



HelaGuard

Non-metallic and metallic flexible conduits and fittings



MADE FOR REAL<sup>®</sup>

Inspired by  
the forces  
of nature



Our experience in meeting customers' demands in many different industries has shaped all our products.

Our HelaGuard conduits and fittings are made to protect cables in the toughest conditions. Yet our offshore customers challenged us with a whole new dimension: lightening. We developed a liquid-tight system, resistant to immense pressure and impact as well as intense UV radiation, which withstands and safely diverts powerful and repeated lightning strikes. To prove our solution, we simulated such conditions in a special laboratory. Our technically highly-advanced conduit and fitting not only emerged intact, but are now reliably fulfilling their exacting function in countless off-shore installations across the globe.

## Comprehensive industry expertise

The HelaGuard range of conduits and fittings meets the requirements of machine building, rolling stock, rail infrastructure, offshore, shipping, mining, plant construction and other industries:



Agricultural technology



Offshore



Construction



Machines



Medical technology



Food and beverage industry



Commercial vehicles



Rail vehicle construction



Shipbuilding



Solar industry



Heavy duty



Wind power



### HelaGuard Application Overview

Conduit System	IP rating available*	Compression strength kg/100 mm, 20 mm Ø	Pull-off strength kg, 20 mm Ø	Minimum bend radius 20 mm Ø
<b>HG-SW</b> PA6 corrugated, standard weight	IP66, IP67, IP68, IP69k	75	40	45
<b>HG-LW</b> PA6 corrugated, light weight	IP66, IP67, IP68, IP69k	60	30	40
<b>HG-HW</b> PA6 corrugated, heavy weight	IP66, IP67, IP68, IP69k	120	70	55
<b>HG-FR</b> Flame retardant PA6 corrugated, standard weight	IP66, IP67, IP68, IP69k	75	40	45
<b>HG-HI</b> PA12 corrugated, standard weight	IP66, IP67, IP68, IP69k	45	30	35
<b>HG-DC</b> PA6 double slit corrugated	IP40	60	15	90
<b>HG-PP</b> PP corrugated	IP40, IP66 IP67, IP68	35	25	40
<b>SC</b> galvanised steel	IP40	350	120	45
<b>SSC</b> stainless steel	IP40	400	170	45
<b>PCS</b> galvanised steel, PVC coated	IP54, IP65	350	120	45
<b>NCS</b> galvanised steel, PA6 coated	IP54, IP65	350	120	45
<b>LFHCS</b> galvanised steel, LFH coated	IP54, IP65	350	120	45
<b>LTS</b> galvanised steel, PVC coated, liquid-tight	IP66, IP67, IP68, IP69k	400	130	65
<b>LTSH</b> galvanised steel, thermoplastic rubber, liquid-tight	IP66, IP67, IP68, IP69k	400	130	65
<b>LTSUL</b> galvanised steel, PVC coated, liquid-tight, UL-listed	IP66, IP67, IP68, IP69k	500	160	90
<b>PCSB</b> galvanised steel, PVC coated, galvanised steel overbraid	IP54, IP65	350	120,130	45
<b>SCSB</b> galvanised steel, galvanised steel overbraid	IP40	350	120	45
<b>PSR</b> Spiral-reinforced PVC, smooth bore	IP66, IP67	60	25	35
<b>PSRSC</b> Spiral-reinforced PVC, smooth bore, smooth cover	IP66, IP67, IP68, IP69k	120	70	35

- yes
- no



	High fatigue life	Temperature range	Flexible	Halogen free	Self-extinguishing	High abrasion resistance	High UV resistance (black)	Page
	●	-40 °C to +120 °C	●	●	●	●	●	11
	●	-40 °C to +120 °C	●	●	●	—	—	12
	—	-40 °C to +120 °C	●	●	●	●	●	13
	—	-40 °C to +120 °C	●	●	●	●	●	14
	●	-50 °C to +110 °C	●	●	●	—	●	15
	—	-40 °C to +140 °C	—	●	●	●	—	16
	—	+20 °C to +90 °C	●	—	●	—	—	17
	—	-100 °C to +300 °C	●	●	●	●	—	64
	—	-100 °C to +600 °C	●	●	●	●	●	65
	●	-15 °C to +70 °C	●	—	●	—	—	72
	—	-40 °C to +120 °C	●	●	●	●	—	73
	—	-25 °C to +90 °C	●	●	●	—	—	74
	—	-20 °C to +105 °C	●	—	●	—	●	85
	—	-60 °C to +150 °C	●	●	●	—	●	86
	—	-15 °C to +75 °C	●	—	●	—	●	87
	—	-15 °C to +70 °C	●	—	●	●	—	95
	—	-100 °C to +300 °C	●	●	●	—	—	102
	—	-20 °C to +70 °C	●	—	●	—	—	109
	—	-5 °C to +70 °C	●	—	●	—	—	110

\* For more information about Ingress Protection (IP) please refer to page 143.

## Seeing is believing. Trying it is better.

Preview thousands of our cable management parts online in 3D and download multi CAD data models in all standard formats for free. Look out for the CAD icon on our product detail pages and visit our CAD construction engineering part portal.

### MADE FOR REAL



CAD – cleverly  
assisted decisions



In cooperation with



Non-Metallic Conduit Systems  
**Page 9**



Metallic Conduit Systems  
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Spiral-Reinforced Conduit Systems  
**Page 107**

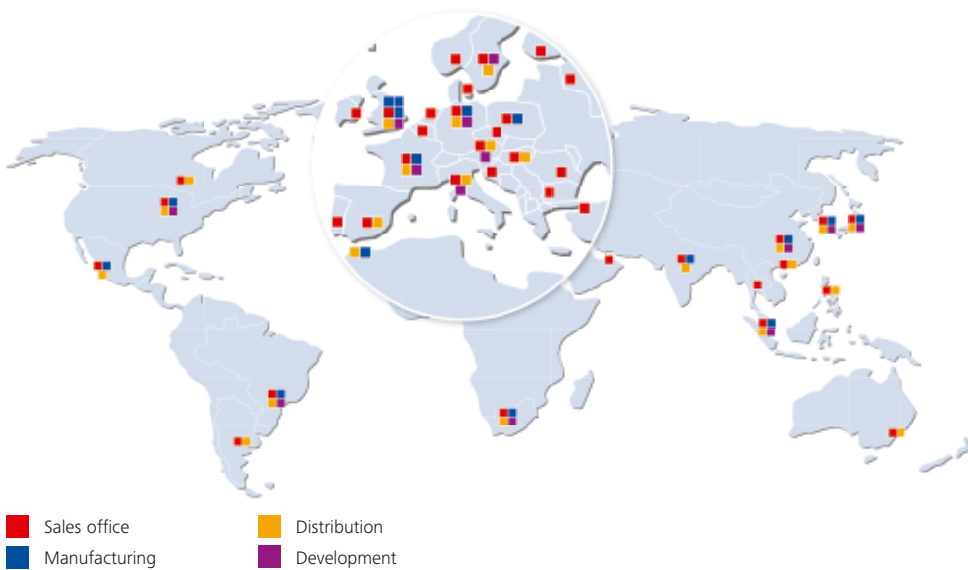


Conduit System Accessories  
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HellermannTyton is an international team with a passion for the best solutions around cables



Regardless of which HellermannTyton sites you visit in person, you can be assured of a friendly atmosphere and maximum reliability. As part of a survey, 10,000 customers all over Europe confirmed that we are on the right track, with 97 per cent of them saying they would be happy to recommend us.

We want things to stay that way and even improve wherever possible. We will do this with high-quality products and – first and foremost – motivated staff. People who listen carefully, get things done and seek to satisfy all needs.

## HellermannTyton INSIDE

Be inspired by teamwork at HellermannTyton. Our INSIDE HellermannTyton programme gives new insights into how our teams work.

See for yourself how we generate new ideas and develop innovative products:



[www.HellermannTyton.com/INSIDE2019HGCA](http://www.HellermannTyton.com/INSIDE2019HGCA)





## 1.1 Non-Metallic Conduit Systems

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HG-FR PA6 Flame Retardant	14
HG-HI PA12 Standard	15
HG-DC PA6 Double Slit	16
HG-PP Standard	17



## 1.2 Fittings for Non-Metallic Conduits

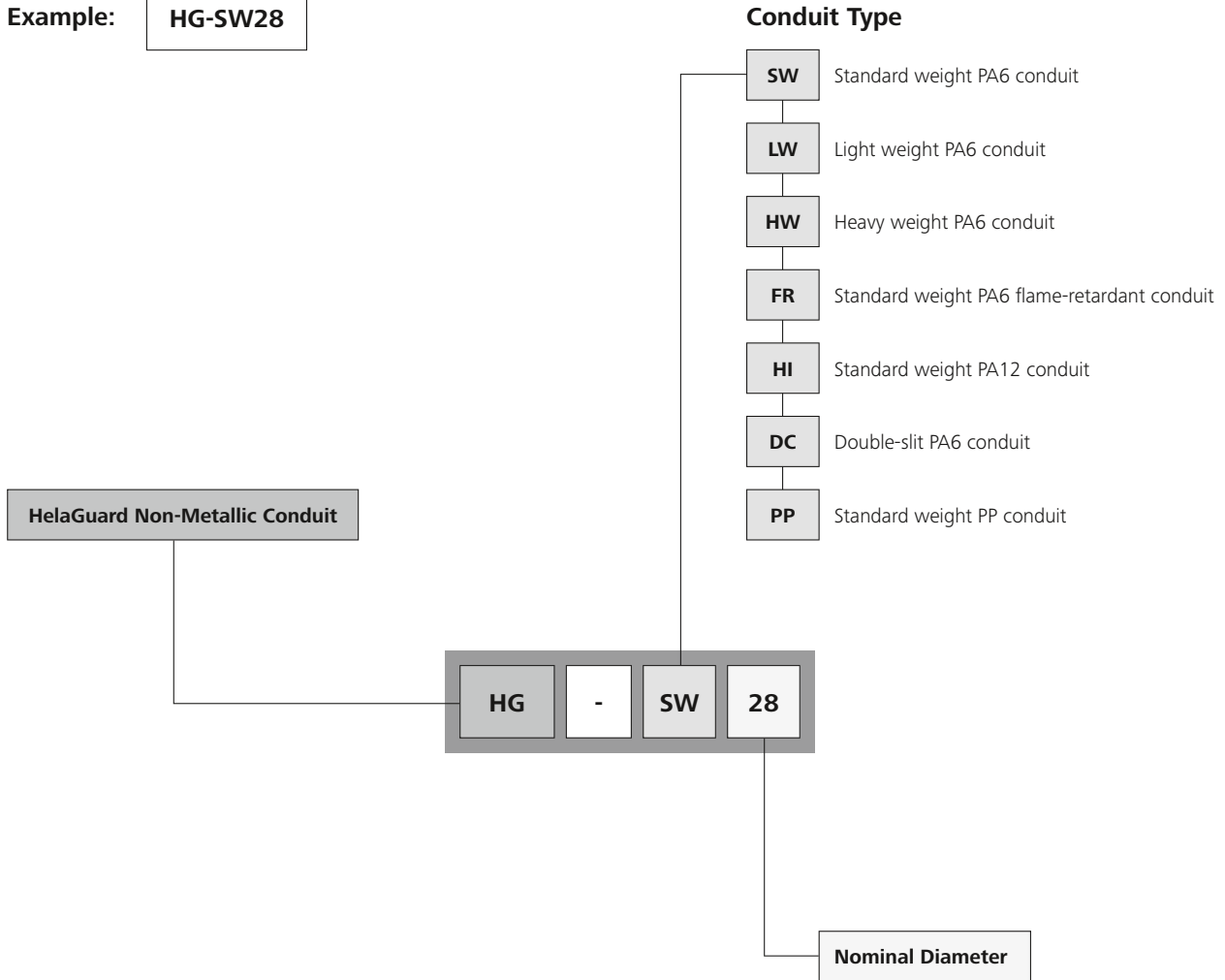
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	HG-45, 45° Elbow, IP66	28
Swivel external thread	HGL-45, 45° Elbow, IP68	29
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	HGL-SM, Straight, IP68	31
	HG-90M, 90° Elbow, IP66	32
	HGL-90M, 90° Elbow, IP68	33
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	HGL-45M, 45° Elbow, IP68	35

Swivel internal thread	HG-SF, Straight, IP66	36
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### HelaGuard Nomenclature for Non-Metallic Conduits

Example:

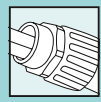
**HG-SW28**



CAD download

The nominal diameters in the product names and data tables of the non-metallic conduits and fittings are closely related to, but not identical with, the exact outside diameter of the conduit. The nominal diameters can be used to identify more easily and quickly which conduits and fittings fit each other.

Some suppliers employ an alternative designation called "Nennweite" ("NW") to identify the size of the conduit. For ease of use, the data tables for the non-metallic conduits contain columns for the nominal diameter, the Nennweite and the exact outside diameter. The Nennweite can therefore be used to determine the nominal diameter.



### Non-metallic conduits

#### HG-SW PA6 Standard Weight

Standard weight corrugated flexible conduit for industrial applications, including 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

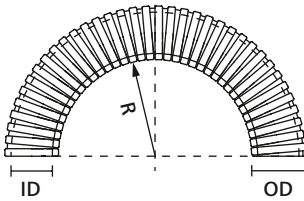


HelaGuard HG-SW for industrial applications.



One Step to the Web!

<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40 °C to +120 °C
<b>Operating Temperature Moving</b>	-20 °C to +100 °C
<b>Flammability</b>	UL 94 V2



HelaGuard non-metallic conduit

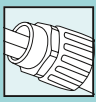
TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-SW10	10	7.5	10.0	6.3	15	19 g/m	50 m	Black (BK)	166-11100
HG-SW11	11	8.5	11.5	8.2	20	22 g/m	50 m	Black (BK)	166-11101
HG-SW13	13	10	13.0	9.8	25	28 g/m	50 m	Black (BK)	166-11102
HG-SW16	16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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Non-Metallic Conduits

#### HG-LW PA6 Light Weight

Light weight corrugated flexible conduit for machine building, plant construction, control panels and public buildings.

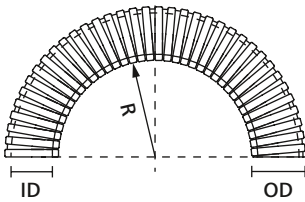
#### Features and benefits

- 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 HG-LW is very light and flexibel.*

<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40 °C to +120 °C
<b>Operating Temperature Moving</b>	-20 °C to +100 °C
<b>Flammability</b>	self-extinguishing according to EN IEC 61386



*HelaGuard non-metallic conduit*



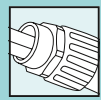
TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-LW10	10	7.5	10.0	6.5	15	18 g/m	50 m	Black (BK)	166-11200
HG-LW11	11	8.5	11.5	8.3	20	22 g/m	50 m	Black (BK)	166-11201
HG-LW13	13	10	13.0	10.0	25	24 g/m	50 m	Black (BK)	166-11202
HG-LW16	16	12	15.8	12.0	35	36 g/m	50 m	Black (BK)	166-11203
HG-LW21	21	17	21.2	16.9	40	56 g/m	50 m	Black (BK)	166-11204
HG-LW28	28	23	28.5	23.0	45	90 g/m	50 m	Black (BK)	166-11205
HG-LW34	34	29	34.5	28.3	55	110 g/m	50 m	Black (BK)	166-11206
HG-LW42	42	36	42.5	35.7	65	150 g/m	25 m	Black (BK)	166-11207
HG-LW54	54	48	54.5	47.4	80	200 g/m	25 m	Black (BK)	166-11208
HG-LW67	67	56	67.2	56.5	110	310 g/m	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.



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### Non-Metallic Conduits

#### HG-HW PA6 Heavy Weight

Heavy weight corrugated flexible conduit for high mechanical demands, including heavy-duty machine building, plant construction, and public buildings.

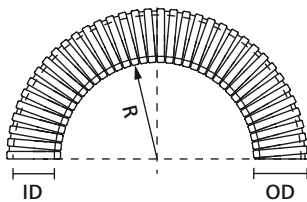
#### Features and benefits

- Heavy weight
- High mechanical strength
- Very abrasion resistant
- High impact strength
- 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)



HelaGuard HG-HW for very high mechanical protection.

<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40 °C to +120 °C
<b>Flammability</b>	UL 94 V2



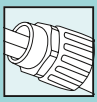
HelaGuard non-metallic conduit

TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-HW13	13	10	13.0	9.0	35	37 g/m	50 m	Black (BK)	166-11302
HG-HW16	16	12	15.8	11.5	45	48 g/m	50 m	Black (BK)	166-11303
HG-HW21	21	17	21.2	15.5	55	80 g/m	50 m	Black (BK)	166-11304
HG-HW28	28	23	28.5	21.3	60	130 g/m	50 m	Black (BK)	166-11305
HG-HW34	34	29	34.5	26.9	70	170 g/m	25 m	Black (BK)	166-11306
HG-HW42	42	36	42.5	34.6	80	200 g/m	25 m	Black (BK)	166-11307
HG-HW54	54	48	54.5	46.0	90	270 g/m	25 m	Black (BK)	166-11308

All dimensions in mm. Subject to technical changes.  
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



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### Non-Metallic Conduits

#### HG-FR PA6 Flame Retardant

Flame-retardant standard weight corrugated flexible conduit is used where high fire-protection is required, including railway vehicles, tunnels and underground stations as well as public buildings.

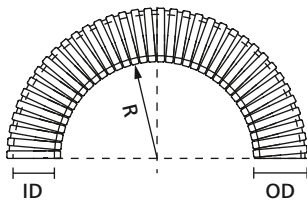
#### Features and benefits

- 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)



HelaGuard HG-FR offers excellent fire protection properties.

<b>MATERIAL</b>	Polyamide 6, flame retardant (PA6-FR)
<b>Operating Temperature</b>	-40 °C to +120 °C
<b>Operating Temperature Moving</b>	-20 °C to +100 °C
<b>Flammability</b>	UL 94 V0



HelaGuard non-metallic conduit



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



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### Non-Metallic Conduits

#### HG-HI PA12 Conduit

PA12 corrugated flexible conduit for applications with continual movement and bending, including robotics and automation, rail, machine building and plant construction.

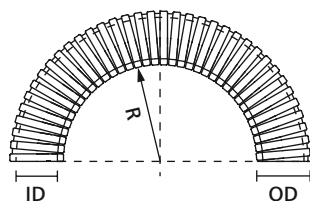
#### Features and benefits

- Excellent fatigue life
- Very flexible
- Recovers form if crushed
- Good mechanical properties at low temperatures
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Self-extinguishing to IEC 61386
- Colour: black (UV resistant)



HelaGuard HG-HI is ideal for robotics and automation.

<b>MATERIAL</b>	Polyamide 12 (PA12)
<b>Operating Temperature</b>	-50 °C to +110 °C
<b>Operating Temperature Moving</b>	-50 °C to +110 °C
<b>Flammability</b>	self-extinguishing according to EN IEC 61386



HelaGuard non-metallic conduit



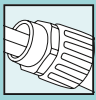
TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-HI13	13	10	13.0	9.8	25	26 g/m	50 m	Black (BK)	166-11501
HG-HI16	16	12	15.8	11.8	30	35 g/m	50 m	Black (BK)	166-11502
HG-HI21	21	17	21.2	16.7	35	55 g/m	50 m	Black (BK)	166-11503
HG-HI28	28	23	28.5	21.7	45	92 g/m	50 m	Black (BK)	166-11504
HG-HI34	34	29	34.5	28.1	55	120 g/m	25 m	Black (BK)	166-11505
HG-HI42	42	36	42.5	35.5	60	160 g/m	25 m	Black (BK)	166-11506
HG-HI54	54	48	54.5	47.2	70	220 g/m	25 m	Black (BK)	166-11507

All dimensions in mm. Subject to technical changes.

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



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### Non-Metallic Conduits

#### HG-DC Double Slit

Double slit corrugated conduit for retrofitting is used in control panels, machine building, plant construction.

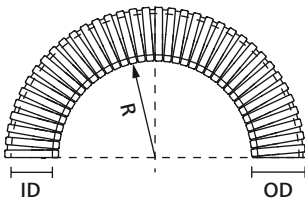
#### Features and benefits

- 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.

<b>MATERIAL</b>	Polyamide 6 (PA6)
<b>Operating Temperature</b>	-40 °C to +140 °C, intermittent +160 °C
<b>Flammability</b>	UL 94 HB



HelaGuard non-metallic conduit



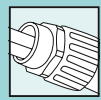
TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-DC11	11	8.5	11.5	6.2	45	37 g/m	50 m	Black (BK)	166-11800
HG-DC13	13	10	12.9	7.9	55	46 g/m	50 m	Black (BK)	166-11801
HG-DC16	16	12	16.2	10.3	60	72 g/m	50 m	Black (BK)	166-11802
HG-DC21	21	17	21.0	13.7	90	110 g/m	50 m	Black (BK)	166-11803
HG-DC28	28	23	28.4	19.8	105	166 g/m	50 m	Black (BK)	166-11804
HG-DC34	34	29	34.2	26.6	150	180 g/m	25 m	Black (BK)	166-11805
HG-DC42	42	36	43.5	32.3	170	293 g/m	25 m	Black (BK)	166-11806
HG-DC54	54	48	53.3	44.0	170	378 g/m	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.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.





### Non-Metallic Conduits

#### HG-PP PP Conduit

Standard weight conduit made of Polypropylen is used in machine building, electrical installations and buildings, often in concrete or plaster.

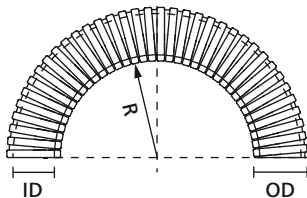
#### Features and benefits

- Very flexible
- Abrasion resistant
- Resistant to acids and alkalis
- Self-extinguishing to IEC 61386



*HelaGuard PP Standard is typically used in electrical installations and buildings.*

<b>MATERIAL</b>	Polypropylene (PP)
<b>Operating Temperature</b>	-20 °C to +90 °C
<b>Flammability</b>	self-extinguishing according to EN IEC 61386



*HelaGuard non-metallic conduit*



TYPE	Nominal Ø	NW Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
HG-PP10	10	7.5	10.0	6.3	15	16 g/m	50 m	Black (BK)	166-11900
HG-PP13	13	10	13.0	9.8	25	20 g/m	50 m	Black (BK)	166-11901
HG-PP16	16	12	15.8	11.8	35	30 g/m	50 m	Black (BK)	166-11902
HG-PP20	20	16	20.0	14.8	40	45 g/m	50 m	Black (BK)	166-11903
HG-PP21	21	17	21.2	16.7	40	50 g/m	50 m	Black (BK)	166-11904
HG-PP25	25	22	25.0	19.1	50	52 g/m	50 m	Black (BK)	166-11905
HG-PP26	26	22	25.4	21.4	50	52 g/m	50 m	Black (BK)	166-11906
HG-PP28	28	23	28.5	22.8	55	65 g/m	50 m	Black (BK)	166-11907
HG-PP34	34	29	34.5	28.1	65	90 g/m	25 m	Black (BK)	166-11908
HG-PP42	42	36	42.5	35.5	80	120 g/m	25 m	Black (BK)	166-11909
HG-PP54	54	48	54.5	47.2	100	150 g/m	25 m	Black (BK)	166-11910
HG-PP67	67	56	67.2	56.3	150	250 g/m	10 m	Black (BK)	166-11911

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.



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### HelaGuard Fitting Finder

#### Fixed external thread

HG-S Straight IP66		Page 22
HGL-S Straight IP68		Page 24
HG-90 90° Elbow IP66		Page 25
HGL-90 90° Elbow IP68		Page 27
HG-45 45° Elbow IP66		Page 28
HGL-45 45° Elbow IP68		Page 29

#### Swivel external thread

HG-SM Straight IP66		Page 30
HGL-SM Straight IP68		Page 31
HG-90M 90° Elbow IP66		Page 32

HGL-90M 90° Elbow IP68		Page 33
HG-45M 45° Elbow IP66		Page 34
HGL-45M 45° Elbow IP68		Page 35

#### Swivel internal thread

HG-SF Straight IP66		Page 36
HGL-SF Straight IP68		Page 37
HG-90F 90° Elbow IP66		Page 38
HGL-90F 90° Elbow IP68		Page 39
HG-45F 45° Elbow IP66		Page 40
HGL-45F 45° Elbow IP68		Page 41

## Swivel flange

HG-SFL Straight IP66		Page 42
HGL-SFL Straight IP68		Page 43
HG-90FL 90° Elbow IP66		Page 44
HGL-90FL 90° Elbow IP68		Page 45
HG-45FL 45° Elbow IP66		Page 46
HGL-45FL 45° Elbow IP68		Page 47

HGL-90CG 90° Elbow IP68		Page 51
HG-45CG 45° Elbow IP66		Page 52
HGL-45CG 45° Elbow IP68		Page 53

## Connectors, reducers and couplers

HG-T T-Connector IP66		Page 54
HGL-T T-Connector IP68		Page 55
HG-Y Y-Connector IP66		Page 56
HGL-Y Y-Connector IP68		Page 57
HG-R Reducer IP66		Page 58
HGL-R Reducer IP68		Page 59
HG-HG Coupler IP66		Page 60

## With strain relief and cable seal

HG-SCG Straight IP66		Page 48
HGL-SCG Straight IP68		Page 49
HG-90CG 90° Elbow IP66		Page 50



CAD download

### Mounting and Removing HelaGuard Non-Metallic Fittings

HelaGuard plastic fittings are mounted simply, quickly and very securely. They offer exceptionally high pull-off strength and are vibration as well as tamper resistant. They can be removed with a screw driver. HelaGuard plastic fittings can be used again and again.

**To mount and remove HelaGuard plastic fittings, follow these simple instructions.**



1. If the fitting has been used before, be sure that the slit points to the "on" position. To assemble the fitting, push it on to the end of the conduit as far as possible without forcing it and twist it slightly. The fitting is now securely locked.



2. To remove the fitting, insert a small screw driver into the slit.



3. Move the handle of the screwdriver towards the "off" position. The capnut will rotate slightly. The locking mechanism is now released.



4. Remove the screwdriver.



5. Manually rotate the capnut further towards the "off" position as far as possible.



6. Simply remove the fitting from the end of the conduit.

**To re-use HelaGuard plastic fittings, simply turn the capnut back to the 'on' position and mount it on to the end of the conduit.**

## HelaGuard Nomenclature for Non-Metallic Fittings

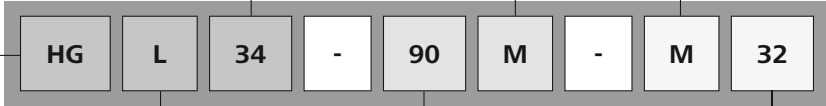
Example:

**HGL34-90M-M32**

### Suitable Conduit Type

**HG** HelaGuard Non-Metallic Conduit

Nominal Diameter



### Thread Type

- M** Swivel external thread
- F** Swivel internal thread
- Fixed external thread
- FL** Flange
- CG** Cable gland

### Thread Code

- M** Metric
- PG** Panzer-Gewinde

Thread Size

### IP Protection

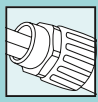
- L** IP67, IP68, IP69k fitting
- IP66 fitting

### Fitting Shape

- 90** 90° elbow fitting
- 45** 45° elbow fitting
- S** Straight fitting
- T** T-connector
- Y** Y-connector
- R** Reducer
- HG** Conduit connector



CAD download



### Fittings with fixed external thread

#### HG-S Straight fitting, 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

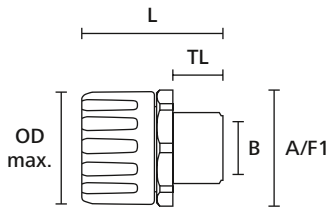


HeliaGuard HG-S Straight, IP66.



For other fittings please check our website.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



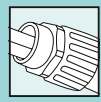
HeliaGuard fitting, straight with fixed external thread

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
HG10-S-PG7	10	PG7	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21010
HG10-S-PG9	10	PG9	9.5	19	35	19	11	10 pcs.	Black (BK)	166-21031
HG11-S-M12	11	M12	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21021
HG11-S-PG7	11	PG7	7.5	19	33	19	9	10 pcs.	Black (BK)	166-21032
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
HG13-S-PG7	13	PG7	7.5	24	35	23	9	10 pcs.	Black (BK)	166-21033
HG13-S-PG9	13	PG9	11.0	24	37	23	11	10 pcs.	Black (BK)	166-21011
HG13-S-PG11	13	PG11	12.5	24	36	23	10	10 pcs.	Black (BK)	166-21034
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
HG16-S-PG9	16	PG9	11.0	29	41	28	11	10 pcs.	Black (BK)	166-21035

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

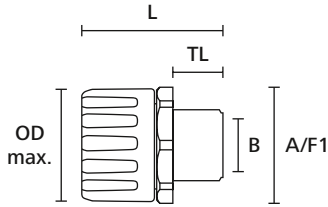


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### Fittings with fixed external thread

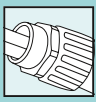
#### HG-S Straight fitting, IP66



HelaGuard fitting, straight with fixed external thread

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.
HG16-S-PG11	16	PG11	14.5	29	40	28	10	10 pcs.	Black (BK)	166-21012
HG16-S-PG13	16	PG13,5	14.5	29	40	28	10	10 pcs.	Black (BK)	166-21013
HG16-S-PG16	16	PG16	14.5	29	41	28	11	10 pcs.	Black (BK)	166-21036
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
HG21-S-PG13	21	PG13,5	16.5	32	40	30	10	10 pcs.	Black (BK)	166-21039
HG21-S-PG16	21	PG16	18.0	32	41	30	11	10 pcs.	Black (BK)	166-21014
HG21-S-PG21	21	PG21	20.5	32	42	30	12	10 pcs.	Black (BK)	166-21040
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
HG28-S-PG21	28	PG21	22.5	44	46	42	12	10 pcs.	Black (BK)	166-21015
HG28-S-PG29	28	PG29	27.5	44	46	42	12	10 pcs.	Black (BK)	166-21041
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
HG34-S-PG29	34	PG29	30.5	51	49	49	12	10 pcs.	Black (BK)	166-21016
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
HG42-S-PG36	42	PG36	40.0	63	56	60	12	2 pcs.	Black (BK)	166-21017
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
HG54-S-PG42	54	PG42	47.0	76	61	73	12	2 pcs.	Black (BK)	166-21042
HG54-S-PG48	54	PG48	52.0	76	61	73	12	2 pcs.	Black (BK)	166-21018
HG67-S-M63	67	M63	56.0	90	70	87	16	1 pc.	Black (BK)	166-21009
HG67-S-PG48	67	PG48	52.0	90	66	87	12	1 pc.	Black (BK)	166-21019

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



### Fittings with fixed external thread

#### HGL-S Straight fitting, IP68

Straight external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

#### 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

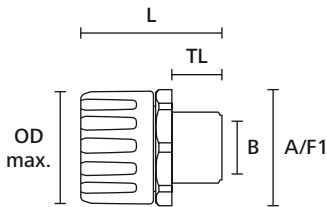


HelaGuard HGL-S Straight with conduit seal, IP68.



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

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, straight with fixed external thread



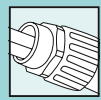
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Body (A/F1)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-S-M16	13	M16	11.0	24	37	22	11	10 pcs.	Black (BK)	166-21600
HGL13-S-PG9	13	PG9	11.5	24	37	23	11	10 pcs.	Black (BK)	166-21608
HGL16-S-M16	16	M16	11.0	29	41	28	11	10 pcs.	Black (BK)	166-21601
HGL16-S-M20	16	M20	14.5	29	44	28	14	10 pcs.	Black (BK)	166-21602
HGL16-S-PG9	16	PG9	11.5	29	41	28	11	10 pcs.	Black (BK)	166-21623
HGL16-S-PG11	16	PG11	14.5	29	40	28	10	10 pcs.	Black (BK)	166-21609
HGL16-S-PG13	16	PG13,5	15.0	29	40	28	10	10 pcs.	Black (BK)	166-21610
HGL16-S-PG16	16	PG16	15.0	29	41	28	11	10 pcs.	Black (BK)	166-21624
HGL21-S-M20	21	M20	14.5	32	44	30	14	10 pcs.	Black (BK)	166-21603
HGL21-S-PG13	21	PG13,5	16.5	32	40	30	10	10 pcs.	Black (BK)	166-21625
HGL21-S-PG16	21	PG16	18.0	32	41	30	11	10 pcs.	Black (BK)	166-21611
HGL21-S-PG21	21	PG21	20.5	32	42	30	12	10 pcs.	Black (BK)	166-21626
HGL28-S-M25	28	M25	19.5	44	50	42	15	10 pcs.	Black (BK)	166-21604
HGL28-S-M32	28	M32	26.5	44	51	42	16	10 pcs.	Black (BK)	166-21619
HGL28-S-PG21	28	PG21	22.5	44	46	42	12	10 pcs.	Black (BK)	166-21612
HGL28-S-PG29	28	PG29	30.0	44	47	42	12	10 pcs.	Black (BK)	166-21627
HGL34-S-M32	34	M32	26.5	51	53	49	16	10 pcs.	Black (BK)	166-21605
HGL34-S-M40	34	M40	32.5	51	55	49	16	10 pcs.	Black (BK)	166-21620
HGL34-S-PG29	34	PG29	30.0	51	49	49	12	10 pcs.	Black (BK)	166-21613

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



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### Fittings with fixed external thread

#### HGL-S Straight fitting, IP68

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.
HGL42-S-M40	42	M40	32.5	63	61	60	16	2 pcs.	Black (BK)	166-21606
HGL42-S-M50	42	M50	40.5	63	61	73	16	2 pcs.	Black (BK)	166-21621
HGL42-S-PG36	42	PG36	40.0	63	56	60	12	2 pcs.	Black (BK)	166-21614
HGL54-S-M50	54	M50	42.0	76	65	73	16	2 pcs.	Black (BK)	166-21607
HGL54-S-M63	54	M63	53.0	76	65	73	16	2 pcs.	Black (BK)	166-21622
HGL54-S-PG42	54	PG42	47.0	76	61	73	12	2 pcs.	Black (BK)	166-21628
HGL54-S-PG48	54	PG48	52.0	76	61	73	12	2 pcs.	Black (BK)	166-21616
HGL67-S-M63	67	M63	56.0	90	70	87	16	1 pc.	Black (BK)	166-21654

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

### Fittings with fixed external thread

#### HG-90 90° Elbow fitting, IP66

90° elbow external thread.

#### Features and benefits

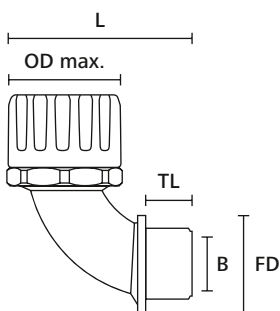
- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



HelaGuard HG-90 90° Elbow, IP66.



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



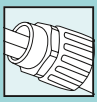
HelaGuard fitting, 90° with fixed external thread

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



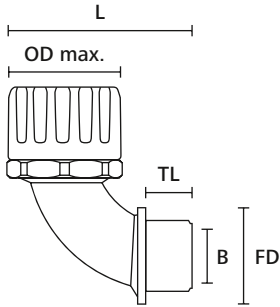
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG10-90-M12	10	M12	6.5	19	32	17	8	10 pcs.	Black (BK)	166-22200
HG10-90-PG7	10	PG7	6.5	19	32	16	8	10 pcs.	Black (BK)	166-22210
HG11-90-M12	11	M12	6.5	19	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
HG13-90-PG9	13	PG9	10.5	24	46	22	10	10 pcs.	Black (BK)	166-22211

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



## Fittings with fixed external thread

## HG-90 90° Elbow fitting, IP66

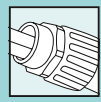


HelaGuard fitting, 90° with fixed external thread

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.
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
HG16-90-PG9	16	PG9	10.5	29	49	22	10	10 pcs.	Black (BK)	166-22225
HG16-90-PG11	16	PG11	10.5	29	49	24	10	10 pcs.	Black (BK)	166-22212
HG16-90-PG13	16	PG13,5	14.0	29	51	26	11	10 pcs.	Black (BK)	166-22213
HG21-90-M20	21	M20	14.0	32	53	27	13	10 pcs.	Black (BK)	166-22204
HG21-90-PG13	21	PG13,5	14.0	32	53	26	11	10 pcs.	Black (BK)	166-22227
HG21-90-PG16	21	PG16	14.0	32	53	27	11	10 pcs.	Black (BK)	166-22214
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
HG28-90-PG21	28	PG21	19.0	44	66	35	12	10 pcs.	Black (BK)	166-22215
HG34-90-M32	34	M32	24.5	51	75	40	16	10 pcs.	Black (BK)	166-22206
HG34-90-PG29	34	PG29	24.5	51	75	44	12	10 pcs.	Black (BK)	166-22216
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
HG42-90-PG36	42	PG36	39.0	63	99	57	12	2 pcs.	Black (BK)	166-22217
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
HG54-90-PG48	54	PG48	49.5	76	104	70	15	2 pcs.	Black (BK)	166-22218
HG67-90-M63	67	M63	49.5	90	120	72	16	1 pc.	Black (BK)	166-22209
HG67-90-PG48	67	PG48	49.5	90	120	70	15	1 pc.	Black (BK)	166-22219

All dimensions in mm. Subject to technical changes.

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



### Fittings with fixed external thread

#### HGL-90 90° Elbow fitting, IP68

90° elbow, external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

#### Features and benefits

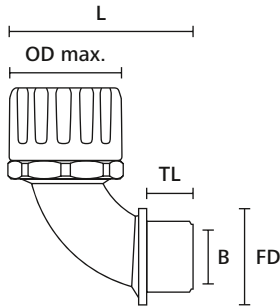
- One piece, fast fit
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



HelaGuard HGL-90 90° Elbow with conduit seal, IP68.



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



HelaGuard fitting, 90° with fixed external thread

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2

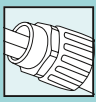


TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-90-M16	13	M16	10.5	24	46	22	11	10 pcs.	Black (BK)	166-22800
HGL13-90-PG9	13	PG9	10.5	24	46	22	10	10 pcs.	Black (BK)	166-22808
HGL16-90-M16	16	M16	10.5	29	49	22	11	10 pcs.	Black (BK)	166-22801
HGL16-90-M20	16	M20	14.0	29	51	27	13	10 pcs.	Black (BK)	166-22802
HGL16-90-PG9	16	PG9	10.5	29	49	22	10	10 pcs.	Black (BK)	166-22820
HGL16-90-PG11	16	PG11	10.5	29	49	24	10	10 pcs.	Black (BK)	166-22809
HGL16-90-PG13	16	PG13,5	14.0	29	51	26	11	10 pcs.	Black (BK)	166-22810
HGL21-90-M20	21	M20	14.0	32	53	27	13	10 pcs.	Black (BK)	166-22803
HGL21-90-PG13	21	PG13,5	14.0	32	53	26	11	10 pcs.	Black (BK)	166-22821
HGL21-90-PG16	21	PG16	14.0	32	53	26	11	10 pcs.	Black (BK)	166-22811
HGL28-90-M25	28	M25	19.0	44	66	32	15	10 pcs.	Black (BK)	166-22804
HGL28-90-PG21	28	PG21	19.0	44	66	35	12	10 pcs.	Black (BK)	166-22812
HGL34-90-M32	34	M32	24.5	51	75	40	16	10 pcs.	Black (BK)	166-22805
HGL34-90-PG29	34	PG29	24.5	51	75	44	12	10 pcs.	Black (BK)	166-22813
HGL42-90-M40	42	M40	32.0	63	98	50	16	2 pcs.	Black (BK)	166-22806
HGL42-90-M50	42	M50	39.0	63	99	60	16	2 pcs.	Black (BK)	166-22818
HGL42-90-PG36	42	PG36	39.0	63	99	57	12	2 pcs.	Black (BK)	166-22814
HGL54-90-M50	54	M50	39.0	76	104	60	16	2 pcs.	Black (BK)	166-22807
HGL54-90-M63	54	M63	49.5	76	104	72	16	2 pcs.	Black (BK)	166-22819
HGL54-90-PG48	54	PG48	49.5	76	104	70	15	2 pcs.	Black (BK)	166-22815

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



#### Fittings with fixed external thread

##### HG-45 45° Elbow fitting, IP66

45° 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

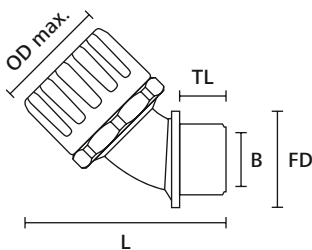


HelaGuard HG-45 45° Elbow, IP66.



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

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 45° with fixed external thread

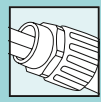


TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG16-45-M20	16	M20	14.0	29	58	27	13	10 pcs.	Black (BK)	166-23400
HG16-45-PG13	16	PG13,5	14.0	29	58	26	11	10 pcs.	Black (BK)	166-23406
HG21-45-M20	21	M20	14.0	32	61	27	13	10 pcs.	Black (BK)	166-23401
HG21-45-PG13	21	PG13,5	14.0	32	61	26	11	10 pcs.	Black (BK)	166-23407
HG21-45-PG16	21	PG16	14.0	32	61	27	11	10 pcs.	Black (BK)	166-23408
HG28-45-M25	28	M25	19.0	44	73	32	15	10 pcs.	Black (BK)	166-23402
HG28-45-PG21	28	PG21	19.0	44	73	35	12	10 pcs.	Black (BK)	166-23409
HG34-45-M32	34	M32	24.5	51	81	40	16	10 pcs.	Black (BK)	166-23403
HG34-45-PG29	34	PG29	24.5	51	81	44	12	10 pcs.	Black (BK)	166-23410
HG42-45-M50	42	M50	39.0	63	98	60	16	2 pcs.	Black (BK)	166-23404
HG42-45-PG36	42	PG36	39.0	63	98	57	12	2 pcs.	Black (BK)	166-23411
HG54-45-M50	54	M50	39.0	76	106	60	16	2 pcs.	Black (BK)	166-23405

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with fixed external thread

#### HGL-45 45° Elbow fitting, IP68

45° elbow external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

#### 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

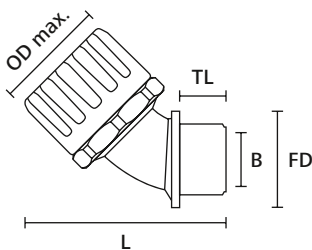


HelaGuard HGL-45 45° Elbow with conduit seal, IP68.



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

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 45° with fixed external thread

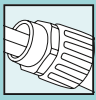


TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL16-45-M20	16	M20	14.0	29	58	27	13	10 pcs.	Black (BK)	166-24000
HGL16-45-PG13	16	PG13,5	14.0	29	58	26	11	10 pcs.	Black (BK)	166-24006
HGL21-45-M20	21	M20	14.0	32	61	27	13	10 pcs.	Black (BK)	166-24001
HGL21-45-PG13	21	PG13,5	14.0	32	61	26	11	10 pcs.	Black (BK)	166-24007
HGL21-45-PG16	21	PG16	14.0	32	61	27	11	10 pcs.	Black (BK)	166-24008
HGL28-45-M25	28	M25	19.0	44	73	32	15	10 pcs.	Black (BK)	166-24002
HGL28-45-PG21	28	PG21	19.0	44	73	35	12	10 pcs.	Black (BK)	166-24009
HGL34-45-M32	34	M32	24.5	51	81	40	16	10 pcs.	Black (BK)	166-24003
HGL34-45-PG29	34	PG29	24.5	51	81	44	12	10 pcs.	Black (BK)	166-24010
HGL42-45-M50	42	M50	39.0	63	98	60	16	2 pcs.	Black (BK)	166-24004
HGL42-45-PG36	42	PG36	39.0	63	98	57	12	2 pcs.	Black (BK)	166-24011
HGL54-45-M50	54	M50	39.0	76	107	60	16	2 pcs.	Black (BK)	166-24005

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



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### Fittings with swivel external thread

#### HG-SM Straight fitting, IP66

Straight swivel brass external thread.

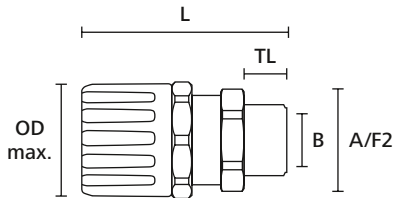
#### Features and benefits

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



HeliaGuard HG-SM Straight Swivel External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



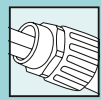
HeliaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-SM-M16	13	M16	11.0	24	51	20	12	10 pcs.	Black (BK)	166-21300
HG13-SM-PG9	13	PG9	11.0	24	49	22	10	10 pcs.	Black (BK)	166-21309
HG16-SM-M16	16	M16	11.0	29	57	20	12	10 pcs.	Black (BK)	166-21301
HG16-SM-M20	16	M20	14.5	29	57	24	12	10 pcs.	Black (BK)	166-21302
HG16-SM-PG9	16	PG9	11.0	29	50	22	10	10 pcs.	Black (BK)	166-21310
HG16-SM-PG11	16	PG11	11.0	29	52	24	12	10 pcs.	Black (BK)	166-21311
HG21-SM-M20	21	M20	14.5	32	57	24	12	10 pcs.	Black (BK)	166-21303
HG21-SM-PG13	21	PG13,5	14.5	32	55	24	10	10 pcs.	Black (BK)	166-21312
HG21-SM-PG16	21	PG16	14.5	32	58	29	13	10 pcs.	Black (BK)	166-21313
HG28-SM-M25	28	M25	19.5	44	62	29	12	10 pcs.	Black (BK)	166-21304
HG28-SM-PG21	28	PG21	19.5	44	64	35	14	10 pcs.	Black (BK)	166-21314
HG34-SM-M32	34	M32	26.5	51	67	38	13	10 pcs.	Black (BK)	166-21305
HG34-SM-PG29	34	PG29	26.5	51	68	42	14	10 pcs.	Black (BK)	166-21315
HG42-SM-M40	42	M40	32.5	63	79	50	15	2 pcs.	Black (BK)	166-21306
HG54-SM-M50	54	M50	42.0	76	85	58	17	2 pcs.	Black (BK)	166-21307

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



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### Fittings with swivel external thread

#### HGL-SM Straight fitting, IP68

Straight swivel brass external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

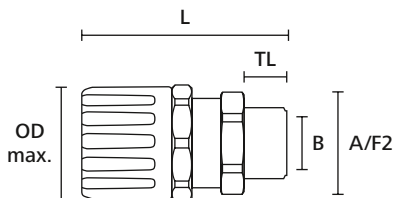
#### Features and benefits

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



HelaGuard HGL-SM Straight Swivel External Thread with conduit seal, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



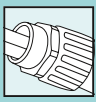
HelaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-SM-M16	13	M16	11.0	24	51	20	12	10 pcs.	Black (BK)	166-21900
HGL13-SM-PG9	13	PG9	11.0	24	49	22	10	10 pcs.	Black (BK)	166-21909
HGL16-SM-M16	16	M16	11.0	29	57	20	12	10 pcs.	Black (BK)	166-21901
HGL16-SM-M20	16	M20	14.5	29	57	24	12	10 pcs.	Black (BK)	166-21902
HGL16-SM-PG9	16	PG9	11.0	29	50	22	10	10 pcs.	Black (BK)	166-21910
HGL16-SM-PG11	16	PG11	11.0	29	52	24	12	10 pcs.	Black (BK)	166-21911
HGL21-SM-M20	21	M20	14.5	32	57	24	12	10 pcs.	Black (BK)	166-21903
HGL21-SM-PG13	21	PG13,5	14.5	32	55	24	10	10 pcs.	Black (BK)	166-21912
HGL21-SM-PG16	21	PG16	14.5	32	58	29	13	10 pcs.	Black (BK)	166-21913
HGL28-SM-M25	28	M25	19.5	44	62	29	12	10 pcs.	Black (BK)	166-21904
HGL28-SM-PG21	28	PG21	19.5	44	64	35	14	10 pcs.	Black (BK)	166-21914
HGL34-SM-M32	34	M32	26.5	51	67	38	13	10 pcs.	Black (BK)	166-21905
HGL34-SM-PG29	34	PG29	26.5	51	68	42	14	10 pcs.	Black (BK)	166-21915
HGL42-SM-M40	42	M40	32.5	63	79	50	15	2 pcs.	Black (BK)	166-21906
HGL54-SM-M50	54	M50	42.0	76	85	58	17	2 pcs.	Black (BK)	166-21907

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



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### Fittings with swivel external thread

#### HG-90M 90° Elbow fitting, IP66

90° elbow swivel brass external thread.

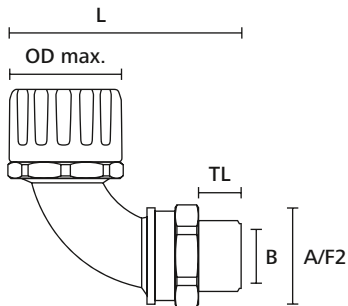
#### Features and benefits

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



HelaGuard HG-90M 90° Elbow Swivel External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 90° with swivel external thread

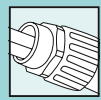
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-90M-M16	13	M16	10.5	24	60	20	12	10 pcs.	Black (BK)	166-22500
HG13-90M-PG9	13	PG9	10.5	24	58	22	10	10 pcs.	Black (BK)	166-22509
HG16-90M-M16	16	M16	10.5	29	62	20	12	10 pcs.	Black (BK)	166-22501
HG16-90M-M20	16	M20	14.0	29	64	24	12	10 pcs.	Black (BK)	166-22502
HG16-90M-PG9	16	PG9	10.5	29	60	22	10	10 pcs.	Black (BK)	166-22510
HG16-90M-PG11	16	PG11	10.5	29	62	24	12	10 pcs.	Black (BK)	166-22511
HG21-90M-M20	21	M20	14.0	32	66	24	12	10 pcs.	Black (BK)	166-22503
HG21-90M-PG13	21	PG13,5	14.0	32	64	24	10	10 pcs.	Black (BK)	166-22512
HG21-90M-PG16	21	PG16	14.0	32	67	29	13	10 pcs.	Black (BK)	166-22513
HG28-90M-M25	28	M25	19.0	44	79	29	12	10 pcs.	Black (BK)	166-22504
HG28-90M-PG21	28	PG21	19.0	44	81	35	14	10 pcs.	Black (BK)	166-22514
HG34-90M-M32	34	M32	24.5	51	88	38	13	10 pcs.	Black (BK)	166-22505
HG34-90M-PG29	34	PG29	24.5	51	89	42	14	10 pcs.	Black (BK)	166-22515
HG42-90M-M40	42	M40	32.5	63	117	50	15	2 pcs.	Black (BK)	166-22506
HG54-90M-M50	54	M50	39.0	76	124	58	17	2 pcs.	Black (BK)	166-22507

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



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### Fittings with swivel external thread

#### HGL-90M 90° Elbow fitting, IP68

90° elbow swivel brass external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

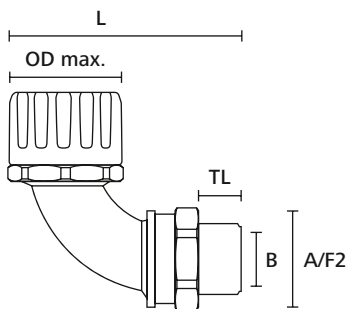
#### Features and benefits

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



HelaGuard HGL-90M 90° Elbow Swivel External Thread with conduit seal, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 90° with swivel external thread

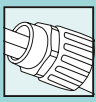
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-90M-M16	13	M16	10.5	24	60	20	12	10 pcs.	Black (BK)	166-23100
HGL13-90M-PG9	13	PG9	10.5	24	58	22	10	10 pcs.	Black (BK)	166-23108
HGL16-90M-M16	16	M16	10.5	29	62	20	12	10 pcs.	Black (BK)	166-23101
HGL16-90M-M20	16	M20	14.0	29	64	24	12	10 pcs.	Black (BK)	166-23102
HGL16-90M-PG9	16	PG9	10.5	29	60	22	10	10 pcs.	Black (BK)	166-23109
HGL16-90M-PG11	16	PG11	10.5	29	62	24	12	10 pcs.	Black (BK)	166-23110
HGL21-90M-M20	21	M20	14.0	32	66	24	12	10 pcs.	Black (BK)	166-23103
HGL21-90M-PG13	21	PG13,5	14.0	32	64	24	10	10 pcs.	Black (BK)	166-23111
HGL21-90M-PG16	21	PG16	14.0	32	67	29	13	10 pcs.	Black (BK)	166-23112
HGL28-90M-M25	28	M25	19.0	44	79	29	12	10 pcs.	Black (BK)	166-23104
HGL28-90M-PG21	28	PG21	19.0	44	81	35	14	10 pcs.	Black (BK)	166-23113
HGL34-90M-M32	34	M32	24.5	51	88	38	13	10 pcs.	Black (BK)	166-23105
HGL34-90M-PG29	34	PG29	24.5	51	89	42	14	10 pcs.	Black (BK)	166-23114
HGL42-90M-M40	42	M40	32.5	63	117	50	15	2 pcs.	Black (BK)	166-23106
HGL54-90M-M50	54	M50	39.0	76	124	58	17	2 pcs.	Black (BK)	166-23107

All dimensions in mm. Subject to technical changes.

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



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### Fittings with swivel external thread

#### HG-45M 45° Elbow fitting, IP66

45° elbow swivel brass external thread.

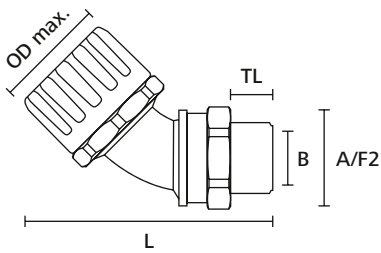
#### Features and benefits

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



HeliaGuard HG-45M 45° Elbow Swivel External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



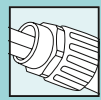
HeliaGuard fitting, 45° with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG16-45M-M20	16	M20	14.0	29	69	24	12	10 pcs.	Black (BK)	166-23700
HG16-45M-PG13	16	PG13,5	14.0	29	67	24	10	10 pcs.	Black (BK)	166-23706
HG16-45M-PG16	16	PG16	14.0	29	70	29	13	10 pcs.	Black (BK)	166-23707
HG21-45M-M20	21	M20	14.0	32	76	24	12	10 pcs.	Black (BK)	166-23701
HG21-45M-PG13	21	PG13,5	14.0	32	74	24	10	10 pcs.	Black (BK)	166-23708
HG21-45M-PG16	21	PG16	14.0	32	77	29	13	10 pcs.	Black (BK)	166-23709
HG28-45M-M25	28	M25	19.0	44	90	29	12	10 pcs.	Black (BK)	166-23702
HG28-45M-PG21	28	PG21	19.0	44	92	35	14	10 pcs.	Black (BK)	166-23710
HG34-45M-M32	34	M32	24.5	51	98	38	13	10 pcs.	Black (BK)	166-23703
HG34-45M-PG29	34	PG29	24.5	51	99	42	14	10 pcs.	Black (BK)	166-23711
HG42-45M-M50	42	M50	39.0	63	117	58	17	2 pcs.	Black (BK)	166-23704
HG54-45M-M50	54	M50	39.0	76	137	58	17	2 pcs.	Black (BK)	166-23705

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel external thread

#### HGL-45M 45° Elbow fitting, IP68

45° elbow swivel brass external thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

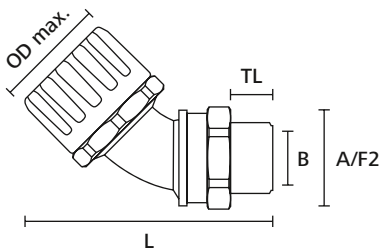
#### Features and benefits

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



HelaGuard HGL-45M 45° Elbow Swivel External Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 45° with swivel external thread



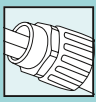
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL16-45M-M20	16	M20	14.0	29	69	24	12	10 pcs.	Black (BK)	166-24300
HGL16-45M-PG13	16	PG13,5	14.0	29	67	24	10	10 pcs.	Black (BK)	166-24306
HGL16-45M-PG16	16	PG16	14.0	29	70	29	13	10 pcs.	Black (BK)	166-24307
HGL21-45M-M20	21	M20	14.0	32	76	24	12	10 pcs.	Black (BK)	166-24301
HGL21-45M-PG13	21	PG13,5	14.0	32	74	24	10	10 pcs.	Black (BK)	166-24308
HGL21-45M-PG16	21	PG16	14.0	32	77	29	13	10 pcs.	Black (BK)	166-24309
HGL28-45M-M25	28	M25	19.0	44	90	29	12	10 pcs.	Black (BK)	166-24302
HGL28-45M-PG21	28	PG21	19.0	44	92	35	14	10 pcs.	Black (BK)	166-24310
HGL34-45M-M32	34	M32	24.5	51	98	38	13	10 pcs.	Black (BK)	166-24303
HGL34-45M-PG29	34	PG29	24.5	51	99	42	14	10 pcs.	Black (BK)	166-24311
HGL42-45M-M50	42	M50	39.0	63	117	58	17	2 pcs.	Black (BK)	166-24304
HGL54-45M-M50	54	M50	39.0	76	137	58	17	2 pcs.	Black (BK)	166-24305

All dimensions in mm. Subject to technical changes.

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel internal thread

#### HG-SF Straight fitting, IP66

Straight swivel brass internal thread.

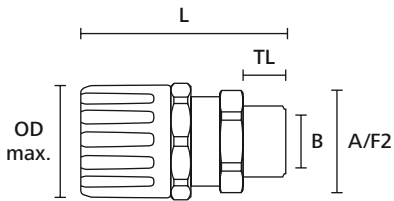
#### Features and benefits

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



HeliaGuard HG-SF Straight Swivel Internal Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



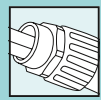
HeliaGuard fitting, straight with swivel internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-SF-M16	13	M16	11.0	24	66	22	14	10 pcs.	Black (BK)	166-21400
HG13-SF-PG9	13	PG9	11.0	24	66	22	14	10 pcs.	Black (BK)	166-21408
HG16-SF-M16	16	M16	11.0	29	69	22	14	10 pcs.	Black (BK)	166-21401
HG16-SF-M20	16	M20	14.5	29	69	24	14	10 pcs.	Black (BK)	166-21402
HG16-SF-PG11	16	PG11	11.0	29	70	22	14	10 pcs.	Black (BK)	166-21409
HG16-SF-PG16	16	PG16	14.5	29	71	24	14	10 pcs.	Black (BK)	166-21410
HG21-SF-M20	21	M20	14.5	32	71	24	14	10 pcs.	Black (BK)	166-21403
HG21-SF-PG16	21	PG16	14.5	32	71	24	14	10 pcs.	Black (BK)	166-21411
HG28-SF-M25	28	M25	19.5	44	78	30	14	10 pcs.	Black (BK)	166-21404
HG28-SF-PG21	28	PG21	19.5	44	78	29	14	10 pcs.	Black (BK)	166-21412
HG34-SF-M32	34	M32	26.5	51	82	38	14	10 pcs.	Black (BK)	166-21405
HG34-SF-PG29	34	PG29	26.5	51	82	38	14	10 pcs.	Black (BK)	166-21413
HG42-SF-M40	42	M40	32.5	63	106	52	14	2 pcs.	Black (BK)	166-21406
HG54-SF-M50	54	M50	42.0	76	110	52	14	2 pcs.	Black (BK)	166-21407

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel internal thread

#### HGL-SF Straight fitting, IP68

Straight swivel brass internal thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

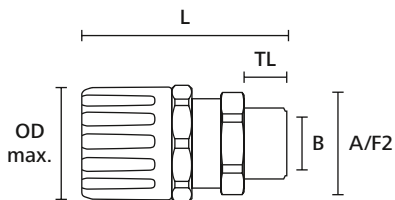
#### Features and benefits

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



HelaGuard HGL-SF Straight Swivel Internal Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



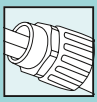
HelaGuard fitting, straight with swivel internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-SF-M16	13	M16	11.0	24	52	22	14	10 pcs.	Black (BK)	166-22000
HGL13-SF-PG9	13	PG9	11.0	24	52	22	14	10 pcs.	Black (BK)	166-22009
HGL16-SF-M16	16	M16	11.0	29	55	22	14	10 pcs.	Black (BK)	166-22001
HGL16-SF-M20	16	M20	14.5	29	55	24	14	10 pcs.	Black (BK)	166-22002
HGL16-SF-PG11	16	PG11	11.0	29	56	22	14	10 pcs.	Black (BK)	166-22011
HGL16-SF-PG16	16	PG16	14.5	29	57	24	14	10 pcs.	Black (BK)	166-22012
HGL21-SF-M20	21	M20	14.5	32	57	24	14	10 pcs.	Black (BK)	166-22003
HGL21-SF-PG16	21	PG16	14.5	32	57	24	14	10 pcs.	Black (BK)	166-22013
HGL28-SF-M25	28	M25	19.5	44	64	30	14	10 pcs.	Black (BK)	166-22004
HGL28-SF-PG21	28	PG21	19.5	44	64	29	14	10 pcs.	Black (BK)	166-22014
HGL34-SF-M32	34	M32	26.5	51	68	38	14	10 pcs.	Black (BK)	166-22005
HGL34-SF-PG29	34	PG29	26.5	51	68	38	14	10 pcs.	Black (BK)	166-22015
HGL42-SF-M40	42	M40	32.5	63	92	52	14	2 pcs.	Black (BK)	166-22006
HGL54-SF-M50	54	M50	42.0	76	96	52	14	2 pcs.	Black (BK)	166-22007

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



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### Fittings with swivel internal thread

#### HG-90F 90° Elbow fitting, IP66

90° elbow swivel brass internal thread.

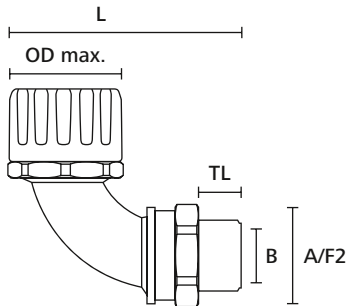
#### Features and benefits

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



HelaGuard HG-90F 90° Elbow Swivel Internal Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



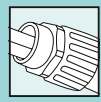
HelaGuard fitting, 90° with swivel internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-90F-M16	13	M16	10.5	24	61	20	14	10 pcs.	Black (BK)	166-22600
HG13-90F-PG9	13	PG9	10.5	24	61	20	14	10 pcs.	Black (BK)	166-22608
HG16-90F-M16	16	M16	10.5	29	63	20	14	10 pcs.	Black (BK)	166-22601
HG16-90F-M20	16	M20	14.0	29	64	24	14	10 pcs.	Black (BK)	166-22602
HG16-90F-PG11	16	PG11	10.5	29	63	20	14	10 pcs.	Black (BK)	166-22610
HG21-90F-M20	21	M20	14.0	32	68	24	14	10 pcs.	Black (BK)	166-22603
HG21-90F-PG16	21	PG16	14.0	32	68	24	14	10 pcs.	Black (BK)	166-22611
HG28-90F-M25	28	M25	19.0	44	81	29	15	10 pcs.	Black (BK)	166-22604
HG28-90F-PG21	28	PG21	19.0	44	81	29	15	10 pcs.	Black (BK)	166-22612
HG34-90F-M32	34	M32	24.5	51	91	38	16	10 pcs.	Black (BK)	166-22605
HG34-90F-PG29	34	PG29	24.5	51	91	38	16	10 pcs.	Black (BK)	166-22613
HG42-90F-M40	42	M40	32.5	63	115	52	14	2 pcs.	Black (BK)	166-22606
HG54-90F-M50	54	M50	39.0	76	117	52	14	2 pcs.	Black (BK)	166-22607

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel internal thread

#### HGL-90F 90° Elbow fitting, IP68

90° elbow swivel brass internal thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

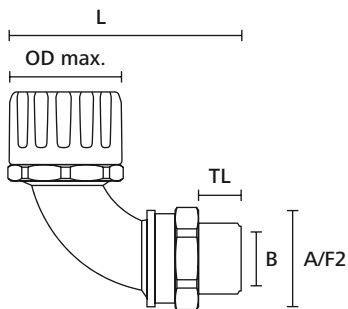
#### Features and benefits

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



HelaGuard HGL-90F 90° Elbow Swivel Internal Thread with conduit seal, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



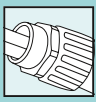
HelaGuard fitting, 90° with swivel internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-90F-M16	13	M16	10.5	24	61	20	14	10 pcs.	Black (BK)	166-23200
HGL13-90F-PG9	13	PG9	10.5	24	61	20	14	10 pcs.	Black (BK)	166-23208
HGL16-90F-M16	16	M16	10.5	29	63	20	14	10 pcs.	Black (BK)	166-23201
HGL16-90F-M20	16	M20	14.0	29	64	24	14	10 pcs.	Black (BK)	166-23202
HGL16-90F-PG11	16	PG11	10.5	29	63	20	14	10 pcs.	Black (BK)	166-23210
HGL21-90F-M20	21	M20	14.0	32	68	24	14	10 pcs.	Black (BK)	166-23203
HGL21-90F-PG16	21	PG16	14.0	32	68	24	14	10 pcs.	Black (BK)	166-23212
HGL28-90F-M25	28	M25	19.0	44	81	29	15	10 pcs.	Black (BK)	166-23204
HGL28-90F-PG21	28	PG21	19.0	44	81	29	15	10 pcs.	Black (BK)	166-23213
HGL34-90F-M32	34	M32	24.5	51	91	38	16	10 pcs.	Black (BK)	166-23205
HGL34-90F-PG29	34	PG29	24.5	51	91	38	16	10 pcs.	Black (BK)	166-23214
HGL42-90F-M40	42	M40	32.5	63	115	52	14	2 pcs.	Black (BK)	166-23206
HGL54-90F-M50	54	M50	39.0	76	117	52	14	2 pcs.	Black (BK)	166-23207

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



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#### Fittings with swivel internal thread

##### HG-45F 45° Elbow fitting, IP66

45° elbow swivel brass internal thread.

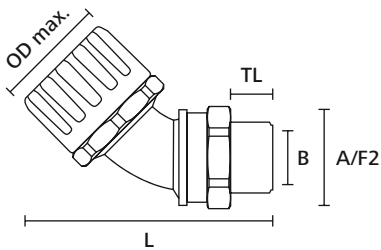
##### Features and benefits

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



HelaGuard HG-45F 45° Elbow Swivel Internal Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 45° with swivel internal thread

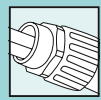
TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG16-45F-M20	16	M20	14.0	29	68	24	14	10 pcs.	Black (BK)	166-23800
HG16-45F-PG16	16	PG16	14.0	29	68	24	14	10 pcs.	Black (BK)	166-23807
HG21-45F-M20	21	M20	14.0	32	75	24	14	10 pcs.	Black (BK)	166-23801
HG21-45F-PG16	21	PG16	14.0	32	75	24	14	10 pcs.	Black (BK)	166-23808
HG28-45F-M25	28	M25	19.0	44	88	29	15	10 pcs.	Black (BK)	166-23802
HG28-45F-PG21	28	PG21	19.0	44	88	29	15	10 pcs.	Black (BK)	166-23809
HG34-45F-M32	34	M32	24.5	51	99	38	16	10 pcs.	Black (BK)	166-23803
HG34-45F-PG29	34	PG29	24.5	51	99	38	16	10 pcs.	Black (BK)	166-23810
HG42-45F-M50	42	M50	39.0	63	115	52	14	2 pcs.	Black (BK)	166-23804
HG54-45F-M50	54	M50	39.0	76	135	52	14	2 pcs.	Black (BK)	166-23805

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.





### Fittings with swivel internal thread

#### HGL-45F 45° Elbow fitting, IP68

45° elbow swivel brass internal thread with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

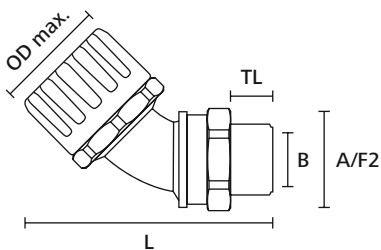
#### Features and benefits

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



HelaGuard HGL-45F 45° Elbow Swivel Internal Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



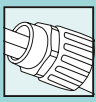
HelaGuard fitting, 45° with swivel internal thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL16-45F-M20	16	M20	14.0	29	68	24	14	10 pcs.	Black (BK)	166-24400
HGL16-45F-PG16	16	PG16	14.0	29	68	24	14	10 pcs.	Black (BK)	166-24407
HGL21-45F-M20	21	M20	14.0	32	75	24	14	10 pcs.	Black (BK)	166-24401
HGL21-45F-PG16	21	PG16	14.0	32	75	24	14	10 pcs.	Black (BK)	166-24408
HGL28-45F-M25	28	M25	19.0	44	88	29	15	10 pcs.	Black (BK)	166-24402
HGL28-45F-PG21	28	PG21	19.0	44	88	29	15	10 pcs.	Black (BK)	166-24409
HGL34-45F-M32	34	M32	24.5	51	99	38	16	10 pcs.	Black (BK)	166-24403
HGL34-45F-PG29	34	PG29	24.5	51	99	38	16	10 pcs.	Black (BK)	166-24410
HGL42-45F-M50	42	M50	39.0	63	115	52	14	2 pcs.	Black (BK)	166-24404
HGL54-45F-M50	54	M50	39.0	76	135	52	14	2 pcs.	Black (BK)	166-24405

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel flange

#### HG-SFL Straight fitting, IP66

Straight swivel flange.

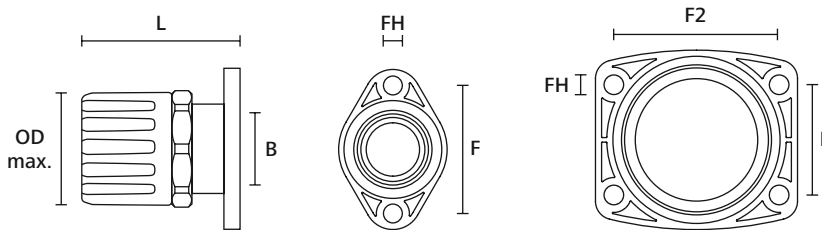
#### Features and benefits

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



HeliaGuard HG-SFL Straight Swivel Flange, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



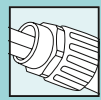
HeliaGuard fitting, straight swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HG16-SFL	16	14.5	29	41	5,2	36	-	10 pcs.	Black (BK)	166-21200
HG21-SFL	21	14.5	34	44	5,2	36	-	10 pcs.	Black (BK)	166-21201
HG28-SFL	28	19.5	44	49	6,2	53	-	10 pcs.	Black (BK)	166-21202
HG34-SFL	34	26.5	51	55	6,2	36	54	10 pcs.	Black (BK)	166-21203
HG42-SFL	42	42.0	63	63	6,2	36	54	2 pcs.	Black (BK)	166-21204

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel flange

#### HGL-SFL Straight fitting, IP68

Straight swivel flange with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

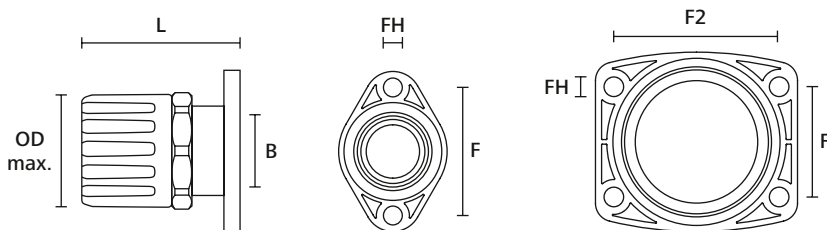
#### Features and benefits

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



HelaGuard HGL-SFL Straight Swivel Flange with conduit seal, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



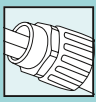
HelaGuard fitting, straight swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HGL16-SFL	16	14.5	29	41	5,2	36	-	10 pcs.	Black (BK)	166-21800
HGL21-SFL	21	14.5	34	44	5,2	36	-	10 pcs.	Black (BK)	166-21801
HGL28-SFL	28	19.5	44	49	6,2	53	-	10 pcs.	Black (BK)	166-21802
HGL34-SFL	34	26.5	51	55	6,2	36	54	10 pcs.	Black (BK)	166-21803
HGL42-SFL	42	42.0	63	63	6,2	36	54	2 pcs.	Black (BK)	166-21804

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



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### Fittings with swivel flange

#### HG-90FL 90° Elbow fitting, IP66

90° elbow swivel flange.

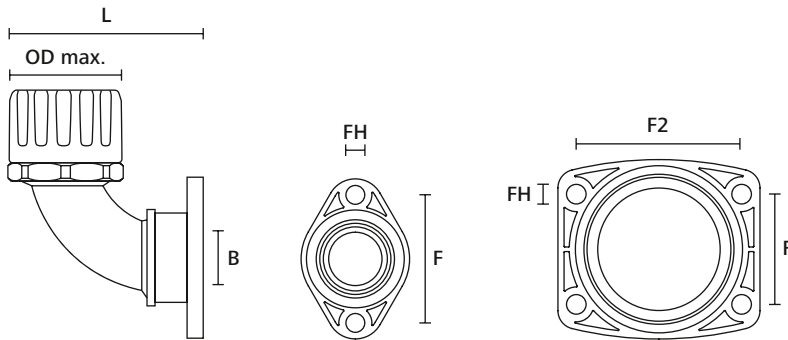
#### Features and benefits

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



HeliaGuard HG-90FL 90° Elbow Swivel Flange, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



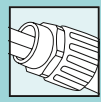
HeliaGuard fitting, 90° swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HG16-90FL	16	14.0	29	51	5,2	36	-	10 pcs.	Black (BK)	166-22400
HG21-90FL	21	14.0	34	53	5,2	36	-	10 pcs.	Black (BK)	166-22401
HG28-90FL	28	19.0	44	66	6,2	53	-	10 pcs.	Black (BK)	166-22402
HG34-90FL	34	24.5	51	79	6,2	36	54	10 pcs.	Black (BK)	166-22403
HG42-90FL	42	39.0	63	100	6,2	36	54	2 pcs.	Black (BK)	166-22404

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with swivel flange

#### HGL-90FL 90° Elbow fitting, IP68

90° elbow swivel flange with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

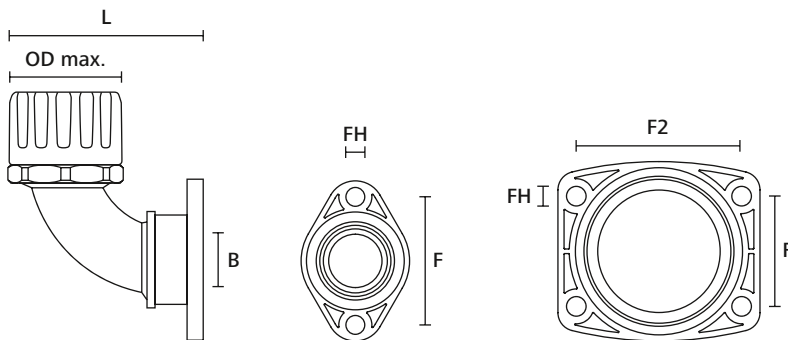
#### Features and benefits

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



HelaGuard HGL-90FL 90° Elbow Swivel Flange, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



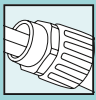
HelaGuard fitting, 90° swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HGL16-90FL	16	14.0	29	51	5,2	36	-	10 pcs.	Black (BK)	166-23000
HGL21-90FL	21	14.0	34	53	5,2	36	-	10 pcs.	Black (BK)	166-23001
HGL28-90FL	28	19.0	44	66	6,2	53	-	10 pcs.	Black (BK)	166-23002
HGL34-90FL	34	24.5	51	79	6,2	36	54	10 pcs.	Black (BK)	166-23003
HGL42-90FL	42	39.0	63	100	6,2	36	54	2 pcs.	Black (BK)	166-23004

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



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#### Fittings with swivel flange

##### HG-45FL 45° Elbow fitting, IP66

45° elbow swivel flange.

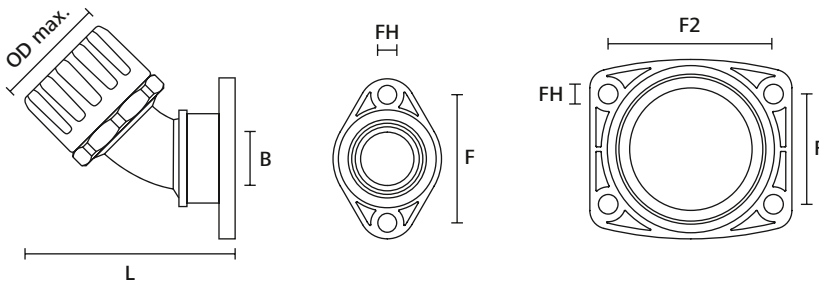
##### Features and benefits

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



HeloGuard HG-45FL 45° Elbow Swivel Flange, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeloGuard fitting, 45° swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HG16-45FL	16	14.0	29	56	5,2	36	-	10 pcs.	Black (BK)	166-23600
HG21-45FL	21	14.0	34	63	5,2	36	-	10 pcs.	Black (BK)	166-23601
HG28-45FL	28	19.0	44	77	6,2	53	-	10 pcs.	Black (BK)	166-23602
HG34-45FL	34	24.5	51	84	6,2	36	54	10 pcs.	Black (BK)	166-23603
HG42-45FL	42	39.0	63	98	6,2	36	54	2 pcs.	Black (BK)	166-23604

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



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### Fittings with swivel flange

#### HGL-45FL 45° Elbow fitting, IP68

45° elbow swivel flange with conduit seal and washer.

Fulfils IP66, IP67, IP68 and IP69k.

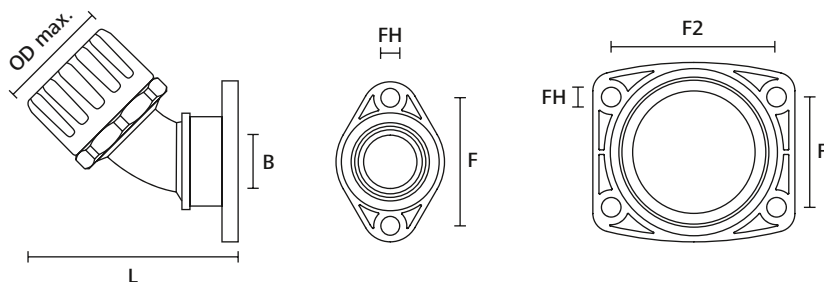
#### Features and benefits

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



HelaGuard HGL-45FL 45° Elbow Swivel Flange, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



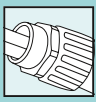
HelaGuard fitting, 45° swivel flange

TYPE	Nominal Ø	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Hole Ø (FH)	Fixing Hole Centres (F)	Fixing Hole Centres (F2)	Pack Cont.	Colour	Article-No.
HGL16-45FL	16	14.0	29	56	5,2	36	-	10 pcs.	Black (BK)	166-24200
HGL21-45FL	21	14.0	34	63	5,2	36	-	10 pcs.	Black (BK)	166-24201
HGL28-45FL	28	19.0	44	77	6,2	53	-	10 pcs.	Black (BK)	166-24202
HGL34-45FL	34	24.5	51	84	6,2	36	54	10 pcs.	Black (BK)	166-24203
HGL42-45FL	42	39.0	63	98	6,2	36	54	2 pcs.	Black (BK)	166-24204

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



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### Fittings with strain relief and cable seal

#### HG-SCG Straight fitting, IP66

Straight fitting with cable seal and strain relief.

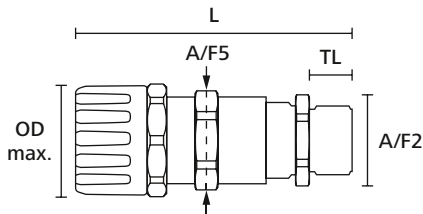
#### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HeliaGuard HG-SCG Straight Cable Gland Fitting, External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeliaGuard fitting, straight cable gland



TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-SCG-M16	13	M16	4.5 - 10	24	72	20	20	12	10 pcs.	Black (BK)	166-21500
HG16-SCG-M16	16	M16	4.5 - 10	29	76	20	20	12	10 pcs.	Black (BK)	166-21501
HG16-SCG-M20	16	M20	7 - 13	29	82	24	24	12	10 pcs.	Black (BK)	166-21502
HG21-SCG-M20	21	M20	7 - 13	32	82	24	24	12	10 pcs.	Black (BK)	166-21503
HG28-SCG-M25	28	M25	9 - 17	44	90	29	29	12	10 pcs.	Black (BK)	166-21504
HG34-SCG-M32	34	M32	11 - 21	51	102	36	38	15	10 pcs.	Black (BK)	166-21505
HG42-SCG-M40	42	M40	19 - 28	63	117	45	50	15	2 pcs.	Black (BK)	166-21506
HG54-SCG-M50	54	M50	27 - 35	76	125	54	56	15	2 pcs.	Black (BK)	166-21507

All dimensions in mm. Subject to technical changes.

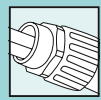
Colour grey available on request. Minimum Order Quantity (MOQ) may differ from package content.

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.





### Fittings with strain relief and cable seal

#### HGL-SCG Straight fitting, IP68

Straight fitting with cable seal and strain relief.

Fulfils IP66, IP67, IP68 and IP69k.

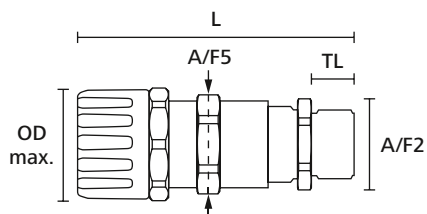
#### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HGL-SCG Straight Cable Gland Fitting, External Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, straight cable gland



TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-SCG-M16	13	M16	4.5 - 10	24	72	20	20	12	10 pcs.	Black (BK)	166-22100
HGL16-SCG-M16	16	M16	4.5 - 10	29	76	20	20	12	10 pcs.	Black (BK)	166-22101
HGL16-SCG-M20	16	M20	7 - 13	29	82	24	24	12	10 pcs.	Black (BK)	166-22102
HGL21-SCG-M20	21	M20	7 - 13	32	82	24	24	12	10 pcs.	Black (BK)	166-22103
HGL28-SCG-M25	28	M25	9 - 17	44	90	29	29	12	10 pcs.	Black (BK)	166-22104
HGL34-SCG-M32	34	M32	11 - 21	51	102	36	38	15	10 pcs.	Black (BK)	166-22105
HGL42-SCG-M40	42	M40	19 - 28	63	117	45	50	15	2 pcs.	Black (BK)	166-22106
HGL54-SCG-M50	54	M50	27 - 35	76	125	54	56	15	2 pcs.	Black (BK)	166-22107

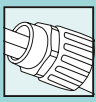
All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



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### Fittings with strain relief and cable seal

#### HG-90CG 90° Elbow fitting, IP66

90° elbow fitting with cable seal and strain relief.

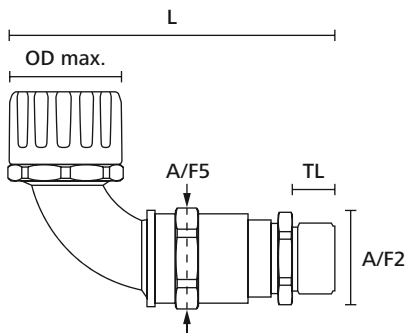
#### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HeliaGuard HG-90CG 90° Cable Gland Fitting, External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeliaGuard fitting, 90° cable gland

TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG13-90CG-M16	13	M16	4.5 - 10	24	81	20	20	12	10 pcs.	Black (BK)	166-23301
HG16-90CG-M16	16	M16	4.5 - 10	29	86	20	20	12	10 pcs.	Black (BK)	166-23302
HG16-90CG-M20	16	M20	7 - 13	29	91	24	24	12	10 pcs.	Black (BK)	166-23303
HG21-90CG-M20	21	M20	7 - 13	32	93	24	24	12	10 pcs.	Black (BK)	166-23304
HG28-90CG-M25	28	M25	9 - 17	44	107	29	29	12	10 pcs.	Black (BK)	166-23305
HG34-90CG-M32	34	M32	11 - 21	51	125	36	38	15	10 pcs.	Black (BK)	166-23306
HG42-90CG-M40	42	M40	19 - 28	63	140	45	50	15	2 pcs.	Black (BK)	166-23307
HG54-90CG-M50	54	M50	27 - 35	76	146	54	56	15	2 pcs.	Black (BK)	166-23308

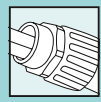
All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



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### Fittings with strain relief and cable seal

#### HGL-90CG 90° Elbow fitting, IP68

90° elbow fitting with cable seal and strain relief.

Fulfils IP66, IP67, IP68 and IP69k.

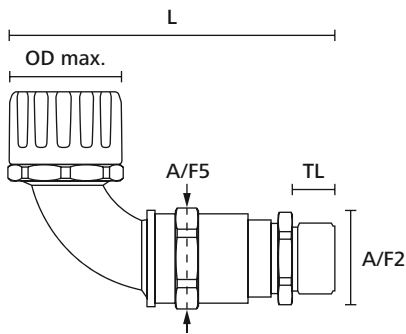
#### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HGL-90CG 90° Cable Gland Fitting, External Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 90° cable gland

TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL13-90CG-M16	13	M16	4.5 - 10	24	81	20	20	12	10 pcs.	Black (BK)	166-22701
HGL16-90CG-M16	16	M16	4.5 - 10	29	86	20	20	12	10 pcs.	Black (BK)	166-22702
HGL16-90CG-M20	16	M20	7 - 13	29	91	24	24	12	10 pcs.	Black (BK)	166-22703
HGL21-90CG-M20	21	M20	7 - 13	32	93	24	24	12	10 pcs.	Black (BK)	166-22704
HGL28-90CG-M25	28	M25	9 - 17	44	107	29	29	12	10 pcs.	Black (BK)	166-22705
HGL34-90CG-M32	34	M32	11 - 21	51	125	36	38	15	10 pcs.	Black (BK)	166-22706
HGL42-90CG-M40	42	M40	19 - 28	63	140	45	50	15	2 pcs.	Black (BK)	166-22707
HGL54-90CG-M50	54	M50	27 - 35	76	146	54	56	15	2 pcs.	Black (BK)	166-22708

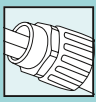
All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



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#### Fittings with strain relief and cable seal

##### HG-45CG 45° Elbow fitting, IP66

45° elbow fitting with cable seal and strain relief.

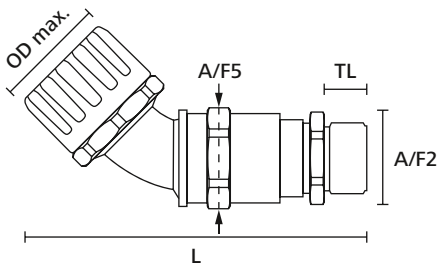
##### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HeliaGuard HG-45CG 45° Cable Gland Fitting, External Thread, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeliaGuard fitting, 45° cable gland

TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HG16-45CG-M20	16	M20	7 - 13	29	95	24	24	12	10 pcs.	Black (BK)	166-23903
HG21-45CG-M20	21	M20	7 - 13	32	100	24	24	12	10 pcs.	Black (BK)	166-23904
HG28-45CG-M25	28	M25	9 - 17	44	114	29	29	12	10 pcs.	Black (BK)	166-23905
HG34-45CG-M32	34	M32	11 - 21	51	133	36	38	15	10 pcs.	Black (BK)	166-23906
HG42-45CG-M40	42	M40	19 - 28	63	140	45	50	15	2 pcs.	Black (BK)	166-23907
HG54-45CG-M50	54	M50	27 - 35	76	164	54	56	15	2 pcs.	Black (BK)	166-23908

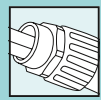
All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings with strain relief and cable seal

#### HGL-45CG 45° Elbow fitting, IP68

45° elbow fitting with cable seal and strain relief.

Fulfils IP66, IP67, IP68 and IP69k.

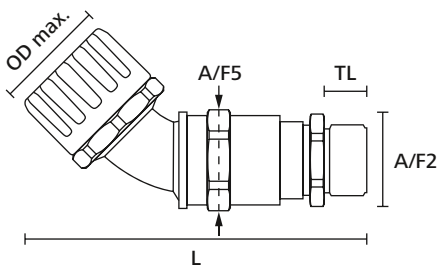
#### Features and benefits

- Provides strain relief
- Seals cable at IP68 and IP69k
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HGL-45CG 45° Cable Gland Fitting, External Thread, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, 45° cable gland

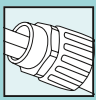


TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Outside Ø max (OD max.)	Length (L)	A/F Thread (A/F2)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
HGL16-45CG-M20	16	M20	7 - 13	29	95	24	24	12	10 pcs.	Black (BK)	166-24503
HGL21-45CG-M20	21	M20	7 - 13	32	100	24	24	12	10 pcs.	Black (BK)	166-24504
HGL28-45CG-M25	28	M25	9 - 17	44	114	29	29	12	10 pcs.	Black (BK)	166-24505
HGL34-45CG-M32	34	M32	11 - 21	51	133	36	38	15	10 pcs.	Black (BK)	166-24506
HGL42-45CG-M40	42	M40	19 - 28	63	140	45	50	15	2 pcs.	Black (BK)	166-24507
HGL54-45CG-M50	54	M50	27 - 35	76	164	54	56	15	2 pcs.	Black (BK)	166-24508

All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



#### Connectors, reducers and couplers

##### HG-T T-Connector, IP66

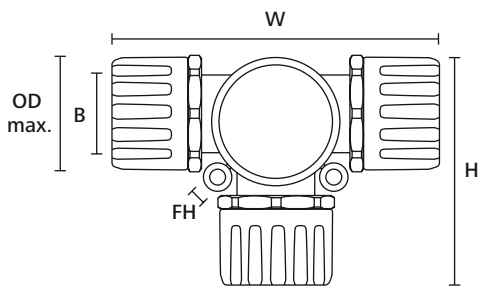
##### Features and benefits

- Fast fit T-shaped connector
- Includes removable inspection lid
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HeliaGuard HG-T, T-Connector, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeliaGuard fitting, T-connector

TYPE	From nominal diameter	To nominal diameter	Min. Bore Size (B)	Outside Ø max (OD max.)	Width (W)	Height (H)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
HG16-T	16	16	14.0	33	96	62	6,2	5 pcs.	Black (BK)	166-24800
HG20-T	20	20	19.0	34	99	63	6,2	3 pcs.	Black (BK)	166-24801
HG21-T	21	21	19.0	34	99	63	6,2	3 pcs.	Black (BK)	166-24802
HG28-T	28	28	25.0	45	125	87	6,0	3 pcs.	Black (BK)	166-24803
HG34-T	34	34	33.0	48	130	91	7,2	2 pcs.	Black (BK)	166-24804
HG42-T	42	42	41.0	55	150	110	7,2	1 pc.	Black (BK)	166-24805

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Connectors, reducers and couplers

#### HGL-T T-Connector, IP68

T-connector with conduit seals.  
Fulfils IP66, IP67, IP68 and IP69k.

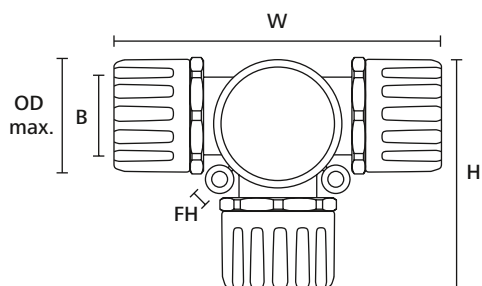
#### Features and benefits

- Fast fit T-shaped connector
- Includes removable inspection lid
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HGL-T, T-Connector with conduit seals.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, T-connector

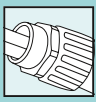


TYPE	From nominal diameter	To nominal diameter	Min. Bore Size (B)	Outside Ø max (OD max.)	Width (W)	Height (H)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
HGL16-T	16	16	14.0	33	96	62	6,2	5 pcs.	Black (BK)	166-24900
HGL21-T	21	21	19.0	34	99	63	6,2	3 pcs.	Black (BK)	166-24901
HGL28-T	28	28	25.0	45	125	87	6,0	3 pcs.	Black (BK)	166-24902
HGL34-T	34	34	33.0	48	130	91	7,2	2 pcs.	Black (BK)	166-24903
HGL42-T	42	42	41.0	55	150	110	7,2	1 pcs.	Black (BK)	166-24904

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



#### Connectors, reducers and couplers

##### HG-Y Y-Connector, IP66

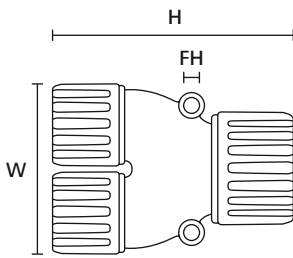
##### Features and benefits

- Fast fit Y-shaped connector
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HG-Y, Y-Connector, IP66.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HelaGuard fitting, Y-connector

TYPE	From nominal diameter	To nominal diameter	Width (W)	Height (H)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
HG16-Y13	16	13	49	77	4,0	5 pcs.	Black (BK)	166-25801
HG21-Y16	21	16	59	89	5,0	3 pcs.	Black (BK)	166-25802
HG28-Y21	28	21	67	93	6,0	3 pcs.	Black (BK)	166-25803
HG34-Y28	34	28	90	116	6,5	2 pcs.	Black (BK)	166-25804

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





### Connectors, reducers and couplers

#### HGL-Y Y-Connector, IP68

Fulfils IP66, IP67, IP68 and IP69k.

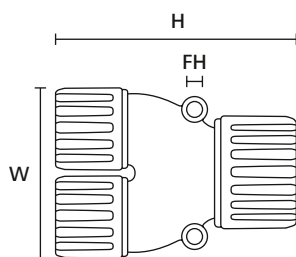
#### Features and benefits

- Fast fit Y-shaped connector
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HelaGuard HGL-Y, Y-Connector with conduit seals.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



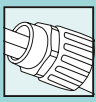
HelaGuard fitting, Y-connector

TYPE	From nominal diameter	To nominal diameter	Width (W)	Height (H)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
<b>HGL16-Y13</b>	16	13	49	77	4,0	5 pcs.	Black (BK)	166-25901
<b>HGL21-Y16</b>	21	16	59	89	5,0	3 pcs.	Black (BK)	166-25902
<b>HGL28-Y21</b>	28	21	67	93	6,0	3 pcs.	Black (BK)	166-25903
<b>HGL34-Y28</b>	34	28	90	116	6,5	2 pcs.	Black (BK)	166-25904

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



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#### Connectors, reducers and couplers

##### HG-R Reducer, IP66

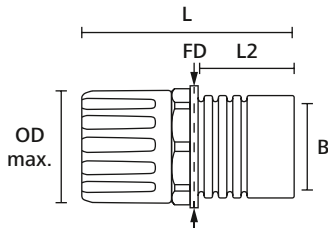
##### Features and benefits

- Reduce size of connector to attach smaller size conduits
- Used with T-Connector and Y-Connectors
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HG-R Reducer.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C



HelaGuard fitting, reducer

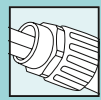


TYPE	From nominal diameter	To nominal diameter	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Length (L2)	Face Diameter (FD)	Pack Cont.	Colour	Article-No.
HG13-R16	16	13	11.7	24	43	17	23	10 pcs.	Black (BK)	166-25000
HG13-R21	21	13	11.7	24	49	23	30	10 pcs.	Black (BK)	166-25001
HG16-R21	21	16	14.5	29	51	23	30	5 pcs.	Black (BK)	166-25002
HG16-R34	34	16	14.5	29	58	30	44	5 pcs.	Black (BK)	166-25005
HG21-R28	28	21	17.5	32	58	29	34	5 pcs.	Black (BK)	166-25004
HG21-R34	34	21	17.5	32	60	30	44	5 pcs.	Black (BK)	166-25007
HG21-R42	42	21	17.5	32	60	30	50	3 pcs.	Black (BK)	166-25010
HG25-R28	28	25	22.5	39	62	29	34	5 pcs.	Black (BK)	166-25003
HG28-R34	34	28	25.7	44	65	30	44	5 pcs.	Black (BK)	166-25006
HG28-R42	42	28	25.7	44	65	30	50	3 pcs.	Black (BK)	166-25009
HG34-R42	42	34	31.5	51	67	30	50	3 pcs.	Black (BK)	166-25008

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



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### Connectors, reducers and couplers

#### HGL-R Reducer, IP68

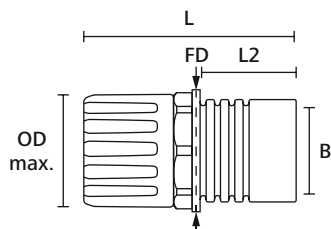
#### Features and benefits

- Reduce size of connector to attach smaller size conduits
- Used with T-Connector and Y-Connectors
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HGL-R Reducer with conduit seal, IP68.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C



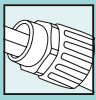
HelaGuard fitting, reducer

TYPE	From nominal diameter	To nominal diameter	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Length (L2)	Face Diameter (FD)	Pack Cont.	Colour	Article-No.
HGL13-R16	16	13	11.7	24	43	17	23	10 pcs.	Black (BK)	166-25100
HGL16-R21	21	16	14.5	29	51	23	30	5 pcs.	Black (BK)	166-25101
HGL16-R28	28	16	14.5	29	57	29	34	5 pcs.	Black (BK)	166-25103
HGL16-R34	34	16	14.5	29	58	30	44	5 pcs.	Black (BK)	166-25106
HGL21-R28	28	21	17.5	32	59	29	34	5 pcs.	Black (BK)	166-25102
HGL21-R34	34	21	17.5	32	60	30	44	5 pcs.	Black (BK)	166-25105
HGL21-R42	42	21	17.5	32	60	30	50	3 pcs.	Black (BK)	166-25109
HGL28-R34	34	28	25.7	44	65	30	44	5 pcs.	Black (BK)	166-25104
HGL28-R42	42	28	25.7	44	60	30	50	3 pcs.	Black (BK)	166-25108
HGL34-R42	42	34	31.5	51	67	30	50	3 pcs.	Black (BK)	166-25107

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



#### Connectors, reducers and couplers

##### HG-HG Conduit Coupler IP66

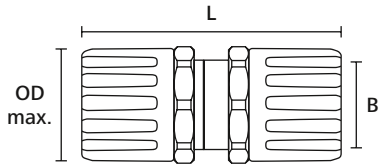
#### Features and benefits

- One piece, fast fit
- Joins corrugated conduits



HeliaGuard HG-HG Coupler.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C

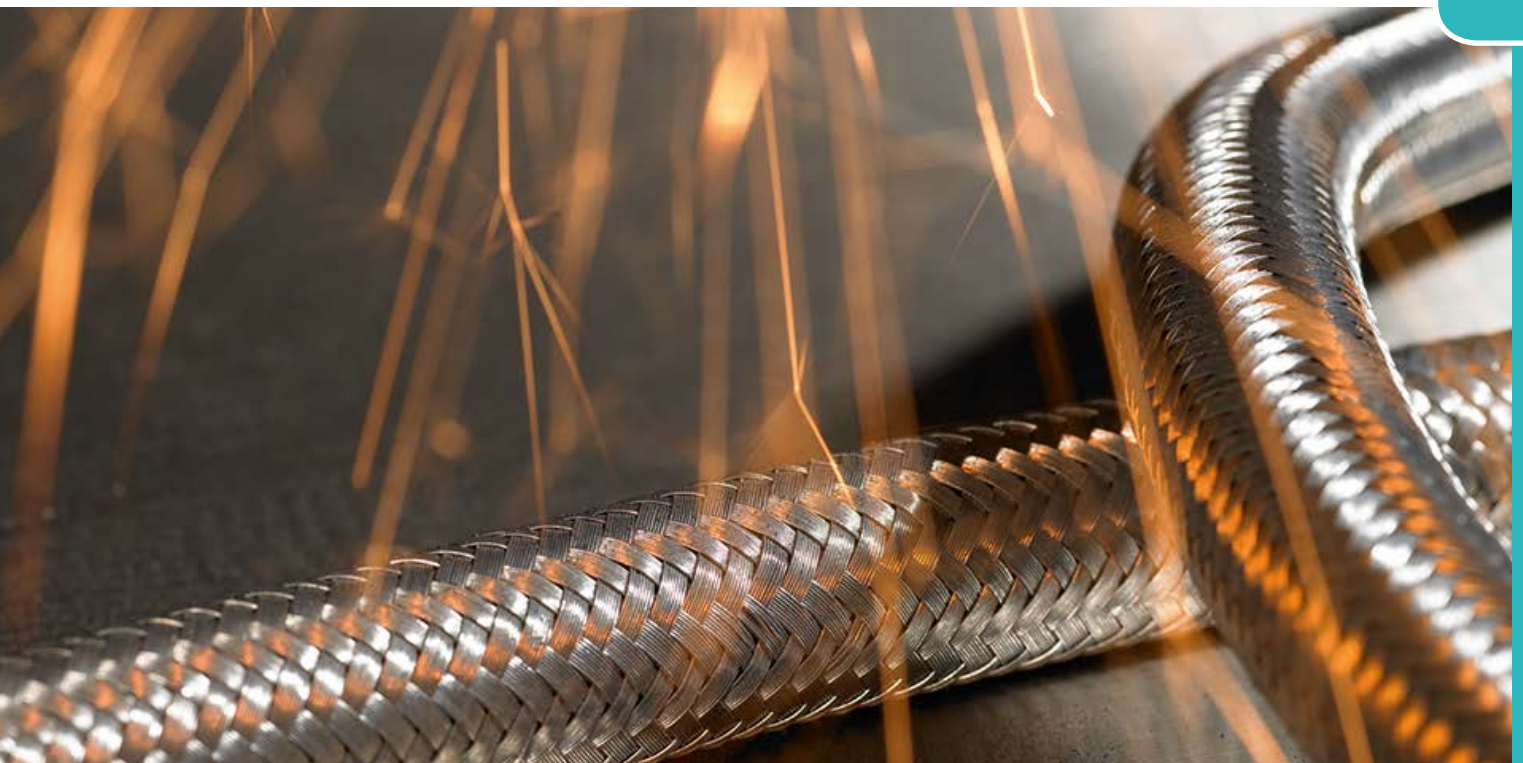


HeliaGuard fitting, coupler



TYPE	From nominal diameter	To nominal diameter	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Pack Cont.	Colour	Article-No.
HG16-HG16	16	16	11.0	29	59	10 pcs.	Black (BK)	166-24600
HG21-HG21	21	21	14.5	32	71	10 pcs.	Black (BK)	166-24601
HG28-HG28	28	28	19.5	44	81	10 pcs.	Black (BK)	166-24602
HG34-HG34	34	34	26.5	51	87	10 pcs.	Black (BK)	166-24603

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



## 2.1 Metallic Conduit Systems

<b>Product Selection</b>	
HelaGuard Nomenclature for Metallic Conduits	62
HelaGuard Nomenclature for Metallic Fittings	63
<b>Metallic Conduits</b>	
SC stainless steel conduit	64
SSC stainless steel conduit	65
<b>Fittings for Metallic Conduits</b>	
SC-FM fixed external thread, IP40	66
SSC-FM stainless steel, fixed external thread, IP40	67
SC-SM swivel external thread, IP40	68
SSC-SM stainless steel, swivel external thread, IP40	69
SC-PC plain hole connectors, IP40	70
SC-FF fixed internal thread, IP40	71



## 2.2 Metallic Conduits with Plastic Coating

PCS, galvanised steel, PVC coating	72
NCS, galvanised steel, PA6 coating	73
LFHCS, galvanised steel, LFH coating	74
<b>Fittings for Metallic Conduits with Plastic Coating</b>	
PCS-FM fixed external thread, IP54	75
PCS-SM swivel external thread, IP54	76
PCS-PC plain hole connector, IP54	77
PCS-FF fixed internal thread, IP54	78
PCS-FMC compression fitting, fixed thread, IP65	79
PCS-SMC compression fitting, swivel thread, IP65	80
PCS-90FMC compression fitting, 90° elbow, IP65	81
PCS-PCS compression coupler, IP65	82
PCS-SCG cable gland fitting, IP65	83
PCS-EI end insert	84



## 2.3 Metallic Conduits with Liquid-Tight Cover

LTS, galvanised steel, PVC cover	85
LTSH, galvanised steel, thermoplastic cover	86
LTSUL, galvanised steel, PVC cover, UL-listed	87
<b>Fittings for Metallic Conduits with Liquid-Tight Cover</b>	
LTS-FMC compression fitting, fixed thread, IP68	88
LTS-SMC compression fitting, swivel thread, IP68	89
LTS-90FMC compression fitting, 90° elbow, IP68	90
LTS-45FMC compression fitting, 45° elbow, IP68	91
LTS-LTS compression coupler, IP68	92
LTS-SCG cable gland fitting, IP68	93
LTS-EI end insert	94



## 2.4 Metallic Conduits with Plastic Coating and Metallic Overbraid

PCSB, galvanised steel, PVC coating, galvanised steel overbraid	95
<b>Fittings for Metallic Conduits with Plastic Coating and Metallic Overbraid</b>	
PCSB-FM fixed external thread, IP54	96
PCSB-SM swivel external thread, IP54	97
PCSB-PC plain hole connector, IP54	98
PCSB-FMC compression fitting, fixed thread, IP65	99
PCSB-SMC compression fitting, swivel thread, IP65	100
PCSB-90FMC compression fitting, 90° elbow, IP65	101



## 2.5 Metallic Conduits with Metallic Overbraid

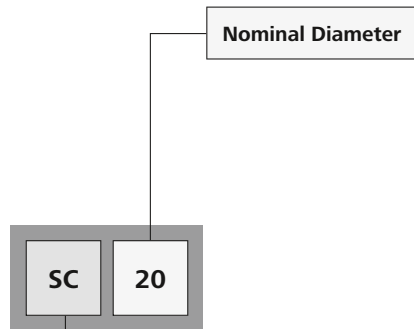
SCSB galvanised steel, galvanised steel overbraid	102
<b>Fittings for Metallic Conduits with Metallic Overbraid</b>	
SCSB-FM fixed external thread, IP40	103
SCSB-SM swivel external thread, IP40	104
SCSB-PC plain hole connector, IP40	105



### HelaGuard Nomenclature for Metallic Conduits

Example:

**SC20**



#### Conduit Type

- SC** Galvanised steel conduit
- SSC** Stainless steel conduit
- PCS** Galvanised steel conduit, PVC cover
- NCS** Galvanised steel conduit, PA6 cover
- LFHCS** Galvanised steel conduit, PO cover
- LTS** Liquid-tight galvanised steel conduit, smooth PVC cover
- LTSH** Liquid-tight galvanised steel conduit, smooth TPR cover
- LTSUL** Liquid-tight galvanised steel conduit, smooth PVC cover, UL listed
- PCSB** Galvanised steel conduit, PVC cover, galvanised steel braid
- SCSB** Galvanised steel conduit, galvanised steel braid



CAD download

## HelaGuard Nomenclature for Metallic Fittings

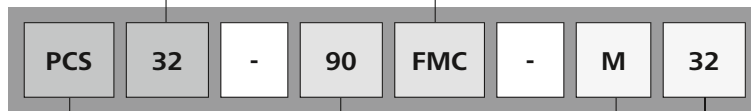
Example:

**PCS32-90FMC-M32**

### Thread Type

- FM** Fixed external thread
- SM** Swivel external thread
- FF** Fixed internal thread
- FMC** Compression fitting, fixed external thread
- SMC** Compression fitting, swivel external thread
- PC** Plain hole connector
- EI** End insert
- SCG** Straight cable gland
- PCS-PCS** Compression conduit coupler

Nominal Diameter



### Suitable Conduit Type

- SC** Galvanised steel conduits
- SSC** Stainless steel conduits
- PCS** Galvanised steel conduit, PVC cover
- NCS** Galvanised steel conduit, PA6 cover
- LFHCS** Galvanised steel conduit, PO cover
- LTS** Liquid-tight galvanised steel conduit, smooth PVC cover
- LTSH** Liquid-tight galvanised steel conduit, smooth TPR cover
- LTSUL** Liquid-tight galvanised steel conduit, smooth PVC cover, UL listed
- PCSB** Galvanised steel conduit, PVC cover, galvanised steel braid
- SCSB** Galvanised steel conduit, galvanised steel braid

Thread Size

### Thread Code

- M** Metric
- PG** Panzer-Gewinde

### Fitting Shape

- Straight fitting
- 90** 90° elbow fitting
- 45** 45° elbow fitting



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## Metallic conduits

### SC Galvanised steel conduit

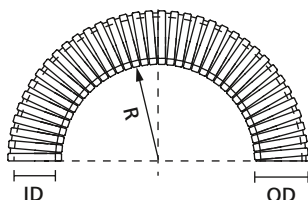
General purpose flexible steel conduit offers high mechanical protection and is typically used in machines, plants, underfloor wiring, data cabling and protection of hydraulic or pneumatic hoses.

#### Features and benefits

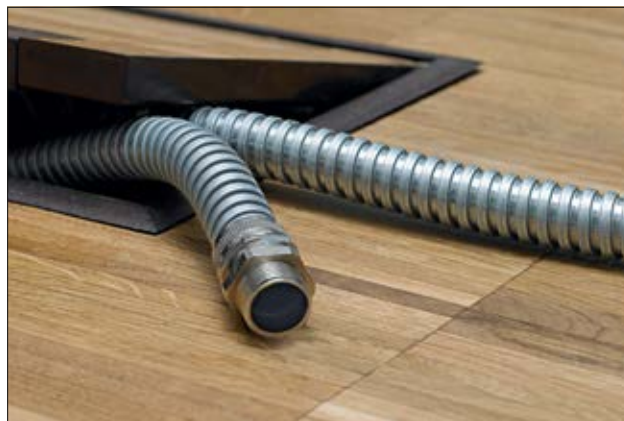
- High compression, tensile and impact strength
- Very flexible



One Step to the Web!



HelaGuard metallic conduit



HeloGuard SC Galvanised Steel Conduit.

<b>MATERIAL</b>	Galvanised Steel (GS)
<b>Operating Temperature</b>	-100 °C to +300 °C



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

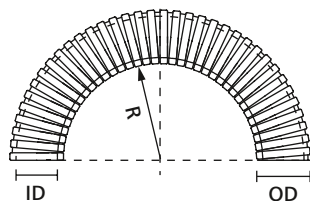
#### Features and benefits

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



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

<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-100 °C to +600 °C



HeloGuard metallic conduit



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
SSC10	10	9.1	6.8	25	110 g/m	25 m	Metal (ML)	166-30200
SSC12	12	12.3	10.0	40	126 g/m	25 m	Metal (ML)	166-30201
SSC16	16	16.4	13.0	40	162 g/m	25 m	Metal (ML)	166-30202
SSC20	20	20.4	16.9	45	202 g/m	25 m	Metal (ML)	166-30203
SSC25	25	24.3	21.1	55	300 g/m	25 m	Metal (ML)	166-30204
SSC32	32	31.7	28.1	70	340 g/m	25 m	Metal (ML)	166-30205
SSC40	40	42.1	37.6	80	410 g/m	10 m	Metal (ML)	166-30206
SSC50	50	52.8	48.4	90	516 g/m	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, IP40

Fixed external thread, nickel plated brass.

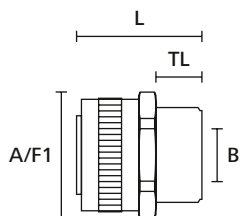
#### Features and benefits

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



HeliaGuard SC-FM Fixed External Thread.

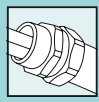
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



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.
SC10-FM-M12	10	M12	5.6	21.0	13	7.0	10 pcs.	Metal (ML)	166-30300
SC10-FM-PG7	10	PG7	5.6	21.0	13	8.0	10 pcs.	Metal (ML)	166-30311
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
SC16-FM-PG11	16	PG11	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-30314
SC20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-30304
SC20-FM-PG16	20	PG16	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-30315
SC25-FM-M25	25	M25	19.1	29.5	29	10.0	10 pcs.	Metal (ML)	166-30305
SC25-FM-PG21	25	PG21	19.1	32.5	29	12.0	10 pcs.	Metal (ML)	166-30316
SC32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-30306
SC32-FM-PG29	32	PG29	26.2	36.8	38	13.0	2 pcs.	Metal (ML)	166-30317
SC40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-30307
SC40-FM-PG36	40	PG36	34.2	39.0	48	14.0	2 pcs.	Metal (ML)	166-30318
SC50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pc.	Metal (ML)	166-30308
SC50-FM-PG42	50	PG42	44.8	42.0	58	15.0	1 pc.	Metal (ML)	166-30319
SC63-FM-M63	63	M63	54.1	50.0	70	18.0	1 pc.	Metal (ML)	166-30309
SC63-FM-PG48	63	PG48	54.5	48.0	70	16.0	1 pc.	Metal (ML)	166-30320
SC75-FM-M75	75	M75	66.4	60.0	84	20.0	1 pc.	Metal (ML)	166-30310

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



### Fittings for metallic conduits

#### SSC-FM Fixed external thread, IP40

Fixed external thread, stainless steel (SS316).

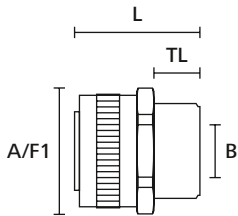
#### Features and benefits

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



HeliaGuard SSC-FM Fixed External Thread.

<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-100 °C to +600 °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.
SSC10-FM-M12	10	M12	5.6	21.0	14	8.0	1 pc.	Metal (ML)	166-30321
SSC12-FM-M16	12	M16	8.5	23.0	19	8.0	1 pc.	Metal (ML)	166-30322
SSC16-FM-M16	16	M16	11.5	25.0	19	10.0	1 pc.	Metal (ML)	166-30323
SSC20-FM-M20	20	M20	15.3	26.3	24	10.0	1 pc.	Metal (ML)	166-30324
SSC25-FM-M25	25	M25	19.1	32.5	29	10.0	1 pc.	Metal (ML)	166-30325
SSC32-FM-M32	32	M32	26.2	36.8	38	13.0	1 pc.	Metal (ML)	166-30326
SSC40-FM-M40	40	M40	34.6	39.0	48	14.0	1 pc.	Metal (ML)	166-30327
SSC50-FM-M50	50	M50	44.7	44.5	58	15.0	1 pc.	Metal (ML)	166-30328

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



## Fittings for metallic conduits

### SC-SM Swivel external thread, IP40

Swivel external thread, nickel plated brass.

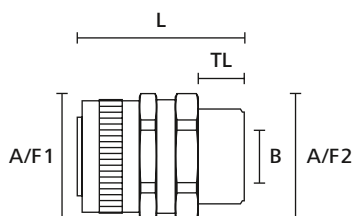
#### Features and benefits

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



HeliaGuard SC-SM Swivel External Thread.

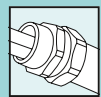
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



HeliaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
SC10-SM-M12	10	M12	5.6	30.2	13	13	8.0	10 pcs.	Metal (ML)	166-30400
SC10-SM-PG7	10	PG7	5.6	30.2	13	13	8.0	10 pcs.	Metal (ML)	166-30410
SC12-SM-M16	12	M16	8.5	32.2	17	17	8.0	10 pcs.	Metal (ML)	166-30401
SC12-SM-PG9	12	PG9	8.5	32.2	17	17	8.0	10 pcs.	Metal (ML)	166-30411
SC16-SM-M16	16	M16	11.5	34.2	20	20	10.0	10 pcs.	Metal (ML)	166-30402
SC16-SM-M20	16	M20	11.5	34.2	20	22	10.0	10 pcs.	Metal (ML)	166-30403
SC16-SM-PG11	16	PG11	11.5	34.2	20	22	10.0	10 pcs.	Metal (ML)	166-30412
SC20-SM-M20	20	M20	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-30404
SC20-SM-PG13	20	PG13,5	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-30413
SC20-SM-PG16	20	PG16	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-30414
SC25-SM-M25	25	M25	19.1	43.7	29	29	12.0	10 pcs.	Metal (ML)	166-30405
SC25-SM-PG21	25	PG21	19.1	43.7	29	29	12.0	10 pcs.	Metal (ML)	166-30415
SC32-SM-M32	32	M32	26.2	48.0	38	38	13.0	2 pcs.	Metal (ML)	166-30406
SC32-SM-PG29	32	PG29	26.2	48.0	38	38	13.0	2 pcs.	Metal (ML)	166-30416
SC40-SM-M40	40	M40	34.2	51.2	48	48	14.0	2 pcs.	Metal (ML)	166-30407
SC40-SM-PG36	40	PG36	34.2	51.2	48	48	14.0	2 pcs.	Metal (ML)	166-30417
SC50-SM-M50	50	M50	44.8	54.2	58	58	15.0	1 pc.	Metal (ML)	166-30408
SC50-SM-PG42	50	PG42	44.8	54.2	58	58	15.0	1 pc.	Metal (ML)	166-30418
SC63-SM-M63	63	M63	54.5	63.2	70	70	18.0	1 pc.	Metal (ML)	166-30409

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



### Fittings for metallic conduits

#### SSC-SM Swivel external thread, IP40

Swivel external thread, stainless steel (SS316).

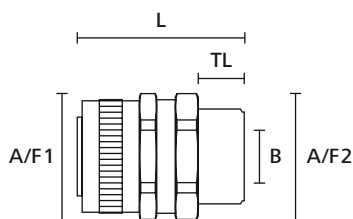
#### Features and benefits

- Two-part fitting of shell and body with external thread
- Highly resistant to rust and corrosion
- External thread swivels about main body
- Provides tight, reliable hold of conduit
- Can be secured with locknut



HeliaGuard SSC-SM Swivel External Thread.

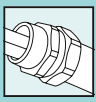
<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-100 °C to +600 °C



HeliaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
SSC10-SM-M12	10	M12	5.6	30.2	14	14	8.0	1 pc.	Metal (ML)	166-30419
SSC12-SM-M16	12	M16	8.5	32.2	19	19	8.0	1 pc.	Metal (ML)	166-30420
SSC16-SM-M16	16	M16	11.5	34.2	19	19	10.0	1 pc.	Metal (ML)	166-30421
SSC20-SM-M20	20	M20	15.3	35.5	24	24	10.0	1 pc.	Metal (ML)	166-30422
SSC25-SM-M25	25	M25	19.1	43.7	29	29	10.0	1 pc.	Metal (ML)	166-30423
SSC32-SM-M32	32	M32	26.2	48.0	38	38	13.0	1 pc.	Metal (ML)	166-30424

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



## Fittings for metallic conduits

### SC-PC Plain hole connector, IP40

Plain hole connector, nickel plated brass.

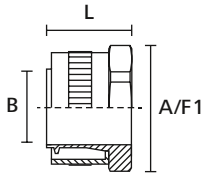
#### Features and benefits

- Two part fitting of shell and body without thread
- Acts as a locking device
- The body is fitted to the conduit through the opposite side of the entry
- Provides a smooth entry bush



HeliaGuard SC-PC Plain Hole Connector.

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



HeliaGuard fitting, plain hole connector

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Pack Cont.	Colour	Article-No.
SC10-PC	10	5.6	15.0	13	10 pcs.	Metal (ML)	166-30500
SC12-PC	12	8.5	15.5	17	10 pcs.	Metal (ML)	166-30501
SC16-PC	16	11.5	20.0	20	10 pcs.	Metal (ML)	166-30502
SC20-PC	20	15.3	16.5	24	10 pcs.	Metal (ML)	166-30503
SC25-PC	25	19.1	20.5	29	10 pcs.	Metal (ML)	166-30504
SC32-PC	32	26.2	23.5	38	2 pcs.	Metal (ML)	166-30505
SC40-PC	40	34.2	24.8	48	2 pcs.	Metal (ML)	166-30506
SC50-PC	50	44.8	30.0	58	1 pc.	Metal (ML)	166-30507
SC63-PC	63	54.5	33.5	70	1 pc.	Metal (ML)	166-30508
SC75-PC	75	66.5	42.0	84	1 pc.	Metal (ML)	166-30509

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



### Fittings for metallic conduits

#### SC-FF Fixed internal thread, IP40

Fixed internal thread, nickel plated brass.

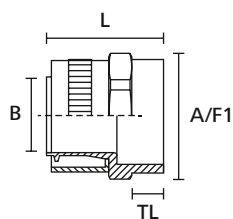
#### Features and benefits

- Two-part fitting of shell and body with internal thread
- Provides tight, reliable hold of conduit
- Can be used to couple two conduits together when used with swivel fitting



HelaGuard SC-FF Fixed Internal Thread.

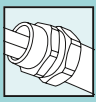
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



HelaGuard fitting, straight with fixed internal 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.
SC16-FF-M20	16	M20	11.5	24.5	22	10.0	10 pcs.	Metal (ML)	166-30600
SC20-FF-M20	20	M20	15.3	26.0	24	10.0	10 pcs.	Metal (ML)	166-30601
SC25-FF-M25	25	M25	19.1	30.0	29	12.0	10 pcs.	Metal (ML)	166-30602
SC32-FF-M32	32	M32	26.2	33.3	36	13.0	2 pcs.	Metal (ML)	166-30603

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



### Metallic conduits with plastic coating

#### PCS Galvanised metallic 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

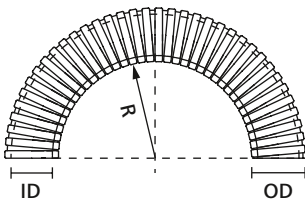


HelaGuard PCS Galvanised Steel Conduit with PVC Coating.

Flexible metallic conduits with polyurethane (PU) cover also available.



HelaGuard PCS Galvanised Steel Conduit with PVC Coating, 10 m in grey.



HelaGuard metallic conduit, plastic coating

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



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PCS10	10	10.1	6.8	25	140 g/m	10 m	Grey (GY)	166-30722
	10	10.1	6.8	25	140 g/m	50 m	Black (BK)	166-30700
PCS12	12	14.2	10.2	30	143 g/m	10 m	Grey (GY)	166-30723
	12	14.2	10.2	30	143 g/m	50 m	Black (BK)	166-30701
PCS16	16	17.0	13.0	40	196 g/m	10 m	Grey (GY)	166-30724
	16	17.1	13.0	40	196 g/m	25 m	Black (BK)	166-30702
PCS20	20	21.6	16.9	45	345 g/m	10 m	Grey (GY)	166-30725
	20	21.6	16.9	45	345 g/m	25 m	Black (BK)	166-30703

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 with plastic coating

#### PCS Galvanised metallic conduit, PVC coating

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PCS25	25	26.0	21.1	55	411 g/m	10 m	Grey (GY)	166-30726
	25	26.0	21.1	55	411 g/m	25 m	Black (BK)	166-30704
PCS32	32	34.0	28.1	60	560 g/m	10 m	Grey (GY)	166-30727
	32	34.0	28.1	60	560 g/m	25 m	Black (BK)	166-30705
PCS40	40	44.2	37.6	80	719 g/m	10 m	Grey (GY)	166-30728
	40	44.2	37.6	80	719 g/m	25 m	Black (BK)	166-30706
PCS50	50	55.0	48.4	90	1,052 g/m	10 m	Grey (GY)	166-30729
	50	55.0	48.4	90	1,052 g/m	25 m	Black (BK)	166-30707
PCS63	63	64.5	57.5	115	1,091 g/m	10 m	Black (BK)	166-30708
	63	64.5	57.5	115	1,091 g/m	10 m	Grey (GY)	166-30730
PCS75	75	79.2	70.0	150	1,459 g/m	10 m	Black (BK)	166-30709
	75	79.2	70.0	150	1,459 g/m	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.

### Metallic conduits with plastic coating

#### NCS Galvanised metallic conduit, PA6 coating

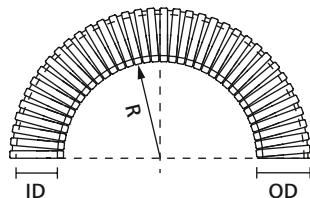
Flexible galvanised steel conduit with elastomeric PA6 coating is used in applications demanding resistance to high temperatures and to acids and solvents.

#### Features and benefits

- Good resistance to high temperatures
- Good abrasion resistance
- High compression, tensile and impact strength
- Very flexible
- Good resistance to alkalis and acids
- Good resistance to chemicals



The HeloGuard NCS galvanised steel conduit with a PA6 coating for higher temperatures and high resistance to acids and solvents.



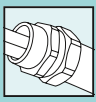
HeloGuard metallic conduit, plastic coating

<b>MATERIAL</b>	Galvanised Steel (GS), Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +120 °C



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
NCS16	16	17.1	12.9	40	174 g/m	25 m	Black (BK)	166-30801
NCS20	20	21.6	16.8	45	345 g/m	25 m	Black (BK)	166-30802
NCS25	25	26.0	20.9	55	411 g/m	25 m	Black (BK)	166-30803
NCS32	32	34.0	27.8	60	510 g/m	10 m	Black (BK)	166-30800

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 with plastic coating

#### LFHCS Galvanised metallic conduit, LFH coating

Flexible galvanised steel conduit with highly flame resistant, low smoke and low toxicity coating, designed for the rail industry, underground stations, tunnels, public buildings and wherever high fire protection is required.

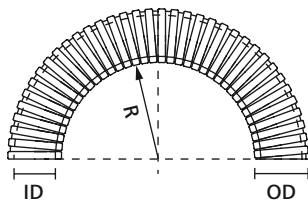
#### Features and benefits

- Self-extinguishing to UL94 V0
- Low smoke, low toxicity
- High compression, tensile and impact strength
- Very flexible
- Halogen, sulphur and phosphorus free



*HelaGuard LFHCS galvanised steel conduit is low smoke, low toxicity, highly flame retardant and halogen free.*

<b>MATERIAL</b>	Galvanised Steel (GS), Polyolefin (PO)
<b>Operating Temperature</b>	-25 °C to +90 °C, intermittent +100 °C
<b>Flammability</b>	UL 94 V0



*HelaGuard metallic conduit, plastic coating*

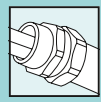


TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
LFHCS12	12	14.2	10.0	30	199 g/m	25 m	Black (BK)	166-30900
LFHCS16	16	17.1	12.9	40	216 g/m	25 m	Black (BK)	166-30901
LFHCS20	20	21.6	16.8	45	350 g/m	25 m	Black (BK)	166-30902
LFHCS25	25	26.0	20.9	55	420 g/m	25 m	Black (BK)	166-30903
LFHCS32	32	34.0	27.8	60	571 g/m	25 m	Black (BK)	166-30904
LFHCS40	40	44.2	37.3	80	739 g/m	10 m	Black (BK)	166-30905
LFHCS50	50	55.0	48.0	90	1,077 g/m	10 m	Black (BK)	166-30906
LFHCS63	63	64.5	57.0	115	1,126 g/m	10 m	Black (BK)	166-30907
LFHCS75	75	79.2	69.4	150	1,509 g/m	10 m	Black (BK)	166-30908

All dimensions in mm. Subject to technical changes.  
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Fittings for metallic conduits with plastic coating

#### PCS-FM Fixed external thread, IP54

Fixed external thread, nickel plated brass.

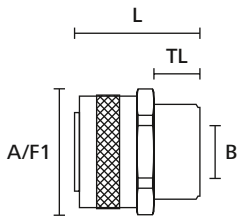
#### Features and benefits

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



HelaGuard PCS-FM Fixed External Thread.

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



HelaGuard 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
PCS10-FM-PG7	10	PG7	5.6	21.0	13	8.0	10 pcs.	Metal (ML)	166-31010
PCS12-FM-M16	12	M16	8.5	23.0	17	8.0	10 pcs.	Metal (ML)	166-31001
PCS12-FM-PG9	12	PG9	8.5	23.0	17	8.0	10 pcs.	Metal (ML)	166-31011
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
PCS16-FM-PG11	16	PG11	11.5	25.0	22	10.0	10 pcs.	Metal (ML)	166-31012
PCS20-FM-M20	20	M20	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-31004
PCS20-FM-PG16	20	PG16	15.3	26.3	24	10.0	10 pcs.	Metal (ML)	166-31014
PCS25-FM-M25	25	M25	19.1	32.5	29	10.0	10 pcs.	Metal (ML)	166-31005
PCS25-FM-PG21	25	PG21	19.1	32.5	29	12.0	2 pcs.	Metal (ML)	166-31015
PCS32-FM-M32	32	M32	26.2	36.8	36	13.0	2 pcs.	Metal (ML)	166-31006
PCS32-FM-PG29	32	PG29	26.2	36.8	38	13.0	2 pcs.	Metal (ML)	166-31016
PCS40-FM-M40	40	M40	34.6	39.0	48	14.0	2 pcs.	Metal (ML)	166-31007
PCS40-FM-PG36	40	PG36	34.2	39.0	48	14.0	2 pcs.	Metal (ML)	166-31017
PCS50-FM-M50	50	M50	44.7	42.0	58	15.0	1 pc.	Metal (ML)	166-31008
PCS50-FM-PG42	50	PG42	44.8	42.0	58	15.0	1 pc.	Metal (ML)	166-31018
PCS63-FM-M63	63	M63	54.5	50.0	70	18.0	1 pc.	Metal (ML)	166-31009
PCS75-FM-M75	75	M75	66.5	60.0	84	20.0	1 pc.	Metal (ML)	166-31019

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



### Fittings for metallic conduits with plastic coating

#### PCS-SM Swivel external thread, IP54

Swivel external thread, nickel plated brass.

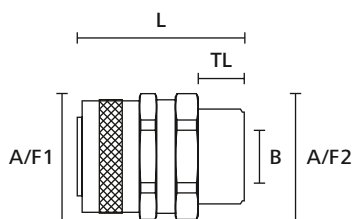
#### Features and benefits

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



HeliaGuard PCS-SM Swivel External Thread.

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



HeliaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS10-SM-M12	10	M12	5.6	30.2	13	13	8.0	10 pcs.	Metal (ML)	166-31100
PCS10-SM-PG7	10	PG7	5.6	30.2	13	13	8.0	10 pcs.	Metal (ML)	166-31110
PCS12-SM-M16	12	M16	8.5	32.2	17	17	8.0	10 pcs.	Metal (ML)	166-31101
PCS12-SM-PG9	12	PG9	8.5	32.2	17	17	8.0	10 pcs.	Metal (ML)	166-31111
PCS16-SM-M16	16	M16	11.5	34.2	20	20	10.0	10 pcs.	Metal (ML)	166-31102
PCS16-SM-M20	16	M20	11.5	34.2	20	22	10.0	10 pcs.	Metal (ML)	166-31103
PCS16-SM-PG11	16	PG11	11.5	34.2	20	22	10.0	10 pcs.	Metal (ML)	166-31112
PCS20-SM-M20	20	M20	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-31104
PCS20-SM-PG13	20	PG13,5	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-31113
PCS20-SM-PG16	20	PG16	15.3	35.5	24	24	10.0	10 pcs.	Metal (ML)	166-31114
PCS25-SM-M25	25	M25	19.1	43.7	29	29	12.0	10 pcs.	Metal (ML)	166-31105
PCS25-SM-PG21	25	PG21	19.1	43.7	29	29	12.0	10 pcs.	Metal (ML)	166-31115
PCS32-SM-M32	32	M32	26.2	48.0	38	38	13.0	2 pcs.	Metal (ML)	166-31106
PCS32-SM-PG29	32	PG29	26.2	48.0	38	38	13.0	2 pcs.	Metal (ML)	166-31116
PCS40-SM-M40	40	M40	34.2	51.2	48	48	14.0	2 pcs.	Metal (ML)	166-31107
PCS40-SM-PG36	40	PG36	34.2	51.2	48	48	14.0	2 pcs.	Metal (ML)	166-31117
PCS50-SM-M50	50	M50	44.8	54.2	58	58	15.0	1 pc.	Metal (ML)	166-31108
PCS50-SM-PG42	50	PG42	44.8	54.2	58	58	15.0	1 pc.	Metal (ML)	166-31118
PCS63-SM-M63	63	M63	54.5	63.2	70	70	18.0	1 pc.	Metal (ML)	166-31109

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



### Fittings for metallic conduits with plastic coating

#### PCS-PC Plain hole connector, IP54

Plain hole connector, nickel plated brass.

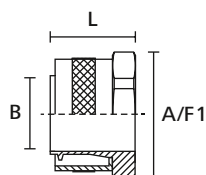
#### Features and benefits

- Two part fitting of shell and body without thread
- Acts as a locking device
- The body is fitted to the conduit through the opposite side of the entry
- Provides a smooth entry bush



HelaGuard PCS-PC Plain Hole Connector.

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

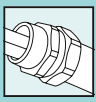


HelaGuard fitting, plain hole connector



TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	Pack Cont.	Colour	Article-No.
PCS10-PC	10	5.6	15.0	13	10 pcs.	Metal (ML)	166-31200
PCS12-PC	12	8.5	15.5	17	10 pcs.	Metal (ML)	166-31201
PCS16-PC	16	11.5	20.0	20	10 pcs.	Metal (ML)	166-31202
PCS20-PC	20	15.3	16.5	24	10 pcs.	Metal (ML)	166-31203
PCS25-PC	25	19.1	20.5	29	10 pcs.	Metal (ML)	166-31204
PCS32-PC	32	26.2	23.5	38	2 pcs.	Metal (ML)	166-31205
PCS40-PC	40	34.2	24.8	48	2 pcs.	Metal (ML)	166-31206
PCS50-PC	50	44.8	30.0	58	1 pc.	Metal (ML)	166-31207
PCS63-PC	63	54.5	33.5	70	1 pc.	Metal (ML)	166-31208
PCS75-PC	75	66.5	42.0	84	1 pc.	Metal (ML)	166-31209

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



### Fittings for metallic conduits with plastic coating

#### PCS-FF Fixed internal thread, IP54

Fixed internal thread, nickel plated brass.

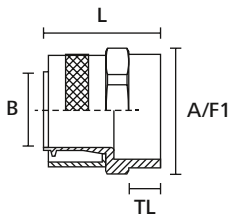
#### Features and benefits

- Two-part fitting of shell and body with internal thread
- Provides tight, reliable hold of conduit
- Can be used to couple two conduits together when used with swivel fitting



HeliaGuard PCS-FF Fixed Internal Thread.

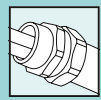
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



HeliaGuard fitting, straight with fixed internal 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.
PCS16-FF-M20	16	M20	11.5	24.5	22	10.0	10 pcs.	Metal (ML)	166-31300
PCS20-FF-M20	20	M20	15.3	26.0	24	10.0	10 pcs.	Metal (ML)	166-31301
PCS25-FF-M25	25	M25	19.1	30.0	29	12.0	10 pcs.	Metal (ML)	166-31302
PCS32-FF-M32	32	M32	26.2	33.3	36	13.0	10 pcs.	Metal (ML)	166-31303

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



### Fittings for metallic conduits with plastic coating

#### PCS-FMC Fixed thread compression fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

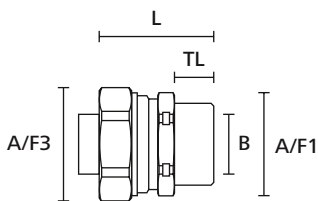
#### Features and benefits

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



HelaGuard PCS-FMC Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C	

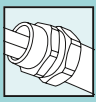


HelaGuard compression fitting, straight with fixed external thread



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
PCS16-FMC-PG11	16	PG11	11.5	31.0	24	26	10.0	10 pcs.	Metal (ML)	166-31409
PCS20-FMC-M20	20	M20	15.3	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-31404
PCS20-FMC-PG16	20	PG16	15.3	32.5	26	29	11.0	10 pcs.	Metal (ML)	166-31410
PCS25-FMC-M25	25	M25	19.1	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-31405
PCS25-FMC-PG21	25	PG21	19.1	38.5	33	35	12.0	10 pcs.	Metal (ML)	166-31411
PCS32-FMC-M32	32	M32	26.0	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-31406
PCS32-FMC-PG29	32	PG29	26.0	42.8	40	42	12.0	2 pcs.	Metal (ML)	166-31412
PCS40-FMC-M40	40	M40	34.6	47.5	56	58	16.0	2 pcs.	Metal (ML)	166-31407
PCS40-FMC-PG36	40	PG36	34.6	43.5	58	58	12.0	2 pcs.	Metal (ML)	166-31415
PCS50-FMC-M50	50	M50	44.7	51.0	70	70	16.0	1 pc.	Metal (ML)	166-31408

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



### Fittings for metallic conduits with plastic coating

#### PCS-SMC Swivel thread compression fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

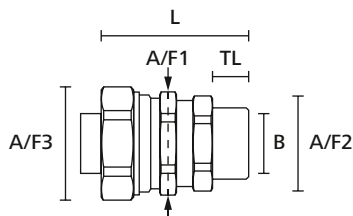
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Provides excellent tensile strength
- External thread swivels about main body even after tightening



HeliaGuard PCS-SMC Swivel Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS12-SMC-M16	12	M16	8.6	39.0	20	20	22	10.0	10 pcs.	Metal (ML)	166-31500
PCS16-SMC-M16	16	M16	11.5	40.9	24	24	26	10.0	10 pcs.	Metal (ML)	166-31501
PCS16-SMC-M20	16	M20	11.5	41.0	24	24	26	10.0	10 pcs.	Metal (ML)	166-31502
PCS20-SMC-M20	20	M20	15.3	41.8	26	26	29	10.0	10 pcs.	Metal (ML)	166-31503
PCS25-SMC-M25	25	M25	19.1	50.7	33	29	35	12.0	10 pcs.	Metal (ML)	166-31504
PCS32-SMC-M32	32	M32	26.0	56.9	40	38	42	13.0	2 pcs.	Metal (ML)	166-31505

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





### Fittings for metallic conduits with plastic coating

#### PCS-90FMC 90° Elbow compression fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

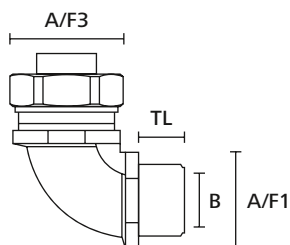
#### Features and benefits

- Multipart 90° compression fitting including elastomeric seal
- Provides excellent tensile strength



HeliaGuard PCS-90FMC 90° Elbow Compression Fitting.

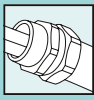
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS12-90FMC-M16	12	M16	8.6	20	22	10.0	10 pcs.	Metal (ML)	166-31601
PCS16-90FMC-M16	16	M16	11.5	20	26	10.0	10 pcs.	Metal (ML)	166-31602
PCS16-90FMC-M20	16	M20	11.5	24	26	13.0	10 pcs.	Metal (ML)	166-31603
PCS20-90FMC-M20	20	M20	15.3	24	29	13.0	10 pcs.	Metal (ML)	166-31604
PCS25-90FMC-M25	25	M25	19.1	30	35	14.0	10 pcs.	Metal (ML)	166-31605
PCS32-90FMC-M32	32	M32	26.0	36	42	15.0	2 pcs.	Metal (ML)	166-31606

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



#### Fittings for metallic conduits with plastic coating

##### PCS-PCS compression coupler, IP65

Nickel plated brass.

Fulfils IP65.

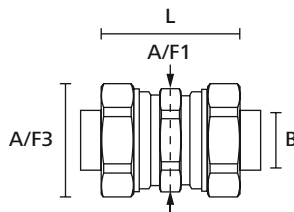
##### Features and benefits

- Multipart compression coupler including polyamide seal
- Joins two conduits
- Provides excellent tensile strength



HeliaGuard PCS-PCS Compression Coupler.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression coupler

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Pack Cont.	Colour	Article-No.
PCS20-PCS20	20	15.3	39.5	26	29	10 pcs.	Metal (ML)	166-31700
PCS25-PCS25	25	19.1	46.9	33	35	10 pcs.	Metal (ML)	166-31701

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



### Fittings for metallic conduits with plastic coating

#### PCS-SCG Straight Cable Gland fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

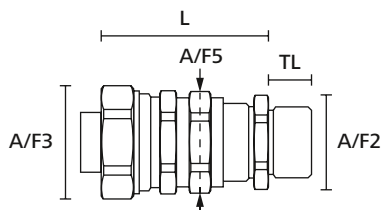
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Powerful strain relief function
- Seals cable at IP68 and IP69k
- Provides excellent tensile strength



PCS-SCG Compression Fitting with Strain Relief and Cable Seal.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C



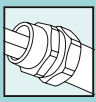
HeliaGuard compression fitting, straight cable gland

TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Length (L)	A/F Thread (A/F2)	A/F Nut (A/F3)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCS16-SCG-M16	16	M16	4.5 - 10	55	20	26	22	12.0	10 pcs.	Metal (ML)	166-36101
PCS20-SCG-M20	20	M20	7 - 13	58	24	29	26	12.0	10 pcs.	Metal (ML)	166-36102
PCS25-SCG-M25	25	M25	9 - 17	65	29	35	33	12.0	10 pcs.	Metal (ML)	166-36103
PCS32-SCG-M32	32	M32	11 - 21	78	36	42	40	15.0	2 pcs.	Metal (ML)	166-36104

All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



## Fittings for metallic conduits with plastic coating

### PCS-EI End Insert

Nickel plated brass.

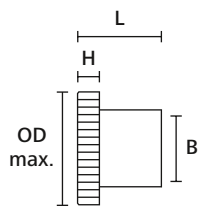
#### Features and benefits

- Single part
- Caps end of conduit



HeliaGuard PCS-EI End Insert.

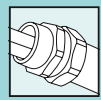
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



HeliaGuard fitting, end insert

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	Outside Ø max (OD max.)	Height (H)	Pack Cont.	Colour	Article-No.
PCS10-EI	10	5.6	16.3	13.8	3.6	10 pcs.	Metal (ML)	166-31800
PCS12-EI	12	8.6	16.3	16.1	3.6	10 pcs.	Metal (ML)	166-31801
PCS16-EI	16	11.5	21.3	20.0	4.3	10 pcs.	Metal (ML)	166-31802
PCS20-EI	20	15.3	23.0	22.9	4.5	10 pcs.	Metal (ML)	166-31803
PCS25-EI	25	19.1	27.5	28.7	6.1	10 pcs.	Metal (ML)	166-31804
PCS32-EI	32	26.0	30.0	35.0	6.6	2 pcs.	Metal (ML)	166-31805
PCS40-EI	40	34.6	28.0	47.5	9.0	2 pcs.	Metal (ML)	166-31806
PCS50-EI	50	44.7	30.0	57.9	10.4	2 pcs.	Metal (ML)	166-31807

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

Flexible galvanised steel conduit with smooth, liquid-tight PVC cover. Fulfills IP66, IP67, IP68 and IP69k with LTS-fittings. LTS is used in machine tools and outdoor installations, wherever liquid-tight 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



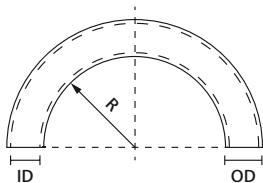
HelaGuard LTS.



**Liquid-tight conduits with polyurethane (PU) cover also available.**

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

**RoHS** ✓



HelaGuard liquid-tight metallic conduit, plastic coating



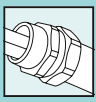
HelaGuard LTS galvanised steel conduit with a smooth, liquid-tight PVC cover is ideal for outdoor installations.

TYPE	Nominal Ø	US Trade Size	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
LTS10	10	1/4 "	11.8	7.0	35	185 g/m	50 m	Black (BK)	166-31900
LTS12	12	5/16 "	14.2	10.0	40	203 g/m	25 m	Black (BK)	166-31901
LTS16	16	3/8 "	17.8	12.6	45	311 g/m	25 m	Black (BK)	166-31902
	16	3/8 "	17.8	12.6	45	311 g/m	25 m	Grey (GY)	166-31917
LTS20	20	1/2 "	21.1	16.0	65	407 g/m	25 m	Black (BK)	166-31903
	20	1/2 "	21.1	16.0	65	407 g/m	25 m	Grey (GY)	166-31918
LTS25	25	3/4 "	26.4	21.1	100	503 g/m	25 m	Black (BK)	166-31904
	25	3/4 "	26.4	21.1	100	503 g/m	25 m	Grey (GY)	166-31919
LTS32	32	1 "	33.1	26.5	135	732 g/m	25 m	Black (BK)	166-31905
	32	1 "	33.1	26.5	135	732 g/m	25 m	Grey (GY)	166-31921
LTS40	40	1 1/4 "	41.8	35.4	175	885 g/m	25 m	Black (BK)	166-31906
	40	1 1/4 "	41.8	35.4	175	885 g/m	25 m	Grey (GY)	166-31927
LTS50	50	1 1/2 "	47.9	40.4	230	1,240 g/m	25 m	Black (BK)	166-31907
LTS63	63	2 "	59.7	51.6	280	1,470 g/m	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.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



#### Metallic conduits with liquid-tight cover

##### LTSH Galvanised steel conduit, thermoplastic cover

Flexible galvanised steel conduit with smooth, flame retardant thermoplastic cover. Fulfills IP66, IP67, IP68 and IP69k with LTS-fittings. LTSH is used in machine tools and outdoor installations, wherever flame retardance or low or high temperature resistance is required.

##### Features and benefits

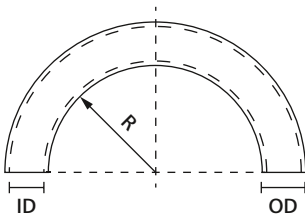
- Liquid-tight (IP68 and IP69k with LTS fittings)
- Flame-retardant
- High compression, tensile and impact strength
- Good flexibility
- Smooth outer cover does not wrinkle when bent
- Good resistance to acids, petrol, oils and greases
- UV-resistant, suitable for outdoor use
- Colour: black



HelaGuard LTSH.



HelaGuard LTSH galvanised steel conduit with a smooth, liquid-tight thermoplastic rubber cover offers very good resistance to oils, greases, petrol, acids and UV.



HelaGuard liquid-tight metallic conduit, plastic coating

<b>MATERIAL</b>	Galvanised Steel (GS), Thermoplastic Rubber (TPR)
<b>Operating Temperature</b>	-60 °C to +150 °C



TYPE	Nominal Ø	US Trade Size	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
LTSH12	12	5/16 "	14.2	10.0	40	203 g/m	25 m	Black (BK)	166-32001
LTSH16	16	3/8 "	17.8	12.6	45	311 g/m	25 m	Black (BK)	166-32002
LTSH20	20	1/2 "	21.1	16.0	65	407 g/m	25 m	Black (BK)	166-32003
LTSH25	25	3/4 "	26.4	21.1	100	445 g/m	25 m	Black (BK)	166-32004
LTSH32	32	1 "	33.1	26.5	135	666 g/m	25 m	Black (BK)	166-32005
LTSH40	40	1 1/4 "	41.8	35.4	175	793 g/m	10 m	Black (BK)	166-32006
LTSH50	50	1 1/2 "	47.9	40.4	230	1,071 g/m	10 m	Black (BK)	166-32007

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 with liquid-tight cover

#### LTSUL, Galvanised steel conduit, PVC cover, UL listed

Flexible galvanised steel conduit including copper bonding strip (up to 40 mm) with smooth, oil resistant PVC cover. Fulfills IP66, IP67, IP68 and IP69k with LTS-fittings. LTSUL is used in machine tools and outdoor installations where UL-listing is required.

#### Features and benefits

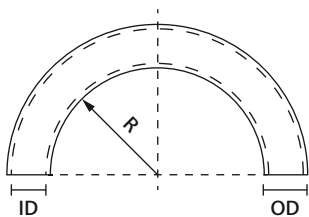
- Liquid-tight (IP68 and IP69k with LTS fittings)
- UL-listed and CSA approved
- High compression, tensile and impact strength
- Good flexibility
- Smooth outer cover does not wrinkle when bent
- Good resistance to acids, petrol, oils and greases
- UV-resistant, suitable for outdoor use
- Colour: black



HelaGuard LTSUL.



The HelaGuard LTSUL galvanised steel conduit with a PVC Cover is UL listed and typically used on drilling platforms.



HelaGuard liquid-tight metallic conduit, plastic coating

<b>MATERIAL</b>	Galvanised Steel (GS), Polyvinylchloride (PVC), Copper (CU)
<b>Operating Temperature</b>	-15 °C to +75 °C



TYPE	Nominal Ø	US Trade Size	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
LTSUL16	16	3/8 "	17.8	12.6	50	432 g/m	25 m	Black (BK)	166-32100
LTSUL20	20	1/2 "	21.1	16.0	90	477 g/m	25 m	Black (BK)	166-32101
LTSUL25	25	3/4 "	26.4	21.1	110	789 g/m	25 m	Black (BK)	166-32102
LTSUL32	32	1 "	33.1	26.5	140	1,221 g/m	15 m	Black (BK)	166-32103
LTSUL40	40	1 1/4 "	41.8	35.4	180	1,519 g/m	15 m	Black (BK)	166-32104
LTSUL50	50	1 1/2 "	47.9	40.4	230	1,846 g/m	15 m	Black (BK)	166-32105
LTSUL63	63	2 "	59.7	51.6	280	2,159 g/m	15 m	Black (BK)	166-32106

All dimensions in mm. Subject to technical changes.  
Other reel lengths available on request. Minimum Order Quantity (MOQ) may differ from package content.



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### 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.

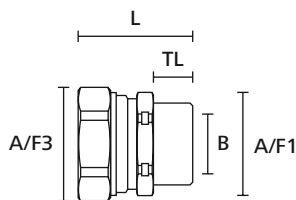
#### Features and benefits

- 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.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with fixed external thread

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
LTS16-FMC-PG11	16	PG11	10.7	31.0	24	26	10.0	10 pcs.	Metal (ML)	166-32212
LTS16-FMC-PG13	16	PG13,5	10.7	31.0	24	26	10.0	10 pcs.	Metal (ML)	166-32216
LTS20-FMC-M20	20	M20	14.5	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-32206
LTS20-FMC-PG16	20	PG16	14.5	32.5	26	29	11.0	10 pcs.	Metal (ML)	166-32213
LTS25-FMC-M25	25	M25	18.0	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-32207
LTS25-FMC-PG21	25	PG21	18.0	38.5	33	35	12.0	10 pcs.	Metal (ML)	166-32214
LTS32-FMC-M32	32	M32	24.6	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-32208
LTS32-FMC-PG29	32	PG29	24.6	42.8	40	42	12.0	2 pcs.	Metal (ML)	166-32215
LTS40-FMC-M40	40	M40	32.7	47.5	50	52	16.0	1 pc.	Metal (ML)	166-32209
LTS50-FMC-M50	50	M50	37.7	53.0	58	58	18.0	1 pc.	Metal (ML)	166-32210
LTS63-FMC-M63	63	M63	49.0	58.8	70	70	20.0	1 pc.	Metal (ML)	166-32211

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





### Fittings for metallic conduits with liquid-tight cover

#### LTS-SMC Swivel thread compression fitting, IP68

External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

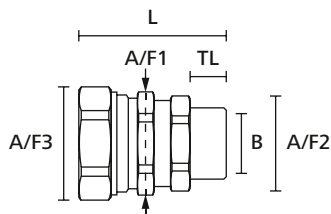
#### Features and benefits

- Multipart compression fitting including polyamide seal
- Provides excellent tensile strength
- External thread swivels about main body even after tightening



HeliaGuard LTS-SMC Swivel Compression Fitting.

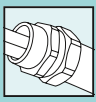
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
LTS12-SMC-M16	12	M16	8.6	39.0	20	20	22	10.0	10 pcs.	Metal (ML)	166-32300
LTS16-SMC-M16	16	M16	10.7	40.9	24	24	26	10.0	10 pcs.	Metal (ML)	166-32301
LTS16-SMC-M20	16	M20	10.7	41.0	24	24	26	10.0	10 pcs.	Metal (ML)	166-32302
LTS20-SMC-M20	20	M20	14.5	41.8	26	26	29	10.0	10 pcs.	Metal (ML)	166-32303
LTS25-SMC-M25	25	M25	18.0	50.7	33	29	35	12.0	10 pcs.	Metal (ML)	166-32304
LTS32-SMC-M32	32	M32	24.6	56.9	40	38	42	13.0	2 pcs.	Metal (ML)	166-32305

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



#### Fittings for metallic conduits with liquid-tight cover

##### LTS-90FMC 90° Elbow compression fitting, IP68

External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

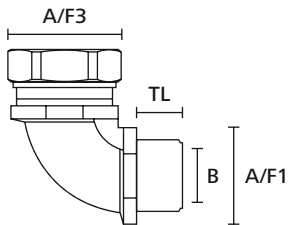
#### Features and benefits

- Multipart 90° compression fitting including polyamide seal
- Provides excellent tensile strength



HeliaGuard LTS-90FMC 90° Elbow Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, 90° with fixed external thread



TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
LTS12-90FMC-M16	12	M16	8.6	20	22	10.0	10 pcs.	Metal (ML)	166-32400
LTS16-90FMC-M16	16	M16	10.7	20	26	10.0	10 pcs.	Metal (ML)	166-32401
LTS16-90FMC-M20	16	M20	10.7	24	26	13.0	10 pcs.	Metal (ML)	166-32402
LTS20-90FMC-M20	20	M20	14.5	24	29	13.0	10 pcs.	Metal (ML)	166-32403
LTS25-90FMC-M25	25	M25	18.0	30	35	14.0	10 pcs.	Metal (ML)	166-32404
LTS32-90FMC-M32	32	M32	24.6	36	42	15.0	2 pcs.	Metal (ML)	166-32405
LTS40-90FMC-M40	40	M40	32.7	46	52	18.0	1 pc.	Metal (ML)	166-32406
LTS50-90FMC-M50	50	M50	37.7	57	58	18.0	1 pc.	Metal (ML)	166-32407
LTS63-90FMC-M63	63	M63	49.0	72	70	20.0	1 pc.	Metal (ML)	166-32408

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



### Fittings for metallic conduits with liquid-tight cover

#### LTS-45FMC 45° Elbow compression fitting, IP68

External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

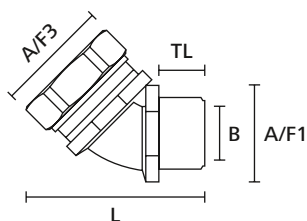
#### Features and benefits

- Multipart 45° compression fitting including polyamide seal
- Provides excellent tensile strength



HeliaGuard LTS-45FMC 45° Elbow Compression Fitting.

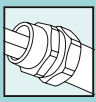
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, 45° with fixed external thread

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.
LTS16-45FMC-M20	16	M20	10.7	44.8	24	26	13.0	10 pcs.	Metal (ML)	166-32500
LTS20-45FMC-M20	20	M20	14.5	49.5	24	29	13.0	10 pcs.	Metal (ML)	166-32501
LTS25-45FMC-M25	25	M25	18.0	63.0	30	35	14.0	10 pcs.	Metal (ML)	166-32502
LTS32-45FMC-M32	32	M32	24.6	76.6	36	42	15.0	2 pcs.	Metal (ML)	166-32503
LTS40-45FMC-M40	40	M40	32.7	86.9	47	57	18.0	1 pc.	Metal (ML)	166-32504
LTS50-45FMC-M50	50	M50	37.7	93.4	61	62	18.0	1 pc.	Metal (ML)	166-32505
LTS63-45FMC-M63	63	M63	49.0	111.0	67	76	20.0	1 pc.	Metal (ML)	166-32506

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



#### Fittings for metallic conduits with liquid-tight cover

##### LTS-LTS Compression coupler, IP68

Nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

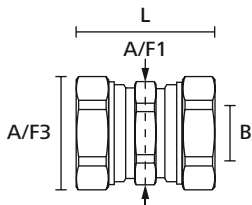
##### Features and benefits

- Multipart compression coupler including polyamide seal
- Joins two conduits
- Provides excellent tensile strength



HeliaGuard LTS-LTS Compression Coupler.

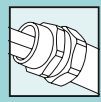
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression coupler

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Pack Cont.	Colour	Article-No.
LTS20-LTS20	20	14.5	39.5	26	29	10 pcs.	Metal (ML)	166-32600
LTS25-LTS25	25	18.0	46.9	33	35	10 pcs.	Metal (ML)	166-32601

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



### Fittings for metallic conduits with liquid-tight cover

#### LTS-SCG Straight cable gland fitting, IP68

External thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k.

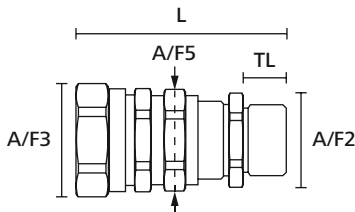
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Powerful strain relief function
- Seals cable at IP68 and IP69k
- Provides excellent tensile strength



LTS-SCG Compression Fitting with Strain Relief and Cable Seal.

<b>MATERIAL</b>	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB), Thermoplastic Elastomer (TPE)
<b>Operating Temperature</b>	-50 °C to +135 °C



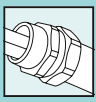
HeliaGuard fitting, straight cable gland

TYPE	Nominal Ø	Thread Size	Suitable for Cable Ø from/to	Length (L)	A/F Thread (A/F2)	A/F Nut (A/F3)	A/F Gland Body (A/F5)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
LTS16-SCG-M16	16	M16	4.5 - 10	55	20	26	22	12.0	10 pcs.	Metal (ML)	166-36201
LTS20-SCG-M20	20	M20	7 - 13	58	24	29	26	12.0	10 pcs.	Metal (ML)	166-36202
LTS25-SCG-M25	25	M25	9 - 17	65	29	35	33	12.0	10 pcs.	Metal (ML)	166-36203
LTS32-SCG-M32	32	M32	11 - 21	78	36	42	40	15.0	2 pcs.	Metal (ML)	166-36204

All dimensions in mm. Subject to technical changes.

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

To ensure the protective seal, it is recommended to use a thread sealant on the thread between the cable gland insert and the conduit fitting.



### Fittings for metallic conduits with liquid-tight cover

#### LTS-EI End insert

Nickel plated brass.

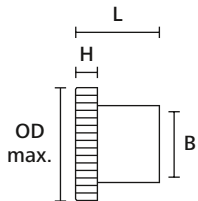
#### Features and benefits

- Single part
- Caps end of conduit



HeliaGuard LTS-EI End Insert.

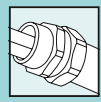
<b>MATERIAL</b>	Nickel Plated Brass (NPB)
<b>Operating Temperature</b>	-100 °C to +300 °C



HeliaGuard fitting, end insert

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	Outside Ø max (OD max.)	Height (H)	Pack Cont.	Colour	Article-No.
LTS10-EI	10	5.6	16.3	13.8	3.6	10 pcs.	Metal (ML)	166-32700
LTS12-EI	12	8.6	16.3	16.1	3.6	10 pcs.	Metal (ML)	166-32701
LTS16-EI	16	10.7	16.5	20.0	4.5	10 pcs.	Metal (ML)	166-32702
LTS20-EI	20	14.5	17.0	22.9	4.5	10 pcs.	Metal (ML)	166-32703
LTS25-EI	25	18.0	21.5	28.7	6.1	10 pcs.	Metal (ML)	166-32704
LTS32-EI	32	24.6	24.0	35.0	6.6	2 pcs.	Metal (ML)	166-32705
LTS40-EI	40	32.7	28.0	45.0	8.1	1 pc.	Metal (ML)	166-32706
LTS50-EI	50	37.7	30.0	51.0	8.1	1 pc.	Metal (ML)	166-32707
LTS63-EI	63	49.0	35.0	63.0	10.1	1 pc.	Metal (ML)	166-32708

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



### Metallic conduits with plastic coating and metallic overbraid

#### PCSB Galvanised steel conduit, PVC coating, galvanised steel overbraid

Flexible galvanised steel conduit with PVC coating and galvanised steel overbraid, typically used in tough industrial environments where high abrasion resistance or EMC screening are required.

#### Features and benefits

- High compression, tensile and impact strength
- Very high abrasion resistance
- Very flexible
- Provides EMC screening

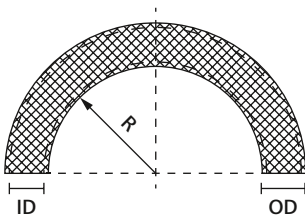


The HeloGuard PCSB galvanised steel conduit with a PVC coating galvanised steel overbraid offers high abrasion resistance and EMC screening.

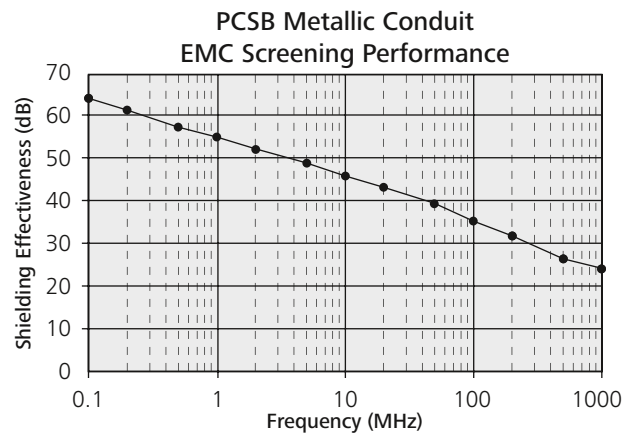
<b>MATERIAL</b>	Galvanised Steel (GS), Polyvinylchloride (PVC)
<b>Operating Temperature</b>	-15 °C to +70 °C



**Stainless steel and tinned copper braiding is also available.**



HeloGuard metallic conduit, plastic coating and metallic braid



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PCSB12	12	15.2	10.2	30	252 g/m	25 m	Metal (ML)	166-33600
PCSB16	16	18.2	13.0	40	348 g/m	25 m	Metal (ML)	166-33601
PCSB20	20	22.7	16.9	45	530 g/m	25 m	Metal (ML)	166-33602
PCSB25	25	27.2	21.1	55	614 g/m	25 m	Metal (ML)	166-33603
PCSB32	32	35.2	28.1	70	832 g/m	25 m	Metal (ML)	166-33604
PCSB40	40	45.7	37.6	80	1,286 g/m	10 m	Metal (ML)	166-33605
PCSB50	50	57.7	48.4	90	1,736 g/m	10 m	Metal (ML)	166-33606

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 and metallic overbraid

#### PCSB-FM Fixed external thread, IP54

Fixed external thread, nickel plated brass.

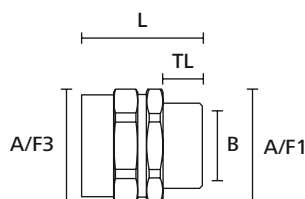
#### Features and benefits

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



HeliaGuard PCSB-FM Fixed External Thread.

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

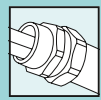


HeliaGuard fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCSB12-FM-M16	12	M16	8.5	26.0	17	17	8.0	10 pcs.	Metal (ML)	166-33800
PCSB12-FM-PG9	12	PG9	8.5	26.0	17	17	8.0	10 pcs.	Metal (ML)	166-33808
PCSB16-FM-M16	16	M16	11.5	28.0	20	20	10.0	10 pcs.	Metal (ML)	166-33801
PCSB16-FM-M20	16	M20	11.5	28.0	22	20	10.0	10 pcs.	Metal (ML)	166-33802
PCSB16-FM-PG11	16	PG11	11.5	28.0	20	20	10.0	10 pcs.	Metal (ML)	166-33809
PCSB20-FM-M20	20	M20	15.3	30.8	24	26	10.0	10 pcs.	Metal (ML)	166-33803
PCSB20-FM-PG16	20	PG16	15.3	30.8	24	26	10.0	10 pcs.	Metal (ML)	166-33810
PCSB25-FM-M25	25	M25	19.1	34.5	29	30	12.0	10 pcs.	Metal (ML)	166-33804
PCSB32-FM-M32	32	M32	26.2	39.3	38	38	13.0	2 pcs.	Metal (ML)	166-33805
PCSB25-FM-PG21	25	PG21	19.1	34.5	29	30	12.0	10 pcs.	Metal (ML)	166-33811
PCSB32-FM-PG29	32	PG29	26.2	39.3	38	38	13.0	2 pcs.	Metal (ML)	166-33812
PCSB40-FM-M40	40	M40	34.2	42.8	48	50	14.0	1 pc.	Metal (ML)	166-33806
PCSB40-FM-PG36	40	PG36	34.2	42.8	48	50	14.0	1 pc.	Metal (ML)	166-33813
PCSB50-FM-M50	50	M50	44.8	48.0	58	61	15.0	1 pc.	Metal (ML)	166-33807

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





### Fittings for metallic conduits with plastic coating and metallic overbraid

#### PCSB-SM Swivel external thread, IP54

Swivel external thread, nickel plated brass.

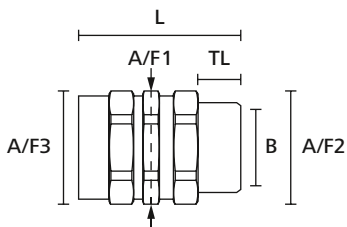
#### Features and benefits

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



HelaGuard PCSB-SM Swivel External Thread.

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



HelaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCSB12-SM-M16	12	M16	8.5	36.2	17	17	17	9.0	10 pcs.	Metal (ML)	166-33900
PCSB12-SM-PG9	12	PG9	8.5	36.2	17	17	17	9.0	10 pcs.	Metal (ML)	166-33908
PCSB16-SM-M16	16	M16	11.5	38.1	20	20	20	10.0	10 pcs.	Metal (ML)	166-33901
PCSB16-SM-M20	16	M20	11.5	38.1	20	22	20	10.0	10 pcs.	Metal (ML)	166-33902
PCSB16-SM-PG11	16	PG11	11.5	38.1	20	20	20	10.0	10 pcs.	Metal (ML)	166-33909
PCSB20-SM-M20	20	M20	15.3	40.0	26	24	24	10.0	10 pcs.	Metal (ML)	166-33903
PCSB20-SM-PG16	20	PG16	15.3	40.0	26	24	24	10.0	10 pcs.	Metal (ML)	166-33910
PCSB25-SM-M25	25	M25	19.1	47.2	30	29	29	12.0	10 pcs.	Metal (ML)	166-33904
PCSB25-SM-PG21	25	PG21	19.1	47.2	30	29	29	12.0	10 pcs.	Metal (ML)	166-33911
PCSB32-SM-M32	32	M32	26.0	52.6	38	38	38	13.0	2 pcs.	Metal (ML)	166-33905
PCSB32-SM-PG29	32	PG29	26.0	52.6	38	38	38	13.0	2 pcs.	Metal (ML)	166-33912
PCSB40-SM-M40	40	M40	34.6	57.8	50	48	48	14.0	1 pc.	Metal (ML)	166-33906
PCSB40-SM-PG36	40	PG36	34.6	57.8	50	48	48	14.0	1 pc.	Metal (ML)	166-33913
PCSB50-SM-M50	50	M50	44.7	60.2	60	58	58	15.0	1 pc.	Metal (ML)	166-33907
PCSB50-SM-PG42	50	PG42	44.7	60.2	60	58	58	15.0	1 pc.	Metal (ML)	166-33914

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



### Fittings for metallic conduits with plastic coating and metallic overbraid

#### PCSB-PC Plain hole connector, IP54

Plain hole connector, nickel plated brass.

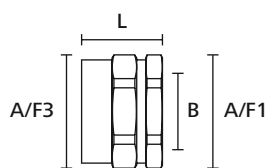
#### Features and benefits

- Two part fitting of shell and body without thread
- Acts as a locking device
- The body is fitted to the conduit through the opposite side of the entry
- Provides a smooth entry bush



HeliaGuard PCSB-PC Plain Hole Connector.

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



HeliaGuard fitting, plain hole connector

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Pack Cont.	Colour	Article-No.
PCSB12-PC	12	8.5	18.0	17	17	10 pcs.	Metal (ML)	166-34000
PCSB16-PC	16	11.5	18.0	20	20	10 pcs.	Metal (ML)	166-34001
PCSB20-PC	20	15.3	21.0	24	26	10 pcs.	Metal (ML)	166-34002
PCSB25-PC	25	19.1	23.5	29	30	10 pcs.	Metal (ML)	166-34003
PCSB32-PC	32	26.0	26.3	38	38	2 pcs.	Metal (ML)	166-34004
PCSB40-PC	40	34.6	28.8	48	50	1 pc.	Metal (ML)	166-34005
PCSB50-PC	50	44.7	33.0	58	60	1 pc.	Metal (ML)	166-34006

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



### Fittings for metallic conduits with plastic coating and metallic overbraid

#### PCSB-FMC Fixed thread compression fitting, IP65

Fixed external thread, nickel plated brass.

Fulfils IP65.

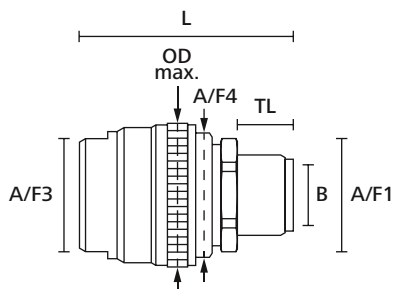
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Braid is locked between inner and outer compression nuts
- Provides very good electrical continuity
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened



HeliaGuard PCSB-FMC Fixed Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	Outside Ø max (OD max.)	A/F Body (A/F1)	A/F Nut (A/F3)	A/F Inner Nut (A/F4)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCSB16-FMC-M16	16	M16	11.5	47.0	32.6	24	24	26	12.0	10 pcs.	Metal (ML)	166-34100
PCSB16-FMC-M20	16	M20	11.5	49.0	32.6	24	24	26	14.0	10 pcs.	Metal (ML)	166-34101
PCSB16-FMC-PG11	16	PG11	11.5	47.0	32.6	24	24	26	12.0	10 pcs.	Metal (ML)	166-34105
PCSB20-FMC-M20	20	M20	15.3	51.0	35.6	26	28	29	14.0	10 pcs.	Metal (ML)	166-34102
PCSB20-FMC-PG16	20	PG16	15.3	51.0	35.6	26	28	29	14.0	10 pcs.	Metal (ML)	166-34106
PCSB25-FMC-M25	25	M25	19.1	58.0	41.8	33	34	36	15.0	10 pcs.	Metal (ML)	166-34103
PCSB25-FMC-PG21	25	PG21	19.1	58.0	41.8	33	34	36	15.0	10 pcs.	Metal (ML)	166-34107
PCSB32-FMC-M32	32	M32	26.0	63.0	48.6	40	41	42	16.0	2 pcs.	Metal (ML)	166-34104
PCSB32-FMC-PG29	32	PG29	26.0	63.0	48.6	40	41	42	16.0	2 pcs.	Metal (ML)	166-34108

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



#### Fittings for metallic conduits with plastic coating and metallic overbraid

##### PCSB-SMC Swivel thread compression fitting, IP65

Swivel external thread, nickel plated brass.

Fulfils IP65.

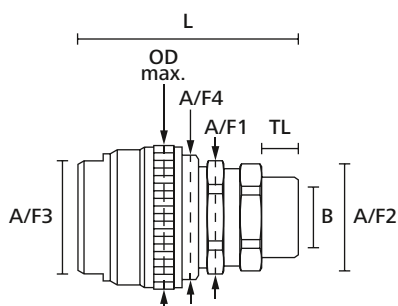
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Braid is locked between inner and outer compression nuts
- Provides very good electrical continuity
- Provides excellent tensile strength
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- External thread swivels about main body even after tightening



HeliaGuard PCSB-SMC Swivel Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	Outside Ø max (OD max.)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	A/F Inner Nut (A/F4)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCSB16-SMC-M16	16	M16	11.5	55.0	32.6	24	20	24	26	10.0	10 pcs.	Metal (ML)	166-34200
PCSB16-SMC-M20	16	M20	11.5	55.0	32.6	24	24	24	26	10.0	10 pcs.	Metal (ML)	166-34201
PCSB20-SMC-M20	20	M20	15.3	57.0	35.6	26	26	28	29	10.0	10 pcs.	Metal (ML)	166-34202
PCSB25-SMC-M25	25	M25	19.1	65.0	41.8	33	33	34	36	12.0	10 pcs.	Metal (ML)	166-34203
PCSB32-SMC-M32	32	M32	26.0	71.0	48.6	40	40	41	42	13.0	2 pcs.	Metal (ML)	166-34204

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



### Fittings for metallic conduits with plastic coating and metallic overbraid

#### PCSB-90FMC 90° Elbow compression fitting, IP65

External thread, nickel plated brass.

Fulfils IP65.

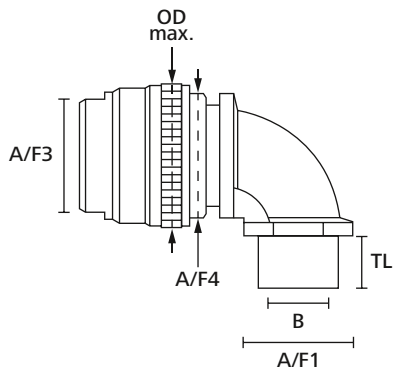
#### Features and benefits

- Multipart 90° compression fitting including elastomeric seal
- Braid is locked between inner and outer compression nuts
- Provides very good electrical continuity
- Provides excellent tensile strength



HelaGuard PCSB-90FMC Swivel Compression Fitting.

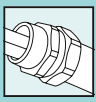
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HelaGuard compression fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	A/F Body (A/F1)	A/F Nut (A/F3)	A/F Inner Nut (A/F4)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PCSB16-90FMC-M16	16	M16	11.5	32.6	20	24	26	10.0	10 pcs.	Metal (ML)	166-34300
PCSB16-90FMC-M20	16	M20	11.5	32.6	24	24	26	13.0	10 pcs.	Metal (ML)	166-34301
PCSB20-90FMC-M20	20	M20	15.3	35.6	24	28	29	13.0	10 pcs.	Metal (ML)	166-34302
PCSB25-90FMC-M25	25	M25	19.1	41.8	30	34	36	14.0	10 pcs.	Metal (ML)	166-34303
PCSB32-90FMC-M32	32	M32	26.0	48.6	36	41	42	15.0	2 pcs.	Metal (ML)	166-34304

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



### Metallic conduits with metallic overbraid

#### SCSB Galvanised steel conduit, galvanised steel overbraid

Flexible, galvanised steel conduit with galvanised steel overbraid, typically used in heavy industrial and high temperature environments.

#### Features and benefits

- High compression, tensile and impact strength
- Highly resistant to abrasion
- Very flexible
- Provides EMC screening
- Highly resistant to hot metal swarf and splashes

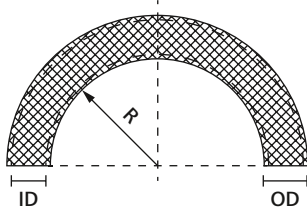


*Helaguard SCSB galvanised steel conduit with galvanised steel overbraid is highly resistant to hot metal swarf and splashes.*

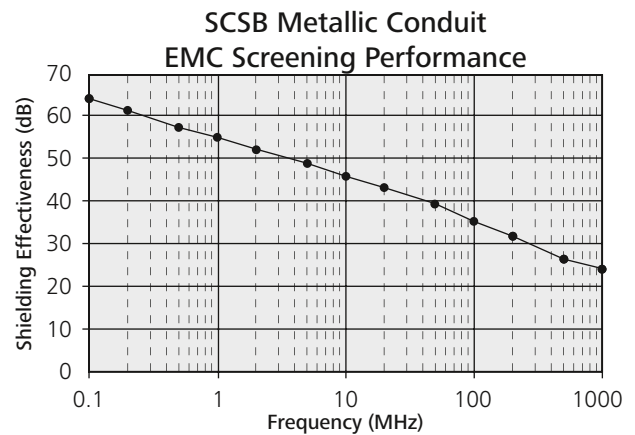
<b>MATERIAL</b>	Galvanised Steel (GS)
<b>Operating Temperature</b>	-100 °C to +300 °C



Stainless steel and tinned copper braiding is also available.



*Helaguard metallic conduit, metallic braid*



TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
SCSB12	12	14.0	10.2	30	232 g/m	25 m	Metal (ML)	166-34400
SCSB16	16	17.5	13.0	40	298 g/m	25 m	Metal (ML)	166-34401
SCSB20	20	21.5	16.9	45	446 g/m	25 m	Metal (ML)	166-34402
SCSB25	25	26.0	21.1	55	503 g/m	25 m	Metal (ML)	166-34403
SCSB32	32	34.0	28.1	70	702 g/m	25 m	Metal (ML)	166-34404
SCSB40	40	43.5	37.6	80	1,086 g/m	10 m	Metal (ML)	166-34405
SCSB50	50	55.0	48.4	90	1,270 g/m	10 m	Metal (ML)	166-34406

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 and metallic overbraid

#### SCSB-FM Fixed external thread, IP40

Fixed external thread, nickel plated brass.

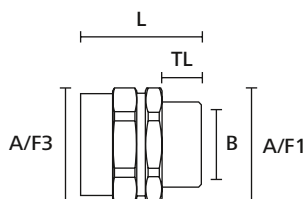
#### Features and benefits

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



HelaGuard SCSB-FM Fixed External Thread.

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



HelaGuard fitting, straight with fixed external thread

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.
SCSB12-FM-M16	12	M16	8.5	28.0	17	17	10.0	10 pcs.	Metal (ML)	166-34600
SCSB12-FM-PG9	12	PG9	8.5	28.0	17	17	10.0	10 pcs.	Metal (ML)	166-34607
SCSB16-FM-M16	16	M16	11.5	28.0	20	20	10.0	10 pcs.	Metal (ML)	166-34601
SCSB16-FM-M20	16	M20	11.5	28.0	22	20	10.0	10 pcs.	Metal (ML)	166-34602
SCSB16-FM-PG11	16	PG11	11.5	28.0	20	20	10.0	10 pcs.	Metal (ML)	166-34608
SCSB20-FM-M20	20	M20	15.3	30.8	24	26	10.0	10 pcs.	Metal (ML)	166-34603
SCSB20-FM-PG16	20	PG16	15.3	30.8	24	26	10.0	10 pcs.	Metal (ML)	166-34609
SCSB25-FM-M25	25	M25	19.1	32.5	29	29	10.0	10 pcs.	Metal (ML)	166-34604
SCSB25-FM-PG21	25	PG21	19.1	32.5	29	29	10.0	10 pcs.	Metal (ML)	166-34610
SCSB32-FM-M32	32	M32	26.0	39.3	36	38	13.0	2 pcs.	Metal (ML)	166-34605
SCSB32-FM-PG29	32	PG29	26.0	39.3	36	38	13.0	2 pcs.	Metal (ML)	166-34611
SCSB40-FM-M40	40	M40	34.6	42.8	48	48	14.0	1 pc.	Metal (ML)	166-34606
SCSB40-FM-PG36	40	PG36	34.6	42.8	48	48	14.0	1 pc.	Metal (ML)	166-34612
SCSB50-FM-M50	50	M50	44.7	48.0	58	58	15.0	1 pc.	Metal (ML)	166-34613

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



## Fittings for metallic conduits and metallic overbraid

### SCSB-SM Swivel external thread, IP40

Swivel external thread, nickel plated brass.

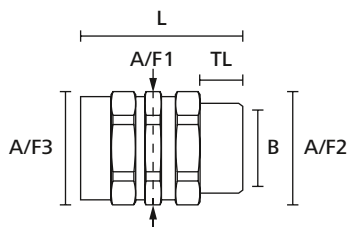
#### Features and benefits

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



HelaGuard SCSB-SM Swivel External Thread.

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



HelaGuard fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
SCSB12-SM-M16	12	M16	8.5	36.2	17	17	17	9.0	10 pcs.	Metal (ML)	166-34700
SCSB12-SM-PG9	12	PG9	8.5	36.2	17	17	17	8.0	10 pcs.	Metal (ML)	166-34707
SCSB16-SM-M16	16	M16	11.5	38.1	20	20	20	10.0	10 pcs.	Metal (ML)	166-34701
SCSB16-SM-M20	16	M20	11.5	38.1	20	22	20	10.0	10 pcs.	Metal (ML)	166-34702
SCSB16-SM-PG11	16	PG11	11.5	38.1	20	20	20	10.0	10 pcs.	Metal (ML)	166-34708
SCSB20-SM-M20	20	M20	15.3	40.0	26	24	24	10.0	10 pcs.	Metal (ML)	166-34703
SCSB20-SM-PG16	20	PG16	15.3	40.0	26	24	24	10.0	10 pcs.	Metal (ML)	166-34709
SCSB25-SM-M25	25	M25	19.1	47.2	29	29	29	12.0	10 pcs.	Metal (ML)	166-34704
SCSB25-SM-PG21	25	PG21	19.1	47.2	29	29	29	12.0	10 pcs.	Metal (ML)	166-34710
SCSB32-SM-M32	32	M32	26.0	52.6	38	38	38	13.0	2 pcs.	Metal (ML)	166-34705
SCSB32-SM-PG29	32	PG29	26.0	52.6	38	38	38	13.0	2 pcs.	Metal (ML)	166-34711
SCSB40-SM-M40	40	M40	34.6	57.8	48	48	48	14.0	1 pc.	Metal (ML)	166-34706
SCSB40-SM-PG36	40	PG36	34.6	57.8	48	48	48	14.0	1 pc.	Metal (ML)	166-34712
SCSB50-SM-M50	50	M50	44.7	60.2	58	58	58	15.0	1 pc.	Metal (ML)	166-34713

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





### Fittings for metallic conduits and metallic overbraid

#### SCSB-PC Plain hole connector, IP40

Plain hole connector, nickel plated brass.

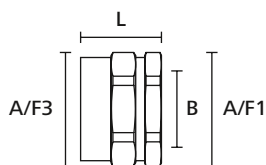
#### Features and benefits

- Two part fitting of shell and body without thread
- Acts as a locking device
- The body is fitted to the conduit through the opposite side of the entry
- Provides a smooth entry bush



HelaGuard SCSB-PC Plain Hole Connector.

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



HelaGuard fitting, plain hole connector

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Nut (A/F3)	Pack Cont.	Colour	Article-No.
SCSB12-PC	12	8.5	18.0	17	17	10 pcs.	Metal (ML)	166-34800
SCSB16-PC	16	11.5	18.9	20	20	10 pcs.	Metal (ML)	166-34801
SCSB20-PC	20	15.3	21.0	24	26	10 pcs.	Metal (ML)	166-34802
SCSB25-PC	25	19.1	23.5	29	29	10 pcs.	Metal (ML)	166-34803
SCSB32-PC	32	26.0	26.3	38	38	2 pcs.	Metal (ML)	166-34804
SCSB40-PC	40	34.6	28.8	48	48	1 pc.	Metal (ML)	166-34805

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

# Less service is good business.

The longer it lasts, the longer it supplies electricity. HellermannTyton offers cable management solutions that extend maintenance intervals for wind turbine operators. For instance our cable protection products solve the problem of abrasion on cable insulation.

[www.HellermannTyton.com/HelaGuard2019hgcat](http://www.HellermannTyton.com/HelaGuard2019hgcat)

MADE FOR REAL 



### 3.1 Spiral-Reinforced Conduit Systems

<b>Product Selection</b>	
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<b>Spiral-Reinforced PVC Conduits</b>	
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<b>Product Selection</b>	
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<b>Fittings for Spiral-Reinforced PVC Conduits</b>	
PSR-S fixed external thread	112
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PSRSC-FMC IP68 compression fitting, fixed thread	114
PSRSC-SMC IP68 compression fitting, swivel thread	115
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### 3.2 FlexiGuard Conduits & Fittings

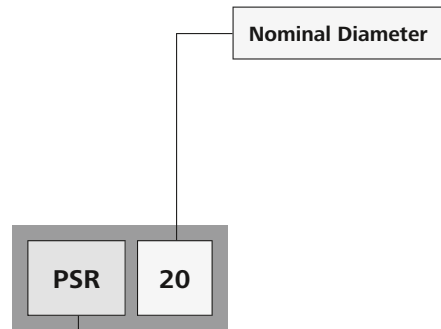
FG PVC conduit, steel wire spiral-reinforced	120
FG IP54 fitting, swivel thread	121
FG IP54 fitting with mounting bracket	122



### HelaGuard Nomenclature for Spiral-Reinforced PVC Conduits

Example:

**PSR20**



#### Conduit Type

- PSR** PVC spiral reinforced PVC conduit, smooth bore
- PSRSC** PVC spiral reinforced PVC conduit, smooth bore and smooth cover



*CAD download*



### Spiral-reinforced PVC conduits

#### PSR Conduit

Flexible, smooth bore conduit with spiral rigid PVC reinforcement and flexible PVC cover. PSR conduits are typically use in machine building, plant construction, shipbuilding, automation, and electrical installations.

#### Features and benefits

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

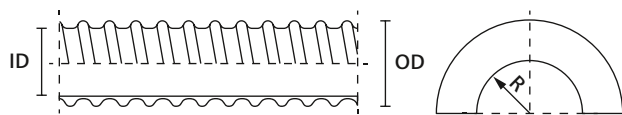


PSR is extremely flexible and allows for easy insertion of cables.

<b>MATERIAL</b>	Polyvinylchloride (PVC)
<b>Operating Temperature</b>	-20 °C to +70 °C
<b>Flammability</b>	self-extinguishing according to EN IEC 61386



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



HelaGuard spiral reinforced conduit



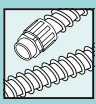
One Step to the Web!

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

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.



### Spiral-reinforced PVC conduits

#### PSRSC Conduit

Flexible, smooth bore conduit and smooth cover with spiral rigid PVC reinforcement and flexible PVC cover. PSRSC is typically used in machine building, plant construction, food processing, shipbuilding, automation and electrical installations.

#### Features and benefits

- Flexible
- Easy to clean outside surface
- Withstands some torsional movement
- Self-extinguishing
- Easy to feed cables
- Can be used with PSR fittings and PSRSC metal fittings
- Colour: grey; black, orange (highly flexible), green (oil resistant) or blue (high temperature resistant) upon request

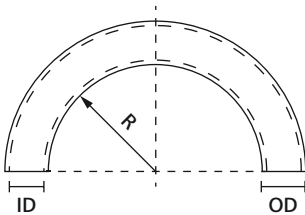


PSRSC allows for easy insertion of cables and cleaning of outside surface.



**PSRSC conduit with higher flexibility (colour: orange), higher resistance to oil (colour: green) or to temperature (colour: blue) available on request.**

<b>MATERIAL</b>	Polyvinylchloride (PVC)
<b>Operating Temperature</b>	-5 °C to +70 °C
<b>Flammability</b>	self-extinguishing according to EN IEC 61386



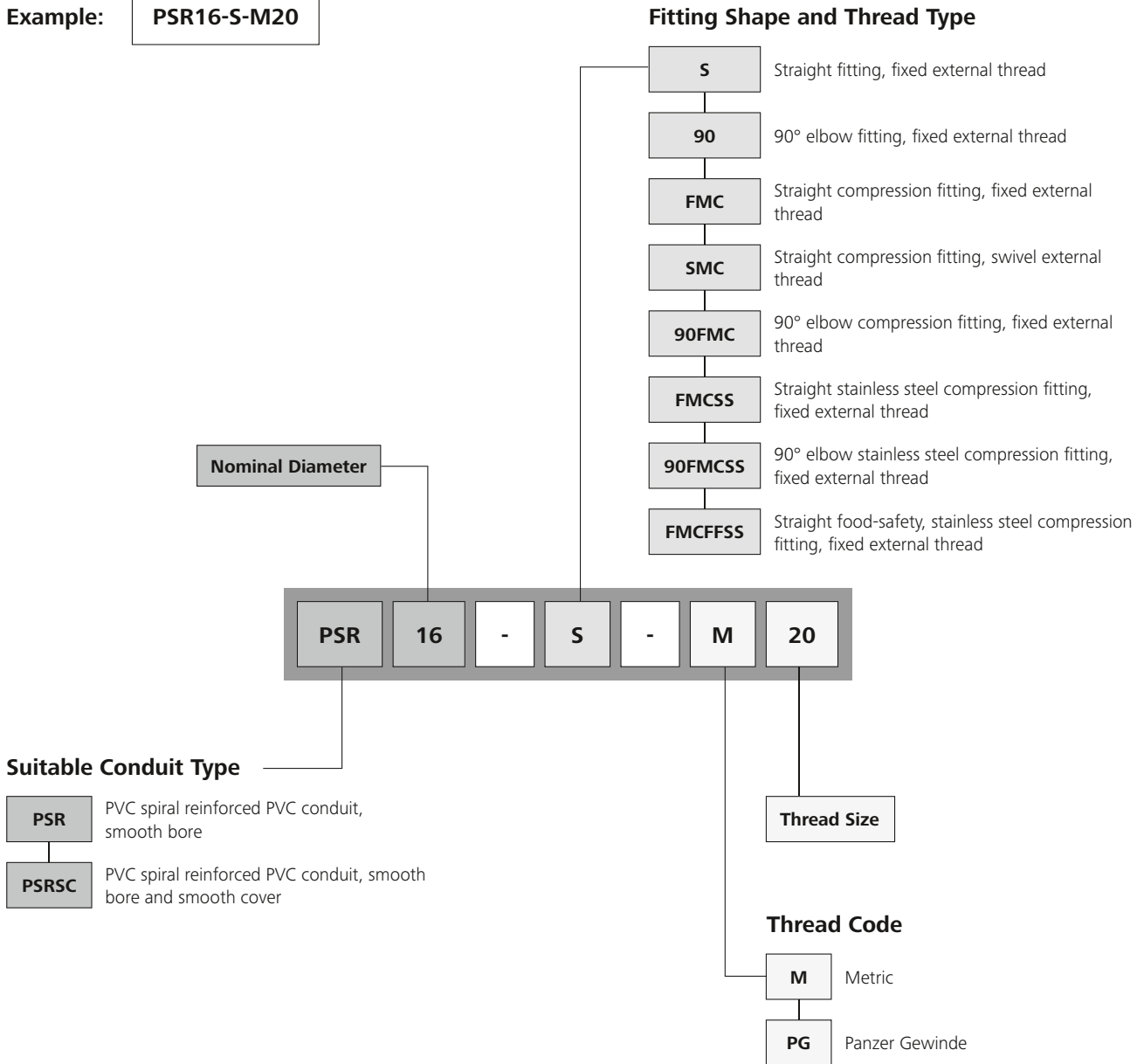
HelaGuard spiral-reinforced conduit, smooth outer coating

TYPE	Nominal Ø	Outside Ø (OD)	Inside Ø (ID)	Min. Bending Radius (R)	Weight	Reel Length	Colour	Article-No.
PSRSC12	12	14.2	10.0	50	76 g/m	30 m	Grey (GY)	166-40301
PSRSC16	16	17.8	12.0	50	139 g/m	30 m	Grey (GY)	166-40302
PSRSC20	20	21.1	16.0	70	174 g/m	30 m	Grey (GY)	166-40303
PSRSC25	25	26.4	21.0	90	235 g/m	30 m	Grey (GY)	166-40304
PSRSC32	32	33.1	26.5	140	327 g/m	30 m	Grey (GY)	166-40305
PSRSC40	40	41.8	35.4	190	448 g/m	30 m	Grey (GY)	166-40306
PSRSC50	50	47.9	40.0	240	725 g/m	30 m	Grey (GY)	166-40307
PSRSC63	63	59.7	51.3	270	948 g/m	30 m	Grey (GY)	166-40308

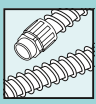
All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content.

## HelaGuard Nomenclature for Spiral-Reinforced PVC Fittings

Example: **PSR16-S-M20**



CAD download



#### Fittings for spiral-reinforced PVC conduits

##### PSR-S Straight fitting

Straight 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

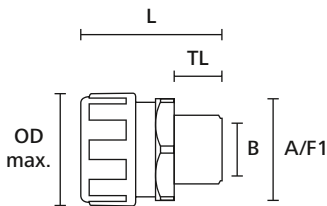


PSR-S Straight.



**Fittings with PG-Thread and in 90° and 45° are also available on request. Please contact us!**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



HeliaGuard fitting, straight with fixed external thread

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 pc.	Grey (GY)	166-40709

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



Please note! Not all products listed on this page may have this approval. Please check our website for latest approvals.





### 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

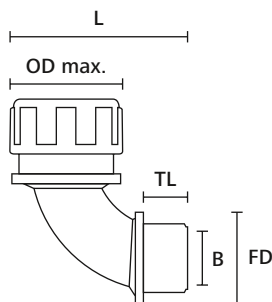


PSR-90 90° Elbow.



**Fittings with PG-Thread and in 45° are also available on request. Please contact us!**

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2

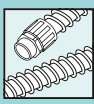


HeliaGuard fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Outside Ø max (OD max.)	Length (L)	Face Diameter (FD)	Thread Length (TL)	Pack Cont.	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.





#### Fittings for spiral-reinforced PVC conduits

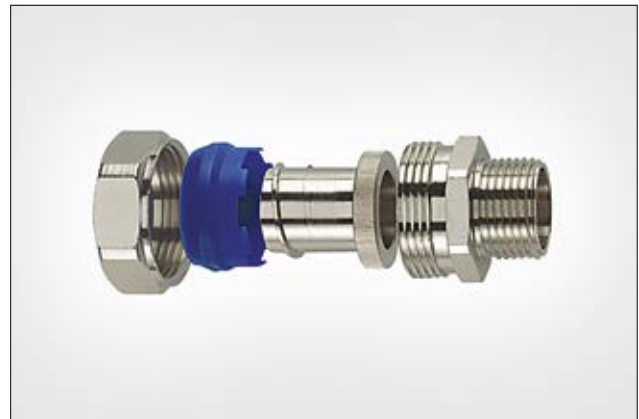
##### PSRSC-FMC compression fitting

Straight fitting, fixed external thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

##### Features and benefits

- Multipart compression fitting including elastomeric seal
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits

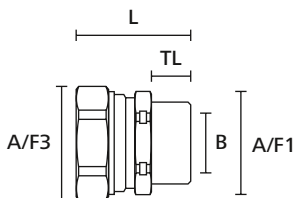


HeliaGuard PSRSC-FMC Compression Fitting.



**PSRSC-FMC-Fittings with PG-Thread available on request.**

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with fixed external thread

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.
PSRSC12-FMC-M16	12	M16	8.6	29.8	20	22	10.0	10 pcs.	Metal (ML)	166-41001
PSRSC16-FMC-M16	16	M16	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-41002
PSRSC16-FMC-M20	16	M20	10.7	33.0	24	26	12.0	10 pcs.	Metal (ML)	166-41003
PSRSC20-FMC-M20	20	M20	14.5	33.5	26	29	12.0	10 pcs.	Metal (ML)	166-41004
PSRSC25-FMC-M25	25	M25	18.0	40.5	33	35	14.0	10 pcs.	Metal (ML)	166-41005
PSRSC32-FMC-M32	32	M32	24.6	45.8	40	42	15.0	2 pcs.	Metal (ML)	166-41006
PSRSC40-FMC-M40	40	M40	32.7	47.5	50	52	16.0	1 pc.	Metal (ML)	166-41007
PSRSC50-FMC-M50	50	M50	37.7	51.0	58	58	16.0	1 pc.	Metal (ML)	166-41008
PSRSC63-FMC-M63	63	M63	49.0	58.8	70	70	20.0	1 pc.	Metal (ML)	166-41009

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



### Fittings for spiral-reinforced PVC conduits

#### PSRSC-SMC swivel compression fitting

Straight fitting, swivel external thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

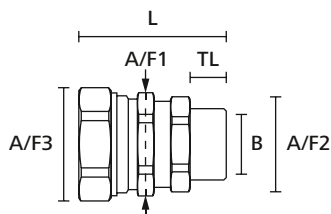
#### Features and benefits

- Multipart compression fitting including elastomeric seal
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits



HeliaGuard PSRSC-SMC Swivel Compression Fitting.

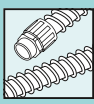
<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with swivel external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Body (A/F1)	A/F Thread (A/F2)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PSRSC16-SMC-M16	16	M16	10.7	40.9	24	24	26	10.0	10 pcs.	Metal (ML)	166-41101
PSRSC16-SMC-M20	16	M20	10.7	41.0	24	24	26	10.0	10 pcs.	Metal (ML)	166-41102
PSRSC20-SMC-M20	20	M20	14.5	41.8	26	26	29	10.0	10 pcs.	Metal (ML)	166-41103
PSRSC25-SMC-M25	25	M25	18.0	50.7	33	29	35	12.0	10 pcs.	Metal (ML)	166-41104
PSRSC32-SMC-M32	32	M32	24.6	56.9	40	38	42	13.0	2 pcs.	Metal (ML)	166-41105

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



### Fittings for spiral-reinforced PVC conduits

#### PSRSC-90FMC 90° compression fitting

90° fitting, fixed external thread, nickel plated brass.

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

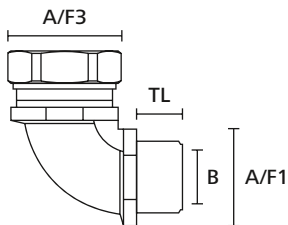
#### Features and benefits

- Multipart 90° compression fitting including elastomeric
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits



HeliaGuard PSRSC-90FMC 90° Elbow Compression Fitting.

<b>MATERIAL</b>	Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, 90° with fixed external thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PSRSC12-90FMC-M16	12	M16	8.6	20	22	10.0	10 pcs.	Metal (ML)	166-41201
PSRSC16-90FMC-M16	16	M16	10.7	20	26	10.0	10 pcs.	Metal (ML)	166-41202
PSRSC16-90FMC-M20	16	M20	10.7	24	26	13.0	10 pcs.	Metal (ML)	166-41203
PSRSC20-90FMC-M20	20	M20	14.5	24	29	13.0	10 pcs.	Metal (ML)	166-41204
PSRSC25-90FMC-M25	25	M25	18.0	30	35	14.0	10 pcs.	Metal (ML)	166-41205
PSRSC32-90FMC-M32	32	M32	24.6	36	42	15.0	2 pcs.	Metal (ML)	166-41206
PSRSC40-90FMC-M40	40	M40	32.7	46	52	18.0	1 pc.	Metal (ML)	166-41207
PSRSC50-90FMC-M50	50	M50	37.7	57	58	18.0	1 pc.	Metal (ML)	166-41208
PSRSC63-90FMC-M63	63	M63	49.0	72	70	20.0	1 pc.	Metal (ML)	166-41209

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



### Fittings for spiral-reinforced PVC Conduits

#### PSRSC-FMCSS compression fitting

Straight fitting, external thread, stainless steel (SS316).

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

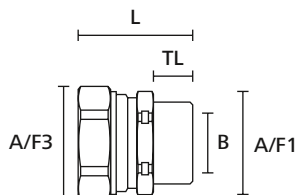
#### Features and benefits

- Multipart stainless steel (SS316) compression fitting including elastomeric seal
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits



PSRSC-FMCSS Straight Compression Fitting.

<b>MATERIAL</b>	Stainless Steel (SS316), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



HeliaGuard compression fitting, straight with fixed external thread

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.
PSRSC16-FMCSS-M16	16	M16	10.7	33.0	24	26	12.0	1 pc.	Metal (ML)	166-41301
PSRSC16-FMCSS-M20	16	M20	10.7	33.0	24	26	12.0	1 pc.	Metal (ML)	166-41302
PSRSC20-FMCSS-M20	20	M20	14.5	33.5	26	29	12.0	1 pc.	Metal (ML)	166-41303
PSRSC25-FMCSS-M25	25	M25	18.0	40.5	33	35	14.0	1 pc.	Metal (ML)	166-41304
PSRSC32-FMCSS-M32	32	M32	24.6	45.8	40	42	15.0	1 pc.	Metal (ML)	166-41305

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



### Fittings for spiral-reinforced PVC conduits

#### PSRSC-90FMCSS 90° compression fitting

90° fitting, fixed external thread, stainless steel (SS316).

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

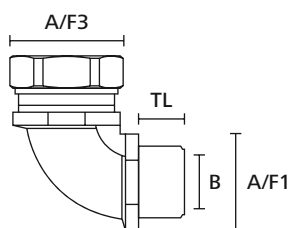
#### Features and benefits

- Multipart 90° stainless steel (SS316) compression fitting including elastomeric seal
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits



*HelaGuard PSRSC-90FMCSS 90° Elbow Compression Fitting.*

<b>MATERIAL</b>	Stainless Steel (SS316), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



*HelaGuard compression fitting, 90° with fixed external thread*

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	A/F Body (A/F1)	A/F Nut (A/F3)	Thread Length (TL)	Pack Cont.	Colour	Article-No.
PSRSC16-90FMCSS-M20	16	M20	10.7	24	26	13.0	1 pc.	Metal (ML)	166-41401
PSRSC20-90FMCSS-M20	20	M20	14.5	24	29	13.0	1 pc.	Metal (ML)	166-41402
PSRSC25-90FMCSS-M25	25	M25	18.0	30	35	14.0	1 pc.	Metal (ML)	166-41403
PSRSC32-90FMCSS-M32	32	M32	24.6	36	42	15.0	1 pc.	Metal (ML)	166-41404

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



### Fittings for spiral-reinforced PVC conduits

#### PSRSC-FMCFSS compression fitting for food-processing applications

Straight fitting, external thread, stainless steel (SS316).

Fulfils IP66, IP67, IP68 and IP69k with PSRSC conduits.

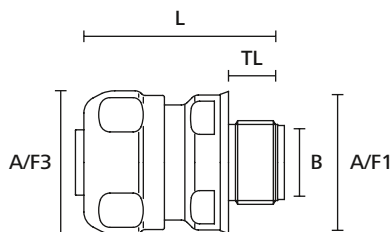
#### Features and benefits

- Multipart stainless steel (SS316) compression fitting including elastomeric seal
- Rounded edges, smooth surfaces and no crevices where food or other substances can collect or bacteria grow with EN standards
- Can be used for knockouts or threaded entries as fitting rotates until tightened
- Fits PSRSC conduits



*HelaGuard PSRSC-FMCFSS stainless steel fittings for applications in the food-processing industry.*

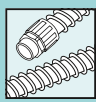
<b>MATERIAL</b>	Stainless Steel (SS316), Nickel Plated Brass (NPB), Polyamide 6 (PA6)
<b>Operating Temperature</b>	-50 °C to +135 °C



*HelaGuard compression fitting, straight with fixed external thread*

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.
PSRSC16-FMCFSS-M16	16	M16	10.7	45.6	27	29	12.0	1 pc.	Metal (ML)	166-41601
PSRSC20-FMCFSS-M20	20	M20	14.5	46.0	30	32	12.0	1 pc.	Metal (ML)	166-41602
PSRSC25-FMCFSS-M25	25	M25	18.7	49.7	36	38	14.0	1 pc.	Metal (ML)	166-41603
PSRSC32-FMCFSS-M32	32	M32	24.6	53.7	42	45	15.0	1 pc.	Metal (ML)	166-41604
PSRSC40-FMCFSS-M40	40	M40	32.7	58.4	52	56	16.0	1 pc.	Metal (ML)	166-41605
PSRSC50-FMCFSS-M50	50	M50	37.7	62.5	59	62	16.0	1 pc.	Metal (ML)	166-41606

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



### FlexiGuard conduits & fittings

#### PVC Conduits with steel wire spiral-reinforcement

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

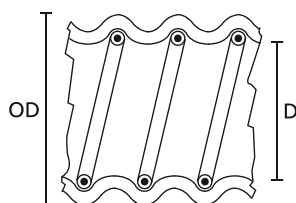
#### Features and benefits

- 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.

<b>MATERIAL</b>	Flexible Polyvinyl Chloride, cadmium free (PVC), Steel (ST)
<b>Operating Temperature</b>	-20 °C to +70 °C, (+80 °C, 200 h)
<b>Flammability</b>	UL 94 HB



FlexiGuard



TYPE	Nominal Ø	Inside Ø (ID)	Outside Ø (OD)	Min. Bending Radius (R)	Reel Length	Colour	Pack Cont.	Article-No.
FG14	14	10	14	14	10 m	Grey (GY)	10 m	167-00209
FG17	17	13	17	17	10 m	Grey (GY)	10 m	167-00211
FG19	19	15	19	19	10 m	Grey (GY)	10 m	167-00213
FG21	21	16	21	21	10 m	Grey (GY)	10 m	167-00216
FG27	27	21	27	27	10 m	Grey (GY)	10 m	167-00221
FG36	36	30	36	36	10 m	Grey (GY)	10 m	167-00229
FG45	45	38	45	45	10 m	Grey (GY)	10 m	167-00236
FG56	56	48	56	56	10 m	Grey (GY)	10 m	167-00248

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





### Fittings for FlexiGuard spiral-reinforced PVC Conduits

#### FG straight fitting with swivel thread, IP54

Straight swivel external thread.

Fulfils IP54 with FlexiGuard FG conduits.

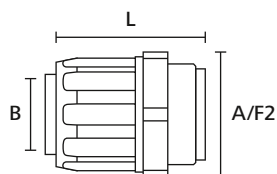
#### Features and benefits

- 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.

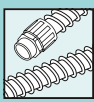
<b>MATERIAL</b>	Polypropylene (PP)
<b>Operating Temperature</b>	-35 °C to +80 °C
<b>Flammability</b>	UL 94 V2



FlexiGuard fitting, straight with swivel thread

TYPE	Nominal Ø	Thread Size	Min. Bore Size (B)	Length (L)	A/F Thread (A/F2)	Colour	Pack Cont.	Article-No.
FG14-M16	14	M16	8.8	42.0	20	Grey (GY)	10 pcs.	167-00530
FG14-PG9	14	PG9	8.8	42.0	20	Grey (GY)	10 pcs.	167-00510
FG17-M20	17	M20	11.1	45.5	24	Grey (GY)	10 pcs.	167-00531
FG17-PG11	17	PG11	11.1	45.5	24	Grey (GY)	10 pcs.	167-00511
FG19-PG13	19	PG13.5	13.0	47.5	27	Grey (GY)	10 pcs.	167-00512
FG21-M25	21	M25	14.8	49.8	30	Grey (GY)	10 pcs.	167-00533
FG21-PG16	21	PG16	14.8	49.8	30	Grey (GY)	10 pcs.	167-00513
FG27-M32	27	M32	19.4	52.0	36	Grey (GY)	10 pcs.	167-00534
FG27-PG21	27	PG21	19.4	52.0	36	Grey (GY)	10 pcs.	167-00514
FG36-M40	36	M40	27.9	55.0	46	Grey (GY)	10 pcs.	167-00535
FG36-PG29	36	PG29	27.9	55.0	46	Grey (GY)	10 pcs.	167-00515
FG45-M50	45	M50	35.6	58.0	55	Grey (GY)	10 pcs.	167-00536
FG45-PG36	45	PG36	35.6	58.0	55	Grey (GY)	10 pcs.	167-00516
FG56-M63	56	M63	45.9	60.5	65	Grey (GY)	10 pcs.	167-00537
FG56-PG48	56	PG48	45.9	60.5	65	Grey (GY)	10 pcs.	167-00517

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



### Fittings for FlexiGuard spiral-reinforced PVC Conduits

#### FG-UH straight fitting with mounting bracket, IP54

Straight swivel bracket.

Fulfills IP54 with FlexiGuard FG conduits.

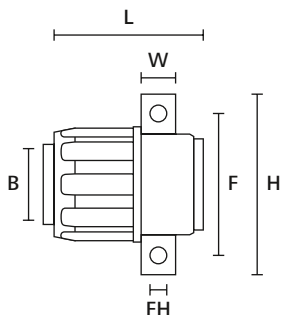
#### Features and benefits

- 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.

<b>MATERIAL</b>	Polypropylene (PP)
<b>Operating Temperature</b>	-35 °C to +80 °C
<b>Flammability</b>	UL 94 V2



FlexiGuard fitting, straight with bracket

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Fixing Hole Centres (F)	Colour	Pack Cont.	Article-No.
FG14-UH	14	8.8	42.0	10.0	40.0	5,7	29.0	Grey (GY)	10 pcs.	167-00520
FG17-UH	17	11.1	45.5	12.0	50.0	5,7	37.0	Grey (GY)	10 pcs.	167-00521
FG19-UH	19	13.0	47.5	12.0	50.0	5,7	37.0	Grey (GY)	10 pcs.	167-00522
FG21-UH	21	14.8	49.8	12.0	50.0	5,7	37.0	Grey (GY)	10 pcs.	167-00523
FG27-UH	27	19.4	52.0	12.5	57.0	5,7	43.0	Grey (GY)	10 pcs.	167-00524
FG36-UH	36	27.9	55.0	13.0	67.0	6,7	53.0	Grey (GY)	10 pcs.	167-00525
FG45-UH	45	35.6	58.0	14.0	80.0	6,7	65.0	Grey (GY)	10 pcs.	167-00526
FG56-UH	56	45.9	60.5	16.5	93.0	6,7	76.0	Grey (GY)	10 pcs.	167-00527

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



## 4.1 Conduit System Accessories

HelaGuard Accessories				
Conduit Clips	PACC for corrugated conduits	124	CNV converters	136
	AFCP for rigid conduits	125	PAEC end caps	138
	AFCS plated steel and PVC liner	126	ConClamp conduit clamp	139
	AFCSS stainless metallic	127	ConCutter conduit cutter	139
A90FM 90° elbow		128		
ACP coupler		129		
Locknuts	ALNPB, nickel plated brass	130		
	ALSS plated steel	131		
	ALSS stainless steel	132		
	ALPA PA66	133		
Washers	AWS chloroprene	134		
	AFWS vulcanised fibre	135		



## HelaGuard accessories

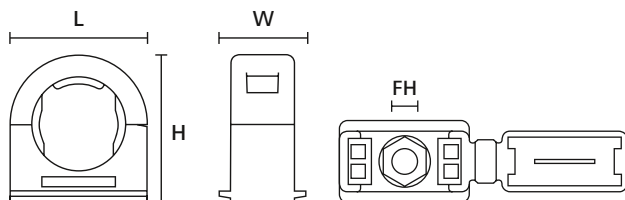
### PACC Clip for corrugated conduits

#### 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 conduit clip, side views

HelaGuard conduit clip, top view



HelaGuard PACC Conduit Clip.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 V2



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

#### AFCP Clip for rigid conduits

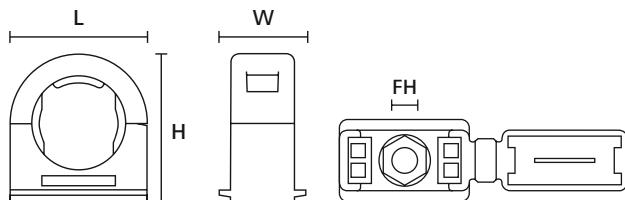
#### Features and benefits

- Easy and quick assembly with metallic conduits
- Lid is integrated
- Hole for fastening with screw
- Can be used in C-shaped DIN rails



HelaGuard AFCP Conduit Clip.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C
<b>Flammability</b>	UL 94 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.
AFCP16	16	30	12	26	M5	10 pcs.	Black (BK)	166-50700
AFCP20	20	36	15	32	M6	10 pcs.	Black (BK)	166-50701
AFCP25	25	45	15	41	M6	10 pcs.	Black (BK)	166-50702
AFCP33	32	51	15	48	M6	10 pcs.	Black (BK)	166-50703

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



CAD download



## HelaGuard accessories

### AFCS Fixing clip, plated steel and PVC liner

The AFCS clip is used to secure metallic conduits.

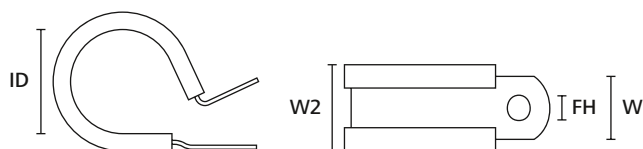
#### Features and benefits

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



HelaGuard AFCS Fixing Clip, Stainless Steel and PVC Liner.

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



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 pc.	Metal (ML), Black (BK)	166-50608
AFCS75	75	76.2	25.4	30.5	14,2 x 17,5	1 pc.	Metal (ML), Black (BK)	166-50609

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



### HelaGuard accessories

#### AFCSS Fixing clip, stainless steel

The AFCSS clip is used to secure metallic conduits.

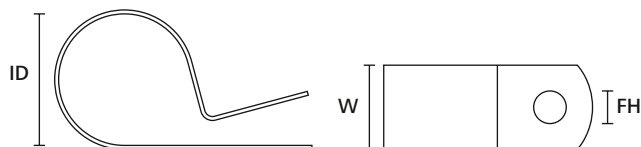
#### Features and benefits

- Simple, secure fixing of metallic conduits



HelaGuard AFCSS Fixing Clip, Stainless Steel.

<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-100 °C to +600 °C



HelaGuard fixing clip, side view

HelaGuard fixing clip, top view

TYPE	Nominal Ø	Inside Ø (ID)	Width (W)	Hole Ø (FH)	Pack Cont.	Colour	Article-No.
AFCSS10	10	9.5	11.1	5,1	10 pcs.	Metal (ML)	166-50610
AFCSS12	12	13.0	11.1	5,1	10 pcs.	Metal (ML)	166-50611
AFCSS16	16	16.0	11.1	5,1	10 pcs.	Metal (ML)	166-50612
AFCSS20	20	20.5	11.1	5,1	10 pcs.	Metal (ML)	166-50613
AFCSS25	25	25.0	11.1	5,1	10 pcs.	Metal (ML)	166-50614
AFCSS32	32	32.0	11.1	5,1	10 pcs.	Metal (ML)	166-50615
AFCSS40	40	42.5	12.7	7,1	5 pcs.	Metal (ML)	166-50616
AFCSS50	50	53.0	12.7	7,1	5 pcs.	Metal (ML)	166-50617

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



## HelaGuard accessories

### A90FM 90° Elbow

Internal and external thread, nickel plated brass.

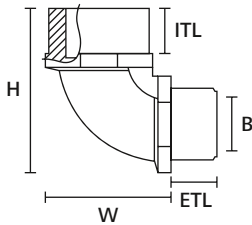
#### Features and benefits

- Can be screwed onto external threaded fittings



*HelGuard A90FM 90° Elbow.*

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



*HelGuard 90° threaded elbow*

TYPE	External Thread Size	Internal Thread Size	Min. Bore Size (B)	Height (H)	Width (W)	External Thread Length (ETL)	Internal Thread Length (ITL)	Pack Cont.	Colour	Article-No.
A90FM-M16	M16	M16	12.0	38.0	31.0	10	11	10 pcs.	Metal (ML)	166-50001
A90FM-M20	M20	M20	15.8	46.0	35.0	13	13	10 pcs.	Metal (ML)	166-50002
A90FM-M25	M25	M25	20.4	55.8	43.8	14	16	10 pcs.	Metal (ML)	166-50003
A90FM-M32	M32	M32	27.0	66.6	53.6	15	16	2 pcs.	Metal (ML)	166-50004
A90FM-M40	M40	M40	34.6	80.4	67.0	18	17	1 pc.	Metal (ML)	166-50005
A90FM-M50	M50	M50	44.6	99.0	80.5	18	18	1 pc.	Metal (ML)	166-50006

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





### HelaGuard accessories

#### ACP Couplers

Internally threaded, nickel plated brass.

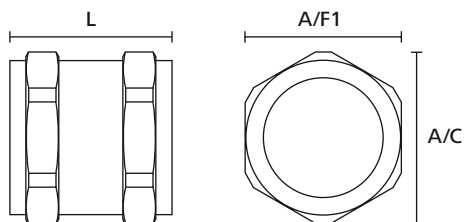
#### Features and benefits

- Can be used to convert from external to internal thread



HelaGuard ACP Couplers.

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



HelaGuard threaded coupler



TYPE	Thread Size	Length (L)	A/F Body (A/F1)	Across Corners (A/C)	Pack Cont.	Colour	Article-No.
ACP-M16	M16	22.5	20	22	10 pcs.	Metal (ML)	166-50400
ACP-M20	M20	25.0	24	27	10 pcs.	Metal (ML)	166-50401
ACP-M25	M25	30.0	29	32	10 pcs.	Metal (ML)	166-50402
ACP-M32	M32	32.5	35	39	10 pcs.	Metal (ML)	166-50403
ACP-M40	M40	34.0	48	53	2 pcs.	Metal (ML)	166-50404
ACP-M50	M50	38.0	58	64	1 pc.	Metal (ML)	166-50405
ACP-M63	M63	45.0	70	77	1 pc.	Metal (ML)	166-50406
ACP-M75	M75	45.0	84	93	1 pc.	Metal (ML)	166-50407

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



## HelaGuard accessories

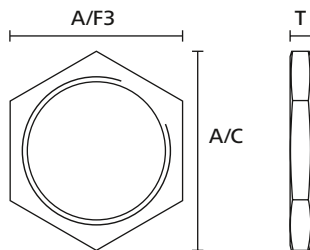
### ALNPB Nickel plated brass locknuts

The ALNPB hexagonal locknut is used to secure fitting.



HelaGuard ALNPB Nickel Plated Brass Locknuts.

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



HelaGuard locknut



TYPE	Thread Size	A/F Nut (A/F3)	Across Corners (A/C)	Thickness (T)	Pack Cont.	Colour	Article-No.
ALNPB-M12	M12	15	17	3.5	10 pcs.	Metal (ML)	166-50100
ALNPB-M16	M16	20	23	3.5	10 pcs.	Metal (ML)	166-50101
ALNPB-M20	M20	24	28	3.5	10 pcs.	Metal (ML)	166-50102
ALNPB-M25	M25	29	33	3.5	10 pcs.	Metal (ML)	166-50103
ALNPB-M32	M32	38	43	4.5	2 pcs.	Metal (ML)	166-50104
ALNPB-M40	M40	48	54	5.0	1 pc.	Metal (ML)	166-50105
ALNPB-M50	M50	58	66	6.0	1 pc.	Metal (ML)	166-50106
ALNPB-M63	M63	70	79	6.5	1 pc.	Metal (ML)	166-50107
ALNPB-M75	M75	84	94	7.0	1 pc.	Metal (ML)	166-50108
ALNPB-PG7	PG7	15	17	2.8	10 pcs.	Metal (ML)	166-50109
ALNPB-PG9	PG9	20	23	3.5	10 pcs.	Metal (ML)	166-50110
ALNPB-PG11	PG11	22	25	3.5	10 pcs.	Metal (ML)	166-50111
ALNPB-PG13	PG13,5	24	28	3.5	10 pcs.	Metal (ML)	166-50112
ALNPB-PG16	PG16	26	30	3.6	10 pcs.	Metal (ML)	166-50113
ALNPB-PG21	PG21	33	37	3.7	10 pcs.	Metal (ML)	166-50114
ALNPB-PG29	PG29	42	46	4.0	1 pc.	Metal (ML)	166-50115
ALNPB-PG36	PG36	52	57	5.0	1 pc.	Metal (ML)	166-50116
ALNPB-PG42	PG42	60	65	5.0	1 pc.	Metal (ML)	166-50117
ALNPB-PG48	PG48	64	70	5.0	1 pc.	Metal (ML)	166-50118

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



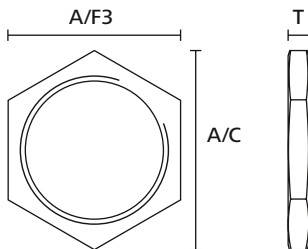
### HelaGuard accessories

#### ALS Plated metallic locknuts

The ALS hexagonal locknut is used to secure fitting.



HelaGuard ALS Plated Steel Locknuts.



HelaGuard locknut

<b>MATERIAL</b>	Galvanised Steel (GS)
<b>Operating Temperature</b>	-100 °C to +300 °C



TYPE	Thread Size	A/F Nut (A/F3)	Across Corners (A/C)	Thickness (T)	Pack Cont.	Colour	Article-No.
ALS-M16	M16	24	27	3	10 pcs.	Metal (ML)	166-50119
ALS-M20	M20	25	28	3	10 pcs.	Metal (ML)	166-50120
ALS-M25	M25	33	38	3	10 pcs.	Metal (ML)	166-50121
ALS-M32	M32	41	47	3	2 pcs.	Metal (ML)	166-50122
ALS-M40	M40	50	58	4	1 pc.	Metal (ML)	166-50123
ALS-M50	M50	63	72	4	1 pc.	Metal (ML)	166-50124
ALS-M63	M63	80	92	5	1 pc.	Metal (ML)	166-50125

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



## HelaGuard accessories

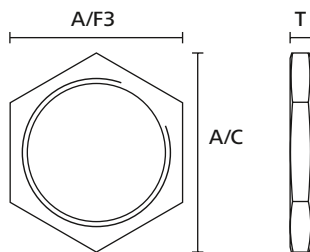
### ALSS Stainless metallic locknuts

The ALSS hexagonal locknut is used to secure fitting.



HelaGuard ALSS Stainless Steel Locknuts.

<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-100 °C to +600 °C



HelaGuard locknut

TYPE	Thread Size	A/F Nut (A/F3)	Across Corners (A/C)	Thickness (T)	Pack Cont.	Colour	Article-No.
ALSS-M16	M16	20	23	3.5	10 pcs.	Metal (ML)	166-50126
ALSS-M20	M20	24	28	3.5	10 pcs.	Metal (ML)	166-50127
ALSS-M25	M25	30	34	3.5	10 pcs.	Metal (ML)	166-50128
ALSS-M32	M32	38	43	4.5	2 pcs.	Metal (ML)	166-50129
ALSS-M40	M40	48	53	5.0	1 pc.	Metal (ML)	166-50130
ALSS-M50	M50	60	65	6.0	1 pc.	Metal (ML)	166-50131
ALSS-M63	M63	70	76	6.5	1 pc.	Metal (ML)	166-50132

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



### HelaGuard accessories

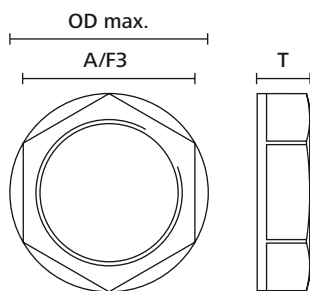
#### ALPA PA66 (glass-fibre reinforced) locknuts

The ALPA hexagonal locknut is used to secure fitting.



HelaGuard ALPA PA66 Locknuts.

<b>MATERIAL</b>	Polyamide 6.6, glass-fibre reinforced (PA66GF30%)
<b>Operating Temperature</b>	-50 °C to +135 °C



HelaGuard locknut



TYPE	Thread Size	A/F Nut (A/F3)	Outside Ø max (OD max.)	Thickness (T)	Pack Cont.	Colour	Article-No.
ALPA-M12	M12	18	20	5	10 pcs.	Black (BK)	166-50133
ALPA-M16	M16	22	24	5	10 pcs.	Black (BK)	166-50134
ALPA-M20	M20	26	29	6	10 pcs.	Black (BK)	166-50135
ALPA-M25	M25	32	35	6	10 pcs.	Black (BK)	166-50136
ALPA-M32	M32	41	46	7	2 pcs.	Black (BK)	166-50137
ALPA-M40	M40	50	55	7	1 pc.	Black (BK)	166-50138
ALPA-M50	M50	60	66	8	1 pc.	Black (BK)	166-50139
ALPA-M63	M63	75	83	8	1 pc.	Black (BK)	166-50140
ALPA-PG7	PG7	19	21	5	10 pcs.	Black (BK)	166-50141
ALPA-PG9	PG9	22	24	5	10 pcs.	Black (BK)	166-50142
ALPA-PG11	PG11	24	26	5	10 pcs.	Black (BK)	166-50143
ALPA-PG13	PG13,5	27	29	6	10 pcs.	Black (BK)	166-50144
ALPA-PG16	PG16	30	33	6	10 pcs.	Black (BK)	166-50145
ALPA-PG21	PG21	36	39	7	10 pcs.	Black (BK)	166-50146
ALPA-PG29	PG29	46	50	7	1 pc.	Black (BK)	166-50147
ALPA-PG36	PG36	60	66	8	1 pc.	Black (BK)	166-50148
ALPA-PG42	PG42	65	73	8	1 pc.	Black (BK)	166-50149
ALPA-PG48	PG48	70	78	8	1 pc.	Black (BK)	166-50150

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



## HelaGuard accessories

### AWS Chloroprene sealing washers

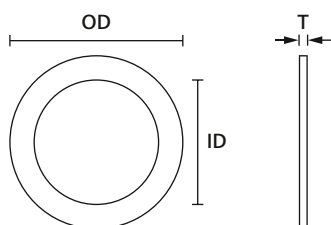
#### Features and benefits

- Protects against water and dust
- For PG and metric threads
- Resistant to oil
- 80 Shore A compression strength



HelaGuard AWS Chloroprene Sealing Washers.

<b>MATERIAL</b>	Chloroprene Rubber (CR)
<b>Operating Temperature</b>	-40 °C to +135 °C, (+140 °C, 500 h)



HelaGuard sealing washer



TYPE	Thread Size	Outside Ø (OD)	Inside Ø (ID)	Thickness (T)	Pack Cont.	Colour	Article-No.
AWS-M12	M12	20	11.5	1.5	100 pcs.	Black (BK)	166-50500
AWS-M16	M16	24	15.5	1.5	100 pcs.	Black (BK)	166-50501
AWS-M20	M20	28	19.5	1.5	50 pcs.	Black (BK)	166-50502
AWS-M25	M25	34	24.5	1.5	10 pcs.	Black (BK)	166-50503
AWS-M32	M32	42	31.5	1.5	10 pcs.	Black (BK)	166-50504
AWS-M40	M40	50	39.5	1.5	10 pcs.	Black (BK)	166-50505
AWS-M50	M50	60	49.5	1.5	10 pcs.	Black (BK)	166-50506
AWS-M63	M63	73	62.5	1.5	10 pcs.	Black (BK)	166-50507
AWS-PG7	PG7	20	11.5	1.5	100 pcs.	Black (BK)	166-50508
AWS-PG9	PG9	24	14.7	1.5	100 pcs.	Black (BK)	166-50509
AWS-PG11	PG11	25	18.1	1.5	100 pcs.	Black (BK)	166-50510
AWS-PG13	PG13,5	28	19.5	1.5	100 pcs.	Black (BK)	166-50511
AWS-PG16	PG16	29	22.0	1.5	50 pcs.	Black (BK)	166-50512
AWS-PG21	PG21	35	27.8	1.5	10 pcs.	Black (BK)	166-50513
AWS-PG29	PG29	44	36.5	1.5	10 pcs.	Black (BK)	166-50514
AWS-PG36	PG36	54	46.5	1.5	10 pcs.	Black (BK)	166-50515
AWS-PG42	PG42	61	53.5	1.5	10 pcs.	Black (BK)	166-50516
AWS-PG48	PG48	70	58.8	1.5	10 pcs.	Black (BK)	166-50517

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



### HelaGuard accessories

#### AFWS Vulcanised fibre sealing washers

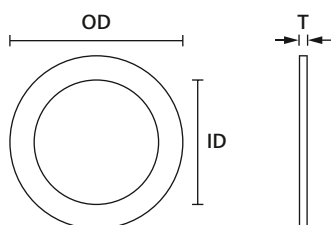
##### Features and benefits

- Rugged, tough material (78 Shore D Hardness) for tighter seal
- Protects against water and dust
- For PG and metric threads
- Resistant to oil
- 78 Shore D hardness



HelaGuard AFWS Vulcanised Fibre Sealing Washers.

<b>MATERIAL</b>	Vulcanised Fibre (VF)
<b>Operating Temperature</b>	-50 °C to +135 °C



HelaGuard sealing washer



TYPE	Thread Size	Outside Ø (OD)	Inside Ø (ID)	Thickness (T)	Pack Cont.	Colour	Article-No.
AFWS-M12	M12	20.0	12.0	1.6	100 pcs.	Red (RD)	166-50518
AFWS-M16	M16	22.0	16.0	1.6	100 pcs.	Red (RD)	166-50519
AFWS-M20	M20	26.0	20.0	1.6	50 pcs.	Red (RD)	166-50520
AFWS-M25	M25	32.0	25.0	1.6	10 pcs.	Red (RD)	166-50521
AFWS-M32	M32	41.2	32.0	1.6	10 pcs.	Red (RD)	166-50522
AFWS-M40	M40	50.0	40.0	1.6	10 pcs.	Red (RD)	166-50523
AFWS-M50	M50	60.0	50.0	1.6	10 pcs.	Red (RD)	166-50524
AFWS-M63	M63	73.0	63.0	1.6	10 pcs.	Red (RD)	166-50525
AFWS-PG7	PG7	16.5	12.5	1.6	100 pcs.	Red (RD)	166-50526
AFWS-PG9	PG9	21.2	15.2	1.6	100 pcs.	Red (RD)	166-50527
AFWS-PG11	PG11	24.6	18.2	1.6	100 pcs.	Red (RD)	166-50528
AFWS-PG13	PG13,5	26.4	20.4	1.6	100 pcs.	Red (RD)	166-50529
AFWS-PG16	PG16	28.5	22.5	1.6	50 pcs.	Red (RD)	166-50530
AFWS-PG21	PG21	34.3	28.3	1.6	10 pcs.	Red (RD)	166-50531
AFWS-PG29	PG29	43.0	37.0	1.6	10 pcs.	Red (RD)	166-50532
AFWS-PG36	PG36	53.0	47.0	1.6	10 pcs.	Red (RD)	166-50533
AFWS-PG42	PG42	60.8	54.0	1.6	10 pcs.	Red (RD)	166-50534
AFWS-PG48	PG48	67.3	59.3	1.6	10 pcs.	Red (RD)	166-50535

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



## HelaGuard accessories

### CNV thread converters

Nickel plated brass.

#### Features and benefits

- Inner and outer thread
- Reduces or enlarges thread size
- Can convert between metric and PG threads



HelaGuard CNV Thread converters.

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



TYPE	Thread Size internal	Thread Size external	Pack Cont.	Colour	Article-No.
CNV-M20-M16	M16	M20	10 pcs.	Metal (ML)	166-50900
CNV-PG7-M16	M16	PG7	10 pcs.	Metal (ML)	166-50901
CNV-PG9-M16	M16	PG9	10 pcs.	Metal (ML)	166-50902
CNV-PG11-M16	M16	PG11	10 pcs.	Metal (ML)	166-50903
CNV-PG13-M16	M16	PG13,5	10 pcs.	Metal (ML)	166-50904
CNV-PG16-M16	M16	PG16	10 pcs.	Metal (ML)	166-50905
CNV-M16-M20	M20	M16	10 pcs.	Metal (ML)	166-50906
CNV-M25-M20	M20	M25	10 pcs.	Metal (ML)	166-50907
CNV-PG9-M20	M20	PG9	10 pcs.	Metal (ML)	166-50908
CNV-PG11-M20	M20	PG11	10 pcs.	Metal (ML)	166-50909
CNV-PG13-M20	M20	PG13,5	10 pcs.	Metal (ML)	166-50910
CNV-PG16-M20	M20	PG16	10 pcs.	Metal (ML)	166-50911
CNV-PG21-M20	M20	PG21	10 pcs.	Metal (ML)	166-50912
CNV-PG29-M20	M20	PG29	2 pcs.	Metal (ML)	166-50913
CNV-M20-M25	M25	M20	10 pcs.	Metal (ML)	166-50914
CNV-M32-M25	M25	M32	10 pcs.	Metal (ML)	166-50915
CNV-M50-M25	M25	M50	1 pc.	Metal (ML)	166-50917
CNV-PG16-M25	M25	PG16	10 pcs.	Metal (ML)	166-50918
CNV-PG21-M25	M25	PG21	10 pcs.	Metal (ML)	166-50919
CNV-PG29-M25	M25	PG29	2 pcs.	Metal (ML)	166-50920
CNV-M25-M32	M32	M25	10 pcs.	Metal (ML)	166-50921
CNV-M40-M32	M32	M40	2 pcs.	Metal (ML)	166-50922
CNV-M50-M32	M32	M50	1 pc.	Metal (ML)	166-50923
CNV-PG21-M32	M32	PG21	2 pcs.	Metal (ML)	166-50924
CNV-PG29-M32	M32	PG29	2 pcs.	Metal (ML)	166-50925

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





## HelaGuard accessories

## CNV thread converters

TYPE	Thread Size internal	Thread Size external	Pack Cont.	Colour	Article-No.
CNV-PG36-M32	M32	PG36	2 pcs.	Metal (ML)	166-50926
CNV-M50-M40	M40	M50	1 pc.	Metal (ML)	166-50927
CNV-M63-M40	M40	M63	1 pc.	Metal (ML)	166-50928
CNV-PG29-M40	M40	PG29	1 pc.	Metal (ML)	166-50929
CNV-PG36-M40	M40	PG36	1 pc.	Metal (ML)	166-50930
CNV-M63-M50	M50	M63	1 pc.	Metal (ML)	166-50931
CNV-M16-PG7	PG7	M16	10 pcs.	Metal (ML)	166-51000
CNV-M20-PG7	PG7	M20	10 pcs.	Metal (ML)	166-51001
CNV-PG9-PG7	PG7	PG9	10 pcs.	Metal (ML)	166-51002
CNV-PG11-PG7	PG7	PG11	10 pcs.	Metal (ML)	166-51003
CNV-PG13-PG7	PG7	PG13,5	10 pcs.	Metal (ML)	166-51004
CNV-PG16-PG7	PG7	PG16	10 pcs.	Metal (ML)	166-51005
CNV-M16-PG9	PG9	M16	10 pcs.	Metal (ML)	166-51006
CNV-M20-PG9	PG9	M20	10 pcs.	Metal (ML)	166-51007
CNV-PG7-PG9	PG9	PG7	10 pcs.	Metal (ML)	166-51008
CNV-PG11-PG9	PG9	PG11	10 pcs.	Metal (ML)	166-51009
CNV-PG13-PG9	PG9	PG13,5	10 pcs.	Metal (ML)	166-51010
CNV-PG16-PG9	PG9	PG16	10 pcs.	Metal (ML)	166-51011
CNV-M16-PG11	PG11	M16	10 pcs.	Metal (ML)	166-51012
CNV-M20-PG11	PG11	M20	10 pcs.	Metal (ML)	166-51013
CNV-PG9-PG11	PG11	PG9	10 pcs.	Metal (ML)	166-51014
CNV-PG13-PG11	PG11	PG13,5	10 pcs.	Metal (ML)	166-51015
CNV-PG16-PG11	PG11	PG16	10 pcs.	Metal (ML)	166-51016
CNV-PG21-PG11	PG11	PG21	10 pcs.	Metal (ML)	166-51017
CNV-M20-PG13	PG13,5	M20	10 pcs.	Metal (ML)	166-51018
CNV-PG11-PG13	PG13,5	PG11	10 pcs.	Metal (ML)	166-51019
CNV-PG16-PG13	PG13,5	PG16	10 pcs.	Metal (ML)	166-51020
CNV-PG21-PG13	PG13,5	PG21	10 pcs.	Metal (ML)	166-51021
CNV-M20-PG16	PG16	M20	10 pcs.	Metal (ML)	166-51022
CNV-PG13-PG16	PG16	PG13,5	10 pcs.	Metal (ML)	166-51023
CNV-PG21-PG16	PG16	PG21	10 pcs.	Metal (ML)	166-51024
CNV-PG29-PG16	PG16	PG29	2 pcs.	Metal (ML)	166-51025
CNV-M20-PG21	PG21	M20	10 pcs.	Metal (ML)	166-51026
CNV-M25-PG21	PG21	M25	10 pcs.	Metal (ML)	166-51027
CNV-PG16-PG21	PG21	PG16	10 pcs.	Metal (ML)	166-51028
CNV-PG29-PG21	PG21	PG29	2 pcs.	Metal (ML)	166-51029
CNV-M40-PG29	PG29	M40	1 pc.	Metal (ML)	166-51030
CNV-PG21-PG29	PG29	PG21	2 pcs.	Metal (ML)	166-51031
CNV-PG36-PG29	PG29	PG36	2 pcs.	Metal (ML)	166-51032
CNV-M50-PG36	PG36	M50	1 pc.	Metal (ML)	166-51033
CNV-PG29-PG36	PG36	PG29	2 pcs.	Metal (ML)	166-51034
CNV-PG42-PG36	PG36	PG42	2 pcs.	Metal (ML)	166-51035

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



## HelaGuard accessories

### PAEC End caps for corrugated conduits

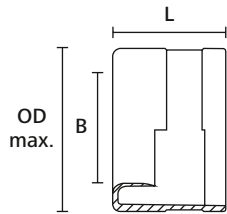
#### Features and benefits

- Fast fit
- Snaps over end of conduit when not terminated with fitting
- Provides smooth entry to prevent damage to cables
- UV resistant (black)



HelaGuard PAEC End Cap.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-50 °C to +135 °C



HelaGuard end cap

TYPE	Nominal Ø	Min. Bore Size (B)	Length (L)	Outside Ø max (OD max.)	Pack Cont.	Colour	Article-No.
PAEC16	16	10.5	19	18.2	10 pcs.	Black (BK)	166-50800
PAEC21	21	15.0	19	23.7	10 pcs.	Black (BK)	166-50801
PAEC28	28	20.0	22	31.2	10 pcs.	Black (BK)	166-50802
PAEC34	34	25.5	23	37.1	10 pcs.	Black (BK)	166-50803
PAEC42	42	32.0	24	45.2	10 pcs.	Black (BK)	166-50804
PAEC54	54	43.5	25	54.7	10 pcs.	Black (BK)	166-50805

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



### HelaGuard accessories

#### ConClamp Conduit clamp

#### Features and benefits

- Holds metallic conduits and guides hacksaw for a clean cut



HelaGuard ConClamp.

TYPE	Pack Cont.	Colour	Article-No.
CONCLAMP	1 pc.	Metal (ML)	166-51100

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

### HelaGuard accessories

#### ConCutter Conduit Cutters

#### Features and benefits

- Cutting tool for non-metallic conduits



HelaGuard ConCutter.

TYPE	Conduit Ø	Pack Cont.	Colour	Article-No.
CONCUTTER1	for non-metallic conduits up to 34	1 pc.	Black (BK)	166-51101
CONCUTTER2	for non-metallic conduits up to 67	1 pc.	Black (BK)	166-51102

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

## Seeing is believing. Trying it is better.

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## Standard Overview

**ISO 9001:2015**

HellermannTyton are certified to ISO 9001:2015.

**ISO 14001:2015**

To guarantee adherence to the guidelines of our environmental policy, HellermannTyton have integrated an intensive environmental management system in accordance with ISO 14001:2015 into our business strategies.

**RoHS**

HellermannTyton products meet the requirements of the European RoHS Directive, Restriction of Hazardous Substances, prohibiting the use of certain hazardous materials found in electrical and electronic products.

**HF**

HellermannTyton products meets the requirements of halogenfree products. The use of halogens is prohibited.

**CE**

HellermannTyton products are marked with the CE mark showing that they comply with the essential requirements of the European Directives.

**CSA**

The HellermannTyton LTSUL conduit is UL listed to UL360 and is CSA approved.

**cRUus**

Most of HellermannTyton PA6 conduits and fittings have UL's Functional Safety Recognized Component Mark for the United States and Canada.

**UL**

The HellermannTyton LTSUL conduit is UL listed to UL360 and is CSA approved.

**Rail Certifications ISO TS 22163:2017 / EN 45545-2:2016**

HellermannTyton are certified to ISO TS 22163:2017. Products are constantly being tested to the most current rail fire performance standards in Europe EN 45545-2:2016. Please contact HellermannTyton for further information.

**IEC EN 61386**

The HelaGuard conduits have been tested to IEC EN 61386, the current and most complete worldwide standard for conduit systems.

**Lloyd's Register**

Several HelaGuard conduit and fittings systems are approved by Lloyd's Register for marine applications.

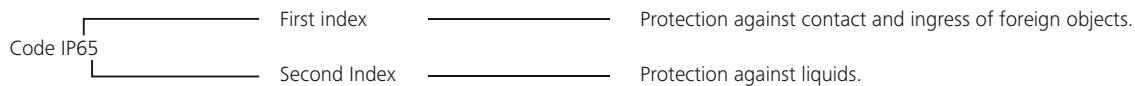
**Food Safety**

The HelaGuard PSRSC conduits and range of fittings conform to EU 10/2011 European food safety regulations.

## Definition of the degrees of protection according to DIN EN IEC 60529

The levels of protection are indicated by a code made up of two constant letters IP and two characteristic numbers for the degree of protection, e.g. IP54.

### Example:



### Degree of protection against access and foreign bodies

Index	Designation	Scope of protection
0	<b>Non-protected</b>	No special protection for persons against direct contact with live or moving parts. No protection of the equipment against ingress of solid foreign objects.
1	<b>Protection against large foreign bodies</b>	Protection against accidental contact of large areas with live and internal moving parts, e.g. back of hand, but not protection against deliberate access to the parts. Protection against ingress of solid foreign objects with a diameter greater than 50 mm.
2	<b>Protection against medium-sized foreign bodies</b>	Protection against contact between the finger and live or internal moving parts. Protection against ingress of solid foreign objects with a diameter greater than 12.5 mm.
3	<b>Protection against small foreign bodies</b>	Protection against contact between live or internal moving parts and tools, wires and the like with a thickness greater than 2.5 mm. Protection against ingress of solid foreign objects with a diameter greater than 2.5 mm.
4	<b>Protection against granular foreign objects</b>	Protection against contact between live or internal moving parts and tools, wires and the like with a thickness greater than 1 mm. Protection against ingress of solid foreign objects with a diameter greater than 1 mm.
5	<b>Protection against dust deposits</b>	Complete protection against contact with live or internal moving parts, protection against hazardous dust deposits. The ingress of dust is not completely prevented, but dust may not penetrate in such quantities as to impair the function.
6	<b>Protection against dust entry</b>	Complete protection against contact with live or internal moving parts. Protection against the ingress of dust.

### Degrees of protection for water

Index	Designation	Scope of protection
0	<b>Non-protected</b>	No special protection.
1	<b>Protection against vertically dripping water</b>	Water dripping vertically must cause no damage.
2	<b>Protection against dripping water (tilted)</b>	Water dripping at an angle of 15° to the vertical from any direction must cause no damage.
3	<b>Protection against spraying water</b>	Water dripping at an angle of 60° to the vertical from any direction must cause no damage.
4	<b>Protection against splashing water</b>	Water that splashes against the equipment from any direction must cause no damage.
5	<b>Protection against water jets</b>	A water jet from a nozzle that is directed against the equipment from any direction must cause no damage.
6	<b>Protection against flooding</b>	Water must not penetrate the equipment in hazardous quantities in cases of temporary flooding, e.g. due to heavy seas.
7	<b>Protection during temporary immersion</b>	Water must not penetrate the equipment in hazardous quantities if the equipment is immersed in water under the specified conditions of pressure and time (1m for 30 min.).
8	<b>Protection during continuous immersion</b>	Water must not penetrate the equipment in hazardous quantities if the equipment is immersed in water (at least 2 bar for 2 h for HelaGuard IP68 non-metallic fittings and 5 bar for 5 h for HelaGuard IP68 metallic fittings.)
9k	<b>Protection against high pressure/steam jet cleaning</b>	Highly pressurised water directed at the enclosure from any direction must cause no damage.

## IEC 61386 Classification for HelaGuard Flexible Conduits

	Compression Resistance (N)	Impact Resistance (J)	Minimum Temperature (°C)	Maximum Temperature (°C)
<b>Non-Metallic Conduits</b> based on nominal conduit size 21 mm				
<b>HG-SW</b> PA6 corrugated, standard weight (with HG fittings)	2	4	2	4
<b>HG-LW</b> PA6 corrugated, light weight (with HG fittings)	2	4	2	4
<b>HG-HW</b> PA6 corrugated, heavy weight (with HGL fittings)	2	4	2	4
<b>HG-FR</b> Flame retardant corrugated, standard weight (with HGL fittings)	2	4	2	4
<b>HG-HI</b> PA12 corrugated, standard weight (with HG fittings)	1	3	5	4
<b>HG-DC</b> PA6 double slit corrugated	2	4	2	4
<b>HG-PP</b> PP corrugated, standard weight	1	2	3	2
<b>Metallic Conduits</b> based on nominal conduit size 20 mm				
<b>SC</b> galvanised steel	4	4	5	6
<b>SSC</b> stainless steel	4	4	5	6
<b>PCS</b> galvanised steel, PVC coated (with compression fittings)	4	4	3	1
<b>NCS</b> galvanised steel, PA6 coated	4	4	4	4
<b>LFHCS</b> galvanised steel, LFH coated	4	4	3	1
<b>LTS</b> galvanised steel, PVC coated, liquid-tight (with compression fittings)	4	4	3	3
<b>LTSH</b> galvanised steel, PVC coated, liquid-tight (with compression fittings)	4	4	5	4
<b>LTSUL</b> galvanised steel, PVC coated, liquid-tight, UL-listed	4	4	3	3
<b>PCSB</b> galvanised steel, PVC coated, galvanised steel overbraid	4	4	3	1
<b>SCSB</b> galvanised steel, galvanised steel overbraid	4	4	5	6
<b>PVC Conduits</b> based on nominal conduit size 20 mm				
<b>PSR</b> Spiral-reinforced PVC, smooth bore	2	3	2	1
<b>PSRSC</b> Spiral-reinforced PVC, smooth bore, smooth cover with PSR fitting	2	3	2	1
<b>PSRSC</b> Spiral-reinforced PVC, smooth bore, smooth cover with PSR fitting	2	3	2	1
<b>FlexiGuard and FlexiGuard Plus Conduits</b>				
<b>FG</b> PVC-Conduit with spring steel wire	2	2	2	1

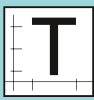
IEC 61386 Classification Key	Compression Resistance (N)	Impact Resistance (J)	Minimum Temperature (°C)	Maximum Temperature (°C)	Bend Resistance	Electrical Properties	IP Rating against solid objects*
0	–	–	–	–	–	non-declared	–
1	125	0.5	5	60	rigid	conducting	–
2	320	1	-5	90	pliable	insulating	–
3	750	2	-15	105	pliable, self-recovering	conducting/insulating	3
4	1250	6	-25	120	flexible	–	4
5	4000	20	-45	150	–	–	5
6	–	–	–	250	–	–	6
7	–	–	–	400	–	–	7



Bend Resistance	Electrical Properties	IP Rating against solid objects*	IP Rating against water*	Corrosion Resistance	Tensile Strength	Resistance to Flame Propagation	Suspended Load Capacity (N)	Page
4	0	6	6	–	2	1	0	11
4	0	6	6	–	1	1	0	12
4	0	6	8	–	3	1	0	13
4	0	6	8	–	2	1	0	14
4	0	6	6	–	1	1	0	15
4	0	4	0	–	2	1	0	16
4	2	6	6	4	2	!	0	17
4	0	4	0	1	4	1	0	64
4	0	4	0	4	4	1	0	65
4	0	6	5	2	4	1	0	72
4	0	6	4	2	4	1	0	73
4	0	6	5	2	4	1	0	74
4	0	6	8	4	4	1	0	85
4	0	6	8	4	4	1	0	86
4	0	6	8	4	4	1	0	87
4	0	5	4	2	4	1	0	95
4	0	4	0	1	4	1	0	102
4	2	6	5	–	2	1	0	109
4	2	6	7	–	3	1	0	110
4	2	6	8	–	3	1	0	110
4	2	3	0	4	1	1	1	120

IP Rating against water*	Corrosion Resistance	Tensile Strength	Resistance to Flame Propagation	Suspended Load Capacity (N)
0	–	–	–	non-declared
1	low inside and outside	100	not flame-propagating	20
2	medium inside and outside	250	flame-propagating	30
3	medium inside, high outside	500	–	150
4	high inside and outside	1000	–	450
5	–	2500	–	850
6	–	–	–	–
7	–	–	–	–

\* For more information about Ingress Protection (IP) please refer to page



**HelaGuard Resistance to Chemicals**

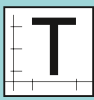
	ASTM NO. 1	ASTM NO. 2	ASTM NO. 3	Acetic acid (10%)	Acetone	Aluminium Chloride	Benzene	Carbon Tetrachloride	Chloroform	Citric acid	Copper Sulphate	Cresol	Diesel oil	Diethylamine	Ethanol	Ether	Ethylamine	Ethylene Glycol	Freon 32	Hydrochloric acid (10%)	Hydrochloric acid (30%)	Hydrogen Peroxide (30%)	Hydrogen Peroxide (60%)	Lactic acid	Lubricating oil	Methanol	
<b>HelaGuard Non Metallic tubing</b>																											
HG-SW	▲	▲	▲	△	▲	○	▲	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
HG-LW	▲	▲	▲	△	▲	○	▲	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
HG-HW	▲	▲	▲	△	▲	○	▲	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
HG-FR	▲	▲	▲	△	▲	○	▲	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
HG-HI	▲	▲	▲	△	▲	△	▲	▲	○	▲	△	○	▲	△	△	▲	△	▲	▲	○	○	○	○	△	▲	△	
HG-DC	▲	▲	▲	△	▲	○	▲	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
HG-PP	▲	▲	△	△	▲	△	△	△	▲	△	○	▲	▲	▲	▲	▲	▲	▲	▲	△	△	○	○	△	▲	△	
<b>HelaGuard Metallic tubing</b>																											
SC	▲	▲	▲	○	▲	○	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	○	○	▲	▲		
SSC	▲	▲	▲	▲	▲	○	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	▲	▲	▲	▲		
PCS	○	○	○	△	○	○	○	○	○	▲	▲	△	△	○	○	○	○	△	△	▲	○	▲	▲	△	△		
NCS	▲	▲	▲	△	▲	○	△	▲	○	▲	△	○	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	△	▲	△	
LFHCS	△	△	△	▲	○	○	○	○	○	▲	▲	○	○	▲	○	○	○	▲	○	○	○	○	○	▲	△	○	
LTS	△	▲	▲	▲	○	○	○	△	○	▲	▲	△	▲	△	○	△	△	△	△	△	○	△	○	△	▲	○	
LTSH	▲	△	△	▲	▲	○	○	△	△	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	▲	▲	△	○	△	▲	▲	
LTSUL	▲	▲	▲	▲	○	○	○	△	○	▲	▲	△	▲	△	○	△	△	△	△	△	○	△	○	△	▲	○	
PCSB	○	○	○	△	○	○	○	○	○	▲	▲	△	△	○	○	○	○	△	△	▲	○	○	○	△	○		
SCSB	▲	▲	▲	○	▲	○	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	○	○	○	▲	▲		
<b>Spiral-reinforced PVC Conduits</b>																											
PSR	○	○	○	△	○	△	○	△	○	▲	△	○	△	△	○	△	△	△	△	○	○	△	○	△	△	○	
PSRSC	▲	▲	▲	▲	○	○	○	△	○	▲	▲	△	▲	△	○	△	△	△	△	△	○	△	○	△	▲	○	

- ▲ Good Resistance
- △ Limited Resistance
- Poor Resistance
- ◇ Suitable with stainless steel fittings

The values shown here are for guidance only. They should not be regarded as exact specifications of materials and are not a substitute for suitability testing. Please see our datasheets for further details.

These information are valid at 23 °C.

	Methyl Bromide	Methyl Ethyl Ketone	Nitric acid (10%)	Nitric acid (60%)	Oxalic acid	Ozone (Gas)	Paraffin oil	Petrol	Phenol	Sea water	Silver Nitrate	Skydrol®	Sodium Chloride	Sodium Hydroxide (10%)	Sodium Hydroxide (60%)	Sulphur Dioxide (Gas)	Sulphuric acid (10%)	Toluene	Transformer oil	1.1.1-Trichloroethane	Trichloroethylene	Turpentine	Vegetable oil	Vinyl Acetate	Water	White Spirit	Zinc Chloride	Page
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	○	▲	○	○	△	○	▲	▲	○	▲	▲	▲	▲	▲	▲	○	○	▲	▲	▲	△	▲	▲	△	▲	▲	○	13
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	○	▲	△	△	△	○	▲	▲	○	▲	▲	▲	▲	▲	▲	○	○	▲	▲	△	△	○	▲	△	▲	▲	○	17
	▲	▲	○	○	○	○	▲	▲	▲	○	○	▲	○	○	○	○	○	▲	▲	○	○	▲	▲	○	○	▲	○	64
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	○	○	△	○	▲	△	▲	▲	△	◇	▲	○	◇	▲	▲	○	◇	○	△	○	○	△	▲	○	▲	△	○	87
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## HelaGuard Thread Standards

### Metric Thread

Standard thread conforming to EN60423

Thread size	External thread outside Ø (mm)	Internal thread inside Ø (mm)	Pitch (mm)
M12	12.0	10.4	1.5
M16	16.0	11.4	1.5
M20	20.0	18.4	1.5
M25	25.0	23.4	1.5
M32	32.0	30.4	1.5
M40	40.0	38.4	1.5
M50	50.0	48.5	1.5
M63	63.0	61.4	1.5
M75	75.0	73.4	1.5

### PG Thread

German standard thread conforming to DIN40430

Thread size	External thread outside Ø (mm)	Internal thread inside Ø (mm)	Pitch (mm)
PG7	12.0	11.3	1.27
PG9	15.2	13.9	1.41
PG11	18.6	17.3	1.41
PG13.5	20.4	19.1	1.41
PG16	22.5	21.2	1.41
PG21	28.3	26.8	1.59
PG29	37.0	35.5	1.59
PG36	47.0	45.5	1.59
PG42	54.0	52.5	1.59
PG48	59.3	57.8	1.59



**September 2018.** We have carefully checked all the information on our catalogue pages. Nevertheless, data and facts may have changed in the meantime. Consequently, we do not guarantee that the information is current, complete and correct in every case. Please consult our Internet site for further details and the most current status.

## Standards for HellermannTyton Conduits and Fittings

Type	Specifications	UL File Number
HG-SW Standard Weight PA6	ANSI/UL 1695, BS EN 61386-23:2004	E325250
HG-LW Light Weight PA6	ANSI/UL 1695	
HG-FR Flame Retardant PA6	ANSI/UL 1695, BS EN 45545-2:2013+A1:2015, BS EN 61386-23:2004, EN 45545-2:2013+A1:2015	
HG-S Straight, IP66	ANSI/UL 1695	
HG-90 90° Elbow, IP66		
LTS Galv. Steel Conduit, PVC Cover for EU CAT	BS EN 61386-23:2004	
PSR-S Straight PA6 Fitting, Ext. Thread	ANSI/UL 1695	E325250
PSR Smooth Bore PVC Spiral Reinforced Conduit		
PSR-90 90° Elbow PA6 Fitting, Ext. Thread		

Specifications apply to limited article numbers. Please contact our sales desk for further information.

Article-No.	Type	Page	Article-No.	Type	Page	Article-No.	Type	Page
166-11100	HG-SW10	11	166-11904	HG-PP21	17	166-21305	HG34-SM-M32	30
166-11101	HG-SW11	11	166-11905	HG-PP25	17	166-21306	HG42-SM-M40	30
166-11102	HG-SW13	11	166-11906	HG-PP26	17	166-21307	HG54-SM-M50	30
166-11103	HG-SW16	11	166-11907	HG-PP28	17	166-21309	HG13-SM-PG9	30
166-11104	HG-SW21	11	166-11908	HG-PP34	17	166-21310	HG16-SM-PG9	30
166-11105	HG-SW28	11	166-11909	HG-PP42	17	166-21311	HG16-SM-PG11	30
166-11106	HG-SW34	11	166-11910	HG-PP54	17	166-21312	HG21-SM-PG13	30
166-11109	HG-SW67	11	166-11911	HG-PP67	17	166-21313	HG21-SM-PG16	30
166-11110	HG-SW16	11	166-21000	HG10-S-M12	22	166-21314	HG28-SM-PG21	30
166-11111	HG-SW21	11	166-21001	HG13-S-M16	22	166-21315	HG34-SM-PG29	30
166-11112	HG-SW28	11	166-21002	HG16-S-M16	22	166-21400	HG13-SF-M16	36
166-11113	HG-SW42	11	166-21003	HG16-S-M20	22	166-21401	HG16-SF-M16	36
166-11114	HG-SW54	11	166-21004	HG21-S-M20	23	166-21402	HG16-SF-M20	36
166-11118	HG-SW34	11	166-21005	HG28-S-M25	23	166-21403	HG21-SF-M20	36
166-11200	HG-LW10	12	166-21006	HG34-S-M32	23	166-21404	HG28-SF-M25	36
166-11201	HG-LW11	12	166-21007	HG42-S-M40	23	166-21405	HG34-SF-M32	36
166-11202	HG-LW13	12	166-21008	HG54-S-M50	23	166-21406	HG42-SF-M40	36
166-11203	HG-LW16	12	166-21009	HG67-S-M63	23	166-21407	HG54-SF-M50	36
166-11204	HG-LW21	12	166-21010	HG10-S-PG7	22	166-21408	HG13-SF-PG9	36
166-11205	HG-LW28	12	166-21011	HG13-S-PG9	22	166-21409	HG16-SF-PG11	36
166-11206	HG-LW34	12	166-21012	HG16-S-PG11	23	166-21410	HG16-SF-PG16	36
166-11207	HG-LW42	12	166-21013	HG16-S-PG13	23	166-21411	HG21-SF-PG16	36
166-11208	HG-LW54	12	166-21014	HG21-S-PG16	23	166-21412	HG28-SF-PG21	36
166-11209	HG-LW67	12	166-21015	HG28-S-PG21	23	166-21413	HG34-SF-PG29	36
166-11302	HG-HW13	13	166-21016	HG34-S-PG29	23	166-21500	HG13-SCG-M16	48
166-11303	HG-HW16	13	166-21017	HG42-S-PG36	23	166-21501	HG16-SCG-M16	48
166-11304	HG-HW21	13	166-21018	HG54-S-PG48	23	166-21502	HG16-SCG-M20	48
166-11305	HG-HW28	13	166-21019	HG67-S-PG48	23	166-21503	HG21-SCG-M20	48
166-11306	HG-HW34	13	166-21020	HG10-S-M16	22	166-21504	HG28-SCG-M25	48
166-11307	HG-HW42	13	166-21021	HG11-S-M12	22	166-21505	HG34-SCG-M32	48
166-11308	HG-HW54	13	166-21022	HG13-S-M12	22	166-21506	HG42-SCG-M40	48
166-11400	HG-FR10	14	166-21023	HG13-S-M20	22	166-21507	HG54-SCG-M50	48
166-11401	HG-FR13	14	166-21025	HG20-S-M20	23	166-21600	HGL13-S-M16	24
166-11402	HG-FR16	14	166-21026	HG25-S-M25	23	166-21601	HGL16-S-M16	24
166-11403	HG-FR21	14	166-21027	HG28-S-M32	23	166-21602	HGL16-S-M20	24
166-11404	HG-FR28	14	166-21028	HG34-S-M40	23	166-21603	HGL21-S-M20	24
166-11405	HG-FR34	14	166-21029	HG42-S-M50	23	166-21604	HGL28-S-M25	24
166-11406	HG-FR42	14	166-21030	HG54-S-M63	23	166-21605	HGL34-S-M32	24
166-11407	HG-FR54	14	166-21031	HG10-S-PG9	22	166-21606	HGL42-S-M40	25
166-11501	HG-HI13	15	166-21032	HG11-S-PG7	22	166-21607	HGL54-S-M50	25
166-11502	HG-HI16	15	166-21033	HG13-S-PG7	22	166-21608	HGL13-S-PG9	24
166-11503	HG-HI21	15	166-21034	HG13-S-PG11	22	166-21609	HGL16-S-PG11	24
166-11504	HG-HI28	15	166-21035	HG16-S-PG9	22	166-21610	HGL16-S-PG13	24
166-11505	HG-HI34	15	166-21036	HG16-S-PG16	23	166-21611	HGL21-S-PG16	24
166-11506	HG-HI42	15	166-21039	HG21-S-PG13	23	166-21612	HGL28-S-PG21	24
166-11507	HG-HI54	15	166-21040	HG21-S-PG21	23	166-21613	HGL34-S-PG29	24
166-11800	HG-DC11	16	166-21041	HG28-S-PG29	23	166-21614	HGL42-S-PG36	25
166-11801	HG-DC13	16	166-21042	HG54-S-PG42	23	166-21616	HGL54-S-PG48	25
166-11802	HG-DC16	16	166-21200	HG16-SFL	42	166-21619	HGL28-S-M32	24
166-11803	HG-DC21	16	166-21201	HG21-SFL	42	166-21620	HGL34-S-M40	24
166-11804	HG-DC28	16	166-21202	HG28-SFL	42	166-21621	HGL42-S-M50	25
166-11805	HG-DC34	16	166-21203	HG34-SFL	42	166-21622	HGL54-S-M63	25
166-11806	HG-DC42	16	166-21204	HG42-SFL	42	166-21623	HGL16-S-PG9	24
166-11807	HG-DC54	16	166-21300	HG13-SM-M16	30	166-21624	HGL16-S-PG16	24
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SC12-FM-M16	166-30301	66	SC75	166-30109	64	SSC25-SM-M25	166-30423	69
SC12-PC	166-30501	70	SC75-FM-M75	166-30310	66	SSC32	166-30205	65
SC12-SM-M16	166-30401	68	SC75-PC	166-30509	70	SSC32-FM-M32	166-30326	67
SC12-SM-PG9	166-30411	68	SCSB12	166-34400	102	SSC32-SM-M32	166-30424	69
SC16	166-30102	64	SCSB12-FM-M16	166-34600	103	SSC40	166-30206	65
SC16	166-30112	64	SCSB12-FM-PG9	166-34607	103	SSC40-FM-M40	166-30327	67
SC16-FF-M20	166-30600	71	SCSB12-PC	166-34800	105	SSC50	166-30207	65
SC16-FM-M16	166-30302	66	SCSB12-SM-M16	166-34700	104	SSC50-FM-M50	166-30328	67
SC16-FM-M20	166-30303	66	SCSB12-SM-PG9	166-34707	104			
SC16-FM-PG11	166-30314	66	SCSB16	166-34401	102			
SC16-PC	166-30502	70	SCSB16-FM-M16	166-34601	103			
SC16-SM-M16	166-30402	68	SCSB16-FM-M20	166-34602	103			
SC16-SM-M20	166-30403	68	SCSB16-FM-PG11	166-34608	103			
SC16-SM-PG11	166-30412	68	SCSB16-PC	166-34801	105			
SC20	166-30103	64	SCSB16-SM-M16	166-34701	104			
SC20	166-30113	64	SCSB16-SM-M20	166-34702	104			
SC20-FF-M20	166-30601	71	SCSB16-SM-PG11	166-34708	104			
SC20-FM-M20	166-30304	66	SCSB20	166-34402	102			
SC20-FM-PG16	166-30315	66	SCSB20-FM-M20	166-34603	103			
SC20-PC	166-30503	70	SCSB20-FM-PG16	166-34609	103			
SC20-SM-M20	166-30404	68	SCSB20-PC	166-34802	105			
SC20-SM-PG13	166-30413	68	SCSB20-SM-M20	166-34703	104			
SC20-SM-PG16	166-30414	68	SCSB20-SM-PG16	166-34709	104			
SC25	166-30104	64	SCSB25	166-34403	102			
SC25	166-30114	64	SCSB25-FM-M25	166-34604	103			
SC25-FF-M25	166-30602	71	SCSB25-FM-PG21	166-34610	103			
SC25-FM-M25	166-30305	66	SCSB25-PC	166-34803	105			
SC25-FM-PG21	166-30316	66	SCSB25-SM-M25	166-34704	104			
SC25-PC	166-30504	70	SCSB25-SM-PG21	166-34710	104			
SC25-SM-M25	166-30405	68	SCSB32	166-34404	102			
SC25-SM-PG21	166-30415	68	SCSB32-FM-M32	166-34605	103			
SC32	166-30105	64	SCSB32-FM-PG29	166-34611	103			
SC32	166-30115	64	SCSB32-PC	166-34804	105			
SC32-FF-M32	166-30603	71	SCSB32-SM-M32	166-34705	104			
SC32-FM-M32	166-30306	66	SCSB32-SM-PG29	166-34711	104			
SC32-FM-PG29	166-30317	66	SCSB40	166-34405	102			
SC32-PC	166-30505	70	SCSB40-FM-M40	166-34606	103			
SC32-SM-M32	166-30406	68	SCSB40-FM-PG36	166-34612	103			
SC32-SM-PG29	166-30416	68	SCSB40-PC	166-34805	105			
SC40	166-30106	64	SCSB40-SM-M40	166-34706	104			



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A large grid of small dots for taking notes, consisting of approximately 30 columns and 70 rows.



A large grid of dots for taking notes, consisting of approximately 30 columns and 40 rows of small black dots.

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