

Installation Equipment and Accessories



Cable gland

Without reduction sealing insert

8161/7-M12-0603 Art. No. 239170



- For safe cable entry in Ex e and Ex i areas
- Can be used at temperatures of between -60 ... +75 °C, degree of protection IP68
- Available in Ex e and Ex i versions (Ex i version distinguished by its blue cap nut)
- Suitable for cable diameters from 1 ... 48 mm
- Versions with multi-seal inserts

MY R. STAHL 8161B



R. STAHL's 8161/7 and 8161/8 series cable entries can be used to safely run cables into Ex e enclosures. They are suitable for cables between 1 to 48 mm in diameter. They are available for Ex e and Ex i circuits – the Ex i version can be distinguished by its blue cap nut. A stopping plug can be integrated to seal any cable entries that are not being used.

Technical Data

Explosion Protection

| | |
|---------------------------------|--|
| Ex version | Ex e |
| Application range (zones) | 1 2 21 22 |
| IECEX gas certificate | IECEX PTB 14.0011 X |
| IECEX gas explosion protection | Ex eb IIC Gb |
| IECEX dust certificate | IECEX PTB 14.0011 X |
| IECEX dust explosion protection | Ex tb IIIC Db |
| ATEX gas certificate | PTB 14 ATEX 1008 X |
| ATEX gas explosion protection | ⊕ II 2 G Ex eb IIC Gb |
| ATEX dust certificate | PTB 14 ATEX 1008 X |
| ATEX dust explosion protection | ⊕ II 2 D Ex tb IIIC Db |
| Certificates | ATEX (PTB), Brazil (ULB), IECEX (PTB), Korea (KGS) |
| Declaration of Conformity | ATEX (EUK) |

Ambient Conditions

| | |
|----------------------|------------------|
| Ambient temperature | 15 °C ... +65 °C |
| Use at the height of | < 2000 m |

Mechanical Data

| | |
|---------------------------|---|
| Strain relief | No |
| Degree of protection (IP) | IP66 |
| Degree of protection note | IP68 at 5 bar 30 min. (IP protection according to IEC/EN 60529) |
| Sealing material | EPDM profile seal |
| Sealing ring material | EPDM |
| Material | Polyamide |
| Material 2 | Glass fibre reinforced |
| Silicone-free | Yes |

Cable gland

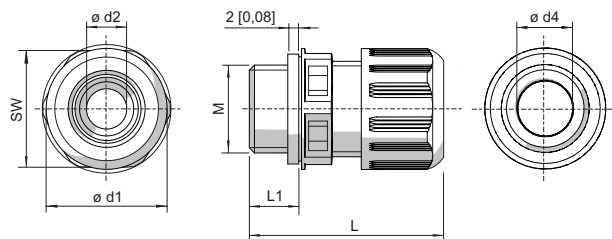
Without reduction sealing insert

8161/7-M12-0603 Art. No. 239170

Mechanical Data

| | |
|-----------------------------|--|
| Self-extinguishing | Yes |
| Flame-retardant | Yes |
| Halogen-free | Yes |
| Surface resistance | $\leq 10^{13} \Omega$ |
| Clamping range | 3 – 6 mm |
| Armouring type | Unarmoured cable types |
| Clamping range | 3 ... 6 mm |
| Total length | 29 to 34 mm |
| Dimension d1 | 18 mm |
| Dimension d2 | 7.3 mm |
| Dimension d4 | 6.3 mm |
| Width across corners | 18 mm |
| Width across flats | 16 mm |
| Thread size | M12 |
| Thread length | 9 mm |
| Thread pitch | 1,5 mm |
| Impact strength (IEC 60079) | 4 J |
| Impact strength | 7 J |
| Impact strength note | Installation only in areas with a low risk of mechanical damage. Protect cable gland from mechanical damage. |
| Colour | Black |
| Lot size | 50 |
| Weight | 7 g |
| Weight | 0.02 lb |

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



M = Thread size
 SW = Width across flats
 L1 = Thread length
 L = Total length

Cable glands without bend protection

| Thread size | Width across flats | Total length | Total length (with long thread) | Thread length | Thread length (long thread) | Clamping range | Clamping range + reduction sealing insert | Dimension d1 | Dimension d2 | Dimension d4 |
|-------------|--------------------|--------------|---------------------------------|---------------|-----------------------------|----------------|---|--------------|--------------|--------------|
| M12 | 16.00 mm | 29 to 34 mm | 35 to 40 mm | 9 mm | 15 mm | 3 - 6 mm | 1 - 6 mm | 18 mm | 7.3 mm | 6.3 mm |
| M16 | 20.00 mm | 31 to 37 mm | 37 to 43 mm | 9 mm | 15 mm | 5 - 9 mm | 2 - 9 mm | 22 mm | 10.3 mm | 9.3 mm |
| M20 | 24.00 mm | 36 to 43 mm | 41 to 48 mm | 10 mm | 15 mm | 7 - 13 mm | 4 - 13 mm | 27 mm | 13.3 mm | 13.3 mm |

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| | | | | | | | | | | |
|-----|-------------|----------------|----------------|-------|-------|------------|------------|-------|------------|------------|
| M25 | 29.00 mm | 38 to 46 mm | 43 to 51 mm | 10 mm | 15 mm | 10 - 17 mm | 7 - 17 mm | 32 mm | 17.3 mm | 17.3 mm |
| M32 | 36.00 mm | 42 to 50 mm | 45 to 53 mm | 12 mm | 15 mm | 13 - 21 mm | 9 - 21 mm | 40 mm | 21.3 mm | 21.3 mm |
| M40 | 46.00 mm | 52 to 65 mm | 58 to 71 mm | 12 mm | 18 mm | 17 - 28 mm | 12 - 28 mm | 51 mm | 28.3 mm | 30 mm |
| M50 | 55.00 mm | 59 to 72 mm | 63 to 76 mm | 14 mm | 18 mm | 23 - 35 mm | 16 - 35 mm | 61 mm | 35.3 mm | 40 mm |
| M63 | 68.00 mm | 64 to 78 mm | 67 to 81 mm | 15 mm | 18 mm | 34 - 48 mm | 28 - 48 mm | 75 mm | 48.3 mm | 53 mm |

Accessories

Locknut, brass nickel-plated (-60 ... +75 °C)

To fasten the cable glands in through holes


Art. No.

| | | |
|--|---|--------|
|  | Material: Nickel-plated brass Lot size: 100 Thread size: M12 | 241518 |
|--|---|--------|

Locknut, plastic (-40 ... +75 °C)

To fasten the cable glands in through holes

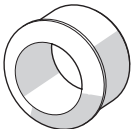
Art. No.

| | | |
|--|---|--------|
|  | Material: Polyamide Lot size: 100 Thread size: M12 | 239460 |
|--|---|--------|

Reduction sealing insert (standard), EPDM (-40 ... +75 °C)

For cable glands

Art. No.

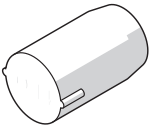
| | | |
|--|---|--------|
|  | Connection thread: M12 x 1.5 Lot size: 50 Clamping range: 1 – 3 mm | 239444 |
|--|---|--------|

Plug (-60 ... +75 °C; depending on cable gland that has been used)

For closing unused cable glands

Material: Polyamide

Art. No.

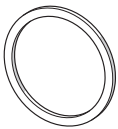
| | | |
|--|-----------------------------|--------|
|  | Diameter: 3 mm Lot size: 50 | 240044 |
| | Diameter: 6 mm Lot size: 50 | 240046 |

Spare Parts

Flat gasket (standard), EPDM (-40 ... +75 °C)

Replacement seals for cable glands

Art. No.

| | | |
|--|--|--------|
|  | For cable glands 8161/-M12-06... Lot size: 100 Connection thread: M12 x 1.5 | 240245 |
| | For cable glands 8161/-M12-06... Lot size: 50 Connection thread: M12 x 1.5 | 240244 |

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