A22

Mouldings in flexible PVC











Flexible PVC has long been known as one of the most economical and useful thermoplastic materials, particularly within the electrical industry. Injection moulded parts in PVC always yield a good surface finish and are dimensionally inert, particularly if the moulding is carried out by an experienced company.
For decades, SES-STERLING has gained this experience by manufacturing extruded and moulded parts in flexible PVC under the PLIO trademark.
Modern, up to date and sophisticated injection moulding machines ensure a very high production rate with consequent economic manufacturing costs. STERLING has its own design and toolmaking shop which also maintains and repairs tooling.

PLIO PVC has following properties:

- resistance against heat: + 90°C for short time, +70/75°C for long duration.
- resistance against cold: -25 to -30°C
- resistant to : water, ozone, UV, diluted acids, alkaline solutions and salts.
- very good resistance to ageing.
- average resistance to ketones, mineral oils, petrol, and esters.
- very good dielectric properties.
- wide range of colours.
- transparent or translucent mouldings are possible.

To complete its product range, SES-STERLING has other qualities (PP, PE, PA).

PLIO standard grommets DK
in flexible black PVC 9542

PLIO®

RoHS

DK-DKF-DR-DKP PVC

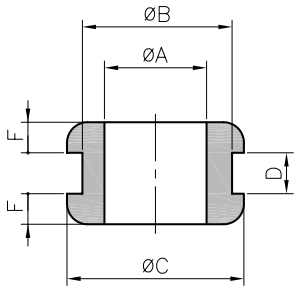
Material:	flexible PVC
Colour:	black
Operating temperatures:	-30 to +70°C
Hardness Shore A:	55 ± 5
Tensile strength at break:	8 MPa
Ultimate elongation:	> 250 %
Dielectric strength:	> 20 kV/mm
Specification:	HB UL94



• Series DK, perforated

type	article number	dimensions (mm) A	B	C	D	F	
DK-PVC 2/5/8-1	0107 0001 010	2	5	8	1	1,5	100
DK-PVC 2/5/8-1,5	0107 0002 010	2	5	8	1,5	1,5	100
DK-PVC 2/5/8-2	0107 0003 010	2	5	8	2	1,5	100
DK-PVC 3/5/8-1	0107 0004 010	3	5	8	1	1,5	100
DK-PVC 3/5/8-1,5	0107 0005 010	3	5	8	1,5	1,5	100
DK-PVC 3/5/8-2	0107 0006 010	3	5	8	2	1,5	100
DK-PVC 4/6/11-4	0107 0100 010	4	6	11	4	2	100
DK-PVC 4/8/11-1	0107 0007 010	4	8	11	1	2	100
DK-PVC 4/8/11-1,5	0107 0008 010	4	8	11	1,5	2	100
DK-PVC 4/8/11-2	0107 0009 010	4	8	11	2	2	100
DK-PVC 4,8/8/12-1,5	0107 0123 010	4,8	8	12	1,5	2	100
DK-PVC 5/7/11-3	0107 0110 010	5	7	11	3	2	100
DK-PVC 5/8/11-1	0107 0010 010	5	8	11	1	2	100
DK-PVC 5/8/11-1,5	0107 0011 010	5	8	11	1,5	2	100
DK-PVC 5/8/11-2	0107 0012 010	5	8	11	2	2	100
DK-PVC 5,5/8/12-1,5	0107 0013 010	5,5	8	12	1,5	2	100
DK-PVC 5,5/9/12-1	0107 0014 010	5,5	9	12	1	2	100
DK-PVC 5,5/9/12-1,5	0107 0015 010	5,5	9	12	1,5	2	100
DK-PVC 5,5/9/12-2	0107 0016 010	5,5	9	12	2	2	100
DK-PVC 5,5/9/12-3	0107 0017 010	5,5	9	12	3	2	100
DK-PVC 6/8/12-1,5	0107 0069 010	6	8	12	1,5	2	100
DK-PVC 6/9/12-1	0107 0018 010	6	9	12	1	2	100
DK-PVC 6/9/12-1,5	0107 0019 010	6	9	12	1,5	2	100
DK-PVC 6/9/12-2	0107 0020 010	6	9	12	2	2	100
DK-PVC 6/9/12-3	0107 0021 010	6	9	12	3	2	100
DK-PVC 6/9/12-4	0107 0090 010	6	9	12	4	2	100
DK-PVC 6/9/12-5	0107 0091 010	6	9	12	5	2	100
DK-PVC 6/9/12-6	0107 0092 010	6	9	12	6	2	100
DK-PVC 6/9/12-7	0107 0093 010	6	9	12	7	2	100
DK-PVC 6/9/12-8	0107 0094 010	6	9	12	8	2	100
DK-PVC 6/9/12-9	0107 0095 010	6	9	12	9	2	100
DK-PVC 6/12/18-2	0107 0087 010	6	12	18	2	2,5	100
DK-PVC 6/13/18-7	0107 0070 010	6	13	18	7	2,5	100
DK-PVC 6/14/18-1	0107 0071 010	6	14	18	1	2,5	100
DK-PVC 7/10/14-1	0132 0090 010	7	10	14	1	2,5	100
DK-PVC 7/10/14-1,5	0132 0091 010	7	10	14	1,5	2,5	100
DK-PVC 7/10/14-2	0132 0092 010	7	10	14	2	2,5	100
DK-PVC 7/10/14-3	0132 0093 010	7	10	14	3	2,5	100
DK-PVC 7/12/16-1	0107 0088 010	7	12	16	1	2,5	100

New



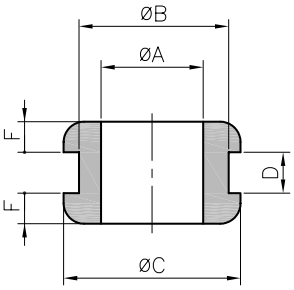
PLIO standard grommets DK
in flexible black PVC 9542

PLIO®

RoHS

type	article number	dimensions (mm) A	B	C	D	F	
DK-PVC 7/14/18-1	0107 0022 010	7	14	18	1	2,5	100
DK-PVC 7/14/18-2	0107 0023 010	7	14	18	2	2,5	100
DK-PVC 7/14/18-3	0107 0024 010	7	14	18	3	2,5	100
DK-PVC 8/10/14-1	0132 0094 010	8	10	14	1	2,5	100
DK-PVC 8/10/14-1,5	0132 0095 010	8	10	14	1,5	2,5	100
DK-PVC 8/10/14-2	0132 0096 010	8	10	14	2	2,5	100
DK-PVC 8/10/14-3	0132 0097 010	8	10	14	3	2,5	100
DK-PVC 8/12/16-1	0132 0098 010	8	12	16	1	2,5	100
DK-PVC 8/12/16-1,5	0132 0099 010	8	12	16	1,5	2,5	100
DK-PVC 8/12/16-2	0132 0100 010	8	12	16	2	2,5	100
DK-PVC 8/12/16-3	0132 0101 010	8	12	16	3	2,5	100
DK-PVC 8/14/18-1	0107 0025 010	8	14	18	1	2,5	100
DK-PVC 8/14/18-2	0107 0026 010	8	14	18	2	2,5	100
DK-PVC 8/14/18-3	0107 0027 010	8	14	18	3	2,5	100
DK-PVC 9/12/16-1	0132 0102 010	9	12	16	1	2,5	100
DK-PVC 9/12/16-1,5	0132 0103 010	9	12	16	1,5	2,5	100
DK-PVC 9/12/16-2	0132 0104 010	9	12	16	2	2,5	100
DK-PVC 9/12/16-3	0132 0105 010	9	12	16	3	2,5	100
DK-PVC 9/14/18-1	0107 0028 010	9	14	18	1	2,5	100
DK-PVC 9/14/18-2	0107 0029 010	9	14	18	2	2,5	100
DK-PVC 9/14/18-3	0107 0030 010	9	14	18	3	2,5	100
DK-PVC 10/12/16-1	0132 0106 010	10	12	16	1	2,5	100
DK-PVC 10/12/16-1,5	0132 0107 010	10	12	16	1,5	2,5	100
DK-PVC 10/12/16-2	0132 0108 010	10	12	16	2	2,5	100
DK-PVC 10/12/16-3	0132 0109 010	10	12	16	3	2,5	100
DK-PVC 10/18/22-1	0107 0031 010	10	18	22	1	2,5	100
DK-PVC 10/18/22-2	0107 0032 010	10	18	22	2	2,5	100
DK-PVC 10/18/22-3	0107 0033 010	10	18	22	3	2,5	100
DK-PVC 10/18/22-4	0107 0034 010	10	18	22	4	2,5	100
DK-PVC 11/18/22-1	0107 0035 010	11	18	22	1	2,5	100
DK-PVC 11/18/22-2	0107 0036 010	11	18	22	2	2,5	100
DK-PVC 11/18/22-3	0107 0037 010	11	18	22	3	2,5	100
DK-PVC 11/18/22-4	0107 0038 010	11	18	22	4	2,5	100
DK-PVC 12/18/22-1	0107 0039 010	12	18	22	1	2,5	100
DK-PVC 12/18/22-2	0107 0040 010	12	18	22	2	2,5	100
DK-PVC 12/18/22-3	0107 0041 010	12	18	22	3	2,5	100
DK-PVC 12/18/22-4	0107 0042 010	12	18	22	4	2,5	100
DK-PVC 14/22/27-1	0107 0043 010	14	22	27	1	3	100
DK-PVC 14/22/27-1,5	0107 0072 010	14	22	27	1,5	3	100
DK-PVC 14/22/27-2	0107 0044 010	14	22	27	2	3	100
DK-PVC 14/22/27-3	0107 0045 010	14	22	27	3	3	100
DK-PVC 14/22/27-4	0107 0046 010	14	22	27	4	3	100
DK-PVC 16/22/27-1	0107 0047 010	16	22	27	1	3	100
DK-PVC 16/22/27-1,5	0107 0073 010	16	22	27	1,5	3	100
DK-PVC 16/22/27-2	0107 0048 010	16	22	27	2	3	100
DK-PVC 16/22/27-3	0107 0049 010	16	22	27	3	3	100
DK-PVC 16/22/27-4	0107 0050 010	16	22	27	4	3	100
DK-PVC 18/22/27-1	0107 0051 010	18	22	27	1	3	100
DK-PVC 18/22/27-1,5	0107 0074 010	18	22	27	1,5	3	100
DK-PVC 18/22/27-2	0107 0052 010	18	22	27	2	3	100
DK-PVC 18/22/27-3	0107 0053 010	18	22	27	3	3	100
DK-PVC 18/22/27-4	0107 0054 010	18	22	27	4	3	100





PLIO® standard grommets DR - DKF - DKP
in flexible PVC black 9542

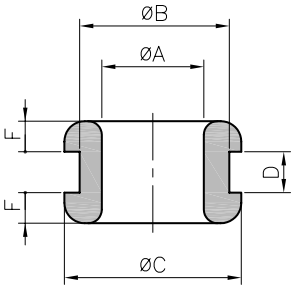
PLIO®

RoHS

• Grommets DR-PVC radiused edges

type	article number	dimensions (mm) A	B	C	D	F		
DR-PVC 4/7/10-1	0132 0010 010	4	7	10	1	1,5		100
DR-PVC 4/7/10-1,5	0132 0011 010	4	7	10	1,5	1,5		100
DR-PVC 4/7/10-2	0132 0012 010	4	7	10	2	1,5		100
DR-PVC 5/8/11-1	0132 0013 010	5	8	11	1	1,5		100
DR-PVC 5/8/11-1,5	0132 0014 010	5	8	11	1,5	1,5		100
DR-PVC 5/8/11-2	0132 0015 010	5	8	11	2	1,5		100
DR-PVC 6/10/14-1	0132 0016 010	6	10	14	1	2		100
DR-PVC 6/10/14-1,5	0132 0017 010	6	10	14	1,5	2		100
DR-PVC 6/10/14-2	0132 0018 010	6	10	14	2	2		100
DR-PVC 6/10/14-3	0132 0019 010	6	10	14	3	2		100
DR-PVC 8/12/16-1	0132 0020 010	8	12	16	1	2		100
DR-PVC 8/12/16-1,5	0132 0021 010	8	12	16	1,5	2		100
DR-PVC 8/12/16-2	0132 0022 010	8	12	16	2	2		100
DR-PVC 8/12/16-3	0132 0023 010	8	12	16	3	2		100
DR-PVC 10/14/18-1	0132 0024 010	10	14	18	1	2		100
DR-PVC 10/14/18-1,5	0132 0025 010	10	14	18	1,5	2		100
DR-PVC 10/14/18-2	0132 0026 010	10	14	18	2	2		100
DR-PVC 10/14/18-3	0132 0027 010	10	14	18	3	2		100

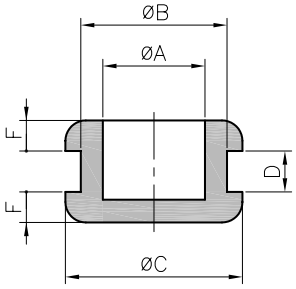




• Grommets DKF-PVC blind (with membrane to perforate)

type	article number	dimensions (mm) A	B	C	D	F		100
DKF-PVC 5/7/11-3	0107 0109 010	5	7	11	3	2		100
DKF-PVC 5,5/9/12-3	0107 0075 010	5,5	9	12	3	2		100
DKF-PVC 6/9/12-3	0107 0076 010	6	9	12	3	2		100
DKF-PVC 6/14/18-1	0107 0077 010	6	14	18	1	2,5		100
DKF-PVC 7/14/18-3	0107 0078 010	7	14	18	3	2,5		100
DKF-PVC 8/14/18-3	0107 0079 010	8	14	18	3	2,5		100
DKF-PVC 9/12/16-2	0107 0099 010	9	12	16	2	2,5		100
DKF-PVC 9/14/18-3	0107 0080 010	9	14	18	3	2,5		100
DKF-PVC 10/18/22-3	0107 0081 010	10	18	22	3	2,5		100
DKF-PVC 10/18/22-4	0107 0082 010	10	18	22	4	2,5		100
DKF-PVC 11/18/22-3	0107 0083 010	11	18	22	3	2,5		100
DKF-PVC 11/18/22-4	0107 0084 010	11	18	22	4	2,5		100
DKF-PVC 12/18/22-3	0107 0085 010	12	18	22	3	2,5		100
DKF-PVC 12/18/22-4	0107 0086 010	12	18	22	4	2,5		100



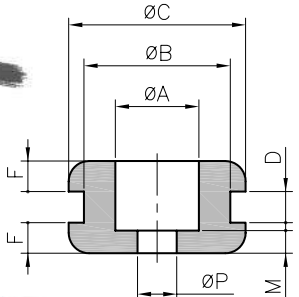


• Grommets DKP-PVC (with perforated membrane)

type	article number	dimensions (mm) A	B	C	D	F	M	P		100
DKP-PVC 3-5/7/11-3	0107 0124 010	5	7	11	3	2,5	0,7	3		100
DKP-PVC 3-7/14/18-3	0107 0055 010	7	14	18	3	2,5	2,5	3		100
DKP-PVC 6,5-8/12/16-2	0107 0089 010	8	12	16	2	2,5	1	6,5		100
DKP-PVC 3,1-9/14/18-3	0107 0096 010	9	14	18	3	2,5	2	3,1		100
DKP-PVC 5,5-9/14/18-3	0107 0097 010	9	14	18	3	2,5	2	5,5		100
DKP-PVC 6-10/18/22-3	0107 0102 010	10	18	22	3	2,5	2	6		100
DKP-PVC 7-10/18/22-3	0107 0122 010	10	18	22	3	2,5	2	7		100
DKP-PVC 8-10/18/22-3	0107 0101 010	10	18	22	3	2,5	2	8		100
DKP-PVC 9-10/18/22-3	0107 0103 010	10	18	22	3	2,5	2	9		100

Neu

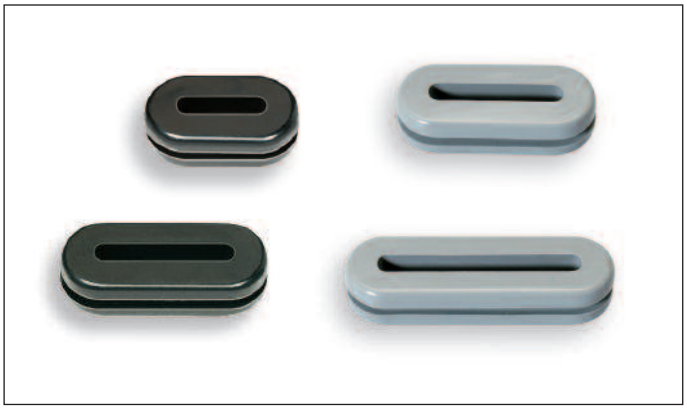
New



PLIO® DO oval grommets
in flexible PVC

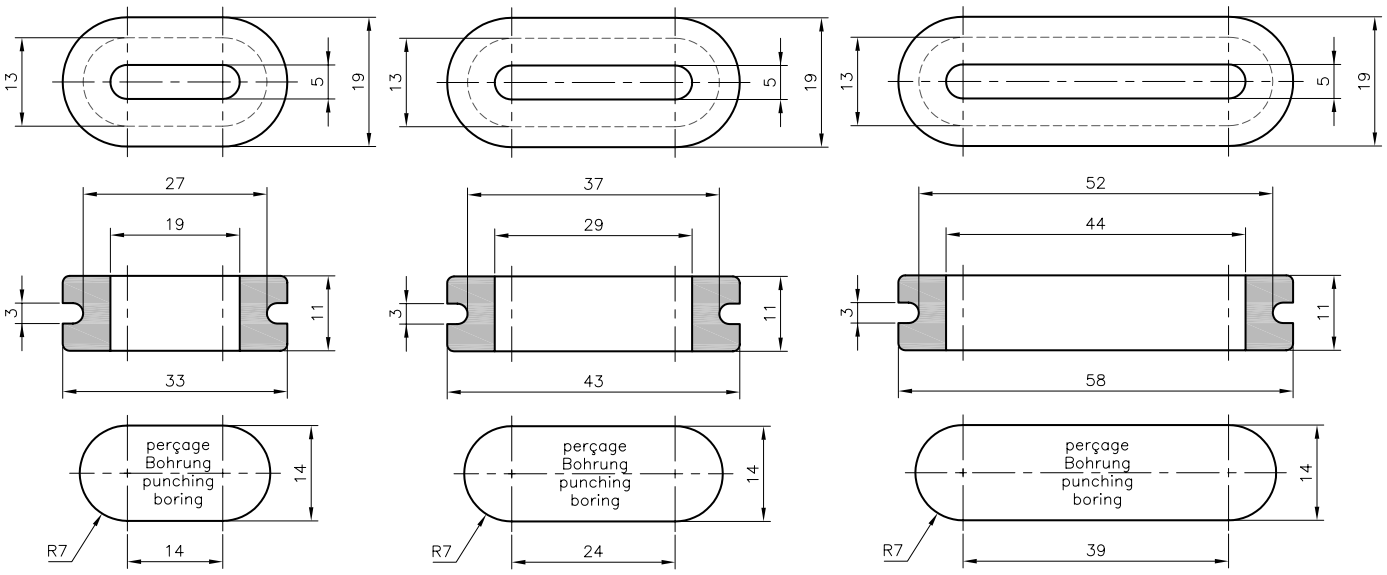
DO-PVC

Material:	flexible PVC
Colours:	black - grey
Operating temperatures:	-30 to +70°C
Hardness Shore A:	55 ± 5
Tensile strength at break:	8 MPa
Ultimate elongation:	> 250 %
Dielectric strength:	> 20 kV/mm
Specification:	HB UL94
Application:	for flat wire protection.



type	article number black 010	article number grey 013	
DO-PVC 19/27/33/3	0135 0001 010	0135 0001 013	100
DO-PVC 29/37/43/3	0135 0002 010	0135 0002 013	100
DO-PVC 44/52/58/3	0135 0003 010	0135 0003 013	100

If no colour is mentioned on the order, DO grommets will be supplied in grey.



DO 19/27/33/3
0135 0001 xxx

DO 29/37/43/3
0135 0002 xxx

DO 44/52/58/3
0135 0003 xxx

PLIO® membrane grommets DG
in flexible PVC

PLIO®

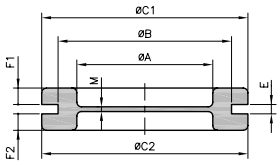
RoHS

DG-PVC

Material: flexible polyvinyl chloride
Colours: black - light grey (RAL 7035)
Operating temperatures: -30 to +70°C
Hardness Shore A: 55 ± 5
Tensile strength at break: 8 MPa
Ultimate elongation: > 250 %
Dielectric strength: > 20 kV/mm
Specification: HB UL94
Application: closure of unused entries.
They allow the passage of cables or conduits through the membrane by ensuring a dust free fit.



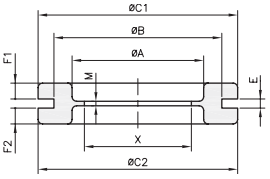
• Membrane grommets



type	article number black 010	article number grey 025	A	B	C1	C2	D	F1	F2	M	
			dimensions (mm)								
DG-PVC 9	0133 0351 010	0133 0351 025	9	15	20	18	2	2,5	2,5	1	100
DG-PVC 11	0133 0352 010	0133 0352 025	11	18	22,5	21,5	2	2,5	2,5	1	100
DG-PVC 13,5	0133 0353 010	0133 0353 025	13,5	20	24	24	2	2,5	2,5	1	100
DG-PVC 16	0133 0354 010	0133 0354 025	16	22	27,5	26	2	2,7	2,7	1	100
DG-PVC 16/E3	0133 0360 010	-	16	22	27,5	26	3	2,7	2,7	2	100
DG-PVC 21	0133 0355 010	0133 0355 025	21	28	34,5	34,5	2	3	3	1	100
DG-PVC 21/E1	0133 0359 010	-	21	28	34,5	34,5	1	4	3	1,2	100
DG-PVC 29	0133 0356 010	-	29	36,5	43	43	2,2	3,7	3,7	1,5	50
DG-PVC 36	0133 0357 010	-	35	46	52,5	52,5	2,5	3,8	3,8	1,3	50
DG-PVC 48	0133 0358 010	-	46,5	59	66,2	66,2	2,5	4	4	1,6	50
DG-PVC M20	0133 0510 010	0133 0510 025	13,5	20	24	24	2	2,5	2,5	1	100
DG-PVC M25	0133 0511 010	0133 0511 025	21	25	34,5	34,5	2	3	3	1	100
DG-PVC M32	0133 0512 010	0133 0512 025	29	32	43	43	2	3,5	3,5	1,5	100

• Cross-cut membrane grommets (other cut-outs possible upon request)





type	article number 010	A	B	C1	C2	D	F1	F2	X	M	
		dimensions (mm)									
DGC-PVC 9	0133 0451 010	9	15	20	18	2	2,5	2,5	8	1	100
DGC-PVC 11	0133 0452 010	11	18	22,5	21,5	2	2,5	2,5	10	1	100
DGC-PVC 13,5	0133 0453 010	13,5	20	24	24	2	2,5	2,5	10	1	100
DGC-PVC 16	0133 0454 010	16	22	27,5	26	2	2,7	2,7	14	1	100
DGC-PVC 21	0133 0455 010	21	28	34,5	34,5	2	3	3	17	1	100
DGC-PVC 21/E1	0133 0456 010	21	28	34,5	34,5	1	4	3	19,5	1,2	100
DGC-PVC 29	0133 0457 010	29	36,5	43	43	2,2	3,7	3,7	25	1,5	50
DGC-PVC 36	0133 0458 010	35	46	52,5	52,5	2,5	3,8	3,8	32	1,3	50
DGC-PVC 48	0133 0464 010	46,5	59	66,2	66,2	2,5	4	4	42	1,6	50

PLIO® membrane grommets DG
in flexible PVC

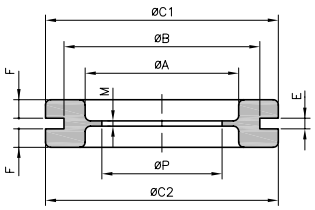
PLIO®

RoHS

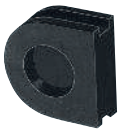
• Grommets with perforated membrane (other cut-outs possible upon request)



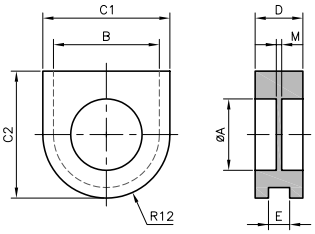
type	article number	dimensions (mm) A	B	C1	C2	E	F	M	P	
DG-PVC 11/4,5	0133 0402 010	11	18	22,5	21,5	2	2,5	1	4,5	100
DG-PVC 16/7 E3	0133 0412 010	16	22	27,5	26	3	2,7	2	7	100



• Special membrane grommets



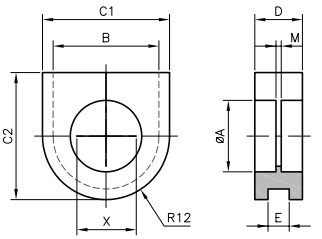
type	article number	dimensions (mm) A	B	C1	C2	D	F	M	
DG-PVC 14-747	0133 0101 010	13,5	20	24	24	9	4	1	100
DG-PVC 14-1475	0133 0102 010	13,5	20	24	24	9	2	1	100



• Cross-cut membrane grommets cut



type	article number	dimensions (mm) A	B	C1	C2	D	F	M	P	
DGC-PVC 14-747/F	0133 0459 010	13,5	20	24	24	9	4	1	12	100
DGC-PVC 14-1475/F	0133 0460 010	13,5	20	24	24	9	2	1	12	100

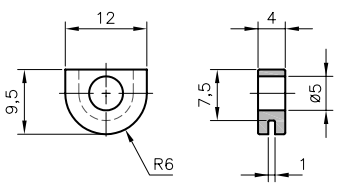


• Special grommets

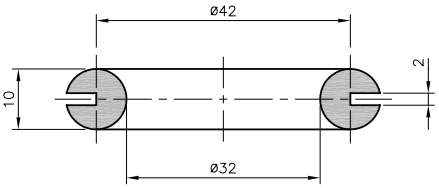
type	article number	
14-1461 PVC	0133 0103 010	100
14-1480 PVC	0133 0463 010	50







14-1461
0133 0103 010



14-1480
0133 0463 010

DG-MS

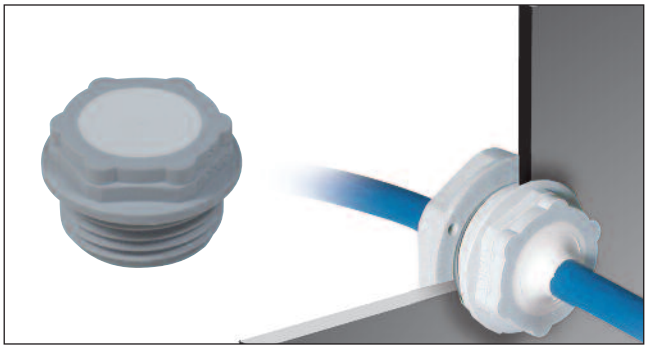
Materials: polypropylene
thermoplastic elastomer (TPE)

Colour: light grey (RAL 7035)

Operating temperatures: -30 to +80°C

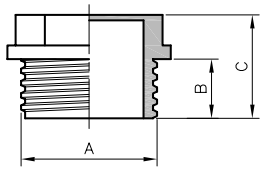
Protection rating: IP 66 according to EN 60 529

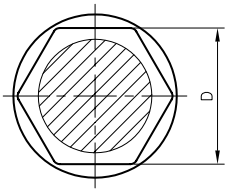
Application: hexagonal membrane grommet with screw thread that allows single cables, flat cables or several cables of small diameters to pass through it.



Delivered without lock-nut.

type	article number	cable max. (mm)	A mm	B mm	C mm	D mm	boring mm	pces
DG-MS 16	0133 0601 025	9	M16 x 1,5	9	15	17	16,5	100
DG-MS 20	0133 0602 025	13	M20 x 1,5	9	15	20	20,5	100
DG-MS 25	0133 0603 025	18	M25 x 1,5	9	15	24	25,5	100
DG-MS 32	0133 0604 025	25	M32 x 1,5	9	15	32	32,5	100





A8/2-03



DG-MT

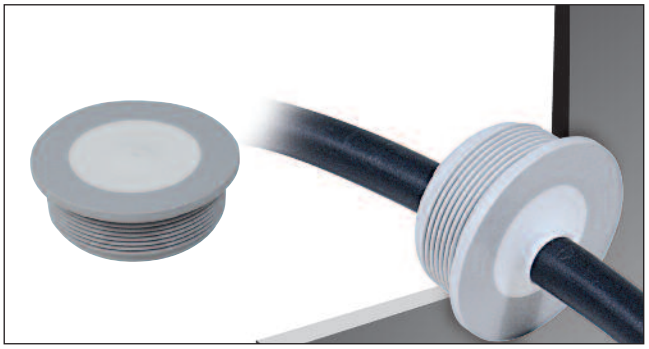
Materials: polyethylene
thermoplastic elastomer (TPE)

Colour: light grey (RAL 7035)

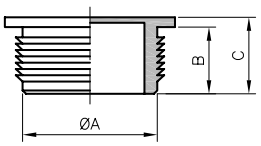
Operating temperatures: -40 to +80°C

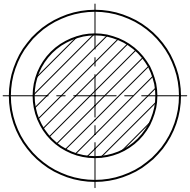
Protection rating: IP 66 according to EN 60 529

Application: round membrane grommet in TPE to clip in that allows single cables, flat cables or several cables of small diameters to pass through it.



type	article number	cable max. (mm)	A mm	B mm	C mm	boring mm	pces
DG-MT 16	0133 0611 025	9	16	9,5	11	16,5	100
DG-MT 20	0133 0612 025	13	20	9,5	11	20,5	100
DG-MT 25	0133 0613 025	18	25	9,5	11	25,5	100
DG-MT 32	0133 0614 025	25	32	9,5	11	32,5	100





PLIOFIX

Material: TPE and Polyamide 6.6

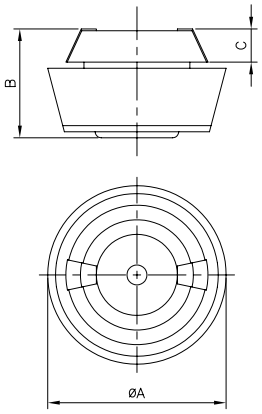
Colours: black
grey (RAL 7035)

Operating temperatures: -20 to +125°C

Protection rating: IP 65 / IP 67

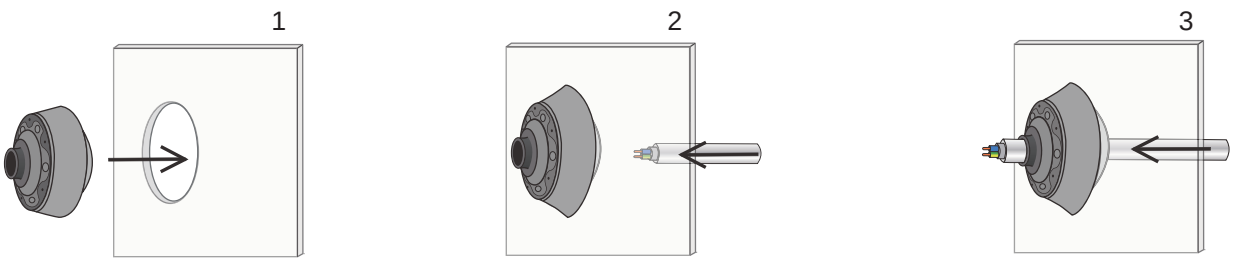
Application: they allow the passage of cables or conduits through their membranes allowing a dust free fit. They combine the advantages of grommets and a gland. They are in particular compact parts offering ease of use and speedy assembly.





type	article number black 010	article number grey 025	cable-mm IP 65	cable-mm IP 67	hole-mm	metal thickness mm	A mm	B mm	C mm	pces
PLIOFIX M20	0144 0603 010	0144 0603 025	4-11	7-11	20,5	2-5	29,3-34,5	17-20	5,7	50
PLIOFIX M25	0144 0604 010	0144 0604 025	4-13	7-13	25,5	2-5	34,3-40	17-20	5,7	50

Instructions

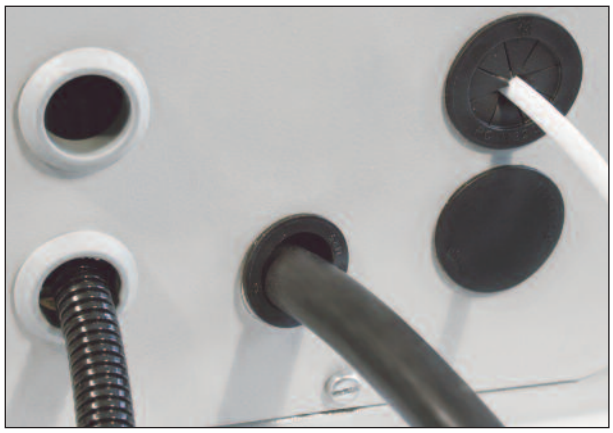


PLIOCAP

Materials:	PE	PP	PA6.6
Temperatures (°C):	-50 to +85	-40 to +85	-40 to +110
Self-extinguishing:	-	-	V2 UL94
Dielectric strength (kV/mm):	>16	>20	26
Colours:	black - grey		

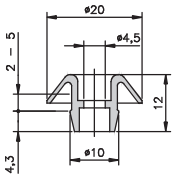
Application: The grommets change angular holes into fully isolated clean and smooth openings.They isolate and protect electric cables passing through a wall. The general version (PC -U) allows cables from Ø 2,6 to 25,2 mm passing through it.

The caps (PC -F) designed to close off unused entries. Simple, fast and safe use.

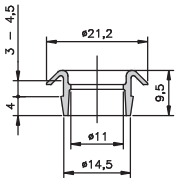


• Grommets (difficult to remove)

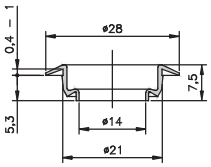
type	article number black 010	article number grey 013	quality PE	quality PP	dimensions (mm) punching	dimensions (mm) cable	dimensions (mm) wall width	
PC 4,5	0143 0004 010	0143 0004 013	X		10	4,5	2 - 5	500
PC 11	0143 0002 010	0143 0002 013	X		14,5	11	3 - 4,5	500
PC 14	0143 0001 010	0143 0001 013		X	21	14	0,4 - 1	500
PC 20	0143 0003 010	0143 0003 013		X	23	20	0,6 - 3	100



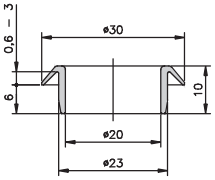
PC 4,5



PC 11



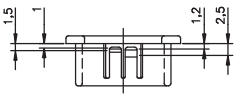
PC 14

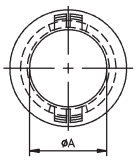


PC 20

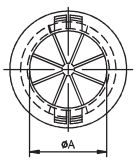
• Grommets (easy removal) - Quality PA 6.6

type	article number black 010	article number grey 013	dimensions (mm) punching	dimensions (mm) A	dimensions (mm) wall width	
Standard grommets						
PC M16	0143 0010 010	0143 0010 013	16	12,2	1 - 2,5	100
PC M20	0143 0012 010	0143 0012 013	20	16,2	1 - 2,5	100
PC M25	0143 0014 010	0143 0014 013	25	20,2	1 - 2,5	50
PC M32	0143 0016 010	0143 0016 013	32	25,2	1 - 2,5	50
Universal grommets						
PC M16-U	0143 0018 010	0143 0018 013	16	12,2	1 - 2,5	100
PC M20-U	0143 0019 010	0143 0019 013	20	16,2	1 - 2,5	100
PC M25-U	0143 0020 010	0143 0020 013	25	20,2	1 - 2,5	50
PC M32-U	0143 0021 010	0143 0021 013	32	25,2	1 - 2,5	50
Caps						
PC M16-F	0143 0011 010	0143 0011 013	16	-	1 - 2,5	100
PC M20-F	0143 0013 010	0143 0013 013	20	-	1 - 2,5	100
PC M25-F	0143 0015 010	0143 0015 013	25	-	1 - 2,5	50
PC M32-F	0143 0017 010	0143 0017 013	32	-	1 - 2,5	50

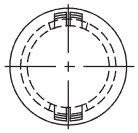




PC M



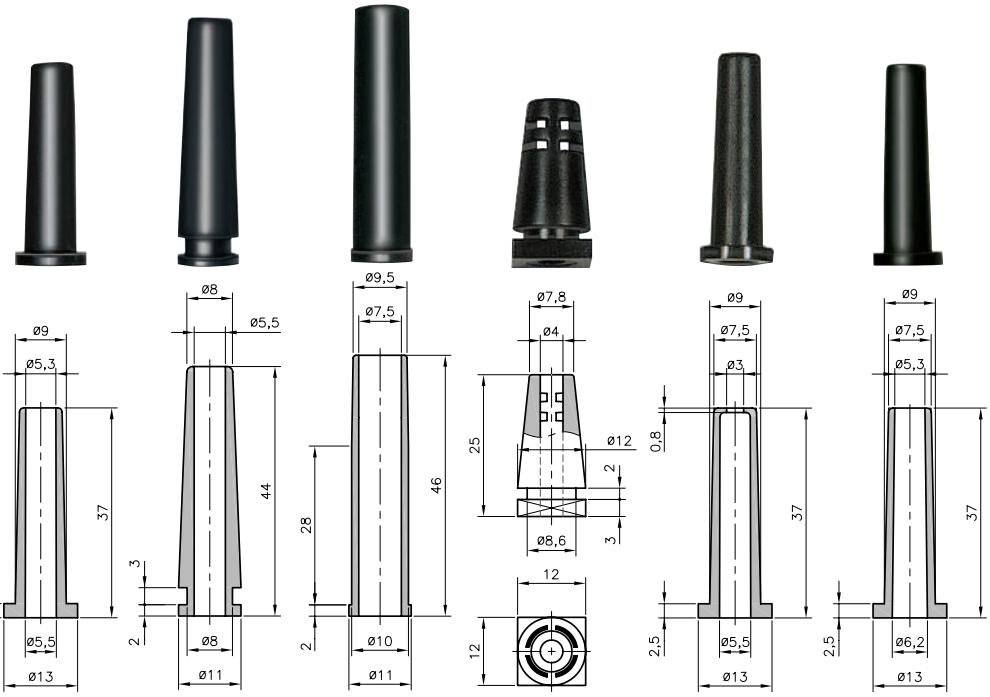
PC M-U


PC M-F

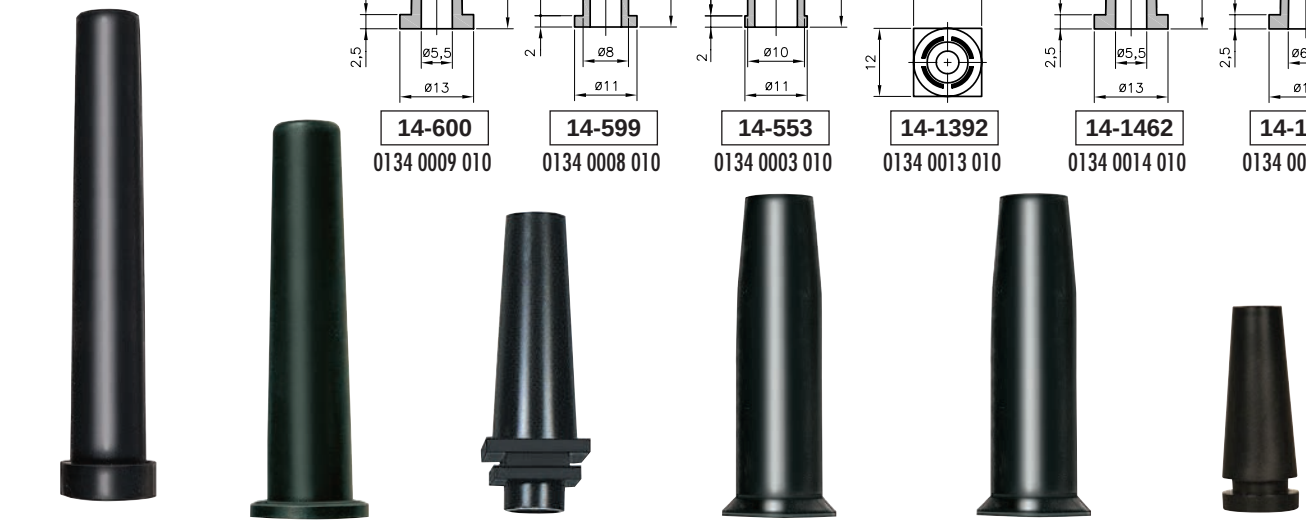
PLIO® strain relief grommets
in flexible PVC

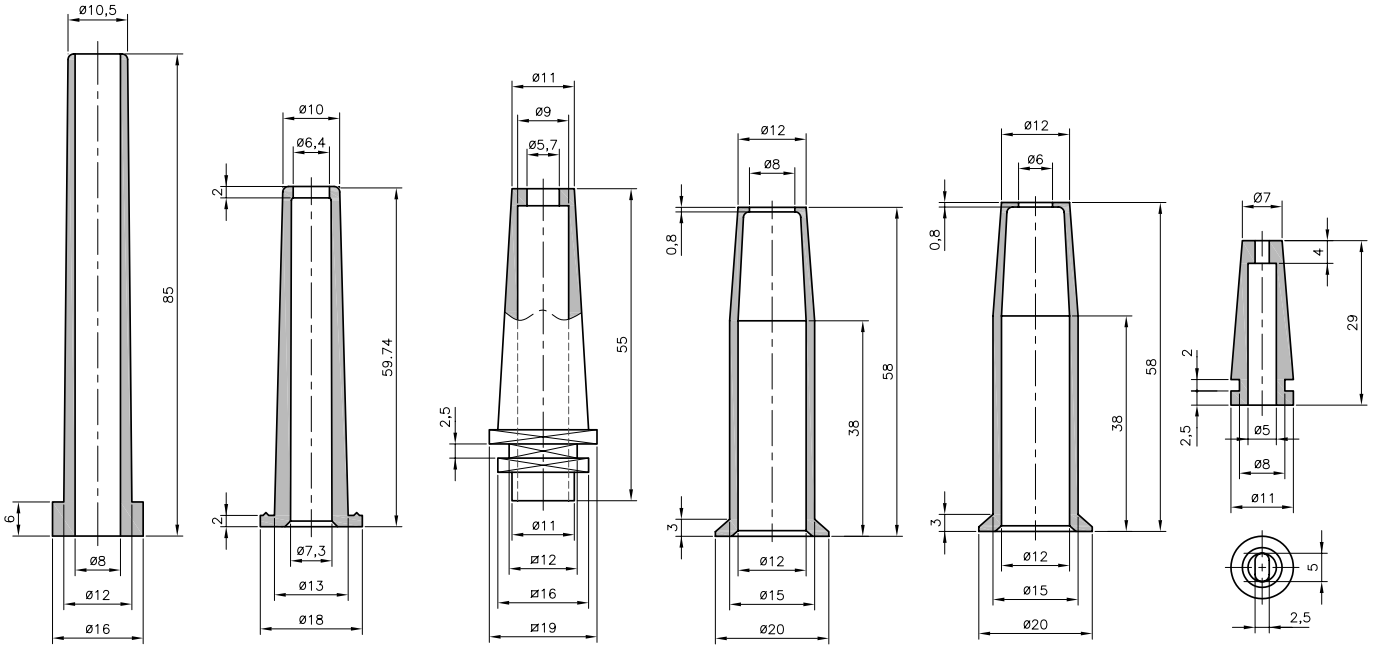
PLIO®
-30 to +70°C
RoHS

type	article number	
14-552 PVC	0134 0002 010	100
14-553 PVC	0134 0003 010	100
14-598 PVC	0134 0007 010	100
14-599 PVC	0134 0008 010	100
14-600 PVC	0134 0009 010	100
14-1372 PVC	0134 0011 010	50
14-1374 PVC	0134 0012 010	100
14-1392 PVC	0134 0013 010	100
14-1459 PVC	0134 0016 010	100
14-1462 PVC	0134 0014 010	100
14-1466 PVC	0134 0018 010	100
14-1584 PVC	0134 0019 010	100



14-600 0134 0009 010 | **14-599** 0134 0008 010 | **14-553** 0134 0003 010 | **14-1392** 0134 0013 010 | **14-1462** 0134 0014 010 | **14-1466** 0134 0018 010





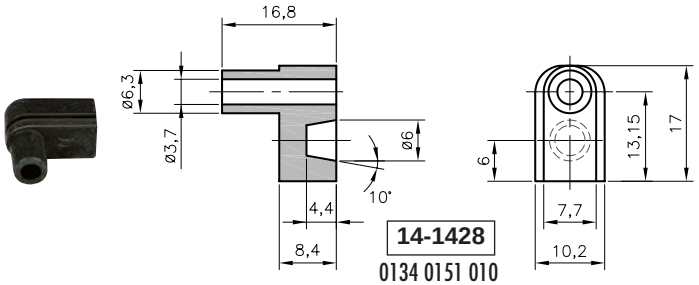
14-598 0134 0007 010 | **14-1459** 0134 0016 010 | **14-1372** 0134 0011 010 | **14-552** 0134 0002 010 | **14-1584** 0134 0019 010 | **14-1374** 0134 0012 010

PLIO® strain relief bushes
in flexible PVC

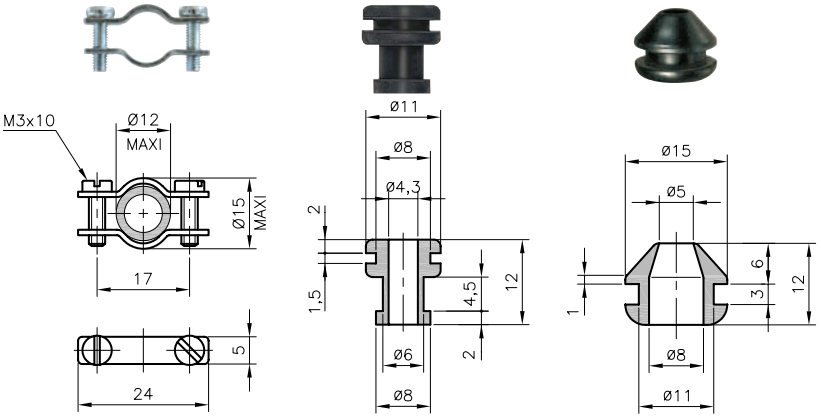
PLIO®
-30 to +70°C

RoHS

type	article number	
Protective strain relief bushes PLIO in PVC		
14-542 PVC	0134 0001 010	100
14-581 PVC	0134 0004 010	100
14-582 PVC	0134 0005 010	100
14-583 PVC	0134 0006 010	100
14-908 PVC	0134 0010 010	100
Metal clamp for bushes 14-542, 14-582, 14-583, 14-908		
16-900	0684 0054 000	100
Special strain relief bushes PLIO		
14-1431 PVC	0134 0102 010	100
Strain relief bushes PLIO		
14-1017 PVC	0132 0910 010	100
14-1428 PVC	0134 0151 010	100



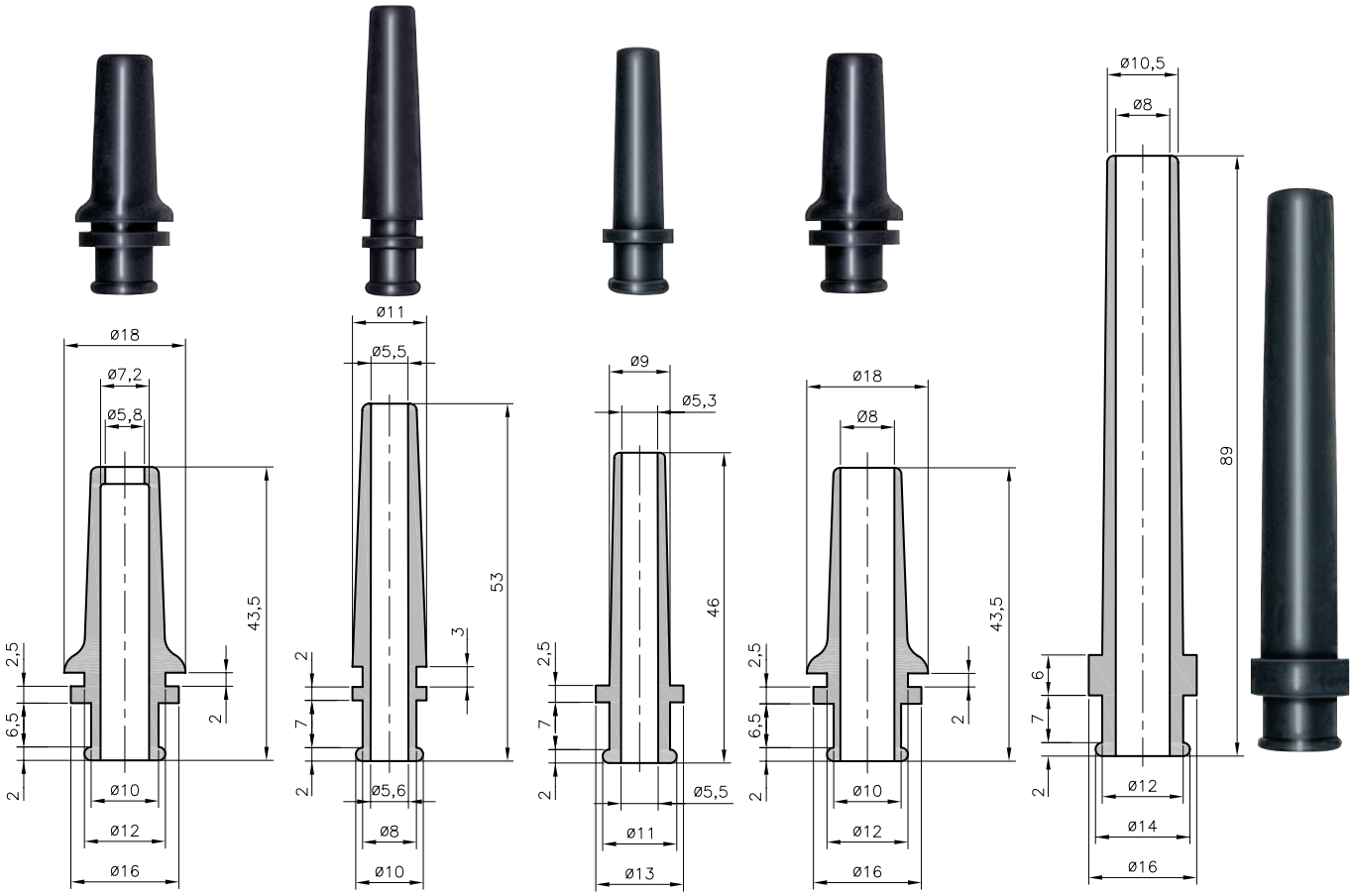
14-1428
0134 0151 010



16-900
0684 0054 000

14-1017
0132 0910 010

14-1431
0134 0102 010



14-542
0134 0001 010

14-582
0134 0005 010

14-583
0134 0006 010

14-908
0134 0010 010

14-581
0134 0004 010

SES® strain relief bushes DM

in Polyamide 6 black and white

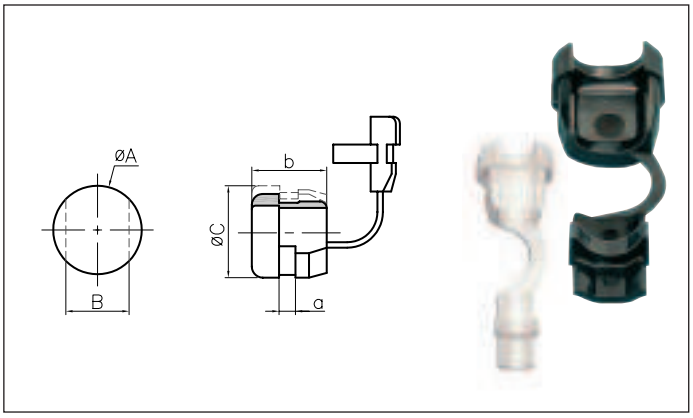
for torsional protection

DM-SES®

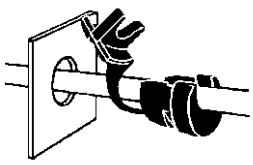
DM-SES

Material: polyamide 6
Colours: black - white
Operating temperature: -20 to +70°C
Tensile strength at break: 80 MPa
Ultimate elongation: > 50%
Dielectric strength: 60 kV/mm
Flame resistance: V2 UL94 (internal test)

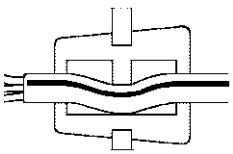
Application: for passing a cable through a wall with cable clamp.



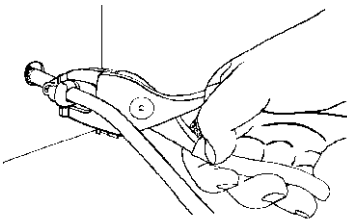
type	art. no. black	art. no. white	dimensions of the cables (mm) Ø PVC insulation	dimensions of the cables (mm) Ø rubber insulation	dimensions (mm) bore Ø A	B	a	b	Ø C	
	010	001								
round cables										
DM 2	0131 0012 010	0131 0012 001	3 ... 4,5	3 ... 4,5	9,5	8,5	1,7	10,3	11	100
DM 2L	0131 0032 010	0131 0032 001	3 ... 4,5	3 ... 4,5	9,5	8,5	3,1	10,3	11	100
DM 4	0131 0001 010	0131 0001 001	5 ... 6,5	5 ... 7	13	11,5	2,5	12	14	100
DM 5	0131 0010 010	0131 0010 001	6,5 ... 7,5	6,5 ... 7,5	13	11,5	2,5	11	14	100
DM 6	0131 0002 010	0131 0002 001	6,6 ... 8	7,1 ... 9	16	14	3,5	17	18	100
DM 7	0131 0003 010	0131 0003 001	8,1 ... 10	9,1 ... 11	22,5	21	3,2	20	25	100
DM 8	0131 0004 010	0131 0004 001	10,1 ... 12,5	11,1 ... 14	22,5	21	3,6	22	22	100
			H x W	H x W	Ø A	B	a	b	Ø C	
flat cables										
DM 2P	0131 0022 010	0131 0022 001	3 x 5	3 x 5	9,5	8,5	1,7	10,3	11	100
DM 2LP	0131 0042 010	0131 0042 001	3 x 5	3 x 5	9,5	8,5	3,1	10,3	11	100
DM 4P	0131 0020 010	0131 0020 001	3 x 7,6	3,8 x 7,1	13	11,5	2,8	10,5	14	100
DM 6P	0131 0021 010	0131 0021 001	5 x 9	5 x 9	16	14	3	17	18	100



Round bore (ØA)
For torsional protection of strain relief grommets, an oblong bore (B) is required.



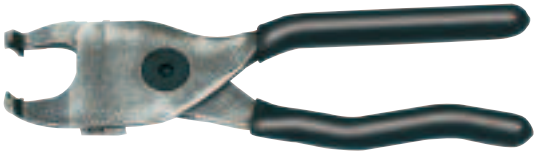
principle of cable clamping



• DM application tool

Rack and pinion pliers with adjustable jaws to apply all types of strain relief grommets DM-SES for small or mid-sized series.

type	article number	characteristics length (mm)	characteristics weight (g)	
R 29	0655 0001 000	180	270	1



PLIO® terminal boots

PLIO®

PLIO-PVC

Material:	PVC
Operating temperature:	-25 to +75°C
Hardness Shore A:	70 +/- 5
Ultimate elongation:	350%
Dielectric strength:	>20 kV/mm
Flame resistance:	HB UL94



Standard colours:

010	011	001	002	003	004	005	006	007	008	013
black	transparent	white	blue	green	yellow	orange	brown	red	violet	grey

Example for order:

code group		detail article					code colours		
0	1	0	5	0	x	x	x	x	x

type	article number black 010	article number transparent 011	colours xxx	for clips	cable Ø mm	length of the boot mm	
for female push-on-terminals (right)							
B-3 PVC	0105 0007 010	0105 0007 011	0105 0007 ***	2,8	2,8	5,5	500
B-4 PVC	0105 0022 010	0105 0022 011	0105 0022 ***	4,8	3,2	7	500
B-5 PVC	0105 0003 010	0105 0003 011	0105 0003 ***	5 AMP	4,5	8	500
B-6 PVC	0105 0001 010	0105 0001 011	0105 0001 ***	6,3	3,6	8	500
BL-6 PVC	0105 0010 010	0105 0010 011	-	6,3	3,2	11	500
BK-6 PVC	0105 0011 010	0105 0011 011	-	6,3	3,2	6	500
B-PVC	0105 0004 010	0105 0004 011	0105 0004 ***	6,3	4	8	500
BM-6 PVC	0105 0012 010	0105 0012 011	-	6,3	5	11	500
BN-6 PVC	0105 0014 010	0105 0014 011	-	6,3	5	9	500
for male push-on-terminals (right)							
BW-6 PVC	0105 0002 010	0105 0002 011	0105 0002 ***	6,3	3,6	5,5	500
BF-6 PVC	0105 0023 010	0105 0023 011	0105 0023 ***	6,3	3,6	11	500
for female flag push-on-terminals							
BE-6 PVC	0105 0005 010	0105 0005 011	0105 0005 ***	6,3	3,6	13,7	500

B10/4 - Printed boots



D6/3-02 - Clips



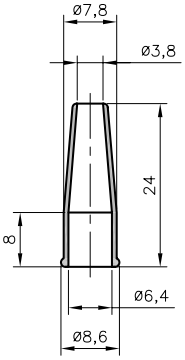


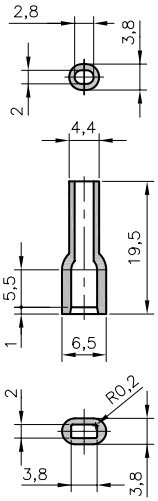


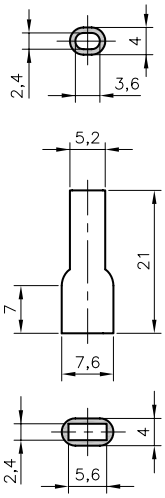


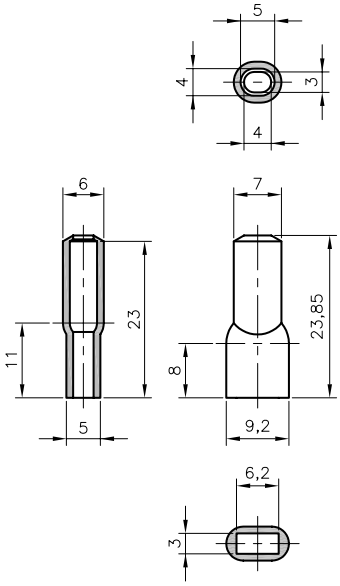


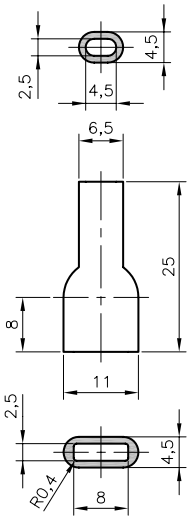












B
0105 0004 xxx

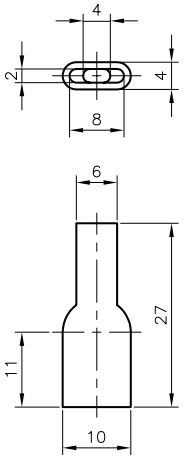
B-3
0105 0007 xxx

B-4
0105 0022 xxx

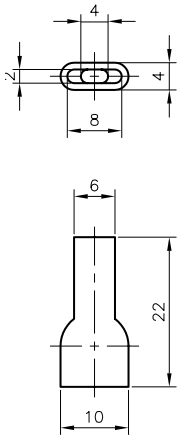
B-5
0105 0003 xxx

B-6
0105 0001 xxx

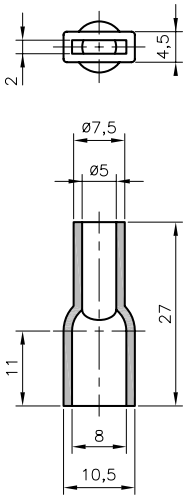




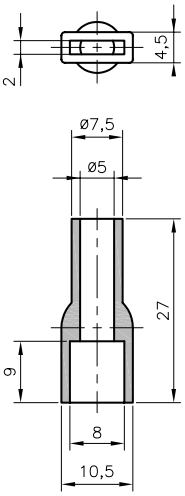












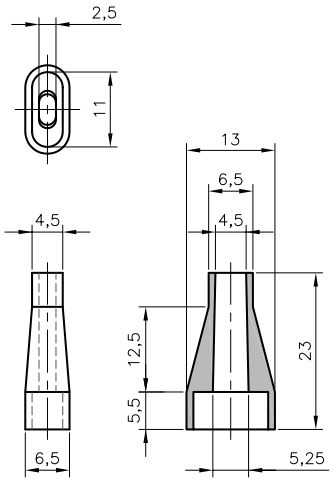
BL-6
0105 0010 xxx

BK-6
0105 0011 xxx

BM-6
0105 0012 xxx

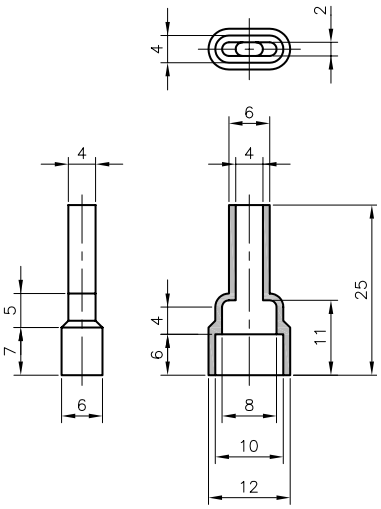
BN-6
0105 0014 xxx





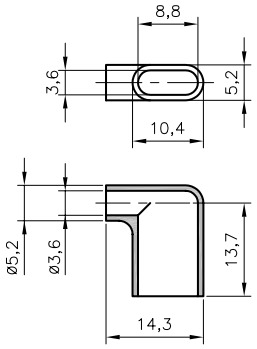
BW-6
0105 0002 xxx





BF-6
0105 0023 xxx





BE-6
0105 0005 xxx

PLIO® standard terminal boots
for special use

PLIO®

PLIO

Material:	**PE**	**PA 6**	**PA 6.6**	**PP**
Colours:	natural	natural	natural	natural or black
Operating temperature:	-50 to +85°C	-20 to +70°C	-40 to +110°C	-25 to +90°C
Ultimate elongation:	500%	>50%	300%	>150%
Dielectric strength:	-	60 kV/mm	26 kV/mm	50kV/mm
Flame resistance:	-	V2 UL94	V2 UL94	-



type	article number black 010	article number natural 018	for clips mm	cable Ø mm	length of the boot mm	pces
Terminale boots for straight female clips						
	PP	**PE**	**PA6**	**PA6.6**	**PP**	
BP-3	-	0105 0020 018	0105 0021 018	-	-	2,8	2,5	7,5	500
BP-6	-	0105 0008 018	0105 0009 018	-	-	6,3	-	9,5	500
Removable caps for female clips flags - assembly after crimping									
BXC-4	-	-	-	0105 0031 018	-	4,8	3,2	6,1	500
BX-6	0105 0018 010	0105 0017 018	-	0105 0016 018	-	6,3	3,2	11	500
BXC-6	0105 0026 010	0105 0024 018	-	0105 0025 018	0105 0026 018	6,3	3,2	8,5	500

B10/4 - Printed boots

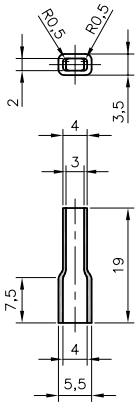
231

D6/3-02 - Clips



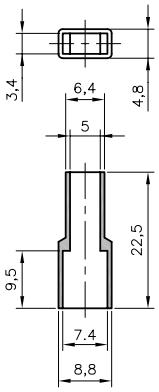
PLIO® standard terminal boots
for special use





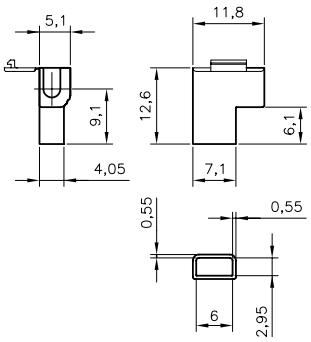
BP-3
0105 0020 018
0105 0021 018





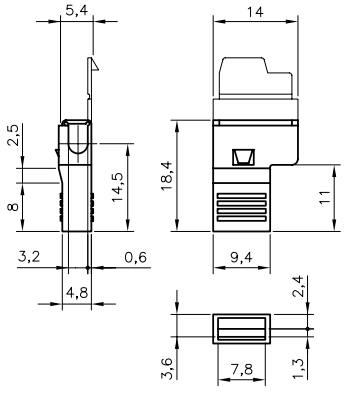
BP-6
0105 0008 018
0105 0009 018





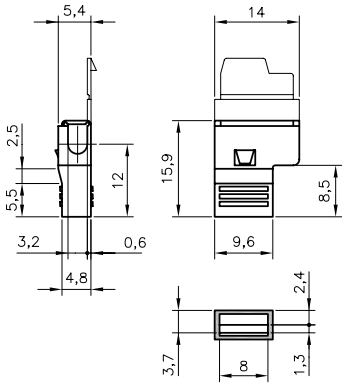
BXC-4
0105 0031 018





BX-6
0105 0016 018
0105 0017 018
0105 0018 010





BXC-6
0105 0024 018
0105 0025 018
0105 0026 xxx

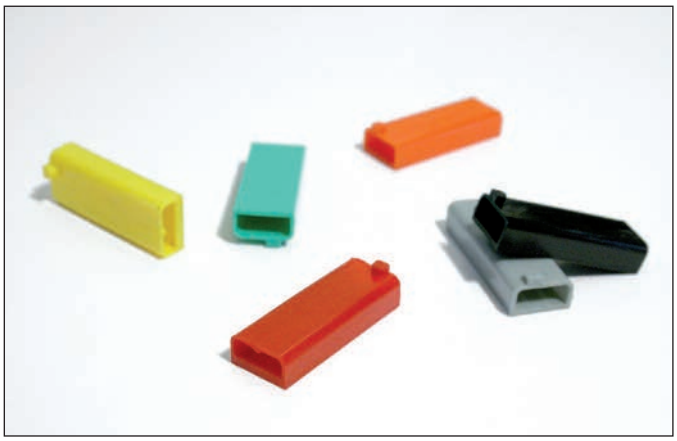
PLIO® standard terminal boots BA
for application after crimping

PLIO®

PLIO BA

Material:	polypropylene
Operating temperature:	-25 to +90°C (+120°C short time)
Ultimate elongation:	30%
Dielectric strength:	>20 kV/mm

Application: our PLIO-BA boots can be applied over precrimped terminals, therefore they can be used with confidence on automatic application machines.



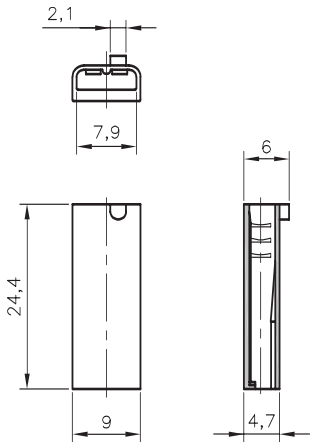
Standard colours:

001	002	003	004	005	006	007	010	013	015	017
white	blue	green	yellow	orange	brown	red	black	grey	pink	lila

Example for order:

code group				detail article				code colour		
0	6	5	1	0	0	0	1	x	x	x

type	article number	for clips mm	cable Ø mm	
BA-6 PP	0651 0001 ***	6,3	3,2	500



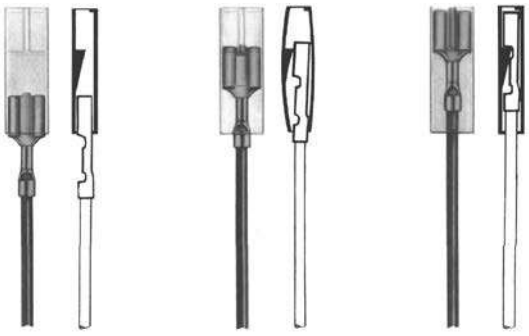
Standard colour:

018

natur

type	article number	for clips mm	cable Ø mm	
BA-6 PP nat.	0651 0002 018	6,3	3,2	500

Assembly instruction



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