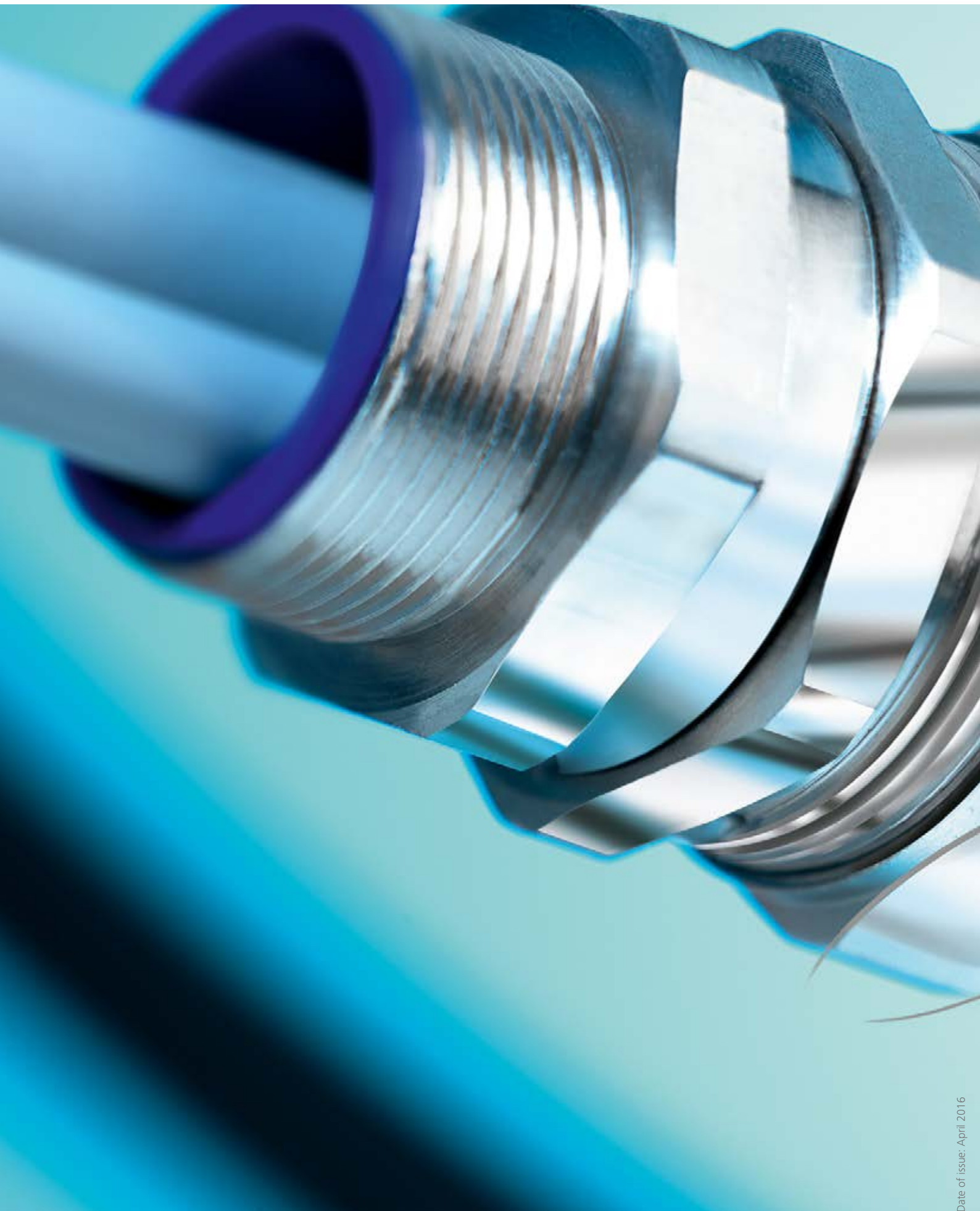
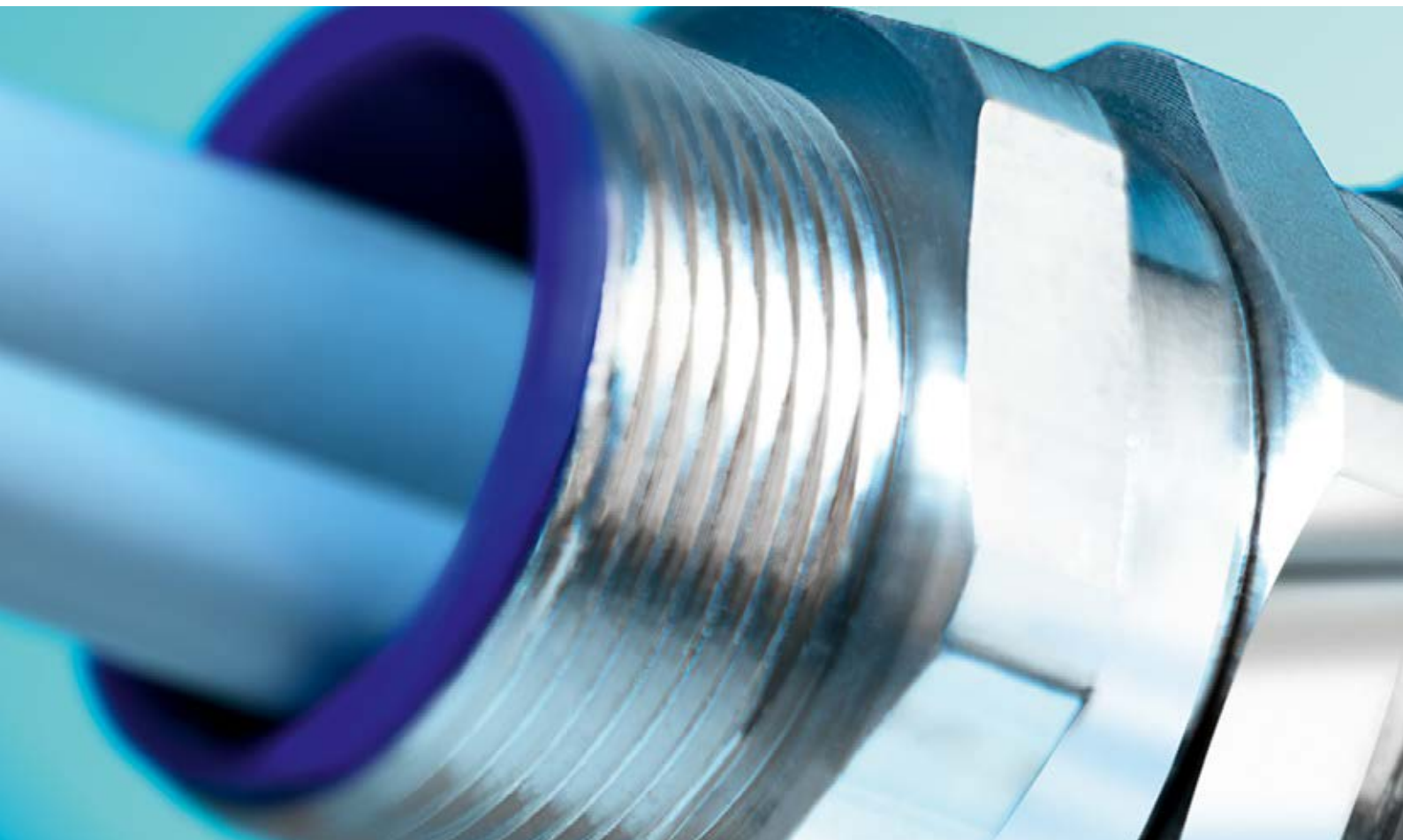




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HelaGuard Flexible Conduits and Fittings



For more information on our complete HelaGuard range of non-metallic and metallic conduits and fittings, please see our new HelaGuard catalogue.

**Order your
HelaGuard catalogue
today!**





Non-Metallic Conduits

HG-SW PA6 Standard Weight

Machine building, plant construction, control panels, public buildings.

Features and Benefits

- Very flexible and high fatigue life
- Very abrasion resistant
- High impact strength, recovers if crushed
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Low smoke and low toxicity
- Self-extinguishing according to UL94 V2
- Colour: black (UV resistant); grey on request

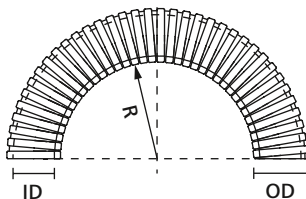


HelaGuard PA6 Standard for industrial applications.



One Step to the Web!

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL94 V2
Specifications	IEC 61386, Lloyd's Register, UL-Recognised



HelaGuard non-metallic conduit



CAD download

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
HG-SW10	10	7.5	10.0	6.3	15	19	50 m	Black (BK)	166-11100
HG-SW11	11	8.5	11.5	8.2	20	22	50 m	Black (BK)	166-11101
HG-SW13	13	10	13.0	9.8	25	28	50 m	Black (BK)	166-11102
HG-SW16	16	12	15.8	11.8	35	38	25 m	Black (BK)	166-11110
	16	12	15.8	11.8	35	38	50 m	Black (BK)	166-11103
HG-SW21	21	17	21.2	16.7	45	60	25 m	Black (BK)	166-11111
	21	17	21.2	16.7	45	60	50 m	Black (BK)	166-11104
HG-SW28	28	23	28.5	22.8	50	100	25 m	Black (BK)	166-11105
	28	23	28.5	22.8	50	100	50 m	Black (BK)	166-11112
HG-SW34	34	29	34.5	28.1	60	135	25 m	Black (BK)	166-11106
	34	29	34.5	28.1	60	135	50 m	Black (BK)	166-11118
HG-SW42	42	36	42.5	35.5	70	165	25 m	Black (BK)	166-11113
HG-SW54	54	48	54.5	47.2	80	235	25 m	Black (BK)	166-11114
HG-SW67	67	56	67.2	56.3	130	365	10 m	Black (BK)	166-11109

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Non-Metallic Conduits

HG-LW PA6 Light Weight

Machine building, plant construction, control panels and public buildings, wherever lower mechanical protection is required.

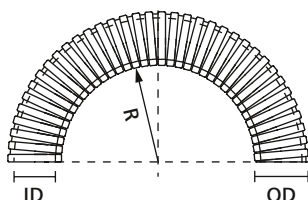
Features and Benefits

- Light weight
- Very flexible and high fatigue life
- Small bending radius
- High impact strength and recovers if crushed
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Colour: black; grey (RAL 7031) on request



HelaGuard PA6 Light is very flexible and can be used in moving applications.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	self-extinguishing according to EN IEC 61386
Specifications	IEC 61386, UL-Recognised



HelaGuard non-metallic conduit

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
HG-LW10	10	7.5	10.0	6.5	15	18	50 m	Black (BK)	166-11200
HG-LW11	11	8.5	11.5	8.4	20	22	50 m	Black (BK)	166-11201
HG-LW13	13	10	13.0	9.8	25	24	50 m	Black (BK)	166-11202
HG-LW16	16	12	15.8	11.8	35	36	50 m	Black (BK)	166-11203
HG-LW21	21	17	21.2	16.7	40	56	50 m	Black (BK)	166-11204
HG-LW28	28	23	28.5	23	45	90	50 m	Black (BK)	166-11205
HG-LW34	34	29	34.5	28.1	55	110	50 m	Black (BK)	166-11206
HG-LW42	42	36	42.5	35.5	65	150	25 m	Black (BK)	166-11207
HG-LW54	54	48	54.5	47.2	80	200	25 m	Black (BK)	166-11208
HG-LW67	67	56	67.2	56.5	110	310	10 m	Black (BK)	166-11209

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Non-Metallic Conduits

HG-FR PA6 Flame Retardant

Railway vehicles, railway tunnels, underground stations and public buildings, where high fire protection is required.

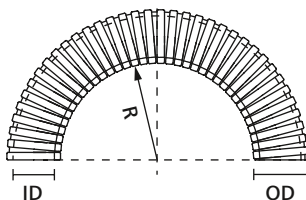
Features and Benefits

- Highly flame retardant (UL94 V0)
- Low smoke, low toxicity
- Very flexible and high fatigue life
- High impact strength, recovers if crushed
- Abrasion resistant
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Colour: black (UV resistant)



Public buildings often require HelaGuard PA6 Flame Retardant due to its high fire protection properties.

MATERIAL	Polyamide 6, flame retardant (PA6-FR)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL94 V0
Specifications	CEN TS 45545-2: 2009, IEC 61386, UL-Recognised



HelaGuard non-metallic conduit

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
HG-FR10	10	7.5	10.0	6.3	15	19	50 m	Black (BK)	166-11400
HG-FR13	13	10	13.0	9.8	25	28	50 m	Black (BK)	166-11401
HG-FR16	16	12	15.8	11.8	35	38	50 m	Black (BK)	166-11402
HG-FR21	21	17	21.2	16.7	45	60	50 m	Black (BK)	166-11403
HG-FR28	28	23	28.5	21.7	50	100	50 m	Black (BK)	166-11404
HG-FR34	34	29	34.5	28.1	60	135	50 m	Black (BK)	166-11405
HG-FR42	42	36	42.5	35.5	70	165	25 m	Black (BK)	166-11406
HG-FR54	54	48	54.5	47.2	80	235	25 m	Black (BK)	166-11407

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Non-Metallic Conduits

HG-DC Double Slit

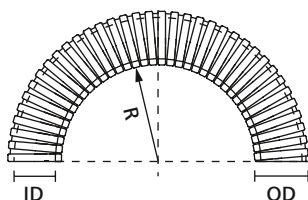
Control panels, machine building, plant construction and wherever retrofitting is a requirement.

Features and Benefits

- Can be opened and closed repeatedly
- Cables can be inserted laterally
- Abrasion resistant
- Free of halogen, sulphur and phosphorus
- Self-extinguishing to IEC 61386
- Colour: black



HelaGuard HG-DC double slit conduit is ideal for retrofitting.



HelaGuard non-metallic conduit

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Flammability	UL94 V2
Specifications	IEC 61386



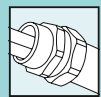
TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
HG-DC11	11	8.5	11.5	6.2	45	23	50 m	Black (BK)	166-11800
HG-DC13	13	10	13.0	7.9	55	37	50 m	Black (BK)	166-11801
HG-DC16	16	12	15.8	10.3	60	41	50 m	Black (BK)	166-11802
HG-DC21	21	17	21.2	13.9	90	63	50 m	Black (BK)	166-11803
HG-DC28	28	23	28.5	20.5	105	94	50 m	Black (BK)	166-11804
HG-DC34	34	29	34.5	26.6	150	118	25 m	Black (BK)	166-11805
HG-DC42	42	36	42.5	34.8	170	193	25 m	Black (BK)	166-11806
HG-DC54	54	48	54.5	45.3	170	263	25 m	Black (BK)	166-11807

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Fittings with fixed external thread

HG-S Straight, IP66

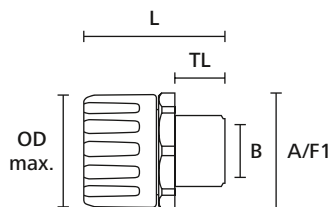
Straight external thread.

Features and Benefits

- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



Fittings with UNEF and NPT threads available on request. Please contact us!



HeliaGuard fitting, straight with fixed external thread



HeliaGuard HG-S Straight, IP66.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2
Specifications	UL-Recognised



TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG10-S-M12	10	M12	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21000
HG10-S-M16	10	M16	9.5	19	35	19	11	10 pcs.	Black (BK)	166-21020
HG11-S-M12	11	M12	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21021
HG13-S-M12	13	M12	7.5	24	35	23	9	10 pcs.	Black (BK)	166-21022
HG13-S-M16	13	M16	11.0	24	37	23	11	10 pcs.	Black (BK)	166-21001
HG13-S-M20	13	M20	12.5	24	40	23	14	10 pcs.	Black (BK)	166-21023
HG16-S-M16	16	M16	11.0	29	41	28	11	10 pcs.	Black (BK)	166-21002
HG16-S-M20	16	M20	14.5	29	34	28	14	10 pcs.	Black (BK)	166-21003
HG20-S-M20	20	M20	14.5	32	44	30	14	10 pcs.	Black (BK)	166-21025
HG21-S-M20	21	M20	14.5	32	44	30	14	10 pcs.	Black (BK)	166-21004
HG25-S-M25	25	M25	19.5	39	49	37	15	10 pcs.	Black (BK)	166-21026
HG28-S-M25	28	M25	19.5	44	49	42	15	10 pcs.	Black (BK)	166-21005
HG28-S-M32	28	M32	26.5	44	50	42	16	10 pcs.	Black (BK)	166-21027
HG34-S-M32	34	M32	26.5	51	53	49	16	10 pcs.	Black (BK)	166-21006
HG34-S-M40	34	M40	32.5	51	53	49	16	10 pcs.	Black (BK)	166-21028
HG42-S-M40	42	M40	32.5	63	60	60	16	2 pcs.	Black (BK)	166-21007
HG42-S-M50	42	M50	40.5	63	60	60	16	2 pcs.	Black (BK)	166-21029
HG54-S-M50	54	M50	42.0	76	65	73	16	2 pcs.	Black (BK)	166-21008
HG54-S-M63	54	M63	53.0	76	65	73	16	2 pcs.	Black (BK)	166-21030
HG67-S-M63	67	M63	56.0	90	70	87	16	1 pcs.	Black (BK)	166-21009

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



CAD download



Fittings with fixed external thread

HG-90 90° Elbow, IP66

90° elbow external thread.

Features and Benefits

- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



HelaGuard HG-90 90° Elbow, IP66.

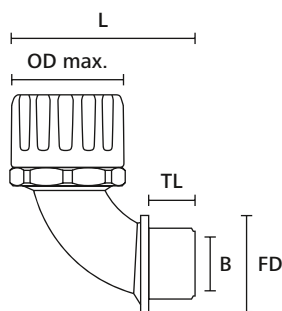


Fittings with UNEF and NPT threads available on request. Please contact us!

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2
Specifications	UL-Recognised

HF ✓

RoHS ✓



HelaGuard fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG10-90-M12	10	M12	6.5	19	32	17	8	10 pcs.	Black (BK)	166-22200
HG11-90-M12	11	M12	6.5	19	32	17	8	10 pcs.	Black (BK)	166-22220
HG13-90-M16	13	M16	10.5	24	46	22	11	10 pcs.	Black (BK)	166-22201
HG16-90-M16	16	M16	10.5	29	49	22	11	10 pcs.	Black (BK)	166-22202
HG16-90-M20	16	M20	14.0	29	51	27	13	10 pcs.	Black (BK)	166-22203
HG21-90-M20	21	M20	14.0	32	53	27	13	10 pcs.	Black (BK)	166-22204
HG25-90-M25	25	M25	19.0	39	63	32	15	10 pcs.	Black (BK)	166-22222
HG28-90-M25	28	M25	19.0	44	66	32	15	10 pcs.	Black (BK)	166-22205
HG34-90-M32	34	M32	24.5	51	75	40	16	10 pcs.	Black (BK)	166-22206
HG42-90-M40	42	M40	32.5	63	98	50	16	2 pcs.	Black (BK)	166-22207
HG42-90-M50	42	M50	39.0	63	99	60	16	2 pcs.	Black (BK)	166-22223
HG54-90-M50	54	M50	39.0	76	104	60	16	2 pcs.	Black (BK)	166-22208
HG54-90-M63	54	M63	49.5	76	104	72	16	2 pcs.	Black (BK)	166-22224
HG67-90-M63	67	M63	49.5	90	120	72	16	1 pcs.	Black (BK)	166-22209

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Metallic conduits

SC Galvanised Steel Conduit

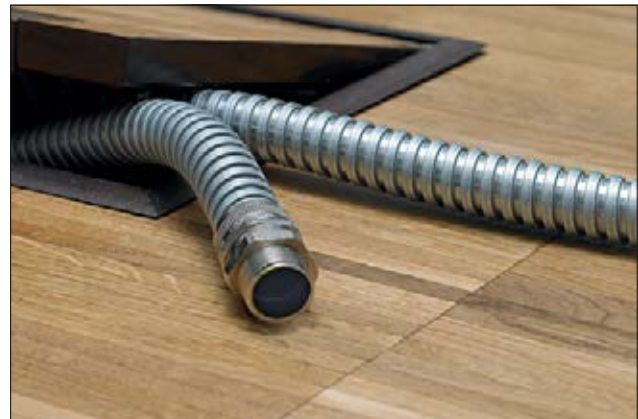
General purpose flexible steel conduit offers high mechanical protection and is typically used in machines, plants, underfloor wiring, data cabling and protection of hydraulic or pneumatic conduits.

Features and Benefits

- High compression, tensile and impact strength
- Very flexible

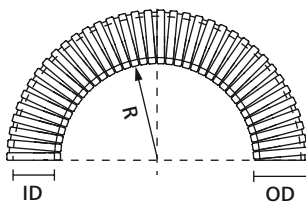


One Step to the Web!



Helaguard SC Galvanised Steel Conduit.

MATERIAL	Galvanised Steel (GS)
Operating Temperature	-100 °C to +300 °C



Helaguard metallic conduit



CAD download

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
SC10	10	9.1	6.8	25	110	10 m	Metal (ML)	166-30110
	10	9.1	6.8	25	110	50 m	Metal (ML)	166-30100
SC12	12	13.2	10.0	30	113	10 m	Metal (ML)	166-30111
	12	13.2	10.0	30	113	50 m	Metal (ML)	166-30101
SC16	16	16.4	12.9	40	152	10 m	Metal (ML)	166-30112
	16	16.4	12.9	40	152	25 m	Metal (ML)	166-30102
SC20	20	20.6	16.9	45	295	10 m	Metal (ML)	166-30113
	20	20.6	16.9	45	295	25 m	Metal (ML)	166-30103
SC25	25	24.6	21.1	55	321	10 m	Metal (ML)	166-30114
	25	24.6	21.1	55	321	25 m	Metal (ML)	166-30104
SC32	32	32.0	28.1	70	450	10 m	Metal (ML)	166-30115
	32	32.0	28.1	70	450	25 m	Metal (ML)	166-30105
SC40	40	42.5	37.6	80	519	10 m	Metal (ML)	166-30116
	40	42.5	37.6	80	519	25 m	Metal (ML)	166-30106
SC50	50	53.2	48.4	90	802	10 m	Metal (ML)	166-30117
	50	53.2	48.4	90	802	25 m	Metal (ML)	166-30107
SC63	63	62.5	57.5	115	836	10 m	Metal (ML)	166-30108
SC75	75	77.0	70.0	150	1,137	10 m	Metal (ML)	166-30109

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



Metallic conduits

SSC Stainless Steel Conduit

Stainless steel, corrosion-resistant flexible conduit used for protection of sensor cables, instrumentation tubing, as well as hydraulic and pneumatic conduits, particularly in corrosive environments. Commonly used in hospitals and clinics.

Features and Benefits

- Highly resistant to rust and corrosion
- High compression, tensile and impact strength
- Very flexible

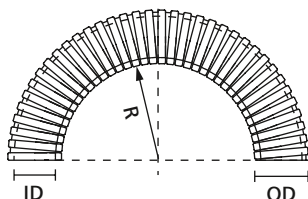


The HelaGuard SSC stainless steel conduit offers superior mechanical protection in corrosive environments.

MATERIAL	Stainless Steel (SS316)
Operating Temperature	-100 °C to +400 °C

HF ✓

RoHS ✓



HelaGuard metallic conduit

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
SSC10	10	9.1	6.8	25	110	25 m	Metal (ML)	166-30200
SSC12	12	12.3	10.0	30	126	25 m	Metal (ML)	166-30201
SSC16	16	16.4	13.0	40	162	25 m	Metal (ML)	166-30202
SSC20	20	20.4	16.9	45	202	25 m	Metal (ML)	166-30203
SSC25	25	24.3	21.1	55	300	25 m	Metal (ML)	166-30204
SSC32	32	31.7	28.1	70	340	25 m	Metal (ML)	166-30205
SSC40	40	42.1	37.6	80	410	10 m	Metal (ML)	166-30206
SSC50	50	52.8	48.4	90	516	10 m	Metal (ML)	166-30207

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



Fittings for metallic conduits

SC-FM Fixed External Thread

Fixed external thread, nickel plated brass.

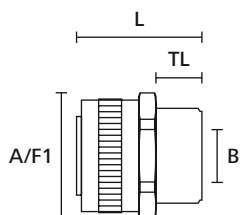
Features and Benefits

- Two-part fitting of shell and body with external thread
- Provides tight, reliable hold of conduit
- Can be secured with locknut



HelaGuard SC-FM Fixed External Thread.

MATERIAL	Nickel Plated Brass (NPB)
Operating Temperature	-100 °C to +300 °C



HelaGuard fitting, straight with fixed external thread



CAD download

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
SC10-FM-M12	10	M12	5.6	21.0	13	7.0	10 pcs.	Metal (ML)	166-30300
SC12-FM-M16	12	M16	8.5	23.0	17	10.0	10 pcs.	Metal (ML)	166-30301
SC16-FM-M16	16	M16	11.5	25.0	20	10.0	10 pcs.	Metal (ML)	166-30302
SC16-FM-M20	16	M20	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-30303
SC20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-30304
SC25-FM-M25	25	M25	19.1	29.5	29	10.0	10 pcs.	Metal (ML)	166-30305
SC32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-30306
SC40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-30307
SC50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pcs.	Metal (ML)	166-30308
SC63-FM-M63	63	M63	54.1	50.0	70	18.0	1 pcs.	Metal (ML)	166-30309
SC75-FM-M75	75	M75	66.4	60.0	84	20.0	1 pcs.	Metal (ML)	166-30310

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Metallic conduits with plastic coating

PCS Galvanised Steel Conduit, PVC Coating

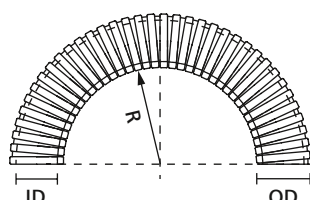
Flexible galvanised steel conduit with PVC coating, typically used in machine and plant construction and electrical installations.

Features and Benefits

- High compression, tensile and impact strength
- Very flexible
- Good resistance to alkalis and acids
- Good resistance to chemicals
- Colour: black, grey



HelaGuard PCS Galvanised Steel Conduit with PVC Coating.



HelaGuard metallic conduit, plastic coating

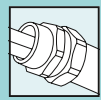
MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-15 °C to +70 °C



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
PCS10	10	10.1	6.8	25	140	10 m	Grey (GY)	166-30722
	10	10.1	6.8	25	140	50 m	Black (BK)	166-30700
PCS12	12	14.2	10.2	30	143	10 m	Grey (GY)	166-30723
	12	14.2	10.2	30	143	50 m	Black (BK)	166-30701
PCS16	16	17.0	13.0	40	196	10 m	Grey (GY)	166-30724
	16	17.1	13.0	40	196	25 m	Black (BK)	166-30702
PCS20	20	21.6	16.9	45	345	10 m	Grey (GY)	166-30725
	20	21.6	16.9	45	345	25 m	Black (BK)	166-30703
PCS25	25	26.0	21.1	55	411	10 m	Grey (GY)	166-30726
	25	26.0	21.1	55	411	25 m	Black (BK)	166-30704
PCS32	32	34.0	28.1	60	560	10 m	Grey (GY)	166-30727
	32	34.0	28.1	60	560	25 m	Black (BK)	166-30705
PCS40	40	44.2	37.6	80	719	10 m	Grey (GY)	166-30728
	40	44.2	37.6	80	719	25 m	Black (BK)	166-30706
PCS50	50	55.0	48.4	90	1,052	10 m	Grey (GY)	166-30729
	50	55.0	48.4	90	1,052	25 m	Black (BK)	166-30707
PCS63	63	64.5	57.5	115	1,091	10 m	Black (BK)	166-30708
	63	64.5	57.5	115	1,091	10 m	Grey (GY)	166-30730
PCS75	75	79.2	70.0	150	1,459	10 m	Black (BK)	166-30709
	75	79.2	70.0	150	1,459	10 m	Grey (GY)	166-30731

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



Fittings for metallic conduits with plastic coating

PCS-FM Fixed External Thread, IP54

Fixed external thread, nickel plated brass.

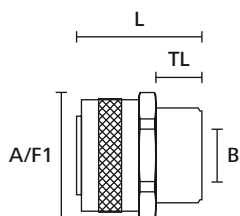
Features and Benefits

- Two-part fitting of shell and body with external thread
- Provides tight, reliable hold of conduit
- Can be secured with locknut



HeliaGuard PCS-FM Fixed External Thread.

MATERIAL	Nickel Plated Brass (NPB)
Operating Temperature	-100 °C to +300 °C



HeliaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS10-FM-M12	10	M12	5.6	21.0	13	8.0	10 pcs.	Metal (ML)	166-31000
PCS12-FM-M16	12	M16	8.5	23.0	17	8.0	10 pcs.	Metal (ML)	166-31001
PCS16-FM-M16	16	M16	11.5	25.0	20	10.0	10 pcs.	Metal (ML)	166-31002
PCS16-FM-M20	16	M20	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-31003
PCS20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-31004
PCS25-FM-M25	25	M25	19.1	32.5	29	10.0	10 pcs.	Metal (ML)	166-31005
PCS32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-31006
PCS40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-31007
PCS50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pcs.	Metal (ML)	166-31008
PCS63-FM-M63	63	M63	54.5	50.0	70	18.0	1 pcs.	Metal (ML)	166-31009
PCS75-FM-M75	75	M75	66.5	60.0	84	20.0	1 pcs.	Metal (ML)	166-31019

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



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Fittings for metallic conduits with plastic coating

PCS-FMC Fixed Thread Compression Fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

Features and Benefits

- Multipart compression fitting including elastomeric seal
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened

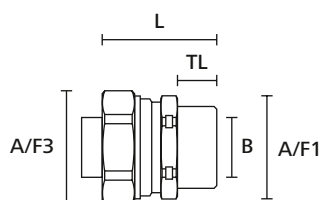


HeliaGuard PCS-FMC Compression Fitting.

MATERIAL	Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
Operating Temperature	-40 °C to +135 °C	

HF ✓

RoHS ✓



HeliaGuard compression fitting, straight with fixed external thread



CAD download

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS10-FMC-M12	10	M12	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-31400
PCS12-FMC-M16	12	M16	8.6	29.8	20	22	10.0	10 pcs.	Metal (ML)	166-31401
PCS16-FMC-M16	16	M16	11.5	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-31402
PCS16-FMC-M20	16	M20	11.5	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-31403
PCS20-FMC-M20	20	M20	15.3	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-31404
PCS25-FMC-M25	25	M25	19.1	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-31405
PCS32-FMC-M32	32	M32	26.0	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-31406
PCS40-FMC-M40	40	M40	34.6	47.5	56	58	16.0	2 pcs.	Metal (ML)	166-31407
PCS50-FMC-M50	50	M50	44.7	51.0	70	70	16.0	1 pcs.	Metal (ML)	166-31408

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Metallic conduits with liquid-tight cover

LTS Galvanised Steel Conduit, PVC Cover

Machine tools or outdoor installations, wherever liquid-tight (IP68) is a requirement.

Features and Benefits

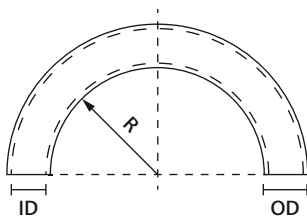
- Liquid-tight (IP68 and IP69k with LTS fittings)
- High compression, tensile and impact strength
- Good flexibility
- Smooth outer cover does not wrinkle when bent
- Good resistance to acids, petrol, oils and greases
- UV-resistant, suitable for outdoor use
- Colour: black



HelaGuard LTS.

MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +105 °C
Specifications	Lloyd's Register

RoHS ✓



HelaGuard liquid-tight metallic conduit, plastic coating



HelaGuard LTS galvanised steel conduit with a smooth, liquid-tight PVC cover is ideal for outdoor installations.

TYPE	Nominal Ø	US Trade Size	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
LTS10	10	1/4 "	11.8	7.0	35	185	50 m	Black (BK)	166-31900
LTS12	12	5/16 "	14.2	10.0	40	203	25 m	Black (BK)	166-31901
LTS16	16	3/8 "	17.8	12.6	45	311	25 m	Black (BK)	166-31902
LTS20	20	1/2 "	21.1	16.0	65	407	25 m	Black (BK)	166-31903
LTS25	25	3/4 "	26.4	21.1	100	503	25 m	Black (BK)	166-31904
LTS32	32	1 "	33.1	26.5	135	732	25 m	Black (BK)	166-31905
LTS40	40	1 1/4 "	41.8	35.4	175	885	25 m	Black (BK)	166-31906
LTS50	50	1 1/2 "	47.9	40.4	230	1,240	25 m	Black (BK)	166-31907
LTS63	63	2 "	59.7	51.6	280	1,470	10 m	Black (BK)	166-31908

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Fittings for metallic conduits with liquid-tight cover

LTS-FMC Fixed Thread Compression Fitting, IP68

External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

Features and Benefits

- Multipart compression fitting including elastomeric seal
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened

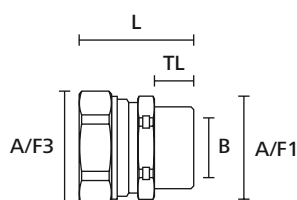


HeliaGuard LTS-FMC Compression Fitting.

MATERIAL	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
Operating Temperature	-40 °C to +135 °C

HF ✓

RoHS ✓



HeliaGuard compression fitting, straight with fixed external thread



CAD download

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
LTS10-FMC-M12	10	M12	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-32200
LTS10-FMC-M16	10	M16	5.6	29.8	20	20	10.0	10 pcs.	Metal (ML)	166-32201
LTS12-FMC-M16	12	M16	8.6	29.8	20	22	10.0	10 pcs.	Metal (ML)	166-32203
LTS16-FMC-M16	16	M16	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-32204
LTS16-FMC-M20	16	M20	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-32205
LTS20-FMC-M20	20	M20	14.5	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-32206
LTS25-FMC-M25	25	M25	18.0	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-32207
LTS32-FMC-M32	32	M32	24.6	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-32208
LTS40-FMC-M40	40	M40	32.7	47.5	50	52	16.0	1 pcs.	Metal (ML)	166-32209
LTS50-FMC-M50	50	M50	37.7	53.0	58	58	18.0	1 pcs.	Metal (ML)	166-32210
LTS63-FMC-M63	63	M63	49.0	58.8	70	70	20.0	1 pcs.	Metal (ML)	166-32211

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Spiral-reinforced PVC Conduits

PSR Conduit

Machine building, plant construction, shipbuilding, automation, electrical installations

Features and Benefits

- Extremely flexible
- Withstands torsional movement
- Self-extinguishing
- Easy to feed cables into conduit
- Can be used with PSR PA66 fittings
- Colour: grey; black, green (oil resistant) or blue (high temperature resistant) upon request



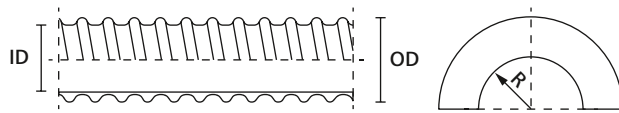
PSR is extremely flexible and allows for easy insertion of cables.



One Step to the Web!

MATERIAL	Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +70 °C
Flammability	self-extinguishing according to EN IEC 61386
Specifications	UL-Recognised

RoHS ✓



HelaGuard spiral reinforced conduit



PSR conduit with higher resistance to oil (color: green) and temperature (colour: blue) available on request.

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight (g/m)	Reel Length	Colour	Article-No.
PSR12	12	14.5	10	25	71	30 m	Grey (GY)	166-40001
PSR16	16	16.5	12	25	76	30 m	Grey (GY)	166-40002
PSR20	20	21.0	16	35	112	30 m	Grey (GY)	166-40003
PSR25	25	27.5	22	45	153	30 m	Grey (GY)	166-40004
PSR32	32	33.5	28	60	327	30 m	Grey (GY)	166-40005
PSR40	40	41.0	35	80	448	30 m	Grey (GY)	166-40006
PSR50	50	46.4	40	105	725	30 m	Grey (GY)	166-40007
PSR63	63	57.0	50	120	948	30 m	Grey (GY)	166-40008

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Fittings for spiral-reinforced PVC Conduits

PSR-S Straight fitting

Straight PA66 fitting, fixed external thread.

Fulfills IP65 with PSR conduits.

Fulfills IP66 and IP67 with PSRSC conduits.

Features and Benefits

- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts
- Fits both PSR and PSRSC conduits

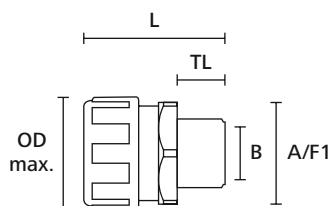


PSR-S Straight.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2
Specifications	UL-Recognised

HF ✓

RoHS ✓



HelagaGuard fitting, straight with fixed external thread



Fittings with PG-Thread and in 45° available on request.

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PSR12-S-M16	12	M16	9.0	24	38	23	11	10 pcs.	Grey (GY)	166-40701
PSR16-S-M16	16	M16	10.5	28	40	25	11	10 pcs.	Grey (GY)	166-40702
PSR16-S-M20	16	M20	10.5	28	41	25	14	10 pcs.	Grey (GY)	166-40703
PSR20-S-M20	20	M20	14.5	33	43	30	14	10 pcs.	Grey (GY)	166-40704
PSR25-S-M25	25	M25	19.0	42	45	37	15	10 pcs.	Grey (GY)	166-40705
PSR32-S-M32	32	M32	24.5	48	48	45	16	10 pcs.	Grey (GY)	166-40706
PSR40-S-M40	40	M40	33.0	60	59	60	16	2 pcs.	Grey (GY)	166-40707
PSR50-S-M50	50	M50	39.0	64	55	60	16	2 pcs.	Grey (GY)	166-40708
PSR63-S-M63	63	M63	48.0	76	56	73	16	1 pcs.	Grey (GY)	166-40709

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Fittings for spiral-reinforced PVC Conduits

PSR-90 90° elbow fitting

90° PA66 fitting, fixed external thread.

Fulfils IP65 with PSR conduits.

Fulfils IP66 and IP67 with PSRSC conduits.

Features and Benefits

- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts
- Fits both PSR and PSRSC conduits

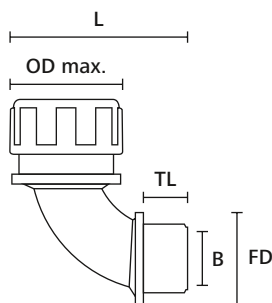


PSR-90 90° Elbow.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2
Specifications	UL-Recognised

HF ✓

RoHS ✓



HelaGuard fitting, 90° with fixed external thread



Fittings with PG-Thread and in 45° available on request.

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Article-No.
PSR16-90-M16	16	M16	10.5	28	49	22	11	10 pcs.	166-40801
PSR16-90-M20	16	M20	10.5	28	51	27	13	10 pcs.	166-40802
PSR20-90-M20	20	M20	14.5	33	52	27	13	10 pcs.	166-40803
PSR25-90-M25	25	M25	19.0	42	63	33	15	10 pcs.	166-40804
PSR32-90-M32	32	M32	24.5	48	74	40	16	2 pcs.	166-40805
PSR40-90-M40	40	M40	33.0	60	113	50	16	2 pcs.	166-40806

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



CAD download



For product specific approvals and specifications please refer to the Appendix.



FlexiGuard Conduits & Fittings

FlexiGuard PVC Protective Conduits

FlexiGuard protective hoses are used to protect cables in machines and plant construction, and robotics as well as leads to switch cabinets.

Features and Benefits

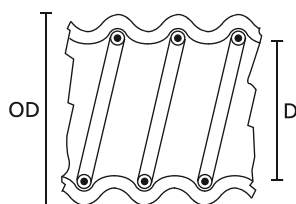
- Extremely flexible
- Excellent mechanical protection
- Good resistance to oils, acids and alkalis
- Good resistance to chemicals
- Good resistance to UV and ozone



FlexiGuard FG with FG-UH fitting.

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC), Steel (ST)
Operating Temperature	-20 °C to +70 °C, (+80 °C, 200 h)
Flammability	UL94 HB

RoHS

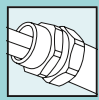


FlexiGuard

TYPE	Ø D	Outside Ø (OD)	Min. Bending Radius (R)	Reel Length	Colour	Article-No.
FG14	10.0	14.0	14	10 m	Grey (GY)	167-00209
FG17	13.0	17.0	17	10 m	Grey (GY)	167-00211
FG19	15.0	19.0	19	10 m	Grey (GY)	167-00213
FG21	16.0	21.0	21	10 m	Grey (GY)	167-00216
FG27	21.0	27.0	27	10 m	Grey (GY)	167-00221
FG36	30.0	36.0	36	10 m	Grey (GY)	167-00229
FG45	38.0	45.0	45	10 m	Grey (GY)	167-00236
FG56	48.0	56.0	56	10 m	Grey (GY)	167-00248

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



FlexiGuard Conduits & Fittings

FG-M Fittings

The TV fittings and TH fasteners are used to protect against dust and moisture, for instance outdoors or wherever dust and moisture are a particular hazard.

Features and Benefits

- One piece, easy fit
- Swivel thread
- Vibration and tension resistant
- Large bore size
- Inner ferrule protects cables
- Good resistance to chemicals
- Good resistance to UV and ozone

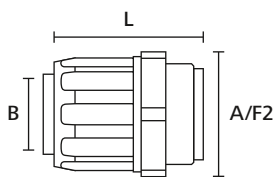


FG conduit fitting.

MATERIAL	Polypropylene (PP)
Operating Temperature	-35 °C to +80 °C
Flammability	UL94 V2

HF ✓

RoHS ✓



FlexiGuard fitting, straight with swivel thread

TYPE	For Hose Outer Ø D	Thread Size	Min. Bore Size (B)	Length (L)	A/F Thread (A/F2)	Colour	Article-No.
FG14-M16	14	M16	8.8	42.0	20	Grey (GY)	167-00530
FG14-PG9	14	PG9	8.8	42.0	20	Grey (GY)	167-00510
FG17-M20	17	M20	11.1	45.5	24	Grey (GY)	167-00531
FG17-PG11	17	PG11	11.1	45.5	24	Grey (GY)	167-00511
FG19-PG13	19	PG13	13.0	47.5	27	Grey (GY)	167-00512
FG21-M25	21	M25	14.8	49.8	30	Grey (GY)	167-00533
FG21-PG16	21	PG16	14.8	49.8	30	Grey (GY)	167-00513
FG27-M32	27	M32	19.4	52.0	36	Grey (GY)	167-00534
FG27-PG21	27	PG21	19.4	52.0	36	Grey (GY)	167-00514
FG36-M40	36	M40	27.9	55.0	46	Grey (GY)	167-00535
FG36-PG29	36	PG29	27.9	55.0	46	Grey (GY)	167-00515
FG45-M50	45	M50	35.6	58.0	55	Grey (GY)	167-00536
FG45-PG36	45	PG36	35.6	58.0	55	Grey (GY)	167-00516
FG56-M63	56	M63	45.9	60.5	65	Grey (GY)	167-00537
FG56-PG48	56	PG48	45.9	60.5	65	Grey (GY)	167-00517

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



FlexiGuard Conduits & Fittings

FG-UH Fittings with Bracket

Straight swivel bracket.

Fulfills IP54 with FlexiGuard FG conduits.

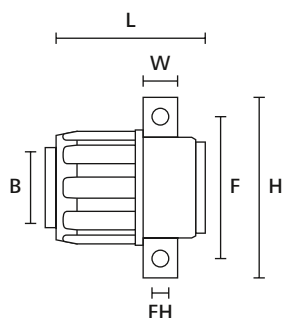
Features and Benefits

- One piece, easy fit
- Swivel bracket
- Vibration and tension resistant
- Large bore size
- Inner ferrule protects cables
- Good resistance to chemicals
- Good resistance to UV and ozone



FG-UH fitting with bracket.

MATERIAL	Polypropylene (PP)
Operating Temperature	-35 °C to +80 °C
Flammability	UL94 V2



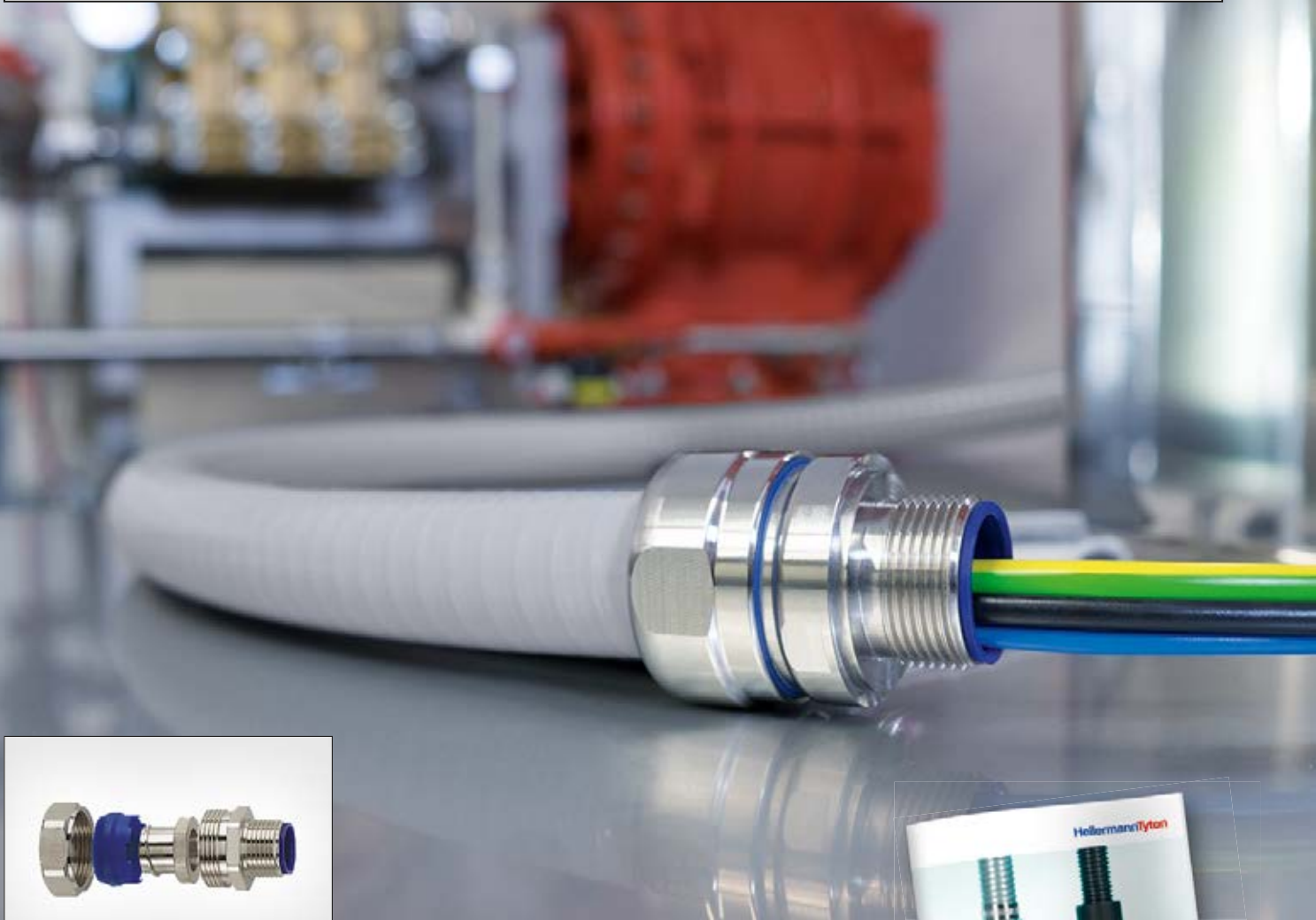
FlexiGuard fitting, straight with bracket

TYPE	For Hose Outer Ø D	Min. Bore Size (B)	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Fixing Hole Centres (F)	Colour	Article-No.
FG14-UH	14	8.8	42.0	10.0	40.0	5.7	29.0	Grey (GY)	167-00520
FG17-UH	17	11.1	45.5	12.0	50.0	5.7	37.0	Grey (GY)	167-00521
FG19-UH	19	13.0	47.5	12.0	50.0	5.7	37.0	Grey (GY)	167-00522
FG21-UH	21	14.8	49.8	12.0	50.0	5.7	37.0	Grey (GY)	167-00523
FG27-UH	27	19.4	52.0	12.5	57.0	5.7	43.0	Grey (GY)	167-00524
FG36-UH	36	27.9	55.0	13.0	67.0	6.7	53.0	Grey (GY)	167-00525
FG45-UH	45	35.6	58.0	14.0	80.0	6.7	65.0	Grey (GY)	167-00526
FG56-UH	56	45.9	60.5	16.5	93.0	6.7	76.0	Grey (GY)	167-00527

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.

HelaGuard Flexible Conduits and Fittings



For more information on our complete HelaGuard range of non-metallic and metallic conduits and fittings, please see our new HelaGuard catalogue.

**Order your
HelaGuard catalogue
today!**





HelaGuard Accessories

PACC Clip for Corrugated Conduits

Features and Benefits

- Easy and quick assembly with non-metallic conduits
- Lid is integrated
- Hole for fastening with screw
- Inner rib prevents conduit from slipping
- Can be used in C-shaped DIN rails

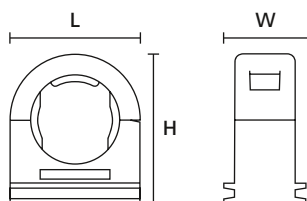


One Step to the Web!

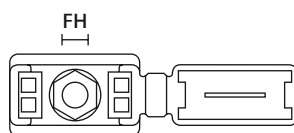


HelaGuard PACC Conduit Clip.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



HelaGuard conduit clip, side views

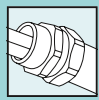


HelaGuard conduit clip, top view

TYPE	Nominal Ø	Height (H)	Width (W)	Length (L)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
PACC10	10	26	12	23	M5	10 pcs.	Black (BK)	166-25707
PACC13	13	26	12	23	M5	10 pcs.	Black (BK)	166-25700
PACC16	16	30	12	26	M5	10 pcs.	Black (BK)	166-25701
PACC21	21	36	15	32	M6	10 pcs.	Black (BK)	166-25702
PACC28	28	45	15	41	M6	10 pcs.	Black (BK)	166-25703
PACC34	34	51	15	48	M6	10 pcs.	Black (BK)	166-25704
PACC42	42	60	15	57	M6	5 pcs.	Black (BK)	166-25705
PACC54	54	72	15	70	M6	5 pcs.	Black (BK)	166-25706

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



HelaGuard Accessories

AFCS Fixing Clip, Plated Steel and PVC Liner

Features and Benefits

- Simple, secure fixing of metallic conduits
- Liner prevents damage due to abrasion

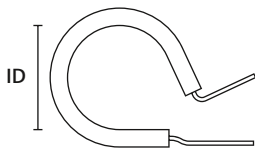


HelaGuard AFCS Fixing Clip, Stainless Steel and PVC Liner.

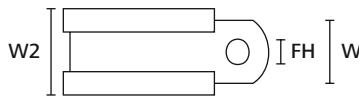
MATERIAL	Galvanised Steel (GS), Polyvinylchloride (PVC)
Operating Temperature	-20 °C to +105 °C



CAD download



HelaGuard fixing clip, side view



HelaGuard fixing clip, top view

TYPE	Nominal Ø	Inside Ø (ID)	Width (W)	Width (W2)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
AFCS10	10	11.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50600
AFCS12	12	14.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50601
AFCS16	16	17.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50602
AFCS20	20	21.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50603
AFCS25	25	25.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50604
AFCS32	32	34.0	12.7	17.4	5.1	10 pcs.	Metal (ML), Black (BK)	166-50605
AFCS40	40	44.0	25.4	30.5	14.2 x 17.5	5 pcs.	Metal (ML), Black (BK)	166-50606
AFCS50	50	54.0	25.4	30.5	14.2 x 17.5	5 pcs.	Metal (ML), Black (BK)	166-50607
AFCS63	63	70.0	25.4	30.5	14.2 x 17.5	1 pcs.	Metal (ML), Black (BK)	166-50608
AFCS75	75	76.2	25.4	30.5	14.2 x 17.5	1 pcs.	Metal (ML), Black (BK)	166-50609

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



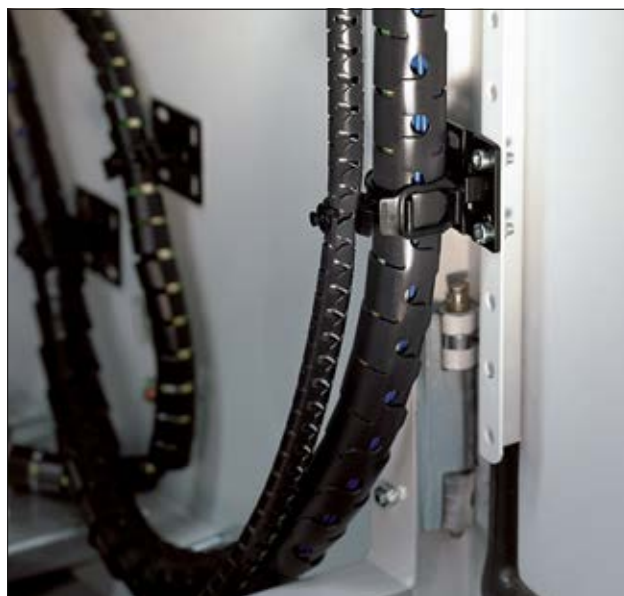
Helawrap Cable Cover

HWPP for industrial applications

Helawrap is used to bundle and protect cables and wires in the electrical industry, panel building, machine building and many other industrial applications. Helawrap is the time-saving solution for industrial applications.

Features and Benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included



HWPP is commonly used wherever high flexibility is required, such as in the door area of wiring panels.



Application video: Helawrap

MATERIAL	Polypropylene (PP)
Operating Temperature	-60 °C to +110 °C, intermittent +140 °C
Flammability	UL94 HB



TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPP8	9.0	Black (BK)	25 m	HAT8	161-64101
	9.0	Grey (GY)	25 m	HAT8	161-64102
	9.0	Silver (SR)	25 m	HAT8	161-64103
	9.0	White (WH)	25 m	HAT8	161-64104
HWPP16	16.0	Black (BK)	25 m	HAT16	161-64201
	16.0	Grey (GY)	25 m	HAT16	161-64202
	16.0	Silver (SR)	25 m	HAT16	161-64203
	16.0	White (WH)	25 m	HAT16	161-64207
HWPP20	21.0	Grey (GY)	25 m	HAT20	161-64302
	21.0	Silver (SR)	25 m	HAT20	161-64303
	21.0	White (WH)	25 m	HAT20	161-64304
	21.1	Black (BK)	25 m	HAT20	161-64301
HWPP25	27.0	Black (BK)	25 m	HAT25	161-64401
	27.0	Grey (GY)	25 m	HAT25	161-64402
	27.0	Silver (SR)	25 m	HAT25	161-64403
	27.0	White (WH)	25 m	HAT25	161-64407
HWPP30	32.0	Black (BK)	25 m	HAT30	161-64501
	32.0	Grey (GY)	25 m	HAT30	161-64502
	32.0	Silver (SR)	25 m	HAT30	161-64503
	32.0	White (WH)	25 m	HAT30	161-64504
HWPP40	42.0	Black (BK)	20 m	HAT40	161-64601

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Helawrap Cable Cover

HWPP for home and office use

Helawrap HWPP in practical 2 metre lengths is designed for home and office use. It puts an end to the cable chaos of PCs, TVs and Hi-Fi systems.



Complete cable management for home and office.



Helawrap HWPP, in practical 2 m lengths, is available in 2 sizes and 3 colours.



Insert one or more cables into the insertion slot of the applicator tool.



Place the applicator tool in one end of the Helawrap cable cover.



Simply slide the applicator tool through the Helawrap cover.

TYPE	Bundle Ø max.	Colour	Length (L)	Application Tool	Article-No.
HWPP16L2	16.0	Black (BK)	2.0 m	HAT16	161-64204
	16.0	Grey (GY)	2.0 m	HAT16	161-64205
	16.0	Silver (SR)	2.0 m	HAT16	161-64206
	16.0	White (WH)	2.0 m	HAT16	161-64215
HWPP25L2	27.0	Black (BK)	2.0 m	HAT25	161-64404
	27.0	Grey (GY)	2.0 m	HAT25	161-64405
	27.0	Silver (SR)	2.0 m	HAT25	161-64406
	27.0	White (WH)	2.0 m	HAT25	161-64415

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Cable Cover, Material: PA6, UL94V0

Helawrap HWPV-V0

Helawrap HWPV0 is used to bundle and protect cable and wires, especially where there is vibration and abrasion. HWPV0 has excellent flame-retardant properties and is halogen-free.

Features and Benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Self-extinguishing according to UL94 V0
- Very good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included



Cables can be branched off at any point for better, more flexible protection.

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +90 °C, intermittent +120 °C
Flammability	UL94 V0
Specifications	CEN TS 45545-2: 2009, DIN 5510-2, UL-Recognised

HF ✓

RoHS ✓

TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPV08	9.1	Black (BK)	25 m	HAT8	161-63101
HWPV016	16.0	Black (BK)	25 m	HAT16	161-63201
HWPV020	21.1	Black (BK)	25 m	HAT20	161-63301
HWPV025	26.9	Black (BK)	25 m	HAT25	161-63401
HWPV030	32.0	Black (BK)	25 m	HAT30	161-63501

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



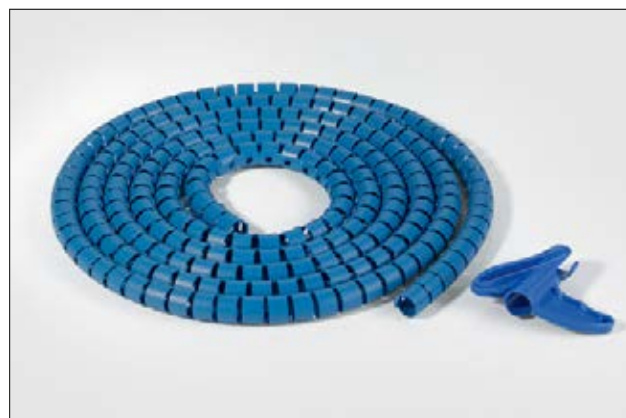
Metal-Content Cable Cover

Helawrap HWPPMC

HWPPMC is particularly suitable for installation and maintenance for food-processing machines and in food-processing plants.

Features and Benefits

- High metal-content for reliable detection with standard detection equipment
- Quick and effortless to apply
- Stainless steel preserves resistance to corrosion
- Blue colour for enhanced visibility
- Ideal solution for bundling and protecting cables and hoses
- Highly flexible
- Very good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reused
- Handy applicator tool included



HWPPMC metal-content cable cover.

MATERIAL	Polypropylene (PP), Stainless Steel (SS)
Operating Temperature	-60 °C to +100 °C, intermittent +140 °C
Flammability	UL94 HB
Specifications	FDA



One Step to the Web!

TYPE	Bundle Ø max.	Colour	Reel Length	Application Tool	Article-No.
HWPPMC8	9.0	Blue (BU)	25 m	HAT8	161-66000
HWPPMC16	16.0	Blue (BU)	25 m	HAT16	161-66100
HWPPMC20	21.0	Blue (BU)	25 m	HAT20	161-66200
HWPPMC25	27.0	Blue (BU)	25 m	HAT25	161-66300
HWPPMC30	32.0	Blue (BU)	25 m	HAT30	161-66400

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Accessories for retaining Helawrap Open Cable Cover

HWClips

Helawrap clips and mounting plates can be linked to mount and route Helawrap cable covers in wiring cabinets and machines as well as in the office or home.

Features and Benefits

- Mounts and routes Helawrap cable cover flexibly and efficiently
- Fit snugly around the cable cover and holds it tight
- Each clip can be joined to mounting plate or other clips of any size
- Each clip rotates freely
- Easily released and re-used
- Mounting plates fixed with screws, cable ties or adhesive



The Helawrap accessory set for bundling, fixing and protecting multiple cable runs.

MATERIAL	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-40 °C to +105 °C	-35 °C to +85 °C
Flammability	UL94 HB	UL94 V2

HF ✓

RoHS ✓

RoHS ✓



Multiple clips can be joined. Clips swivel freely.

For secure hold, R1 loop can be used (for HWClip25 and HWClip30 only).

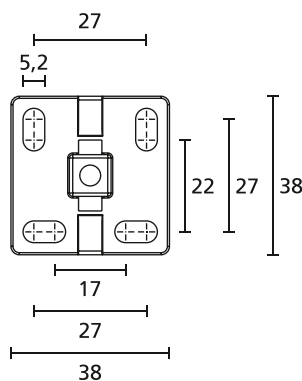
TYPE	for Helawrap size	Material	Colour	Article-No.
HWCLIP08	8	PA66HIRHS	Black (BK)	161-64002
HWCLIP16	16	PA66HIRHS	Black (BK)	161-64004
HWCLIP20	20	PA66HIRHS	Black (BK)	161-64006
HWCLIP25	25	PA66HIRHS	Black (BK)	161-64008
HWCLIP30	30	PA66HIRHS	Black (BK)	161-64010
R1	25, 30	PVC	Black (BK)	201-20010

Subject to technical changes.

HWBase

Features and Benefits

- Mounting plates can be fixed with screws, cable ties or adhesive
- Can be used to mount any size HWClip



Helawrap HWBase/HWBaseA

TYPE	Adhesive	Colour	Article-No.
HWBASE	-	Black (BK)	161-64014
HWBASEA	Acrylate with base of polyurethane foam	Black (BK)	161-64012

All dimensions in mm. Subject to technical changes.



Application Tools for Helawrap Cable Cover

HAT Tools

The HAT application tools are used with Helawrap HWPP, HWPAV0 and HWPPMC slit cable covers to bundle and protect cables rapidly and efficiently. There is a specially designed HAT application tool for each size Helawrap cable cover.

Features and Benefits

- Bundle cable rapidly and effortlessly
- Glides smoothly and securely through cover
- Easy insertion of cable



Applicator tools HAT are available for every Helawrap cover size.

TYPE	Colour	Pack Cont.	Article-No.
HAT8	Blue (BU)	10 pcs.	161-60001
HAT16	Blue (BU)	10 pcs.	161-60002
HAT20	Blue (BU)	10 pcs.	161-60003
HAT25	Blue (BU)	10 pcs.	161-60004
HAT30	Blue (BU)	10 pcs.	161-60005
HAT40	Blue (BU)	5 pcs.	161-60006

Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Standard Polyethylene Spiral Binding for general applications

SBPE

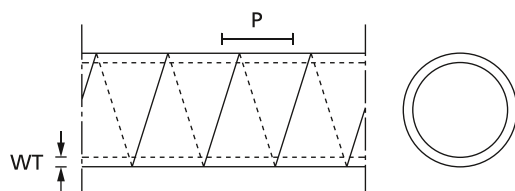
SBPE spiral binding is suitable for standard electrical applications and panel building and plant engineering. Sizes 4 and 9 are also available in practical 5 metre lengths.

Features and Benefits

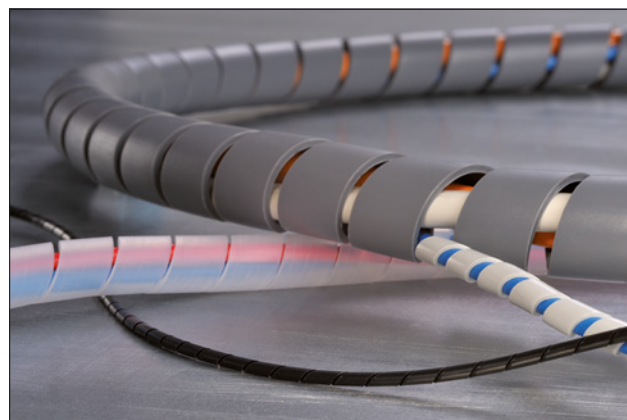
- Organises and protects cables and hoses
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



One Step to the Web!



Spiral binding



Spiral binding SBPE.

MATERIAL	Polyethylene (PE)
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL94 HB



TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPE1.5	1.5	0.80	6.0	1.6	8.0	Black (BK)	30 m	161-41001
	1.5	0.80	6.0	1.6	8.0	Grey (GY)	30 m	161-41002
	1.5	0.80	6.0	1.6	8.0	Natural (NA)	30 m	161-41000
SBPE4	4	1.00	7.8	5.0	20.0	Black (BK)	30 m	161-41101
	4	1.00	7.8	5.0	20.0	Grey (GY)	30 m	161-41102
	4	1.00	7.8	5.0	20.0	Natural (NA)	30 m	161-41100
SBPE9	9	1.40	12.5	10.0	100.0	Black (BK)	30 m	161-41201
	9	1.40	12.5	10.0	100.0	Grey (GY)	30 m	161-41202
	9	1.40	12.5	10.0	100.0	Natural (NA)	30 m	161-41200
SBPE16	16	1.60	16.0	20.0	150.0	Black (BK)	30 m	161-41301
	16	1.60	16.0	20.0	150.0	Grey (GY)	30 m	161-41302
	16	1.60	16.0	20.0	150.0	Natural (NA)	30 m	161-41300

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPE4D	4	1.00	7.8	5.0	20.0	Black (BK)	5 m	161-41104
	4	1.00	7.8	5.0	20.0	Grey (GY)	5 m	161-41105
	4	1.00	7.8	5.0	20.0	Natural (NA)	5 m	161-41103
SBPE9D	9	1.40	12.5	10.0	100.0	Black (BK)	5 m	161-41204
	9	1.40	12.5	10.0	100.0	Grey (GY)	5 m	161-41205
	9	1.40	12.5	10.0	100.0	Natural (NA)	5 m	161-41203

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Polyethylene Spiral Binding for enhanced flame protection

SBPEFR

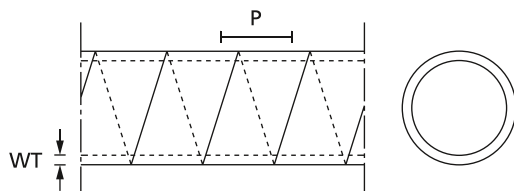
The flame-retardant properties of SBPEFR make it suitable for applications in the automobile and electrical industries, where enhanced fire protection is needed.

Features and Benefits

- Organises and protects cables and hoses
- Self-extinguishing according to UL94 V2
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



Spiral binding SBPEFR is available in a wide range of diameters and in colours black and white.



Spiral binding

MATERIAL	Polyethylene (PEFR), Flame retardant
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL94 V2, FMVSS 302, Type B

RoHS

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPEFR1.5	1.5	0.80	6.0	1.6	8.0	Black (BK)	30 m	161-43001
	1.5	0.80	6.0	1.6	8.0	White (WH)	30 m	161-43000
SBPEFR4	4	1.00	7.8	5.0	20.0	Black (BK)	30 m	161-43101
	4	1.00	7.8	5.0	20.0	White (WH)	30 m	161-43100
SBPEFR9	9	1.40	12.5	10.0	100.0	Black (BK)	30 m	161-43201
	9	1.40	12.5	10.0	100.0	White (WH)	30 m	161-43200
SBPEFR16	16	1.60	16.0	20.0	150.0	Black (BK)	30 m	161-43301
	16	1.60	16.0	20.0	150.0	White (WH)	30 m	161-43300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Polyamide Spiral Binding for added strength and protection against abrasion

SBPA

SBPA spiral binding is used for cable harnesses in the automobile industry and for many demanding industrial applications.

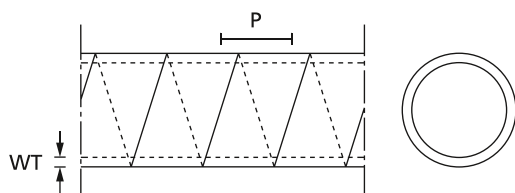
Features and Benefits

- Organises and protects cables and hoses
- Very good protection against abrasion
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



SPBA spiral binding made of polyamide offers excellent protection against abrasion.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +95 °C, intermittent +130 °C
Flammability	UL94 HB



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPA1.5	1.5	0.40	6.0	1.6	8.0	Natural (NA)	30 m	161-42000
SBPA4	4	0.60	7.8	5.0	20.0	Natural (NA)	30 m	161-42100
SBPA9	9	1.00	12.5	10.0	100.0	Natural (NA)	30 m	161-42200
SBPA16	16	1.20	16.0	20.0	150.0	Natural (NA)	30 m	161-42300

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



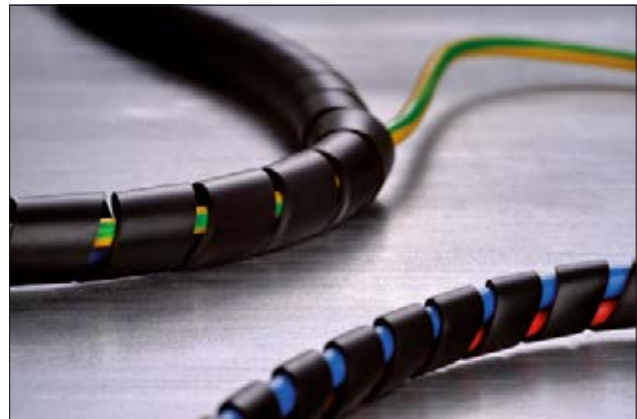
Polyethylene Spiral Binding with UL94V0 classification

SBPAV0

Due to its excellent flame protection properties, SBPAV0 spiral binding is particularly suitable for the rail and aviation industries as well as public buildings.

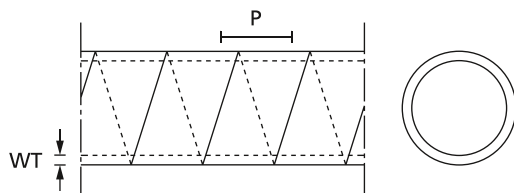
Features and Benefits

- Organises and protects cables and hoses
- Self-extinguishing according to UL94 V0
- Very good protection against abrasion
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters



Spiral binding SBPAV0.

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +90 °C, intermittent +120 °C
Flammability	UL94 V0
Specifications	CEN TS 45545-2: 2009, DIN 5510-2



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPAV01.5	1.5	0.40	6.0	1.6	8.0	Black (BK)	30 m	161-44000
SBPAV04	4	0.60	7.8	5.0	20.0	Black (BK)	30 m	161-44100
SBPAV09	9	1.00	12.5	10.0	100.0	Black (BK)	30 m	161-44200
SBPAV016	16	1.20	16.0	20.0	150.0	Black (BK)	30 m	161-44300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



PTFE Spiral Binding for superior protection

SBPTFE

Wherever superior protection against chemical and extreme temperatures are important, the use of SBPTFE is recommended.

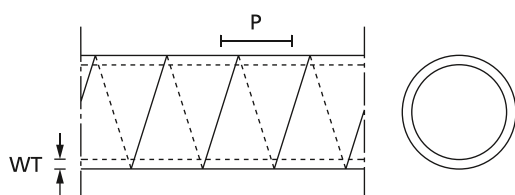
Features and Benefits

- Organises and protects cables and hoses
- Excellent fire protection
- Self-extinguishing according to UL94 V0
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



Spiral binding SBTFE - ideal for extreme conditions.

MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-60 °C to +260 °C, intermittent +350 °C
Flammability	UL94 V0



Spiral binding

TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPTFE1.5	1.5	0.50	6.0	1.6	8.0	Natural (NA)	5 m	161-45000
SBPTFE4	4	0.70	7.8	5.0	20.0	Natural (NA)	5 m	161-45100
SBPTFE9	9	1.00	12.5	10.0	100.0	Natural (NA)	5 m	161-45200

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Metal-Content Spiral Binding

SBPEMC

SBPEMC is designed for applications in food-processing plants and machines.

Features and Benefits

- High metal-content for reliable detection with standard detection equipment
- Stainless steel preserves resistance to corrosion
- Blue colour for enhanced visibility
- Ideal solution for bundling and protecting cables and hoses
- Highly flexible
- Suitable for retro-fitting
- Branching off cable at any point



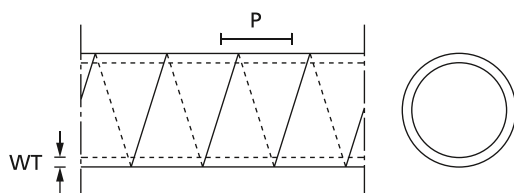
SBPEMC metal-content spiral binding.



One Step to the Web!



Detectable, metal-content spiral binding protects cables on food-processing machines.



Spiral binding

MATERIAL	Polyethylene (PE), Stainless Steel (SS)
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL94 HB
Specifications	FDA



TYPE	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
SBPEMC1.5	1.5	0.80	6.0	1.6	8.0	Blue (BU)	30 m	161-46000
SBPEMC4	4	1.40	12.5	5.0	20.0	Blue (BU)	30 m	161-46100
SBPEMC9	9	1.60	16.0	10.0	100.0	Blue (BU)	30 m	161-46200
SBPEMC16	16	1.00	7.8	20.0	150.0	Blue (BU)	30 m	161-46300

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polypropylene spiral binding for high resistance against oil, narrow pitch

SPS

SPS spiral binding is especially suitable for the use in areas where high abrasion resistance and much larger cable diameters are needed, for example the automobile and petrochemical industry as well as in heavy plant construction.

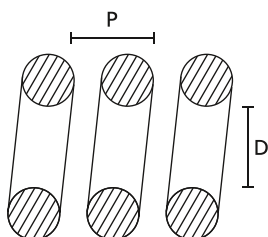
Features and Benefits

- Heavy-walled and very robust
- Excellent protection from mechanical stress
- Very high abrasion resistance
- Very good resistance to oils
- Available in diameters up to 50 mm
- Ideal for larger cable bundles



Spiral binding SPS is very robust and provides good protection against oil.

MATERIAL	Polypropylene (PP)
Operating Temperature	-30 °C to +100 °C
Flammability	UL94 HB



SPS spiral binding (narrow pitch)

TYPE	Ø D	Pitch (P)	Bundle Ø max.	Length (L)	Colour	Article-No.
SPS10	10.0	5.0	14.0	1.0 m	Black (BK)	162-10100
SPS15	15.0	5.0	20.0	1.0 m	Black (BK)	162-10150
SPS20	20.0	5.5	25.0	1.0 m	Black (BK)	162-10200
SPS25	25.0	6.0	30.0	1.0 m	Black (BK)	162-10250
SPS30	30.0	6.5	37.0	1.0 m	Black (BK)	162-10300
SPS35	35.0	6.5	42.0	1.0 m	Black (BK)	162-10350
SPS40	40.0	7.0	48.0	1.0 m	Black (BK)	162-10400
SPS50	50.0	8.0	59.0	1.0 m	Black (BK)	162-10500

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Polypropylene spiral binding for high resistance against oil, wide pitch

SPF

Wherever high abrasion resistance and stable cable inserting are important, the use of SPF spiral binding is recommended. SPF is suitable for wind industry, plant construction and the petrochemical industry.

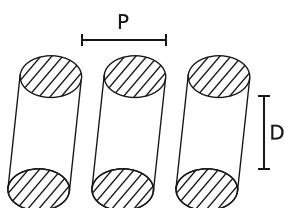
Features and Benefits

- Heavy-walled and very robust
- Excellent protection from mechanical stress
- Very high abrasion resistance
- Very good resistance to oils
- Available in diameters up to 50 mm
- Ideal for larger cable bundles



Spiral binding - extremely robust and abrasion resistant.

MATERIAL	Polypropylene (PP)
Operating Temperature	-30 °C to +100 °C
Flammability	UL94 HB



SPF spiral binding (wide pitch)

TYPE	Ø D	Pitch (P)	Bundle Ø max.	Length (L)	Colour	Article-No.
SPF10	10.0	10.0	13.0	1.0 m	Black (BK)	162-20100
SPF15	15.0	13.0	18.0	1.0 m	Black (BK)	162-20150
SPF20	20.0	18.0	23.0	1.0 m	Black (BK)	162-20200
SPF25	25.0	19.0	29.0	1.0 m	Black (BK)	162-20250
SPF30	30.0	20.0	34.0	1.0 m	Black (BK)	162-20300
SPF35	35.0	20.0	39.0	1.0 m	Black (BK)	162-20350
SPF40	40.0	20.0	45.0	1.0 m	Black (BK)	162-20400
SPF50	50.0	22.0	56.0	1.0 m	Black (BK)	162-20500

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Flexible Cable Support

Heladuct Flex

Heladuct flexible cable supports are commonly used in switching cabinets. They are also used in the furniture industry, where cables need to be routed rapidly and attractively.

Features and Benefits

- Space-saving wiring system
- Highly flexible, can be installed at angles of 90° and higher
- Cable clearly open to view
- Rapid mounting with screws or adhesive strip with high-quality foam bonding layer



Heladuct Flex- clearly and space-saving arrangement of wiring, even at angles above 90°.

MATERIAL	Polypropylene (PP)
Operating Temperature	-20 °C to +70 °C
Adhesive	Synthetic rubber with base of polyethylene foam
Flammability	UL94 V0 (excluding adhesive)



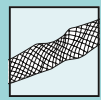
TYPE	Nominal Ø	No. of Wires			Max. load on a length of 500 mm at 70 °C (g)	Colour	Length (L)	Article-No.
Heladuct Flex10	10	9 x 0.75 mm ²	6 x 1.50 mm ²	4 x 2.50 mm ²	100	White (WH)	500.0	164-11008
Heladuct Flex20	20	32 x 0.75 mm ²	22 x 1.50 mm ²	14 x 2.50 mm ²	300	White (WH)	500.0	164-21008
Heladuct Flex30	30	67 x 0.75 mm ²	50 x 1.50 mm ²	34 x 2.50 mm ²	650	White (WH)	500.0	164-31008
Heladuct Flex40	40	-	81 x 1.50 mm ²	60 x 2.50 mm ²	1,100	White (WH)	500.0	164-41008

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

Heladuct Flex with Adhesive

TYPE	Nominal Ø	No. of Wires			Max. load on a length of 500 mm at 70 °C (g)	Colour	Length (L)	Article-No.
Heladuct Flex10SK	10	9 x 0.75 mm ²	6 x 1.50 mm ²	4 x 2.50 mm ²	100	White (WH)	500.0	164-11108
Heladuct Flex20SK	20	32 x 0.75 mm ²	22 x 1.50 mm ²	14 x 2.50 mm ²	300	White (WH)	500.0	164-21108
Heladuct Flex30SK	30	67 x 0.75 mm ²	50 x 1.50 mm ²	34 x 2.50 mm ²	500	White (WH)	500.0	164-31108
Heladuct Flex40SK	40	-	81 x 1.50 mm ²	60 x 2.50 mm ²	400	White (WH)	500.0	164-41108

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



Standard polyester braided sleeving

Helagaine HEGP

Helagaine HEGP braided sleeving is used in the automotive industry and in machine construction. It is also used for smaller electrical appliances to avoid pockets of high temperature. HEGP fulfils the strict requirement of DIN5510-2 and is therefore also optimal for railway applications.

Features and Benefits

- Made of sturdy polyester
- Highly flexible
- High abrasion resistance
- Very high surface coverage
- 13 sizes for diameters from 1 - 66 mm for an optimal fit



Helagaine HEGP braided sleeving.



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL94 V2, FMVSS 302
Specifications	EN 45545: 2013

HF ✓

RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGP03	1.0	5.0	Black (BK)	200 m	170-10300
HEGP04	2.0	7.0	Black (BK)	200 m	170-10400
HEGP05	3.0	9.0	Black (BK)	200 m	170-10500
HEGP06	4.0	11.0	Black (BK)	100 m	170-10600
HEGP08	5.0	12.0	Black (BK)	100 m	170-10800
HEGP10	7.0	15.0	Black (BK)	100 m	170-11000
HEGP12	8.0	17.0	Black (BK)	100 m	170-11200
HEGP15	10.0	20.0	Black (BK)	100 m	170-11500
HEGP20	14.0	26.0	Black (BK)	50 m	170-12000
HEGP25	18.0	34.0	Black (BK)	50 m	170-12500
HEGP30	20.0	40.0	Black (BK)	50 m	170-13000
HEGP40	30.0	50.0	Black (BK)	50 m	170-14000
HEGP50	40.0	66.0	Black (BK)	50 m	170-15000

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Standard polyester braided sleeving, expansion rate: 3:1

Helagaine HEGPX

Helagaine HEGPX is used whenever a higher expansion rate is required. HEGPX is particularly suitable for use in the automotive industry and in electrical appliances.

Features and Benefits

- Made of sturdy polyester
- Highly flexible
- Expansion rate of 3:1
- Easy to apply over irregular shapes
- Good abrasion resistance



Helagaine HEGPX braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL94 V2, FMVSS 302
Specifications	EN 45545: 2013, UL-Recognised

HF ✓

RoHS ✓



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

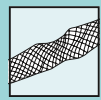
TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGPX06	3.0	10.0	Black (BK)	200 m	170-00060
HEGPX09	5.0	16.0	Black (BK)	100 m	170-00090
HEGPX12	6.0	19.0	Black (BK)	100 m	170-00120
HEGPX20	13.0	32.0	Black (BK)	100 m	170-00200
HEGPX30	19.0	45.0	Black (BK)	50 m	170-00300
HEGPX40	32.0	70.0	Black (BK)	50 m	170-00400

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polyester braided sleeving, UL94V0 classification

Helagaine HEGPV0

HEGPV0 braided sleeveings are used wherever fire protection is important such as control cabinets, robotics and automatic equipment. Also HEGPV0 is suitable for railway vehicle manufacturing as it conforms to the strict requirements of DIN5510-2 and NFF-16 101.

Features and Benefits

- Made of sturdy polyester
- Self-extinguishing according to UL94 V0 for enhanced fire protection
- Highly flexible
- High abrasion resistance
- High surface coverage



Helagaine HEGPV0 braided sleeving.

MATERIAL	Polyester (PBT)
Operating Temperature	-50 °C to +150 °C, intermittent +200 °C
Melting Point	+225 °C
Flammability	UL94 V0, FMVSS 302
Specifications	NF F 16-101

RoHS ✓



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGPV004	3.0	7.0	Black with White Identification Yarn (BKIDWH)	100 m	170-30400
HEGPV006	5.0	11.0	Black with White Identification Yarn (BKIDWH)	100 m	170-30600
HEGPV008	7.0	13.0	Black with White Identification Yarn (BKIDWH)	100 m	170-30800
HEGPV012	11.0	17.0	Black with White Identification Yarn (BKIDWH)	50 m	170-31200
HEGPV015	13.0	20.0	Black with White Identification Yarn (BKIDWH)	50 m	170-31500
HEGPV020	18.0	25.0	Black with White Identification Yarn (BKIDWH)	50 m	170-32000
HEGPV030	27.0	40.0	Black with White Identification Yarn (BKIDWH)	50 m	170-33000
HEGPV040	35.0	50.0	Black with White Identification Yarn (BKIDWH)	50 m	170-34000
HEGPV050	40.0	60.0	Black with White Identification Yarn (BKIDWH)	50 m	170-35000

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polyester braided sleeving, expansion rate: 3:1, UL94V0 classification

Helagaine HEGPV0X

Helagaine HEGPV0X is especially suitable for areas wherever fire protection is important as well as a higher expansion ratio of the braided sleeve. Helagaine HEGPV0X offers superior cable protection for machine tools, robotics and automatic equipment. Helagaine HEGPV0X had been successfully tested to DIN5510-2 and NF F 16-101 and can thus be used in many railway applications.

Features and Benefits

- Made of sturdy polyester
- Self-extinguishing according to UL94 V0 for enhanced fire protection
- Highly flexible
- Expansion ratio of 3:1
- Easy to apply over irregular shapes
- Good abrasion resistance



Helagaine HEGPV0X braided sleeving.

MATERIAL	Polyester (PBT)
Operating Temperature	-50 °C to +150 °C, intermittent +200 °C
Melting Point	+225 °C
Flammability	UL94 V0, FMVSS 302
Specifications	NF F 16-101, UL-Recognised

RoHS ✓



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

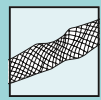
TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGPV0X03	2.0	6.0	Black with White Identification Yarn (BKIDWH)	200 m	170-50030
HEGPV0X06	3.0	10.0	Black with White Identification Yarn (BKIDWH)	200 m	170-50060
HEGPV0X09	5.0	16.0	Black with White Identification Yarn (BKIDWH)	100 m	170-50090
HEGPV0X12	6.0	19.0	Black with White Identification Yarn (BKIDWH)	100 m	170-50120
HEGPV0X20	12.0	32.0	Black with White Identification Yarn (BKIDWH)	100 m	170-50200
HEGPV0X30	19.0	45.0	Black with White Identification Yarn (BKIDWH)	50 m	170-50300
HEGPV0X40	32.0	70.0	Black with White Identification Yarn (BKIDWH)	50 m	170-50400
HEGPV0X50	38.0	76.0	Black with White Identification Yarn (BKIDWH)	50 m	170-50500

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polyamide braided sleeving for excellent abrasion resistance

Helagaine HEGPA66

Helagaine HEGPA66 is particularly suitable for vehicle manufacturing as well as plant construction.

Features and Benefits

- Made from heavy-duty polyamide yarn
- Excellent abrasion resistance
- Highly flexible
- Easy to apply over irregular shapes
- Eases application by expanding when compressed
- Very high surface covering



Various types of Helagaine braided sleeving.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-60 °C to +150 °C, intermittent +200 °C
Melting Point	+255 °C
Flammability	UL94 V2, FMVSS 302
Specifications	EN 45545: 2013

HF ✓

RoHS ✓



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGPA6604	3.0	6.0	Black (BK)	200 m	170-40400
HEGPA6606	4.0	8.0	Black (BK)	100 m	170-40600
HEGPA6608	5.0	10.0	Black (BK)	100 m	170-40800
HEGPA6610	7.0	12.0	Black (BK)	100 m	170-41000
HEGPA6612	8.0	14.0	Black (BK)	100 m	170-41200
HEGPA6616	12.0	18.0	Black (BK)	50 m	170-41600
HEGPA6620	15.0	23.0	Black (BK)	50 m	170-42000
HEGPA6625	18.0	28.0	Black (BK)	50 m	170-42500
HEGPA6630	25.0	32.0	Black (BK)	50 m	170-43000
HEGPA6640	30.0	44.0	Black (BK)	50 m	170-44000
HEGPA6650	40.0	55.0	Black (BK)	50 m	170-45000
HEGPA6660	50.0	65.0	Black (BK)	50 m	170-46000

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Light weight standard polyester braided sleeving

Helagaine HEGPL

Helagaine HEGPL is used primarily in automobile interiors, motor compartments, car bodies and underfloors.

Features and Benefits

- Made of sturdy polyester
- Expansion rate of 3:1
- Easier application over irregular shapes
- Highly flexible
- Good abrasion resistance



Helagaine HEGPL braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C
Flammability	UL94 V2, FMVSS 302, Type B

RoHS ✓

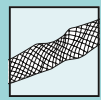


To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGPL03	3.0	8.0	Black (BK)	1,000 m	170-80503
HEGPL06	5.0	12.0	Black (BK)	400 m	170-80506
HEGPL12	8.0	21.0	Black (BK)	300 m	170-80512
HEGPL20	12.0	30.0	Black (BK)	300 m	170-80520
HEGPL30	18.0	55.0	Black (BK)	200 m	170-80530
HEGPL40	24.0	66.0	Black (BK)	150 m	170-80540
HEGPL50	30.0	82.0	Black (BK)	150 m	170-80550

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Standard braided sleeving in dispenser boxes

Helagaine HLB

Helagaine HLB is supplied in practical dispenser boxes and covers a wide range of applications with only a few sizes. It is ideal for both the professional and the home user. Helagaine HLB bundles and effectively protects cables and wires, for instance in HiFi systems and in industrial plants. Helagaine HLB also provides good resistance to abrasion.

Features and Benefits

- In practical, space-saving 10 m dispenser boxes
- Expansion rate of 3:1
- Bundling diameters from 5 mm to 54 mm
- Three sizes for very wide range of applications
- Extraction of sleeves



Helagaine HLB: The expansion rate makes it possible. Only three sizes in a handy dispenser box for almost all standard diameters.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +220 °C
Melting Point	+250 °C



One Step to the Web!

HF ✓

RoHS ✓



To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

TYPE	Ø D	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HLB15	15.0	5.0	21.0	Black (BK)	10 m	170-80150
HLB25	25.0	10.0	30.0	Black (BK)	10 m	170-80250
HLB35	35.0	18.0	54.0	Black (BK)	10 m	170-80350

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Polyester braided sleeving for reduction of vibration noise

Helagaine HEGSAS

Helagaine HEGSAS is used primarily in the automotive sector and wherever vibration noise must be reduced. Helagaine HEGSAS can be supplied in pre-cut lengths on request.

Features and Benefits

- Superior noise reduction
- Made of sturdy polyester
- Highly flexible
- Expansion rate of 3:1
- Easy to apply over irregular shapes due
- High surface coverage
- Excellent abrasion resistance



Helagaine HEGSAS braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C, intermittent +200 °C
Melting Point	+250 °C
Flammability	FMVSS 302

HF ✓

RoHS ✓

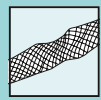


To prevent fraying, the sleeve can be cut with the hot cutting tool HSG0. See page 533.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGSAS04	2.0	8.0	Black (BK)	200 m	170-60401
HEGSAS06	4.0	11.0	Black (BK)	200 m	170-60600
HEGSAS09	6.0	16.0	Black (BK)	100 m	170-60900
HEGSAS12	8.0	20.0	Black (BK)	100 m	170-61200
HEGSAS15	10.0	24.0	Black (BK)	50 m	170-61500
HEGSAS20	13.0	30.0	Black (BK)	50 m	170-62000
HEGSAS30	20.0	40.0	Black (BK)	25 m	170-63000
HEGSAS40	30.0	50.0	Black (BK)	25 m	170-64000

All dimensions in mm. Subject to technical changes.

Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Meta-aramid braided sleeving

Helagaine HEGMAN

Helagaine HEGMAN provides excellent mechanical protection for applications involving high temperatures and fire-protection, particularly in the aerospace, military, railway and ship-building industries.

Features and Benefits

- Made of non-flammable meta-aramid
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation and fluids



One Step to the Web!



Helagaine HEGMAN and HEGMANWO are available in various sizes.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (NOMEX)
Operating Temperature	+240 °C
Melting Point	Does not melt / Carbonisation above +370 °C
Flammability	UL94 V0 (Raw material), UL224 VW-1
Specifications	DIN EN 6049

RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGMAN-02	1.0	2.0	Green (GN)	100 m	170-02100
HEGMAN-04	2.0	4.0	Green (GN)	100 m	170-02101
HEGMAN-06	4.0	8.0	Green (GN)	100 m	170-02102
HEGMAN-08	6.0	12.0	Green (GN)	50 m	170-02103
HEGMAN-10	8.0	16.0	Green (GN)	50 m	170-02104
HEGMAN-15	10.0	20.0	Green (GN)	50 m	170-02105
HEGMAN-20	12.0	24.0	Green (GN)	50 m	170-02106
HEGMAN-25	15.0	30.0	Green (GN)	50 m	170-02107
HEGMAN-30	20.0	40.0	Green (GN)	50 m	170-02108

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. NOMEX® is a registered trademark of DuPont. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Water and oil repellent meta-aramid braided sleeving

Helagaine HEGMANWO

Helagaine HEGMANWO is especially resistant to water and oil and is designed for applications requiring mechanical protection at high temperatures, particularly in the aerospace, military, railway and ship-building industries.

Features and Benefits

- Made of non-flammable meta-aramid
- Water and oil-repellent
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation and fluids



Helagaine HEGMAN and HEGMANWO are available in various sizes.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (NOMEX)
Operating Temperature	-60 °C to +240 °C
Melting Point	Does not melt / Carbonisation above +370 °C
Flammability	UL94 V0 (Raw material), UL224 VW-1
Specifications	DIN EN 6049

RoHS ✓

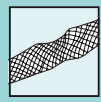
TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HEGMANWO-02	1.0	2.0	Green (GN)	100 m	170-02000
HEGMANWO-04	2.0	4.0	Green (GN)	100 m	170-02001
HEGMANWO-06	4.0	8.0	Green (GN)	100 m	170-02002
HEGMANWO-08	6.0	12.0	Green (GN)	50 m	170-02003
HEGMANWO-10	8.0	16.0	Green (GN)	50 m	170-02004
HEGMANWO-15	10.0	20.0	Green (GN)	50 m	170-02005
HEGMANWO-20	12.0	24.0	Green (GN)	50 m	170-02006
HEGMANWO-25	15.0	30.0	Green (GN)	50 m	170-02007
HEGMANWO-30	20.0	40.0	Green (GN)	50 m	170-02008

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. NOMEX® is a registered trademark of DuPont. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polyester self-closing sleeving

Helagaine Twist-In

Helagaine Twist-In is used to bundle and protect pre-terminated cables in machine-building and automation, electrical installations and automobile and truck manufacturing.

Helagaine Twist-In is also available in practical 2 m and 5 m lengths for use in the home or office.

Features and Benefits

- Self-closing sleeve made of polyester
- Very good protection against abrasion
- Ideal for retro-fitting
- Quick and easy installation and removal
- Allows to bundle for inspection, maintenance and assembly
- Small range of sizes covers a wide range of applications



Application video: Twist-In



Helagaine Twist-In gives easy access to cables and wires for inspection, maintenance and assembly.

MATERIAL	Polyester (PET)
Operating Temperature	-70 °C to +125 °C
Melting Point	+255 °C
Flammability	Self extinguishing, FMVSS 302
Specifications	UL-Recognised



The sleeve can best be cut with the hot cutting tool HSG0. See page 533.



TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
Twist-In 05	4.0	5.0	Black (BK)	150 m	170-01000
Twist-In 08	5.0	8.0	Black (BK)	100 m	170-01001
Twist-In 13	10.0	13.0	Black (BK)	50 m	170-01002
Twist-In 19	16.0	19.0	Black (BK)	25 m	170-01004
Twist-In 25	19.0	25.0	Black (BK)	25 m	170-01005
Twist-In 29	25.0	29.0	Black (BK)	15 m	170-01006
Twist-In 32	29.0	32.0	Black (BK)	15 m	170-01007
Twist-In 38	32.0	38.0	Black (BK)	15 m	170-01008
Twist-In 50	38.0	50.0	Black (BK)	15 m	170-01010

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.

TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
Twist-In 05	4.0	5.0	Black (BK)	5 m	170-01011
Twist-In 08	5.0	8.0	Black (BK)	5 m	170-01012
Twist-In 13	10.0	13.0	Black (BK)	5 m	170-01013
Twist-In 19	16.0	19.0	Black (BK)	2 m	170-01014
Twist-In 25	19.0	25.0	Black (BK)	2 m	170-01015
Twist-In 29	25.0	29.0	Black (BK)	2 m	170-01016
Twist-In 32	29.0	32.0	Black (BK)	2 m	170-01017
Twist-In 38	32.0	38.0	Black (BK)	2 m	170-01018

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Polyester self-closing sleeving, flame-retardant

Helagaine Twist-In-FR

Helagaine Twist-In-FR can be used in areas where fire protection is important, such as railway, aerospace and shipbuilding.

Features and Benefits

- Self-closing sleeve made from polyester
- Optimal fire protection
- Ideal for retro-fitting
- Very easy, quick installation and removal
- Quick and easy access to bundle for inspection, maintenance and assembly
- Small range of sizes covers a wide range of applications



Helagaine Twist-In-FR with the white identification yarn.



Application video: Twist-In

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +125 °C
Melting Point	+240 °C
Flammability	UL94 V0, FMVSS 302
Specifications	EN 45545: 2013, NF F 16-101, UL-Recognised



The sleeve can best be cut with the hot cutting tool HSG0. See page 533.

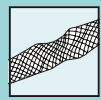
TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
Twist-In-FR 05	4.0	5.0	Black with White Identification Yarn (BKIDWH)	150 m	170-01100
Twist-In-FR 08	5.0	8.0	Black with White Identification Yarn (BKIDWH)	100 m	170-01101
Twist-In-FR 13	10.0	13.0	Black with White Identification Yarn (BKIDWH)	50 m	170-01102
Twist-In-FR 19	16.0	19.0	Black with White Identification Yarn (BKIDWH)	25 m	170-01104
Twist-In-FR 25	19.0	25.0	Black with White Identification Yarn (BKIDWH)	25 m	170-01105
Twist-In-FR 29	25.0	29.0	Black with White Identification Yarn (BKIDWH)	15 m	170-01106
Twist-In-FR 32	29.0	32.0	Black with White Identification Yarn (BKIDWH)	15 m	170-01107
Twist-In-FR 38	32.0	38.0	Black with White Identification Yarn (BKIDWH)	15 m	170-01108
Twist-In-FR 50	38.0	50.0	Black with White Identification Yarn (BKIDWH)	15 m	170-01109

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



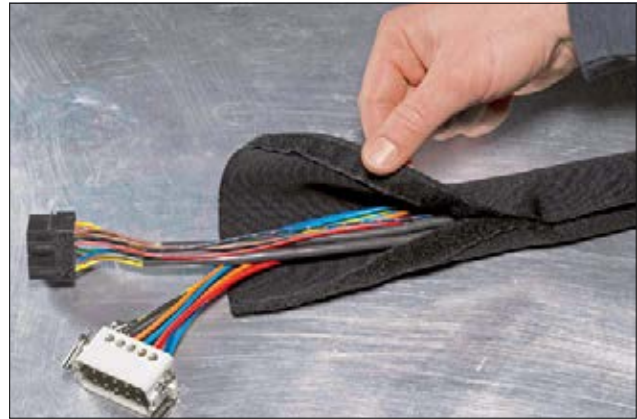
Re-sealable protective sleeving for post-termination cable organisation

HELAHOOK

HELAHOOK is used in industrial machines, electrical appliances, shipbuilding, railway vehicles and in the aerospace industry. HELAHOOK is also employed in automobiles or commercial vehicles. It is the ideal solution for post-termination cable organisation and wherever repeated use is a necessity.

Features and Benefits

- Re-sealable cable protection made of polyester
- Very elastic, fits snugly around the cables
- Hook and loop sealing system can be used for retro-fitting
- High abrasion-resistance



HELAHOOK protective sleeving allows for retrospective fitting and repeated use.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Flammability	UL94 V2, FMVSS 302



One Step to the Web!



TYPE	Bundle Ø min.	Bundle Ø max.	Colour	Reel Length	Article-No.
HELAHOOK10	3.0	15.0	Black (BK)	25 m	170-05100
HELAHOOK15	10.0	20.0	Black (BK)	25 m	170-05150
HELAHOOK20	15.0	30.0	Black (BK)	25 m	170-05200
HELAHOOK25	20.0	40.0	Black (BK)	25 m	170-05250
HELAHOOK30	25.0	50.0	Black (BK)	25 m	170-05300

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Burst Protection Sleeving for Hydraulic Hoses

Helagaine HEGWS

HEGWS is a highly abrasion and tear-resistant burst protection sleeve. HEGWS is used to protect hydraulic hoses and prevent injuries due to leaks emitting high-pressure liquid jets. HEGWS fulfils the standards of Earth Moving Machinery EN ISO 3457 and Mechanical Vibration and Shock EN 1299.

Features and Benefits

- Exceptional tear-resistance
- Very good protection against abrasion
- Optimal protection of hydraulic hoses
- Reduces risk of liquid-jet injuries
- Fullfils the standards of Earth Moving Machinery EN ISO 3457 and Mechanical Vibration and Shock EN 1299

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +125 °C
Melting Point	+220 +/- 10 °C
Flammability	UL94 V2, FMVSS 302, Type B

HF ✓

RoHS ✓



One Step to the Web!



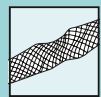
Helagaine HEGWS burst protection sleeving made of polyamide 6 offers excellent abrasion protection.



Helagaine HEGWS: The ideal protective sleeve for hydraulic hoses.

TYPE	Inside Ø (ID)	Wall (WT)	Colour	Reel Length	Article-No.
HEGWS20	12	1.10	Black (BK)	50 m	170-01300
HEGWS25	15	1.10	Black (BK)	50 m	170-01301
HEGWS30	19	1.10	Black (BK)	50 m	170-01302
HEGWS35	22	1.10	Black (BK)	50 m	170-01303
HEGWS40	25	1.10	Black (BK)	50 m	170-01304
HEGWS45	28	1.10	Black (BK)	50 m	170-01305
HEGWS50	31	1.10	Black (BK)	50 m	170-01306
HEGWS60	38	1.10	Black (BK)	50 m	170-01307
HEGWS70	44	1.10	Black (BK)	50 m	170-01308
HEGWS80	50	1.10	Black (BK)	50 m	170-01309
HEGWS90	57	1.10	Black (BK)	50 m	170-01310
HEGWS100	60	1.10	Black (BK)	50 m	170-01311
HEGWS115	70	1.10	Black (BK)	50 m	170-01312
HEGWS145	90	1.10	Black (BK)	50 m	170-01313
HEGWS176	110	1.10	Black (BK)	50 m	170-01314
HEGWS200	125	1.10	Black (BK)	50 m	170-01315

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



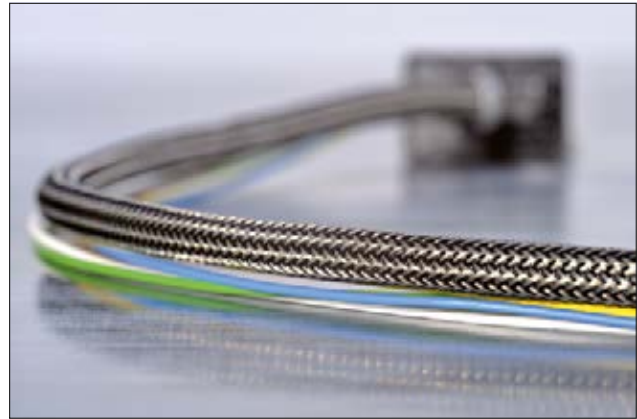
Electromagnetic protection braided sleeving

Helagaine HEGEMIP

Helagaine HEGEMIP braided sleeving is used for highly sensitive electronics, such as electrical appliances and machines, radio equipment, military and automotive engineering.

Features and Benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- Superior abrasion protection
- No kinks or tears, even when bending the sleeve 90°
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP braided sleeving: reliable protection from electromagnetic radiation.

MATERIAL	Polyester (Halogen free), Tin Plated copper
Operating Temperature	-40 °C to +175 °C, intermittent +200 °C
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
Flammability	UL94 V2, FMVSS 302

HF ✓

RoHS ✓

TYPE	Ø D	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP04	4.0	4.0	6.0	Tin coloured and Black	21.5 g/m	100 m	173-00400
HEGEMIP06	6.0	5.0	10.0	Tin coloured and Black	28.5 g/m	100 m	173-00600
HEGEMIP08	8.0	8.0	11.0	Tin coloured and Black	35.7 g/m	100 m	173-00800
HEGEMIP10	10.0	8.0	13.0	Tin coloured and Black	43.5 g/m	50 m	173-01000
HEGEMIP12	12.0	10.0	15.0	Tin coloured and Black	48.0 g/m	50 m	173-01200
HEGEMIP14	14.0	12.0	18.0	Tin coloured and Black	58.0 g/m	100 m	173-01400
HEGEMIP16	16.0	14.0	20.0	Tin coloured and Black	72.5 g/m	100 m	173-01600
HEGEMIP18	18.0	16.0	22.0	Tin coloured and Black	78.6 g/m	50 m	173-01800
HEGEMIP20	20.0	18.0	25.0	Tin coloured and Black	100.0 g/m	50 m	173-02000

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Electromagnetic protection, flame-retardant protection braided sleeving

Helagaine HEGEMIPV0

Helagaine HEGEMIPV0 braided sleeving is used for protection of highly sensitive electronics in industries, wherever fire protection is important, such as mass transit, aerospace and military industries.

Features and Benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- Self-extinguishing according to UL94 V0
- Superior abrasion protection
- No kinks or tears, even when bending the sleeve 90°
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIPV0 braided sleeve: EMI protection with enhanced flame retardance.

MATERIAL	Polyester (PBT), Tin Plated copper
Operating Temperature	-40 °C to +175 °C, intermittent +200 °C
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
Flammability	UL94 V0, FMVSS 302

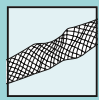
RoHS



TYPE	Ø D	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIPV004	4.0	4.0	6.0	Tin coloured and Black	21.5 g/m	100 m	173-60400
HEGEMIPV006	6.0	5.0	10.0	Tin coloured and Black	28.5 g/m	100 m	173-60600
HEGEMIPV008	8.0	8.0	11.0	Tin coloured and Black	26.5 g/m	100 m	173-60800
HEGEMIPV010	10.0	8.0	13.0	Tin coloured and Black	43.5 g/m	50 m	173-61000
HEGEMIPV012	12.0	10.0	15.0	Tin coloured and Black	48.0 g/m	50 m	173-61200
HEGEMIPV014	14.0	12.0	18.0	Tin coloured and Black	58.0 g/m	100 m	173-61400
HEGEMIPV016	16.0	14.0	20.0	Tin coloured and Black	72.5 g/m	100 m	173-61600
HEGEMIPV018	18.0	16.0	22.0	Tin coloured and Black	78.6 g/m	50 m	173-61800
HEGEMIPV020	20.0	18.0	25.0	Tin coloured and Black	100.0 g/m	50 m	173-62000

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Electromagnetic protection braided sleeving for hybrid automobiles

Helagain HEGEMIP-HY

Helagain HEGEMIP-HY provides electromagnetic protection in hybrid automobiles.

Features and Benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- No kinks or ruptures even when bent at sharp angles
- Superior abrasion protection
- Special copper alloy for enhanced protection against salt spray
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP-HY braided sleeving: EMI protection for hybrid automobiles.

MATERIAL	Polyester (PET), Tin Plated copper
Operating Temperature	-40 °C to +150 °C
EMI requirements	10 KHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)
Flammability	UL94 V2, FMVSS 302

RoHS ✓

TYPE	Ø D	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP-HY20	20.0	19.0	27.0	Silver (SR), Orange (OG)	72 g/m	50 m	173-02001
HEGEMIP-HY30	30.0	25.0	35.0	Silver (SR), Orange (OG)	101 g/m	50 m	173-03000
HEGEMIP-HY35	35.0	30.0	40.0	Silver (SR), Orange (OG)	120 g/m	50 m	173-03501
HEGEMIP-HY40	40.0	30.0	50.0	Silver (SR), Orange (OG)	180 g/m	50 m	173-04000
HEGEMIP-HY50	50.0	40.0	60.0	Silver (SR), Orange (OG)	193 g/m	50 m	173-05000

All dimensions in mm. Subject to technical changes.

Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.



Electromagnetic protection braided sleeving for defence applications

Helagaine HEGEMIP-VG

Helagaine HEGEMIP-VG provides electromagnetic protection for the defence industry.

Features and Benefits

- Excellent electromagnetic protection
- Very flexible, expandable and easy to apply
- Especially suitable for applications in tight areas or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Very good abrasion resistance
- Approved to military norm VG 96936-10 / Type A



HEGEMIP-VG braided sleeving with VG approval for defence applications.

MATERIAL	Tin Plated copper
Operating Temperature	-65 °C to +150 °C
Flammability	UL94 V2, FMVSS 302
Specifications	VG 96936-10



One Step to the Web!



TYPE	Ø D	Bundle Ø min.	Bundle Ø max.	Colour	Weight	Reel Length	Article-No.
HEGEMIP-VG03	3.0	3.5	5.0	Metal (ML)	18.5 g/m	500 m	173-00200
HEGEMIP-VG04	4.0	4.5	7.0	Metal (ML)	30.0 g/m	500 m	173-00201
HEGEMIP-VG06	6.0	5.5	8.5	Metal (ML)	36.5 g/m	500 m	173-00202
HEGEMIP-VG07,5	7.5	7.5	13.5	Metal (ML)	71.0 g/m	500 m	173-00203
HEGEMIP-VG10	10.0	13.0	17.5	Metal (ML)	95.5 g/m	250 m	173-00204
HEGEMIP-VG12,5	12.5	15.0	19.5	Metal (ML)	100.0 g/m	200 m	173-00205
HEGEMIP-VG20	20.0	19.0	30.0	Metal (ML)	264.5 g/m	100 m	173-00206

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.



For product specific approvals and specifications please refer to the Appendix.



Edge protection for cut-out sections

Flexiform edge protection is used to protect cables and wires routed through sharp-edged cut-out sections.

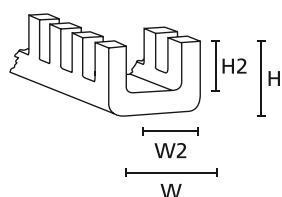
Features and Benefits

- Very flexible
- Easily and securely applied without adhesives
- Provides effective, orderly-looking protection
- Flexiform G51P made of polyethylene offers general purpose edge protection
- Flexiform G51N made of PA6 offers very good abrasion resistance
- Flexiform G51T made of PTFE offers excellent resistance to high temperatures and most chemicals



Optimal protection of cables and wires at panel edges.

Flexiform G51P polyethylene grommet strip



MATERIAL	Polyethylene (PE)
Operating Temperature	-30 °C to +80 °C
Flammability	UL94 HB

HF ✓

RoHS ✓

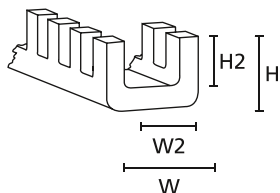
TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51PAA	0.4 - 0.9	2.3	0.9	2.7	1.8	PE	Natural (NA)	25 m	251-10009
G51PA	0.4 - 1.3	3.9	1.5	4.3	2.7	PE	Natural (NA)	25 m	251-10109
G51PB	1.3 - 2.1	4.6	2.4	4.3	2.7	PE	Natural (NA)	25 m	251-10209
G51PC	2.1 - 3.3	5.7	3.5	4.3	2.7	PE	Natural (NA)	25 m	251-10309
G51PD	3.3 - 4.8	8.4	5.1	6.2	4.3	PE	Natural (NA)	25 m	251-10409
G51PE	4.8 - 6.5	9.9	6.7	6.4	4.5	PE	Natural (NA)	25 m	251-10509
G51PF	6.5 - 8.1	11.4	8.3	6.8	4.8	PE	Natural (NA)	25 m	251-10609
G51PG	8.1 - 9.7	13.2	10.1	6.8	4.8	PE	Natural (NA)	25 m	251-10709
G51PH	9.7 - 12.9	16.4	13.2	6.8	4.8	PE	Natural (NA)	25 m	251-10809

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.



Edge protection for cut-out sections

Flexiform G51N polyamide 6 grommet strip



MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +95 °C
Flammability	UL94 HB
Specifications	NASM21266, NSA939510, PAN6480

HF ✓

RoHS ✓

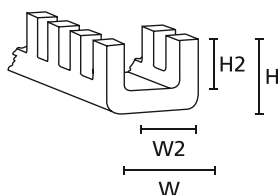
TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51NA	0.4 - 1.3	3.9	1.5	4.3	2.7	PA6	Natural (NA)	25 m	251-21109
G51NB	1.3 - 2.1	4.6	2.4	4.3	2.7	PA6	Natural (NA)	25 m	251-21209
G51NC	2.1 - 3.3	5.7	3.5	4.3	2.7	PA6	Natural (NA)	25 m	251-21309
G51ND	3.3 - 4.8	8.4	5.1	6.2	4.3	PA6	Natural (NA)	25 m	251-21409
G51NE	4.8 - 6.5	9.9	6.7	6.4	4.5	PA6	Natural (NA)	25 m	251-21509
G51NF	6.5 - 8.1	11.4	8.3	6.8	4.8	PA6	Natural (NA)	25 m	251-21609
G51NG	8.1 - 9.7	13.2	10.1	6.8	4.8	PA6	Natural (NA)	25 m	251-21709
G51NH	9.7 - 12.9	16.4	13.2	6.8	4.8	PA6	Natural (NA)	25 m	251-21809

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.

NASM **NSA** **PAN**

For product specific approvals and specifications please refer to the Appendix.

Flexiform G51T PTFE grommet strip



MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-60 °C to +260 °C, intermittent +350 °C
Flammability	UL94 V0
Specifications	PAN6480

RoHS ✓

TYPE	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Material	Colour	Pack Cont.	Article-No.
G51TA	0.4 - 1.3	3.9	1.5	4.3	2.7	PTFE	Natural (NA)	3 m	251-30109
G51TB	1.3 - 2.1	4.6	2.4	4.3	2.7	PTFE	Natural (NA)	3 m	251-30209
G51TC	2.1 - 3.3	5.7	3.5	4.3	2.7	PTFE	Natural (NA)	3 m	251-30309
G51TD	3.3 - 4.8	8.4	5.1	6.2	4.3	PTFE	Natural (NA)	3 m	251-30409
G51TE	4.8 - 6.5	9.9	6.7	6.4	4.5	PTFE	Natural (NA)	3 m	251-30509
G51TF	6.5 - 8.1	11.4	8.3	6.8	4.8	PTFE	Natural (NA)	3 m	251-30609
G51TG	8.1 - 9.7	13.2	10.1	6.8	4.8	PTFE	Natural (NA)	3 m	251-30709
G51TH	9.7 - 12.9	16.4	13.2	6.8	4.8	PTFE	Natural (NA)	3 m	251-30809

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
Flexiform grommet strips are not self-adhesive and therefore not suitable for outer edges.

PAN

For product specific approvals and specifications please refer to the Appendix.



Beading Edge Protection

EdgeGuard

PVC Beading strip is used to protect cables routed through sharp-edged cutout sections. It can also be used to provide an attractive finish to panel edges.

Features and Benefits

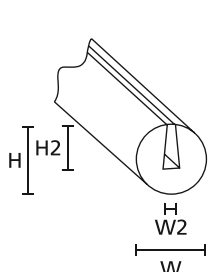
- Very flexible
- Easy to apply
- Protects cables from chafing on bulkheads



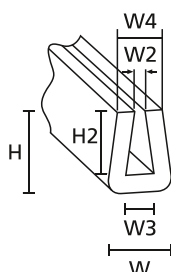
EdgeGuard.

MATERIAL	Polyvinylchloride (PVC)
Operating Temperature	-65 °C to +105 °C
Flammability	UL94 HB

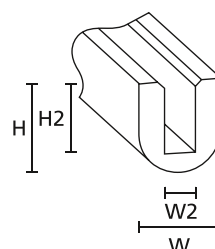
RoHS



PS1



SM1



RA1

TYPE	Width (W)	Width (W2)	Width (W3)	Width (W4)	Height (H)	Height (H2)	Colour	Pack Cont.	Article-No.
PS1	1.2	0.6	-	-	5.0	3.2	Black (BK)	75 m	800-00200
SM1	5.0	1.0	1.8	4.2	6.3	4.9	Black (BK)	75 m	800-00004
RA1	6.4	2.4	-	-	7.1	5.6	Black (BK)	75 m	800-00001

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



Push-on Caps

The protective push-on caps and elbow grommets are specially constructed to insulate and protect flat pin bushings. The caps and grommets are used in all areas of automotive electronics and in electrical connection systems.

Features and Benefits

- Protects effectively against spraying water
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



Push-on caps and elbow grommets in various dimensions.

MATERIAL	Polyvinylchloride (PVC)	Polyvinylchloride, flame retardant (PVC-FR)	Polyethylene (PE)
Operating Temperature	-30 °C to +60 °C		-10 °C to +70 °C
Shore Hardness A	70±5	56±5	Nom. 45
Flammability	UL94 HB	UL94 V0	UL94 HB

RoHS✓

RoHS✓

HF✓

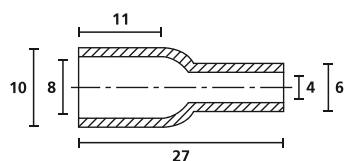
RoHS✓

TYPE	Drawing	Material	Colour	Article-No.
HV4819		PVC-FR	Black (BK)	631-08190
		PVC-FR	Natural (NA)	631-08199
HV4820		PVC	Black (BK)	631-08200
		PVC	Natural (NA)	631-08209
HV4823		PVC	Black (BK)	631-08230
		PVC	Natural (NA)	631-08239
HV4825		PVC	Natural (NA)	631-08259
OP4827		PE	Natural (NA)	631-58279
OP4828		PE	Natural (NA)	631-58289

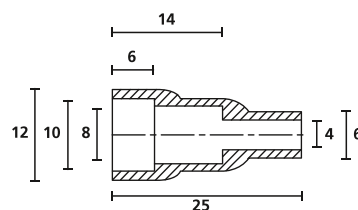
All dimensions in mm. Subject to technical changes.



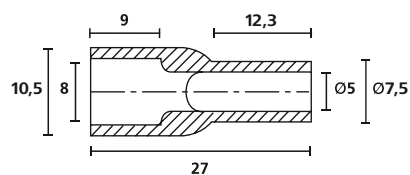
Push-on Caps



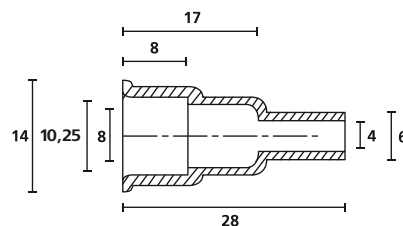
HV4819



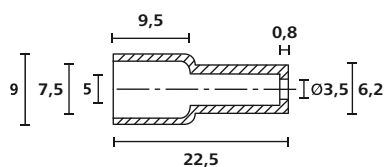
HV4820



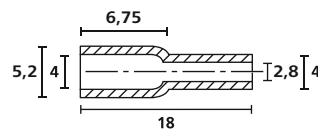
HV4823



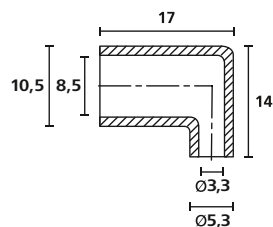
HV4825



OP4827



OP4828



HV4821

TYPE	Drawing	Material	Colour	Article-No.
HV4821		PVC-FR	Black (BK)	631-08210
		PVC-FR	Natural (NA)	631-08219

All dimensions in mm. Subject to technical changes.



Bend protection grommets

Bend protection grommets are typically used for protection of cables at apertures in casings.

Features and Benefits

- Routes cables free of kinks and breakage
- Provides strain relief
- Flexible and easy to apply
- High resistance to chemicals und environmental influences



Protection of cables and routing free of kinks and breakage.

MATERIAL	Polyvinylchloride, flame retardant (PVC-FR)
Operating Temperature	-30 °C to +60 °C
Shore Hardness A	56±5
Flammability	UL94 V0

RoHS

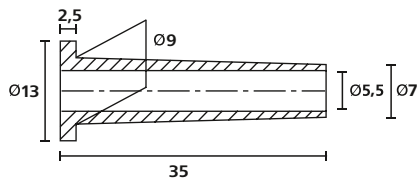


TYPE	Drawing	Colour	Article-No.
HV2101		Black (BK)	632-01010
		Grey (GY)	632-01017
		White (WH)	632-01019
HV2101A		Black (BK)	632-01020
HV2103		Black (BK)	632-01030
HV2104		Black (BK)	632-01040
HV2107		Black (BK)	632-01070
HV2206		Black (BK)	632-02060
HV2209		Black (BK)	632-02090
HV2210		Black (BK)	632-02100
HV2213		Black (BK)	632-02130
HV2228		Black (BK)	632-02280

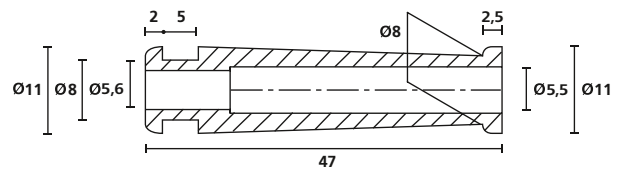
All dimensions in mm. Subject to technical changes.



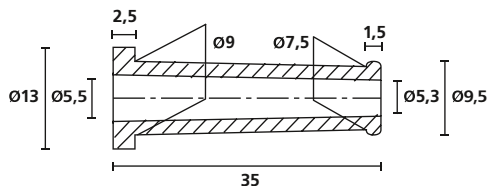
Bend protection grommets



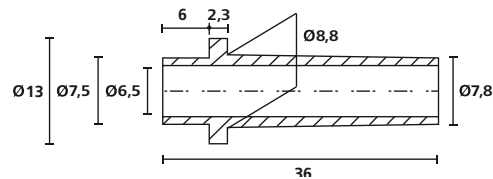
HV2101



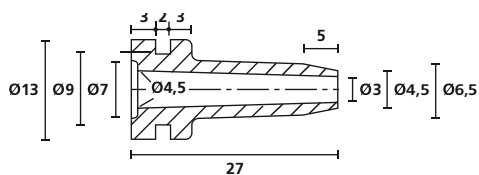
HV2206



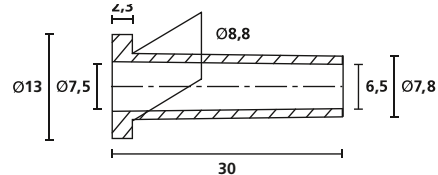
HV2101A



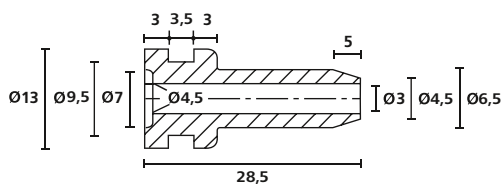
HV2209



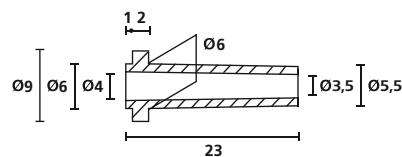
HV2103



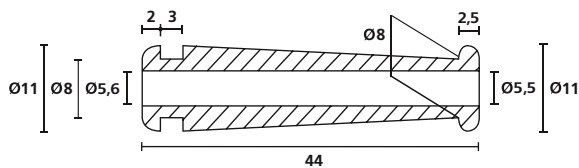
HV2210



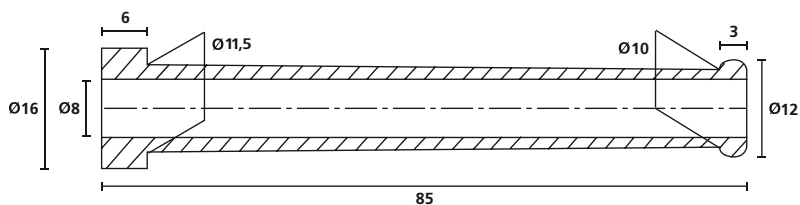
HV2104



HV2213



HV2228



HV2107



Strain protection grommets

Straining protection grommets are used as protection for cables and wires from pulling. They are also used for bend protection in casing apertures. They are especially useful in electrical equipment, for instance in electrical drills.

The use of Hellerine is recommended when working with grommets.

Features and Benefits

- Provides excellent strain relieve
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



Bend and strain protection on casings.

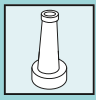
MATERIAL	Polyvinylchloride, flame retardant (PVC-FR)	Flexible Polyvinyl Chloride, cadmium free (PVC)
Operating Temperature	-30 °C to +60 °C	
Shore Hardness A	56±5	63±5
Flammability	UL94 V0	UL94 HB

RoHS ✓

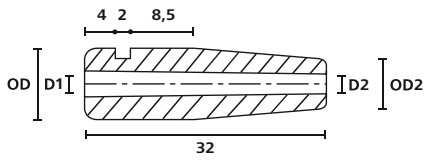
RoHS ✓

TYPE	Drawing	Outside Ø (OD)	Outside Ø (OD2)	Outside Ø (OD3)	Ø D	Ø D2	Material	Colour	Article-No.
H125		9.0	6.0	-	4.0	3.5	PVC	Black (BK)	634-31250
H126		9.0	6.0	-	5.0	4.5	PVC	Black (BK)	634-31260
		9.0	6.0	-	5.0	4.5	PVC	Grey (GY)	634-31268
H321		8.5	7.0	8.5	6.0	5.5	PVC-FR	Black (BK)	634-03210
H3A		9.0	5.0	8.0	4.5	3.0	PVC-FR	Black (BK)	634-00310
H4202		-	-	-	-	-	PVC-FR	Black (BK)	634-04200
H119		7.0	4.5	6.5	4.5	3.0	PVC-FR	Black (BK)	634-01190
H120		8.0	6.0	8.0	4.5	3.0	PVC-FR	Black (BK)	634-01200
H121		11.0	8.5	-	8.0	7.0	PVC-FR	Black (BK)	634-01210

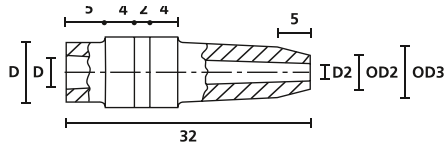
All dimensions in mm. Subject to technical changes.



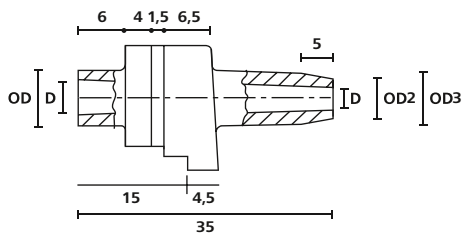
Strain protection grommets



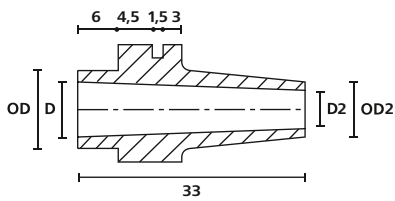
H125/H126



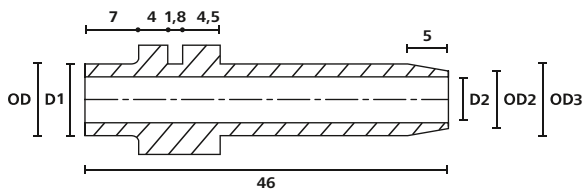
H119



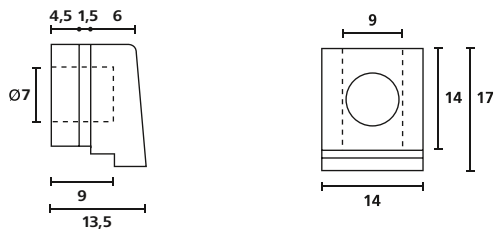
H120



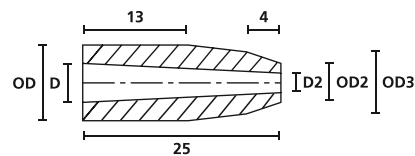
H121



H321



H4202



H3A



Edge protection grommets

Edge protection grommets are used wherever cable and wires are routed through outlets and apertures. HellermannTyton grommets offer excellent mechanical protection.

Features and Benefits

- Protects cables from sharp edges
- Provides additional strain relief
- Flexible and easy to apply
- High resistance to chemicals and environmental influences

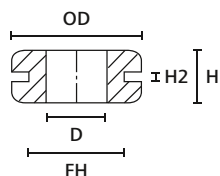


Edge protection grommets.

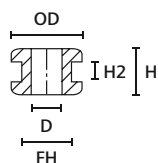
MATERIAL	Polyvinylchloride (PVC)	Polyvinylchloride, flame retardant (PVC-FR)
Operating Temperature	-30 °C to +60 °C	
Shore Hardness A	70±5	56±5
Flammability	UL94 HB	UL94 V0

RoHS✓

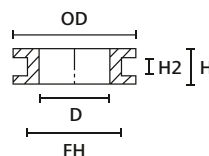
RoHS✓



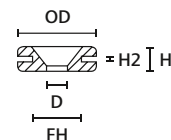
HV1101



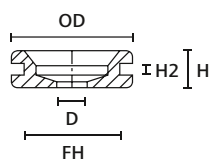
HV1201 to HV1218



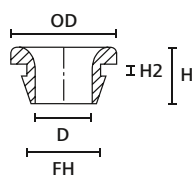
HV1301 to HV1305



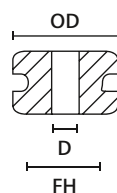
HV1401



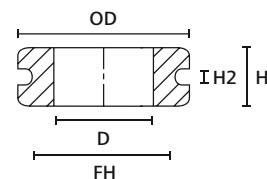
HV1402



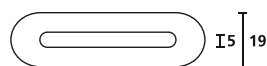
HV1502 to OP1503



HV1606 to HV1608



HV1606 to HV1608



HV1606 to HV1608



Edge protection grommets

TYPE	Drawing	Bundle Ø max.	Hole Ø (FH)	Ø D	Height (H)	Height (H2)	Material	Colour	Article-No.
HV1101		25.5	19.0	12.0	10.0	1.6	PVC-FR	Black (BK)	633-01010
HV1212		9.0	6.0	4.0	7.0	1.0	PVC-FR	Black (BK)	633-02120
HV1201		9.5	6.4	4.0	5.6	1.6	PVC-FR	Black (BK)	633-02010
HV1201B		9.5	6.4	4.0	6.5	2.5	PVC-FR	Black (BK)	633-02020
HV1215		10.0	8.0	6.0	5.0	1.0	PVC-FR	Black (BK)	633-02150
HV1209		11.0	9.0	4.0	5.5	1.5	PVC-FR	Black (BK)	633-02090
HV1208		14.0	9.5	8.0	8.0	1.5	PVC-FR	Black (BK)	633-02080
HV1207		14.0	10.0	6.0	6.4	1.5	PVC-FR	Black (BK)	633-02070
HV1218		14.0	10.0	6.0	9.0	4.0	PVC-FR	Black (BK)	633-02180
HV1216		14.5	8.0	5.0	6.5	1.5	PVC-FR	Black (BK)	633-02160
HV1210		15.0	9.0	6.0	10.5	2.0	PVC-FR	Black (BK)	633-02100
HV1203		17.5	12.0	10.0	6.8	2.0	PVC-FR	Black (BK)	633-02030
HV1204		17.5	12.0	10.0	8.8	4.0	PVC-FR	Black (BK)	633-02040
HV1206		17.5	12.0	10.0	10.8	6.0	PVC-FR	Black (BK)	633-02060
HV1205		17.5	13.5	10.0	8.7	4.0	PVC-FR	Black (BK)	633-02050
HV1303		15.9	11.0	8.0	6.4	1.6	PVC-FR	Black (BK)	633-03030
HV1301		15.9	11.0	8.0	7.0	1.0	PVC-FR	Black (BK)	633-03010
HV1302		15.9	11.0	8.0	9.0	3.0	PVC-FR	Black (BK)	633-03020
HV1304		15.9	11.0	8.0	10.8	6.0	PVC-FR	Black (BK)	633-03040
HV1305		24.0	18.0	14.0	7.0	3.0	PVC-FR	Black (BK)	633-03050
		24.0	18.0	14.0	7.0	3.0	PVC-FR	White (WH)	633-03059
HV1401		15.9	9.5	5.0	4.8	0.8	PVC-FR	Black (BK)	633-04010
HV1402		23.0	18.5	6.0	7.0	2.0	PVC-FR	Black (BK)	633-04020
HV1502		11.5	8.0	6.5	8.0	1.5	PVC	Black (BK)	633-05020
HV1606		31.0	25.0	17.0	11.0	3.0	PVC-FR	Grey (GY)	633-06068
HV1607		43.0	37.0	29.0	11.0	3.0	PVC-FR	Grey (GY)	633-06078
HV1608		58.0	52.0	44.0	11.0	3.0	PVC-FR	Grey (GY)	633-06088

All dimensions in mm. Subject to technical changes.



Set for Bend and Edge Protection

HOT Kit

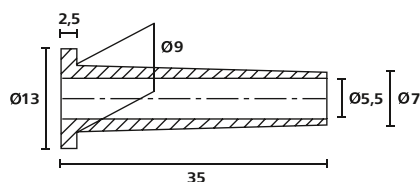
The practical mix of grommets for construction, repairs and home improvement.

Features and Benefits

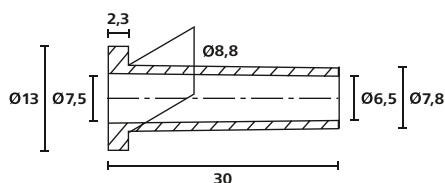
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



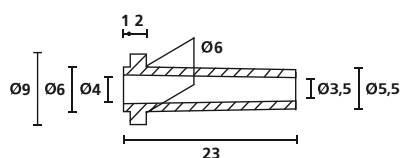
Small, but practical - the HOT Grommet Kit.



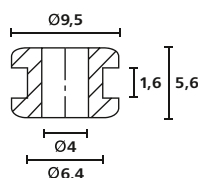
HV2101



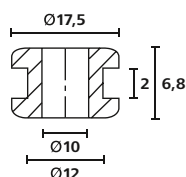
HV2210



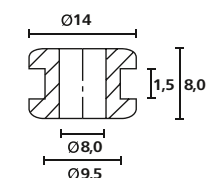
HV2213



HV1201



HV1203

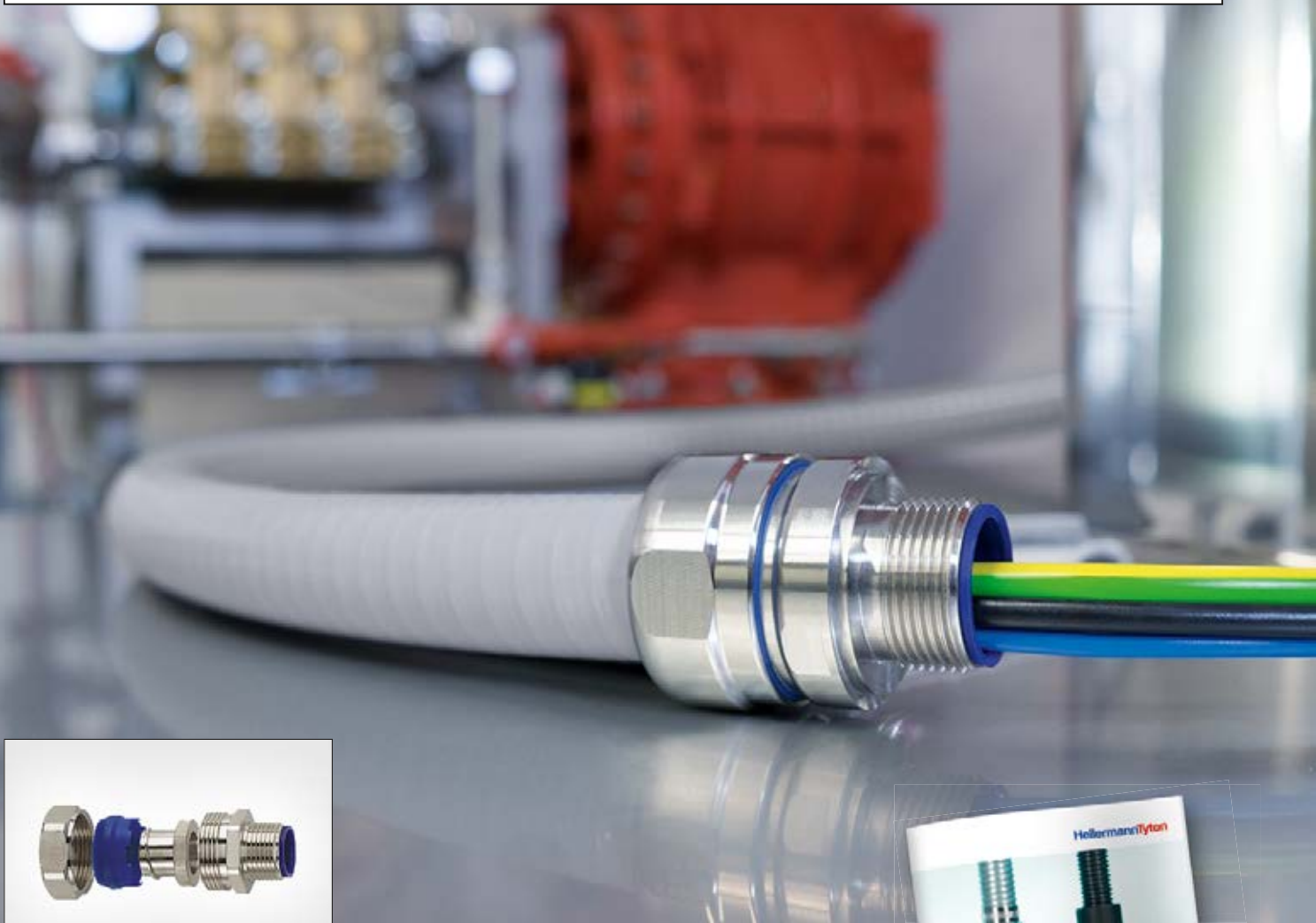


HV1208

Description	Type	Content	Article-No.	Page
Set for Bend and Edge Protection	HOT Kit	-	639-60000	-
Bend Protection Grommets	HV2101	15	632-01010	344
	HV2210	15	632-02100	344
	HV2213	20	632-02130	344
Edge Protection Grommets	HV1201	20	633-02010	348
	HV1203	15	633-02030	348
	HV1208	15	633-02080	348

Minimum Order Quantity (MOQ) may differ from package content.

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