

# Cable entries

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# Cable entries

In this section of the catalogue, we offer a selected range of cable glands for heavy-duty connectors.

Our complete product range is listed in our Enclosure and Cable Entry Catalogue.

Depending on the connector series and the application area, the cable glands, sealing plugs, adaptors, pressure compensation elements and accessories are certified and manufactured in line with the following standards:

- EN 60423 (metric thread)
- EN 40430 (PG and NPT thread)
- EN 60079-0 (General ATEX regulations)
- EN 50262 (strain relief)
- EN 60529 (IP protection degree)

The range of cable glands is available in metric (M) and high-strength (PG) threads. When choosing glands and sealing plugs, the table with the sealing characteristics of the O-rings, IP washers and sealing rings must be considered. The O-ring or IP washer is provided to seal the connecting thread of an enclosure, the sealing ring is for the gland and actually seals and clamps the connection cable.



You should always observe the maximum drill-hole diameter when installing a cable gland. These must not exceed the following specified maximum values / tolerances so that the protection degree of the whole enclosure can be guaranteed.

### Through-hole information

M thread	Through-hole, in mm
M 16	16.2
M 20	20.2
M 25	25.2
M 32	32.2
M 40	40.2
M 50	50.2
M 63	63.2
PG thread	Through-hole, in mm
PG 9	15.1
PG 11	18.5
PG 13.5	20.4
PG 16	22.5
PG 21	28.3
PG 29	37.4
PG 36	47.2
PG 42	54.2
PG 48	59.5

### Overview of sealing materials for O-rings, flat gaskets as well as seal inserts

Abbreviation	Material	Trade name	Temperature range	Chemical resistance	Fire resistant	Shore	Free from halogens	UV resistance
<b>TPE</b>	Thermo-plastic elastomer	Santoprene	-40 °C...+130 °C	Hydrocarbons, oils, acids	UL94, HB	64	Yes	very good
<b>CR</b>	Chloroprene rubber	Neoprene	-40 °C...+130 °C	Mineral oils, greases, fuels	very good	40 - 90	No	very good
<b>NBR</b>	Nitrile rubber	Perbunan, Nitrile	-40 °C...+130 °C	Hydrocarbons, oils, acids, aliphatic solvents, greases, fuels	weak	40 - 90	No	good
<b>EPDM</b>	Ethylene-propylene-diene rubber	Keltan	-50 °C...+130 °C	Weather-, grease-, mineral oil-, chlorine-,and ozone resistant, hydrocarbons	weak	20 - 90		very good
<b>FPM</b>	Fluoro-rubber	Viton	-25 °C...+200 °C	ozone, oxygen, mineral oils, synthetic hydraulic fluids, fuels, aromatics, many organic solvents and chemicals	weak	65 - 95		good

### Abbreviations - technical data

A, L	Length
L1	Length of thread
D	Diameter
S	Thickness
S1,S2	Depth
SW	Distance across flats (AF)
KB	Clamping range
Thread	External thread
SUHB	Shroud
TRQ BO	Body torque
MODR	Mounting torque
TRQ CN	Cap nut torque
Qty.	Packing unit












### Product designation

VG	Cable gland
VP	Sealing plugs
ZE	Strain relief
EMV	Electromagnetic compatibility
SKS	Spiral kink protection
GWDR	Flat IP washer
SKMU	Hexagon nut




# Glands and accessories

The tables below provide an overview of the Weidmüller cable glands and the recommended accessories.


## Standard glands

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
<b>Plastic</b>												
 VG ... K67	IP67								•			
 VG ... K68	IP68 / 5 bar								•			
 VG ... K68 SKS	IP68 / 5 bar								•			
<b>Nickel-plated brass</b>												
 VG ... MS54	IP54	IP65				optional					•	
 VG ... MS54-ZE	IP54										•	
 VG...MS54 ZE BS	IP54										•	
 VG...MS54 ZR	IP54										•	
 VG ... MS68		IP68 / 5 bar, IP69k						included			•	
 VG ... EMV		IP68 / 10 bar		•				included				•
 VG ... 1/EMV		IP68 / 5 bar, IP69k		•				included				•
<b>Stainless steel</b>												
 VG...SS68		IP68 / 5 bar, IP69k						included			•	



## Cable glands HQ

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
<b>Plastic</b>												
 VG ... K68 ...	IP65											
<b>Nickel-plated brass</b>												
 VG ... MS68 ...	IP65											
 VG ... EMV68 ...	IP65			•								

## Cable glands Ex

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
<b>Nickel-plated brass</b>												
 VG ... Exe MS		IP68 / 20 bar	Exe					included			•	•
Stainless steel glands on request												

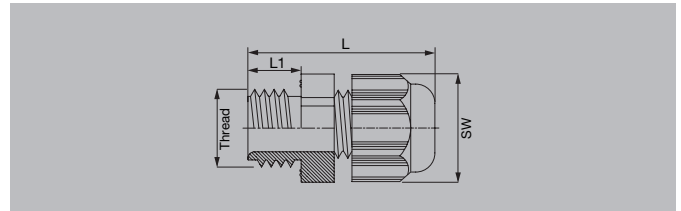
## Stopping plugs

Material/Type	Approvals				Thread sealing rings			Locknuts				
	IP class of protection without seal	IP class of protection with seal	Ex	EMC	Armouring	CSM GWDR PO	CR GWDR...NR	O-Ring	grey SKMU...K GR	black SKMU...K SW	brass SKMU...MS	MS EMC SKMU EMV...
<b>Plastic</b>												
 VP ... K54	IP54	IP66							•			
<b>Nickel-plated brass</b>												
 VP ... MS65		IP68						included			•	

## Cable glands - Plastic - IP68



Plastic cable glands with integrated strain relief mechanism suitable for industrial applications that require IP68 protection.



## Technical data

Material / Colour	Polyamide 6 / RAL 7035
Seal insert	CR
Temperature range	-30 °C...80 °C
Degree of protection	IP68 - 5 bar (30 min)
Flammability rating	V-2

**Note** Version with moulded sealing lip  
Length L varies depending on the cable diameter used

## Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M16-1/K68	M 16 x 1.5	5.00-10.00	39.7 / 10.00	22	2.00	3.00	3.00	5.00	50	1772290000
VG M16-1/K68	M 16 x 1.5	4.00-8.00	35.7 / 8.00	19	2.50	2.50	3.80	3.80	50	1909860000
VG M20-1/K68	M 20 x 1.5	6.00-12.00	41.2 / 10.00	24	2.50	2.50	3.80	3.80	50	1772300000
VG M25-1/K68	M 25 x 1.5	13.00-18.00	48.2 / 10.00	33	7.00	9.00	10.00	13.00	25	1772310000
VG M25-1/K68	M 25 x 1.5	11.00-17.00	43.2 / 8.00	29	5.00	5.00	7.50	7.50	25	1909870000
VG M32-1/K68	M 32 x 1.5	18.00-25.00	50.8 / 15.00	42	8.00	10.00	12.00	15.00	20	1772320000
VG M32-1/K68	M 32 x 1.5	15.00-21.00	50.7 / 10.00	36	5.00	5.00	7.50	7.50	20	1909880000
VG M40-1/K68	M 40 x 1.5	22.00-32.00	69.9 / 15.00	53	15.00	20.00	22.00	30.00	10	1772330000
VG M40-1/K68	M 40 x 1.5	19.00-28.00	55.2 / 10.00	46	11.00	11.00	7.50	7.50	10	1909890000
VG M50-1/K68	M 50 x 1.5	30.00-38.00	71.7 / 18.00	60	20.00	25.00	30.00	35.00	10	1772340000
VG M50-1/K68	M 50 x 1.5	30.00-38.00	70.3 / 18.00	60	12.00	12.00	7.50	7.50	10	1909900000
VG M63-1/K68	M 63 x 1.5	34.00-44.00	72.9 / 18.00	65	12.00	12.00	7.50	7.50	10	1772350000
<b>PG</b>										
VG 9-K68	PG 9	4.00-8.00	34 / 8.00	19	2.50	2.50	3.75	3.75	50	1568980000
VG 11-K68	PG 11	5.00-10.00	37 / 8.00	22	2.50	2.50	3.75	3.75	50	1568990000
VG 13.5-K68	PG 13.5	6.00-12.00	39 / 9.00	24	2.50	2.50	3.75	3.75	50	1569000000
VG 16-K68	PG 16	10.00-14.00	42.5 / 10.00	27	3.30	3.30	5.00	5.00	50	1569010000
VG 21-K68	PG 21	13.00-18.00	48 / 11.00	33	5.00	5.00	7.50	7.50	25	1569020000
VG 29-K68	PG 29	18.00-25.00	53 / 11.00	42	5.00	5.00	7.50	7.50	20	1569030000
VG 36-K68	PG 36	22.00-32.00	65 / 13.00	53	5.00	5.00	7.50	7.50	10	1569040000
VG 42-K68	PG 42	30.00-38.00	68 / 13.00	60	5.00	5.00	7.50	7.50	10	1569050000
VG 48-K68	PG 48	34.00-44.00	69 / 14.00	65	5.00	5.00	7.50	7.50	10	1718770000

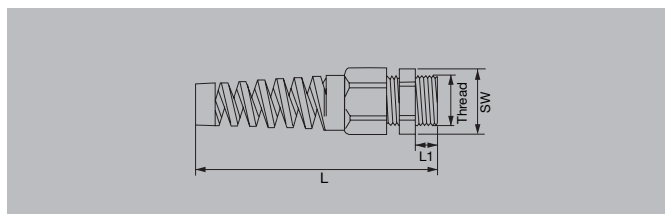
**Note** halogen free, without sealing ring

## Standard cable glands - Plastic

## Cable glands - Plastic - SKS



Plastic cable glands with spiral bending protection specially suited for flexible connections.



## Technical data

Material / Colour	Polyamide 6 / RAL 7035
Seal insert	OR
Temperature range	-30 °C...80 °C
Degree of protection	IP68 - 5 bar (30 min)
Flammability rating	V-2

**Note** Version with moulded sealing lip  
Length L varies depending on the cable diameter used

## Ordering data

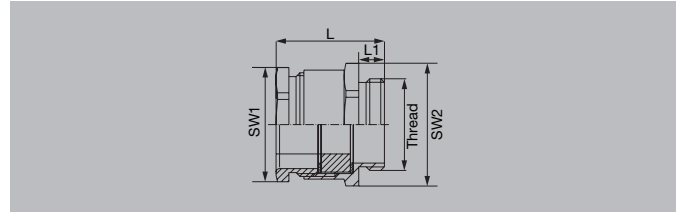
Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M16-K68 SKS	M 16 x 1.5	5.00-10.00	80 / 15.00	22	2.50	2.50	3.80	3.80	50	1776710000
VG M20-K68 SKS	M 20 x 1.5	6.00-12.00	106 / 11.00	24	2.50	2.50	3.80	3.80	50	1778860000
VG M20-K68 SKS	M 20 x 1.5	10.00-14.00	106 / 15.00	27	3.30	3.30	5.00	5.00	50	1776720000
VG M25-K68 SKS	M 25 x 1.5	13.00-18.00	129 / 15.00	33	5.00	5.00	7.50	7.50	25	1776730000
<b>PG</b>										
VG 9-K68 SKS	PG 9	4.00-8.00	78 / 8.00	19	2.50	2.50	3.75	3.75	50	1720480000
VG 11-K68 SKS	PG 11	5.00-10.00	84 / 8.00	22	2.50	2.50	3.75	3.75	100	1720490000
VG 13.5-K68 SKS	PG 13.5	6.00-12.00	105 / 9.00	24	2.50	2.50	3.75	3.75	50	1720500000
VG 16-K68 SKS	PG 16	10.00-14.00	117 / 10.00	27	3.30	3.30	5.00	5.00	25	1720510000
VG 21-K68 SKS	PG 21	13.00-18.00	130 / 11.00	33	5.00	5.00	7.50	7.50	20	1720520000

**Note** halogen free, without sealing ring

## Cable glands - Brass - IP54



Brass cable glands for industrial applications that require IP54 protection.



## Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...60 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 65

**Note** Optional sealing ring  
Length „L\*“ varies depending on the cable diameter used.

## Ordering data

Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M16-MS54	M 16 x 1.5	8.00-10.00	26 / 6.00	18 / 20	3.05	3.05	6.25	6.25	100	1778390000
VG M20-MS54	M 20 x 1.5	8.00-10.00	26.5 / 6.50	18 / 22	3.05	3.05	6.25	6.25	50	1778380000
VG M20-MS54	M 20 x 1.5	10.00-12.00	26.5 / 6.50	20 / 22	3.05	3.05	6.25	6.25	50	1778370000
VG M25-MS54	M 25 x 1.5	12.00-14.00	27.5 / 7.00	22 / 27	3.66	3.66	7.50	7.50	50	1778360000
VG M25-MS54	M 25 x 1.5	15.00-17.00	29.5 / 7.00	28 / 30	4.88	4.88	10.00	10.00	50	1778350000
VG M32-MS54	M 32 x 1.5	24.00-26.00	33 / 8.00	38 / 40	4.88	4.88	10.00	10.00	25	1778340000
VG M40-MS54	M 40 x 1.5	28.00-30.00	33 / 8.00	37 / 43	4.88	4.88	10.00	10.00	25	1778330000
VG M50-MS54	M 50 x 1.5	31.00-33.00	39 / 9.00	47 / 55	4.88	4.88	10.00	10.00	10	1778320000
VG M50-MS54	M 50 x 1.5	39.00-41.00	43 / 9.00	54 / 57	4.88	4.88	10.00	10.00	5	1778310000
VG M63-MS54	M 63 x 1.5	45.00-47.00	45 / 10.00	60 / 68	4.88	4.88	10.00	10.00	5	1778300000
<b>PG</b>										
VG 9-MS54	PG 9	6.00-8.00	22 / 6.00	15 / 17	10.13	10.13	15.20	15.20	100	0261500000
VG 11-MS54	PG 11	8.00-10.00	26 / 6.00	18 / 20	12.40	12.40	18.60	18.60	50	0260700000
VG 13.5-MS54	PG 13.5	10.00-12.00	26 / 6.50	20 / 22	13.60	13.60	20.40	20.40	50	0260800000
VG 16-MS54	PG 16	12.00-14.00	27 / 6.50	22 / 24	15.00	15.00	22.50	22.50	50	0261400000
VG 21-MS54	PG 21	15.00-17.00	29.5 / 7.00	28 / 30	18.87	18.87	28.30	28.30	50	0260900000
VG 29-MS54	PG 29	24.00-26.00	33 / 8.00	37 / 40	24.67	24.67	37.00	37.00	25	0261000000
VG 36-MS54	PG 36	33.00-35.00	39 / 9.00	47 / 50	31.33	31.33	47.00	47.00	20	0497600000
VG 42-MS54	PG 42	41.00-43.00	44 / 10.00	54 / 57	36.00	36.00	54.00	54.00	10	0497700000
VG 48-MS54	PG 48	45.00-47.00	45 / 10.00	60 / 64	39.50	39.50	59.30	59.30	5	1718780000

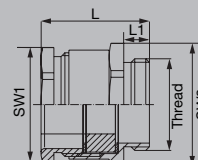
**Note** Further versions on request

## Standard cable glands - Brass

## Cable glands - Brass - ZR



Brass cable gland with concentric O-rings for standard industrial applications. The sealed insert used here contains several removable or dividable inlets. This allows to connect cables of a wide diameter range (from 4 mm to 41 mm) with only one sealed insert.



## Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

## Note

## Ordering data

Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ BO, min.	D1	D2	D3	D4	Qty.	Order No.
<b>metric</b>												
VG M20-MS54	M 20 x 1.5	4.00-13.00	26.5 / 6.50	22 / 24	3.05	6.25	4	7	10	13	50	1009560000
VG M25-MS54	M 25 x 1.5	8.50-18.00	27.5 / 7.00	28 / 30	3.66	7.50	8.5	11.5	14.5	18	25	1009570000
VG M32-MS54	M 32 x 1.5	16.00-26.00	33 / 8.00	37 / 40	4.88	10.00	16	19	22	25	25	1009580000
VG M40-MS54	M 40 x 1.5	23.00-30.00	33 / 33.00	47 / 50	4.88	10.00	23	26	29	32	10	1009590000
VG M50-MS54	M 50 x 1.5	32.00-40.00	39 / 39.00	54 / 57	4.88	10.00	32	35	38	41	5	1009600000
<b>PG</b>												
VGPG13.5-MS54	PG 13.5	7.50-12.50	22 / 6.50	20 / 22	13.60	20.40	7.5	10	12.5	0	50	1009610000
VG PG16-MS54	PG 16	7.50-15.00	27 / 6.50	22 / 24	15.00	22.50	7.5	10	12.5	15	50	1009620000
VG PG21-MS54	PG 21	10.00-19.00	29.5 / 7.00	28 / 30	18.87	28.30	10	13	16	19	25	1009630000
VG PG29-MS54	PG 29	18.00-27.00	33 / 8.00	37 / 40	24.67	37.00	18	21	24	27	25	1009640000
VG PG36-MS54	PG 36	24.00-33.00	39 / 9.00	47 / 50	31.33	47.00	24	27	30	33	10	1009650000
VG PG42-MS54	PG 42	30.00-39.00	44 / 10.00	54 / 57	36.00	54.00	30	33	36	39	5	1009670000

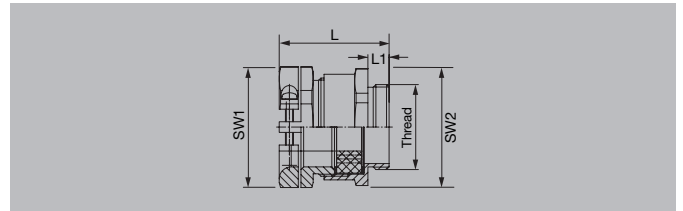
**Note** It is possible to connect cables with diameters ranging from D1 to D4.



## Cable glands - Brass - ZE



Brass cable glands with external, centrally positioned strain relief provided by the clamping jaws.



## Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

**Note** Optional sealing ring  
Length „L“ varies depending on the cable diameter used.

## Ordering data

Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M16-MS54 ZE	M 16 x 1.5	4.00-10.00	26 / 6.00	18 / 19	6.67	6.67	10.00	10.00	100	1778440000
VG M20-MS54 ZE	M 20 x 1.5	6.50-12.50	26.5 / 6.50	20 / 22	8.00	8.00	12.00	12.00	50	1778450000
VG M20-MS54 ZE	M 20 x 1.5	6.50-12.50	26.5 / 6.50	22 / 22	8.00	8.00	12.00	12.00	50	1778460000
VG M25-MS54 ZE	M 25 x 1.5	9.00-19.00	29.5 / 7.00	30 / 34	8.00	8.00	12.00	12.00	50	1778480000
VG M32-MS54 ZE	M 32 x 1.5	17.00-27.00	33 / 8.00	40 / 42	12.00	12.00	18.00	18.00	25	1778490000
VG M40-MS54 ZE	M 40 x 1.5	23.00-33.00	33 / 8.00	50 / 52	12.00	12.00	18.00	18.00	25	1778500000
VG M50-MS54 ZE	M 50 x 1.5	29.00-39.00	43 / 9.00	57 / 59	13.33	13.33	20.00	20.00	5	1778520000
VG M63-MS54 ZE	M 63 x 1.5	35.00-45.00	45 / 10.00	66 / 64	13.33	13.33	20.00	20.00	5	1778530000
<b>PG</b>										
VG 9-MS54-ZE	PG 9	4.00-10.00	30.5 / 6.00	17 / 19	10.13	10.13	15.20	15.20	50	1718810000
VG 11-MS54-ZE	PG 11	6.50-12.50	31.5 / 6.00	20 / 22	12.40	12.40	18.60	18.60	50	1718820000
VG 13.5-MS54-ZE	PG 13.5	6.50-12.50	32 / 6.50	22 / 24	13.60	13.60	20.40	20.40	50	1718830000
VG 16-MS54-ZE	PG 16	6.50-15.00	33 / 6.50	24 / 27	15.00	15.00	22.50	22.50	50	1718840000
VG 21-MS54-ZE	PG 21	9.00-19.00	38 / 7.00	30 / 34	18.87	18.87	28.30	28.30	50	1718850000
VG 29-MS54-ZE	PG 29	17.00-27.00	43 / 8.00	40 / 42	24.67	24.67	37.00	37.00	25	1718860000
VG 36-MS54-ZE	PG 36	23.00-33.00	49.5 / 9.00	50 / 52	31.33	31.33	47.00	47.00	10	1718870000
VG 42-MS54-ZE	PG 42	29.00-39.00	53.5 / 10.00	57 / 62	36.00	36.00	54.00	54.00	5	1718880000
VG 48-MS54-ZE	PG 48	35.00-45.00	55 / 10.00	64 / 68	39.53	39.53	59.30	59.30	5	1718890000

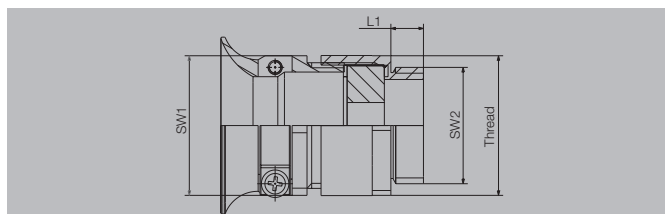
**Note** Further versions on request

## Standard cable glands - Brass

## Cable glands with strain-relief and bending protection



Industrial brass cable glands with strain-relief and bending protection for connecting non-stationary cables and lines.



## Technical data

Material	Brass, nickel-plated
Seal insert	NBR
Temperature range	-20 °C...80 °C
Degree of protection	IP 54

## Note

## Ordering data

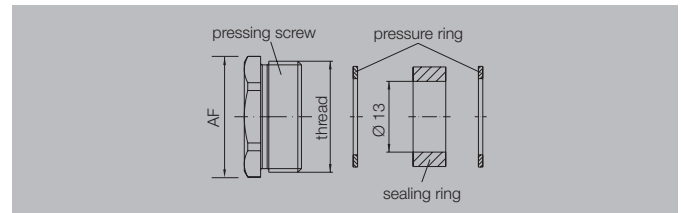
Type	Thread	KB	L/L1	SW1/SW2	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VGM16-MS54ZE	M 16 x 1.5	4.00-10.00	5 / 5.00	17 / 18	2.50	2.50	4.00	4.00	50	1005190000
VGM16-MS54ZE	M 16 x 1.5	6.50-12.50	34 / 5.00	17 / 18	2.50	2.50	4.00	4.00	50	1005200000
VGM20-MS54ZE	M 20 x 1.5	6.50-12.50	37.8 / 6.00	22 / 22	8.00	8.00	12.00	12.00	50	1005210000
VGM20-MS54ZE	M 20 x 1.5	6.50-15.00	37.8 / 6.00	22 / 22	8.00	8.00	12.00	12.00	50	1005220000
VGM25-MS54ZE	M 25 x 1.5	9.00-19.00	44 / 7.00	30 / 30	8.00	8.00	12.00	12.00	25	1005230000
VGM32-MS54ZE	M 32 x 1.5	17.00-27.00	50.8 / 8.00	41 / 40	12.00	12.00	18.00	18.00	25	1005240000

## Note

## Brass clamping screws - IP54



These special cable glands are designed for use in HDC RockStar® bases and hoods.



## Technical data

Clamping screw material	Nickel-plated brass
Sealing ring material	SBR/NBR
Pressure ring material	Polyamide
Temperature range	-20 °C...60 °C

## Note

## Ordering data

Type	Thread	Inserts in mm	SW	Qty.	Order No.
<b>metric</b>					
VG H M20 MS	M 20 x 1.5	4 / 7 / 10 / 13	20	50	1921720000
VG H M25 MS	M 25 x 1.5	8.5 / 11.5 / 14.5 / 18	25	25	1921740000
VG H M32 MS	M 32 x 1.5	16 / 19 / 22 / 25	32	20	1921760000
VG H M40 MS	M 40 x 1.5	23 / 26 / 29 / 32	40	10	1921770000
<b>PG</b>					
KV 11-M	PG 11	7.5 / 10 / 12.5	10	10	1656390000
KV 13-M	PG 13	7.5 / 10 / 12.5	10	10	1656400000
KV 16-M	PG 16	7.5 / 10 / 12.5 / 15	10	10	1656410000
KV 21-M	PG 21	10 / 13 / 16 / 19	10	10	1656420000
KV 29-M	PG 29	18 / 21 / 24 / 27	10	10	1656430000

## Note

## Standard cable glands - Brass

## Cable glands HQ



Cable glands specifically for the HQ series, in plastic. Available as brass and brass-EMC versions.

## Technical data

Material	PA 6 / Brass, nickel-plated
Seal insert	TPE-V
Temperature range	-40 °C...100 °C
Degree of protection	IP 68

## Note

## Ordering data

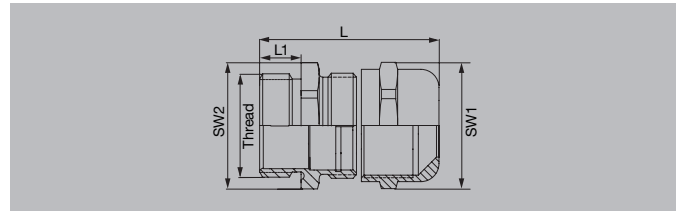
Type	Thread	KB	SW	Qty.	Order No.
<b>Plastic</b>					
VG 16 HQ K68 9-13	PG 16	9.00-13.00	27	1	1016070000
VG 16 HQ K68 11.5-15.5	PG 16	11.50-15.50	27	1	1016080000
<b>Brass</b>					
VG 21 HQ MS68 9-13	PG 21	9.00-13.00	30	1	1016090000
VG 21 HQ MS68 11.5-15.5	PG 21	11.50-15.50	30	1	1016100000
VG 21 HQ MS68 14-18	PG 21	14.00-18.00	30	1	1016110000
<b>EMC</b>					
VG 21 HQ EMV68 11-15.5	PG 21	11.00-15.50	30	1	1016120000
VG 21 HQ EMV68 14-18	PG 21	14.00-18.00	30	1	1016130000
<b>Only for angled HQ base housing (order number 1003110000)</b>					
VG16 HQ K68 9-12SH	PG 16	9.00-12.00	30	50	1045530000
VG16 HQ K68 11.5-15.5SH	PG 16	11.50-15.50	30	50	1045540000

## Note

## Cable glands - Brass - IP68



Standard brass cable glands for industrial applications that require IP68 protection.



## Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Clamp insert	Polyamide
Degree of protection with thread gasket	IP 68 - 5 bar

**Note** Length „L“ varies according to cable diameter used

## Ordering data

Type	Thread	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>									
VG M16-1/MS68	M 16 x 1.5	28 / 5.50	17	2.50	2.50	3.80	3.80	50	1772210000
VG M16-1/MS68	M 16 x 1.5	37.3 / 7.00	20	12.00	12.00	10.00	10.00	50	1909910000
VG M20-1/MS68	M 20 x 1.5	32 / 8.00	22	2.50	2.50	3.80	3.80	50	1772220000
VG M25-1/MS68	M 25 x 1.5	35 / 7.00	30	12.00	12.00	7.50	7.50	25	1772230000
VG M25-1/MS68	M 25 x 1.5	42 / 8.00	27	20.00	20.00	14.00	14.00	25	1909920000
VG M32-1/MS68	M 32 x 1.5	39 / 8.00	34	12.00	12.00	7.50	7.50	25	1772240000
VG M32-1/MS68	M 32 x 1.5	45 / 8.00	34	20.00	20.00	20.00	20.00	20	1909930000
VG M40-1/MS68	M 40 x 1.5	53 / 8.00	44	12.00	12.00	7.50	7.50	20	1772250000
VG M40-1/MS68	M 40 x 1.5	55.1 / 9.00	43	20.00	20.00	20.00	20.00	20	1909940000
VG M50-1/MS68	M 50 x 1.5	62.2 / 9.00	58	20.00	20.00	20.00	20.00	12	1909950000
VG M63-1/MS68	M 63 x 1.5	63.6 / 14.00	64	20.00	20.00	20.00	20.00	12	1772270000
<b>PG (IP 69K)</b>									
VG 9-MS68	PG 9	27 / 6.00	17	12.00	12.00	10.00	10.00	50	1569070000
VG 11-MS68	PG 11	28.5 / 6.00	20	12.00	12.00	10.00	10.00	50	1569080000
VG 13.5-MS68	PG 13.5	29.5 / 6.50	22	14.00	14.00	12.00	12.00	50	1569090000
VG 16-MS68	PG 16	29.5 / 6.50	24	14.00	14.00	14.00	14.00	25	1569100000
VG 21-MS68	PG 21	33.5 / 7.00	30	18.00	18.00	16.00	16.00	25	1569110000
<b>PG (IP 68)</b>									
VG 29-MS68	PG 29	37.5 / 8.00	40	20.00	20.00	20.00	20.00	20	1569120000
VG 36-MS68	PG 36	45 / 10.00	50	20.00	20.00	20.00	20.00	15	1569130000
VG 42-MS68	PG 42	47.5 / 12.00	58	20.00	20.00	20.00	20.00	12	1569140000
VG 48-MS68	PG 48	50.5 / 14.00	64	20.00	20.00	20.00	20.00	12	1718790000

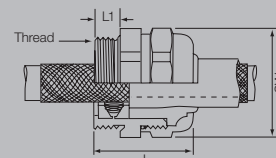
**Note** Further versions on request

## EMC cable glands

## Cable glands - Brass - EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 100 dB. Contact with cable shield by means of spring washer.



## Technical data

Material	Brass, nickel-plated
O-Ring	NBR
Temperature range	-40 °C...135 °C
Degree of protection	IP 68 - 5 bar
Degree of protection with thread gasket	IP 68 - 10 bar
Clamp insert	TPE

**Note** Length „L“ varies according to cable diameter used

## Ordering data

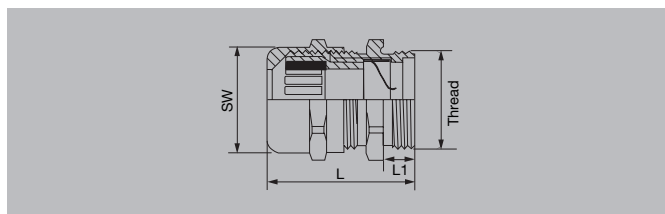
Type	Thread	KB	Shield Ø	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>											
VG EMV M20X1.5	M 20 x 1.5	8.00-11.00	4.00-8.50	41 / 10.00	24	9.00	10.00	9.00	9.00	50	1706940000
VG EMV M25X1.5	M 25 x 1.5	14.00-18.00	8.00-13.50	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1706950000
<b>PG</b>											
VG EMV PG 9/11	PG 9	6.50-9.50	2.50-6.00	34 / 6.00	20	6.00	8.00	6.00	6.00	50	1706860000
VG EMV PG 11	PG 11	6.50-9.00	3.50-7.50	41 / 10.00	24	10.00	10.00	10.00	10.00	50	1706870000
VG EMV PG 13.5	PG 13.5	8.00-11.00	4.00-8.50	41 / 10.00	24	10.00	10.00	10.00	10.00	50	1706880000
VG EMV PG 16 K14	PG 16	10.00-14.00	8.00-13.00	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1706890000
VG EMV PG 16 K18	PG 16	14.00-18.00	8.00-13.00	43 / 11.00	30	10.00	10.00	10.00	10.00	25	1713880000
VG EMV PG 21 K18	PG 21	17.00-18.00	12.50-17.50	45 / 11.00	35	10.00	15.00	10.00	10.00	10	1706900000
VG EMV PG K28	PG 21	17.00-20.00	12.50-17.50	45 / 11.00	35	8.00	15.00	8.00	8.00	10	1713890000
VG EMV PG 29 K26	PG 29	22.00-26.00	15.00-21.00	52 / 13.00	40	15.00	20.00	15.00	15.00	10	1706910000
VG EMV PG 29 K29	PG 29	25.00-29.00	22.00-25.00	58 / 13.00	50	20.00	20.00	20.00	20.00	5	1713900000
VG EMV PG36 K32-27	PG 36	27.00-32.00	24.00-30.50	54 / 9.00	50	15.00	30.00	15.00	15.00	10	1770410000

**Note** Further versions on request

## Cable glands - Brass - 1/EMC



Brass cable glands for shielding against interference frequencies with a screening attenuation of up to 90 dB. Conical metal cage ensures multiple contacts with the cable shielding.



## Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP 68 - 5 bar
Clamp insert	Polyamide

**Note** Length „L“ varies according to cable diameter used

## Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M16-MS 1/EMV	M 16 x 1.5	4.50-10.00	37.3 / 7.00	20	5.00	7.00	8.00	10.00	50	1909500000
VG M20-MS 1/EMV	M 20 x 1.5	6.00-12.00	38.8 / 8.00	22	8.00	10.00	12.00	15.00	50	1909510000
VG M25-MS 1/EMV	M 25 x 1.5	11.00-17.00	42 / 8.00	27	6.00	8.00	9.00	12.00	25	1909520000
VG M32-MS 1/EMV	M 32 x 1.5	15.00-21.00	45 / 8.00	34	6.00	10.00	9.00	15.00	20	1909530000
VG M40-MS 1/EMV	M 40 x 1.5	19.00-28.00	55.1 / 9.00	43	7.00	10.00	10.00	15.00	10	1909540000
VG M50-MS 1/EMV	M 50 x 1.5	27.00-38.00	62.2 / 9.00	58	20.00	30.00	30.00	45.00	10	1909550000
VG M63-MS 1/EMV	M 63 x 1.5	34.00-44.00	71.5 / 14.00	64	23.00	28.00	30.00	40.00	5	1909560000

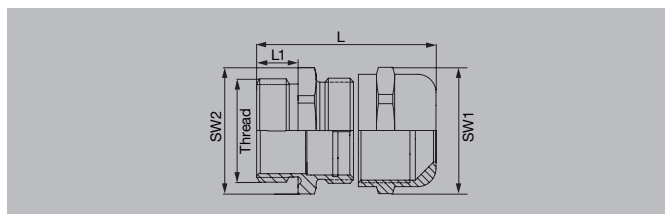
**Note** Further versions on request

## Standard cable glands - Stainless steel

## Cable glands - Stainless steel - IP68



Stainless steel cable glands for standard industrial applications that require a high (IP68) degree of protection. These cable glands – with their resistance to impact and sea water – are also suitable for use in applications under extreme environmental conditions.



## Technical data

Material	Stainless steel
O-Ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP68 - 5 bar (30 min)

## Note

## Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VGM16-SS 68 KB 4-8	M 16 x 1.5	4.00-8.00	7.00	18	8.00	10.00	15.00	12.00	50	1009850000
VGM20-SS 68 KB 6-12	M 20 x 1.5	6.00-12.00	8.00	22	12.00	15.00	22.00	16.00	50	1009860000
VGM25-SS 68 KB 10-14	M 25 x 1.5	10.00-14.00	8.00	27	15.00	20.00	30.00	22.00	25	1009870000
VGM32-SS 68 KB 13-18	M 32 x 1.5	13.00-18.00	9.00	34	28.00	35.00	50.00	40.00	20	1009880000
VGM40-SS 68 KB 18-25	M 40 x 1.5	18.00-25.00	9.00	43	30.00	40.00	60.00	45.00	20	1009890000
VGM50-SS 68 KB 22-32	M 50 x 1.5	22.00-32.00	9.00	55	35.00	45.00	60.00	50.00	12	1009900000
VGM63-SS 68 KB 34-44	M 63 x 1.5	34.00-44.00	14.00	68	45.00	55.00	70.00	60.00	10	1009910000
<b>PG</b>										
VG 9-SS 68 KB 4-8	PG 9	4.00-8.00	6.00	17	8.00	10.00	15.00	12.00	50	1009750000
VG 11-SS 68 KB 5-10	PG 11	5.00-10.00	6.00	22	10.00	13.00	20.00	15.00	50	1009760000
VG 13.5-SS 68 KB 6-12	PG 13.5	6.00-12.00	6.50	22	12.00	15.00	22.00	16.00	50	1009770000
VG 16-SS 68 KB 10-14	PG 16	10.00-14.00	6.50	24	15.00	20.00	30.00	22.00	25	1009780000
VG 21-SS 68 KB 13-18	PG 21	13.00-18.00	7.50	30	28.00	35.00	50.00	40.00	25	1009790000
VG 29-SS 68 KB 18-25	PG 29	18.00-25.00	8.00	40	30.00	40.00	60.00	45.00	20	1009800000
VG 36-SS 68 KB 22-32	PG 36	22.00-32.00	9.00	50	35.00	45.00	60.00	50.00	15	1009810000
VG 42-SS 68 KB 30-38	PG 42	30.00-38.00	12.00	58	40.00	50.00	70.00	55.00	12	1009820000
VG 48-SS 68 KB 34-44	PG 48	34.00-44.00	14.00	64	45.00	55.00	70.00	60.00	10	1009830000

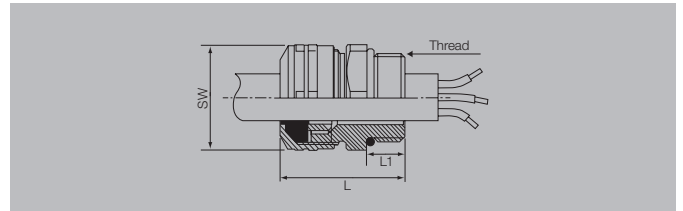
## Note



## Cable glands - Brass - Ex e, IP 68



Brass nickel-plated cable glands for use in Ex zones Ex-e and Ex-i.



## Technical data

Material	Brass, nickel-plated
O-ring / Seal insert	NBR / CR
Temperature range	-40 °C...100 °C
Degree of protection	IP 68 - 5 bar (30 min.)
Approval	Ex e II, II 2 GD

**Note** Length „L“ varies according to cable diameter used

## Ordering data

Type	Thread	KB	L/L1	SW	TRQ CN, min.	TRQ CN, max.	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>										
VG M20-EXE MS	M 20 x 1.5	8.50-13.00	28 / 8.00	24	27.50	27.50	6.00	6.00	50	1737220000
VG M25-EXE MS	M 25 x 1.5	13.50-18.00	33 / 9.00	30	45.00	45.00	10.00	10.00	20	1737230000
VG M32-EXE MS	M 32 x 1.5	17.50-25.00	38 / 10.00	41	85.00	85.00	17.50	17.50	20	1737240000
<b>NPT</b>										
VG NPT 3/4" Eex-e MS	NPT 3/4"	13.50-18.00	24 / 16.00	30					1	1778150000

**Note** Further versions available on request  
Suitable for the Heat Trace connector, Chapter G

## Adaptors

### Adaptors with NPT male threads



Adaptors can be used to connect threaded holes and cable glands of different thread sizes and types.

### Technical data

Material	Brass, nickel-plated
Temperature range	-40 °C...100 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 68
Approval	II 2 GD, Ex d IIC, Ex e II, Ex tD

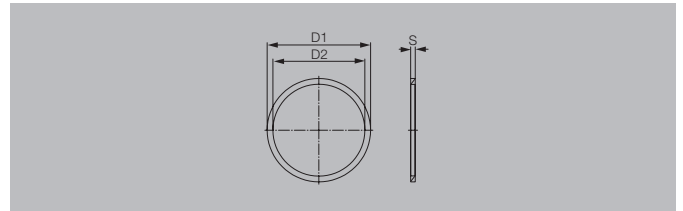
### Ordering data

External thread	3/4" NPT
Inner thread	Order No.
M20	1737640000
M25	1737800000
M32	1737950000
1/2" NPT	1738400000
3/4" NPT	1738560000
<b>Note</b>	We recommend using sealing compound or tape Suitable for the Heat Trace connector, Chapter G

Flat IP washers - Standard - Polyethylene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs. The IP washer is also suitable as a replacement for O-rings.



Technical data

Material / Colour	Polyethylene / transparent
Temperature range	-30 °C...90 °C

Note

Ordering data

Type	Thread	D1	D2	S	Qty.	Order No.
<b>metric</b>						
GWDR M12-PO	M 12 x 1.5	16.00	12.00	1.50	50	1777920000
GWDR M16-PO	M 16 x 1.5	20.00	16.00	1.50	50	1777930000
GWDR M20-PO	M 20 x 1.5	25.00	20.40	2.00	100	1777940000
GWDR M25-PO	M 25 x 1.5	30.00	25.00	2.00	50	1777950000
GWDR M32-PO	M 32 x 1.5	38.00	32.00	2.00	50	1777960000
GWDR M40-PO	M 40 x 1.5	45.00	40.00	2.00	50	1777970000
GWDR M50-PO	M 50 x 1.5	56.00	50.00	2.00	50	1777980000
GWDR M63-PO	M 63 x 1.5	70.00	63.00	2.00	50	1777990000
<b>PG</b>						
GWDR PG7-PO	PG 7	16.50	12.50	1.60	100	1719440000
GWDR PG9-PO	PG 9	19.00	15.20	1.60	100	1719450000
GWDR PG11-PO	PG 11	22.50	18.60	1.80	100	1719460000
GWDR PG13.5-PO	PG 13.5	25.00	20.40	1.80	100	1719470000
GWDR PG16-PO	PG 16	27.00	22.50	1.80	100	1719480000
GWDR PG21-PO	PG 21	33.50	28.30	2.20	100	1719490000
GWDR PG29-PO	PG 29	43.50	37.00	2.20	50	1719500000
GWDR PG36-PO	PG 36	55.00	47.00	2.70	50	1719510000
GWDR PG42-PO	PG 42	63.00	54.00	3.20	10	1719520000
GWDR PG48-PO	PG 48	69.00	59.30	3.20	5	1719530000

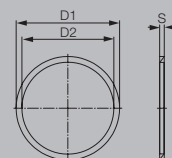
Note Further versions on request

## Accessories - Flat IP washers

## Flat IP washers - Standard - Neoprene



Flat IP washers for increasing the degree of protection for cable glands and sealing plugs – recommended for use in Ex applications. The IP washers are also suitable as a replacement for O-rings.



## Technical data

Material / Colour	Neoprene / RAL 9005
Temperature range	-40 °C...100 °C

## Note

## Ordering data

Type	Thread	D1	D2	S	Qty.	Order No.
<b>metric</b>						
GWDR M12-NP	M 12 x 1.5	16.00	12.00	1.20	50	1913320000
GWDR M16-NP	M 16 x 1.5	22.00	16.00	1.20	50	1736230000
GWDR M20-NP	M 20 x 1.5	24.00	20.00	1.20	50	1736240000
GWDR M25-NP	M 25 x 1.5	30.00	25.00	1.50	50	1736250000
GWDR M32-NP	M 32 x 1.5	42.00	32.00	1.50	50	1736260000
GWDR M40-NP	M 40 x 1.5	52.00	40.00	1.50	20	1736270000
GWDR M50-NP	M 50 x 1.5	63.00	50.00	1.50	20	1736280000
GWDR M63-NP	M 63 x 1.5	77.00	63.00	2.00	10	1736290000
<b>PG</b>						
GWDR PG7-NP	PG 7	17.00	11.60	1.20	100	1719540000
GWDR PG9-NP	PG 9	21.00	14.00	1.20	100	1719550000
GWDR PG11-NP	PG 11	24.00	17.00	1.20	100	1719560000
GWDR PG13.5-NP	PG 13.5	27.00	19.50	1.20	100	1719570000
GWDR PG16-NP	PG 16	30.00	22.50	1.20	100	1719580000
GWDR PG21-NP	PG 21	35.00	28.30	1.50	100	1719590000
GWDR PG29-NP	PG 29	45.00	37.00	1.50	50	1719600000
GWDR PG36-NP	PG 36	60.00	47.00	1.50	20	1719610000
GWDR PG42-NP	PG 42	65.00	54.00	1.50	10	1719620000
GWDR PG48-NP	PG 48	71.00	59.30	1.50	5	1719630000

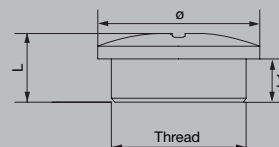
## Note

Further versions on request

## Sealing plugs - Plastic



Plastic sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.



## Technical data

Material / Colour	Polyamid 6 (PA6 - GF30) / RAL 7035
Temperature range	-40 °C...100 °C
Degree of protection	IP 54
Degree of protection with thread gasket	IP 65
Flammability rating	V-2

**Note** Optional sealing ring

## Ordering data

Type	Thread	L	L1	Head Ø	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>								
VP M12 K54	M 12 x 1.5	10	6.00	15.00	0.50	0.50	100	1776930000
VP M16 K54	M 16 x 1.5	11.5	7.00	19.00	0.50	0.50	100	1776920000
VP M20 K54	M 20 x 1.5	12.5	7.50	22.00	1.00	1.00	100	1776910000
VP M25 K54	M 25 x 1.5	15	11.00	27.00	1.00	1.00	100	1776900000
VP M32 K54	M 32 x 1.5	16	11.00	34.00	1.00	1.00	100	1776940000
VP M40 K54	M 40 x 1.5	18	12.00	42.00	2.00	2.00	50	1776950000
VP M50 K54	M 50 x 1.5	20	13.00	52.00	2.00	2.00	25	1776960000
VP M63 K54	M 63 x 1.5	20	14.00	65.00	2.50	2.50	50	1776970000
<b>PG</b>								
VP 7-K54	PG 7	8	6.00	15.00	0.50	0.50	50	1719250000
VP 9-K54	PG 9	9	6.00	19.00	0.50	0.50	100	0294760000
VP 11-K54	PG 11	10.5	6.50	22.00	0.50	0.50	100	0294860000
VP 13.5-K54	PG 13.5	9.5	6.00	25.00	1.00	1.00	100	0294960000
VP 16-K54	PG 16	9.5	6.00	27.00	1.00	1.00	100	0295060000
VP 21-K54	PG 21	11	8.00	33.00	1.00	1.00	100	0295160000
VP 29-K54	PG 29	12	8.00	44.00	1.00	1.00	50	0501160000
VP 36-K54	PG 36	15	10.00	55.00	2.00	2.00	25	0501260000
VP 42-K54	PG 42	16	10.00	62.00	2.00	2.00	10	0501360000
VP 48-K54	PG 48	16	12.00	69.00	2.50	2.50	5	1719260000

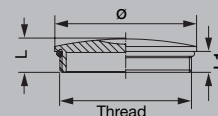
**Note** Further versions on request

## Sealing plugs

## Sealing plugs - Brass - Nickel-plated



Brass sealing plugs with cross-heads are used to seal surplus threaded holes and to maintain the IP protection degree.



## Technical data

Material	Brass, nickel-plated
O-Ring	NBR
Temperature range	-30 °C...100 °C
Degree of protection with thread gasket	IP 68

## Note

## Ordering data

Type	Thread	L	L1	Head Ø	TRQ BO, min.	TRQ BO, max.	Qty.	Order No.
<b>metric</b>								
VP M12-MS65	M 12 x 1.5	7.4	5.00	14.00	8.00	8.00	100	1777720000
VP M16-MS65	M 16 x 1.5	8	5.00	18.00	10.00	10.00	100	1777730000
VP M20-MS65	M 20 x 1.5	9.4	6.50	22.00	12.00	12.00	100	1777740000
VP M25-MS65	M 25 x 1.5	10.8	7.00	28.00	12.00	12.00	100	1777750000
VP M32-MS65	M 32 x 1.5	11.6	8.00	35.00	18.00	18.00	50	1777760000
VP M40-MS65	M 40 x 1.5	12.3	8.00	44.00	18.00	18.00	50	1777770000
VP M50-MS65	M 50 x 1.5	15	9.00	54.00	20.00	20.00	25	1777780000
VP M63-MS65	M 63 x 1.5	18	10.00	67.00	20.00	20.00	10	1777790000
<b>PG</b>								
VP 7-MS65	PG 7	8	5.00	15.00	12.50	12.50	100	0521600000
VP 9-MS65	PG 9	8	5.00	18.00	15.20	15.20	100	0294700000
VP 11-MS65	PG 11	8	5.00	20.00	18.60	18.60	100	0294800000
VP 13.5-MS65	PG 13.5	9.5	5.50	22.00	20.40	20.40	100	0294900000
VP 16-MS65	PG 16	9	5.50	24.00	22.50	22.50	100	0295000000
VP 21-MS65	PG 21	11	6.00	30.00	28.30	28.30	100	0295100000
VP 29-MS65	PG 29	12	8.00	40.00	37.00	37.00	50	0501100000
VP 36-MS65	PG 36	15	9.00	50.00	47.00	47.00	25	0501200000
VP 42-MS65	PG 42	16	10.00	57.00	54.00	54.00	10	0501300000
VP 48-MS65	PG 48	16	10.00	64.00	59.30	59.30	5	1719270000

## Note

Further versions on request