2,5
2830320	M3	20,0	3,0	5,5	2,5

Part no.	A	B	C	D	E
2830325	M3	25,0	3,0	5,5	2,5
2830408	M4	8,0	4,0	7,0	3,0
2830410	M4	10,0	4,0	7,0	3,0
2830412	M4	12,0	4,0	7,0	3,0
2830415	M4	15,0	4,0	7,0	3,0

Part no.	A	B	C	D	E
2830420	M4	20,0	4,0	7,0	3,0
2830425	M4	25,0	4,0	7,0	3,0
2830430	M4	30,0	4,0	7,0	3,0
2830508	M5	8,0	5,0	8,5	4,0
2830510	M5	10,0	5,0	8,5	4,0
2830512	M5	12,0	5,0	8,5	4,0
2830515	M5	15,0	5,0	8,5	4,0
2830520	M5	20,0	5,0	8,5	4,0
2830525	M5	25,0	5,0	8,5	4,0
2830530	M5	30,0	5,0	8,5	4,0
2830610	M6	10,0	6,0	10,0	5,0
2830612	M6	12,0	6,0	10,0	5,0

Part no.	A	B	C	D	E
2830615	M6	15,0	6,0	10,0	5,0
2830620	M6	20,0	6,0	10,0	5,0
2830625	M6	25,0	6,0	10,0	5,0
2830630	M6	30,0	6,0	10,0	5,0
2830635	M6	35,0	6,0	10,0	5,0
2830810	M8	10,0	8,0	13,0	6,0
2830812	M8	12,0	8,0	13,0	6,0
2830815	M8	15,0	8,0	13,0	6,0
2830820	M8	20,0	8,0	13,0	6,0
2830825	M8	25,0	8,0	13,0	6,0
2830830	M8	30,0	8,0	13,0	6,0
2830835	M8	35,0	8,0	13,0	6,0

Screws without DIN of plastic | Cylinder head screws PC



Material: PC
Colour: transparent

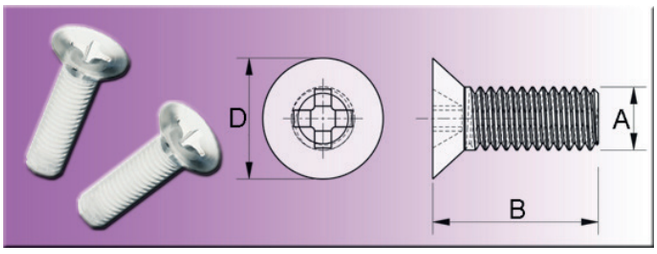
Part no.	A	B	C	D
2690206	M2	6,0	1,3	3,5
2690208	M2	8,0	1,3	3,5
2690210	M2	10,0	1,3	3,5
2690212	M2	12,0	1,3	3,5
2690304	M3	4,0	2,0	5,5
2690305	M3	5,0	2,0	5,5
2690306	M3	6,0	2,0	5,5
2690308	M3	8,0	2,0	5,5
2690310	M3	10,0	2,0	5,5
2690312	M3	12,0	2,0	5,5
2690315	M3	15,0	2,0	5,5
2690316	M3	16,0	2,0	5,5
2690318	M3	18,0	2,0	5,5
2690320	M3	20,0	2,0	5,5
2690325	M3	25,0	2,0	5,5
2690330	M3	30,0	2,0	5,5
2690405	M4	5,0	2,6	7,0
2690406	M4	6,0	2,6	7,0

Part no.	A	B	C	D
2690408	M4	8,0	2,6	7,0
2690410	M4	10,0	2,6	7,0
2690412	M4	12,0	2,6	7,0
2690415	M4	15,0	2,6	7,0
2690416	M4	16,0	2,6	7,0
2690418	M4	18,0	2,6	7,0
2690420	M4	20,0	2,6	7,0
2690425	M4	25,0	2,6	7,0
2690430	M4	30,0	2,6	7,0
2690506	M5	6,0	3,3	9,0
2690508	M5	8,0	3,3	9,0
2690510	M5	10,0	3,3	9,0
2690512	M5	12,0	3,3	9,0
2690515	M5	15,0	3,3	9,0
2690516	M5	16,0	3,3	9,0
2690518	M5	18,0	3,3	9,0
2690520	M5	20,0	3,3	9,0
2690525	M5	25,0	3,3	9,0

Part no.	A	B	C	D
2690530	M5	30,0	3,3	9,0
2690535	M5	35,0	3,3	9,0
2690610	M6	10,0	3,9	10,5
2690612	M6	12,0	3,9	10,5
2690615	M6	15,0	3,9	10,5
2690620	M6	20,0	3,9	10,5
2690625	M6	25,0	3,9	10,5
2690630	M6	30,0	3,9	10,5

Part no.	A	B	C	D
2690635	M6	35,0	3,9	10,5
2690640	M6	40,0	3,9	10,5
2690812	M8	12,0	5,2	14,0
2690815	M8	15,0	5,2	14,0
2690820	M8	20,0	5,2	14,0
2690825	M8	25,0	5,2	14,0
2690830	M8	30,0	5,2	14,0
2690840	M8	40,0	5,2	14,0

Screws without DIN of plastic | Countersunk screws PC



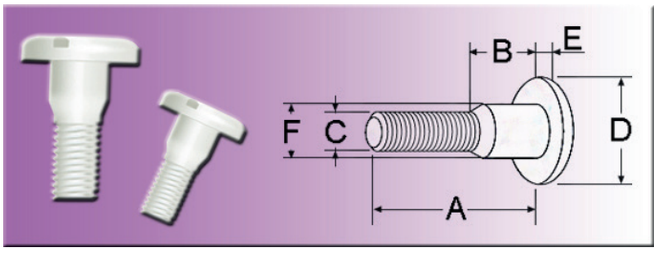
Material: PC
Colour: transparent

Part no.	A	B	D
2700203	M2	4,0	4,0
2700305	M3	6,0	6,0
2700307	M3	8,0	6,0
2700309	M3	10,0	6,0
2700315	M3	15,0	6,0
2700318	M3	18,0	6,0
2700320	M3	20,0	6,0
2700325	M3	25,0	6,0
2700406	M4	6,0	8,0
2700408	M4	8,0	8,0
2700410	M4	10,0	8,0
2700412	M4	12,0	8,0

Part no.	A	B	D
2700415	M4	15,0	8,0
2700416	M4	16,0	8,0
2700418	M4	18,0	8,0
2700420	M4	20,0	8,0
2700425	M4	25,0	8,0
2700508	M5	8,0	10,0
2700510	M5	10,0	10,0
2700512	M5	12,0	10,0
2700515	M5	15,0	10,0
2700520	M5	20,0	10,0
2700525	M5	25,0	10,0
2700610	M6	10,0	12,0

Part no.	A	B	D
2700612	M6	12,0	12,0
2700615	M6	15,0	12,0
2700620	M6	20,0	12,0
2700625	M6	25,0	12,0
2700630	M6	30,0	12,0
2700635	M6	35,0	12,0
2700810	M8	10,0	16,0
2700815	M8	15,0	16,0
2700820	M8	20,0	16,0
2700825	M8	25,0	16,0
2700830	M8	30,0	16,0

Screws without DIN of plastic | Binding screws



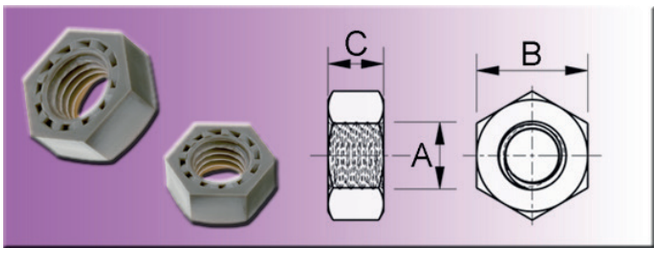
Suitable for the connection of pattern books, colour fans etc.
To be used with appropriate female part of series 081, page 298.

Material: PA 6
Colours:
Last digits 500 = white
Last digits 599 = black

Part no.	A	B	C	D	E	F
0820410500	10,0	-	M4	12,0	2,5	6,0
0820410599	10,0	-	M4	12,0	2,5	6,0
0820510500	10,0	-	M5	14,0	2,5	7,0
0820510599	10,0	-	M5	14,0	2,5	7,0
0820515500	15,0	5,0	M5	14,0	2,5	7,0
0820515599	15,0	5,0	M5	14,0	2,5	7,0
0820520500	20,0	10,0	M5	14,0	2,5	7,0
0820520599	20,0	10,0	M5	14,0	2,5	7,0
0820526500	25,0	15,0	M5	14,0	2,5	7,0
0820526599	25,0	15,0	M5	14,0	2,5	7,0
0820530500	30,0	20,0	M5	14,0	2,5	7,0
0820530599	30,0	20,0	M5	14,0	2,5	7,0
0820540500	40,0	30,0	M5	14,0	2,5	7,0
0820540599	40,0	30,0	M5	14,0	2,5	7,0

Part no.	A	B	C	D	E	F
0820610500	10,0	-	M6	16,0	3,0	8,0
0820610599	10,0	-	M6	16,0	3,0	8,0
0820618500	18,0	8,0	M6	16,0	3,0	8,0
0820618599	18,0	8,0	M6	16,0	3,0	8,0
0820625500	25,0	8,0	M6	16,0	3,0	8,0
0820625599	25,0	8,0	M6	16,0	3,0	8,0
0820630500	30,0	8,0	M6	16,0	3,0	8,0
0820630599	30,0	8,0	M6	16,0	3,0	8,0
0820636500	36,0	8,0	M6	16,0	3,0	8,0
0820636599	36,0	8,0	M6	16,0	3,0	8,0
0820639500	39,0	8,0	M6	16,0	3,0	8,0
0820639599	39,0	8,0	M6	16,0	3,0	8,0
0820648500	48,0	8,0	M6	16,0	3,0	8,0
0820648599	48,0	8,0	M6	16,0	3,0	8,0

Nuts without DIN of plastic | Hexagon nuts PEEK



Material: PEEK
Colour: light brown

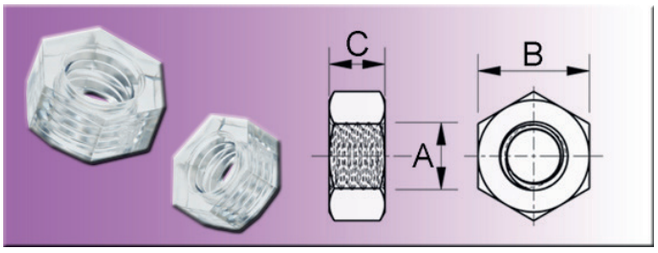
- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285

Part no.	A	B	C
2840300	M3	5,5	2,4
2840400	M4	7,0	3,2

Part no.	A	B	C
2840500	M5	8,0	4,0
2840600	M6	10,0	5,0

Part no.	A	B	C
2840800	M8	13,0	6,5
2841000	M10	17,0	8,0

Nuts without DIN of plastic | Hexagon nuts PC



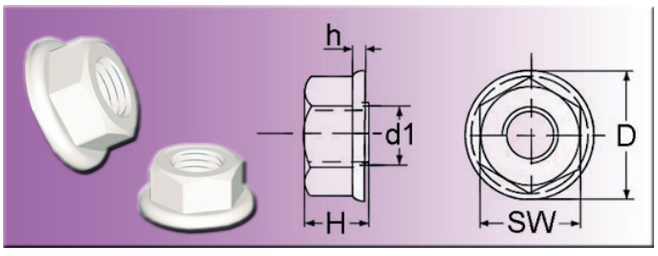
Material: PC
Colour: transparent

Part no.	A	B	C
2710002	M2	4,0	1,6
2710003	M3	5,5	2,4

Part no.	A	B	C
2710004	M4	7,0	3,2
2710005	M5	8,0	4,0

Part no.	A	B	C
2710006	M6	10,0	5,0
2710008	M8	13,0	6,5

Nuts without DIN of plastic | Hexagon nuts with flange

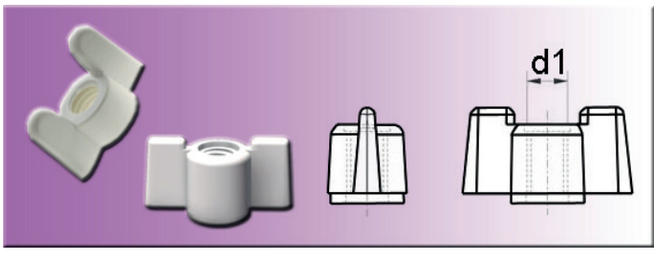


Material: PA
Colour: natural

Part no.	d1	D	SW	H	h
0880400	M4	9,5	7,0	4,2	1,1
0880500	M5	11,0	8,0	5,2	1,0
0880600	M6	13,0	10,0	6,0	1,2
0880800	M8	16,8	13,0	7,35	1,4
0881000	M10	21,7	16,0	9,5	1,8

Part no.	d1	D	SW	H	h
0881200	M12	27,1	18,0	12,7	3,0
0881600	M16	35,0	24,0	16,6	3,0
0882000	M20	44,0	30,0	20,0	3,5
0882400	M24	53,0	36,0	23,8	4,0

Nuts without DIN of plastic | Wing nuts type 26



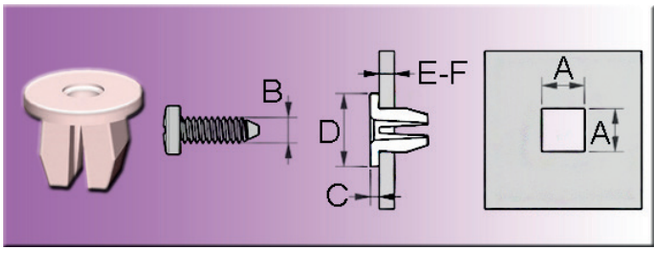
Material: PA 6.6
Colour: natural

Further types on written request.

Part no.	d1
0530400	M4
0530500	M5

Part no.	d1
0530600	M6
0530800	M8

Nuts without DIN of plastic | Grommet nuts



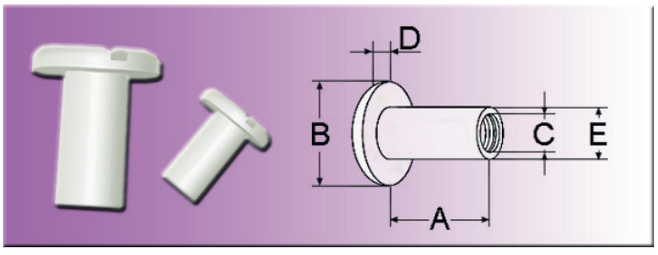
For a long-lasting and secure thread connection between thin steel plates. Easy and quick mounting.
Isolates vibrations and avoids anodic corrosion. Prevents threads from stripping.
Suitable in connection with pan head screw with cross slot DIN 7981 / ISO 7049
Dimension B indicates the size of the appropriate pan head screw (DIN 7981).

Material: PA 6.6
Colour: natural

Part no.	A	B	C	D	E	F
2625013000	5,0	2,9	1,3	8,0	0,8	2,5
2626014000	6,0	3,5	1,4	10,0	0,8	3,0

Part no.	A	B	C	D	E	F
2627015000	7,0	4,2	1,5	12,0	0,8	4,0
2628016000	8,0	4,8	1,6	14,0	0,8	5,0

Nuts without DIN of plastic | Book screw nuts

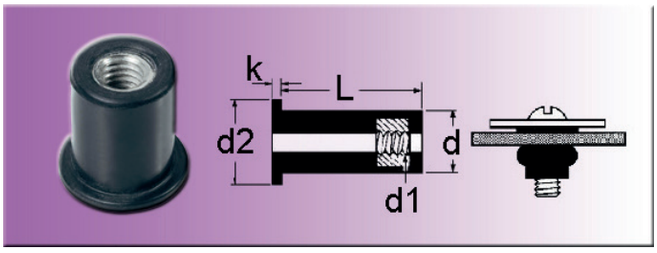


Suitable for screwing of sample books, colour fans etc.
To be used with adequate male part of series 082, page 296.

Material: PA 6
Colours:
Last digits 500 = white
Last digits 599 = black

Part no.	A	B	C	D	E
0810410500	10,0	12,0	M4	2,2	6,0
0810410599	10,0	12,0	M4	2,2	6,0
0810415500	15,0	12,0	M4	2,2	6,0
0810415599	15,0	12,0	M4	2,2	6,0
0810420500	20,0	12,0	M4	2,2	6,0
0810420599	20,0	12,0	M4	2,2	6,0
0810425500	25,0	12,0	M4	2,2	6,0
0810425599	25,0	12,0	M4	2,2	6,0

Part no.	A	B	C	D	E
0810430500	30,0	12,0	M4	2,2	6,0
0810430599	30,0	12,0	M4	2,2	6,0
0810510500	10,0	14,0	M5	2,5	7,0
0810510599	10,0	14,0	M5	2,5	7,0
0810610500	10,0	16,0	M6	3,0	8,0
0810610599	no longer available!				
0810616500	no longer available!				
0810616599	no longer available!				



Quick and easy assembly. Neoprene rivet body, electrically non-conductive.
Temperature-resistant from -40°C to +90°C. Oil and corrosion resistant.

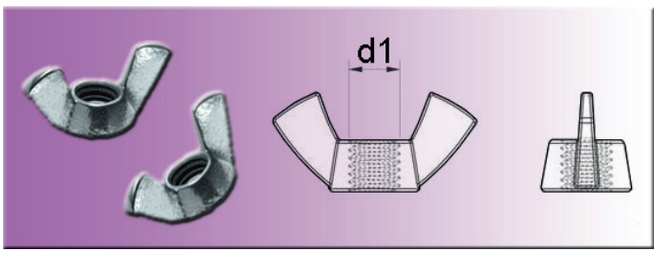
Material: EPDM (* = neoprene)
Colour: black

S = material thickness

Example of use:
Drill or blank mounting hole. Stick in ISO box nut.
Turn the screw with the part you want to attach into the ISO box nut with moderate force.
By turning the screw the rivet body bellies out and forms a safe and tight closing head.
In the case of a blind bore the elastic rivet body fixes itself by frictional connection.

Part no.	d1	d2	d	k	L	Nm	S
2553004	M3	11,0	7,9	1,2	11,4	0,25-0,50	0,4-4,0
2554039	M4	11,0	7,9	1,2	11,4	0,25-0,40	0,4-4,0
2555049	M5	12,7	9,6	0,9	13,2	0,34-0,50	0,4-4,9
2555057	no longer available!						
2555059	M5	14,0	9,6	1,0	16,0	0,29-0,69	0,85-5,9
2555114*	M5	14,0	9,5	0,9	20,6	0,34	4,0-10,0
2555163	M5	14,0	9,6	1,3	25,2	0,30-0,70	7,9-15,0
2555164*	M5	14,3	9,5	1,3	25,4	0,34	7,9-16,3
2555290	M5	14,0	9,6	1,3	37,7	0,60-1,00	20,5-30,0
2556028	M6	16,0	12,7	1,3	14,7	0,60-1,00	0,4-4,0
2556047	M6	19,1	12,7	4,8	16,3	0,80-1,00	0,8-4,7
2556116	M6	16,3	12,7	2,0	24,7	0,80-1,00	6,4-11,5
2558047	M8	21,5	15,9	3,2	15,1	1,00-1,50	0,4-4,0
2558095	M8	21,5	15,9	5,7	22,2	1,00-1,60	3,9-9,5
2558390	M8	20,0	18,0	1,6	48,4	3,00-4,00	15,0-35,0
2551040	M10	22,5	20,0	1,3	53,7	4,50-5,50	19,0-38,0
2551264	M12	27,0	24,0	1,3	77,7	6,00-7,00	38,0-56,0

Nuts without DIN of metal | Wing nuts of machining steel



Material: machining steel
Colour: zinc-plated

NO LONGER AVAILABLE!

Threaded pins/bars according to DIN | Threaded pins ~DIN 551



Threaded pins ~DIN 551 (~DIN EN ISO 24766)

Minimum order quantity:
500 pcs. for M3
200 pcs. for M4, M5 + M6
100 pcs. from M8 upwards

Material: PA 6.6
Colour: natural
(* = version without cone point)

Further types on written request.

Part no.	d1 x L
0860308	M3 x 8,6
0860310	M3 x 10
0860311	M3 x 11
0860313	M3 x 13
0860315	M3 x 15
0860316	M3 x 16
0860317	M3 x 17
0860319	M3 x 19
0860321	M3 x 21
0860326	M3 x 26
0860331	M3 x 31
0860334	M3 x 34
0860335	M3 x 35
0860404	M4 x 4
0860405*	M4 x 5
0860406	M4 x 6
0860407	M4 x 7
0860408	M4 x 8

Part no.	d1 x L
0860409	M4 x 9
0860410	M4 x 10
0860411	M4 x 11
0860413	M4 x 13
0860415	M4 x 15
0860416	M4 x 16
0860417	M4 x 17
0860419	M4 x 19
0860420	M4 x 20
0860421	M4 x 21
0860425	M4 x 25
0860426	M4 x 26
0860429	M4 x 29
0860430	M4 x 30
0860431	M4 x 31
0860435	M4 x 35
0860440	M4 x 40
0860441	M4 x 41

Part no.	d1 x L
0860505	M5 x 5
0860506	M5 x 6
0860507	M5 x 7
0860508	M5 x 8
0860509	M5 x 9
0860510	M5 x 10
0860511	M5 x 11
0860512	M5 x 12
0860513	M5 x 13
0860515	M5 x 15
0860516	M5 x 16
0860517	M5 x 17
0860518	M5 x 18
0860521	M5 x 21
0860526	M5 x 26
0860531	M5 x 31
0860536	M5 x 36
0860541	M5 x 41

Part no.	d1 x L
0860546	M5 x 46
0860550	M5 x 50
0860605	M6 x 5
0860606	M6 x 6
0860607	M6 x 7
0860608	M6 x 8
0860609	M6 x 9
0860610	M6 x 10
0860611	M6 x 11
0860612	M6 x 12
0860613	M6 x 13
0860615	M6 x 15
0860616	M6 x 16
0860617	M6 x 17
0860618	M6 x 18
0860620	M6 x 20
0860621	M6 x 21
0860622	M6 x 22
0860625	M6 x 25
0860626	M6 x 26
0860627	M6 x 27
0860630	M6 x 30
0860631	M6 x 31
0860632	M6 x 32
0860635	M6 x 35
0860636	M6 x 36
0860640	M6 x 40
0860641	M6 x 41
0860642	M6 x 42
0860645	M6 x 45
0860646	M6 x 46

Part no.	d1 x L
0860651	M6 x 51
0860656	M6 x 56
0860670	M6 x 70
0860805	M8 x 5
0860806	M8 x 6
0860807	M8 x 7
0860808	M8 x 8
0860809	M8 x 9
0860810	M8 x 10
0860811	M8 x 11
0860812	M8 x 12
0860813	M8 x 13
0860814	M8 x 14
0860815	M8 x 15
0860816	M8 x 16
0860817	M8 x 17
0860818	M8 x 18
0860819	M8 x 19
0860820	M8 x 20
0860822	M8 x 22
0860825	M8 x 25
0860826	M8 x 26
0860827	M8 x 27
0860830	M8 x 30
0860835	M8 x 35
0860837	M8 x 37
0860840	M8 x 40
0860842	M8 x 42
0860847	M8 x 47
0860850	M8 x 50
0860851	M8 x 51

Part no.	d1 x L
0860852	M8 x 52
0860860	M8 x 60
0860862	M8 x 62
0860867	M8 x 67
0860880	M8 x 80
0861005	M10 x 5
0861006	M10 x 6
0861007	M10 x 7
0861008	M10 x 8
0861009	M10 x 9
0861010	M10 x 10
0861012	M10 x 12
0861013	M10 x 13
0861014	M10 x 14
0861016	M10 x 16
0861020	M10 x 20
0861021	M10 x 21
0861022	M10 x 22
0861026	M10 x 26
0861027	M10 x 27
0861036	M10 x 36
0861037	M10 x 37
0861052	M10 x 52
0861210	M12 x 10
0861212	M12 x 12
0861216	M12 x 16
0861221	M12 x 21
0861225	M12 x 25
0861230	M12 x 30
0861236	M12 x 36

Threaded pins/bars according to DIN | Threaded pins ~DIN 913



Threaded pins with internal hexagon ~DIN 913 (~DIN EN ISO 4026)

Minimum order quantity: 1,000 pcs. per order and dimension

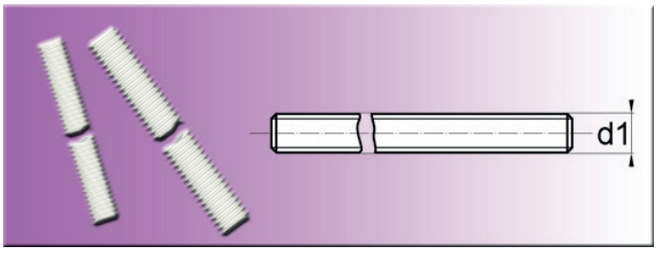
Material: PA 6.6
Colour: natural

Part no.	d1 x L
2860505	M5 x 5
2860506	M5 x 6
2860507	M5 x 7
2860508	M5 x 8
2860509	M5 x 9
2860510	M5 x 10
2860511	M5 x 11
2860512	M5 x 12
2860513	M5 x 13
2860515	M5 x 15
2860516	M5 x 16
2860517	M5 x 17
2860518	M5 x 18
2860521	M5 x 21
2860526	M5 x 26
2860531	M5 x 30
2860536	M5 x 36
2860541	M5 x 41
2860546	M5 x 46
2860551	M5 x 51
2860605	M6 x 5
2860606	M6 x 6
2860607	M6 x 7
2860608	M6 x 8

Part no.	d1 x L
2860609	M6 x 9
2860610	M6 x 10
2860611	M6 x 11
2860612	M6 x 12
2860613	M6 x 13
2860615	M6 x 15
2860616	M6 x 16
2860617	M6 x 17
2860618	M6 x 18
2860620	M6 x 20
2860621	M6 x 21
2860622	M6 x 22
2860625	M6 x 25
2860626	M6 x 26
2860630	M6 x 30
2860631	M6 x 31
2860632	M6 x 32
2860636	M6 x 36
2860641	M6 x 41
2860646	M6 x 46
2860651	M6 x 51
2860656	M6 x 56
2860805	M8 x 5
2860806	M8 x 6

Part no.	d1 x L
2860807	M8 x 7
2860808	M8 x 8
2860809	M8 x 9
2860810	M8 x 10
2860811	M8 x 11
2860812	M8 x 12
2860813	M8 x 13
2860814	M8 x 14
2860815	M8 x 15
2860816	M8 x 16
2860817	M8 x 17
2860818	M8 x 18
2860819	M8 x 19
2860820	M8 x 20
2860822	M8 x 22
2860825	M8 x 25
2860826	M8 x 26
2860827	M8 x 27
2860842	M8 x 42
2860847	M8 x 47
2860851	M8 x 51
2860852	M8 x 52
2860862	M8 x 62
2860867	M8 x 65

Threaded pins/bars according to DIN | Threaded bars ~DIN 975



Threaded bars ~DIN 975
Standard length 1000 mm, further lengths on written request.

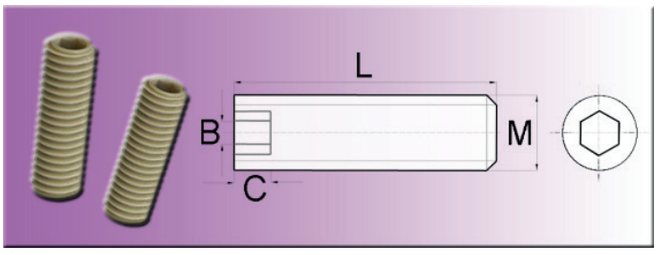
Material: PA 6
Colour: natural

Part no.	d1
9750030	M3
9750040	M4
9750050	M5
9750060	M6

Part no.	d1
9750080	M8
9751000	M10
9751200	M12
9751400	M14

Part no.	d1
9751600	M16
9751800	M18
9752000	M20
9752400	M24

Threaded pins/bars without DIN | Threaded pins with internal hexagon PEEK



Material: PEEK
Colour: light brown

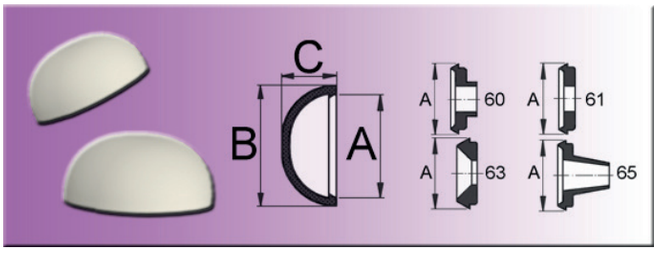
- Temperature: max. 180°C
- High-strength and excellent form stability
- High modulus of elasticity and excellent creep resistance
- Resistant to many chemicals
- Flammability rating: UL94 V0
- Further PEEK products: series 280 to series 285 and 302

Part no.	M x L	B x C
3860304	M3 x 4	1,5 x 2
3860306	M3 x 6	1,5 x 2
3860308	M3 x 8	1,5 x 2
3860310	M3 x 10	1,5 x 2
3860312	M3 x 12	1,5 x 2
3860315	M3 x 15	1,5 x 2
3860406	M4 x 6	2 x 2,5
3860408	M4 x 8	2 x 2,5
3860410	M4 x 10	2 x 2,5
3860412	M4 x 12	2 x 2,5
3860415	M4 x 15	2 x 2,5

Part no.	M x L	B x C
3860420	M4 x 20	2 x 2,5
3860506	M5 x 6	2,5 x 3
3860508	M5 x 8	2,5 x 3
3860510	M5 x 10	2,5 x 3
3860512	M5 x 12	2,5 x 3
3860515	M5 x 15	2,5 x 3
3860520	M5 x 20	2,5 x 3
3860606	M6 x 6	3 x 3,5
3860608	M6 x 8	3 x 3,5
3860610	M6 x 10	3 x 3,5
3860612	M6 x 12	3 x 3,5

Part no.	M x L	B x C
3860615	M6 x 15	3 x 3,5
3860620	M6 x 20	3 x 3,5
3860625	M6 x 25	3 x 3,5
3860810	M8 x 10	4 x 5
3860812	M8 x 12	4 x 5
3860815	M8 x 15	4 x 5
3860820	M8 x 20	4 x 5
3860825	M8 x 25	4 x 5
3860830	M8 x 30	4 x 5

Protective caps for screws & nuts | Snap-on caps/rings - caps type 61



Caps for snap-on rings.
These caps are applicable for ring types: 60, 61, 63 and 65.

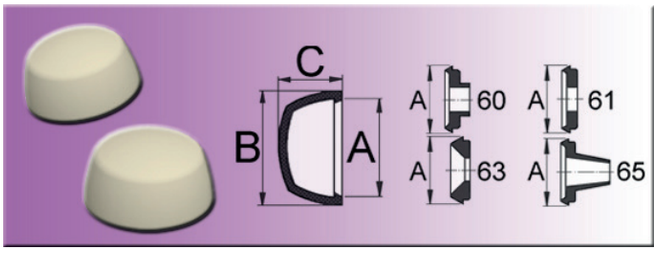
Material: LDPE / PA 6
Colours:
last digits 500 / 113 = white
last digits 599 = black
last digits 002 = grey
last digits 076 = brown

Cap type 61 suitable for
DIN 84, 85, 95, 96, 97, 439, 963, 964, 965, 966, 6912, 7963, 7971, 7972, 7981, 7982, 7983, 7984, 7991, 7995, 7996, 7997
ISO 1207, 1481, 1482, 1580, 2009, 2010, 4035, 7046, 7047, 7049, 7050, 7051, 10642

Dimension A has to match the dimension A of the snap-on rings.

Part no.	A	B	C	D
0061032002	8,5	10,5	4,3	M3
0061032076	8,5	10,5	4,3	M3
0061032113	8,5	10,5	4,3	M3
0061032220	8,5	10,5	4,3	M3
0061042002	10,8	12,2	5,9	M4
0061042076	10,8	12,2	5,9	M4
0061042500	10,8	12,2	5,9	M4
0061042599	10,8	12,2	5,9	M4
0061052002	12,8	14,5	6,5	M5
0061052076	12,8	14,5	6,5	M5

Part no.	A	B	C	D
0061052500	12,8	14,5	6,5	M5
0061052599	12,8	14,5	6,5	M5
0061062002	14,8	16,5	7,5	M6
0061062076	14,8	16,5	7,5	M6
0061062500	14,8	16,5	7,5	M6
0061062599	14,8	16,5	7,5	M6
0061082002	18,8	20,6	10,2	M8
0061082076	18,8	20,6	10,2	M8
0061082500	18,8	20,6	10,2	M8
0061082599	18,8	20,6	10,2	M8



Caps for snap-on rings.
These caps are applicable for ring types: 60, 61, 63 and 65.

Material: PA 6
Colours:
last digits 500 = white
last digits 599 = black
last digits 002 = grey
last digits 076 = brown

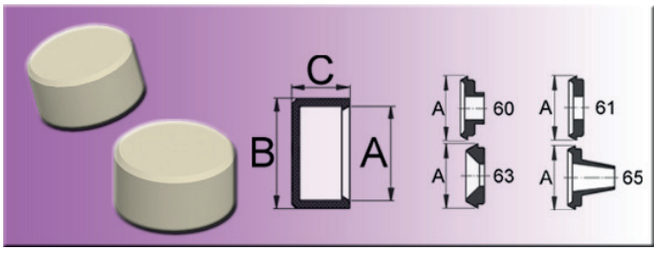
Cap type 62 suitable for
DIN 95, 97, 555, 558, 571, 601, 912, 931, 934, 963, 964, 965, 966, 979, 7963, 7972, 7976, 7982, 7983, 7991, 7995, 7997
ISO 1482, 2009, 2010, 4014, 4016, 4018, 4032, 4034, 4762, 7046, 7047, 7050, 7051, 10642

Dimension A has to match the dimension A of the snap-on rings.

Part no.	A	B	C	D
0062042002	10,8	12,2	6,0	M4
0062042076	10,8	12,2	6,0	M4
0062042500	10,8	12,2	6	M4
0062042599	10,8	12,2	6	M4
0062052002	12,8	14,2	8	M5
0062052076	12,8	14,2	8	M5
0062052500	12,8	14,2	8	M5
0062052599	12,8	14,2	8	M5
0062062002	14,8	16,6	9	M6
0062062076	14,8	16,6	9	M6

Part no.	A	B	C	D
0062062500	14,8	16,6	9	M6
0062062599	14,8	16,6	9	M6
0062082002	18,8	21,3	12	M8
0062082076	18,8	21,3	12	M8
0062082500	18,8	21,3	12	M8
0062082599	18,8	21,3	12	M8
0062102002	24,0	26,3	15,5	M10
0062102076	24,0	26,3	15,5	M10
0062102500	24,0	26,3	15,5	M10
0062102599	24,0	26,3	15,5	M10

Protective caps for screws & nuts | Snap-on caps/rings - caps type 64



Caps for snap-on rings.
These caps are applicable for ring types: 60, 61, 63 and 65.

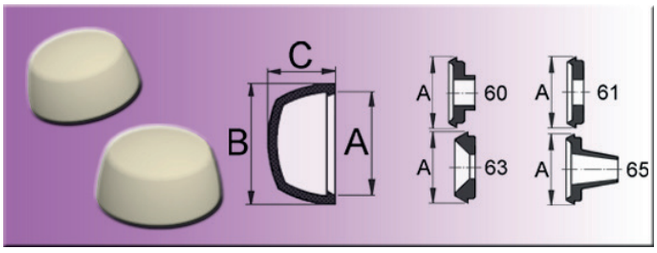
Material: PA 6
Colours:
last digits 500 = white
last digits 599 = black
last digits 002 = grey
last digits 076 = brown

Cap type 64 suitable for
DIN 95, 97, 555, 558, 571, 601, 912, 931, 934, 963, 964, 965, 966, 979, 7963, 7972, 7976, 7982, 7983, 7991, 7995, 7997
ISO 1482, 2009, 2010, 4014, 4016, 4018, 4032, 4034, 4762, 7046, 7047, 7050, 7051, 10642

Dimension A has to match the dimension A of the snap-on rings.

Part no.	A	B	C	D
0064042002	10,8	12,2	6,2	M4
0064042076	10,8	12,2	6,2	M4
0064042500	10,8	12,2	6,2	M4
0064042599	10,8	12,2	6,2	M4
0064052002	12,8	14,2	7,0	M5
0064052076	12,8	14,2	7,0	M5
0064052500	12,8	14,2	7,0	M5
0064052599	12,8	14,2	7,0	M5
0064062002	14,8	16,5	8,5	M6
0064062076	14,8	16,5	8,5	M6

Part no.	A	B	C	D
0064062500	14,8	16,5	8,5	M6
0064062599	14,8	16,5	8,5	M6
0064082002	18,8	20,6	10,8	M8
0064082076	18,8	20,6	10,8	M8
0064082500	18,8	20,6	10,8	M8
0064082599	18,8	20,6	10,8	M8
0064102002	24,0	26,1	12,8	M10
0064102076	24,0	26,1	12,8	M10
0064102500	24,0	26,1	12,8	M10
0064102599	24,0	26,1	12,8	M10



Caps for snap-on rings.
These caps are applicable for ring types: 60, 61, 63 and 65.

Material: HDPE
Colours:
last digits 011 = white
last digits 114 = black
last digits 015 = grey ~RAL7035

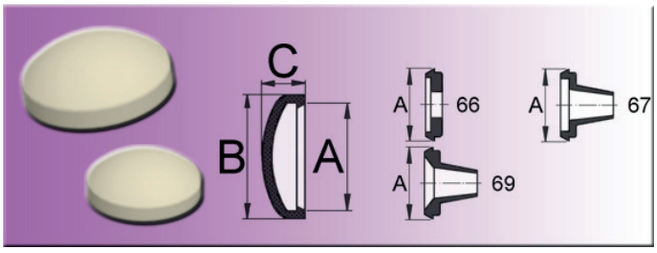
Cap type 65 suitable for
DIN 95, 97, 555, 558, 571, 601, 912, 931, 934, 963, 964, 965, 966, 979, 7963, 7972, 7976, 7982, 7983, 7991, 7995, 7997
ISO 1482, 2009, 2010, 4014, 4016, 4018, 4032, 4034, 4762, 7046, 7047, 7050, 7051, 10642

Dimension A has to match the dimension A of the snap-on rings.

Part no.	A	B	C	D
0065042011	10,8	12,2	6,0	M4
0065042015	10,8	12,2	6,0	M4

Part no.	A	B	C	D
0065042114	10,8	12,2	6,0	M4

Protective caps for screws & nuts | Snap-on caps/rings - caps type 66



Caps for snap-on rings.
These caps are applicable for ring types: 66, 67 and 69.

Material: HDPE
Colours:
last digits 076 = brown ~RAL8019
last digits 027 = brown ~RAL8014
last digits 021 = beige ~RAL9001
last digits 020 = grey ~RAL7038
last digits 018 = grey ~RAL7044
last digits 015 = grey ~RAL7035
last digits 014 = grey ~RAL7001
last digits 013 = grey ~RAL7004
last digits 012 = white ~RAL9016
last digits 011 = white ~RAL9003
without last digits = black ~RAL9005

Cap type 66 suitable for
DIN 84, 85, 95, 96, 97, 439, 963, 964, 965, 6912, 7963, 7971, 7972, 7981, 7982, 7983, 7984, 7991, 7995, 7996
ISO 1207, 1481, 1482, 1580, 2009, 2010, 4035, 7046, 7047, 7050, 7051, 10642

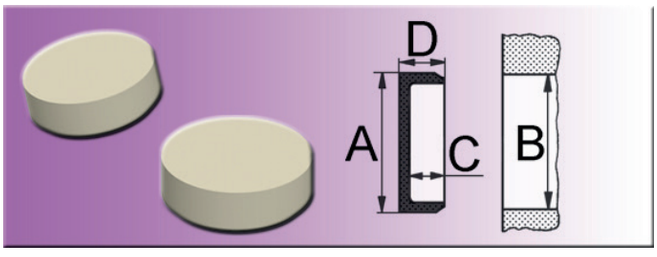
Dimension A has to match the dimension A of the snap-on rings.

Part no.	A	B	C
0066052	12,0	14,2	5,2
0066052011	12,0	14,2	5,2
0066052012	12,0	14,2	5,2
0066052013	12,0	14,2	5,2

Part no.	A	B	C
0066052014	12,0	14,2	5,2
0066052015	12,0	14,2	5,2
0066052018	12,0	14,2	5,2
0066052020	12,0	14,2	5,2

Part no.	A	B	C
0066052027	12,0	14,2	5,2
0066052076	12,0	14,2	5,2

Protective caps for screws & nuts | Snap-on caps/rings - caps type 68



Caps suitable for hole size 12.0 mm

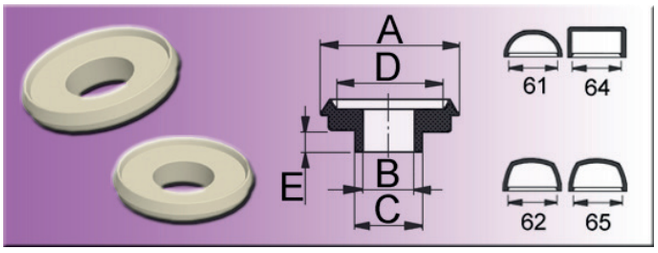
Material: PA
Colours:
last digits 013 = grey ~RAL7004
last digits 015 = grey ~RAL7035
last digits 021 = white ~RAL9001
last digits 599 = black ~RAL9006
without last digits = white ~RAL9003

Cap type 68 suitable for
DIN 84, 85, 96, 439, 6912, 7971, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4035

Part no.	A	B	C	D
0068042	12,2	12,0	3,3	4,0
0068042013	12,2	12,0	3,3	4,0

Part no.	A	B	C	D
0068042015	12,2	12,0	3,3	4,0
0068042599	12,2	12,0	3,3	4,0

Protective caps for screws & nuts | Snap-on caps/rings - rings type 60



Washers for snap-on caps.
These rings are applicable for cap types: 61, 62, 64 and 65.

Material: PA
Colours: natural

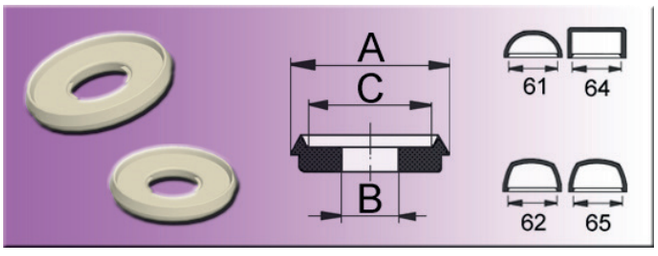
Ring type 60 suitable for
DIN 84, 85, 96, 439, 555, 558, 571, 601, 912, 931, 934, 979, 6912, 7971, 7976, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4014, 4016, 4018, 4032, 4034, 4035, 4762, 7049.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D	E	F
0060041	10,8	4,2	5,9	8,8	2,0	M4
0060051	12,8	5,2	6,9	10,8	2,0	M5
0060061	14,8	6,2	7,9	12,5	2,0	M6

Part no.	A	B	C	D	E	F
0060081	18,8	8,3	9,8	16,5	3,0	M8
0060101	24,0	10,4	11,8	21,0	3,0	M10

Protective caps for screws & nuts | Snap-on caps/rings - rings type 61



Washers for snap-on caps.
These rings are applicable for cap types: 61, 62, 64 and 65.

Material: PA
Colours: natural

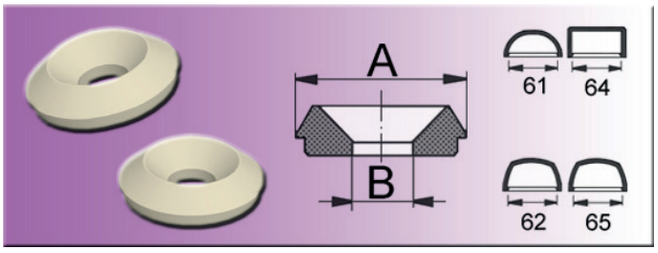
Ring type 61 suitable for
DIN 84, 85, 96, 439, 555, 558, 571, 601, 912, 931, 934, 979, 6912, 7971, 7976, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4014, 4016, 4018, 4032, 4034, 4035, 4762, 7049.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D
0061031	8,5	3,2	6,0	M3
0061041	10,8	4,2	8,6	M4
0061051	12,8	5,2	10,8	M5

Part no.	A	B	C	D
0061061	14,8	6,4	12,8	M6
0061081	18,8	8,4	16,8	M8
0062101	24,0	10,5	21,0	M10

Protective caps for screws & nuts | Snap-on caps/rings - rings type 63



Washers for snap-on caps.
These rings are applicable for cap types: 61, 62, 64 and 65.

Material: PA
Colours: natural

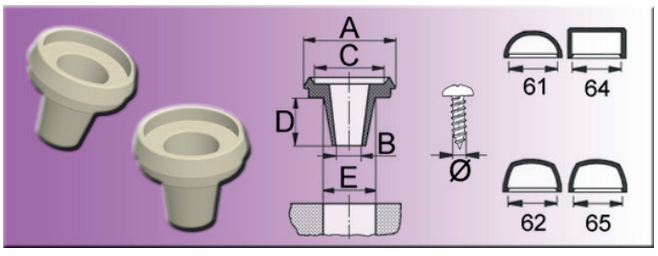
Ring type 63 suitable for
DIN 95, 97, 963, 964, 965, 966, 7963, 7972, 7982, 7983, 7991, 7995, 7997
ISO 1482, 2009, 2010, 7046, 7047, 7050, 7051, 10642.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C
0063041	10,8	3,2	M3
0063051	12,8	4,3	M4

Part no.	A	B	C
0063061	14,8	5,3	M5
0063081	18,8	6,4	M6

Protective caps for screws & nuts | Snap-on caps/rings - rings type 65



Washers for snap-on caps.
These rings are applicable for cap types: 61, 62, 64 and 65.

Material: PA
Colours: natural

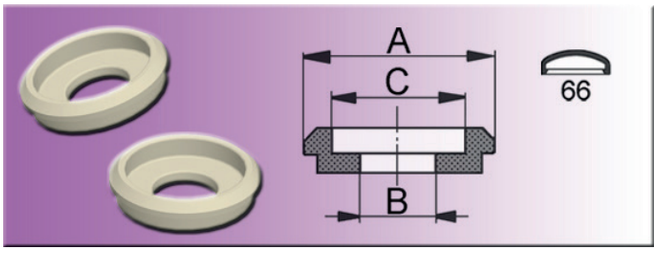
Ring type 65 suitable for
DIN 84, 85, 96, 439, 555, 558, 571, 601, 912, 931, 934, 979, 6912, 7971, 7976, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4014, 4016, 4018, 4032, 4034, 4035, 7049.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D	E	Ø
0065031	10,8	3,8	8,6	6,0	6,0	3,8

Part no.	A	B	C	D	E	Ø
0065041	10,8	4,2	8,6	6,0	6,0	4,2

Protective caps for screws & nuts | Snap-on caps/rings - rings type 66



Washers for snap-on caps.
These rings are applicable for cap type: 66

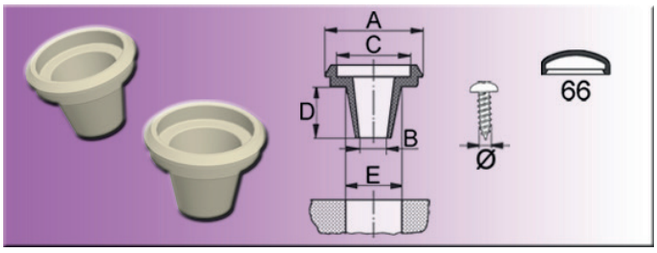
Material: PA
Colours: natural

Ring type 66 suitable for
DIN 84, 85, 96, 439, 6912, 7971, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4035.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D
0066051	12,0	5,0	9,5	M4

Protective caps for screws & nuts | Snap-on caps/rings - rings type 67



Washers for snap-on caps.
These rings are applicable for cap type: 66

Material: PA
Colours: natural

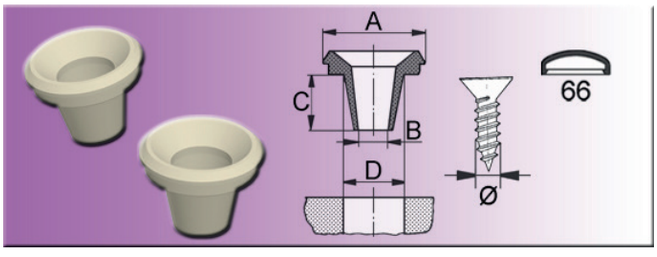
Ring type 67 suitable for
DIN 84, 85, 96, 439, 6912, 7971, 7981, 7984, 7996
ISO 1207, 1481, 1580, 4035.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D	E	Ø
0067031	12,0	3,8	9,5	6,0	6,0	3,8
0067041	12,0	4,2	9,5	6,0	6,0	4,2

Part no.	A	B	C	D	E	Ø
0067051	12,0	5,0	9,5	6,0	8,0	4,8

Protective caps for screws & nuts | Snap-on caps/rings - rings type 69



Washers for snap-on caps.
These rings are applicable for cap type: 66

Material: PA
Colours: natural

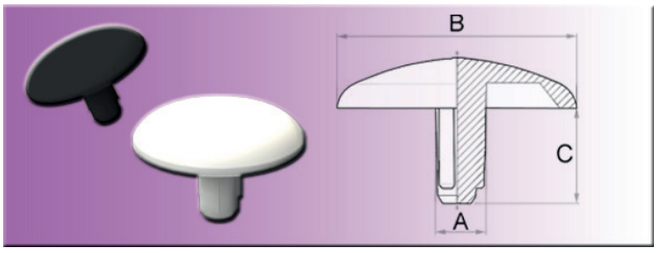
Ring type 69 suitable for
DIN 95, 97, 963, 964, 965, 7963, 7972, 7982, 7983, 7991, 7995
ISO 1482, 2009, 2010, 7046, 7047, 7050, 7051, 10642.

Dimension A has to match the dimension A of the snap-on caps.

Part no.	A	B	C	D	Ø
0069041	12,0	4,2	6,0	7,5	4,2

Part no.	A	B	C	D	Ø
0069051	12,0	5,0	6,0	8,0	4,8

Protective caps for screws & nuts | Covering caps for screws



Ideal for booth construction, toolbuilding and furniture industry.
Please note that diameter A should exceed the bore hole by 0.2 - 0.3 mm.

Material: PE
Colours:
last digits 600 = white
last digits 699 = black

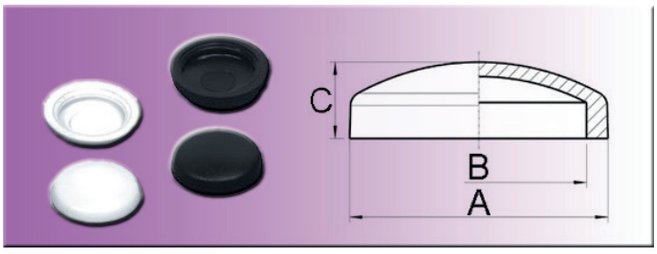
Further types on written request.

Part no.	A	B	C
0642512600	2,5	12,0	3,5
0642512699	2,5	12,0	3,5
0642612600	2,6	12,0	4,7
0642612699	2,6	12,0	4,7

Part no.	A	B	C
0643212600	3,0	12,0	6,0
0643212699	3,0	12,0	6,0
0643215600	3,0	15,0	6,0
0643215699	3,0	15,0	6,0

Part no.	A	B	C
0643218600	3,0	18,0	7,0
0643218699	3,0	18,0	7,0

Protective caps for screws & nuts | Flat head caps



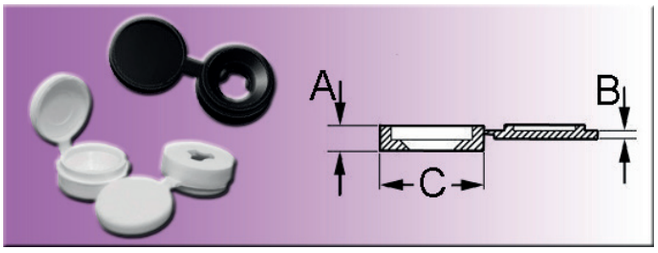
Material: PE
Colours:
last digits 600 = white
last digits 699 = black

Part no.	A	B	C
0630906600	9,0	6,0	3,5
0630906699	9,0	6,0	3,5
0630907600	9,2	7,0	4,0
0630907699	9,2	7,0	4,0
0631006600	10,0	6,0	4,0
0631006699	10,0	6,0	4,0
0631007600	10,5	7,0	5,0
0631007699	10,5	7,0	5,0
0631207600	12,0	7,0	4,2
0631207699	12,0	7,0	4,2
0631208600	12,0	8,2	2,5
0631208699	12,0	8,2	2,5
0631209600	12,0	9,0	2,5

Part no.	A	B	C
0631209699	12,0	9,0	2,5
0631219600	12,0	9,0	5,0
0631219699	12,0	9,0	5,0
0631409600	14,0	9,0	4,7
0631409699	14,0	9,0	4,7
0631410600	14,5	10,5	3,8
0631410699	14,5	10,5	3,8
0631411600	14,5	11,0	3,8
0631411699	14,5	11,0	3,8
0631511600	15,0	11,5	4,0
0631511699	15,0	11,5	4,0
0631612600	16,0	12,0	5,0
0631612699	16,0	12,0	5,0

Part no.	A	B	C
0631615600	16,4	15,0	6,7
0631615699	16,4	15,0	6,7
0631711600	17,0	11,6	4,0
0631711699	17,0	11,6	4,0
0631712600	17,0	12,0	3,6
0631712699	17,0	12,0	3,6
0631815600	18,0	15,0	5,3
0631815699	18,0	15,0	5,3
0631915600	19,0	15,0	5,7
0631915699	19,0	15,0	5,7
0632522600	25,0	22,0	10,0
0632522699	25,0	22,0	10,0

Protective caps for screws & nuts | Uniscrew caps



Cap with integrated washer that shortens the mounting time considerably and delivers an aesthetic end product.
Applicable for M3, M4 and M5 screws.
One dimension for several screw sizes!

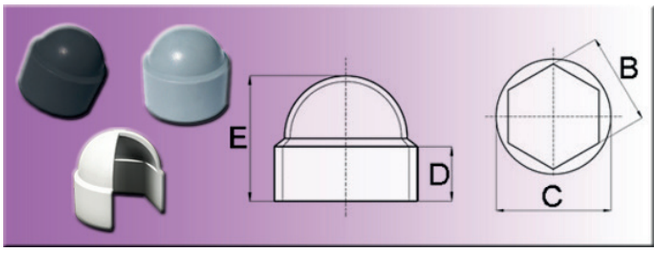
Material: PP
Colours:
without last digits = white
last digits 699 = black

V = for countersunk screws / M = for metric screws

Part no.	V	M	A	B	C
1970002	Nr. 6 - 12	3,5 - 6 mm	3,4	1,0	13,6
1970002699	Nr. 6 - 12	3,5 - 6 mm	3,4	1,0	13,6
1970001	Nr. 6 - 12	3,5 - 6 mm	3,9	2,9	13,7

Part no.	V	M	A	B	C
1970003	Nr. 10 - 12	5,0 - 6 mm	5,0	1,0	17,5
1970003699	Nr. 10 - 12	5,0 - 6 mm	5,0	1,0	17,5

Protective caps for screws & nuts | Hexagon protection caps



Protection against dirt and corrosion.

Material: PE
Colours:
without last digits = black
last digit W = white
last digits GR = grey

Further types on written request.

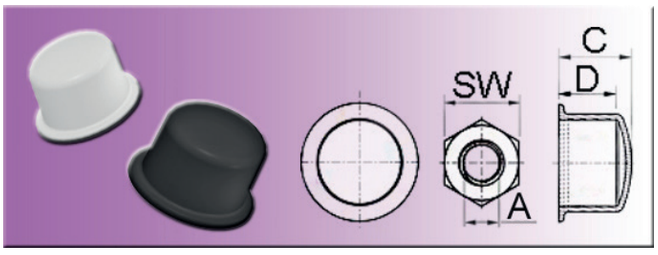
Part no.	A	B	C	D	E
1300040	M4	6,9	10,7	6,0	9,4
1300040GR	M4	6,9	10,7	6,0	9,4
1300040W	M4	6,9	10,7	6,0	9,4
1300050	M5	8,0	10,5	5,3	10,2
1300050GR	M5	8,0	10,5	5,3	10,2
1300050W	M5	8,0	10,5	5,3	10,2
1300060	M6	10,0	13,0	7,0	13,0
1300060GR	M6	10,0	13,0	7,0	13,0
1300060W	M6	10,0	13,0	7,0	13,0
1300080	M8	13,0	16,6	7,6	15,2
1300080GR	M8	13,0	16,6	7,6	15,2
1300080W	M8	13,0	16,6	7,6	15,2
1300100	M10	17,0	22,0	8,5	19,5
1300100GR	M10	17,0	22,0	8,5	19,5
1300100W	M10	17,0	22,0	8,5	19,5
1300120	M12	19,0	24,0	11,0	21,5

Part no.	A	B	C	D	E
1300120GR	M12	19,0	24,0	11,0	21,5
1300120W	M12	19,0	24,0	11,0	21,5
1300140	M14	22,0	26,5	12,0	23,5
1300140GR	M14	22,0	26,5	12,0	23,5
1300140W	M14	22,0	26,5	12,0	23,5
1300160	M16	24,0	30,0	14,0	26,5
1300160GR	M16	24,0	30,0	14,0	26,5
1300160W	M16	24,0	30,0	14,0	26,5
1300180	M18	26,9	34,0	16,0	31,0
1300180GR	M18	26,9	34,0	16,0	31,0
1300180W	M18	26,9	34,0	16,0	31,0
1300200	M20	29,0	36,5	19,4	33,5
1300200GR	M20	29,0	36,5	19,4	33,5
1300200W	M20	29,0	36,5	19,4	33,5
1300220	M22	31,3	38,9	21,2	36,0
1300220GR	M22	31,3	38,9	21,2	36,0

Part no.	A	B	C	D	E
1300220W	no longer available!				
1300240	M24	34,5	43,9	22,8	39,3
1300240GR	M24	34,5	43,9	22,8	39,3
1300240W	M24	34,5	43,9	22,8	39,3
1300270	M27	41,0	50,0	25,9	46,5
1300270GR	no longer available!				
1300300	M30	46,0	55,0	26,0	50,0
1300300GR	M30	46,0	55,0	26,0	50,0
1300300W	M30	46,0	55,0	26,0	50,0
1300330	M33	50,0	59,5	28,3	56,2
1300330GR	M33	50,0	59,5	28,3	56,2
1300330W	no longer available!				

Part no.	A	B	C	D	E
1300360	M36	55,0	66,0	29,2	58,0
1300360GR	M36	55,0	66,0	29,2	58,0
1300360W	no longer available!				
1300390	M39	60,0	72,0	34,6	61,0
1300390GR	no longer available!				
1300390W	no longer available!				
1300420	M42	65,0	76,6	36,6	63,1
1300420GR	no longer available!				
1300420W	no longer available!				
1300450	M45	70,0	84,0	34,5	88,4
1300450GR	no longer available!				
1300450W	no longer available!				

Protective caps for screws & nuts | Protection caps - short



Short version!
Protect against dirt and corrosion and are resistant to all weather influences and a lot of chemicals. Applicable **without** washer.

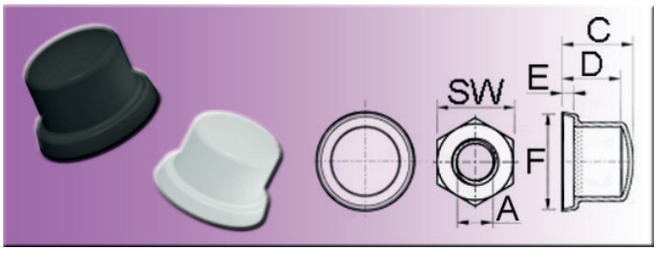
Material: PE
Colours:
last digits 500 = white
without last digits = black

Also available in grey RAL 7004 - please send us your enquiry!

Part no.	A	SW	C	D
0340303	M3	5,5	3,7	2,7
0340306	M3	5,5	6,5	5,5
0340307	M3	5,5	8,2	7,0
0340404	M4	7	5,1	4,0
0340407	M4	7	8,1	7,1
0340409	M4	7	10,0	8,9
0340505	M5	8	6,0	4,9
0340508	M5	8	9,6	8,2
0340510	M5	8	11,3	10,2
0340519	M5	8	20,0	18,9
0340610	M6	10	10,0	7,0
0340610500	M6	10	10,0	7,0

Part no.	A	SW	C	D
0340812	M8	13	12,0	9,0
0340812500	M8	13	12,0	9,0
0341015	M10	17	15,0	11,0
0341015500	M10	17	15,0	11,0
0341217	M12	19	17,0	13,0
0341217500	M12	19	17,0	13,0
0341422	M14	22	22,0	18,0
0341422500	M14	22	22,0	18,0
0341622	M16	24	22,0	18,0
0341622500	M16	24	22,0	18,0
0342028	M20	30	28,0	24,0
0342028500	M20	30	28,0	24,0

Protective caps for screws & nuts | Protection caps - short with washer



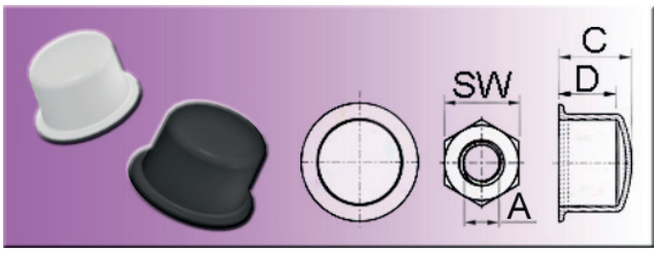
Short version!
Protect against dirt and corrosion and are resistant to all weather influences and a lot of chemicals. Applicable **with** washer.

Material: PE
Colours:
last digits 500 = white
without last digits = black

Part no.	A	SW	C	D	E	F
0350405	M4	7	10,8	4,7	0,8	9,8
0350410	M4	7	10,8	9,7	0,8	9,4
0350408	M4	7	10,9	7,8	0,8	9,6
0350409	M4	7	14,0	8,6	1,0	12,8
0350509	M5	8	11,6	9,1	1,0	10,8
0350511	M5	8	12,0	11,1	1,0	10,9
0350506	M5	8	12,3	5,6	1,0	11,0
0350510	M5	8	16,8	10,6	1,9	15,5
0350612	M6	10	12,0	9,0	2,0	13,2
0350612500	M6	10	12,0	9,0	2,0	13,2

Part no.	A	SW	C	D	E	F
0350815	M8	13	15,0	12,0	2,3	17,9
0350815500	M8	13	15,0	12,0	2,3	17,9
0351018	M10	17	18,0	14,0	2,7	22,0
0351018500	M10	17	18,0	14,0	2,7	22,0
0351221	M12	19	21,0	17,0	3,5	25,5
0351221500	M12	19	21,0	17,0	3,5	25,5
0351627	M16	24	27,0	23,0	4,4	31,5
0351627500	M16	24	27,0	23,0	4,4	31,5
0352033	M20	30	32,0	4,7	5,0	38,7
0352033500	M20	30	32,0	4,7	5,0	38,7

Protective caps for screws & nuts | Protection caps - long



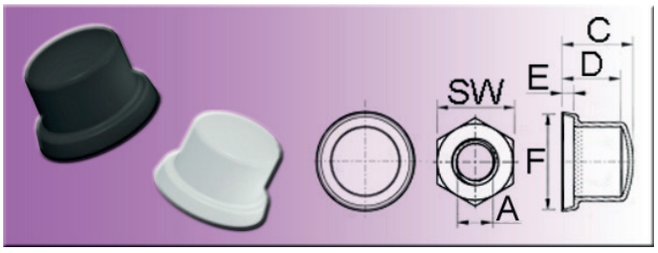
Long version!
Protect against dirt and corrosion and are resistant to all weather influences and a lot of chemicals. Applicable **without** washer.

Material: PE
Colours:
last digits 500 = white
without last digits = black

Part no.	A	SW	C	D
0340615	M6	10	15,0	12,0
0340615500	M6	10	15,0	12,0
0340819	M8	13	19,0	16,0
0340819500	M8	13	19,0	16,0
0341023	M10	17	23,0	19,0
0341023500	M10	17	23,0	19,0
0341227	M12	19	27,0	23,0

Part no.	A	SW	C	D
0341227500	M12	19	27,0	23,0
0341635	M16	24	35,0	31,0
0341635500	M16	24	35,0	31,0
0342044	M20	30	44,0	40,0
0342044500	M20	30	44,0	40,0
0342249	M22	32	49,0	44,0
0342249500	M22	32	49,0	44,0

Protective caps for screws & nuts | Protection caps - long with washer



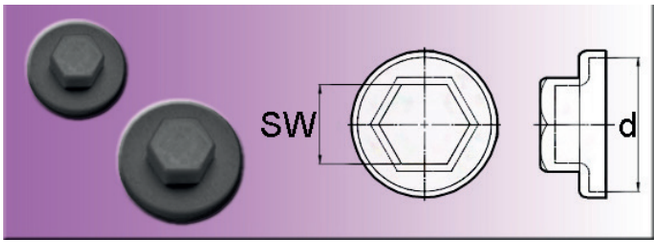
Long version!
Protect against dirt and corrosion and are resistant to all weather influences and a lot of chemicals. Applicable **with** washer.

Material: PE
Colours:
last digits 500 = white
without last digits = black

Part no.	A	SW	C	D	E	F
0350617	M6	10	17,0	13,0	2,0	13,2
0350617500	M6	10	17,0	13,0	2,0	13,2
0350822	M8	13	22,0	19,0	2,3	17,9
0350822500	M8	13	22,0	19,0	2,3	17,9
0351026	M10	17	26,0	22,0	2,7	22,0
0351026500	M10	17	26,0	22,0	2,7	22,0

Part no.	A	SW	C	D	E	F
0351231	M12	19	31,0	27,0	3,5	25,5
0351231500	M12	19	31,0	27,0	3,5	25,5
0351640	M16	24	40,0	36,0	4,4	31,5
0351640500	M16	24	40,0	36,0	4,4	31,5
0352049	M20	30	48,0	45,0	5,0	38,7
0352049500	M20	30	48,0	45,0	5,0	38,7

Protective caps for screws & nuts | Protection caps for facade screws



Protection caps for facade screws (hexagon head screws) with round neoprene slice.

Material: PE
Colour: black

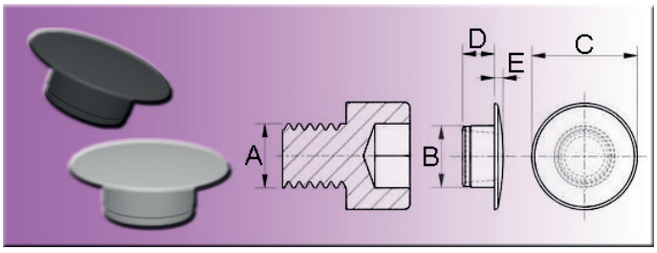
A production according to RAL colour chart or colour sample is possible - please send us your enquiry!

Part no.	SW	d	Ø washer
0440001	3/8“	18,0	16
0440002	3/8“	25,5	19 - 22
0440003	8	18,0	16

Part no.	SW	d	Ø washer
0440004	8	25,5	19 - 22 + 25
0440005	10	18,0	16
0440006	10	25,5	19 - 22 + 25

Part no.	SW	d	Ø washer
0440007	17	26,0	19 - 22 + 25

Protective caps for screws & nuts | for hexagon socket screws



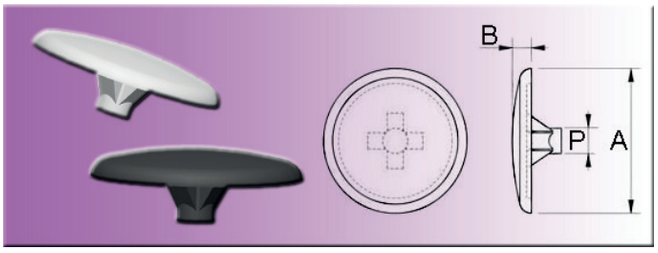
For a quick and clean covering of hexagon socket screws. Protection against dust and dirt. Ideal for toolbuilding and mechanical engineering.

Material: PE
Colours:
last digits 113 = white
last digits 220 = black
last digits 002 = grey

Part no.	A	B	C	D	DIN	E
0390032002	-	3,1	12,0	2,0	-	-
0390032113	-	3,1	12,0	2,0	-	-
0390032220	-	3,1	12,0	2,0	-	-
0390003002	-	3,2	9,0	2,2	-	-
0390003113	-	3,2	9,0	2,2	-	-
0390003220	-	3,2	9,0	2,2	-	-
0390052002	-	4,1	12,5	2,3	-	-
0390052113	-	4,1	12,5	2,3	-	-
0390052220	-	4,1	12,5	2,3	-	-
0390005002	M5	4,2	9,0	2,5	912	1,3
0390005113	M5	4,2	9,0	2,5	912	1,3
0390005220	M5	4,2	9,0	2,5	912	1,3
0390053002	-	4,2	10,0	2,9	-	-
0390053113	-	4,2	10,0	2,9	-	-
0390053220	-	4,2	10,0	2,9	-	-
0390004002	M5	4,2	13,0	3,0	-	-
0390004113	M5	4,2	13,0	2,9	-	-
0390004220	M5	4,2	13,0	3,0	-	-
0390055002	-	4,2	14,5	2,4	-	-
0390055113	-	4,2	14,5	2,4	-	-
0390055220	-	4,2	14,5	2,4	-	-
0390056002	-	4,4	12,5	2,0	-	-
0390056113	-	4,4	12,5	2,0	-	-
0390056220	-	4,4	12,5	2,0	-	-
0390057002	-	4,4	14,5	2,4	-	-
0390057113	-	4,4	14,5	2,4	-	-
0390057220	-	4,4	14,5	2,4	-	-
0390051113	-	4,2	18,0	-	7984/7991	-
0390051220	-	4,4	18,0	-	7984/7991	-

Part no.	A	B	C	D	DIN	E
0390006002	M6	5,2	10,0	3,1	912	1,4
0390006113	M6	5,2	10,0	3,1	912	1,4
0390006220	M6	5,2	10,0	3,1	912	1,4
0390062002	-	5,3	10,0	2,7	-	-
0390062113	-	5,3	10,0	2,7	-	-
0390062220	-	5,3	10,0	2,7	-	-
0390063002	-	5,3	11,5	2,7	-	-
0390063113	-	5,3	11,5	2,7	-	-
0390063220	-	5,3	11,5	2,7	-	-
0390061113	-	5,3	18,0	4,0	7984/7991	1,0
0390061220	-	5,3	18,0	4,0	7984/7991	1,0
0390008002	M8	6,2	13,0	4,0	912	1,5
0390008113	M8	6,2	13,0	4,0	912	1,5
0390008220	M8	6,2	13,0	4,0	912	1,5
0390081220	-	6,2	18,0	2,75	7984/7991	1,08
0390010002	M10	8,2	16,0	5,0	912	1,6
0390010113	M10	8,2	16,0	5,0	912	1,6
0390010220	M10	8,2	16,0	5,0	912	1,6
0390101220	-	8,4	18,0	-	7984/7991	-
0390012002	M12	10,3	18,0	6,4	912	1,8
0390012113	M12	10,3	18,0	6,4	912	1,8
0390012220	M12	10,3	18,0	6,4	912	1,8
0390016002	M16	14,4	24,0	7,0	912	2,2
0390016113	M16	14,4	24,0	7,0	912	2,2
0390016220	M16	14,4	24,0	7,0	912	2,2
0390020002	M20	17,4	30,0	9,0	912	2,5
0390020113	M20	17,4	30,0	9,0	912	2,5
0390020220	M20	17,4	30,0	9,0	912	2,5

Protective caps for screws & nuts | for Pozidriv



Ideal for booth construction and toolbuilding as well as for the furniture industry.
P = Pozidriv

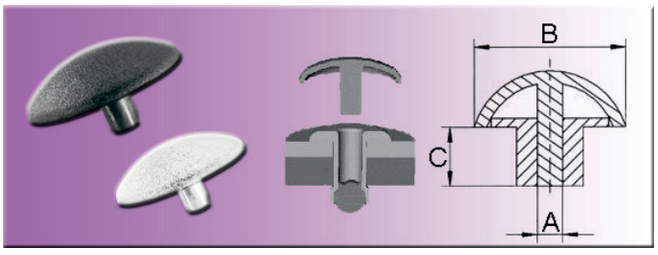
Material: PE
Colours:
last digits 600 = white
last digits 699 = black

Part no.	A	B	P
1190001600	8,1	1,7	1
1190001699	8,1	1,7	1
1190002600	12,0	1,7	2
1190002699	12,0	1,7	2

Part no.	A	B	P
1190003600	13,0	2,4	3
1190003699	13,0	2,4	3
1190004600	14,0	2,2	4
1190004699	14,0	2,2	4

Part no.	A	B	P
1190005600	18,2	2,2	5
1190005699	18,2	2,2	5

Protective caps for screws & nuts | for blind rivets



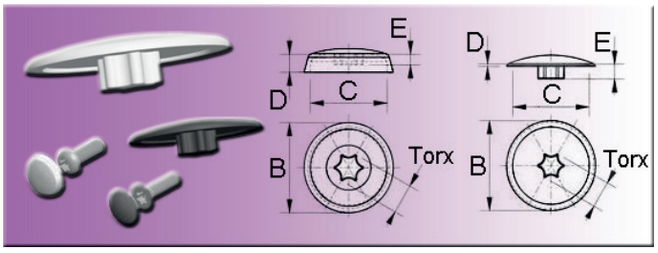
Ideal for booth construction and toolbuilding as well as for the furniture industry.

Material: PE
Colours:
last digits 600 = white
last digits 699 = black

Part no.	A	B	C
0652080600	2,0	8,0	1,5
0652080699	2,0	8,0	1,5
0652612600	2,6	12,0	5,0
0652612699	2,6	12,0	5,0
0652613600	2,6	13,0	4,0
0652613699	2,6	13,0	4,0
0652615600	2,6	15,0	4,0
0652615699	2,6	15,0	4,0
0652812600	2,8	11,0	4,0
0652812699	2,8	11,0	4,0

Part no.	A	B	C
0653013600	3,0	13,0	4,0
0653013699	3,0	13,0	4,0
0653015600	3,0	15,0	5,0
0653015699	3,0	15,0	5,0
0653018600	3,0	18,0	2,0
0653018699	3,0	18,0	2,0
0653019600	3,0	18,0	7,0
0653019699	3,0	18,0	7,0
0653213600	3,2	13,0	4,0
0653213699	3,2	13,0	4,0

Part no.	A	B	C
0653913600	3,9	13,0	10,0
0653913699	3,9	13,0	10,0
0653916600	3,9	15,8	8,8
0653916699	3,9	15,8	8,8
0654513600	4,5	13,0	10,0
0654513699	4,5	13,0	10,0
0655214600	5,2	14,0	10,0
0655214699	5,2	14,0	10,0



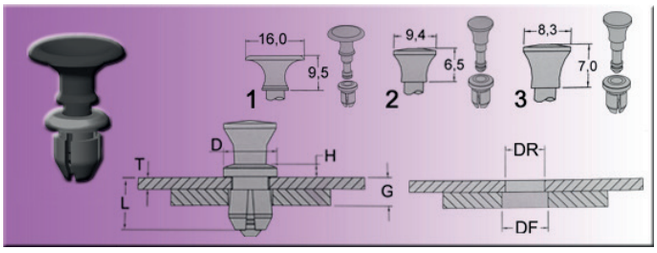
Covering caps for SIT and torx screws. Protect against dirt, damage and unintentional release. Available for countersunk and fillister head screws.

Material: LDPE
Colours:
last digits 500 = white ~RAL 9010
last digits 599 = black ~RAL 9005
last digits 002 = silver-grey ~RAL 7001

Special colours according to RAL possible from 5,000 pcs - please send us your enquiry!

Part no.	Torx	B	C	D	E
2580105002	10	12,0	-	-	1,2
2580105500	10	12,0	-	-	1,2
2580105599	10	12,0	-	-	1,2
2580110002	15	12,0	-	1,6	1,5
2580110500	15	12,0	-	1,6	1,5
2580110599	15	12,0	-	1,6	1,5
2580115002	20	12,0	-	2,1	1,6
2580115500	20	12,0	-	2,1	1,6
2580115599	20	12,0	-	2,1	1,6
2580120002	25	15,0	12,8	0,3	2,4
2580120500	25	15,0	12,8	0,3	2,4
2580120599	25	15,0	12,8	0,3	2,4
2580005002	25	16,5	13,0	2,7	4,1
2580005500	25	16,5	13,0	2,7	4,1

Part no.	Torx	B	C	D	E
2580005599	25	16,5	13,0	2,7	4,1
2580125002	30	16,5	13,5	0,5	2,4
2580125500	30	16,5	13,5	0,5	2,4
2580125599	30	16,5	13,5	0,5	2,4
2580010002	30	16,5	14,4	3,3	1,6
2580010500	30	16,5	14,4	3,3	1,6
2580010599	30	16,5	14,4	3,3	1,6
2580015002	40	16,2	14,2	2,6	4,8
2580015500	40	16,2	14,2	2,6	4,8
2580015599	40	16,2	14,2	2,6	4,8
2580130002	40	18,0	15,2	0,1	2,4
2580130500	40	18,0	15,2	0,1	2,4
2580130599	40	18,0	15,2	0,1	2,4



Quick fastening system set

Set1 (0951) = pin Ø 16 mm
Set2 (0952) = pin Ø 9,4 mm
Set3 (0953) = pin Ø 8,3 mm

Installing: Push the socket into the removable board and then insert the pin into the socket.
To remove simply pull the pin.

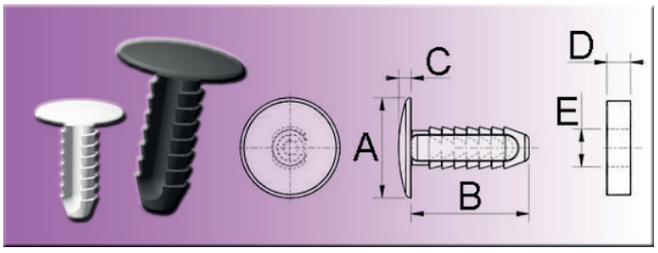
Material:
Pin: PA 6 UL94-V2
Socket: Polycarbonate UL94-V2

Colour: black

White colour on request.

Part no.	D	DF	DR	G	H	L	T
0951000699	10,8	8,1 ± 0,1	7,6 ± 0,1	1,5-3,7	2	8,6	1,1
0951001699	10,8	8,1 ± 0,1	7,6 ± 0,1	2,0-4,2	2	9	1,6
0951002699	10,8	8,1 ± 0,1	7,6 ± 0,1	3,0-5,2	2	10	2,5
0951003699	10,8	8,1 ± 0,1	7,6 ± 0,1	4,6-6,9	2	11,7	4,1
0951004699	10,8	8,1 ± 0,1	7,6 ± 0,1	5,8-8,1	2	12,9	5,3
0952000699	10,8	8,1 ± 0,1	7,6 ± 0,1	1,5-3,7	2	8,6	1,1
0952001699	10,8	8,1 ± 0,1	7,6 ± 0,1	2,0-4,2	2	9	1,6
0952002699	10,8	8,1 ± 0,1	7,6 ± 0,1	3,0-5,2	2	10	2,5
0952003699	10,8	8,1 ± 0,1	7,6 ± 0,1	4,6-6,9	2	11,7	4,1
0952004699	10,8	8,1 ± 0,1	7,6 ± 0,1	5,8-8,1	2	12,9	5,3
0953000699	8,5	6,4 ± 0,1	6,0 ± 0,1	1,5-3,7	1,8	8	1,1
0953001699	8,5	6,4 ± 0,1	6,0 ± 0,1	2,0-4,2	1,8	8,5	1,6
0953002699	8,5	6,4 ± 0,1	6,0 ± 0,1	3,0-5,2	1,8	9,5	2,5
0953003699	8,5	6,4 ± 0,1	6,0 ± 0,1	4,6-6,9	1,8	11	4,1

Drive fasteners | rivets | Ribbed rivets



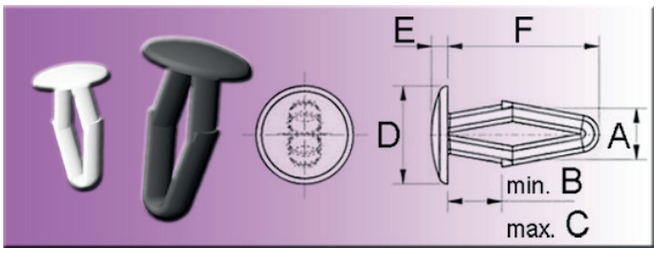
For the fastening in timber, steel sheets, cardboards etc. Easy finger-pressure assembly.
Also applicable in threads.

Material: PA 6.6
Colours:
last digits 000 = white
last digits 599 = black

Further types on written request.

Part no.	A	B	C	D	E
0920001000	14,0	15,0	2,0	3,0 - 11,0	5,8
0920001599	14,0	15,0	2,0	3,0 - 11,0	5,8
0920002000	16,0	19,0	2,0	3,0 - 15,0	5,8
0920002599	16,0	19,0	2,0	3,0 - 15,0	5,8
0920004000	18,0	23,0	2,0	3,0 - 19,0	7,0
0920004599	18,0	23,0	2,0	3,0 - 19,0	7,0

Drive fasteners | rivets | Rivets POM



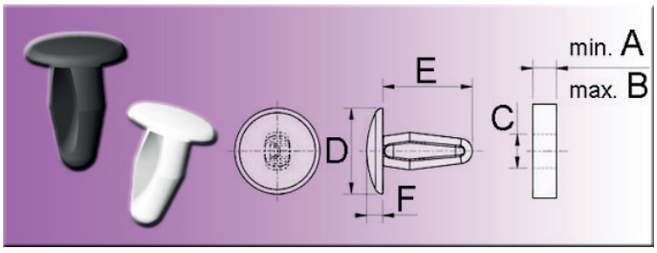
Unique:
One rivet for several sheet thicknesses. Quick and easy to assemble by hand. Made of a plastic material with lasting elasticity.

Material: POM
Colours:
last digits 000 = white
last digits 599 = black

Further types on written request.

Part no.	A	B - C	D	E	F
1370008000	3,2	1,0 - 4,5	8,0	1,5	13,0
1370008599	3,2	1,0 - 4,5	8,0	1,5	13,0
1370010000	3,4 - 3,5	1,0 - 4,5	8,0	1,5	13,0
1370010599	3,4 - 3,5	1,0 - 4,5	8,0	1,5	13,0
1370020000	3,9 - 4,0	1,0 - 5,0	9,0	1,6	14,0
1370020599	3,9 - 4,0	1,0 - 5,0	9,0	1,6	14,0
1370030000	4,7 - 4,8	1,0 - 5,5	10,0	1,7	15,0
1370030599	4,7 - 4,8	1,0 - 5,5	10,0	1,7	15,0
1370031000	4,7 - 4,8	1,0 - 5,5	11,0	3,0	15,0
1370031599	4,7 - 4,8	1,0 - 5,5	11,0	3,0	15,0
1370060000	5,5	6,0 - 9,0	12,0	2,0	18,0
1370060599	5,5	6,0 - 9,0	12,0	2,0	18,0
1370040000	6,4 - 6,5	1,5 - 6,5	12,0	2,0	17,0
1370040599	6,4 - 6,5	1,5 - 6,5	12,0	2,0	17,0
1370050000	7,8 - 8,0	1,5 - 7,0	14,0	2,4	19,0
1370050599	7,8 - 8,0	1,5 - 7,0	14,0	2,4	19,0

Drive fasteners | rivets | Rivets PA 6.6

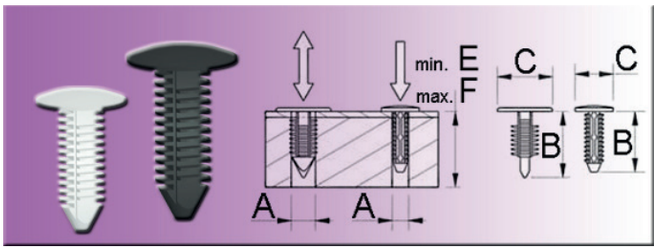


Easy assembly by thumb pressure!
The rivets provide a cheap way to fasten metal, plastic, timber and other thin-walled materials. Resistant to vibrations, abrasion and corrosion.
Reusable! Can also be used as a plug or cap.

Material: PA 6.6
Colours:
Last digits 000 = natural
Last digits 699 and 599 = black

Part no.	A - B	C	D	E	F
0910010000	0,5 - 3,0	5,0	14,0	14,5	3,0
0910113699	0,5 - 3,0	4,6	14,0	14,5	3,0
0910010699	no longer available!				
0910000000	0,8 - 3,6	2,8	7,8	12,0	1,2
0910013000	no longer available!				
0910013599	0,8 - 5,0	6,6	12,7	14,5	1,7
0910002000	0,9 - 4,0	3,5	10,3	11,0	2,5
0910002699	0,9 - 4,0	3,5	10,3	11,0	2,5
0910003000	0,9 - 4,0	3,5	10,3	11,0	4,8
0910003699	0,9 - 4,0	3,5	10,3	11,0	4,8
0910004000	1,5 - 3,5	5,0	9,5	11,0	1,6
0910004599	1,5 - 3,5	5,0	9,5	11,0	1,6
0911002000	1,6 - 3,2	3,8	7,1	9,9	1,5
0911002699	1,6 - 3,2	3,8	7,1	9,9	1,5
0911003000	1,6 - 3,2	4,1	7,1	9,9	1,5
0911003699	1,6 - 3,2	4,1	7,1	9,9	1,5
0911007000	1,6 - 3,2	5,7	9,4	10,7	1,5
0911007699	1,6 - 3,2	5,7	9,4	10,7	1,5
0911009000	1,6 - 3,2	5,7	9,4	11,4	1,5
0911009699	1,6 - 3,2	5,7	9,4	11,4	1,5
0911006000	1,6 - 3,7	4,6	7,1	10,2	1,5
0911006699	no longer available!				
0911013000	1,6 - 8,6	9,5	17,3	22,9	1,8
0911013699	1,6 - 8,6	9,5	17,3	22,9	1,8

Part no.	A - B	C	D	E	F
0910015000	2,0 - 5,5	7,2	14,3	17,0	2,0
0910015699	2,0 - 5,5	7,2	14,3	17,0	2,0
0910001000	2,4 - 5,8	3,5	7,6	13,0	1,1
0910001699	2,4 - 5,8	3,5	7,6	13,0	1,1
0910007699	3,0 - 6,0	4,7	14,0	15,0	2,2
0910011000	no longer available!				
0910011699	no longer available!				
0910016000	3,0 - 9,0	9,4	20,0	24,0	2,6
0910016599	3,0 - 9,0	9,4	20,0	24,0	2,6
0911004000	3,2 - 3,6	4,1	7,1	8,1	1,5
0911004699	no longer available!				
0911010000	3,2 - 4,7	6,3	9,4	13,7	1,5
0911010699	3,2 - 4,7	6,3	9,4	13,7	1,5
0911011000	3,2 - 4,7	7,4	12,3	14,6	1,5
0911011699	3,2 - 4,7	7,4	12,3	14,6	1,5
0911008000	4,2 - 4,7	5,2	9,4	13,2	1,5
0911008699	4,2 - 4,7	5,2	9,4	13,2	1,5
0910012000	6,0 - 8,5	5,8	15,0	18,0	3,0
0910012699	6,0 - 8,5	5,8	15,0	18,0	3,0
0911005000	7,4 - 7,6	5,0	7,1	13,5	1,5
0911005699	7,4 - 7,6	5,0	7,1	13,5	1,5
0911012000	9,1 - 9,7	6,2	15,5	20,6	1,7
0911012699	9,1 - 9,7	6,2	15,5	20,6	1,7



Applicable for higher bore hole tolerances. Suitable for blind holes or holes with and without screw threads. Fast assembly, generally no tools required.

2 types - removable (application dependent) and non-removable (application dependent)
D = removable +/- (yes/no)

Material: PA
Colours:
last digits 000 = natural
last digits 699 = black

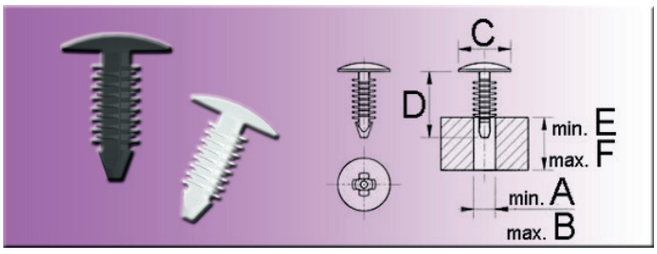
Part no.	A	B	C	D	E	F
2670020000	3,0	7,8	6	+	3,5	6,3
2670020699	3,0	7,8	6	+	3,5	6,3
2670025000	3,0	14,5	5,5	+	4	12
2670025699	3,0	14,5	5,5	+	4	12
2670027000	3,0	18,5	5,4	+	4	16,5
2670027699	3,0	18,5	5,4	+	4	16,5
2671020000	3,5	9,5	9,1	-	0,7	5
2671020699	3,5	9,5	9,1	-	0,7	5
2671025000	4,0	11,0	9,1	-	0,7	6
2671025699	4,0	11,0	9,1	-	0,7	6
2670030000	4,0	13,5	9,5	+	0,9	8
2670030699	4,0	13,5	9,5	+	0,9	8
2670035000	4,8	11,1	11	+	0,9	5,3
2670035699	4,8	11,1	11	+	0,9	5,3
2671035000	4,8	12,2	11	-	0,7	8
2671035699	4,8	12,2	11	-	0,7	8
2671040000	4,8	12,2	19	-	0,7	8
2671040699	4,8	12,2	19	-	0,7	8
2670045000	4,8	16,3	11	+	2	10
2670045699	4,8	16,3	11	+	2	10
2671030000	4,8	17,3	11	-	0,7	13
2671030699	4,8	17,3	11	-	0,7	13
2671031699	4,8	17,4	11,5	-	1,7	13
2670040000	4,8	17,8	11,9	+	2,5	15,2
2670040699	4,8	17,8	11,9	+	2,5	15,2
2670050000	5,0	11,0	16	+	1,2	6
2670050699	5,0	11,0	16	+	1,2	6
2670055000	5,0	12,7	11	+	1,7	8
2670055699	5,0	12,7	11	+	1,7	8
2671050000	5,5	19,7	13	-	1,5	14,2
2671050699	5,5	19,7	13	-	1,5	14,2

Part no.	A	B	C	D	E	F
2671045000	5,5	19,7	16,5	-	1,5	14,2
2671045699	5,5	19,7	16,5	-	1,5	14,2
2670065000	6,0	12,7	15,5	+	2	8
2670065699	6,0	12,7	15,5	+	2	8
2670067000	6,0	12,7	19	+	2,4	8,1
2670067699	6,0	12,7	19	+	2,4	8,1
2671060000	6,0	15,5	17,8	-	2,3	8,9
2671060699	6,0	15,5	17,8	-	2,3	8,9
2671065000	6,0	15,9	12,7	-	3,2	10,3
2671065699	6,0	15,9	12,7	-	3,2	10,3
2670070699	6,0	18,0	13	+	2,5	10
2671070000	6,0	20,4	17,8	-	2,5	12
2671070699	6,0	20,4	17,8	-	2,5	12
2670075000	6,0	24,0	12,7	+	3,5	19
2670075699	6,0	24,0	12,7	+	3,5	19
2671072000	6,0	26,9	17,8	-	2,5	20,3
2671072699	6,0	26,9	17,8	-	2,5	20,3
2670085000	6,0	36,6	25,4	+	1,7	31,8
2670085699	6,0	36,6	25,4	+	1,7	31,8
2670090000	6,4	38,1	12,6	+	0,9	26,5
2670090699	6,4	38,1	12,6	+	0,9	26,5
2670100000	7,0	17,9	23,8	+	1,3	11,2
2670100699	7,0	17,9	23,8	+	1,3	11,2
2670110000	7,0	18,9	15,9	+	2,4	11,9
2670110699	7,0	18,9	15,9	+	2,4	11,9
2671075000	7,0	21,2	19	-	1,5	14
2671075699	7,0	21,2	19	-	1,5	14
2670125000	7,0	30,2	31,8	+	13,5	23,4
2670125699	7,0	30,2	31,8	+	13,5	23,4
2671080000	7,0	30,5	19	-	1,5	25,4
2671080699	7,0	30,5	19	-	1,5	25,4

Part no.	A	B	C	D	E	F
2670120000	7,0	32,0	19,3	+	1,3	22,9
2670120699	7,0	32,0	19,3	+	1,3	22,9
2670115000	7,0	33,3	15,2	+	2,5	22
2670115699	7,0	33,3	15,2	+	2,5	22
2670130000	8,0	16,8	12,7	+	3,3	12,7
2670130699	8,0	16,8	12,7	+	3,3	12,7

Part no.	A	B	C	D	E	F
2671085699	8,7	19,1	16	-	1,4	13
2671090000	10,0	20,8	25,4	-	2,9	14,4
2671090699	10,0	20,8	25,4	-	2,9	14,4
2671095000	10,0	28,2	21,8	-	1,5	20
2671095699	10,0	28,2	21,8	-	1,5	20

Drive fasteners | rivets | PineTreeClips - type 2

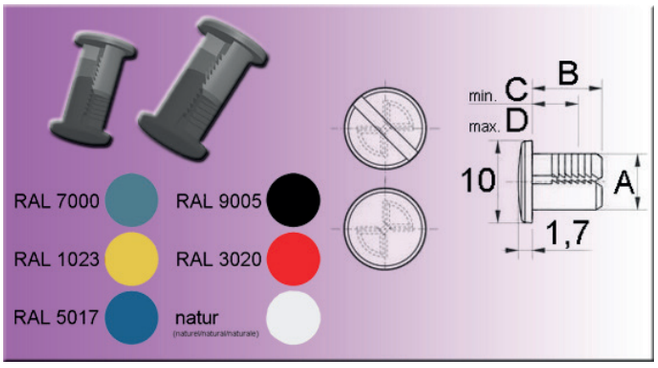


Applicable for higher bore hole tolerances.
Suitable for blind holes or holes with and without screw threads.
Fast assembly, generally no tools required.
Please also have a look at our series 267, page 323.

Material: PA
Colours:
last digits 000 = natural
last digits 699 = black

Part no.	A	B	C	D	E	F
3672010000	2,7	3,3	6,0	7,0	1,5	4,0
3672010699	2,7	3,3	6,0	7,0	1,5	4,0
3672015000	2,7	3,3	6,0	11,0	1,5	8,0
3672015699	2,7	3,3	6,0	11,0	1,5	8,0
3672020000	2,7	3,3	6,0	18,0	1,5	15,0
3672020699	2,7	3,3	6,0	18,0	1,5	15,0
3672030000	3,3	4,2	10,0	8,0	1,5	4,5
3672030699	3,3	4,2	10,0	8,0	1,5	4,5
3672040000	4,1	5,2	12,0	6,0	1,0	2,5
3672040699	4,1	5,2	12,0	6,0	1,0	2,5
3672045000	4,1	5,2	12,0	10,0	1,5	5,5
3672045699	4,1	5,2	12,0	10,0	1,5	5,5
3672050000	4,1	5,2	12,0	15,0	2,0	10,0
3672050699	4,1	5,2	12,0	15,0	2,0	10,0

Part no.	A	B	C	D	E	F
3672060000	5,6	6,4	13,0	12,0	2,0	7,0
3672060699	5,6	6,4	13,0	12,0	2,0	7,0
3672065000	5,6	6,4	13,0	20,0	1,5	15,0
3672065699	5,6	6,4	13,0	20,0	1,5	15,0
3672070000	5,6	6,4	13,0	32,0	1,0	27,0
3672070699	5,6	6,4	13,0	32,0	1,0	27,0
3672080000	5,9	7,2	17,0	11,0	2,0	5,5
3672080699	5,9	7,2	17,0	11,0	2,0	5,5
3672085000	5,9	7,2	17,0	15,0	1,0	10,0
3672085699	5,9	7,2	17,0	15,0	1,0	10,0
3672090000	5,9	7,2	17,0	24,0	2,0	19,0
3672090699	5,9	7,2	17,0	24,0	2,0	19,0
3672100000	6,8	8,3	13,0	14,0	1,5	9,0
3672100699	6,8	8,3	13,0	14,0	1,5	9,0



Quick assembly without tools. Suitable for combining sheets, plates etc.

Material: PA 6
Colours:
last digits 000 = natural
last digits 002 = grey ~RAL 7000
last digits 087 = blue ~RAL 5017
last digits 114 = black ~RAL 9005
last digits 124 = red ~RAL 3020
last digits 132 = yellow ~RAL 1023

Two parts are needed for every connection!
For thin clamping width (from 0.9 mm) you have to use a snap-ring (page 326).

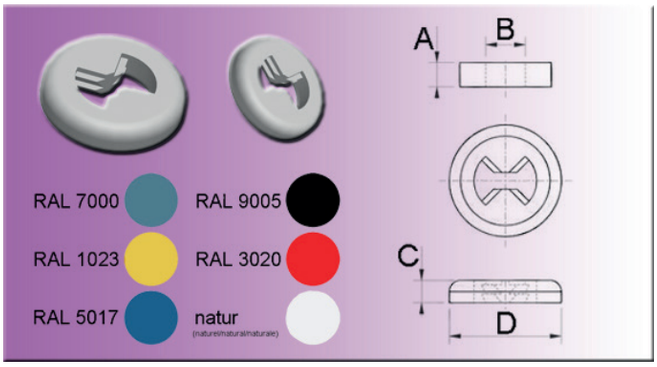
Additional information: Dimensions A 5.5 mm and part no. 0960610 = slotted head.
You get the best clamping effect if the hole diameter matches dimension A.

Part no.	A	B	C - D
0960655000	5,5	5,4	5,7 - 7,3
0960655002	5,5	5,4	5,7 - 7,3
0960655087	5,5	5,4	5,7 - 7,3
0960655114	5,5	5,4	5,7 - 7,3
0960655124	5,5	5,4	5,7 - 7,3
0960655132	5,5	5,4	5,7 - 7,3
0960955000	5,5	8,5	8,9 - 12,9
0960955002	5,5	8,5	8,9 - 12,9
0960955087	5,5	8,5	8,9 - 12,9
0960955114	5,5	8,5	8,9 - 12,9
0960955124	5,5	8,5	8,9 - 12,9
0960955132	5,5	8,5	8,9 - 12,9
0961355000	5,5	12,4	12,8 - 20,5
0961355002	5,5	12,4	12,8 - 20,5
0961355087	5,5	12,4	12,8 - 20,5
0961355114	5,5	12,4	12,8 - 20,5

Part no.	A	B	C - D
0961355124	5,5	12,4	12,8 - 20,5
0961355132	5,5	12,4	12,8 - 20,5
0962055000	5,5	19,8	20,2 - 34,4
0962055002	5,5	19,8	20,2 - 34,4
0962055087	5,5	19,8	20,2 - 34,4
0962055114	5,5	19,8	20,2 - 34,4
0962055124	5,5	19,8	20,2 - 34,4
0962055132	5,5	19,8	20,2-34,4
0960610000	7,0 - 7,2	5,4	5,7 - 7,3
0960610002	7,0 - 7,2	5,4	5,7 - 7,3
0960610087	7,0 - 7,2	5,4	5,7 - 7,3
0960610114	7,0 - 7,2	5,4	5,7 - 7,3
0960610124	7,0 - 7,2	5,4	5,7 - 7,3
0960610132	7,0 - 7,2	5,4	5,7 - 7,3
0960910000	7,0 - 7,2	8,5	8,9 - 12,9
0960910002	7,0 - 7,2	8,5	8,9 - 12,9

Part no.	A	B	C - D
0960910087	7,0 - 7,2	8,5	8,9 - 12,9
0960910114	7,0 - 7,2	8,5	8,9 - 12,9
0960910124	7,0 - 7,2	8,5	8,9 - 12,9
0960910132	7,0 - 7,2	8,5	8,9 - 12,9
0961310000	7,0 - 7,2	12,4	12,8 - 20,5
0961310002	7,0 - 7,2	12,4	12,8 - 20,5
0961310087	7,0 - 7,2	12,4	12,8 - 20,5
0961310114	7,0 - 7,2	12,4	12,8 - 20,5
0961310124	7,0 - 7,2	12,4	12,8 - 20,5
0961310132	7,0 - 7,2	12,4	12,8 - 20,5
0962010000	7,0 - 7,2	19,8	20,2 - 34,4
0962010002	7,0 - 7,2	19,8	20,2 - 34,4
0962010087	7,0 - 7,2	19,8	20,2 - 34,4
0962010114	7,0 - 7,2	19,8	20,2 - 34,4
0962010124	7,0 - 7,2	19,8	20,2 - 34,4
0962010132	7,0 - 7,2	19,8	20,2 - 34,4

Drive fasteners | rivets | Snap rings



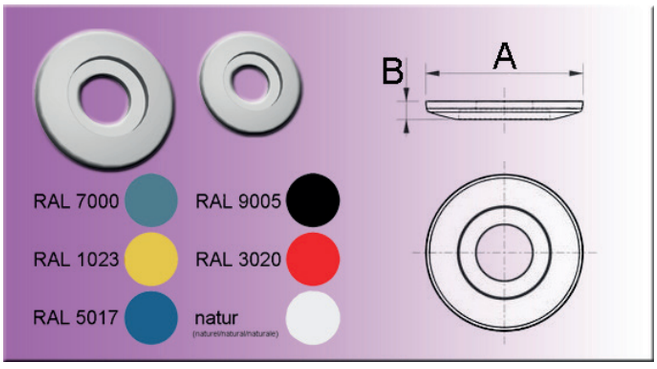
Specially designed for connections from 0.9 mm thickness.
Snapping instead of screwing.
Made for all lengths of Snip&Snap rivets with bore size 5.5 mm.

Material: PA 6
Colours:
last digits 000 = natural
last digits 002 = grey ~RAL 7000
last digits 087 = blue ~RAL 5017
last digits 599 = black ~RAL 9005
last digits 124 = red ~RAL3020
last digits 132 = yellow ~RAL1023

Part no.	A	B	C	D
0960010000	0,9	5,5	2,0	10,0
0960010002	0,9	5,5	2,0	10,0
09600100124	0,9	5,5	2,0	10,0

Part no.	A	B	C	D
0960010087	0,9	5,5	2,0	10,0
0960010132	0,9	5,5	2,0	10,0
0960010599	0,9	5,5	2,0	10,0

Drive fasteners | rivets | Washers for Snip&Snap rivets



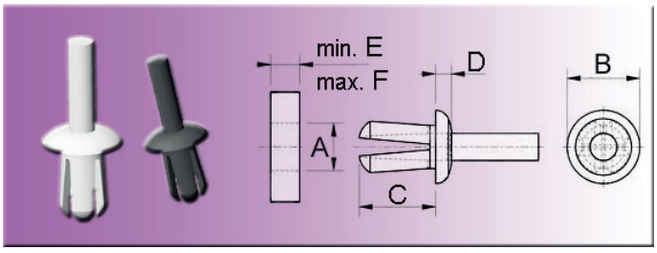
Provide a larger bearing surface for Snip&Snap rivets (bore diameter 5.5 mm). Different colour combinations possible. Also suitable for pivot points.

Material: PA 6
Colours:
last digits 000 = natural
last digits 002 = grey ~RAL 7000
last digits 087 = blue ~RAL5017
last digits 114 = black ~RAL 9005
last digits 124 = red ~RAL3020
last digits 132 = yellow ~RAL1023

Part no.	A	B
0960018000	18,2	2,1
0960018002	18,2	2,1

Part no.	A	B
0960018087	18,2	2,1
0960018114	18,2	2,1

Part no.	A	B
0960018124	18,2	2,1
0960018132	18,2	2,1



For a quick rivet connection with blind assembly.
By assembling larger quantities we recommend to use tool type 112, page 328 (see dimension G).

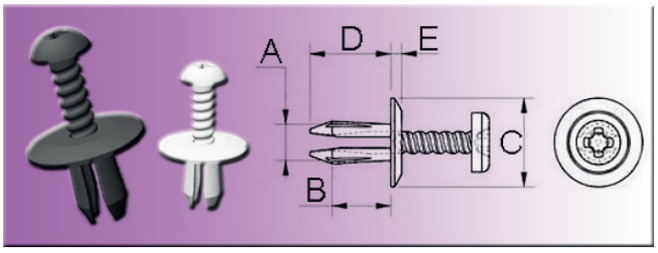
Material: PA 6.6 / POM / PA 12 / PA 6
Colours:
last digits 000 = natural
last digits 599 oder 699 = black

Further types on written request.

Part no.	A	B	C	D	E-F	G
0930110000	3,0	5,0	5,7	1,3	1,0-4,0	3,0
0930110599	3,0	5,0	5,7	1,3	1,0-4,0	3,0
0930000000	3-3,65	4,8	6,2	1,3	0,8-4,5	3,0
0930000699	3-3,65	4,8	6,2	1,3	0,8-4,5	3,0
0930001000	3,3	4,8	5,0	1,3	0,5-3,5	3,0
0930120000	3,5	6,0	6,8	1,3	1,0-5,0	3,0
0930120599	3,5	6,0	6,8	1,3	1,0-5,0	3,0
0930002000	3,6	8,0	7,0	2,0	2,0-5,5	3,0
0930002699	3,6	8,0	7,0	2,0	2,0-5,5	3,0
0930130000	4,0	6,5	7,9	1,5	1,5-6,0	3,0
0930130599	4,0	6,5	7,9	1,5	1,5-6,0	3,0
0930004000	4,0	6,5	8,0	1,5	4,0-6,5	3,0
0930004699	4,0	6,5	8,0	1,5	4,0-6,5	3,0
0930005000	*no longer available*					
0930005699	4,0	7,5	8,0	1,5	4,0-6,5	3,0
0930131000	4-4,2	8,0	8,5	1,0	2,0-6,0	-
0930131699	4-4,2	8,0	8,5	1,0	2,0-6,0	-
0930023000	*no longer available*					
0930023699	*no longer available*					
0930008000	4,8	7,1	11,0	1,2	4,0-8,7	4,0
0930008699	*no longer available*					
0931010000	*no longer available*					
0931010699	4,8	7,15	7,5	1,9	1,5-5,0	-
0932010000	4,8	8,7	7,4	2,5	1,6-4,7	-
0930009699	4,9	12,0	15,0	2,0	8,0-11,0	4,0
0930017699	4,95-5,35	9,0	7,5	2,0	1,5-5	-
0930014000	4,95-5,55	10,0	11,5	2,0	3,0-8,0	-
0930014699	4,95-5,55	10,0	11,5	2,0	3,0-8,0	-
0930140000	5,0	8,5	9,2	1,8	1,5-7,0	4,0

Part no.	A	B	C	D	E-F	G
0930140599	5,0	8,5	9,2	1,8	1,5-7,0	4,0
0930141000	5-5,2	8,5	6,0	2,0	0,75-3	-
0930141699	5-5,2	8,5	6,0	2,0	0,75-3	-
0930142000	5-5,2	10,0	11,4	2,0	2,5-8,0	-
0930142699	5-5,2	10,0	11,4	2,0	2,5-8,0	-
0930012000	5,5	16,0	11,0	2,0	2,5-7,0	4,0
0930012699	5,5	16,0	11,0	2,0	2,5-7,0	4,0
0930150000	6,0	10,0	10,5	2,2	2,0-8,0	4,0
0930150599	6,0	10,0	10,5	2,2	2,0-8,0	4,0
0930024699	6,0	11,0	10,0	2,0	3,0-7,0	4,0
0930013699	6,0	16,0	14,5	2,5	7,5-8,6	-
0930152699	6-6,2	16,0	14,5	2,5	7,5-8,6	-
0930151699	6,2-6,5	10,0	12,0	2,0	1,5-6,5	-
0930026000	6,4-7,0	11,0	12,3	2,0	5,5-9,5	-
0930026699	6,4-7,0	11,0	12,3	2,0	5,5-9,5	-
0930160000	7,0	12,0	11,8	2,6	2,5-9,0	-
0930160599	7,0	12,0	11,8	2,6	2,5-9,0	-
0930018699	7,1	18,0	18,0	2,5	4,0-8,0	4,0
0930021000	7,9	16,0	12,0	2,0	4,0-7,0	4,0
0930021699	7,9	16,0	12,0	2,0	4,0-7,0	4,0
0930027000	7,9-8,7	16,0	12,0	2,0	4,0-7,0	-
0930027699	7,9-8,7	16,0	12,0	2,0	4,0-7,0	-
0930170000	8,0	13,5	13,0	3,0	3,0-10,0	-
0930170599	8,0	13,5	13,0	3,0	3,0-10,0	-
0930019699	8,0	18,0	10,0	2,5	4,5-6,0	4,0
0930171699	8-8,4	22,0	13,0	3,0	4,0-8,0	-
0930190000	8-8,6	13,0	15,0	3,0	5,5-10	-
0930190699	8-8,6	13,0	15,0	3,0	5,5-10	-

Drive fasteners | rivets | Screw rivets



For a fast and strong connection.
Same assembly as for push rivets; can, however, be removed like a screw for maintenace purposes and also be reused. Variable rivet thickness absorbs vibrations.

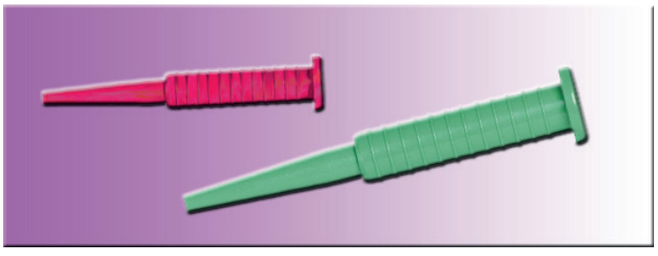
Material: PA 6.6
Colours:
without last digits = black
last digits 000 = natural

Further types on written request.

Part no.	A	B	C	D	E
1131050	5,0	2,0 - 7,0	12,5	9,6	1,2
1131050000	5,0	2,0 - 7,0	12,5	9,6	1,2
1130001	5,0	3,75 - 6,0	12,0	11,0	1,5
1131060	6,0	2,0 - 8,0	15,0	10,7	1,3
1131060000	6,0	2,0 - 8,0	15,0	10,7	1,3
1130002	6,0	4,0 - 6,0	16,0	11,0	1,5

Part no.	A	B	C	D	E
1131070	7,0	3,0 - 9,0	17,5	12,1	1,4
1131070000	7,0	3,0 - 9,0	17,5	12,1	1,4
1131080	8,0	3,0 - 10,0	20,0	13,5	1,5
1131080000	8,0	3,0 - 10,0	20,0	13,5	1,5
1130003	8,0	3,0 - 10,0	20,0	14,0	1,3

Drive fasteners | rivets | Rivetting tool



Convenient tool to fasten rivets, type 093.
By using this tool the pin of the push rivet is mounted very reliably which speeds up the assembly time and avoids product failure.

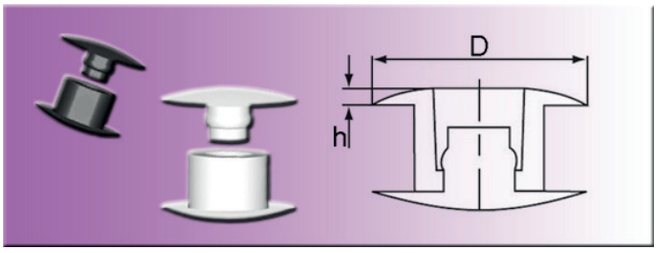
G = dimension G from series 093, page 327.

Application:
Attach the guide bushing on the rivet pin.
Push the tool through completely.
Thereby the pin is driven into the rivet.

Part no.	G (093)
1121003	3,0

Part no.	G (093)
1121004	3,5

Part no.	G (093)
1121006	4,0



Ø = mounting hole diameter
S = max. sheet thickness

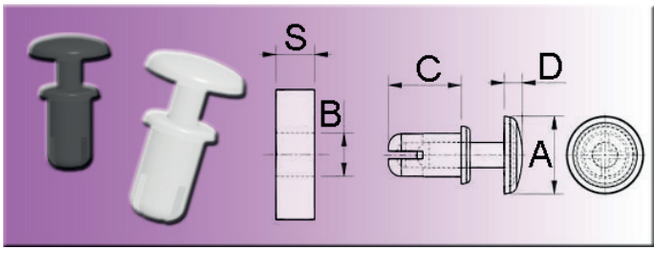
Material: PA 6.6
Colours:
last digits 500 = white
last digits 599 = black

Note: The order quantity refers to the connections.
e.g. order quantity = 500 pcs., you get 500 clips & 500 counter pieces --> 500 connections

Part no.	Ø	S	D	h
0800602500	6,0	2,2	10,0	0,8
0800602599	6,0	2,2	10,0	0,8
0800603500	6,0	3,2	10,0	0,8
0800603599	6,0	3,2	10,0	0,8

Part no.	Ø	S	D	h
0800604500	6,0	4,2	10,0	0,8
0800604599	6,0	4,2	10,0	0,8
0800605500	6,0	5,2	10,0	0,8
0800605599	6,0	5,2	10,0	0,8

Drive fasteners | rivets | Drive fasteners



These rivets can be brought into the right position with one turn.
No tools required! Mountable by thumb pressure.

Material: PA 6 , UL 94 V-2
Colours:
last digits 600 = white
last digits 699 = black

Further types on written request.

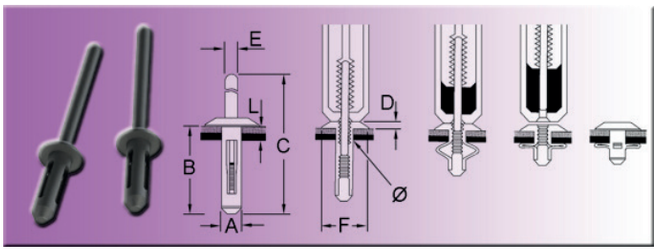
Part no.	A	B	C	D	S
0940010600	4,2	2,1	2,4	1,2	0,6 - 1,2
0940010699	4,2	2,1	2,4	1,2	0,6 - 1,2
0940015600	4,2	2,1	3,2	1,2	1,3 - 2,0
0940015699	4,2	2,1	3,2	1,2	1,3 - 2,0
0940020600	4,2	2,1	4,0	1,2	2,1 - 2,8
0940020699	4,2	2,1	4,0	1,2	2,1 - 2,8
0940025600	4,2	2,1	4,8	1,2	2,9 - 3,6
0940025699	4,2	2,1	4,8	1,2	2,9 - 3,6
0940030600	4,2	2,1	6,4	1,2	3,7 - 4,4
0940030699	4,2	2,1	6,4	1,2	3,7 - 4,4
0940050600	5,0	2,7	3,2	1,4	1,0 - 2,0
0940050699	5,0	2,7	3,2	1,4	1,0 - 2,0
0940055600	5,0	2,7	4,2	1,4	2,1 - 3,0
0940055699	5,0	2,7	4,2	1,4	2,1 - 3,0
0940060600	5,0	2,7	4,8	1,4	2,7 - 3,6
0940060699	5,0	2,7	4,8	1,4	2,7 - 3,6
0940065600	5,0	2,7	5,5	1,4	3,4 - 4,3
0940065699	5,0	2,7	5,5	1,4	3,4 - 4,3
0940110600	6,2	3,1	3,7	1,6	1,0 - 2,0
0940110699	6,2	3,1	3,7	1,6	1,0 - 2,0
0940120600	6,2	3,1	4,5	1,6	2,0 - 3,0
0940120699	6,2	3,1	4,5	1,6	2,0 - 3,0
0940130600	6,2	3,1	5,5	1,6	3,0 - 4,0
0940130699	6,2	3,1	5,5	1,6	3,0 - 4,0
0940210600	6,2	3,6	3,7	1,6	1,2 - 2,1
0940210699	6,2	3,6	3,7	1,6	1,2 - 2,1
0940220600	6,2	3,6	4,6	1,6	2,2 - 3,1
0940220699	6,2	3,6	4,6	1,6	2,2 - 3,1
0940240600	6,2	3,6	5,5	1,6	3,2 - 4,1
0940240699	6,2	3,6	5,5	1,6	3,2 - 4,1
0940250600	6,2	3,6	6,0	1,6	3,7 - 4,6
0940250699	6,2	3,6	6,0	1,6	3,7 - 4,6
0940260600	6,2	3,6	7,1	1,6	4,7 - 5,6

Part no.	A	B	C	D	S
0940260699	6,2	3,6	7,1	1,6	4,7 - 5,6
0940135600	6,4	3,1	6,5	1,6	4,0 - 5,0
0940135699	6,4	3,1	6,5	1,6	4,0 - 5,0
0940140600	6,4	3,1	7,5	1,6	5,0 - 6,0
0940140699	6,4	3,1	7,5	1,6	5,0 - 6,0
0940145600	6,4	3,1	8,0	1,6	5,5 - 6,5
0940145699	6,4	3,1	8,0	1,6	5,5 - 6,5
0940150600	6,4	3,1	9,0	1,6	6,5 - 7,5
0940150699	6,4	3,1	9,0	1,6	6,5 - 7,5
0940155600	6,4	3,1	10,0	1,0	7,5 - 8,5
0940155699	6,4	3,1	10,0	1,0	7,5 - 8,5
0940230600	6,4	3,6	5,0	1,6	2,7 - 3,6
0940230699	6,4	3,6	5,0	1,6	2,7 - 3,6
0940265600	6,4	3,6	8,0	1,6	5,7 - 6,6
0940265699	6,4	3,6	8,0	1,6	5,7 - 6,6
0940310600	7,8	4,1	5,0	1,8	2,5 - 3,5
0940310699	7,8	4,1	5,0	1,8	2,5 - 3,5
0940320600	7,8	4,1	6,0	1,8	3,5 - 4,5
0940320699	7,8	4,1	6,0	1,8	3,5 - 4,5
0940330600	8,0	4,1	7,0	1,8	4,5 - 5,5
0940330699	8,0	4,1	7,0	1,8	4,5 - 5,5
0940340600	8,0	4,1	8,0	1,8	5,5 - 6,5
0940340699	8,0	4,1	8,0	1,8	5,5 - 6,5
0940350600	8,0	4,1	10,0	2,2	7,5 - 8,5
0940350699	8,0	4,1	10,0	2,2	7,5 - 8,5
0940410600	9,0	5,1	4,5	2,2	1,5 - 2,5
0940410699	9,0	5,1	4,5	2,2	1,5 - 2,5
0940420600	9,0	5,1	5,5	2,2	2,5 - 3,5
0940420699	9,0	5,1	5,5	2,2	2,5 - 3,5
0940430600	9,0	5,1	6,5	2,2	3,5 - 4,5
0940430699	9,0	5,1	6,5	2,2	3,5 - 4,5
0940440600	9,0	5,1	7,5	2,2	4,5 - 5,5
0940440699	9,0	5,1	7,5	2,2	4,5 - 5,5

Part no.	A	B	C	D	S
0940450600	9,0	5,1	8,5	2,2	5,5 - 6,5
0940450699	9,0	5,1	8,5	2,2	5,5 - 6,5
0940455600	9,0	5,1	9,5	2,2	6,5 - 7,5
0940455699	9,0	5,1	9,5	2,2	6,5 - 7,5
0940460600	9,0	5,1	10,0	2,0	7,5 - 8,5

Part no.	A	B	C	D	S
0940460699	9,0	5,1	10,0	2,0	7,5 - 8,5
0940510600	12,0	6,1	6,0	2,5	2,5 - 4,0
0940510699	12,0	6,1	6,0	2,5	2,5 - 4,0
0940520600	12,0	6,1	8,0	3,0	4,0 - 5,5
0940520699	12,0	6,1	8,0	3,0	4,0 - 5,5

Drive fasteners | rivets | R-Lok / plastic rivets

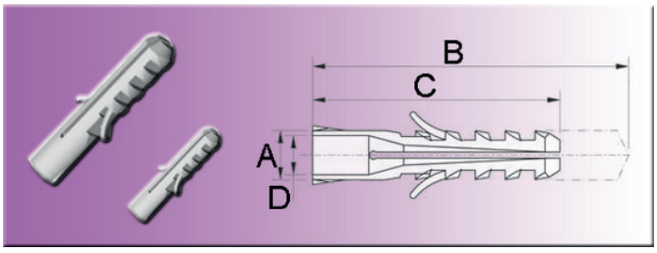


Mounting with standard tools.

Material: PA 6.6 / POM
Colour: black

Part no.	Ø	L	A	B	C	D	E	F
1540001	4,0	1,5 - 4,5	3,9	18,5	48,0	2,5	2,4	8,0
1540004	5,0	6,0 - 10,0	4,8	25,0	51,0	1,8	2,9	12,0
1540002	5,0	1,5 - 4,5	4,9	18,5	48,0	3,3	2,9	12,0
1540003	5,0	3,0 - 6,0	4,9	20,0	48,0	1,8	2,9	12,0

Studs | Snap-in nuts | Wall studs



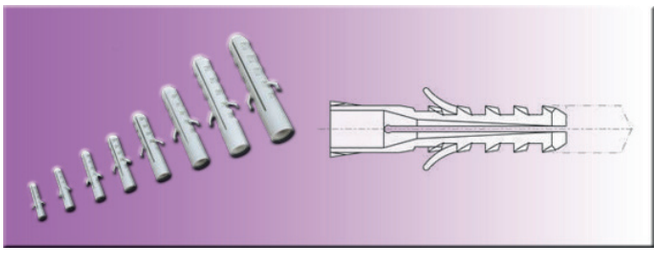
Centrical screw guidance in the inner body, very durable.

Material: PA 6
Colour: grey

Part no.	A	B	C	D
1080004	4,0	25,0	20,0	2,0-3,0
1080005	5,0	32,0	25,0	2,5-4,0
1080006	6,0	40,0	30,0	3,5-4,0
1080008	8,0	55,0	40,0	4,5-6,0

Part no.	A	B	C	D
1080010	10,0	70,0	50,0	6,0-8,0
1080012	12,0	80,0	60,0	8,0-10,0
1080014	14,0	95,0	75,0	10,0-12,0

Studs | Snap-in nuts | Wall stud selection



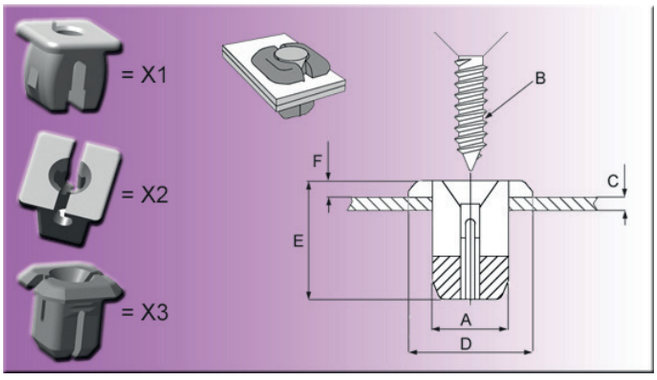
Centrical screw guidance in the inner body, very durable.

Material: PA 6
Colour: grey

Part no.	X1	X2	X3
108-S1	50 x 4 mm	50 x 5 mm	-

Part no.	X1	X2	X3
108-S2	50 x 6 mm	50 x 8 mm	-

Part no.	X1	X2	X3
108-S3	20 x 10 mm	15 x 12 mm	15 x 14 mm



for square holes
For the mounting of parts with metric screws on components with holes.
The nut tapping is done by the screw.
Permits blind assembly and prevents nut rotation.

Material: PA 6.6 / PA 6
Colour:
+ natural / * black

NO LONGER AVAILABLE!



Adhesive tapes | Suction pads

Adhesive tapes | Suction pads



Adhesive tapes Page 336



Suction pads Page 337

Adhesive tapes | Electric insulating tape



This premium insulating tape is appropriate for electrical insulation, cable loom production, the protection of low and medium voltage cable splices and for colour coding.
The tape provides an excellent resistance to abrasion, corrosion and humidity, as well as a mechanical protection and a high dielectric strength.

Material: self-extinguishing plasticised PVC with natural rubber adhesive
Material thickness: 0.15 mm
Temperature resistance: -10°C to +90°C

Approvals: IMQ, VDE, ÖVE, CEBEC, SEMKO, NEMKO, DEMKO, compliant with BS3924

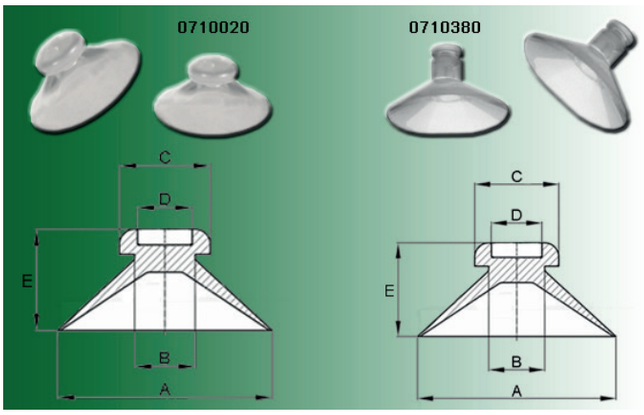
Colours:
last digits 002 = grey
last digits 500 = white
last digits 599 = black
last digits BL = blue
last digits BR = brown
last digits GE = yellow
last digits GG = citreous
last digits GR = green
last digits R = red

Part no.	A
0251510002	15 mm x 10 m
0251510500	15 mm x 10 m
0251510599	15 mm x 10 m

Part no.	A
0251510BL	15 mm x 10 m
0251510BR	15 mm x 10 m
0251510GE	15 mm x 10 m

Part no.	A
0251510GG	15 mm x 10 m
0251510GR	15 mm x 10 m
0251510R	15 mm x 10 m

Suction pads | Suction pads



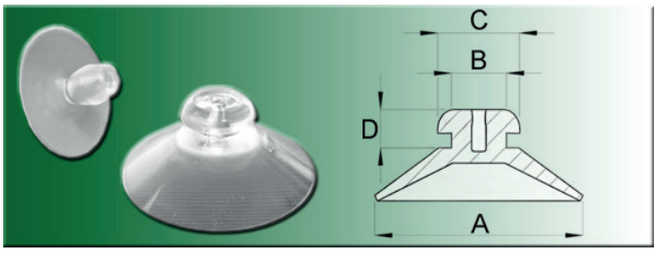
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D	E
0710380	38/41	6,5	10	2,5	18/10

Part no.	A	B	C	D	E
0710020	21	11	15	7,3	10,5/5,5

Suction pads | with head bore hole



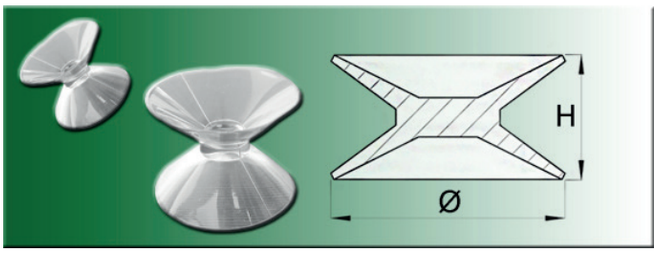
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D
0712030	30,0	10,0	14,0	6,0
0712040	40,0	10,0	15,0	6,0

Part no.	A	B	C	D
0712501	25,0	6,3	8,2	10,6

Suction pads | Double suction pads

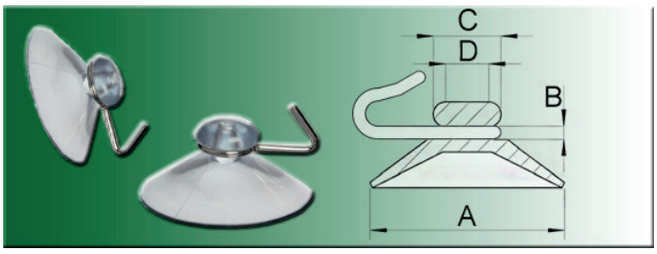


Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	Ø	H
0718035	35,0 x 35,0	26,0

Suction pads | with metal hook



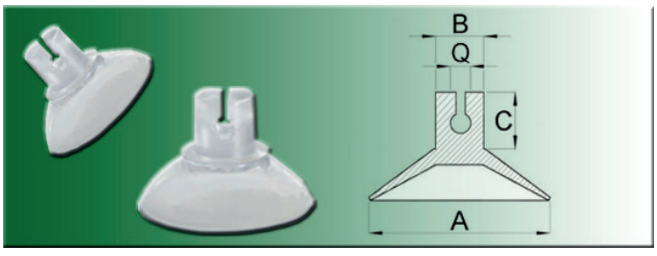
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D
0713020	21	-	15	11
0713030	30	6	14	10
0713040	40	6	15	10

Part no.	A	B	C	D
0713050	50	6	-	11,5
0713060	60	-	-	-

Suction pads | with slot



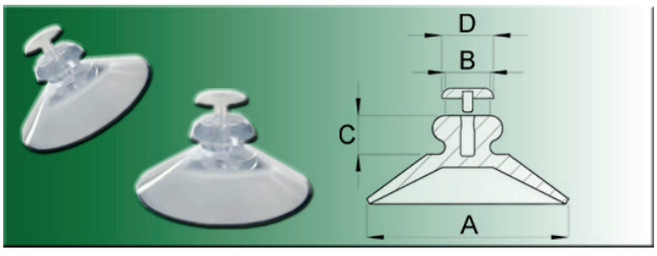
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	Q
0711020	20	8	7	2,5

Part no.	A	B	C	Q
0711030	30	10	14	3

Suction pads | with plexiglas bolt



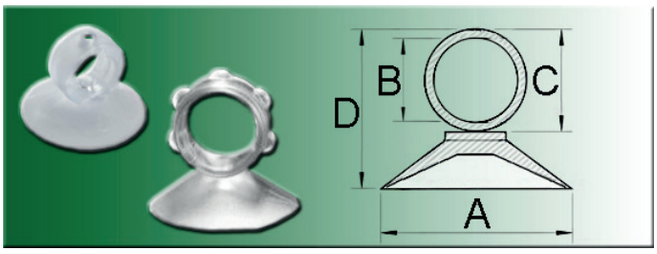
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D
0714030	30	10	6	14

Part no.	A	B	C	D
0714040	40	10	6	15

Suction pads | with collar



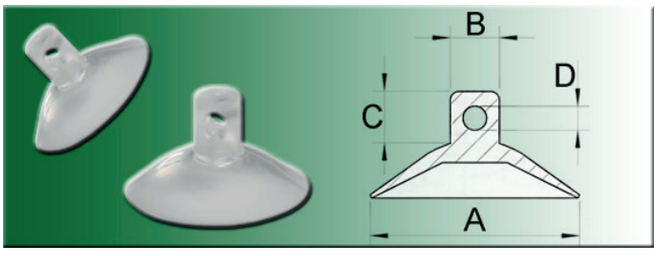
Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D
0715030	30	10	14	-
0715031	30	15	20	-

Part no.	A	B	C	D
0715050	50	25	-	60

Suction pads | with cross hole



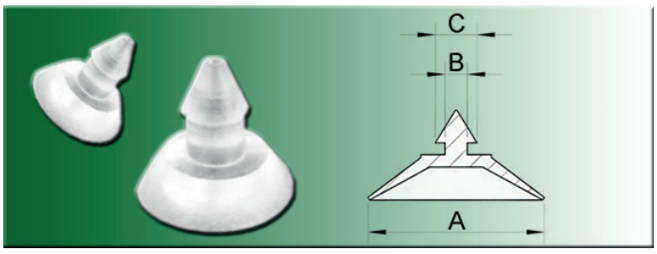
Suction pads with cross hole, e.g. for strings

Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C	D
0716020	20	6	7	3

Suction pads | with arrowhead



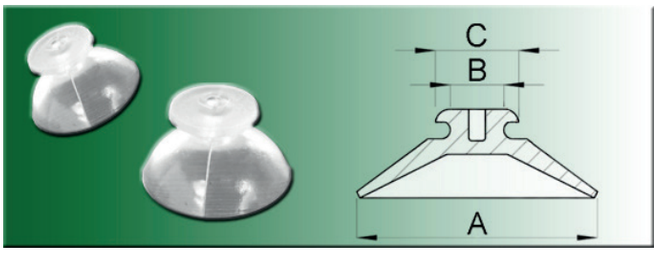
Suction pads for the mounting of flyers at windows.

Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C
0717014	14	5	6

Suction pads | with flange

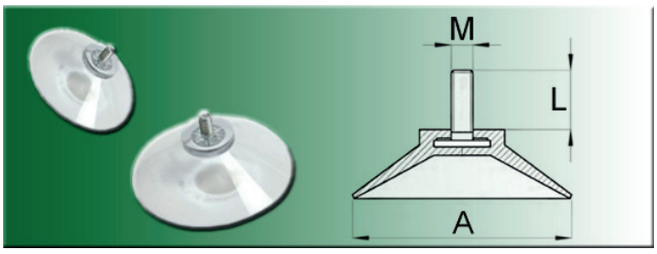


Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B	C
0719020	21	11	17

Suction pads | with threaded pin M4



Material: plasticised PVC
Colour: natural (clear)

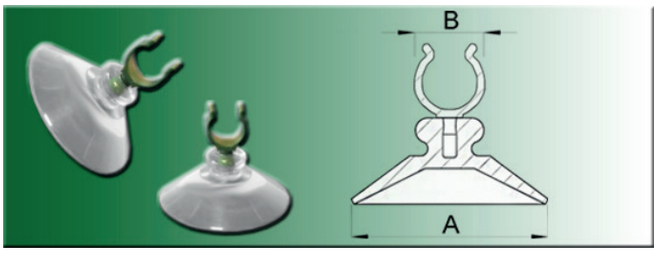
Further types on written request.

Part no.	A	MxL
0711130	30	M4x6
0711131	30	M4x10

Part no.	A	MxL
0711140	40	M4x6
0711141	40	M4x10

Part no.	A	MxL
0711150	50	M4x6
0711151	50	M4x10

Suction pads | with clip



Material: plasticised PVC
Colour: natural (clear)

Further types on written request.

Part no.	A	B
0710030	30,0	10,0



Edge protection | Spur gears Other

Edge protection | Spur gears
Other



Corner & edge protectors Page 344



Sealings & round cords Page 349



Spur wheels | other Page 352

Corner & edge protectors | Tubular protective netting



Protection of irregular shapes, excellent extensibility.

Order unit: meter

Material: LDPE
Size indication by different colours.
Colours: (X = Colour)
1 = orange / 2 = black / 3 = purple / 4 = red / 5 = yellow / 6 = blue

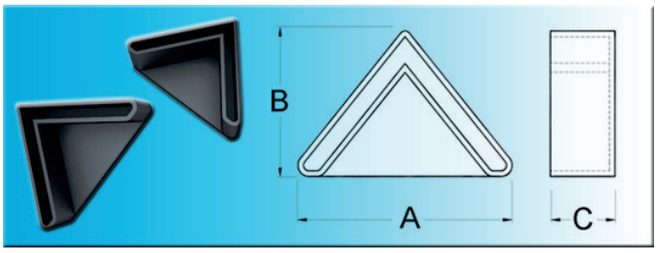
Ø = diameter range

Part no.	Ø	X
1980006	6 - 17	1
1980010	10 - 25	2

Part no.	Ø	X
1980018	25 - 60	3
1980050	50 - 100	4

Part no.	Ø	X
1980100	100 - 200	5
1980200	200 - 300	6

Corner & edge protectors | Angle bar feet



Angle bar feet for profiles

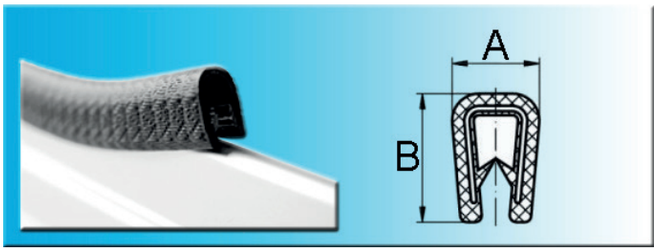
Material: PE
Colour: black

W = angle profile / S = wall thickness

Part no.	W	A	B	C	S
2122500	25 x 25	42,6	26,6	11,5	1,5 - 2
2123000	30 x 30	47,4	27,5	10,0	1 - 2,5

Part no.	W	A	B	C	S
2123600	36 x 36	58,5	34,6	11,3	1,5 - 2,5
2124000	40 x 40	62,9	36,2	12,0	1,5 - 3

Corner & edge protectors | Flexible edge-protection profile, with metal core



Edge-protection profile with metal core

Material: PVC
Colour: black
last digits 002 = off-white
last digits 003 = silver
last digits 004 = light grey
last digits 113 = white

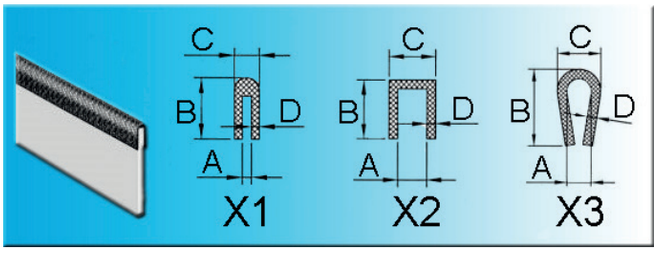
X = clamping range
Further types on written request.

Part no.	A	B	X
2160000	5,5	8,0	0,8-1,5
2160001	6,5	9,5	1,0 - 2,0

Part no.	A	B	X
2160001002	6,5	9,5	1,0 - 2,0
2160001003	6,5	9,5	1,0 - 2,0

Part no.	A	B	X
2160002	10,5	14,5	1,0 - 4,0
2160002004	10,5	14,5	1,0 - 4,0

Corner & edge protectors | Flexible edge-protection profile, U profile



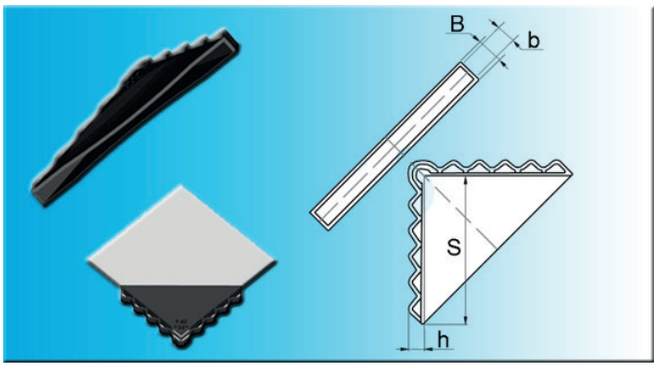
U profile

Material: EPDM
Colour: black

Part no.	X	A	B	C	D
2161000	1	1,5	10,0	4,0	1,25
2161001	1	4,0	15,0	7,5	1,75
2161002	2	2,0	8,0	5,0	1,5
2161003	2	3,0	10,0	6,0	1,5
2161004	2	4,0	8,0	7,0	1,5
2161005	2	5,0	10,0	8,0	1,5
2161006	2	6,0	15,0	8,0	1,5

Part no.	X	A	B	C	D
2161013	3	2,0	7,5	5,0	1,5
2161007	3	3,0	13,0	6,0	1,5
2161008	3	4,0	11,5	6,0	1,0
2161009	3	5,0	16,0	9,0	2,0
2161010	3	6,0	18,0	11,0	2,5
2161011	3	6,5	20,0	10,0	1,75
2161012	3	8,0	21,0	14,0	3,0

Corner & edge protectors | Angle protectors



Angle protection for clamping

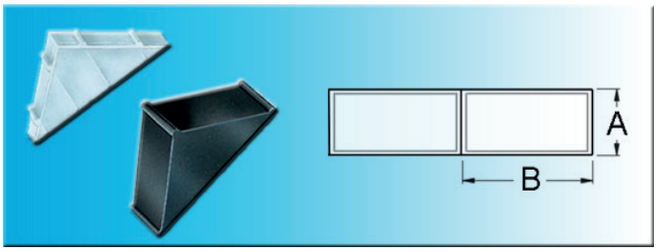
Material: PE
Colour: black

Further types on written request.

Part no.	B	b	S	h
2170004	6,0	4,0	50,0	6,0
2170005	7,0	5,0	50,0	6,0
2170006	8,0	6,0	50,0	6,0

Part no.	B	b	S	h
2170008	10,4	8,0	60,0	6,0
2170010	12,4	10,0	60,0	6,0
2170012	14,4	12,0	60,0	6,0

Corner & edge protectors | Angle protectors



These angle protectors are easy to assemble and provide a good and economic material protection during transport and storage.

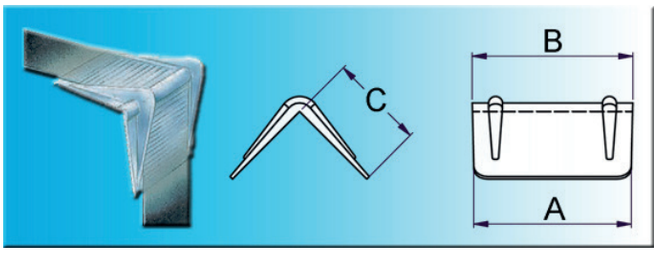
Material: LDPE
Colour:
+ natural / * black

Further types on written request.

Part no.	A	B
2110001	0,8-1,2	32,0
2110002	2,0-3,0	45,0

Part no.	A	B
2110003	4,0	45,0
2110004	4,0	46,0

Corner & edge protectors | Edge protectors



These edge protectors are easy to assemble and provide a good and economic material protection during transport and storage. They are ideal to be used with belt tensioners.

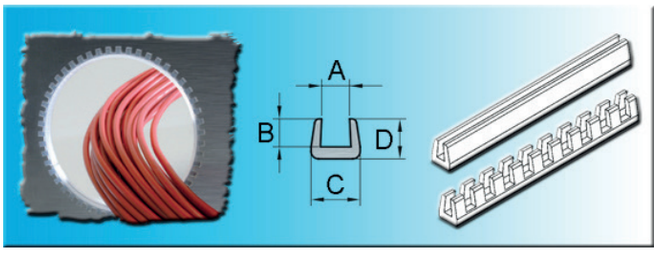
Material: LDPE
Colour: natural

Further types on written request.

Part no.	A	B	C	X
2110019	26,3	33,3	26,3	19,0
2110024	29,4	29,3	21,9	24,0

Part no.	A	B	C	X
2110028	44,3	45,2	27,0	28,0

Corner & edge protectors | Edge-protection profile



Edge protection profiles - to protect cables from sharp edges in distribution boxes etc.
Available with closed or toothed edge.

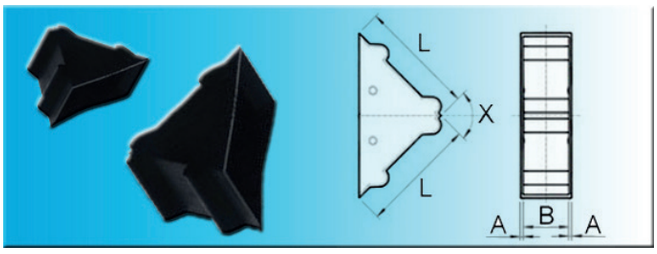
X = type (G = closed edge / Z = toothed edge)
S = sheet thickness in mm
Y = packing unit (minimum quantity per roll)

Two materials available:
polyethylene (PE)
flame-resistant polyethylene (PE AF), last digit F
Colour: natural

Part no.	A	B	C	D	S	X	Y
2160010	1	2	3	3,2	0,8 - 1	G	35m
2160010F	1	2	3	3,2	0,8 - 1	G	35m
2160020	1	2	3	3,2	0,8 - 1	Z	35m
2160020F	1	2	3	3,2	0,8 - 1	Z	35m
2160011	1,5	2	3,5	3,2	1,1 - 1,5	G	30m

Part no.	A	B	C	D	S	X	Y
2160011F	1,5	2	3,5	3,2	1,1 - 1,5	G	30m
2160021	1,5	2	3,5	3,2	1,1 - 1,5	Z	30m
2160021F	1,5	2	3,5	3,2	1,1 - 1,5	Z	30m
2160012	2	3	4,3	4,3	1,6 - 2	G	25m
2160012F	2	3	4,3	4,3	1,6 - 2	G	25m
2160022	2	3	4,3	4,3	1,6 - 2	Z	25m
2160022F	2	3	4,3	4,3	1,6 - 2	Z	25m
2160013	3	3	5,3	4,3	2,1 - 3	G	20m
2160013F	3	3	5,3	4,3	2,1 - 3	G	20m
2160023	3	3	5,3	4,3	2,1 - 3	Z	20m
2160023F	3	3	5,3	4,3	2,1 - 3	Z	20m
2160014	4	3,5	6,9	5,3	3,1 - 4	G	15m
2160014F	4	3,5	6,9	5,3	3,1 - 4	G	15m
2160024	4	3,5	6,9	5,3	3,1 - 4	Z	15m
2160024F	4	3,5	6,9	5,3	3,1 - 4	Z	15m

Corner & edge protectors | Corner protectors



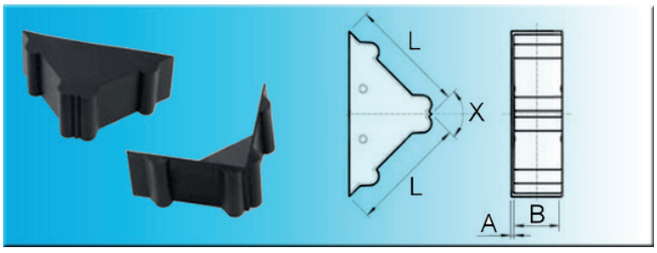
Material: PE
Colour: black

Special colours, other dimensions or larger quantities on written request.

Part no.	A	B	L	X
5110001	1	2-3	50	90°
5110002	1	3-4	30	90°
5110003	1	3-4	50	90°
5110004	1	4-5	50	90°
5110005	1	5-6	50	90°
5110006	1	7-8	50	90°
5110007	1	9-10	50	90°
5110008	1	11-12	50	90°

Part no.	A	B	L	X
5110009	1	15-16	50	90°
5110010	1	19-20	50	90°
5110011	1	21-22	50	90°
5110012	1	25-26	50	90°
5110013	1	32-33	50	90°
5110014	1	39-40	50	90°
5110015	1	28,5-30	50	90°
5110016	1	49-50	50	90°

Corner & edge protectors | Corner protectors - with one side open

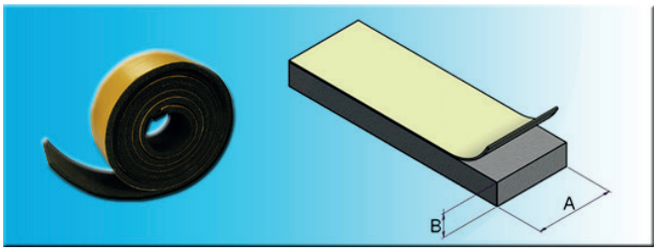


Material: PE
Colour: black

Special colours, other dimensions or larger quantities on written request.

Part no.	A	B	L	X
5120001	1	25	50	90°

Sealings & round cords | Foam sealing strip



Adhesive foam sealing - easy handling, ideal for metal housings.
Roll of 10 metres.

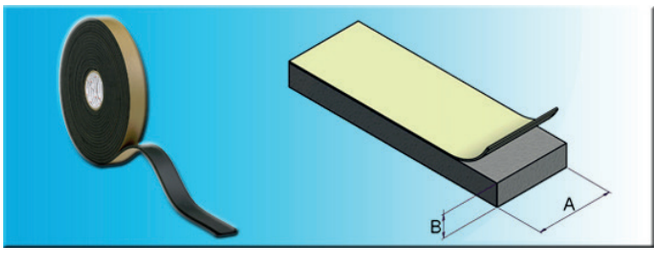
Material: EPDM
Colour: black

Part no.	A	B
2600001	10	3
2600002	10	5
2600003	15	3

Part no.	A	B
2600004	15	5
2600005	20	3
2600006	20	5

Part no.	A	B
2600007	25	3
2600008	30	5

Sealings & round cords | Sealing strip



Sealing strip - roll of 15 metres.

Material: blend of neoprene/nitrile/PVC
Colour: black

Permanently adhesive on one side (not recommended with direct UV radiation).
Very good resistance to acids, ozone and oxidation.

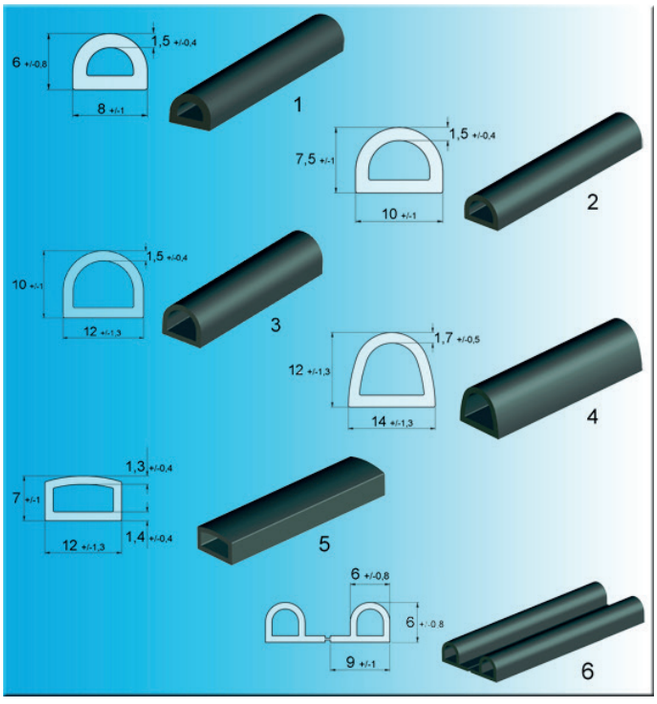
Operating temperature: -28°C to +110°C
Density (kg/m³): 64-112
Deflection of compression: 140-350 g/cm²

For heating, airing and air conditioning technology, electrical and lighting systems, for shock absorption and much more.

Part no.	A	B
2590001	12,7	3,2
2590003	12,7	6,4

Part no.	A	B
2590002	25,4	3,2
2590004	25,4	6,4

Sealings & round cords | Foam gaskets



Adhesive foam sealing - roll at 20 metres.

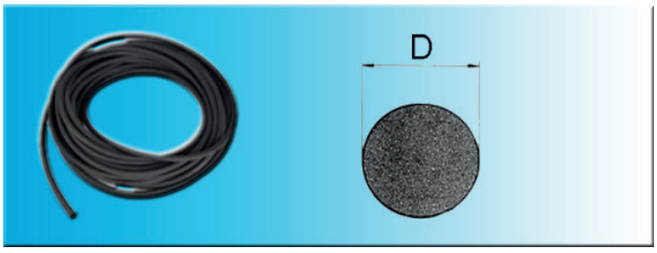
Material: EPDM
Colour: black

Easy handling, ideal for metal housings.

Part no.	T
2630001	1
2630002	2

Part no.	T
2630003	3
2630004	4

Part no.	T
2630005	5
2630006	6



Round cords made of foam rubber

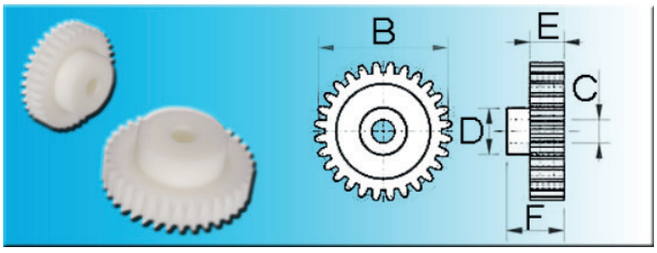
Material: EPDM
Colours:
last digits 699 = black
last digits 002 = grey

Part no.	D
2640001002	2
2640001699	2
2640002002	2,5
2640002699	2,5
2640003002	3
2640003699	3
2640004002	3,5
2640004699	3,5
2640005002	4
2640005699	4
2640006002	4,5
2640006699	4,5
2640007002	5
2640007699	5
2640008002	6
2640008699	6
2640009002	7
2640009699	7

Part no.	D
2640010002	8
2640010699	8
2640011002	9
2640011699	9
2640012002	10
2640012699	10
2640013002	11
2640013699	11
2640014002	12
2640014699	12
2640015002	13
2640015699	13
2640016002	14
2640016699	14
2640017002	15
2640017699	15
2640018002	16
2640018699	16

Part no.	D
2640019002	18
2640019699	18
2640020002	20
2640020699	20
2640021002	22
2640021699	22
2640022002	25
2640022699	25
2640023002	30
2640023699	30
2640024002	35
2640024699	35
2640025002	40
2640025699	40
2640026002	45
2640026699	45
2640027002	50
2640027699	50

Spur wheels | other | Spur wheels



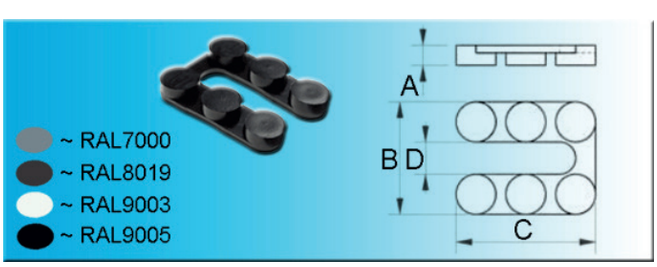
Made of 100% polyacetal (POM) for a low-noise and shock-free transfer.
Service temperature: up to 95°C
Max. tooth load: 35 N/mm²
Tolerances: 140 DIN 16901
Pressure angle: 20°

Material: POM
Colour: natural

X = number of teeth / M = module

NO LONGER AVAILABLE!

Spur wheels | other | Distance pieces

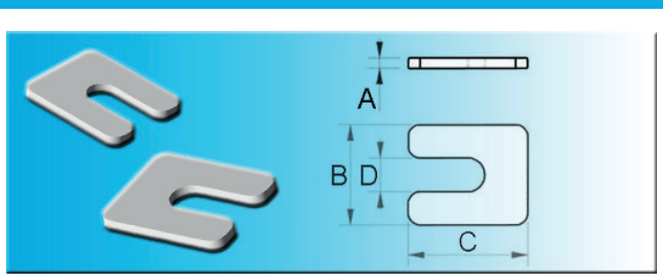


Material: PE
Colours: X = Colour
1 = white ~ RAL 9003
2 = grey ~ RAL 7000
3 = brown ~ RAL 8019
4 = black ~ RAL 9005

Part no.	A	B	C	D	X
0771020	2	28	35	8	1
0771030	3	28	35	8	2

Part no.	A	B	C	D	X
0771040	4	28	35	8	3
0771050	5	28	35	8	4

Spur wheels | other | Distance pieces natural

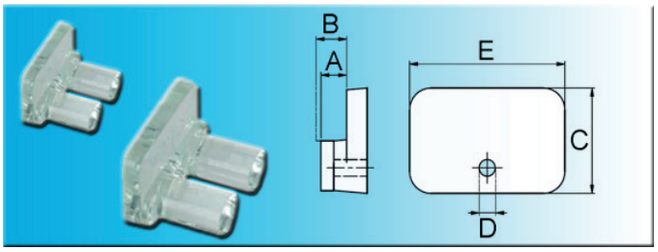


Material: PE
Colour: natural

Part no.	A	B	C	D
0770015	1,5	25	30	8,4

Part no.	A	B	C	D
0770025	2,5	25	30	8,4

Spur wheels | other | Photo clips

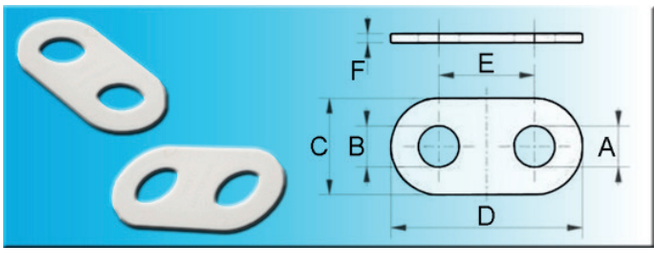


Material: Sealon
Colour: transparent

Part no.	A	B	C x E	D
0460250	2,4	2,5	10x15	1,5
0460400	3,9	4,0	10x15	1,5

Part no.	A	B	C x E	D
0460600	5,8	6,0	10x15	1,5
0460800	7,8	8,0	10x15	1,5

Spur wheels | other | Hanging plates

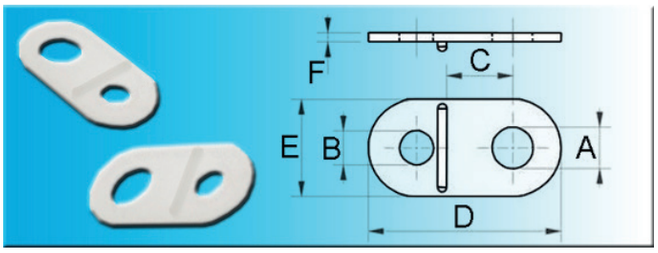


Material: PE
Colour: natural

Part no.	A	B	C	D	E	F
1500606	6	6	16	32	16	1,6
1500707	7	7	16	32	16	1,6

Part no.	A	B	C	D	E	F
1500808	8	8	16	32	16	1,6

Spur wheels | other | File clips



Material: PE
Colour: natural

Part no.	A	B	C	D	E	F
1490606	6	6	11	32	16	1,5
1490607	6	7	11	32	16	1,5

Part no.	A	B	C	D	E	F
1490608	6	8	11	32	16	1,5



Excellent substitute for environment polluting and poisonous lead!

Material: Sealon
Colour: grey

Part no.	A	B	C	D
1520200	5	9	9	1,5

PG	Description	Page
001	**Washers**	
	without DIN	231
002-	**Spacers**	
	PA-glass fibre reinforced	245
002	**Threaded spacers**	
	hexagonal, ff threaded	217
	hexagonal, fm threaded	220
	round, ff threaded	216
003	**Washers**	
	without DIN	231
	PA DIN 125	228
	PP DIN 125	228
	PVDF DIN 125	229
004	**Tapered caps|plugs**	2
005	**Spacers**	
	PA	238
	POM	239
006	**Snap-on caps**	304
	Snap-on rings	309
007	**Metric finishing washers**	256
008	**Bush bearings with collar**	260
009	**Pipe caps**	34
010	**Sealing plugs**	31
011	**Retaining washers**	
	Quick-locking rings	234
	Centre fixing rings	234
	Retaining rings	235
012	**Clamps with snap-in lock**	180
	Adapter	180
014	**Caps**	
	for oval tubes	36
	for elliptical tubes	36
015	**Captive washers**	235
016	**Screw retaining washers**	
	for hexagon socket screws	236
	for hexagon head screws	236
017	**Cable protection grommets**	193
017	**End grommets for lamp sockets**	189
018	**Insulating cases**	
	PA 6 natural	254
022-	**Spacers**	
	with anti-loss protection	251
023	**Spacers**	
	with onesided chamfer	252
	with bothsided chamfer	253
024	**Anti-loss washers**	233
025	**Electric insulating tapes**	336
026	**Threaded plugs**	
	for rectangular tubes	114
029	**Angular ribbed inserts**	
	for square pipes	159
030	**Angular ribbed inserts**	
	for rectangular pipes	159
031	**Washers**	
	without DIN	231
032	**Washers**	
	without DIN	231
	PA DIN 9021	230
033	**Washers**	
	without DIN	231
034	**Protection caps**	
	short	314
	long	315
035	**Protection caps**	
	short with washer	315
	long with washer	316

PG	Description	Page
036	**Angular ribbed inserts, round**	155
	with felt	156
	with pack protection	156
	with pack protection & felt	157
	with PA slip surface	157
	with POM|PTFE slip surface	157
	with anti-slip surface	158
037	**Knurled knobs**	
	flat type	93
	tall type	93
038	**Knurled knobs**	
	with hexagon socket	94
039	**Protective caps**	
	for hexagon socket screws	317
040	**Snap-fit bushes**	190
	with lateral opening	191
041	**Washers**	
	PA DIN 433	229
042	**Grommets**	188
044	**Protection caps**	
	for facade screws	316
045	**Plugs for steel pipes**	31
046	**Photo clips**	354
047	**Plug-in feet**	
	PVC black	124
048	**Buffers | screw feet**	119
049	**Plug-in feet plasticised PVC**	126
	conical	125
05-	**Spacers of PA**	241
050	**Flat head screws DIN 85**	270
051	**Hexagon nuts DIN 934**	
	PA	288
	PP	289
	PVDF	289
052	**Hexagon cap nuts DIN 1587**	288
053	**Wing nuts**	
	DIN 315	288
	Type 26	297
054	**Barrel plugs**	
	white / black	29
055	**Barrel plugs**	
	natural white	26
056	**Square ribbed inserts**	146
057	**Rectangular ribbed inserts**	149
058	**Twist ties**	
	standard	183
	with snap-in foot	183
	adhesive	183
059	**Angled slides**	161
060	**Adjustable plugs**	
	for round tubes	113
	for square tubes	113
061	**Parallel prot. plugs LDPE natural**	5
062	**Thread protection caps**	21
062	**Stud protection caps**	14
063	**Flat head caps**	312
064	**Covering caps for screws**	312
065	**Protective caps for blind rivets**	318
066	**Door bumpers**	119
067	**Angular ribbed inserts**	
	oval	158
	oval with felt	158
068	**Plug-in feet**	126
069	**Glass buffers concave**	122
070	**Glass buffers convex**	121

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071	**Suction pads**	
	with head	337
	with head bore hole	337
	double suction pads	337
	with metal hook	338
	with slot	338
	with plexiglas bolt	338
	with collar	339
	with cross hole	339
	with arrowhead	340
	with flange	340
	with threaded pin	341
	with clip	341
072	**Knurled nuts DIN 467 flat**	97
073	**Knurled nuts DIN 467 tall**	97
074	**Snap-in nuts**	333
075	**Lock screws**	
	DIN 158	19
	DIN 2999	19
077	**Distance pieces**	353
	natural	353
079	**O-rings**	
	Nitrile (NBR)	51
	FPM	51
079	**O-ring set**	
	Nitrile (NBR)	52
	FPM	52
080	**Push clips**	329
081	**Book screw nuts**	298
082	**Binding screws**	296
083	**Insulating cases, tapered**	253
084	**Coding rings**	240
085	**Round ribbed inserts**	138
	with PA slip surface	143
	with POM|PTFE slip surface	143
	with PTFE slip surface	144
	with felt	144
	with metal slip surface	144
	with anti-slip surface	145
086	**Threaded pins PA DIN 551**	300
088	**Hexagon nuts with flange**	297
090	**Cable ties with title block**	173
091	**Rivets PA 6.6**	322
092	**Ribbed rivets**	321
093	**Push rivets**	327
094	**Drive fasteners**	330
095	**Quick-fastening rivets**	320
096	**Snip & Snap**	
	Rivets	325
	Rings	326
	Washers	326
097	**Cable ties**	
	standard	170
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	with expansion anchor	171
	for mounting on edges	172
098	**Cable tie mounts**	184
	adjustable	178
099	**Releasable cable ties**	172
100	**PCB supports with female thread**	
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	M3 AF8 for sheet 2.0 mm	199
	M4 AF8 for sheet 1.6 mm	201
	M4 AF8 for sheet 2.0 mm	203
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PG	Description	Page
100	**PCB supports with male thread**	
	M3 AF8 for sheet 2.0 mm	205
	M4 AF8 for sheet 2.0 mm	207
	M4	209
100	**PCB supports with head**	
	for sheet 1.0 mm	210
	for sheet 2.0 mm	211
	for sheet 2.5 mm	212
	for sheet 3.0 mm	213
100	**PCB supports, snappable**	214
101	**Cable holders pluggable with loop**	
	grey	176
	black	177
102	**Saddle washers**	240
103	**Bush bearings without collar**	264
104	**Spur wheels**	352
105	**Star grip screws**	83
106	**Star grip nuts**	77
107	**Ball knobs, round**	
	with covering plate	73
	DIN 319 C glossy	74
	DIN 319 C matt	74
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110	**Hand grip end caps**	64
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113	**Screw rivets**	328
114	**Cable clamps**	179
115	**Mini cable clip**	178
116	**Cable mounts**	185
117	**Adhesive bumpers**	120
118	**Protection caps**	14
119	**Protective caps for Pozidriv**	318
120	**Insert feet**	127
121	**Cable strain reliefs**	193
122	**Plugs for sheets**	10
123	**Vent plugs**	
	with louvres	32
	with holes	32
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125	**Hex head plugs**	195
126	**Locknuts**	194
127	**Locking screws**	194
128	**Membrane grommets**	
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129	**Quick-fit grommets**	192
130	**Hexagon protection caps**	313
135	**Hose clamps**	53
137	**Rivets POM**	321
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139	**PCB fastening feet**	215
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142	**Cable tie mounts**	
	Plug-in mounts for cable ties	184
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	Cable mounts	185
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	universal	174
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PG	Description	Page
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149	**File clips**	354
150	**Hanging plates**	354
151	**Ribbon cable holders**	179
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153	**Adjustable hexagonal feet**	104
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160	**Threaded plugs, round**	115
161	**Round caps**	35
162	**Rectangular caps**	38
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	PVC	15
	TPG	43
164	**Hand grips for pipes**	62
166	**End caps TPG**	43
167	**Protection caps**	
	Silicone / EPDM	42
168	**Tapered protection plugs**	
	Silicone / EPDM	46
169	**Pull plugs**	49
171	**Pull plugs with flange**	49
172	**Grease nipple caps**	16
173	**Protection caps with pull-off strap**	22
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	without finger grip, white	6
	with finger grip, white	7
	with finger grip, red	7
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	metric	17
	UNF	17
	BSP	18
177	**Threaded caps**	
	metric	24
	UNF / JIC	24
	BSP / Gas	25
179	**Ezeplugs**	8
180	**Blind plugs white / black**	30
181	**Quick-fit threaded plugs**	
	metric	20
	BSP / Gas	20
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General Terms and Conditions

§1 General

a) Scope of Application T
hese general terms and conditions apply to all business transactions between syskomp GmbH, Max-Planck-Straße 1, 92224 Amberg, represented by Managing Directors Dr. Georg Baumann and Marlena Baumann, and the customer. The version valid at the time the contract was entered into shall apply. Any contradicting terms and conditions issued by the customer are expressly excluded.

b) Contractual Agreement
The language of this contract is German.

c) Retrospective Changes to the Terms and Conditions
syskomp GmbH is permitted to carry out retrospective changes to the general terms and conditions for existing business relationships, insofar as changes to the law or jurisdiction or other circumstances mean that the contractual balance has been considerably affected. Retrospective changes to the terms and conditions shall be valid as long as the customer does not contest the changes within six weeks of being informed of intended changes. syskomp GmbH shall remind the customer of the consequences of remaining silent at the beginning of this contesting period, and allow the customer the chance to provide an express declaration. If the customer contests within the deadline, both syskomp GmbH and the customer are permitted to extraordinarily terminate the contract.

§2 Registration / Conclusion of Contract

a) Registration
In order to fully use this website, it is first necessary to create a customer account. You will be asked to enter data necessary for syskomp GmbH to carry out its services. Entries must be confirmed by clicking on the 'register' button. The customer will receive a confirmation email with information required for logging in. Registration is complete once the customer has used this information to log into the syskomp GmbH website.
The customer must keep his/her password, which allows the customer access to the personal area, strictly confidential and must not transfer it to third parties. The customer shall carry out suitable and reasonable measures to prevent third party access to his/her password. A customer account may not be transferred to another user or any other third party.

b) Conclusion of Contract
The presentation of goods in the syskomp GmbH online shop is non-binding. The order process on this website is made up of four steps. Firstly, the customer selects the desired wares. Secondly, he/she enters data, including the billing address and a separate shipping address if applicable, insofar as these are not saved to the customer account. Thirdly, the customer selects a payment method and delivery option. Finally, the customer can check all entries (e.g. name, address, payment method, order products) and correct any errors if necessary, before clicking on 'order' to confirm the order. By ordering, the customer creates a binding offer. syskomp GmbH will immediately confirm receipt of the customer's offer. This confirmation does not constitute an acceptance of the offer. syskomp GmbH is permitted to bindingly accept the order offer within two days of receiving the order by issuing a notification via email, fax, telephone or post, or by dispatching the ordered wares. Once the order is accepted, a contract is created between the customer and syskomp GmbH.

c) Saving the Contract Text
The contractual text is saved by syskomp GmbH and sent to the customer along with the relevant terms and conditions and customer information texts (e.g. via email, fax or post). The customer cannot access the contractual text via the website again once the order has been placed. The customer can use their browser's printing function to print out the relevant web page with the contractual text.

d) Conclusion of Contract for Custom Products
Customers can commission syskomp GmbH with the production of custom products. The contract in this case takes the form of an individual contract and a related declaration of acceptance. This contract must be concluded in writing. All contractual agreements must be made in writing.

§3 Delivery

a) Minimum Quantity Surcharge I
f the customer lives within Germany or the EU and his/her order does not exceed EUR 25, there shall be a minimum delivery charge of EUR 10. If the customer lives outside the EU and his/her order does not exceed EUR 50, there shall be a minimum delivery charge of EUR 50.

b) Tolerance for Business Contracts Any deviations in the ordered amount of wares of up to 1 0% shall be acceptable as a tolerance if the contract is with a business.

c) Partial Deliveries
syskomp GmbH is permitted to carry out partial deliveries if this is reasonable to the customer. The customer shall not incur additional delivery charges for partial deliveries.

d) Delivery and Service Delays
syskomp GmbH is not responsible for delays in deliveries or services due to force majeure or unusual and unforeseeable circumstances that were not able to be prevented by syskomp GmbH (this especially includes strikes, governmental or judicial injunctions and cases of incorrect or improper self-delivery in spite of hedging transactions). Such circumstances allow syskomp GmbH to delay the delivery for the duration of the obstacle.

e) Withdrawal I
f wares are not available due to the circumstances outlined above, syskomp GmbH may withdraw from the contract. syskomp GmbH is obliged to immediately inform the customer about the lack of availability and to immediately refund any payment already received.

f) Delivery Exclusion
We do not deliver to PO boxes.

g) Default of Acceptance I
f the customer is in default of acceptance of the ordered wares, syskomp GmbH is permitted to set a reasonable deadline and, if this deadline passes unobserved, to demand damage compensation either for default or for non-fulfilment. During this default of acceptance, the customer shall bear the risk of accidental loss or deterioration.

h) Performance Time
Unless otherwise expressly agreed in writing, syskomp GmbH shall deliver within 5 days. This deadline begins the day after the transferring bank has provided a notification of payment if the order is being paid for in advance, and the day after the contract was concluded if the order is to be paid for by invoice or cash on delivery. This period shall end on the fifth following day. If this last day falls on a Saturday, Sunday or public holiday at the delivery destination, the deadline shall be moved to the next valid delivery day.

§4 Place of Fulfilment for Business Contracts

The syskomp GmbH head office in Amberg is agreed as the place of fulfilment for all obligations arising from a contractual relationship with a business. All deliveries are ex works. If the wares are being sent to a different location than the place of fulfilment at the customer's request, risk shall be transferred to the customer as soon as syskomp GmbH has transferred the wares to the courier, freight service provider or any other delivery agent.

§5 Payment

a) Prices and Delivery Costs
All prices stated in contracts with consumers include VAT. In business contracts, prices do not include VAT. Costs for postage and packaging are listed separately, unless the customer has arranged to pick up the order from syskomp GmbH in Amberg. For international deliveries, the customer is responsible for settling any applicable customs charges and tax.

b) Discounts
syskomp GmbH reserves the right to agree on a discount with the customer.

c) Default of Payment
The customer shall be considered in default of payment if payment has not been received by syskomp GmbH within 30 days after the invoice was received. Interest of 5 percent above the base rate established by the European Central Bank shall be charged for default of payment, or 9% above the European Central Bank's base rate for legal transactions to which the consumer is not a party. If the customer is in default of payment, syskomp GmbH reserves the right to charge EUR 5 for the issuing of a payment reminder. The right to claim for additional damage compensation is reserved. The customer has the right to prove that syskomp GmbH incurred either lower costs or no costs at all.

d) Right of Retention
The customer may only exercise the right of retention for counterclaims that are payable and relating to the same contract as the customer's obligation.

§6 Right of Withdrawal Explanation for Consumers in Distance Sales Contracts

Withdrawal Explanation

Right of Withdrawal

You have the right to withdraw from this contract within fourteen days without providing a reason.

The right of withdrawal is valid for fourteen days from the day on which you or a third party named by you that is not the carrier received possession of the wares/the last wares.

In order to exercise your right of withdrawal, you must send us a notification of your decision to withdraw from the contract (*syskomp GmbH, Max-Planck-Straße 1, 92224 Amberg, telephone: +49 9621 6754-50, fax: +49 9621 6754-599, e-mail:* verkauf@emico.de). You can use the template provided but this is not mandatory.

In order to honour the withdrawal deadline, it is sufficient that you dispatch the notification before the end of the deadline.

Repercussions of Withdrawal

If you withdraw from this contract, we will refund all payments already received from you including delivery costs (excluding additional costs if you selected a different delivery option than our cheapest standard delivery option) within fourteen days of the day we received your notification of withdrawal. For this payment, we shall use the same payment method you used for the initial transaction unless otherwise agreed with you. You will not be charged by us for this transaction. We can refuse refunds until we have received the wares or until we have received evidence that you have dispatched the wares, whichever is earlier.

You must dispatch or hand over the wares to us within fourteen days from the day you sent the notification of withdrawal. This deadline is considered honoured if you dispatch the wares by the end of the deadline. You will cover the costs of returning the wares.

You must only cover any loss of value to the wares if this loss can be traced back to you during an inspection of the ware's quality, properties and function.

End of Withdrawal Explanation -

Exclusion of the Right of Withdrawal
The right of withdrawal does not apply to contracts for the delivery of wares that are not prefabricated and whose manufacture is based on an individual decision or requirement issued by the consumer, or that are obviously adapted to suit the consumer's personal requirements.

§7 Return of Ordered Wares

Customers can return ordered products (apart from custom products) within 30 days of receipt as long as the product is complete, new and not damaged. In this case, syskomp GmbH shall refund the purchase price minus 30% of the product value. The customer's right of withdrawal and guarantee are generally not affected.

§8 Customer Obligations for Custom Products

a) Custom Products
The customer is solely responsible for the content and correctness of the transferred data for custom orders. He/she is also obliged to not provide any data that infringes third party content rights (e.g. personal rights, naming rights, trademark, copyright etc) or that violates any applicable laws.

b) Indemnity
The customer shall indemnify syskomp GmbH from all third party claims relating to such infringements against syskomp GmbH. This also includes reimbursing costs for necessary legal representation.

c) Data Security
The customer is responsible for ensuring transferred information is secure. syskomp GmbH cannot be held liable for the loss of information transferred by the customer, as syskomp GmbH does not offer a general data security guarantee.

§9 Retention of Ownership

a) General
Insofar as the customer is a business, any wares, works and materials shall remain property of syskomp GmbH until all present and future claims arising from the transaction have been fulfilled. If the customer is a consumer, only the delivered product from the concrete contract shall remain property of syskomp GmbH until the purchase price has been received in full. The customer must treat any items affected by retention of ownership with due care. The customer transfers any claim and/or compensation he/she would receive for the damage, loss or destruction of these items to syskomp GmbH. Unless otherwise agreed, the customer is not permitted to sell, give away, pledge or transfer the goods affected by retention as collateral.

b) Pledging and Other Impairments
If the object subject to retention of ownership is pledged or impaired by third parties in any other way, the customer must inform syskomp GmbH immediately so a case can be opened in accordance with §771 of the ZPO (Code of Civil Procedure). If the third party is not in a position to reimburse judicial and extra-judicial costs in accordance with §771 of the ZPO, the customer shall be held liable to syskomp GmbH for any losses incurred.

c) Further Sale
Insofar as the customer is a business, he/she shall be permitted to further sell the reserved wares within the realms of normal business transactions. The customer transfers all claims against the purchaser in advance to syskomp GmbH to the sum of the final invoice amount (including VAT). This transfer shall apply regardless of whether the purchased item was sold on after being processed in any way. The customer is still permitted to exercise the claim even after the transfer of rights. syskomp GmbH's right to exercise the claim itself remains unaffected. However, syskomp GmbH will not exercise this claim as long as the customer fulfils his/her payment obligations from the proceeds received, is not in default of payment, there has been no cessation of payment and no insolvency proceedings have been initiated against the customer.

d) Remodelling, Processing and Editing
Insofar as the customer is a business, any editing and processing or remodelling shall take place in the name of and on behalf of syskomp GmbH. In this case, the customer's expectant right to the purchased product continues to the remodelled object. Insofar as the purchased product has been processed with other items not belonging to syskomp GmbH, syskomp GmbH shall receive joint ownership of the new item proportionate to the objective value of the purchased object to other items used at the time of processing. The same applies if items have been combined. If this combination was carried out in such a way that the customer's item is the main item, it is agreed that the customer shall transfer proportional partial ownership to syskomp GmbH, and shall ensure syskomp GmbH's either sole or partial ownership. In order to ensure claims against the customer, the customer transfers to syskomp GmbH all such claims that the customer is granted against third parties via the combination of the reserved wares with a site. syskomp GmbH accepts this transfer of rights in advance.

e) Retraction
If the customer violates the contract, especially by default of payment but also if insolvency proceedings are initiated against the customer's assets, syskomp GmbH is permitted to take the item back. Retraction does not constitute a withdrawal from the contract unless otherwise expressly declared in writing by syskomp GmbH.

f) Release of Collateral
If the value of collateral exceeds the value of the claim by more than 15 percent, syskomp GmbH is obliged to release this collateral at the customer's request.

§10 Rights to Catalogues, Drawings and Models

The content of all catalogues, drawings and models created by syskomp GmbH, including all authorised copies, are the material and intellectual property of syskomp GmbH. Re-printing excerpts from catalogues and drawings, and copying parts of models, is only permitted with syskomp GmbH's written permission.

§11 Warranty

a) Warranty Claim
Statutory rights of warranty apply. A warranty claim can only arise in relation to the product's quality; reasonable aesthetic deviations are not covered by a warranty. If a guarantee has also been issued alongside warranty claims, the applicable conditions can be found with the product. Guarantees do not affect rights of warranty.

b) Transfer of Risk
The risk of accidental loss and deterioration of the purchased wares is transferred to the customer when the wares are transferred.

c) Notification
If the customer establishes that the outer packaging is damaged and/or establishes damage after receipt of the wares, he/she is asked to inform syskomp GmbH immediately. However, this is not an obligation and failure to do so does not affect the customer's rights of warranty.

d) Supplementary Performance
If the wares are defective, the customer can request supplementary performance either in the form of improvement or replacement. If defects are not rectified after two attempts, the customer may withdraw from the contract or request a reduction in payment.

e) Rights Concerning Considerable Defects
If the product has a significant defect, the customer has the right to a reduction of the purchase price under exclusion of their right of withdrawal.

f) Damage Compensation for Defects
There is no warranty for damages caused by improper handling or use. syskomp GmbH only offers damage compensation for defects in the case of intent or gross negligence. This limitation does not affect liability for damages to life, body or health. Product Liability regulations also remain unaffected from these liability limitations.

g) Business Warranty
Contrary to statutory warranty regulations, the following applies to businesses: syskomp GmbH shall provide supplementary performance in the form of either replacement or repair at its discretion if a product is defective. The risk of accidental deterioration or loss of the item is transferred to the customer once the order has been transferred to the delivery agent. Warranty claims expire within one year after this transfer of risk.

h) Business Obligation to Inspect
Businesses must declare any obvious defects immediately in writing; warranty claims shall otherwise not apply. Timely dispatch is sufficient to honour deadlines. The business is obliged to provide evidence for all claim requirements, especially the defect itself, the time the defect was established, and that the defect was declared in good time.

i) Warranty for Used Items
If the purchaser is a business, there is no warranty for used items. For consumer, there is a 1-year warranty for used items. This does not exclude liability for damages to life, body or health. Product Liability regulations also remain unaffected.

§12 Liability

a) Information
Information about the processing and use applications of the products sold by syskomp GmbH, as well as technical advice and other entries, are provided to the best of our knowledge and belief. Liability limitations and reservations apply as outlined below.

b) Liability Limitation
syskomp GmbH and its legal representatives and vicarious agents shall only be held liable for intent or gross negligence. If any cardinal obligations (obligations integral for the fulfilment of the contract) are affected, we shall also be held liable for slight negligence. However, liability shall be limited to the foreseeable, typical, direct average damages.

c) Liability Provisions
The above liability limitations do not affect liability for damages to life, body or health. Product Liability law also remain unaffected by these liability limitations.

§13 Final Provisions

a) Place of Jurisdiction
The exclusive place of jurisdiction for all legal disputes arising from this contract is agreed as the syskomp GmbH head offices in Amberg insofar as the customer is a business, a legal entity under public law or a special fund under public law or insofar as the customer does not have a place of jurisdiction within Germany.

b) Applicable Law
Unless otherwise strictly required by the legal regulations of the customer's residence, German law shall apply, with the exclusion of the UN Sales Convention.

c) Severability Clause
If individual provisions are ineffective, all other provisions in these general terms and conditions shall remain unaffected.