HUMMEL

smart & reliable connections

CABLE GLANDS

HUMMEL – smart & reliable

HUMMEL AG is a renowned manufacturer of connection technology and components for electric and heating areas. The medium sized family business stands for quality, precision, reliability and pronounced service consciousness. A wide vertical range of manufacture with in-house development, construction, toolmaking, manufacturing, electroplating and assembling from a single source, offers best conditions for implementing individual solutions.

connections

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INDUSTRIAL CABLE GLANDS MADE OF PLASTIC AND METAL

The right solution for every application

HUMMEL offers a huge portfolio of cable glands for industrial applications. Plastic, brass and stainless steel glands in many different sizes and variants. The products are backed up by all relevant certification. This gives the customers the security they need for a wide range of uses.

// Conforming to RoHS and REACH / SVHC
// Free of conflict materials
// Halogen- and phospherous-free
// Fire protection class V0 according to UL 94
// Outdoor durable polyamide according to UL 746C f1 (HSK-K black)
// Protection IP 66 and IP 68 – 10 bar according to DIN EN 60529
// Protection IP 69K according to DIN 40050-9
// Patented ratchet and spline secures the dome nut on the body

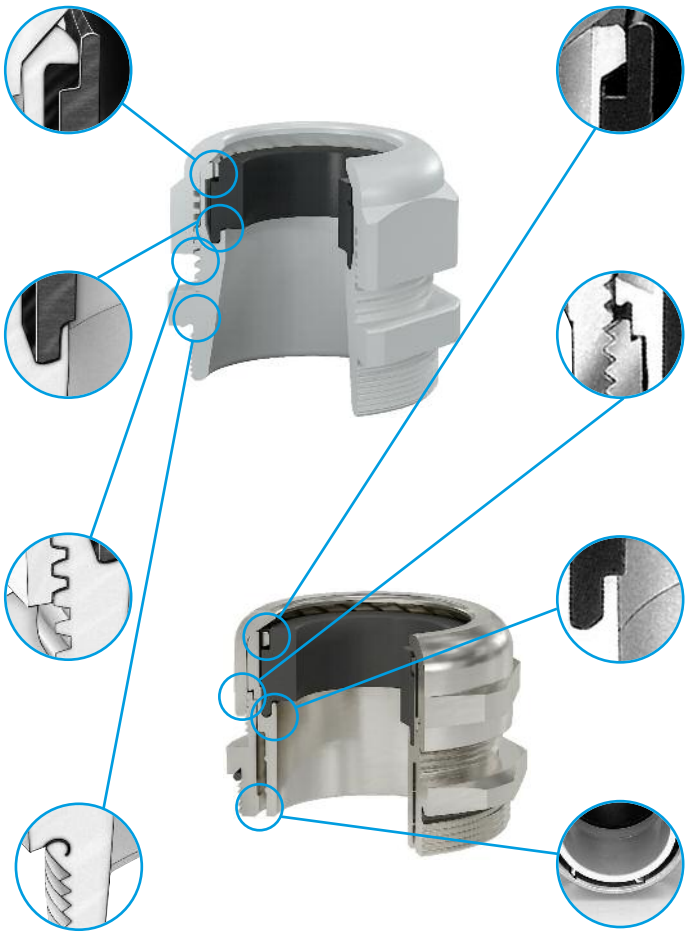
HSK-K

Flexible overlapping clamping splines prevent the form seal from being pulled out of the fitting

The form seal allows for an IP 68 (10 bar) rating

The rugged lead screw results in a dependable transmission of force between nut and body

The concentric seal ridge and molded groove for an optional O-Ring results in a liquid tight seal between body and housing



HSK-M

Flexible overlapping clamping splines prevent the form seal from being pulled out of the fitting

The internal sealing edge results in a superior seal between the splined Nylon clamping insert and the nickel plated brass body

The form seal allows for an IP 68 (10 bar) rating

Rotation of the cable during installation is prevented due to the internal splines

Product from page 13 and page 31

All-round security: 360° EMC connection

As a premium manufacturer, HUMMEL relies on high-quality materials and innovative technology. In particular when it involves an EMC connection, users can rely on long-lasting protection. Measurements prove that HUMMEL cable glands with a metallic clamp insert provide secure EMC protection even after many years of use.

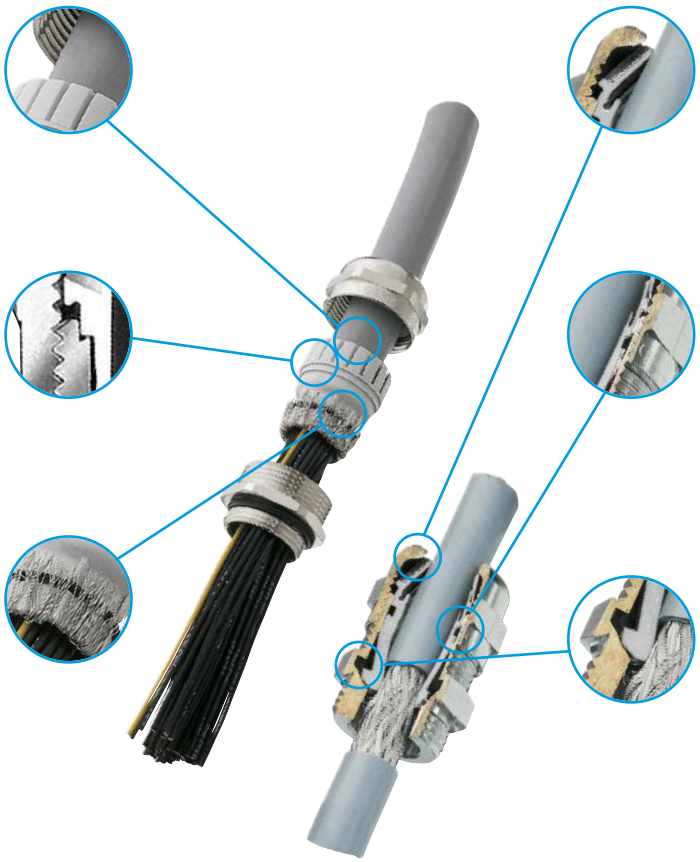
// Conforming to RoHS and REACH / SVHC
// Free of conflict materials
// Halogen- and phospherous-free
// Fire protection class V0 according to UL 94
// Protection IP 66 and IP 68 – 10 bar according to DIN EN 60529
// Protection IP 69K according to DIN 40050-9
// Quick assembly and reliable grounding of shielded cables

HSK-M-EMC

Flexible overlapping clamping splines prevent the form seal from being pulled out of the fitting

The internal sealing edge results in a superior seal between the splined Nylon clamping insert and the nickel plated brass body

Patented 360° grounding due to the internal O-Ring, which results in a perfect contact between braided shield of cable and fitting



HSK-M-EMC-D

Flexible overlapping clamping splines prevent the form seal from being pulled out of the fitting

Metallized spline insert provides electrical conductivity

Flexible contact points allow contact with variable braid diameters

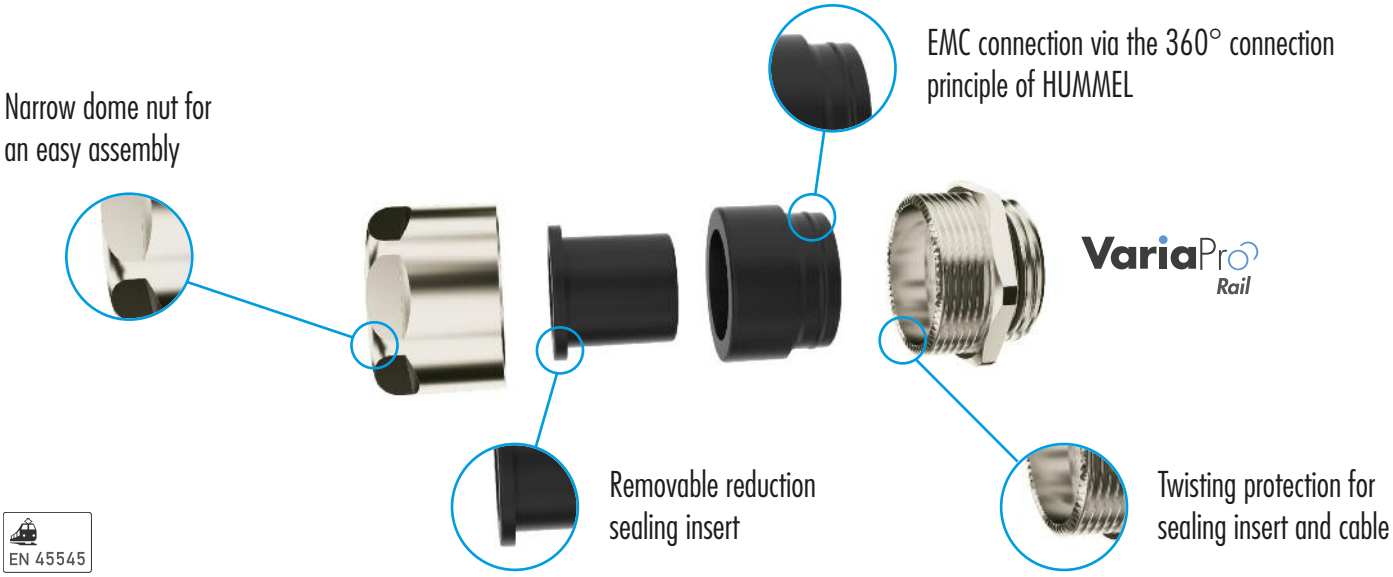
Product from page 51

CABLE GLANDS FOR SPECIAL APPLICATIONS

VariaPro Rail: Meets all requirements for use in rail transportation

VariaPro Rail cable gland has successfully passed the tests of the fire protection standards DIN EN 45545-2 and DIN EN 45545-3. Thus it can be used without restrictions in all trains on the European rail network. The slim structure meets the requirement for a space saving installation. Added to this is the ease of installation of the cable gland.

// EMC connection as standard
// High fire protection
// Seal: EPDM
// Extremely high strain relief
// Big clamping range due to reducers
// No twisting of inserts and cables



VariaPro Temp

VariaPro Temp products have been designed specially for applications under extreme temperature conditions. These cable glands function reliably in a temperature range from -60° to +200° C.

VariaPro FKM

The VariaPro FKM cable glands feature extremely high resistance properties against the influence of chemicals, acids or cleaning agents.

RoHS EMC

Product from page 62

HSK-INOX-HD / HSK-INOX-HD-Pro: Cope with all hygienic requirements

The hygienic design cable glands have been developed for applications with special requirements. They are used in areas where high hygienic standards for cleaning and chemical resistance are demanded. These are areas where deposits of bacteria and microorganisms need to be avoided.

Fields of application

// Food industry
// Pharma / chemical industry
// Biotechnical plants
// Packaging machinery

HSK-INOX-HD-Pro

// EHEDG-certified
// High-pressure tested (IP 69K)
// Free of halogens and phosphate

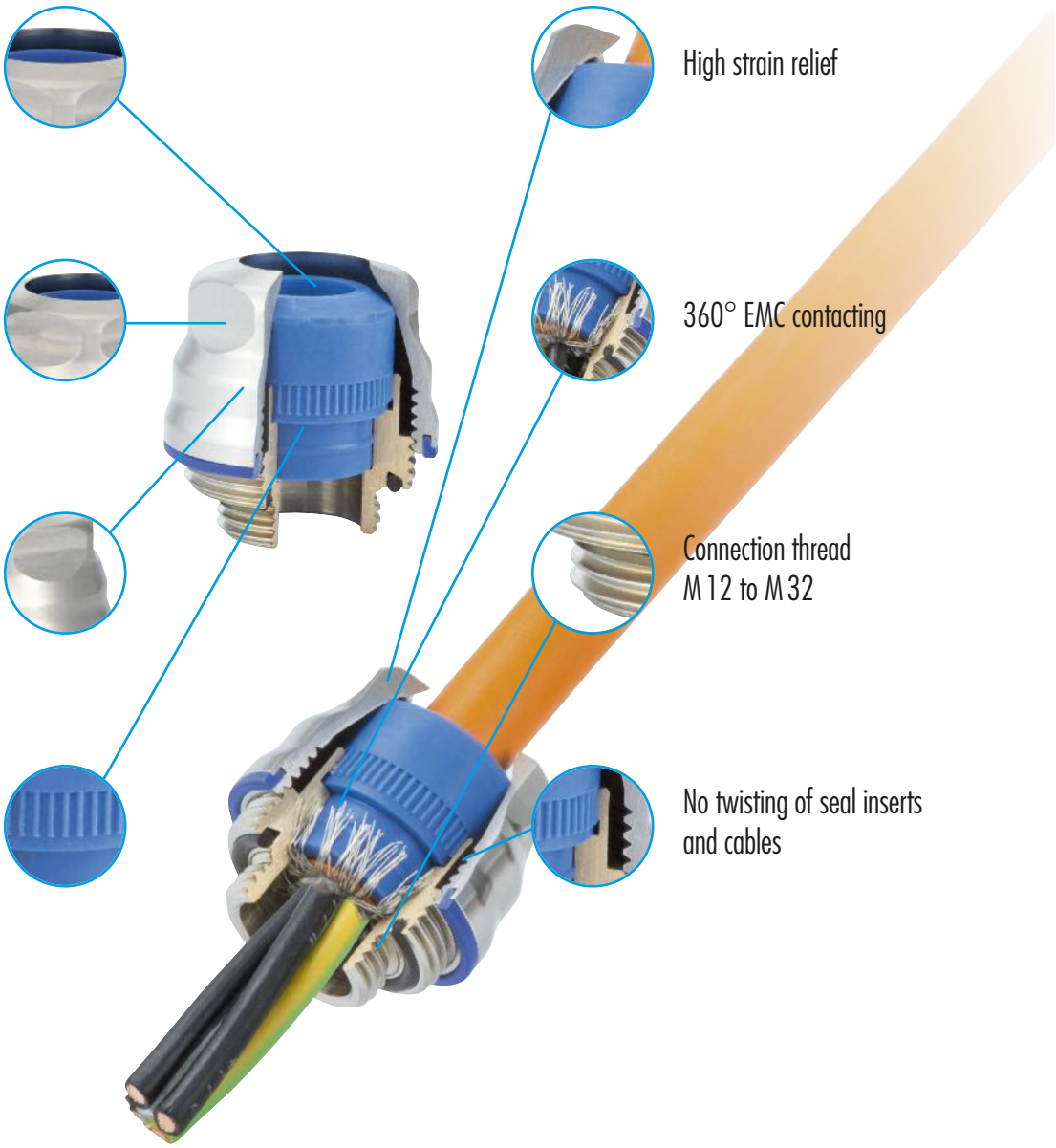
HSK-INOX-HD-Pro

The elastic membrane sealing avoids cable slipping

Easy cleaning, because of missing corners and edges.

Resistant enclosure made of stainless steel (EN 1.4404 / AISI 316L))

High-quality silicone sealing



High strain relief

360° EMC contacting

Connection thread M12 to M32

No twisting of seal inserts and cables

Product on page 66

CABLE GLANDS FOR HAZARDOUS AREAS

Polyamide cable glands for hazardous areas

This cable gland, made of special formulated fibre glass reinforced polyamide has been designed for applications in electrical equipment, which require types of protection Ex e and Ex t according to the latest standards EN 60079-0, 60079-7 and 60079-31 and meets the latest approvals according to ATEX and IECEx.

// Halogen-free
// Protection IP 68 – 10 bar according to DIN EN 60529
// Vibration-protected dome nut
// Wide clamping range
// Applicable up to +85° C (185° F)
// Abrasion resistant marking
// O-Ring as standard
// Applicable in zone 1 – 2 and zone 20 – 22

HSK-K-Ex-Active

Overlapping clamping splines ensure an extremely high integrated strain-relief

Form seal for reliable sealing at protection class IP 68 up to 10 bar

HUMMEL trapezoidal thread for dependable transmission of force between dome nut and gland body

Molded O-Ring groove results in a reliable tightening between gland body and installation

Molded O-Ring groove results in a reliable tightening between gland body and installation

Product from page 104

EXIOS combats even particularly severe environments

EXIOS is at home in areas at risk of explosion, in particularly severe environments. This range of cable glands is used in refineries, chemical plants, in gas distribution and in offshore or marine applications. They meet the highest level of reliability, tension relief and sealing performance. EXIOS is available in all common connection thread types for reinforced and non-reinforced cables.

// EXIOS Standard for reinforced cables in severe environments
// EXIOS MZ with extra tension relief
// EXIOS Barrier with compound cast encapsulation
// EXIOS A2F for non-reinforced cables in explosion areas
// Certified to IECEx and ATEX standards
// Approved for Ex d, Ex e and Ex ta environments
// Material: Brass, nickel-plated brass (INOX upon request)
// Available sizes from M16 to M75

Product from page 141

CABLE PROTECTION SYSTEMS

Reliable protection for cables

Cables and data leads are exposed to very high levels of stress in industrial applications. Heat and cold, tension and pressure, plus abrasion, all damage the leads and can lead to malfunction and production downtime. HUMMEL cable protection conduits offer reliable protection. The cable protection range is as versatile as a chameleon. The polyamide plastic series and metal protection conduits deliver the right solution for every application. A wide selection of fittings makes it easy for planners and designers to find the right solution for every challenge.

Polyamide

// **Polyamide conduit** – the flexible polyamide cable conduit
// **Polyamide fitting** – fittings for polyamide cable protection conduits, appropriate for all installation conditions

Metal

// **Metal conduit** – resilient shaft conduit made of nickel-plated steel
// **Metal fitting** – ideal for all metal protection conduits

// **Metal conduit pro** – multi-layer version for greater demands
// **Metal fitting pro** – fittings for metal conduits in particularly robust applications

PLASTIC CABLE GLANDS

HUMMEL HSK-K series cable glands lie in the premium segment and meet the highest demands for quality and safety. When it comes to fire protection, sealing ability and impact resistance, numerous certifications prove performance at the highest level. HUMMEL customers can rely on this.

In this chapter, you will find:

// HSK-K: Polyamide cable glands
// HSK-K-PVDF: Cable glands for use at high temperatures
// HSK-K-Multi: Glands for applications with several cables
// HSK-K-Flaka: with fitting for flat cables
// HSK-K-Flex: offers bending protection for dynamic applications
// HSK-W: Versions with a folding bracket for mounting with 90° cabling

In each case, HUMMEL offers different clamping areas, thread lengths, thread types and various sealing materials for different temperature ranges. The cable glands have all relevant approvals for international markets and a wide range of sectors.

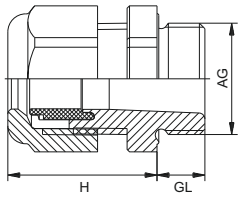
PLASTIC CABLE GLANDS

HSK-K — Metr.

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety „i“

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request

ULfT in black color



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
M 12 x 1,5	3–6,5	8	21	15	1.209.1200.50	1.209.1201.50	1.209.1202.50
M 12 x 1,5	2–5	8	21	15	1.209.1200.51	1.209.1201.51	1.209.1202.51
M 16 x 1,5	4–8	8	22	19	1.209.1600.50	1.209.1601.50	1.209.1602.50
M 16 x 1,5	2–6	8	22	19	1.209.1600.51	1.209.1601.51	1.209.1602.51
M 16 x 1,5	5–10	8	25	22	1.219.1600.50	1.219.1601.50	1.219.1602.50
M 20 x 1,5	6–12	9	27	24	1.209.2000.50	1.209.2001.50	1.209.2002.50
M 20 x 1,5	5–9	9	27	24	1.209.2000.51	1.209.2001.51	1.209.2002.51
M 20 x 1,5	10–14	9	28	27	1.219.2000.50	1.219.2001.50	1.219.2002.50
M 25 x 1,5	13–18	11	31	30	1.219.2500.50	1.219.2501.50	1.219.2502.50
M 25 x 1,5	13–18	11	31	33	1.209.2500.50	1.209.2501.50	1.209.2502.50
M 25 x 1,5	9–16	11	31	33	1.209.2500.51	1.209.2501.51	1.209.2502.51
M 32 x 1,5	15–21	11	39	36	1.219.3200.50	1.219.3201.50	1.219.3202.50
M 32 x 1,5	18–25	11	39	42	1.209.3200.50	1.209.3201.50	1.209.3202.50
M 32 x 1,5	13–20	11	39	42	1.209.3200.51	1.209.3201.51	1.209.3202.51
M 40 x 1,5	19–27	13	47	46	1.219.4000.50	1.219.4001.50	1.219.4002.50
M 40 x 1,5	22–32	13	48	53	1.209.4000.50	1.209.4001.50	1.209.4002.50
M 40 x 1,5	20–26	13	48	53	1.209.4000.51	1.209.4001.51	1.209.4002.51
M 50 x 1,5	32–38	13	49	60	1.209.5000.50	1.209.5001.50	1.209.5002.50
M 50 x 1,5	25–31	13	49	60	1.209.5000.51	1.209.5001.51	1.209.5002.51
M 63 x 1,5	37–44	14	49	65 / 68	1.209.6300.50	1.209.6301.50	1.209.6302.50
M 63 x 1,5	29–35	14	49	65 / 68	1.209.6300.51	1.209.6301.51	1.209.6302.51

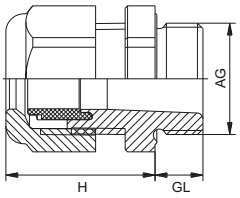
Suitable accessories from page 73

HSK-K — Metr.-elongated

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety „i“

ULft in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
M 12 x 1,5	3–6,5	15	21	15	1.209.1200.30	1.209.1201.30	1.209.1202.30
M 12 x 1,5	2–5	15	21	15	1.209.1200.31	1.209.1201.31	1.209.1202.31
M 16 x 1,5	4–8	15	22	19	1.209.1600.30	1.209.1601.30	1.209.1602.30
M 16 x 1,5	2–6	15	22	19	1.209.1600.31	1.209.1601.31	1.209.1602.31
M 16 x 1,5	5–10	15	25	22	1.219.1600.30	1.219.1601.30	1.219.1602.30
M 20 x 1,5	6–12	15	27	24	1.209.2000.30	1.209.2001.30	1.209.2002.30
M 20 x 1,5	5–9	15	27	24	1.209.2000.31	1.209.2001.31	1.209.2002.31
M 20 x 1,5	10–14	15	28	27	1.219.2000.30	1.219.2001.30	1.219.2002.30
M 25 x 1,5	13–18	15	31	33	1.209.2500.30	1.209.2501.30	1.209.2502.30
M 25 x 1,5	9–16	15	31	33	1.209.2500.31	1.209.2501.31	1.209.2502.31
M 32 x 1,5	18–25	15	39	42	1.209.3200.30	1.209.3201.30	1.209.3202.30
M 32 x 1,5	13–20	15	39	42	1.209.3200.31	1.209.3201.31	1.209.3202.31
M 40 x 1,5	22–32	18	48	53	1.209.4000.30	1.209.4001.30	1.209.4002.30
M 40 x 1,5	20–26	18	48	53	1.209.4000.31	1.209.4001.31	1.209.4002.31
M 50 x 1,5	32–38	18	49	60	1.209.5000.30	1.209.5001.30	1.209.5002.30
M 50 x 1,5	25–31	18	49	60	1.209.5000.31	1.209.5001.31	1.209.5002.31
M 63 x 1,5	37–44	18	49	65 / 68	1.209.6300.30	1.209.6301.30	1.209.6302.30
M 63 x 1,5	29–35	18	49	65 / 68	1.209.6300.31	1.209.6301.31	1.209.6302.31

Suitable accessories from page 73

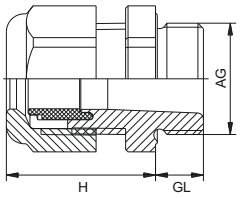
PLASTIC CABLE GLANDS

HSK-K PG

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety „i“

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request

ULft in black color



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
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PG 7	2–5	8	21	15	1.209.0700.15	1.209.0701.15	1.209.0702.15
PG 9	4–8	8	22	19	1.209.0900.14	1.209.0901.14	1.209.0902.14
PG 9	2–6	8	22	19	1.209.0900.15	1.209.0901.15	1.209.0902.15
PG 11	5–10	8	25	22	1.209.1100.14	1.209.1101.14	1.209.1102.14
PG 11	3–7	8	25	22	1.209.1100.15	1.209.1101.15	1.209.1102.15
PG 13,5	6–12	9	27	24	1.209.1300.14	1.209.1301.14	1.209.1302.14
PG 13,5	5–9	9	27	24	1.209.1300.15	1.209.1301.15	1.209.1302.15
PG 16	10–14	10	28	27	1.209.1600.14	1.209.1601.14	1.209.1602.14
PG 16	7–12	10	28	27	1.209.1600.15	1.209.1601.15	1.209.1602.15
PG 21	13–18	11	31	33	1.209.2100.14	1.209.2101.14	1.209.2102.14
PG 21	9–16	11	31	33	1.209.2100.15	1.209.2101.15	1.209.2102.15
PG 29	18–25	11	39	42	1.209.2900.14	1.209.2901.14	1.209.2902.14
PG 29	13–20	11	39	42	1.209.2900.15	1.209.2901.15	1.209.2902.15
PG 36	22–32	13	48	53	1.209.3600.14	1.209.3601.14	1.209.3602.14
PG 36	20–26	13	48	53	1.209.3600.15	1.209.3601.15	1.209.3602.15
PG 42	32–38	13	49	60	1.209.4200.14	1.209.4201.14	1.209.4202.14
PG 42	25–31	13	49	60	1.209.4200.15	1.209.4201.15	1.209.4202.15
PG 48	37–44	14	49	65	1.209.4800.14	1.209.4801.14	1.209.4802.14
PG 48	29–35	14	49	65	1.209.4800.15	1.209.4801.15	1.209.4802.15

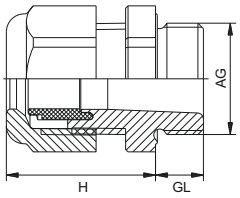
Suitable accessories from page 73

HSK-K — PG-elongated

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety „i“

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request

in black color



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
PG 7	3–6,5	15	21	15	1.209.0700.60	1.209.0701.60	1.209.0702.60
PG 7	2–5	15	21	15	1.209.0700.61	1.209.0701.61	1.209.0702.61
PG 9	4–8	15	22	19	1.209.0900.60	1.209.0901.60	1.209.0902.60
PG 9	2–6	15	22	19	1.209.0900.61	1.209.0901.61	1.209.0902.61
PG 11	5–10	15	25	22	1.209.1100.60	1.209.1101.60	1.209.1102.60
PG 11	3–7	15	25	22	1.209.1100.61	1.209.1101.61	1.209.1102.61
PG 13,5	6–12	15	27	24	1.209.1300.60	1.209.1301.60	1.209.1302.60
PG 13,5	5–9	15	27	24	1.209.1300.61	1.209.1301.61	1.209.1302.61
PG 16	10–14	15	28	27	1.209.1600.60	1.209.1601.60	1.209.1602.60
PG 16	7–12	15	28	27	1.209.1600.61	1.209.1601.61	1.209.1602.61
PG 21	13–18	15	31	33	1.209.2100.60	1.209.2101.60	1.209.2102.60
PG 21	9–16	15	31	33	1.209.2100.61	1.209.2101.61	1.209.2102.61
PG 29	18–25	15	39	42	1.209.2900.60	1.209.2901.60	1.209.2902.60
PG 29	13–20	15	39	42	1.209.2900.61	1.209.2901.61	1.209.2902.61
PG 36	22–32	18	48	53	1.209.3600.60	1.209.3601.60	1.209.3602.60
PG 36	20–26	18	48	53	1.209.3600.61	1.209.3601.61	1.209.3602.61
PG 42	32–38	18	49	60	1.209.4200.60	1.209.4201.60	1.209.4202.60
PG 42	25–31	18	49	60	1.209.4200.61	1.209.4201.61	1.209.4202.61
PG 48	37–44	18	49	65	1.209.4800.60	1.209.4801.60	1.209.4802.60
PG 48	29–35	18	49	65	1.209.4800.61	1.209.4801.61	1.209.4802.61

Suitable accessories from page 73

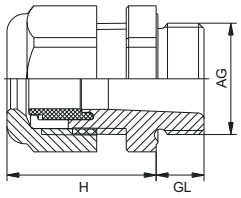
PLASTIC CABLE GLANDS

HSK-K NPT

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety „i“

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request

in black color



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
NPT 3/8"	4–8	15	22	19 / 22	1.209.3800.70	1.209.3801.70	1.209.3802.70
NPT 3/8"	2–6	15	22	19 / 22	1.209.3800.71	1.209.3801.71	1.209.3802.71
NPT 1/2"	6–12	13	27	24	1.209.1200.70	1.209.1201.70	1.209.1202.70
NPT 1/2"	5–9	13	27	24	1.209.1200.71	1.209.1201.71	1.209.1202.71
NPT 1/2" (16)	10–14	13	28	27	1.209.1216.70	1.209.1217.70	1.209.1218.70
NPT 1/2" (16)	7–12	13	28	27	1.209.1216.71	1.209.1217.71	1.209.1218.71
NPT 3/4"	13–18	14	31	33	1.209.3400.70	1.209.3401.70	1.209.3402.70
NPT 3/4"	9–16	14	31	33	1.209.3400.71	1.209.3401.71	1.209.3402.71
NPT 1"	18–25	19	39	42	1.209.1000.70	1.209.1001.70	1.209.1002.70
NPT 1"	13–20	19	39	42	1.209.1000.71	1.209.1001.71	1.209.1002.71
NPT 1 1/4"	18–25	16	39	42 / 46	1.209.5400.70	1.209.5401.70	1.209.5402.70
NPT 1 1/4"	13–20	16	39	42 / 46	1.209.5400.71	1.209.5401.71	1.209.5402.71
NPT 1 1/2"	22–32	20	48	53	1.209.6400.70	1.209.6401.70	1.209.6402.70
NPT 1 1/2"	20–26	20	48	53	1.209.6400.71	1.209.6401.71	1.209.6402.71

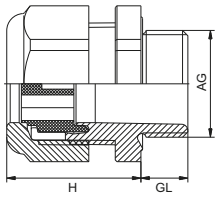
Suitable accessories from page 73

HSK-K-Multi — Metr., PG, NPT

Material	Polyamide V0 according to UL 94
Seal	Elastomer
Protection	IP 65 / IP 68 with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

ULfT in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials and colors upon request
// Elongated threads upon request
// Installation instructions see page 152
// Further seal inserts on page 86 or upon request
// The shown inserts are samples, more inserts (also customer specific) upon request



AG	GL mm	H mm	mm	Number of holes x d	Number grey	Number black	Number of holes x d	Number grey	Number black
M 16 x 1,5	8	22	19	4 x 1,4	1.597.1600.50	1.597.1600.51	2 x 3	1.597.1601.50	1.597.1601.51
M 20 x 1,5	9	27	24	6 x 3	1.597.2001.50	1.597.2001.51	2 x 5	1.597.2003.50	1.597.2003.51
M 25 x 1,5	11	31	33	4 x 6	1.597.2500.50	1.597.2500.51	3 x 7	1.597.2501.50	1.597.2501.51
M 32 x 1,5	11	39	42	6 x 6,5	1.597.3200.50	1.597.3200.51	4 x 9	1.597.3201.50	1.597.3201.51
M 40 x 1,5	13	48	53	7 x 9	1.597.4001.50	1.597.4001.51	2 x 15	1.597.4003.50	1.597.4003.51
M 50 x 1,5	13	49	60		1.597.5099.50	1.597.5099.51			
M 63 x 1,5	14	49	65 / 68	6 x 12	1.597.6301.50	1.597.6301.51	3 x 18	1.597.6302.50	1.597.6302.51
PG 7	8	21	15		1.597.0799.00				
PG 9	8	22	19	4 x 1,4	1.597.0900.00	1.597.0900.01	2 x 3	1.597.0901.00	1.597.0901.01
PG 11	8	25	22	2 x 4	1.597.1102.00	1.597.1102.01	3 x 3	1.597.1101.00	1.597.1101.01
PG 13,5	9	27	24	3 x 4	1.597.1302.00	1.597.1302.01	2 x 5	1.597.1303.00	1.597.1303.01
PG 16	10	28	27	4 x 4	1.597.1602.00	1.597.1602.01	6 x 4	1.597.1604.00	1.597.1604.01
PG 16	10	28	27	3 x 5,6	1.597.1606.00	1.597.1606.01	2 x 6	1.597.1605.00	1.597.1605.01
PG 21	11	31	33	4 x 6	1.597.2100.00	1.597.2100.01	3 x 7	1.597.2101.00	1.597.2101.01
PG 29	11	39	42	6 x 6,5	1.597.2900.00	1.597.2900.01	4 x 9	1.597.2901.00	1.597.2901.01
PG 36	13	48	53	7 x 9	1.597.3601.00	1.597.3601.01	2 x 15	1.597.3603.00	1.597.3603.01
PG 42	13	49	60		1.597.4299.00				
PG 48	14	49	65	6 x 12	1.597.4801.00	1.597.4801.01	3 x 18	1.597.4802.00	1.597.4802.01
NPT 3/8"	15	22	19 / 22	4 x 1,4	1.597.3800.70	1.597.3800.71	2 x 3	1.597.3801.70	1.597.3801.71
NPT 1/2"	13	27	24	3 x 4	1.597.1202.70	1.597.1202.71	2 x 5	1.597.1203.70	1.597.1203.71
NPT 1/2" (16)	13	28	27	6 x 4	1.597.1220.70	1.597.1220.71	2 x 6	1.597.1221.70	1.597.1221.71
NPT 3/4"	14	31	33	4 x 6	1.597.3400.70	1.597.3400.71	3 x 7	1.597.3401.70	1.597.3401.71
NPT 1"	19	39	42	6 x 6,5	1.597.1000.70	1.597.1000.71	4 x 9	1.597.1001.70	1.597.1001.71
NPT 1 1/4"	16	39	42 / 46		1.597.5499.70	1.597.5499.71			
NPT 1 1/2"	20	48	53	5 x 9	1.597.6400.70	1.597.6400.71	7 x 9	1.597.6401.70	1.597.6401.71

Suitable accessories from page 73

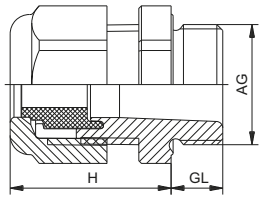
PLASTIC CABLE GLANDS

HSK-K-Flaka — Metr., PG, NPT

Material	Polyamide V0 according to UL 94
Seal	Elastomer
Protection	IP 65 / IP 68 with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

ULfT in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials and colors upon request
// Elongated threads upon request
// Installation instructions see page 152
// The shown inserts are samples, more inserts upon request



AG	GL mm	H mm	mm	Dimensions w x h mm	Number grey	Number black	Dimensions w x h mm	Number grey	Number black
M 20 x 1,5	9	28	27	11,5 x 5	1.587.2016.50	1.587.2016.51	12 x 7	1.587.2017.50	1.587.2017.51
M 20 x 1,5	9	28	27	14 x 6	1.587.2018.50	1.587.2018.51			
M 25 x 1,5	11	31	33	14 x 6	1.587.2500.50	1.587.2500.51	14 x 7	1.587.2501.50	1.587.2501.51
M 32 x 1,5	11	39	42	22 x 8	1.587.3200.50	1.587.3200.51			
M 40 x 1,5	13	48	53	28,5 x 10	1.587.4000.50	1.587.4000.51	29 x 5,5	1.587.4001.50	1.587.4001.51
M 40 x 1,5	13	48	53	30,5 x 12	1.587.4002.50	1.587.4002.51	31 x 7,5	1.587.4003.50	1.587.4003.51
M 50 x 1,5	13	49	60	33,5 x 11,5	1.587.5000.50	1.587.5000.51			
M 63 x 1,5	14	49	65 / 68	38 x 12	1.587.6300.50	1.587.6301.51			
PG 16	10	28	27	11,5 x 5	1.587.1600.00	1.587.1600.01	12 x 7	1.587.1601.00	1.587.1601.01
PG 16	10	28	27	14 x 6	1.587.1602.00	1.587.1602.01			
PG 21	11	31	33	14 x 6	1.587.2100.00	1.587.2100.01	14 x 7	1.587.2101.00	1.587.2101.01
PG 29	11	39	42	22 x 8	1.587.2900.00	1.587.2900.01			
PG 36	13	48	53	28,5 x 10	1.587.3600.00	1.587.3600.01	29 x 5,5	1.587.3601.00	1.587.3601.01
PG 36	13	48	53	30,5 x 12	1.587.3602.00	1.587.3602.01	31 x 7,5	1.587.3603.00	1.587.3603.01
PG 42	13	49	60	33,5 x 11,5	1.587.4200.00	1.587.4200.01			
PG 48	14	49	65	38 x 12	1.587.4800.00	1.587.4800.01			
NPT 1/2" (16)	13	28	27	11,5 x 5,5	1.587.1216.70	1.587.1216.71	12 x 7	1.587.1217.70	1.587.1217.71
NPT 1/2" (16)	13	28	27	14 x 6	1.587.1218.70	1.587.1218.71			
NPT 3/4"	14	31	33	14 x 6	1.587.3400.70	1.587.3400.71			
NPT 1"	19	39	42	22 x 8	1.587.1000.70	1.587.1000.71			
NPT 1 1/4"	16	39	42 / 46	22 x 8	1.587.5400.70	1.587.5400.71			
NPT 1 1/2"	20	48	53	28,5 x 10	1.587.6400.70	1.587.6400.71	29 x 5,5	1.587.6401.70	1.587.6401.71
NPT 1 1/2"	20	48	53	30,5 x 12	1.587.6402.70	1.587.6402.71	31 x 7,5	1.587.6403.70	1.587.6403.71

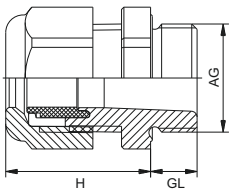
Suitable accessories from page 73

HSK-K-PVDF

Metr.

Material	PVDF V0 according to UL 94
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-35 °C – 150 °C (-31 °F – 302 °F)
Colors	nature

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	3–6,5	8	21	15	1.299.1200.50
M 12 x 1,5	2–5	8	21	15	1.299.1200.51
M 16 x 1,5	4–8	8	22	19	1.299.1600.50
M 16 x 1,5	2–6	8	22	19	1.299.1600.51
M 20 x 1,5	6–12	9	27	24	1.299.2000.50
M 20 x 1,5	5–9	9	27	24	1.299.2000.51
M 25 x 1,5	13–18	11	31	33	1.299.2500.50
M 25 x 1,5	9–16	11	31	33	1.299.2500.51
M 32 x 1,5	18–25	11	39	42	1.299.3200.50
M 32 x 1,5	13–20	11	39	42	1.299.3200.51

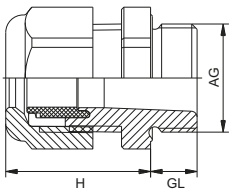
Suitable accessories from page 73

PLASTIC CABLE GLANDS

HSK-K-PVDF PG

Material	PVDF V0 according to UL 94
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-35 °C – 150 °C (-31 °F – 302 °F)
Colors	nature

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



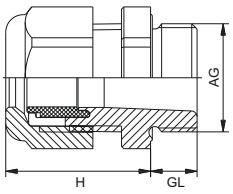
AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	3–6,5	8	21	15	1.299.0700.14
PG 7	2–5	8	21	15	1.299.0700.15
PG 9	4–8	8	22	19	1.299.0900.14
PG 9	2–6	8	22	19	1.299.0900.15
PG 11	5–10	8	25	22	1.299.1100.14
PG 11	3–7	8	25	22	1.299.1100.15
PG 13,5	6–12	9	27	24	1.299.1300.14
PG 13,5	5–9	9	27	24	1.299.1300.15
PG 16	10–14	10	28	27	1.299.1600.14
PG 16	7–12	10	28	27	1.299.1600.15
PG 21	13–18	11	31	33	1.299.2100.14
PG 21	9–16	11	31	33	1.299.2100.15
PG 29	18–25	11	39	42	1.299.2900.14
PG 29	13–20	11	39	42	1.299.2900.15
PG 36	22–32	13	48	53	1.299.3600.14
PG 36	20–26	13	48	53	1.299.3600.15
PG 42	32–38	13	49	60	1.299.4200.14
PG 42	25–31	13	49	60	1.299.4200.15
PG 48	37–44	14	49	65	1.299.4800.14
PG 48	29–35	14	49	65	1.299.4800.15

Suitable accessories from page 73

HSK-K-PVDF NPT

Material	PVDF V0 nach UL 94
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-35 °C – 150 °C (-31 °F – 302 °F)
Colors	nature

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	GL mm	H mm	mm	Number
NPT 3/8"	4 – 8	15	22	19 / 22	1.299.3800.70
NPT 3/8"	2–6	15	22	19 / 22	1.299.3800.71
NPT 1/2"	6–12	13	27	24	1.299.1200.70
NPT 1/2"	5–9	13	27	24	1.299.1200.71
NPT 1/2" (16)	10–14	13	28	27	1.299.1216.70
NPT 1/2" (16)	7–12	13	28	27	1.299.1216.71
NPT 3/4"	13–18	14	31	33	1.299.3400.70
NPT 3/4"	9–16	14	31	33	1.299.3400.71

Suitable accessories from page 73

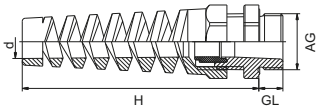
PLASTIC CABLE GLANDS

HSK-K-Flex — Metr., Metr.-elongated

Material	Polyamide
Seal	NBR
Protection	IP 68 – 10 bar / IP 69K with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

ULFT in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	d mm	H mm	mm	GL mm	Number grey	Number black	GL mm	Number grey elelongated	Number black elongated
M 12 x 1,5	3–6,5	7	54	15	8	1.293.1200.50	1.293.1201.50	15	1.293.1200.30	1.293.1201.30
M 12 x 1,5	2–5	7	54	15	8	1.293.1200.51	1.293.1201.51	15	1.293.1200.31	1.293.1201.31
M 16 x 1,5	4–8	8,5	63	19	8	1.293.1600.50	1.293.1601.50	15	1.293.1600.30	1.293.1601.30
M 16 x 1,5	2–6	8,5	63	19	8	1.293.1600.51	1.293.1601.51	15	1.293.1600.31	1.293.1601.31
M 16 x 1,5	5–10	10,5	78	22	8	1.294.1600.50	1.294.1601.50	15	1.294.1600.30	1.294.1601.30
M 16 x 1,5	3–7	10,5	78	22	8	1.294.1600.51	1.294.1601.51	15	1.294.1600.31	1.294.1601.31
M 20 x 1,5	6–12	13	90	24	9	1.293.2000.50	1.293.2001.50	15	1.293.2000.30	1.293.2001.30
M 20 x 1,5	5–9	13	90	24	9	1.293.2000.51	1.293.2001.51	15	1.293.2000.31	1.293.2001.31
M 20 x 1,5	10–14	15,5	100	27	9	1.294.2000.50	1.294.2001.50	15	1.294.2000.30	1.294.2001.30
M 20 x 1,5	7–12	15,5	100	27	9	1.294.2000.51	1.294.2001.51	15	1.294.2000.31	1.294.2001.31
M 25 x 1,5	13–18	20	114	33	11	1.293.2500.50	1.293.2501.50	15	1.293.2500.30	1.293.2501.30
M 25 x 1,5	9–16	20	114	33	11	1.293.2500.51	1.293.2501.51	15	1.293.2500.31	1.293.2501.31

Suitable accessories from page 73

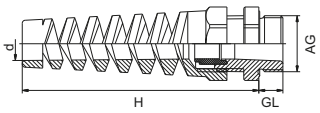
HSK-K-Flex

PG, PG-elongated, NPT

Material	Polyamide
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K with additional O-Ring
Operating Temperature	-40 °C – 100 °C
Colors	grey (RAL 7035), black (RAL 9005)

ULft in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	d mm	H mm	mm	GL mm	Number grey	Number black	GL mm	Number grey elongated	Number black elongated
PG 7*	3–6,5	7	54	15	8	1.293.0700.14	1.293.0701.14	15	1.293.0700.60	1.293.0701.60
PG 7*	2–5	7	54	15	8	1.293.0700.15	1.293.0701.15	15	1.293.0700.61	1.293.0701.61
PG 9*	4–8	8,5	63	19	8	1.293.0900.14	1.293.0901.14	15	1.293.0900.60	1.293.0901.60
PG 9*	2–6	8,5	63	19	8	1.293.0900.15	1.293.0901.15	15	1.293.0900.61	1.293.0901.61
PG 11*	5–10	10,5	78	22	8	1.293.1100.14	1.293.1101.14	15	1.293.1100.60	1.293.1101.60
PG 11*	3–7	10,5	78	22	8	1.293.1100.15	1.293.1101.15	15	1.293.1100.61	1.293.1101.61
PG 13,5*	6–12	13	90	24	9	1.293.1300.14	1.293.1301.14	15	1.293.1300.60	1.293.1301.60
PG 13,5*	5–9	13	90	24	9	1.293.1300.15	1.293.1301.15	15	1.293.1300.61	1.293.1301.61
PG 16*	10–14	15,5	100	27	10	1.293.1600.14	1.293.1601.14	15	1.293.1600.60	1.293.1601.60
PG 16*	7–12	15,5	100	27	10	1.293.1600.15	1.293.1601.15	15	1.293.1600.61	1.293.1601.61
PG 21*	13–18	20	114	33	11	1.293.2100.14	1.293.2101.14	15	1.293.2100.60	1.293.2101.60
PG 21*	9–16	20	114	33	11	1.293.2100.15	1.293.2101.15	15	1.293.2100.61	1.293.2101.61
NPT 3/8"	4–8	8,5	63	22 / 19	15	1.293.3800.70	1.293.3801.70			
NPT 3/8"	2–6	8,5	63	22 / 19	15	1.293.3800.71	1.293.3801.71			
NPT 1/2"	6–12	13	90	24	13	1.293.1200.70	1.293.1201.70			
NPT 1/2"	5–9	13	90	24	13	1.293.1200.71	1.293.1201.71			
NPT 1/2" (16)	10–14	15,5	100	27	13	1.293.1216.70	1.293.1217.70			
NPT 1/2" (16)	7–12	15,5	100	27	13	1.293.1216.71	1.293.1217.71			
NPT 3/4"	13–18	20	114	33	14	1.293.3400.70	1.293.3401.70			
NPT 3/4"	9–16	20	114	33	14	1.293.3400.71	1.293.3401.71			

* Also available as KE-Flex with enlarged clamping range and as KR-Flex with reduced clamping range, see clamping range page 29

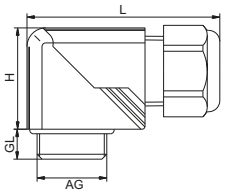
Suitable accessories from page 73

PLASTIC CABLE GLANDS

HSK-W — Metr.

// Other sealing materials e.g. silicone upon request
// Other colors upon request

Material	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

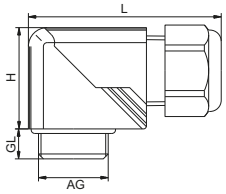


AG	⌀ mm	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
M 16 x 1,5	4–8	8	23	45	5	19	1.313.1600.50	1.313.1601.50
M 16 x 1,5	2–6	8	23	45	5	19	1.313.1600.51	1.313.1601.51
M 20 x 1,5	6–12	9	30,5	57	7	24	1.313.2000.50	1.313.2001.50
M 20 x 1,5	5–9	9	30,5	57	7	24	1.313.2000.51	1.313.2001.51
M 25 x 1,5	13–18	11	40	73	10	33	1.313.2500.50	1.313.2501.50
M 25 x 1,5	9–16	11	40	73	10	33	1.313.2500.51	1.313.2501.51
M 32 x 1,5	18–25	11	51,5	91	14	42	1.313.3200.50	1.313.3201.50
M 32 x 1,5	13–20	11	51,5	91	14	42	1.313.3200.51	1.313.3201.51

HSK-W — NPT

// Glands not fitted with O-Rings
// Other sealing materials e.g. silicone upon request
// Other colors upon request

Material	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)



AG	⌀ mm	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
NPT 3/8"	4–8	15	23	45	5	19	1.313.3800.70	1.313.3801.70
NPT 3/8"	2–6	15	23	45	5	19	1.313.3800.71	1.313.3801.71
NPT 1/2"	6–12	13	32,5	57	7	24	1.313.1200.70	1.313.1201.70
NPT 1/2"	5–9	13	32,5	57	7	24	1.313.1200.71	1.313.1201.71
NPT 1/2" (16)	10–14	13	31,5	59	8	27	1.313.1216.70	1.313.1217.70
NPT 1/2" (16)	7–12	13	31,5	59	8	27	1.313.1216.71	1.313.1217.71
NPT 3/4"	13–18	13	40	73	10	33	1.313.3400.70	1.313.3401.70
NPT 3/4"	9–16	13	40	73	10	33	1.313.3400.71	1.313.3401.71
NPT 1"	18–25	19	51,5	91	14	42	1.313.1000.70	1.313.1001.70
NPT 1"	13–20	19	51,5	91	14	42	1.313.1000.71	1.313.1001.71

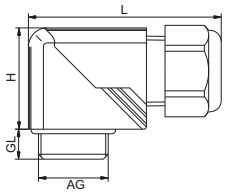
Suitable accessories from page 73

HSK-W

PG

// Other sealing materials e.g. silicone upon request
// Other colors upon request

Material	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)



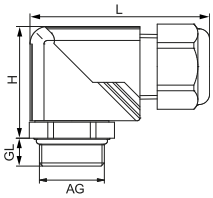
AG	⌀ mm	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
PG 9	4–8	8	23	45	5	19	1.313.0900.14	1.313.0901.14
PG 9	2–6	8	23	45	5	19	1.313.0900.15	1.313.0901.15
PG 11	5–10	8	27	50	6	22	1.313.1100.14	1.313.1101.14
PG 11	3–7	8	27	50	6	22	1.313.1100.15	1.313.1101.15
PG 13,5	6–12	9	30,5	57	7	24	1.313.1300.14	1.313.1301.14
PG 13,5	5–9	9	30,5	57	7	24	1.313.1300.15	1.313.1301.15
PG 16	10–14	10	32,5	59	8	27	1.313.1600.14	1.313.1601.14
PG 16	7–12	10	32,5	59	8	27	1.313.1600.15	1.313.1601.15
PG 21	13–18	11	40	73	10	33	1.313.2100.14	1.313.2101.14
PG 21	9–16	11	40	73	10	33	1.313.2100.15	1.313.2101.15
PG 29	18–25	11	51,5	91	14	42	1.313.2900.14	1.313.2901.14
PG 29	13–20	11	51,5	91	14	42	1.313.2900.15	1.313.2901.15

HSK-W rotating version

PG

// Other sealing materials e.g. silicone upon request
// Other colors upon request

Material	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)



AG	⌀ mm	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
PG 9	4–8	8	28	45	5	19	1.317.0900.14	1.317.0901.14
PG 9	2–6	8	28	45	5	19	1.317.0900.15	1.317.0901.15
PG 11	5–10	8	32	50	6	22	1.317.1100.14	1.317.1101.14
PG 11	3–7	8	32	50	6	22	1.317.1100.15	1.317.1101.15
PG 13,5	6–12	9	35,5	57	7	24	1.317.1300.14	1.317.1301.14
PG 13,5	5–9	9	35,5	57	7	24	1.317.1300.15	1.317.1301.15
PG 16	10–14	10	38,5	59	8	27	1.317.1600.14	1.317.1601.14
PG 16	7–12	11	46	73	10	33	1.317.1600.15	1.317.1601.15
PG 21	13–18	11	46	73	10	33	1.317.2100.14	1.317.2101.14
PG 21	9–16	11	46	73	10	33	1.317.2100.15	1.317.2101.15

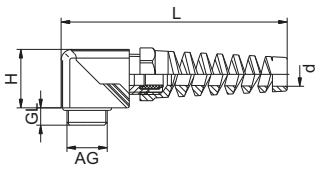
Suitable accessories from page 73

PLASTIC CABLE GLANDS

HSK-W-Flex — Metr., PG, NPT

Material	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

// Other sealing materials e.g. silicone upon request
// Other colors upon request



AG	⌀ mm	d mm	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
M 16 x 1,5	4–8	8,5	8	23	85	5	19	1.314.1600.50	1.314.1601.50
M 16 x 1,5	2–6	8,5	8	23	85	5	19	1.314.1600.51	1.314.1601.51
M 20 x 1,5	6–12	13	9	30,5	119	7	24	1.314.2000.50	1.314.2001.50
M 20 x 1,5	5–9	13	9	30,5	119	7	24	1.314.2000.51	1.314.2001.51
M 25 x 1,5	13–18	20	11	40	156	10	33	1.314.2500.50	1.314.2501.50
M 25 x 1,5	9–16	20	11	40	156	10	33	1.314.2500.51	1.314.2501.51
PG 9	4–8	8,5	8	23	85	5	19	1.314.0900.14	1.314.0901.14
PG 9	2–6	8,5	8	23	85	5	19	1.314.0900.15	1.314.0901.15
PG 11	5–10	10,5	8	27	103	6	22	1.314.1100.14	1.314.1101.14
PG 11	3–7	10,5	8	27	103	6	22	1.314.1100.15	1.314.1101.15
PG 13,5	6–12	13	9	30,5	119	7	24	1.314.1300.14	1.314.1301.14
PG 13,5	5–9	13	9	30,5	119	7	24	1.314.1300.15	1.314.1301.15
PG 16	10–14	15,5	10	32,5	130	8	27	1.314.1600.14	1.314.1601.14
PG 16	7–12	15,5	10	32,5	130	8	27	1.314.1600.15	1.314.1601.15
PG 21	13–18	20	11	40	156	10	33	1.314.2100.14	1.314.2101.14
PG 21	9–16	20	11	40	156	10	33	1.314.2100.15	1.314.2101.15
NPT 3/8"	4–8	8,5	15	23	85	5	19	1.314.3800.70	1.314.3801.70
NPT 3/8"	2–6	8,5	15	23	85	5	19	1.314.3800.71	1.314.3801.71
NPT 1/2"	6–12	13	13	30,5	119	7	24	1.314.1200.70	1.314.1201.70
NPT 1/2"	5–9	13	13	30,5	119	7	24	1.314.1200.71	1.314.1201.71
NPT 1/2" (16)	10–14	15,5	13	31,5	130	8	27	1.314.1216.70	1.314.1217.70
NPT 1/2" (16)	7–12	15,5	13	31,5	130	8	27	1.314.1216.71	1.314.1217.71
NPT 3/4"	13–18	20	13	40	156	10	33	1.314.3400.70	1.314.3401.70
NPT 3/4"	9–16	20	13	40	156	10	33	1.314.3400.71	1.314.3401.71

Suitable accessories from page 73

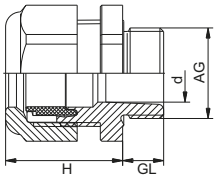
HSK-KE

PG

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

ULfl in black color

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials and colors upon request



AG	⌀ mm	d mm	GL mm	H mm	mm	Number grey	Number black
PG 7	4–8	7	8	22	19	1.590.0700.14	1.590.0701.14
PG 7	2–6	7	8	22	19	1.590.0700.15	1.590.0701.15
PG 9	5–10	9	8	25	22	1.590.0900.14	1.590.0901.14
PG 9	3–7	9	8	25	22	1.590.0900.15	1.590.0901.15
PG 11	6–12	10,5	8	24	24	1.590.1100.14	1.590.1101.14
PG 11	5–9	10,5	8	24	24	1.590.1100.15	1.590.1101.15
PG 13,5	10–14	12,5	9	28	27	1.590.1300.14	1.590.1301.14
PG 13,5	7–12	12,5	9	28	27	1.590.1300.15	1.590.1301.15
PG 16	13–18	15	10	31	33	1.590.1600.14	1.590.1601.14
PG 16	9–16	15	10	31	33	1.590.1600.15	1.590.1601.15

Suitable accessories from page 73

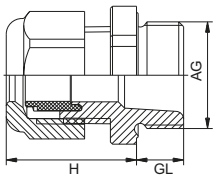
PLASTIC CABLE GLANDS

HSK-KR PG

Material	Polyamide V0 according to UL 94
Seal	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) with additional O-Ring
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

// With additional pre-assembled O-Ring upon request
// Suitable O-Ring on page 88
// Other sealing materials and colors upon request

in black color



AG	⌀ mm	GL mm	H mm	mm	Number grey	Number black
PG 9	3–6,5	8	21	19	1.591.0900.14	1.591.0901.14
PG 9	2–5	8	21	19	1.591.0900.15	1.591.0901.15
PG 11	4–8	8	22	22	1.591.1100.14	1.591.1101.14
PG 11	2–6	8	22	22	1.591.1100.15	1.591.1101.15
PG 13,5	5–10	9	25	24	1.591.1300.14	1.591.1301.14
PG 13,5	3–7	9	25	24	1.591.1300.15	1.591.1301.15
PG 16	6–12	10	27	27	1.591.1600.14	1.591.1601.14
PG 16	5–9	10	27	27	1.591.1600.15	1.591.1601.15
PG 21	10–14	11	28	33	1.591.2100.14	1.591.2101.14
PG 21	7–12	11	28	33	1.591.2100.15	1.591.2101.15

Suitable accessories from page 73

METAL CABLE GLANDS

Brass (nickel-plated) and stainless steel cable glands are very robust and generally suitable for industrial applications. The HSK series offers a huge range of solutions - for common, and also very unusual, applications. Uncompromising use of high-quality materials ensures the outstanding quality of HUMMEL products.

In this chapter, you will find:

// HSK-M: Nickel-plated brass cable glands
// HSK-INOX: Stainless steel cable glands in a range of variants
// HSK-M-Multi: Glands for applications with several cables
// HSK-M-Flaka: Variants for applications with flat cables
// HSK-M-Flex: with bending protection
// HSK-Mini: for threads smaller than M12
// HSK-XL: Cable glands with threads from M63 to M110
// HSK-MZ: Additional clamping for particularly high tension relief

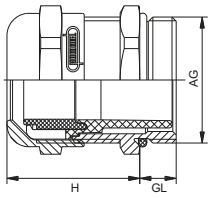
In each case, HUMMEL offers different clamping areas, thread lengths, thread types and various sealing materials for different temperature ranges. The cable glands have all relevant approvals for international markets and a wide range of sectors.

METAL CABLE GLANDS

HSK-M / HSK-M-PVDF — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Formdichtung	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request
// Please see page 45 for size < M 12 and > M 63



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
M 12 x 1,5	3–6,5	6,5	19	14	1.609.1200.50	1.699.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.609.1200.51	1.699.1200.51
M 16 x 1,5	4–8	6	21	17 / 19	1.609.1600.50	1.699.1600.50
M 16 x 1,5	2–6	6	21	17 / 19	1.609.1600.51	1.699.1600.51
M 16 x 1,5	5–10	6	22	20	1.609.1611.50	1.699.1611.50
M 20 x 1,5	6–12	6	23	22	1.609.2000.50	1.699.2000.50
M 20 x 1,5	5–9	6	23	22	1.609.2000.51	1.699.2000.51
M 20 x 1,5	10–14	6	24	24	1.609.2016.50	1.699.2016.50
M 25 x 1,5	13–18	7	26	30	1.609.2500.50	1.699.2500.50
M 25 x 1,5	9–16	7	26	30	1.609.2500.51	1.699.2500.51
M 32 x 1,5	18–25	8	31	40	1.609.3200.50	1.699.3200.50
M 32 x 1,5	13–20	8	31	40	1.609.3200.51	1.699.3200.51
M 32 x 1,5	15–21	8	33	36	1.609.3200.52	
M 40 x 1,5	22–32	8	37	50	1.609.4000.50	1.699.4000.50
M 40 x 1,5	20–26	8	37	50	1.609.4000.51	1.699.4000.51
M 40 x 1,5	19–27	8	33	46	1.609.4000.52	
M 50 x 1,5	32–38	9	37	57	1.609.5000.50	
M 50 x 1,5	25–31	9	37	57	1.609.5000.51	
M 63 x 1,5	37–44	10	38	64 / 68	1.609.6300.50	
M 63 x 1,5	29–35	10	38	64 / 68	1.609.6300.51	

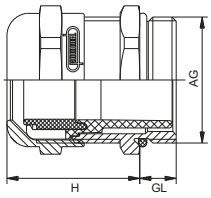
Suitable accessories from page 73

HSK-M / HSK-M-PVDF

Metr.-elongated

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request
// Please see page 45 for size < M 12 and > M 63



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
M 12 x 1,5	3–6,5	10	19	14	1.609.1200.30	1.699.1200.30
M 12 x 1,5	2–5	10	19	14	1.609.1200.31	1.699.1200.31
M 16 x 1,5	4–8	10	21	17 / 19	1.609.1600.30	1.699.1600.30
M 16 x 1,5	2–6	10	21	17 / 19	1.609.1600.31	1.699.1600.31
M 16 x 1,5	5–10	10	22	20	1.609.1611.30	1.699.1611.30
M 20 x 1,5	6–12	10	23	22	1.609.2000.30	1.699.2000.30
M 20 x 1,5	5–9	10	23	22	1.609.2000.31	1.699.2000.31
M 20 x 1,5	10–14	10	24	24	1.609.2016.30	1.699.2016.30
M 25 x 1,5	13–18	12	26	30	1.609.2500.30	1.699.2500.30
M 25 x 1,5	9–16	12	26	30	1.609.2500.31	1.699.2500.31
M 32 x 1,5	18–25	12	31	40	1.609.3200.30	1.699.3200.30
M 32 x 1,5	13–20	12	31	40	1.609.3200.31	1.699.3200.31
M 32 x 1,5	15–21	12	37	36	1.609.3200.32	
M 40 x 1,5	22–32	15	37	50	1.609.4000.30	1.699.4000.30
M 40 x 1,5	20–26	15	37	50	1.609.4000.31	1.699.4000.31
M 40 x 1,5	19–27	15	37	46	1.609.4000.32	
M 50 x 1,5	32–38	15	37	57	1.609.5000.30	
M 50 x 1,5	25–31	15	37	57	1.609.5000.31	
M 63 x 1,5	37–44	15	38	64 / 68	1.609.6300.30	
M 63 x 1,5	29–35	15	38	64 / 68	1.609.6300.31	

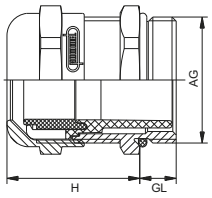
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-M / HSK-M-PVDF — PG

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
PG 7	3–6,5	5	19	14	1.609.0700.01	1.699.0700.01
PG 7	2–5	5	19	14	1.609.0700.15	1.699.0700.15
PG 9	4–8	6	21	17	1.609.0900.01	1.699.0900.01
PG 9	2–6	6	21	17	1.609.0900.15	1.699.0900.15
PG 11	5–10	6	22	20	1.609.1100.01	1.699.1100.01
PG 11	3–7	6	22	20	1.609.1100.15	1.699.1100.15
PG 13,5	6–12	6,5	24	22	1.609.1300.01	1.699.1300.01
PG 13,5	5–9	6,5	24	22	1.609.1300.15	1.699.1300.15
PG 16	10–14	6,5	23	24	1.609.1600.01	1.699.1600.01
PG 16	7–12	6,5	23	24	1.609.1600.15	1.699.1600.15
PG 21	13–18	7	24	30	1.609.2100.01	1.699.2100.01
PG 21	9–16	7	24	30	1.609.2100.15	1.699.2100.15
PG 29	18–25	8	29	40	1.609.2900.01	1.699.2900.01
PG 29	13–20	8	29	40	1.609.2900.15	1.699.2900.15
PG 36	22–32	8	35	50	1.609.3600.01	1.699.3600.01
PG 36	20–26	8	35	50	1.609.3600.15	1.699.3600.15
PG 42	32–38	9	37	57	1.609.4200.01	1.699.4200.01
PG 42	25–31	9	37	57	1.609.4200.15	1.699.4200.15
PG 48	37–44	10	38	64	1.609.4800.01	1.699.4800.01
PG 48	29–35	10	38	64	1.609.4800.15	1.699.4800.15

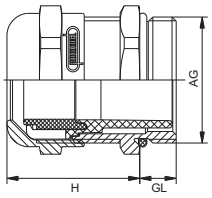
Suitable accessories from page 73

HSK-M / HSK-M-PVDF

PG-elongated

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
PG 7	3–6,5	10	19	14	1.609.0700.60	1.699.0700.60
PG 7	2–5	10	19	14	1.609.0700.61	1.699.0700.61
PG 9	4–8	10	21	17	1.609.0900.60	1.699.0900.60
PG 9	2–6	10	21	17	1.609.0900.61	1.699.0900.61
PG 11	5–10	10	22	20	1.609.1100.60	1.699.1100.60
PG 11	3–7	10	22	20	1.609.1100.61	1.699.1100.61
PG 13,5	6–12	10	24	22	1.609.1300.60	1.699.1300.60
PG 13,5	5–9	10	24	22	1.609.1300.61	1.699.1300.61
PG 16	10–14	10	23	24	1.609.1600.60	1.699.1600.60
PG 16	7–12	10	23	24	1.609.1600.61	1.699.1600.61
PG 21	13–18	12	24	30	1.609.2100.60	1.699.2100.60
PG 21	9–16	12	24	30	1.609.2100.61	1.699.2100.61
PG 29	18–25	12	29	40	1.609.2900.60	1.699.2900.60
PG 29	13–20	12	29	40	1.609.2900.61	1.699.2900.61
PG 36	22–32	15	35	50	1.609.3600.60	1.699.3600.60
PG 36	20–26	15	35	50	1.609.3600.61	1.699.3600.61
PG 42	32–38	15	37	57	1.609.4200.60	1.699.4200.60
PG 42	25–31	15	37	57	1.609.4200.61	1.699.4200.61
PG 48	37–44	15	38	64	1.609.4800.60	1.699.4800.60
PG 48	29–35	15	38	64	1.609.4800.61	1.699.4800.61

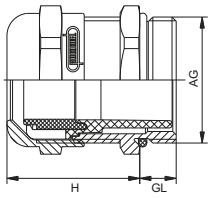
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-M / HSK-M-PVDF — NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M -40 °C – 100 °C	Number HSK-M-PVDF -35 °C – 150 °C
NPT 3/8"	4–8	15	21	17 / 19	1.609.3800.70	1.699.3800.70
NPT 3/8"	2–6	15	21	17 / 19	1.609.3800.71	1.699.3800.71
NPT 1/2"	6–12	13	24	22 / 24	1.609.1200.70	1.699.1200.70
NPT 1/2"	5–9	13	24	22 / 24	1.609.1200.71	1.699.1200.71
NPT 3/4"	13–18	13	25	30	1.609.3400.70	1.699.3400.70
NPT 3/4"	9–16	13	25	30	1.609.3400.71	1.699.3400.71
NPT 1"	18–25	19	29	40	1.609.1000.70	
NPT 1"	13–20	19	29	40	1.609.1000.71	

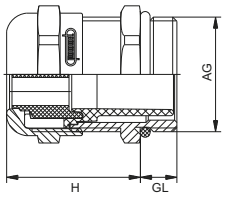
Suitable accessories from page 73

HSK-M-Multi

Metr., PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Elastomer
O-Ring	Buna-N
Protection	IP 65 / IP 68 10 bar possible with ideal fit
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request
// INOX upon request
// Elongated threads upon request
// Installation instructions see page 152
// The inserts shown are samples, more seal inserts on page 86 or upon request



AG	GL mm	H mm	mm	Number of holes x d	Number	Number of holes x d	Number
M 12 x 1,5	6,5	19	14		1.697.1299.50		
M 16 x 1,5	6	21	17 / 19	4 x 1,4	1.697.1600.50	2 x 3	1.697.1601.50
M 20 x 1,5	6	23	22	6 x 3	1.697.2001.50	2 x 5	1.697.2003.50
M 25 x 1,5	7	26	30	4 x 6	1.697.2500.50	3 x 7	1.697.2501.50
M 32 x 1,5	8	31	40	6 x 6,5	1.697.3200.50	4 x 9	1.697.3201.50
M 40 x 1,5	8	37	50	7 x 9	1.697.4001.50	2 x 15	1.697.4003.50
M 50 x 1,5	9	37	57		1.697.5099.50		
M 63 x 1,5	10	38	64 / 68	6 x 12	1.697.6301.50	3 x 18	1.697.6302.50
PG 7	5	19	14		1.697.0799.01		
PG 9	6	21	17	4 x 1,4	1.697.0900.01	2 x 3	1.697.0901.01
PG 11	6	22	20	2 x 4	1.697.1102.01	3 x 3	1.697.1101.01
PG 13,5	6,5	24	22	3 x 4	1.697.1302.01	2 x 5	1.697.1303.01
PG 16	6,5	23	24	4 x 4	1.697.1602.01	6 x 4	1.697.1604.01
PG 16	6,5	23	24	3 x 5,6	1.697.1606.01	2 x 6	1.697.1605.01
PG 21	7	24	30	4 x 6	1.697.2100.01	3 x 7	1.697.2101.01
PG 29	8	29	40	6 x 6,5	1.697.2900.01	4 x 9	1.697.2901.01
PG 36	8	35	50	7 x 9	1.697.3601.01	2 x 15	1.697.3603.01
PG 42	9	37	57		1.697.4299.01		
PG 48	10	38	64	6 x 12	1.697.4801.01	3 x 18	1.697.4802.01
NPT 3/8"	15	21	17 / 19	4 x 1,4	1.697.3800.70	2 x 3	1.697.3801.70
NPT 1/2"	13	24	24	3 x 4	1.697.1202.70	2 x 5	1.697.1203.70
NPT 3/4"	13	25	30	4 x 6	1.697.3400.70	3 x 7	1.697.3401.70
NPT 1"	19	29	40	6 x 6,5	1.697.1000.70	4 x 9	1.697.1001.70

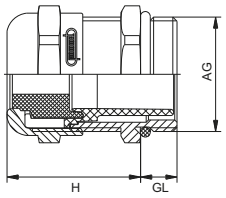
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-M-Flaka — Metr., PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Elastomer
O-Ring	Buna-N
Protection	IP 65 / IP 68 10 bar possible with ideal fit
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request
// INOX upon request
// Elongated threads upon request
// Installation instructions see page 152
// The inserts shown are samples, more inserts upon request



AG	GL mm	H mm	mm	w x h mm	Number	w x h mm	Number
M 20 x 1,5	6	24	24	11,5 x 5	1.688.2016.50	12 x 7	1.688.2017.50
M 20 x 1,5	6	24	24	14 x 6	1.688.2018.50		
M 25 x 1,5	7	26	30	14 x 6	1.688.2500.50	14 x 7	1.688.2501.50
M 32 x 1,5	8	31	40	22 x 8	1.688.3200.50		
M 40 x 1,5	8	37	50	28,5 x 10	1.688.4000.50	29 x 5,5	1.688.4001.50
M 40 x 1,5	8	37	50	30,5 x 12	1.688.4002.50	31 x 7,5	1.688.4003.50
M 50 x 1,5	9	37	57	33,5 x 11,5	1.688.5000.50		
M 63 x 1,5	10	38	64 / 68	38 x 12	1.688.6300.50		
PG 16	6,5	23	24	11,5 x 5	1.688.1600.01	12 x 7	1.688.1601.01
PG 16	6,5	23	24	14 x 6	1.688.1602.01		
PG 21	7	24	30	14 x 6	1.688.2100.01	14 x 7	1.688.2101.01
PG 29	8	29	40	22 x 8	1.688.2900.01		
PG 36	8	35	50	28,5 x 10	1.688.3600.01	29 x 5,5	1.688.3601.01
PG 36	8	35	50	30,5 x 12	1.688.3602.01	31 x 7,5	1.688.3603.01
PG 42	9	37	57	33,5 x 11,5	1.688.4200.01		
PG 48	10	38	64	38 x 12	1.688.4802.01		
NPT 3/4"	13	25	30	14 x 6	1.688.3400.70	14 x 7	1.688.3401.70
NPT 1"	19	29	40	22 x 8	1.688.1000.70		

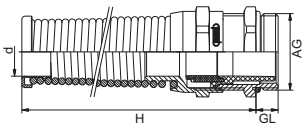
Suitable accessories from page 73

HSK-M-Flex

Metr., Metr.-elongated

Material	Nickel plated brass
Steel spring	INOX 1.4310
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	d mm	H mm	mm	GL mm	Number	GL mm	Number elongated
M 12 x 1,5	3–6,5	6,8	55	14	6,5	1.623.1200.50	10	1.623.1200.30
M 12 x 1,5	2–5	6,8	55	14	6,5	1.623.1200.51	10	1.623.1200.31
M 16 x 1,5	4–8	8,2	66	19	6	1.623.1600.50	10	1.623.1600.30
M 16 x 1,5	2–6	8,2	66	19	6	1.623.1600.51	10	1.623.1600.31
M 16 x 1,5	5–10	10,3	77	20	6	1.623.1611.50	10	1.623.1611.30
M 16 x 1,5	3–7	10,3	77	20	6	1.623.1611.51	10	1.623.1611.31
M 20 x 1,5	6–12	12,3	88	22	6	1.623.2000.50	10	1.623.2000.30
M 20 x 1,5	5–9	12,3	88	22	6	1.623.2000.51	10	1.623.2000.31
M 20 x 1,5	10–14	14,3	98	24	6	1.623.2016.50	10	1.623.2016.30
M 20 x 1,5	7–12	14,3	98	24	6	1.623.2016.51	10	1.623.2016.31
M 25 x 1,5	13–18	18,4	111	30	7	1.623.2500.50	12	1.623.2500.30
M 25 x 1,5	9–16	18,4	111	30	7	1.623.2500.51	12	1.623.2500.31

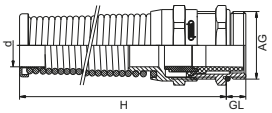
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-M-Flex — PG, PG-elongated

Material	Nickel plated brass
Steel spring	INOX 1.4310
Clamping insert	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



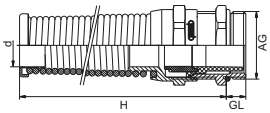
AG	⌀ mm	d mm	H mm	mm	GL mm	Number	GL mm	Number elongated
PG 7	3–6,5	6,8	55	14	5	1.623.0700.01	10	1.623.0700.60
PG 7	2–5	6,8	55	14	5	1.623.0700.15	10	1.623.0700.61
PG 9	4–8	8,2	66	17	6	1.623.0900.01	10	1.623.0900.60
PG 9	2–6	8,2	66	17	6	1.623.0900.15	10	1.623.0900.61
PG 11	5–10	10,3	77	20	6	1.623.1100.01	10	1.623.1100.60
PG 11	3–7	10,3	77	20	6	1.623.1100.15	10	1.623.1100.61
PG 13,5	6–12	12,3	88	22	6,5	1.623.1300.01	10	1.623.1300.60
PG 13,5	5–9	12,3	88	22	6,5	1.623.1300.15	10	1.623.1300.61
PG 16	10–14	14,3	98	24	6,5	1.623.1600.01	10	1.623.1600.60
PG 16	7–12	14,3	98	24	6,5	1.623.1600.15	10	1.623.1600.61
PG 21	13–18	18,4	111	30	7	1.623.2100.01	12	1.623.2100.60
PG 21	9–16	18,4	111	30	7	1.623.2100.15	12	1.623.2100.61

Suitable accessories from page 73

HSK-M-Flex NPT

Material	Nickel plated brass
Steel spring	INOX 1.4310
Clamping insert	Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	d mm	GL mm	H mm	mm	Number
NPT 3/8″	4–8	8,2	15	66	17/19	1.623.3800.70
NPT 3/8″	2–6	8,2	15	66	17/19	1.623.3800.71
NPT 1/2″	6–12	12,3	13	88	22/24	1.623.1200.70
NPT 1/2″	5–9	12,3	13	88	22/24	1.623.1200.71
NPT 3/4″	13–18	18,4	13	111	33	1.623.3400.70
NPT 3/4″	9–16	18,4	13	111	33	1.623.3400.71

Suitable accessories from page 73

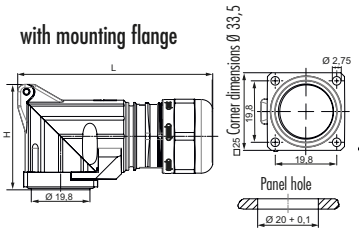
METAL CABLE GLANDS

HSK-M-W — Metr., PG

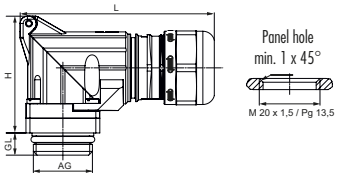
Material	Zinc die casting / Nickel plated brass
Clamping insert	Polyamide
Seal ring	Buna-N
O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request

with mounting flange



with threaded connection



AG	⌀ mm	GL mm	H mm	L mm	R mm	mm	Number
with mounting flange							
	10–14		29	66	7	25	1.309.2000.50
	7–12		29	66	7	25	1.309.2000.51
with threaded connection							
M 20 x 1,5	10–14	6	37	66	7	25	1.309.2020.50
	7–12	6	37	66	7	25	1.309.2020.51
PG 13,5	10–14	6	37	66	7	25	1.309.2013.50
	7–12	6	37	66	7	25	1.309.2013.51

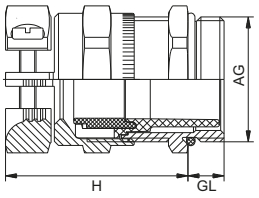
Suitable accessories from page 73

HSK-MZ / HSK-MZ-PVDF

Metr., Metr.-elongated

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	H mm	mm	GL mm	Number HSK-MZ -40 °C – 100 °C	Number HSK-MZ-PVDF -35 °C – 150 °C	GL mm	Number HSK-MZ elongated -40 °C – 100 °C
M 12 x 1,5	3–6,5	26	14	6,5	1.690.1200.50	1.669.1200.50	10	1.690.1200.30
M 16 x 1,5	4–8	28	17 / 19	6	1.690.1600.50	1.669.1600.50	10	1.690.1600.30
M 16 x 1,5	6–10	30	20	6	1.690.1611.50	1.669.1611.50	10	1.690.1611.30
M 20 x 1,5	6–12	33	22	6	1.690.2000.50	1.669.2000.50	10	1.690.2000.30
M 20 x 1,5	10–14	33	24	6	1.690.2016.50	1.669.2016.50	10	1.690.2016.30
M 25 x 1,5	13–18	37	30	7	1.690.2500.50	1.669.2500.50	12	1.690.2500.30
M 32 x 1,5	18–25	43	40	8	1.690.3200.50	1.669.3200.50	12	1.690.3200.30
M 40 x 1,5	22–32	50	50	8	1.690.4000.50	1.669.4000.50	15	1.690.4000.30
M 50 x 1,5	32–38	51	57	9	1.690.5000.50		15	1.690.5000.30
M 50 x 1,5	25–31	51	57	9	1.690.5000.51		15	1.690.5000.31
M 63 x 1,5	37–44	52	64 / 68	10	1.690.6300.50		15	1.690.6300.30
M 63 x 1,5	29–35	52	64 / 68	10	1.690.6300.51		15	1.690.6300.31

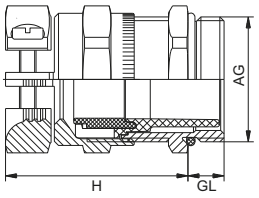
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-MZ / HSK-MZ-PVDF — PG, PG-elongated, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



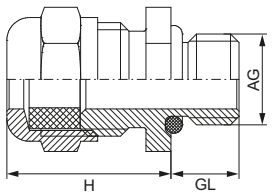
AG	⌀ mm	H mm	mm	GL mm	Number HSK-MZ -40 °C – 100 °C	Number HSK-MZ-PVDF -35 °C – 150 °C	GL mm	Number elongated
PG 7	3–6,5	26	14	5	1.690.0700.01	1.669.0700.01	10	1.690.0700.60
PG 9	4–8	28	17	6	1.690.0900.01	1.669.0900.01	10	1.690.0900.60
PG 11	6–10	30	20	6	1.690.1100.01	1.669.1100.01	10	1.690.1100.60
PG 13,5	6–12	33	22	6,5	1.690.1300.01	1.669.1300.01	10	1.690.1300.60
PG 16	10–14	33	24	6,5	1.690.1600.01	1.669.1600.01	10	1.690.1600.60
PG 21	13–18	37	30	7	1.690.2100.01	1.669.2100.01	12	1.690.2100.60
PG 29	18–25	43	40	8	1.690.2900.01	1.669.2900.01	12	1.690.2900.60
PG 36	22–36	50	50	8	1.690.3600.01	1.669.3600.01	15	1.690.3600.60
PG 42	32–38	51	57	9	1.690.4200.01	1.669.4200.01	15	1.690.4200.60
PG 42	25–31	51	57	9	1.690.4200.15	1.669.4200.15	15	1.690.4200.61
PG 48	37–44	52	64	10	1.690.4800.01	1.669.4800.01	15	1.690.4800.60
PG 48	29–35	51	64	10	1.690.4800.15	1.669.4800.15	15	1.690.4800.61
NPT 3/8"	4–8	28	17/19	15	1.690.3800.70	1.669.3800.70		
NPT 1/2"	7–12	33	22/24	13	1.690.1200.70	1.669.1200.70		
NPT 3/4"	13–18	37	30	13	1.690.3400.70	1.669.3400.70		
NPT 1"	18–25	43	40	19	1.690.1000.70			

Suitable accessories from page 73

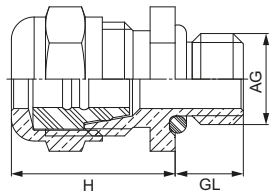
HSK-Mini — Metr., PG

Material	Nickel plated brass / INOX 1.4305
Seal	Buna-N / TPE / FKM
O-Ring	Buna-N / FKM
Protection	IP 68
Operating Temperature	-20 °C – 100 °C (-4 °F – 212 °F) (Buna-N / TPE) -25 °C – 200 °C (-13 °F – 392 °F) (FKM)

HSK-Mini



HSK-Mini EMC

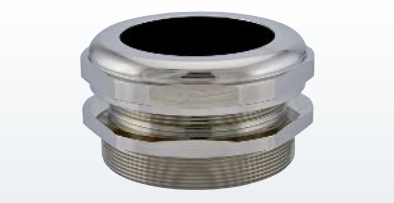


AG	⌀ mm	GL mm	H mm	mm	Number Buna-N / TPE	Number FKM
M 6 x 1	2–3,2	6	10	8	1.106.0601.50	1.106.0600.55
M 8 x 0,75	2–4,5	3,5	14,3	11	1.112.0801.01	
M 8 x 1,25	3–5	6	13	11	1.106.0801.50	1.106.0800.55
M 10 x 1,5	4–6	6	14	12	1.106.1001.50	1.106.1000.55
PG 7	2–4,5	3,5	14,3	11 / 15	1.112.0708.01	
HSK-Mini elongated						
M 8 x 1,25	3–5	10	13	11	1.106.0801.30	1.106.0800.35
M 10 x 1,5	4–6	10	14	12	1.106.1001.30	1.106.1000.35
HSK-Mini EMC						
M 8 x 1,25	3–5	6	13	11	1.119.0800.50	
M 10 x 1,5	4–6	6	14	12	1.119.1000.50	
HSK-Mini INOX						
M 8 x 1,25	3–5	6	13	11	1.129.0800.50	1.129.0800.55
M 10 x 1,5	4–6	6	14	12	1.129.1000.50	1.129.1000.55

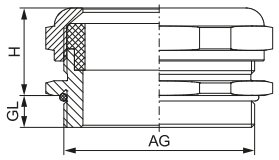
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-XL — Metr.

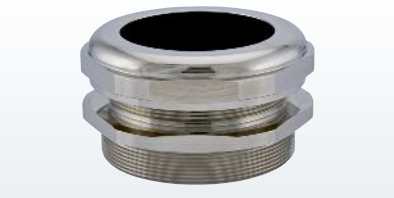


Material	Nickel plated brass
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-20 °C – 100 °C (-4 °F – 212 °F)

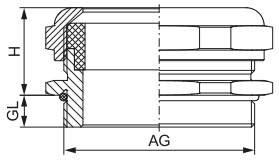


AG	⌀ mm	GL mm	H mm	mm	Number
M 63 x 1,5	48–55	10	42	75	1.106.6375.50
M 75 x 1,5	48–55	15	42	80	1.106.7500.50
M 75 x 1,5	53–60	15	42	85	1.106.7500.51
M 80 x 2	58–65	15	42	90	1.106.8000.50
M 90 x 2	63–70	15	42	100	1.106.9000.50
M 90 x 2	68–75	15	52	100	1.106.9000.51
M 100 x 2	78–85	20	52	110	1.106.1000.50
M 100 x 2	73–80	20	52	110	1.106.1000.51
M 110 x 2	83–90	20	52	120	1.106.1100.51

HSK-XL — G



Material	Nickel plated brass
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-20 °C – 100 °C (-4 °F – 212 °F)



AG	⌀ mm	GL mm	H mm	mm	Number
G 2 1/2″	48–55	18	42	80	1.106.5200.01
G 2 1/2″	53–60	18	42	85	1.106.5201.01
G 3″	58–65	18	42	90 / 95	1.106.3000.01
G 3″	63–70	18	42	100	1.106.3001.01
G 4″	68–75	22	52	100 / 120	1.106.4000.01
G 4″	73–80	22	52	110 / 120	1.106.4001.01
G 4″	78–85	22	52	110 / 120	1.106.4002.01
G 4″	83–90	22	52	120	1.106.4003.01

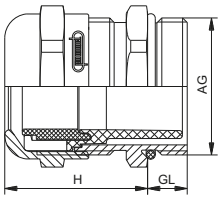
Dimensions and specifications may be changed without prior notice
Suitable accessories from page 73

HSK-INOX / HSK-INOX-PVDF

Metr.

Material	INOX 1.4305 / 1.4404
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX 1.4305 -40 °C – 100 °C	Number HSK-INOX-PVDF 1.4305 -35 °C – 150 °C	Number HSK-INOX 1.4404 -40 °C – 100 °C	Number HSK-INOX-PVDF 1.4404 -35 °C – 150 °C
M 12 x 1,5	3–6,5	6,5	19	14	1.695.1200.50	1.696.1200.50	1.675.1200.50	1.676.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.695.1200.51	1.696.1200.51	1.675.1200.51	1.676.1200.51
M 16 x 1,5	5–10	6	22	22	1.695.1600.50	1.696.1600.50	1.675.1600.50	1.676.1600.50
M 16 x 1,5	3–7	6	22	22	1.695.1600.51	1.696.1600.51	1.675.1600.51	1.676.1600.51
M 20 x 1,5	10–14	6	23	24	1.695.2000.50	1.696.2000.50	1.675.2000.50	1.676.2000.50
M 20 x 1,5	7–12	6	23	24	1.695.2000.51	1.696.2000.51	1.675.2000.51	1.676.2000.51
M 25 x 1,5	13–18	7	24	30	1.695.2500.50	1.696.2500.50	1.675.2500.50	1.676.2500.50
M 25 x 1,5	9–16	7	24	30	1.695.2500.51	1.696.2500.51	1.675.2500.51	1.676.2500.51
M 32 x 1,5	18–25	8	31	41	1.695.3200.50	1.696.3200.50	1.675.3200.50	1.676.3200.50
M 32 x 1,5	13–20	8	31	41	1.695.3200.51	1.696.3200.51	1.675.3200.51	1.676.3200.51
M 40 x 1,5	22–32	8	37	50	1.695.4000.50	1.696.4000.50	1.675.4000.50	1.676.4000.50
M 40 x 1,5	20–26	8	37	50	1.695.4000.51	1.696.4000.51	1.675.4000.51	1.676.4000.51
M 50 x 1,5	32–38	9	37	60	1.695.5000.50		1.675.5000.50	
M 50 x 1,5	25–31	9	37	60	1.695.5000.51		1.675.5000.51	
M 63 x 1,5	37–44	10	38	64/68	1.695.6300.50		1.675.6300.50	
M 63 x 1,5	29–35	10	38	64/68	1.695.6300.51		1.675.6300.51	

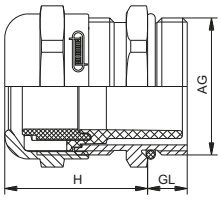
Suitable accessories from page 73

METAL CABLE GLANDS

HSK-INOX / HSK-INOX-PVDF — PG

Material	INOX 1.4305 / 1.4404
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



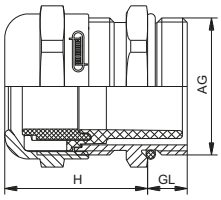
AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX 1.4305 -40 °C – 100 °C	Number HSK-INOX-PVDF 1.4305 -35 °C – 150 °C	Number HSK-INOX 1.4404 -40 °C – 100 °C	Number HSK-INOX-PVDF 1.4404 -35 °C – 150 °C
PG 7	3–6,5	5	19	14	1.695.0700.01	1.696.0700.01	1.675.0700.01	1.676.0700.01
PG 7	2–5	5	19	14	1.695.0700.15	1.696.0700.15	1.675.0700.15	1.676.0700.15
PG 9	4–8	6	21	17	1.695.0900.01	1.696.0900.01	1.675.0900.01	1.676.0900.01
PG 9	2–6	6	21	17	1.695.0900.15	1.696.0900.15	1.675.0900.15	1.676.0900.15
PG 11	5–10	6	22	22	1.695.1100.01	1.696.1100.01	1.675.1100.01	1.676.1100.01
PG 11	3–7	6	22	22	1.695.1100.15	1.696.1100.15	1.675.1100.15	1.676.1100.15
PG 13,5	6–12	6,5	24	22	1.695.1300.01	1.696.1300.01	1.675.1300.01	1.676.1300.01
PG 13,5	5–9	6,5	24	22	1.695.1300.15	1.696.1300.15	1.675.1300.15	1.676.1300.15
PG 16	10–14	6,5	23	24	1.695.1600.01	1.696.1600.01	1.675.1600.01	1.676.1600.01
PG 16	7–12	6,5	23	24	1.695.1600.15	1.696.1600.15	1.675.1600.15	1.676.1600.15
PG 21	13–18	7	24	30	1.695.2100.01	1.696.2100.01	1.675.2100.01	1.676.2100.01
PG 21	9–16	7	24	30	1.695.2100.15	1.696.2100.15	1.675.2100.15	1.676.2100.15
PG 29	18–25	8	29	41	1.695.2900.01	1.696.2900.01	1.675.2900.01	1.676.2900.01
PG 29	13–20	8	29	41	1.695.2900.15	1.696.2900.15	1.675.2900.15	1.676.2900.15
PG 36	22–32	8	35	50	1.695.3600.01	1.696.3600.01	1.675.3600.01	1.676.3600.01
PG 36	20–26	8	35	50	1.695.3600.15	1.696.3600.15	1.675.3600.15	1.676.3600.15
PG 42	32–38	9	37	57	1.695.4200.01	1.696.4200.01	1.675.4200.01	1.676.4200.01
PG 42	25–31	9	37	57	1.695.4200.15	1.696.4200.15	1.675.4200.15	1.676.4200.15
PG 48	37–44	10	38	64	1.695.4800.01	1.696.4800.01	1.675.4800.01	1.676.4800.01
PG 48	29–35	10	38	64	1.695.4800.15	1.696.4800.15	1.675.4800.15	1.676.4800.15

Suitable accessories from page 73

HSK-INOX / HSK-INOX-PVDF — NPT

Material	INOX 1.4305 / 1.4404
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// PVDF type upon request
// Other sealing materials e.g. silicone upon request



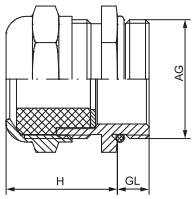
AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX 1.4305	Number HSK-INOX 1.4404
NPT 3/8"	4–8	15	21	17 / 19	1.695.3800.70	1.675.3800.70
NPT 3/8"	2–6	15	21	17 / 19	1.695.3800.71	1.675.3800.71
NPT 1/2"	6–12	13	24	22 / 24	1.695.1200.70	1.675.1200.70
NPT 1/2"	5–9	13	24	22 / 24	1.695.1200.71	1.675.1200.71
NPT 3/4"	13–18	13	25	30	1.695.3400.70	1.675.3400.70
NPT 3/4"	9–16	13	25	30	1.695.3400.71	1.675.3400.71
NPT 1"	18–25	19	29	41	1.695.1000.70	1.675.1000.70
NPT 1"	13–20	19	29	41	1.695.1000.71	1.675.1000.71

Suitable accessories from page 73

METAL CABLE GLANDS

WADI-A-FKM — Metr.

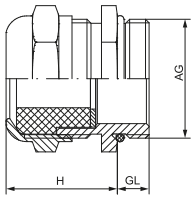
Material	Nickel plated brass
Seal ring	FKM
O-Ring	FKM
Protection	IP 68 (NEMA 6)
Operating Temperature	-25 °C – 200 °C (-13 °F – 392 °F)



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	4–6	5	18	14	1.106.1200.58
M 16 x 1,5	7–9	5	19	18	1.106.1600.58
M 20 x 1,5	10–13	6	21	22	1.106.2000.58
M 25 x 1,5	15–18	7	23	28	1.106.2500.58
M 32 x 1,5	20–24	8	26	35	1.106.3200.58
M 40 x 1,5	27–32	8	27	45	1.106.4000.58
M 50 x 1,5	35–40	10	28	55	1.106.5000.58
M 63 x 1,5	45–52	10	36	68	1.106.6300.58

WADI-A-FKM — PG

Material	Nickel plated brass
Seal ring	FKM
O-Ring	FKM
Protection	IP 68 (NEMA 6)
Operating Temperature	-25 °C – 200 °C (-13 °F – 392 °F)



AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	5–7	6	16	14	1.106.0700.80
PG 9	6–8	6	17	18	1.106.0900.80
PG 9	7–10	6	17	18	1.106.0901.80
PG 11	6–8	6	20	18	1.106.1100.80
PG 11	7–10	6	20	18	1.106.1101.80
PG 11	8–12	6	20	18	1.106.1102.80
PG 13,5	11–15	6	21	24	1.106.1300.80
PG 16	11–15	6	21	24	1.106.1600.80
PG 21	15–20,5	7,5	22,5	32	1.106.2100.80
PG 29	20–27	8	24	40	1.106.2900.80
PG 36	30–35	8	29	50	1.106.3600.80
PG 42	40–45	10	31	60	1.106.4200.80
PG 48	42–49	11	33	64	1.106.4800.80

Suitable accessories from page 73

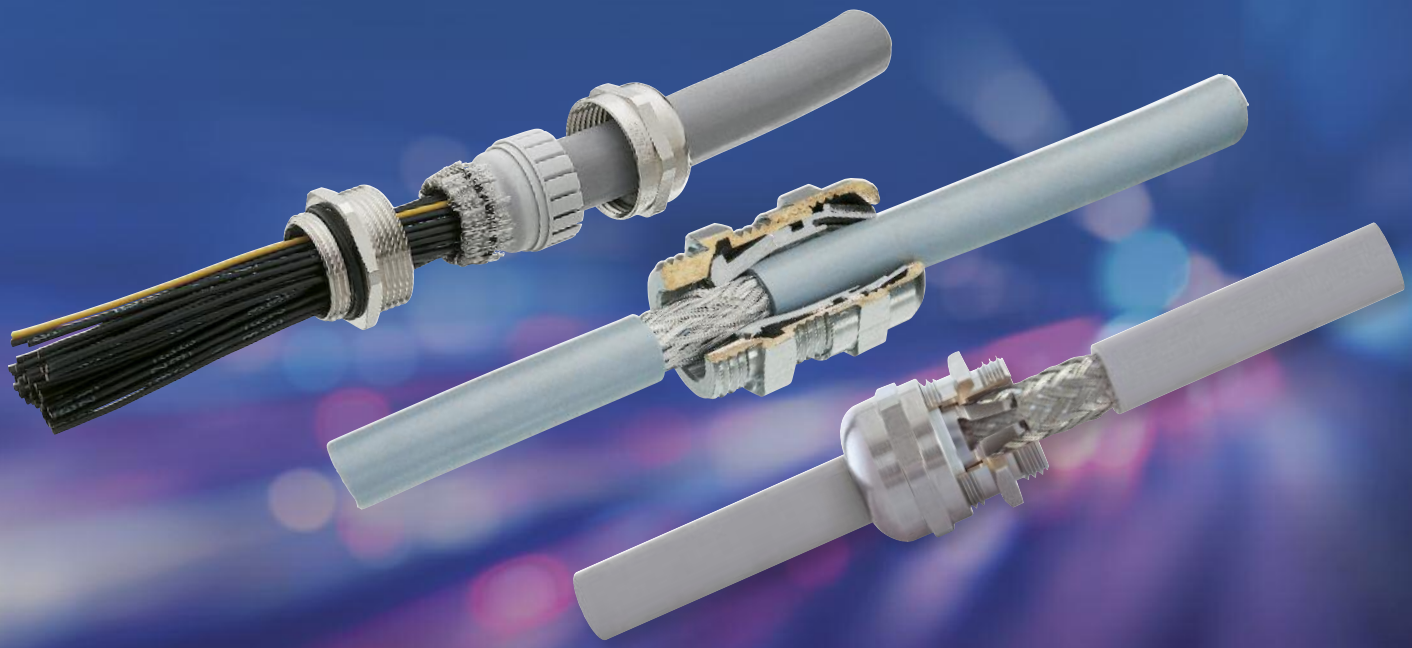
EMC CABLE GLANDS

Protecting power units and electronic components from electromagnetic influences is becoming increasingly important. Cable management and connection solutions are of particularly high importance in this regard. Only a secure, long-lasting, 360° shield connection guarantees lasting protection for technical equipment.

In this chapter, you will find:

// HSK-M-EMC: The standard version with very good shield effectiveness
// HSK-M-EMC-D: Simple, quick fitting with maximum EMC protection
// PVDF variants for applications in the particularly high temperature range
// Flex variants with integrated bending protection
// Glands with additional tension relief (HSK-M-EMC-MZ)
// Stainless steel variants with outstanding shielding effectiveness

In each case, HUMMEL offers different clamping areas, thread lengths, thread types and various sealing materials for different temperature ranges. The cable glands have all relevant approvals for international markets and a wide range of sectors.

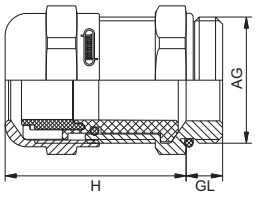


EMC CABLE GLANDS

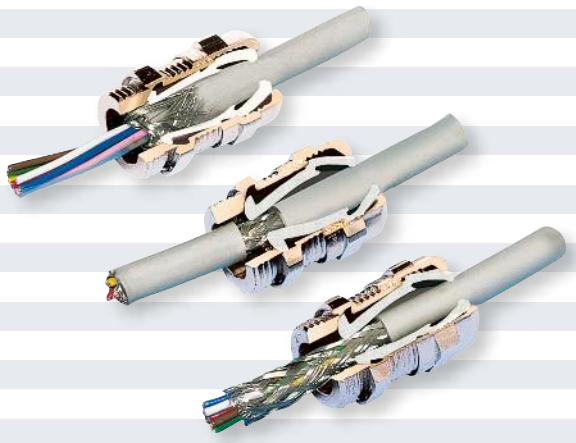
HSK-M-EMC-D — Metr., Metr.-elongated

Material	Nickel plated brass
Clamping insert	Metallized polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	H mm	mm	GL mm	Number	GL mm	Number elongated
M 12 x 1,5	3–6,5	25	14	6,5	1.631.1200.50	10	1.631.1200.30
M 16 x 1,5	4–8	29	17 / 19	6	1.631.1609.50	10	1.631.1609.30
M 16 x 1,5	5–10	32	20	6	1.631.1600.50	10	1.631.1600.30
M 20 x 1,5	6–12	32,5	22	6	1.631.2013.50	10	1.631.2013.30
M 20 x 1,5	10–14	33	24	6	1.631.2000.50	10	1.631.2000.30
M 25 x 1,5	13–18	39	30	7	1.631.2500.50	12	1.631.2500.30
M 32 x 1,5	18–25	45	40	8	1.631.3200.50	12	1.631.3200.30
M 40 x 1,5	24–32	51	50	8	1.631.4000.50	15	1.631.4000.30
M 50 x 1,5	32–38	57,5	57	9	1.631.5000.50	15	1.631.5000.30
M 63 x 1,5	37–44	52	64 / 68	10	1.631.6300.50	15	1.631.6300.30

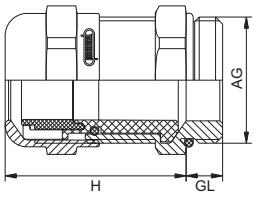


Suitable accessories from page 73

HSK-M-EMC-D — PG, NPT

Material	Nickel plated brass
Clamping insert	Metallized polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



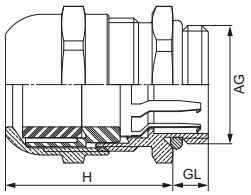
AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	3–6,5	5	24	14	1.631.0700.01
PG 9	4–8	6	28	17	1.631.0900.01
PG 11	5–10	6	29	20	1.631.1100.01
PG 13,5	6–12	6,5	31	22	1.631.1300.01
PG 16	10–14	6,5	32	24	1.631.1600.01
PG 21	13–18	7	38	30	1.631.2100.01
PG 29	18–25	8	43	40	1.631.2900.01
PG 36	24–32	8	48	50	1.631.3600.01
PG 42	32–38	9	45	57	1.631.4200.01
PG 48	37–44	10	46	64	1.631.4800.01
NPT 3/8"	4–8	15	29	17 / 19	1.631.3800.70
NPT 1/2"	6–12	13	32,5	22 / 24	1.631.1200.70
NPT 3/4"	13–18	13	39	30	1.631.3400.70

Suitable accessories from page 73

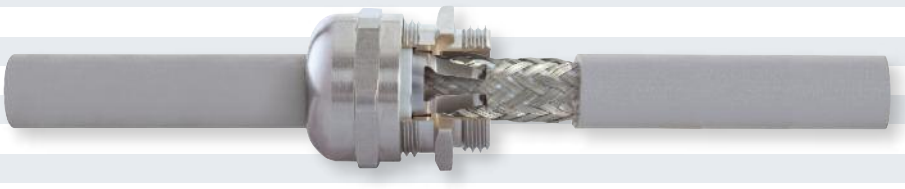
EMC CABLE GLANDS

METRICA-M-EMC-E — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 5 bar
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	3–6,5	6	19,4	14	1.607.1200.50
M 16 x 1,5	4,5–10	6	24,4	19	1.607.1600.50
M 20 x 1,5	6–12	6	25,4	22	1.607.2013.50
M 20 x 1,5	7,5–14	6	28,3	24	1.607.2000.50
M 25 x 1,5	9–17	7	29,3	29	1.607.2500.50
M 32 x 1,5	11–21	8	37,7	34	1.607.3200.50
M 40 x 1,5	19–28	8	40,7	44	1.607.4000.50
M 50 x 1,5	27–35	9	50,7	55	1.607.5000.50
M 63 x 1,5	34–48	10	55,7	68	1.607.6300.50



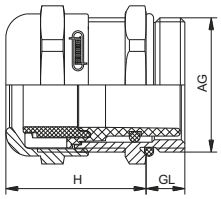
Suitable accessories from page 73

HSK-M-EMC / HSK-M-PVDF-EMC

Metr., PG-elongated

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Dauergebrauchstemperatur	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request
// Please see page 45 for HSK-Mini EMC M 8 and M10



AG	⌀ mm	H mm	mm	GL mm	Number HSK-M-EMC -40 °C – 100 °C	Number HSK-M-PVDF-EMC -35 °C – 150 °C	GL mm	Number HSK-M-EMC elongated -40 °C – 100 °C
M 12 x 1,5	3–6,5	19	14	6,5	1.691.1200.50	1.698.1200.50	10	1.691.1200.30
M 12 x 1,5	2–5	19	14	6,5	1.691.1200.51	1.698.1200.51	10	1.691.1200.31
M 16 x 1,5	5–10	22	20	6	1.691.1600.50	1.698.1611.50	10	1.691.1600.30
M 16 x 1,5	3–7	22	20	6	1.691.1600.51	1.698.1611.51	10	1.691.1600.31
M 20 x 1,5	10–14	24	24	6	1.691.2000.50	1.698.2000.50	10	1.691.2000.30
M 20 x 1,5	7–12	24	24	6	1.691.2000.51	1.698.2000.51	10	1.691.2000.31
M 25 x 1,5	13–18	26	30	7	1.691.2500.50	1.698.2500.50	12	1.691.2500.30
M 25 x 1,5	9–16	26	30	7	1.691.2500.51	1.698.2500.51	12	1.691.2500.31
M 32 x 1,5	18–25	31	40	8	1.691.3200.50		12	1.691.3200.30
M 32 x 1,5	13–20	31	40	8	1.691.3200.51		12	1.691.3200.31
M 32 x 1,5	15–21	33	36	8	1.691.3200.52		12	1.691.3200.32
M 40 x 1,5	22–32	37	50	8	1.691.4000.50		15	1.691.4000.30
M 40 x 1,5	20–26	37	50	8	1.691.4000.51		15	1.691.4000.31
M 40 x 1,5	19–27	33	46	8	1.691.4000.52		15	1.691.4000.32
M 50 x 1,5	32–38	37	57	9	1.691.5000.50		15	1.691.5000.30
M 50 x 1,5	25–31	37	57	9	1.691.5000.51		15	1.691.5000.31
M 63 x 1,5	37–44	38	64 / 68	10	1.691.6300.50		15	1.691.6300.30
M 63 x 1,5	29–35	38	64 / 68	10	1.691.6300.51		15	1.691.6300.31

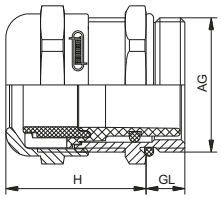
Suitable accessories from page 73

EMC CABLE GLANDS

HSK-M-EMC / HSK-M-PVDF-EMC — PG, PG-elongated, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F) (PA) -35 °C – 150 °C (-31 °F – 302 °F) (PVDF)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	H mm	mm	GL mm	Number HSK-M-EMC -40 °C – 100 °C	Number HSK-M-PVDF-EMC -35 °C – 150 °C	GL mm	Number HSK-M-EMC elongated -40 °C – 100 °C
PG 7	3–6,5	19	14	5	1.691.0700.01	1.698.0700.01	10	1.691.0700.60
PG 7	2–5	19	14	5	1.691.0700.15	1.698.0700.15	10	1.691.0700.61
PG 9	4–8	21	17	6	1.691.0900.01	1.698.0900.01	10	1.691.0900.60
PG 9	2–6	21	17	6	1.691.0900.15	1.698.0900.15	10	1.691.0900.61
PG 11	5–10	22	20	6	1.691.1100.01	1.698.1100.01	10	1.691.1100.60
PG 11	3–7	22	20	6	1.691.1100.15	1.698.1100.15	10	1.691.1100.61
PG 13,5	6–12	24	22	6,5	1.691.1300.01	1.698.1300.01	10	1.691.1300.60
PG 13,5	5–9	24	22	6,5	1.691.1300.15	1.698.1300.15	10	1.691.1300.61
PG 16	10–14	23	24	6,5	1.691.1600.01	1.698.1600.01	10	1.691.1600.60
PG 16	7–12	23	24	6,5	1.691.1600.15	1.698.1600.15	10	1.691.1600.61
PG 21	13–18	24	30	7	1.691.2100.01	1.698.2100.01	12	1.691.2100.60
PG 21	9–16	24	30	7	1.691.2100.15	1.698.2100.15	12	1.691.2100.61
PG 29	18–25	29	40	8	1.691.2900.01	1.698.2900.01	12	1.691.2900.60
PG 29	13–20	29	40	8	1.691.2900.15	1.698.2900.15	12	1.691.2900.61
PG 36	22–32	35	50	8	1.691.3600.01	1.698.3600.01	15	1.691.3600.60
PG 36	20–26	35	50	8	1.691.3600.15	1.698.3600.15	15	1.691.3600.61
PG 42	32–38	37	57	9	1.691.4200.01		15	1.691.4200.60
PG 42	25–31	37	57	9	1.691.4200.15		15	1.691.4200.61
PG 48	37–44	38	64	10	1.691.4800.01		15	1.691.4800.60
PG 48	29–35	38	64	10	1.691.4800.15		15	1.691.4800.61
NPT 3/8"	4–8	21	17 / 19	15	1.691.3800.70			
NPT 3/8"	2–6	21	17 / 19	15	1.691.3800.71			
NPT 1/2"	6–12	24	22 / 24	13	1.691.1200.70			
NPT 1/2"	5–9	24	22 / 24	13	1.691.1200.71			
NPT 3/4"	13–18	25	30	13	1.691.3400.70			
NPT 3/4"	9–16	25	30	13	1.691.3400.71			

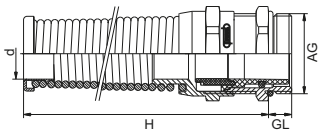
Suitable accessories from page 73

HSK-M-Flex-EMC

Metr., Metr.-elongated

Material	Nickel plated brass
Steel spring	INOX 1.4310
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request



AG	⌀ mm	d mm	H mm	mm	GL mm	Number	GL mm	Number elongated
M 12 x 1,5	3–6,5	6,8	55	14	6,5	1.624.1200.50	10	1.624.1200.30
M 12 x 1,5	2–5	6,8	55	14	6,5	1.624.1200.51	10	1.624.1200.31
M 16 x 1,5	5–10	10,3	77	20	6	1.624.1600.50	10	1.624.1600.30
M 16 x 1,5	3–7	10,3	77	20	6	1.624.1600.51	10	1.624.1600.31
M 20 x 1,5	10–14	14,3	98	24	6	1.624.2000.50	10	1.624.2000.30
M 20 x 1,5	7–12	14,3	98	24	6	1.624.2000.51	10	1.624.2000.31
M 25 x 1,5	13–18	18,4	111	30	7	1.624.2500.50	12	1.624.2500.30
M 25 x 1,5	9–16	18,4	111	30	7	1.624.2500.51	12	1.624.2500.31

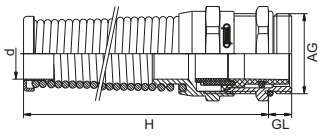
Suitable accessories from page 73

EMC CABLE GLANDS

HSK-M-Flex-EMC — PG, PG-elongated, NPT

Material	Nickel plated brass
Steel spring	INOX 1.4310
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request
// Also available in PVDF, -35 °C – 150 °C



AG	⌀ mm	d mm	H mm	mm	GL mm	Number	GL mm	Number elongated
PG 7	3–6,5	6,8	55	14	5	1.624.0700.01	10	1.624.0700.60
PG 7	2–5	6,8	55	14	5	1.624.0700.15	10	1.624.0700.61
PG 9	4–8	8,2	66	17	6	1.624.0900.01	10	1.624.0900.60
PG 9	2–6	8,2	66	17	6	1.624.0900.15	10	1.624.0900.61
PG 11	5–10	10,3	77	20	6	1.624.1100.01	10	1.624.1100.60
PG 11	3–7	10,3	77	20	6	1.624.1100.15	10	1.624.1100.61
PG 13,5	6–12	12,3	88	22	6,5	1.624.1300.01	10	1.624.1300.60
PG 13,5	5–9	12,3	88	22	6,5	1.624.1300.15	10	1.624.1300.61
PG 16	10–14	14,3	98	24	6,5	1.624.1600.01	10	1.624.1600.60
PG 16	7–12	14,3	98	24	6,5	1.624.1600.15	10	1.624.1600.61
PG 21	13–18	18,4	111	30	7	1.624.2100.01	12	1.624.2100.60
PG 21	9–16	18,4	111	30	7	1.624.2100.15	12	1.624.2100.61
NPT 3/8"	4–8	8,2	66	17 / 19	15	1.624.3800.70		
NPT 3/8" NPT	2–6	8,2	66	17 / 19	15	1.624.3800.71		
NPT 1/2" NPT	6–12	12,3	88	22 / 24	13	1.624.1200.70		
NPT 1/2" NPT	5–9	12,3	88	22 / 24	13	1.624.1200.71		
NPT 3/4" NPT	13–18	18,4	111	30	13	1.624.3400.70		
NPT 3/4" NPT	9–16	18,4	111	30	13	1.624.3400.71		

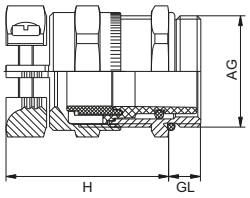
Suitable accessories from page 73

HSK-MZ-EMC

Metr., Metr.-elongated, PG, PG-elongated, NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// Other sealing materials e.g. silicone upon request
// Also available in PVDF, -35 °C – 150 °C *



AG	⌀ mm	H mm	mm	GL mm	Number	GL mm	Number elongated
M 12 x 1,5	3–6,5	26	14	6,5	1.692.1200.50	10	1.692.1200.30
M 16 x 1,5	6–10	29	20	6	1.692.1600.50	10	1.692.1600.30
M 20 x 1,5	10–14	32	24	6	1.692.2000.50	10	1.692.2000.30
M 25 x 1,5	13–18	35	30	7	1.692.2500.50	12	1.692.2500.30
M 32 x 1,5	18–25	41	40	8	1.692.3200.50	12	1.692.3200.30
M 40 x 1,5	22–32	48	50	8	1.692.4000.50	15	1.692.4000.30
M 50 x 1,5	32–38	51	57	9	1.692.5000.50	15	1.692.5000.30
M 50 x 1,5	25–31	51	57	9	1.692.5000.51	15	1.692.5000.31
M 63 x 1,5	37–44	52	64 / 68	10	1.692.6300.50	15	1.692.6300.30
M 63 x 1,5	29–35	52	64 / 68	10	1.692.6300.51	15	1.692.6300.31
PG 7*	3–6,5	26	14	5	1.692.0700.01	10	1.692.0700.60
PG 9*	4–8	28	17	6	1.692.0900.01	10	1.692.0900.60
PG 11*	6–10	29	20	6	1.692.1100.01	10	1.692.1100.60
PG 13,5*	6–12	33	22	6,5	1.692.1300.01	10	1.692.1300.60
PG 16*	10–14	32	24	6,5	1.692.1600.01	10	1.692.1600.60
PG 21*	13–18	35	30	7	1.692.2100.01	12	1.692.2100.60
PG 29*	18–25	41	40	8	1.692.2900.01	12	1.692.2900.60
PG 36*	22–32	48	50	8	1.692.3600.01	15	1.692.3600.60
PG 42*	32–38	51	57	9	1.692.4200.01	15	1.692.4200.60
PG 42*	25–31	51	57	9	1.692.4200.15	15	1.692.4200.61
PG 48*	37–44	51	64	10	1.692.4800.01	15	1.692.4800.60
PG 48*	29–35	51	64	10	1.692.4800.15	15	1.692.4800.61
NPT 3/8"	4–8	28	17 / 19	15	1.692.3800.70		
NPT 1/2"	6–12	29	22 / 24	13	1.692.1200.70		
NPT 3/4"	13–18	35	30	13	1.692.3400.70		

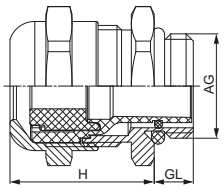
Suitable accessories from page 73

EMC CABLE GLANDS

HSK-INOX-EMC — Metr., PG

Material	INOX 1.4305
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

// INOX 1.4404 upon request



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	3–6,5	6,5	19	14	1.693.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.693.1200.51
M 16 x 1,5	5–10	6	21	20	1.693.1600.50
M 16 x 1,5	3–7	6	21	20	1.693.1600.51
M 20 x 1,5	10–14	6	23	24	1.693.2000.50
M 20 x 1,5	7–12	6	23	24	1.693.2000.51
M 25 x 1,5	13–18	7	26	30	1.693.2500.50
M 25 x 1,5	9–16	7	26	30	1.693.2500.51
M 32 x 1,5	18–25	8	31	40	1.693.3200.50
M 32 x 1,5	13–20	8	31	40	1.693.3200.51
M 40 x 1,5	22–32	8	37	50	1.693.4000.50
M 40 x 1,5	20–26	8	37	50	1.693.4000.51
PG 7	3–6,5	5	19	14	1.693.0700.01
PG 7	2–5	5	19	14	1.693.0700.15
PG 9	4–8	6	21	17	1.693.0900.01
PG 9	2–6	6	21	17	1.693.0900.15
PG 11	5–10	6	22	22	1.693.1100.01
PG 11	3–7	6	22	22	1.693.1100.15
PG 13,5	6–12	6,5	24	22	1.693.1300.01
PG 13,5	5–9	6,5	24	22	1.693.1300.15
PG 16	10–14	6,5	23	24	1.693.1600.01
PG 16	7–12	6,5	23	24	1.693.1600.15
PG 21	13–18	7	24	30	1.693.2100.01
PG 21	9–16	7	24	30	1.693.2100.15
PG 29	18–25	8	29	41	1.693.2900.01
PG 29	13–20	8	29	41	1.693.2900.15
PG 36	22–32	8	35	50	1.693.3600.01
PG 36	20–26	8	35	50	1.693.3600.15

Suitable accessories from page 73

CABLE GLANDS FOR SPECIAL APPLICATIONS

With the VariaPro series, HUMMEL focusses on very special applications and the particular requirements of selected sectors.
The VariaPro cable glands have been designed for very special sector requirements in each case. Their specific strengths with regard to temperature, fire protection or hygiene are certified which means they can be used without restriction in these extreme applications.

In this chapter, you will find:

// VariaPro Rail: The cable gland with railway approval EN 45545-3
// VariaPro Temp: Suitable for particularly low, and extremely high temperatures
// VariaPro FKM: The acid-resistant cable gland for the process industry
// HSK-INOX-HD: Developed for areas with a high level of hygienic requirements
// HSK-INOX-HD-Pro: The HD cable gland with EHEDG certification

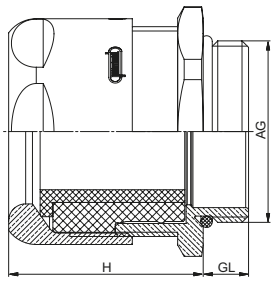
In each case, HUMMEL offers different clamping areas, thread lengths, thread types and various sealing materials for different temperature ranges. The cable glands have all relevant approvals for international markets and a wide range of sectors.

CABLE GLANDS FOR SPECIAL APPLICATIONS

VariaPro Rail — Metr.

Material	Nickel plated brass
Seal	EPDM
O-Ring	EPDM
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-40 °C – 100 °C (- 40 °F – 212 °F)

// DIN EN 45545-2 and DIN EN 45545-3
// Fire resistance E30
// Large clamping range due to reducer
// No twisting of inserts and cables



AG	mm	GL	H mm	mm Dome Nut	mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.750.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.750.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.750.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.750.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.750.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.750.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.750.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.750.4000.51

* Versions with removable reducers

Suitable accessories from page 73

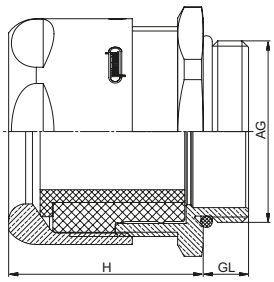
VariaPro Temp — Metr.

+200 °C
-60 °C

Material	Nickel plated brass
Seal	VMQ (Silicone)
O-Ring	VMQ (Silicone)
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-60 °C – 200 °C (-76 °F – 392 °F)

RoHS EMC

// Suitable for applications under extreme temperature conditions
// Integrated option for EMC connection
// Large clamping range due to reducer
// No twisting of inserts and cables



AG	⌀ mm	GL	H mm	mm Dome Nut	mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.751.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.751.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.751.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.751.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.751.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.751.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.751.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.751.4000.51

* Versions with removable reducers

Suitable accessories from page 73

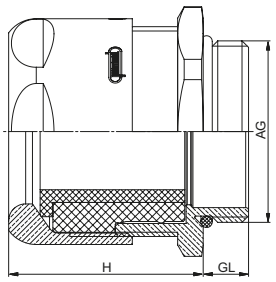
CABLE GLANDS FOR SPECIAL APPLICATIONS

VariaPro FKM — Metr.

Material	Nickel plated brass
Seal	FKM
O-Ring	FKM
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-20 °C – 180 °C (-4 °F – 356 °F)

RoHS EMC

// High resistance against the influence of acids and chemicals
// Integrated option for EMC connection
// Large clamping range due to reducer
// No twisting of inserts and cables



AG	⌀k mm	GL	H mm	mm Dome Nut	mm Body	Number
M 20 x 1,5	7,0 – 14,0	6	27	22	24	1.752.2000.50*
M 20 x 1,5	10,0 – 14,0	6	27	22	24	1.752.2000.51
M 25 x 1,5	11,0 – 18,0	7	29	27	30	1.752.2500.50*
M 25 x 1,5	14,5 – 18,0	7	29	27	30	1.752.2500.51
M 32 x 1,5	16,0 – 25,0	8	34	36	40	1.752.3200.50*
M 32 x 1,5	20,5 – 25,0	8	34	36	40	1.752.3200.51
M 40 x 1,5	21,0 – 32,0	8	40	46	50	1.752.4000.50*
M 40 x 1,5	26,5 – 32,0	8	40	46	50	1.752.4000.51

* Versions with removable reducers

Suitable accessories from page 73

HSK-INOX-HD

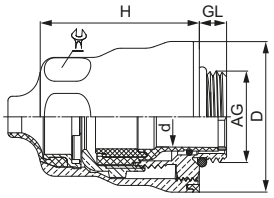
Metr.

Material HD-enclosure	INOX 1.4404 / AISI 316 L
Sealing HD-enclosure	VMQ (Silicone), blue (similar RAL 5017)
Protection	IP 68
Operating Temperature	-40 °C – 120 °C (-40 °F – 248 °F)

EMC

// EMC integrated
// VDMA Riboflavintest fulfilled and passed
// Durability and cleanability tested and passed with compounds from ECOLAB

ideal for foam-cleaning



AG	⌀ mm	d mm	GL mm	H mm	D mm	mm	Number
M 12 x 1,5	3,5–6,5	5,8	6	30	21	14	1.740.1202.50
M 16 x 1,5	5–10	9,3	6	34	27	18 / 20	1.740.1602.50
M 20 x 1,5	10–14	13,2	6	34,5	33	24	1.740.2002.50
M 25 x 1,5	13–18	17,3	7	41,5	40	27 / 30	1.740.2502.50

Suitable accessories from page 73

CABLE GLANDS FOR SPECIAL APPLICATIONS

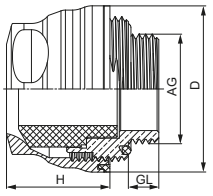
HSK-INOX-HD-Pro — Metr.

Material HD-enclosure	INOX 1.4404 / AISI 316 L
Sealing HD-enclosure	VMQ (Silicone), blue (similar RAL 5017)
Protection	IP 66, IP 68 to 10 bar, IP 69K
Operating Temperature	-40 °C – 120 °C (-40 °F – 248 °F)

// EMC connection integrated
// VDMA Riboflavin cleaning test passed
// EHEDG 01 cleaning test passed
// EHEDG certificate EL class I AUX approved

EMC

ideal for high-pressure cleaning



AG	⌀ mm	GL mm	H mm	D mm	mm	Number
M 12 x 1,5	5–6,5	6	19	21	14	1.740.1203.50
M 16 x 1,5	7,5–10	6	20	27	19 / 21	1.740.1603.50
M 16 x 1,5	6–7,5	6	20	27	19 / 21	1.740.1603.51
M 20 x 1,5	11–13,5	6	22,5	33	24 / 27	1.740.2003.50
M 20 x 1,5	9–12	6	22,5	33	24 / 27	1.740.2003.51
M 20 x 1,5	11–13,5	6	20	28	21 / 24	1.740.2003.54
M 25 x 1,5	15–18	7	23,5	38	30	1.740.2503.50
M 25 x 1,5	14–16	7	23,5	38	30	1.740.2503.52
M 32 x 1,5	21–25	8	26,5	45	36	1.740.3203.50
M 32 x 1,5	18–21	8	26,5	45	36	1.740.3203.51

Suitable accessories from page 73

DIN CABLE GLANDS

These cable glands have been designed to meet the requirements of very special norms and standards. This means they have a different construction and function compared to the premium cable glands in the HSK series. DIN cable glands offer very special clamping areas and feature a very low construction height.

In this chapter, you will find:

// DIN 46320: Plastic and brass cable glands
// Z (DIN 46320): Cable glands with extra high tension relief
// SE (DIN 46320): Cable glands with EMC connection
// ZSE (DIN 46320): Cable glands with extra high tension relief and EMC connection

In each case, HUMMEL offers different clamping areas, thread types and various sealing materials for different temperature ranges. The cable glands have the necessary approvals and certificates.

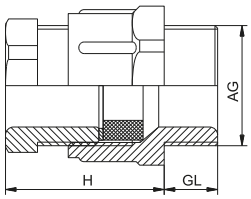
DIN CABLE GLANDS

DIN 46320-A-FS with seal ring No. 6 — PG

// Metric thread upon request
// Please see page 89 for suitable thread seal ring

Material	Polyamide
Seal ring	Buna-N
Schutzart	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
Colors	grey (RAL 7035)

RoHS



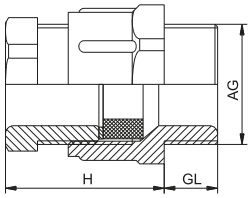
AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	3,5–6	8	20	15 / 13	1.202.0700.11
PG 9	4,5–7	8	21	19 / 16	1.202.0900.11
PG 11	6–9	8	22	22 / 19	1.202.1100.11
PG 13,5	9–12	9	26	24 / 21	1.202.1300.11
PG 16	11–14	10	28	27 / 23	1.202.1600.11
PG 21	14–18	11	32	33 / 30	1.202.2100.11
PG 29	18–25	11	35	42 / 40	1.202.2900.11
PG 36	25–32	13	39	53 / 50	1.202.3600.11
PG 42	30–38	13	44	60 / 55	1.202.4200.11
PG 48	34–42	14	44	65 / 60	1.202.4800.11

DIN 46320-A-FS with multiperforated seal ring No. 7 — PG

// Metric thread upon request
// Please see page 89 for suitable thread seal ring

Material	Polyamide
Seal ring	Buna-N (multiperforated)
Schutzart	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
Colors	grey (RAL 7035)

RoHS



AG	⌀ mm	GL mm	H mm	mm	Number
PG 9	4–10	8	21	19 / 16	1.202.0901.11
PG 11	6,5–12	8	22	22 / 19	1.202.1101.11
PG 13,5	6,5–13,5	9	26	24 / 21	1.202.1301.11
PG 16	6,5–16	10	28	27 / 23	1.202.1601.11
PG 21	9–20	11	32	33 / 30	1.202.2101.11
PG 29	17–28	11	35	42 / 40	1.202.2901.11
PG 36	23–34	13	39	53 / 50	1.202.3601.11
PG 42	29–40	13	44	60 / 55	1.202.4201.11
PG 48	35–46	14	44	65 / 60	1.202.4801.11

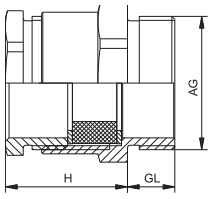
Suitable accessories from page 73

DIN 46320-C4-Ms with seal ring No. 6 — PG

// Metric thread upon request
// Please see page 89 for suitable thread seal ring
// This cable gland is available with additional strain relief (see page 70 / 71) and EMC attenuation (see page 72)

Material	Nickel plated brass
Seal ring	Buna-N
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



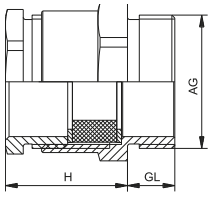
AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	6–8	5	15	14 / 13	1.101.0703.01
PG 9	8–10	6	15	17 / 15	1.101.0903.01
PG 11	10–12	6	17	20 / 18	1.101.1103.01
PG 13,5	12–14	6,5	20	22 / 20	1.101.1303.01
PG 16	14–16	6,5	22	24 / 22	1.101.1603.01
PG 21	17–19	7	24	30 / 28	1.101.2103.01
PG 29	26–28	8	26	40 / 37	1.101.2903.01
PG 36	33–35	9	30	50 / 47	1.101.3603.01
PG 42	39–41	10	34	57 / 54	1.101.4203.01
PG 48	45–47	10	37	64 / 60	1.101.4803.01

DIN 46320-C4-Ms with multiperforated seal ring No. 7 — PG

// Metric thread upon request
// Please see page 89 for suitable thread seal ring
// This cable gland is available with additional strain relief (see page 70 / 71) and EMC attenuation (see page 72)

Material	Nickel plated brass
Seal ring	Buna-N (multiperforated)
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



AG	⌀ mm	GL mm	H mm	mm	Number
PG 9	4–10	6	15	17 / 15	1.101.0901.01
PG 11	6,5–12	6	17	20 / 18	1.101.1101.01
PG 13,5	6,5–13,5	6,5	20	22 / 20	1.101.1301.01
PG 16	6,5–16	6,5	22	24 / 22	1.101.1601.01
PG 21	9–20	7	24	30 / 28	1.101.2101.01
PG 29	17–28	8	26	40 / 37	1.101.2901.01
PG 36	23–34	9	30	50 / 47	1.101.3601.01
PG 42	29–40	10	34	57 / 54	1.101.4201.01
PG 48	35–46	10	37	64 / 60	1.101.4801.01

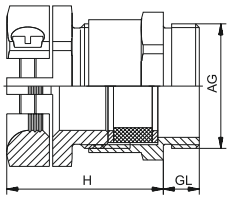
Suitable accessories from page 73

DIN CABLE GLANDS

Z (DIN 46320-C4-Ms with seal ring No. 6 with additional strain relief) — Metr.

// Please see page 89 for suitable thread seal ring

Material	Nickel plated brass
Seal ring	Buna-N
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

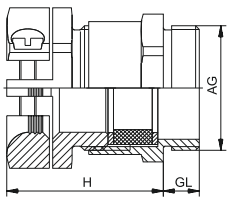


AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	6–8	5	22	14 / 16	1.105.1200.51
M 16 x 1,5	8–10	5	25	18 / 19	1.105.1600.51
M 20 x 1,5	10–12	6	26	22 / 22	1.105.2000.51
M 20 x 1,5	12–14	6	27,5	22 / 24	1.105.2013.51
M 20 x 1,5	13–15	6	28,5	24 / 26	1.105.2016.51
M 25 x 1,5	17–19	6	33	30 / 33	1.105.2500.51
M 32 x 1,5	26–27	6	36	39 / 42	1.105.3200.51
M 40 x 1,5	33–35	7	41	50 / 52	1.105.4000.51
M 50 x 1,5	39–41	8	45	57 / 59	1.105.5000.51
M 63 x 1,5	43–45	9	48	66 / 64	1.105.6300.51

Z (DIN 46320-C4-Ms with multiperforated seal ring No. 7 with additional strain relief) — Metr.

// Please see page 89 for suitable thread seal ring

Material	Nickel plated brass
Seal ring	Buna-N (multiperforated)
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)



AG	⌀ mm	GL mm	H mm	mm	Number
M 16 x 1,5	6,5–10	5	25	18 / 19	1.105.1600.52
M 20 x 1,5	7,5–12	6	26	22 / 22	1.105.2000.52
M 20 x 1,5	8,5–13,5	6	27,5	22 / 24	1.105.2013.52
M 20 x 1,5	10,5–15	6	28,5	24 / 26	1.105.2016.52
M 25 x 1,5	13–20	6	33	30 / 33	1.105.2500.52
M 32 x 1,5	19–28	6	36	39 / 42	1.105.3200.52
M 40 x 1,5	24–34	7	41	50 / 52	1.105.4000.52
M 50 x 1,5	34–40	8	45	57 / 59	1.105.5000.52
M 63 x 1,5	39–46	9	48	66 / 64	1.105.6300.52

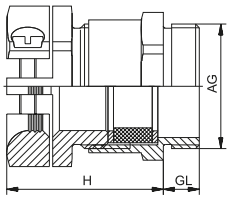
Suitable accessories from page 73

Z (DIN 46320-C4-Ms with seal ring No. 6 with additional strain relief) PG

// Please see page 89 for suitable thread seal ring
// Please see page 72 for the EMC version of this gland

Material	Nickel plated brass
Seal ring	Buna-N
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



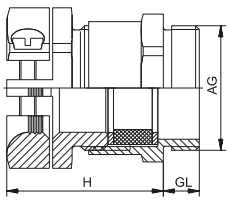
AG	⌀ mm	GL mm	H mm	mm	Number Buna-N -20 °C – 80 °C
PG 7	6–8	5	22	14/16	1.105.0703.01
PG 9	8–10	6	25	17/19	1.105.0903.01
PG 11	10–12	6	26	20/22	1.105.1103.01
PG 13,5	12–14	6,5	27,5	22/24	1.105.1303.01
PG 16	14–16	6,5	28,5	24/26	1.105.1603.01
PG 21	17–19	7	33	30/33	1.105.2103.01
PG 29	26–28	8	36	40/42	1.105.2903.01
PG 36	33–35	9	41	50/52	1.105.3603.01
PG 42	39–41	10	45	57/59	1.105.4203.01
PG 48	43–45	10	48	64/64	1.105.4803.01

Z (DIN 46320-C4-Ms with multiperforated seal ring No. 7 with additional strain relief) PG

// Please see page 89 for suitable thread seal ring
// Please see page 72 for the EMC version of this gland

Material	Nickel plated brass
Seal ring	Buna-N (multiperforated)
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



AG	⌀ mm	GL mm	H mm	mm	Number
PG 9	6,5–10	6	25	17/19	1.105.0901.01
PG 11	7,5–12	6	26	20/22	1.105.1101.01
PG 13,5	8,5–13,5	6,5	27,5	22/24	1.105.1301.01
PG 16	10,5–16	6,5	28,5	24/26	1.105.1601.01
PG 21	13–20	7	33	30/33	1.105.2101.01
PG 29	19–28	8	36	40/42	1.105.2901.01
PG 36	24–34	9	41	50/52	1.105.3601.01
PG 42	34–40	10	45	57/59	1.105.4201.01
PG 48	39–46	10	48	64/64	1.105.4801.01

Suitable accessories from page 73

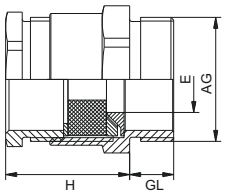
DIN CABLE GLANDS

SE (DIN 46320-C4 with EMC attenuation with multiperforated seal ring No. 7) PG

// Please see page 89 for suitable thread seal ring

Material	Nickel plated brass
Seal ring	Buna-N
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



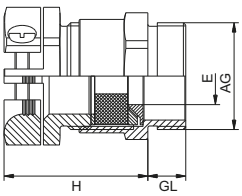
AG	⌀ mm	GL mm	H mm	mm	E mm	Number
PG 9	4–10	7	17	17/15	6	1.680.0906.01
PG 11	6,5–12	7	20	20/18	8	1.680.1108.01
PG 13,5	6,5–13,5	8	21	22/20	10	1.680.1310.01
PG 13,5	6,5–13,5	8	21	22/20	12	1.680.1312.01
PG 16	6,5–16	8	24	24/22	12	1.680.1612.01
PG 16	6,5–16	8	24	24/22	14	1.680.1614.01
PG 21	9–20	10	27	30/28	15	1.680.2115.01
PG 21	9–20	10	27	30/28	18	1.680.2118.01
PG 29	17–28	10	30	40/37	20	1.680.2920.01
PG 29	17–28	10	30	40/37	24	1.680.2924.01

ZSE (DIN 46320-C4 with EMC attenuation and multiperforated seal ring No. 7 with additional strain relief) PG

// Please see page 89 for suitable thread seal ring

Material	Nickel plated brass
Seal ring	Buna-N
Protection	IP 54, with thread seal ring IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS



AG	⌀ mm	GL mm	H mm	mm	E mm	Number
PG 9	6,5–10	7	27	17/19	6	1.681.0906.01
PG 11	7,5–12	7	29	20/22	7	1.681.1107.01
PG 11	7,5–12	7	29	20/22	8	1.681.1108.01
PG 13,5	8,5–13,5	8	30	22/24	10	1.681.1310.01
PG 13,5	8,5–13,5	8	30	22/24	12	1.681.1312.01
PG 16	10,5–16	8	31	24/26	12	1.681.1612.01
PG 16	10,5–16	8	31	24/26	14	1.681.1614.01
PG 21	13–20	10	36	30/33	15	1.681.2115.01
PG 21	13–20	10	36	30/33	18	1.681.2118.01
PG 29	19–28	10	40	40/42	20	1.681.2920.01
PG 29	19–28	10	40	40/42	24	1.681.2924.01

Suitable accessories from page 73

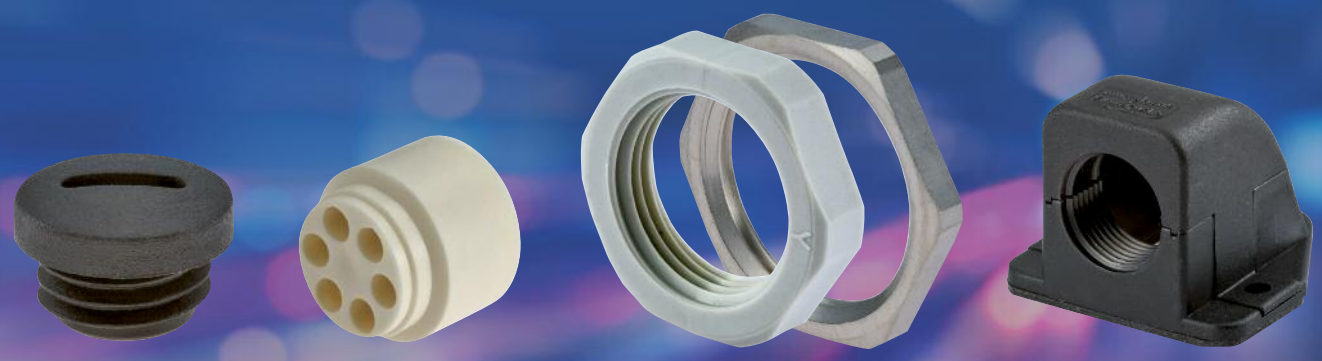
ACCESSORIES

That finishing touch for may applications: accessories. Seemingly insignificant, but actually extremely important. For the desired functionality is often only achieved with the right accessories. That's why HUMMEL offers a huge range of accessory components which are aligned perfectly with the cable glands and have been tried and tested over many years.

In this chapter, you will find:

// Accessories in plastic, brass and stainless steel
// Plugs and locknuts
// O-rings and connecting thread sealing rings
// Various inserts (Multi, Flaka)
// Reduction and expansion parts

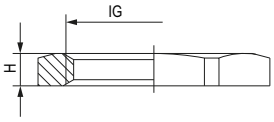
The accessories come in a range of materials, sizes and thread types. HUMMEL accessories also have all relevant approvals for international markets.



Locknut GM-FS — Metr., PG, NPT

Material	Polyamide
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

// Other colors upon request

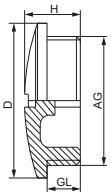


IG	H mm	mm	Number PA grey	Number PA black
M 12 x 1,5	5	17	1.262.1200.50	1.262.1201.50
M 16 x 1,5	5	22	1.262.1600.50	1.262.1601.50
M 20 x 1,5	6	27	1.262.2000.50	1.262.2001.50
M 25 x 1,5	6,5	32	1.262.2500.50	1.262.2501.50
M 32 x 1,5	7	41	1.262.3200.50	1.262.3201.50
M 40 x 1,5	7	50	1.262.4000.50	1.262.4001.50
M 50 x 1,5	8	60	1.262.5000.50	1.262.5001.50
M 63 x 1,5	8	75	1.262.6300.50	1.262.6301.50
PG 7	5	19	1.262.0700.11	1.262.0701.11
PG 9	5	22	1.262.0900.11	1.262.0901.11
PG 11	5	24	1.262.1100.11	1.262.1101.11
PG 13,5	6	27	1.262.1300.11	1.262.1301.11
PG 16	6	30	1.262.1600.11	1.262.1601.11
PG 21	7	36	1.262.2100.11	1.262.2101.11
PG 29	7	46	1.262.2900.11	1.262.2901.11
PG 36	8	60	1.262.3600.11	1.262.3601.11
PG 42	8	65	1.262.4200.11	1.262.4201.11
PG 48	8	70	1.262.4800.11	1.262.4801.11
NPT 3/8"	7	24	1.262.3800.70	1.262.3801.70
NPT 1/2"	6	27	1.262.1200.70	1.262.1201.70
NPT 3/4"	7	32	1.262.3400.70	1.262.3401.70
NPT 1"	7	40	1.262.1000.70	1.262.1001.70

Plug V-N-FS — Metr.

// Other colors upon request

Material	Polyamide
Protection	IP 54
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

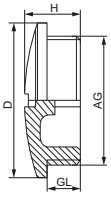


AG	GL mm	H mm	D mm	Number PA grey	Number PA black
M 12 x 1,5	6	10	15	1.251.1200.50	1.251.1201.50
M 16 x 1,5	7	11,5	20	1.251.1600.50	1.251.1601.50
M 20 x 1,5	6	9,5	25	1.251.2000.50	1.251.2001.50
M 25 x 1,5	11	15,5	30	1.251.2500.50	1.251.2501.50
M 32 x 1,5	11	16	38	1.251.3200.50	1.251.3201.50
M 40 x 1,5	13	18	46	1.251.4000.50	1.251.4001.50
M 50 x 1,5	13	18,5	56	1.251.5000.50	1.251.5001.50
M 63 x 1,5	15	19	69	1.251.6300.50	1.251.6301.50

Plug V-N-FS — PG

// Other colors upon request

Material	Polyamide
Protection	IP 54
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)



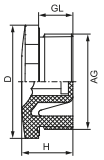
AG	GL mm	H mm	D mm	Number PA grey	Number PA black
PG 7	6	8	15	1.251.0700.11	1.251.0701.11
PG 9	6	9	19	1.251.0900.11	1.251.0901.11
PG 11	6	9	22	1.251.1100.11	1.251.1101.11
PG 13,5	6	9,5	25	1.251.1300.11	1.251.1301.11
PG 16	6	9,5	27	1.251.1600.11	1.251.1601.11
PG 21	8	11	33	1.251.2100.11	1.251.2101.11
PG 29	8	12	44	1.251.2900.11	1.251.2901.11
PG 36	10	15	55	1.251.3600.11	1.251.3601.11
PG 42	10	16	62	1.251.4200.11	1.251.4201.11
PG 48	12	16	69	1.251.4800.11	1.251.4801.11

Plug V-NE / V-NE-SD — Metr.

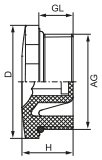
// Suitable O-Rings on page 88

Material	Polyamid, fiber reinforced
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
O-Ring	Buna-N
Colors	black (RAL 9005)
Protection	IP 54 (V-NE) IP 68 – 10 bar / IP 69K (V-NE-SD)

V-NE



V-NE-SD



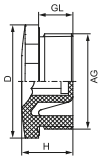
AG	GL mm	H mm	D mm	mm	mm	Number V-NE without O-Ring	Number V-NE-SD
M 12 x 1,5	8,5	13	16,5	15	6	1.255.1201.50	1.256.1201.50
M 16 x 1,5	8,5	13	20,5	19	8	1.255.1601.50	1.256.1601.50
M 20 x 1,5	9	14,5	25,5	24	8	1.255.2001.50	1.256.2001.50
M 25 x 1,5	10,5	16	30,5	28	8	1.255.2501.50	1.256.2501.50
M 32 x 1,5	11,5	17,5	38	36	8	1.255.3201.50	1.256.3201.50
M 40 x 1,5	11,5	18	48	46	8	1.255.4001.50	1.256.4001.50
M 50 x 1,5	13,5	20	60	55	8	1.255.5001.50	1.256.5001.50
M 63 x 1,5	14,5	21	75	70	8	1.255.6301.50	1.256.6301.50

Plug V-NE / V-NE-SD — PG

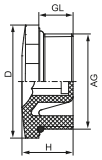
// Suitable O-Rings on page 88

Material	Polyamid, fiber reinforced
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
O-Ring	Buna-N
Colors	black (RAL 9005)
Protection	IP 54 (V-NE) IP 68 – 10 bar / IP 69K (V-NE-SD)

V-NE



V-NE-SD



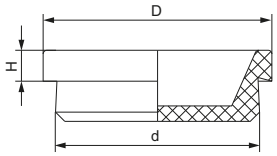
AG	GL mm	H mm	D mm	mm	mm	Number V-NE without O-Ring	Number V-NE-SD
PG 7	8,5	13	16,5	15	6	1.255.0701.11	1.256.0701.11
PG 9	8,5	13	20,5	19	8	1.255.0901.11	1.256.0901.11
PG 11	9	14,5	25,5	24	8	1.255.1101.11	1.256.1101.11
PG 13,5	9	14,5	25,5	24	8	1.255.1301.11	1.256.1301.11
PG 16	10,5	16	30,5	28	8	1.255.1601.11	1.256.1601.11
PG 21	11,5	17,5	38	36	8	1.255.2101.11	1.256.2101.11
PG 29	11,5	18	48	46	8	1.255.2901.11	1.256.2901.11
PG 36	13,5	20	60	55	8	1.255.3601.11	1.256.3601.11
PG 42	13,5	20	65	60	8	1.255.4201.11	1.256.4201.11
PG 48	14,5	21	75	70	8	1.255.4801.11	1.256.4801.11

Unthreaded sealing plug DS — Metr.

// For through holes or threaded holes

Material	Elastomer
Protection	IP 54
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS

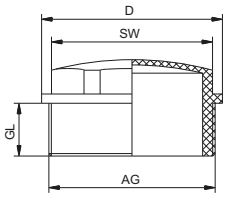


d mm	D mm	H mm	Number
12	17	5	1.250.1201.50
16	20	5	1.250.1601.50
20	25	5	1.250.2001.50
25	30	5	1.250.2501.50
32	37	5	1.250.3201.50
40	45	5	1.250.4001.50
50	56	5	1.250.5001.50
63	70	5	1.250.6301.50

Threaded sealing plug WN — Metr.

Material	Polyethylene
Protection	IP 54
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)

RoHS

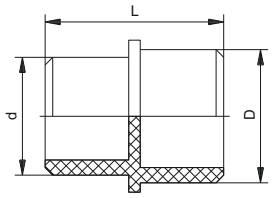


AG	GL mm	D mm	mm	Number
M 16 x 1,5	9	19,8	15	1.282.1600.50
M 20 x 1,5	12	24	19	1.282.2000.50
M 25 x 1,5	12	29,5	24	1.282.2500.50
M 32 x 1,5	14	37,5	30	1.282.3200.50
M 40 x 1,5	14	45,8	37	1.282.4000.50
M 50 x 1,5	18	55,8	46	1.282.5000.50
M 63 x 1,5	20	68,8	56	1.282.6300.50

Plug HSK-V — Metr., PG, NPT

Material	Polyamide
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	black (RAL 9005)

// Plugs for cable glands (HSK series)

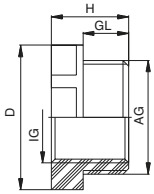


Fits the following sizes			D mm	d mm	L mm	Number
M 12 x 1,5	PG 7		6	4,5	15	1.280.0007.00
M 16 x 1,5	PG 9	NPT 3/8"	7,5	5,5	17	1.280.0009.00
M 16 x 1,5 / 11	PG 11		9,5	6,5	19	1.280.0011.00
M 20 x 1,5	PG 13,5	NPT 1/2"	11,5	8,5	19	1.280.0013.00
M 20 x 1,5 / 16	PG 16	NPT 1/2" (16)	13,5	11,5	19,5	1.280.0016.00
M 25 x 1,5	PG 21	NPT 3/4"	17,5	15,5	23,5	1.280.0021.00
M 32 x 1,5	PG 29	NPT 1" NPT 1 1/4"	24	19	26	1.280.0029.00
M 40 x 1,5	PG 36	NPT 1 1/2"	31	25	28	1.280.0036.00
M 50 x 1,5	PG 42		37	30	28	1.280.0042.00
M 63 x 1,5	PG 48		43	34	28	1.280.0048.00

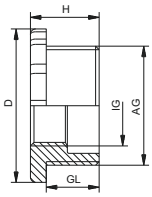
Adapter R-FS — Metr., PG

Material	Polyamide
Operating Temperature	-40 °C – 80 °C (-40 °F – 176 °F)
Colors	grey (RAL 7035)

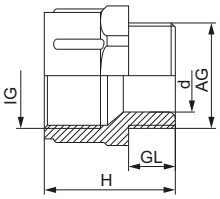
Type A



Type B



Type C

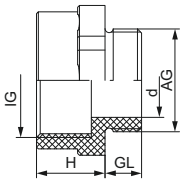


AG	IG	Type	GL mm	H mm	D mm	d mm	mm	Number
M 16 x 1,5	M 12 x 1,5	A	9	16	24		22	1.272.1612.50
M 20 x 1,5	M 16 x 1,5	A	9	16	27		24	1.272.2016.50
M 25 x 1,5	M 20 x 1,5	A	10	17	32		29	1.272.2520.50
M 32 x 1,5	M 25 x 1,5	A	12	19	40		36	1.272.3225.50
M 40 x 1,5	M 32 x 1,5	A	12	19	51		46	1.272.4032.50
M 50 x 1,5	M 40 x 1,5	A	14	21	61		55	1.272.5040.50
M 63 x 1,5	M 50 x 1,5	A	15	22	75		65	1.272.6350.50
PG 13,5	PG 9	B	8	12	27			1.272.1309.11
PG 16	PG 9	B	10	13	29			1.272.1609.11
PG 16	PG 11	B	10	13	29			1.272.1611.11
PG 21	PG 13,5	B	11	13,5	36			1.272.2113.11
PG 21	PG 16	B	11	13,5	36			1.272.2116.11
PG 29	PG 21	B	11	13,5	46			1.272.2921.11
PG 36	PG 29	B	11	15	58			1.272.3629.11
Reducing intermediate connector								
PG 9	PG 7	C	8	14		19	15	1.236.0907.11
PG 11	PG 9	C	8	18		22,5	19	1.236.1109.11
PG 13,5	PG 11	C	9	21		25,5	22	1.236.1311.11
PG 16	PG 13,5	C	10	25		28,5	24	1.236.1613.11

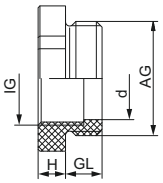
Adapter R-M-PA — Metr., PG

Material	Polyamide
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	black (RAL 9005)

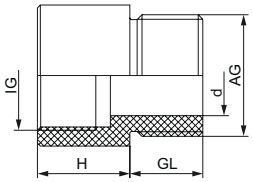
Type A



Type B



Type C

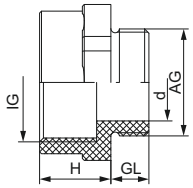


AG	IG	Typ	GL mm	H mm	d mm	mm	Number
M 16 x 1,5	M 12 x 1,5	B	8	6	10	20	1.273.1612.50
M 20 x 1,5	M 16 x 1,5	B	8	6	13,5	25	1.273.2016.50
M 25 x 1,5	M 20 x 1,5	B	8	6	18	29	1.273.2520.50
M 32 x 1,5	M 25 x 1,5	B	10	6	23	36	1.273.3225.50
M 40 x 1,5	M 32 x 1,5	C	15	5	30		1.273.4032.50
M 50 x 1,5	M 40 x 1,5	C	15	5	38		1.273.5040.50
M 63 x 1,5	M 50 x 1,5	C	15	5	48		1.273.6350.50
M 25 x 1,5	PG 13,5	B	8	6	18	29	1.273.2513.50
M 25 x 1,5	PG 16	A	8	14	18	29	1.273.2516.50
M 32 x 1,5	PG 21	A	10	15	25	36	1.273.3221.50
M 40 x 1,5	PG 29	A	10	15	33	45	1.273.4029.50
M 50 x 1,5	PG 36	A	12	17	43	55	1.273.5036.50
M 63 x 1,5	PG 42	C	15	5	52		1.273.6342.50
PG 9	M 12 x 1,5	C	15	19	8,5		1.273.0912.11
PG 11	M 16 x 1,5	C	15	19	11,5		1.273.1116.11
PG 13,5	M 16 x 1,5	B	8	6	14	25	1.273.1316.11
PG 16	M 20 x 1,5	A	8	13	16	27	1.273.1620.11
PG 21	M 25 x 1,5	C	15	19	20,5		1.273.2125.11
PG 29	M 32 x 1,5	C	15	19	28		1.273.2932.11
PG 36	M 40 x 1,5	C	15	5	38		1.273.3640.11
PG 42	M 40 x 1,5	C	15	5	38		1.273.4240.11
PG 48	M 50 x 1,5	C	15	5	38		1.273.4850.11

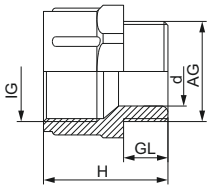
Adapter E-M-PA, K-FS — Metr., PG

Material	Polyamide (Type A / Type B), Polypropylene (Type C)
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
Colors	**K-FS** grey (RAL 7035), **E-M-PA** black (RAL 9005)

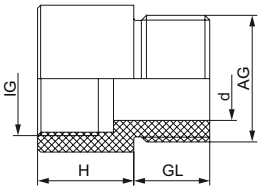
Type A



Type B



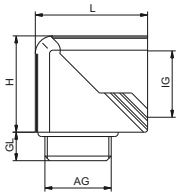
Type C



AG	IG	Typ	GL mm	H mm	d mm	mm	Number grey	Number black
M 12 x 1,5	M 16 x 1,5	A	8	12	6,5	21		1.239.1216.50
M 16 x 1,5	M 20 x 1,5	A	8	13	9	25		1.239.1620.50
M 20 x 1,5	M 25 x 1,5	A	8	15	14	30		1.239.2025.50
M 25 x 1,5	M 32 x 1,5	C	15	15	16,5			1.239.2532.50
M 32 x 1,5	M 40 x 1,5	C	15	19,5	23			1.239.3240.50
M 40 x 1,5	M 50 x 1,5	C	15	19,5	30			1.239.4050.50
M 50 x 1,5	M 63 x 1,5	C	15	20	39			1.239.5063.50
M 12 x 1,5	PG 7	A	8	12	6,5	17		1.239.1207.50
M 16 x 1,5	PG 9	C	1	19	8,5			1.239.1609.50
M 20 x 1,5	PG 13,5	A	8	13	14	25		1.239.2013.50
M 63 x 1,5	PG 48	C	15	20	51			1.239.6348.50
PG 7	M 12 x 1,5	C	15	19	6			1.239.0712.11
PG 9	M 16 x 1,5	A	8	12	9	21		1.239.0916.11
PG 11	M 20 x 1,5	C	15	19	11,5			1.239.1120.11
PG 13,5	M 20 x 1,5	A	8	13	14	25		1.239.1320.11
PG 16	M 25 x 1,5	A	8	15	16	30		1.239.1625.11
PG 21	M 32 x 1,5	A	8	15	21	37		1.239.2132.11
PG 29	M 40 x 1,5	A	10	17	30	45		1.239.2940.11
PG 36	M 50 x 1,5	C	15	19,5	37			1.239.3650.11
PG 42	M 50 x 1,5	C	15	19,5	43			1.239.4250.11
PG 48	M 63 x 1,5	C	15	20	48			1.239.4863.11
PG 11	PG 13,5	B	8	15	12,5	24	1.233.1113.11	
PG 13,5	PG 16	B	9	16	15	27	1.233.1316.11	
PG 16	PG 21	B	10	19	16	32	1.233.1621.11	
PG 21	PG 29	B	11	21	22,5	42	1.233.2129.11	

90° Snap Elbow — Metr., PG, NPT

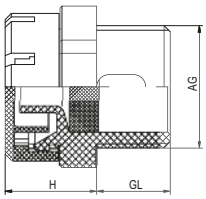
Material	Polyamide
O-Ring	Buna-N
Protection	IP 68 (NEMA 6)
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
Colors	grey (RAL 7035), black (RAL 9005)



AG	IG	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
M 16 x 1,5	M 16 x 1,5	8	23	28,5	5	19	1.316.1600.50	1.316.1601.50
M 20 x 1,5	M 20 x 1,5	9	30,5	35	7	24	1.316.2000.50	1.316.2001.50
M 25 x 1,5	M 25 x 1,5	11	40	49	10	33	1.316.2500.50	1.316.2501.50
PG 9	M 16 x 1,5	8	23	28,5	5	19	1.316.0900.11	1.316.0901.11
PG 13,5	M 20 x 1,5	9	30,5	35	7	24	1.316.1300.11	1.316.1301.11
PG 21	M 25 x 1,5	11	40	49	10	33	1.316.2100.11	1.316.2101.11
M 16 x 1,5	PG 9	8	23	28,5	5	19	1.315.1600.50	1.315.1601.50
M 20 x 1,5	PG 13,5	9	30,5	35	7	24	1.315.2000.50	1.315.2001.50
M 25 x 1,5	PG 21	11	40	49	10	33	1.315.2500.50	1.315.2501.50
M 32 x 1,5	PG 29	11	51,5	60	14	42	1.315.3200.50	1.315.3201.50
PG 9	PG 9	8	23	28,5	5	19	1.315.0900.11	1.315.0901.11
PG 11	PG 11	8	27	31,5	6	22	1.315.1100.11	1.315.1101.11
PG 13,5	PG 13,5	9	30,5	35	7	24	1.315.1300.11	1.315.1301.11
PG 16	PG 16	10	32,5	37,5	8	27	1.315.1600.11	1.315.1601.11
PG 21	PG 21	11	40	49	10	33	1.315.2100.11	1.315.2101.11
PG 29	PG 29	11	51,5	60	14	42	1.315.2900.11	1.315.2901.11
NPT 3/8"	PG 9	15	23	28,5	5	19	1.315.3800.70	1.315.3801.70
NPT 1/2"	PG 13,5	13	30,5	35	7	24	1.315.1200.70	1.315.1201.70
NPT 3/4"	PG 21	13	40	49	10	33	1.315.3400.70	1.315.3401.70
NPT 1"	PG 29	19	51,5	60	14	42	1.315.1000.70	1.315.1001.70

Breather drain KS — Metr.

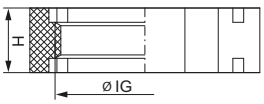
Material	Polyamide
Protection	IP 54
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)



AG	GL mm	H mm	mm	Number grey	Number black
M 25 x 1,5	15	21,5	30	1.213.2500.50	1.213.2501.50

Locknut for breather drain GM-KS — Metr.

Material	Polyamide
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)
Colors	grey (RAL 7035), black (RAL 9005)

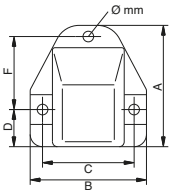


AG	H mm	mm	Number grey	Number black
M 25 x1,5	9	30	1.263.2500.50	1.263.2501.50

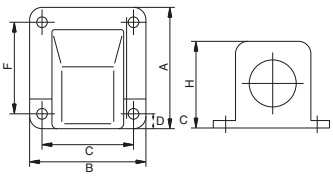
Foldable flange elbow KF-G — Metr., PG

Material	Polyamide
Seal	Buna-N
Protection	IP 54
Operating Temperature	-40 °C – 110 °C (-40 °F – 230 °F)
Colors	grey (RAL 7011), black (RAL 9005)

Type 1



Type 2



Size	Type	Ø mm	A mm	B mm	C mm	D mm	F mm	H mm	Number grey	Number black
M 16 x 1,5	1	4,3	49	47	37	15,5	29	35	1.312.1600.50	1.312.1601.50
M 20 x 1,5	1	4,5	49	47	37	15,5	29	35	1.312.2000.50	1.312.2001.50
M 25 x 1,5	1	6,0	69	65	51,5	21,5	41,5	44	1.312.2500.50	1.312.2501.50
M 32 x 1,5	2	6,5	90	78	64,5	9,5	64,5	55	1.312.3200.50	1.312.3201.50
M 40 x 1,5	2	6,5	99	94	79,5	10,5	79,5	66	1.312.4000.50	1.312.4001.50
M 50 x 1,5	2	6,5	116	101	87,5	12,5	87,5	76	1.312.5000.50	1.312.5001.50
PG 11	1	4,3	49	47	37	15,5	29	35	1.312.1100.11	1.312.1101.11
PG 16	1	4,3	49	47	37	15,5	29	35	1.312.1600.11	1.312.1601.11
PG 21	1	6,0	69	65	51,5	21,5	41,5	44	1.312.2100.11	1.312.2101.11
PG 29	2	6,5	90	78	64,5	9,5	64,5	55	1.312.2900.11	1.312.2901.11
PG 36	2	6,5	99	94	79,5	10,5	79,5	66	1.312.3600.11	1.312.3601.11
PG 48	2	6,5	116	101	87,5	12,5	87,5	76	1.312.4800.11	1.312.4801.11

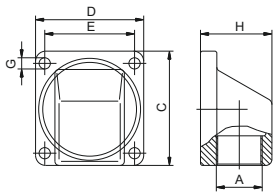
Flange elbow FW-T

PG

Material	Polyamide
O-Ring	Buna-N
Protection	IP 65
Operating Temperature	-20 °C – 95 °C (- 4 °F – 203 °F)
Colors	grey (RAL 7011)

RoHS

// Metric threads with O-Ring thread seal available



A	C mm	D mm	E mm	G mm	H mm	Number
PG 9	50	45	37	4,3	29	1.306.0900.14
PG 11	50	45	37	4,3	29	1.306.1100.14
PG 13,5	56	53	44	5,5	35	1.306.1300.14
PG 16	56	53	44	5,5	35	1.306.1600.14
PG 21	68	68	55,5	5,5	43	1.306.2100.14
PG 29	74	70	60	5,5	52	1.306.2900.14
PG 36	93	88	72	6,5	68	1.306.3600.14

Multiple cable insertion HSK-ME — Metr., PG, NPT

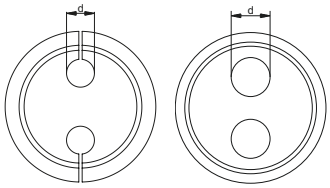
Material	Elastomer
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

RoHS

// Installation instructions see page 152
// The shown inserts are samples, more inserts upon request

! The inserts are exclusively capable for the glands of the HSK series

Slit version



Fits the following sizes			Number of holes x d	Number	Number of holes x d	Number	Number without holes
M 12 x 1,5	PG 7 / KR PG 9		1,5*	1.089.0712.19			1.089.0799.19
M 16 x 1,5	PG 9 / KE PG 7 / KR PG 11	NPT 3/8"	4 x 1,4	1.089.0900.19	2 x 3	1.089.0901.19	1.089.0999.19
			5 x 1,6	1.089.0902.19	10 x 1,4	1.089.0904.19	
			4 x 2,3	1.089.0908.19	2 x 2*	1.089.0916.19	
M 16 x 1,5 / 11	PG 11 / KE PG 9 / KR PG 13,5		2 x 3	1.089.1100.19	3 x 3	1.089.1101.19	1.089.1199.19
			2 x 4	1.089.1102.19	3 x 1,5	1.089.1103.19	
M 20 x 1,5	PG 13,5 / KE PG 11 / KR PG 16	NPT 1/2"	3 x 2	1.089.1300.19	6 x 3	1.089.1301.19	1.089.1399.19
			3 x 4	1.089.1302.19	2 x 5	1.089.1303.19	
			3 x 3	1.089.1304.19	1 x 5*	1.089.1312.19	
M 20 x 1,5 / 16	PG 16 / KE PG 13,5 / KR PG 21	NPT 1/2" (16)	4 x 4	1.089.1602.19	5 x 4	1.089.1603.19	1.089.1699.19
			6 x 4	1.089.1604.19	2 x 6	1.089.1605.19	
			6 x 3	1.089.1607.19	3 x 4	1.089.1601.19	
			4 x 5	1.089.1611.19	2 x 4,5	1.089.1614.19	
M 25 x 1,5	PG 21 / KE PG 16	NPT 3/4"	4 x 6	1.089.2100.19	3 x 7	1.089.2101.19	1.089.2199.19
			2 x 8	1.089.2102.19	4 x 5	1.089.2103.19	
			3 x 5,2	1.089.2106.19	1 x 5,8*	1.089.2113.19	
M 32 x 1,5	PG 29	NPT 1"/NPT 1 1/4"	6 x 6,5	1.089.2900.19	4 x 9	1.089.2901.19	1.089.2999.19
			2 x 6	1.089.2905.19			
M 40 x 1,5	PG 36	NPT 1 1/2"	5 x 9	1.089.3600.19	7 x 9	1.089.3601.19	1.089.3699.19
			6 x 8	1.089.3602.19	2 x 15	1.089.3603.19	
M 50 x 1,5	PG 42		3 x 14*	1.089.4203.19	2 x 17	1.089.4205.19	1.089.4299.19
M 63 x 1,5	PG 48		8 x 10	1.089.4800.19	6 x 12	1.089.4801.19	1.089.4899.19

* Slit version to accommodate terminated cable

Flat cable insertion HSK-Flaka — Metr., PG, NPT

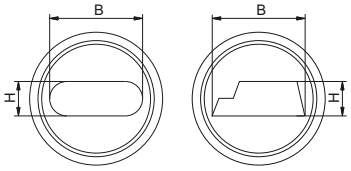
Material	Elastomer
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

RoHS

// Installation instructions see page 152
// The shown inserts are samples, more inserts upon request

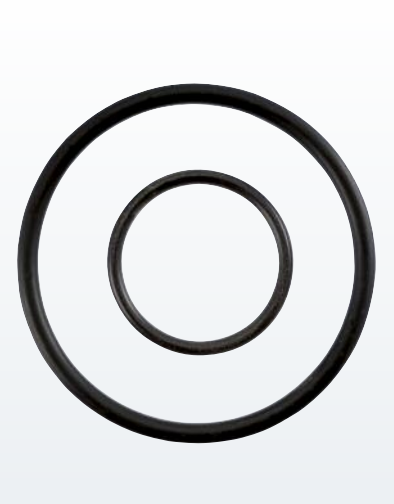
! The inserts are exclusively capable for the glands of the HSK series

ASI-BUS



Fits the following sizes				w x h mm	Number	w x h mm	Number
M 20 x 1,5	PG 13,5	NPT 1/2"	(ASI-BUS)	10,4 x 4,2	1.091.1300.19		
M 20 x 1,5 / 16	PG 16 / KE PG 13,5 / KR PG 21	NPT 1/2" (16)		14 x 6	1.091.1600.19	11,5 x 5	1.091.1601.19
M 20 x 1,5 / 16	PG 16 / KE PG 13,5 / KR PG 21	NPT 1/2" (16)		12 x 7	1.091.1602.19		
M 25 x 1,5	PG 21 / KE PG 16	NPT 3/4"		14 x 6	1.091.2100.19	14 x 7	1.091.2101.19
M 32 x 1,5	PG 29	NPT 1"/ 1 1/4"		22 x 8	1.091.2900.19		
M 40 x 1,5	PG 36	NPT 1 1/2"		28,5 x 10	1.091.3600.19	29 x 5,5	1.091.3601.19
M 50 x 1,5	PG 42			33,5 x 11,5	1.091.4200.19		
M 63 x 1,5	PG 48			38 x 12	1.091.4800.19		

O-Ring — Metr., PG, NPT



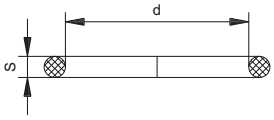
RoHS

O-Ring Buna-N	
Material	Buna-N
Operating Temperature	-30 °C – 120 °C (-22 °F – 248 °F)

O-Ring FKM	
Material	FKM
Operating Temperature	-40 °C – 200 °C (-40 °F – 392 °F)

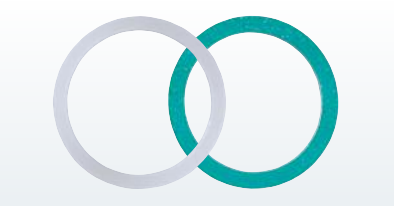
O-Ring VMQ	
Material	VMQ (Silicone)
Operating Temperature	-60 °C – 250 °C (-76 °F – 482 °F)

// O-Ring for HSK-K



Fits the following sizes	d mm	S mm	Number Buna-N	Number FKM	Number VMQ
M 12 x 1,5	10	1,5	1.321.1200.57	1.321.1200.58	1.321.1200.59
M 16 x 1,5	12	1,5	1.321.1600.57	1.321.1600.58	1.321.1600.59
M 20 x 1,5	17	1,8	1.321.2000.57	1.321.2000.58	1.321.2000.59
M 25 x 1,5	23	2	1.321.2500.57	1.321.2500.58	1.321.2500.59
M 32 x 1,5	30	2,5	1.321.3200.57	1.321.3200.58	1.321.3200.59
M 40 x 1,5	35	2	1.321.4000.57	1.321.4000.58	1.321.4000.59
M 50 x 1,5	43	2	1.321.5000.57	1.321.5000.58	1.321.5000.59
M 63 x 1,5	55	2	1.321.6300.57	1.321.6300.58	1.321.6300.59
PG 7	10	1,5	1.321.0700.17	1.321.0700.21	1.321.0700.22
PG 9	12	1,5	1.321.0900.17	1.321.0900.21	1.321.0900.22
PG 11	16	1,5	1.321.1100.17	1.321.1100.21	1.321.1100.22
PG 13,5	17	1,8	1.321.1300.17	1.321.1300.21	1.321.1300.22
PG 16	18	1,5	1.321.1600.17	1.321.1600.21	1.321.1600.22
PG 21	26	2	1.321.2100.17	1.321.2100.21	1.321.2100.22
PG 29	33	2	1.321.2900.17	1.321.2900.21	1.321.2900.22
PG 36	43	2	1.321.3600.17	1.321.3600.21	1.321.3600.22
PG 42	50	2	1.321.4200.17	1.321.4200.21	1.321.4200.22
PG 48	55	2	1.321.4800.17	1.321.4800.21	1.321.4800.22
NPT 3/8"	13	2	1.321.3800.77	1.321.3800.78	1.321.3800.79
NPT 1/2"	19	1,8	1.321.1200.77	1.321.1200.78	1.321.1200.79
NPT 3/4"	23	2,5	1.321.3400.77	1.321.3400.78	1.321.3400.79
NPT 1"	30	2,5	1.321.1000.77	1.321.1000.78	1.321.1000.79
NPT 1 1/4"	38	2,5	1.321.5400.77	1.321.5400.78	1.321.5400.79
NPT 1 1/2"	45	2,5	1.321.6400.77	1.321.6400.78	1.321.6400.79

Thread Seal Ring — Metr.



// GFK thread seal see page 149

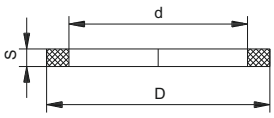
Thread Seal Ring PE

Material	Polyethylene
Operating Temperature	-30 °C – 70 °C (-22 °F – 158 °F)

Thread Seal Ring HD

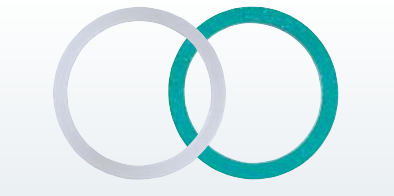
Material	Fiber-reinforced plastic
Operating Temperature	-40 °C – 300 °C (-40 °F – 572 °F)

RoHS



Fits the following sizes	d mm	D mm	S mm	Number Polyethylene	Number Fiber-reinforced plastic
M 12 x 1,5	12	16	2	1.325.1200.59	1.325.1200.50
M 16 x 1,5	16	20	2	1.325.1600.59	1.325.1600.50
M 20 x 1,5	20	25	2	1.325.2000.59	1.325.2000.50
M 25 x 1,5	25	31	2	1.325.2500.59	1.325.2500.50
M 32 x 1,5	32	38	2	1.325.3200.59	1.325.3200.50
M 40 x 1,5	40	52,7	2	1.325.4000.59	1.325.4000.50
M 50 x 1,5	50	58	2	1.325.5000.59	1.325.5000.50
M 63 x 1,5	63	72	2	1.325.6300.59	1.325.6300.50

Thread Seal Ring — PG



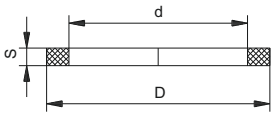
Thread Seal Ring PE

Material	Polyethylene
Operating Temperature	-30 °C – 70 °C (-22 °F – 158 °F)

Thread Seal Ring HD

Material	Fiber-reinforced plastic
Operating Temperature	-40 °C – 300 °C (-40 °F – 572 °F)

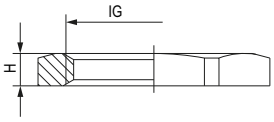
RoHS



Fits the following sizes	d mm	D mm	S Polyethylene mm	S Fiber-reinforced plastic mm	Number Polyethylene	Number Fiber-reinforced plastic
PG 7	12,5	16,5	2	1,5	1.325.0700.19	1.325.0700.20
PG 9	15,2	19	2	1,5	1.325.0900.19	1.325.0900.20
PG 11	18,6	22,5	2	1,5	1.325.1100.19	1.325.1100.20
PG 13,5	20,4	25	2	1,5	1.325.1300.19	1.325.1300.20
PG 16	22,5	27	2	1,5	1.325.1600.19	1.325.1600.20
PG 21	28,3	33,5	2	2	1.325.2100.19	1.325.2100.20
PG 29	37	43,5	2	2	1.325.2900.19	1.325.2900.20
PG 36	47	55	2	2	1.325.3600.19	1.325.3600.20
PG 42	54	63	2	2	1.325.4200.19	1.325.4200.20
PG 48	59,3	69	2	2	1.325.4800.19	1.325.4800.20

Locknut GM-Ms — Metr., PG, G

Material	Nickel plated brass

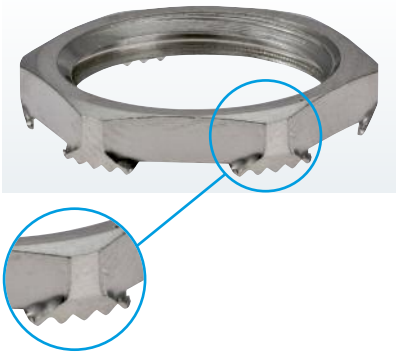


IG	H mm	mm	Number
M 12 x 1,5	2,8	15	1.161.1200.50
M 16 x 1,5	2,8	19	1.161.1600.50
M 20 x 1,5	3,0	23	1.161.2000.50
M 25 x 1,5	3,5	29	1.161.2500.50
M 32 x 1,5	4,0	36	1.161.3200.50
M 40 x 1,5	4,5	45	1.161.4000.50
M 50 x 1,5	5,5	55	1.161.5000.50
M 63 x 1,5	6,0	70	1.161.6300.50
M 75 x 1,5	8,0	85	1.161.7500.50
M 80 x 2	8,0	90	1.161.8000.50
M 90 x 2	8,0	100	1.161.9000.50

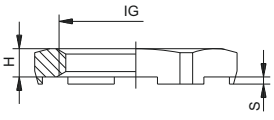
IG	H mm	mm	Number
M 100 x 2	11	115	1.161.1000.50
M 110 x 2	11	125	1.161.1100.50
PG 7	2,8	15	1.161.0700.01
PG 9	2,8	18	1.161.0900.01
PG 11	3,0	21	1.161.1100.01
PG 13,5	3,0	23	1.161.1300.01
PG16	3,0	26	1.161.1600.01
PG 21	3,5	32	1.161.2100.01
PG 29	4,0	41	1.161.2900.01
PG 36	5,0	51	1.161.3600.01

IG	H mm	mm	Number
PG 42	5,0	60	1.161.4200.01
PG 48	5,5	64	1.161.4800.01
G 2 1/2"	7	80	1.106.5200.99
G 3"	8	95	1.106.3000.99
G 4"	11	125	1.106.4000.99

Locknut GM-EMC — Metr., PG



Material	Nickel plated brass

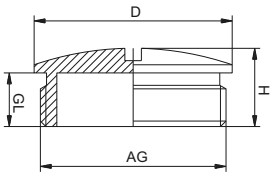


IG	H mm	mm	S mm	Number
M 12 x 1,5	2,8	15	0,7	1.167.1200.50
M 16 x 1,5	2,8	19	0,7	1.167.1600.50
M 20 x 1,5	3,0	24	0,7	1.167.2000.50
M 25 x 1,5	3,5	30	0,7	1.167.2500.50
M 32 x 1,5	4,5	36	0,7	1.167.3200.50
M 40 x 1,5	5,0	46	0,7	1.167.4000.50
M 50 x 1,5	5,0	60	0,7	1.167.5000.50
M 63 x 1,5	6,0	70	0,7	1.167.6300.50

IG	H mm	mm	S mm	Number
PG 7	2,8	15	0,7	1.167.0700.01
PG 9	2,8	18	0,7	1.167.0900.01
PG 11	3,0	21	0,7	1.167.1100.01
PG 13,5	3,0	23	0,7	1.167.1300.01
PG 16	3,0	26	0,7	1.167.1600.01
PG 21	3,5	32	0,7	1.167.2100.01
PG 29	4,0	41	0,7	1.167.2900.01
PG 36	5,0	51	0,7	1.167.3600.01
PG 42	5,0	60	0,7	1.167.4200.01
PG 48	5,5	64	0,7	1.167.4800.01

Plug V-N-Ms — Metr., PG

Material	Nickel plated brass
Protection	IP 54



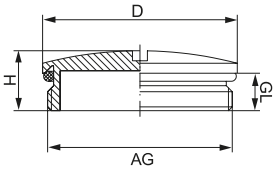
AG	GL mm	H mm	D mm	Number
M 12 x 1,5	5	7,5	14	1.052.1200.50
M 16 x 1,5	5	9,0	18	1.052.1600.50
M 20 x 1,5	6,5	9,5	22	1.052.2000.50
M 25 x 1,5	7	11,0	28	1.052.2500.50
M 32 x 1,5	8	12,0	35	1.052.3200.50
M 40 x 1,5	8,5	13,0	44	1.052.4000.50
M 50 x 1,5	9	15,0	54	1.052.5000.50
M 63 x 1,5	10	16,0	67	1.052.6300.50

AG	GL mm	H mm	D mm	Number
PG 7	5	8	14	1.052.0700.01
PG 9	6	9	17	1.052.0900.01
PG 11	6	9	20	1.052.1100.01
PG 13,5	6,5	9,5	22	1.052.1300.01
PG 16	6,5	9,5	24	1.052.1600.01
PG 21	7	11	30	1.052.2100.01
PG 29	8	12	39	1.052.2900.01
PG 36	9	15	50	1.052.3600.01
PG 42	10	16	57	1.052.4200.01
PG 48	10	16	64	1.052.4800.01

Plug V-N-Ms-SD — Metr., PG

// Other O-Ring materials upon request

Material	Nickel plated brass
O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-40 °C – 80 °C 40 °F – 176 °F)



AG	GL mm	H mm	D mm	Number
M 12 x 1,5	6,5	9,5	14	1.052.1201.50
M 16 x 1,5	6	9	20	1.052.1601.50
M 20 x 1,5	6,5	9,5	24	1.052.2001.50
M 25 x 1,5	7	11	28	1.052.2501.50
M 32 x 1,5	8	12,5	35	1.052.3201.50
M 40 x 1,5	8	12	45	1.052.4001.50
M 50 x 1,5	9	15	55	1.052.5001.50
M 63 x 1,5	10	16	68	1.052.6301.50

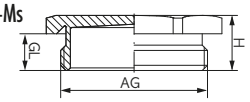
AG	GL mm	H mm	D mm	Number
PG 7	4,8	8	14	1.052.0701.01
PG 9	5,5	9	17	1.052.0901.01
PG 11	5,5	9	20	1.052.1101.01
PG 13,5	6	9,5	22	1.052.1301.01
PG 16	6	9,5	24	1.052.1601.01
PG 21	6,5	11	30	1.052.2101.01
PG 29	7,5	12	39	1.052.2901.01
PG 36	9	15	50	1.052.3601.01
PG 42	10	16	57	1.052.4201.01
PG 48	10	16	64	1.052.4801.01

Plug V-NE-Ms — Metr.

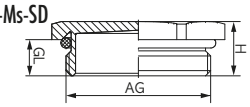
// Other O-Ring materials upon request

Material	Nickel plated brass
V-NE-Ms	
Protection	IP 54
V-NE-Ms-SD / V-NE-Ms-SD-FKM	
Protection	IP 68 – 10 bar / IP 69K
O-Ring / Operating Temperature	Buna-N / -20 °C – 95 °C (-4 °F – 203 °F) FKM / -20 °C – 180 °C (-4 °F – 356 °F)

V-NE-Ms

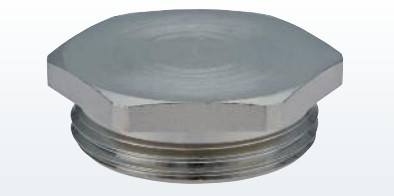


V-NE-Ms-SD



AG	GL mm	H mm	mm	Number V-NE-Ms without O-Ring	Number V-NE-Ms-SD -20 °C – 95 °C	Number V-NE-Ms-SD-FKM -20 °C – 180 °C
M 12 x 1,5	6,5	9,5	14	1.155.1200.50	1.156.1200.50	1.157.1200.50
M 16 x 1,5	6	9	19	1.155.1600.50	1.156.1600.50	1.157.1600.50
M 20 x 1,5	6	9,5	22	1.155.2000.50	1.156.2000.50	1.157.2000.50
M 25 x 1,5	7	10,5	30	1.155.2500.50	1.156.2500.50	1.157.2500.50
M 32 x 1,5	8	12,5	41	1.155.3200.50	1.156.3200.50	1.157.3200.50
M 40 x 1,5	8	13	46	1.155.4000.50	1.156.4000.50	1.157.4000.50
M 50 x 1,5	9	15	55	1.155.5000.50	1.156.5000.50	1.157.5000.50
M 63 x 1,5	10	16,5	70	1.155.6300.50	1.156.6300.50	1.157.6300.50

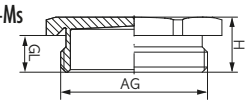
Plug V-NE-Ms — PG



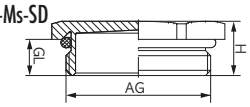
// Other O-Ring materials upon request

Material	Nickel plated brass
V-NE-Ms	
Protection	IP 54
V-NE-Ms-SD / V-NE-Ms-SD-FKM	
Protection	IP 68 – 10 bar / IP 69K
O-Ring / Operating Temperature	Buna-N / -20 °C – 95 °C (-4 °F – 203 °F) FKM / -20 °C – 180 °C (-4 °F – 356 °F)

V-NE-Ms



V-NE-Ms-SD

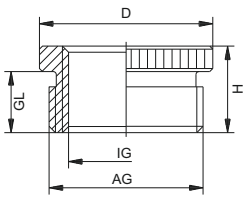


AG	GL mm	H mm	mm	Number V-NE-Ms without O-Ring	Number V-NE-Ms-SD -20 °C – 95 °C	Number V-NE-Ms-SD-FKM -20 °C – 180 °C
PG 7	5	8	14	1.155.0700.01	1.156.0700.01	1.157.0700.01
PG 9	6	9	17	1.155.0900.01	1.156.0900.01	1.157.0900.01
PG 11	6	9,5	20	1.155.1100.01	1.156.1100.01	1.157.1100.01
PG 13,5	6,5	10	22	1.155.1300.01	1.156.1300.01	1.157.1300.01
PG 16	6,5	10	24	1.155.1600.01	1.156.1600.01	1.157.1600.01
PG 21	7	10,5	30	1.155.2100.01	1.156.2100.01	1.157.2100.01
PG 29	8	12,5	41	1.155.2900.01	1.156.2900.01	1.157.2900.01
PG 36	8	13	50	1.155.3600.01	1.156.3600.01	1.157.3600.01
PG 42	9	15	58	1.155.4200.01	1.156.4200.01	1.157.4200.01
PG 48	10	16,5	65	1.155.4800.01	1.156.4800.01	1.157.4800.01

Adapter R-H

Metr., PG

Material	Nickel plated brass

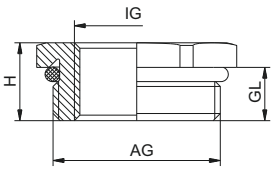


AG	IG	GL mm	H mm	D mm	Number
M 16 x 1,5	M 12 x 1,5	6,0	8,5	18	1.076.1612.50
M 20 x 1,5	M 12 x 1,5	6,5	9,0	24	1.076.2012.50
M 20 x 1,5	M 16 x 1,5	6,5	9,0	24	1.076.2016.50
M 25 x 1,5	M 16 x 1,5	7,0	10,0	30	1.076.2516.50
M 25 x 1,5	M 20 x 1,5	7,0	10,0	30	1.076.2520.50
M 32 x 1,5	M 20 x 1,5	8,0	11,5	39	1.076.3220.50
M 32 x 1,5	M 25 x 1,5	8,0	11,5	39	1.076.3225.50
M 40 x 1,5	M 25 x 1,5	8,0	11,5	43	1.076.4025.50
M 40 x 1,5	M 32 x 1,5	9,0	12,5	43	1.076.4032.50
M 50 x 1,5	M 32 x 1,5	10,0	14,0	57	1.076.5032.50
M 50 x 1,5	M 40 x 1,5	10,0	14,0	57	1.076.5040.50
M 63 x 1,5	M 40 x 1,5	10,0	14,0	64	1.076.6340.50
M 63 x 1,5	M 50 x 1,5	10,0	14,0	64	1.076.6350.50
PG 9	PG 7	6	8,5	17	1.071.0907.01
PG 11	PG 7	6	8,5	20	1.071.1107.01
PG 11	PG 9	6	8,5	20	1.071.1109.01
PG 13,5	PG 9	6,5	9	22	1.071.1309.01
PG 13,5	PG 11	6,5	9	22	1.071.1311.01
PG 16	PG 9	6,5	9,5	24	1.071.1609.01
PG 16	PG 11	6,5	9,5	24	1.071.1611.01
PG 16	PG 13,5	6,5	9,5	24	1.071.1613.01
PG 21	PG 11	7	10	30	1.071.2111.01
PG 21	PG 13,5	7	10	30	1.071.2113.01
PG 21	PG 16	7	10	30	1.071.2116.01
PG 29	PG 16	8	11,5	39	1.071.2916.01
PG 29	PG 21	8	11,5	39	1.071.2921.01
PG 36	PG 21	9	12,5	50	1.071.3621.01
PG 36	PG 29	9	12,5	50	1.071.3629.01
PG 42	PG 29	10	14	57	1.071.4229.01
PG 42	PG 36	10	14	57	1.071.4236.01
PG 48	PG 36	10	14	64	1.071.4836.01
PG 48	PG 42	10	14	64	1.071.4842.01

Adapter RSD-Ms — Metr.

// Other O-Ring materials upon request

Material	Nickel plated brass
O-Ring	Buna-N
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)



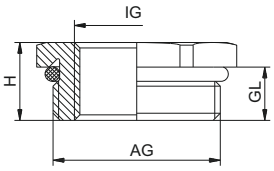
AG	IG	GL mm	H mm	mm	Number
M 16 x 1,5	M 12 x 1,5	5	8	17	1.077.1612.50
M 20 x 1,5	M 12 x 1,5	6	9	22	1.077.2012.50
M 20 x 1,5	M 16 x 1,5	6	9	22	1.077.2016.50
M 25 x 1,5	M 16 x 1,5	7	10	29	1.077.2516.50
M 25 x 1,5	M 20 x 1,5	7	10	29	1.077.2520.50
M 32 x 1,5	M 16 x 1,5	8	11	34	1.077.3216.50
M 32 x 1,5	M 20 x 1,5	8	11	34	1.077.3220.50
M 32 x 1,5	M 25 x 1,5	8	11	34	1.077.3225.50
M 40 x 1,5	M 20 x 1,5	8	12	43	1.077.4020.50
M 40 x 1,5	M 25 x 1,5	8	12	43	1.077.4025.50
M 40 x 1,5	M 32 x 1,5	8	12	43	1.077.4032.50

AG	IG	GL mm	H mm	mm	Number
M 50 x 1,5	M 25 x 1,5	9	13	55	1.077.5025.50
M 50 x 1,5	M 32 x 1,5	9	13	55	1.077.5032.50
M 50 x 1,5	M 40 x 1,5	9	13	55	1.077.5040.50
M 63 x 1,5	M 32 x 1,5	10	14	65	1.077.6332.50
M 63 x 1,5	M 40 x 1,5	10	14	65	1.077.6340.50
M 63 x 1,5	M 50 x 1,5	10	14	65	1.077.6350.50

Adapter RSD-Ms — PG

// Other O-Ring materials upon request

Material	Nickel plated brass
O-Ring	Buna-N
Operating Temperature	-40 °C – 100 °C (-40 °F – 212 °F)

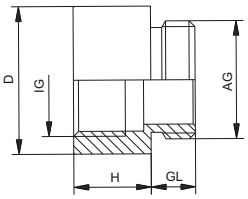


AG	IG	GL mm	H mm	mm	Number
PG 9	PG 7	6	8,8	17	1.077.0907.01
PG 11	PG 7	6	9	20	1.077.1107.01
PG 11	PG 9	6	9	20	1.077.1109.01
PG 13,5	PG 9	6,5	9,5	22	1.077.1309.01
PG 13,5	PG 11	6,5	9,5	22	1.077.1311.01
PG 16	PG 9	6,5	9,5	24	1.077.1609.01
PG 16	PG 11	6,5	9,5	24	1.077.1611.01
PG 16	PG 13,5	6,5	9,5	24	1.077.1613.01
PG 21	PG 11	7	10,3	30	1.077.2111.01
PG 21	PG 13,5	7	10,3	30	1.077.2113.01
PG 21	PG 16	7	10,3	30	1.077.2116.01

AG	IG	GL mm	H mm	mm	Number
PG 29	PG 16	8	11,5	40	1.077.2916.01
PG 29	PG 21	8	11,5	40	1.077.2921.01
PG 36	PG 21	9	12,5	50	1.077.3621.01
PG 36	PG 29	9	12,5	50	1.077.3629.01
PG 42	PG 29	10	13,5	57	1.077.4229.01
PG 42	PG 36	10	13,5	57	1.077.4236.01
PG 48	PG 36	10	13,5	64	1.077.4836.01
PG 48	PG 42	10	13,5	64	1.077.4842.01

Adapter RE-Ms — Metr., PG

Material	Nickel plated brass

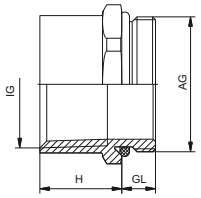


AG	IG	GL mm	H mm	D mm	Number
M 16 x 1,5	PG 9	6	10,5	20	1.039.1609.01
M 20 x 1,5	PG 11	6,5	12,5	22	1.039.2011.01
M 20 x 1,5	PG 13,5	6,5	12,5	22	1.039.2013.01
M 20 x 1,5	PG 16	6,5	12,5	24	1.039.2016.01
M 25 x 1,5	PG 16	6,5	12,5	28	1.039.2516.01
M 25 x 1,5	PG 21	6,5	14,5	30	1.039.2521.01
M 32 x 1,5	PG 29	7	16	39	1.039.3229.01

AG	IG	GL mm	H mm	D mm	Number
PG 9	M 16 x 1,5	6	10,5	20	1.039.0916.01
PG 11	M 20 x 1,5	6,5	12,5	22	1.039.1120.01
PG 13,5	M 20 x 1,5	6,5	12,5	22	1.039.1320.01
PG 16	M 25 x 1,5	6,5	14,5	27	1.039.1625.01

Adapter RE-Ms — Metr., PG

Material	Nickel plated brass
O-Ring	Buna-N

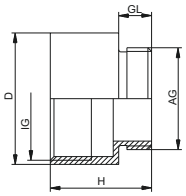


AG	IG	GL mm	H mm	⌀ mm	Number
M 16 x 1,5	NPT 1/2"	6	17	24	1.171.1612.50
M 20 x 1,5	NPT 1/2"	6	17	24	1.171.2012.50
M 25 x 1,5	NPT 1/2"	7	8	30	1.171.2512.50
M 25 x 1,5	NPT 3/4"	7	19	30	1.171.2534.50
M 32 x 1,5	NPT 1"	8	25	40	1.171.3210.50
M 32 x 1,5	NPT 1 1/4"	8	25	46	1.171.3254.50

AG	IG	GL mm	H mm	⌀ mm	Number
PG 11	NPT 1/2"	6	16,7	24	1.171.1112.01
PG 13,5	NPT 1/2"	6,5	17	24	1.171.1312.01
PG 16	NPT 1/2"	6,5	16,5	24	1.171.1612.01
PG 21	NPT 1/2"	7	8	30	1.171.2112.01
PG 21	NPT 3/4"	7	17	30	1.171.2134.01
PG 29	NPT 1"	8	12	40	1.171.2910.01

Adapter E-Ms — Metr.

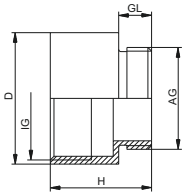
Material	Nickel plated brass



AG	IG	GL mm	H mm	D mm	Number
M 12 x 1,5	M 16 x 1,5	5	15	18	1.033.1216.50
M 16 x 1,5	M 20 x 1,5	6	17,5	22	1.033.1620.50
M 20 x 1,5	M 25 x 1,5	6,5	19	27	1.033.2025.50
M 25 x 1,5	M 32 x 1,5	6,5	21	34	1.033.2532.50
M 32 x 1,5	M 40 x 1,5	7	23	42	1.033.3240.50
M 40 x 1,5	M 50 x 1,5	9	31	53	1.033.4050.50
M 50 x 1,5	M 63 x 1,5	9	31	66	1.033.5063.50

Adapter E-Ms — PG

Material	Nickel plated brass

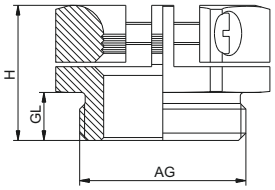


AG	IG	GL mm	H mm	D mm	Number
PG 7	PG 9	5	15	17	1.033.0709.01
PG 9	PG 11	6	16,5	20	1.033.0911.01
PG 9	PG 13,5	6	17,5	22	1.033.0913.01
PG 11	PG 13,5	6	17,5	22	1.033.1113.01
PG 11	PG 16	6	18,5	24	1.033.1116.01
PG 11	PG 21	6	20,5	30	1.033.1121.01
PG 13,5	PG 16	6,5	19	24	1.033.1316.01
PG 13,5	PG 21	6,5	21	30	1.033.1321.01
PG 16	PG 21	6,5	21	30	1.033.1621.01
PG 16	PG 29	6,5	22,5	39	1.033.1629.01
PG 21	PG 29	7	23	39	1.033.2129.01

AG	IG	GL mm	H mm	D mm	Number
PG 29	PG 36	8	27,5	50	1.033.2936.01
PG 36	PG 42	9	31	57	1.033.3642.01
PG 42	PG 48	10	33	64	1.033.4248.01

Compression clamp KLE — Metr.

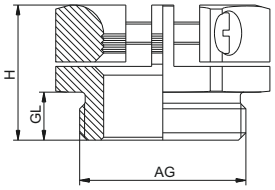
Material: Nickel plated brass



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	5–7,5	5,5	15,0	16	1.143.1200.50
M 16 x 1,5	7–10	6,0	16,0	19	1.143.1600.50
M 20 x 1,5	10–14	6,5	18,0	24	1.143.2000.50
M 25 x 1,5	12–21,5	8,0	21,0	34	1.143.2500.50
M 32 x 1,5	16–27	8,0	22,0	42	1.143.3200.50
M 40 x 1,5	22–33	9,5	25,5	52	1.143.4000.50

Compression clamp KLE — PG

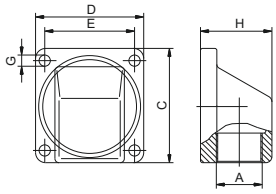
Material: Nickel plated brass



AG	⌀ mm	GL mm	H mm	mm	Number
PG 7	5,5–8	5,5	14,8	16	1.143.0700.01
PG 9	6,5–10	6	16,6	19	1.143.0900.01
PG 11	7,5–12	6	17,3	22	1.143.1100.01
PG 13,5	8,5–14	6,5	17,8	24	1.143.1300.01
PG 16	9,5–16	6,5	18,3	26	1.143.1600.01
PG 21	12–21	7,5	20,8	33	1.143.2100.01
PG 29	19–30	8	21,8	42	1.143.2900.01
PG 36	25–37	9,5	25,3	52	1.143.3600.01
PG 42	31–43	10	26,3	59	1.143.4200.01
PG 48	35–48	11	27,3	64	1.143.4800.01

Flange elbow FW-ZN — Metr.

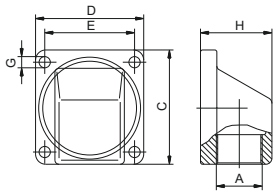
Material	Zinc die casting
O-Ring	Buna-N
Protection	IP 65
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)



A	C mm	D mm	E mm	G mm	H mm	Number
M 20 x 1,5	56	53	44	5,5	35	1.306.2000.50
M 25 x 1,5	65	63	54	5,5	42	1.306.2500.50
M 32 x 1,5	75	71	60	5,5	52	1.306.3200.50
M 50 x 1,5	93	89	72	6,5	69	1.306.5000.50
M 63 x 1,5	114	96	84	6,5	74	1.306.6300.50

Flange elbow FW-ZN — PG

Material	Zinc die casting
O-Ring	Buna-N
Protection	IP 65
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)

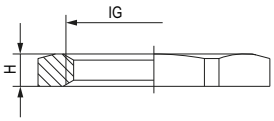


A	C mm	D mm	E mm	G mm	H mm	Number
PG 9	50	45	37	4,3	30	1.306.0900.05
PG 11	50	45	37	4,3	30	1.306.1100.05
PG 13,5	56	53	44	5,5	35	1.306.1300.05
PG 16	56	53	44	5,5	35	1.306.1600.05
PG 21	65	63	54	5,5	42	1.306.2100.05
PG 29	74	70	60	5,5	52	1.306.2900.05
PG 36	94	89	72	6,5	69	1.306.3600.05
PG 42	114	96	84	6,5	74	1.306.4200.05
PG 48	114	96	84	6,5	74	1.306.4800.05

Locknut GM-INOX — Metr.

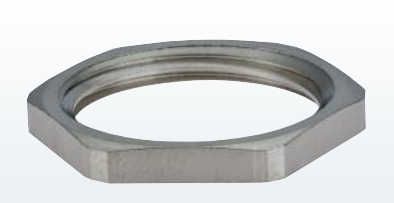
Material	INOX 1.4305

// Other sizes upon request
// INOX 1.4404 upon request



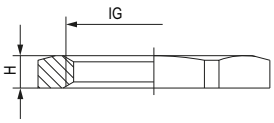
IG	H mm	mm	Number
M 12 x 1,5	2,8	15	1.161.1200.58
M 16 x 1,5	2,8	19	1.161.1600.58
M 20 x 1,5	3	24	1.161.2000.58
M 25 x 1,5	3,5	30	1.161.2500.58
M 32 x 1,5	3,5	36	1.161.3200.58
M 40 x 1,5	5	46	1.161.4000.58
M 50 x 1,5	5	57	1.161.5000.58
M 63 x 1,5	6	70	1.161.6300.58

Locknut GM-INOX — PG



Material	INOX 1.4305

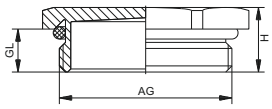
// Other sizes upon request
// INOX 1.4404 upon request



IG	H mm	mm	Number
PG 7	2,8	17	1.161.0700.08
PG 9	2,8	22	1.161.0900.08
PG 11	3	22	1.161.1100.08
PG 13,5	3	24	1.161.1300.08
PG 16	3	27	1.161.1600.08
PG 21	3,5	32	1.161.2100.08
PG 29	4	41	1.161.2900.08
PG 36	5	50	1.161.3600.08

Plug V-INOX — Metr.

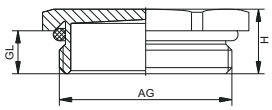
Material	INOX 1.4305
O-Ring	Buna-N / FKM / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N), -20 °C – 180 °C (-4 °F – 356 °F) (FKM), - 60 °C – 180 °C (-76 °F – 356 °F) (VMQ)



AG	GL mm	H mm	mm	Number V-INOX-NBR -20 °C – 95 °C	Number V-INOX-FKM -20 °C – 180 °C	Number V-INOX-VMQ -60 °C – 180 °C
M 12 x 1,5	6,5	9,5	14	1.152.1200.50	1.153.1200.50	1.154.1200.50
M 16 x 1,5	6	9	19	1.152.1600.50	1.153.1600.50	1.154.1600.50
M 20 x 1,5	6	9,5	22	1.152.2000.50	1.153.2000.50	1.154.2000.50
M 25 x 1,5	7	10,5	30	1.152.2500.50	1.153.2500.50	1.154.2500.50
M 32 x 1,5	8	12,5	41	1.152.3200.50	1.153.3200.50	1.154.3200.50
M 40 x 1,5	8	13	46	1.152.4000.50	1.153.4000.50	1.154.4000.50

Plug V-INOX — PG

Material	INOX 1.4305
O-Ring	Buna-N / FKM / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N), -20 °C – 180 °C (-4 °F – 356 °F) (FKM), - 60 °C – 180 °C (-76 °F – 356 °F) (VMQ)



AG	GL mm	H mm	mm	Number V-INOX-NBR -20 °C – 95 °C	Number V-INOX-FKM -20 °C – 180 °C	Number V-INOX-VMQ -60 °C – 180 °C
PG 7	5	8	14	1.152.0700.01	1.153.0700.01	1.154.0700.01
PG 9	6	9	17	1.152.0900.01	1.153.0900.01	1.154.0900.01
PG 11	6	9,5	20	1.152.1100.01	1.153.1100.01	1.154.1100.01
PG 13,5	6,5	10	22	1.152.1300.01	1.153.1300.01	1.154.1300.01
PG 16	6,5	10	24	1.152.1600.01	1.153.1600.01	1.154.1600.01
PG 21	7	10,5	30	1.152.2100.01	1.153.2100.01	1.154.2100.01
PG 29	8	12,5	41	1.152.2900.01	1.153.2900.01	1.154.2900.01
PG 36	8	13	50	1.152.3600.01	1.153.3600.01	1.154.3600.01

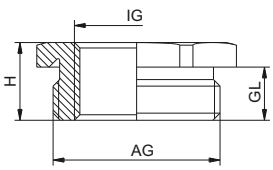
Adapter RS-INOX / RSD-INOX

Metr.

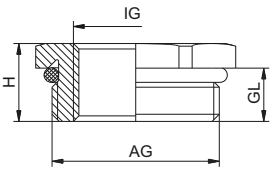
Material	INOX 1.4305
O-Ring	Buna-N
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)

// Other O-Ring materials upon request

RS-INOX



RSD-INOX



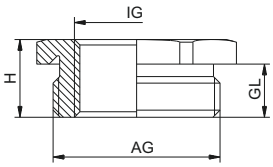
AG	IG	GL mm	H mm	mm	Number RS-INOX without O-Ring	Number RSD-INOX
M 16 x 1,5	M 12 x 1,5	6	9	19	1.094.1612.50	1.097.1612.50
M 20 x 1,5	M 12 x 1,5	6	9,5	22	1.094.2012.50	1.097.2012.50
M 20 x 1,5	M 16 x 1,5	6	9,5	22	1.094.2016.50	1.097.2016.50
M 25 x 1,5	M 16 x 1,5	7	10,5	30	1.094.2516.50	1.097.2516.50
M 25 x 1,5	M 20 x 1,5	7	10,5	30	1.094.2520.50	1.097.2520.50
M 32 x 1,5	M 16 x 1,5	8	12,5	41	1.094.3216.50	1.097.3216.50
M 32 x 1,5	M 20 x 1,5	8	12,5	41	1.094.3220.50	1.097.3220.50
M 32 x 1,5	M 25 x 1,5	8	12,5	41	1.094.3225.50	1.097.3225.50
M 40 x 1,5	M 20 x 1,5	8	13	46	1.094.4020.50	1.097.4020.50
M 40 x 1,5	M 25 x 1,5	8	13	46	1.094.4025.50	1.097.4025.50
M 40 x 1,5	M 32 x 1,5	8	13	46	1.094.4032.50	1.097.4032.50
M 50 x 1,5	M 25 x 1,5	9	15	55	1.094.5025.50	1.097.5025.50
M 50 x 1,5	M 32 x 1,5	9	15	55	1.094.5032.50	1.097.5032.50
M 50 x 1,5	M 40 x 1,5	9	15	55	1.094.5040.50	1.097.5040.50
M 63 x 1,5	M 32 x 1,5	10	16,5	65	1.094.6332.50	1.097.6332.50
M 63 x 1,5	M 40 x 1,5	10	16,5	65	1.094.6340.50	1.097.6340.50
M 63 x 1,5	M 50 x 1,5	10	16,5	65	1.094.6350.50	1.097.6350.50

Adapter RS-INOX / RSD-INOX — PG

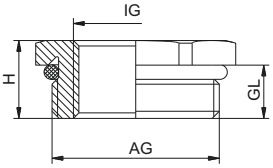
Material	INOX 1.4305
O-Ring	Buna-N
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)

// Other O-Ring materials upon request

RS-INOX



RSD-INOX



AG	IG	GL mm	H mm	⌀ mm	Number RS-INOX without O-Ring	Number RSD-INOX
PG 9	PG 7	6	8,8	17	1.094.0907.01	1.097.0907.01
PG 11	PG 7	6	9	22	1.094.1107.01	1.097.1107.01
PG 11	PG 9	6	9	22	1.094.1109.01	1.097.1109.01
PG 13,5	PG 9	6,5	9,5	22	1.094.1309.01	1.097.1309.01
PG 13,5	PG 11	6,5	9,5	22	1.094.1311.01	1.097.1311.01
PG 16	PG 9	6,5	9,5	24	1.094.1609.01	1.097.1609.01
PG 16	PG 11	6,5	9,5	24	1.094.1611.01	1.097.1611.01
PG 16	PG 13,5	6,5	9,5	24	1.094.1613.01	1.097.1613.01
PG 21	PG 11	7	10,3	30	1.094.2111.01	1.097.2111.01
PG 21	PG 13,5	7	10,3	30	1.094.2113.01	1.097.2113.01
PG 21	PG 16	7	10,3	30	1.094.2116.01	1.097.2116.01
PG 29	PG 16	8	11,5	41	1.094.2916.01	1.097.2916.01
PG 29	PG 21	8	11,5	41	1.094.2921.01	1.097.2921.01
PG 36	PG 21	9	12,5	50	1.094.3621.01	1.097.3621.01
PG 36	PG 29	9	12,5	50	1.094.3629.01	1.097.3629.01
PG 42	PG 29	10	13,5	60	1.094.4229.01	1.097.4229.01
PG 42	PG 36	10	13,5	60	1.094.4236.01	1.097.4236.01
PG 48	PG 36	10	13,5	65	1.094.4836.01	1.097.4836.01
PG 48	PG 42	10	13,5	65	1.094.4842.01	1.097.4842.01

Ex CABLE GLANDS

HUMMEL offers a wide range of cable glands for explosion protection areas. This includes cable glands for ignition protection types Ex d and Ex e. For areas where “Increased Safety” (Ex e) is prescribed, HUMMEL offers plastic and metal cable glands, also with multi or flat cable inserts. Cable glands for ignition type Ex d meet the requirements for “Pressure-tight Encapsulation”.
This prevents transfer of an explosion in the housing interior to the exterior.

In this chapter, you will find:

// HSK-K-Ex-Active, the plastic cable gland for ex-areas
// Ex e metal cable glands with various inserts
// Ex d metal cable glands for pressure-tight encapsulation

HUMMEL has many years of experience in handling components for explosion-protection areas. This is why we have a sophisticated range of explosion area products in a range of materials and designs.

Ex e PLASTIC CABLE GLANDS

HSK-K-Ex-Active — Metr.

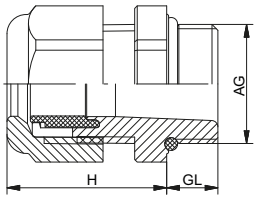
Material	Polyamide, fiber reinforced
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-20 °C – 85 °C (-4 °F – 185 °F)
Colors	black (RAL 9005) / blue-black (RAL 5012)

// FKM and VMQ O-Ring upon request

CE ATEX EAC RoHS

IECEx II 2G Ex eb IIC Gb
II 1D Ex ta IIIC Da

cSPus Class I Div 2 Groups A, B, C, D
Class II Div 1 Groups E, F, G



AG	⌀ mm	H mm	mm	GL mm	Number black	Number blue-black	GL mm	Number black elongated	Number blue-black elongated
M 12 x 1,5	3–6,5	21	15	8	1.292.1201.50	1.292.1202.50	15	1.292.1201.30	1.292.1202.30
M 12 x 1,5	2–5	21	15	8	1.292.1201.51	1.292.1202.51	15	1.292.1201.31	1.292.1202.31
M 16 x 1,5	4–8	22	19	8	1.292.1601.50	1.292.1602.50	15	1.292.1601.30	1.292.1602.30
M 16 x 1,5	3–6	22	19	8	1.292.1601.51	1.292.1602.51	15	1.292.1601.31	1.292.1602.31
M 16 x 1,5	5–10	25	22	8	1.292.1611.50	1.292.1612.50	15	1.292.1611.30	1.292.1612.30
M 16 x 1,5	3–7	25	22	8	1.292.1611.51	1.292.1612.51	15	1.292.1611.31	1.292.1612.31
M 20 x 1,5	6–12	27	24	9	1.292.2001.50	1.292.2002.50	15	1.292.2001.30	1.292.2002.30
M 20 x 1,5	5–9	27	24	9	1.292.2001.51	1.292.2002.51	15	1.292.2001.31	1.292.2002.31
M 20 x 1,5	10–14	28	27	9	1.292.2016.50	1.292.2017.50	15	1.292.2016.30	1.292.2017.30
M 20 x 1,5	7–12	28	27	9	1.292.2016.51	1.292.2017.51	15	1.292.2016.31	1.292.2017.31
M 25 x 1,5	13–18	31	33	11	1.292.2501.50	1.292.2502.50	15	1.292.2501.30	1.292.2502.30
M 25 x 1,5	9–16	31	33	11	1.292.2501.51	1.292.2502.51	15	1.292.2501.31	1.292.2502.31
M 32 x 1,5	18–25	39	42	11	1.292.3201.50	1.292.3202.50	15	1.292.3201.30	1.292.3202.30
M 32 x 1,5	13–20	39	42	11	1.292.3201.51	1.292.3202.51	15	1.292.3201.31	1.292.3202.31
M 40 x 1,5	22–32	48	53	13	1.292.4001.50	1.292.4002.50	18	1.292.4001.30	1.292.4002.30
M 40 x 1,5	20–26	48	53	13	1.292.4001.51	1.292.4002.51	18	1.292.4001.31	1.292.4002.31
M 50 x 1,5	32–38	49	60	13	1.292.5001.50	1.292.5002.50	18	1.292.5001.30	1.292.5002.30
M 50 x 1,5	25–31	49	60	13	1.292.5001.51	1.292.5002.51	18	1.292.5001.31	1.292.5002.31
M 63 x 1,5	37–44	49	65 / 68	14	1.292.6301.50	1.292.6302.50	18	1.292.6301.30	1.292.6302.30
M 63 x 1,5	29–35	49	65 / 68	14	1.292.6301.51	1.292.6302.51	18	1.292.6301.31	1.292.6302.31

Suitable accessories from page 73 and page 129

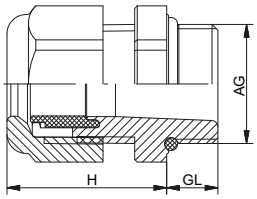
HSK-K-Ex-Active — NPT

Material	Polyamide, fiber reinforced
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-20 °C – 85 °C (-4 °F – 185 °F)
Colors	black (RAL 9005) / blue-black (RAL 5012)

// FKM and VMQ O-Ring upon request

II 2G Ex eb IIC Gb
II 1D Ex ta IIIC Da

Class I Div 2 Groups A, B, C, D
Class II Div 1 Groups E, F, G



AG	⌀ mm	GL mm	H mm	mm	Number black	Number blue-black
NPT 3/8"	4–8	15	22	19 / 22	1.292.3801.70	1.292.3802.70
NPT 3/8"	3–6	15	22	19 / 22	1.292.3801.71	1.292.3802.71
NPT 1/2"	6–12	13	27	24	1.292.1201.70	1.292.1202.70
NPT 1/2"	5–9	13	27	24	1.292.1201.71	1.292.1202.71
NPT 1/2" (16)	10–14	13	28	27	1.292.1216.70	1.292.1217.70
NPT 1/2" (16)	7–12	13	28	27	1.292.1216.71	1.292.1217.71
NPT 3/4"	13–18	14	31	33	1.292.3401.70	1.292.3402.70
NPT 3/4"	9–16	14	31	33	1.292.3401.71	1.292.3402.71
NPT 1"	18–25	19	39	42	1.292.1001.70	1.292.1002.70
NPT 1"	13–20	19	39	42	1.292.1001.71	1.292.1002.71
NPT 1 1/4"	18–25	16	39	42 / 46	1.292.5401.70	1.292.5402.70
NPT 1 1/4"	13–20	16	39	42 / 46	1.292.5401.71	1.292.5402.71
NPT 1 1/2"	22–32	20	48	53	1.292.6401.70	1.292.6402.70
NPT 1 1/2"	20–26	20	48	53	1.292.6401.71	1.292.6402.71

Suitable accessories from page 73 and page 129

Ex e PLASTIC CABLE GLANDS

HSK-K-Multi-Ex-Active — Metr., NPT

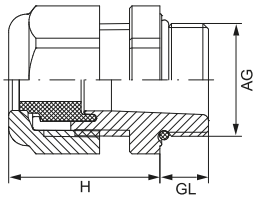
Material	Polyamide, fiber reinforced
Seal	Elastomer
O-Ring	Buna-N
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-20 °C – 85 °C (-4 °F – 185 °F)
Colors	black (RAL 9005) / blue-black (RAL 5012)

// FKM and VMQ O-Ring upon request
// The inserts shown are samples, more inserts upon request

Installation Instructions: Cable diameter should not be less than 20 % of hole diameter and the difference between cable diameter and hole should never exceed 1 mm (.04").

II 2G Ex eb IIC Gb
II 1D Ex ta IIIC Da

Class I Div 2 Groups A, B, C, D
Class II Div 1 Groups E, F, G



AG	GL mm	H mm	mm	Number of holes x d	Number black	Number blue-black	Number of holes x d	Number black	Number blue-black
M 16 x 1,5	8	22	19	4 x 1,4	1.581.1600.51	1.581.1600.52	2 x 3	1.581.1601.51	1.581.1601.52
M 20 x 1,5	9	27	24	6 x 3	1.581.2001.51	1.581.2001.52	2 x 5	1.581.2003.51	1.581.2003.52
M 25 x 1,5	11	31	33	4 x 6	1.581.2500.51	1.581.2500.52	3x 7	1.581.2501.51	1.581.2501.52
M 32 x 1,5	11	39	42	6 x 6,5	1.581.3200.51	1.581.3200.52	4 x 9	1.581.3201.51	1.581.3201.52
M 40 x 1,5	13	48	53	7 x 9	1.581.4001.51	1.581.4001.52	2 x 15	1.581.4003.51	1.581.4003.52
M 50 x 1,5	13	49	60		1.581.5099.51	1.581.5099.52			
M 63 x 1,5	14	49	65 / 68	6 x 12	1.581.6301.51	1.581.6301.52	3 x 18	1.581.6302.51	1.581.6302.52
NPT 3/8"	15	22	19 / 22	4 x 1,4	1.581.3800.71	1.581.3800.72	2 x 3	1.581.3801.71	1.581.3801.72
NPT 1/2"	13	27	24	3 x 4	1.581.1202.71	1.581.1202.72	2 x 5	1.581.1203.71	1.581.1203.72
NPT 1/2" (16)	13	28	27	6 x 4	1.581.1220.71	1.581.1220.72	2 x 6	1.581.1221.71	1.581.1221.72
NPT 3/4"	14	31	33	4 x 6	1.581.3400.71	1.581.3400.72	3 x 7	1.581.3401.71	1.581.3401.72
NPT 1"	19	39	42	6 x 6,5	1.581.1000.71	1.581.1000.72	4 x 9	1.581.1001.71	1.581.1001.72
NPT 1 1/4"	16	39	42 / 46		1.581.5499.71	1.581.5499.72			
NPT 1 1/2"	20	48	53	5 x 9	1.581.6400.71	1.581.6400.72	7 x 9	1.581.6401.71	1.581.6401.72

Suitable accessories from page 73 and page 129

HSK-K-Flaka-Ex-Active — Metr., NPT

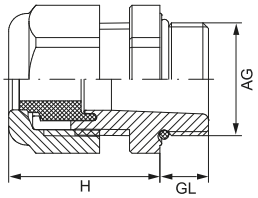
Material	Polyamide, fiber reinforced
Seal	Elastomer
O-Ring	Buna-N
Protection	IP 68 – 10 bar within the specified clamping range
Operating Temperature	-20 °C – 85 °C (-4 °F – 185 °F)
Colors	black (RAL 9005) / blue-black (RAL 5012)

// FKM and VMQ O-Ring upon request
// The inserts shown are samples, more inserts upon request

Installation Instructions: The clamping range of the cable used may not deviate from the manufacturer-specified minimum values by more than 1 mm in length and 1 mm in width. The geometries of the cable and the insert hole must be compatible (semicircular or straight at the sides).

II 2G Ex eb IIC Gb
II 1D Ex ta IIIC Da

Class I Div 2 Groups A, B, C, D
Class II Div 1 Groups E, F, G



AG	mm	H mm	GL mm	Dimensions w x h mm	Number black	Number blue-black	Dimensions w x h mm	Number black	Number blue-black
M 20 x 1,5	9	28	27	12 x 7	1.582.2017.51	1.582.2017.52	14 x 6	1.582.2018.51	1.582.2018.52
M 25 x 1,5	11	31	33	14 x 6	1.582.2500.51	1.582.2500.52	14,5 x 7,2	1.582.2501.51	1.582.2501.52
M 32 x 1,5	11	39	42	22 x 8	1.582.3200.51	1.582.3200.52			
M 40 x 1,5	13	48	53	28,5 x 10	1.582.4000.51	1.582.4000.52	29 x 5,5	1.582.4001.51	1.582.4001.52
M 40 x 1,5	13	48	53	30,5 x 12	1.582.4002.51	1.582.4002.52	31 x 7,5	1.582.4003.51	1.582.4003.52
M 50 x 1,5	13	49	60	33,5 x 11,5	1.582.5000.51	1.582.5000.52			
NPT 1/2" (16)	13	28	27	12 x 7	1.582.1217.71	1.582.1217.72	14x 6	1.582.1218.71	1.582.1218.72
NPT 3/4"	14	31	33	14 x 6	1.582.3400.71	1.582.3400.72			
NPT 1"	19	39	42	22 x 8	1.582.1000.71	1.582.1000.72			
NPT 1 1/4"	16	39	42 / 46	22 x 8	1.582.5400.71	1.582.5400.72			
NPT 1 1/2"	16	48	53	28,5 x 10	1.582.6400.71	1.582.6400.72	29 x 5,5	1.582.6401.71	1.582.6401.72
NPT 1 1/2"	20	48	53	30,5 x 12	1.582.6402.71	1.582.6402.72	31 x 7,5	1.582.6403.71	1.582.6403.72

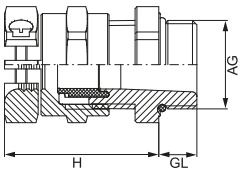
Suitable accessories from page 73 and page 129

Ex e PLASTIC CABLE GLANDS

HSK-K-MZ-Ex — Metr.

Material	Polyamide-AL
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 70 °C (-4 °F – 158 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number
M 16 x 1,5	4–8	15	29	19	1.215.1601.50
M 20 x 1,5	7–12	15	35,5	24	1.215.2001.50
M 25 x 1,5	13–18	11	41	33	1.215.2501.50
M 32 x 1,5	18–25	11	49	42	1.215.3201.50
M 40 x 1,5	22–32	13	58	53	1.215.4001.50
M 50 x 1,5	32–38	13	61,5	60	1.215.5001.50
M 63 x 1,5	37–44	14	62	65 / 68	1.215.6301.50

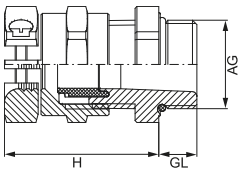
Suitable accessories from page 73 and page 129

HSK-K-MZ-Ex

PG

Material	Polyamide-AL
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 70 °C (-4 °F – 158 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number
PG 9	4–8	15	29	19	1.215.0901.14
PG 11	6–10	15	32,5	22	1.215.1101.14
PG 13,5	7–12	15	35,5	24	1.215.1301.14
PG 16	10–14	10	37,5	27	1.215.1601.14
PG 21	13–18	11	41	33	1.215.2101.14
PG 29	18–25	11	49	42	1.215.2901.14
PG 36	22–32	13	58	53	1.215.3601.14
PG 42	32–38	13	61,5	60	1.215.4201.14
PG 48	37–44	14	62	65	1.215.4801.14

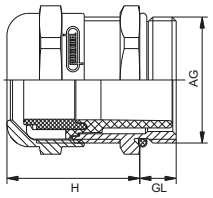
Suitable accessories from page 73 and page 129

Ex e METAL CABLE GLANDS

HSK-M-Ex / HSK-M-PVDF-Ex — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (PA) -60 °C – 95 °C (-76 °F – 203 °F) (PA) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



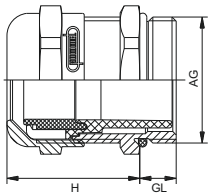
AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex -20 °C – 95 °C	Number HSK-M-Ex -60 °C – 95 °C	Number HSK-M-PVDF-Ex -20 °C – 130 °C
M 12 x 1,5	3–6,5	6,5	19	14	1.610.1200.50	1.640.1200.50	1.660.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.610.1200.51	1.640.1200.51	1.660.1200.51
M 16 x 1,5	4–8	6	21	17 / 19	1.610.1600.50	1.640.1600.50	1.660.1600.50
M 16 x 1,5	2–6	6	21	17 / 19	1.610.1600.51	1.640.1600.51	1.660.1600.51
M 16 x 1,5	6–10	6	22	20	1.610.1611.50	1.640.1611.50	1.660.1611.50
M 16 x 1,5	3–7	6	22	20	1.610.1611.51	1.640.1611.51	1.660.1611.51
M 20 x 1,5	7–12	6	23	22	1.610.2000.50	1.640.2000.50	1.660.2000.50
M 20 x 1,5	5–9	6	23	22	1.610.2000.51	1.640.2000.51	1.660.2000.51
M 20 x 1,5	10–14	6	24	24	1.610.2016.50	1.640.2016.50	1.660.2016.50
M 20 x 1,5	7–12	6	24	24	1.610.2016.51	1.640.2016.51	1.660.2016.51
M 25 x 1,5	14–18	7	26	30	1.610.2500.50	1.640.2500.50	1.660.2500.50
M 25 x 1,5	10–16	7	26	30	1.610.2500.51	1.640.2500.51	1.660.2500.51
M 32 x 1,5	20–25	8	31	40	1.610.3200.50	1.640.3200.50	1.660.3200.50
M 32 x 1,5	13–20	8	31	40	1.610.3200.51	1.640.3200.51	1.660.3200.51
M 40 x 1,5	22–32	8	37	50	1.610.4000.50	1.640.4000.50	1.660.4000.50
M 40 x 1,5	20–26	8	37	50	1.610.4000.51	1.640.4000.51	1.660.4000.51
M 50 x 1,5	32–38	9	37	57	1.610.5000.50	1.640.5000.50	
M 50 x 1,5	25–31	9	37	57	1.610.5000.51	1.640.5000.51	
M 63 x 1,5	37–44	10	38	64 / 68	1.610.6300.50	1.640.6300.50	
M 63 x 1,5	29–35	10	38	64 / 68	1.610.6300.51	1.640.6300.51	

Suitable accessories from page 73 and page 129

HSK-M-Ex / HSK-M-PVDF-Ex — Metr.-elongated

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (PA) -60 °C – 95 °C (-76 °F – 203 °F) (PA) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex -20 °C – 95 °C	Number HSK-M-Ex -60 °C – 95 °C	Number HSK-M-PVDF-Ex -20 °C – 130 °C
M 12 x 1,5	3–6,5	10	19	14	1.610.1200.30	1.640.1200.30	1.660.1200.30
M 12 x 1,5	2–5	10	19	14	1.610.1200.31	1.640.1200.31	1.660.1200.31
M 16 x 1,5	4–8	10	21	17 / 19	1.610.1600.30	1.640.1600.30	1.660.1600.30
M 16 x 1,5	2–6	10	21	17 / 19	1.610.1600.31	1.640.1600.31	1.660.1600.31
M 16 x 1,5	6–10	10	22	20	1.610.1611.30	1.640.1611.30	1.660.1611.30
M 16 x 1,5	3–7	10	22	20	1.610.1611.31	1.640.1611.31	1.660.1611.31
M 20 x 1,5	7–12	10	23	22	1.610.2000.30	1.640.2000.30	1.660.2000.30
M 20 x 1,5	5–9	10	23	22	1.610.2000.31	1.640.2000.31	1.660.2000.31
M 20 x 1,5	10–14	10	24	24	1.610.2016.30	1.640.2016.30	1.660.2016.30
M 20 x 1,5	7–12	10	24	24	1.610.2016.31	1.640.2016.31	1.660.2016.31
M 25 x 1,5	14–18	12	26	30	1.610.2500.30	1.640.2500.30	1.660.2500.30
M 25 x 1,5	10–16	12	26	30	1.610.2500.31	1.640.2500.31	1.660.2500.31
M 32 x 1,5	20–25	12	31	40	1.610.3200.30	1.640.3200.30	1.660.3200.30
M 32 x 1,5	13–20	12	31	40	1.610.3200.31	1.640.3200.31	1.660.3200.31
M 40 x 1,5	22–32	15	37	50	1.610.4000.30	1.640.4000.30	1.660.4000.30
M 40 x 1,5	20–26	15	37	50	1.610.4000.31	1.640.4000.31	1.660.4000.31
M 50 x 1,5	32–38	15	37	57	1.610.5000.30	1.640.5000.30	
M 50 x 1,5	25–31	15	37	57	1.610.5000.31	1.640.5000.31	
M 63 x 1,5	37–44	15	38	64 / 68	1.610.6300.30	1.640.6300.30	
M 63 x 1,5	29–35	15	38	64 / 68	1.610.6300.31	1.640.6300.31	

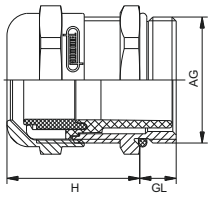
Suitable accessories from page 73 and page 129

Ex e METAL CABLE GLANDS

HSK-M-Ex / HSK-M-PVDF-Ex — PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (PA) -60 °C – 95 °C (-76 °F – 203 °F) (PA) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex -20 °C – 95 °C	Number HSK-M-Ex -60 °C – 95 °C	Number HSK-M-PVDF-Ex -20 °C – 130 °C
PG 7	3–6,5	5	19	14	1.610.0700.01	1.640.0700.01	1.660.0700.01
PG 7	2–5	5	19	14	1.610.0700.15	1.640.0700.15	1.660.0700.15
PG 9	4–8	6	21	17	1.610.0900.01	1.640.0900.01	1.660.0900.01
PG 9	2–6	6	21	17	1.610.0900.15	1.640.0900.15	1.660.0900.15
PG 11	6–10	6	22	20	1.610.1100.01	1.640.1100.01	1.660.1100.01
PG 11	3–7	6	22	20	1.610.1100.15	1.640.1100.15	1.660.1100.15
PG 13,5	7–12	6,5	24	22	1.610.1300.01	1.640.1300.01	1.660.1300.01
PG 13,5	5–9	6,5	24	22	1.610.1300.15	1.640.1300.15	1.660.1300.15
PG 16	10–14	6,5	23	24	1.610.1600.01	1.640.1600.01	1.660.1600.01
PG 16	7–12	6,5	23	24	1.610.1600.15	1.640.1600.15	1.660.1600.15
PG 21	14–18	7	24	30	1.610.2100.01	1.640.2100.01	1.660.2100.01
PG 21	10–16	7	24	30	1.610.2100.15	1.640.2100.15	1.660.2100.15
PG 29	20–25	8	29	40	1.610.2900.01	1.640.2900.01	1.660.2900.01
PG 29	13–20	8	29	40	1.610.2900.15	1.640.2900.15	1.660.2900.15
PG 36	22–32	8	35	50	1.610.3600.01	1.640.3600.01	1.660.3600.01
PG 36	20–26	8	35	50	1.610.3600.15	1.640.3600.15	1.660.3600.15
PG 42	32–38	9	37	57	1.610.4200.01	1.640.4200.01	1.660.4200.01
PG 42	25–31	9	37	57	1.610.4200.15	1.640.4200.15	1.660.4200.15
PG 48	37–44	10	38	64	1.610.4800.01	1.640.4800.01	1.660.4800.01
PG 48	29–35	10	38	64	1.610.4800.15	1.640.4800.15	1.660.4800.15
NPT 3/8"	4–8	15	21	17 / 19	1.610.3800.70	1.640.3800.70	1.660.3800.70
NPT 3/8"	2–6	15	21	17 / 19	1.610.3800.71	1.640.3800.71	1.660.3800.71
NPT 1/2"	7–12	13	24	22 / 24	1.610.1200.70	1.640.1200.70	1.660.1200.70
NPT 1/2"	5–9	13	24	22 / 24	1.610.1200.71	1.640.1200.71	1.660.1200.71
NPT 3/4"	14–18	13	25	30	1.610.3400.70	1.640.3400.70	1.660.3400.70
NPT 3/4"	10–16	13	25	30	1.610.3400.71	1.640.3400.71	1.660.3400.71
NPT 1"	20–25	19	29	40	1.610.1000.70	1.640.1000.70	
NPT 1"	13–20	19	29	40	1.610.1000.71	1.640.1000.71	

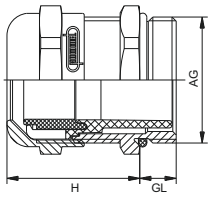
Suitable accessories from page 73 and page 129

HSK-M-Ex / HSK-M-PVDF-Ex

PG-elongated

Material	Messing vernickelt
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (PA) -60 °C – 95 °C (-76 °F – 203 °F) (PA) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex -20 °C – 95 °C	Number HSK-M-Ex -60 °C – 95 °C	Number HSK-M-PVDF-Ex -20 °C – 130 °C
PG 7	3–6,5	10	19	14	1.610.0700.60	1.640.0700.60	1.660.0700.60
PG 7	2–5	10	19	14	1.610.0700.61	1.640.0700.61	1.660.0700.61
PG 9	4–8	10	21	17	1.610.0900.60	1.640.0900.60	1.660.0900.60
PG 9	2–6	10	21	17	1.610.0900.61	1.640.0900.61	1.660.0900.61
PG 11	6–10	10	22	20	1.610.1100.60	1.640.1100.60	1.660.1100.60
PG 11	3–7	10	22	20	1.610.1100.61	1.640.1100.61	1.660.1100.61
PG 13,5	7–12	10	24	22	1.610.1300.60	1.640.1300.60	1.660.1300.60
PG 13,5	5–9	10	24	22	1.610.1300.61	1.640.1300.61	1.660.1300.61
PG 16	10–14	10	23	24	1.610.1600.60	1.640.1600.60	1.660.1600.60
PG 16	7–12	10	23	24	1.610.1600.61	1.640.1600.61	1.660.1600.61
PG 21	14–18	12	24	30	1.610.2100.60	1.640.2100.60	1.660.2100.60
PG 21	10–16	12	24	30	1.610.2100.61	1.640.2100.61	1.660.2100.61
PG 29	20–25	12	29	40	1.610.2900.60	1.640.2900.60	1.660.2900.60
PG 29	13–20	12	29	40	1.610.2900.61	1.640.2900.61	1.660.2900.61
PG 36	22–32	15	35	50	1.610.3600.60	1.640.3600.60	1.660.3600.60
PG 36	20–26	15	35	50	1.610.3600.61	1.640.3600.61	1.660.3600.61
PG 42	32–38	15	37	57	1.610.4200.60	1.640.4200.60	1.660.4200.60
PG 42	25–31	15	37	57	1.610.4200.61	1.640.4200.61	1.660.4200.61
PG 48	37–44	15	38	64	1.610.4800.60	1.640.4800.60	1.660.4800.60
PG 48	29–35	15	38	64	1.610.4800.61	1.640.4800.61	1.660.4800.61

Suitable accessories from page 73 and page 129

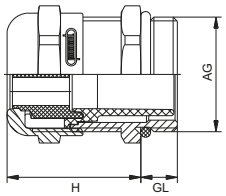
Ex e METAL CABLE GLANDS

HSK-M-Multi-Ex — Metr., PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Elastomer
O-Ring	Buna-N
Protection	IP 68
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)

// INOX upon request
// The inserts shown are samples, more inserts upon request

II 2G 1D



AG	GL mm	H mm	mm	Number of holes x d	Number	Number of holes x d	Number
M 16 x 1,5	6	21	17 / 19	4 x 1,4	1.687.1600.50	2 x 3	1.687.1601.50
M 20 x 1,5	6	23	22	6 x 3	1.687.2001.50	2 x 5	1.687.2003.50
M 25 x 1,5	7	26	30	4 x 6	1.687.2500.50	3 x 7	1.687.2501.50
M 32 x 1,5	8	31	40	6 x 6,5	1.687.3200.50	4 x 9	1.687.3201.50
M 40 x 1,5	8	37	50	7 x 9	1.687.4001.50	2 x 15	1.687.4003.50
M 50 x 1,5	9	37	57				1.687.5099.50
M 63 x 1,5	10	38	64 / 68	6 x 12	1.687.6301.50	3 x 18	1.687.6302.50
PG 9	6	21	17	4 x 1,4	1.687.0900.01	2 x 3	1.687.0901.01
PG 11	6	22	20	2 x 4	1.687.1102.01	3 x 3	1.687.1101.01
PG 13,5	6,5	24	22	3 x 4	1.687.1302.01	2 x 5	1.687.1303.01
PG 16	6,5	23	24	4 x 4	1.687.1602.01	6 x 4	1.687.1604.01
PG 16	6,5	23	24	3 x 5,6	1.687.1606.01	2 x 6	1.687.1605.01
PG 21	7	24	30	4 x 6	1.687.2100.01	3 x 7	1.687.2101.01
PG 29	8	29	40	6 x 6,5	1.687.2900.01	4 x 9	1.687.2901.01
PG 36	8	35	50	7 x 9	1.687.3601.01	2 x 15	1.687.3603.01
PG 48	10	38	64	6 x 12	1.687.4801.01	3 x 18	1.687.4802.01
NPT 3/8"	15	21	17 / 19	4 x 1,4	1.687.3800.70	2 x 3	1.687.3801.70
NPT 1/2"	13	24	24	3 x 4	1.687.1220.70	2 x 5	1.687.1203.70
NPT 3/4"	13	25	30	4 x 6	1.687.3400.70	3 x 7	1.687.3401.70
NPT 1"	19	29	40	6 x 6,5	1.687.1000.70	4 x 9	1.687.1001.70

Suitable accessories from page 73 and page 129

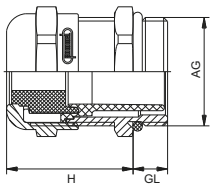
HSK-M-Flaka-Ex

Metr., PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Elastomer
O-Ring	Buna-N
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)

// INOX upon request
// The inserts shown are samples, more inserts upon request

II 2G 1D



AG	GL mm	H mm	mm	w x h mm	Number	w x h mm	Number
M 20 x 1,5	6	24	24	12 x 7	1.689.2017.50	14 x 6	1.689.2018.50
M 25 x 1,5	7	26	30	14 x 6	1.689.2500.50	14 x 7	1.689.2501.50
M 32 x 1,5	8	31	40	22 x 8	1.689.3200.50		
M 40 x 1,5	8	37	50	28,5 x 10	1.689.4000.50	29 x 5,5	1.689.4001.50
M 40 x 1,5	8	37	50	30,5 x 12	1.689.4002.50	31 x 7,5	1.689.4003.50
M 50 x 1,5	9	37	57	33,5 x 11,5	1.689.5000.50		
M 63 x 1,5	10	38	64 / 68	38 x 12	1.689.6300.50		
PG 16	6,5	23	24	12 x 7	1.689.1601.01	14 x 6	1.689.1602.01
PG 21	7	24	30	14 x 6	1.689.2100.01	14 x 7	1.689.2101.01
PG 29	8	29	40	22 x 8	1.689.2900.01		
PG 36	8	35	50	28,5 x 10	1.689.3600.01	29 x 5,5	1.689.3601.01
PG 36	8	35	50	30,5 x 12	1.689.3602.01	31 x 7,5	1.689.3603.01
PG 42	9	37	57	33,5 x 11,5	1.689.4200.01		
PG 48	10	38	64	38 x 12	1.689.4802.01		
NPT 3/4"	13	25	30	14 x 6	1.689.3400.70	14 x 7	1.689.3401.70
NPT 1"	19	29	40	22 x 8	1.689.1000.70		

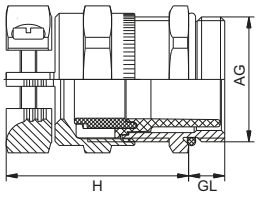
Suitable accessories from page 73 and page 129

Ex e METAL CABLE GLANDS

HSK-MZ-Ex / HSK-MZ-PVDF-Ex — Metr., PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



AG mm	⌀ mm	GL mm	H mm	HSK-MZ-Ex	Number HSK-MZ-Ex -20 °C – 95 °C	Number HSK-MZ-PVDF-Ex -60 °C – 95 °C	Number -20 °C – 130 °C
M 12 x 1,5	3–6,5	6,5	26	14	1.611.1200.50	1.641.1200.50	1.661.1200.50
M 16 x 1,5	4–8	6	28	19	1.611.1600.50	1.641.1600.50	1.661.1600.50
M 16 x 1,5	6–10	6	30	20	1.611.1611.50	1.641.1611.50	1.661.1611.50
M 20 x 1,5	7–12	6	33	22	1.611.2000.50	1.641.2000.50	1.661.2000.50
M 20 x 1,5	10–14	6	33	24	1.611.2016.50	1.641.2016.50	1.661.2016.50
M 25 x 1,5	14–18	7	37	30	1.611.2500.50	1.641.2500.50	1.661.2500.50
M 32 x 1,5	20–25	8	43	40	1.611.3200.50	1.641.3200.50	1.661.3200.50
M 40 x 1,5	24–32	8	50	50	1.611.4000.50	1.641.4000.50	1.661.4000.50
M 50 x 1,5	32–38	9	51	57	1.611.5000.50	1.641.5000.50	
M 63 x 1,5	37–44	10	52	64 / 68	1.611.6300.50	1.641.6300.50	
PG 7	3–6,5	5	26	14	1.611.0700.01	1.641.0700.01	1.661.0700.01
PG 9	4–8	6	28	17	1.611.0900.01	1.641.0900.01	1.661.0900.01
PG 11	6–10	6	30	20	1.611.1100.01	1.641.1100.01	1.661.1100.01
PG 13,5	7–12	6	33	22	1.611.1300.01	1.641.1300.01	1.661.1300.01
PG 16	10–14	6	33	24	1.611.1600.01	1.641.1600.01	1.661.1600.01
PG 21	13–18	7	37	30	1.611.2100.01	1.641.2100.01	1.661.2100.01
PG 29	20–25	8	43	40	1.611.2900.01	1.641.2900.01	1.661.2900.01
PG 36	24–32	8	50	50	1.611.3600.01	1.641.3600.01	1.661.3600.01
PG 42	32–38	9	51	57	1.611.4200.01	1.641.4200.01	1.661.4200.01
PG 48	37–44	10	52	64	1.611.4800.01	1.641.4800.01	1.661.4800.01
NPT 3/8"	4–8	15	28	17 / 19	1.611.3800.70	1.641.3800.70	1.661.3800.70
NPT 1/2"	7–12	13	33	22 / 24	1.611.1200.70	1.641.1200.70	1.661.1200.70
NPT 3/4"	13–18	13	37	30	1.611.3400.70	1.641.3400.70	1.661.3400.70
NPT 1"	20–25	19	43	40	1.611.1000.70	1.641.1000.70	

Suitable accessories from page 73 and page 129

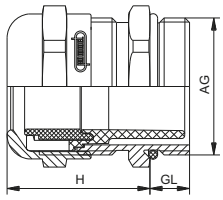
HSK-INOX-Ex / HSK-INOX-PVDF-Ex

Metr., PG

Material	INOX 1.4305
Clamping insert	Polyamid / PVDF
Seal	NBR / FKM
O-Ring	NBR / FKM
Protection	IP 68 – 10 bar / IP 69K
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

// INOX 1.4404 upon request

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX-Ex -20 °C – 95 °C	Number HSK-INOX-Ex -60 °C – 95 °C	Number HSK-INOX-PVDF-Ex -20 °C – 130 °C
M 12 x 1,5	3–6,5	6,5	19	14	1.612.1200.50	1.642.1200.50	1.662.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.612.1200.51	1.642.1200.51	1.662.1200.51
M 16 x 1,5	5–10	6	22	22	1.612.1600.50	1.642.1600.50	1.662.1600.50
M 16 x 1,5	3–7	6	22	22	1.612.1600.51	1.642.1600.51	1.662.1600.51
M 20 x 1,5	10–14	6	23	24	1.612.2000.50	1.642.2000.50	1.662.2000.50
M 20 x 1,5	7–12	6	23	24	1.612.2000.51	1.642.2000.51	1.662.2000.51
M 25 x 1,5	13–18	7	24	30	1.612.2500.50	1.642.2500.50	1.662.2500.50
M 25 x 1,5	9–16	7	24	30	1.612.2500.51	1.642.2500.51	1.662.2500.51
M 32 x 1,5	20–25	8	29	41	1.612.3200.50	1.642.3200.50	1.662.3200.50
M 32 x 1,5	13–20	8	29	41	1.612.3200.51	1.642.3200.51	1.662.3200.51
M 40 x 1,5	22–32	8	35	50	1.612.4000.50	1.642.4000.50	1.662.4000.50
M 40 x 1,5	20–26	8	35	50	1.612.4000.51	1.642.4000.51	1.662.4000.51
PG 7	3–6,5	5	19	14	1.612.0700.01	1.642.0700.01	1.662.0700.01
PG 7	2–5	5	19	14	1.612.0700.15	1.642.0700.15	1.662.0700.15
PG 9	4–8	6	21	17	1.612.0900.01	1.642.0900.01	1.662.0900.01
PG 9	2–6	6	21	17	1.612.0900.15	1.642.0900.15	1.662.0900.15
PG 11	5–10	6	22	22	1.612.1100.01	1.642.1100.01	1.662.1100.01
PG 11	3–7	6	22	22	1.612.1100.15	1.642.1100.15	1.662.1100.15
PG 13,5	7–12	6	24	22	1.612.1300.01	1.642.1300.01	1.662.1300.01
PG 13,5	5–9	6	24	22	1.612.1300.15	1.642.1300.15	1.662.1300.15
PG 16	10–14	6	23	24	1.612.1600.01	1.642.1600.01	1.662.1600.01
PG 16	7–12	6	23	24	1.612.1600.15	1.642.1600.15	1.662.1600.15
PG 21	13–18	7	24	30	1.612.2100.01	1.642.2100.01	1.662.2100.01
PG 21	9–16	7	24	30	1.612.2100.15	1.642.2100.15	1.662.2100.15
PG 29	20–25	8	29	41	1.612.2900.01	1.642.2900.01	1.662.2900.01
PG 29	13–20	8	29	41	1.612.2900.15	1.642.2900.15	1.662.2900.15
PG 36	22–32	8	35	50	1.612.3600.01	1.642.3600.01	1.662.3600.01
PG 36	20–26	8	35	50	1.612.3600.15	1.642.3600.15	1.662.3600.15

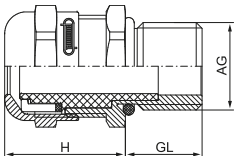
Suitable accessories from page 73 and page 129

Ex d METAL CABLE GLANDS

HSK-M-Ex d / HSK-M-PVDF-Ex d — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal / O-Ring	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F) (PA) -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D Ex d IIC

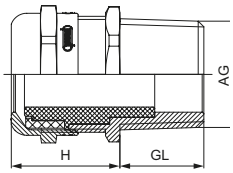


AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex d -60 °C – 105 °C	Number HSK-M-PVDF-Ex d -20 °C – 130 °C
M 12 x 1,5	3–6,5	16	18,7	14	1.622.1200.50	1.634.1200.50
M 12 x 1,5	2–5	16	18,7	14	1.622.1200.51	1.634.1200.51
M 16 x 1,5	5–10	16	22	20	1.622.1600.50	1.634.1600.50
M 16 x 1,5	3–7	16	22	20	1.622.1600.51	1.634.1600.51
M 20 x 1,5	10–14	16	25	24	1.622.2000.50	1.634.2000.50
M 20 x 1,5	7–12	16	25	24	1.622.2000.51	1.634.2000.51
M 25 x 1,5	13–18	16	26,5	30	1.622.2500.50	1.634.2500.50
M 25 x 1,5	9–16	16	26,5	30	1.622.2500.51	1.634.2500.51
M 32 x 1,5	18–25	16	32	40	1.622.3200.50	1.634.3200.50
M 32 x 1,5	14–20	16	32	40	1.622.3200.51	1.634.3200.51
M 40 x 1,5	22–32	16	38,5	50	1.622.4000.50	1.634.4000.50
M 40 x 1,5	20–26	16	38,5	50	1.622.4000.51	1.634.4000.51

HSK-M-Ex d / HSK-M-PVDF-Ex d — NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F) (PA) -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D Ex d IIC



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-Ex d -60 °C – 105 °C	Number HSK-M-PVDF-Ex d -20 °C – 130 °C
NPT 3/8"	5–10	16	22	20	1.622.3800.70	1.634.3800.70
NPT 3/8"	3–7	16	22	20	1.622.3800.71	1.634.3800.71
NPT 1/2"	10–14	20	25	24	1.622.1200.70	1.634.1200.70
NPT 1/2"	7–12	20	25	24	1.622.1200.71	1.634.1200.71
NPT 3/4"	13–18	20,5	26,5	30	1.622.3400.70	1.634.3400.70
NPT 3/4"	9–16	20,5	26,5	30	1.622.3400.71	1.634.3400.71
NPT 1"	18–25	25	32	40	1.622.1000.70	
NPT 1"	14–20	25	32	40	1.622.1000.71	
NPT 1 1/4"	22–32	26	38,5	50	1.622.5400.70	
NPT 1 1/4"	20–26	26	38,5	50	1.622.5400.71	
NPT 1 1/2"	22–32	26,5	38,5	50	1.622.6400.70	
NPT 1 1/2"	20–26	26,5	38,5	50	1.622.6400.71	

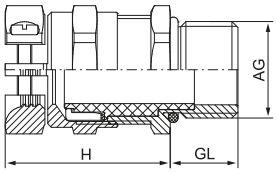
Dimensions and specifications may be changed without prior notice

Suitable accessories from page 73 and page 129

HSK-MZ-Ex d — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide
Seal / O-Ring	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F)

II 2G 1D Ex d IIC

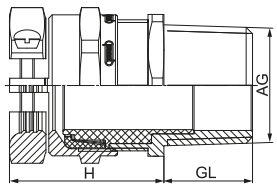


AG	⌀ mm	GL mm	H mm	mm	Number HSK-MZ-Ex d -60 °C – 105 °C
M 12 x 1,5	3–6,5	16	26	14	1.628.1200.50
M 16 x 1,5	5–10	16	30,2	20	1.628.1600.50
M 20 x 1,5	10–14	16	34	24	1.628.2000.50
M 25 x 1,5	13–18	16	37,8	30	1.628.2500.50
M 32 x 1,5	18–25	16	44	40	1.628.3200.50
M 40 x 1,5	22–32	16	51,5	50	1.628.4000.50

HSK-MZ-Ex d — NPT

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F)

II 2G 1D Ex d IIC



AG	⌀ mm	GL mm	H mm	mm	Number HSK-MZ-Ex d -60 °C – 105 °C
NPT 3/8"	5–10	16	30	20	1.628.3800.70
NPT 1/2"	10–14	20	33,6	24	1.628.1200.70
NPT 3/4"	13–18	20,5	37,8	30	1.628.3400.70
NPT 1"	18–25	25	44	40	1.628.1000.70
NPT 1 1/4"	22–32	26	51,5	50	1.628.5400.70
NPT 1 1/2"	22–32	26,5	51,5	50	1.628.6400.70

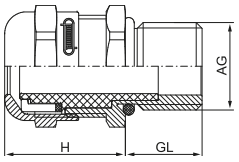
Suitable accessories from page 73 and page 129

Ex d METAL CABLE GLANDS

HSK-INOX-Ex d / HSK-INOX-PVDF-Ex d — Metr.

Material	INOX 1.4404
Clamping insert	Polyamide / PVDF
Seal / O-Ring	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F) (PA) -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D Ex d IIC

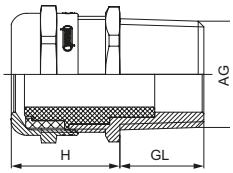


AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX-Ex d -60 °C – 105 °C	Number HSK-INOX-PVDF-Ex d -20 °C – 130 °C
M 12 x 1,5	3–6,5	16	19	14	1.632.1200.50	1.633.1200.50
M 12 x 1,5	2–5	16	19	14	1.632.1200.51	1.633.1200.51
M 16 x 1,5	5–10	16	22	20	1.632.1600.50	1.633.1600.50
M 16 x 1,5	3–7	16	22	20	1.632.1600.51	1.633.1600.51
M 20 x 1,5	10–14	16	25	24	1.632.2000.50	1.633.2000.50
M 20 x 1,5	7–12	16	25	24	1.632.2000.51	1.633.2000.51
M 25 x 1,5	13–18	16	26,5	30	1.632.2500.50	1.633.2500.50
M 25 x 1,5	9–16	16	26,5	30	1.632.2500.51	1.633.2500.51
M 32 x 1,5	18–25	16	32	40	1.632.3200.50	1.633.3200.50
M 32 x 1,5	14–20	16	32	40	1.632.3200.51	1.633.3200.51
M 40 x 1,5	22–32	16	38,5	50	1.632.4000.50	1.633.4000.50
M 40 x 1,5	20–26	16	38,5	50	1.632.4000.51	1.633.4000.51

HSK-INOX-Ex d / HSK-INOX-PVDF-Ex d — NPT

Material	INOX 1.4404
Clamping insert	Polyamide / PVDF
Seal	FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F) (PA) -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D Ex d IIC



AG	⌀ mm	GL mm	H mm	mm	Number HSK-INOX-Ex d -60 °C – 105 °C	Number HSK-INOX-PVDF-Ex d -20 °C – 130 °C
NPT 3/8"	5–10	16	22	20	1.632.3800.70	1.633.3800.70
NPT 3/8"	3–7	16	22	20	1.632.3800.71	1.633.3800.71
NPT 1/2"	10–14	20	25	24	1.632.1200.70	1.633.1200.70
NPT 1/2"	7–12	20	25	24	1.632.1200.71	1.633.1200.71
NPT 3/4"	13–18	20,5	26,5	30	1.632.3400.70	1.633.3400.70
NPT 3/4"	9–16	20,5	26,5	30	1.632.3400.71	1.633.3400.71

Suitable accessories from page 73 and page 129

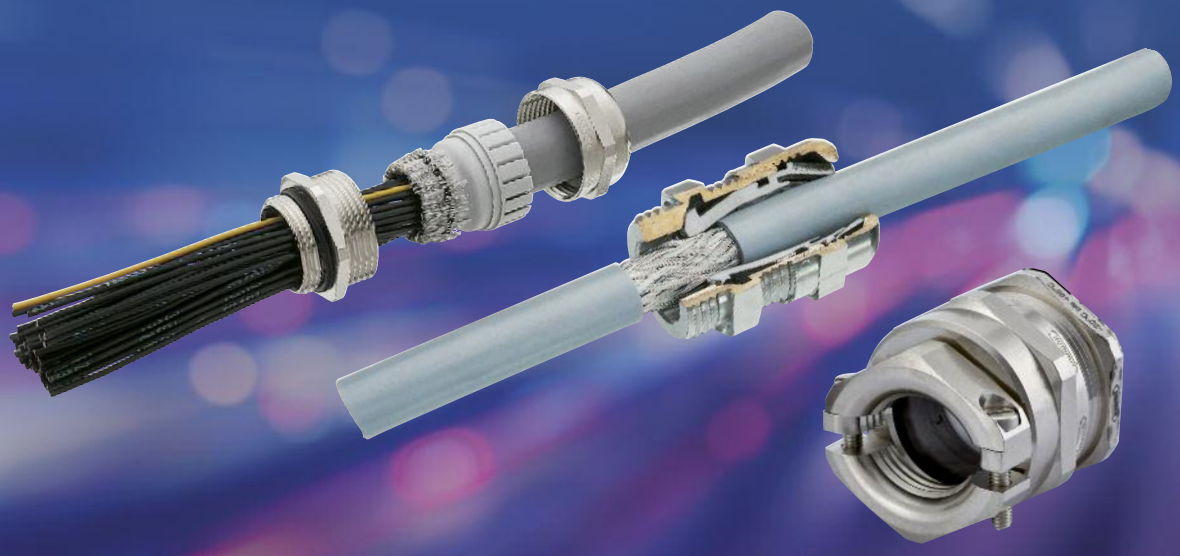
EMC-Ex e CABLE GLANDS

Safe EMC protection plus explosion area approval: This is what EMC Ex e cable glands deliver. HUMMEL also offers a range of designs for particular requirements here too. These include cable glands for high-temperature applications, designs for very easy fitting and also stainless steel versions.

In this chapter, you will find:

// HSK-M-EMC-Ex: Cable glands with excellent shielding properties
// HSK-M-EMC-D-Ex: Fast, easy fitting, combined with maximum EMC protection
// HSK-M-PVDF-EMC-Ex: High-temperature cable glands with EMC connection and explosion protection
// HSK-INOX-EMC-Ex: Stainless steel cable glands
// HSK-MZ-EMC-Ex: Glands with a high level of tension-relief, EMC and explosion protection

HUMMEL has many years of experience in handling components for explosion-protection areas. This is why we have a sophisticated range of explosion area products in a range of materials and designs.

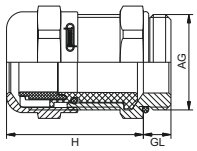


EMC-Ex e CABLE GLANDS

HSK-M-EMC-D-Ex — Metr.

Material	Nickel plated brass
Clamping insert	Metallized Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D

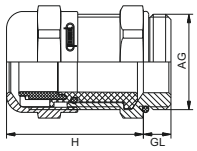


AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-D-Ex -20 °C – 95 °C	Number HSK-M-EMC-D-Ex -60 °C – 95 °C
M 16 x 1,5	5–10	6	29	20	1.636.1600.50	1.637.1600.50
M 20 x 1,5	10–14	6	31	24	1.636.2000.50	1.637.2000.50
M 25 x 1,5	13–18	7	38	30	1.636.2500.50	1.637.2500.50
M 32 x 1,5	18–25	8	43	40	1.636.3200.50	1.637.3200.50
M 40 x 1,5	24–32	8	51	50	1.636.4000.50	1.637.4000.50

HSK-M-EMC-D-Ex — Metr.-elongated

Material	Nickel plated brass
Clamping insert	Metallized Polyamide
Seal / O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-D-Ex -20 °C – 95 °C	Number HSK-M-EMC-D-Ex -60 °C – 95 °C
M 16 x 1,5	5–10	10	29	20	1.636.1600.30	1.637.1600.30
M 20 x 1,5	10–14	10	31	24	1.636.2000.30	1.637.2000.30
M 25 x 1,5	13–18	12	38	30	1.636.2500.30	1.637.2500.30
M 32 x 1,5	18–25	12	43	40	1.636.3200.30	1.637.3200.30
M 40 x 1,5	24–32	15	51	50	1.636.4000.30	1.637.4000.30

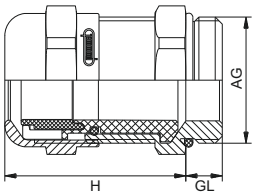
Suitable accessories from page 73 and page 129

HSK-M-EMC-D-Ex

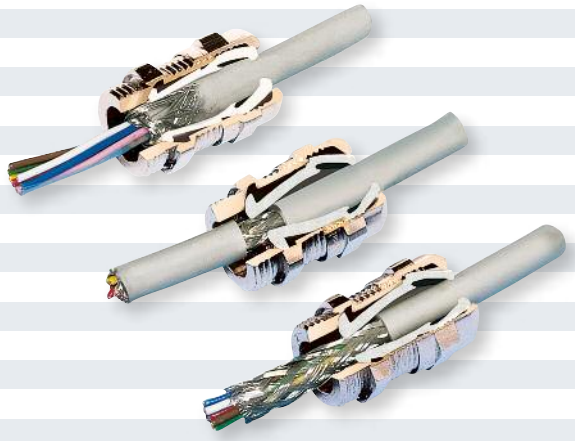
PG

Material	Nickel plated brass
Clamping insert	Metallized Polyamide
Seal	Buna-N
O-Ring	NBR
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-D-Ex -20 °C – 95 °C	Number HSK-M-EMC-D-Ex -60 °C – 95 °C
PG 11	5–10	6	29	20	1.636.1100.01	1.637.1100.01
PG 13,5	7–12	6,5	31	22	1.636.1300.01	1.637.1300.01
PG 16	10–14	6,5	32	24	1.636.1600.01	1.637.1600.01
PG 21	13–18	7	38	30	1.636.2100.01	1.637.2100.01
PG 29	18–25	8	43	40	1.636.2900.01	1.637.2900.01
PG 36	22–32	8	48	50	1.636.3600.01	1.637.3600.01



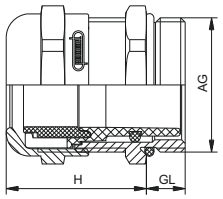
Suitable accessories from page 73 and page 129

EMC-Ex e CABLE GLANDS

HSK-M-EMC-Ex — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



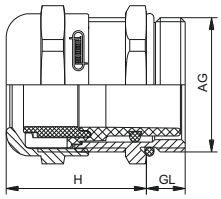
AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-Ex -20 °C – 95 °C	Number HSK-M-EMC-Ex -60 °C – 95 °C
M 12 x 1,5	3–6,5	6,5	19	14	1.616.1200.50	1.646.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.616.1200.51	1.646.1200.51
M 16 x 1,5	6–10	6	22	20	1.616.1600.50	1.646.1600.50
M 16 x 1,5	3–7	6	22	20	1.616.1600.51	1.646.1600.51
M 20 x 1,5	10–14	6	23	24	1.616.2000.50	1.646.2000.50
M 20 x 1,5	7–12	6	23	24	1.616.2000.51	1.646.2000.51
M 25 x 1,5	14–18	7	24	30	1.616.2500.50	1.646.2500.50
M 25 x 1,5	10–16	7	24	30	1.616.2500.51	1.646.2500.51
M 32 x 1,5	20–25	8	31	40	1.616.3200.50	1.646.3200.50
M 32 x 1,5	13–20	8	31	40	1.616.3200.51	1.646.3200.51
M 40 x 1,5	22–32	8	37	50	1.616.4000.50	1.646.4000.50
M 40 x 1,5	20–26	8	37	50	1.616.4000.51	1.646.4000.51
M 50 x 1,5	32–38	9	37	57	1.616.5000.50	1.646.5000.50
M 50 x 1,5	25–31	9	37	57	1.616.5000.51	1.646.5000.51
M 63 x 1,5	37–44	10	38	64 / 68	1.616.6300.50	1.646.6300.50
M 63 x 1,5	29–35	10	38	64 / 68	1.616.6300.51	1.646.6300.51

Suitable accessories from page 73 and page 129

HSK-M-EMC-Ex / HSK-M-EMC-PVDF-Ex — PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FKM
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-Ex -20 °C – 95 °C	Number HSK-M-EMC-Ex -60 °C – 95 °C	Number HSK-M-PVDF-EMC-Ex -20 °C – 130 °C
PG 7	3–6,5	5	19	14	1.616.0700.01	1.646.0700.01	1.666.0700.01
PG 7	2–5	5	19	14	1.616.0700.15	1.646.0700.15	1.666.0700.15
PG 9	4–8	6	21	17	1.616.0900.01	1.646.0900.01	1.666.0900.01
PG 9	2–6	6	21	17	1.616.0900.15	1.646.0900.15	1.666.0900.15
PG 11	6–10	6	22	20	1.616.1100.01	1.646.1100.01	1.666.1100.01
PG 11	3–7	6	22	20	1.616.1100.15	1.646.1100.15	1.666.1100.15
PG 13,5	7–12	6,5	24	22	1.616.1300.01	1.646.1300.01	1.666.1300.01
PG 13,5	5–9	6,5	24	22	1.616.1300.15	1.646.1300.15	1.666.1300.15
PG 16	10–14	6,5	23	24	1.616.1600.01	1.646.1600.01	1.666.1600.01
PG 16	7–12	6,5	23	24	1.616.1600.15	1.646.1600.15	1.666.1600.15
PG 21	14–18	7	24	30	1.616.2100.01	1.646.2100.01	1.666.2100.01
PG 21	10–16	7	24	30	1.616.2100.15	1.646.2100.15	1.666.2100.15
PG 29	20–25	8	29	40	1.616.2900.01	1.646.2900.01	1.666.2900.01
PG 29	13–20	8	29	40	1.616.2900.15	1.646.2900.15	1.666.2900.15
PG 36	22–32	8	35	50	1.616.3600.01	1.646.3600.01	1.666.3600.01
PG 36	20–26	8	35	50	1.616.3600.15	1.646.3600.15	1.666.3600.15
PG 42	32–38	9	37	57	1.616.4200.01	1.646.4200.01	1.666.4200.01
PG 42	25–31	9	37	57	1.616.4200.15	1.646.4200.15	1.666.4200.15
PG 48	37–44	10	38	64	1.616.4800.01	1.646.4800.01	1.666.4800.01
PG 48	29–35	10	38	64	1.616.4800.15	1.646.4800.15	1.666.4800.15
NPT 3/8"	4–8	15	21	17 / 19	1.616.3800.70	1.646.3800.70	1.666.3800.70
NPT 3/8"	2–6	15	21	17 / 19	1.616.3800.71	1.646.3800.71	1.666.3800.71
NPT 1/2"	7–12	13	24	22 / 24	1.616.1200.70	1.646.1200.70	1.666.1200.70
NPT 1/2"	5–9	13	24	22 / 24	1.616.1200.71	1.646.1200.71	1.666.1200.71
NPT 3/4"	14–18	13	25	30	1.616.3400.70	1.646.3400.70	1.666.3400.70
NPT 3/4"	10–16	13	25	30	1.616.3400.71	1.646.3400.71	1.666.3400.71

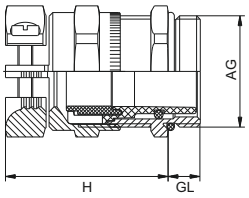
Suitable accessories from page 73 and page 129

EMC-Ex e CABLE GLANDS

HSK-MZ-EMC-Ex — Metr.

Material	Nickel plated brass
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



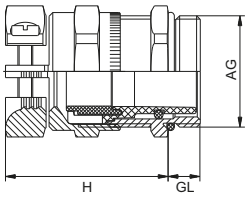
AG	⌀ mm	GL mm	H mm	mm	Number HSK-M-EMC-Ex -20 °C – 95 °C	Number HSK-M-EMC-Ex -60 °C – 95 °C
M 12 x 1,5	3–6,5	6,5	26	14	1.617.1200.50	1.647.1200.50
M 16 x 1,5	6–10	6	29	20	1.617.1600.50	1.647.1600.50
M 20 x 1,5	10–14	6	32	24	1.617.2000.50	1.647.2000.50
M 25 x 1,5	14–18	7	35	30	1.617.2500.50	1.647.2500.50
M 32 x 1,5	20–25	8	41	40	1.617.3200.50	1.647.3200.50
M 40 x 1,5	24–32	8	48	50	1.617.4000.50	1.647.4000.50
M 50 x 1,5	32–38	9	51	57	1.617.5000.50	1.647.5000.50
M 50 x 1,5	28–31	9	51	57	1.617.5000.51	1.647.5000.51
M 63 x 1,5	37–44	10	52	68	1.617.6300.50	1.647.6300.50
M 63 x 1,5	32–35	10	52	68	1.617.6300.51	1.647.6300.51

Suitable accessories from page 73 and page 129

HSK-MZ-EMC-Ex / HSK-MZ-EMC-PVDF-Ex — PG, NPT

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) -60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number HSK-MZ-EMC-Ex -20 °C – 95 °C	Number HSK-MZ-EMC-Ex -60 °C – 95 °C	Number HSK-MZ-PVDF-EMC-Ex -20 °C – 130 °C
PG 7	3–6,5	5	26	14	1.617.0700.01	1.647.0700.01	1.667.0700.01
PG 9	4–8	6	28	17	1.617.0900.01	1.647.0900.01	1.667.0900.01
PG 11	6–10	6	29	20	1.617.1100.01	1.647.1100.01	1.667.1100.01
PG 13,5	7–12	6,5	33	22	1.617.1300.01	1.647.1300.01	1.667.1300.01
PG 16	10–14	6,5	32	24	1.617.1600.01	1.647.1600.01	1.667.1600.01
PG 21	13–18	7	35	30	1.617.2100.01	1.647.2100.01	1.667.2100.01
PG 29	20–25	8	41	40	1.617.2900.01	1.647.2900.01	1.667.2900.01
PG 36	24–32	8	48	50	1.617.3600.01	1.647.3600.01	1.667.3600.01
PG 42	32–38	9	51	57	1.617.4200.01	1.647.4200.01	1.667.4200.01
PG 42	28–31	9	51	57	1.617.4200.15	1.647.4200.15	1.667.4200.15
PG 48	37–44	10	51	64	1.617.4800.01	1.647.4800.01	1.667.4800.01
PG 48	32–35	10	51	64	1.617.4800.15	1.647.4800.15	1.667.4800.15
NPT 3/8"	4–8	15	27	17/19	1.617.3800.70	1.647.3800.70	1.667.3800.70
NPT 1/2"	7–12	13	31	22/24	1.617.1200.70	1.647.1200.70	1.667.1200.70
NPT 3/4"	13–18	13	36	30	1.617.3400.70	1.647.3400.70	1.667.3400.70

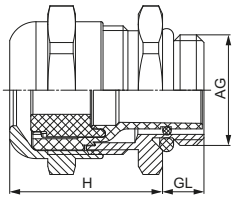
Suitable accessories from page 73 and page 129

EMC-Ex e CABLE GLANDS

HSK-INOX-EMC-Ex — Metr.

Material	INOX 1.4305
Clamping insert	Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-60 °C – 95 °C (-76 °F – 203 °F)

II 2G 1D



AG	⌀ mm	GL mm	H mm	mm	Number
M 12 x 1,5	3–6,5	6,5	19	14	1.673.1200.50
M 12 x 1,5	2–5	6,5	19	14	1.673.1200.51
M 16 x 1,5	5–10	6	21	20	1.673.1600.50
M 16 x 1,5	3–7	6	21	20	1.673.1600.51
M 20 x 1,5	10–14	6	23	24	1.673.2000.50
M 20 x 1,5	7–12	6	23	24	1.673.2000.51
M 25 x 1,5	13–18	7	26	30	1.673.2500.50
M 25 x 1,5	9–16	7	26	30	1.673.2500.51
M 32 x 1,5	18–25	8	31	41	1.673.3200.50
M 32 x 1,5	13–20	8	31	41	1.673.3200.51
M 40 x 1,5	22–32	8	37	50	1.673.4000.50
M 40 x 1,5	20–26	8	37	50	1.673.4000.51
PG 7	3–6,5	5	19	14	1.673.0700.01
PG 7	2–5	5	19	14	1.673.0700.15
PG 9	4–8	6	21	17	1.673.0900.01
PG 9	2–6	6	21	17	1.673.0900.15
PG 11	5–10	6	22	22	1.673.1100.01
PG 11	3–7	6	22	22	1.673.1100.15
PG 13,5	7–12	6,5	24	22	1.673.1300.01
PG 13,5	5–9	6,5	24	22	1.673.1300.15
PG 16	10–14	6,5	23	24	1.673.1600.01
PG 16	7–12	6,5	23	24	1.673.1600.15
PG 21	13–18	7	24	30	1.673.2100.01
PG 21	9–16	7	24	30	1.673.2100.15
PG 29	18–25	8	29	41	1.673.2900.01
PG 29	13–20	8	29	41	1.673.2900.15
PG 36	22–32	8	35	50	1.673.3600.01
PG 36	20–26	8	35	50	1.673.3600.15

Suitable accessories from page 73 and page 129

Ex ACCESSORIES

Cable glands for explosion protection areas also demand accessories specifically designed for those areas. HUMMEL has a wide range of accessories specially developed for this sector. These accessories meet all the requirements for ex-areas and are backed up by all the necessary certification and approvals.

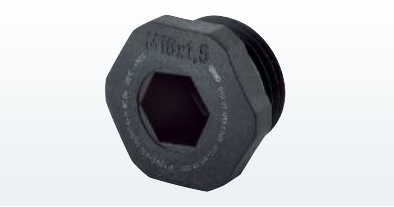
In this chapter, you will find:

// Accessories in plastic, brass and stainless steel
// Plugs with explosion area approval
// Reduction fittings in a wide range of different sizes

The accessories come in a range of materials, sizes and thread types.

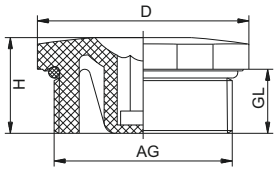
Ex ACCESSORIES

Plug V-Ex — Metr.



Material	Polyamide, fiber reinforced
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)
Colors	black (RAL 9005)

II 2G 1D

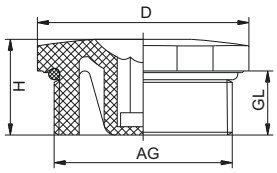


AG	GL mm	H mm	D mm	mm	mm	Number
M 12 x 1,5	8,5	13	16,5	15	6	1.297.1201.50
M 16 x 1,5	8,5	13	20,5	19	8	1.297.1601.50
M 20 x 1,5	9	14,5	25,5	24	8	1.297.2001.50
M 25 x 1,5	10,5	16	30,5	28	8	1.297.2501.50
M 32 x 1,5	11,5	17,5	38	36	8	1.297.3201.50
M 40 x 1,5	11,5	18	48	46	8	1.297.4001.50
M 50 x 1,5	13,5	20	60	55	8	1.297.5001.50
M 63 x 1,5	14,5	21	75	70	8	1.297.6301.50

Plug V-Ex — PG

Material	Polyamide, fiber reinforced
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)
Colors	black (RAL 9005)

II 2G 1D



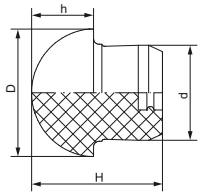
AG	GL mm	H mm	D mm	mm	mm	Number
PG 7	8,5	13	16,5	15	6	1.297.0701.11
PG 9	8,5	13	20,5	19	8	1.297.0901.11
PG 11	9	14,5	25,5	24	8	1.297.1101.11
PG 13,5	9	14,5	25,5	24	8	1.297.1301.11
PG 16	10,5	16	30,5	28	8	1.297.1601.11
PG 21	11,5	17,5	38	36	8	1.297.2101.11
PG 29	11,5	18	48	46	8	1.297.2901.11
PG 36	13,5	20	60	55	8	1.297.3601.11
PG 42	13,5	20	65	60	8	1.297.4201.11
PG 48	14,5	21	75	70	8	1.297.4801.11

Plug HSK-V-Ex

Metr., PG, NPT

Material	Elastomer
Operating Temperature	-40 °C – 95 °C (-40 °F – 203 °F)
Colors	black (RAL 9005)

ATEX II 2G 1D



Fits the following sizes			D mm	d mm	H mm	h mm	Number
PG 7	M 12 x 1,5		9,5	6,3	11,5	4,5	1.296.0701.11
PG 9	M 16 x 1,5	NPT 3/8"	11	7,8	13,5	5,5	1.296.0901.11
PG 11	M 16 x 1,5		13,5	9,8	14,5	5,5	1.296.1101.11
PG 13,5	M 20 x 1,5	NPT 1/2"	16	11,8	18	8	1.296.1301.11
PG 16	M 20 x 1,5	NPT 1/2"/16	18,5	13,8	19	9	1.296.1601.11
PG 21	M 25 x 1,5	NPT 3/4"	22	17,8	22	11	1.296.2101.11
PG 29	M 32 x 1,5	NPT 1" NPT 1 1/4"	29	25	25	10	1.296.2901.11
PG 36	M 40 x 1,5	NPT 1 1/2"	38	32	28	11	1.296.3601.11
PG 42	M 50 x 1,5		43	38	30	12	1.296.4201.11
PG 48	M 63 x 1,5		49	44	30	12	1.296.4801.11

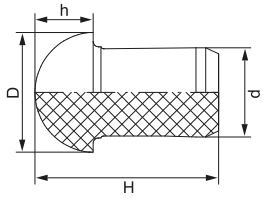
Plug HSK-V-Ex MZ version

Metr., PG, NPT

Material	Elastomer
Operating Temperature	-40 °C – 95 °C (-40 °F – 203 °F)
Colors	black (RAL 9005)

// This plug is suitable in all HSK glands with additional strain relief

ATEX II 2G 1D

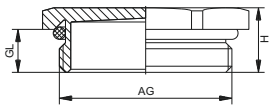


Fits the following sizes			D mm	d mm	H mm	h mm	Number
PG 7	M 12 x 1,5		9,5	6,3	18	4,5	1.296.0701.61
PG 9	M 16 x 1,5	NPT 3/8"	11	7,8	20,5	5,5	1.296.0901.61
PG 11	M 16 x 1,5		13,5	9,8	22	5,5	1.296.1101.61
PG 13,5	M 20 x 1,5	NPT 1/2"	16	11,8	26,5	8	1.296.1301.61
PG 16	M 20 x 1,5	NPT 1/2"/16	18,5	13,8	28,4	9	1.296.1601.61
PG 21	M 25 x 1,5	NPT 3/4"	22	17,8	32	11	1.296.2101.61
PG 29	M 32 x 1,5	NPT 1" NPT 1 1/4"	29	25	35,5	10	1.296.2901.61
PG 36	M 40 x 1,5	NPT 1 1/2"	38	32	39	11	1.296.3601.61

Plug V-Ms-Ex / V-Ms-FKM-Ex / V-Ms-VMQ-Ex — Metr.

Material	Nickel plated brass
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
V-Ms-Ex O-Ring	Buna-N
V-Ms-FKM-Ex O-Ring	FKM
V-Ms-VMQ-Ex O-Ring	VMQ
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D

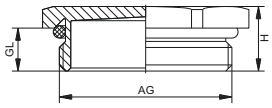


AG	GL mm	H mm	mm	Number V-Ms-Ex -20 °C – 95 °C	Number V-Ms-FKM-Ex -20 °C – 180 °C	Number V-Ms-VMQ-Ex -60 °C – 180 °C
M 12 x 1,5	6,5	9,5	14	1.197.1200.50	1.198.1200.50	1.199.1200.50
M 16 x 1,5	6	9	19	1.197.1600.50	1.198.1600.50	1.199.1600.50
M 20 x 1,5	6	9,5	22	1.197.2000.50	1.198.2000.50	1.199.2000.50
M 25 x 1,5	7	10,5	30	1.197.2500.50	1.198.2500.50	1.199.2500.50
M 32 x 1,5	8	12,5	41	1.197.3200.50	1.198.3200.50	1.199.3200.50
M 40 x 1,5	8	13	46	1.197.4000.50	1.198.4000.50	1.199.4000.50
M 50 x 1,5	9	15	55	1.197.5000.50	1.198.5000.50	1.199.5000.50
M 63 x 1,5	10	16,5	70	1.197.6300.50	1.198.6300.50	1.199.6300.50

Plug V-Ms-Ex / V-Ms-FKM-Ex / V-Ms-VMQ-Ex — PG

Material	Nickel plated brass
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
V-Ms-Ex O-Ring	Buna-N
V-Ms-FKM-Ex O-Ring	FKM
V-Ms-VMQ-Ex O-Ring	VMQ
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D

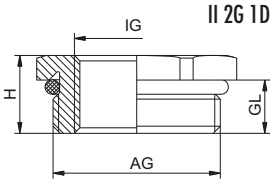


AG	GL mm	H mm	mm	Number V-Ms-Ex -20 °C – 95 °C	Number V-Ms-FKM-Ex -20 °C – 180 °C	Number V-Ms-VMQ-Ex -60 °C – 180 °C
PG 7	5	8	14	1.197.0700.01	1.198.0700.01	1.199.0700.01
PG 9	6	9	17	1.197.0900.01	1.198.0900.01	1.199.0900.01
PG 11	6	9,5	20	1.197.1100.01	1.198.1100.01	1.199.1100.01
PG 13,5	6,5	10	22	1.197.1300.01	1.198.1300.01	1.199.1300.01
PG 16	6,5	10	24	1.197.1600.01	1.198.1600.01	1.199.1600.01
PG 21	7	10,5	30	1.197.2100.01	1.198.2100.01	1.199.2100.01
PG 29	8	12,5	41	1.197.2900.01	1.198.2900.01	1.199.2900.01
PG 36	8	13	50	1.197.3600.01	1.198.3600.01	1.199.3600.01
PG 42	9	15	58	1.197.4200.01	1.198.4200.01	1.199.4200.01
PG 48	10	16,5	65	1.197.4800.01	1.198.4800.01	1.199.4800.01

Adapter RSD-Ms-Ex — Metr.

Material	Nickel plated brass
O-Ring	Buna-N / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D



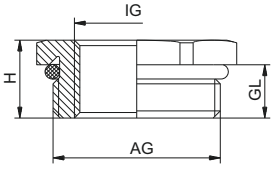
AG	IG	GL mm	mm	Number NBR -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
M 16 x 1,5	M 12 x 1,5	5	17	1.078.1612.50	1.079.1612.50
M 20 x 1,5	M 12 x 1,5	6	22	1.078.2012.50	1.079.2012.50
M 20 x 1,5	M 16 x 1,5	6	22	1.078.2016.50	1.079.2016.50
M 25 x 1,5	M 16 x 1,5	7	29	1.078.2516.50	1.079.2516.50
M 25 x 1,5	M 20 x 1,5	7	29	1.078.2520.50	1.079.2520.50
M 32 x 1,5	M 16 x 1,5	8	34	1.078.3216.50	1.079.3216.50
M 32 x 1,5	M 20 x 1,5	8	34	1.078.3220.50	1.079.3220.50
M 32 x 1,5	M 25 x 1,5	8	34	1.078.3225.50	1.079.3225.50
M 40 x 1,5	M 20 x 1,5	8	43	1.078.4020.50	1.079.4020.50
M 40 x 1,5	M 25 x 1,5	8	43	1.078.4025.50	1.079.4025.50
M 40 x 1,5	M 32 x 1,5	8	43	1.078.4032.50	1.079.4032.50
M 50 x 1,5	M 25 x 1,5	9	55	1.078.5025.50	1.079.5025.50

AG	IG	GL mm	mm	Number NBR -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
M 50 x 1,5	M 32 x 1,5	9	55	1.078.5032.50	1.079.5032.50
M 50 x 1,5	M 40 x 1,5	9	55	1.078.5040.50	1.079.5040.50
M 63 x 1,5	M 32 x 1,5	10	65	1.078.6332.50	1.079.6332.50
M 63 x 1,5	M 40 x 1,5	10	65	1.078.6340.50	1.079.6340.50
M 63 x 1,5	M 50 x 1,5	10	65	1.078.6350.50	1.079.6350.50

Adapter RSD-Ms-Ex — PG

Material	Nickel plated brass
O-Ring	Buna-N / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D



AG	IG	GL mm	H mm	mm	Number NBR -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
PG 9	PG 7	6	8,8	17	1.078.0907.01	1.079.0907.01
PG 11	PG 7	6	9	20	1.078.1107.01	1.079.1107.01
PG 11	PG 9	6	9	20	1.078.1109.01	1.079.1109.01
PG 13,5	PG 9	6,5	9,5	22	1.078.1309.01	1.079.1309.01
PG 16	PG 9	6,5	9,5	24	1.078.1609.01	1.079.1609.01
PG 16	PG 11	6,5	9,5	24	1.078.1611.01	1.079.1611.01
PG 16	PG 13,5	6,5	9,5	24	1.078.1613.01	1.079.1613.01
PG 21	PG 11	7	10,3	30	1.078.2111.01	1.079.2111.01
PG 21	PG 13,5	7	10,3	30	1.078.2113.01	1.079.2113.01
PG 21	PG 16	7	10,3	30	1.078.2116.01	1.079.2116.01
PG 29	PG 16	8	11,5	40	1.078.2916.01	1.079.2916.01
PG 29	PG 21	8	11,5	40	1.078.2921.01	1.079.2921.01

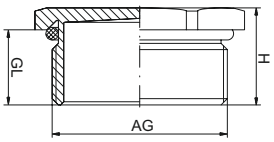
AG	IG	GL mm	H mm		Number NBR -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
PG 36	PG 21	9	12,5	50	1.078.3621.01	1.079.3621.01
PG 36	PG 29	9	12,5	50	1.078.3629.01	1.079.3629.01
PG 42	PG 29	10	13,5	57	1.078.4229.01	1.079.4229.01
PG 42	PG 36	10	13,5	57	1.078.4236.01	1.079.4236.01
PG 48	PG 36	10	13,5	64	1.078.4836.01	1.079.4836.01
PG 48	PG 42	10	13,5	64	1.078.4842.01	1.079.4842.01

Plug V-Ms-Ex d — Metr., NPT

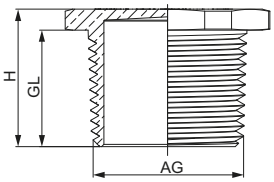
Material	Nickel plated brass
O-Ring	Buna-N / FKM / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D

Metr.



NPT



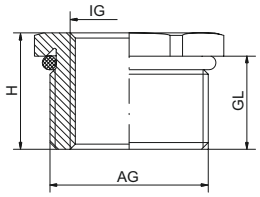
AG	GL mm	H mm	mm	Number without O-Ring	Number Buna-N -20 °C – 95 °C	Number FKM -20 °C – 180 °C	Number VMQ -60 °C – 180 °C
M 12 x 1,5	16	21	14		1.875.1200.50	1.876.1200.50	1.877.1200.50
M 16 x 1,5	16	20	19		1.875.1600.50	1.876.1600.50	1.877.1600.50
M 20 x 1,5	16	19,5	22		1.875.2000.50	1.876.2000.50	1.877.2000.50
M 25 x 1,5	16	19,5	30		1.875.2500.50	1.876.2500.50	1.877.2500.50
M 32 x 1,5	16	20,5	41		1.875.3200.50	1.876.3200.50	1.877.3200.50
M 40 x 1,5	16	21	46		1.875.4000.50	1.876.4000.50	1.877.4000.50
M 50 x 1,5	16	22	55		1.875.5000.50	1.876.5000.50	1.877.5000.50
M 63 x 1,5	16	22,5	70		1.875.6300.50	1.876.6300.50	1.877.6300.50
NPT 3/8"	16	20	16	1.877.3800.70			
NPT 1/2"	20	23,5	24	1.877.1200.70			
NPT 3/4"	20,5	24	30	1.877.3400.70			
NPT 1"	25	29,5	41	1.877.1000.70			
NPT 1 1/4"	26	31	46	1.877.5400.70			
NPT 1 1/2"	26,5	32,5	55	1.877.6400.70			

Adapter RSD-Ms-Ex d

Metr.

Material	Nickel plated brass
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D Ex d IIC

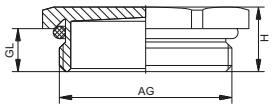


AG	IG	GL mm	H mm	mm	Number Buna-N -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
M 16 x 1,5	M 12 x 1,5	16	19	19	1.878.1612.50	1.879.1612.50
M 20 x 1,5	M 12 x 1,5	16	19,5	22	1.878.2012.50	1.879.2012.50
M 20 x 1,5	M 16 x 1,5	16	19,5	22	1.878.2016.50	1.879.2016.50
M 25 x 1,5	M 16 x 1,5	16	19,5	30	1.878.2516.50	1.879.2516.50
M 25 x 1,5	M 20 x 1,5	16	19,5	30	1.878.2520.50	1.879.2520.50
M 32 x 1,5	M 16 x 1,5	16	20,5	41	1.878.3216.50	1.879.3216.50
M 32 x 1,5	M 20 x 1,5	16	20,5	41	1.878.3220.50	1.879.3220.50
M 32 x 1,5	M 25 x 1,5	16	20,5	41	1.878.3225.50	1.879.3225.50
M 40 x 1,5	M 20 x 1,5	16	21	46	1.878.4020.50	1.879.4020.50
M 40 x 1,5	M 25 x 1,5	16	21	46	1.878.4025.50	1.879.4025.50
M 40 x 1,5	M 32 x 1,5	16	21	46	1.878.4032.50	1.879.4032.50
M 50 x 1,5	M 25 x 1,5	16	21	55	1.878.5025.50	1.879.5025.50
M 50 x 1,5	M 32 x 1,5	16	21	55	1.878.5032.50	1.879.5032.50

Plug V-INOX-Ex — Metr.

Material	INOX 1.4305
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
V-INOX-Ex O-Ring	Buna-N
V-INOX-FKM-Ex O-Ring	FKM
V-INOX-VMQ-Ex O-Ring	VMQ
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D

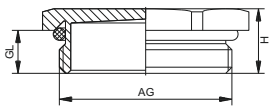


AG	GL mm	H mm	mm	Number V-INOX-Ex -20 °C – 95 °C	Number V-INOX-FKM-Ex -20 °C – 180 °C	Number V-INOX-VMQ-Ex -60 °C – 180 °C
M 12 x 1,5	6,5	9,5	14	1.192.1200.50	1.193.1200.50	1.194.1200.50
M 16 x 1,5	6	9	19	1.192.1600.50	1.193.1600.50	1.194.1600.50
M 20 x 1,5	6	9,5	22	1.192.2000.50	1.193.2000.50	1.194.2000.50
M 25 x 1,5	7	10,5	30	1.192.2500.50	1.193.2500.50	1.194.2500.50
M 32 x 1,5	8	12,5	41	1.192.3200.50	1.193.3200.50	1.194.3200.50
M 40 x 1,5	8	13	46	1.192.4000.50	1.193.4000.50	1.194.4000.50
M 50 x 1,5	9	15	55	1.192.5000.50	1.193.5000.50	1.194.5000.50
M 63 x 1,5	10	16,5	70	1.192.6300.50	1.193.6300.50	1.194.6300.50

Plug V-INOX-Ex — PG

Material	INOX 1.4305
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
V-INOX-Ex O-Ring	Buna-N
V-INOX-FKM-Ex O-Ring	FKM
V-INOX-VMQ-Ex O-Ring	VMQ
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D



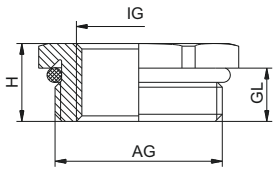
AG	GL mm	H mm	mm	Number V-INOX-Ex -20 °C – 95 °C	Number V-INOX-FKM-Ex -20 °C – 180 °C	Number V-INOX-VMQ-Ex -60 °C – 180 °C
PG 7	5	8	14	1.192.0700.01	1.193.0700.01	1.194.0700.01
PG 9	6	9	17	1.192.0900.01	1.193.0900.01	1.194.0900.01
PG 11	6	9,5	20	1.192.1100.01	1.193.1100.01	1.194.1100.01
PG 13,5	6,5	10	22	1.192.1300.01	1.193.1300.01	1.194.1300.01
PG 16	6,5	10	24	1.192.1600.01	1.193.1600.01	1.194.1600.01
PG 21	7	10,5	30	1.192.2100.01	1.193.2100.01	1.194.2100.01
PG 29	8	12,5	41	1.192.2900.01	1.193.2900.01	1.194.2900.01
PG 36	8	13	50	1.192.3600.01	1.193.3600.01	1.194.3600.01
PG 42	9	15	58	1.192.4200.01	1.193.4200.01	1.194.4200.01
PG 48	10	16,5	65	1.192.4800.01	1.193.4800.01	1.194.4800.01

Plug RSD-INOX-Ex

Metr.

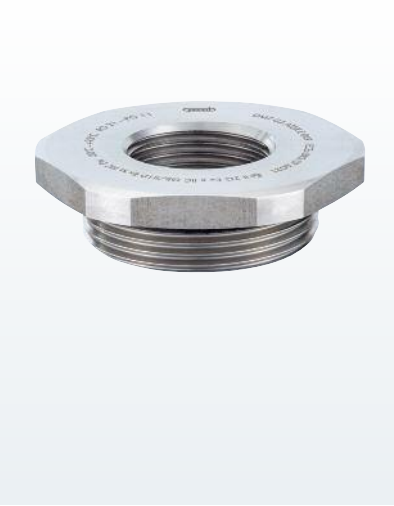
Material	INOX 1.4305
O-Ring	Buna-N / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D



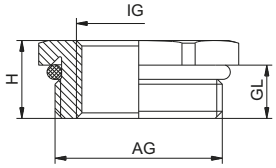
AG	IG	GL mm	mm	Number Buna-N -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
M 16 x 1,5	M 12 x 1,5	5	19	1.098.1612.50	1.099.1612.50
M 20 x 1,5	M 12 x 1,5	6	22	1.098.2012.50	1.099.2012.50
M 20 x 1,5	M 16 x 1,5	6	22	1.098.2016.50	1.099.2016.50
M 25 x 1,5	M 16 x 1,5	7	30	1.098.2516.50	1.099.2516.50
M 25 x 1,5	M 20 x 1,5	7	30	1.098.2520.50	1.099.2520.50
M 32 x 1,5	M 16 x 1,5	8	41	1.098.3216.50	1.099.3216.50
M 32 x 1,5	M 20 x 1,5	8	41	1.098.3220.50	1.099.3220.50
M 32 x 1,5	M 25 x 1,5	8	41	1.098.3225.50	1.099.3225.50
M 40 x 1,5	M 20 x 1,5	8	46	1.098.4020.50	1.099.4020.50
M 40 x 1,5	M 25 x 1,5	8	46	1.098.4025.50	1.099.4025.50
M 40 x 1,5	M 32 x 1,5	8	46	1.098.4032.50	1.099.4032.50
M 50 x 1,5	M 25 x 1,5	9	55	1.098.5025.50	1.099.5025.50
M 50 x 1,5	M 32 x 1,5	9	55	1.098.5032.50	1.099.5032.50
M 63 x 1,5	M 32 x 1,5	10	65	1.098.6332.50	1.099.6332.50
M 63 x 1,5	M 50 x 1,5	10	65	1.098.6350.50	1.099.6350.50

Plug RSD-INOX-Ex — PG



Material	INOX 1.4305
O-Ring	Buna-N / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D



AG	IG	GL mm	H mm	mm	Number Buna-N -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
PG 9	PG 7	6	8,8	17	1.098.0907.01	1.099.0907.01
PG 11	PG 7	6	9	20	1.098.1107.01	1.099.1107.01
PG 11	PG 9	6	9	20	1.098.1109.01	1.099.1109.01
PG 13,5	PG 9	6,5	9,5	22	1.098.1309.01	1.099.1309.01
PG 13,5	PG 11	6,5	9,5	22	1.098.1311.01	1.099.1311.01
PG 16	PG 9	6,5	9,5	24	1.098.1609.01	1.099.1609.01
PG 16	PG 11	6,5	9,5	24	1.098.1611.01	1.099.1611.01
PG 16	PG 13,5	6,5	9,5	24	1.098.1613.01	1.099.1613.01
PG 21	PG 11	7	10,3	30	1.098.2111.01	1.099.2111.01
PG 21	PG 13,5	7	10,3	30	1.098.2113.01	1.099.2113.01
PG 21	PG 16	7	10,3	30	1.098.2116.01	1.099.2116.01
PG 29	PG 16	8	11,5	40	1.098.2916.01	1.099.2916.01
PG 29	PG 21	8	11,5	40	1.098.2921.01	1.099.2921.01
PG 36	PG 21	9	12,5	50	1.098.3621.01	1.099.3621.01
PG 36	PG 29	9	12,5	50	1.098.3629.01	1.099.3629.01
PG 42	PG 29	10	13,5	57	1.098.4229.01	1.099.4229.01
PG 42	PG 36	10	13,5	57	1.098.4236.01	1.099.4236.01
PG 48	PG 36	10	13,5	64	1.098.4836.01	1.099.4836.01
PG 48	PG 42	10	13,5	64	1.098.4842.01	1.099.4842.01

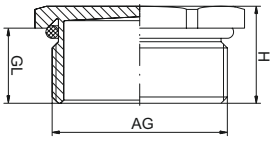
Plug V-INOX-Ex d

Metr., NPT

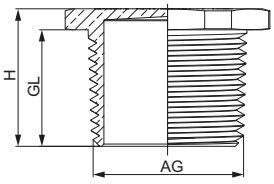
Material	INOX 1.4404
O-Ring	Buna-N / FKM / VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -20 °C – 180 °C (-4 °F – 356 °F) (FKM) / -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D Ex d IIC

Metr.



NPT

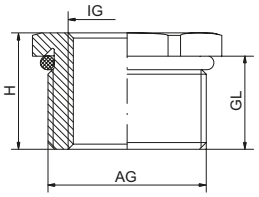


AG	GL mm	H mm	mm	Number without O-Ring self sealing	Number Buna-N -20 °C – 95 °C	Number FKM -20 °C – 180 °C	Number VMQ -60 °C – 180 °C
M 12 x 1,5	16	19	14		1.895.1200.50	1.896.1200.50	1.897.1200.50
M 16 x 1,5	16	19	19		1.895.1600.50	1.896.1600.50	1.897.1600.50
M 20 x 1,5	16	19,5	22		1.895.2000.50	1.896.2000.50	1.897.2000.50
M 25 x 1,5	16	19,5	30		1.895.2500.50	1.896.2500.50	1.897.2500.50
M 32 x 1,5	16	20,5	41		1.895.3200.50	1.896.3200.50	1.897.3200.50
M 40 x 1,5	16	21	46		1.895.4000.50	1.896.4000.50	1.897.4000.50
M 50 x 1,5	16	22	55		1.895.5000.50	1.896.5000.50	1.897.5000.50
M 63 x 1,5	16	22,5	70		1.895.6300.50	1.896.6300.50	1.897.6300.50
NPT 3/8"	16	20	19	1.897.3800.70			
NPT 1/2"	20	23,5	24	1.897.1200.70			
NPT 3/4"	20,5	24	30	1.897.3400.70			
NPT 1"	25	29,5	41	1.897.1000.70			
NPT 1 1/4"	26	31	46	1.897.5400.70			
NPT 1 1/2"	26,5	32,5	55	1.897.6400.70			

Adapter RSD-INOX-Ex d — Metr.

Material	INOX 1.4404
O-Ring	Buna-N / FKM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) (Buna-N) -60 °C – 180 °C (-76 °F – 356 °F) (VMQ)

II 2G 1D Ex d IIC



AG	IG	GL mm	H mm	mm	Number Buna-N -20 °C – 95 °C	Number VMQ -60 °C – 180 °C
M 16 x 1,5	M 12 x 1,5	16	19	19	1.898.1612.50	1.899.1612.50
M 20 x 1,5	M 12 x 1,5	16	19,5	22	1.898.2012.50	1.899.2012.50
M 20 x 1,5	M 16 x 1,5	16	19,5	22	1.898.2016.50	1.899.2016.50
M 25 x 1,5	M 16 x 1,5	16	19,5	30	1.898.2516.50	1.899.2516.50
M 25 x 1,5	M 20 x 1,5	16	19,5	30	1.898.2520.50	1.899.2520.50
M 32 x 1,5	M 16 x 1,5	16	20,5	41	1.898.3216.50	1.899.3216.50
M 32 x 1,5	M 20 x 1,5	16	20,5	41	1.898.3220.50	1.899.3220.50
M 32 x 1,5	M 25 x 1,5	16	20,5	41	1.898.3225.50	1.899.3225.50
M 40 x 1,5	M 20 x 1,5	16	21	46	1.898.4020.50	1.899.4020.50
M 40 x 1,5	M 25 x 1,5	16	21	46	1.898.4025.50	1.899.4025.50
M 40 x 1,5	M 32 x 1,5	16	21	46	1.898.4032.50	1.899.4032.50

EXIOS CABLE GLANDS FOR „HAZARDOUS AREAS“

Ex d
Ex e

Cable glands for all popular threads, used in electrical equipment and hazardous areas in Group I, II and III applications. The Ex d, Ex e and / or Ex ta certified cable glands have been designed for all explosion proof areas which are in need of high standards, reliability, strain relief and water proof requirements, e.g. marine, offshore, gas conveying machinery, refineries and chemical industry.

// EXIOS+ STANDARD — The innovative HUMMEL high-end cable gland for armoured cables in hazardous areas including the latest IECEx and ATEX certifications, for the use in Ex e, Ex d and Ex ta areas

// EXIOS+ MZ — High-end cable gland with extra strain relief and zero torsion or armour and wires. For armoured cables in hazardous areas including the latest IECEx and ATEX certifications, for the use in Ex e, Ex d and Ex ta areas.

// EXIOS+ BARRIER — High-end cable gland for armoured cables in hazardous areas uses a barrier compound sealing. Including the latest IECEx and ATEX certifications, for the use in Ex e, Ex d and Ex ta areas.

// EXIOS+ A2F — For non-armoured cables for the use in Ex e and Ex d areas

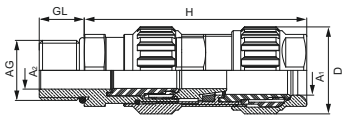
// Accessories

EXIOS CABLE GLANDS FOR „HAZARDOUS AREAS“

EXIOS+ STANDARD — **Metr., NPT**

Material	Brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60° C – 105 °C (-76 °F – 221 °F)

// INOX upon request



BVS 10 ATEX E 062 X

II 2G Ex de IIC Gb
II 1D Ex ta IIIC Da

IECEx BVS 10.0078X

RU C-DE.AA87.B.01078

TÜV 12.0321X

12.2557737X

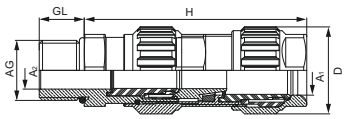
AG	Size	A1 mm	A2 mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm Clamping ring 1	Clamping ring 2	Clamping ring optional	Number
M 16 x1,5	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.1600.50
M 20 x1,5	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.2000.50
M 20 x1,5	20–2	9–16	6–12	16	74,3	24	29	0–0,7	0,7–1,25		1.605.2000.51
M 20 x1,5	20–3	12,5–20,5	9–14	16	80,5	30	35	0–0,7	0,7–1,4		1.605.2000.52
M 25 x1,5	20–3	12,5–20,5	9–14	16	80,5	30	35	0–0,7	0,7–1,4		1.605.2500.51
M 25 x1,5	25	16,9–26	12,5–20,5	16	91	36	42	0–0,7	0,9–1,6	0,7–1,4	1.605.2500.50
M 32 x1,5	32	22–33	16,9–26	16	96	46	52	0–0,7	1,3–2,0	0,7–1,4	1.605.3200.50
M 40 x1,5	40	28–41	22–33	16	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.4000.50
M 50 x1,5	50	36–52,6	28,9–44,4	16	131,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.605.5000.50
M 63 x1,5	63	46–65,3	39,9–56,3	16	144,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.605.6300.50
M 75 x1,5	75	57–78	50,5–68,2	16	154	95	107	0–1,0	1,5–2,5	1,0–2,0	1.605.7500.50
NPT 3/8"	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.3800.70
NPT 1/2"	20–2	9–16	6–12	20	74,3	24	29	0–0,7	0,7–1,25		1.605.1200.70
NPT 1/2"	20–3	12,5–20,5	9–14	20	80,5	30	35	0–0,7	0,7–1,4		1.605.1200.71
NPT 3/4"	25	16,9–26	12,5–20,5	20,5	91	36	42	0–0,7	0,9–1,6	0,7–1,4	1.605.3400.70
NPT 1"	32	22–33	16,9–26	25	96	46	52	0–0,7	1,3–2,0	0,7–1,4	1.605.1000.70
NPT 1 1/4"	40	28–41	22–33	26	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.5400.70
NPT 1 1/2"	40	28–41	22–33	26,5	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.6400.70
NPT 2"	50	36–52,6	28,9–44,4	27	131,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.605.2000.70
NPT 2 1/2"	63	46–65,3	39,9–56,3	40	144,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.605.5200.70
NPT 3"	75	57–78	50,5–68,2	41,5	154	95	107	0–1,0	1,5–2,5	1,0–2,0	1.605.3000.70

EXIOS+ STANDARD — Metr., NPT

Material	Nickel plated brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60° C – 105 °C (-76 °F – 221 °F)

// INOX upon request

ATEX BVS 10 ATEX E 062 X
II 2G Ex de IIC Gb
II 1D Ex ta IIIC Da
IECEx BVS 10.0078X
RU C-DE.AA87.B.01078
TÜV 12.0321X
12.2557737X



AG	Size	A1 mm	A2 mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm Clamping ring 1	Clamping ring 2	Clamping ring optional	Number
M 16 x1,5	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.1603.50
M 20 x1,5	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.2003.50
M 20 x1,5	20–2	9–16	6–12	16	74,3	24	29	0–0,7	0,7–1,25		1.605.2003.51
M 20 x1,5	20–3	12,5–20,5	9–14	16	80,5	30	35	0–0,7	0,7–1,4		1.605.2003.52
M 25 x1,5	20–3	12,5–20,5	9–14	16	80,5	30	35	0–0,7	0,7–1,4		1.605.2503.51
M 25 x1,5	25	16,9–26	12,5–20,5	16	91	36	42	0–0,7	0,9–1,6	0,7–1,4	1.605.2503.50
M 32 x1,5	32	22–33	16,9–26	16	96	46	52	0–0,7	1,3–2,0	0,7–1,4	1.605.3203.50
M 40 x1,5	40	28–41	22–33	16	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.4003.50
M 50 x1,5	50	36–52,6	28,9–44,4	16	131,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.605.5003.50
M 63 x1,5	63	46–65,3	39,9–56,3	16	144,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.605.6303.50
M 75 x1,5	75	57–78	50,5–68,2	16	154	95	107	0–1,0	1,5–2,5	1,0–2,0	1.605.7503.50
NPT 3/8"	20–1	6–12	3–8,1	16	69,5	22	27	0–0,7	0,7–1,25		1.605.3803.70
NPT 1/2"	20–2	9–16	6–12	20	74,3	24	29	0–0,7	0,7–1,25		1.605.1203.70
NPT 1/2"	20–3	12,5–20,5	9–14	20	80,5	30	35	0–0,7	0,7–1,4		1.605.1203.71
NPT 3/4"	25	16,9–26	12,5–20,5	20,5	91	36	42	0–0,7	0,9–1,6	0,7–1,4	1.605.3403.70
NPT 1"	32	22–33	16,9–26	25	96	46	52	0–0,7	1,3–2,0	0,7–1,4	1.605.1003.70
NPT 1 1/4"	40	28–41	22–33	26	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.5403.70
NPT 1 1/2"	40	28–41	22–33	26,5	107	55	64	0–0,7	1,3–2,0	0,7–1,4	1.605.6403.70
NPT 2"	50	36–52,6	28,9–44,4	27	131,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.605.2003.70
NPT 2 1/2"	63	46–65,3	39,9–56,3	40	144,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.605.5203.70
NPT 3"	75	57–78	50,5–68,2	41,5	154	95	107	0–1,0	1,5–2,5	1,0–2,0	1.605.3003.70

EXIOS CABLE GLANDS FOR „HAZARDOUS AREAS“

EXIOS+ MZ — **Metr., NPT**

Material	Brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60° C – 105 °C (-76 °F – 221 °F)

// INOX upon request

ABS

RoHS

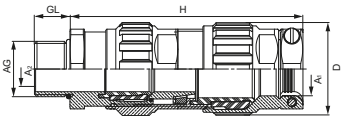
ATEX BVS 10 ATEX E 062 X

II 2G Ex de IIC Gb
II 1D Ex ta IIIC Da

IECEx BVS 10.0078X

RU C-DE.AA87.B.01078

12.2557737X



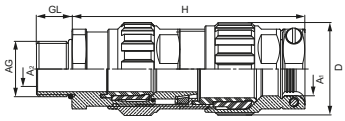
AG	Size	A1 mm	A2 mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm Clamping ring 1	Clamping ring 2	Clamping ring optional	Number
M 16 x1,5	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.1600.50
M 20 x1,5	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.2000.50
M 20 x1,5	20–2	9–13	6–12	16	83,8	24	29	0–0,7	0,7–1,25		1.6Z5.2000.51
M 20 x1,5	20–3	12,5–17,5	9–14	16	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.2000.52
M 25 x1,5	20–3	12,5–17,5	9–14	16	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.2500.51
M 25 x1,5	25	16,9–24	12,5–20,5	16	105,7	36	42	0–0,7	0,9–1,6	0,7–1,4	1.6Z5.2500.50
M 32 x1,5	32	22–32,5	16,9–26	16	107	46	52	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.3200.50
M 40 x1,5	40	28–41	22–33	16	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.4000.50
M 50 x1,5	50	36–39,5	28,9–44,4	16	144,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.5000.50
M 63 x1,5	63	46–64	39,9–56,3	16	157,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.6300.50
M 75 x1,5	75	57–78	50,5–68,2	16	167	95	107	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.7500.50
NPT 3/8"	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.3800.70
NPT 1/2"	20–2	9–13	6–12	20	83,8	24	29	0–0,7	0,7–1,25		1.6Z5.1200.70
NPT 1/2"	20–3	12,5–17,5	9–14	20	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.1200.71
NPT 3/4"	25	16,9–24	12,5–20,5	20,5	105,7	36	42	0–0,7	0,9–1,6	0,7–1,4	1.6Z5.3400.70
NPT 1"	32	22–32,5	16,9–26	25	107	46	52	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.1000.70
NPT 1 1/4"	40	28–39,5	22–33	26	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.5400.70
NPT 1 1/2"	40	28–39,5	22–33	26,5	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.6400.70
NPT 2"	50	36–49	28,9–44,4	27	144,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.2000.70
NPT 2 1/2"	63	46–64	39,9–56,3	40	157,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.5200.70
NPT 3"	75	57–78	50,5–68,2	41,5	167	95	107	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.3000.70

EXIOS+MZ — Metr., NPT

Material	Nickel plated brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60° C – 105 °C (-76 °F – 221 °F)

// INOX upon request

ATEX BVS 10 ATEX E 062 X
II 2G Ex de IIC Gb
II 1D Ex ta IIIC Da
IECEx BVS 10.0078X
RU C-DE.AA87.B.01078
12.2557737X



AG	Size	A1 mm	A2 mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm Clamping ring 1	Clamping ring 2	Clamping ring optional	Number
M 16 x1,5	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.1603.50
M 20 x1,5	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.2003.50
M 20 x1,5	20–2	9–13	6–12	16	83,8	24	29	0–0,7	0,7–1,25		1.6Z5.2003.51
M 20 x1,5	20–3	12,5–17,5	9–14	16	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.2003.52
M 25 x1,5	20–3	12,5–17,5	9–14	16	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.2503.51
M 25 x1,5	25	16,9–24	12,5–20,5	16	105,7	36	42	0–0,7	0,9–1,6	0,7–1,4	1.6Z5.2503.50
M 32 x1,5	32	22–32,5	16,9–26	16	107	46	52	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.3203.50
M 40 x1,5	40	28–41	22–33	16	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.4003.50
M 50 x1,5	50	36–39,5	28,9–44,4	16	144,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.5003.50
M 63 x1,5	63	46–64	39,9–56,3	16	157,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.6303.50
M 75 x1,5	75	57–78	50,5–68,2	16	167	95	107	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.7503.50
NPT 3/8"	20–1	6–11	3–8,1	16	79	22	27	0–0,7	0,7–1,25		1.6Z5.3803.70
NPT 1/2"	20–2	9–13	6–12	20	83,8	24	29	0–0,7	0,7–1,25		1.6Z5.1203.70
NPT 1/2"	20–3	12,5–17,5	9–14	20	91,5	30	35	0–0,7	0,7–1,4		1.6Z5.1203.71
NPT 3/4"	25	16,9–24	12,5–20,5	20,5	105,7	36	42	0–0,7	0,9–1,6	0,7–1,4	1.6Z5.3403.70
NPT 1"	32	22–32,5	16,9–26	25	107	46	52	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.1003.70
NPT 1 1/4"	40	28–39,5	22–33	26	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.5403.70
NPT 1 1/2"	40	28–39,5	22–33	26,5	120	55	64	0–0,7	1,3–2,0	0,7–1,4	1.6Z5.6403.70
NPT 2"	50	36–49	28,9–44,4	27	144,5	65	73	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.2003.70
NPT 2 1/2"	63	46–64	39,9–56,3	40	157,5	80	90	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.5203.70
NPT 3"	75	57–78	50,5–68,2	41,5	167	95	107	0–1,0	1,5–2,5	1,0–2,0	1.6Z5.3003.70

EXIOS CABLE GLANDS FOR „HAZARDOUS AREAS“

EXIOS+ BARRIER — **Metr., NPT**

Material	Brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Compound	Two-component epoxy compound
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60 °C – 85 °C (-76 °F – 185 °F)

// INOX upon request

ATEX Sira 11 ATEX 1110 X

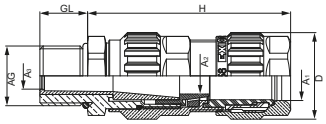
I M2 Ex de I Mb IIC Gb
I M2 Ex ta I IIIC Da

IECEx SIR 11.0044X

RU C-DE.AA87.B.01078

TÜV 12.0175X

12.2557737X



AG	Size	A1 mm	A2 mm	A3 mm	GL mm	H max. mm	mm	D mm	Max. No. cores	Armouring Ø mm Clamping ring 1	Armouring Ø mm Clamping ring 2	Number
M 16 x1,5	20–1	6–12	8,2	7,9	16	68,5	22	27	8	0–0,7	0,7–1,25	1.606.1600.50
M 20 x1,5	20–1	6–12	8,2	7,9	16	68,5	22	27	8	0–0,7	0,7–1,25	1.606.2000.50
M 20 x1,5	20–2	9–16	12	8,8	16	74,3	24	29	10	0–0,7	0,7–1,25	1.606.2000.51
M 20 x1,5	20–3	12,5–20,5	14	11,5	16	80,5	30	35	15	0–0,7	0,7–1,4	1.606.2000.52
M 25 x1,5	20–3	12,5–20,5	14	11,5	16	80,5	30	35	15	0–0,7	0,7–1,4	1.606.2500.51
M 25 x1,5	25	16,9–26	20	16,4	16	91	36	42	25	0–0,7	0,9–1,6	1.606.2500.50
M 32 x1,5	32	22–32,5	26	21,4	16	96	46	52	45	0–0,7	1,3–2,0	1.606.3200.50
M 40 x1,5	40	28–41	33,2	27,6	16	107	55	64	70	0–0,7	1,3–2,0	1.606.4000.50
M 50 x1,5	50	36–52,6	44,2	37,5	16	131,5	65	73	85	0–1,0	1,5–2,5	1.606.5000.50
M 63 x1,5	63	46–65,3	56,2	47,3	16	144,5	80	90	120	0–1,0	1,5–2,5	1.606.6300.50
M 75 x1,5	75	57–78	68,2	58,0	16	154	95	107	150	0–1,0	1,5–2,5	1.606.7500.50
NPT 3/8"	20–1	6–12	8,2	7,9	16	64	22	27	8	0–0,7	0,7–1,25	1.606.3800.70
NPT 1/2"	20–2	9–12	12	8,8	20	68	24	29	10	0–0,7	0,7–1,25	1.606.1200.70
NPT 1/2"	20–3	12,5–20,5	14	11,5	20	73	30	35	15	0–0,7	0,7–1,4	1.606.1200.71
NPT 3/4"	25	16,9–26	20	16,4	20,5	81,3	36	42	25	0–0,7	0,9–1,6	1.606.3400.70
NPT 1"	32	22–32,5	26	21,4	25	85,5	46	52	45	0–0,7	1,3–2,0	1.606.1000.70
NPT 1 1/4"	40	28–41	33,2	27,6	26	94,4	55	64	70	0–0,7	1,3–2,0	1.606.5400.70
NPT 1 1/2"	40	28–41	33,2	27,6	26,5	94,4	55	64	70	0–0,7	1,3–2,0	1.606.6400.70
NPT 2"	50	36–52,6	44,2	37,5	27	116,3	65	73	85	0–1,0	1,5–2,5	1.606.2000.70
NPT 2 1/2"	63	46–65,3	56,2	47,3	40	127,6	80	90	120	0–1,0	1,5–2,5	1.606.5200.70
NPT 3"	75	57–78	68,2	58,0	41,5	136,5	95	107	150	0–1,0	1,5–2,5	1.606.3000.70

EXIOS+ BARRIER — Metr., NPT

Material	Nickel plated brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Armouring	Metallic Armour or Screen
Compound	Two-component epoxy compound
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60 °C – 85 °C (-76 °F – 185 °F)

// INOX upon request

ABS RoHS

ATEX Sira 11 ATEX 1110 X

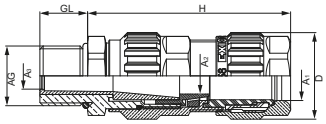
I M2 Ex de I Mb IIC Gb
I M2 Ex ta I IIIC Da

IECEx SIR 11.0044X

RU C-DE.AA87.B.01078

TÜV 12.0175X

12.2557737X



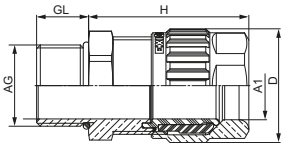
AG	Size	A1 mm	A2 mm	A3 mm	GL mm	H max. mm	mm	D mm	Max. No. cores	Armouring Ø mm Clamping ring 1	Armouring Ø mm Clamping ring 2	Number
M 16 x1,5	20–1	6–12	8,2	7,9	16	68,5	22	27	8	0–0,7	0,7–1,25	1.606.1603.50
M 20 x1,5	20–1	6–12	8,2	7,9	16	68,5	22	27	8	0–0,7	0,7–1,25	1.606.2003.50
M 20 x1,5	20–2	9–16	12	8,8	16	74,3	24	29	10	0–0,7	0,7–1,25	1.606.2003.51
M 20 x1,5	20–3	12,5–20,5	14	11,5	16	80,5	30	35	15	0–0,7	0,7–1,4	1.606.2003.52
M 25 x1,5	20–3	12,5–20,5	14	11,5	16	80,5	30	35	15	0–0,7	0,7–1,4	1.606.2503.51
M 25 x1,5	25	16,9–26	20	16,4	16	91	36	42	25	0–0,7	0,9–1,6	1.606.2503.50
M 32 x1,5	32	22–32,5	26	21,4	16	96	46	52	45	0–0,7	1,3–2,0	1.606.3203.50
M 40 x1,5	40	28–41	33,2	27,6	16	107	55	64	70	0–0,7	1,3–2,0	1.606.4003.50
M 50 x1,5	50	36–52,6	44,2	37,5	16	131,5	65	73	85	0–1,0	1,5–2,5	1.606.5003.50
M 63 x1,5	63	46–65,3	56,2	47,3	16	144,5	80	90	120	0–1,0	1,5–2,5	1.606.6303.50
M 75 x1,5	75	57–78	68,2	58,0	16	154	95	107	150	0–1,0	1,5–2,5	1.606.7503.50
NPT 3/8"	20–1	6–12	8,2	7,9	16	64	22	27	8	0–0,7	0,7–1,25	1.606.3803.70
NPT 1/2"	20–2	9–12	12	8,8	20	68	24	29	10	0–0,7	0,7–1,25	1.606.1203.70
NPT 1/2"	20–3	12,5–20,5	14	11,5	20	73	30	35	15	0–0,7	0,7–1,4	1.606.1203.71
NPT 3/4"	25	16,9–26	20	16,4	20,5	81,3	36	42	25	0–0,7	0,9–1,6	1.606.3403.70
NPT 1"	32	22–32,5	26	21,4	25	85,5	46	52	45	0–0,7	1,3–2,0	1.606.1003.70
NPT 1 1/4"	40	28–41	33,2	27,6	26	94,4	55	64	70	0–0,7	1,3–2,0	1.606.5403.70
NPT 1 1/2"	40	28–41	33,2	27,6	26,5	94,4	55	64	70	0–0,7	1,3–2,0	1.606.6403.70
NPT 2"	50	36–52,6	44,2	37,5	27	116,3	65	73	85	0–1,0	1,5–2,5	1.606.2003.70
NPT 2 1/2"	63	46–65,3	56,2	47,3	40	127,6	80	90	120	0–1,0	1,5–2,5	1.606.5203.70
NPT 3"	75	57–78	68,2	58,0	41,5	136,5	95	107	150	0–1,0	1,5–2,5	1.606.3003.70

EXIOS CABLE GLANDS FOR „HAZARDOUS AREAS“

EXIOS+ A2F — **Metr., NPT**

Material	Brass
Seal	Silicone, VMQ
Clamping insert	PA 6
Protection	IP 66, 67 and 68 (5 bar)
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F)

// INOX upon request



ATEX DEKRA 12 ATEX 0139 X

II Ex db e IIC Gb
II 1D Ex ta IIIC Da

IECEx DEK 12.0039X

RU C-DE.AA87.B.01078

TÜV 13.0800X

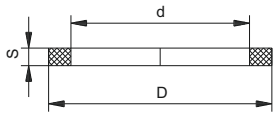
12.2557737X

AG	Size	A1 mm	GL mm	H max. mm	mm	D mm	Number	Number Nickel plated brass
M 16 x 1,5	20–1	6–12	16	36,5	22	27	1.608.1600.50	1.608.1603.50
M 20 x 1,5	20–1	6–12	16	36,5	22	27	1.608.2000.50	1.608.2003.50
M 20 x 1,5	20–2	9–16	16	41	24	29	1.608.2000.51	1.608.2003.51
M 25 x 1,5	20–3	12,5–20,5	16	48	30	35	1.608.2500.50	1.608.2503.50
M 32 x 1,5	25	16,9–26	16	48,5	36	42	1.608.3200.50	1.608.3203.50
M 40 x 1,5	32	22–33	16	54	46	52	1.608.4000.50	1.608.4003.50
M 50 x 1,5	40	28–41	16	60	55	64	1.608.5000.50	1.608.5003.50
M 63 x 1,5	50	40–52,6	16	67	65	73	1.608.6300.50	1.608.6303.50
M 75 x 1,5	63	51–65,3	16	72	80	90	1.608.7500.50	1.608.7503.50
NPT 3/8"	20–1	6–12	16	35,6	22	27	1.608.3800.70	1.608.3803.70
NPT 1/2"	20–1	6–12	20	35,6	22 / 24	27	1.608.1200.70	1.608.1203.70
NPT 1/2"	20–2	9–16	20	39,7	24	29	1.608.1200.71	1.608.1203.71
NPT 3/4"	20–3	12,5–20,5	20,5	47,5	30	35	1.608.3400.70	1.608.3403.70
NPT 1"	25	16,9–26	25	47,8	36	42	1.608.1000.70	1.608.1003.70
NPT 1 1/4"	32	22–33	26	51,1	46	52	1.608.5400.70	1.608.5403.70
NPT 1 1/2"	40	28–41	26,5	56,8	55	64	1.608.6400.70	1.608.6403.70
NPT 2"	50	40–52,6	27	65,4	65	73	1.608.2000.70	1.608.2003.70
NPT 2 1/2"	63	51–61	40	70,3	80	90	1.608.5200.70	1.608.5203.70
NPT 3"	75	62–78	41,5	76,2	95	107	1.608.3000.70	1.608.3003.70

Thread Seal Ring — Metr., NPT

GFK thread seal

Material	Fiber reinforced Nylon
Operating Temperature	-60 °C – 105 °C (-76 °F – 221 °F)

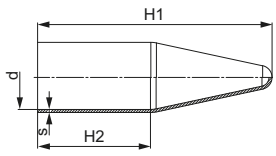


Fits the following sizes	D	d	S	Number
M 16	24	16,1	1,5	1.326.1600.50
M 20	28,5	20,5	1,5	1.326.2000.50
M 25	36,5	25,5	1,6	1.326.2500.50
M 32	42,5	32,5	1,6	1.326.3200.50
M 40	51,5	40	1,5	1.326.4000.50
M 50	61,5	51	1,6	1.326.5000.50
M 63	76	63,5	1,6	1.326.6300.50
M 75	87,5	75,5	1,8	1.326.7500.50

Fits the following sizes	D	d	S	Number
3/8"	25,5	17,5	1,5	1.326.3800.70
1/2"	30	22	1,5	1.326.1200.70
3/4"	33,5	26,5	1,5	1.326.3400.70
1"	42,5	34	1,6	1.326.1000.70
1 1/4"	52	42,5	1,6	1.326.5400.70
1 1/2"	58,7	50	1,5	1.326.6400.70
2"	69,5	60,8	1,6	1.326.2000.70
2 1/2"	83	73,8	1,5	1.326.5200.70
3"	114,5	91,5	1,8	1.326.3000.70

PVC Shroud

Material	PVC

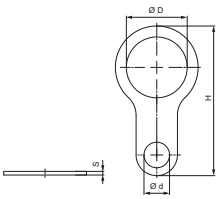


Fits the following sizes	H1 mm	H2 mm	d mm	Number
20 – 1	115	60	26	1.802.2000.50
20 – 2	125	70	28	1.802.2000.51
20 – 3	130	65	34	1.802.2000.52
25	160	90	42	1.802.2500.50
32	165	95	51	1.802.3200.50
40	200	110	63	1.802.4000.50
50	210	115	72	1.802.5000.50
63	245	140	88	1.802.6300.50
75	245	140	108	1.802.7500.50

EXIOS ACCESSORIES

Earthtag — Metr., NPT

Material	Brass

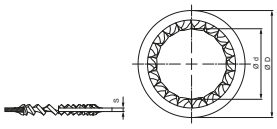


Size	D	d	s	H	Number
M 16	16	6,5	1,5	50,5	1.022.1600.50
M 20	21	7	1,5	54	1.022.2000.50
M 25	25,5	10,5	1,5	61,5	1.022.2500.50
M 32	33,5	12,5	1,5	77	1.022.3200.50
M 40	40,5	13,5	1,5	86,5	1.022.4000.50
M 50	51	13,5	1,5	111	1.022.5000.50
M 63	64	1,5	1,5	128,5	1.022.6300.50
M 75	75,5	13	1,5	138	1.022.7500.50

Size	D	d	s	H	Number
1/2"	21,5	7	1,6	53,5	1.022.1200.70
3/4"	27	10,5	1,6	61,5	1.022.3400.70
1"	35	12,5	1,6	73	1.022.1000.70
1 1/4"	43,5	13,5	1,6	87	1.022.5400.70
1 1/2"	51	12,5	1,6	112	1.022.6400.70
2"	61	13,5	1,6	125,5	1.022.2000.70
2 1/2"	76	13,5	1,6	138	1.022.5200.70

Serrated Washer — Metr., NPT

Material	INOX 1.4401



Size	D	d	s	Number
M 16	26,5	17	1,5	1.329.1600.50
M 20	33,5	21,5	1,5	1.329.2000.50
M 25	39	26	1,5	1.329.2500.50
M 32	48	30,5	1,5	1.329.3200.50
M 40	59,5	40,5	1,5	1.329.4000.50
M 50	71	51,5	1,5	1.329.5000.50
M 63	87	64	1,5	1.329.6300.50
M 75	102,5	76,5	1,5	1.329.7500.50

Size	D	d	s	Number
3/8"	30	19,5	1,5	1.329.3800.70
1/2"	39	23,5	1,5	1.329.1200.70
3/4"	42	29,5	1,5	1.329.3400.70
1"	49,5	35	1,5	1.329.1000.70
1 1/4"	59,5	44	1,5	1.329.5400.70
1 1/2"	71	51,5	1,5	1.329.6400.70
2"	86,6	61,5	1,5	1.329.2000.70
2 1/2"	102,5	76,5	1,5	1.329.5200.70

Approvals for HSK Strain Relief Fittings* / Licence Number 40042698, 40012033, 40042701

Page	Article	Number	Temperature Range	Approval G (Gas)	Approval D (Dust)	EC-Type Examination Certificate
133	RSD-Ms-Ex	1.078.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 049
133	RSD-Ms-Ex	1.079.*	-60 °C–180 °C	x	x	DMT 03 ATEX E 049
137	RSD-INOX-Ex	1.098.*	-20 °C–180 °C	x	x	DMT 03 ATEX E 049
137	RSD-INOX-Ex	1.099.*	-60 °C–180 °C	x	x	DMT 03 ATEX E 049
136	V-INOX-Ex	1.192.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 049
136	V-INOX-FKM-Ex	1.193.*	-20 °C–180 °C	x	x	DMT 03 ATEX E 049
136	V-INOX-VMQ-Ex	1.194.*	-60 °C–180 °C	x	x	DMT 03 ATEX E 049
132	V-Ms-Ex	1.197.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 049
132	V-Ms-FKM-Ex	1.198.*	-20 °C–180 °C	x	x	DMT 03 ATEX E 049
132	V-Ms-VMQ-Ex	1.199.*	-60 °C–180 °C	x	x	DMT 03 ATEX E 049
108	HSK-K-MZ-Ex	1.215.*	-20 °C–70 °C	x	x	KEMA 99 ATEX 6971 X
104-105	HSK-K-Ex-Active	1.292.*	-20 °C–85 °C	x	x	BVS 14 ATEX E 025 X
131	HSK-V-Ex / HSK-V-Ex Mz	1.296.*	-20 °C–95 °C	x	x	BVS 03 ATEX E 298 X
130	V-Ex	1.297.*	-20 °C–90 °C	x	x	DMT 03 ATEX E 049
142-143	EXIOS Standard	1.605.*	-60° C–105° C	x	x	BVS 10 ATEX E 062 X
146-147	EXIOS Barrier	1.606.*	-60° C–85° C	x	x	Sira 11 ATEX 1110 X
148	EXIOS A2F	1.608.*	-60° C–105° C	x	x	DEKRA 12 ATEX 0139 X
110-113, 124-125	HSK-M-Ex / EMC-Ex	1.610.* / 1.616.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
116, 126-127	HSK-MZ-Ex / EMC-Ex	1.611.* / 1.617.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
117	HSK-INOX-Ex	1.612.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
118	HSK-M-Ex d	1.622.*	-60 °C–105 °C	x	x	KEMA 99 ATEX 6968 X
119	HSK-MZ-Ex d	1.628.*	-60 °C–105 °C	x	x	KEMA 99 ATEX 6968 X
120	HSK-INOX-Ex d	1.632.*	-60 °C–105 °C	x	x	KEMA 99 ATEX 6968 X
120	HSK-INOX-PVDF-Ex d	1.633.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6968 X
118	HSK-M-PVDF-Ex d	1.634.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6968 X
122-123	HSK-M-EMC-D-Ex	1.636.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
122-123	HSK-M-EMC-D-Ex	1.637.*	-60 °C–95 °C	x	x	KEMA 99 ATEX 6971 X
110-113, 124-125	HSK-M-Ex / EMC-Ex	1.640.* / 1.646.*	-60 °C–95 °C	x	x	KEMA 99 ATEX 6971 X
126-127	HSK-MZ-EMC-Ex	1.647.*	-60 °C–95 °C	x	x	KEMA 99 ATEX 6971 X
117	HSK-INOX-Ex	1.642.*	-60 °C–95 °C	x	x	KEMA 99 ATEX 6971 X
110-113	HSK-M-PVDF-Ex	1.660.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6971 X
116	HSK-MZ-PVDF-Ex	1.661.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6971 X
117	HSK-INOX-PVDF-Ex	1.662.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6971 X
125	HSK-M-EMC-PVDF-Ex	1.666.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6971 X
127	HSK-MZ-EMC-PVDF-Ex	1.667.*	-20 °C–130 °C	x	x	KEMA 99 ATEX 6971 X
114	HSK-M-Multi-Ex	1.687.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
115	HSK-M-Flaka-Ex	1.689.*	-20 °C–95 °C	x	x	DMT 03 ATEX E 051 X
134, 139	V-Ms-Ex d / INOX-Ex d	1.875.* / 1.895.*	-20 °C–95 °C	x	x	KEMA 06 ATEX 0024
134, 139	V-Ms-Ex d/ INOX-FKM-Ex d	1.876.* / 1.896.*	-20 °C–180 °C	x	x	KEMA 06 ATEX 0024
134, 139	V-Ms-Ex d / INOX-VMQ-Ex d	1.877.* / 1.897.*	-60 °C–180 °C	x	x	KEMA 06 ATEX 0024
135, 140	RSD-Ms-Ex d / INOX-Ex d	1.878.* / 1.898.*	-20 °C–95 °C	x	x	KEMA 06 ATEX 0024
135, 140	RSD-Ms-Ex d/ INOX-Ex d	1.879.* / 1.899.*	-60 °C–180 °C	x	x	KEMA 06 ATEX 0024

TECHNICAL INFORMATION

International Protection, EN 60529

1. Code: Protection against human access to hazardous parts	Protection of equipment against penetration of solid foreign objects	2. Code	Penetration of water	Non-protected	protection against dripping water	Protected against vertically falling water (drops when device is tilted up to 15 °)	Water sprayed at an angle up to 60° on either side of the vertical (shall have no harmful) effects	Water splashed from any direction shall have no harmful effects	Water projected in jets from any direction shall have no harmful effects	Water projected in powerful jets from any direction shall have no harmful effects	protection against temporary submersion	protection against permanent submersion
				IP x0	IP x1	IP x2	IP x3	IP x4	IP x5	IP x6	IP x7	IP x8
Non-protected	Non-protected	IP 0x		IP 00								
Protected against access to hazardous parts with the back of the hand	Protected against solid foreign objects larger in diameter than 50 mm	IP 1x		IP 10	IP 11	IP 12						
Protected against access to hazardous parts with a finger	Protected against solid foreign object larger in diameter than 12,5 mm	IP 2x		IP 20	IP 21	IP 22	IP 23					
Protected against access to hazardous parts with a tool larger in diameter than 25 mm	Protected against solid foreign objects larger in diameter than 2,5 mm	IP 3x		IP 30	IP 31	IP 32	IP 33	IP 34				
Protected against access to hazardous parts with a wire larger in diameter than 1,0 mm	Protected against solid foreign objects larger in diameter than 1 mm	IP 4x		IP 40	IP 41	IP 42	IP 43	IP 44				
Protected against access to hazardous parts with a wire larger in diameter than 1,0 mm	Prevents penetration of dust sufficient to cause damage inside the equipment	IP 5x		IP 50				IP 54	IP 55			
Protected against access to hazardous parts with a wire larger in diameter than 1,0 mm	Dust proof	IP 6x		IP 60					IP 65	IP 66	IP 67	IP 68

Product Material Abbreviations

CR	Chloroprene rubber
FKM	Fluorelastomer
Ms	Nickel plated brass
NBR	Buna-N
PA	Polyamide
PE	Polyethylene
PP	Polypropylene
PVC	Polyvinylchloride
PVDF	Polyvinylidenfluoride
VMQ	Silicone

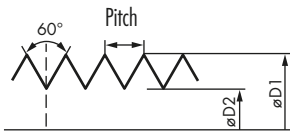
Installation Instructions

Multi hole inserts: Cable diameter should not be less than 20 % of hole diameter and the difference between cable diameter and hole should never exceed 1 mm (.04").

Flat cable inserts: The clamping range of the cable used may not deviate from the manufacturer-specified minimum values by more than 1 mm in length and 1 mm in width. The geometries of the cable and the insert hole must be compatible (semicircular or straight at the sides).

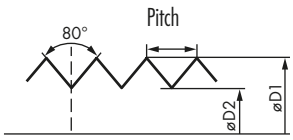
Fire protection classes according UL94:
V0: burning stops within 10 seconds, drips of particles allowed as long as they are not inflamed, maximum afterglow 30 seconds
V1: burning stops within 30 seconds, drips of particles allowed as long as they are not inflamed, maximum afterglow 60 seconds
V2: burning stops within 30 seconds, drips of flaming particles are allowed

Metric ISO Thread Specifications



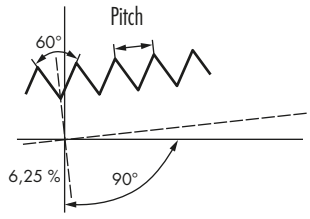
Size	Pitch mm	Outside-Ø D1 mm	Inside-Ø D2 mm	Through hole mm
M 12 x 1,5	1,5	12	10,38	12,2
M 16 x 1,5	1,5	16	14,38	16,2
M 20 x 1,5	1,5	20	18,38	20,2
M 25 x 1,5	1,5	25	23,38	25,2
M 32 x 1,5	1,5	32	30,38	32,2
M 40 x 1,5	1,5	40	38,38	40,2
M 50 x 1,5	1,5	50	48,38	50,2
M 63 x 1,5	1,5	63	61,38	63,2

PG Thread Specifications



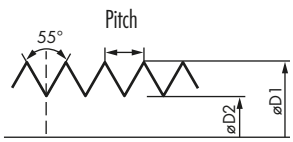
Size	Pitch mm	Outside-Ø D1 mm	Inside-Ø D2 mm	Through hole mm
PG 7	1,270	12,5	11,28	12,7
PG 9	1,410	15,2	13,86	15,4
PG 11	1,410	18,6	17,26	18,8
PG 13,5	1,410	20,4	19,06	20,7
PG 16	1,410	22,5	21,16	22,8
PG 21	1,588	28,3	26,78	28,6
PG 29	1,588	37,0	35,48	37,4
PG 36	1,588	47,0	45,48	47,5
PG 42	1,588	54,0	52,48	54,5
PG 48	1,588	59,3	57,78	59,8

NPT Thread Specifications



Size	Pitch mm	Outside-Ø mm	Number of pitches n
1/4" NPT	1,411	13,716	18
3/8" NPT	1,411	17,145	18
1/2" NPT	1,814	21,336	14
3/4" NPT	1,814	26,67	14
1" NPT	2,208	33,4	11 1/2
1 1/4" NPT	2,208	42,164	11 1/2
1 1/2" NPT	2,208	48,26	11 1/2
2" NPT	2,208	60,325	11 1/2
2 1/2" NPT	3,175	73,025	8
3" NPT	3,175	88,9	8
3 1/2" NPT	3,175	101,6	8

British G Thread Specifications



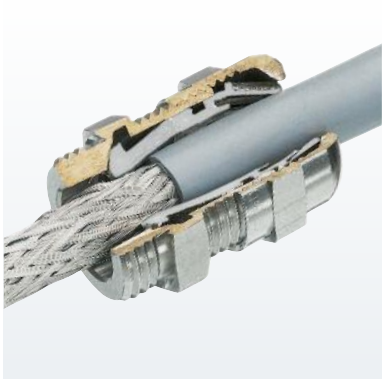
Size	Pitch mm	Outside-Ø D1 mm	Inside-Ø D2 mm	Through hole mm
G 1/4"	1,337	13,157	11,445	13,4
G 3/8"	1,337	16,662	14,950	17,0
G 1/2"	1,814	20,955	18,631	21,3
G 5/8"	1,814	26,441	24,117	26,8
G 1"	2,309	33,249	30,291	33,7
G 1 1/4"	2,309	41,910	38,952	42,4
G 1 1/2"	2,309	47,803	44,845	48,3
G 2"	2,309	59,614	56,656	60,2
G 2 1/2"	2,309	75,184	72,226	75,7
G 3"	2,309	87,884	84,926	88,5
G 3 1/2"	2,309	100,330	97,372	101,0
G 4"	2,309	113,030	110,072	114,0

ASSEMBLY INSTRUCTIONS

HSK-M-EMC-D

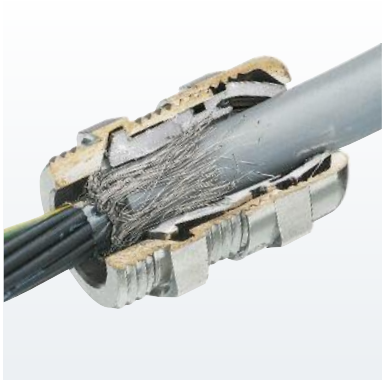
Option 1 – Feed-through of cable and shield (braided or foil)

// Expose shield approximately 7/16" (10 mm)
// Insert cable into fitting until the shield reaches the contact position
// Tighten dome nut



Option 2 – Feed-through of shield (braided or foil)

// Remove cable jacket to expose the shield as required
// Insert cable into fitting until the shield reaches the contact position
// Tighten dome nut



Option 3 – Termination of the braided shield in the fitting

// Strip cable jacket and braided shield to different lengths
// For small diameter cables fold the braided shield back over the cable jacket
// Insert cable into fitting until the shield reaches the contact position
// Tighten dome nut

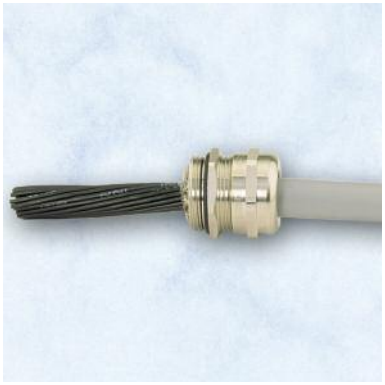
HSK-M-EMC

Step 1

// Strip cable
// Expose braided shield

Step 2

// Feed cable through dome nut and clamping insert
// Fold braided shield over clamping insert
// Make sure that braided shield overlaps the O-Ring by 3/32" (2 mm)



Step 3

// Push clamping insert into body and tighten dome nut
// Assemble into housing
// Finished!

NUMERICAL INDEX

Numerical Index

Alphabetical Index

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