



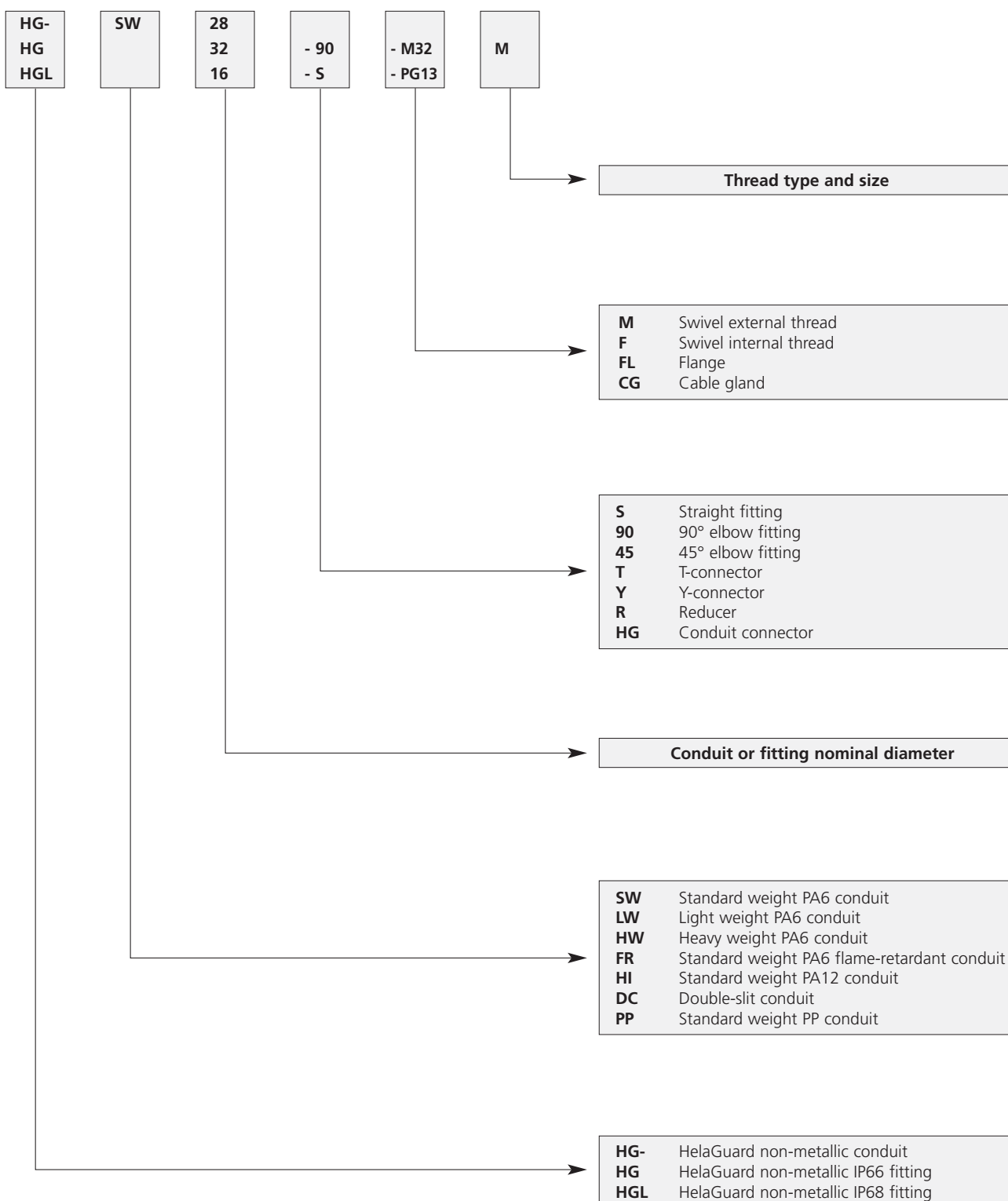
HelaGuard Non-Metallic System Nomenclature

Examples:

HG-SW28

HG32-90M-M32

HGL16-S





Non-Metallic Conduits

• HG-SW PA6 Standard Weight

Standard weight corrugated flexible conduit for industrial applications.

Features and Benefits

- Highly flexible and high fatigue life
- 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
- Colour: black (UV resistant); grey (RAL 7031) on request

Application

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



HelaGuard PA6 Standard for industrial applications.

Material Data

Material	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL94 V2



Technical Table

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

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Other reel lengths available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Non-Metallic Conduits

• HG-LW PA6 Light Weight

Light weight corrugated flexible conduit.

Features and Benefits

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

Application

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



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

Material Data	
Material	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	self-extinguishing according to EN IEC 61386



Technical Table

Article-No.	Type	Nominal Ø	Outside Ø	Inside Ø	Bending Radius	Weight (g/m)	Reel Length (m)	Colour
166-11200	HG-LW10	10	10.0	6.5	15	18	50	Black (BK)
166-11201	HG-LW11	11	11.5	8.4	20	22	50	Black (BK)
166-11202	HG-LW13	13	13.0	10.0	25	24	50	Black (BK)
166-11203	HG-LW16	16	15.8	12.0	35	36	50	Black (BK)
166-11204	HG-LW21	21	21.2	16.9	40	56	50	Black (BK)
166-11205	HG-LW28	28	28.5	23.0	45	90	50	Black (BK)
166-11206	HG-LW34	34	34.5	28.3	55	110	50	Black (BK)
166-11207	HG-LW42	42	42.5	35.7	65	150	25	Black (BK)
166-11208	HG-LW54	54	54.5	47.4	80	200	25	Black (BK)
166-11209	HG-LW67	67	67.2	56.5	110	310	10	Black (BK)

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Other reel lengths available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Non-Metallic Conduits

• HG-HW PA6 Heavy Weight

Heavy weight corrugated flexible conduit for high mechanical demands.

Features and Benefits

- Heavy weight
- High mechanical strength
- Abrasion resistant
- High impact strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Colour: black (UV resistant)

Application

Heavy-duty machine building, plant construction, and public buildings, wherever high mechanical strength is required.



When high mechanical protection is needed: HelaGuard PA6 Heavy.

Material Data

Material	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +120 °C
Flammability	UL94 V2



Technical Table

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

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Non-Metallic Conduits

• HG-FR PA6 Flame Retardant

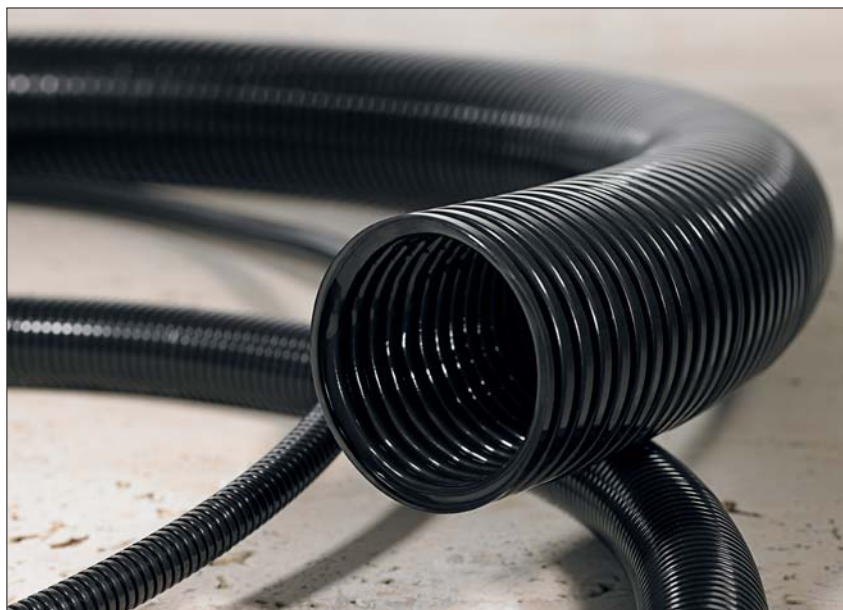
Where high fire protection is required.

Features and Benefits

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

Application

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



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

Material Data	
Material	Polyamide 6, Flame retardant (PA6-FR)
Operating Temperature	-40 °C to +120 °C
Operating Temperature Moving	-20 °C to +100 °C
Flammability	UL94 V0



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

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request.



Lloyd's
Register
LIFE MATTERS

DIN 5510-2

UIC 564-2

NFF 106-1, -2

BS 6853

Please note! Not all products listed on this page may have this approval.

For product specific approvals please refer to the Appendix.



Non-Metallic Conduits

• HG-HI PA12

Standard weight PA12 corrugated flexible conduit for applications with continual movement and bending.

Features and Benefits

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

Application

Robots, rail, machine building, plant construction and wherever continual movement and bending are requirements.



HelaGuard PA12 is ideal for robotics.

Material Data

Material	Polyamide 12 (PA12)
Operating Temperature	-50 °C to +110 °C
Flammability	self-extinguishing according to EN IEC 61386



Technical Table

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

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Non-Metallic Conduits

• HG-DC Double Slit

Double slit corrugated conduit for retrofitting.

Features and Benefits

- Can be opened and closed repeatedly
- Cables can be inserted laterally
- Abrasion resistant
- Free of halogen, sulphur and phosphorus
- Colour: black (UV resistant)

Application

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



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

Material Data

Material	Polyamide 6 (PA6)
Operating Temperature	-40 °C to +110 °C
Flammability	UL94 V2



Technical Table

Article-No.	Type	Nominal Ø	Outside Ø	Ø D	Bending Radius	Weight (g/m)	Reel Length (m)	Colour
166-11800	HG-DC11	11	11.2	6.7	45	23	50	Black (BK)
166-11801	HG-DC13	13	12.9	7.9	55	37	50	Black (BK)
166-11802	HG-DC16	16	15.8	10.5	60	41	50	Black (BK)
166-11803	HG-DC21	21	21.0	13.9	90	63	50	Black (BK)
166-11804	HG-DC28	28	28.3	20.5	105	94	50	Black (BK)
166-11805	HG-DC34	34	34.5	27.0	150	118	25	Black (BK)
166-11806	HG-DC42	42	42.5	34.8	170	193	25	Black (BK)
166-11807	HG-DC54	54	54.5	45.3	170	263	25	Black (BK)

All dimensions in mm. Subject to technical changes.

Other reel lengths available on request.



Non-Metallic Conduits

• HG-PP PP Standard Weight

The standard conduit made from Polypropylene.

Features and Benefits

- resistant to acids and alkalis
- self-extinguishing

Application

Machine building, electrical installations, buildings, particularly when buried in concrete or plaster.



HelaGuard PP Standard is typically used in electrical installations and buildings, particularly when buried in concrete or plaster.

Material Data

Material	Polypropylene (PP)
Operating Temperature	-20 °C to +90 °C
Flammability	self-extinguishing according to EN IEC 61386



Technical Table

Article-No.	Type	Nominal Ø	Outside Ø	Inside Ø	Bending Radius	Weight (g/m)	Reel Length (m)	Colour
166-11900	HG-PP10	10	10.0	6.3	15	16	50	Black (BK)
166-11901	HG-PP13	13	13.0	9.8	25	20	50	Black (BK)
166-11902	HG-PP16	16	15.8	11.8	35	30	50	Black (BK)
166-11903	HG-PP20	20	20.0	14.8	40	45	50	Black (BK)
166-11904	HG-PP21	21	21.2	16.7	40	50	50	Black (BK)
166-11905	HG-PP25	25	25.0	19.1	50	60	50	Black (BK)
166-11906	HG-PP26	26	25.4	21.4	50	52	50	Black (BK)
166-11907	HG-PP28	28	28.5	22.8	55	65	50	Black (BK)
166-11908	HG-PP34	34	34.5	28.1	65	90	25	Black (BK)
166-11909	HG-PP42	42	42.5	35.5	80	120	25	Black (BK)
166-11910	HG-PP54	54	54.5	47.2	100	150	25	Black (BK)
166-11911	HG-PP67	67	67.2	56.3	150	250	10	Black (BK)

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Other reel lengths available on request.



HellaGuard Fitting Finder

Fixed Thread Fittings

Straight IP66 HG-S		→ Page 327
90° Elbow IP66 HG-90		→ Page 329
45° Elbow IP66 HG-45		→ Page 331

Straight IP68 HGL-S		→ Page 328
90° Elbow IP68 HGL-90		→ Page 330
45° Elbow IP68 HGL-45		→ Page 331

Swivel, External Thread Fittings

Straight IP66 HG-SM		→ Page 332
90° Elbow IP66 HG-90M		→ Page 333
45° Elbow IP66 HG-45M		→ Page 334

Straight IP68 HGL-SM		→ Page 332
90° Elbow IP68 HGL-90M		→ Page 333
45° Elbow IP68 HGL-45M		→ Page 334

Swivel, Internal Thread Fittings

Straight IP66 HG-SF		→ Page 335
90° Elbow IP66 HG-90F		→ Page 336
45° Elbow IP66 HG-45F		→ Page 337

Straight IP68 HGL-SF		→ Page 335
90° Elbow IP68 HGL-90F		→ Page 336
45° Elbow IP68 HGL-45F		→ Page 337

Flange Fittings

Straight IP66 HG-SFL		→ Page 338
90° Elbow IP66 HG-90FL		→ Page 339
45° Elbow IP66 HG-45FL		→ Page 340

Straight IP68 HGL-SFL		→ Page 338
90° Elbow IP68 HGL-90FL		→ Page 339
45° Elbow IP68 HGL-45FL		→ Page 340



Cable Gland Fittings

Straight IP66 HG-SCG		→ Page 341	Straight IP68 HGL-SCG		→ Page 341
90° Elbow IP66 HG-90CG		→ Page 342	90° Elbow IP68 HGL-90CG		→ Page 342
45° Elbow IP66 HG-45CG		→ Page 343	45° Elbow IP68 HGL-45CG		→ Page 343

T-Connectors, Reducers, Connectors

T-Connector IP66 HG-T		→ Page 344	T-Connector IP68 HGL-T		→ Page 344
Y-Connector IP66 HG-Y		→ Page 345	Y-Connector IP68 HGL-Y		→ Page 345
Reducer IP66 HG-R		→ Page 346	Reducer IP68 HGL-R		→ Page 346
Connector IP66 HG-HG		→ Page 347			

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.



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



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



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



4. Remove the screw driver.



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.



Fittings with fixed external thread

• HG-S Straight, IP66

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-S Straight, IP66.

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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-21000	HG10-S-M12	10	M12	–	10
166-21020	HG10-S-M16	10	M16	–	10
166-21010	HG10-S-PG7	10	–	PG7	10
166-21031	HG10-S-PG9	10	–	PG9	10
166-21021	HG11-S-M12	11	M12	–	10
166-21032	HG11-S-PG7	11	–	PG7	10
166-21022	HG13-S-M12	13	M12	–	10
166-21001	HG13-S-M16	13	M16	–	10
166-21023	HG13-S-M20	13	M20	–	10
166-21033	HG13-S-PG7	13	–	PG7	10
166-21011	HG13-S-PG9	13	–	PG9	10
166-21034	HG13-S-PG11	13	–	PG11	10
166-21002	HG16-S-M16	16	M16	–	10
166-21003	HG16-S-M20	16	M20	–	10
166-21035	HG16-S-PG9	16	–	PG9	10
166-21012	HG16-S-PG11	16	–	PG11	10
166-21013	HG16-S-PG13	16	–	PG13.5	10
166-21036	HG16-S-PG16	16	–	PG16	10
166-21024	HG18-S-M20	18	M20	–	10
166-21037	HG18-S-PG13	18	–	PG13.5	10
166-21038	HG18-S-PG16	18	–	PG16	10
166-21025	HG20-S-M20	20	M20	–	10
166-21004	HG21-S-M20	21	M20	–	10
166-21039	HG21-S-PG13	21	–	PG13.5	10
166-21014	HG21-S-PG16	21	–	PG16	10
166-21040	HG21-S-PG21	21	–	PG21	10
166-21026	HG25-S-M25	25	M25	–	10
166-21005	HG28-S-M25	28	M25	–	10
166-21027	HG28-S-M32	28	M32	–	10
166-21015	HG28-S-PG21	28	–	PG21	10
166-21041	HG28-S-PG29	28	–	PG29	10
166-21006	HG34-S-M32	34	M32	–	10
166-21028	HG34-S-M40	34	M40	–	10
166-21016	HG34-S-PG29	34	–	PG29	10
166-21007	HG42-S-M40	42	M40	–	2
166-21029	HG42-S-M50	42	M50	–	2
166-21017	HG42-S-PG36	42	–	PG36	2
166-21008	HG54-S-M50	54	M50	–	2
166-21030	HG54-S-M63	54	M63	–	2
166-21042	HG54-S-PG42	54	–	PG42	2
166-21018	HG54-S-PG48	54	–	PG48	2
166-21009	HG67-S-M63	67	M63	–	1
166-21019	HG67-S-PG48	67	–	PG48	1

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



RI® Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with fixed external thread

• HGL-S Straight, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-21600	HGL13-S-M16	13	M16	–	10
166-21608	HGL13-S-PG9	13	–	PG9	10
166-21601	HGL16-S-M16	16	M16	–	10
166-21602	HGL16-S-M20	16	M20	–	10
166-21623	HGL16-S-PG9	16	–	PG9	10
166-21609	HGL16-S-PG11	16	–	PG11	10
166-21610	HGL16-S-PG13	16	–	PG13.5	10
166-21624	HGL16-S-PG16	16	–	PG16	10
166-21603	HGL21-S-M20	21	M20	–	10
166-21625	HGL21-S-PG13	21	–	PG13.5	10
166-21611	HGL21-S-PG16	21	–	PG16	10
166-21626	HGL21-S-PG21	21	–	PG21	10
166-21604	HGL28-S-M25	28	M25	–	10
166-21619	HGL28-S-M32	28	M32	–	10
166-21612	HGL28-S-PG21	28	–	PG21	10
166-21627	HGL28-S-PG29	28	–	PG29	10
166-21605	HGL34-S-M32	34	M32	–	10
166-21620	HGL34-S-M40	34	M40	–	10
166-21613	HGL34-S-PG29	34	–	PG29	10
166-21606	HGL42-S-M40	42	M40	–	2
166-21621	HGL42-S-M50	42	M50	–	2
166-21614	HGL42-S-PG36	42	–	PG36	2
166-21607	HGL54-S-M50	54	M50	–	2
166-21622	HGL54-S-M63	54	M63	–	2
166-21628	HGL54-S-PG42	54	–	PG42	2
166-21616	HGL54-S-PG48	54	–	PG48	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

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

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



RT Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with fixed external thread

• HG-90 90° Elbow, IP66

90° elbow external thread.

Features and Benefits

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



HelaGuard HG-90 90° Elbow, IP66.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-22200	HG10-90-M12	10	M12	–	10
166-22210	HG10-90-PG7	10	–	PG7	10
166-22220	HG11-90-M12	11	M12	–	10
166-22201	HG13-90-M16	13	M16	–	10
166-22211	HG13-90-PG9	13	–	PG9	10
166-22202	HG16-90-M16	16	M16	–	10
166-22203	HG16-90-M20	16	M20	–	10
166-22225	HG16-90-PG9	16	–	PG9	10
166-22212	HG16-90-PG11	16	–	PG11	10
166-22213	HG16-90-PG13	16	–	PG13.5	10
166-22226	HG18-90-PG13	18	–	PG13.5	10
166-22221	HG20-90-M20	20	M20	–	10
166-22204	HG21-90-M20	21	M20	–	10
166-22227	HG21-90-PG13	21	–	PG13.5	10
166-22214	HG21-90-PG16	21	–	PG16	10
166-22222	HG25-90-M25	25	M25	–	10
166-22205	HG28-90-M25	28	M25	–	10
166-22215	HG28-90-PG21	28	–	PG21	10
166-22206	HG34-90-M32	34	M32	–	10
166-22216	HG34-90-PG29	34	–	PG29	10
166-22207	HG42-90-M40	42	M40	–	2
166-22223	HG42-90-M50	42	M50	–	2
166-22217	HG42-90-PG36	42	–	PG36	2
166-22208	HG54-90-M50	54	M50	–	2
166-22224	HG54-90-M63	54	M63	–	2
166-22218	HG54-90-PG48	54	–	PG48	2
166-22209	HG67-90-M63	67	M63	–	1
166-22219	HG67-90-PG48	67	–	PG48	1

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

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

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2





Fittings with fixed external thread

• HGL-90 90° Elbow, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-22800	HGL13-90-M16	13	M16	–	10
166-22808	HGL13-90-PG9	13	–	PG9	10
166-22801	HGL16-90-M16	16	M16	–	10
166-22802	HGL16-90-M20	16	M20	–	10
166-22820	HGL16-90-PG9	16	–	PG9	10
166-22809	HGL16-90-PG11	16	–	PG11	10
166-22810	HGL16-90-PG13	16	–	PG13.5	10
166-22803	HGL21-90-M20	21	M20	–	10
166-22821	HGL21-90-PG13	21	–	PG13.5	10
166-22811	HGL21-90-PG16	21	–	PG16	10
166-22804	HGL28-90-M25	28	M25	–	10
166-22812	HGL28-90-PG21	28	–	PG21	10
166-22805	HGL34-90-M32	34	M32	–	10
166-22813	HGL34-90-PG29	34	–	PG29	10
166-22806	HGL42-90-M40	42	M40	–	2
166-22818	HGL42-90-M50	42	M50	–	2
166-22814	HGL42-90-PG36	42	–	PG36	2
166-22807	HGL54-90-M50	54	M50	–	2
166-22819	HGL54-90-M63	54	M63	–	2
166-22815	HGL54-90-PG48	54	–	PG48	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

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

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with fixed external thread

• HG-45 45° Elbow, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-23400	HG16-45-M20	16	M20	–	10
166-23406	HG16-45-PG13	16	–	PG13	10
166-23401	HG21-45-M20	21	M20	–	10
166-23407	HG21-45-PG13	21	–	PG13.5	10
166-23408	HG21-45-PG16	21	–	PG16	10
166-23402	HG28-45-M25	28	M25	–	10
166-23409	HG28-45-PG21	28	–	PG21	10
166-23403	HG34-45-M32	34	M32	–	10
166-23410	HG34-45-PG29	34	–	PG29	10
166-23404	HG42-45-M50	42	M50	–	2
166-23411	HG42-45-PG36	42	–	PG36	2
166-23405	HG54-45-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-45 45° Elbow, 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!

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-24000	HGL16-45-M20	16	M20	–	10
166-24006	HGL16-45-PG13	16	–	PG13.5	10
166-24001	HGL21-45-M20	21	M20	–	10
166-24007	HGL21-45-PG13	21	–	PG13.5	10
166-24008	HGL21-45-PG16	21	–	PG16	10
166-24002	HGL28-45-M25	28	M25	–	10
166-24009	HGL28-45-PG21	28	–	PG21	10
166-24003	HGL34-45-M32	34	M32	–	10
166-24010	HGL34-45-PG29	34	–	PG29	10
166-24004	HGL42-45-M50	42	M50	–	2
166-24011	HGL42-45-PG36	42	–	PG36	2
166-24005	HGL54-45-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with swivel external thread

• HG-SM Straight Swivel External Thread, 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



HelaGuard HG-SM Straight Swivel External Thread, IP66.

• HGL-SM Straight Swivel External Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-21300	HG13-SM-M16	13	M16	–	10
166-21309	HG13-SM-PG9	13	–	PG9	10
166-21301	HG16-SM-M16	16	M16	–	10
166-21302	HG16-SM-M20	16	M20	–	10
166-21310	HG16-SM-PG9	16	–	PG9	10
166-21311	HG16-SM-PG11	16	–	PG11	10
166-21303	HG21-SM-M20	21	M20	–	10
166-21312	HG21-SM-PG13	21	–	PG13.5	10
166-21313	HG21-SM-PG16	21	–	PG16	10
166-21304	HG28-SM-M25	28	M25	–	10
166-21314	HG28-SM-PG21	28	–	PG21	10
166-21305	HG34-SM-M32	34	M32	–	10
166-21315	HG34-SM-PG29	34	–	PG29	10
166-21306	HG42-SM-M40	42	M40	–	2
166-21307	HG54-SM-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-21900	HGL13-SM-M16	13	M16	–	10
166-21909	HGL13-SM-PG9	13	–	PG9	10
166-21901	HGL16-SM-M16	16	M16	–	10
166-21902	HGL16-SM-M20	16	M20	–	10
166-21910	HGL16-SM-PG9	16	–	PG9	10
166-21911	HGL16-SM-PG11	16	–	PG11	10
166-21903	HGL21-SM-M20	21	M20	–	10
166-21912	HGL21-SM-PG13	21	–	PG13.5	10
166-21913	HGL21-SM-PG16	21	–	PG16	10
166-21904	HGL28-SM-M25	28	M25	–	10
166-21914	HGL28-SM-PG21	28	–	PG21	10
166-21905	HGL34-SM-M32	34	M32	–	10
166-21915	HGL34-SM-PG29	34	–	PG29	10
166-21906	HGL42-SM-M40	42	M40	–	2
166-21907	HGL54-SM-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

 Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel external thread

• HG-90M 90° Elbow Swivel External Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-22500	HG13-90M-M16	13	M16	–	10
166-22509	HG13-90M-PG9	13	–	PG9	10
166-22501	HG16-90M-M16	16	M16	–	10
166-22502	HG16-90M-M20	16	M20	–	10
166-22510	HG16-90M-PG9	16	–	PG9	10
166-22511	HG16-90M-PG11	16	–	PG11	10
166-22503	HG21-90M-M20	21	M20	–	10
166-22512	HG21-90M-PG13	21	–	PG13.5	10
166-22513	HG21-90M-PG16	21	–	PG16	10
166-22504	HG28-90M-M25	28	M25	–	10
166-22514	HG28-90M-PG21	28	–	PG21	10
166-22505	HG34-90M-M32	34	M32	–	10
166-22515	HG34-90M-PG29	34	–	PG29	10
166-22506	HG42-90M-M40	42	M40	–	2
166-22507	HG54-90M-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-90M 90° Elbow Swivel External Thread, IP68

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

Fulfills 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-23100	HGL13-90M-M16	13	M16	–	10
166-23108	HGL13-90M-PG9	13	–	PG9	10
166-23101	HGL16-90M-M16	16	M16	–	10
166-23102	HGL16-90M-M20	16	M20	–	10
166-23109	HGL16-90M-PG9	16	–	PG9	10
166-23110	HGL16-90M-PG11	16	–	PG11	10
166-23103	HGL21-90M-M20	21	M20	–	10
166-23111	HGL21-90M-PG13	21	–	PG13.5	10
166-23112	HGL21-90M-PG16	21	–	PG16	10
166-23104	HGL28-90M-M25	28	M25	–	10
166-23113	HGL28-90M-PG21	28	–	PG21	10
166-23105	HGL34-90M-M32	34	M32	–	10
166-23114	HGL34-90M-PG29	34	–	PG29	10
166-23106	HGL42-90M-M40	42	M40	–	2
166-23107	HGL54-90M-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



® Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel external thread

• HG-45M 45° Elbow Swivel External Thread, 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



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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-23700	HG16-45M-M20	16	M20	–	10
166-23706	HG16-45M-PG13	16	–	PG13	10
166-23707	HG16-45M-PG16	16	–	PG16	10
166-23701	HG21-45M-M20	21	M20	–	10
166-23708	HG21-45M-PG13	21	–	PG13.5	10
166-23709	HG21-45M-PG16	21	–	PG16	10
166-23702	HG28-45M-M25	28	M25	–	10
166-23710	HG28-45M-PG21	28	–	PG21	10
166-23703	HG34-45M-M32	34	M32	–	10
166-23711	HG34-45M-PG29	34	–	PG29	10
166-23704	HG42-45M-M50	42	M50	–	2
166-23705	HG54-45M-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-45M 45° Elbow Swivel External Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-24300	HGL16-45M-M20	16	M20	–	10
166-24306	HGL16-45M-PG13	16	–	PG13	10
166-24307	HGL16-45M-PG16	16	–	PG16	10
166-24301	HGL21-45M-M20	21	M20	–	10
166-24308	HGL21-45M-PG13	21	–	PG13.5	10
166-24309	HGL21-45M-PG16	21	–	PG16	10
166-24302	HGL28-45M-M25	28	M25	–	10
166-24310	HGL28-45M-PG21	28	–	PG21	10
166-24303	HGL34-45M-M32	34	M32	–	10
166-24311	HGL34-45M-PG29	34	–	PG29	10
166-24304	HGL42-45M-M50	42	M50	–	2
166-24305	HGL54-45M-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with swivel internal thread

• HG-SF Straight Swivel Internal Thread, 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



HelaGuard HG-SF Straight Swivel Internal Thread, IP66.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-21400	HG13-SF-M16	13	M16	–	10
166-21408	HG13-SF-PG9	13	–	PG9	10
166-21401	HG16-SF-M16	16	M16	–	10
166-21402	HG16-SF-M20	16	M20	–	10
166-21409	HG16-SF-PG11	16	–	PG11	10
166-21410	HG16-SF-PG16	16	–	PG16	10
166-21403	HG21-SF-M20	21	M20	–	10
166-21411	HG21-SF-PG16	21	–	PG16	10
166-21404	HG28-SF-M25	28	M25	–	10
166-21412	HG28-SF-PG21	28	–	PG21	10
166-21405	HG34-SF-M32	34	M32	–	10
166-21413	HG34-SF-PG29	34	–	PG29	10
166-21406	HG42-SF-M40	42	M40	–	2
166-21407	HG54-SF-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-SF Straight Swivel Internal Thread, IP68

Straight swivel brass internal thread with conduit seal and washer. Fulfills 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-22000	HGL13-SF-M16	13	M16	–	10
166-22009	HGL13-SF-PG9	13	–	PG9	10
166-22001	HGL16-SF-M16	16	M16	–	10
166-22002	HGL16-SF-M20	16	M20	–	10
166-22010	HGL16-SF-PG9	16	–	PG9	10
166-22011	HGL16-SF-PG11	16	–	PG11	10
166-22003	HGL21-SF-M20	21	M20	–	10
166-22012	HGL21-SF-PG13	21	–	PG13.5	10
166-22013	HGL21-SF-PG16	21	–	PG16	10
166-22004	HGL28-SF-M25	28	M25	–	10
166-22014	HGL28-SF-PG21	28	–	PG21	10
166-22005	HGL34-SF-M32	34	M32	–	10
166-22015	HGL34-SF-PG29	34	–	PG29	10
166-22006	HGL42-SF-M40	42	M40	–	2
166-22007	HGL54-SF-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Fittings with swivel internal thread

• HG-90F 90° Elbow Swivel Internal Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-22600	HG13-90F-M16	13	M16	–	10
166-22608	HG13-90F-PG9	13	–	PG9	10
166-22601	HG16-90F-M16	16	M16	–	10
166-22602	HG16-90F-M20	16	M20	–	10
166-22609	HG16-90F-PG9	16	–	PG9	10
166-22610	HG16-90F-PG11	16	–	PG11	10
166-22603	HG21-90F-M20	21	M20	–	10
166-22614	HG21-90F-PG13	21	–	PG13.5	10
166-22611	HG21-90F-PG16	21	–	PG16	10
166-22604	HG28-90F-M25	28	M25	–	10
166-22612	HG28-90F-PG21	28	–	PG21	10
166-22605	HG34-90F-M32	34	M32	–	10
166-22613	HG34-90F-PG29	34	–	PG29	10
166-22606	HG42-90F-M40	42	M40	–	2
166-22607	HG54-90F-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-90F 90° Elbow Swivel Internal Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-23200	HGL13-90F-M16	13	M16	–	10
166-23208	HGL13-90F-PG9	13	–	PG9	10
166-23201	HGL16-90F-M16	16	M16	–	10
166-23202	HGL16-90F-M20	16	M20	–	10
166-23209	HGL16-90F-PG9	16	–	PG9	10
166-23210	HGL16-90F-PG11	16	–	PG11	10
166-23203	HGL21-90F-M20	21	M20	–	10
166-23211	HGL21-90F-PG13	21	–	PG13.5	10
166-23212	HGL21-90F-PG16	21	–	PG16	10
166-23204	HGL28-90F-M25	28	M25	–	10
166-23213	HGL28-90F-PG21	28	–	PG21	10
166-23205	HGL34-90F-M32	34	M32	–	10
166-23214	HGL34-90F-PG29	34	–	PG29	10
166-23206	HGL42-90F-M40	42	M40	–	2
166-23207	HGL54-90F-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel internal thread

• HG-45F 45° Elbow Swivel Internal Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-23800	HG16-45F-M20	16	M20	–	10
166-23807	HG16-45F-PG16	16	–	PG16	10
166-23801	HG21-45F-M20	21	M20	–	10
166-23808	HG21-45F-PG16	21	–	PG16	10
166-23802	HG28-45F-M25	28	M25	–	10
166-23809	HG28-45F-PG21	28	–	PG21	10
166-23803	HG34-45F-M32	34	M32	–	10
166-23810	HG34-45F-PG29	34	–	PG29	10
166-23804	HG42-45F-M50	42	M50	–	2
166-23805	HG54-45F-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-45F 45° Elbow Swivel Internal Thread, 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.

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Thread Size (PG)	Pack Cont.
166-24400	HGL16-45F-M20	16	M20	–	10
166-24407	HGL16-45F-PG16	16	–	PG16	10
166-24401	HGL21-45F-M20	21	M20	–	10
166-24408	HGL21-45F-PG16	21	–	PG16	10
166-24402	HGL28-45F-M25	28	M25	–	10
166-24409	HGL28-45F-PG21	28	–	PG21	10
166-24403	HGL34-45F-M32	34	M32	–	10
166-24410	HGL34-45F-PG29	34	–	PG29	10
166-24404	HGL42-45F-M50	42	M50	–	2
166-24405	HGL54-45F-M50	54	M50	–	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel flange

• HG-SFL Straight Swivel Flange, 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-21200	HG16-SFL	16	10
166-21201	HG21-SFL	21	10
166-21202	HG28-SFL	28	10
166-21203	HG34-SFL	34	10
166-21204	HG42-SFL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



HelaGuard HG-SFL Straight Swivel Flange, IP66.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-SFL Straight Swivel Flange, 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-21800	HGL16-SFL	16	10
166-21801	HGL21-SFL	21	10
166-21802	HGL28-SFL	28	10
166-21803	HGL34-SFL	34	10
166-21804	HGL42-SFL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



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



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel flange

• HG-90FL 90° Elbow Swivel Flange, 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-22400	HG16-90FL	16	10
166-22401	HG21-90FL	21	10
166-22402	HG28-90FL	28	10
166-22403	HG34-90FL	34	10
166-22404	HG42-90FL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



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

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-90FL 90° Elbow Swivel Flange, 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-23000	HGL16-90FL	16	10
166-23001	HGL21-90FL	21	10
166-23002	HGL28-90FL	28	10
166-23003	HGL34-90FL	34	10
166-23004	HGL42-90FL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



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



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with swivel flange

• HG-45FL 45° Elbow Swivel Flange, 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-23600	HG16-45FL	16	10
166-23601	HG21-45FL	21	10
166-23602	HG28-45FL	28	10
166-23603	HG34-45FL	34	10
166-23604	HG42-45FL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



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

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-45FL 45° Elbow Swivel Flange, IP68

45° elbow swivel flange with conduit seal and washer.

Fulfills 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

Technical Table

Article-No.	Type	Nominal Ø	Pack Cont.
166-24200	HGL16-45FL	16	10
166-24201	HGL21-45FL	21	10
166-24202	HGL28-45FL	28	10
166-24203	HGL34-45FL	34	10
166-24204	HGL42-45FL	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



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



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Fittings with strain relief and cable seal

• HG-SCG Straight Cable Gland Fitting, IP66

Straight fitting with cable seal and strain relief.

Features and Benefits

- One piece, fast fit
- High pull-off strength
- Provides strain relief
- Seals cable at IP68 and IP69k
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-21500	HG13-SCG-M16	13	M16	4,5 - 10	10
166-21501	HG16-SCG-M16	16	M16	4,5 - 10	10
166-21502	HG16-SCG-M20	16	M20	7 - 13	10
166-21503	HG21-SCG-M20	21	M20	7 - 13	10
166-21504	HG28-SCG-M25	28	M25	9 - 17	10
166-21505	HG34-SCG-M32	34	M32	11 - 21	10
166-21506	HG42-SCG-M40	42	M40	19 - 28	2
166-21507	HG54-SCG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-SCG Straight Cable Gland Fitting, IP68

Straight fitting with cable seal and strain relief.

Fulfills 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
- Metric threads supplied with locknuts



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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-22100	HGL13-SCG-M16	13	M16	4,5 - 10	10
166-22101	HGL16-SCG-M16	16	M16	4,5 - 10	10
166-22102	HGL16-SCG-M20	16	M20	7 - 13	10
166-22103	HGL21-SCG-M20	21	M20	7 - 13	10
166-22104	HGL28-SCG-M25	28	M25	9 - 17	10
166-22105	HGL34-SCG-M32	34	M32	11 - 21	10
166-22106	HGL42-SCG-M40	42	M40	19 - 28	2
166-22107	HGL54-SCG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



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

- One piece, fast fit
- High pull-off strength
- Provides strain relief
- Seals cable at IP68 and IP69k
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



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

• HGL-90CG 90° Elbow fitting, IP68

90° elbow fitting with cable seal and strain relief.

Fulfils IP66, IP67, IP68 and IP69k.

Features and Benefits

- One piece, fast fit
- High pull-off strength
- Provides strain relief
- Seals cable at IP68 and IP69k
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-23301	HG13-90CG-M16	13	M16	4,5 - 10	10
166-23302	HG16-90CG-M16	16	M16	4,5 - 10	10
166-23303	HG16-90CG-M20	16	M20	7 - 13	10
166-23304	HG21-90CG-M20	21	M20	7 - 13	10
166-23305	HG28-90CG-M25	28	M25	9 - 17	10
166-23306	HG34-90CG-M32	34	M32	11 - 21	10
166-23307	HG42-90CG-M40	42	M40	19 - 28	2
166-23308	HG54-90CG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-22701	HGL13-90CG-M16	13	M16	4,5 - 10	10
166-22702	HGL16-90CG-M16	16	M16	4,5 - 10	10
166-22703	HGL16-90CG-M20	16	M20	7 - 13	10
166-22704	HGL21-90CG-M20	21	M20	7 - 13	10
166-22705	HGL28-90CG-M25	28	M25	9 - 17	10
166-22706	HGL34-90CG-M32	34	M32	11 - 21	10
166-22707	HGL42-90CG-M40	42	M40	19 - 28	2
166-22708	HGL54-90CG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

RT® Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



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

- One piece, fast fit
- High pull-off strength
- Provides strain relief
- Seals cable at IP68 and IP69k
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



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

• HGL-45CG 45° Elbow fitting, IP68

45° elbow fitting with cable seal and strain relief.

Fulfills IP66, IP67, IP68 and IP69k.

Features and Benefits

- One piece, fast fit
- High pull-off strength
- Provides strain relief
- Seals cable at IP68 and IP69k
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus
- Metric threads supplied with locknuts



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

Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-23903	HG16-45CG-M20	16	M20	7 - 13	10
166-23904	HG21-45CG-M20	21	M20	7 - 13	10
166-23905	HG28-45CG-M25	28	M25	9 - 17	10
166-23906	HG34-45CG-M32	34	M32	11 - 21	10
166-23907	HG42-45CG-M40	42	M40	19 - 28	2
166-23908	HG54-45CG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66), Nickel Plated Brass (NPB)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



Technical Table

Article-No.	Type	Nominal Ø	Thread Size (metric)	Suitable for Cable Ø from/to	Pack Cont.
166-24503	HGL16-45CG-M20	16	M20	7 - 13	10
166-24504	HGL21-45CG-M20	21	M20	7 - 13	10
166-24505	HGL28-45CG-M25	28	M25	9 - 17	10
166-24506	HGL34-45CG-M32	34	M32	11 - 21	10
166-24507	HGL42-45CG-M40	42	M40	19 - 28	2
166-24508	HGL54-45CG-M50	54	M50	27 - 35	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval. For product specific approvals please refer to the Appendix.



Connectors, reducers and couplers

• HG-T T-Connector, IP66

T-connector with inspection lid.

Features and Benefits

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



HelaGuard HG-T, T-Connector, IP66.

Technical Table

Article-No.	Type	Entry nominal diameter	Exit nominal diameter	Pack Cont.
166-24800	HG16-T	16	16	5
166-24801	HG20-T	20	20	3
166-24802	HG21-T	21	21	3
166-24803	HG28-T	28	28	3
166-24804	HG34-T	34	34	2
166-24805	HG42-T	42	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-T T-Connector, IP68

T-connector with conduit seals.

Fulfils IP66, IP67, IP68 and IP69k.

Features and Benefits

- Fast fit T-connector
- With inspection lid and additional seals
- High pull-off strength
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



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

Technical Table

Article-No.	Type	Entry nominal diameter	Exit nominal diameter	Pack Cont.
166-24900	HGL16-T	16	16	5
166-24901	HGL21-T	21	21	3
166-24902	HGL28-T	28	28	3
166-24903	HGL34-T	34	34	2
166-24904	HGL42-T	42	42	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Connectors, reducers and couplers

• HG-Y Y-Connector, IP66

Features and Benefits

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



HelaGuard HG-Y, Y-Connector, IP66.

Technical Table

Article-No.	Type	Entry nominal diameter	Exit nominal diameter	Pack Cont.
166-25801	HG16-Y13	16	13	5
166-25802	HG21-Y16	21	16	3
166-25803	HG28-Y21	28	21	3
166-25804	HG34-Y28	34	28	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C
Flammability	UL94 V2



• HGL-Y Y-Connector, IP68

Fulfills IP66, IP67, IP68 and IP69k.

Features and Benefits

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



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

Technical Table

Article-No.	Type	Entry nominal diameter	Exit nominal diameter	Pack Cont.
166-25901	HGL16-Y13	16	13	5
166-25902	HGL21-Y16	21	16	3
166-25903	HGL28-Y21	28	21	3
166-25904	HGL34-Y28	34	28	2

All dimensions in mm. Subject to technical changes.

Colour grey available on request.



Please note! Not all products listed on this page may have this approval.
For product specific approvals please refer to the Appendix.



Connectors, reducers and couplers

• HG-R Reducer, IP66

Features and Benefits

- Used with T-Connector and Y-Connectors
- Reduces outlets
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HG-R Reducer.

Technical Table

Article-No.	Type	From nominal diameter	To nominal diameter	Pack Cont.
166-25000	HG13-R16	16	13	5
166-25001	HG13-R21	21	13	5
166-25002	HG16-R21	21	16	5
166-25003	HG25-R28	28	25	5
166-25004	HG21-R28	28	21	5
166-25005	HG16-R34	34	16	5
166-25006	HG28-R34	34	28	5
166-25007	HG21-R34	34	21	5
166-25008	HG34-R42	42	34	5
166-25009	HG28-R42	42	28	5
166-25010	HG21-R42	42	12	5

All dimensions in mm. Subject to technical changes.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C



• HGL-R Reducer, IP68

Features and Benefits

- Used with T-Connector and Y-Connectors
- Reduces outlets
- Highly resistant to solvents and oils
- Free of halogen, sulphur and phosphorus



HGL-R Reducer with conduit seal, IP68.

Technical Table

Article-No.	Type	From nominal diameter	To nominal diameter	Pack Cont.
166-25100	HGL13-R16	16	13	5
166-25101	HGL16-R21	21	16	5
166-25102	HGL21-R28	28	21	5
166-25103	HGL16-R28	28	16	5
166-25104	HGL28-R34	34	28	5
166-25105	HGL21-R34	34	21	5
166-25106	HGL16-R34	34	16	5
166-25107	HGL34-R42	42	34	5
166-25108	HGL28-R42	42	28	5
166-25109	HGL21-R42	42	21	5

All dimensions in mm. Subject to technical changes.

Material Data

Material	Polyamide 6.6 (PA66), Thermoplastic Elastomer (TPE)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C





Connectors, reducers and couplers

• HG-HG Conduit Connector, IP66

Features and Benefits

- One piece, fast fit
- Joins corrugated conduits

Technical Table

Article-No.	Type	From nominal diameter	To nominal diameter	Pack Cont.
166-24600	HG16-HG16	16	16	10
166-24601	HG21-HG21	21	21	10
166-24602	HG28-HG28	28	28	10
166-24603	HG34-HG34	34	34	10

All dimensions in mm. Subject to technical changes.



HelaGuard HG-HG Coupler.

Material Data

Material	Polyamide 6.6 (PA66)
Colour	Black (BK)
Operating Temperature	-50 °C to +135 °C

