

*Setting Standards*

# Cable Glands Cable Protection



# 2013



Setting Standards

[www.hummel.com](http://www.hummel.com)

# HUMMEL AG





## Online Catalog

- Product Pictures and Product Information
- Product and Assembly Videos
- Assembly and Operations Manual
- Technical drawings
- 3D data
- Certificates



## Download-Center

- Catalog and Flyer
- Assembly instructions and installation instructions
- Press releases
- Certificates and approvals
- ...



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- Part Number search
- Searching Details



## Enclosure-Configurator

- Individual Enclosures
- Enclosure Solutions
- Online configuration, requesting and ordering



## Technology Center

- Technical Information (Protection, thread, material, ...)
- Diagrams and evaluation
- Product description
- Assembly Video and Operations Manual



## NEWS News of the HUMMEL AG

- Trade fairs and exhibitions
- Press releases
- New Products
- Job vacancies
- Studies, training and vocational practical training



## Solutions all from one source



Touch



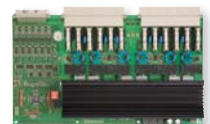
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Circular Connectors



Solutions



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### Limited Liability

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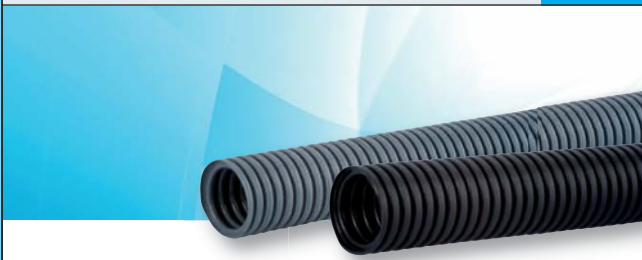
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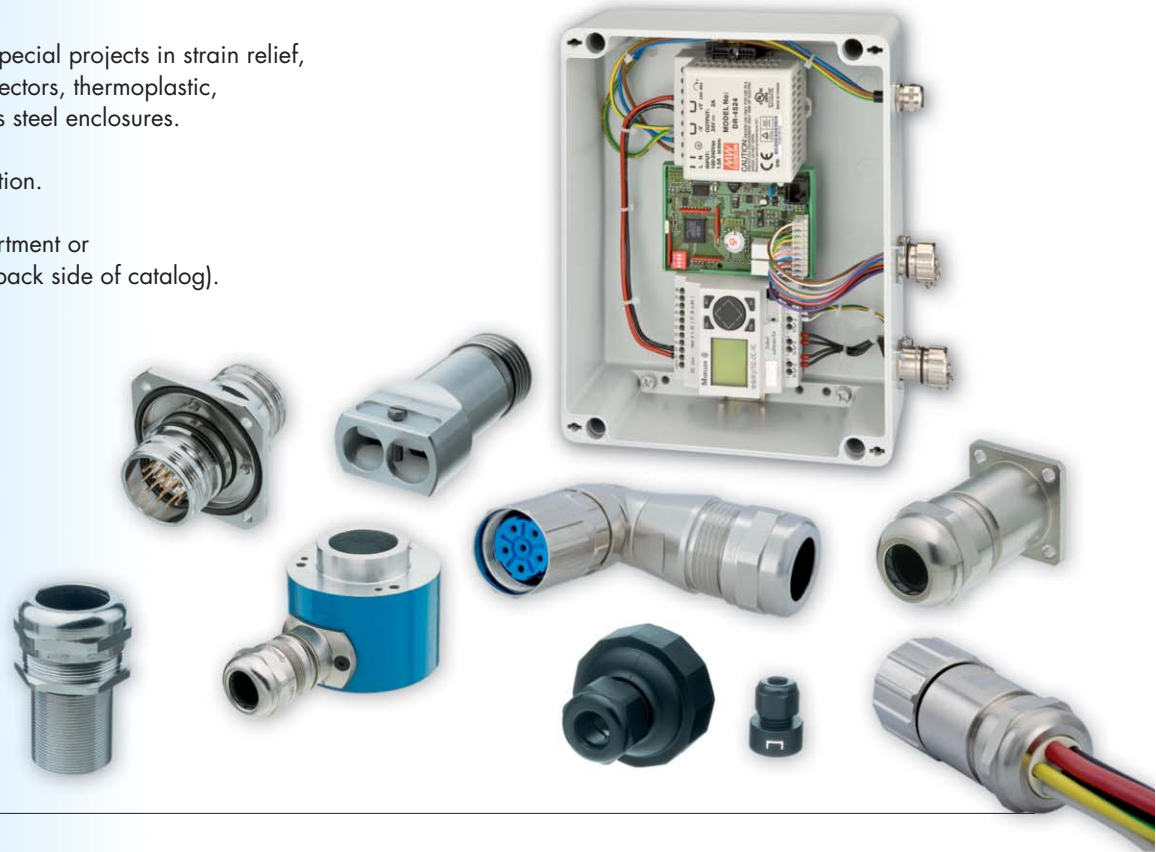


## Special Products

HUMMEL is your partner for special projects in strain relief, conduit systems, circular connectors, thermoplastic, aluminium, metal and stainless steel enclosures.

Challenge us – we find a solution.

Please contact our sales department or engineering department (see back side of catalog).



# New Products

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M16 x 1,5 to M75 x 1,5  
NPT 3/8" to NPT 3"

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**EXIOS**  
+ BARRIER



- + **EXIOS A2F** Ex-e and Ex-d cable gland for non-armoured cables for hazardous areas in the sizes M16 x 1,5 to M75 x 1,5

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**EXIOS**  
+ A2F



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## HSK-Industry Standard



also in



IP 69K

- + Halogen- and phosphorous-free
- + Fire protection class V0 according to UL 94
- + ULf1 UV-stable HSK Black Nylon
- + Liquid tight per NEMA 4x & 6 to 150 PSIG (IP 68 to 10 bar) according to DIN EN 60529
- + Patented ratchet and spline secures the dome nut on the body

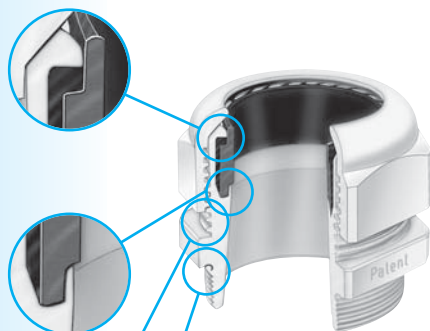
### HSK-K

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



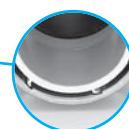
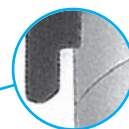
### HSK-M

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





# HSK-EMC-Industry Standard



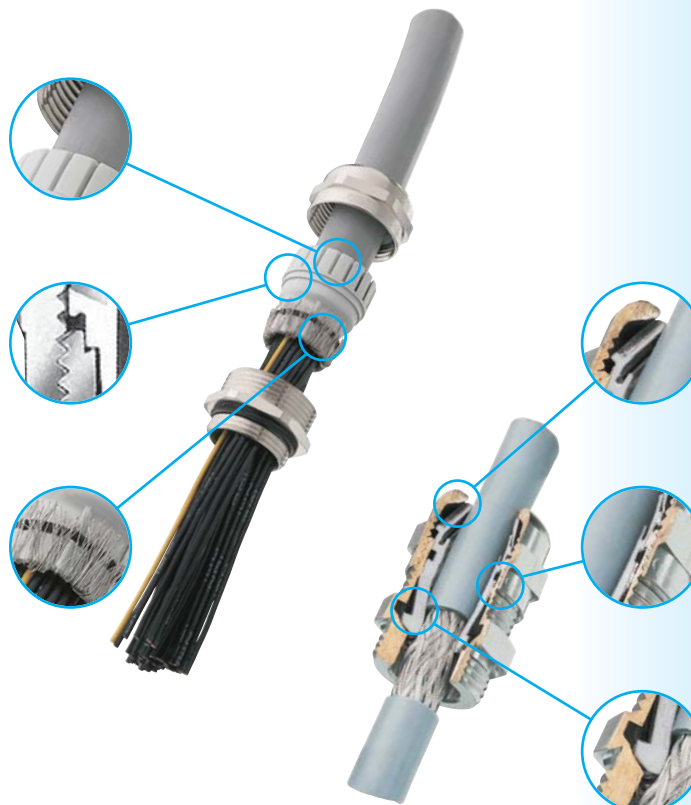
- + Halogen- and phosphorous-free
- + Fire protection class V0 according to UL 94
- + Liquid tight per NEMA 4x & 6 to 150 PSIG (IP 68 to 10 bar) according to DIN EN 60529
- + Quick assembly and reliable grounding of shielded cables

## HSK-M-EMV

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-EMV-D

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

Metalised spline insert provides electrical conductivity

Flexible contact points allow contact with variable braid diameters

# Snapclic-DUO



- + Conduit fitting and cable gland in one article
- + Halogen- and phosphorous-free
- + Quick assembly
- + IP 68 degree of protection on cable gland according to DIN EN 60529
- + EMC version available



screw in



tighten  
nut



push  
into hole



finished



**Snapclic-DUO**  
Corrugated conduit  
mounting with  
integrated cable gland

# Industrial cable glands

## HSK-standard cable glands

Cable glands of the HSK-series fulfil the highest demands of quality and security. Outstanding high-grade materials are used together with innovative technology to offer premium products.



### You can find in this chapter:

HSK standard cable glands, made of

- polyamide
- PVDF
- nickel plated brass
- various grades of stainless steel

We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

If there are still open requests from your side, please contact us. We are looking forward to developing solutions together. You profit from our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

### Advice:

- ➔ HSK EMC cable glands can be found in the next chapter from page 29
- ➔ Cable glands with smaller threads than M12 and larger threads than M63, multi hole fittings and much more can be found in the chapter "HSK cable glands for special applications" from page 37



# HSK-standard 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)  
within the specified clamping range, only with optional O-Ring



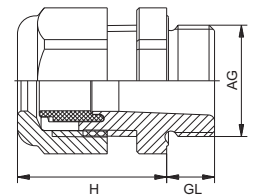
**Operating Temperature** -40 °C – 100 °C (-40 °F – 212 °F)

**Colors** grey (RAL 7035), black (RAL 9005),  
blue (RAL 5012) for the intrinsic safety "i"



**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request



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

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-K

## Metr.-elongated



**Material** Polyamide VO according to UL 94

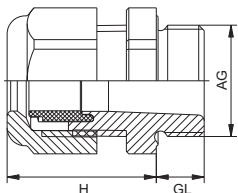
**Seal** Buna-N

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional 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"

- Advice:**
- With additional pre-assembled O-Ring upon request
  - Please find suitable O-Ring on page 88
  - Other sealing material e.g. Silicone upon request
  - Other colors on request



AG	∅k mm	GL mm	H mm	Y 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

➔ Accessories see page 73

# HSK-standard 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)  
within the specified clamping range, only with optional O-Ring

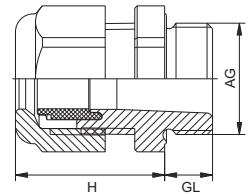
**Operating Temperature** -40 °C – 100 °C (-40 °F – 212 °F)

**Colors** grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety "i"



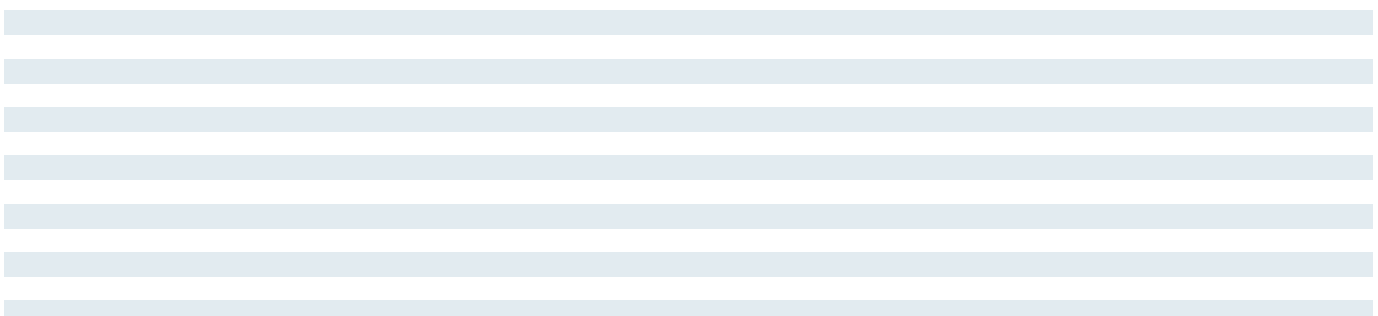
**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number grey	Number black	Number blue
PG 7	3-6,5	8	21	15	1.209.0700.14	1.209.0701.14	1.209.0702.14
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

**Advice:** see page 18 for further polyamide cable glands with special clamping ranges in PG threads



➔ Accessories see page 73



# HSK-standard cable glands

## HSK-K

## PG-elongated

RoHS



**Material** Polyamide VO according to UL 94

**Seal** Buna-N

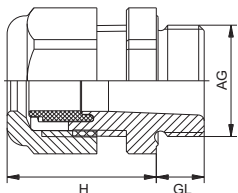
**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional O-Ring

**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"

**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request




AG	∅k 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

➔ Accessories see page 73

# HSK-standard cable glands


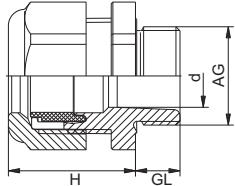
## HSK-KE PG




**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material and colors upon request


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

AG	$\varnothing$ 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

➔ Accessories see page 71


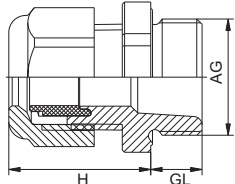
## HSK-KR PG




**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material and colors upon request

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

AG	$\varnothing$ 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

➔ Accessories see page 73

# HSK-standard cable glands

HSK-K

NPT

RoHS



**Material** Polyamide VO according to UL 94

**Seal** Buna-N

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional O-Ring

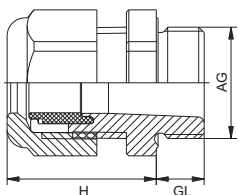
**Operating Temperature** -40 °C – 100 °C (-40 °F – 212 °F)

**Colors** grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety "i"



**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request




AG	∅k 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

➔ Accessories see page 73

# HSK-standard cable glands


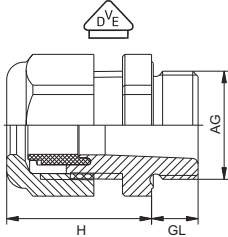
## HSK-K-PVDF Metr.



**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material and colors upon request


<b>Material</b>	PVDF V0 according to UL 94
<b>Seal</b>	FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range, only with optional O-Ring
<b>Operating Temperature</b>	-35 °C – 150 °C (-31 °F – 302 °F)
<b>Colors</b>	nature

AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ 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

➔ Accessories see page 73


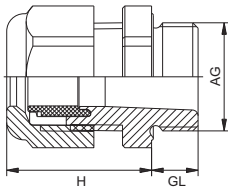
## HSK-K-PVDF NPT



**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material and colors upon request

<b>Material</b>	PVDF V0 according to UL 94
<b>Seal</b>	FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range, only with optional O-Ring
<b>Operating Temperature</b>	-35 °C – 150 °C (-31 °F – 302 °F)
<b>Colors</b>	nature

AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ 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

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-K-PVDF

PG

RoHS



**Material** PVDF V0 according to UL 94

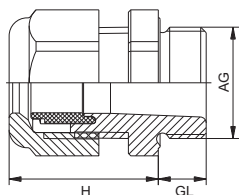
**Seal** FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional O-Ring

**Operating Temperature** -35 °C – 150 °C (-31 °F – 302 °F)

**Colors** nature

- Advice:**
- With additional pre-assembled O-Ring upon request
  - Please find suitable O-Ring on page 88
  - Other sealing material e.g. Silicone upon request
  - Other colors on request



AG	∅ <sub>k</sub> mm	GL mm	H mm	∅ <sub>h</sub> 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

➔ Accessories see page 73



# HSK-standard cable glands

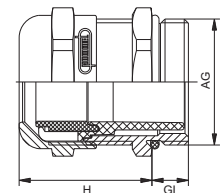
## HSK-M / HSK-M-PVDF

Metr.



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

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Please see page 51 for size < M12 and > M63



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M -40 °C – 100 °C -40 °F – 212 °F	Number HSK-M-PVDF -35 °C – 150 °C -31 °F – 302 °F
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	

➔ Accessories see page 73

# HSK-standard cable glands

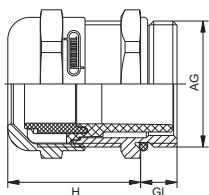
## HSK-M / HSK-M-PVDF

Metr.-elongated



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

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Please see page 51 for size < M12 and > M63



AG mm	∅ mm	GL mm	H mm	∅ mm	Number HSK-M -40 °C – 100 °C -40 °F – 212 °F	Number HSK-M-PVDF -35 °C – 150 °C -31 °F – 302 °F
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	

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-M / HSK-M-PVDF

PG



**Material** Nickel plated brass



**Clamping insert** Polyamide / PVDF



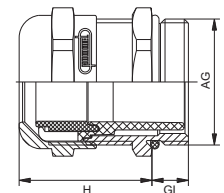
**Seal** Buna-N / FPM

**O-Ring** Buna-N / FPM

**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)

**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M -40 °C – 100 °C -40 °F – 212 °F	Number HSK-M-PVDF -35 °C – 150 °C -31 °F – 302 °F
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

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-M / HSK-M-PVDF

## PG-elongated

RoHS



**Material** Nickel plated brass

**Clamping insert** Polyamide / PVDF

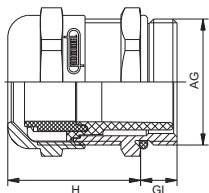
**Seal** Buna-N / FPM

**O-Ring** Buna-N / FPM

**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)

**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	 mm	Number HSK-M -40 °C – 100 °C -40 °F – 212 °F	Number HSK-M-PVDF -35 °C – 150 °C -31 °F – 302 °F
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

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-M / HSK-M-PVDF

NPT



**Material** Nickel plated brass



**Clamping insert** Polyamide / PVDF



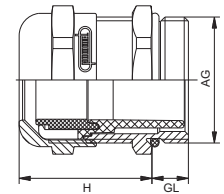
**Seal** Buna-N / FPM

**O-Ring** Buna-N / FPM

**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)

**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M -40 °C – 100 °C -40 °F – 212 °F	Number HSK-M-PVDF -35 °C – 150 °C -31 °F – 302 °F
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	

➔ Accessories see page 73



# HSK-standard cable glands

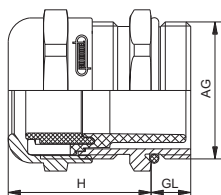
## HSK-INOX / HSK-INOX-PVDF

Metr.



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

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Other sizes upon request



AG	Ø	GL	H	Y	Number		Number	
					HSK-INOX 1.4305 -40 °C – 100 °C	HSK-INOX-PVDF 1.4305 -35 °C – 150 °C	HSK-INOX 1.4404 -40 °C – 100 °C	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	

➔ Accessories see page 73

# HSK-standard cable glands

## HSK-INOX / HSK-INOX-PVDF

## PG, NPT



**Material** INOX 1.4305 / 1.4404



**Clamping insert** Polyamide / PVDF



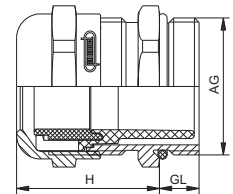
**Seal** Buna-N / FPM

**O-Ring** Buna-N / FPM

**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)

**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	Ø mm	GL mm	H mm	mm	Number		Number	
					HSK-INOX 1.4305	HSK-INOX-PVDF 1.4305	HSK-INOX 1.4404	HSK-INOX-PVDF 1.4404
					-40 °C – 100 °C	-35 °C – 150 °C	-40 °C – 100 °C	-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
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	

➔ Accessories see page 73

# Industrial cable glands

## HSK-EMC cable glands

Cable glands of the HSK-series fulfil the highest demands of quality and security. Outstanding high-grade materials are used together with innovative technology to offer premium products.



### You can find in this chapter:

HSK EMC cable glands

- EMC-D version with Best EMI attenuation and easy installation
- EMC standard version
- with additional bending protection
- with additional strain relief

We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

### Advice:

- ➔ Do you need EMC boxes or EMC connectors? You can find suitable solutions in our catalogs „Enclosure Solutions“ and „Circular Connectors“

# HSK-EMC cable glands

## HSK-M-EMV-D

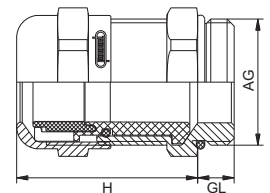
Metr., Metr.-elongated



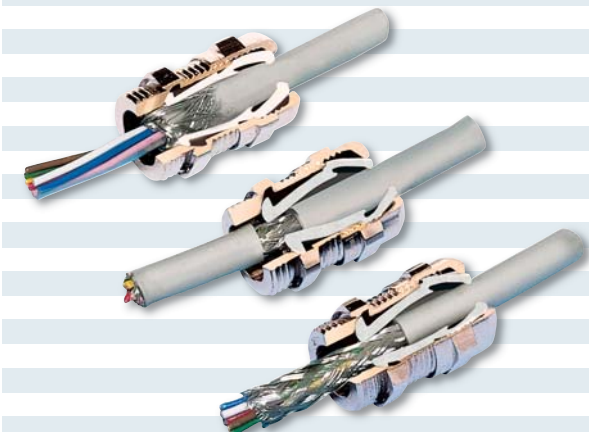
<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Metalised polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



**Advice:**  
- Other sealing material e.g. Silicone upon request



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



➔ Accessories see page 73

# HSK-EMC cable glands

## HSK-M-EMV-D PG

**RoHS**

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Metalised polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Elongated threads on request

AG	$\varnothing$ 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

Accessories see page 73

## HSK-M-EMV-D NPT

**RoHS**

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Metalised polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)

**Advice:**  
 - Other sealing material e.g. Silicone upon request

AG	$\varnothing$ mm	GL mm	H mm	mm	Number
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

Accessories see page 73



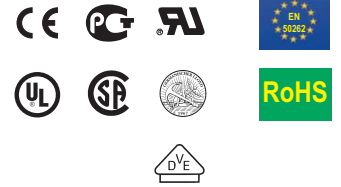
# HSK-EMC cable glands

## HSK-M-EMV

Metr., Metr.-elongated

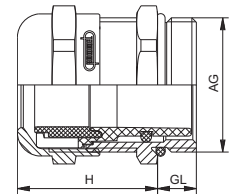


<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Stainless steel on request

See our homepage [www.hummel.com](http://www.hummel.com)  
 for assembling advices for maximum  
 cable diameters



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



➔ Accessories see page 73

## HSK-M-EMV

PG, PG-elongated, NPT

RoHS



**Material** Nickel plated brass

**Clamping insert** Polyamide

**Seal** Buna-N

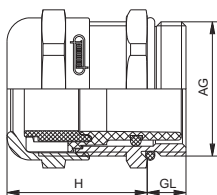
**O-Ring** Buna-N

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range

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

**Advice:**

- Also available in PVDF
- Other sealing material e.g. Silicone upon request
- Stainless steel on request



AG	∅k mm	GL mm	H mm	∅ mm	Number	GL mm	Number elongated
PG 7	3 – 6,5	5	19	14	1.691.0700.01	10	1.691.0700.60
PG 7	2 – 5	5	19	14	1.691.0700.15	10	1.691.0700.61
PG 9	4 – 8	6	21	17	1.691.0900.01	10	1.691.0900.60
PG 9	2 – 6	6	21	17	1.691.0900.15	10	1.691.0900.61
PG 11	5 – 10	6	22	20	1.691.1100.01	10	1.691.1100.60
PG 11	3 – 7	6	22	20	1.691.1100.15	10	1.691.1100.61
PG 13,5	6 – 12	6,5	24	22	1.691.1300.01	10	1.691.1300.60
PG 13,5	5 – 9	6,5	24	22	1.691.1300.15	10	1.691.1300.61
PG 16	10 – 14	6,5	23	24	1.691.1600.01	10	1.691.1600.60
PG 16	7 – 12	6,5	23	24	1.691.1600.15	10	1.691.1600.61
PG 21	13 – 18	7	24	30	1.691.2100.01	12	1.691.2100.60
PG 21	9 – 16	7	24	30	1.691.2100.15	12	1.691.2100.61
PG 29	18 – 25	8	29	40	1.691.2900.01	12	1.691.2900.60
PG 29	13 – 20	8	29	40	1.691.2900.15	12	1.691.2900.61
PG 36	22 – 32	8	35	50	1.691.3600.01	15	1.691.3600.60
PG 36	20 – 26	8	35	50	1.691.3600.15	15	1.691.3600.61
PG 42	32 – 38	9	37	57	1.691.4200.01	15	1.691.4200.60
PG 42	25 – 31	9	37	57	1.691.4200.15	15	1.691.4200.61
PG 48	37 – 44	10	38	64	1.691.4800.01	15	1.691.4800.60
PG 48	29 – 35	10	38	64	1.691.4800.15	15	1.691.4800.61
NPT 3/8"	4 – 8	15	21	17/19	1.691.3800.70		
NPT 3/8"	2 – 6	15	21	17/19	1.691.3800.71		
NPT 1/2"	6 – 12	13	24	22/24	1.691.1200.70		
NPT 1/2"	5 – 9	13	24	22/24	1.691.1200.71		
NPT 3/4"	13 – 18	13	25	30	1.691.3400.70		
NPT 3/4"	9 – 16	13	25	30	1.691.3400.71		

➔ Accessories see page 73

# HSK-EMC cable glands

## HSK-M-Flex-EMV

Metr., Metr.-elongated

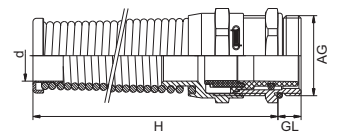


<b>Material</b>	Nickel plated brass
<b>Steel spring</b>	INOX 1.4310
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)

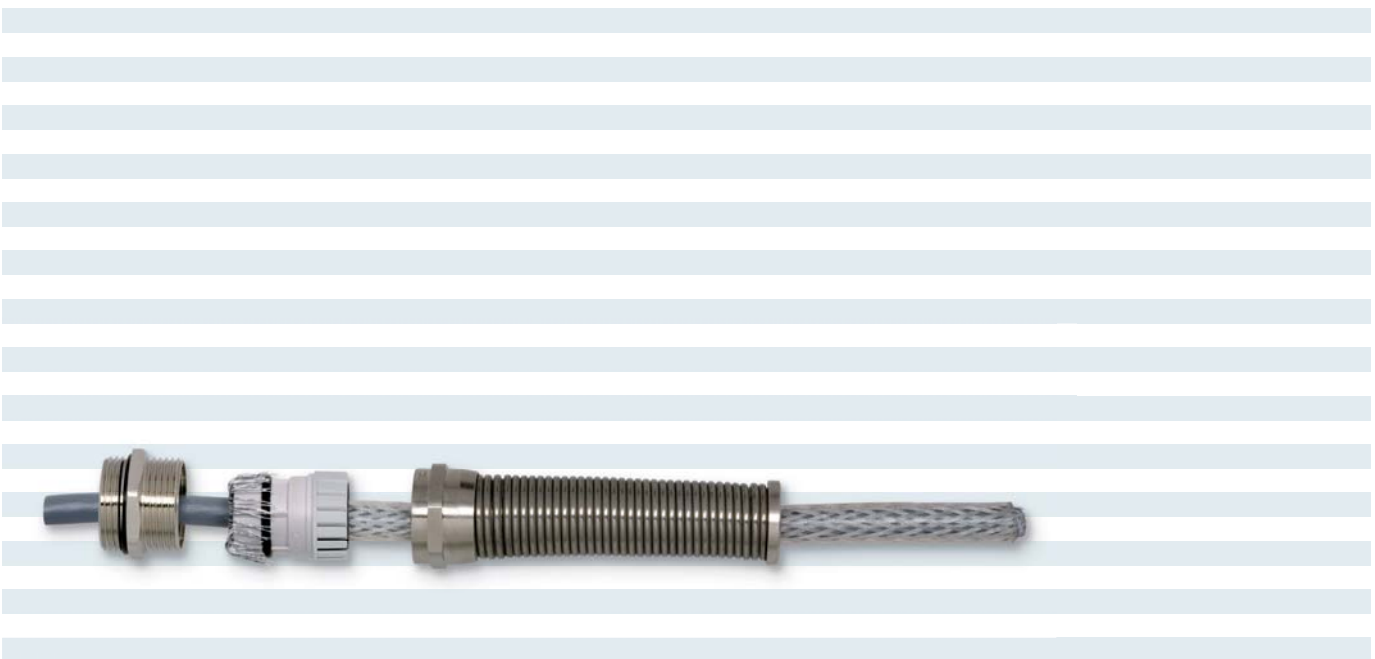


**Advice:**  
- Other sealing material e.g. Silicone upon request

See our homepage [www.hummel.com](http://www.hummel.com) for assembling advices for maximum cable diameters



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



➔ Accessories see page 73

## HSK-M-Flex-EMV

## PG, PG-elongated, NPT

RoHS



**Material** Nickel plated brass

**Steel spring** INOX 1.4310

**Clamping insert** Polyamide

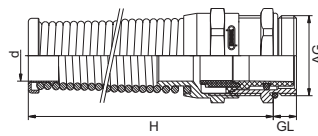
**Seal** Buna-N

**O-Ring** Buna-N

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range

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

**Advice:**  
- Also available in PVDF  
- Other sealing material e.g. Silicone upon request



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

➔ Accessories see page 73



# HSK-EMC cable glands

## HSK-MZ-EMV

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

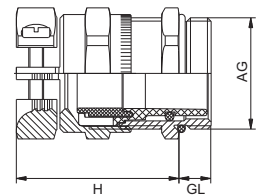


<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



**Advice:**  
 - Also available in PVDF\*  
 - Other sealing material e.g. Silicone upon request

See our homepage [www.hummel.com](http://www.hummel.com) for assembling advices for maximum cable diameters



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



➔ Accessories see page 73

# Industrial cable glands

## HSK cable glands for special applications

Cable glands of the HSK-series fulfil highest demands of quality and security. Outstanding high-grade materials are used together with innovative technology to offer premium products.

**NEW**



### You can find in this chapter:

HSK cable glands

- for hygienic areas like food production, pharmaceutical and chemical industries, biotechnology and clean room
- made of polyamide and nickel plated brass with multi hole and flat cable sealing inserts
- made of polyamide and nickel plated brass with bending protection
- snap elbows made of polyamide and nickel plated brass
- Minis in the sizes M6 to M10 and PG7
- XL in the sizes M63 with extended clamping range to M110 and XL cable glands with pipe threads from G2 1/2" to G4"
- with additional strain relief

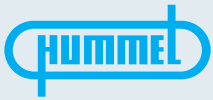
We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49 (0) 76 66/9 11 10-0



## HSK-INOX Hygienic-Design

[www.hummel.com](http://www.hummel.com)

The HSK-INOX Hygienic Design has been developed for all areas which require the avoidance of possible bacteria and micro-organism deposits, for example in food, pharmaceutical and chemical industries, biotechnology and clean room areas.

### Characteristics

- Available sizes: M 12 to M 25
- Operating Temperature:  
-40 °C – 120 °C (-40 °F – 248 °F)  
-35 °C – 150 °C (-31 °F – 302 °F)  
PVDF version (on request)

- Protection: IP 66, IP 68
- EMC protection

### Certifications

- EHEDG conforming materials
- FDA conforming materials

### Materials HD-shell

- Made of stainless steel grade 1.4404/  
AISI 316 L, surface roughness < 0,8 µm
- Silicone seals made of VMQ

### Advantages

- Easy and efficient to clean
- Fast and simple installation
- High chemical and thermal resistance

**NEW**

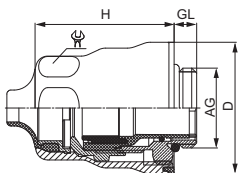
# HSK cable glands for special applications

## HSK-INOX-HD

Metr.

<b>Material HD-shell</b>	1.4404 / AISI 316 L
<b>Seal HD-shell</b>	VMQ (Silicone), blue
<b>Protection</b>	IP 66, IP 68
<b>Operating Temperature</b>	-40 °C – 120 °C (-40 °F – 248 °F)

- Advice:**
- Elongated threads on request
  - Other sizes upon request
  - IP 69 K on request
  - Other temperature range on request



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

**Advice:** Accessories see page 73



# HSK cable glands for special applications

## HSK-K-Multi

Metr., PG, NPT



**Material** Polyamide V0 according to UL 94



**Seal** Elastomer



**Protection** IP 65  
IP 68 possible with ideal fit, only with optional O-Ring

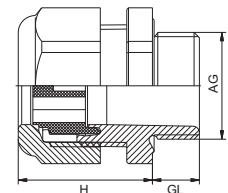
**Operating Temperature** -40 °C – 100 °C (-40 °F – 212 °F)

**Colors** grey (RAL 7035), black (RAL 9005)



**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Elongated threads on request
- Installation instruction see page 176



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

**Advice:** The shown inserts are samples, more inserts upon request

➔ Accessories see page 73



# HSK cable glands for special applications

## HSK-K-FLAKA

Metr., PG, NPT



**Material** VO according to UL 94

**Seal** Elastomer

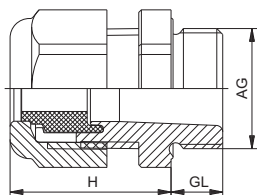
**Protection** IP 65  
IP 68 possible with ideal fit, only with optional O-Ring

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

**Colors** grey (RAL 7035), black (RAL 9005)

**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Elongated threads on request
- Installation instruction see page 176



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

**Advice:** The shown inserts are samples, more inserts upon request

➔ Accessories see page 73

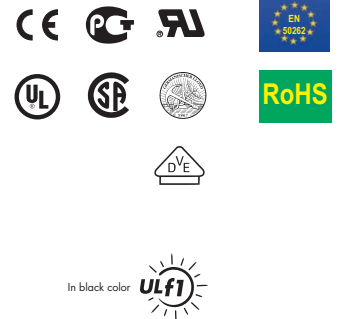
# HSK cable glands for special applications

## HSK-K-Flex

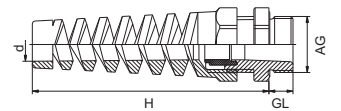
Metr., Metr.-elongated



<b>Material</b>	Polyamide
<b>Seal</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range, only with optional O-Ring
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	grey (RAL 7035), black (RAL 9005)



- Advice:**
- With additional pre-assembled O-Ring upon request
  - Please find suitable O-Ring on page 88
  - Other sealing material e.g. Silicone upon request
  - Other colors on request



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

➔ Accessories see page 73

# HSK cable glands for special applications

## HSK-K-Flex

## PG, PG-elongated, NPT

RoHS



**Material** Polyamide

**Seal** Buna-N

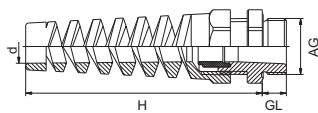
**Protection** IP 68 – 10 bar/ IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional O-Ring

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

**Colors** grey (RAL 7035), black (RAL 9005)

**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request



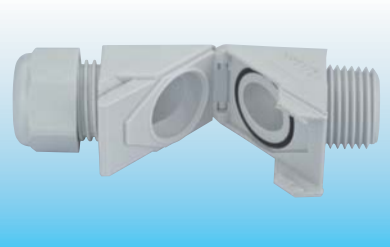
AG	$\varnothing$ mm	GL mm	H mm	d mm	$\varnothing$ mm	Number grey	Number black	GL mm	Number grey elongated	Number black elongated
PG 7*	3-6,5	8	54	7	15	1.293.0700.14	1.293.0701.14	15	1.293.0700.60	1.293.0701.60
PG 7*	2-5	8	54	7	15	1.293.0700.15	1.293.0701.15	15	1.293.0700.61	1.293.0701.61
PG 9*	4-8	8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

➔ Accessories see page 73

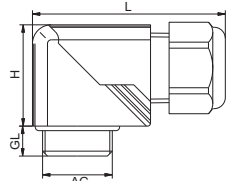
# HSK cable glands for special applications

## HSK-W Metr.



**Advice:**  
- Other sealing material e.g. Silicone upon request  
- Other colors on request


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



AG	$\varnothing$ mm	GL mm	H mm	L mm	$\frac{R}{mm}$	$\frac{R}{mm}$	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

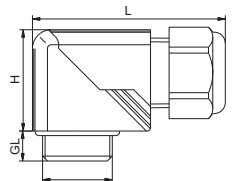
➔ Accessories see page 73

## HSK-W NPT



**Advice:**  
- Glands not fitted with O-Rings.  
We recommend the use of thread washer seal ring (page 89)

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



AG	$\varnothing$ mm	GL mm	H mm	L mm	$\frac{R}{mm}$	$\frac{R}{mm}$	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

➔ Accessories see page 73

# HSK cable glands for special applications

## HSK-W PG

**RoHS**

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

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Other colors on request

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

➔ Accessories see page 73

## HSK-W rotating version PG

**RoHS**

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

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Other colors on request

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

➔ Accessories see page 73



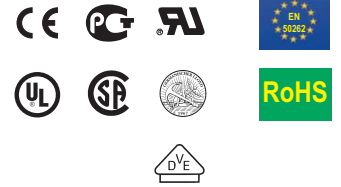
# HSK cable glands for special applications

## HSK-W-Flex

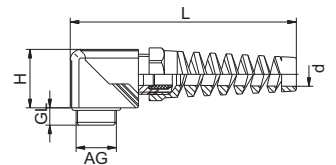
Metr., PG, NPT



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



- Advice:**
- Other sealing material e.g. Silicone upon request
  - Other colors on request



AG	$\varnothing$ 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

\* Glands not fitted with O-Rings. We recommend the use of thread washer seal ring. Please see page 89 for suitable thread seal ring.

➔ Accessories see page 73

# HSK cable glands for special applications

## HSK-M-Multi

Metr., PG, NPT



**Material** Nickel plated brass

**Clamping insert** Polyamide

**Seal** Elastomer

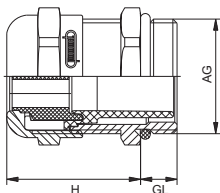
**O-Ring** NBR

**Protection** IP 65  
IP 68 possible with ideal fit

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

**Advice:**

- Other sealing material e.g. Silicone upon request
- Stainless steel on request
- Elongated threads on request
- Installation instructions see page 176



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		1.697.1299.50
M 16 x 1,5	6	21	17 / 19		1.697.1600.50		1.697.1601.50
M 20 x 1,5	6	23	22	4 x 1,4	1.697.2001.50	2 x 3	1.697.2003.50
M 25 x 1,5	7	26	30	6 x 3	1.697.2500.50	2 x 5	1.697.2501.50
M 32 x 1,5	8	31	40	4 x 6	1.697.3200.50	3 x 7	1.697.3201.50
M 40 x 1,5	8	37	50	6 x 6,5	1.697.4001.50	4 x 9	1.697.4003.50
M 50 x 1,5	9	37	57	7 x 9	1.697.5099.50	2 x 15	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		1.697.0799.01
PG 9	6	21	17		1.697.0900.01	2 x 3	1.697.0901.01
PG 11	6	22	20	4 x 1,4	1.697.1102.01	2 x 3	1.697.1101.01
PG 13,5	6,5	24	22	2 x 4	1.697.1302.01	3 x 3	1.697.1303.01
PG 16	6,5	23	24	3 x 4	1.697.1602.01	2 x 5	1.697.1604.01
PG 16	6,5	23	24	4 x 4	1.697.1606.01	6 x 4	1.697.1605.01
PG 21	7	24	30	3 x 5,6	1.697.2100.01	2 x 6	1.697.2101.01
PG 29	8	29	40	4 x 6	1.697.2900.01	3 x 7	1.697.2901.01
PG 36	8	35	50	6 x 6,5	1.697.3601.01	4 x 9	1.697.3603.01
PG 42	9	37	57	7 x 9	1.697.4299.01	2 x 15	1.697.4299.01
PG 48	10	38	64		1.697.4801.01		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

**Advice:** The shown inserts are samples, more inserts upon request

➔ Accessories see page 73



# HSK cable glands for special applications

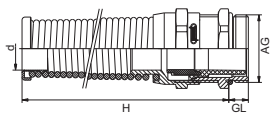
## HSK-M-Flex

Metr. / Metr.-elongated



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

**Advice:**  
- Other sealing material e.g. Silicone upon request



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

➔ Accessories see page 73

# HSK cable glands for special applications

## HSK-M-Flex PG, PG-elongated



**Advice:**  
- Other sealing material e.g. Silicone upon request

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




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

➔ Accessories see page 73

## HSK-M-Flex NPT



**Advice:**  
- Other sealing material e.g. Silicone upon request

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




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

➔ Accessories see page 73



# HSK cable glands for special applications

## HSK-MINI

Metr., PG



**Material** Nickel plated brass / INOX 1.4305

**Seal ring** TPE / FPM

**O-Ring** Buna-N / FPM

**Protection** IP 68

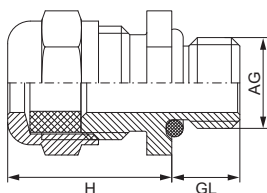
**Operating Temperature** -20 °C – 100 °C (-4 °F – 212 °F) (Buna-N / TPE)  
-25 °C – 200 °C (-13 °F – 392 °F) (FPM)

**Advice:**

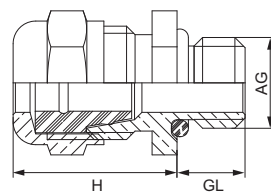
- Other sealing material e.g. Silicone upon request
- Other thread pitches on request
- Stainless steel 1.4404 on request



HSK-Mini



HSK-Mini EMC



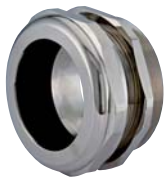
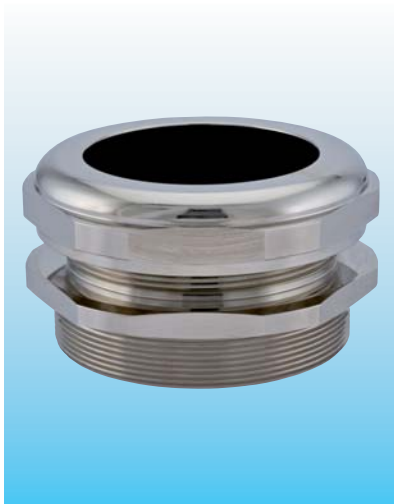
AG	∅k mm	GL mm	H mm	Wrench mm	Number Buna-N / TPE	Number FPM
M 6 x 1	2-3,2	6	10	8	1.106.0601.50	1.106.0600.55
M 8 x 0,75	2-4,5	3,5	14,3	11	1.112.0801.01	
M 8 x 1,25	3-5	6	13	11	1.106.0801.50	1.106.0800.55
M 10 x 1,5	4-6	6	14	12	1.106.1001.50	
PG 7	2-4,5	3,5	14,3	11/15	1.112.0708.01	
<b>HSK-Mini elongated</b>						
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
<b>HSK-Mini EMV</b>						
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	
<b>HSK-Mini INOX</b>						
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

➔ Accessories see page 73

# HSK cable glands for special applications

## HSK-XL

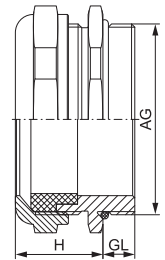
Metr.



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



**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Stainless steel on request



AG	$\varnothing$ 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

➔ Accessories see page 73

# HSK cable glands for special applications

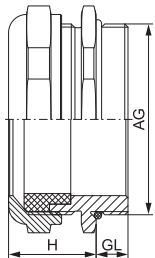
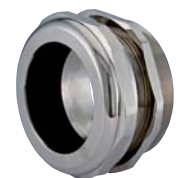
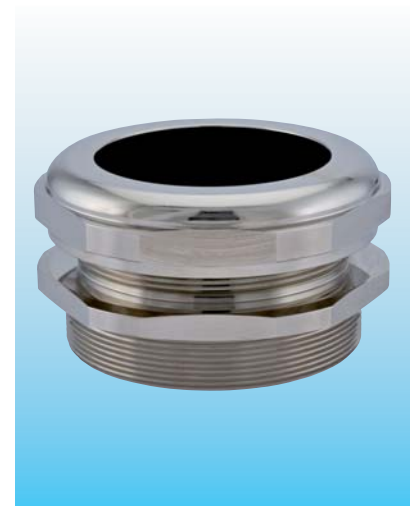
HSK-XL

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)

**Advice:**  
 - Other sealing material e.g. Silicone upon request  
 - Stainless steel on request



AG	Øk mm	GL mm	H mm	U 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

➔ Accessories see page 73



# HSK cable glands for special applications

## HSK-MZ / HSK-MZ-PVDF

## PG, PG-elongated

RoHS



**Material** Nickel plated brass

**Clamping insert** Polyamide / PVDF

**Seal** Buna-N / FPM

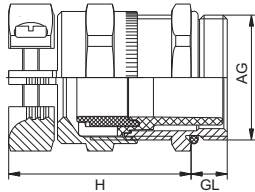
**O-Ring** Buna-N / FPM

**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)



**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	 mm	Number HSK-MZ -40 °C – 100 °C -40 °F – 212 °F	Number HSK-MZ-PVDF -35 °C – 150 °C -31 °F – 302 °F	GL mm	Number elongated
PG 7	3 – 6,5	5	26	14	1.690.0700.01	1.669.0700.01	10	1.690.0700.60
PG 9	4 – 8	6	28	17	1.690.0900.01	1.669.0900.01	10	1.690.0900.60
PG 11	6 – 10	6	30	20	1.690.1100.01	1.669.1100.01	10	1.690.1100.60
PG 13,5	6 – 12	6,5	33	22	1.690.1300.01	1.669.1300.01	10	1.690.1300.60
PG 16	10 – 14	6,5	33	24	1.690.1600.01	1.669.1600.01	10	1.690.1600.60
PG 21	13 – 18	7	37	30	1.690.2100.01	1.669.2100.01	12	1.690.2100.60
PG 29	18 – 25	8	43	40	1.690.2900.01	1.669.2900.01	12	1.690.2900.60
PG 36	22 – 36	8	50	50	1.690.3600.01	1.669.3600.01	15	1.690.3600.60
PG 42	32 – 38	9	51	57	1.690.4200.01	1.669.4200.01	15	1.690.4200.60
PG 42	25 – 31	9	51	57	1.690.4200.15	1.669.4200.15	15	1.690.4200.61
PG 48	37 – 44	10	52	64	1.690.4800.01	1.669.4800.01	15	1.690.4800.60
PG 48	29 – 35	10	51	64	1.690.4800.15	1.669.4800.15	15	1.690.4800.61

➔ Accessories see page 73

## HSK-MZ / HSK-MZ-PVDF

## NPT

RoHS



**Material** Nickel plated brass

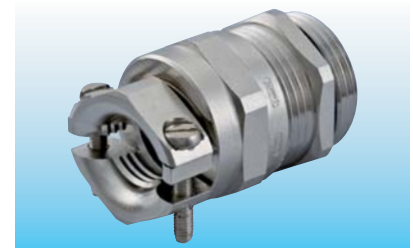
**Clamping insert** Polyamide / PVDF

**Seal** Buna-N / FPM

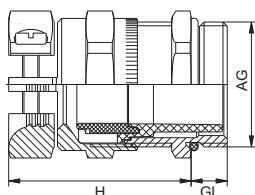
**O-Ring** Buna-N / FPM

**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)



**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	 mm	Number HSK-MZ -40 °C – 100 °C -40 °F – 212 °F	Number HSK-MZ-PVDF -35 °C – 150 °C -31 °F – 302 °F
NPT 3/8"	4 – 8	15	28	17/19	1.690.3800.70	1.669.3800.70
NPT 1/2"	7 – 12	13	33	22/24	1.690.1200.70	1.669.1200.70
NPT 3/4"	13 – 18	13	37	30	1.690.3400.70	1.669.3400.70
NPT 1"	18 – 25	19	43	40	1.690.1000.70	

➔ Accessories see page 73





# Industrial cable glands

## METRICA cable glands

Cable glands of the METRICA series are based on metric dimensions. So these glands offer space saving with optimised clamping ranges.

Both plastic and nickel plated brass versions feature recessed grooves for O-rings on the connecting thread.

In combination with the sealing O-Ring these glands keep the protection rating IP 68 also with the high pressure of 10 bars.



### You can find in this chapter:

METRICA cable glands

- made of polyamide
- made of polyamide with bending protection
- made of nickel plated brass
- made of nickel plated brass in EMC and EMC-E version.

We provide variable clamping ranges and thread lengths.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

# METRICA cable glands

## METRICA-P, METRICA-P-Flex

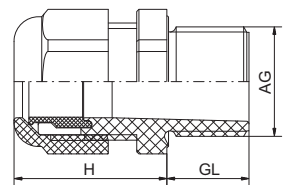
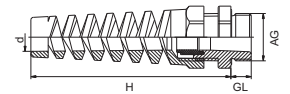
Metr.



<b>Material</b>	Polyamide
<b>Seal</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range, only with optional O-Ring
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	grey (RAL 7035), black (RAL 9005), blue (RAL 5012) for the intrinsic safety "i"



- Advice:**
- With additional pre-assembled O-Ring upon request
  - Please find suitable O-Ring on page 88
  - Other sealing material e.g. Silicone upon request
  - Other colors on request



AG	∅ mm	GL mm	H mm	U mm	d mm	Number grey	Number black	Number blue
M 12 x 1,5	4 – 7	8	22	15		1.218.1200.50	1.218.1201.50	1.218.1202.50
M 12 x 1,5	2 – 5	8	22	15		1.218.1200.51	1.218.1201.51	1.218.1202.51
M 16 x 1,5	6 – 10	8	26	19		1.218.1600.50	1.218.1601.50	1.218.1602.50
M 16 x 1,5	3 – 7	8	26	19		1.218.1600.51	1.218.1601.51	1.218.1602.51
M 20 x 1,5	8 – 13	9	29	24		1.218.2000.50	1.218.2001.50	1.218.2002.50
M 20 x 1,5	7 – 10	9	29	24		1.218.2000.51	1.218.2001.51	1.218.2002.51
M 25 x 1,5	11 – 17	10	33	30		1.218.2500.50	1.218.2501.50	1.218.2502.50
M 25 x 1,5	8 – 13	10	33	30		1.218.2500.51	1.218.2501.51	1.218.2502.51
M 32 x 1,5	11 – 21	10	41	36		1.218.3200.50	1.218.3201.50	1.218.3202.50
M 32 x 1,5	10 – 15	10	41	36		1.218.3200.51	1.218.3201.51	1.218.3202.51
M 40 x 1,5	19 – 28	12	46	46		1.218.4000.50	1.218.4001.50	1.218.4002.50
M 40 x 1,5	15 – 23	12	46	46		1.218.4000.51	1.218.4001.51	1.218.4002.51
M 50 x 1,5	27 – 35	12	52	55		1.218.5000.50	1.218.5001.50	1.218.5002.50
M 50 x 1,5	22 – 29	12	52	55		1.218.5000.51	1.218.5001.51	1.218.5002.51
M 63 x 1,5	36 – 48	12	57	68		1.218.6300.50	1.218.6301.50	1.218.6302.50
M 63 x 1,5	28 – 39	12	57	68		1.218.6300.51	1.218.6301.51	1.218.6302.51

### METRICA-P-Flex

M 12 x 1,5	4 – 7	8	55,5	15	7,5	1.238.1200.50	1.238.1201.50	
M 12 x 1,5	2 – 5	8	55,5	15	7,5	1.238.1200.51	1.238.1201.51	
M 16 x 1,5	6 – 10	8	67	19	10,5	1.238.1600.50	1.238.1601.50	
M 16 x 1,5	3 – 7	8	67	19	10,5	1.238.1600.51	1.238.1601.51	
M 20 x 1,5	8 – 13	9	92,5	24	14	1.238.2000.50	1.238.2001.50	
M 20 x 1,5	7 – 10	9	92,5	24	14	1.238.2000.51	1.238.2001.51	
M 25 x 1,5	11 – 17	10	113	30	19	1.238.2500.50	1.238.2501.50	
M 25 x 1,5	8 – 13	10	113	30	19	1.238.2500.51	1.238.2501.51	

➔ Accessories see page 73

## METRICA-P, METRICA-P-Flex

## Metr.-elongated



**Material** Polyamide

**Seal** Buna-N

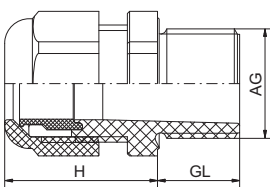
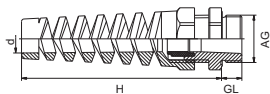
**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range, only with optional O-Ring

**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"

**Advice:**

- With additional pre-assembled O-Ring upon request
- Please find suitable O-Ring on page 88
- Other sealing material e.g. Silicone upon request
- Other colors on request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	d mm	Number grey	Number black	Number blue
M 12 x 1,5	4 – 7	15	22	15		1.218.1200.30	1.218.1201.30	1.218.1202.30
M 12 x 1,5	2 – 5	15	22	15		1.218.1200.31	1.218.1201.31	1.218.1202.31
M 16 x 1,5	6 – 10	15	26	19		1.218.1600.30	1.218.1601.30	1.218.1602.30
M 16 x 1,5	3 – 7	15	26	19		1.218.1600.31	1.218.1601.31	1.218.1602.31
M 20 x 1,5	8 – 13	15	29	24		1.218.2000.30	1.218.2001.30	1.218.2002.30
M 20 x 1,5	7 – 10	15	29	24		1.218.2000.31	1.218.2001.31	1.218.2002.31
M 25 x 1,5	11 – 17	15	33	30		1.218.2500.30	1.218.2501.30	1.218.2502.30
M 25 x 1,5	8 – 13	15	33	30		1.218.2500.31	1.218.2501.31	1.218.2502.31
M 32 x 1,5	11 – 21	15	41	36		1.218.3200.30	1.218.3201.30	1.218.3202.30
M 32 x 1,5	10 – 15	15	41	36		1.218.3200.31	1.218.3201.31	1.218.3202.31
M 40 x 1,5	19 – 28	18	46	46		1.218.4000.30	1.218.4001.30	1.218.4002.30
M 40 x 1,5	15 – 23	18	46	46		1.218.4000.31	1.218.4001.31	1.218.4002.31
M 50 x 1,5	27 – 35	18	52	55		1.218.5000.30	1.218.5001.30	1.218.5002.30
M 50 x 1,5	22 – 29	18	52	55		1.218.5000.31	1.218.5001.31	1.218.5002.31
M 63 x 1,5	36 – 48	18	57	68		1.218.6300.30	1.218.6301.30	1.218.6302.30
M 63 x 1,5	28 – 39	18	57	68		1.218.6300.31	1.218.6301.31	1.218.6302.31

### METRICA-P-Flex

M 12 x 1,5	4 – 7	15	55,5	15	7,5	1.238.1200.30	1.238.1201.30	
M 12 x 1,5	2 – 5	15	55,5	15	7,5	1.238.1200.31	1.238.1201.31	
M 16 x 1,5	6 – 10	15	67	19	10,5	1.238.1600.30	1.238.1601.30	
M 16 x 1,5	3 – 7	15	67	19	10,5	1.238.1600.31	1.238.1601.31	
M 20 x 1,5	8 – 13	15	92,5	24	14	1.238.2000.30	1.238.2001.30	
M 20 x 1,5	7 – 10	15	92,5	24	14	1.238.2000.31	1.238.2001.31	
M 25 x 1,5	11 – 17	15	113	30	19	1.238.2500.30	1.238.2501.30	
M 25 x 1,5	8 – 13	15	113	30	19	1.238.2500.31	1.238.2501.31	

➔ Accessories see page 73

# METRICA cable glands

## METRICA-M

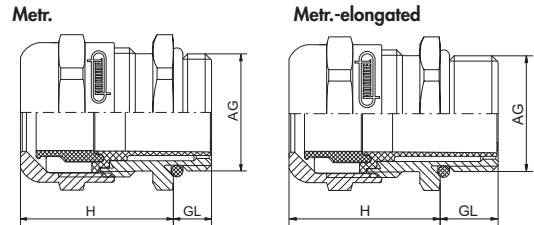
## Metr., Metr.-elongated



<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number	GL mm	Number elongated
M 12 x 1,5	4 – 7	6	20	14	1.618.1200.50	10	1.618.1200.30
M 12 x 1,5	2 – 5	6	20	14	1.618.1200.51	10	1.618.1200.31
M 16 x 1,5	6 – 10	6	25	19	1.618.1600.50	10	1.618.1600.30
M 16 x 1,5	3 – 7	6	25	19	1.618.1600.51	10	1.618.1600.31
M 20 x 1,5	8 – 13	6,5	26	24	1.618.2000.50	10	1.618.2000.30
M 20 x 1,5	7 – 10	6,5	26	24	1.618.2000.51	10	1.618.2000.31
M 25 x 1,5	11 – 17	7	29	29	1.618.2500.50	12	1.618.2500.30
M 25 x 1,5	8 – 13	7	29	29	1.618.2500.51	12	1.618.2500.31
M 32 x 1,5	11 – 21	8	37	34	1.618.3200.50	12	1.618.3200.30
M 32 x 1,5	10 – 15	8	37	34	1.618.3200.51	12	1.618.3200.31
M 40 x 1,5	19 – 28	8	40,5	44	1.618.4000.50	15	1.618.4000.30
M 40 x 1,5	15 – 23	8	40,5	44	1.618.4000.51	15	1.618.4000.31
M 50 x 1,5	27 – 35	9	49,5	55	1.618.5000.50	15	1.618.5000.30
M 50 x 1,5	22 – 29	9	49,5	55	1.618.5000.51	15	1.618.5000.31
M 63 x 1,5	34 – 48	10	49	68	1.618.6300.50	15	1.618.6300.30
M 63 x 1,5	28 – 39	10	49	68	1.618.6300.51	15	1.618.6300.31

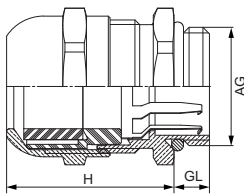
➔ Accessories see page 73

## METRICA-M-EMV-E

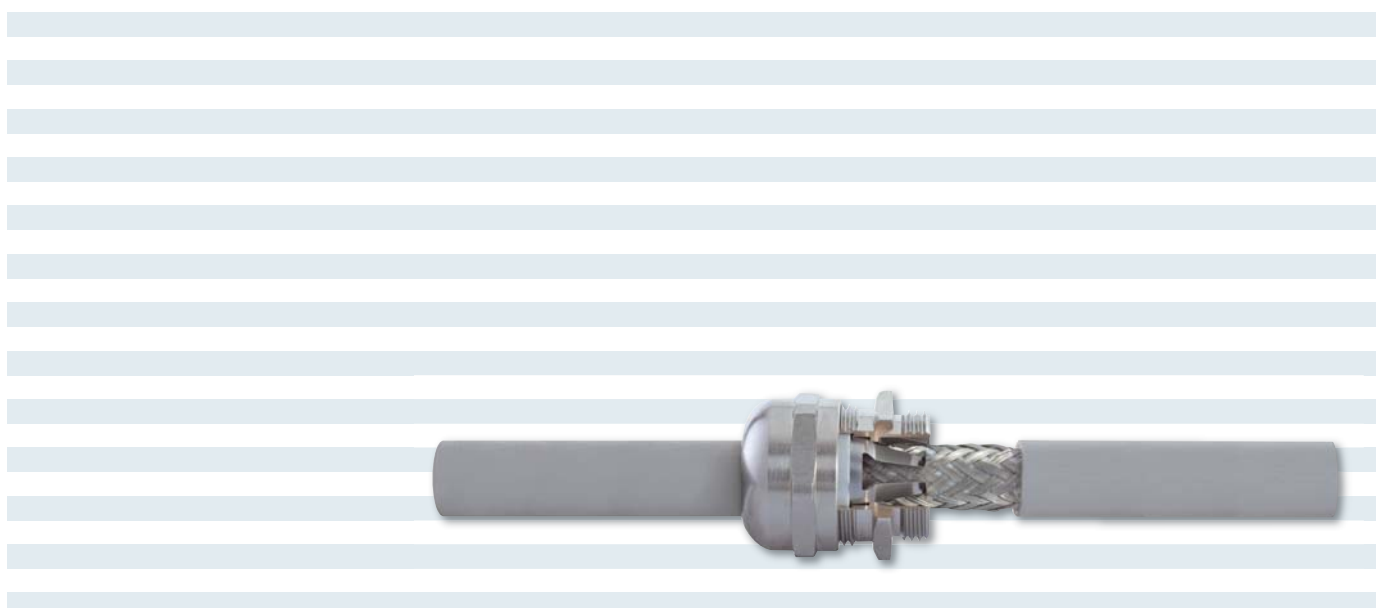
Metr.



<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ 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



➔ Accessories see page 73

# METRICA cable glands

## METRICA-M-EMV

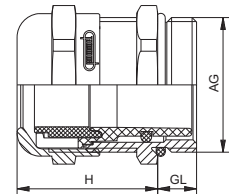
Metr., Metr.-elongated



<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)



**Advice:**  
- Other sealing material e.g. Silicone upon request



AG	$\varnothing_k$ mm	GL mm	H mm	$\varnothing$ mm	Number	GL mm	Number elongated
M 12 x 1,5	4 – 7	6	20	14	1.683.1200.50	10	1.683.1200.30
M 12 x 1,5	2 – 5	6	20	14	1.683.1200.51	10	1.683.1200.31
M 16 x 1,5	6 – 10	6	25	19	1.683.1600.50	10	1.683.1600.30
M 16 x 1,5	3 – 7	6	25	19	1.683.1600.51	10	1.683.1600.31
M 20 x 1,5	8 – 13	6,5	26	24	1.683.2000.50	10	1.683.2000.30
M 20 x 1,5	7 – 10	6,5	26	24	1.683.2000.51	10	1.683.2000.31
M 25 x 1,5	11 – 17	7	29	29	1.683.2500.50	12	1.683.2500.30
M 25 x 1,5	8 – 13	7	29	29	1.683.2500.51	12	1.683.2500.31
M 32 x 1,5	11 – 21	8	37	34	1.683.3200.50	12	1.683.3200.30
M 32 x 1,5	10 – 15	8	37	34	1.683.3200.51	12	1.683.3200.31
M 40 x 1,5	19 – 28	8	40,5	44	1.683.4000.50	15	1.683.4000.30
M 40 x 1,5	15 – 23	8	40,5	44	1.683.4000.51	15	1.683.4000.31
M 50 x 1,5	27 – 35	9	49,5	55	1.683.5000.50	15	1.683.5000.30
M 50 x 1,5	22 – 29	9	49,5	55	1.683.5000.51	15	1.683.5000.31
M 63 x 1,5	34 – 48	10	49	68	1.683.6300.50	15	1.683.6300.30
M 63 x 1,5	28 – 39	10	49	68	1.683.6300.51	15	1.683.6300.31



➔ Accessories see page 73



# Industrial cable glands

## Miscellaneous cable glands

Cable glands in this chapter have different designs to the modern clamping finger cable glands. Some types are perfect for high temperature applications or provide special options for clamping ranges.



### You can find in this chapter:

Miscellaneous cable glands

- WADI cable glands with various clamping and temperature ranges
- DIN 46320 cable glands made of plastic or nickel plated brass
- Z cable glands made of nickel plated brass. These glands meet the DIN 46320 standard made from nickel plated brass but with additional strain relief
- SE cable glands made of nickel plated brass. These glands meet the DIN 46320 standard and are made of nickel plated brass with additional EMC attenuation
- ZSE cable glands made of nickel plated brass. These glands meet the "Z standard" but with additional EMC attenuation

We provide variable clamping ranges and thread lengths.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49 (0) 76 66/9 11 10-0

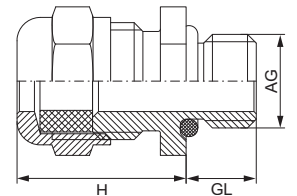
# Miscellaneous cable glands

## WADI-A

Metr.



<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 (NEMA 6)
<b>Operating Temperature</b>	-20 °C – 100 °C (-4 °F – 212 °F) short time exposure 130 °C (266 °F)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number
M 12 x 1,5	4-6	5	16	14	1.106.1201.50
M 16 x 1,5	4-9	5	18	18	1.106.1601.50
M 20 x 1,5	7-13	6	22	22	1.106.2001.50
M 25 x 1,5	10-18	7	23	28	1.106.2501.50
M 32 x 1,5	20-24	8	26	35	1.106.3201.50
M 40 x 1,5	27-32	8	27	45	1.106.4001.50
M 50 x 1,5	35-40	10	28	55	1.106.5001.50
M 63 x 1,5	45-52	10	36	68	1.106.6301.50

➔ Accessories see page 73

# Miscellaneous cable glands

## WADI-A PG

**RoHS**

<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 (NEMA 6)
<b>Operating Temperature</b>	-20 °C – 100 °C (-4 °F – 212 °F) short time exposure 130 °C (266 °F)

AG	∅ mm	GL mm	H mm		Number	∅ mm	Number	∅ mm	Number
PG 7	2 – 3	6	16	14	1.106.0701.01	4 – 6,5	1.106.0700.01	6,5 – 8	1.106.0702.01
PG 9	4 – 5	6	17	18	1.106.0904.01	5 – 7	1.106.0900.01	7 – 10	1.106.0902.01
PG 11	5 – 7	6	20	18	1.106.1101.01	7 – 10	1.106.1103.01	8 – 12	1.106.1100.01
PG 13,5	7 – 10	6	21	24	1.106.1303.01	9 – 12	1.106.1300.01	11 – 15	1.106.1304.01
PG 16	7 – 10	6	21	24	1.106.1603.01	9 – 12	1.106.1600.01	11 – 15	1.106.1604.01
PG 21	14 – 17	7,5	22,5	32	1.106.2102.01	16 – 20,5	1.106.2103.01	19 – 22	1.106.2101.01
PG 29	19 – 22,5	8	24	40	1.106.2901.01	20 – 27	1.106.2902.01		
PG 29	22 – 28	8	24	40	1.106.2903.01	26 – 32	1.106.2904.01		

➔ Accessories see page 73

## WADI-A two piece sealing insert PG

**RoHS**

<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	Buna-N (multi-perforated)
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 (NEMA 6)
<b>Operating Temperature</b>	-20 °C – 100 °C (-4 °F – 212 °F) short time exposure 130 °C (266 °F)

AG	∅ mm	GL mm	H mm		Number
PG 11	5 – 12	6	18	20	1.106.1104.01
PG 13,5	8 – 15	6	21	24	1.106.1301.01
PG 16	8 – 15	6	21	24	1.106.1601.01
PG 21	11 – 20,5	7,5	22,5	32	1.106.2100.01
PG 29	18 – 27	8	24	40	1.106.2900.01
PG 36	25 – 35	8	29	50	1.106.3600.01
PG 42	35 – 45	10	31	60	1.106.4200.01
PG 48	38 – 49	11	33	64	1.106.4800.01

➔ Accessories see page 73

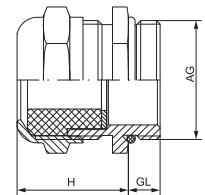
## Miscellaneous cable glands

### WADI-A-FPM

Metr.



Material	Nickel plated brass
Seal ring	FPM
O-Ring	FPM
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

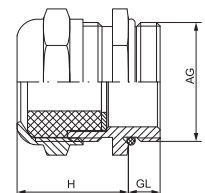
➔ Accessories see page 73

### WADI-A-FPM two piece sealing insert

Metr.



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



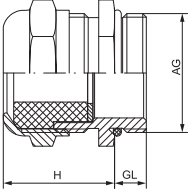
AG	∅ mm	GL mm	H mm	mm	Number
M 16 x 1,5	4-9	5	19	18	1.106.1601.58
M 20 x 1,5	7-13	6	21	22	1.106.2001.58
M 25 x 1,5	10-18	7	23	28	1.106.2501.58
M 32 x 1,5	16-24	8	26	35	1.106.3201.58
M 40 x 1,5	22-32	8	27	45	1.106.4001.58
M 50 x 1,5	30-40	10	28	55	1.106.5001.58
M 63 x 1,5	38-52	10	36	68	1.106.6301.58

➔ Accessories see page 73


# Miscellaneous cable glands

**WADI-A-FPM** **PG**

**RoHS**



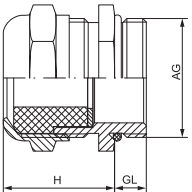
<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	FPM
<b>O-Ring</b>	FPM
<b>Protection</b>	IP 68 (NEMA 6)
<b>Operating Temperature</b>	-25 °C – 200 °C (-13 °F – 392 °F)




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

**WADI-A-FPM two piece sealing insert** **PG**

**RoHS**



<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	FPM (multiperforated)
<b>O-Ring</b>	FPM
<b>Protection</b>	IP 68 (NEMA 6)
<b>Operating Temperature</b>	-25 °C – 200 °C (-13 °F – 392 °F)



AG	mm	GL mm	H mm	mm	Number
PG 11	5-12	6	20	18	1.106.1103.80
PG 13,5	8-15	6	21	24	1.106.1301.80
PG 16	8-15	6	21	24	1.106.1601.80
PG 21	11-20,5	7,5	22,5	32	1.106.2101.80
PG 29	18-27	8	24	40	1.106.2901.80
PG 36	25-35	8	29	50	1.106.3601.80
PG 42	35-45	10	30	60	1.106.4201.80
PG 48	38-49	11	33	64	1.106.4801.80

Accessories see page 73

## Miscellaneous cable glands

### DIN 46320-A-FS with Seal ring No. 6

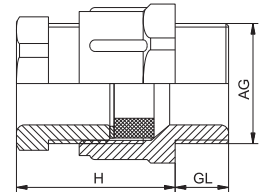
**PG**

**Material** Styrene Butadiene / Polyamide

**Seal ring** Soft rubber / Buna-N

**Protection** IP 54,  
with thread seal ring IP 65

**Operating Temperature** < -20 °C – 60 °C (-4 °F – 140 °F) (Soft rubber)  
-20 °C – 80 °C (-4 °F – 176 °F) (Buna-N)

**Colors** grey (RAL 7035)

**Advice:**

- Metric thread on request
- Please see page 89 for suitable thread seal ring

AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number SB / Soft rubber -20 °C – 60 °C -4 °F – 140 °F	Number PA / Buna-N -20 °C – 80 °C -4 °F – 176 °F
PG 7	3,5–6	8	20	15 / 13	1.201.0700.10	1.202.0700.11
PG 9	4,5–7	8	21	19 / 16	1.201.0900.10	1.202.0900.11
PG 11	6–9	8	22	22 / 19	1.201.1100.10	1.202.1100.11
PG 13,5	9–12	9	26	24 / 21	1.201.1300.10	1.202.1300.11
PG 16	11–14	10	28	27 / 23	1.201.1600.10	1.202.1600.11
PG 21	14–18	11	32	33 / 30	1.201.2100.10	1.202.2100.11
PG 29	18–25	11	35	42 / 40	1.201.2900.10	1.202.2900.11
PG 36	25–32	13	39	53 / 50	1.201.3600.10	1.202.3600.11
PG 42	30–38	13	44	60 / 55	1.201.4200.10	1.202.4200.11
PG 48	34–42	14	44	65 / 60	1.201.4800.10	1.202.4800.11

Accessories see page 73

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

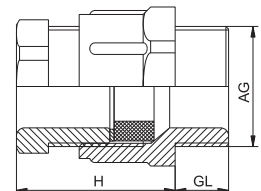
**PG**

**Material** Styrene Butadiene / Polyamide

**Seal ring** Soft rubber / Buna-N (multiperforated)

**Protection** IP 54,  
with thread seal ring IP 65

**Operating Temperature** -20 °C – 60 °C (-4 °F – 140 °F) (Soft rubber)  
-20 °C – 80 °C (-4 °F – 176 °F) (Buna-N)

**Colors** grey (RAL 7035)

**Advice:**

- Metric thread on request
- Please see page 89 for suitable thread seal ring

AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number SB / Soft rubber -20 °C – 60 °C -4 °F – 140 °F	Number PA / Buna-N -20 °C – 80 °C -4 °F – 176 °F
PG 9	4–10	8	21	19 / 16	1.201.0902.10	1.202.0901.11
PG 11	6,5–12	8	22	22 / 19	1.201.1102.10	1.202.1101.11
PG 13,5	6,5–13,5	9	26	24 / 21	1.201.1302.10	1.202.1301.11
PG 16	6,5–16	10	28	27 / 23	1.201.1602.10	1.202.1601.11
PG 21	9–20	11	32	33 / 30	1.201.2102.10	1.202.2101.11
PG 29	17–28	11	35	42 / 40	1.201.2902.10	1.202.2901.11
PG 36	23–34	13	39	53 / 50	1.201.3602.10	1.202.3601.11
PG 42	29–40	13	44	60 / 55	1.201.4202.10	1.202.4201.11
PG 48	35–46	14	44	65 / 60	1.201.4802.10	1.202.4801.11

Accessories see page 73



## Miscellaneous cable glands

### DIN 46320-C4-Ms with Seal ring No. 6

PG

RoHS



**Material** Nickel plated brass

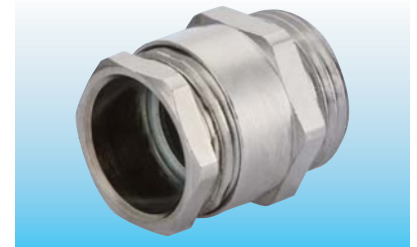
**Seal ring** Soft rubber / Buna-N

**Protection** IP 54,  
with thread seal ring IP 65

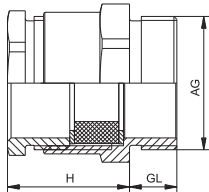
**Operating Temperature** -20 °C – 60 °C (-4 °F – 140 °F) (Soft rubber)  
-20 °C – 80 °C (-4 °F – 176 °F) (Buna-N)

**Advice:**

- Metric thread on request
- Please see page 89 for suitable thread seal ring



- This cable gland is available with additional strain relief (see page 71) and EMC attenuation (see page 72)



AG	∅ mm	GL mm	H mm	mm	Number Soft rubber -20 °C – 60 °C -4 °F – 140 °F	Number Buna-N -20 °C – 80 °C -4 °F – 176 °F
PG 7	6–8	5	15	14/13	1.101.0700.01	1.101.0703.01
PG 9	8–10	6	15	17/15	1.101.0900.01	1.101.0903.01
PG 11	10–12	6	17	20/18	1.101.1100.01	1.101.1103.01
PG 13,5	12–14	6,5	20	22/20	1.101.1300.01	1.101.1303.01
PG 16	14–16	6,5	22	24/22	1.101.1600.01	1.101.1603.01
PG 21	17–19	7	24	30/28	1.101.2100.01	1.101.2103.01
PG 29	26–28	8	26	40/37	1.101.2900.01	1.101.2903.01
PG 36	33–35	9	30	50/47	1.101.3600.01	1.101.3603.01
PG 42	39–41	10	34	57/54	1.101.4200.01	1.101.4203.01
PG 48	45–47	10	37	64/60	1.101.4800.01	1.101.4803.01

➔ Accessories see page 73

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

PG

RoHS



**Material** Nickel plated brass

**Seal ring** Buna-N (multiperforated)

**Protection** IP 54,  
with thread seal ring IP 65

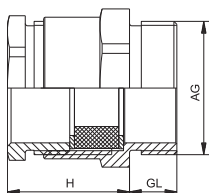
**Operating Temperature** -20 °C – 80 °C (-4 °F – 176 °F)

**Advice:**

- Metric thread on request
- Please see page 89 for suitable thread seal ring



- This cable gland is available with additional strain relief (see page 71) and EMC attenuation (see page 72)



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

➔ Accessories see page 73

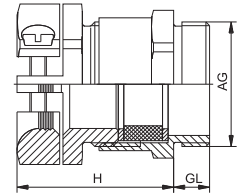
## Miscellaneous cable glands

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

Metr.



<b>Material</b>	Nickel plated brass
<b>Seal ring</b>	Soft rubber / Buna-N
<b>Protection</b>	IP 54, with thread seal ring IP 65
<b>Operating Temperature</b>	-20 °C – 60 °C (-4 °F – 140 °F) (Soft rubber) -20 °C – 80 °C (-4 °F – 176 °F) (Buna-N)



**Advice:**

- Please see page 89 for suitable thread seal ring

AG	$\varnothing$ mm	GL mm	H mm	 mm	Number Soft rubber -20 °C – 60 °C -4 °F – 160 °F	Number Buna-N -20 °C – 80 °C -4 °F – 176 °F
M 12 x 1,5	6-8	5	22	14/16	1.105.1200.50	1.105.1200.51
M 16 x 1,5	8-10	5	25	18/19	1.105.1600.50	1.105.1600.51
M 20 x 1,5	10-12	6	26	22/22	1.105.2000.50	1.105.2000.51
M 20 x 1,5	12-14	6	27,5	22/24	1.105.2013.50	1.105.2013.51
M 20 x 1,5	13-15	6	28,5	24/26	1.105.2016.50	1.105.2016.51
M 25 x 1,5	17-19	6	33	30/33	1.105.2500.50	1.105.2500.51
M 32 x 1,5	26-27	6	36	39/42	1.105.3200.50	1.105.3200.51
M 40 x 1,5	33-35	7	41	50/52	1.105.4000.50	1.105.4000.51
M 50 x 1,5	39-41	8	45	57/59	1.105.5000.50	1.105.5000.51
M 63 x 1,5	43-45	9	48	66/64	1.105.6300.50	1.105.6300.51

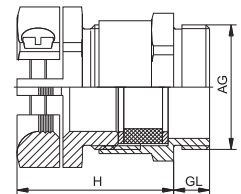
➔ Accessories see page 73

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

Metr.



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



**Advice:**

- Please see page 89 for suitable thread seal ring

AG	$\varnothing$ 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

➔ Accessories see page 73

## Miscellaneous cable glands

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

PG

RoHS



**Material** Nickel plated brass

**Seal ring** Soft rubber / Buna-N

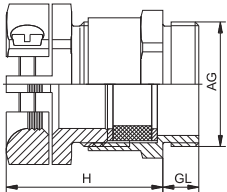
**Protection** IP 54,  
with thread seal ring IP 65

**Operating Temperature** -20 °C – 60 °C (-4 °F – 140 °F) (Soft rubber)  
-20 °C – 80 °C (-4 °F – 176 °F) (Buna-N)



**Advice:**

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



AG	∅ mm	GL mm	H mm	mm	Number Soft rubber -20 °C – 60 °C -4 °F – 140 °F	Number Buna-N -20 °C – 80 °C -4 °F – 176 °F
PG 7	6–8	5	22	14 / 16	1.105.0700.01	1.105.0703.01
PG 9	8–10	6	25	17 / 19	1.105.0900.01	1.105.0903.01
PG 11	10–12	6	26	20 / 22	1.105.1100.01	1.105.1103.01
PG 13,5	12–14	6,5	27,5	22 / 24	1.105.1300.01	1.105.1303.01
PG 16	14–16	6,5	28,5	24 / 26	1.105.1600.01	1.105.1603.01
PG 21	17–19	7	33	30 / 33	1.105.2100.01	1.105.2103.01
PG 29	26–28	8	36	40 / 42	1.105.2900.01	1.105.2903.01
PG 36	33–35	9	41	50 / 52	1.105.3600.01	1.105.3603.01
PG 42	39–41	10	45	57 / 59	1.105.4200.01	1.105.4203.01
PG 48	43–45	10	48	64 / 64	1.105.4800.01	1.105.4803.01

➔ Accessories see page 73

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

PG

RoHS



**Material** Nickel plated brass

**Seal ring** Buna-N (multiperforated)

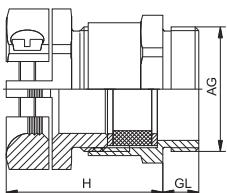
**Protection** IP 54,  
with thread seal ring IP 65

**Operating Temperature** -20 °C – 80 °C (-4 °F – 176 °F)



**Advice:**

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



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

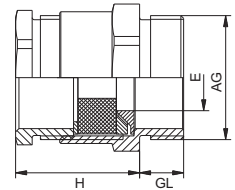
➔ Accessories see page 73

## Miscellaneous cable glands

### SE (DIN 46320-C4-Ms with EMC attenuation)

**PG**


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


**Advice:**

- Please see page 89 for suitable thread seal ring

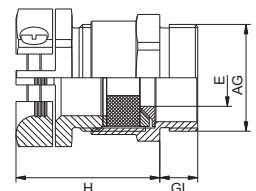
AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	E mm	Number
PG 9	4–10	7	17	17/15	6	1.680.0906.01
PG 11	6,5–12	7	20	20/18	8	1.680.1108.01
PG 13,5	6,5–13,5	8	21	22/20	10	1.680.1310.01
PG 13,5	6,5–13,5	8	21	22/20	12	1.680.1312.01
PG 16	6,5–16	8	24	24/22	12	1.680.1612.01
PG 16	6,5–16	8	24	24/22	14	1.680.1614.01
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

➔ Accessories see page 73

### ZSE (DIN 46320-C4-Ms with EMC attenuation with additional strain relief)

**PG**


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


**Advice:**

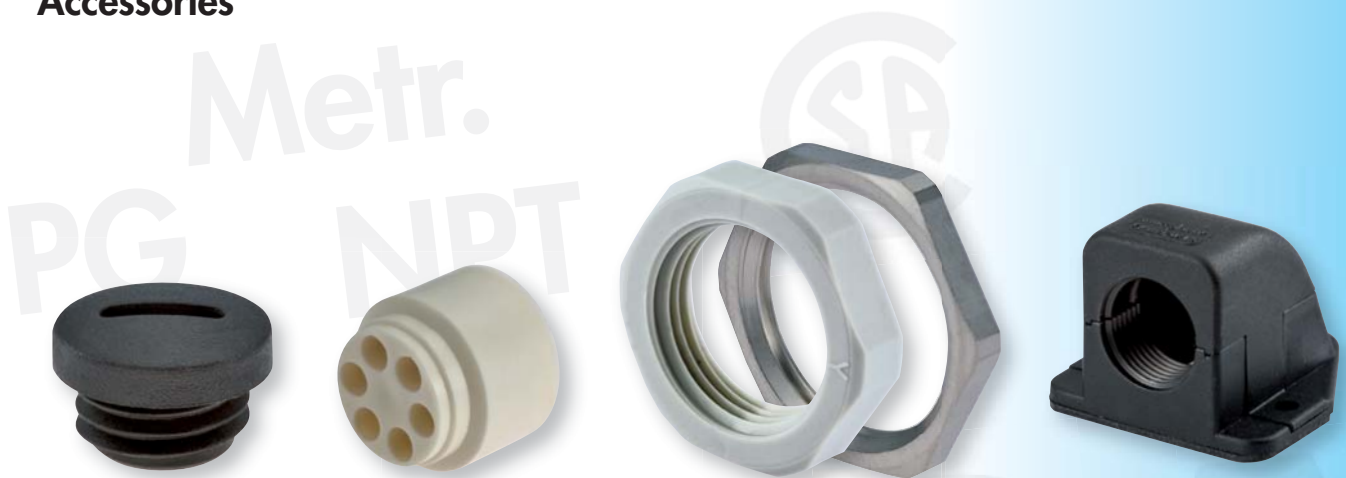
- Please see page 89 for suitable thread seal ring

AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ 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

➔ Accessories see page 73

# Industrial cable glands

## Accessories



You can find in this chapter accessories for all series of our industrial cable glands:

- Accessories made of plastic from page 74
- Accessories made of nickel plated brass from page 90
- Accessories made of stainless steel from page 99

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

**Contact us:**

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/911 10-0

GM-FS

Metr., PG, NPT

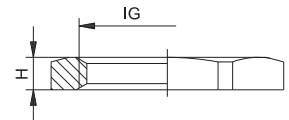


**Material** Polyamide V0 according to UL 94

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

**Colors** grey (RAL 7035), black (RAL 9005)



**Advice:**  
- Other colors upon request




IG	H mm	mm	Number PA V0 grey	Number PA V0 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



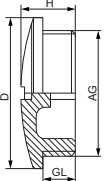
## V-N-FS Metr.

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




**Advice:**  
- Other colors upon request




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

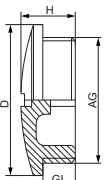
## V-N-FS PG



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



**Advice:**  
- Other colors upon request



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

## Accessories

### V-NE / V-NE-SD

Metr.



**Material** Polyamide, fiber reinforced



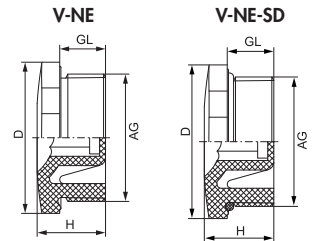
**Operating Temperature** -20 °C – 80 °C (-4 °F – 176 °F)



**O-Ring** Buna-N

**Colors** black (RAL 9005)

**Protection** IP 54 (V-NE)  
IP 68 – 10 bar / IP 69K (V-NE-SD)

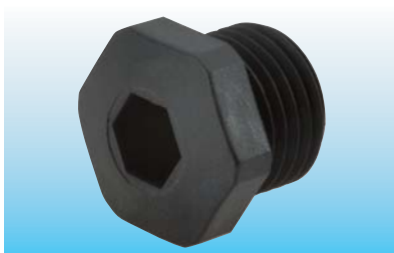


**Advice:**  
- Other colors upon request  
- Please find more O-Rings on page 88

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

### V-NE / V-NE-SD

PG



**Material** Polyamide, fiber reinforced

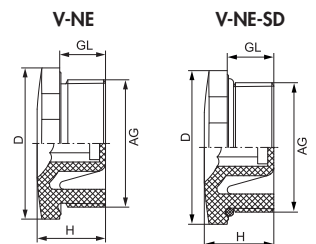


**Operating Temperature** -20 °C – 80 °C (-4 °F – 176 °F)

**O-Ring** Buna-N

**Colors** black (RAL 9005)

**Protection** IP 54 (V-NE)  
IP 68 – 10 bar / IP 69K (V-NE-SD)



**Advice:**  
- Other colors upon request  
- Please find more O-Rings on page 88

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

**DS** **Metr.**

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

Ø 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

**WN** **Metr.**

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

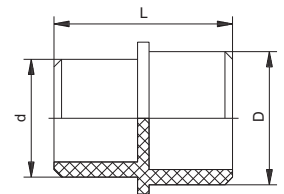
AG	GL mm	Ø mm	mm	Number
M 16 x 1,5	9	19,8	15	1.282.1600.50
M 20 x 1,5	12	24	19	1.282.2000.50
M 25 x 1,5	12	29,5	24	1.282.2500.50
M 32 x 1,5	14	37,5	30	1.282.3200.50
M 40 x 1,5	14	45,8	37	1.282.4000.50
M 50 x 1,5	18	55,8	46	1.282.5000.50
M 63 x 1,5	20	68,8	56	1.282.6300.50

HSK-V

Metr., PG, NPT



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



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

R-FS

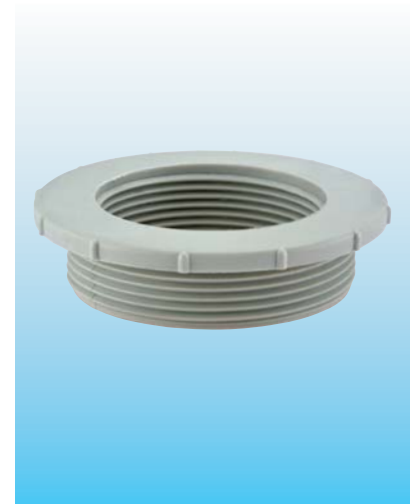
Metr., PG



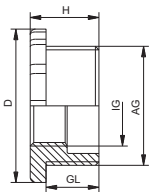
**Material** Styrene Butadiene / Polyamide

**Operating Temperature** -20 °C – 70 °C (-4 °F – 156 °F) (Styrene Butadiene)  
-40 °C – 80 °C (-40 °F – 176 °F) (Polyamide)

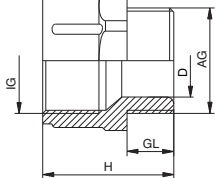
**Colors** grey (RAL 7035)



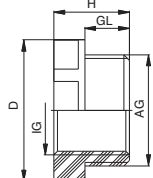
Type A



Type B



Type C



AG	IG	GL mm	H mm	D mm	mm	Type	Number SB	Number PA	
M 16 x 1,5	M 12 x 1,5	9	16	24	22	A		1.272.1612.50	
M 20 x 1,5	M 16 x 1,5	9	16	27	24	A		1.272.2016.50	
M 25 x 1,5	M 20 x 1,5	10	17	32	29	A		1.272.2520.50	
M 32 x 1,5	M 25 x 1,5	12	19	40	36	A		1.272.3225.50	
M 40 x 1,5	M 32 x 1,5	12	19	51	46	A		1.272.4032.50	
M 50 x 1,5	M 40 x 1,5	14	21	61	55	A		1.272.5040.50	
M 63 x 1,5	M 50 x 1,5	15	22	75	65	A		1.272.6350.50	
PG 13,5	PG 9	8	12	27		B	1.271.1309.10	1.272.1309.11	
PG 16	PG 9	10	13	29		B	1.271.1609.10	1.272.1609.11	
PG 16	PG 11	10	13	29		B	1.271.1611.10	1.272.1611.11	
PG 21	PG 13,5	11	13,5	36		B	1.271.2113.10	1.272.2113.11	
PG 21	PG 16	11	13,5	36		B	1.271.2116.10	1.272.2116.11	
PG 29	PG 21	11	13,5	46		B	1.271.2921.10	1.272.2921.11	
PG 36	PG 29	11	15	58		B	1.271.3629.10	1.272.3629.11	
<b>Reducing intermediate connector</b>									
PG 9	PG 7	8	14	19	15	C	1.235.0907.10	1.236.0907.11	
PG 11	PG 9	8	18	22,5	19	C	1.235.1109.10	1.236.1109.11	
PG 13,5	PG 11	9	21	25,5	22	C	1.235.1311.10	1.236.1311.11	
PG 16	PG 13,5	10	25	28,5	24	C	1.235.1613.10	1.236.1613.11	





## E-M-PA, K-FS

Metr., PG



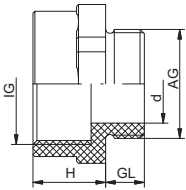
**Material** Polyamide (Type A/Type B), Polypropylene (Type C)

**Operating Temperature** -20 °C – 80 °C (-4 °F – 176 °F)

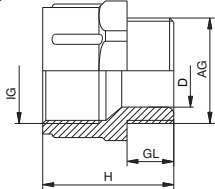
**Colors** K-FS grey (RAL 7035), E-M-PA black (RAL 9005)



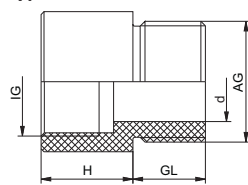
Type A



Type B



Type C



AG	IG	Type	GL mm	H mm	d mm	mm	Number
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

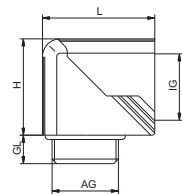
# Accessories

## 90° Snap Elbow

Metr., PG, NPT



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



AG	IG	GL mm	H mm	L mm	R mm	mm	Number grey	Number black
M 16x1,5	M 16x1,5	8	23	28,5	5	19	1.316.1600.50	1.316.1601.50
M 20x1,5	M 20x1,5	9	30,5	35	7	24	1.316.2000.50	1.316.2001.50
M 25x1,5	M 25x1,5	11	40	49	10	33	1.316.2500.50	1.316.2501.50
PG 9	M 16x1,5	8	23	28,5	5	19	1.316.0900.11	1.316.0901.11
PG 13,5	M 20x1,5	9	30,5	35	7	24	1.316.1300.11	1.316.1301.11
PG 21	M 25x1,5	11	40	49	10	33	1.316.2100.11	1.316.2101.11
M 16x1,5	PG 9	8	23	28,5	5	19	1.315.1600.50	1.315.1601.50
M 20x1,5	PG 13,5	9	30,5	35	7	24	1.315.2000.50	1.315.2001.50
M 25x1,5	PG 21	11	40	49	10	33	1.315.2500.50	1.315.2501.50
M 32x1,5	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

**KS** **Metr.**

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

AG	GL mm	H mm	 mm	Number grey	Number black
M 25x1,5	15	21,5	30	1.213.2500.50	1.213.2501.50

**GM-KS** **Metr.**

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

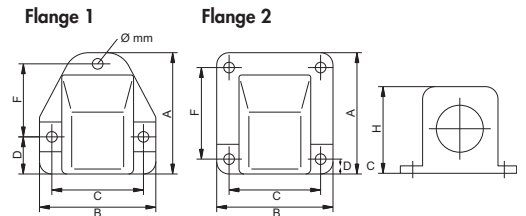
AG	H mm	 mm	Number grey	Number black
M 25x1,5	9	30	1.263.2500.50	1.263.2501.50

KF-G

Metr., PG



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



Size	Flange	Ø mm	A mm	B mm	C mm	D mm	F mm	H mm	Number grey	Number black
M 16x1,5	1	4,3	49	47	37	15,5	29	35	1.312.1600.50	1.312.1601.50
M 20x1,5	1	4,5	49	47	37	15,5	29	35	1.312.2000.50	1.312.2001.50
M 25x1,5	1	6,0	69	65	51,5	21,5	41,5	44	1.312.2500.50	1.312.2501.50
M 32x1,5	2	6,5	90	78	64,5	9,5	64,5	55	1.312.3200.50	1.312.3201.50
M 40x1,5	2	6,5	99	94	79,5	10,5	79,5	66	1.312.4000.50	1.312.4001.50
M 50x1,5	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

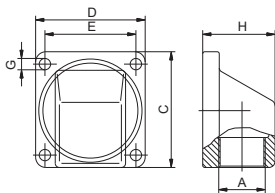
FW-T

PG



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

**Advice:**  
- 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

# Accessories

## HSK-ME

Metr., PG, NPT



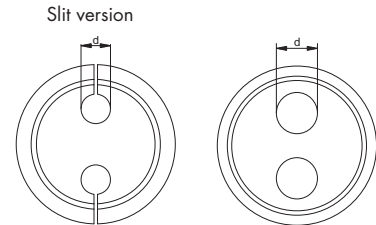
**Material** Elastomer



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

**Advice:**  
 - Installation instruction see page 176  
 - Other materials available upon request

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



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

\* Slit version to accommodate terminated cable

**Advice:** The shown inserts are samples, more inserts upon request





# Accessories

## 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 FPM

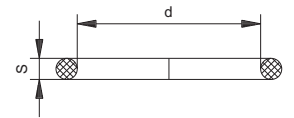
Material: FPM

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 FPM	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	22	2	1.321.2500.57	1.321.2500.58	1.321.2500.59
M 32 x 1,5	29	2	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"	22	2	1.321.3400.77	1.321.3400.78	1.321.3400.79
NPT 1"	29	2	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.

**RoHS**

**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)

**Advice:**  
- GFK thread seal see page 109

Size	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	48	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

**RoHS**

**Thread Seal Ring PE**

**Material** Polyethylene

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

**Thread Seal Ring HD**

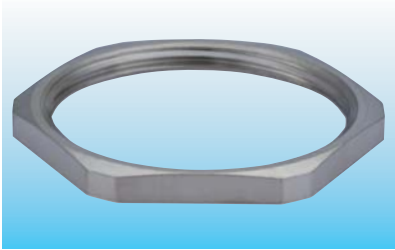
**Material** Fiber-reinforced plastic

**Operating Temperature** -40 °C – 300 °C (-40 °F – 572 °F)




Size	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

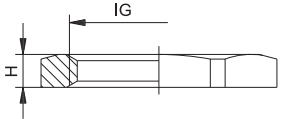
## Accessories



### GM-Ms Metr., PG, G




**Material** Nickel plated brass





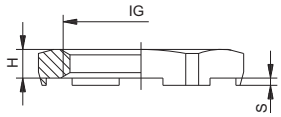
IG	H mm	 mm	Number	IG	H mm	 mm	Number
M 12 x 1,5	2,8	15	1.161.1200.50	PG 7	2,8	15	1.161.0700.01
M 16 x 1,5	2,8	19	1.161.1600.50	PG 9	2,8	18	1.161.0900.01
M 20 x 1,5	3,0	23	1.161.2000.50	PG 11	3,0	21	1.161.1100.01
M 25 x 1,5	3,5	29	1.161.2500.50	PG 13,5	3,0	23	1.161.1300.01
M 32 x 1,5	4,0	36	1.161.3200.50	PG 16	3,0	26	1.161.1600.01
M 40 x 1,5	4,5	45	1.161.4000.50	PG 21	3,5	32	1.161.2100.01
M 50 x 1,5	5,5	55	1.161.5000.50	PG 29	4,0	41	1.161.2900.01
M 63 x 1,5	6,0	70	1.161.6300.50	PG 36	5,0	51	1.161.3600.01
M 75 x 1,5	8,0	85	1.161.7500.50	PG 42	5,0	60	1.161.4200.01
M 80 x 2	8,0	90	1.161.8000.50	PG 48	5,5	64	1.161.4800.01
M 90 x 2	8,0	100	1.161.9000.50	G 2 1/2"	7	80	1.106.5200.99
M 100 x 2	11	115	1.161.1000.50	G 3"	8	95	1.106.3000.99
M 110 x 2	11	125	1.161.1100.50	G 4"	11	125	1.106.4000.99



### GM-EMV Metr., PG



**Material** Nickel plated brass



IG	H mm	 mm	S mm	Number	IG	H mm	 mm	S mm	Number
M 12 x 1,5	2,8	15	0,7	1.167.1200.50	PG 7	2,8	15	0,7	1.167.0700.01
M 16 x 1,5	2,8	19	0,7	1.167.1600.50	PG 9	2,8	18	0,7	1.167.0900.01
M 20 x 1,5	3,0	24	0,7	1.167.2000.50	PG 11	3,0	21	0,7	1.167.1100.01
M 25 x 1,5	3,5	30	0,7	1.167.2500.50	PG 13,5	3,0	23	0,7	1.167.1300.01
M 32 x 1,5	4,5	36	0,7	1.167.3200.50	PG 16	3,0	26	0,7	1.167.1600.01
M 40 x 1,5	5,0	46	0,7	1.167.4000.50	PG 21	3,5	32	0,7	1.167.2100.01
M 50 x 1,5	5,0	60	0,7	1.167.5000.50	PG 29	4,0	41	0,7	1.167.2900.01
M 63 x 1,5	6,0	70	0,7	1.167.6300.50	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

## V-N-Ms Metr., PG

**Material** Nickel plated brass

**Protection** IP 54

AG	GL mm	H mm	D mm	Number	AG	GL mm	H mm	D mm	Number
M 12 x 1,5	5	7,5	14	1.052.1200.50	PG 7	5	8	14	1.052.0700.01
M 16 x 1,5	5	9,0	18	1.052.1600.50	PG 9	6	9	17	1.052.0900.01
M 20 x 1,5	6,5	9,5	22	1.052.2000.50	PG 11	6	9	20	1.052.1100.01
M 25 x 1,5	7	11,0	28	1.052.2500.50	PG 13,5	6,5	9,5	22	1.052.1300.01
M 32 x 1,5	8	12,0	35	1.052.3200.50	PG 16	6,5	9,5	24	1.052.1600.01
M 40 x 1,5	8,5	13,0	44	1.052.4000.50	PG 21	7	11	30	1.052.2100.01
M 50 x 1,5	9	15,0	54	1.052.5000.50	PG 29	8	12	39	1.052.2900.01
M 63 x 1,5	10	16,0	67	1.052.6300.50	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

## V-N-Ms-SD Metr., PG

**Material** Nickel plated brass

**O-Ring** Buna-N

**Protection** IP 68 (NEMA 6)

**Operating Temperature** -40 °C – 80 °C (-40 °F – 176 °F)

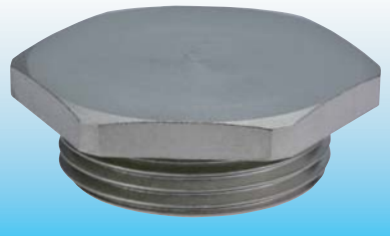
**Advice:**

- NPT thread on request
- Elongated thread on request
- Other O-Ring materials upon request

AG	GL mm	H mm	D mm	Number	AG	GL mm	H mm	D mm	Number
M 12 x 1,5	6,5	9,5	14	1.052.1201.50	PG 7	4,8	8	14	1.052.0701.01
M 16 x 1,5	6	9	20	1.052.1601.50	PG 9	5,5	9	17	1.052.0901.01
M 20 x 1,5	6,5	9,5	24	1.052.2001.50	PG 11	5,5	9	20	1.052.1101.01
M 25 x 1,5	7	11	28	1.052.2501.50	PG 13,5	6	9,5	22	1.052.1301.01
M 32 x 1,5	8	12,5	35	1.052.3201.50	PG 16	6	9,5	24	1.052.1601.01
M 40 x 1,5	8	12	45	1.052.4001.50	PG 21	6,5	11	30	1.052.2101.01
M 50 x 1,5	9	15	55	1.052.5001.50	PG 29	7,5	12	39	1.052.2901.01
M 63 x 1,5	10	16	68	1.052.6301.50	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

## Accessories

### V-NE-Ms Metr.



**Advice:**

- NPT thread on request
- Elongated thread on request
- Other O-Ring materials upon request

**Material** Nickel plated brass


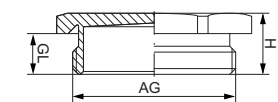
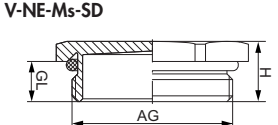
**V-NE-Ms**


**Protection** IP 54

**V-NE-Ms-SD/ V-NE-Ms-SD-FPM**

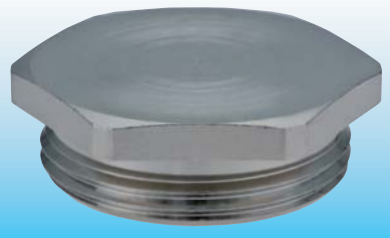
**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)

**O-Ring / Operating Temperature** Buna-N/ -20°C – 95°C (-4°F – 203°F)  
FPM/-20°C – 180°C (-4°F – 356°F)

AG	GL mm	H mm	 mm	Number V-NE-Ms without O-Ring	Number V-NE-Ms-SD -20°C – 95°C -4°F – 203°F	Number V-NE-Ms-SD-FPM -20°C – 180°C -4°F – 356°F
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

### V-NE-Ms PG



**Advice:**

- Other O-Ring materials upon request

**Material** Nickel plated brass


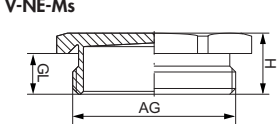
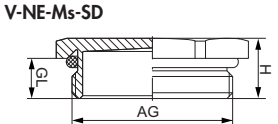
**V-NE-Ms**


**Protection** IP 54

**V-NE-Ms-SD/ V-NE-Ms-SD-FPM**

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)

**O-Ring / Operating Temperature** Buna-N/ -20°C – 95°C (-4°F – 203°F)  
FPM/-20°C – 180°C (-4°F – 356°F)

AG	GL mm	H mm	 mm	Number V-NE-Ms without O-Ring	Number V-NE-Ms-SD -20°C – 95°C -4°F – 203°F	Number V-NE-Ms-SD-FPM -20°C – 180°C -4°F – 356°F
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



R-H

Metr., PG

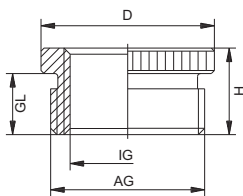


**Material**

Nickel plated brass

**Advice:**

- Metric threads with O-Ring thread seal available

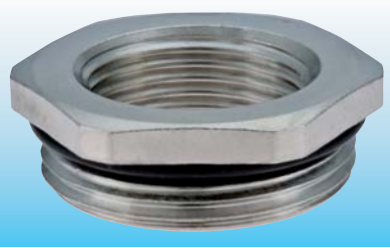


AG	IG	GL mm	H mm	D mm	Number
M 16 x 1,5	M 12 x 1,5	6,0	8,5	18	1.076.1612.50
M 20 x 1,5	M 12 x 1,5	6,5	9,0	24	1.076.2012.50
M 20 x 1,5	M 16 x 1,5	6,5	9,0	24	1.076.2016.50
M 25 x 1,5	M 16 x 1,5	7,0	10,0	30	1.076.2516.50
M 25 x 1,5	M 20 x 1,5	7,0	10,0	30	1.076.2520.50
M 32 x 1,5	M 20 x 1,5	8,0	11,5	39	1.076.3220.50
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

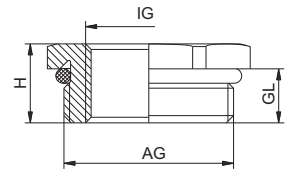
## Accessories

### RSD-Ms

Metr.



<b>Material</b>	Nickel plated brass
<b>O-Ring</b>	Buna-N
<b>Operating Temperature</b>	-40°C – 100°C



**Advice:**

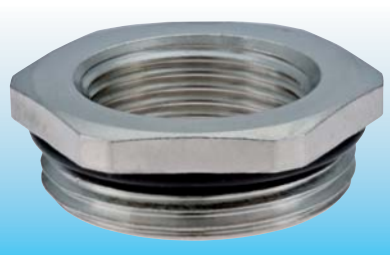
- Other O-Ring materials upon request

AG	IG mm	GL mm	H 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	35	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

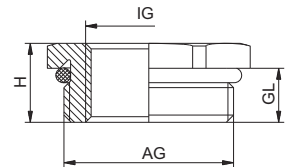
AG	IG mm	GL mm	H mm		Number
M 50 x 1,5	M 25 x 1,5	9	13	55	1.077.5025.50
M 50 x 1,5	M 32 x 1,5	9	13	55	1.077.5032.50
M 50 x 1,5	M 40 x 1,5	9	13	55	1.077.5040.50
M 63 x 1,5	M 32 x 1,5	10	14	65	1.077.6332.50
M 63 x 1,5	M 40 x 1,5	10	14	65	1.077.6340.50
M 63 x 1,5	M 50 x 1,5	10	14	65	1.077.6350.50

### RSD-Ms

PG



<b>Material</b>	Nickel plated brass
<b>O-Ring</b>	Buna-N
<b>Operating Temperature</b>	-40°C – 100°C



**Advice:**

- Other O-Ring materials upon request

AG	IG mm	GL mm	H 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 mm	GL mm	H 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

**RE-Ms** **Metr., PG**

**Material** Nickel plated brass

AG	IG	GL mm	H mm	D mm	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
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

**RE-Ms** **PG**

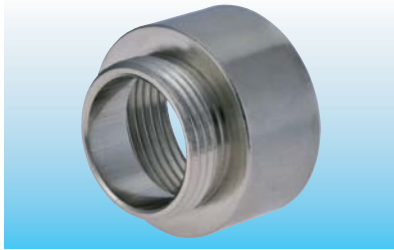
**Material** Nickel plated brass

**O-Ring** NBR

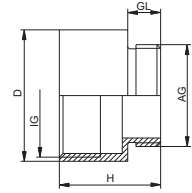
AG	IG	GL mm	H mm	D mm	mm	Number
M 16 x 1,5	NPT 1/2"	6	17		24	1.171.1612.50
M 20 x 1,5	NPT 1/2"	6	17		24	1.171.2012.50
M 25 x 1,5	NPT 1/2"	7	8		30	1.171.2512.50
M 25 x 1,5	NPT 3/4"	7	19		30	1.171.2534.50
M 32 x 1,5	NPT 1"	8	25		40	1.171.3210.50
M 32 x 1,5	NPT 1 1/4"	8	25		46	1.171.3254.50
PG 11	NPT 1/2"	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

E-Ms

Metr.



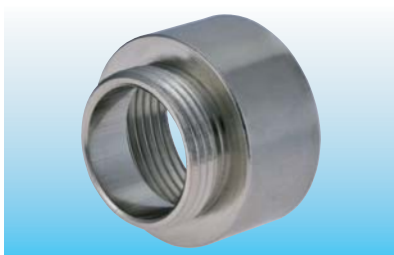
Material Nickel plated brass



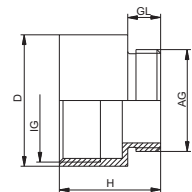
AG	IG	GL mm	H mm	D mm	Number
M 12 x 1,5	M 16 x 1,5	5	15	18	1.033.1216.50
M 16 x 1,5	M 20 x 1,5	6	17,5	22	1.033.1620.50
M 20 x 1,5	M 25 x 1,5	6,5	19	27	1.033.2025.50
M 25 x 1,5	M 32 x 1,5	6,5	21	34	1.033.2532.50
M 32 x 1,5	M 40 x 1,5	7	23	42	1.033.3240.50
M 40 x 1,5	M 50 x 1,5	9	31	53	1.033.4050.50
M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

E-Ms

PG



Material Nickel plated brass



AG	IG	GL mm	H mm	D mm	Number	AG	IG	GL mm	H mm	D mm	Number
PG 7	PG 9	5	15	17	1.033.0709.01	PG 29	PG 36	8	27,5	50	1.033.2936.01
PG 9	PG 11	6	16,5	20	1.033.0911.01	PG 36	PG 42	9	31	57	1.033.3642.01
PG 9	PG 13,5	6	17,5	22	1.033.0913.01	PG 42	PG 48	10	33	64	1.033.4248.01
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						

**KLE** **Metr.**

**Material** Nickel plated brass

AG	GL	H mm	 mm	$\varnothing$ mm	Number
M12 x 1,5	5,5	15,0	16	5-7,5	1.143.1200.50
M16 x 1,5	6,0	16,0	19	7-10	1.143.1600.50
M20 x 1,5	6,5	18,0	24	10-14	1.143.2000.50
M25 x 1,5	8,0	21,0	34	12-21,5	1.143.2500.50
M32 x 1,5	8,0	22,0	42	16-27	1.143.3200.50
M40 x 1,5	9,5	25,5	52	22-33	1.143.4000.50
M50 x 1,5	9,5	25,5	52	25-38,5	1.143.5000.50

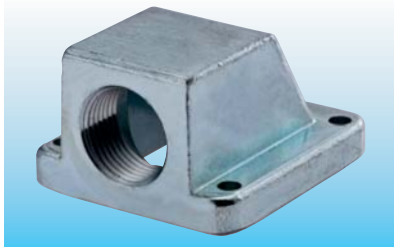
**KLE** **PG**

**Material** Nickel plated brass

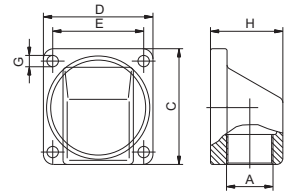
AG	GL	H mm	 mm	$\varnothing$ mm	Number
PG 7	5,5	14,8	16	5,5-8	1.143.0700.01
PG 9	6	16,6	19	6,5-10	1.143.0900.01
PG 11	6	17,3	22	7,5-12	1.143.1100.01
PG 13,5	6,5	17,8	24	8,5-14	1.143.1300.01
PG 16	6,5	18,3	26	9,5-16	1.143.1600.01
PG 21	7,5	20,8	33	12-21	1.143.2100.01
PG 29	8	21,8	42	19-30	1.143.2900.01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

FW-ZN

Metr.



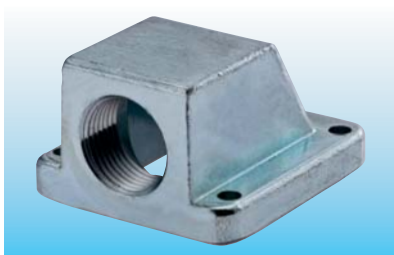
Material	Zinc die casting
Protection	IP 65
O-Ring	Buna-N
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)



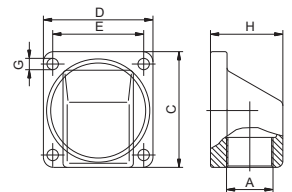
A	C mm	D mm	E mm	G mm	H mm	Number
M 20 x 1,5	56	53	44	5,5	35	1.306.2000.50
M 25 x 1,5	65	63	54	5,5	42	1.306.2500.50
M 32 x 1,5	75	71	60	5,5	52	1.306.3200.50
M 50 x 1,5	93	89	72	6,5	69	1.306.5000.50
M 63 x 1,5	114	96	84	6,5	74	1.306.6300.50

FW-ZN

PG



Material	Zinc die casting
Protection	IP 65
O-Ring	Buna-N
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



**GM-INOX** **Metr.**

**Material** INOX 1.4305

**Advice:**

- Other sizes upon request
- Other steel upon request

IG mm	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

**GM-INOX** **PG**

**Material** INOX 1.4305

**Advice:**

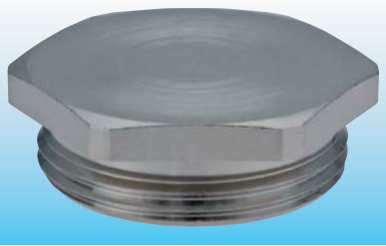
- Other sizes upon request
- Other steel upon request

IG mm	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

## Accessories

### V-INOX

Metr.



**Material** INOX 1.4305

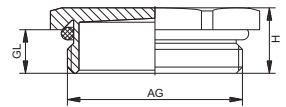


**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)



**O-Ring** Buna-N / FPM / VMQ

**Operating Temperature** -20°C – 95°C (-4°F – 203°F) (NBR), -20°C – 180°C (-4°F – 356°F) (FPM), -60°C – 180°C (-76°F – 356°F) (VMQ)



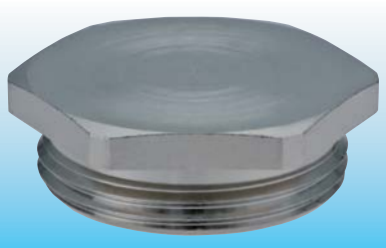
**Advice:**

- Elongated thread on request
- Other sizes upon request
- AISI 316L on request

AG	GL mm	H mm	mm	Number V-INOX-Buna-N -20 °C – 95 °C -4 °F – 203 °F	Number V-INOX-FPM -20 °C – 180 °C -4 °F – 356 °F	Number V-INOX-VMQ -60 °C – 180 °C -76 °F – 356 °F
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

### V-INOX

PG



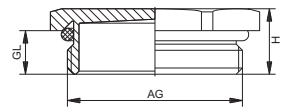
**Material** INOX 1.4305



**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)

**O-Ring** Buna-N / FPM / VMQ

**Operating Temperature** -20°C – 95°C (-4°F – 203°F) (NBR), -20°C – 180°C (-4°F – 356°F) (FPM), -60°C – 180°C (-76°F – 356°F) (VMQ)



**Advice:**

- Elongated thread on request
- Other sizes upon request
- AISI 316L on request

AG	GL mm	H mm	mm	Number V-INOX-Buna-N -20 °C – 95 °C -4 °F – 203 °F	Number V-INOX-FPM -20 °C – 180 °C -4 °F – 356 °F	Number V-INOX-VMQ -60 °C – 180 °C -76 °F – 356 °F
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

## RS-INOX / RSD-INOX

Metr.

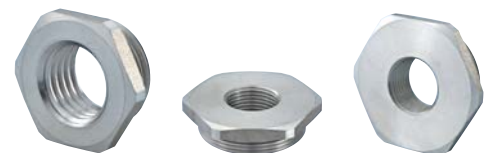
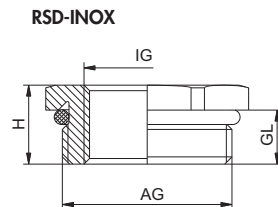
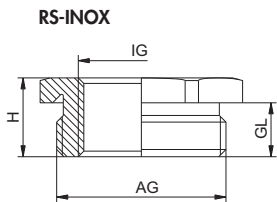
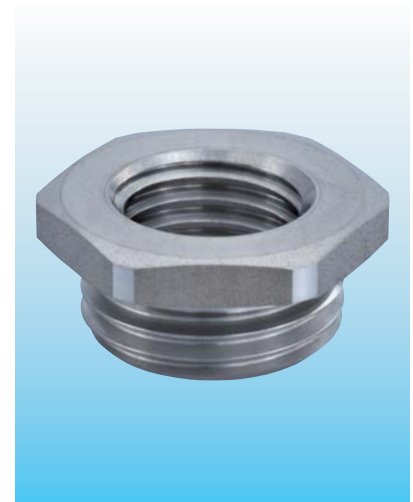


**Material** INOX 1.4305

**O-Ring** Buna-N

**Operating Temperature** -20°C – 95°C (-4 °F – 203 °F)

**Advice:**  
 - Other O-Ring materials upon request  
 - AISI 316L on request

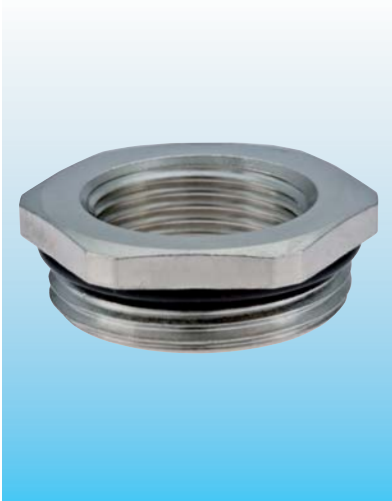


AG	IG	GL mm	H mm	 mm	Number RS-INOX without O-Ring	Number RSD-INOX
M 16 x 1,5	M 12 x 1,5	6	9	19	1.094.1612.50	1.097.1612.50
M 20 x 1,5	M 12 x 1,5	6	9,5	22	1.094.2012.50	1.097.2012.50
M 20 x 1,5	M 16 x 1,5	6	9,5	22	1.094.2016.50	1.097.2016.50
M 25 x 1,5	M 16 x 1,5	7	10,5	27	1.094.2516.50	1.097.2516.50
M 25 x 1,5	M 20 x 1,5	7	10,5	27	1.094.2520.50	1.097.2520.50
M 32 x 1,5	M 16 x 1,5	8	12,5	34	1.094.3216.50	1.097.3216.50
M 32 x 1,5	M 20 x 1,5	8	12,5	34	1.094.3220.50	1.097.3220.50
M 32 x 1,5	M 25 x 1,5	8	12,5	34	1.094.3225.50	1.097.3225.50
M 40 x 1,5	M 20 x 1,5	8	13	43	1.094.4020.50	1.097.4020.50
M 40 x 1,5	M 25 x 1,5	8	13	43	1.094.4025.50	1.097.4025.50
M 40 x 1,5	M 32 x 1,5	8	13	43	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

# Accessories

## RS-INOX / RSD-INOX

PG



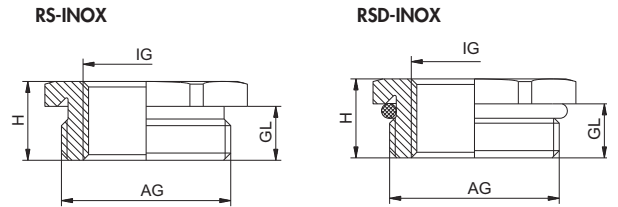
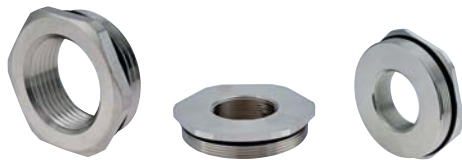
**Material** INOX 1.4305



**O-Ring** Buna-N

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Advice:**  
 - Other O-Ring materials upon request  
 - AISI 316L on request



AG	IG	GL mm	H mm	mm	Number RS-INOX without O-Ring	Number RSD-INOX -20 °C – 95 °C -4 °F – 203 °F
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

# Cable glands for hazardous areas

### **EXIOS<sup>+</sup>STANDARD**, **EXIOS<sup>+</sup>BARRIER**, **EXIOS<sup>+</sup>A2F**

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.



#### You can find in this chapter

- **EXIOS<sup>+</sup>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<sup>+</sup>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<sup>+</sup>A2F** for non-armoured cables for the use in Ex-e and Ex-d areas
- Accessories:
  - Thread Seal Ring
  - Plugs
  - Earthtags
  - Serrated Washer

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit from our vast knowledge in development, engineering and production technology.

#### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49 (0) 76 66/9 11 10-0

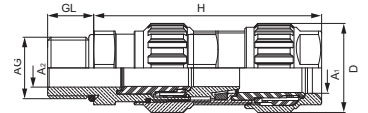
# Cable glands for hazardous areas

**EXIOS<sup>+</sup> 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)



**Advice:**  
- INOX on request

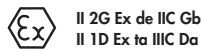


AG	Size	∅ <sub>A1</sub> mm	∅ <sub>A2</sub> mm	GL mm	H max. mm	mm	D mm	Armouring ∅ mm			Number
								Clamping ring 1	Clamping ring 2	Clamping ring optional	
M 16 x1,5	20-1	6 - 12	3 - 8,1	16	69,5	22	27	0 - 0,7	0,7 - 1,25		1.605.1600.50
M 20 x1,5	20-1	6 - 12	3 - 8,1	16	69,5	22	27	0 - 0,7	0,7 - 1,25		1.605.2000.50
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

# Cable glands for hazardous areas

**EXIOS<sup>+</sup> STANDARD**

**Metr., NPT**



**ATEX** BVS-10-ATEX-E-062-X

**IECEx** BVS 10.0078X

**PG** POCC-RU-0001-11TB05

**N** AEX-13499-X  
INMETRO



**Material** Nickel plated brass

**Seal** Silicone, VMQ

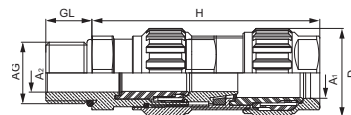
**Clamping insert** PA 6

**Armouring** Metallic Armour or Screen

**Protection** IP 66, 67 and 68 (5 bar)

**Operating Temperature** -60° C – 105° C (-76° F – 221° F)

**Advice:**  
- INOX on request



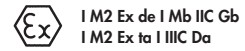
AG	Size	Ø		GL mm	H max. mm	Hook mm	D mm	Armouring Ø mm			Number
		A <sub>1</sub> mm	A <sub>2</sub> mm					Clamping ring 1	Clamping ring 2	Clamping ring optional	
M 16 x1,5	20-1	6 - 12	3 - 8,1	16	69,5	22	27	0 - 0,7	0,7 - 1,25		1.605.1603.50
M 20 x1,5	20-1	6 - 12	3 - 8,1	16	69,5	22	27	0 - 0,7	0,7 - 1,25		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



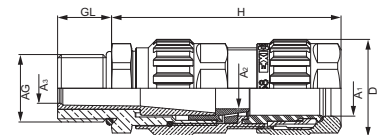
# Cable glands for hazardous areas

**EXIOS<sup>+</sup> 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)



Advice:  
- INOX on request



AG	Size	A <sub>1</sub> mm	A <sub>2</sub> mm	A <sub>3</sub> mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm			
									Max. No. cores	Clamping ring 1	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 - 33	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 - 33	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

# Cable glands for hazardous areas

**EXIOS<sup>+</sup> BARRIER**

**Metr., NPT**



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

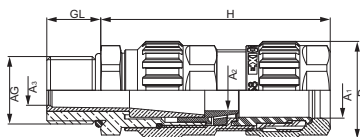
**ATEX** Ex Sira-11-ATEX-1110-X

**IECEx** Sir 11.0044X



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

**Advice:**  
- INOX on request



AG	Size	A <sub>1</sub> mm	A <sub>2</sub> mm	A <sub>3</sub> mm	GL mm	H max. mm	mm	D mm	Armouring Ø mm			Number
									Max. No. cores	Clamping ring 1	Clamping ring 2	
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 - 33	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 - 33	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

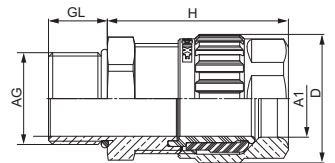
# Cable glands for hazardous areas

**EXIOS<sup>+</sup> A2F**
**Metr.**


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)





**Advice:**  
- Aluminum and Stainless Steel on request



AG	Size	∅ <sub>k</sub> A1 mm	GL mm	H max. mm	∅ <sub>k</sub> 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 - 23	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


## Cable glands for hazardous areas

### Red Fibre Washer Metr., NPT


**GFK thread seal**

<b>Material</b>	Fiber reinforced Nylon
<b>Operating Temperature</b>	-60 °C – 105 °C




Size	Number	Size	Number
M 16	1.326.1600.50	1/2"	1.326.1200.70
M 20	1.326.2000.50	3/4"	1.326.3400.70
M 25	1.326.2500.50	1"	1.326.1000.70
M 32	1.326.3200.50	1 1/4"	1.326.5400.70
M 40	1.326.4000.50	1 1/2"	1.326.6400.70
M 50	1.326.5000.50	2"	1.326.2000.70
M 63	1.326.6300.50	2 1/2"	1.326.5200.70
M 75	1.326.7500.50	3"	1.326.3000.70

### PVC Shroud



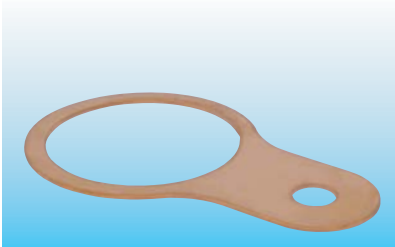
<b>Material</b>	PVC
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Size	Number
20- 1	1.802.2000.50
20- 2	1.802.2000.51
20- 3	1.802.2000.52
25	1.802.2500.50
32	1.802.3200.50
40	1.802.4000.50
50	1.802.5000.50
63	1.802.6300.50
75	1.802.7500.50

## Cable glands for hazardous areas

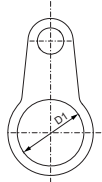
### Earthtag Metr., NPT



**Material** Brass 





**Advice**  
- INOX on request




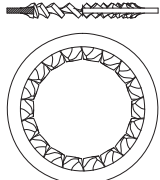
Size	Number	Size	Number
M 16	1.022.1600.50	1/2"	1.022.1200.70
M 20	1.022.2000.50	3/4"	1.022.3400.70
M 25	1.022.2500.50	1"	1.022.1000.70
M 32	1.022.3200.50	1 1/4"	1.022.5400.70
M 40	1.022.4000.50	1 1/2"	1.022.6400.70
M 50	1.022.5000.50	2"	1.022.2000.70
M 63	1.022.6300.50	2 1/2"	1.022.5200.70
M 75	1.022.7500.50	3"	1.022.3000.70

### Serrated Washer Metr., NPT



**Material** INOX 





Size	Number	Size	Number
M 16	1.329.1600.50	1/2"	1.329.1200.70
M 20	1.329.2000.50	3/4"	1.329.3400.70
M 25	1.329.2500.50	1"	1.329.1000.70
M 32	1.329.3200.50	1 1/4"	1.329.5400.70
M 40	1.329.4000.50	1 1/2"	1.329.6400.70
M 50	1.329.5000.50	2"	1.329.2000.70
M 63	1.329.6300.50	2 1/2"	1.329.5200.70
M 75	1.329.7500.50	3"	1.329.3000.70

# Industrial cable glands

## HSK Ex-e Standard cable glands

Cable glands of the HSK-Ex-e-series have been designed for standard applications in hazardous locations type "e" according to EN 60079-0 and EN 60079-7.



### You can find in this chapter:

HSK-Ex-e standard cable glands

- made of polyamide
- nickel plated brass with different temperature ranges
- various grades of stainless steel with different temperature ranges

We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit of our vast knowledge in development, engineering and production technology

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

### Advice:

- ➔ you can find HSK-EMV-Ex-e cable glands in the next chapter from page 123
- ➔ you can find HSK-Ex-e Multi hole glands and much more in the chapter "HSK-Ex-e cable glands for special applications" from page 131
- ➔ you can find HSK-Ex-d standard cable glands from page 139

# HSK Ex-e Standard cable glands

## HSK-K-Ex

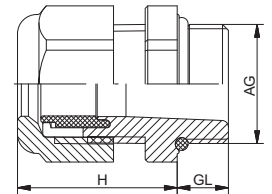
Metr.



<b>Material</b>	Polyamide V0 according to UL 94
<b>Seal</b>	Bung-N
<b>O-Ring</b>	Bung-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-20 °C – 95 °C (-4 °F – 203 °F)
<b>Colors</b>	grey (RAL 7035) black (RAL 9005), blue (RAL 5012)



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number grey	Number black	Number blue
M 12 x 1,5	3 – 6,5	8	21	15	1.291.1200.50	1.291.1201.50	1.291.1202.50
M 12 x 1,5	2 – 5	8	21	15	1.291.1200.51	1.291.1201.51	1.291.1202.51
M 16 x 1,5	4 – 8	8	22	19	1.291.1600.50	1.291.1601.50	1.291.1602.50
M 16 x 1,5	3 – 6	8	22	19	1.291.1600.51	1.291.1601.51	1.291.1602.51
M 16 x 1,5	5 – 10	8	25	22	1.295.1600.50	1.295.1601.50	1.295.1602.50
M 16 x 1,5	3 – 7	8	25	22	1.295.1600.51	1.295.1601.51	1.295.1602.51
M 20 x 1,5	6,5 – 12	9	27	24	1.291.2000.50	1.291.2001.50	1.291.2002.50
M 20 x 1,5	5 – 9	9	27	24	1.291.2000.51	1.291.2001.51	1.291.2002.51
M 20 x 1,5	10 – 14	9	28	27	1.295.2000.50	1.295.2001.50	1.295.2002.50
M 20 x 1,5	7 – 12	9	28	27	1.295.2000.51	1.295.2001.51	1.295.2002.51
M 25 x 1,5	13 – 18	11	31	33	1.291.2500.50	1.291.2501.50	1.291.2502.50
M 25 x 1,5	9 – 16	11	31	33	1.291.2500.51	1.291.2501.51	1.291.2502.51
M 32 x 1,5	18 – 25	11	39	42	1.291.3200.50	1.291.3201.50	1.291.3202.50
M 32 x 1,5	13 – 20	11	39	42	1.291.3200.51	1.291.3201.51	1.291.3202.51
M 40 x 1,5	22 – 32	13	48	53	1.291.4000.50	1.291.4001.50	1.291.4002.50
M 40 x 1,5	20 – 26	13	48	53	1.291.4000.51	1.291.4001.51	1.291.4002.51
M 50 x 1,5	32 – 38	13	49	60	1.291.5000.50	1.291.5001.50	1.291.5002.50
M 50 x 1,5	25 – 31	13	49	60	1.291.5000.51	1.291.5001.51	1.291.5002.51
M 63 x 1,5	37 – 44	14	49	65/68	1.291.6300.50	1.291.6301.50	1.291.6302.50
M 63 x 1,5	29 – 35	14	49	65/68	1.291.6300.51	1.291.6301.51	1.291.6302.51

➔ Accessories see page 73 and 143



# HSK Ex-e Standard cable glands

## HSK-K-Ex

Metr.-elongated

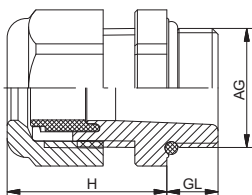


II 2G 1D



For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

Material	Polyamide VO according to UL 94
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)
Colors	grey (RAL 7035) black (RAL 9005), blue (RAL 5012)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number grey	Number black	Number blue
M 12 x 1,5	3 – 6,5	15	21	15	1.291.1200.30	1.291.1201.30	1.291.1202.30
M 12 x 1,5	2 – 5	15	21	15	1.291.1200.31	1.291.1201.31	1.291.1202.31
M 16 x 1,5	4 – 8	15	22	19	1.291.1600.30	1.291.1601.30	1.291.1602.30
M 16 x 1,5	3 – 6	15	22	19	1.291.1600.31	1.291.1601.31	1.291.1602.31
M 16 x 1,5	5 – 10	15	25	22	1.295.1600.30	1.295.1601.30	1.295.1602.30
M 16 x 1,5	3 – 7	15	25	22	1.295.1600.31	1.295.1601.31	1.295.1602.31
M 20 x 1,5	6,5 – 12	15	27	24	1.291.2000.30	1.291.2001.30	1.291.2002.30
M 20 x 1,5	5 – 9	15	27	24	1.291.2000.31	1.291.2001.31	1.291.2002.31
M 20 x 1,5	10 – 14	15	28	27	1.295.2000.30	1.295.2001.30	1.295.2002.30
M 20 x 1,5	7 – 12	15	28	27	1.295.2000.31	1.295.2001.31	1.295.2002.31
M 25 x 1,5	13 – 18	15	31	33	1.291.2500.30	1.291.2501.30	1.291.2502.30
M 25 x 1,5	9 – 16	15	31	33	1.291.2500.31	1.291.2501.31	1.291.2502.31
M 32 x 1,5	18 – 25	15	39	42	1.291.3200.30	1.291.3201.30	1.291.3202.30
M 32 x 1,5	13 – 20	15	39	42	1.291.3200.31	1.291.3201.31	1.291.3202.31
M 40 x 1,5	22 – 32	18	48	53	1.291.4000.30	1.291.4001.30	1.291.4002.30
M 40 x 1,5	20 – 26	18	48	53	1.291.4000.31	1.291.4001.31	1.291.4002.31
M 50 x 1,5	32 – 38	18	49	60	1.291.5000.30	1.291.5001.30	1.291.5002.30
M 50 x 1,5	25 – 31	18	49	60	1.291.5000.31	1.291.5001.31	1.291.5002.31
M 63 x 1,5	37 – 44	18	49	65/68	1.291.6300.30	1.291.6301.30	1.291.6302.30
M 63 x 1,5	29 – 35	18	49	65/68	1.291.6300.31	1.291.6301.31	1.291.6302.31

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

## HSK-K-Ex

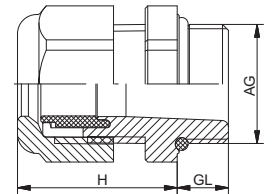
## PG



<b>Material</b>	Polyamide V0 according to UL 94
<b>Seal</b>	Bung-N
<b>O-Ring</b>	Bung-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-20 °C – 95 °C (-4 °F – 203 °F)
<b>Colors</b>	grey (RAL 7035) black (RAL 9005), blue (RAL 5012)



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number grey	Number black	Number blue
PG 7	3 – 6,5	8	21	15	1.291.0700.14	1.291.0701.14	1.291.0702.14
PG 7	2 – 5	8	21	15	1.291.0700.15	1.291.0701.15	1.291.0702.15
PG 9	4 – 8	8	22	19	1.291.0900.14	1.291.0901.14	1.291.0902.14
PG 9	3 – 6	8	22	19	1.291.0900.15	1.291.0901.15	1.291.0902.15
PG 11	5 – 10	8	25	22	1.291.1100.14	1.291.1101.14	1.291.1102.14
PG 11	3 – 7	8	25	22	1.291.1100.15	1.291.1101.15	1.291.1102.15
PG 13,5	6,5 – 12	9	27	24	1.291.1300.14	1.291.1301.14	1.291.1302.14
PG 13,5	5 – 9	9	27	24	1.291.1300.15	1.291.1301.15	1.291.1302.15
PG 16	10 – 14	10	28	27	1.291.1600.14	1.291.1601.14	1.291.1602.14
PG 16	7 – 12	10	28	27	1.291.1600.15	1.291.1601.15	1.291.1602.15
PG 21	13 – 18	11	31	33	1.291.2100.14	1.291.2101.14	1.291.2102.14
PG 21	9 – 16	11	31	33	1.291.2100.15	1.291.2101.15	1.291.2102.15
PG 29	18 – 25	11	39	42	1.291.2900.14	1.291.2901.14	1.291.2902.14
PG 29	13 – 20	11	39	42	1.291.2900.15	1.291.2901.15	1.291.2902.15
PG 36	22 – 32	13	48	53	1.291.3600.14	1.291.3601.14	1.291.3602.14
PG 36	20 – 26	13	48	53	1.291.3600.15	1.291.3601.15	1.291.3602.15
PG 42	32 – 38	13	49	60	1.291.4200.14	1.291.4201.14	1.291.4202.14
PG 42	25 – 31	13	49	60	1.291.4200.15	1.291.4201.15	1.291.4202.15
PG 48	37 – 44	14	49	65	1.291.4800.14	1.291.4801.14	1.291.4802.14
PG 48	29 – 35	14	49	65	1.291.4800.15	1.291.4801.15	1.291.4802.15

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

HSK-K-Ex

PG-elongated

RoHS



**Material** Polyamide VO according to UL 94



**Seal** Buna-N

II 2G 1D



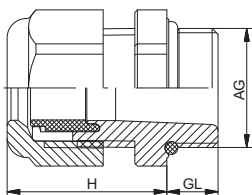
**O-Ring** Buna-N

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

**Colors** grey (RAL 7035)  
black (RAL 9005), blue (RAL 5012)



AG	∅ mm	GL mm	H mm	mm	Number grey	Number black	Number blue
PG 7	3-6,5	15	21	15	1.291.0700.60	1.291.0701.60	1.291.0702.60
PG 7	2-5	15	21	15	1.291.0700.61	1.291.0701.61	1.291.0702.61
PG 9	4-8	15	22	19	1.291.0900.60	1.291.0901.60	1.291.0902.60
PG 9	3-6	15	22	19	1.291.0900.61	1.291.0901.61	1.291.0902.61
PG 11	5-10	15	25	22	1.291.1100.60	1.291.1101.60	1.291.1102.60
PG 11	3-7	15	25	22	1.291.1100.61	1.291.1101.61	1.291.1102.61
PG 13,5	6,5-12	15	27	24	1.291.1300.60	1.291.1301.60	1.291.1302.60
PG 13,5	5-9	15	27	24	1.291.1300.61	1.291.1301.61	1.291.1302.61
PG 16	10-14	15	28	27	1.291.1600.60	1.291.1601.60	1.291.1602.60
PG 16	7-12	15	28	27	1.291.1600.61	1.291.1601.61	1.291.1602.61
PG 21	13-18	15	31	33	1.291.2100.60	1.291.2101.60	1.291.2102.60
PG 21	9-16	15	31	33	1.291.2100.61	1.291.2101.61	1.291.2102.61
PG 29	18-25	15	39	42	1.291.2900.60	1.291.2901.60	1.291.2902.60
PG 29	13-20	15	39	42	1.291.2900.61	1.291.2901.61	1.291.2902.61
PG 36	22-32	18	48	53	1.291.3600.60	1.291.3601.60	1.291.3602.60
PG 36	20-26	18	48	53	1.291.3600.61	1.291.3601.61	1.291.3602.61
PG 42	32-38	18	49	60	1.291.4200.60	1.291.4201.60	1.291.4202.60
PG 42	25-31	18	49	60	1.291.4200.61	1.291.4201.61	1.291.4202.61
PG 48	37-44	18	49	65	1.291.4800.60	1.291.4801.60	1.291.4802.60
PG 48	29-35	18	49	65	1.291.4800.61	1.291.4801.61	1.291.4802.61

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

## HSK-K-Ex

NPT



**Material** Polyamide V0 according to UL 94



**Seal** Bung-N



**O-Ring** Bung-N



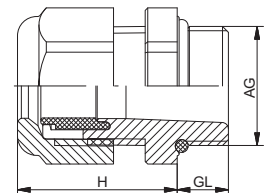
II 2G 1D

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Colors** grey (RAL 7035)  
black (RAL 9005), blue (RAL 5012)

For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number grey	Number black	Number blue
NPT 3/8"	4 – 8	15	22	19/22	1.291.3800.70	1.291.3801.70	1.291.3802.70
NPT 3/8"	2 – 6	15	22	19/22	1.291.3800.71	1.291.3801.71	1.291.3802.71
NPT 1/2"	6,5 – 12	13	27	24	1.291.1200.70	1.291.1201.70	1.291.1202.70
NPT 1/2"	5 – 9	13	27	24	1.291.1200.71	1.291.1201.71	1.291.1202.71
NPT 1/2" (16)	10 – 14	13	28	27	1.291.1216.70	1.291.1217.70	1.291.1218.70
NPT 1/2" (16)	7 – 12	13	28	27	1.291.1216.71	1.291.1217.71	1.291.1218.71
NPT 3/4"	13 – 18	14	31	33	1.291.3400.70	1.291.3401.70	1.291.3402.70
NPT 3/4"	9 – 16	14	31	33	1.291.3400.71	1.291.3401.71	1.291.3402.71
NPT 1"	18 – 25	19	39	42	1.291.1000.70	1.291.1001.70	1.291.1002.70
NPT 1"	13 – 20	19	39	42	1.291.1000.71	1.291.1001.71	1.291.1002.71
NPT 1 1/4"	18 – 25	16	39	42/46	1.291.5400.70	1.291.5401.70	1.291.5402.70
NPT 1 1/4"	13 – 20	16	39	42/46	1.291.5400.71	1.291.5401.71	1.291.5402.71
NPT 1 1/2"	22 – 32	20	48	53	1.291.6400.70	1.291.6401.70	1.291.6402.70
NPT 1 1/2"	20 – 26	20	48	53	1.291.6400.71	1.291.6401.71	1.291.6402.71

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

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

Metr.

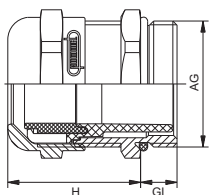


II 2G 1D



For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FPM
O-Ring	Buna-N / FPM
Protection	IP 68 – 10 bar / IP 69K within the specified clamping range
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)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-Ex -20°C – 95°C (-4°F – 203°F)	Number HSK-M-Ex -60°C – 95°C (-76°F – 203°F)	Number HSK-M-PVDF-Ex -20°C – 130°C (-4°F – 266°F)
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	6 – 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	

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

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

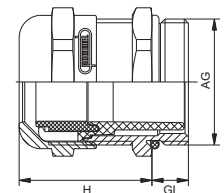
Metr.-elongated



<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide / PVDF
<b>Seal</b>	Buna-N / FPM
<b>O-Ring</b>	Buna-N / FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-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)



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-M-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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	6 – 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	

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

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

PG, NPT

RoHS



**Material** Nickel plated brass



**Clamping insert** Polyamide / PVDF

II 2G 1D



**Seal** Buna-N / FPM

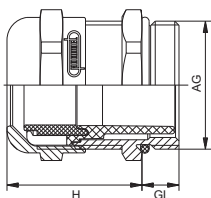
**O-Ring** Buna-N / FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range

**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)



For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)



AG	mm	GL mm	H mm	mm	Number HSK-M-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-M-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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	6 – 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"	6 – 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	1.660.1000.70
NPT 1"	13 – 20	19	29	40	1.610.1000.71	1.640.1000.71	1.660.1000.71

➔ Accessories see page 73 and 143



# HSK Ex-e Standard cable glands

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

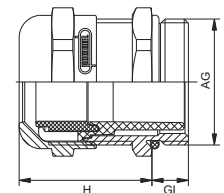
PG-elongated



<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide / PVDF
<b>Seal</b>	Buna-N / FPM
<b>O-Ring</b>	Buna-N / FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-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)



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-Ex -20°C – 95°C (-4°F – 203°F)	Number HSK-M-Ex -60°C – 95°C (-76°F – 203°F)	Number HSK-M-PVDF-Ex -20°C – 130°C (-4°F – 266°F)
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	6 – 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

➔ Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

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

Metr.



II 2G 1D



For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

**Material** INOX (1.4305)

**Clamping insert** Polyamide / PVDF

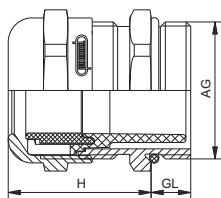
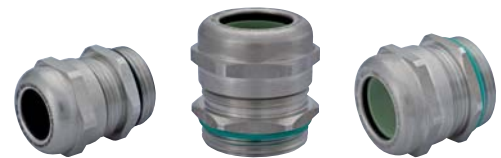
**Seal** Buna-N / FPM

**O-Ring** Buna-N / FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)  
within the specified clamping range

**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)

**Advice:**  
- AISI 316L on request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-INOX-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-INOX-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-INOX-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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

Accessories see page 73 and 143

# HSK Ex-e Standard cable glands

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

**PG**

**Material** INOX (1.4305)

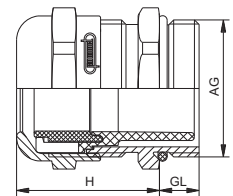
**Clamping insert** Polyamide / PVDF

**Seal** Buna-N / FPM

**II 2G 1D**
**O-Ring** Buna-N / FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range

**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)

 For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)
**Advice:**  
 - AISI 316L on request


AG	$\varnothing$ mm	GL mm	H mm	 mm	Number HSK-INOX-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-INOX-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-INOX-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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	6 – 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

Accessories see page 73 and 143

## Industrial cable glands

### HSK-EMC-Ex-e cable glands

Cable glands of the HSK-EMC-Ex-series have been designed for standard applications in hazardous locations type "e" according to EN 60079-0 and EN 60079-7.



#### You can find in this chapter:

HSK-EMC-Ex-e cable glands

- made of nickel plated brass with different temperature ranges
- various grades of stainless steel with different temperature ranges

We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit of our vast knowledge in development, engineering and production technology.

#### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

#### Advice:

- ➔ you can find HSK-Ex-e Multi hole glands and much more in the chapter "HSK-Ex-e cable glands for special applications" from page 131
- ➔ you can find HSK-Ex-d standard cable glands from page 139

## HSK-EMC-Ex-e cable glands

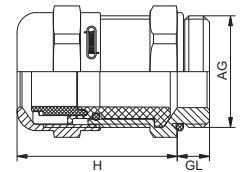
### HSK-M-EMV-D-Ex

Metr.



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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



AG	$\varnothing_k$ mm	GL mm	H mm	 mm	Number HSK-M-EMV-D-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-EMV-D-Ex -60 °C – 95 °C (-76 °F – 203 °F)
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

➔ Accessories see page 73 and 143

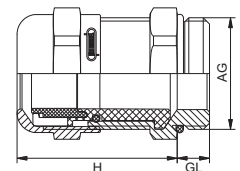
### HSK-M-EMV-D-Ex

Metr.-elongated



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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



AG	$\varnothing_k$ mm	GL mm	H mm	 mm	Number HSK-M-EMV-D-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-EMV-D-Ex -60 °C – 95 °C (-76 °F – 203 °F)
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

➔ Accessories see page 73 and 143

# HSK-EMC-Ex-e cable glands

## HSK-M-EMV-D-Ex

PG

RoHS



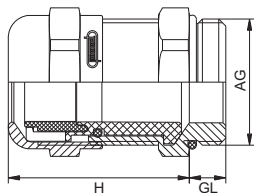
II 2G 1D



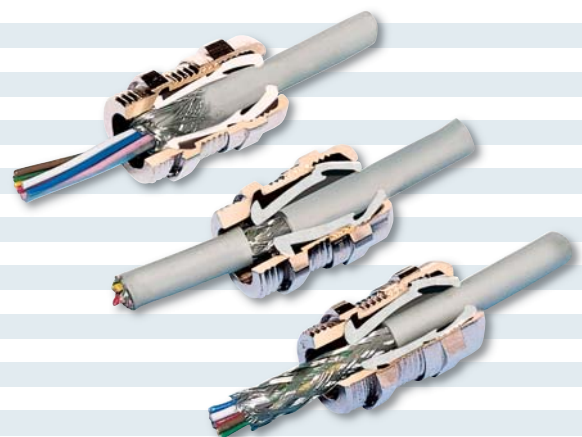
For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

Material	Nickel plated brass
Clamping insert	Metalised Polyamide
Seal	Buna-N
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K within the specified clamping range
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) / -60 °C – 95 °C (-76 °F – 203 °F)

**Advice:**  
- Elongated threads on request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-EMV-D-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-EMV-D-Ex -60 °C – 95 °C (-76 °F – 203 °F)
PG 11	5–10	6	29	20	1.636.1100.01	1.637.1100.01
PG 13,5	6–12	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



➔ Accessories see page 73 and 143



# HSK-EMC-Ex-e cable glands

## HSK-M-EMV-Ex

Metr.



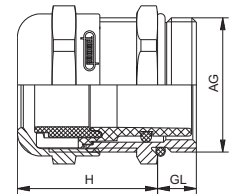
<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-20 °C – 95 °C (-4 °F – 203 °F) / -60 °C – 95 °C (-76 °F – 203 °F)



**Advice:**  
 - Elongated threads on request  
 - Stainless steel on request

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

See our homepage [www.hummel.com](http://www.hummel.com) for assembling advices for maximum cable diameters



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-EMV-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-EMV-Ex -60 °C – 95 °C (-76 °F – 203 °F)
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

➔ Accessories see page 73 and 143



# HSK-EMC-Ex-e cable glands

## HSK-M-EMV-Ex / HSK-M-EMV-PVDF-Ex

PG, NPT

RoHS



**Material** Nickel plated brass



**Clamping insert** Polyamide / PVDF

II 2G 1D



**Seal** Buna-N / FPM

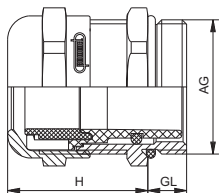
**O-Ring** Buna-N / FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range

**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)

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

**Advice:**  
- Elongated threads on request



AG	∅ mm	GL mm	H mm	∅ mm	Number HSK-M-EMV-Ex -20°C – 95°C (-4°F – 203°F)	Number HSK-M-EMV-Ex -60°C – 95°C (-76°F – 203°F)	Number HSK-M-EMV-PVDF-Ex -20°C – 130°C (-4°F – 266°F)
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	6 – 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"	6 – 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

➔ Accessories see page 73 and 143

# HSK-EMC-Ex-e cable glands

## HSK-MZ-EMV-Ex

Metr.



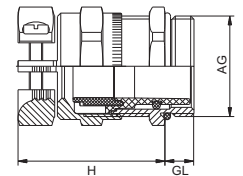
<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	Buna-N
<b>O-Ring</b>	Buna-N
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-20 °C – 95 °C (-4 °F – 203 °F) / -60 °C – 95 °C (-76 °F – 203 °F)



**Advice:**  
- Elongated threads on request

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

See our homepage [www.hummel.com](http://www.hummel.com) for assembling advices for maximum cable diameters



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-EMV-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-M-EMV-Ex -60 °C – 95 °C (-76 °F – 203 °F)
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

➔ Accessories see page 73 and 143

# HSK-EMC-Ex-e cable glands

## HSK-MZ-EMV-Ex / HSK-MZ-EMV-PVDF-Ex

PG

RoHS



**Material** Nickel plated brass



**Clamping insert** Polyamide / PVDF

II 2G 1D



**Seal** Buna-N / FPM

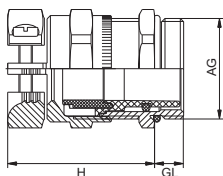
**O-Ring** Buna-N / FPM

**Protection** IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range

**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)

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

**Advice:**  
- Elongated threads on request



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-MZ-EMV-Ex -20°C – 95°C (-4°F – 203°F)	Number HSK-MZ-EMV-Ex -60°C – 95°C (-76°F – 203°F)	Number HSK-MZ-EMV-PVDF-Ex -20°C – 130°C (-4°F – 266°F)
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

Accessories see page 73 and 143

# HSK-EMC-Ex-e cable glands

## HSK-MZ-EMV-Ex / HSK-MZ-EMV-PVDF-Ex

NPT

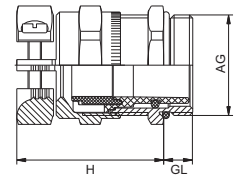


Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FPM
O-Ring	Buna-N / FPM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F) / -60 °C – 95 °C (-76 °F – 203 °F) / -20 °C – 130 °C (-4 °F – 266 °F) (PVDF)
Advice:	- Elongated threads on request



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

II 2G 1D



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-MZ-EMV-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-MZ-EMV-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-MZ-EMV-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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

➔ Accessories see page 73 and 143

# Industrial cable glands

## HSK Ex-e cable glands for special applications

Cable glands of the HSK-Ex-e-series have been designed for standard applications in hazardous locations type "e" according to EN 60079-0 and EN 60079-7.



### You can find in this chapter:

HSK-Ex-e cable glands

- made of polyamide and nickel plated brass with multi hole and flat cable sealing inserts
- made of polyamide and nickel plated brass with additional stain relief

We provide variable clamping ranges, thread lengths, thread types plus different sealing materials and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit of our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

### Advice:

➔ you can find HSK-Ex-d standard cable glands from page 139

# HSK Ex-e cable glands for special applications

## HSK-K-Multi-Ex

Metr., PG, NPT

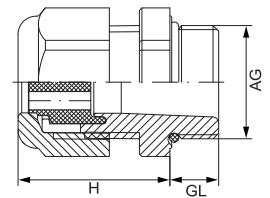


Material	Polyamide V0 according to UL 94
Seal	Elastomer
Protection	IP 68
Operating Temperature	-20 °C – 95 °C (-4 °F – 203 °F)
Colors	grey (RAL 7035), black (RAL 9005)
O-Ring	Buna-N



**Advice:**  
- Installation instruction see page 176

For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



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	1.599.1600.50	1.599.1600.51	2 x 3	1.599.1601.50	1.599.1601.51
M 20 x 1,5	9	27	24	6 x 3	1.599.2001.50	1.599.2001.51	2 x 5	1.599.2003.50	1.599.2003.51
M 25 x 1,5	11	31	33	4 x 6	1.599.2500.50	1.599.2500.51	3 x 7	1.599.2501.50	1.599.2501.51
M 32 x 1,5	11	39	42	6 x 6,5	1.599.3200.50	1.599.3200.51	4 x 9	1.599.3201.50	1.599.3201.51
M 40 x 1,5	13	48	53	7 x 9	1.599.4001.50	1.599.4001.51	2 x 15	1.599.4003.50	1.599.4003.51
M 50 x 1,5	13	49	60		1.599.5099.50	1.599.5099.51			
M 63 x 1,5	14	49	65/68	6 x 12	1.599.6301.50	1.599.6301.51	3 x 18	1.599.6302.50	1.599.6302.51
PG 9	8	22	19	4 x 1,4	1.599.0900.00	1.599.0900.01	2 x 3	1.599.0901.00	1.599.0901.01
PG 11	8	25	22	2 x 4	1.599.1102.00	1.599.1102.01	3 x 3	1.599.1101.00	1.599.1101.01
PG 13,5	9	27	24	3 x 4	1.599.1302.00	1.599.1302.01	2 x 5	1.599.1303.00	1.599.1303.01
PG 16	10	28	27	4 x 4	1.599.1602.00	1.599.1602.01	6 x 4	1.599.1604.00	1.599.1604.01
PG 16	10	28	27	3 x 5,6	1.599.1606.00	1.599.1606.01	2 x 6	1.599.1605.00	1.599.1605.01
PG 21	11	31	33	4 x 6	1.599.2100.00	1.599.2100.01	3 x 7	1.599.2101.00	1.599.2101.01
PG 29	11	39	42	6 x 6,5	1.599.2900.00	1.599.2900.01	4 x 9	1.599.2901.00	1.599.2901.01
PG 36	13	48	53	7 x 9	1.599.3601.00	1.599.3601.01	2 x 15	1.599.3603.00	1.599.3603.01
PG 48	14	49	65	6 x 12	1.599.4801.00	1.599.4801.01	3 x 18	1.599.4802.00	1.599.4802.01
NPT 3/8"	15	22	19/22	4 x 1,4	1.599.3800.70	1.599.3800.71	2 x 3	1.599.3801.70	1.599.3801.71
NPT 1/2"	13	27	24	3 x 4	1.599.1202.70	1.599.1202.71	2 x 5	1.599.1203.70	1.599.1203.71
NPT 1/2" (16)	13	28	27	6 x 4	1.599.1220.70	1.599.1220.71	2 x 6	1.599.1221.70	1.599.1221.71
NPT 3/4"	14	31	33	4 x 6	1.599.3400.70	1.599.3400.71	3 x 7	1.599.3401.70	1.599.3401.71
NPT 1"	19	39	42	6 x 6,5	1.599.1000.70	1.599.1000.71	4 x 9	1.599.1001.70	1.599.1001.71
NPT 1 1/4"	16	39	42/46		1.599.5499.70	1.599.5499.71			
NPT 1 1/2"	20	48	53	5 x 9	1.599.6400.70	1.599.6400.71	7 x 9	1.599.6401.70	1.599.6401.71

**Advice:** The shown inserts are samples, more inserts upon request

➔ Accessories see page 73 and 143





# HSK Ex-e cable glands for special applications

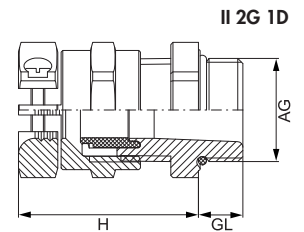
## HSK-K-MZ-Ex

Metr.



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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



AG	$\varnothing$ 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	6 – 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

➔ Accessories see page 73 and 143

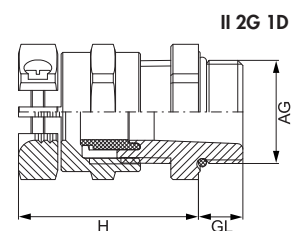
## HSK-K-MZ-Ex

PG



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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



AG	$\varnothing$ 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	6 – 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

➔ Accessories see page 73 and 143

# HSK Ex-e cable glands for special applications

## HSK-M-Multi-Ex

Metr., PG, NPT



II 2G 1D



**Material** Nickel plated brass

**Clamping insert** Polyamide

**Seal** Elastomer

**O-Ring** Buna-N

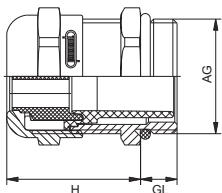
**Protection** IP 68

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Advice:**  
- Stainless steel on request



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



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

**Advice:** The shown inserts are samples, more inserts upon request

➔ Accessories see page 73 and 143

# HSK Ex-e cable glands for special applications

## HSK-M-FLAKA-Ex

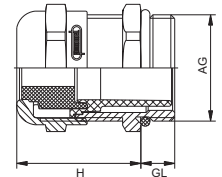
Metr.



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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

Advice:  
- Stainless steel on 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	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		

Advice: The shown inserts are samples, more inserts upon request

➔ Accessories see page 73 and 143

## HSK-M-FLAKA-Ex

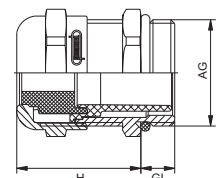
PG, NPT



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

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

Advice:  
- Stainless steel on request



AG	GL mm	H mm	mm	w x h mm	Number	w x h mm	Number
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		

Advice: The shown inserts are samples, more inserts upon request

➔ Accessories see page 73 and 143

# HSK Ex-e cable glands for special applications

## HSK-MZ-Ex / HSK-MZ-PVDF-Ex

Metr.



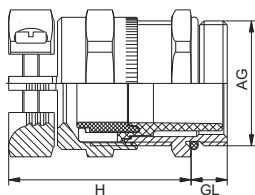
II 2G 1D



For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

Material	Nickel plated brass
Clamping insert	Polyamide / PVDF
Seal	Buna-N / FPM
O-Ring	Buna-N / FPM
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
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)

**Advice:**  
- Elongated threads on request.



AG	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-MZ-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-MZ-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-MZ-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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	6 – 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	

Accessories see page 73 and 143

# HSK Ex-e cable glands for special applications

## HSK-MZ-Ex / HSK-MZ-PVDF-Ex

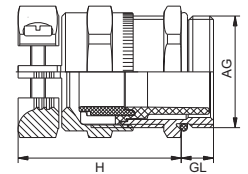
PG



Material	Nickel plated brass
Clamping insert	Polyamide/PVDF
Seal	Buna-N / FPM
O-Ring	Buna-N / FPM
Protection	IP 68 – 10 bar / IP 69K within the specified clamping range
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)



ATEX II 2G 1D



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

Advice:  
- Elongated threads on request.

AG	mm	GL mm	H mm	mm	Number HSK-MZ-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-MZ-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-MZ-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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

➔ Accessories see page 73 and 143

## HSK-MZ-Ex / HSK-MZ-PVDF-Ex

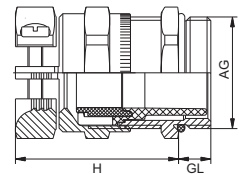
NPT



Material	Nickel plated brass
Clamping insert	Polyamide/PVDF
Seal	Buna-N / FPM
O-Ring	Buna-N / FPM
Protection	IP 68 – 10 bar / IP 69K within the specified clamping range
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)



ATEX II 2G 1D



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

Advice:  
- Elongated threads on request.

AG	mm	GL mm	H mm	mm	Number HSK-MZ-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number HSK-MZ-Ex -60 °C – 95 °C (-76 °F – 203 °F)	Number HSK-MZ-PVDF-Ex -20 °C – 130 °C (-4 °F – 266 °F)
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	

➔ Accessories see page 73 and 143

# Industrial cable glands

## HSK-Ex-d standard cable glands

Cable glands of the HSK-Ex-d series have been designed for standard applications in hazardous locations type "e" and/or "d" according to EN 60079-0, EN 60079-1 and EN 60079-7



### You can find in this chapter:

HSK-Ex-d cable glands

- made of nickel plated brass
- made of nickel plated brass with additional strain relief
- acid-resistant stainless steel

We provide variable clamping ranges, thread types and temperature ranges. Our range is completed by global certifications.

For any further question please do not hesitate to contact us. We look forward to develop solutions together with you. You profit of our vast knowledge in development, engineering and production technology.

### Contact us:

E-Mail: [info.et@hummel.com](mailto:info.et@hummel.com)

Tel.: +49(0) 76 66/9 11 10-0

# HSK-Ex-d standard cable glands

## HSK-M-Ex-d / HSK-M-PVDF-Ex-d

Metr.

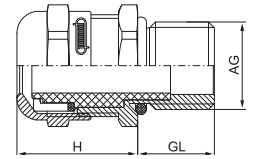


For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide / PVDF
<b>Seal</b>	FPM / FPM
<b>O-Ring</b>	FPM / FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-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	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-Ex-d -60°C – 105°C (-76°F – 221°F)	Number HSK-M-PVDF-Ex-d -20°C – 130°C (-4°F – 266°F)
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

➔ Accessories see page 73 and 143

## HSK-M-Ex-d / HSK-M-PVDF-Ex-d

NPT

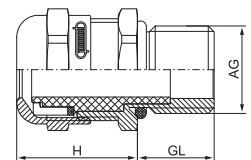


For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide / PVDF
<b>Seal</b>	FPM / FPM
<b>O-Ring</b>	FPM / FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-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	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-M-Ex-d -60°C – 105°C (-76°F – 221°F)	Number HSK-M-PVDF-Ex-d -20°C – 130°C (-4°F – 266°F)
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	1.634.1000.70
NPT 1"	14 – 20	25	32	40	1.622.1000.71	1.634.1000.71
NPT 1 1/4"	22 – 32	26	38,5	50	1.622.5400.70	1.634.5400.70
NPT 1 1/4"	20 – 26	26	38,5	50	1.622.5400.71	1.634.5400.71
NPT 1 1/2"	22 – 32	26,5	38,5	50	1.622.6400.70	1.634.6400.70
NPT 1 1/2"	20 – 26	26,5	38,5	50	1.622.6400.71	1.634.6400.71

➔ Accessories see page 73 and 143



# HSK-Ex-d standard cable glands

## HSK-MZ-Ex-d Metr.

II 2G 1D Ex d IIC

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	FPM
<b>O-Ring</b>	FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-60°C – 105°C (-76°F – 221°F)

For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

AG	mm	GL mm	H mm	mm	Number HSK-MZ-Ex-d -60 °C – 105 °C (-76 °F – 221 °F)
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

➔ Accessories see page 73 and 143

## HSK-MZ-Ex-d NPT

II 2G 1D Ex d IIC

<b>Material</b>	Nickel plated brass
<b>Clamping insert</b>	Polyamide
<b>Seal</b>	FPM
<b>O-Ring</b>	FPM
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
<b>Operating Temperature</b>	-60°C – 105°C (-76°F – 221°F)

For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)

AG	mm	GL mm	H mm	mm	Number HSK-MZ-Ex-d -60 °C – 105 °C (-76 °F – 221 °F)
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

➔ Accessories see page 73 and 143

# HSK-Ex-d standard cable glands

## HSK-INOX-Ex-d / HSK-INOX-PVDF-Ex-d

Metr.

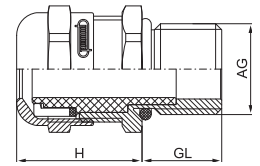


For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

Material	INOX (1.4404)
Clamping insert	Polyamide/PVDF
Seal	FPM/FPM
O-Ring	FPM/FPM
Protection	IP 68 – 10 bar/IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
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	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-INOX-Ex-d -60°C – 105°C (-76°F – 221°F)	Number HSK-INOX-PVDF-Ex-d -20°C – 130°C (-4°F – 266°F)
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

➔ Accessories see page 73 and 143

## HSK-INOX-Ex-d / HSK-INOX-PVDF-Ex-d

NPT

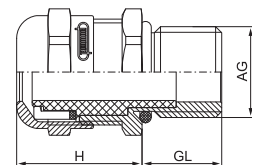


For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

Material	INOX (1.4404)
Clamping insert	Polyamide/PVDF
Seal	FPM/FPM
O-Ring	FPM/FPM
Protection	IP 68 – 10 bar/IP 69K (NEMA 6 – 150 PSIG) within the specified clamping range
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	$\varnothing$ mm	GL mm	H mm	$\varnothing$ mm	Number HSK-INOX-Ex-d -60°C – 105°C (-76°F – 221°F)	Number HSK-INOX-PVDF-Ex-d -20°C – 130°C (-4°F – 266°F)
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


➔ Accessories see page 73 and 143

# Industrial cable glands

## Ex accessories

You can find in this chapter accessories for all series of our industrial cable glands for hazardous locations with protection "e" and/or "d":

- accessories made of plastic starting on page 144
- accessories made of nickel plated brass starting on page 147
- accessories made of stainless steel starting on page 151



# Ex accessories

## V-Ex

Metr.

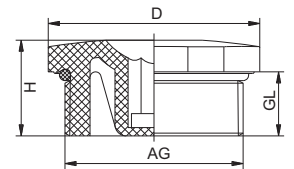


Material	Polyamide, fiber reinforced
O-Ring	Buna-N
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20 °C – 90 °C (-4 °F – 194 °F)
Colors	black (RAL 9005)



II 2G 1D

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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



## Ex accessories

### HSK-V-Ex

Metr., PG, NPT

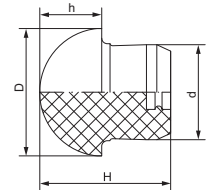


**Material** Elastomer

**Operating Temperature** -40 °C – 95 °C (-40 °F – 203 °F)

**Colors** black (RAL 9005)

**Advice:**  
- Elongated threads on request



II 2G 1D

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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

### HSK-V-Ex MZ variety

Metr., PG, NPT

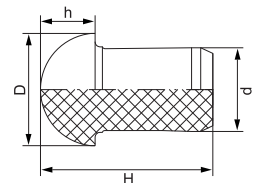


**Material** Elastomer

**Operating Temperature** -40 °C – 95 °C (-40 °F – 203 °F)

**Colors** black (RAL 9005)

**Advice:**  
- This plug is suitable in all HSK glands with additional strain relief



II 2G 1D

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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
PG 42	M 50 x 1,5		43	38	42,5	12	1.296.4201.61
PG 48	M 63 x 1,5		49	44	42,5	12	1.296.4801.61

## V-Ms-Ex / V-Ms-FPM-Ex / V-Ms-VMQ-Ex Metr.

**II 2G 1D**

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

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AG	GL mm	H mm	mm	Number V-Ms-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number V-Ms-FPM-Ex -20 °C – 180 °C (-4 °F – 356 °F)	Number V-Ms-VMQ-Ex -60 °C – 180 °C (-76 °F – 356 °F)
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

## V-Ms-Ex / V-Ms-FPM-Ex / V-Ms-VMQ-Ex PG

**II 2G 1D**

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

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AG	GL mm	H mm	mm	Number V-Ms-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number V-Ms-FPM-Ex -20 °C – 180 °C (-4 °F – 356 °F)	Number V-Ms-VMQ-Ex -60 °C – 180 °C (-76 °F – 356 °F)
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



## Ex accessories

### RSD-MS-Ex

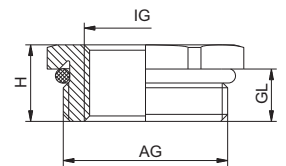
Metr.



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



II 2G 1D

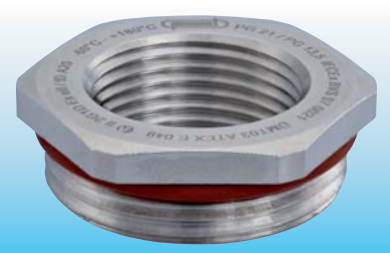


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AG	IG	GL mm	H mm	⌀ mm	Number		AG	IG	GL mm	H mm	⌀ mm	Number	
					Buna-N -20°C – 95°C (-4°F – 203°F)	VMQ -60°C – 180°C (-76°F – 356°F)						Buna-N -20°C – 95°C (-4°F – 203°F)	VMQ -60°C – 180°C (-76°F – 356°F)
M 16 x 1,5	M 12 x 1,5	5	17		1.078.1612.50	1.079.1612.50	M 50 x 1,5	M 32 x 1,5	9	55		1.078.5032.50	1.079.5032.50
M 20 x 1,5	M 12 x 1,5	6	22		1.078.2012.50	1.079.2012.50	M 50 x 1,5	M 40 x 1,5	9	55		1.078.5040.50	1.079.5040.50
M 20 x 1,5	M 16 x 1,5	6	22		1.078.2016.50	1.079.2016.50	M 63 x 1,5	M 32 x 1,5	10	65		1.078.6332.50	1.079.6332.50
M 25 x 1,5	M 16 x 1,5	7	29		1.078.2516.50	1.079.2516.50	M 63 x 1,5	M 40 x 1,5	10	65		1.078.6340.50	1.079.6340.50
M 25 x 1,5	M 20 x 1,5	7	29		1.078.2520.50	1.079.2520.50	M 63 x 1,5	M 50 x 1,5	10	65		1.078.6350.50	1.079.6350.50
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							

### RSD-MS-Ex

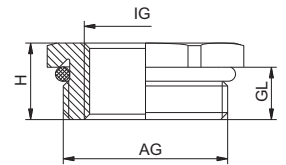
PG



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



II 2G 1D



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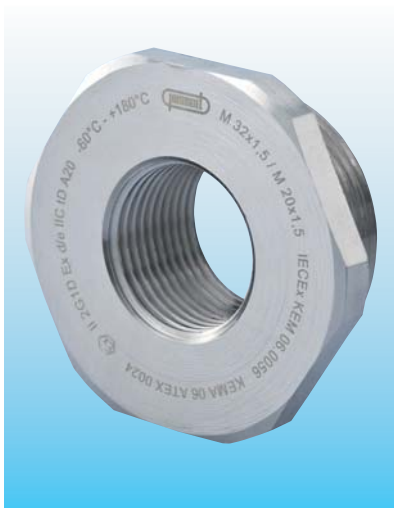
AG	IG	GL mm	H mm	⌀ mm	Number		AG	IG	GL mm	H mm	⌀ mm	Number	
					Buna-N -20°C – 95°C (-4°F – 203°F)	VMQ -60°C – 180°C (-76°F – 356°F)						Buna-N -20°C – 95°C (-4°F – 203°F)	VMQ -60°C – 180°C (-76°F – 356°F)
PG 9	PG 7	6	8,8	17	1.078.0907.01	1.079.0907.01	PG 36	PG 21	9	12,5	50	1.078.3621.01	1.079.3621.01
PG 11	PG 7	6	9	20	1.078.1107.01	1.079.1107.01	PG 36	PG 29	9	12,5	50	1.078.3629.01	1.079.3629.01
PG 11	PG 9	6	9	20	1.078.1109.01	1.079.1109.01	PG 42	PG 29	10	13,5	57	1.078.4229.01	1.079.4229.01
PG 13,5	PG 9	6,5	9,5	22	1.078.1309.01	1.079.1309.01	PG 42	PG 36	10	13,5	57	1.078.4236.01	1.079.4236.01
PG 16	PG 9	6,5	9,5	24	1.078.1609.01	1.079.1609.01	PG 48	PG 36	10	13,5	64	1.078.4836.01	1.079.4836.01
PG 16	PG 11	6,5	9,5	24	1.078.1611.01	1.079.1611.01	PG 48	PG 42	10	13,5	64	1.078.4842.01	1.079.4842.01
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							



# Ex accessories

## RSD-MS-Ex-d

Metr.



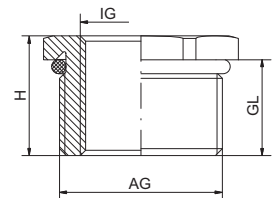
<b>Material</b>	Nickel plated brass
<b>O-Ring</b>	Buna-N / VMQ
<b>Protection</b>	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
<b>Operating Temperature</b>	-20°C – 95°C (-4°F – 203°F) (Buna-N) -60°C – 180°C (-76°F – 356°F) (VMQ)



II 2G 1D Ex d IIC



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AG	IG	GL mm	H mm	⌀ mm	Number Buna-N -20°C – 95°C (-4°F – 203°F)	Number VMQ -60°C – 180°C (-76°F – 356°F)
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

## V-INOX-Ex Metr.

II 2G 1D

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

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AG	GL mm	H mm	mm	Number V-INOX-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number V-INOX-FPM-Ex -20 °C – 180 °C (-4 °F – 356 °F)	Number V-INOX-VMQ-Ex -60 °C – 180 °C (-76 °F – 356 °F)
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

## V-INOX-Ex PG

II 2G 1D

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

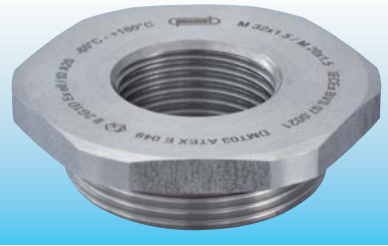
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AG	GL mm	H mm	mm	Number V-INOX-Ex -20 °C – 95 °C (-4 °F – 203 °F)	Number V-INOX-FPM-Ex -20 °C – 180 °C (-4 °F – 356 °F)	Number V-INOX-VMQ-Ex -60 °C – 180 °C (-76 °F – 356 °F)
PG 7	5	8	14	1.192.0700.01	1.193.0700.01	1.194.0700.01
PG 9	6	9	17	1.192.0900.01	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

## Ex accessories

### RSD-INOX-Ex

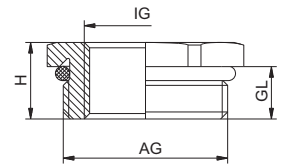
Metr.



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



II 2G 1D

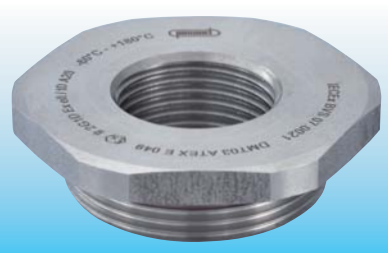


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AG	IG	GL mm	mm	Number		AG	IG	GL mm	mm	Number	
				Buna-N -20 °C – 95 °C (-4 °F – 203 °F)	VMQ -60 °C – 180 °C (-76 °F – 356 °F)					Buna-N -20 °C – 95 °C (-4 °F – 203 °F)	VMQ -60 °C – 180 °C (-76 °F – 356 °F)
M 16 x 1,5	M 12 x 1,5	5	17	1.098.1612.50	1.099.1612.50	M 50 x 1,5	M 32 x 1,5	9	55	1.098.5032.50	1.099.5032.50
M 20 x 1,5	M 12 x 1,5	6	22	1.098.2012.50	1.099.2012.50	M 50 x 1,5	M 40 x 1,5	9	55	1.098.5040.50	1.099.5040.50
M 20 x 1,5	M 16 x 1,5	6	22	1.098.2016.50	1.099.2016.50	M 63 x 1,5	M 32 x 1,5	10	65	1.098.6332.50	1.099.6332.50
M 25 x 1,5	M 16 x 1,5	7	27	1.098.2516.50	1.099.2516.50	M 63 x 1,5	M 40 x 1,5	10	65	1.098.6340.50	1.099.6340.50
M 25 x 1,5	M 20 x 1,5	7	27	1.098.2520.50	1.099.2520.50	M 63 x 1,5	M 50 x 1,5	10	65	1.098.6350.50	1.099.6350.50
M 32 x 1,5	M 16 x 1,5	8	34	1.098.3216.50	1.099.3216.50						
M 32 x 1,5	M 20 x 1,5	8	34	1.098.3220.50	1.099.3220.50						
M 32 x 1,5	M 25 x 1,5	8	34	1.098.3225.50	1.099.3225.50						
M 40 x 1,5	M 20 x 1,5	8	43	1.098.4020.50	1.099.4020.50						
M 40 x 1,5	M 25 x 1,5	8	43	1.098.4025.50	1.099.4025.50						
M 40 x 1,5	M 32 x 1,5	8	43	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						

### RSD-INOX-Ex

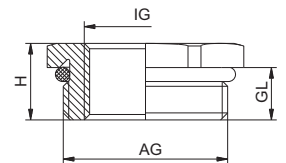
PG



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



II 2G 1D



For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)

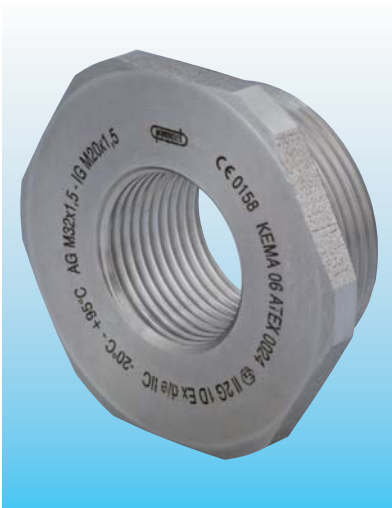
AG	IG	GL mm	H mm	mm	Number		AG	IG	GL mm	mm	Number		
					Buna-N -20 °C – 95 °C (-4 °F – 203 °F)	VMQ -60 °C – 180 °C (-76 °F – 356 °F)					Buna-N -20 °C – 95 °C (-4 °F – 203 °F)	VMQ -60 °C – 180 °C (-76 °F – 356 °F)	
PG 9	PG 7	6	8,8	17	1.098.0907.01	1.099.0907.01	PG 29	PG 21	8	11,5	40	1.098.2921.01	1.099.2921.01
PG 11	PG 7	6	9	20	1.098.1107.01	1.099.1107.01	PG 36	PG 21	9	12,5	50	1.098.3621.01	1.099.3621.01
PG 11	PG 9	6	9	20	1.098.1109.01	1.099.1109.01	PG 36	PG 29	9	12,5	50	1.098.3629.01	1.099.3629.01
PG 13,5	PG 9	6,5	9,5	22	1.098.1309.01	1.099.1309.01	PG 42	PG 29	10	13,5	57	1.098.4229.01	1.099.4229.01
PG 13,5	PG 11	6,5	9,5	22	1.098.1311.01	1.099.1311.01	PG 42	PG 36	10	13,5	57	1.098.4236.01	1.099.4236.01
PG 16	PG 9	6,5	9,5	24	1.098.1609.01	1.099.1609.01	PG 48	PG 36	10	13,5	64	1.098.4836.01	1.099.4836.01
PG 16	PG 11	6,5	9,5	24	1.098.1611.01	1.099.1611.01	PG 48	PG 42	10	13,5	64	1.098.4842.01	1.099.4842.01
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							



# Ex accessories

## RSD-INOX-Ex-d

Metr.



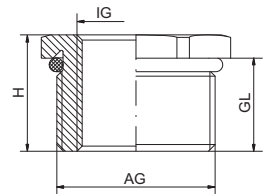
Material	INOX (1.4404)
O-Ring	Buna-N/VMQ
Protection	IP 68 – 10 bar / IP 69K (NEMA 6 – 150 PSIG)
Operating Temperature	-20°C – 95°C (-4°F – 203°F) (Buna-N) -60°C – 180°C (-76°F – 356°F) (VMQ)



II 2G 1D Ex d IIC



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AG	IG	GL mm	H mm	mm	Number Buna-N -20°C – 95°C (-4°F – 203°F)	Number VMQ -60°C – 180°C (-76°F – 356°F)
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



# Corrugated conduit systems

## Snapflex Industry standard metric

Conduits of the Snapflex series are based on metric dimensions and fulfil current and future requirements.



### You can find in this chapter:

- metric conduits
- conduit glands
- combined conduit/cable glands
- T and Y-shaped distributors for metric conduits
- snap elbow systems for metric conduits
- Nylon mounting brackets for metric conduits

# Snapflex Industry standard metric

## Snapflex



**Material** Polyamide

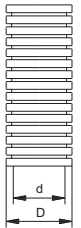


RoHS

**Operating Temperature** -30 °C – 100 °C (-22 °F – 212 °F)

**Colors** grey (RAL 7035), black (RAL 9005)

**Advice:**  
- PP on request



Size D	d mm	D mm	Number grey	Number black
16	10,7	16	1.510.1600.50	1.510.1601.50
20	14,1	20	1.510.2000.50	1.510.2001.50
25	18,3	25	1.510.2500.50	1.510.2501.50
32	24,3	32	1.510.3200.50	1.510.3201.50
40	31,2	40	1.510.4000.50	1.510.4001.50
50	39,6	50	1.510.5000.50	1.510.5001.50
63	50,6	63	1.510.6300.50	1.510.6301.50



# Snapflex Industry standard metric

SM-N

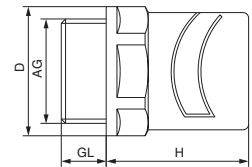
Metr.



<b>Material</b>	Polyamide
<b>Protection</b>	IP 54, with O-Ring with fixed conduit mounting IP 65
<b>Operating Temperature</b>	-20 °C – 80 °C (-4 °F – 176 °F)
<b>Colors</b>	grey (RAL 7031), black (RAL 9005)



**Advice:**  
- International certificat under development



AG	GL mm	H mm	D mm	mm	fits to Snapflex	Number grey	Number black
M 16 x 1,5	8	23	23	17	16	1.514.1600.50	1.514.1601.50
M 20 x 1,5	9	28	28,6	24	20	1.514.2000.50	1.514.2001.50
M 25 x 1,5	11	32	34	35	25	1.514.2500.50	1.514.2501.50
M 32 x 1,5	11	35	41	39	32	1.514.3200.50	1.514.3201.50
M 40 x 1,5	13	40	51	47	40	1.514.4000.50	1.514.4001.50
M 50 x 1,5	14	48	62	57	50	1.514.5000.50	1.514.5001.50

# Snapflex Industry standard metric

## Snapturn Metr.

<b>Material</b>	Polyamide
<b>Operating Temperature</b>	-20 °C – 80 °C
<b>Protection</b>	IP 42
<b>Colors</b>	black (RAL 9005)

**Advice:**  
- International certificat under development

AG	d mm	GL mm	D mm	H mm	mm	fits to Snapflex	Number
M 16 x 1,5	9,5	9	25,6	29,5	25	16	1.515.1601.50
M 20 x 1,5	12,5	9	31	33	30	20	1.515.2001.50
M 25 x 1,5	17	11	40,2	36,5	39	25	1.515.2501.50
M 32 x 1,5	22,5	13	47,5	38,5	47,5	32	1.515.3201.50
M 40 x 1,5	29	13	56,5	41	55	40	1.515.4001.50
M 50 x 1,5	36,5	13,5	67	43	65	50	1.515.5001.50

## Snapturn-M Metr.

<b>Material</b>	Polyamide, Brass
<b>Operating Temperature</b>	-20 °C – 80 °C
<b>Protection</b>	IP 42
<b>Colors</b>	black (RAL 9005)

**Advice:**  
- International certificat under development  
- NPT on request

AG	d mm	GL mm	D mm	H mm	mm	fits to Snapflex	Number
M 16 x 1,5	9,5	6	25,6	29,5	25	16	1.515.1681.50
M 20 x 1,5	12,5	6	31	33	30	20	1.515.2081.50
M 25 x 1,5	17	6,5	40,2	36,5	39	25	1.515.2581.50
M 32 x 1,5	22,5	8	47,5	38,5	47,5	32	1.515.3281.50
M 40 x 1,5	29	8	56,5	41	55	40	1.515.4081.50
M 50 x 1,5	36,5	10	67	43	65	50	1.515.5081.50

# Snapflex Industrie Standard metrisch

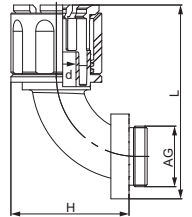
## Snapturn 90°

Metr.



Material	Polyamide
Operating Temperature	-20 °C – 80 °C
Protection	IP 42
Colors	black (RAL 9005)

**Advice:**  
- International certificat under development



AG	d mm	GL mm	H mm	L mm	⌀ mm	fits to Snapflex	Number
M 16 x 1,5	9,5	9,5	30	57	12	16	1.525.1601.50
M 20 x 1,5	12,5	9,5	35,5	64	16	20	1.525.2001.50
M 25 x 1,5	17	10	45	71,5	20	25	1.525.2501.50
M 32 x 1,5	22,5	13	51	87,5	27	32	1.525.3201.50
M 40 x 1,5	29	13	65,4	97,2	32	40	1.525.4001.50
M 50 x 1,5	36,5	13,5	72	106,5	41	50	1.525.5001.50

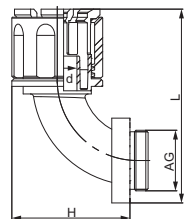
## Snapturn-M 90°

Metr.



Material	Polyamide, Brass
Operating Temperature	-20 °C – 80 °C
Protection	IP 42
Colors	black (RAL 9005)

**Advice:**  
- International certificat under development  
- NPT on request

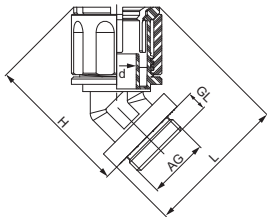


AG	d mm	GL mm	H mm	L mm	⌀ mm	fits to Snapflex	Number
M 16 x 1,5	9,5	6	33,5	57	12	16	1.525.1681.50
M 20 x 1,5	12,5	6	39	64	16	20	1.525.2081.50
M 25 x 1,5	17	6,5	48,5	71,5	20	25	1.525.2581.50
M 32 x 1,5	22,5	8	54,5	87,5	27	32	1.525.3281.50
M 40 x 1,5	29	8	68,5	97,2	32	40	1.525.4081.50
M 50 x 1,5	36,5	9	75,5	106,5	41	50	1.525.5081.50

# Snapflex Industrie Standard metrisch

## Snapturn 135°

Metr.



Material Polyamide

Operating Temperature -20 °C – 80 °C

Protection IP 42

Colors black (RAL 9005)

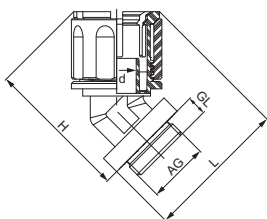
Advice:  
- International certificat under development



AG	d mm	GL mm	H mm	L mm	mm	fits to Snapflex	Number
M 16 x 1,5	9,5	9,5	38,9	40,4	12	16	1.526.1601.50
M 20 x 1,5	12,5	9,5	44,7	48,2	16	20	1.526.2001.50
M 25 x 1,5	17	10	53,9	57,4	20	25	1.526.2501.50
M 32 x 1,5	22,5	13	60,8	68,8	27	32	1.526.3201.50
M 40 x 1,5	29	13	69,5	79,5	32	40	1.526.4001.50
M 50 x 1,5	36,5	13,5	78,5	89,5	41	50	1.526.5001.50

## Snapturn-M 135°

Metr.



Material Polyamide, Brass

Operating Temperature -20 °C – 80 °C

Protection IP 42

Colors black (RAL 9005)

Advice:  
- International certificat under development  
- NPT on request



AG	d mm	GL mm	H mm	L mm	mm	fits to Snapflex	Number
M 16 x 1,5	9,5	6	42,4	41,4	12	16	1.526.1681.50
M 20 x 1,5	12,5	6	48,2	48,2	16	20	1.526.2081.50
M 25 x 1,5	17	6,5	57,4	57,9	20	25	1.526.2581.50
M 32 x 1,5	22,5	8	64,3	68,8	27	32	1.526.3281.50
M 40 x 1,5	29	8	73	79,5	32	40	1.526.4081.50
M 50 x 1,5	36,5	9	82	89,5	41	50	1.526.5081.50



## Snapflex Industry standard metric

### Snapcllic-DUO-PA

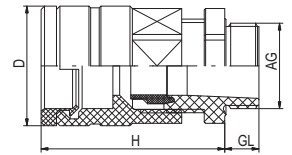
**Metr.**

**Material** Polyamide

**Seal** NBR

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

**Colors** black (RAL 9005)

**Advice:**  
 - NPT and elongated thread upon request


AG	$\varnothing_k$ mm	GL mm	H mm	D mm	$\varnothing$ mm	fits to Snapflex	Number
M 16 x 1,5	5-10	8	42	25	22	16	1.542.1601.50
M 16 x 1,5	3-7	8	42	25	22	16	1.542.1601.51
M 20 x 1,5	10-14	10	46	30	27	20	1.542.2001.50
M 20 x 1,5	7-12	10	46	30	27	20	1.542.2001.51
M 25 x 1,5	13-18	11	50	35	33	25	1.542.2501.50
M 25 x 1,5	9-16	11	50	35	33	25	1.542.2501.51
M 32 x 1,5	18-24	11	60	42	42	32	1.542.3201.50
M 32 x 1,5	13-20	11	60	42	42	32	1.542.3201.51
M 40 x 1,5	22-31	13	60	50	53	40	1.542.4001.50
M 40 x 1,5	20-26	13	60	50	53	40	1.542.4001.51

### Snapcllic-DUO-PA

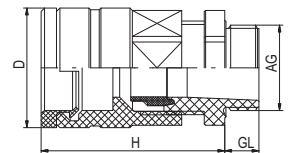
**PG**

**Material** Polyamide

**Seal** NBR

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

**Colors** black (RAL 9005)

**Advice:**  
 - NPT and elongated thread upon request


AG	$\varnothing_k$ mm	GL mm	H mm	D mm	$\varnothing$ mm	fits to Snapflex	Number
PG 11	5-10	8	42	25	22	16	1.543.1116.14
PG 11	3-7	8	42	25	22	16	1.543.1116.15
PG 16	10-14	10	46	30	27	20	1.543.1620.14
PG 16	7-12	10	46	30	27	20	1.543.1620.15
PG 21	13-16	11	50	35	33	25	1.543.2125.14
PG 21	9-16	11	50	35	33	25	1.543.2125.15
PG 29	18-22	11	60	42	42	32	1.543.2932.14
PG 29	13-20	11	60	42	42	32	1.543.2932.15
PG 36	22-31	13	60	50	53	40	1.543.3640.14
PG 36	20-26	13	60	50	53	40	1.543.3640.15

# Snapflex Industry standard metric

## Snapcllic-DUO-Ms Metr.

**Material** Nickel plated brass

**Clamping insert** Polyamide

**Seal** NBR

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

**Advice:**  
 - NPT and elongated thread upon request  
 - Also available as EMC version!  
 - DN Corrugated Conduit upon request!

AG	mm	GL mm	H mm	D mm	mm	fits to Snapflex	Number
M 16 x 1,5	5-10	6	38,5	25	24/20	16	1.547.1601.50
M 16 x 1,5	3-7	6	38,5	25	24/20	16	1.547.1601.51
M 20 x 1,5	10-14	6	41,5	30	28/24	20	1.547.2001.50
M 20 x 1,5	7-12	6	41,5	30	28/24	20	1.547.2001.51
M 25 x 1,5	13-18	7	44,5	35	34/30	25	1.547.2501.50
M 25 x 1,5	9-16	7	44,5	35	34/30	25	1.547.2501.51
M 32 x 1,5	18-24	8	52,5	42	40	32	1.547.3201.50
M 32 x 1,5	13-20	8	52,5	42	40	32	1.547.3201.51
M 40 x 1,5	22-31	8	59	50	50	40	1.547.4001.50
M 40 x 1,5	20-26	8	59	50	50	40	1.547.4001.51

## Snapcllic-DUO-Ms PG

**Material** Nickel plated brass

**Clamping insert** Polyamide

**Seal** NBR

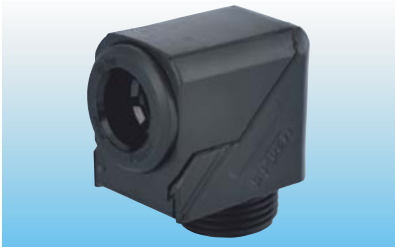
**Operating Temperature** -40 °C – 100 °C (-40 °F – 212 °F)

**Advice:**  
 - NPT and elongated thread upon request  
 - Also available as EMC version!  
 - DN Corrugated Conduit upon request!

AG	mm	GL mm	H mm	D mm	mm	fits to Snapflex	Number
PG 11	5-10	6	38,5	25	24/20	16	1.548.1116.01
PG 11	3-7	6	38,5	25	24/20	16	1.548.1116.15
PG 16	10-14	6	41,5	30	28/24	20	1.548.1620.01
PG 16	7-12	6	41,5	30	28/24	20	1.548.1620.15
PG 21	13-16	7	44,5	35	34/30	25	1.548.2125.01
PG 21	9-16	7	44,5	35	34/30	25	1.548.2125.15
PG 29	18-22	8	52,5	42	40	32	1.548.2932.01
PG 29	13-20	8	52,5	42	40	32	1.548.2932.15
PG 36	22-28	8	59	50	50	40	1.548.3640.01
PG 36	20-26	8	59	50	50	40	1.548.3640.15


## Snapflex Industry standard metric

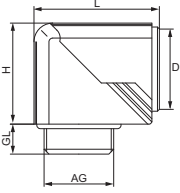
**Snapclic-PA-W**
**Metr.**




<b>Material</b>	Polyamide
<b>O-Ring</b>	NBR
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	black (RAL 9005)

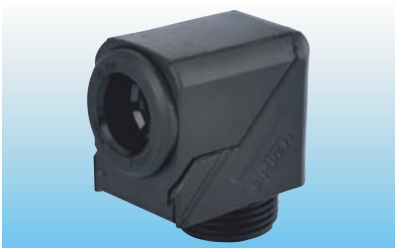
**Advice:**  
- NPT thread on request






AG	GL mm	H mm	L mm	D mm	 mm	fits to Snapflex	Number
M 25 x 1,5	11	40	53	30	33	20	1.552.2520.50
M 25 x 1,5	11	40	53	35	33	25	1.552.2525.50
M 32 x 1,5	11	51,5	64,5	42	42	32	1.552.3200.50

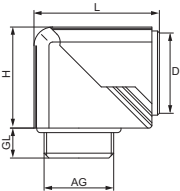
**Snapclic-PA-W**
**PG, NPT**




<b>Material</b>	Polyamide
<b>O-Ring</b>	NBR
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	black (RAL 9005)

**Advice:**  
- NPT thread on request





AG	GL mm	H mm	L mm	D mm	 mm	fits to Snapflex	Number
PG 16	10	32,5	41,5	25	27	16	1.552.1616.14
PG 21	11	40	53	30	33	20	1.552.2120.14
PG 21	11	40	53,5	35	33	25	1.552.2125.14
PG 29	11	51,5	64,5	42	42	32	1.552.2932.14
NPT 3/4"	13	40	53	30	33	20	1.552.3420.70
NPT 3/4"	13	40	53,5	35	33	25	1.552.3425.70
NPT 1"	19	51,5	64,5	42	42	32	1.552.1032.70

## Snapflex Industry standard metric

**Snapclic-DUO-PA-W** **Metr.**

<b>Material</b>	Polyamide
<b>Seal</b>	NBR
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	black (RAL 9005)

**Advice:**  
 - NPT thread on request  
 - DN Corrugated Conduit upon request

AG	$\varnothing$ mm	GL mm	H mm	L mm	D mm	$\varnothing$ mm	fits to Snapflex	Number
M 25 x 1,5	13 – 18	11	40	93	35	33	25	1.553.2501.50
M 25 x 1,5	9 – 16	11	40	93	35	33	25	1.553.2501.51
M 32 x 1,5	18 – 22	11	51,5	110,5	42	42	32	1.553.3201.50
M 32 x 1,5	13 – 20	11	51,5	110,5	42	42	32	1.553.3201.51

**Snapclic-DUO-PA-W** **PG**

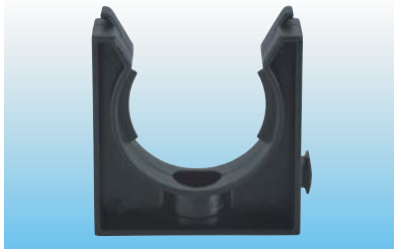
<b>Material</b>	Polyamide
<b>Seal</b>	NBR
<b>Operating Temperature</b>	-40 °C – 100 °C (-40 °F – 212 °F)
<b>Colors</b>	black (RAL 9005)

**Advice:**  
 - NPT thread on request  
 - DN Corrugated Conduit upon request

AG	$\varnothing$ mm	GL mm	H mm	L mm	D mm	$\varnothing$ mm	fits to Snapflex	Number
PG 11	5 – 10	8	27	66,5	25	22	16	1.554.1116.14
PG 11	3 – 7	8	27	66,5	25	22	16	1.554.1116.15
PG 16	10 – 14	10	32,5	78	30	27	20	1.554.1620.14
PG 16	7 – 12	10	32,5	78	30	27	20	1.554.1620.15
PG 21	13 – 16	11	40	93	35	33	25	1.554.2125.14
PG 21	9 – 16	11	40	93	35	33	25	1.554.2125.15
PG 29	18 – 22	11	51,5	110,5	42	42	32	1.554.2932.14
PG 29	13 – 20	11	51,5	110,5	42	42	32	1.554.2932.15

## Snapflex Industry standard metric

### Snapclip



**Material** Polyamide

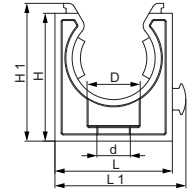


RoHS

**Operating Temperature** -30 °C – 100 °C (-22 °F – 212 °F)

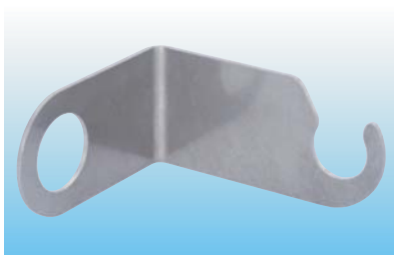
**Colors** grey (RAL 7031), black (RAL 9005)

**Advice:**  
- PP on request



fits to Snapflex	H mm	H1 mm	L mm	L1 mm	D mm	d mm	Number grey	Number black
16	27	29,5	21	27	10	5,3	1.730.1600.50	1.730.1601.50
20	31	33,5	28	31	10	5,3	1.730.2000.50	1.730.2001.50
25	36	36	34	37	10	5,3	1.730.2500.50	1.730.2501.50
32	43	45,5	42	42,5	10	5,3	1.730.3200.50	1.730.3201.50
40	51	53,5	51	52	10	5,3	1.730.4000.50	1.730.4001.50
50	61	63,5	62	65	10	5,3	1.730.5000.50	1.730.5001.50
63	73	77	76	78	10	5,3	1.730.6300.50	1.730.6301.50

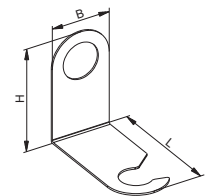
### Snapform



**Material** Special steel



RoHS



fits to Snapflex	H mm	L mm	B mm	Number
16	50	66	30	1.318.1600.04
20	60	75	34	1.318.2000.04
25	65	80	39	1.318.2500.04
32	75	90	46	1.318.3200.04
40	95	105	55	1.318.4000.04
50	115	125	66	1.318.5000.04
63	145	165	82	1.318.6300.04

# Corrugated conduit systems

## Snapflex-Ex metric

Conduits of the Snapflex-Ex series are based on metric dimensions. They were designed for standard applications in hazardous locations type "e" according to EN 60079-0 and EN 60079-7.



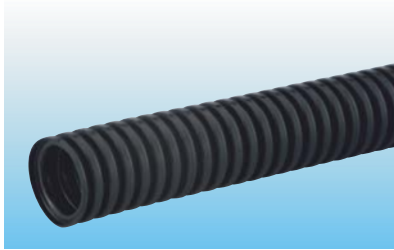
You can find in this chapter:

- ATEX certified conduits
- ATEX certified combined conduit/cable glands



## Snapflex-Ex metric

### Snapflex-Ex



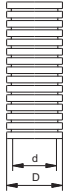
**Material** Polyamide



**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

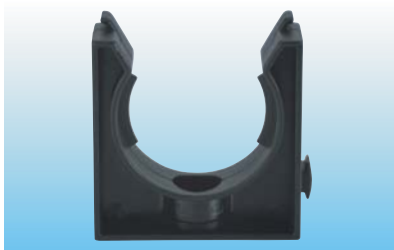
**Colors** black (RAL 9005)

**Advice:**  
- For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)



Size D	d mm	D mm	Number black
16	10,7	16	1.560.1601.50
20	14,1	20	1.560.2001.50
25	18,3	25	1.560.2501.50
32	24,3	32	1.560.3201.50
40	31,2	40	1.560.4001.50

### Snapclip-Ex



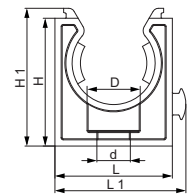
**Material** Polyamide



**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Colors** black (RAL 9005)

**Advice:**  
- For the international certificates  
please see page 176 or our homepage  
[www.hummel.com](http://www.hummel.com)



Size D	H mm	H1 mm	L mm	L1 mm	D mm	d mm	Number black
16	27	29,5	21	27	10	5,3	1.731.1601.50
20	31	33,5	28	37	10	5,3	1.731.2001.50
25	36	36	34	37	10	5,3	1.731.2501.50
32	43	45,5	42	42,5	10	5,3	1.731.3201.50
40	51	53,5	51	52	10	5,3	1.731.4001.50



## Snapcllic-DUO-MS-Ex

Metr.



II 2G 1D

**Material** Nickel plated brass

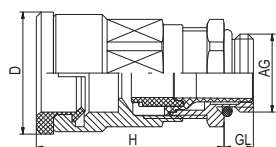
**Clamping insert** Polyamide

**Seal** NBR

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Advice:**

- NPT and elongated thread on request
- For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



AG	$\varnothing$ mm	GL mm	H mm	D mm	 mm	fits to Snapflex-Ex	Number
M 16 x 1,5	5 – 10	6	38,5	25	24/20	16	1.566.1601.50
M 16 x 1,5	3 – 7	6	38,5	25	24/20	16	1.566.1601.51
M 20 x 1,5	10 – 14	6	41,5	30	28/24	20	1.566.2001.50
M 20 x 1,5	7 – 12	6	41,5	30	28/24	20	1.566.2001.51
M 25 x 1,5	13 – 18	7	44,5	35	34/30	25	1.566.2501.50
M 25 x 1,5	9 – 16	7	44,5	35	34/30	25	1.566.2501.51
M 32 x 1,5	18 – 24	8	52,5	42	40	32	1.566.3201.50
M 32 x 1,5	13 – 20	8	52,5	42	40	32	1.566.3201.51
M 40 x 1,5	22 – 31	8	59	50	50	40	1.566.4001.50
M 40 x 1,5	20 – 26	8	59	50	50	40	1.566.4001.51

# Snapflex-Ex metric

## Snapcllic-DUO-MS-Ex

PG



**Material** Nickel plated brass



**Clamping insert** Polyamide

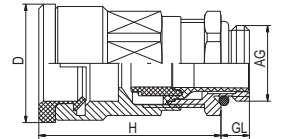
II 2G 1D

**Seal** NBR

**Operating Temperature** -20 °C – 95 °C (-4 °F – 203 °F)

**Advice:**

- NPT and elongated thread on request
- For the international certificates please see page 176 or our homepage [www.hummel.com](http://www.hummel.com)



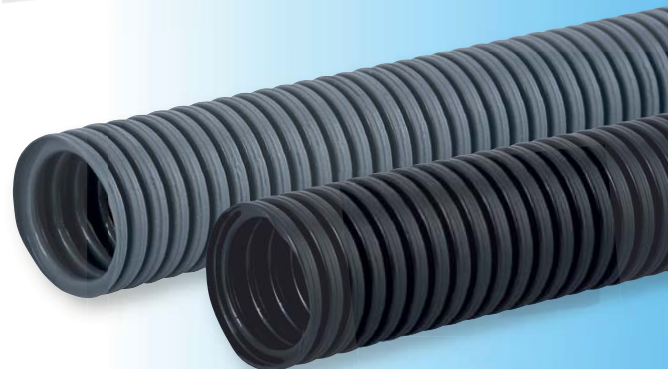
AG	$\varnothing$ mm	GL mm	H mm	D mm	 mm	fits to Snapflex-Ex	Number
PG 11	5-10	6	38,5	25	24/20	16	1.567.1116.01
PG 11	3-7	6	38,5	25	24/20	16	1.567.1116.15
PG 16	10-14	6	41,5	30	28/24	20	1.567.1620.01
PG 16	7-12	6	41,5	30	28/24	20	1.567.1620.15
PG 21	13-16	7	44,5	35	34/30	25	1.567.2125.01
PG 21	9-16	7	44,5	35	34/30	25	1.567.2125.15
PG 29	18-22	8	52,5	42	40	32	1.567.2932.01
PG 29	13-20	8	52,5	42	40	32	1.567.2932.15
PG 36	22-28	8	59	50	50	40	1.567.3640.01
PG 36	20-26	8	59	50	50	40	1.567.3640.15

# Corrugated conduit systems

## DN conduits

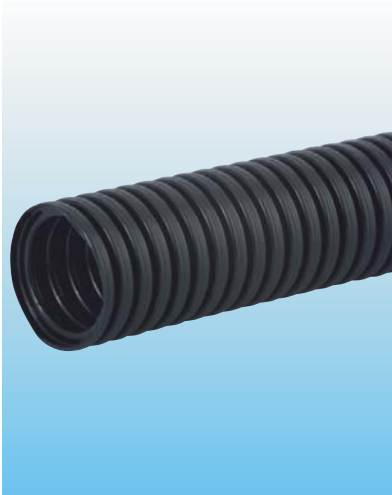
You can find in this chapter:

- DN conduit made of polyamide
- SM fittings for fast mounting of DN conduit
- snap elbow systems for DN conduit

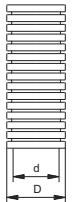


SM-WS-PA

DN



Material	Polyamide
Operating Temperature	-40 °C – 110 °C (-40 °F – 230 °F)
Colors	grey (RAL 7031), black (RAL 9005)



Size DN	Typ	d mm	D mm	Number grey	Number black
10	PA	10	13	1.510.0900.14	1.510.0901.14
12	PA	12	15,5	1.510.1100.14	1.510.1101.14
14	PA	14	18,5	1.510.1300.14	1.510.1301.14
17	PA	16,5	21	1.510.1600.14	1.510.1601.14
23	PA	22,5	28,5	1.510.2100.14	1.510.2101.14
29	PA	28,5	34,5	1.510.2900.14	1.510.2901.14
37	PA	36	42	1.510.3600.14	1.510.3601.14
50	PA	47,5	54	1.510.4800.14	1.510.4801.14

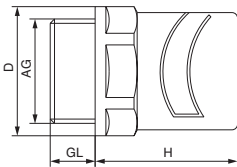
## SM-N

Metr., PG, NPT



RoHS

<b>Material</b>	Polyamide
<b>Protection</b>	IP 54, with O-Ring with fixed conduit mounting IP 65
<b>Operating Temperature</b>	-20 °C – 80 °C (-4 °F – 176 °F)
<b>Colors</b>	grey (RAL 7031), black (RAL 9005)



AG	GL mm	H mm	D mm	mm	DN	Number grey	Number black
M 16 x 1,5	8	23	20	17	10	1.511.1600.50	1.511.1601.50
M 20 x 1,5	9	28	26,5	24	14	1.511.2000.50	1.511.2001.50
M 25 x 1,5	11	32	38,5	35	23	1.511.2500.50	1.511.2501.50
M 32 x 1,5	11	35	46	42	29	1.511.3200.50	1.511.3201.50
PG 9	8	23	19	17	10	1.511.0900.14	1.511.0901.14
PG 11	8	25	23	21	12	1.511.1100.14	1.511.1101.14
PG 13,5	9	28	26,5	24	14	1.511.1300.14	1.511.1301.14
PG 16	10	29	30	27	17	1.511.1600.14	1.511.1601.14
PG 21	11	32	38,5	35	23	1.511.2100.14	1.511.2101.14
PG 29	11	35	46	42	29	1.511.2900.14	1.511.2901.14
PG 36	13	41	54,5	50	37	1.511.3600.14	1.511.3601.14
PG 48	14	46	70	64	50	1.511.4800.14	1.511.4801.14
NPT 3/8"	15	23	19	17	10	1.511.3800.70	1.511.3801.70
NPT 1/2"	13	29	30	27	17	1.511.1216.70	1.511.1217.70
NPT 3/4"	13	32	38,5	35	23	1.511.3400.70	1.511.3401.70
NPT 1"	15	35	46	42	29	1.511.1000.70	1.511.1001.70

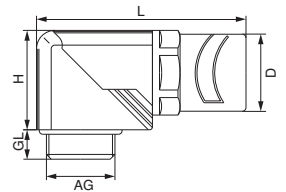
# DN conduits

## SM-W

Metr., PG, NPT



Material	Polyamide
O-Ring	NBR
Protection	IP 54 with fixed conduit mounting IP 65
Operating Temperature	-20 °C – 80 °C (-4 °F – 176 °F)
Colors	black (RAL 9005)



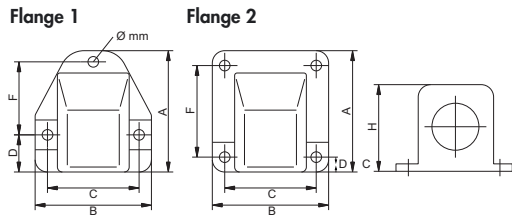
AG	GL mm	H mm	L mm	mm	D mm	fits to SM-Conduit DN	Number
M 16 x 1,5	8	23	43	19	20	10	1.513.1601.50
M 20 x 1,5	9	30,5	52	24	26,5	14	1.513.2001.50
M 25 x 1,5	11	40	70	33	38,5	23	1.513.2501.50
M 32 x 1,5	11	51,5	83	42	46	29	1.513.3201.50
PG 9	8	23	43	19	19	10	1.513.0901.14
PG 11	8	27	48	22	23	12	1.513.1101.14
PG 13,5	9	30,5	52	24	26,5	14	1.513.1301.14
PG 16	10	32,5	56	27	30	17	1.513.1601.14
PG 21	11	40	70	33	38,5	23	1.513.2101.14
PG 29	11	51,5	83	42	46	29	1.513.2901.14
NPT 3/8"	15	23	43	19	19	10	1.513.3801.70
NPT 1/2"	13	32,5	56	27	30	17	1.513.1217.70
NPT 3/4"	13	40	70	33	38,5	23	1.513.3401.70
NPT 1"	15	51,5	83	42	46	29	1.513.1001.70

KF-G

DN



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



Size DN	Flange	Ø mm	A mm	B mm	C mm	D mm	F mm	H mm	Number grey	Number black
12	1	4,3	49	47	37	15,5	29	35	1.312.1100.15	1.312.1101.15
17	1	4,3	49	47	37	15,5	29	35	1.312.1600.15	1.312.1601.15
23	1	6,0	69	65	51,5	21,5	41,5	44	1.312.2100.15	1.312.2101.15
29	2	6,5	90	78	64,5	9,5	64,5	55	1.312.2900.15	1.312.2901.15
37	2	6,5	99	94	79,5	10,5	79,5	66	1.312.3600.15	1.312.3601.15
50	2	6,5	116	101	87,5	12,5	87,5	76	1.312.4800.15	1.312.4801.15



## Technical Information

### Other International Ex-Certifications

	Ukraine	No. 1100	
	Russia	PPC 00-27485 POCC-DE-RG05-B03140, POCC-RU-0001-11TB05	
	China	CQST CNEx06.1147U CQST CNEx06.1148U	
	Brazil	INMETRO MC AEX-4665-X INMETRO MC AEX-5233-X INMETRO MC AEX-5234-X INMETRO MC AEX-5235-X INMETRO MC AEX-8528	INMETRO MC AEX-6203-X INMETRO MC AEX-6410-X INMETRO MC AEX-6411-X INMETRO MC AEX-6412-X INMETRO MC AEX-8822-X

### 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).



IECEX BVS 07.0019X	IECEX KEM 06.0056
IECEX BVS 07.0021	IECEX KEM 07.0012
IECEX BVS 07.0020X	IECEX KEM 07.0014X
IECEX BVS 07.0022X	IECEX KEM 07.0013X
IECEX BVS 10.0078X	

### Approvals for HSK Strain Relief Fittings / Licence Number 40012033

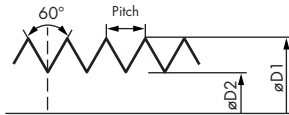
Page	Article	Number	Temperature Range	Approval G (Gas)	Approval D (Dust)	EC-Type Examination Certificate
148	RSD-MS-Ex	1.078.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 049
148	RSD-MS-Ex	1.079.*	-60 °C – 180 °C	x	x	DMT 03 ATEX E 049
152	RSD-INOX-Ex	1.098.*	-20 °C – 180 °C	x	x	DMT 03 ATEX E 049
152	RSD-INOX-Ex	1.099.*	-60 °C – 180 °C	x	x	DMT 03 ATEX E 049
151	V-INOX-Ex	1.192.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 049
151	V-INOX-FPM-Ex	1.193.*	-20 °C – 180 °C	x	x	DMT 03 ATEX E 049
151	V-INOX-VMQ-Ex	1.194.*	-60 °C – 180 °C	x	x	DMT 03 ATEX E 049
147	V-MS-Ex	1.197.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 049
147	V-MS-FPM-Ex	1.198.*	-20 °C – 180 °C	x	x	DMT 03 ATEX E 049
147	V-MS-VMQ-Ex	1.199.*	-60 °C – 180 °C	x	x	DMT 03 ATEX E 049
134	HSK-K-MZ-Ex	1.215.*	-20 °C – 70 °C	x	x	KEMA 99 ATEX 6971 X
112–116	HSK-K-Ex	1.291.*	-20 °C – 95 °C	x	x	DMT 02 ATEX E 047 X
112, 113	HSK-K-Ex	1.295.*	-20 °C – 95 °C	x	x	DMT 02 ATEX E 047 X
146	HSK-V-Ex / Mz-V-Ex	1.296.*	-20 °C – 95 °C	x	x	BVS 03 ATEX E 298
144, 145	V-Ex	1.297.*	-20 °C – 90 °C	x	x	DMT 03 ATEX E 049
169, 170	Snapclie-Duo-MS-Ex	1.566.* / 1.567.*	-20 °C – 95 °C	x	x	BVS 06 ATEX E 069 X
168	Snapflex-Ex	1.560.*	-20 °C – 95 °C	x	x	BVS 06 ATEX E 069 X
133	HSK-K-FLAKA-Ex	1.589.*	-20 °C – 95 °C	x	x	DMT 02 ATEX E 047 X
136	HSK-M-FLAKA-Ex	1.689.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
132	HSK-K-Multi-Ex	1.599.*	-20 °C – 95 °C	x	x	DMT 02 ATEX E 047 X
106, 107	EXIOS Barrier	1.606.*	-60 °C – 85 °C	x	x	Sira-11-ATEX-1110-X
104, 105	EXIOS Standard	1.605.*	-60 °C – 105 °C	x	x	BVS 10 ATEX E 062 X
117–120, 126, 127	HSK-M/EMV-Ex	1.610.* / 1.616.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
128 – 130, 137, 138	HSK-MZ/EMV-Ex	1.611.* / 1.617.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
121, 122	HSK-INOX-Ex	1.612.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
140	HSK-M-Ex-d	1.622.*	-60 °C – 105 °C	x	x	KEMA 99 ATEX 6968 X
141	HSK-MZ-Ex-d	1.628.*	-60 °C – 105 °C	x	x	KEMA 99 ATEX 6968 X
142	HSK-INOX-Ex-d	1.632.*	-60 °C – 105 °C	x	x	KEMA 99 ATEX 6968 X
142	HSK-INOX-PVDF-Ex-d	1.633.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6968 X
140	HSK-M-PVDF-Ex-d	1.634.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6968 X
124, 125	HSK-M-EMV-D-Ex	1.636.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
124, 125	HSK-M-EMV-D-Ex	1.637.*	-60 °C – 95 °C	x	x	KEMA 99 ATEX 6971 X
117–120, 126, 127	HSK-M/EMV-Ex	1.640.* / 1.646.*	-60 °C – 95 °C	x	x	KEMA 99 ATEX 6971 X
128–130	HSK-MZ/EMV-Ex	1.647.*	-60 °C – 95 °C	x	x	KEMA 99 ATEX 6971 X
121, 122	HSK-INOX-Ex	1.642.*	-60 °C – 95 °C	x	x	KEMA 99 ATEX 6971 X
117–120	HSK-M-PVDF-Ex	1.660.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6971 X
137, 138	HSK-MZ-PVDF-Ex	1.661.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6971 X
121, 122	HSK-INOX-PVDF-Ex	1.662.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6971 X
127	HSK-M-EMV-PVDF-Ex	1.666.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6971 X
129, 130	HSK-MZ-EMV-PVDF-Ex	1.667.*	-20 °C – 130 °C	x	x	KEMA 99 ATEX 6971 X
135	HSK-M-Multi-Ex	1.687.*	-20 °C – 95 °C	x	x	DMT 03 ATEX E 051 X
168	Snapclip-Ex	1.731.*	-20 °C – 95 °C	x	x	BVS 06 ATEX E 069 X
149, 153	V-MS-/INOX-Ex-d	1.875.* / 1.895.*	-20 °C – 95 °C	x	x	KEMA 06 ATEX 0024
149, 153	V-MS-/INOX-FPM-Ex-d	1.876.* / 1.896.*	-20 °C – 180 °C	x	x	KEMA 06 ATEX 0024
149, 153	V-MS-/INOX-VMQ-Ex-d	1.877.* / 1.897.*	-60 °C – 180 °C	x	x	KEMA 06 ATEX 0024
150, 154	RSD-MS-/INOX-Ex-d	1.878.* / 1.898.*	-20 °C – 95 °C	x	x	KEMA 06 ATEX 0024
150, 154	RSD-MS-/INOX-Ex-d	1.879.* / 1.899.*	-60 °C – 180 °C	x	x	KEMA 06 ATEX 0024

1. Code		2. Code	Penetration of water									
Protection against human access to hazardous parts	Protection of equipment against penetration of solid foreign objects		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 50mm	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 12,5mm	IP 2x	IP 20	IP 21	IP 22	IP 23						
Protected against access to hazardous parts with a tool larger in diameter than 25mm	Protected against solid foreign objects larger in diameter than 2,5mm	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 1,0mm	Protected against solid foreign objects larger in diameter than 1mm	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 1,0mm	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 1,0mm	Dust proof	IP 6x	IP 60					IP 65	IP 66	IP 67	IP 68	

Product Material Abbreviations	
CR Chloroprene rubber	PP Polypropylene
FPM Fluorelastomer	PVC Polyvinylchloride
Ms Nickel plated brass	PVDF Polyvinylidenfluoride
NBR Buna-N	SB Styrene Butadiene
PA Polyamide	VMQ Silicone
PE Polyethylene	

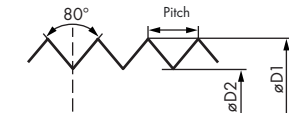
## Technical Information

### Metric ISO Thread Specifications



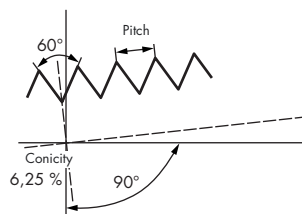
Size	Pitch mm	Outside-Ø D1 mm	Inside-Ø D2 mm	Thru- hole mm
M 12 x 1,5	1,5	12	10,38	12,2
M 16 x 1,5	1,5	16	14,38	16,2
M 20 x 1,5	1,5	20	18,38	20,2
M 25 x 1,5	1,5	25	23,38	25,2
M 32 x 1,5	1,5	32	30,38	32,2
M 40 x 1,5	1,5	40	38,38	40,2
M 50 x 1,5	1,5	50	48,38	50,2
M 63 x 1,5	1,5	63	61,38	63,2

### PG Thread Specifications



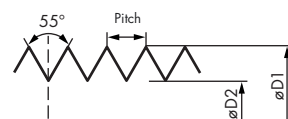
Size	Pitch mm	Outside-Ø D1 mm	Inside-Ø D2 mm	Thru- hole mm
PG 7	1,270	12,5	11,28	12,7
PG 9	1,410	15,2	13,86	15,4
PG 11	1,410	18,6	17,26	18,8
PG 13,5	1,410	20,4	19,06	20,7
PG 16	1,410	22,5	21,16	22,8
PG 21	1,588	28,3	26,78	28,6
PG 29	1,588	37,0	35,48	37,4
PG 36	1,588	47,0	45,48	47,5
PG 42	1,588	54,0	52,48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

# Snapturn

## High strain relief on corrugated conduit!

1. Screw Snapturn into mounting hole
2. Insert Snapflex into Snapturn
3. Hold Snapturn against the housing and tighten the nut – finished!



screw in



insert



tighten nut



finished



## Snapturn

the efficient way of  
corrugated conduit  
mounting

# HSK-M-EMV / METRICA-M-EMV



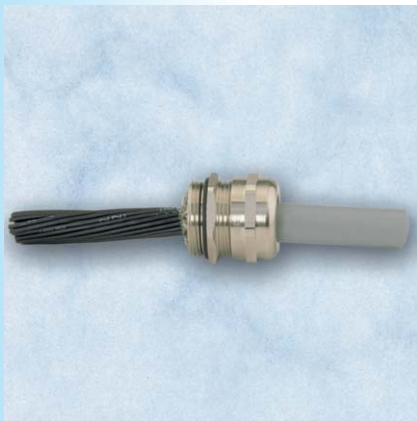
## Step 1



- + 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



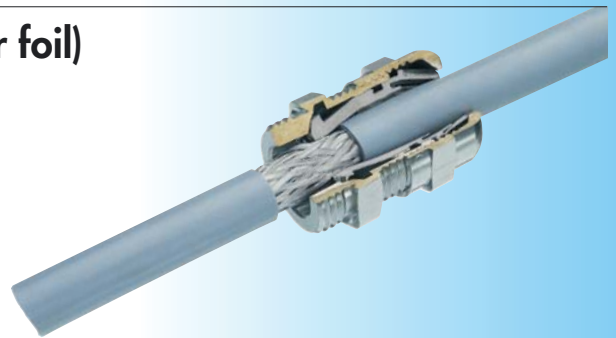
- + Push clamping insert into body and tighten dome nut
- + Assemble into housing
- + Finished!

## HSK-M-EMV-D

### Option 1

#### Feed-through of cable and shield (braided or foil)

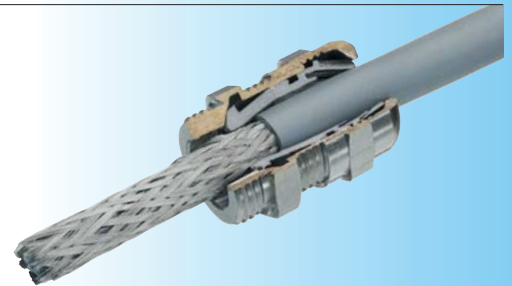
- + Expose shield approximately 7/16" (10 mm)
- + Insert cable into fitting until the shield reaches the contact position
- + Tighten dome nut



### 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







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