

# HELUTOR

## Технические характеристики

### По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231  
Архангельск (8182)63-90-72  
Астрахань (8512)99-46-04  
Барнаул (3852)73-04-60  
Белгород (4722)40-23-64  
Брянск (4832)59-03-52  
Владивосток (423)249-28-31  
Волгоград (844)278-03-48  
Вологда (8172)26-41-59  
Воронеж (473)204-51-73  
Екатеринбург (343)384-55-89  
Иваново (4932)77-34-06  
Ижевск (3412)26-03-58  
Иркутск (395)279-98-46  
Россия (495)268-04-70

Казань (843)206-01-48  
Калининград (4012)72-03-81  
Калуга (4842)92-23-67  
Кемерово (3842)65-04-62  
Киров (8332)68-02-04  
Краснодар (861)203-40-90  
Красноярск (391)204-63-61  
Курск (4712)77-13-04  
Липецк (4742)52-20-81  
Магнитогорск (3519)55-03-13  
Москва (495)268-04-70  
Мурманск (8152)59-64-93  
Набережные Челны (8552)20-53-41  
Нижний Новгород (831)429-08-12  
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81  
Новосибирск (383)227-86-73  
Омск (3812)21-46-40  
Орел (4862)44-53-42  
Оренбург (3532)37-68-04  
Пенза (8412)22-31-16  
Пермь (342)205-81-47  
Ростов-на-Дону (863)308-18-15  
Рязань (4912)46-61-64  
Самара (846)206-03-16  
Санкт-Петербург (812)309-46-40  
Саратов (845)249-38-78  
Севастополь (8692)22-31-93  
Симферополь (3652)67-13-56  
Казахстан (7172)727-132

Смоленск (4812)29-41-54  
Сочи (862)225-72-31  
Ставрополь (8652)20-65-13  
Сургут (3462)77-98-35  
Тверь (4822)63-31-35  
Томск (3822)98-41-53  
Тула (4872)74-02-29  
Тюмень (3452)66-21-18  
Ульяновск (8422)24-23-59  
Уфа (347)229-48-12  
Хабаровск (4212)92-98-04  
Челябинск (351)202-03-61  
Череповец (8202)49-02-64  
Ярославль (4852)69-52-93

**HELUTOP® HT** cable gland**HELUTOP® HT**

The plastic cable gland with vibration protection.

**Application**

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

**Material**

Polyamide PA 6  
Seal: Chloroprene-rubber (CR)

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

**Properties**

- Optimum strain relief through clamping plates
- Easy to assemble
- Large clamping areas

**Note**

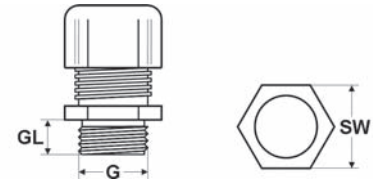
Details on the individual tests appear in section Technical Information.

**Technical data**

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C

Test standard: EN50262

**Dimensions**

- G Thread size  
GL Thread length  
SW Spanner size

**metric thread**

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit |
|------------------------------------|-----------------------------------|-------------------------------|---------------|----------------------------|------------------------|-----------------------|------|
| 93908                              | 93923                             | 93937                         | M12 x 1,5     | 3,0 - 6,5                  | 6,0                    | 15                    | -    |
| 93909                              | 93924                             | 93938                         | M16 x 1,5     | 4,0 - 8,0                  | 8,0                    | 19                    | 50   |
| 907275                             | 907276                            | 907277                        | M16 x 1,5     | 5,0 - 10,0                 | 8,0                    | 19                    | 50   |
| 92667                              | 92668                             | 92669                         | M16 x 1,5     | 5,0 - 10,0                 | 10,0                   | 22                    | 50   |
| 93910                              | 93925                             | 93939                         | M20 x 1,5     | 6,0 - 12,0                 | 10,0                   | 24                    | 50   |
| 93911                              | 93926                             | 93940                         | M25 x 1,5     | 11,0 - 17,0                | 8,0                    | 29                    | 50   |
| 93912                              | 93927                             | 93941                         | M32 x 1,5     | 15,0 - 21,0                | 10,0                   | 36                    | 25   |
| 93913                              | 93928                             | 93942                         | M40 x 1,5     | 19,0 - 28,0                | 10,0                   | 46                    | 20   |
| 93914                              | 93929                             | 93943                         | M50 x 1,5     | 30,0 - 38,0                | 18,0                   | 60                    | 10   |
| 93915                              | 93930                             | 93944                         | M63 x 1,5     | 34,0 - 44,0                | 18,0                   | 65                    | 10   |

**metric thread - with reducing seal**

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit |
|------------------------------------|-----------------------------------|-------------------------------|---------------|----------------------------|------------------------|-----------------------|------|
| 903532                             | 903542                            | 903552                        | M12 x 1,5     | 2,0 - 5,0                  | 8,0                    | 15                    | -    |
| 903533                             | 903543                            | 903553                        | M16 x 1,5     | 2,0 - 6,0                  | 8,0                    | 19                    | 50   |
| 903534                             | 903544                            | 903554                        | M20 x 1,5     | 5,0 - 9,0                  | 10,0                   | 24                    | 50   |
| 903535                             | 903545                            | 903555                        | M25 x 1,5     | 9,0 - 13,0                 | 8,0                    | 29                    | 50   |
| 903536                             | 903546                            | 903556                        | M32 x 1,5     | 11,0 - 15,0                | 10,0                   | 36                    | 25   |
| 903537                             | 903547                            | 903557                        | M40 x 1,5     | 16,0 - 23,0                | 10,0                   | 46                    | 20   |
| 903538                             | 903548                            | 903558                        | M50 x 1,5     | 25,0 - 31,0                | 18,0                   | 60                    | 10   |
| 903539                             | 903549                            | 903559                        | M63 x 1,5     | 29,0 - 35,0                | 18,0                   | 65                    | 10   |

Continuation ►

**HELUTOP® HT** cable gland**PG thread**

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>PG | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit |   |
|------------------------------------|-----------------------------------|-------------------------------|------------|----------------------------|------------------------|-----------------------|------|---|
| 99300                              | 99310                             | 99320                         | 7          | 3,0 - 6,5                  | 8,0                    | 15                    | 100  | - |
| 99301                              | 99311                             | 99321                         | 9          | 4,0 - 8,0                  | 8,0                    | 19                    | 50   | - |
| 99302                              | 99312                             | 99322                         | 11         | 5,0 - 10,0                 | 8,0                    | 22                    | 50   | - |
| 99303                              | 99313                             | 99323                         | 13,5       | 6,0 - 12,0                 | 9,0                    | 24                    | 50   | - |
| 99304                              | 99314                             | 99324                         | 16         | 10,0 - 14,0                | 10,0                   | 27                    | 50   | - |
| 99305                              | 99315                             | 99325                         | 21         | 13,0 - 18,0                | 11,0                   | 33                    | 25   | - |
| 99306                              | 99316                             | 99326                         | 29         | 18,0 - 25,0                | 11,0                   | 42                    | 20   | - |
| 99307                              | 99317                             | 99327                         | 36         | 22,0 - 32,0                | 13,0                   | 53                    | 10   | - |
| 99308                              | 99318                             | 99328                         | 42         | 30,0 - 38,0                | 13,0                   | 60                    | 10   | - |
| 99309                              | 99319                             | 99329                         | 48         | 34,0 - 44,0                | 14,0                   | 65                    | 10   | - |

**NPT thread**

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>NPT | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit |   |
|------------------------------------|-----------------------------------|-------------------------------|-------------|----------------------------|------------------------|-----------------------|------|---|
| 92780                              | 92790                             | 92800                         | 3/8"        | 5,0 - 10,0                 | 15,0                   | 22                    | 50   | - |
| 92781                              | 92791                             | 92801                         | 1/2"        | 6,0 - 12,0                 | 15,0                   | 24                    | 50   | - |
| 92782                              | 92792                             | 92802                         | 1/2"        | 10,0 - 14,0                | 15,0                   | 27                    | 50   | - |
| 92783                              | 92793                             | 92803                         | 3/4"        | 13,0 - 18,0                | 15,0                   | 33                    | 25   | - |
| 92784                              | 92794                             | 92804                         | 1"          | 18,0 - 25,0                | 18,0                   | 42                    | 20   | - |

Dimensions and specifications may be changed without prior notice.

**HELUTOP® HT-MS** cable gland**HELUTOP® HT-MS**

The nickel-coated brass cable gland.

**Application**

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

**Material**

Brass, nickel plated  
Clamp: Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
O-ring: NBR

**Properties**

- Optimum strain relief through clamping plates
- Easy to assemble
- Large clamping areas

**Note**

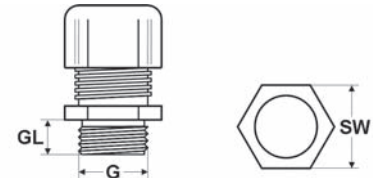
Details on the individual tests appear in section "Technical Information".

**Technical data**

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262

**Dimensions**

G Thread size  
GL Thread length  
SW Spanner size

**metric thread**

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|------------|----------------------|------------------|-----------------|------|---|
| 90760    | M12 x 1,5  | 3,0 - 6,5            | 6,0              | 14              | 50   | - |
| 99960    | M16 x 1,5  | 5,0 - 10,0           | 7,0              | 20              | 50   | - |
| 90762    | M20 x 1,5  | 6,0 - 12,0           | 8,0              | 22              | 50   | - |
| 99961    | M25 x 1,5  | 11,0 - 17,0          | 8,0              | 27              | 25   | - |
| 94624    | M32 x 1,5  | 15,0 - 21,0          | 8,0              | 34              | 20   | - |
| 99962    | M40 x 1,5  | 19,0 - 28,0          | 9,0              | 43              | 5    | - |
| 99963    | M50 x 1,5  | 30,0 - 38,0          | 9,0              | 58              | 5    | - |
| 90767    | M63 x 1,5  | 34,0 - 44,0          | 14,0             | 64 / 68         | 5    | - |
| 906199   | M63 x 1,5  | 44,0 - 55,0          | 10,0             | 75              | 5    | - |

**metric thread - with reducing seal**

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|------------|----------------------|------------------|-----------------|------|---|
| 903560   | M12 x 1,5  | 2,0 - 5,0            | 6,0              | 14              | 50   | - |
| 903561   | M16 x 1,5  | 3,0 - 7,0            | 7,0              | 20              | 50   | - |
| 903562   | M20 x 1,5  | 5,0 - 9,0            | 8,0              | 22              | 50   | - |
| 903563   | M25 x 1,5  | 9,0 - 13,0           | 8,0              | 27              | 25   | - |
| 903564   | M32 x 1,5  | 11,0 - 15,5          | 8,0              | 34              | 20   | - |
| 903565   | M40 x 1,5  | 16,0 - 23,0          | 9,0              | 43              | 5    | - |
| 903566   | M50 x 1,5  | 25,0 - 31,0          | 9,0              | 58              | 5    | - |
| 903567   | M63 x 1,5  | 29,0 - 35,0          | 14,0             | 64 / 68         | 5    | - |

Continuation ▶



**HELUTOP® HT-MS** cable gland**PG thread**

| Part no. | Size PG | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|---------|----------------------|------------------|-----------------|------|---|
| 90750    | 7       | 3,0 - 6,5            | 5,0              | 14              | 50   | - |
| 90751    | 9       | 4,0 - 8,0            | 6,0              | 17              | 50   | - |
| 90752    | 11      | 5,0 - 10,0           | 6,0              | 20              | 50   | - |
| 90753    | 13,5    | 6,0 - 12,0           | 6,5              | 22              | 50   | - |
| 90754    | 16      | 10,0 - 14,0          | 6,5              | 24              | 25   | - |
| 90755    | 21      | 13,0 - 18,0          | 7,0              | 30              | 25   | - |
| 90756    | 29      | 18,0 - 25,0          | 8,0              | 40              | 20   | - |
| 90757    | 36      | 22,0 - 32,0          | 9,0              | 50              | 5    | - |
| 90758    | 42      | 32,0 - 38,0          | 14,0             | 58              | 5    | - |
| 90759    | 48      | 37,0 - 44,0          | 14,0             | 64              | 5    | - |

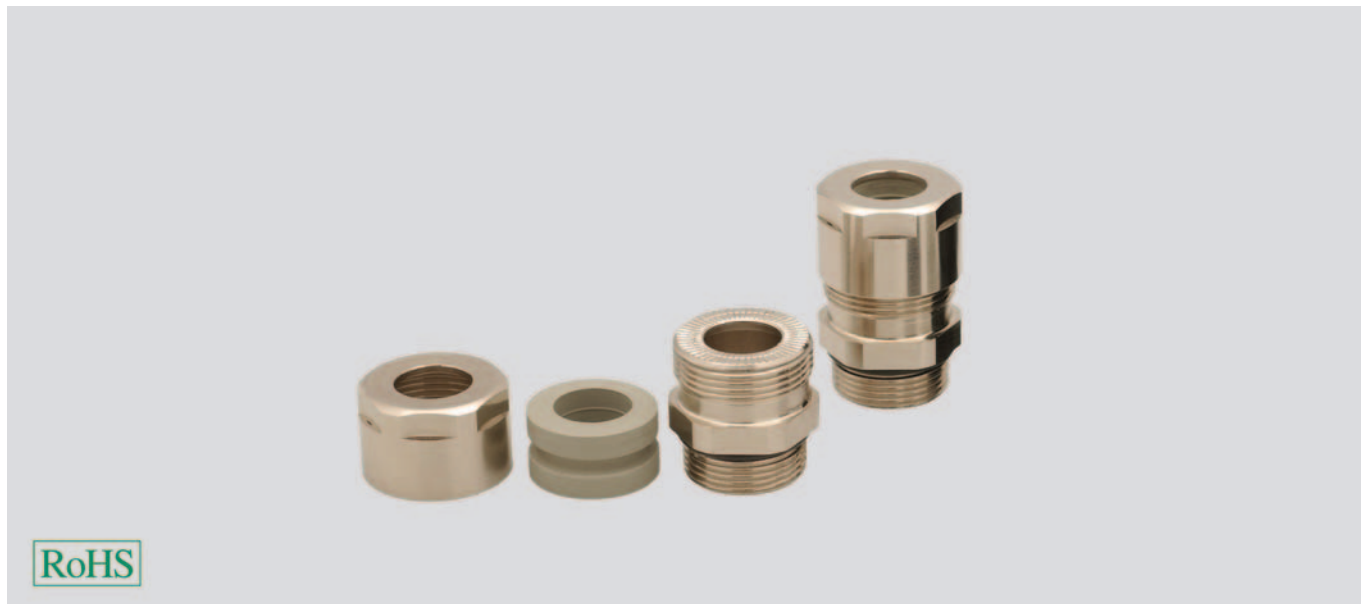
**NPT thread**

| Part no. | Size NPT | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|----------|----------------------|------------------|-----------------|------|---|
| 99965    | 3/8"     | 5,0 - 10,0           | 15,0             | 20              | 50   | - |
| 99966    | 1/2"     | 6,0 - 12,0           | 15,0             | 22              | 50   | - |
| 99967    | 3/4"     | 13,0 - 18,0          | 15,0             | 27              | 25   | - |
| 99968    | 1"       | 18,0 - 25,0          | 17,0             | 34              | 10   | - |

Dimensions and specifications may be changed without prior notice.

**HELUTOP® HT-MS Plus** cable gland

for increased strain relief

**HELUTOP® HT-MS Plus**

The nickel-coated brass cable gland for very high density and strain relief.

**Application**

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

**Material**

Brass, nickel plated  
Seal: NBR  
O-ring: NBR

**Properties**

- Optimum strain relief through clamping plates (strain relief B to EN 50262 over the entire clamping region)
- Easy to assemble
- Large clamping areas

**Note**

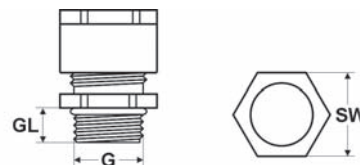
For rotating the cap nut use tool. Note tightening torque!  
Details on the individual tests appear in section "Technical Information".

**Technical data**

Protection class: IP 68 - 40 bar / IP 69K

Temperature range: -40°C up to +120°C

Test standard: EN50262

**Dimensions**

G Thread size  
GL Thread length  
SW Spanner size

**metric thread**

| Part no. | Size Metr. | Sealing insert colour | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|------------|-----------------------|----------------------|------------------|-----------------|------|---|
| 905720   | M16 x 1,5  | grey                  | 4,0 - 11,0           | 8,0              | 21              | 100  | - |
| 905721   | M20 x 1,5  | grey                  | 5,0 - 13,0           | 10,0             | 24              | 100  | - |
| 905722   | M25 x 1,5  | grey                  | 6,5 - 15,5           | 10,0             | 28              | 50   | - |
| 905723   | M25 x 1,5  | grey                  | 10,0 - 20,0          | 10,0             | 30              | 50   | - |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-MS-EX-d cable gland



Brass, explosive area, pressure resistant



## HELUTOP® HT-MS-EX-d

For use in explosive areas

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Brass, nickel plated  
 Clamp: Polyamide PA 6  
 Seal: Chloroprene-rubber (CR)  
 O-ring: NBR

### Note

**Certificate of Conformity:**  
 IMQ 11 ATEX 038X

### Marking:

Ex-d, Ex-e, EX II 2GD, Exd IIC Gb, Exe IIC Gb,  
 Ex t IIIC DB  
 Stainless steel 1.4404 and other temperature  
 ranges available on request.

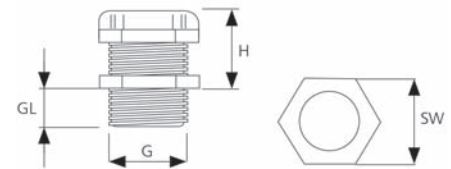
**Unit: 1 pcs**

### Technical data

Protection class: IP 66 / IP 68 (EN 60529)

Temperature range: -30°C up to +120°C

Test standard: EN60079-0:2009 /  
 EN60079-1:2007 / EN60079-7:2007 /  
 EN60079-11:2010 / EN60079-31:2009



### Dimensions

G Thread size  
 GL Thread length  
 SW Spanner size

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Height mm |
|----------|------------|----------------------|------------------|-----------------|-----------|
| 906941   | M16 x 1,5  | 3,0 - 12,0           | 16,0             | 22              | 24        |
| 906942   | M20 x 1,5  | 3,0 - 12,0           | 16,0             | 22              | 24        |
| 906943   | M20 x 1,5  | 10,0 - 16,0          | 16,0             | 28              | 29        |
| 906944   | M25 x 1,5  | 10,0 - 18,0          | 16,0             | 28              | 24        |
| 906945   | M25 x 1,5  | 14,0 - 20,0          | 16,0             | 35              | 34        |
| 906946   | M32 x 1,5  | 14,0 - 24,0          | 16,0             | 35              | 27        |
| 906947   | M32 x 1,5  | 22,0 - 28,0          | 16,0             | 45              | 37        |
| 906948   | M40 x 1,5  | 22,0 - 32,0          | 18,0             | 45              | 27        |
| 906949   | M40 x 1,5  | 26,0 - 34,0          | 18,0             | 50              | 37        |
| 906950   | M50 x 1,5  | 26,0 - 35,0          | 18,0             | 55 / 50         | 28        |
| 906951   | M50 x 1,5  | 35,0 - 44,0          | 18,0             | 55 / 58         | 45        |
| 906952   | M63 x 1,5  | 35,0 - 45,0          | 18,0             | 68 / 58         | 35        |
| 906953   | M63 x 1,5  | 45,0 - 57,0          | 18,0             | 75 / 80         | 44        |
| 906954   | M75 x 1,5  | 46,0 - 62,0          | 20,0             | 80              | 44        |
| 906955   | M75 x 1,5  | 60,0 - 70,0          | 20,0             | 95              | 55        |
| 906956   | M90 x 1,5  | 60,0 - 75,0          | 20,0             | 95              | 55        |
| 906957   | M90 x 1,5  | 75,0 - 85,0          | 20,0             | 105             | 57        |
| 906958   | M100 x 1,5 | 75,0 - 85,0          | 20,0             | 105             | 57        |
| 906982   | M110 x 1,5 | 85,0 - 95,0          | 20,0             | 115             | 57        |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-Clean Stainless steel cable gland



## HELUTOP® HT-Clean

Highest requirements to cleanliness and cleaning.

### Application

- Food industry - milk and meat products
- Packaging of food machines
- Beverage industry
- Pharmaceutical industry
- Clean room technology
- Biotechnology
- Chemical industry

### Material

Stainless steel 1.4305 / AISI 303  
Strain relief: POM  
Grommet: **TPE according to FDA 21 CFR 177.2600**

### Properties

- the smooth surface prevents to adhere harmful micro organisms
- easy, fast and less expensive cleaning because of the smooth surface
- suitable for high pressure steam cleanin
- resistant against chemical cleaning supplies
- no threads are exposed
- high tightness
- no enter from water and dirt from outside
- reliable strain relief due to strain relief element separated from grommet

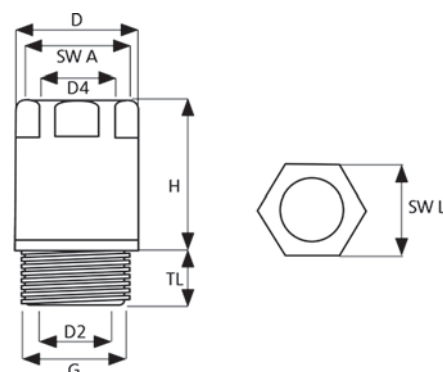
### Note

- For tightening from outside you have to use the listed tightening tool
- The cable gland can be assembled with a commercial socket wrench
- **Delivery including counter nut**

### Technical data

Protection class: IP 68-5 bar, 30 min. according to EN 60529;  
IP 69K according to DIN 40050-9

Temperature range: -20°C up to +100°C  
Temperature range temporary: -40°C up to +150°C



### Dimensions

D Outer diameter of upper part  
D2 Inner diameter of thread  
D4 Inner diameter of upper part  
H Height without thread  
TL Thread length  
SW Spanner size

## HELUTOP® Clean

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Outer Ø of upper part mm | Inner Ø of upper part mm | Inner Ø of thread mm | Height without thread mm | Recommended Cap Counternut Nm | Unit |
|----------|------------|----------------------|------------------|-----------------|--------------------------|--------------------------|----------------------|--------------------------|-------------------------------|------|
| 906914   | M12 x 1,5  | 3,0 - 6,5            | 6,0              | 14              | 15,6                     | 6,8                      | 7                    | 21,5                     | 2,5                           | 1    |
| 906915   | M16 x 1,5  | 5,0 - 10,0           | 7,0              | 18              | 20,2                     | 10,3                     | 10                   | 23                       | 4                             | 1    |
| 906916   | M20 x 1,5  | 6,0 - 12,0           | 10,0             | 22              | 24,1                     | 12,3                     | 13                   | 27                       | 5                             | 1    |
| 906917   | M25 x 1,5  | 12,0 - 17,0          | 14,0             | 28              | 30,1                     | 17,3                     | 17                   | 30                       | 6                             | 1    |

### Counternut

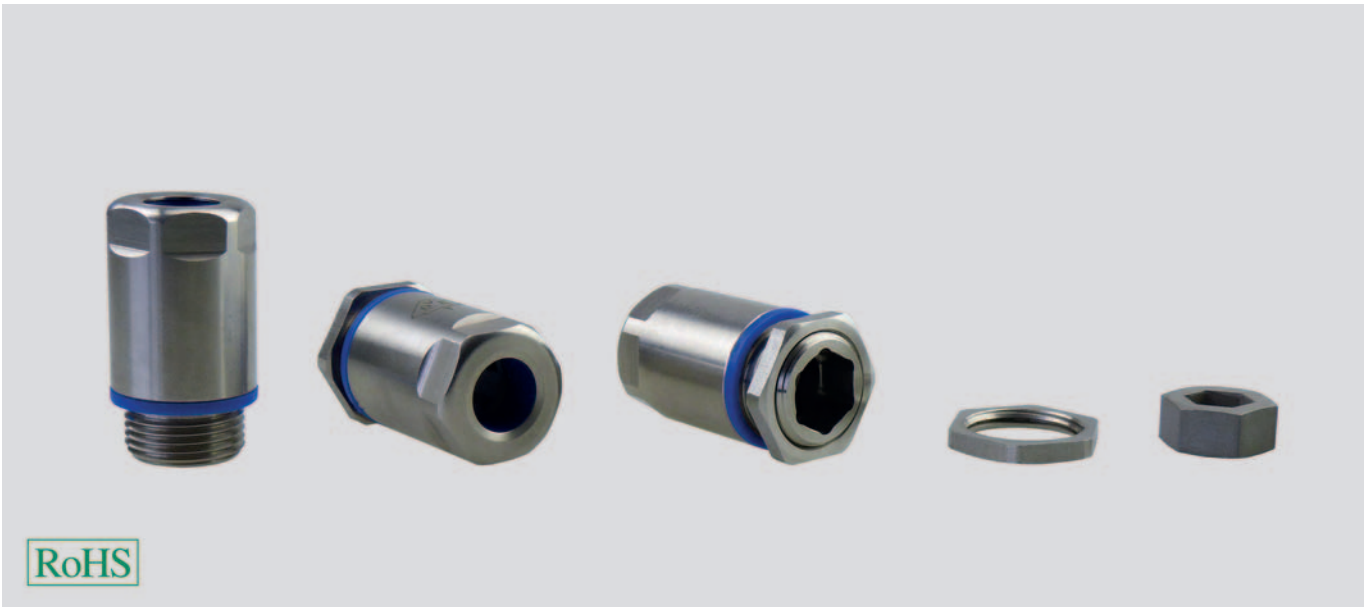
| Spanner size mm | Height without thread mm | Recommended Cap Counternut Nm |
|-----------------|--------------------------|-------------------------------|
| 15              | 2,8                      | 6                             |
| 19              | 3                        | 9                             |
| 24              | 3,5                      | 12                            |
| 30              | 4                        | 14                            |

### Tightening Tool

| Part no. | Size Metr. | Spanner size mm | Height mm | Unit |
|----------|------------|-----------------|-----------|------|
| 906921   | M12 x 1,5  | 5 / 7           | 5         | 1    |
| 906922   | M16 x 1,5  | 6 / 10          | 5         | 1    |
| 906923   | M20 x 1,5  | 8 / 13          | 8         | 1    |
| 906924   | M25 x 1,5  | 10 / 17         | 8         | 1    |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-Clean-EMV (EMC) Stainless steel cable gland



## HELUTOP® HT-Clean EMC

Highest requirements to cleanliness and cleaning.

### Application

- Food industry - milk and meat products
- Packaging of food machines
- Beverage industry
- Pharmaceutical industry
- Clean room technology
- Biotechnology
- Chemical industry

### Material

Stainless steel 1.4305 / AISI 303  
Strain relief: POM  
Grommet: **TPE according to FDA 21 CFR 177.2600**

### Properties

- the smooth surface prevents to adhere harmful micro organisms
- easy, fast and less expensive cleaning because of the smooth surface
- suitable for high pressure steam cleanin
- resistant against chemical cleaning supplies
- no threads are exposed
- high tightness
- no enter from water and dirt from outside
- reliable strain relief due to strain relief element separated from grommet

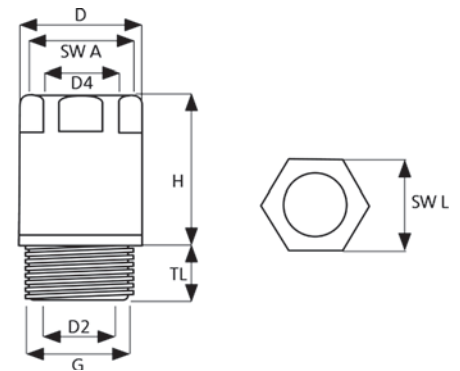
### Note

- For tightening from outside you have to use the listed tightening tool
- The cable gland can be assembled with a commercial socket wrench
- **Delivery including Counternut**

### Technical data

Protection class: IP 68-5 bar, 30 min. according to EN 60529;  
IP 69K according to DIN 40050-9

Temperature range: -20°C up to +100°C  
Temperature range temporary: -40°C up to +150°C



### Dimensions

- D Outer diameter of upper part
- D2 Inner diameter of thread
- D4 Inner diameter of upper part
- H Height without thread
- TL Thread length
- SW Spanner size

## HELUTOP® Clean-EMV (EMC)

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Outer Ø of upper part mm | Inner Ø of upper part mm | Inner Ø of thread mm | Height without thread mm | Recommended Cap Counternut Nm | Unit |
|----------|------------|----------------------|------------------|-----------------|--------------------------|--------------------------|----------------------|--------------------------|-------------------------------|------|
| 906918   | M16 x 1,5  | 5,0 - 10,0           | 7,0              | 18              | 20,2                     | 10,3                     | 10                   | 28,5                     | 4                             | 1    |
| 906919   | M20 x 1,5  | 6,0 - 12,0           | 10,0             | 22              | 24,1                     | 12,3                     | 13                   | 33                       | 5                             | 1    |
| 906920   | M25 x 1,5  | 12,0 - 17,0          | 14,0             | 28              | 30,1                     | 17,3                     | 17                   | 38                       | 6                             | 1    |

## Counternut Clean-EMV (EMC)

| Spanner size mm | Height without thread mm | Recommended Cap Counternut Nm |
|-----------------|--------------------------|-------------------------------|
| 19              | 3                        | 9                             |
| 24              | 3,5                      | 12                            |
| 30              | 4                        | 14                            |

## Tightening Tool

| Part no. | Size Metr. | Spanner size mm | Height mm | Unit |
|----------|------------|-----------------|-----------|------|
| 906921   | M12 x 1,5  | 5 / 7           | 5         | 1    |
| 906922   | M16 x 1,5  | 6 / 10          | 5         | 1    |
| 906923   | M20 x 1,5  | 8 / 13          | 8         | 1    |
| 906924   | M25 x 1,5  | 10 / 17         | 8         | 1    |

Dimensions and specifications may be changed without prior notice.

**HELUTOP® HT-PA-EX** explosive area**HELUTOP® HT-PA-EX**

For use in explosive areas.

**Application**

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

**Material**

Polyamide PA 6  
Seal: NBR  
O-ring: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

**Note****Certificate of Conformity:**

IMQ 08 ATEX 012 X

**Marking:** EX II 2GD Ex e II, Ex tD A21

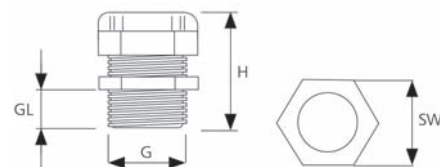
For intrinsically safe area type "i", in blue on request.

**Technical data**

Protection class: IP 66 / IP 68 (EN 60529)

Temperature range: -20°C up to +80°C

Test standard: EN60079-0:2006 /  
EN60079-7:2007 / EN60079-11:2007 /  
EN61241-0:2006 / EN61241-1:2004

**Dimensions**

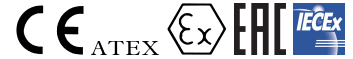
G Thread size  
GL Thread length  
SW Spanner size

| Part no. black | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Height mm | Unit |
|----------------|------------|----------------------|------------------|-----------------|-----------|------|
| 906689         | M12 x 1,5  | 3,0 - 6,5            | 8,0              | 15              | 31        | 100  |
| 906936         | M12 x 1,5  | 3,0 - 6,5            | 15,0             | 15              | 31        | 100  |
| 906690         | M16 x 1,5  | 4,5 - 10,0           | 10,0             | 19              | 38        | 50   |
| 906937         | M16 x 1,5  | 4,5 - 10,0           | 15,0             | 19              | 43        | 50   |
| 906691         | M20 x 1,5  | 6,0 - 12,0           | 10,0             | 24              | 41        | 50   |
| 906938         | M20 x 1,5  | 6,0 - 12,0           | 15,0             | 24              | 46        | 50   |
| 906692         | M20 x 1,5  | 10,0 - 14,0          | 10,0             | 27              | 42        | 50   |
| 906939         | M20 x 1,5  | 10,0 - 14,0          | 15,0             | 27              | 46,5      | 50   |
| 906693         | M25 x 1,5  | 13,0 - 18,0          | 10,0             | 33              | 47        | 25   |
| 906940         | M25 x 1,5  | 13,0 - 18,0          | 15,0             | 33              | 47        | 25   |
| 906694         | M25 x 1,5  | 11,0 - 17,0          | 8,0              | 29              | 42,5      | 50   |
| 906695         | M32 x 1,5  | 15,0 - 21,0          | 10,0             | 36              | 50        | 25   |
| 906696         | M32 x 1,5  | 18,0 - 25,0          | 15,0             | 42              | 58,5      | 25   |
| 906697         | M40 x 1,5  | 19,0 - 28,0          | 10,0             | 46              | 55        | 20   |
| 906698         | M40 x 1,5  | 22,0 - 32,0          | 18,0             | 53              | 68        | 10   |
| 906699         | M50 x 1,5  | 30,0 - 38,0          | 18,0             | 60              | 69        | 10   |
| 906700         | M63 x 1,5  | 34,0 - 44,0          | 18,0             | 65              | 71        | 10   |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-PA-EX-Plus

explosive area



## HELUTOP® HT-PA-EX-Plus

For use in explosive areas.

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
Flat seal: Chloroprene Rubber (CR)

- phosphor-free
- silicone-free
- cadmium-free

### Note

For intrinsically safe area type "I", in blue on request.

### Certificate of Conformity:

IMQ 13 ATEX 010 X  
IECEx IMQ 13.0003X

### Approval:

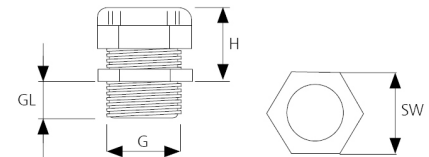
EX II 2GD  
Ex e IIC Gb/Ex tb IIC Db IP 66/68

### Technical data

Protection class: IP 66 / IP 68  
Impact-resistant: 7 Joule

Temperature range: -40°C up to +70°C

Test standard: EN 60079-0:2012 / EN 60079-7:2007 / EN 60079-11:2012 / EN 60079-31:2014 / IEC 60079-0:2011 / IEC 60079-7:2006 / IEC 60079-11:2011 / IEC 60079-31:2013



### Dimensions

G Thread size  
GL Thread length  
H Height

### Chloroprene sealing

| Part no.<br>black | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Height<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|-------------------|---------------|----------------------------|------------------------|-----------------------|--------------|------|------------------------------------|-----------|------------|
|                   |               |                            |                        |                       |              |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 908080            | M12 x 1,5     | 4,0 - 6,5                  | 10,0                   | 15                    | 22           | 100  | o. r.                              | o. r.     | o. r.      |
| 908081            | M12 x 1,5     | 4,0 - 6,5                  | 15,0                   | 15                    | 22           | 100  | o. r.                              | o. r.     | o. r.      |
| 908082            | M16 x 1,5     | 5,0 - 8,0                  | 10,0                   | 19                    | 26           | 50   | o. r.                              | o. r.     | o. r.      |
| 908083            | M16 x 1,5     | 6,0 - 10,0                 | 10,0                   | 22                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908084            | M16 x 1,5     | 6,0 - 10,0                 | 15,0                   | 22                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908085            | M20 x 1,5     | 6,0 - 10,0                 | 10,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908086            | M20 x 1,5     | 7,0 - 12,0                 | 10,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908087            | M20 x 1,5     | 7,0 - 12,0                 | 15,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908088            | M20 x 1,5     | 7,0 - 13,0                 | 10,0                   | 25                    | 30,5         | 50   | o. r.                              | o. r.     | o. r.      |
| 908089            | M20 x 1,5     | 11,0 - 14,0                | 10,0                   | 27                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908090            | M20 x 1,5     | 11,0 - 14,0                | 15,0                   | 27                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908091            | M25 x 1,5     | 11,0 - 14,0                | 10,0                   | 27                    | 29           | 25   | o. r.                              | o. r.     | o. r.      |
| 908092            | M25 x 1,5     | 11,0 - 14,0                | 15,0                   | 27                    | 29           | 25   | o. r.                              | o. r.     | o. r.      |
| 908093            | M25 x 1,5     | 12,0 - 17,0                | 15,0                   | 29                    | 35           | 25   | o. r.                              | o. r.     | o. r.      |
| 908094            | M25 x 1,5     | 12,0 - 17,0                | 10,0                   | 29                    | 35           | 25   | o. r.                              | o. r.     | o. r.      |
| 908095            | M25 x 1,5     | 14,0 - 18,0                | 10,0                   | 33                    | 37           | 25   | o. r.                              | o. r.     | o. r.      |
| 908096            | M25 x 1,5     | 14,0 - 18,0                | 15,0                   | 33                    | 37           | 25   | o. r.                              | o. r.     | o. r.      |
| 908098            | M32 x 1,5     | 16,0 - 21,0                | 10,0                   | 36                    | 42           | 20   | o. r.                              | o. r.     | o. r.      |
| 908099            | M32 x 1,5     | 16,0 - 21,0                | 15,0                   | 42                    | 41           | 20   | o. r.                              | o. r.     | o. r.      |
| 908468            | M32 x 1,5     | 19,0 - 25,0                | 15,0                   | 42                    | 40,5         | 20   | o. r.                              | o. r.     | o. r.      |
| 908100            | M40 x 1,5     | 20,0 - 28,0                | 10,0                   | 46                    | 46           | 10   | o. r.                              | o. r.     | o. r.      |
| 908101            | M40 x 1,5     | 20,0 - 28,0                | 15,0                   | 46                    | 46           | 10   | o. r.                              | o. r.     | o. r.      |
| 908102            | M40 x 1,5     | 23,0 - 32,0                | 18,0                   | 53                    | 51,5         | 10   | o. r.                              | o. r.     | o. r.      |
| 908103            | M50 x 1,5     | 31,0 - 38,0                | 18,0                   | 60                    | 53           | 10   | o. r.                              | o. r.     | o. r.      |
| 908104            | M63 x 1,5     | 35,0 - 44,0                | 18,0                   | 65                    | 53,5         | 10   | o. r.                              | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request



# HELUTOP® HT-MFDE Multiple sealing inserts



## HELUTOP® HT-MFDE

Multiple sealing inserts made by NBR for populating the HELUTOP® HT gland bodies made by polyamide or by brass.

## Application

- Plant and machine construction
- Robotics
- Automation technology
- Vehicle construction and shipbuilding
- Railway technology
- Installation technology
- Control cabinet construction

## Material

NBR

Colours: black

## Technical data

Temperature range: -20°C up to +100°C

## Note

Inserts for size M16x1,5 are suitable for cable glands M16x1,5 with clamping range 5-10mm.

| Part no. | Size metric | Insert colour | Number x Ø borehole mm | Unit | Net EUR/100 items at a purchase of |           |            |
|----------|-------------|---------------|------------------------|------|------------------------------------|-----------|------------|
|          |             |               |                        |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 905773   | M16 x 1,5   | black         | 2x 2,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920102   | M16 x 1,5   | black         | 2x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905776   | M16 x 1,5   | black         | 3x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905775   | M16 x 1,5   | black         | 2x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905774   | M16 x 1,5   | black         | 2x 3,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920103   | M20 x 1,5   | black         | 2x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920105   | M20 x 1,5   | black         | 3x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920104   | M20 x 1,5   | black         | 2x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905777   | M20 x 1,5   | black         | 4x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920109   | M20 x 1,5   | black         | 4x 3,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920106   | M20 x 1,5   | black         | 3x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920113   | M25 x 1,5   | black         | 3x 7,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905779   | M25 x 1,5   | black         | 5x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905778   | M25 x 1,5   | black         | 3x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 903529   | M25 x 1,5   | black         | 7x 3,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920114   | M25 x 1,5   | black         | 4x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920112   | M25 x 1,5   | black         | 3x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920117   | M25 x 1,5   | black         | 6x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920110   | M25 x 1,5   | black         | 2x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920119   | M32 x 1,5   | black         | 2x 8,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920129   | M32 x 1,5   | black         | 9x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 904926   | M32 x 1,5   | black         | 4x 8,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920126   | M32 x 1,5   | black         | 6x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905783   | M32 x 1,5   | black         | 8x 4,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905782   | M32 x 1,5   | black         | 4x 7,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 903531   | M32 x 1,5   | black         | 9x 3,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905780   | M32 x 1,5   | black         | 2x 7,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920122   | M32 x 1,5   | black         | 3x 8,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 903530   | M32 x 1,5   | black         | 6x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920120   | M32 x 1,5   | black         | 2x 9,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920123   | M32 x 1,5   | black         | 4x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905784   | M32 x 1,5   | black         | 8x 5,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 920125   | M32 x 1,5   | black         | 5x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905786   | M40 x 1,5   | black         | 3x 10,0                | 1    | o. r.                              | o. r.     | o. r.      |
| 905789   | M40 x 1,5   | black         | 6x 7,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905785   | M40 x 1,5   | black         | 2x 10,0                | 1    | o. r.                              | o. r.     | o. r.      |
| 905791   | M40 x 1,5   | black         | 9x 7,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905790   | M40 x 1,5   | black         | 8x 6,0                 | 1    | o. r.                              | o. r.     | o. r.      |
| 905787   | M40 x 1,5   | black         | 4x 8,0                 | 1    | o. r.                              | o. r.     | o. r.      |

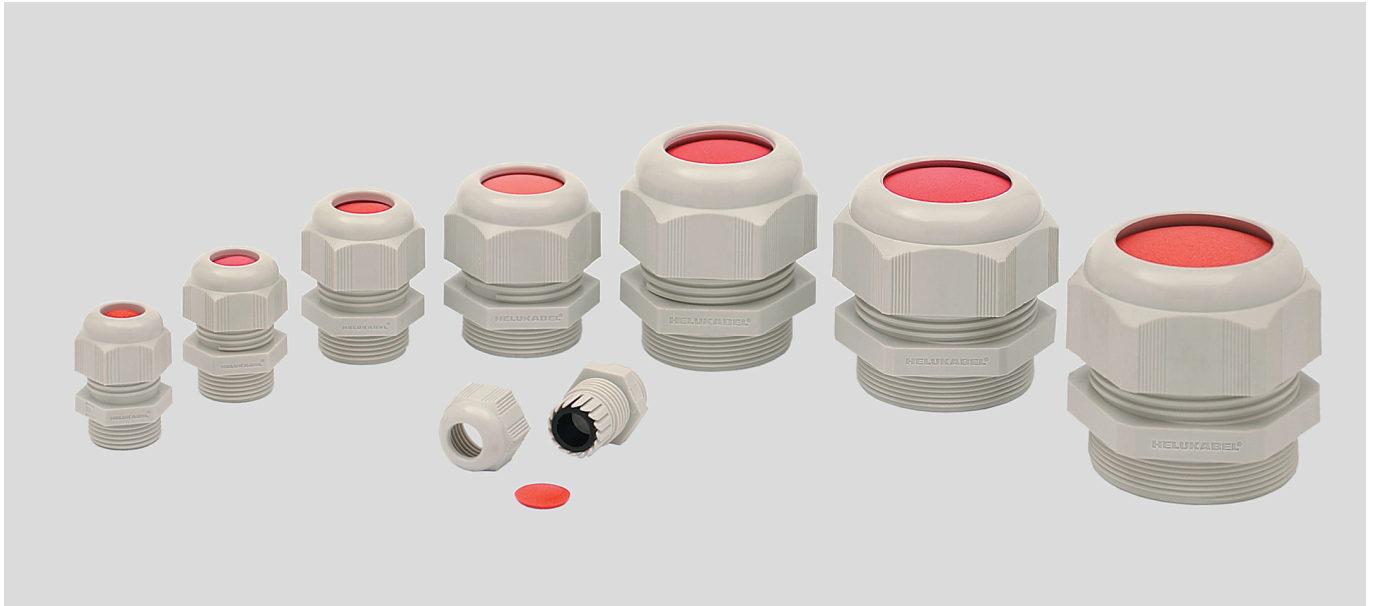
Dimensions and specifications may be changed without prior notice.

o. r. = on request



# HELUTOP® HT-BS Cable gland

With dust protection



## HELUTOP® HT-BS

Plastic cable gland with vibration protection and pre-assembled dust protection.

### Application

- Plant and machine construction
- Robotics
- Automation technology
- Vehicle construction and shipbuilding
- Railway technology
- Installation technology
- Control cabinet construction

### Material

Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
Dust protection: Foam rubber

- phosphor-free
- silicone-free
- cadmium-free

### Properties

- Optimum strain relief through clamping lamella
- Easy to assemble
- Large clamping areas

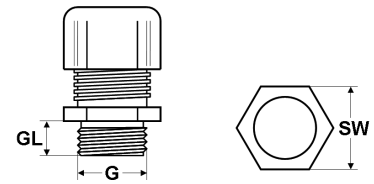
### Note

Details on the individual tests appear in section "Technical Information".  
The information of the protection classification applies only by use as cable gland, not as dust cap.

### Technical data

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C



### Dimensions

G Thread size  
GL Thread length  
SW Spanner size

### Metric thread

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|------------------------------------|-----------------------------------|-------------------------------|---------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------|------------|
|                                    |                                   |                               |               |                            |                        |                       |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 94530                              | 94540                             | 94550                         | M12 x 1,5     | 3,0 - 6,5                  | 8,0                    | 15                    | 100  | o. r.                              | o. r.     | o. r.      |
| 94531                              | 94541                             | 94551                         | M16 x 1,5     | 5,0 - 10,0                 | 10,0                   | 22                    | 50   | o. r.                              | o. r.     | o. r.      |
| 94532                              | 94542                             | 94552                         | M20 x 1,5     | 6,0 - 12,0                 | 10,0                   | 24                    | 50   | o. r.                              | o. r.     | o. r.      |
| 94533                              | 94543                             | 94553                         | M25 x 1,5     | 11,0 - 17,0                | 8,0                    | 29                    | 25   | o. r.                              | o. r.     | o. r.      |
| 94534                              | 94544                             | 94554                         | M32 x 1,5     | 15,0 - 21,0                | 10,0                   | 36                    | 25   | o. r.                              | o. r.     | o. r.      |
| 94535                              | 94545                             | 94555                         | M40 x 1,5     | 19,0 - 28,0                | 10,0                   | 46                    | 20   | o. r.                              | o. r.     | o. r.      |
| 94536                              | 94546                             | 94556                         | M50 x 1,5     | 30,0 - 38,0                | 18,0                   | 60                    | 10   | o. r.                              | o. r.     | o. r.      |
| 94537                              | 94547                             | 94557                         | M63 x 1,5     | 34,0 - 44,0                | 18,0                   | 65                    | 10   | o. r.                              | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request

# HELUTOP® HT-MS-LF

## lead-free cable gland



- Optimum strain relief due to clamping plates
- Easy to assemble
- Large clamping areas

Nickel-coated brass cable gland.

### metric thread

| Part no.                 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |                       |                       |                       |
|--------------------------|---------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------------------|-----------------------|-----------------------|
|                          |               |                            |                        |                       |      | up to 100                          | 101 - 500             | 501 - 1000            |                       |
| <a href="#">11019988</a> | M12 x 1,5     | 3,0 - 6,5                  |                        | 6,014                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019989</a> | M16 x 1,5     | 5,0 - 10,0                 |                        | 7,020                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019990</a> | M20 x 1,5     | 6,0 - 12,0                 |                        | 8,022                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019991</a> | M25 x 1,5     | 11,0 - 17,0                |                        | 8,027                 |      | 25                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019992</a> | M32 x 1,5     | 15,0 - 21,0                |                        | 8,034                 |      | 8                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019993</a> | M40 x 1,5     | 19,0 - 28,0                |                        | 9,043                 |      | 8                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019994</a> | M50 x 1,5     | 27,0 - 38,0                |                        | 9,058                 |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019995</a> | M63 x 1,5     | 34,0 - 44,0                |                        | 14,064 / 68           |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |

### PG thread

| Part no.                 | Size<br>PG | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |                       |                       |                       |
|--------------------------|------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------------------|-----------------------|-----------------------|
|                          |            |                            |                        |                       |      | up to 100                          | 101 - 500             | 501 - 1000            |                       |
| <a href="#">11019996</a> | 7          | 3,0 - 6,5                  |                        | 6,014                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019997</a> | 9          | 4,0 - 8,0                  |                        | 6,017                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019998</a> | 11         | 5,0 - 10,0                 |                        | 6,020                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11019999</a> | 13,5       | 6,0 - 12,0                 |                        | 6,522                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020000</a> | 16         | 10,0 - 14,0                |                        | 6,524                 |      | 25                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020001</a> | 21         | 13,0 - 18,0                |                        | 7,230                 |      | 18                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020002</a> | 29         | 18,0 - 25,0                |                        | 8,040                 |      | 8                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020003</a> | 36         | 22,0 - 32,0                |                        | 9,050                 |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020004</a> | 42         | 30,0 - 38,0                |                        | 12,058                |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020005</a> | 48         | 34,0 - 44,0                |                        | 14,064                |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |

**NPT thread**

| Part no.        | Size<br>NPT | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |              |              |
|-----------------|-------------|----------------------------|------------------------|-----------------------|------|------------------------------------|--------------|--------------|
|                 |             |                            |                        |                       |      | up to 100                          | 101 - 500    | 501 - 1000   |
| <u>11020006</u> | 3/8"        | 4,0 - 8,0                  |                        | 11,517 / 19           | 50   | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020007</u> | 1/2"        | 6,0 - 12,0                 |                        | 13,022                | 50   | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020008</u> | 3/4"        | 13,0 - 18,0                |                        | 13,030                | 25   | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020009</u> | 1"          | 18,0 - 25,0                |                        | 13,040 / 43           | 8    | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020010</u> | 1 1/4"      | 22,0 - 32,0                |                        | 25,650                | 4    | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020011</u> | 1 1/2"      | 30,0 - 38,0                |                        | 26,058                | 4    | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |
| <u>11020012</u> | 2"          | 34,0 - 44,0                |                        | 27,064                | 4    | <u>0. r.</u>                       | <u>0. r.</u> | <u>0. r.</u> |

# HELUTOP® HT-K Cable gland



With anti-kink spirals



## HELUTOP® HT-K

Plastic cable gland with anti-kink spiral for mobile use.

### Application

- Plant and machine construction
- Robotics
- Automation technology
- Vehicle construction and shipbuilding
- Railway technology
- Installation technology

### Material

Polyamide PA 6  
Seal: Chloroprene-rubber (CR)

- phosphor-free
- silicone-free
- cadmium-free

### Properties

- Optimum strain relief through clamping lamella
- Easy to assemble

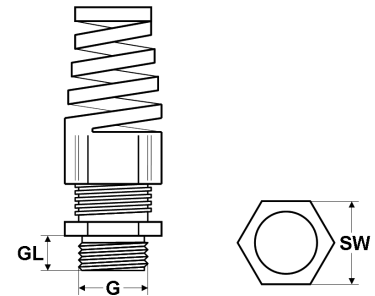
### Note

Details on the individual tests appear in section "Technical Information".

### Technical data

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C



### Dimensions

G Thread size  
GL Thread length  
SW Spanner size

### Metric thread

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|------------------------------------|-----------------------------------|-------------------------------|---------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------|------------|
|                                    |                                   |                               |               |                            |                        |                       |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 93867                              | 93856                             | 93878                         | M12 x 1,5     | 3,0 - 6,5                  | 8,0                    | 15                    | 100  | o. r.                              | o. r.     | o. r.      |
| 93868                              | 93857                             | 93879                         | M16 x 1,5     | 5,0 - 10,0                 | 10,0                   | 22                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93869                              | 93858                             | 93880                         | M20 x 1,5     | 6,0 - 12,0                 | 10,0                   | 24                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93870                              | 93859                             | 93881                         | M20 x 1,5     | 10,0 - 14,0                | 10,0                   | 27                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93871                              | 93860                             | 93882                         | M25 x 1,5     | 13,0 - 18,0                | 10,0                   | 33                    | 25   | o. r.                              | o. r.     | o. r.      |

### PG thread

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>PG | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|------------------------------------|-----------------------------------|-------------------------------|------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------|------------|
|                                    |                                   |                               |            |                            |                        |                       |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 93861                              | 93850                             | 93872                         | 7          | 3,0 - 6,5                  | 8,0                    | 15                    | 100  | o. r.                              | o. r.     | o. r.      |
| 93862                              | 93851                             | 93873                         | 9          | 4,0 - 8,0                  | 8,0                    | 19                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93863                              | 93852                             | 93874                         | 11         | 5,0 - 10,0                 | 8,0                    | 22                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93864                              | 93853                             | 93875                         | 13,5       | 6,0 - 12,0                 | 9,0                    | 24                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93865                              | 93854                             | 93876                         | 16         | 10,0 - 14,0                | 10,0                   | 27                    | 50   | o. r.                              | o. r.     | o. r.      |
| 93866                              | 93855                             | 93877                         | 21         | 13,0 - 18,0                | 11,0                   | 33                    | 25   | o. r.                              | o. r.     | o. r.      |

### NPT thread

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | Size<br>NPT | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|------------------------------------|-----------------------------------|-------------------------------|-------------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------|------------|
|                                    |                                   |                               |             |                            |                        |                       |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 99804                              | 99901                             | 99905                         | 3/8"        | 5,0 - 10,0                 | 15,0                   | 22                    | 50   | o. r.                              | o. r.     | o. r.      |
| 99805                              | 99902                             | 99906                         | 1/2"        | 6,0 - 12,0                 | 15,0                   | 24                    | 50   | o. r.                              | o. r.     | o. r.      |
| 99806                              | 99903                             | 99907                         | 3/4"        | 14,0 - 18,0                | 15,0                   | 33                    | 25   | o. r.                              | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request

# HELUTOP® HT-MS-EP-LF

## lead-free EMC-cable gland



- Optimum strain relief through clamping plates
- No damage of shield during assembly or disassembly by moving contact ring
- Contact made automatically when the gland is closed
- Excellent shield damping and current deflection
- High savings achieved in time and assembly costs

EMC- and earthing gland with integrated contact system for safe and quick assembly as well as contacting.

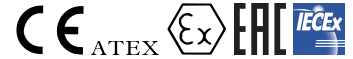
### metric thread

| Part no.                 | Size      | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |                       |                       |                       |
|--------------------------|-----------|----------------------------|------------------------|-----------------------|------|------------------------------------|-----------------------|-----------------------|-----------------------|
|                          | Metr.     |                            |                        |                       |      | up to 100                          | 101 - 500             | 501 - 1000            |                       |
| <a href="#">11020013</a> | M12 x 1,5 | 3,0 - 6,5                  |                        | 6,014                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020014</a> | M16 x 1,5 | 5,0 - 10,0                 |                        | 7,020                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020015</a> | M20 x 1,5 | 6,0 - 12,0                 |                        | 8,022                 |      | 50                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020016</a> | M25 x 0,0 | 11,0 - 17,0                |                        | 8,027                 |      | 25                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020017</a> | M32 x 1,5 | 15,0 - 21,0                |                        | 8,034                 |      | 18                                 | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020018</a> | M40 x 1,5 | 19,0 - 28,0                |                        | 9,043                 |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020019</a> | M50 x 1,5 | 27,0 - 38,0                |                        | 9,058                 |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |
| <a href="#">11020020</a> | M63 x 1,5 | 34,0 - 44,0                |                        | 14,064 / 68           |      | 4                                  | <a href="#">o. r.</a> | <a href="#">o. r.</a> | <a href="#">o. r.</a> |



# HELUTOP® HT-PA-EX-Plus

explosive area



## HELUTOP® HT-PA-EX-Plus

For use in explosive areas.

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
Flat seal: Chloroprene Rubber (CR)

- phosphor-free
- silicone-free
- cadmium-free

### Note

For intrinsically safe area type "I", in blue on request.

### Certificate of Conformity:

IMQ 13 ATEX 010 X  
IECEx IMQ 13.0003X

### Approval:

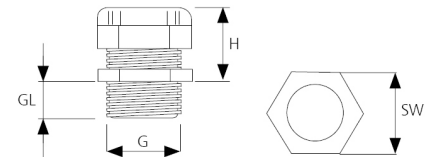
EX II 2GD  
Ex e IIC Gb/Ex tb IIC Db IP 66/68

### Technical data

Protection class: IP 66 / IP 68  
Impact-resistant: 7 Joule

Temperature range: -40°C up to +70°C

Test standard: EN 60079-0:2012 / EN 60079-7:2007 / EN 60079-11:2012 / EN 60079-31:2014 / IEC 60079-0:2011 / IEC 60079-7:2006 / IEC 60079-11:2011 / IEC 60079-31:2013



### Dimensions

G Thread size  
GL Thread length  
H Height

### Chloroprene sealing

| Part no.<br>black | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Height<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|-------------------|---------------|----------------------------|------------------------|-----------------------|--------------|------|------------------------------------|-----------|------------|
|                   |               |                            |                        |                       |              |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 908080            | M12 x 1,5     | 4,0 - 6,5                  | 10,0                   | 15                    | 22           | 100  | o. r.                              | o. r.     | o. r.      |
| 908081            | M12 x 1,5     | 4,0 - 6,5                  | 15,0                   | 15                    | 22           | 100  | o. r.                              | o. r.     | o. r.      |
| 908082            | M16 x 1,5     | 5,0 - 8,0                  | 10,0                   | 19                    | 26           | 50   | o. r.                              | o. r.     | o. r.      |
| 908083            | M16 x 1,5     | 6,0 - 10,0                 | 10,0                   | 22                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908084            | M16 x 1,5     | 6,0 - 10,0                 | 15,0                   | 22                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908085            | M20 x 1,5     | 6,0 - 10,0                 | 10,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908086            | M20 x 1,5     | 7,0 - 12,0                 | 10,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908087            | M20 x 1,5     | 7,0 - 12,0                 | 15,0                   | 24                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908088            | M20 x 1,5     | 7,0 - 13,0                 | 10,0                   | 25                    | 30,5         | 50   | o. r.                              | o. r.     | o. r.      |
| 908089            | M20 x 1,5     | 11,0 - 14,0                | 10,0                   | 27                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908090            | M20 x 1,5     | 11,0 - 14,0                | 15,0                   | 27                    | 29           | 50   | o. r.                              | o. r.     | o. r.      |
| 908091            | M25 x 1,5     | 11,0 - 14,0                | 10,0                   | 27                    | 29           | 25   | o. r.                              | o. r.     | o. r.      |
| 908092            | M25 x 1,5     | 11,0 - 14,0                | 15,0                   | 27                    | 29           | 25   | o. r.                              | o. r.     | o. r.      |
| 908093            | M25 x 1,5     | 12,0 - 17,0                | 15,0                   | 29                    | 35           | 25   | o. r.                              | o. r.     | o. r.      |
| 908094            | M25 x 1,5     | 12,0 - 17,0                | 10,0                   | 29                    | 35           | 25   | o. r.                              | o. r.     | o. r.      |
| 908095            | M25 x 1,5     | 14,0 - 18,0                | 10,0                   | 33                    | 37           | 25   | o. r.                              | o. r.     | o. r.      |
| 908096            | M25 x 1,5     | 14,0 - 18,0                | 15,0                   | 33                    | 37           | 25   | o. r.                              | o. r.     | o. r.      |
| 908098            | M32 x 1,5     | 16,0 - 21,0                | 10,0                   | 36                    | 42           | 20   | o. r.                              | o. r.     | o. r.      |
| 908099            | M32 x 1,5     | 16,0 - 21,0                | 15,0                   | 42                    | 41           | 20   | o. r.                              | o. r.     | o. r.      |
| 908468            | M32 x 1,5     | 19,0 - 25,0                | 15,0                   | 42                    | 40,5         | 20   | o. r.                              | o. r.     | o. r.      |
| 908100            | M40 x 1,5     | 20,0 - 28,0                | 10,0                   | 46                    | 46           | 10   | o. r.                              | o. r.     | o. r.      |
| 908101            | M40 x 1,5     | 20,0 - 28,0                | 15,0                   | 46                    | 46           | 10   | o. r.                              | o. r.     | o. r.      |
| 908102            | M40 x 1,5     | 23,0 - 32,0                | 18,0                   | 53                    | 51,5         | 10   | o. r.                              | o. r.     | o. r.      |
| 908103            | M50 x 1,5     | 31,0 - 38,0                | 18,0                   | 60                    | 53           | 10   | o. r.                              | o. r.     | o. r.      |
| 908104            | M63 x 1,5     | 35,0 - 44,0                | 18,0                   | 65                    | 53,5         | 10   | o. r.                              | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request

# HELUTOP® HT-MS-EX-d Cable gland

Brass, explosive area, pressure resistant



## HELUTOP® HT-MS-EX-d

For use in explosive areas

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Brass, nickel plated  
 Clamp: Polyamide PA 6  
 Seal: Chloroprene-rubber (CR)  
 O-ring: Chloroprene-rubber (CR)

### Note

#### Certificate of Conformity:

IMQ 13 ATEX 018X

**Marking:** Ex-d, Ex-e, EX II 2GD, Exd IIC Gb, Exe IIC Gb, Ex t IIIC DB

Stainless steel 1.4404 and other temperature ranges available on request.

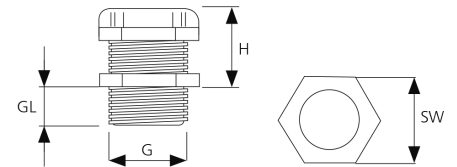
**Unit: 1 pcs**

### Technical data

Protection class: IP 66 / IP 68 (EN 60529)

Temperature range: -40°C up to +80°C

Test standard: EN 60079-0:2012 / EN 60079-1:2007 / EN 60079-7:2007 / EN 60079-11:2012 / EN 60079-31:2014 / IEC 60079-0:2012 / IEC 60079-1:2014 / IEC 60079-7:2006 / IEC 60079-11:2011 / IEC 60079-31:2013



### Dimensions

G Thread size  
 GL Thread length  
 SW Spanner size

### Metric thread

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Height mm |
|----------|------------|----------------------|------------------|-----------------|-----------|
| 906941   | M16 x 1,5  | 4,0 - 12,0           | 16,0             | 22              | 31        |
| 906942   | M20 x 1,5  | 4,0 - 12,0           | 16,0             | 22              | 27        |
| 906943   | M20 x 1,5  | 10,0 - 16,0          | 16,0             | 28              | 30        |
| 906944   | M25 x 1,5  | 10,0 - 18,0          | 16,0             | 28              | 30,5      |
| 906945   | M25 x 1,5  | 14,0 - 20,0          | 16,0             | 35              | 34        |
| 906946   | M32 x 1,5  | 14,0 - 24,0          | 16,0             | 35              | 33        |
| 906947   | M32 x 1,5  | 22,0 - 28,0          | 16,0             | 45              | 41        |
| 906948   | M40 x 1,5  | 22,0 - 32,0          | 18,0             | 45              | 41        |
| 906949   | M40 x 1,5  | 26,0 - 34,0          | 18,0             | 50              | 44        |
| 906950   | M50 x 1,5  | 26,0 - 35,0          | 18,0             | 55 / 50         | 44        |
| 906951   | M50 x 1,5  | 35,0 - 44,0          | 18,0             | 64              | 43        |
| 906952   | M63 x 1,5  | 35,0 - 45,0          | 18,0             | 68 / 64         | 43        |
| 906953   | M63 x 1,5  | 46,0 - 56,0          | 20,0             | 75 / 80         | 52,5      |
| 906954   | M75 x 1,5  | 46,0 - 62,0          | 20,0             | 80              | 52        |
| 906955   | M75 x 1,5  | 60,0 - 69,0          | 20,0             | 95              | 55        |
| 906956   | M90 x 1,5  | 60,0 - 75,0          | 20,0             | 95              | 55        |
| 906957   | M90 x 1,5  | 75,0 - 82,0          | 20,0             | 105             | 55        |
| 906958   | M100 x 1,5 | 75,0 - 85,0          | 20,0             | 105             | 55        |
| 906982   | M110 x 1,5 | 85,0 - 95,0          | 20,0             | 115             | 57        |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-MS-EX-d 1 EMV

Brass, explosive area, pressure resistant



## HELUTOP® HT-MS-EX-d 1 EMV

For use in explosive areas. For cables with braided hose, copper tinned (EMC)

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Brass, nickel plated  
 Contact system: Copper-Beryllium  
 Clamp: Polyamide PA 6  
 Seal: Chloroprene-rubber (CR)  
 O-ring: Chloroprene-rubber (CR)

### Note

Also available in stainless steel 1.4404, further sizes or for other temperature ranges on request.

**Certificate of Conformity:** IMQ 13 ATEX 018X

**Marking:** Ex-d, Ex-e EX II 2GD Ex d IIC Gb, Ex e IIC Gb, Ex tb III CDb

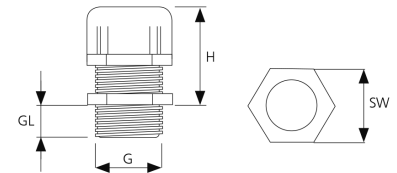
**Unit:** 1 pcs

### Technical data

Protection class: IP 66 / IP 68 (EN 60529)

Temperature range: -40°C up to +80°C

Test standard: EN 60079-0:2012 / EN 60079-1:2007 / EN 60079-7:2007 / EN 60079-11:2012 / EN 60079-31:2014 / IEC 60079-0:2012 / IEC 60079-1:2014 / IEC 60079-7:2016 / IEC 60079-11:2011 / IEC 60079-31:2013



### Dimensions

GL Thread length  
 G Thread size  
 H Height without thread  
 SW Spanner size

### Metric thread

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Height mm |
|----------|------------|----------------------|------------------|-----------------|-----------|
| 906959   | M16 x 1,5  | 4,0 - 8,0            | 16,0             | 22              | 28,5      |
| 906960   | M20 x 1,5  | 4,0 - 12,0           | 18,0             | 22              | 27        |
| 906961   | M25 x 1,5  | 10,0 - 18,0          | 16,0             | 28              | 30,5      |
| 906962   | M32 x 1,5  | 14,0 - 24,0          | 19,0             | 35              | 33        |
| 906963   | M40 x 1,5  | 22,0 - 32,0          | 20,0             | 45              | 40,5      |
| 906964   | M50 x 1,5  | 26,0 - 35,0          | 20,0             | 55 / 50         | 43,5      |

Dimensions and specifications may be changed without prior notice.



# HELUTOP® HT-MS-EX-d / e4

Brass, explosive areas, for armoured cables



## HELUTOP® HT-MS-EX-d / e 4

For use in explosive areas. For armoured cables (copper or steel).

### Application

- Zone 1, Zone 2, Zone 21, Zone 22, IIA, IIB, IIC

### Material

Brass, nickel plated  
 Clamp: Polyamide PA 6  
 Seal: NBR  
 O-ring: NBR

### Properties

- Sealing
- Strain relief
- EMC
- Explosive protection

### Note

Stainless steel 1.4404 and other temperature ranges on request.

**PVC shrouds and earth tags on request.**

**Certificate of Conformity:** CESI 13 ATEX 033X

**Marking:** Ex II 2 GD, Exd IIC Gb / Exe IIC Gb, Extb IIIC Db

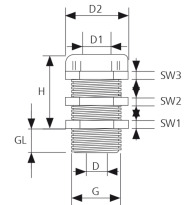
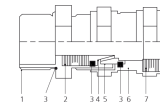
**Unit: 1 pcs**

### Technical data

Protection class: IP 66 / IP 68

Temperature range: -40°C up to +100°C

Test standard: EN 60079-0:2012 / EN 60079-1:2007 / EN 60079-7:2007 / EN 60079-31:2009 / IEC 60079-0:2011 Edition:6.0 / IEC 60079-1:2007-04 Edition: 6.0 / IEC 60079-31:2008 Edition:1 / IEC 60079-7:2006-07 Edition:4



### Dimensions:

- 1 Lower body
- 2 Lower sealing ring
- 3 O-Ring
- 4 Grounding cone
- 5 Swivel braid retainer
- 6 Middle body
- 7 Upper sealing ring
- 8 Pressure cap

### Metric thread

| Part no. | Size Metr. | Cable Ø Inner sheath from / to mm | Cable Ø Outer sheath from / to mm | Thread length mm | Spanner size mm | Angle size D2 mm | Height mm |
|----------|------------|-----------------------------------|-----------------------------------|------------------|-----------------|------------------|-----------|
| 906965   | M16 x 1,5  | 3,0 - 8,5                         | 6,0 - 12,0                        | 16,0             | 22 / 26         | 29,0             | 47        |
| 906966   | M16 x 1,5  | 6,0 - 12,0                        | 8,5 - 16,0                        | 16,0             | 25 / 29         | 31,5             | 48        |
| 906967   | M20 x 1,5  | 3,0 - 8,5                         | 6,0 - 12,0                        | 16,0             | 24 / 26         | 29,0             | 47        |
| 906968   | M20 x 1,5  | 6,0 - 12,0                        | 8,5 - 16,0                        | 16,0             | 25 / 29         | 31,5             | 47        |
| 906970   | M25 x 1,5  | 6,0 - 12,0                        | 8,5 - 16,0                        | 18,0             | 29 / 29         | 31,5             | 48        |
| 906972   | M25 x 1,5  | 12,0 - 20,0                       | 16,0 - 26,0                       | 18,0             | 36 / 40         | 44,0             | 60        |
| 906973   | M32 x 1,5  | 12,0 - 20,0                       | 16,0 - 26,0                       | 18,0             | 40 / 40         | 44,0             | 62        |
| 906974   | M32 x 1,5  | 15,0 - 26,0                       | 20,0 - 33,0                       | 18,0             | 48 / 52         | 57,0             | 78        |
| 906975   | M40 x 1,5  | 15,0 - 26,0                       | 20,0 - 33,0                       | 18,0             | 48 / 52         | 57,0             | 78        |
| 906976   | M40 x 1,5  | 20,0 - 32,0                       | 29,0 - 41,0                       | 18,0             | 55 / 60         | 66,0             | 89        |
| 906977   | M50 x 1,5  | 22,0 - 35,0                       | 33,0 - 48,0                       | 18,0             | 60 / 70         | 82,0             | 97        |
| 906978   | M50 x 1,5  | 27,0 - 41,0                       | 36,0 - 52,0                       | 18,0             | 70 / 70         | 83,0             | 100       |
| 906979   | M63 x 1,5  | 35,0 - 45,0                       | 43,0 - 57,0                       | 20,0             | 75 / 80         | 89,5             | 106       |
| 906980   | M63 x 1,5  | 40,0 - 52,0                       | 47,0 - 60,0                       | 20,0             | 85 / 85         | 94,0             | 107       |
| 906981   | M75 x 1,5  | 40,0 - 52,0                       | 47,0 - 60,0                       | 20,0             | 85 / 85         | 94,0             | 107       |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-AIR-PA To prevent water condensation



## HELUTOP® HT-AIR-PA

Cable gland with integrated pressure compensation and ventilation system. Prevents water condensation.

### Application

- High sealing enclosures
- Environments with extensive temperature ranges

### Material

Polyamide PA 6  
 Seal: Chloroprene-rubber (CR)  
 Flat seal: NBR  
 Vent element: PTFE

- phosphor-free
- silicone-free
- cadmium-free

### Properties

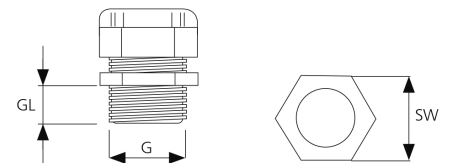
- A membrane accounts for, that air humidity can leave the enclosure, just at less pressure differences
- Different pressures will reduce water condensation
- No enter from water and dirt from outside
- High strain relief
- Large clamping areas

### Technical data

Protection class: IP 66 / IP 67 / IP 69k

Temperature range: -20°C up to +80°C  
 Temperature range temporary: -30°C up to +150°C

Test standard: EN62444



### Dimensions

G Thread size  
 GL Thread length  
 SW Spanner size

### Metric thread

| Part no.<br>light grey<br>RAL 7035 | Size<br>Metr. | Cable Ø<br>from / to<br>mm | Thread<br>length<br>mm | Spanner<br>size<br>mm | Unit |
|------------------------------------|---------------|----------------------------|------------------------|-----------------------|------|
| 906990                             | M12 x 1,5     | 4,0 - 8,0                  | 8,0                    | 19                    | 100  |
| 906991                             | M16 x 1,5     | 4,0 - 8,0                  | 10,0                   | 19                    | 50   |
| 906992                             | M20 x 1,5     | 6,0 - 12,0                 | 10,0                   | 24                    | 50   |

Dimensions and specifications may be changed without prior notice.

# HELUTOP® HT-AIR-MS To prevent water condensation



## HELUTOP® HT-AIR-MS

Cable gland with integrated pressure compensation and ventilation system. Prevents water condensation.

### Application

- High sealing enclosures
- Environments with extensive temperature ranges

### Material

Brass, nickel plated  
Clamp: Polyamide PA6 - V2  
Seal: Chloroprene-rubber (CR)  
O-ring: NBR  
Flat seal: NBR  
Vent element: PTFE

- phosphor-free
- silicone-free
- cadmium-free

### Properties

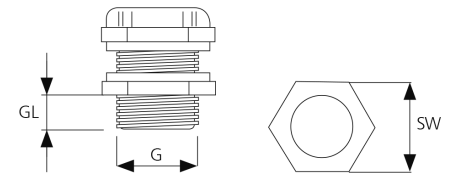
- A membrane accounts for, that air humidity can leave the enclosure, just at less pressure differences
- Different pressures will reduce water condensation
- No enter from water condensation
- High strain relief
- Large clamping areas

### Technical data

Protection class: IP 66 / IP 67 / IP 69k

Temperature range: -20°C up to +80°C  
Temperature range temporary: -30°C up to +150°C

Test standard: EN62444



### Dimensions

G Thread size  
GL Thread length  
SW Spanner size

### Metric thread

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |
|----------|------------|----------------------|------------------|-----------------|------|
| 906993   | M12 x 1,5  | 4,0 - 8,0            | 8,0              | 17              | 50   |
| 906994   | M16 x 1,5  | 4,0 - 8,0            | 8,0              | 17              | 50   |
| 906995   | M16 x 1,5  | 5,0 - 10,0           | 7,0              | 20              | 50   |
| 906996   | M20 x 1,5  | 6,0 - 12,0           | 6,5              | 22              | 50   |

Dimensions and specifications may be changed without prior notice.

**HELUTOP® MS-EP** EMC cable gland**HELUTOP® MS-EP**

The EMC- and earthing gland with integrated contact system for safe, quick assembly and contacting.

**Application**

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

**Material**

Brass, nickel plated  
Contact system: Copper-Beryllium  
Clamp: Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
O-ring: NBR

**Properties**

- Optimum strain relief through clamping plates
- No damage of shield during assembly or disassembly by moving contact ring
- Contact made automatically when the gland is closed
- Excellent shield damping and current deflection
- High savings achieved in time and assembly costs

**Note**

Details on the individual tests appear in section "Technical Information".

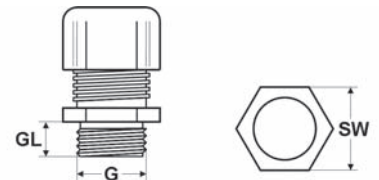
**Technical data**

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C

Test standard: EN50262

Contact system: patented

**Dimensions**

G Thread size  
GL Thread length  
SW Spanner size

**metric thread**

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|------------|----------------------|------------------|-----------------|------|---|
| 99950    | M12 x 1,5  | 3,0 - 6,5            | 6,0              | 14              | 50   | - |
| 99951    | M16 x 1,5  | 5,0 - 10,0           | 7,0              | 20              | 50   | - |
| 99952    | M20 x 1,5  | 6,0 - 12,0           | 8,0              | 22              | 50   | - |
| 99953    | M25 x 1,5  | 11,0 - 17,0          | 8,0              | 27              | 25   | - |
| 99954    | M32 x 1,5  | 15,0 - 21,0          | 8,0              | 34              | 25   | - |
| 99955    | M40 x 1,5  | 19,0 - 28,0          | 9,0              | 43              | 20   | - |
| 99956    | M50 x 1,5  | 27,0 - 38,0          | 9,0              | 58              | 5    | - |
| 99957    | M63 x 1,5  | 34,0 - 44,0          | 14,0             | 64 / 68         | 5    | - |

Dimensions and specifications may be changed without prior notice.

**HELUTOP® MS-EP4** EMC cable gland**HELUTOP® MS-EP4**

The EMC- cable gland with integrated contact system.

**Application**

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

**Material**

Brass, nickel plated  
 Contact system: Copper-Beryllium  
 Clamp: Polyamide PA 6  
 Seal: Chloroprene-rubber (CR)  
 O-ring: NBR

**Properties**

- Easy installation
- Secure contact
- High vibration resistance

**Note**

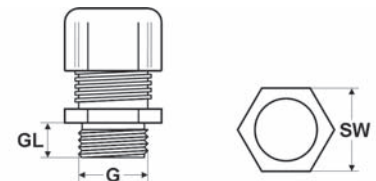
Details on the individual tests appear in section "Technical Information".

**Technical data**

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C

Contact system: patented

**Dimensions**

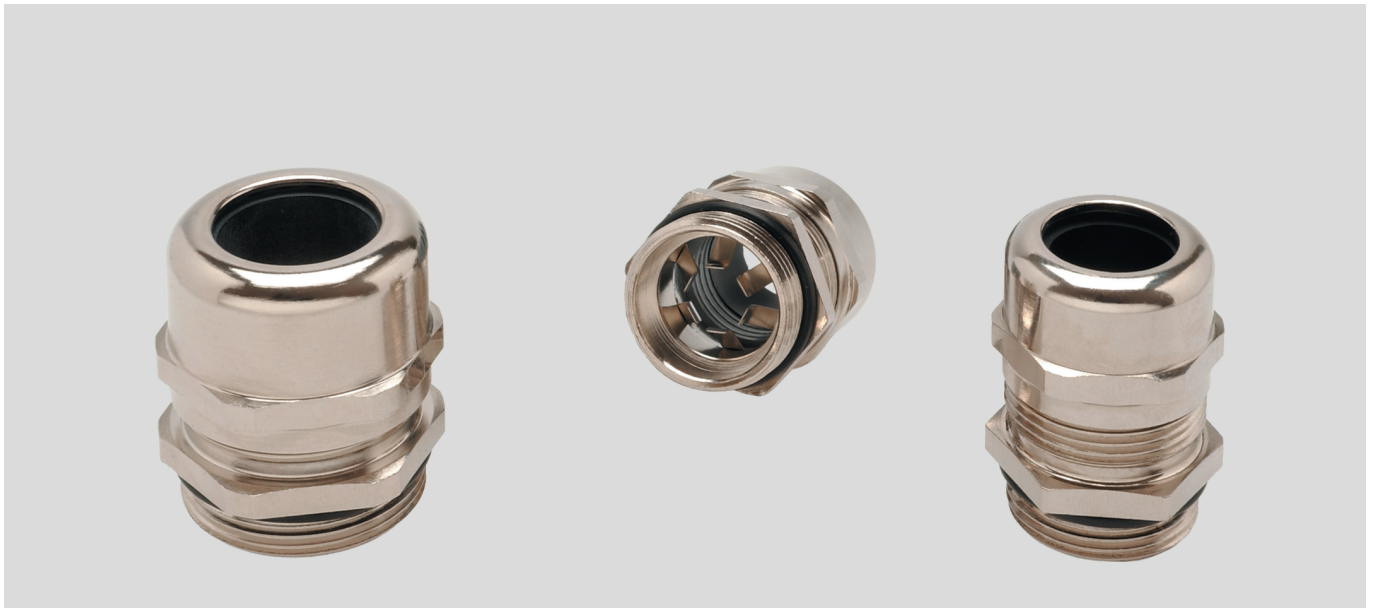
G Thread size  
 GL Thread length  
 SW Spanner size

**metric thread**

| Part no. | Size Metr. | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit |   |
|----------|------------|----------------------|------------------|-----------------|------|---|
| 905181   | M12 x 1,5  | 3,0 - 6,5            | 6,0              | 14              | 50   | - |
| 905182   | M16 x 1,5  | 5,0 - 10,0           | 6,0              | 20              | 50   | - |
| 905183   | M20 x 1,5  | 6,0 - 12,0           | 6,0              | 22              | 50   | - |
| 905184   | M20 x 1,5  | 7,5 - 14,0           | 8,0              | 24              | 50   | - |
| 905185   | M25 x 1,5  | 10,0 - 18,0          | 8,0              | 30              | 25   | - |
| 905186   | M32 x 1,5  | 16,0 - 25,0          | 9,0              | 40              | 20   | - |
| 905187   | M40 x 1,5  | 22,0 - 32,0          | 9,0              | 50              | 20   | - |
| 905188   | M50 x 1,5  | 30,0 - 38,0          | 9,0              | 58              | 10   | - |
| 905189   | M63 x 1,5  | 34,0 - 44,0          | 14,0             | 64 / 68         | 5    | - |
| 905248   | M63 x 1,5  | 37,0 - 53,0          | 10,0             | 75              | 5    | - |

Dimensions and specifications may be changed without prior notice.





## HELUTOP® MS-E

EMC cable gland with clamping fingers from spring steel for quick assembly and contacting.

## Material

Brass, nickel plated  
Contact system: Copper-Beryllium  
Clamp: Polyamide PA 6  
Seal: Chloroprene-rubber (CR)  
O-ring: NBR

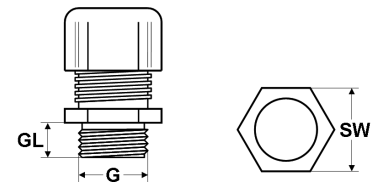
## Note

Details on the individual tests appear in section "Technical Information".

## Technical data

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C



## Dimensions

G Thread size  
GL Thread length  
SW Spanner size

### PG thread

| Part no. | Size PG | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit | Net EUR/ 100 items at a purchase of |           |            |
|----------|---------|----------------------|------------------|-----------------|------|-------------------------------------|-----------|------------|
|          |         |                      |                  |                 |      | up to 100                           | 101 - 500 | 501 - 1000 |
| 90770    | 7       | 3,0 - 6,5            | 6,0              | 14              | 50   | o. r.                               | o. r.     | o. r.      |
| 90771    | 9       | 4,0 - 8,0            | 6,0              | 17              | 50   | o. r.                               | o. r.     | o. r.      |
| 90772    | 11      | 5,0 - 10,0           | 6,0              | 20              | 50   | o. r.                               | o. r.     | o. r.      |
| 90773    | 13,5    | 6,0 - 12,0           | 6,5              | 22              | 50   | o. r.                               | o. r.     | o. r.      |
| 90774    | 16      | 10,0 - 14,0          | 6,5              | 24              | 25   | o. r.                               | o. r.     | o. r.      |
| 90775    | 21      | 13,0 - 18,0          | 7,2              | 30              | 25   | o. r.                               | o. r.     | o. r.      |
| 90776    | 29      | 18,0 - 25,0          | 8,0              | 40              | 20   | o. r.                               | o. r.     | o. r.      |
| 90777    | 36      | 22,0 - 32,0          | 9,0              | 50              | 5    | o. r.                               | o. r.     | o. r.      |
| 90778    | 42      | 30,0 - 38,0          | 12,0             | 58              | 5    | o. r.                               | o. r.     | o. r.      |
| 90779    | 48      | 34,0 - 44,0          | 14,0             | 64              | 5    | o. r.                               | o. r.     | o. r.      |

### NPT thread

| Part no. | Size NPT | Cable Ø from / to mm | Thread length mm | Spanner size mm | Unit | Net EUR/ 100 items at a purchase of |           |            |
|----------|----------|----------------------|------------------|-----------------|------|-------------------------------------|-----------|------------|
|          |          |                      |                  |                 |      | up to 100                           | 101 - 500 | 501 - 1000 |
| 99808    | 3/8"     | 5,0 - 10,0           | 11,5             | 20              | 50   | o. r.                               | o. r.     | o. r.      |
| 99809    | 1/2"     | 6,0 - 12,0           | 13,0             | 22              | 50   | o. r.                               | o. r.     | o. r.      |
| 99810    | 3/4"     | 13,0 - 18,0          | 13,0             | 30              | 25   | o. r.                               | o. r.     | o. r.      |
| 99811    | 1"       | 18,0 - 25,0          | 13,0             | 40              | 10   | o. r.                               | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request



## HELUTOP® Easy

Threadless cable gland for easy and quick installation with patented spring/snap system without tools.

### Advantages:

- No tools required for installation
- No threaded holes required
- No locknuts required
- Same clamping range as HELUTOP® HT-Series
- VDE-according to DIN EN 62444
- Gland and cable will be fixed with clockwise thread
- Installation in tight areas and no-access spaces (locknut side)
- Cable gland fits as tightly as traditional gland held in place with threaded hole or locknut
- Hexagon of body and cap are same SW
- Large wall thickness range: 0,5 – 4,0 mm
- Quick and easy disassembly with separate tool. No damage to cable gland or wall

## Material

PA 6, V2 acc. to UL 94  
Seal: Chloroprene-rubber (CR)

## Note

Additional colors on request: red RAL 3020, white RAL 9003, blau RAL 5015.  
Dimensions borehole  $\varnothing = \pm 0.1$

## Technical data

Protection class: IP66 / IP68 - 5 bar

Temperature range: -20°C up to +100°C  
Temperature range temporary: -30°C up to +150°C

| Part no.<br>light grey<br>RAL 7035 | Part no.<br>dark grey<br>RAL 7001 | Part no.<br>black<br>RAL 9005 | ØDrill hole /<br>Metr. | Cable Ø<br>from / to<br>mm | Spanner<br>size<br>mm | Unit | Net EUR/100 items at a purchase of |           |            |
|------------------------------------|-----------------------------------|-------------------------------|------------------------|----------------------------|-----------------------|------|------------------------------------|-----------|------------|
|                                    |                                   |                               |                        |                            |                       |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 908054                             | 908060                            | 908062                        | 16,3 / M16             | 5,0 - 10,0                 | 22                    | 50   | o. r.                              | o. r.     | o. r.      |
| 908055                             | 908061                            | 908063                        | 20,3 / M20             | 6,0 - 12,0                 | 24                    | 50   | o. r.                              | o. r.     | o. r.      |
| 908368                             | 908383                            | 908385                        | 25,3 / M25             | 11,0 - 17,0                | 29                    | 25   | o. r.                              | o. r.     | o. r.      |
| 908369                             | 908384                            | 908386                        | 32,3 / M32             | 15,0 - 21,0                | 36                    | 25   | o. r.                              | o. r.     | o. r.      |

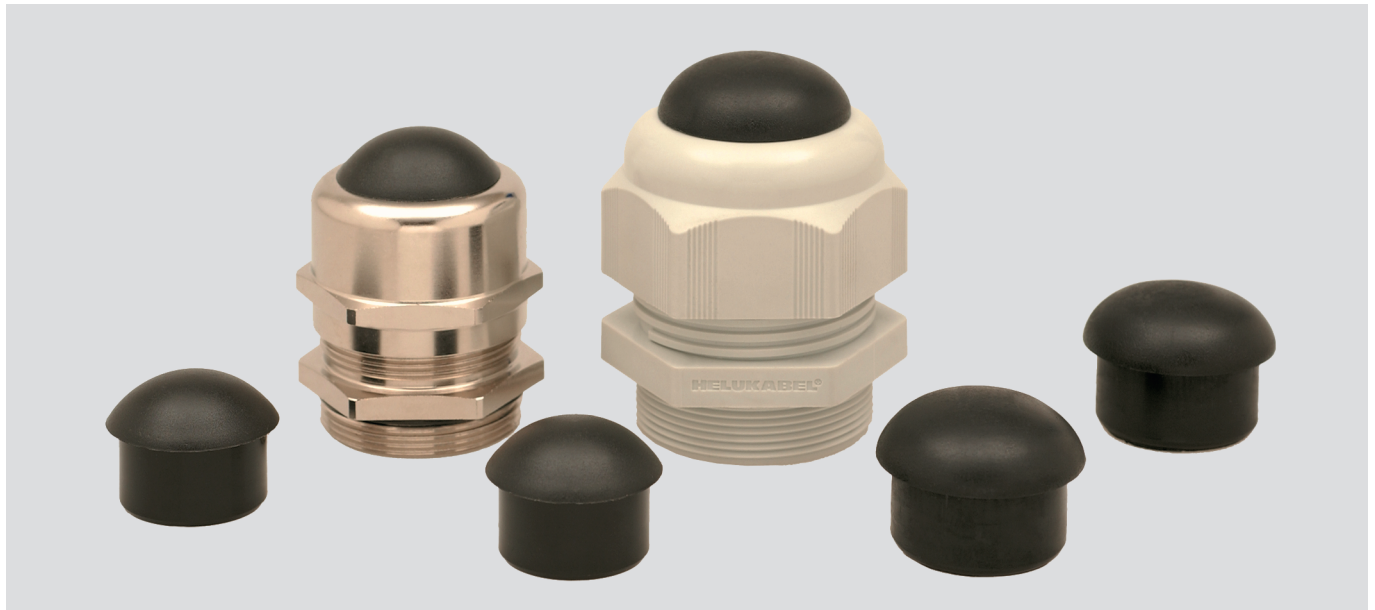
## Disassembly tool

| Part no. | Type                             | Unit | Net EUR/item at a purchase of |       |        |
|----------|----------------------------------|------|-------------------------------|-------|--------|
|          |                                  |      | 1                             | 2 - 4 | 5 - 10 |
| 908056   | Disassembly tool for Ø16 and Ø20 | 1    | o. r.                         | o. r. | o. r.  |
| 908387   | Disassembly tool for Ø25 and Ø32 | 1    | o. r.                         | o. r. | o. r.  |

Dimensions and specifications may be changed without prior notice.

o. r. = on request

# HELUTOP® sealing inserts



## HELUTOP® sealing inserts

Protection tab for sealing of not assigned cable glands HELUTOP® HT.

## Application

- Plant and machine construction
- Robotics
- Automation technology
- Vehicle construction and shipbuilding
- Railway technology
- Installation technology
- Control cabinet construction

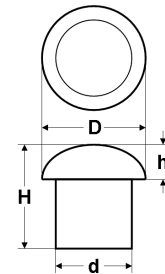
## Material

Polyamide 6

Colours: black

## Note

\*Protection tab 903492 only for cable glands type HT and HT-MS with clamping range 5-10mm.



## Dimensions

|   |                       |
|---|-----------------------|
| D | Outer diameter head   |
| d | Outer diameter insert |
| H | Height total          |
| h | Height head           |

| Part no. | Size metric/ PG | Clamping area from/up to mm | Outer Ø head mm | Outer Ø insert mm | Height total mm | Height head mm | Unit | Net EUR/100 items at a purchase of |           |            |
|----------|-----------------|-----------------------------|-----------------|-------------------|-----------------|----------------|------|------------------------------------|-----------|------------|
|          |                 |                             |                 |                   |                 |                |      | up to 100                          | 101 - 500 | 501 - 1000 |
| 905924   | M16/ PG7        | 3,0 - 6,5                   | 9,2             | 6,4               | 11,0            | 4,0            | 100  | o. r.                              | o. r.     | o. r.      |
| 905925   | M16/ PG9        | 4,0 - 8,0                   | 10,5            | 8,0               | 16,0            | 5,0            | 100  | o. r.                              | o. r.     | o. r.      |
| 903492*  | M16/ PG11       | 5,0 - 10,0                  | 13,3            | 9,7               | 20,7            | 5,7            | 100  | o. r.                              | o. r.     | o. r.      |
| 903493   | M20/ PG13,5     | 6,0 - 12,0                  | 15,8            | 12,0              | 18,0            | 8,0            | 100  | o. r.                              | o. r.     | o. r.      |
| 905928   | M20/ PG16       | 10,0 - 14,0                 | 18,0            | 13,6              | 18,7            | 8,7            | 100  | o. r.                              | o. r.     | o. r.      |
| 903494   | M25             | 11,0 - 17,0                 | 19,9            | 16,4              | 18,3            | 7,3            | 100  | o. r.                              | o. r.     | o. r.      |
| 905929   | M25/ PG21       | 13,0 - 18,0                 | 22,2            | 17,8              | 21,0            | 9,7            | 100  | o. r.                              | o. r.     | o. r.      |
| 903495   | M32             | 15,0 - 21,0                 | 24,1            | 20,4              | 21,2            | 9,2            | 100  | o. r.                              | o. r.     | o. r.      |
| 903496   | M40             | 19,0 - 28,0                 | 32,0            | 27,5              | 25,0            | 9,0            | 100  | o. r.                              | o. r.     | o. r.      |

Dimensions and specifications may be changed without prior notice.

o. r. = on request



**По вопросам продаж и поддержки обращайтесь:**

|                             |                                 |                                |                           |
|-----------------------------|---------------------------------|--------------------------------|---------------------------|
| Алматы (7273)495-231        | Казань (843)206-01-48           | Новокузнецк (3843)20-46-81     | Смоленск (4812)29-41-54   |
| Архангельск (8182)63-90-72  | Калининград (4012)72-03-81      | Новосибирск (383)227-86-73     | Сочи (862)225-72-31       |
| Астрахань (8512)99-46-04    | Калуга (4842)92-23-67           | Омск (3812)21-46-40            | Ставрополь (8652)20-65-13 |
| Барнаул (3852)73-04-60      | Кемерово (3842)65-04-62         | Орел (4862)44-53-42            | Сургут (3462)77-98-35     |
| Белгород (4722)40-23-64     | Киров (8332)68-02-04            | Оренбург (3532)37-68-04        | Тверь (4822)63-31-35      |
| Брянск (4832)59-03-52       | Краснодар (861)203-40-90        | Пенза (8412)22-31-16           | Томск (3822)98-41-53      |
| Владивосток (423)249-28-31  | Красноярск (391)204-63-61       | Пермь (342)205-81-47           | Тула (4872)74-02-29       |
| Волгоград (844)278-03-48    | Курск (4712)77-13-04            | Ростов-на-Дону (863)308-18-15  | Тюмень (3452)66-21-18     |
| Вологда (8172)26-41-59      | Липецк (4742)52-20-81           | Рязань (4912)46-61-64          | Ульяновск (8422)24-23-59  |
| Воронеж (473)204-51-73      | Магнитогорск (3519)55-03-13     | Самара (846)206-03-16          | Уфа (347)229-48-12        |
| Екатеринбург (343)384-55-89 | Москва (495)268-04-70           | Санкт-Петербург (812)309-46-40 | Хабаровск (4212)92-98-04  |
| Иваново (4932)77-34-06      | Мурманск (8152)59-64-93         | Саратов (845)249-38-78         | Челябинск (351)202-03-61  |
| Ижевск (3412)26-03-58       | Набережные Челны (8552)20-53-41 | Севастополь (8692)22-31-93     | Череповец (8202)49-02-64  |
| Иркутск (395)279-98-46      | Нижний Новгород (831)429-08-12  | Симферополь (3652)67-13-56     | Ярославль (4852)69-52-93  |
| Россия (495)268-04-70       | Киргизия (996)312-96-26-47      | Казахстан (7172)727-132        |                           |