

# Amphenol®



## GuardXcel™ Cable Gland Series

[www.amphenol-industrial.com](http://www.amphenol-industrial.com)

## Company Profile



*Endicott, NY*

### Amphenol Industrial Operations

Amphenol Industrial Operations, headquartered in a 30,000 square foot facility in Endicott, N.Y., provides a full range of high reliability power/signal connectors and interconnection systems specifically for the industrial markets including rail/mass transit, process control, automotive manufacturing, heavy equipment, wireless base stations and petrochemical/power generation.

Products include ruggedized-for-industry cylindrical, rectangular, fiber optic, signal and power, RADSOK power and power-to-board solutions, cable and harness assemblies, as well as industrialized versions of Amphenol's MIL-DTL-5015 cylindrical, MIL-DTL-26482 miniature cylindrical and GT reverse bayonet cylindrical connectors. Amphenol Industrial Operations employs more than 1,400 people globally and is ISO9001, TS96949 and MIL-STD-790 certified.



### Amphenol Technology (Zhuhai) Co., Ltd

Established in 2007, Amphenol Technology (Zhuhai) Co., Ltd. is a manufacturing facility for Amphenol Industrial Operations, which serves a number of industrial markets. Included but not limited to Factory Automation, Transportation, Heavy Equipment, Alternative Energy, Energy Storage. Server/Data Comm and Power Distribution.

Amphenol Technology (Zhuhai) Co., Ltd. covers an area of 276,000 ft<sup>2</sup> and is equipped with CNC, plating, injection molding and assembly workshops. This plant specializes in the design and manufacturing of industrial connectors featuring high power, high density, medium to high voltage electrical properties, and harsh environment applications.

With industry leading engineering, design and manufacturing expertise, Amphenol Technology(Zhuhai) Co., Ltd. has earned more than 60 utility patents on its innovative interconnects. Many of the products produced have been certified by independent standards including UL, IEC/TUV, ATEX, IECEx and MA. The facility is also certified to ISO 9001, ISO 14001 and IATF 16949.

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# STANDARD CABLE GLANDS WITH THREAD, POLYAMIDE

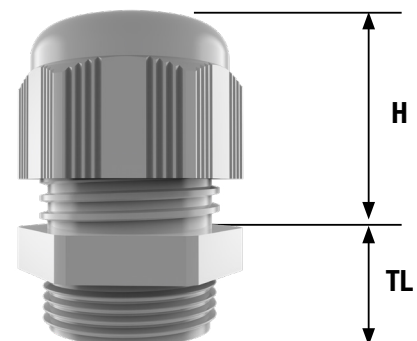
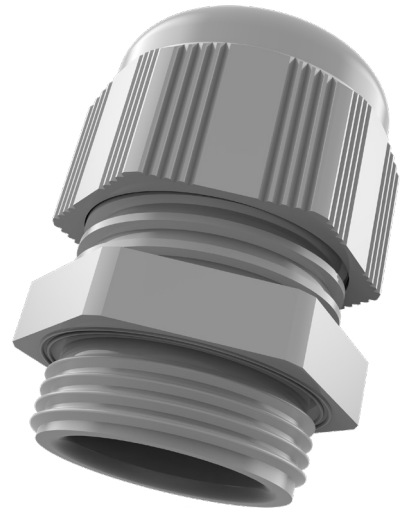
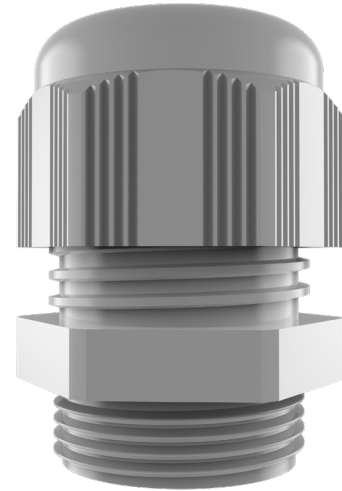
## Polyamide Cable Glands with Lamellar Clamping

- For standard industrial applications in harsh environments.
- Easy assembly.
- High quality strain relief and sealing reliable performance for standard industrial applications.
- Up-to-date international approvals

### Technical Details

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                      |                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                            | PA 6 (Polyamide 6)                                 |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                 | CR (Chloroprene)                                   |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                         |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                 |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                            | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                    | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPT ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• Gas ISO 228</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                            |                                                    |
| Cable Type                                                                          | Non-armored                                                                                                                                                                                                                                                                                                                                                          |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                    |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes.</li> <li>• Other colors on request<br/>RAL 5015 (blue)<br/>RAL 9003 (white)<br/>RAL 3020 (red)</li> </ul> |                                                    |
| Approvals                                                                           | Certification Number                                                                                                                                                                                                                                                                                                                                                 | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                              | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                      | UL50E                                              |

For more approvals: see our web page



# STANDARD CABLE GLANDS WITH THREAD, POLYAMIDE

| Thread Type Metric Acc. to EN 60423 |              |                     |               |           |         |             |                     |                  |                  |
|-------------------------------------|--------------|---------------------|---------------|-----------|---------|-------------|---------------------|------------------|------------------|
| Outer Thread Size                   | Core Ø       | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |                  |                  |
|                                     | min-max (mm) | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      | RAL 7035 Light Gray | RAL 7001 Gray    | RAL 9005 Black   |
| M12x1.5                             | 2.0-5.0      | 8.0                 | 15            | 15        | 17.0    | 25.3        | AIO-BICS-1S         | AIO-BICS-0S      | AIO-BICS-2S      |
|                                     | 2.0-5.0      | 10.0                |               |           |         |             | AIO-BMCS-EN-1SMR    | AIO-BMCS-EN-0SMR | AIO-BMCS-EN-2SMR |
|                                     | 2.0-5.0      | 15.0                |               |           |         |             | AIO-BMCS-EN-1SRL    | AIO-BMCS-EN-0SRL | AIO-BMCS-EN-2SRL |
|                                     | 3.0-6.5      | 8.0                 |               |           |         |             | AIO-BMCS-1S         | AIO-BMCS-0S      | AIO-BMCS-2S      |
|                                     | 3.0-6.5      | 10.0                |               |           |         |             | AIO-BMCS-EN-1SM     | AIO-BMCS-EN-0SM  | AIO-BMCS-EN-2SM  |
|                                     | 3.0-6.5      | 15.0                |               |           |         |             | AIO-BMCS-EN-1SL     | AIO-BMCS-EN-0SL  | AIO-BMCS-EN-2SL  |
| M16x1.5                             | 2.0-6.0      | 8.0                 | 19            | 19        | 21.7    | 27.4        | AIO-BMCS-EN-11R     | AIO-BMCS-EN-01R  | AIO-BMCS-EN-21R  |
|                                     | 2.0-6.0      | 10.0                |               |           |         |             | AIO-BMCS-EN-11MR    | AIO-BMCS-EN-01MR | AIO-BMCS-EN-21MR |
|                                     | 2.0-6.0      | 15.0                |               |           |         |             | AIO-BMCS-EN-11LR    | AIO-BMCS-EN-01LR | AIO-BMCS-EN-21LR |
|                                     | 3.0-7.0      | 10.0                | 22            | 22        | 25.0    | 32.2        | AIO-BICS-11         | AIO-BICS-01      | AIO-BICS-21      |
|                                     | 3.0-7.0      | 15.0                |               |           |         |             | AIO-BICS-11L        | AIO-BICS-01L     | AIO-BICS-21L     |
|                                     | 4.0-8.0      | 8.0                 |               |           |         |             | AIO-BMCS-EN-11      | AIO-BMCS-EN-01   | AIO-BMCS-EN-21   |
|                                     | 4.0-8.0      | 10.0                | 19            | 19        | 21.7    | 27.4        | AIO-BMCS-EN-11M     | AIO-BMCS-EN-01M  | AIO-BMCS-EN-21M  |
|                                     | 4.0-8.0      | 15.0                |               |           |         |             | AIO-BMCS-EN-11L     | AIO-BMCS-EN-01L  | AIO-BMCS-EN-21L  |
|                                     | 5.0-10.0     | 10.0                |               |           |         |             | AIO-BMCS-11         | AIO-BMCS-01      | AIO-BMCS-21      |
|                                     | 5.0-10.0     | 15.0                | 22            | 22        | 25.0    | 32.2        | AIO-BMCS-11L        | AIO-BMCS-01L     | AIO-BMCS-21L     |
| M20x1.5                             | 5.0-9.0      | 10.0                | 24            | 24        | 27.0    | 32.4        | AIO-BICS-12         | AIO-BICS-02      | AIO-BICS-22      |
|                                     | 5.0-9.0      | 15.0                |               |           |         |             | AIO-BICS-12L        | AIO-BICS-02L     | AIO-BICS-22L     |
|                                     | 6.0-12.0     | 10.0                |               |           |         |             | AIO-BMCS-12         | AIO-BMCS-02      | AIO-BMCS-22      |
|                                     | 6.0-12.0     | 15.0                | 27            | 27        | 30.9    | 31.9        | AIO-BMCS-12L        | AIO-BMCS-02L     | AIO-BMCS-22L     |
|                                     | 7.0-12.0     | 10.0                |               |           |         |             | AIO-BICS-13         | AIO-BICS-03      | AIO-BICS-23      |
|                                     | 7.0-12.0     | 15.0                |               |           |         |             | AIO-BICS-14         | AIO-BICS-04      | AIO-BICS-24      |
|                                     | 7.0-13.0     | 10.0                | 25            | 25        | 27.5    | 34.0        | AIO-BMCS-EN-12S     | AIO-BMCS-EN-02S  | AIO-BMCS-EN-22S  |
|                                     | 10.0-14.0    | 10.0                |               |           |         |             | AIO-BMCS-13         | AIO-BMCS-03      | AIO-BMCS-23      |
|                                     | 10.0-14.0    | 15.0                |               |           |         |             | AIO-BMCS-14         | AIO-BMCS-04      | AIO-BMCS-24      |
|                                     |              |                     | 27            | 27        | 30.9    | 31.9        |                     |                  |                  |
| M25x1.5                             | 9.0-13.0     | 8.0                 | 29            | 29        | 32.5    | 37.7        | AIO-BMCS-EN-13R     | AIO-BMCS-EN-03R  | AIO-BMCS-EN-23R  |
|                                     | 9.0-13.0     | 15.0                |               |           |         |             | AIO-BMCS-EN-13RL    | AIO-BMCS-EN-03RL | AIO-BMCS-EN-23RL |
|                                     | 9.0-16.0     | 10.0                | 33            | 33        | 37.2    | 38.4        | AIO-BICS-15         | AIO-BICS-05      | AIO-BICS-25      |
|                                     | 9.0-16.0     | 15.0                | 33            | 33        | 37.2    | 38.4        | AIO-BICS-16         | AIO-BICS-06      | AIO-BICS-26      |
|                                     | 11.0-17.0    | 8.0                 | 29            | 29        | 32.5    | 37.7        | AIO-BMCS-EN-13      | AIO-BMCS-EN-03   | AIO-BMCS-EN-23   |
|                                     | 11.0-17.0    | 15.0                |               |           |         |             | AIO-BMCS-EN-13L     | AIO-BMCS-EN-03L  | AIO-BMCS-EN-23L  |
|                                     | 13.0-18.0    | 10.0                |               |           |         |             | AIO-BMCS-15         | AIO-BMCS-05      | AIO-BMCS-25      |
|                                     | 13.0-18.0    | 15.0                | 33            | 33        | 37.2    | 38.4        | AIO-BMCS-16         | AIO-BMCS-06      | AIO-BMCS-26      |
|                                     |              |                     |               |           |         |             |                     |                  |                  |
| M32x1.5                             | 11.0-15.0    | 10.0                | 36            | 36        | 41.0    | 42.3        | AIO-BMCS-EN-14R     | AIO-BMCS-EN-04R  | AIO-BMCS-EN-24R  |
|                                     | 11.0-15.0    | 15.0                |               |           |         |             | AIO-BMCS-EN-14RL    | AIO-BMCS-EN-04RL | AIO-BMCS-EN-24RL |
|                                     | 12.0-20.0    | 15.0                | 42            | 42        | 47.1    | 42.3        | AIO-BICS-17         | AIO-BICS-07      | AIO-BICS-27      |
|                                     | 15.0-21.0    | 10.0                | 36            | 36        | 41.0    | 42.3        | AIO-BMCS-EN-14      | AIO-BMCS-EN-04   | AIO-BMCS-EN-24   |
|                                     | 15.0-21.0    | 15.0                |               |           |         |             | AIO-BMCS-EN-14L     | AIO-BMCS-EN-04L  | AIO-BMCS-EN-24L  |
|                                     | 18.0-25.0    | 15.0                | 42            | 42        | 47.1    | 43.3        | AIO-BMCS-17         | AIO-BMCS-07      | AIO-BMCS-27      |
| M40x1.5                             | 16.0-23.0    | 10.0                | 46            | 46        | 52.4    | 47.4        | AIO-BMCS-EN-15R     | AIO-BMCS-EN-05R  | AIO-BMCS-EN-25R  |
|                                     | 16.0-23.0    | 18.0                |               |           |         |             | AIO-BMCS-EN-15RL    | AIO-BMCS-EN-05RL | AIO-BMCS-EN-25RL |
|                                     | 19.0-28.0    | 10.0                |               |           |         |             | AIO-BMCS-EN-15      | AIO-BMCS-EN-05   | AIO-BMCS-EN-25   |
|                                     | 19.0-28.0    | 18.0                | 53            | 53        | 59.6    | 52.4        | AIO-BMCS-EN-15L     | AIO-BMCS-EN-05L  | AIO-BMCS-EN-25L  |
|                                     | 20.0-26.0    | 18.0                |               |           |         |             | AIO-BICS-18         | AIO-BICS-08      | AIO-BICS-28      |
|                                     | 22.0-32.0    | 18.0                |               |           |         |             | AIO-BMCS-18         | AIO-BMCS-08      | AIO-BMCS-28      |
| M50x1.5                             | 25.0-31.0    | 18.0                | 60            | 60        | 67.8    | 54.8        | AIO-BICS-19         | AIO-BICS-09      | AIO-BICS-29      |
|                                     | 30.0-38.0    | 18.0                |               |           |         |             | AIO-BMCS-19         | AIO-BMCS-09      | AIO-BMCS-29      |
| M63x1.5                             | 29.0-35.0    | 18.0                | 65            | 65        | 72.4    | 54.9        | AIO-BICS-20         | AIO-BICS-10      | AIO-BICS-30      |
|                                     | 34.0-44.0    | 18.0                |               |           |         |             | AIO-BMCS-20         | AIO-BMCS-10      | AIO-BMCS-30      |
| M75x2.0                             | 48.0-55.0    | 25.0                | 75            | 80        | 89.0    | 55.0        | AIO-BMCS-B12        | AIO-BMCS-B02     | AIO-BMCS-B22     |

# STANDARD CABLE GLANDS WITH THREAD, POLYAMIDE

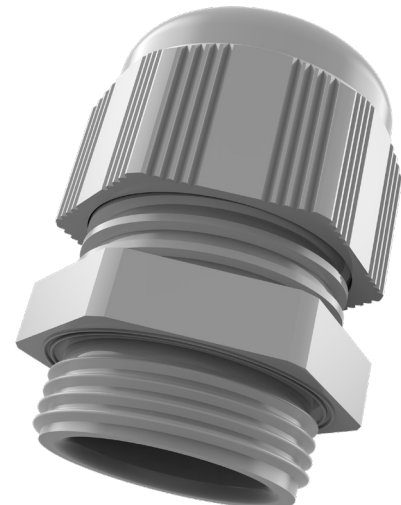
## Polyamide Cable Glands with Lamellar Clamping

- For standard industrial applications in harsh environments.
- Easy assembly.
- High quality strain relief and sealing reliable performance for standard industrial applications.
- Up-to-date international approvals.

### Technical Details

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                    |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                             | PA 6 (Polyamide 6)                                 |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                  | CR (Chloroprene)                                   |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min IP 66                                                                                                                                                                                                                                                                                                                                             |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                  |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                             | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                     | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPT ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• Gas ISO 228</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                             |                                                    |
| Cable Type                                                                          | Non-armored                                                                                                                                                                                                                                                                                                                                                           |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                     |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes.</li> <li>• Other colors on request:<br/>RAL 5015 (blue)<br/>RAL 9003 (white)<br/>RAL 3020 (red)</li> </ul> |                                                    |
| Approvals                                                                           | Certification Number                                                                                                                                                                                                                                                                                                                                                  | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                               | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                       | UL50E                                              |

For more approvals: see our web page

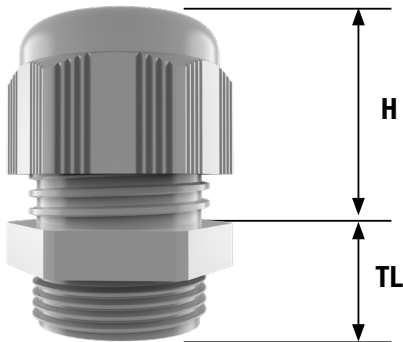


# STANDARD CABLE GLANDS WITH THREAD, POLYAMIDE

| Thread Type NPT Acc. to ANSI B1.20.1 |                  |                     |               |           |         |             |                     |                |                |
|--------------------------------------|------------------|---------------------|---------------|-----------|---------|-------------|---------------------|----------------|----------------|
| Outer Thread Size (Male)             | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |                |                |
|                                      | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      | RAL 7035 Light Gray | RAL 7001 Gray  | RAL 9005 Black |
| NPT 3/8"                             | 3.0-7.0          | 15.0                | 22            | 22        | 25.0    | 32.2        | AIO-BSCSPA-11R      | AIO-BSCSPA-01R | AIO-BSCSPA-21R |
|                                      | 5.0-10.0         | 15.0                | 22            | 22        | 25.0    | 32.2        | AIO-BSCSPA-11       | AIO-BSCSPA-01  | AIO-BSCSPA-21  |
| NPT 1/2"                             | 5.0-9.0          | 15.0                | 24            | 24        | 27.0    | 32.4        | AIO-BSCSPB-12R      | AIO-BSCSPB-02R | AIO-BSCSPB-22R |
|                                      | 6.0-12.0         | 15.0                | 24            | 24        | 27.0    | 32.4        | AIO-BSCSPB-12       | AIO-BSCSPB-02  | AIO-BSCSPB-22  |
|                                      | 7.0-12.0         | 15.0                | 27            | 27        | 30.9    | 31.9        | AIO-BSCSPC-12R      | AIO-BSCSPC-02R | AIO-BSCSPC-22R |
|                                      | 10.0-14.0        | 15.0                | 27            | 27        | 30.9    | 31.9        | AIO-BSCSPC-12       | AIO-BSCSPC-02  | AIO-BSCSPC-22  |
| NPT 3/4"                             | 9.0-16.0         | 15.0                | 33            | 33        | 37.2    | 38.4        | AIO-BSCSPD-13R      | AIO-BSCSPD-03R | AIO-BSCSPD-23R |
|                                      | 13.0-18.0        | 15.0                | 33            | 33        | 37.2    | 38.4        | AIO-BSCSPD-13       | AIO-BSCSPD-03  | AIO-BSCSPD-23  |
| NPT 1"                               | 12.0-20.0        | 18.0                | 42            | 42        | 47.1    | 43.3        | AIO-BSCSP-14R       | AIO-BSCSP-04R  | AIO-BSCSP-24R  |
|                                      | 18.0-25.0        | 18.0                | 42            | 42        | 47.1    | 43.3        | AIO-BSCSP-14        | AIO-BSCSP-04   | AIO-BSCSP-24   |

| Thread Type PG Acc. to DIN 40430 |              |                     |               |           |         |             |                     |               |                |
|----------------------------------|--------------|---------------------|---------------|-----------|---------|-------------|---------------------|---------------|----------------|
| Outer Thread Size                | Core Ø       | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |               |                |
|                                  | min-max (mm) | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | h (mm)      | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| PG 7                             | 2.0-5.0      | 8.0                 | 15            | 15        | 17      | 25.3        | AIO-BSCSR-11        | AIO-BSCSR-01  | AIO-BSCSR-21   |
|                                  | 3.0-6.5      |                     |               |           |         |             | AIO-BSCS-11         | AIO-BSCS-01   | AIO-BSCS-21    |
| PG 9                             | 2.0-6.0      | 8.0                 | 19            | 19        | 21.7    | 27.4        | AIO-BSCSR-12        | AIO-BSCSR-02  | AIO-BSCSR-22   |
|                                  | 4.0-8.0      |                     |               |           |         |             | AIO-BSCS-12         | AIO-BSCS-02   | AIO-BSCS-22    |
| PG 11                            | 3.0-7.0      | 8.0                 | 22            | 22        | 25      | 32.2        | AIO-BSCSR-13        | AIO-BSCSR-03  | AIO-BSCSR-23   |
|                                  | 5.0-10.0     |                     |               |           |         |             | AIO-BSCS-13         | AIO-BSCS-03   | AIO-BSCS-23    |
| PG 13.5                          | 5.0-9.0      | 10.0                | 24            | 24        | 27      | 32.4        | AIO-BSCSR-14        | AIO-BSCSR-04  | AIO-BSCSR-24   |
|                                  | 6.0-12.0     |                     |               |           |         |             | AIO-BSCS-14         | AIO-BSCS-04   | AIO-BSCS-24    |
| PG 16                            | 7.0-12.0     | 10.0                | 27            | 27        | 30.9    | 31.9        | AIO-BSCSR-15        | AIO-BSCSR-05  | AIO-BSCSR-25   |
|                                  | 10.0-14.0    |                     |               |           |         |             | AIO-BSCS-15         | AIO-BSCS-05   | AIO-BSCS-25    |
| PG 21                            | 9.0-16.0     | 11.0                | 33            | 33        | 37.2    | 38.4        | AIO-BSCSR-16        | AIO-BSCSR-06  | AIO-BSCSR-26   |
|                                  | 13.0-18.0    |                     |               |           |         |             | AIO-BSCS-16         | AIO-BSCS-06   | AIO-BSCS-26    |
| PG 29                            | 12.0-20.0    | 11.0                | 42            | 42        | 47.1    | 43.3        | AIO-BSCSR-17        | AIO-BSCSR-07  | AIO-BSCSR-27   |
|                                  | 18.0-25.0    |                     |               |           |         |             | AIO-BSCS-17         | AIO-BSCS-07   | AIO-BSCS-27    |
| PG 36                            | 20.0-26.0    | 13.0                | 53            | 53        | 59.6    | 52.4        | AIO-BSCSR-18        | AIO-BSCSR-08  | AIO-BSCSR-28   |
|                                  | 22.0-32.0    |                     |               |           |         |             | AIO-BSCS-18         | AIO-BSCS-08   | AIO-BSCS-28    |
| PG 42                            | 25.0-31.0    | 13.0                | 60            | 60        | 67.8    | 54.8        | AIO-BSCSR-19        | AIO-BSCSR-09  | AIO-BSCSR-29   |
|                                  | 30.0-38.0    |                     |               |           |         |             | AIO-BSCS-19         | AIO-BSCS-09   | AIO-BSCS-29    |
| PG 48                            | 29.0-35.0    | 14.0                | 65            | 65        | 72.4    | 54.9        | AIO-BSCSR-20        | AIO-BSCSR-10  | AIO-BSCSR-30   |
|                                  | 34.0-44.0    |                     |               |           |         |             | AIO-BSCS-20         | AIO-BSCS-10   | AIO-BSCS-30    |

# STANDARD CABLE GLANDS WITH THREAD, POLYAMIDE



Thread Type G Acc. to G ISO 228

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number         |               |                |
|--------------------------|------------------|---------------------|---------------|-----------|---------|------------|---------------------|---------------|----------------|
|                          | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| G 1/4                    | 2.0-5.0          | 10.0                | 15            | 15        | 17.0    | 25.3       | AIO-BPCSFR-1S       | AIO-BPCSFR-0S | AIO-BPCSFR-2S  |
|                          | 3.0-6.5          | 10.0                | 15            | 15        | 17.0    | 25.3       | AIO-BPCSF-1S        | AIO-BPCSF-0S  | AIO-BPCSF-2S   |
| G 3/8                    | 3.0-7.0          | 11.0                | 22            | 22        | 25.0    | 32.2       | AIO-BPCSFR-11       | AIO-BPCSFR-01 | AIO-BPCSFR-21  |
|                          | 5.0-10.0         | 11.0                | 22            | 22        | 25.0    | 32.2       | AIO-BPCSF-11        | AIO-BPCSF-01  | AIO-BPCSF-21   |
| G 1/2                    | 5.0-9.0          | 10.0                | 24            | 24        | 27.0    | 32.4       | AIO-BPCSFR-12       | AIO-BPCSFR-02 | AIO-BPCSFR-22  |
|                          | 6.0-12.0         | 10.0                | 24            | 24        | 27.0    | 32.4       | AIO-BPCSF-12        | AIO-BPCSF-02  | AIO-BPCSF-22   |
|                          | 7.0-12.0         | 11.0                | 27            | 27        | 30.9    | 31.9       | AIO-BPCSFR-13       | AIO-BPCSFR-03 | AIO-BPCSFR-23  |
|                          | 10.0-14.0        | 11.0                | 27            | 27        | 30.9    | 31.9       | AIO-BPCSF-13        | AIO-BPCSF-03  | AIO-BPCSF-23   |
| G 3/4                    | 9.0-16.0         | 12.0                | 33            | 33        | 37.2    | 38.4       | AIO-BPCSFR-14       | AIO-BPCSFR-04 | AIO-BPCSFR-24  |
|                          | 13.0-18.0        | 12.0                | 33            | 33        | 37.2    | 38.4       | AIO-BPCSF-14        | AIO-BPCSF-04  | AIO-BPCSF-24   |
| G 1                      | 12.0-20.0        | 13.0                | 42            | 42        | 47.1    | 43.3       | AIO-BPCSFR-15       | AIO-BPCSFR-05 | AIO-BPCSFR-25  |
|                          | 18.0-25.0        | 13.0                | 42            | 42        | 47.7    | 43.3       | AIO-BPCSF-15        | AIO-BPCSF-05  | AIO-BPCSF-25   |

# STANDARD CABLE GLANDS WITH THREAD, BRASS

## Brass Cable Glands with Lamellar Clamping

- For standard industrial applications in harsh environments.
- Easy assembly.
- High quality strain relief and sealing reliable performance for standard industrial applications.
- Up-to-date international approvals.

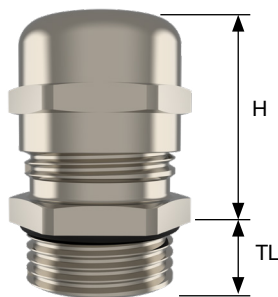


| Technical Details                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                    | Brass Nickel plated                                |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                         | CR (Chloroprene)                                   |
|                                                                                     | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                                              | PA 6 (Polyamide 6)                                 |
|                                                                                     | O-Ring                                                                                                                                                                                                                                                                                                                                                                                                                                       | NBR                                                |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                    | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                            | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPT ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                           |                                                    |
| Cable Type                                                                          | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                                                            |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes.</li> <li>• O-ring available in Metric and PG threads as a standard. For NPT threads, O-ring available upon request.</li> <li>• Accessories must be ordered separately.</li> </ul> |                                                    |
| Approvals                                                                           | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                                                           | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                      | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                              | UL50E                                              |

## Order Coding

| Part Number   | - | Gasket (Washer)               | Lock Nut   | Sealing Plug               |
|---------------|---|-------------------------------|------------|----------------------------|
| Mandatory     | - | Option                        | Option     | Option                     |
| See table     | - | WC-Chloroprene<br>WS-Silicone | L-Lock Nut | P-Dome Plug<br>T-Dust Plug |
| Example       |   |                               |            |                            |
| AIO-BMCSBE-E4 | - | WC                            | L          | P                          |

# STANDARD CABLE GLANDS WITH THREAD, BRASS



| Thread Type NPT Acc. to ANSI B |               |                     |               |           |         |             | Part Number    |
|--------------------------------|---------------|---------------------|---------------|-----------|---------|-------------|----------------|
| Outer Thread Size (Male)       | Clamp Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height |                |
|                                | min-max (mm)  | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                |
| NPT 3/8"                       | 2.0-6.0       | 11.5                | 17            | 19        | 21.0    | 25.5        | AIO-BNCSBD-01  |
|                                | 3.0-7.0       | 11.5                | 20            | 20        | 22.0    | 31.5        | AIO-BNCSBD-01S |
|                                | 4.0-8.0       | 11.5                | 17            | 19        | 21.0    | 25.5        | AIO-BNCSBC-01  |
|                                | 5.0-10.0      | 11.5                | 20            | 20        | 22.0    | 31.5        | AIO-BNCSBC-01S |
| NPT 1/2"                       | 5.0-9.0       | 13.0                | 22            | 22        | 24.5    | 27.5        | AIO-BNCSBD-02  |
|                                | 6.0-12.0      | 13.0                | 22            | 22        | 24.5    | 27.5        | AIO-BNCSBC-02  |
|                                | 7.0-12.0      | 13.0                | 24            | 24        | 26.8    | 30.0        | AIO-BNCSBD-02S |
|                                | 10.0-14.0     | 13.0                | 24            | 24        | 26.8    | 30.0        | AIO-BNCSBC-02S |
| NPT 3/4"                       | 9.0-16.0      | 13.0                | 30            | 30        | 33.0    | 38.0        | AIO-BNCSBD-03  |
|                                | 13.0-18.0     | 13.0                | 30            | 30        | 33.0    | 38.0        | AIO-BNCSBC-03  |
| NPT 1"                         | 12.0-20.0     | 13.0                | 40            | 43        | 48.5    | 45.5        | AIO-BNCSBD-04  |
|                                | 18.0-25.0     | 13.0                | 40            | 43        | 48.5    | 45.5        | AIO-BNCSBC-04  |
| NPT 1 1/4"                     | 22.0-32.0     | 25.6                | 50            | 50        | 55.5    | 50.0        | AIO-BNCSBC-05  |
| NPT 1 1/2"                     | 30.0-38.0     | 26.0                | 58            | 58        | 64.0    | 51.0        | AIO-BNCSBC-06  |
| NPT 2"                         | 34.0-44.0     | 27.0                | 64            | 64        | 70.0    | 55.0        | AIO-BNCSBC-07  |

# STANDARD CABLE GLANDS WITH THREAD, BRASS

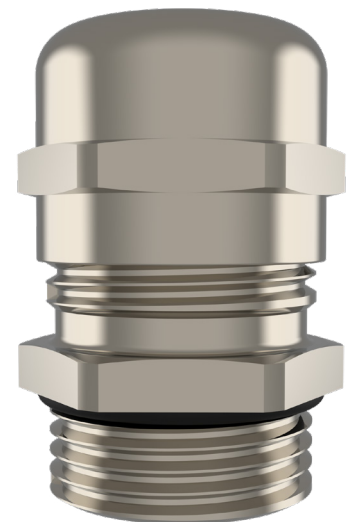
| Thread Type PG Acc. to DIN 40430 |               |                     |               |           |         |             |                |
|----------------------------------|---------------|---------------------|---------------|-----------|---------|-------------|----------------|
| Outer Thread Size (Male)         | Clamp Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number    |
|                                  | min-max (mm)  | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                |
| PG 7                             | 2.0-5.0       | 6.0                 | 14            | 14        | 15.5    | 24.0        | AIO-BSCSBD-01  |
|                                  | 2.0-5.0       | 10.0                | 14            | 14        | 15.5    | 24.0        | AIO-BSCSBE-01R |
|                                  | 3.0-6.5       | 6.0                 | 14            | 14        | 15.5    | 24.0        | AIO-BSCSBC-01  |
|                                  | 3.0-6.5       | 10.0                | 14            | 14        | 15.5    | 24.0        | AIO-BSCSBE-01  |
| PG 9                             | 2.0-6.0       | 6.0                 | 17            | 17        | 18.9    | 25.5        | AIO-BSCSBD-02  |
|                                  | 2.0-6.0       | 10.0                | 17            | 17        | 18.9    | 25.5        | AIO-BSCSBE-02R |
|                                  | 4.0-8.0       | 6.0                 | 17            | 17        | 18.9    | 25.5        | AIO-BSCSBC-02  |
|                                  | 4.0-8.0       | 10.0                | 17            | 17        | 18.9    | 25.5        | AIO-BSCSBE-02  |
| PG 11                            | 3.0-7.0       | 6.0                 | 20            | 20        | 22.0    | 28.0        | AIO-BSCSBD-03  |
|                                  | 3.0-7.0       | 10.0                | 20            | 20        | 22.0    | 28.0        | AIO-BSCSBE-03R |
|                                  | 5.0-10.0      | 6.0                 | 20            | 20        | 22.0    | 28.0        | AIO-BSCSBC-03  |
|                                  | 5.0-10.0      | 10.0                | 20            | 20        | 22.0    | 28.0        | AIO-BSCSBE-03  |
| PG 13.5                          | 5.0-9.0       | 6.5                 | 22            | 22        | 24.5    | 26.5        | AIO-BSCSBD-04  |
|                                  | 5.0-9.0       | 10.0                | 22            | 22        | 24.5    | 26.5        | AIO-BSCSBE-04R |
|                                  | 6.0-12.0      | 6.5                 | 22            | 22        | 24.5    | 26.5        | AIO-BSCSBC-04  |
|                                  | 6.0-12.0      | 10.0                | 22            | 22        | 24.5    | 26.5        | AIO-BSCSBE-04  |
| PG 16                            | 7.0-12.0      | 6.5                 | 24            | 24        | 26.5    | 30.0        | AIO-BSCSBD-05  |
|                                  | 7.0-12.0      | 10.0                | 24            | 24        | 26.5    | 30.0        | AIO-BSCSBE-05R |
|                                  | 10.0-14.0     | 6.5                 | 24            | 24        | 26.5    | 30.0        | AIO-BSCSBC-05  |
|                                  | 10.0-14.0     | 10.0                | 24            | 24        | 26.5    | 30.0        | AIO-BSCSBE-05  |
| PG 21                            | 9.0-16.0      | 7.2                 | 30            | 30        | 33.0    | 35.0        | AIO-BSCSBD-06  |
|                                  | 9.0-16.0      | 12.0                | 30            | 30        | 33.0    | 35.0        | AIO-BSCSBE-06R |
|                                  | 13.0-18.0     | 7.2                 | 30            | 30        | 33.0    | 35.0        | AIO-BSCSBC-06  |
|                                  | 13.0-18.0     | 12.0                | 30            | 30        | 33.0    | 35.0        | AIO-BSCSBE-06  |
| PG 29                            | 12.0-20.0     | 8.0                 | 40            | 40        | 44.5    | 40.5        | AIO-BSCSBD-07  |
|                                  | 12.0-20.0     | 12.0                | 40            | 40        | 44.5    | 40.5        | AIO-BSCSBE-07R |
|                                  | 18.0-25.0     | 8.0                 | 40            | 40        | 44.5    | 40.5        | AIO-BSCSBC-07  |
|                                  | 18.0-25.0     | 12.0                | 40            | 40        | 44.5    | 40.5        | AIO-BSCSBE-07  |
| PG 36                            | 20.0-26.0     | 9.0                 | 50            | 50        | 55.5    | 50.0        | AIO-BSCSBD-08  |
|                                  | 20.0-26.0     | 14.0                | 50            | 50        | 55.5    | 50.0        | AIO-BSCSBE-08R |
|                                  | 22.0-32.0     | 9.0                 | 50            | 50        | 55.5    | 50.0        | AIO-BSCSBC-08  |
|                                  | 22.0-32.0     | 14.0                | 50            | 50        | 55.5    | 50.0        | AIO-BSCSBE-08  |
| PG 42                            | 25.0-31.0     | 12.0                | 58            | 58        | 64.0    | 51.0        | AIO-BSCSBD-09  |
|                                  | 25.0-31.0     | 16.0                | 58            | 58        | 64.0    | 51.0        | AIO-BSCSBE-09R |
|                                  | 30.0-38.0     | 12.0                | 58            | 58        | 64.0    | 51.0        | AIO-BSCSBC-09  |
|                                  | 30.0-38.0     | 16.0                | 58            | 58        | 64.0    | 51.0        | AIO-BSCSBE-09  |
| PG 48                            | 29.0-35.0     | 14.0                | 64            | 64        | 70.0    | 54.5        | AIO-BSCSBD-10  |
|                                  | 29.0-35.0     | 18.0                | 64            | 64        | 70.0    | 54.5        | AIO-BSCSBE-10R |
|                                  | 34.0-44.0     | 14.0                | 64            | 64        | 70.0    | 54.5        | AIO-BSCSBC-10  |
|                                  | 34.0-44.0     | 18.0                | 64            | 64        | 70.0    | 54.5        | AIO-BSCSBE-10  |

# STANDARD CABLE GLANDS WITH THREAD, BRASS

## Brass Cable Glands with Lamellar Clamping

- For standard industrial applications in harsh environments.
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- High quality strain relief and sealing reliable performance for standard industrial applications.
- Up-to-date international approvals.

| Technical Details                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                    |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                   | Brass Nickel plated                                |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                        | CR (Chloroprene)                                   |
|                                                                                     | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                                             | PA 6 (Polyamide 6)                                 |
|                                                                                     | O-Ring                                                                                                                                                                                                                                                                                                                                                                                                                                      | NBR                                                |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                                                                                                |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                   | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                           | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPT ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                          |                                                    |
| Cable Type                                                                          | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                                                           |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes.</li> <li>• O-ring available in Metric and PG threads as a standard. For NPT thread, O-ring available upon request.</li> <li>• Accessories must be ordered separately.</li> </ul> |                                                    |
| Approvals                                                                           | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                                                          | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                     | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                    |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                             | UL50E                                              |

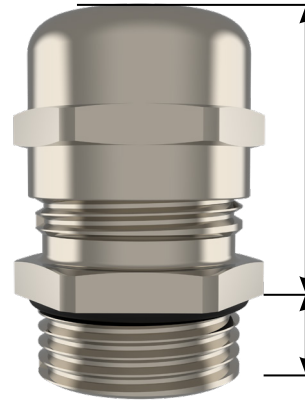


## Order Coding

| Part Number   | - | Gasket (Washer)               | Lock Nut   | Sealing Plug               |
|---------------|---|-------------------------------|------------|----------------------------|
| Mandatory     | - | Option                        | Option     | Option                     |
| See table     | - | WC-Chloroprene<br>WS-Silicone | L-Lock Nut | P-Dome Plug<br>T-Dust Plug |
| Example       |   |                               |            |                            |
| AIO-BMCSBE-E4 | - | WC                            | L          | P                          |

# STANDARD CABLE GLANDS WITH THREAD, BRASS

| Thread Type Metric Acc. to EN 60423 |               |                     |               |           |         |             |                 |
|-------------------------------------|---------------|---------------------|---------------|-----------|---------|-------------|-----------------|
| Outer Thread Size (Male)            | Clamp Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number     |
|                                     | min-max (mm)  | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                 |
| M12x1.5                             | 2.0-5.0       | 6.0                 | 14            | 14        | 15.5    | 24.0        | AIO-BMCSBD-0S   |
|                                     | 2.0-5.0       | 12.0                | 14            | 14        | 15.5    | 24.0        | AIO-BMCSBE-0SR  |
|                                     | 3.0-6.5       | 6.0                 | 14            | 14        | 15.5    | 24.0        | AIO-BMCSBC-0S   |
|                                     | 3.0-6.5       | 12.0                | 14            | 14        | 15.5    | 24.0        | AIO-BMCSBE-0S   |
| M16x1.5                             | 2.0-6.0       | 7.0                 | 17            | 18        | 20.0    | 25.5        | AIO-BMCSBD-01   |
|                                     | 2.0-6.0       | 12.0                | 17            | 18        | 20.0    | 25.5        | AIO-BMCSBE-01R  |
|                                     | 3.0-7.0       | 7.0                 | 20            | 20        | 22.0    | 30.5        | AIO-BMCSBD-E1   |
|                                     | 3.0-7.0       | 12.0                | 20            | 20        | 22.0    | 30.5        | AIO-BMCSBE-E1R  |
|                                     | 4.0-8.0       | 7.0                 | 17            | 18        | 20.0    | 25.5        | AIO-BMCSBC-01   |
|                                     | 4.0-8.0       | 12.0                | 17            | 18        | 20.0    | 25.5        | AIO-BMCSBE-01   |
|                                     | 5.0-10.0      | 6.5                 | 20            | 20        | 22.0    | 31.5        | AIO-BMCSBC-01S  |
|                                     | 5.0-10.0      | 7.0                 | 20            | 20        | 22.0    | 30.5        | AIO-BMCSBC-E1   |
| M20x1.5                             | 5.0-9.0       | 8.0                 | 22            | 22        | 24.5    | 28.0        | AIO-BMCSBD-E2   |
|                                     | 5.0-9.0       | 12.0                | 22            | 22        | 24.5    | 28.0        | AIO-BMCSBE-E2R  |
|                                     | 6.0-12.0      | 8.0                 | 22            | 22        | 24.5    | 26.5        | AIO-BMCSBC-02   |
|                                     | 6.0-12.0      | 12.0                | 22            | 22        | 24.5    | 26.5        | AIO-BMCSBE-02   |
|                                     | 7.0-13.0      | 8.0                 | 24            | 24        | 26.5    | 30.5        | AIO-BMCSBC-E2S  |
|                                     | 10.0-14.0     | 8.0                 | 24            | 24        | 26.5    | 30.0        | AIO-BMCSBC-02S  |
|                                     | 10.0-14.0     | 12.0                | 24            | 24        | 26.5    | 30.0        | AIO-BMCSBE-02S  |
| M25x1.5                             | 7.0-12.0      | 8.0                 | 24            | 27        | 30.0    | 30.0        | AIO-BMCSBD-03   |
|                                     | 7.0-12.0      | 12.0                | 24            | 27        | 30.0    | 30.0        | AIO-BMCSBE-03R  |
|                                     | 9.0-16.0      | 8.0                 | 30            | 30        | 33.0    | 35.0        | AIO-BMCSBD-03S  |
|                                     | 9.0-16.0      | 12.0                | 30            | 30        | 33.0    | 35.0        | AIO-BMCSBE-03SR |
|                                     | 10.0-14.0     | 8.0                 | 24            | 27        | 30.0    | 30.0        | AIO-BMCSBC-03   |
|                                     | 10.0-14.0     | 12.0                | 24            | 27        | 30.0    | 30.0        | AIO-BMCSBE-03   |
|                                     | 11.0-17.0     | 8.0                 | 27            | 27        | 30.0    | 32.5        | AIO-BMCSBC-E3   |
|                                     | 11.0-17.0     | 12.0                | 27            | 27        | 30.0    | 32.5        | AIO-BMCSBE-E3   |
| M32x1.5                             | 13.0-18.0     | 8.0                 | 30            | 30        | 33.0    | 35.0        | AIO-BMCSBC-03S  |
|                                     | 13.0-18.0     | 12.0                | 30            | 30        | 33.0    | 35.0        | AIO-BMCSBE-03S  |
|                                     | 9.0-16.0      | 9.0                 | 30            | 34        | 37.5    | 35.0        | AIO-BMCSBD-04   |
|                                     | 9.0-16.0      | 15.0                | 30            | 34        | 37.5    | 35.0        | AIO-BMCSBE-04R  |
|                                     | 12.0-20.0     | 9.0                 | 40            | 40        | 44.5    | 46.0        | AIO-BMCSBD-04S  |
|                                     | 12.0-20.0     | 15.0                | 40            | 40        | 44.5    | 46.0        | AIO-BMCSBE-04SR |
|                                     | 13.0-18.0     | 9.0                 | 30            | 34        | 37.5    | 35.0        | AIO-BMCSBC-04   |
|                                     | 13.0-18.0     | 15.0                | 30            | 34        | 37.5    | 35.0        | AIO-BMCSBE-04   |
| M32x1.5                             | 15.0-21.0     | 8.0                 | 34            | 34        | 37.5    | 38.0        | AIO-BMCSBC-E4   |
|                                     | 15.0-21.0     | 15.0                | 34            | 34        | 37.5    | 38.0        | AIO-BMCSBE-E4   |
|                                     | 18.0-25.0     | 9.0                 | 40            | 40        | 44.5    | 46.0        | AIO-BMCSBC-04S  |
|                                     | 18.0-25.0     | 15.0                | 40            | 40        | 44.5    | 46.0        | AIO-BMCSBE-04S  |



| Thread Type Metric Acc. to EN 60423 |               |                     |               |           |         |             |                |
|-------------------------------------|---------------|---------------------|---------------|-----------|---------|-------------|----------------|
| Outer Thread Size (Male)            | Clamp Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number    |
|                                     | min-max (mm)  | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                |
| M40x1.5                             | 12.0-20.0     | 9.0                 | 40            | 43        | 48.5    | 40.5        | AIO-BMCSBD-05  |
|                                     | 12.0-20.0     | 15.0                | 40            | 43        | 48.5    | 40.5        | AIO-BMCSBE-05R |
|                                     | 18.0-25.0     | 9.0                 | 40            | 43        | 48.5    | 40.5        | AIO-BMCSBC-05  |
|                                     | 18.0-25.0     | 15.0                | 40            | 43        | 48.5    | 40.5        | AIO-BMCSBE-05  |
|                                     | 16.0-23.0     | 9.0                 | 43            | 43        | 48.5    | 45.5        | AIO-BMCSBD-E5  |
|                                     | 16.0-23.0     | 15.0                | 43            | 43        | 48.5    | 45.5        | AIO-BMCSBE-E5R |
|                                     | 19.0-28.0     | 9.0                 | 43            | 43        | 48.5    | 45.5        | AIO-BMCSBC-E5  |
|                                     | 19.0-28.0     | 15.0                | 43            | 43        | 48.5    | 45.5        | AIO-BMCSBE-E5  |
|                                     | 22.0-32.0     | 9.0                 | 50            | 50        | 55.5    | 54.5        | AIO-BMCSBC-05S |
|                                     | 22.0-32.0     | 15.0                | 50            | 50        | 55.5    | 54.5        | AIO-BMCSBE-05S |
| M50x1.5                             | 20.0-26.0     | 9.0                 | 50            | 55        | 61.0    | 50.0        | AIO-BMCSBD-06  |
|                                     | 20.0-26.0     | 15.0                | 50            | 55        | 61.0    | 50.0        | AIO-BMCSBE-06R |
|                                     | 22.0-32.0     | 9.0                 | 50            | 55        | 61.0    | 50.0        | AIO-BMCSBC-06  |
|                                     | 22.0-32.0     | 15.0                | 50            | 55        | 61.0    | 50.0        | AIO-BMCSBE-06  |
|                                     | 27.0-38.0     | 9.0                 | 58            | 58        | 64.0    | 54.0        | AIO-BMCSBC-E6  |
|                                     | 27.0-38.0     | 15.0                | 58            | 58        | 64.0    | 54.0        | AIO-BMCSBE-E6  |
|                                     | 34.0-44.0     | 9.0                 | 64            | 64        | 70.0    | 55.0        | AIO-BMCSBC-06S |
|                                     | 34.0-44.0     | 15.0                | 64            | 64        | 70.0    | 55.0        | AIO-BMCSBE-06S |
| M63x1.5                             | 29.0-35.0     | 10.0                | 64            | 68        | 75.0    | 56.0        | AIO-BMCSBD-E7  |
|                                     | 29.0-35.0     | 14.0                | 64            | 68        | 75.0    | 55.0        | AIO-BMCSBD-07  |
|                                     | 29.0-35.0     | 18.0                | 64            | 68        | 75.0    | 55.0        | AIO-BMCSBE-07R |
|                                     | 34.0-44.0     | 10.0                | 64            | 68        | 75.0    | 55.0        | AIO-BMCSBC-E7  |
|                                     | 34.0-44.0     | 15.0                | 64            | 68        | 75.0    | 56.0        | AIO-BMCSBE-E7  |
|                                     | 34.0-44.0     | 14.0                | 64            | 68        | 75.0    | 55.0        | AIO-BMCSBC-07  |
|                                     | 34.0-44.0     | 18.0                | 64            | 68        | 75.0    | 55.0        | AIO-BMCSBE-07  |
|                                     | 37.0-53.0     | 10.0                | 75            | 75        | 83.0    | 53.0        | AIO-BMCSBC-07S |
|                                     | 37.0-53.0     | 18.0                | 75            | 75        | 83.0    | 53.0        | AIO-BMCSBE-07S |

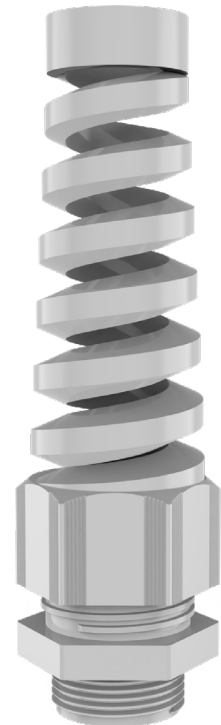
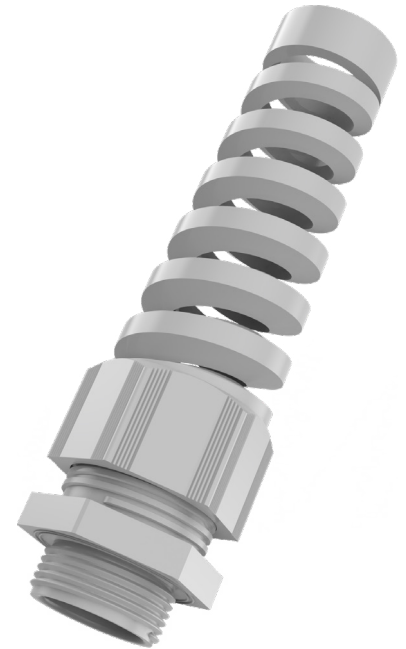
# CABLE PROTECTION GLANDS, POLYAMIDE

## Cable Protection Glands with Lamellar Clamping

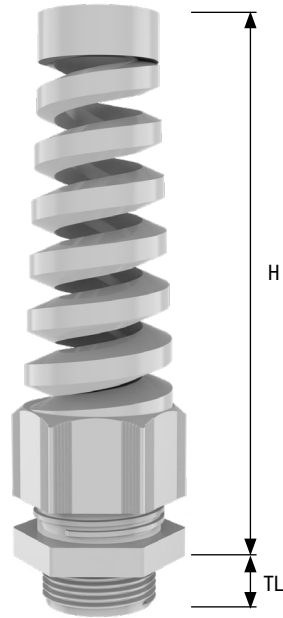
- For cable bending protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

### Technical Details

|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                    |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                                       | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PA 6 (Polyamide 6)                                 |
|                                                                                                | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CR (Chloroprene)                                   |
| Ingress Protection Rating                                                                      | IP 68-5 Bar, 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                    |
| Flammability                                                                                   | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |
| Operating Temperature                                                                          | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Intermittent                                       |
|                                                                                                | -20° C to +100° C                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -40° C to +150° C                                  |
| Thread Type                                                                                    | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• PG DIN 40430</li> <li>• NPT ANSI B1.20.1</li> <li>• Gas ISO 228</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                              |                                                    |
| Cable Type                                                                                     | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                    |
| Accessories                                                                                    | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                                                                                                            |                                                    |
| Remarks                                                                                        | <ul style="list-style-type: none"> <li>• Different Seal types available. Manufactured according to DIN EN 62444/50262.</li> <li>• All accessories must be ordered separately.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes. Other colors on request:</li> <li>• RAL 5015 (blue)</li> <li>• RAL 9003 (white)</li> <li>• RAL 3020 (red)</li> </ul> |                                                    |
| Approvals                                                                                      | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Standards                                          |
| <br>TYPE 4X | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                                                | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | UL50E                                              |



# CABLE PROTECTION GLANDS, POLYAMIDE



Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |                |                |
|--------------------------|------------------|---------------------|---------------|-----------|---------|-------------|---------------------|----------------|----------------|
|                          | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      | RAL 7035 Light Gray | RAL 7001 Gray  | RAL 9005 Black |
| M12x1.5                  | 2.0-5.0          | 8.0                 | 15            | 15        | 16.6    | 58.0        | AIO-BICSSP-1S       | AIO-BICSSP-0S  | AIO-BICSSP-2S  |
|                          | 2.0-5.0          | 10.0                | 15            | 15        | 16.6    | 58.0        | AIO-BICSSP-1SM      | AIO-BICSSP-0SM | AIO-BICSSP-2SM |
|                          | 2.0-5.0          | 15.0                | 15            | 15        | 16.6    | 58.0        | AIO-BICSSP-1SL      | AIO-BICSSP-0SL | AIO-BICSSP-2SL |
|                          | 3.0-6.5          | 8.0                 | 15            | 15        | 16.6    | 58.0        | AIO-BMCSSP-1S       | AIO-BMCSSP-0S  | AIO-BMCSSP-2S  |
|                          | 3.0-6.5          | 10.0                | 15            | 15        | 16.6    | 58.0        | AIO-BMCSSP-1SM      | AIO-BMCSSP-0SM | AIO-BMCSSP-2SM |
|                          | 3.0-6.5          | 15.0                | 15            | 15        | 16.6    | 58.0        | AIO-BMCSSP-1SL      | AIO-BMCSSP-0SL | AIO-BMCSSP-2SL |
| M16x1.5                  | 3.0-7.0          | 10.0                | 22            | 22        | 25.1    | 83.2        | AIO-BICSSP-11       | AIO-BICSSP-01  | AIO-BICSSP-21  |
|                          | 3.0-7.0          | 15.0                | 22            | 22        | 25.1    | 83.2        | AIO-BICSSP-11L      | AIO-BICSSP-01L | AIO-BICSSP-21L |
|                          | 5.0-10.0         | 10.0                | 22            | 22        | 25.1    | 83.2        | AIO-BMCSSP-11       | AIO-BMCSSP-01  | AIO-BMCSSP-21  |
|                          | 5.0-10.0         | 15.0                | 22            | 22        | 25.1    | 83.2        | AIO-BMCSSP-11L      | AIO-BMCSSP-01L | AIO-BMCSSP-21L |
| M20x1.5                  | 5.0-9.0          | 10.0                | 24            | 24        | 27.6    | 96.5        | AIO-BICSSP-12       | AIO-BICSSP-02  | AIO-BICSSP-22  |
|                          | 5.0-9.0          | 15.0                | 24            | 24        | 27.6    | 96.5        | AIO-BICSSP-12L      | AIO-BICSSP-02L | AIO-BICSSP-22L |
|                          | 6.0-12.0         | 10.0                | 24            | 24        | 27.6    | 96.5        | AIO-BMCSSP-12       | AIO-BMCSSP-02  | AIO-BMCSSP-22  |
|                          | 6.0-12.0         | 15.0                | 24            | 24        | 27.6    | 96.5        | AIO-BMCSSP-12L      | AIO-BMCSSP-02L | AIO-BMCSSP-22L |
|                          | 7.0-12.0         | 10.0                | 27            | 27        | 30.5    | 106.4       | AIO-BICSSP-13       | AIO-BICSSP-03  | AIO-BICSSP-23  |
|                          | 7.0-12.0         | 15.0                | 27            | 27        | 30.5    | 106.4       | AIO-BICSSP-14       | AIO-BICSSP-04  | AIO-BICSSP-24  |
|                          | 10.0-14.0        | 10.0                | 27            | 27        | 30.5    | 106.4       | AIO-BMCSSP-13       | AIO-BMCSSP-03  | AIO-BMCSSP-23  |
|                          | 10.0-14.0        | 15.0                | 27            | 27        | 30.5    | 106.4       | AIO-BMCSSP-14       | AIO-BMCSSP-04  | AIO-BMCSSP-24  |
| M25x1.5                  | 9.0-16.0         | 10.0                | 33            | 33        | 37.8    | 118.9       | AIO-BICSSP-15       | AIO-BICSSP-05  | AIO-BICSSP-25  |
|                          | 9.0-16.0         | 15.0                | 33            | 33        | 37.8    | 118.9       | AIO-BICSSP-16       | AIO-BICSSP-06  | AIO-BICSSP-26  |
|                          | 13.0-18.0        | 10.0                | 33            | 33        | 37.8    | 118.9       | AIO-BMCSSP-15       | AIO-BMCSSP-05  | AIO-BMCSSP-25  |
|                          | 13.0-18.0        | 15.0                | 33            | 33        | 37.8    | 118.9       | AIO-BMCSSP-16       | AIO-BMCSSP-06  | AIO-BMCSSP-26  |

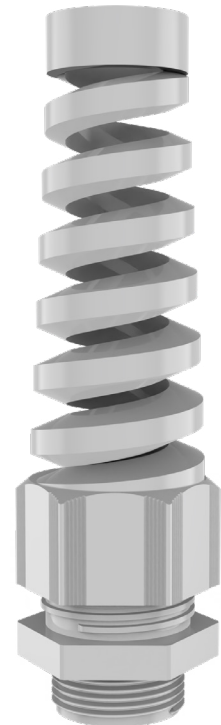
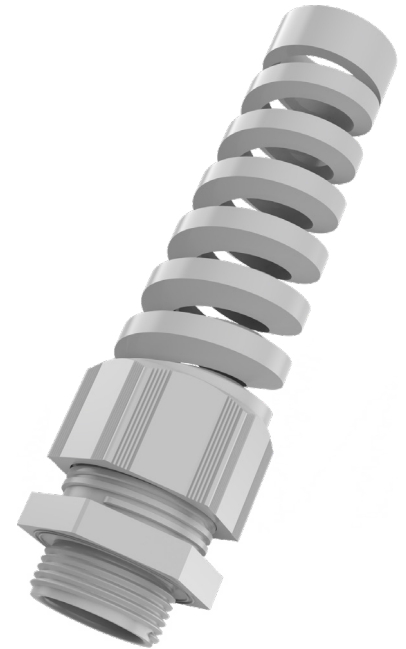
# CABLE PROTECTION GLANDS, POLYAMIDE

## Cable Protection Glands with Lamellar Clamping

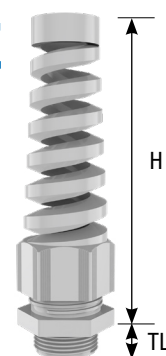
- For cable bending protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

### Technical Details

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                    |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PA 6 (Polyamide 6)                                 |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CR (Chloroprene)                                   |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -30 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• PG DIN 40430</li> <li>• NPT ANSI B1.20.1</li> <li>• Gas ISO 228</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                                                                                             |                                                    |
| Cable Type                                                                          | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                                                                                                                                                                           |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Different Seal types available.</li> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• Accessories must be ordered separately.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Some approvals do not cover all sizes. Other colors on request:               <ul style="list-style-type: none"> <li>• RAL 5015 (blue)</li> <li>• RAL 9003 (white)</li> <li>• RAL 3020 (red)</li> </ul> </li> </ul> |                                                    |
| Approvals                                                                           | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
|                                                                                     | TYPE 4X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL50E                                              |



## CABLE PROTECTION GLANDS, POLYAMIDE



Thread Type NPT Acc. to ANSI B1.20.1

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |                 |                 |
|--------------------------|------------------|---------------------|---------------|-----------|---------|-------------|---------------------|-----------------|-----------------|
|                          | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      | RAL 7035 Light Gray | RAL 7001 Gray   | RAL 9005 Black  |
| NPT 3/8"                 | 3.0-7.0          | 15.0                | 22            | 22        | 25.1    | 83.2        | AIO-BNCSSPA-11R     | AIO-BNCSSPA-01R | AIO-BNCSSPA-21R |
|                          | 5.0-10.0         | 15.0                | 22            | 22        | 25.1    | 83.2        | AIO-BNCSSPA-11      | AIO-BNCSSPA-01  | AIO-BNCSSPA-21  |
| NPT 1/2"                 | 5.0-9.0          | 15.0                | 24            | 24        | 27.6    | 96.5        | AIO-BNCSSPB-12R     | AIO-BNCSSPB-02R | AIO-BNCSSPB-22R |
|                          | 6.0-12.0         | 15.0                | 24            | 24        | 27.6    | 96.5        | AIO-BNCSSPB-12      | AIO-BNCSSPB-02  | AIO-BNCSSPB-22  |
|                          | 7.0-12.0         | 15.0                | 27            | 27        | 30.5    | 106.4       | AIO-BNCSSPC-12R     | AIO-BNCSSPC-02R | AIO-BNCSSPC-22R |
|                          | 10.0-14.0        | 15.0                | 27            | 27        | 30.5    | 106.4       | AIO-BNCSSPC-12      | AIO-BNCSSPC-02  | AIO-BNCSSPC-22  |
| NPT 3/4"                 | 9.0-16.0         | 15.0                | 33            | 33        | 37.8    | 118.9       | AIO-BNCSSPD-13R     | AIO-BNCSSPD-03R | AIO-BNCSSPD-23R |
|                          | 13.0-18.0        | 15.0                | 33            | 33        | 37.8    | 118.9       | AIO-BNCSSPD-13      | AIO-BNCSSPD-03  | AIO-BNCSSPD-23  |

Thread Type PG Acc. to DIN 40430

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number         |               |                |
|--------------------------|------------------|---------------------|---------------|-----------|---------|-------------|---------------------|---------------|----------------|
|                          | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| PG 7                     | 2.0-5.0          | 8.0                 | 15            | 15        | 16.6    | 58.0        | AIO-BSCSRP-11       | AIO-BSCSRP-01 | AIO-BSCSRP-21  |
|                          | 3.0-6.5          | 8.0                 | 15            | 15        | 16.6    | 58.0        | AIO-BSCSSP-11       | AIO-BSCSSP-01 | AIO-BSCSSP-21  |
| PG 9                     | 2.0-6.0          | 8.0                 | 19            | 19        | 21.5    | 68.4        | AIO-BSCSRP-12       | AIO-BSCSRP-02 | AIO-BSCSRP-22  |
|                          | 4.0-8.0          | 8.0                 | 19            | 19        | 21.5    | 68.4        | AIO-BSCSSP-12       | AIO-BSCSSP-02 | AIO-BSCSSP-22  |
| PG 11                    | 3.0-7.0          | 8.0                 | 22            | 22        | 25.1    | 83.2        | AIO-BSCSRP-13       | AIO-BSCSRP-03 | AIO-BSCSRP-23  |
|                          | 5.0-10.0         | 8.0                 | 22            | 22        | 25.1    | 83.2        | AIO-BSCSSP-13       | AIO-BSCSSP-03 | AIO-BSCSSP-23  |
| PG 13.5                  | 5.0-9.0          | 10.0                | 24            | 24        | 27.6    | 96.5        | AIO-BSCSRP-14       | AIO-BSCSRP-04 | AIO-BSCSRP-24  |
|                          | 6.0-12.0         | 10.0                | 24            | 24        | 27.6    | 96.5        | AIO-BSCSSP-14       | AIO-BSCSSP-04 | AIO-BSCSSP-24  |
| PG 16                    | 7.0-12.0         | 10.0                | 27            | 27        | 30.5    | 106.4       | AIO-BSCSRP-15       | AIO-BSCSRP-05 | AIO-BSCSRP-25  |
|                          | 10.0-14.0        | 10.0                | 27            | 27        | 30.5    | 106.4       | AIO-BSCSSP-15       | AIO-BSCSSP-05 | AIO-BSCSSP-25  |
| PG 21                    | 9.0-16.0         | 11.0                | 33            | 33        | 37.8    | 118.9       | AIO-BSCSRP-16       | AIO-BSCSRP-06 | AIO-BSCSRP-26  |
|                          | 13.0-18.0        | 11.0                | 33            | 33        | 37.8    | 118.9       | AIO-BSCSSP-16       | AIO-BSCSSP-06 | AIO-BSCSSP-26  |

# CABLE PROTECTION GLANDS, BRASS

## Cable Protection Glands with Lamellar Clamping, Brass

- For cable bending protection.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.



| Technical Details         |                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Material                  | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                  | Brass, Nickel plated                                                                             |
|                           | Seal                                                                                                                                                                                                                                                                                                                                                                                                                       | CR (Chloroprene)                                                                                 |
|                           | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                            | PA 6 (Polyamide 6)                                                                               |
|                           | Bending Spiral                                                                                                                                                                                                                                                                                                                                                                                                             | Stainless steel (AISI 301)                                                                       |
|                           | O-ring                                                                                                                                                                                                                                                                                                                                                                                                                     | NBR                                                                                              |
| Ingress Protection Rating | IP 68-5 Bar, 30 min                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |
| Flammability              | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                  |
| Operating Temperature     | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                  | Intermittent                                                                                     |
|                           | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                          | -30 °C to +150 °C                                                                                |
| Thread Type               | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• PG DIN 40430</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                                     |                                                                                                  |
| Cable Type                | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                  |
| Accessories               | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> </ul>                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul> |
|                           | <ul style="list-style-type: none"> <li>• Different Seal types available.</li> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• Accessories must be ordered separately.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• O-ring available in Metric and PG threads.</li> <li>• Accessories must be ordered separately.</li> </ul> |                                                                                                  |

### Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number      |
|--------------------------|------------------|---------------------|---------------|-----------|---------|------------|------------------|
|                          | min-max (mm)     |                     | Cap (mm)      | Body (mm) |         |            |                  |
| M12x1.5                  | 3.0-6.5          | 6.0                 | 14            | 14        | 15.5    | 60.0       | AIO-BMCSBCSP-0S  |
| M16x1.5                  | 3.0-7.0          | 6.5                 | 20            | 20        | 22.0    | 77.0       | AIO-BMCSBDSP-01  |
|                          | 5.0-10.0         | 6.5                 | 20            | 20        | 22.0    | 77.0       | AIO-BMCSBCSP-01  |
| M20x1.5                  | 5.0-9.0          | 8.0                 | 22            | 22        | 24.5    | 87.0       | AIO-BMCSBDSP-02  |
|                          | 6.0-12.0         | 8.0                 | 22            | 22        | 24.5    | 87.0       | AIO-BMCSBCSP-02  |
|                          | 10.0-14.0        | 8.0                 | 24            | 24        | 26.5    | 91.5       | AIO-BMCSBCSP-02S |
| M25x1.5                  | 7.0-12.0         | 8.0                 | 24            | 27        | 30.0    | 91.5       | AIO-BMCSBDSP-03  |
|                          | 10.0-14.0        | 8.0                 | 24            | 27        | 30.0    | 91.5       | AIO-BMCSBCSP-03  |
| M32x1.5                  | 9.0-16.0         | 9.0                 | 30            | 34        | 37.5    | 96.0       | AIO-BMCSBDSP-04  |
|                          | 13.0-18.0        | 9.0                 | 30            | 34        | 37.5    | 96.0       | AIO-BMCSBCSP-04  |

### Thread Type PG Acc. to DIN 40430

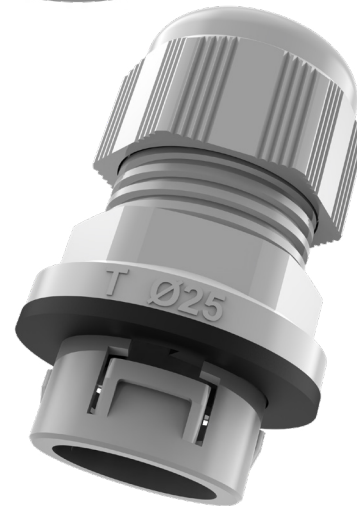
| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number     |
|--------------------------|------------------|---------------------|---------------|-----------|---------|------------|-----------------|
|                          | min-max (mm)     |                     | Cap (mm)      | Body (mm) |         |            |                 |
| PG 11                    | 3.0-7.0          | 6.0                 | 20            | 20        | 22.0    | 73.5       | AIO-BSCSBDSP-03 |
|                          | 5.0-10.0         | 6.0                 | 20            | 20        | 22.0    | 73.5       | AIO-BSCSBCSP-03 |
| PG 13.5                  | 5.0-9.0          | 6.5                 | 22            | 22        | 24.5    | 86.0       | AIO-BSCSBDSP-04 |
|                          | 6.0-12.0         | 6.5                 | 22            | 22        | 24.5    | 86.0       | AIO-BSCSBCSP-04 |
| PG 16                    | 7.0-12.0         | 6.5                 | 24            | 24        | 26.5    | 91.5       | AIO-BSCSBDSP-05 |
|                          | 10.0-14.0        | 6.5                 | 24            | 24        | 26.5    | 91.5       | AIO-BSCSBCSP-05 |
| PG 21                    | 9.0-16.0         | 7.2                 | 30            | 30        | 33.0    | 96.5       | AIO-BSCSBDSP-06 |
|                          | 13.0-18.0        | 7.2                 | 30            | 30        | 33.0    | 96.5       | AIO-BSCSBCSP-06 |

# SNAP-IN GLANDS WITHOUT THREAD, POLYAMIDE

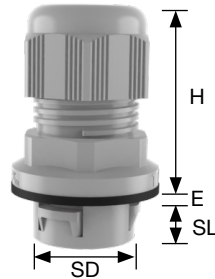
## Polyamide Cable Glands, without Thread

- Easy assembly: push cable gland and turn body clockwise.
- For wall thickness 0.5 mm to 4.0 mm.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Easy disassembly (with separate tool).

| Technical Details                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                    |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                                       | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                        | PA 6 (Polyamide 6)                                 |
|                                                                                                | Gasket                                                                                                                                                                                                                                                                                                                                                                                                           | CR (Chloroprene)                                   |
|                                                                                                | Seal                                                                                                                                                                                                                                                                                                                                                                                                             | CR (Chloroprene)                                   |
| Ingress Protection Rating                                                                      | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                                                                     |                                                    |
| Flammability                                                                                   | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                             |                                                    |
| Operating Temperature                                                                          | Permanent                                                                                                                                                                                                                                                                                                                                                                                                        | Intermittent                                       |
|                                                                                                | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                | -30 °C to +150 °C                                  |
| Cable Type                                                                                     | Non-armored                                                                                                                                                                                                                                                                                                                                                                                                      |                                                    |
| Accessories                                                                                    | <ul style="list-style-type: none"> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Disassembly tools (one piece included per Minimum Order Quantity)</li> </ul>                                                                                                                                                                                     |                                                    |
| Remarks                                                                                        | <ul style="list-style-type: none"> <li>• Different Seal types available.</li> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• Accessories must be ordered separately.</li> <li>• Some approvals do not cover all sizes.</li> <li>• Other colors on request: <ul style="list-style-type: none"> <li>• RAL 5015 (blue)</li> <li>• RAL 9003 (white)</li> <li>• RAL 3020 (red)</li> </ul> </li> </ul> |                                                    |
| Approvals                                                                                      | Certificate Number                                                                                                                                                                                                                                                                                                                                                                                               | Standards                                          |
| <br>TYPE 4X | E542803                                                                                                                                                                                                                                                                                                                                                                                                          | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
|                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                  | UL50E                                              |



# SNAP-IN GLANDS WITHOUT THREAD, POLYAMIDE



Wall Thickness (E) : 0.5-4.0 mm

| Snap Size | Clamp Range    |           | Snap    |         | Wall Hole Ø | Spanner Width |           | Outer Ø | Max. Height | Part Number         |                     |                     |
|-----------|----------------|-----------|---------|---------|-------------|---------------|-----------|---------|-------------|---------------------|---------------------|---------------------|
|           |                |           | Length  | Ø       |             |               |           |         |             | RAL 7035 Light Gray | RAL 7001 Gray       | RAL 9005 Black      |
|           | Ø min-max (mm) | Seal Type | SL (mm) | SD (mm) | HD (mm)     | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                     |                     |                     |
| 16        | 3.0-10.0       | Double    | 9.0     | 15.9    | 16.2-16.4   | 22            | 22        | 26.5    | 44.5        | AIO-BMCSOS-DS-11    | AIO-BMCSOS-DS-01    | AIO-BMCSOS-DS-21    |
|           | 5.0-10.0       | Single    | 9.0     | 15.9    | 16.2-16.4   | 22            | 22        | 26.5    | 44.5        | AIO-BMCSOS-11       | AIO-BMCSOS-01       | AIO-BMCSOS-21       |
| 20        | 5.0-12.0       | Double    | 9.0     | 19.9    | 20.2-20.4   | 24            | 24        | 30.3    | 43.5        | AIO-BMCSOS-DS-12    | AIO-BMCSOS-DS-02    | AIO-BMCSOS-DS-22    |
|           | 3.0-13.0       | Double    | 9.0     | 19.9    | 20.2-20.4   | 25            | 25        | 30.3    | 43.5        | AIO-BMCSOS-EU-DS-12 | AIO-BMCSOS-EU-DS-02 | AIO-BMCSOS-EU-DS-22 |
|           | 6.0-12.0       | Single    | 9.0     | 19.9    | 20.2-20.4   | 24            | 24        | 30.3    | 43.5        | AIO-BMCSOS-12       | AIO-BMCSOS-02       | AIO-BMCSOS-22       |
|           | 7.0-13.0       | Single    | 9.0     | 19.9    | 20.2-20.4   | 25            | 25        | 30.3    | 43.5        | AIO-BMCSOS-EU-12    | AIO-BMCSOS-EU-02    | AIO-BMCSOS-EU-22    |
| 25        | 8.0-17.0       | Double    | 9.0     | 24.9    | 25.2-25.4   | 29            | 29        | 36.3    | 45.5        | AIO-BMCSOS-EU-DS-13 | AIO-BMCSOS-EU-DS-03 | AIO-BMCSOS-EU-DS-23 |
|           | 11.0-17.0      | Single    | 9.0     | 24.9    | 25.2-25.4   | 29            | 29        | 36.3    | 45.5        | AIO-BMCSOS-EU-13    | AIO-BMCSOS-EU-03    | AIO-BMCSOS-EU-23    |
| 32        | 11.0-21.0      | Double    | 9.0     | 31.9    | 32.2-32.4   | 36            | 36        | 43.2    | 51.5        | AIO-BMCSOS-EU-DS-14 | AIO-BMCSOS-EU-DS-04 | AIO-BMCSOS-EU-DS-24 |
|           | 15.0-21.0      | Single    | 9.0     | 31.9    | 32.2-32.4   | 36            | 36        | 43.2    | 51.5        | AIO-BMCSOS-EU-14    | AIO-BMCSOS-EU-04    | AIO-BMCSOS-EU-24    |
| 40        | 16.0-28.0      | Double    | 13.2    | 39.9    | 40.2-40.4   | 46            | 46        | 55.2    | 58.0        | AIO-BMCSOS-EU-DS-15 | AIO-BMCSOS-EU-DS-05 | AIO-BMCSOS-EU-DS-25 |
|           | 19.0-28.0      | Single    | 13.2    | 39.9    | 40.2-40.4   | 46            | 46        | 55.2    | 58.0        | AIO-BMCSOS-EU-15    | AIO-BMCSOS-EU-05    | AIO-BMCSOS-EU-25    |

## Tool to Disassemble Snap-In Glands

### Technical Details

Material Plastic

| For Gland Size | Inner Ø | Height | Part Number  |
|----------------|---------|--------|--------------|
|                | ID (mm) | h (mm) |              |
| 16             | 16.0    | 13.0   | AIO-BECSX-16 |
| 20             | 20.0    | 13.0   | AIO-BECSX-20 |
| 25             | 25.0    | 13.0   | AIO-BECSX-25 |
| 32             | 32.0    | 13.0   | AIO-BECSX-32 |
| 40             | 40.0    | 15.5   | AIO-BECSX-40 |

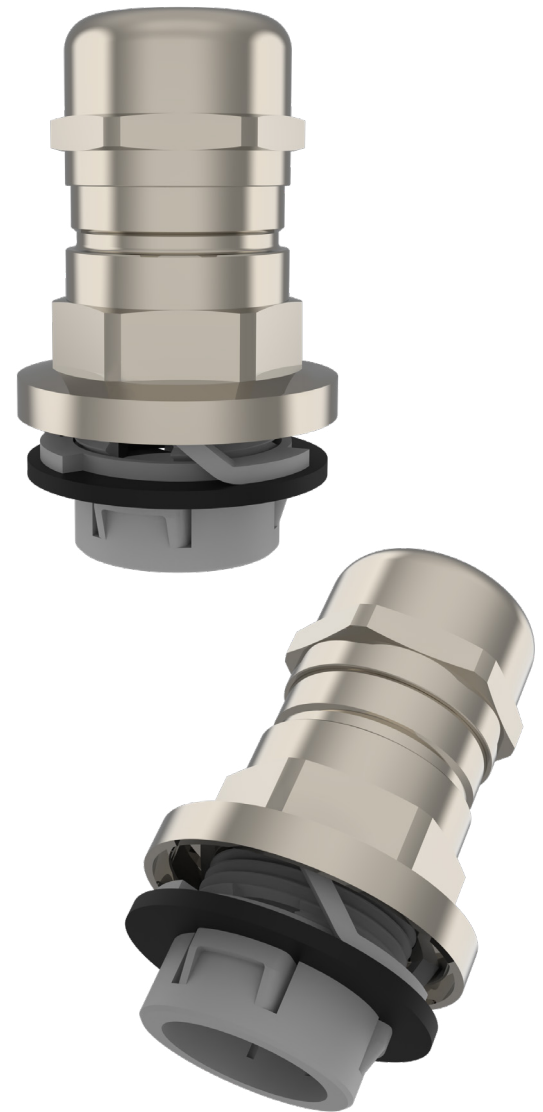
# SNAP-IN CABLE GLANDS WITHOUT THREAD, BRASS

## Brass Cable Glands without Thread

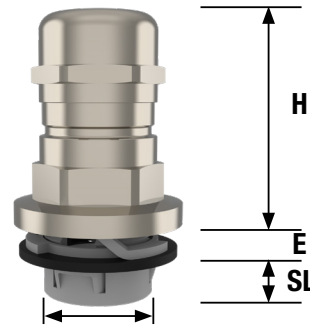
- Easy assembly: push cable gland and turn body clockwise.
- For wall thickness 0.5 mm to 4.0 mm.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Easy disassembly (with separate tool).

### Technical Details

|                           |                                                                                                                                                                                                                        |                     |  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|
| Material                  | Body, Cap                                                                                                                                                                                                              | Brass Nickel plated |  |
|                           | Seal                                                                                                                                                                                                                   | CR (Chloroprene)    |  |
|                           | Gasket                                                                                                                                                                                                                 | CR (Chloroprene)    |  |
|                           | Clamping Insert                                                                                                                                                                                                        | PA 6 (Polyamide 6)  |  |
|                           | Lower Body                                                                                                                                                                                                             | PA 6 (Polyamide 6)  |  |
| Ingress Protection Rating | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                           |                     |  |
| Flammability              | V2 according to UL94                                                                                                                                                                                                   |                     |  |
| Operating Temperature     | Permanent                                                                                                                                                                                                              | Intermittent        |  |
|                           | -20 °C to +100 °C                                                                                                                                                                                                      | -40 °C to +150 °C   |  |
| Cable Type                | Shielded                                                                                                                                                                                                               |                     |  |
| Accessories               | <ul style="list-style-type: none"><li>• Dome plugs</li><li>• Reducing seals</li><li>• Flat cable seals</li><li>• Multihole seals</li><li>• Disassembly tools (one piece included per Minimum Order Quantity)</li></ul> |                     |  |
| Remarks                   | <ul style="list-style-type: none"><li>• Different Seal types available.</li><li>• Manufactured according to DIN EN 62444/50262.</li><li>• Accessories must be ordered separately.</li></ul>                            |                     |  |



# SNAP-IN CABLE GLANDS WITHOUT THREAD, BRASS



| Snap Size | Clamping Range Ø | Seal Type | Snap Length | Snap Ø  | Enclosure Hole Ø | Spanner Width |           | Outer Ø | Max Height | Part Number         |
|-----------|------------------|-----------|-------------|---------|------------------|---------------|-----------|---------|------------|---------------------|
|           | min-max (mm)     |           | SL (mm)     | SD (mm) | HD (mm)          | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                     |
| 16        | 3.0-7.0          | Single    | 9.0         | 16      | 16.2-16.4        | 20            | 20        | 28.3    | 47.0       | AIO-BBCSOS-11R      |
|           | 5.0-10.0         | Single    | 9.0         | 16      | 16.2-16.4        | 20            | 20        | 28.3    | 47.0       | AIO-BBCSOS-11       |
|           | 3.0-10.0         | Double    | 9.0         | 16      | 16.2-16.4        | 20            | 20        | 28.3    | 47.0       | AIO-BBCSOS-DS-11    |
| 20        | 5.0-9.0          | Single    | 9.0         | 20      | 20.2-20.4        | 22            | 22        | 32.3    | 46.0       | AIO-BBCSOS-12R      |
|           | 6.0-12.0         | Single    | 9.0         | 20      | 20.2-20.4        | 22            | 22        | 32.3    | 46.0       | AIO-BBCSOS-12       |
|           | 5.0-12.0         | Double    | 9.0         | 20      | 20.2-20.4        | 22            | 22        | 32.3    | 46.0       | AIO-BBCSOS-DS-12    |
| 25        | 9.0-13.0         | Single    | 9.0         | 25      | 25.2-25.4        | 27            | 27        | 38.5    | 48.0       | AIO-BBCSOS-EU-13R   |
|           | 11.0-17.0        | Single    | 9.0         | 25      | 25.2-25.4        | 27            | 27        | 38.5    | 48.0       | AIO-BBCSOS-EU-13    |
|           | 8.0-17.0         | Double    | 9.0         | 25      | 25.2-25.4        | 27            | 27        | 38.5    | 48.0       | AIO-BBCSOS-EU-DS-13 |
| 32        | 11.0-15.0        | Single    | 9.0         | 32      | 32.2-32.4        | 34            | 34        | 45.5    | 56.5       | AIO-BBCSOS-EU-14R   |
|           | 15.0-21.0        | Single    | 9.0         | 32      | 32.2-32.4        | 34            | 34        | 45.5    | 56.5       | AIO-BBCSOS-EU-14    |
|           | 11.0-21.0        | Double    | 9.0         | 32      | 32.2-32.4        | 34            | 34        | 45.5    | 56.5       | AIO-BBCSOS-EU-DS-14 |
| 40        | 16.0-23.0        | Single    | 13.2        | 40      | 40.2-40.4        | 43            | 43        | 59.0    | 64.0       | AIO-BBCSOS-EU-15R   |
|           | 19.0-28.0        | Single    | 13.2        | 40      | 40.2-40.4        | 43            | 43        | 59.0    | 64.0       | AIO-BBCSOS-EU-15    |
|           | 16.0-28.0        | Double    | 13.2        | 40      | 40.2-40.4        | 43            | 43        | 59.0    | 64.0       | AIO-BBCSOS-EU-DS-15 |

## SNAP-IN GLAND DISASSEMBLING TOOL

### Tool to Disassemble Snap-In Glands

#### Technical Details

Material PA 6 (Polyamide 6)

| For Gland Size | Inner Ø | Height | Part Number  |
|----------------|---------|--------|--------------|
|                | ID (mm) | h (mm) |              |
| 16             | 16.0    | 13.0   | AIO-BECSX-16 |
| 20             | 20.0    | 13.0   | AIO-BECSX-20 |
| 25             | 25.0    | 13.0   | AIO-BECSX-25 |
| 32             | 32.0    | 13.0   | AIO-BECSX-32 |
| 40             | 40.0    | 15.5   | AIO-BECSX-40 |

# EMC 2 CABLE GLANDS, BRASS

## EMC Cable Glands with Fixed Spring Contact

- Specially designed EMC protective cable glands.
- Long-lasting contact by high definition contact spring.
- Easy assembly: install cable gland-prepare cable sheath-insert cable-tighten cap.
- High quality strain relief and sealing reliable performance for EMC applications.

| Technical Details                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                    |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Brass Nickel plated                                |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | CR (Chloroprene)                                   |
|                                                                                     | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PA 6 (Polyamide 6)                                 |
|                                                                                     | Contact Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Special Copper Alloy                               |
|                                                                                     | O-Ring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | NBR                                                |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• PG DIN 40430</li> <li>• NPT ANSI B1.20.1</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                                                                                                                                                                                                                                                            |                                                    |
| Cable Type                                                                          | Shielded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• EMC Lock nuts</li> <li>• Dome plugs</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of threaded holes and/or the use of special EMC lock nuts to ensure high quality EMC contact quality.</li> <li>• Some approvals do not cover all sizes.</li> <li>• O-ring available in Metric and PG threads as a standard. For NPT threads, O-ring available upon request.</li> <li>• Accessories must be ordered separately.</li> <li>• Other lock nut types also available upon request.</li> </ul> |                                                    |
| Approvals                                                                           | Certification Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL50E                                              |

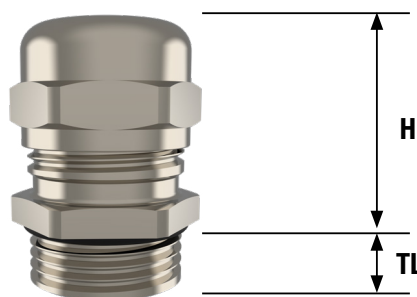
For more approvals: see our web page



# EMC 2 CABLE GLANDS, BRASS

| Thread Type Metric Acc. to EN 60423 |                  |                   |                     |               |           |         |            |                |
|-------------------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|----------------|
| Outer Thread Size (Male)            | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number    |
|                                     | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                |
| M12x1.5                             | 3.0-6.5          | 2.5-4.5           | 6.0                 | 14            | 14        | 15.5    | 24.0       | AIO-BMCSEM-0S  |
|                                     | 3.0-6.5          | 2.5-4.5           | 12.0                | 14            | 14        | 15.5    | 24.0       | AIO-BMCSEN-0S  |
| M16x1.5                             | 4.0-8.0          | 3.5-6.0           | 7.0                 | 17            | 18        | 20.0    | 25.5       | AIO-BMCSEM-01  |
|                                     | 4.0-8.0          | 3.5-6.0           | 12.0                | 17            | 18        | 20.0    | 25.5       | AIO-BMCSEN-01  |
|                                     | 5.0-10.0         | 4.0-8.0           | 6.5                 | 20            | 20        | 22.0    | 31.5       | AIO-BMCSEM-01S |
| M20x1.5                             | 6.0-12.0         | 5.0-10.0          | 8.0                 | 22            | 22        | 24.5    | 26.5       | AIO-BMCSEM-02  |
|                                     | 6.0-12.0         | 5.0-10.0          | 12.0                | 22            | 22        | 24.5    | 26.5       | AIO-BMCSEN-02  |
| M25x1.5                             | 10.0-14.0        | 8.5-11.5          | 8.0                 | 24            | 27        | 30.0    | 30.0       | AIO-BMCSEM-03  |
|                                     | 10.0-14.0        | 8.5-11.5          | 12.0                | 24            | 27        | 30.0    | 30.0       | AIO-BMCSEN-03  |
|                                     | 13.0-18.0        | 11.0-14.0         | 8.0                 | 30            | 30        | 33.0    | 40.0       | AIO-BMCSEM-03S |
| M32x1.5                             | 13.0-18.0        | 11.0-14.0         | 9.0                 | 30            | 34        | 37.5    | 35.0       | AIO-BMCSEM-04  |
|                                     | 13.0-18.0        | 11.0-14.0         | 15.0                | 30            | 34        | 37.5    | 35.0       | AIO-BMCSEN-04  |
|                                     | 18.0-25.0        | 16.0-20.0         | 9.0                 | 40            | 40        | 44.5    | 46.0       | AIO-BMCSEM-04S |
| M40x1.5                             | 18.0-25.0        | 16.0-20.0         | 9.0                 | 40            | 43        | 48.5    | 40.5       | AIO-BMCSEM-05  |
|                                     | 18.0-25.0        | 16.0-20.0         | 15.0                | 40            | 43        | 48.5    | 40.5       | AIO-BMCSEN-05  |
|                                     | 22.0-32.0        | 20.0-27.0         | 9.0                 | 50            | 50        | 55.5    | 54.5       | AIO-BMCSEM-05S |
| M50x1.5                             | 22.0-32.0        | 20.0-27.0         | 9.0                 | 50            | 55        | 61.0    | 50.0       | AIO-BMCSEM-06  |
|                                     | 22.0-32.0        | 20.0-27.0         | 15.0                | 50            | 55        | 61.0    | 50.0       | AIO-BMCSEN-06  |
| M63x1.5                             | 34.0-44.0        | 31.0-40.0         | 14.0                | 64            | 68        | 75.0    | 55.0       | AIO-BMCSEM-07  |
|                                     | 34.0-44.0        | 31.0-40.0         | 18.0                | 64            | 68        | 75.0    | 55.0       | AIO-BMCSEN-07  |

## EMC 2 CABLE GLANDS, BRASS



Thread Type NPT Acc. to ANSI B1.20.1

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number   |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|---------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |               |
| NPT 3/8"                 | 5.0-10.0         | 4.0-8.0           | 11.5                | 20            | 20        | 22.0    | 31.5       | AIO-BNCSEM-01 |
| NPT 1/2"                 | 6.0-12.0         | 5.0-10.0          | 13.0                | 22            | 22        | 24.5    | 27.5       | AIO-BNCSEM-02 |
| NPT 3/4"                 | 13.0-18.0        | 11.0-14.0         | 13.0                | 30            | 30        | 33.0    | 38.0       | AIO-BNCSEM-03 |
| NPT 1"                   | 18.0-25.0        | 16.0-20.0         | 13.0                | 40            | 43        | 48.5    | 45.5       | AIO-BNCSEM-04 |

Thread Type PG Acc. to DIN 40430

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number   |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|---------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |               |
| PG 7                     | 3.0-6.5          | 2.5-4.5           | 6.0                 | 14            | 14        | 15.5    | 24.0       | AIO-BSCSEM-01 |
|                          | 3.0-6.5          | 2.5-4.5           | 10.0                | 14            | 14        | 15.5    | 24.0       | AIO-BSCSEN-01 |
| PG 9                     | 4.0-8.0          | 3.5-6.0           | 6.0                 | 17            | 17        | 18.9    | 25.5       | AIO-BSCSEM-02 |
|                          | 4.0-8.0          | 3.5-6.0           | 10.0                | 17            | 17        | 18.9    | 25.5       | AIO-BSCSEN-02 |
| PG 11                    | 5.0-10.0         | 4.0-8.0           | 6.0                 | 20            | 20        | 22.0    | 28.0       | AIO-BSCSEM-03 |
|                          | 5.0-10.0         | 4.0-8.0           | 10.0                | 20            | 20        | 22.0    | 28.0       | AIO-BSCSEN-03 |
| PG 13.5                  | 6.0-12.0         | 5.0-10.0          | 6.5                 | 22            | 22        | 24.5    | 26.5       | AIO-BSCSEM-04 |
|                          | 6.0-12.0         | 5.0-10.0          | 10.0                | 22            | 22        | 24.5    | 26.5       | AIO-BSCSEN-04 |
| PG 16                    | 10.0-14.0        | 8.5-11.5          | 6.5                 | 24            | 24        | 26.5    | 30.0       | AIO-BSCSEM-05 |
|                          | 10.0-14.0        | 8.5-11.5          | 10.0                | 24            | 24        | 26.5    | 30.0       | AIO-BSCSEN-05 |
| PG 21                    | 13.0-18.0        | 11.0-14.0         | 7.2                 | 30            | 30        | 33.0    | 35.0       | AIO-BSCSEM-06 |
|                          | 13.0-18.0        | 11.0-14.0         | 12.0                | 30            | 30        | 33.0    | 35.0       | AIO-BSCSEN-06 |
| PG 29                    | 18.0-25.0        | 16.0-20.0         | 8.0                 | 40            | 40        | 44.5    | 40.5       | AIO-BSCSEM-07 |
|                          | 18.0-25.0        | 16.0-20.0         | 12.0                | 40            | 40        | 44.5    | 40.5       | AIO-BSCSEN-07 |
| PG 36                    | 22.0-32.0        | 20.0-27.0         | 9.0                 | 50            | 50        | 55.5    | 50.0       | AIO-BSCSEM-08 |
|                          | 22.0-32.0        | 20.0-27.0         | 14.0                | 50            | 50        | 55.5    | 50.0       | AIO-BSCSEN-08 |
| PG 42                    | 30.0-38.0        | 28.0-34.0         | 12.0                | 58            | 58        | 64.0    | 51.0       | AIO-BSCSEM-09 |
|                          | 30.0-38.0        | 28.0-34.0         | 16.0                | 58            | 58        | 64.0    | 51.0       | AIO-BSCSEN-09 |
| PG 48                    | 34.0-44.0        | 31.0-40.0         | 14.0                | 64            | 64        | 70.0    | 55.0       | AIO-BSCSEM-10 |
|                          | 34.0-44.0        | 31.0-40.0         | 18.0                | 64            | 64        | 70.0    | 55.0       | AIO-BSCSEN-10 |

## Order Coding

| Part Number   |   | Gasket (Washer)                    | EMC Lock Nut | Sealing Plug                |
|---------------|---|------------------------------------|--------------|-----------------------------|
| Mandatory     | - | Option                             | Option       | Option                      |
| See table     | - | WC CR (Chloroprene)<br>WS Silicone | EL Lock Nut  | P Dome Plug<br>T Dust Plugs |
| Example       |   |                                    |              |                             |
| AIO-BMCSEM-03 | - | WC                                 | EL           | P                           |

# EMC 3 CABLE GLANDS, BRASS

## EMC Cable Glands with Moving Spring Contact

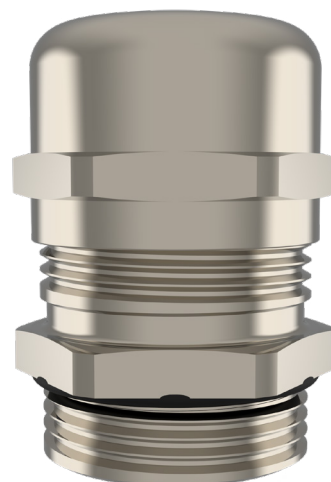
- Specially designed EMC protective cable glands.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly: install cable gland-prepare cable sheath-insert cable-tighten cap.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

### Technical Details

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                    |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Brass Nickel plated                                |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CR (Chloroprene)                                   |
|                                                                                     | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PA 6 (Polyamide 6)                                 |
|                                                                                     | Contact Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Special Copper Alloy                               |
|                                                                                     | O-Ring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | NBR                                                |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                    |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                    |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Intermittent                                       |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -40 °C to +150 °C                                  |
| Thread Type                                                                         | <ul style="list-style-type: none"><li>• Metric EN 60423</li><li>• Other thread types also available upon request.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                         |                                                    |
| Cable Type                                                                          | Shielded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                    |
| Accessories                                                                         | <ul style="list-style-type: none"><li>• EMC Lock nuts</li><li>• Dome plugs</li><li>• Gaskets (Washers)</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                    |                                                    |
| Remarks                                                                             | <ul style="list-style-type: none"><li>• Manufactured according to DIN EN 62444/50262.</li><li>• We recommend the use lock nuts and gaskets</li><li>• to ensure IP rating for rough surfaces or through holes.</li><li>• Some approvals do not cover all sizes.</li><li>• O-ring available in Metric and PG threads as a standard.</li><li>• For NPT threads, O-ring available upon request.</li><li>• Accessories must be ordered separately.</li><li>• Other lock nut types also available upon request.</li></ul> |                                                    |
| Approvals                                                                           | Certification Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Standards                                          |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | UL50E                                              |

For more approvals: see our web page

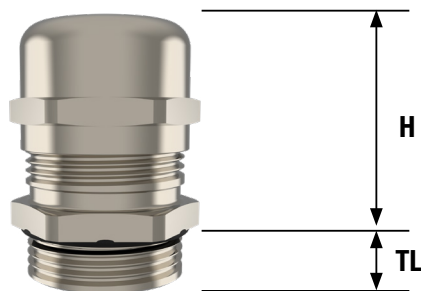
For more approvals: see our web page



### Order Coding

| Part Number   |   | Gasket (Washer)                    | EMC Lock Nut | Sealing Plug                |
|---------------|---|------------------------------------|--------------|-----------------------------|
| Mandatory     | - | Option                             | Option       | Option                      |
| See table     | - | WC CR (Chloroprene)<br>WS Silicone | EL Lock Nut  | P Dome Plug<br>T Dust Plugs |
| Example       |   |                                    |              |                             |
| AIO-KBCSET2LM | - | WC                                 | EL           | P                           |

# EMC 3 CABLE GLANDS, BRASS



Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number   |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|---------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |               |
| M12x1.5                  | 3.0-6.5          | 2.5-4.5           | 6.0                 | 14            | 14        | 15.5    | 24.0       | AIO-BMCSEM-ES |
| M16x1.5                  | 5.0-10.0         | 4.0-8.0           | 7.0                 | 20            | 20        | 22.0    | 32.0       | AIO-BMCSEM-E1 |
| M20x1.5                  | 6.0-12.0         | 5.0-10.0          | 8.0                 | 22            | 22        | 24.5    | 29.5       | AIO-BMCSEM-E2 |
| M25x1.5                  | 11.0-17.0        | 9.5-15.0          | 8.0                 | 27            | 27        | 30.0    | 33.5       | AIO-BMCSEM-E3 |
| M32x1.5                  | 15.0-21.0        | 13.5-19.0         | 8.0                 | 34            | 34        | 37.5    | 38.0       | AIO-BMCSEM-E4 |
| M40x1.5                  | 19.0-28.0        | 17.0-25.0         | 9.0                 | 43            | 43        | 48.5    | 48.0       | AIO-BMCSEM-E5 |
| M50x1.5                  | 27.0-38.0        | 25.0-32.0         | 9.0                 | 58            | 58        | 64.0    | 56.0       | AIO-BMCSEM-E6 |
| M63x1.5                  | 34.0-44.0        | 31.0-41.0         | 14.0                | 64            | 68        | 75.0    | 59.5       | AIO-BMCSEM-E7 |

# EMC 4 CABLE GLANDS, BRASS

## Brass Cable Gland for EMC

- Vibration proof EMC performance.
- Long-lasting contact by high definition contact spring.
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly and disassembly of cable. Spring closes and opens according to fastening of the cap.
- Easy movement of cable as long as not fastened.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

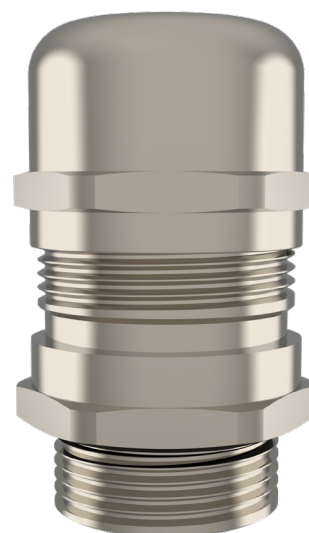
### Technical Details

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                    |  |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--|
| Material                                                                            | Body, Cap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Brass Nickel plated                                |  |
|                                                                                     | Seal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CR (Chloroprene)                                   |  |
|                                                                                     | Clamping Insert                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PA 6 (Polyamide 6)                                 |  |
|                                                                                     | Contact Spring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Special Copper Alloy                               |  |
|                                                                                     | O-Ring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NBR                                                |  |
| Ingress Protection Rating                                                           | IP 68-5 Bar, 30 min                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |  |
| Flammability                                                                        | V2 according to UL94                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                    |  |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Intermittent                                       |  |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -40 °C to +150 °C                                  |  |
| Thread Type                                                                         | <ul style="list-style-type: none"><li>• Metric EN 60423</li><li>• PG DIN 40430</li><li>• NPT ANSI B1.20.1</li><li>• Other thread types also available upon request.</li></ul>                                                                                                                                                                                                                                                                                                                                         |                                                    |  |
| Cable Type                                                                          | Shielded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                    |  |
| Accessories                                                                         | <ul style="list-style-type: none"><li>• EMC Lock nuts</li><li>• Dome plugs</li><li>• Gaskets (Washers)</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                      |                                                    |  |
| Remarks                                                                             | <ul style="list-style-type: none"><li>• Manufactured according to DIN EN 62444/50262.</li><li>• We recommend the use of threaded holes and/or the use of special EMC lock nuts to ensure high quality EMC contact quality.</li><li>• Some approvals do not cover all sizes.</li><li>• O-ring available in Metric and PG threads as a standard. For NPT threads O-ring available upon request.</li><li>• Accessories must be ordered separately.</li><li>• Other lock nut types also available upon request.</li></ul> |                                                    |  |
| Approvals                                                                           | Certification Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Standards                                          |  |
|  | E542803                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | UL514B<br>CSA22.2 No 18.3-12<br>CSA22.2 No 94.2-15 |  |
| TYPE 4X                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UL50E                                              |  |

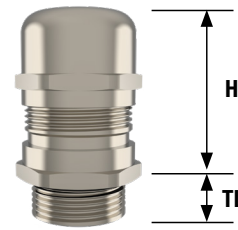
For more approvals: see our web page

### Order Coding

| Part Number         |   | Gasket (Washer)                    | EMC Lock Nut | Sealing Plug                |
|---------------------|---|------------------------------------|--------------|-----------------------------|
| Mandatory           | - | Option                             | Option       | Option                      |
| See table           | - | WC CR (Chloroprene)<br>WS Silicone | EL Lock Nut  | P Dome Plug<br>T Dust Plugs |
| Example             |   |                                    |              |                             |
| AIO-BMCSEM-E6(M50T) | - | WC                                 | EL           | P                           |



## EMC 4 CABLE GLANDS, BRASS



## Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number          |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|----------------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                      |
| M12x1.5                  | 3.0-6.5          | 2.0-5.0           | 6.0                 | 14            | 14        | 15.5    | 30.0       | AIO-BMCSEM-ES(M12T)  |
| M16x1.5                  | 5.0-10.0         | 3.5-8.0           | 6.0                 | 20            | 20        | 22.0    | 35.0       | AIO-BMCSEM-E1(M16T)  |
| M20x1.5                  | 6.0-12.0         | 4.5-10.0          | 6.0                 | 22            | 22        | 24.5    | 33.5       | AIO-BMCSEM-E2S(M20T) |
|                          | 7.5-14.0         | 5.5-11.5          | 8.0                 | 24            | 24        | 26.8    | 41.5       | AIO-BMCSEM-E2(M20T)  |
| M25x1.5                  | 10.0-18.0        | 7.0-14.0          | 8.0                 | 30            | 30        | 33.0    | 44.5       | AIO-BMCSEM-E3(M25T)  |
| M32x1.5                  | 16.0-25.0        | 12.0-20.0         | 9.0                 | 40            | 40        | 44.5    | 55.0       | AIO-BMCSEM-E4(M32T)  |
| M40x1.5                  | 22.0-32.0        | 18.0-27.0         | 9.0                 | 50            | 50        | 55.5    | 62.5       | AIO-BMCSEM-E5(M40T)  |
| M50x1.5                  | 30.0-38.0        | 26.0-34.0         | 9.0                 | 58            | 58        | 64.0    | 74.0       | AIO-BMCSEM-E6(M50T)  |
| M63x1.5                  | 34.0-44.0        | 30.0-40.0         | 14.0                | 64            | 68        | 75.0    | 60.0       | AIO-BMCSEM-E7(M63T)  |
|                          | 37.0-53.0        | 33.0-49.0         | 10.0                | 75            | 75        | 83.0    | 75.0       | AIO-BMCSEM-E7L(M63T) |

## Thread Type NPT Acc. to ANSI B1.20.1

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number               |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|---------------------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                           |
| NPT 1/4"                 | 3.0-6.5          | 2.0-5.0           | 11.5                | 14            | 15        | 16.5    | 30.0       | AIO-BNCSEM-ES(NPT1/4"T)   |
| NPT 3/8"                 | 5.0-10.0         | 3.5-8.0           | 11.5                | 20            | 20        | 22.0    | 35.0       | AIO-BNCSEM-E1(NPT3/8"T)   |
| NPT 1/2"                 | 6.0-12.0         | 4.5-10.0          | 15.0                | 22            | 22        | 24.5    | 39.5       | AIO-BNCSEM-E2S(NPT1/2"T)  |
|                          | 7.5-14.0         | 5.5-11.5          | 15.0                | 24            | 24        | 26.8    | 41.5       | AIO-BNCSEM-E2(NPT1/2"T)   |
| NPT 3/4"                 | 10.0-18.0        | 7.0-14.0          | 15.0                | 30            | 30        | 33.0    | 43.5       | AIO-BNCSEM-E3(NPT3/4"T)   |
| NPT 1"                   | 16.0-25.0        | 12.0-20.0         | 20.0                | 40            | 40        | 44.5    | 54.0       | AIO-BNCSEM-E4(NPT1"T)     |
| NPT 1 1/4"               | 22.0-32.0        | 18.0-27.0         | 20.0                | 50            | 50        | 55.5    | 63.0       | AIO-BNCSEM-E5(NPT1 1/4"T) |
| NPT 1 1/2"               | 30.0-38.0        | 26.0-34.0         | 22.0                | 58            | 58        | 64.0    | 73.0       | AIO-BNCSEM-E6(NPT1 1/2"T) |
| NPT 2"                   | 34.0-44.0        | 30.0-40.0         | 22.0                | 64            | 68        | 75.0    | 73.0       | AIO-BNCSEM-E7(NPT2"T)     |

## Thread Type PG Acc. to DIN 40430

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | Part Number            |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|------------|------------------------|
|                          | min-max (mm)     | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                        |
| PG 7                     | 3.0-6.5          | 2.0-5.0           | 6.0                 | 14            | 15        | 16.5    | 30.0       | AIO-BSCSEM-E1(PG7T)    |
| PG 9                     | 4.0-8.0          | 2.5-6.0           | 6.0                 | 17            | 17        | 19.0    | 36.0       | AIO-BSCSEM-E2(PG9T)    |
| PG 11                    | 5.0-10.0         | 3.5-8.0           | 6.0                 | 20            | 21        | 23.0    | 35.0       | AIO-BSCSEM-E3(PG11T)   |
| PG 13.5                  | 6.0-12.0         | 4.5-10.0          | 6.5                 | 22            | 22        | 24.5    | 33.5       | AIO-BSCSEM-E4(PG13.5T) |
| PG 16                    | 7.5-14.0         | 5.5-11.5          | 6.5                 | 24            | 25        | 27.5    | 41.5       | AIO-BSCSEM-E5(PG16T)   |
| PG 21                    | 10.0-18.0        | 7.0-14.0          | 7.0                 | 30            | 32        | 35.5    | 44.5       | AIO-BSCSEM-E6(PG21T)   |
| PG 29                    | 16.0-25.0        | 12.0-20.0         | 9.0                 | 40            | 40        | 44.5    | 55.0       | AIO-BSCSEM-E7(PG29T)   |
| PG 36                    | 22.0-32.0        | 18.0-27.0         | 9.0                 | 50            | 50        | 55.5    | 62.0       | AIO-BSCSEM-E8(PG36T)   |
| PG 42                    | 30.0-38.0        | 26.0-34.0         | 12.0                | 58            | 60        | 66.5    | 74.5       | AIO-BSCSEM-E9(PG42T)   |
| PG 48                    | 34.0-44.0        | 30.0-40.0         | 14.0                | 64            | 68        | 75.0    | 60.5       | AIO-BSCSEM-E10(PG48T)  |

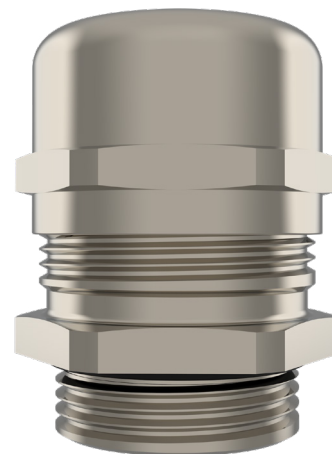
# OCTANS CABLE GLANDS FOR RAILWAY APPLICATION, BRASS

## Brass Railway Cable Glands with Lamellar Clamping

- For railway applications.
- Prevents damages according to pressure differences.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals.

### Technical Details

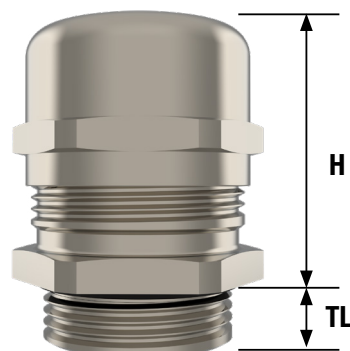
|                           |            |                                                                                                                                                                                                              |
|---------------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Body, Cap: | Brass, Brass Nickel Plated                                                                                                                                                                                   |
|                           | Seal:      | EPDM                                                                                                                                                                                                         |
|                           | O-ring:    | EPDM                                                                                                                                                                                                         |
| Ingress Protection Rating |            | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                 |
| Flammability              |            | R22 acc. to EN45545-2<br>R23 acc. to EN45545-2<br>HL2 acc. to EN45545-2<br>HL3 acc. to EN45545-2                                                                                                             |
| Approvals                 |            | The sealing material of the products has CURRENTA Approval in conformity with EN 45545-3.                                                                                                                    |
| Operating Temperature     |            | SEAL MATERIAL<br>Permanent<br>-50°C to +125°C                                                                                                                                                                |
| Thread Type               |            | Metric (M) EN 60423<br>NPT (N) ANSI ASME B1.20.1                                                                                                                                                             |
| Accessories               |            | Locknuts                                                                                                                                                                                                     |
| Remarks                   |            | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |



## Order Coding

|                       |   |            |
|-----------------------|---|------------|
| Part Number           | - | Lock Nut   |
| Mandatory             | - | Option     |
| See table             | - | L Lock nut |
| Example               |   |            |
| AIO-AIO-R-BCSCSU2MBNE | - | L          |

# OCTANS CABLE GLANDS FOR RAILWAY APPLICATION, BRASS



Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Clamping Range Seal Type | Outer Thread Length | Spanner Width |           | Outer Ø | Max. Height | Part Number      |
|--------------------------|------------------|--------------------------|---------------------|---------------|-----------|---------|-------------|------------------|
|                          | min-max (mm)     |                          | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                  |
| M20x1.5                  | 4.0-12.0         | Triple                   | 9.0                 | 22            | 22        | 24.5    | 29.0        | AIO-R-BCSU1MBNE  |
|                          | 10.0-16.0        | Triple                   | 9.0                 | 28            | 28        | 31.0    | 32.0        | AIO-R-BCSU12MBNE |
| M25x1.5                  | 4.0-12.0         | Triple                   | 9.0                 | 22            | 28        | 31.0    | 29.0        | AIO-R-BCSU2SMBNE |
|                          | 10.0-18.0        | Triple                   | 9.0                 | 28            | 28        | 31.0    | 32.5        | AIO-R-BCSU2MBNE  |
| M32x1.5                  | 10.0-18.0        | Triple                   | 9.0                 | 28            | 35        | 39.0    | 32.5        | AIO-R-BCSU3SMBNE |
|                          | 14.0-24.0        | Triple                   | 9.0                 | 35            | 35        | 39.0    | 35.0        | AIO-R-BCSU3MBNE  |
|                          | 22.0-28.0        | Triple                   | 9.0                 | 45            | 45        | 49.5    | 42.5        | AIO-R-BCSU34MBNE |
| M40x1.5                  | 14.0-24.0        | Triple                   | 9.0                 | 35            | 45        | 49.5    | 35.0        | AIO-R-BCSU4SMBNE |
|                          | 22.0-32.0        | Triple                   | 9.0                 | 45            | 45        | 49.5    | 42.5        | AIO-R-BCSU4MBNE  |
| M50x1.5                  | 26.0-35.0        | Triple                   | 9.0                 | 50            | 55        | 61.0    | 45.5        | AIO-R-BCSU5MBNE  |
|                          | 35.0-44.0        | Triple                   | 9.0                 | 64            | 64        | 70.0    | 45.0        | AIO-R-BCSU56MBNE |

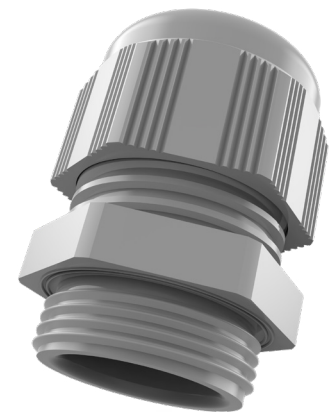
# STANDARD CABLE GLANDS FOR RAILWAY APPLICATIONS, POLYAMIDE

## Polyamide Cable Glands for Railway Application

- For standard industrial applications.
- Easy Assembly
- High quality strain relief and sealing, reliable performance for standard industrial applications.
- Up-to-date international approvals

### Technical Details

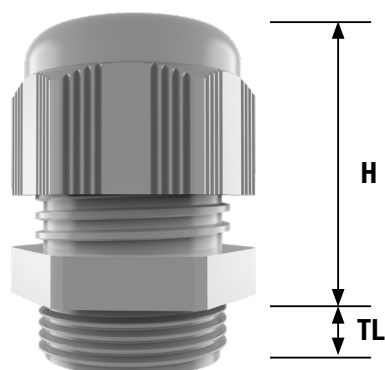
|                           |                     |                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Body, Cap:<br>Seal: | PA 6 (Polyamide 6) (R22, HL3 and R23, HL3)<br>EPDM (R22, HLC and R23, HL3)                                                                                                                                                                                                                                                                                                                               |
| Ingress Protection Rating |                     | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                                                                                                                                                                                                             |
| Flammability              |                     | <ul style="list-style-type: none"> <li>• R22 acc. to EN45545-2</li> <li>• R23 acc. to EN45545-2</li> <li>• HL2 acc. to EN45545-2</li> <li>• HL3 acc. to EN45545-2</li> </ul>                                                                                                                                                                                                                             |
| Operating Temperature     |                     | EPDM<br>-40°C to +100°C                                                                                                                                                                                                                                                                                                                                                                                  |
| Thread Type               |                     | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• PG DIN 40430</li> <li>• NPT ANSI B1.20.1</li> <li>• GasISO 228</li> <li>• Other thread types also available upon request</li> </ul>                                                                                                                                                                                                  |
| Cable Type                |                     | Non-armored                                                                                                                                                                                                                                                                                                                                                                                              |
| Accessories               |                     | <ul style="list-style-type: none"> <li>• Locknuts</li> <li>• Dome plugs</li> <li>• Reducing seals</li> <li>• Flat cable seals</li> <li>• Multihole seals</li> <li>• Gaskets (Washers)</li> </ul>                                                                                                                                                                                                         |
| Remarks                   |                     | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262</li> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes</li> <li>• Some approvals do not cover all sizes</li> <li>• Accessories must be ordered separately</li> <li>• Other colors on request: RAL 5015 (blue), RAL 9003 (white) RAL 3020 (red)</li> </ul> |



### Order Coding

|                         |   |                              |              |            |
|-------------------------|---|------------------------------|--------------|------------|
| Part Number             | - | Gasket (Washer)              | Sealing Plug | Lock Nut   |
| Mandatory               | - | Option                       | Option       | Option     |
| See table               | - | WC Chloroprene<br>WS Silicon | P Dome Plug  | L Lock nut |
| Example                 |   |                              |              |            |
| AIO-R-BCSMEM-E2S (M20T) | - | WC                           | P            | L          |

# STANDARD CABLE GLANDS FOR RAILWAY APPLICATIONS, POLYAMIDE



Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Outer Thread Length | Spanner Width |           | Outer Ø | Max Height | RAL 7035 Light Gray | RAL 7001 Gray     | RAL 9005 Black    |
|--------------------------|------------------|---------------------|---------------|-----------|---------|------------|---------------------|-------------------|-------------------|
|                          | min-max (mm)     | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)     |                     |                   |                   |
| M12x1.5                  | 3.0-6.5          | 8.0                 | 15            | 15        | 17.0    | 25.3       | AIO-R-BCSM-1S       | AIO-R-BCSM-0S     | AIO-R-BCSM-2S     |
| M16x1.5                  | 4.0-8.0          | 8.0                 | 19            | 19        | 21.7    | 27.4       | AIO-R-BCSM-EN-11    | AIO-R-BCSM-EN-01  | AIO-R-BCSM-EN-21  |
|                          | 4.0-8.0          | 10.0                | 19            | 19        | 21.7    | 27.4       | AIO-R-BCSM-EN-11M   | AIO-R-BCSM-EN-01M | AIO-R-BCSM-EN-21M |
|                          | 5.0-10.0         | 10.0                | 22            | 22        | 25.0    | 32.2       | AIO-R-BCSM-11       | AIO-R-BCSM-01     | AIO-R-BCSM-21     |
|                          | 5.0-10.0         | 15.0                | 22            | 22        | 25.0    | 32.2       | AIO-R-BCSM-11L      | AIO-R-BCSM-01L    | AIO-R-BCSM-21L    |
| M20x1.5                  | 6.0-12.0         | 10.0                | 24            | 24        | 27.0    | 32.4       | AIO-R-BCSM-12       | AIO-R-BCSM-02     | AIO-R-BCSM-22     |
|                          | 6.0-12.0         | 15.0                | 24            | 24        | 27.0    | 32.4       | AIO-R-BCSM-12L      | AIO-R-BCSM-02L    | AIO-R-BCSM-22L    |
|                          | 10.0-14.0        | 10.0                | 27            | 27        | 30.9    | 31.9       | AIO-R-BCSM-13       | AIO-R-BCSM-03     | AIO-R-BCSM-23     |
|                          | 10.0-14.0        | 15.0                | 27            | 27        | 30.9    | 31.9       | AIO-R-BCSM-14       | AIO-R-BCSM-04     | AIO-R-BCSM-24     |
| M25x1.5                  | 13.0-18.0        | 10.0                | 33            | 33        | 37.2    | 38.4       | AIO-R-BCSM-15       | AIO-R-BCSM-05     | AIO-R-BCSM-25     |
|                          | 13.0-18.0        | 15.0                | 33            | 33        | 37.2    | 38.4       | AIO-R-BCSM-16       | AIO-R-BCSM-06     | AIO-R-BCSM-26     |
| M32x1.5                  | 18.0-25.0        | 15.0                | 42            | 42        | 47.1    | 43.3       | AIO-R-BCSM-17       | AIO-R-BCSM-07     | AIO-R-BCSM-27     |
| M40x1.5                  | 22.0-32.0        | 18.0                | 53            | 53        | 59.6    | 52.4       | AIO-R-BCSM-18       | AIO-R-BCSM-08     | AIO-R-BCSM-28     |

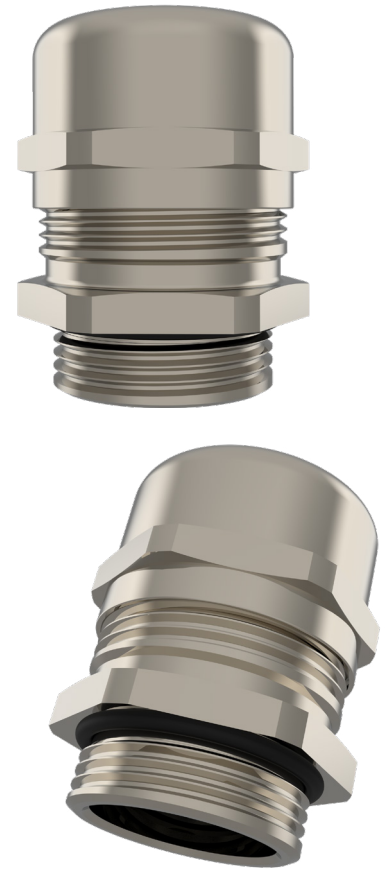
# STANDARD CABLE GLANDS FOR RAILWAY APPLICATION, BRASS

## Brass Railway Cable Glands with Lamellar Clamping

- For railway applications.
- Prevents damages according to pressure differences.
- Easy assembly.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

### Technical Details

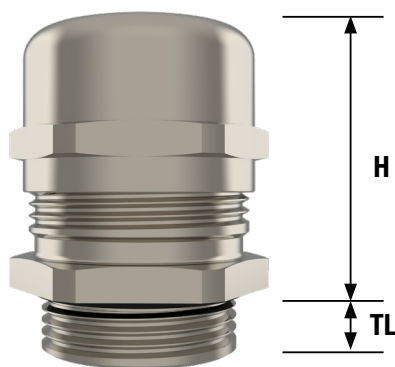
|                           |                 |                                                                                                                                                                                                              |
|---------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Body, Cap       | Brass, Brass Nickel Plated                                                                                                                                                                                   |
|                           | Seal            | EPDM                                                                                                                                                                                                         |
|                           | Clamping Insert | PA 6 (Polyamide 6)                                                                                                                                                                                           |
|                           | O-ring          | EPDM                                                                                                                                                                                                         |
| Ingress Protection Rating |                 | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                 |
| Flammability              |                 | <ul style="list-style-type: none"> <li>• R22 acc. to EN45545-2</li> <li>• R23 acc. to EN45545-2</li> <li>• HL2 acc. to EN45545-2</li> <li>• HL3 acc. to EN45545-2</li> </ul>                                 |
| Approvals                 |                 | The sealing material of the products has CURRENTA Approval in conformity with EN 45545-3.                                                                                                                    |
| Operating Temperature     |                 | SEAL MATERIAL<br>Permanent<br>-40°C to +100°C                                                                                                                                                                |
| Thread Type               |                 | Metric (M) EN 60423<br>NPT (N) ANSI ASME B1.20.1                                                                                                                                                             |
| Accessories               |                 | Locknuts                                                                                                                                                                                                     |
| Remarks                   |                 | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |



## Order Coding

|                 |   |            |
|-----------------|---|------------|
| Part Number     | - | Lock Nut   |
| Mandatory       | - | Option     |
| See table       | - | L Lock nut |
| Example         |   |            |
| AIO-R-BCSMBE-E2 | - | L          |

# CABLE GLANDS FOR RAILWAY APPLICATIONS, BRASS



| Thread Type Metric Acc. to EN 60423 |                     |                        |               |              |           |            |                  |
|-------------------------------------|---------------------|------------------------|---------------|--------------|-----------|------------|------------------|
| Outer Thread Size<br>(Male)         | Clamping Range<br>Ø | Outer Thread<br>Length | Spanner Width |              | Outer Ø   | Max Height | Part Number      |
|                                     | min-max<br>(mm)     | TL<br>(mm)             | Cap<br>(mm)   | Body<br>(mm) | D<br>(mm) | H<br>(mm)  |                  |
| M12x1.5                             | 3.0-6.5             | 6.0                    | 14            | 14           | 15.5      | 24.0       | AIO-R-BCSMBC-ES  |
|                                     | 3.0-6.5             | 12.0                   | 14            | 14           | 15.5      | 24.0       | AIO-R-BCSMBE-ES  |
| M16x1.5                             | 4.0-8.0             | 7.0                    | 17            | 18           | 20.0      | 25.5       | AIO-R-BCSMBC-01  |
|                                     | 4.0-8.0             | 12.0                   | 17            | 18           | 20.0      | 25.5       | AIO-R-BCSMBE-01  |
|                                     | 5.0-10.0            | 7.0                    | 20            | 20           | 22.0      | 30.5       | AIO-R-BCSMBC-E1  |
|                                     | 5.0-10.0            | 12.0                   | 20            | 20           | 22.0      | 30.5       | AIO-R-BCSMBE-E1  |
| M20x1.5                             | 6.0-12.0            | 8.0                    | 22            | 22           | 24.5      | 28.0       | AIO-R-BCSMBC-E2  |
|                                     | 6.0-12.0            | 12.0                   | 22            | 22           | 24.5      | 28.0       | AIO-R-BCSMBE-E2  |
|                                     | 10.0-14.0           | 8.0                    | 24            | 24           | 26.5      | 30.0       | AIO-R-BCSMBC-02S |
|                                     | 10.0-14.0           | 12.0                   | 24            | 24           | 26.5      | 30.0       | AIO-R-BCSMBE-02S |
| M25x1.5                             | 13.0-18.0           | 8.0                    | 30            | 30           | 33.0      | 35.0       | AIO-R-BCSMBC-03S |
|                                     | 13.0-18.0           | 12.0                   | 30            | 30           | 33.0      | 35.0       | AIO-R-BCSMBE-03S |
| M32x1.5                             | 18.0-25.0           | 9.0                    | 40            | 40           | 44.5      | 46.0       | AIO-R-BCSMBC-04S |
|                                     | 18.0-25.0           | 15.0                   | 40            | 40           | 44.5      | 46.0       | AIO-R-BCSMBE-04S |
| M40x1.5                             | 22.0-32.0           | 9.0                    | 50            | 50           | 55.5      | 54.5       | AIO-R-BCSMBC-05S |
|                                     | 22.0-32.0           | 15.0                   | 50            | 50           | 55.5      | 54.5       | AIO-R-BCSMBE-05S |

# CABLE GLANDS FOR RAILWAY APPLICATIONS, EMC 4, BRASS

## EMC 4 Railway Cable Glands with Lamellar Clamping

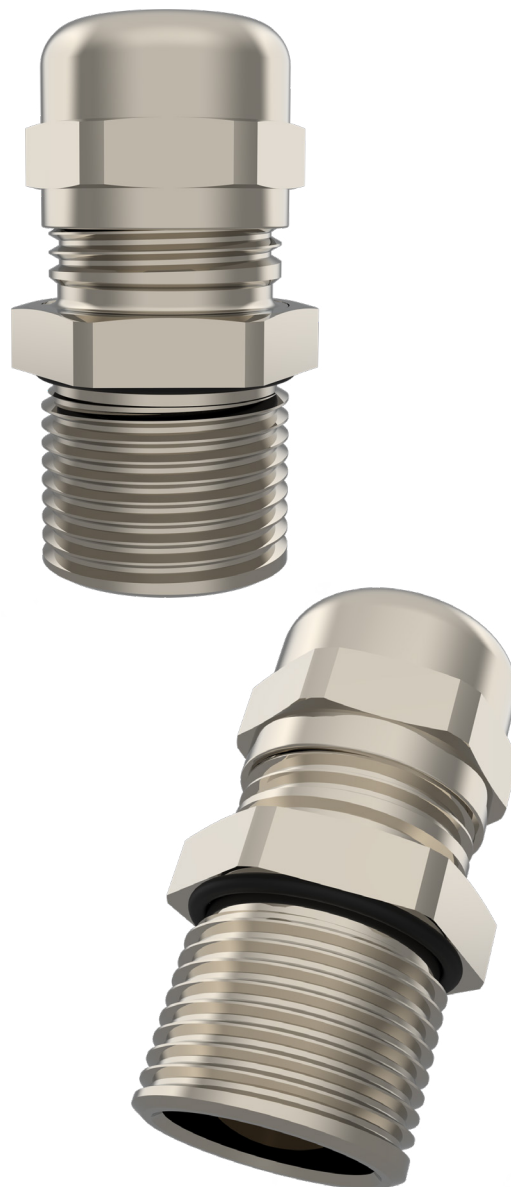
- For railway applications.
- Vibration proof EMC performance
- Long-lasting contact by high definition contact spring
- Moving spring contact offers reduced risk of sheath damage.
- Easy assembly and disassembly of cable. Spring closes and opens according to fastening of the cap.
- Easy movement of cable as long as not fastened.
- High quality strain relief and sealing, reliable performance for EMC applications.
- Up-to-date international approvals.

### Technical Details

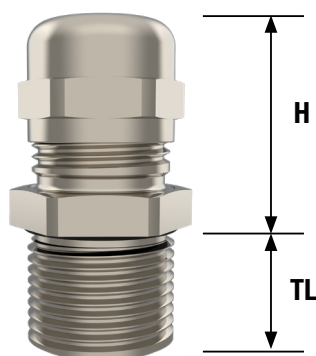
|                           |                  |                                                                                                                                                                                                              |
|---------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Body, Cap:       | Brass Nickel Plated                                                                                                                                                                                          |
|                           | Seal:            | EPDM                                                                                                                                                                                                         |
|                           | Clamping Insert: | PA 6 (Polyamide 6)                                                                                                                                                                                           |
|                           | Contact Spring:  | Special Copper Alloy                                                                                                                                                                                         |
|                           | O-ring:          | EPDM                                                                                                                                                                                                         |
| Ingress Protection Rating |                  | IP 68-5 Bar, 30 min<br>IP 66                                                                                                                                                                                 |
| Flammability              |                  | R22 acc. to EN45545-2<br>R23 acc. to EN45545-2<br>HL2 acc. to EN45545-2<br>HL3 acc. to EN45545-2                                                                                                             |
| Approvals                 |                  | The raw material of the products has<br>CURRENTA Approval in conformity with<br>EN 45545-3.                                                                                                                  |
| Operating Temperature     |                  | SEAL MATERIAL<br>Permanent<br>-40°C to +100°C                                                                                                                                                                |
| Thread Type               |                  | Metric (M) EN 60423<br>NPT (N) ANSI ASME B1.20.1                                                                                                                                                             |
| Accessories               |                  | <ul style="list-style-type: none"> <li>• Locknuts</li> </ul>                                                                                                                                                 |
| Remarks                   |                  | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |

### Order Coding

|                         |   |                              |            |
|-------------------------|---|------------------------------|------------|
| Part Number             | - | Gasket (Washer)              | Lock Nut   |
| Mandatory               | - | Option                       | Option     |
| See table               | - | WC Chloroprene<br>WS Silicon | L Lock nut |
| Example                 |   |                              |            |
| AIO-R-BCSMEM-E2S (M20T) | - | WC                           | L          |



# CABLE GLANDS FOR RAILWAY APPLICATIONS, EMC 4, BRASS



Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Clamping Range Ø | Shield Diameter Ø | Outer Thread Length | Spanner Width |           | Outer Ø | max. Height | Part Number             |
|--------------------------|------------------|-------------------|---------------------|---------------|-----------|---------|-------------|-------------------------|
|                          | min-max mm)      | min-max (mm)      | TL (mm)             | Cap (mm)      | Body (mm) | D (mm)  | H (mm)      |                         |
| M12x1.5                  | 3.0-6.5          | 2.0-5.0           | 6.0                 | 14            | 14        | 15.5    | 30.0        | AIO-R-BCSMEM-ES (M12T)  |
| M16x1.5                  | 5.0-10.0         | 3.5-8.0           | 6.0                 | 20            | 20        | 22.0    | 35.0        | AIO-R-BCSMEM-E1 (M16T)  |
| M20x1.5                  | 6.0-12.0         | 4.5-10.0          | 6.0                 | 22            | 22        | 24.5    | 33.5        | AIO-R-BCSMEM-E2S (M20T) |
| M20x1.5                  | 7.5-14.0         | 5.5-11.5          | 8.0                 | 24            | 24        | 26.8    | 41.5        | AIO-R-BCSMEM-E2 (M20T)  |
| M25x1.5                  | 10.0-18.0        | 7.0-14.0          | 8.0                 | 30            | 30        | 33.0    | 44.5        | AIO-R-BCSMEM-E3 (M25T)  |
| M32x1.5                  | 16.0-25.0        | 12.0-20.0         | 9.0                 | 40            | 40        | 44.5    | 55.0        | AIO-R-BCSMEM-E4 (M32T)  |
| M40x1.5                  | 22.0-32.0        | 18.0-27.0         | 9.0                 | 50            | 50        | 55.5    | 62.5        | AIO-R-BCSMEM-E5 (M40T)  |

# ARMORED CABLE GLANDS

## Cable Glands for Armored Cables

- Specially designed cable glands for armored cables. Large temperature range applications.
- Easy assembly: install cable gland-prepare steel wires-insert cable-tighten cap.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

### Technical Details

|                           |                                                                                                                                                                                                                                                                        |                                             |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Material                  | Cable Gland                                                                                                                                                                                                                                                            | Brass, Brass Nickel Plated, Stainless Steel |
|                           | Inner Part                                                                                                                                                                                                                                                             | Brass, Brass Nickel Plated, Stainless Steel |
|                           | Sealing                                                                                                                                                                                                                                                                | CR (Chloroprene), Silicone                  |
| Ingress Protection Rating | IP 66                                                                                                                                                                                                                                                                  |                                             |
| Operating Temperature     | Seal Material                                                                                                                                                                                                                                                          |                                             |
|                           | CR (Chloroprene)                                                                                                                                                                                                                                                       | Silicone                                    |
|                           | -40°C to +100°C                                                                                                                                                                                                                                                        | -60°C to + 180°C                            |
| Thread Type               | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPT ANSI B1.20.1</li> <li>• Other thread types also available upon request.</li> </ul>                                                                                                             |                                             |
| Cable Type                | SWA, SWB, AWA, STA and Shielded                                                                                                                                                                                                                                        |                                             |
| Accessories               | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Gaskets (Washers)</li> <li>• Shroud</li> </ul>                                                                                                                                                           |                                             |
| Remarks                   | <ul style="list-style-type: none"> <li>• Manufactured according to DIN EN 62444/50262.</li> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |                                             |



## Order Coding

| Part Number   | Seal                             | Material                                               | - | Gasket (Washer)                    | Lock Nut   | Shroud   |
|---------------|----------------------------------|--------------------------------------------------------|---|------------------------------------|------------|----------|
| Mandatory     | Mandatory                        | Mandatory                                              | - | Option                             | Option     | Option   |
| See table     | C CR (Chloroprene)<br>S Silicone | B Brass<br>BN Brass Nickel Plated<br>X Stainless Steel | - | WC CR (Chloroprene)<br>WS Silicone | L Lock Nut | S Shroud |
| Example       |                                  |                                                        |   |                                    |            |          |
| AIO-KBCSET2LM | S                                | BN                                                     | - | WC                                 | L          | S        |

# ARMORED CABLE GLANDS

| Thread Type Metric Acc. to EN 60423 |               |               |                     |               |                  |                 |         |             |               |
|-------------------------------------|---------------|---------------|---------------------|---------------|------------------|-----------------|---------|-------------|---------------|
| Outer Thread Size (Male)            | Clamp Range Ø | Armour Wire Ø | Outer Thread Length | Spanner Width |                  |                 | Outer Ø | Max. Height | Part Number   |
|                                     | min-max (mm)  | min-max (mm)  | TL (mm)             | Cap (mm)      | Middle Body (mm) | Lower Body (mm) | D (mm)  | H (mm)      |               |
| M16x1.5                             | 8.0-15.0      | 0.3-1.3       | 9.0                 | 25            | 25               | 24              | 27.0    | 42.5        | AIO-KBCSET01M |
| M20x1.5                             | 8.0-15.0      | 0.3-1.3       | 9.0                 | 25            | 25               | 24              | 27.0    | 42.5        | AIO-KBCSET1M  |
|                                     | 13.5-21.0     | 0.4-1.3       | 9.0                 | 30            | 30               | 29              | 33.0    | 43.5        | AIO-KBCSET1LM |
| M25x1.5                             | 8.0-15.0      | 0.3-1.3       | 9.0                 | 25            | 25               | 25              | 27.0    | 42.5        | AIO-KBCSET2SM |
|                                     | 13.5-21.0     | 0.4-1.3       | 9.0                 | 30            | 30               | 29              | 33.0    | 43.5        | AIO-KBCSET2M  |
|                                     | 18.0-27.0     | 0.4-1.6       | 9.0                 | 40            | 40               | 40              | 44.5    | 50.0        | AIO-KBCSET2LM |
| M32x1.5                             | 18.0-27.0     | 0.4-1.6       | 9.0                 | 40            | 40               | 40              | 44.5    | 50.0        | AIO-KBCSET3SM |
|                                     | 23.0-33.0     | 0.4-2.0       | 9.0                 | 43            | 43               | 43              | 47.0    | 53.5        | AIO-KBCSET3M  |
| M40x1.5                             | 29.0-40.0     | 0.4-2.0       | 9.0                 | 52            | 52               | 52              | 59.0    | 57.0        | AIO-KBCSET4M  |
| M50x1.5                             | 35.0-48.0     | 0.4-2.5       | 9.0                 | 60            | 60               | 60              | 66.5    | 69.5        | AIO-KBCSET5SM |
|                                     | 42.0-56.0     | 0.6-2.5       | 9.0                 | 75            | 74               | 70              | 83.0    | 76.5        | AIO-KBCSET5M  |
| M63x1.5                             | 42.0-56.0     | 0.6-2.5       | 9.0                 | 75            | 74               | 70              | 83.0    | 76.5        | AIO-KBCSET6SM |
|                                     | 53.0-66.0     | 0.6-2.5       | 9.0                 | 85            | 85               | 80              | 94.0    | 77.5        | AIO-KBCSET6M  |
| M75x1.5                             | 53.0-66.0     | 0.6-2.5       | 9.0                 | 85            | 85               | 80              | 94.0    | 77.5        | AIO-KBCSET7SM |
|                                     | 63.0-75.0     | 0.6-2.5       | 9.0                 | 95            | 95               | 90              | 105.0   | 81.0        | AIO-KBCSET7M  |

| Thread Type NPT Acc. to ANSI B1.20.1 |               |               |                     |               |                  |                 |         |             |               |
|--------------------------------------|---------------|---------------|---------------------|---------------|------------------|-----------------|---------|-------------|---------------|
| Outer Thread Size (Male)             | Clamp Range Ø | Armour Wire Ø | Outer Thread Length | Spanner Width |                  |                 | Outer Ø | Max. Height | Part Number   |
|                                      | min-max (mm)  | min-max (mm)  | TL (mm)             | Cap (mm)      | Middle Body (mm) | Lower Body (mm) | D (mm)  | H (mm)      |               |
| NPT 3/8"                             | 8.0-15.0      | 0.3-1.3       | 16.0                | 25            | 25               | 24              | 27.0    | 42.5        | AIO-KBCSET01N |
| NPT 1/2"                             | 8.0-15.0      | 0.3-1.3       | 16.0                | 25            | 25               | 24              | 27.0    | 42.5        | AIO-KBCSET1N  |
|                                      | 13.5-21.0     | 0.4-1.3       | 16.0                | 30            | 30               | 29              | 33.0    | 43.5        | AIO-KBCSET1LN |
| NPT 3/4"                             | 8.0-15.0      | 0.3-1.3       | 16.0                | 25            | 25               | 27              | 30.0    | 42.5        | AIO-KBCSET2SN |
|                                      | 13.5-21.0     | 0.4-1.3       | 16.0                | 30            | 30               | 29              | 33.0    | 43.5        | AIO-KBCSET2N  |
|                                      | 18.0-27.0     | 0.4-1.6       | 16.0                | 40            | 40               | 40              | 44.5    | 50.0        | AIO-KBCSET2LN |
| NPT 1"                               | 18.0-27.0     | 0.4-1.6       | 21.0                | 40            | 40               | 40              | 44.5    | 50.0        | AIO-KBCSET3SN |
|                                      | 23.0-33.0     | 0.4-2.0       | 21.0                | 43            | 43               | 43              | 47.0    | 53.5        | AIO-KBCSET3N  |
| NPT 1 1/4"                           | 29.0-40.0     | 0.4-2.0       | 21.0                | 52            | 52               | 52              | 59.0    | 57.0        | AIO-KBCSET4N  |
| NPT 1 1/2"                           | 35.0-48.0     | 0.4-2.5       | 21.0                | 60            | 60               | 60              | 66.5    | 69.5        | AIO-KBCSET5SN |
|                                      | 42.0-56.0     | 0.6-2.5       | 21.0                | 75            | 74               | 70              | 83.0    | 76.5        | AIO-KBCSET5N  |
| NPT 2"                               | 42.0-56.0     | 0.6-2.5       | 21.0                | 75            | 74               | 70              | 83.0    | 76.5        | AIO-KBCSET6SN |
|                                      | 53.0-66.0     | 0.6-2.5       | 21.0                | 85            | 85               | 80              | 94.0    | 77.5        | AIO-KBCSET6N  |
| NPT 2 1/2"                           | 53.0-66.0     | 0.6-2.5       | 21.0                | 85            | 85               | 80              | 94.0    | 77.5        | AIO-KBCSET7SN |
|                                      | 63.0-75.0     | 0.6-2.5       | 21.0                | 95            | 95               | 90              | 105.0   | 81.0        | AIO-KBCSET7N  |

# DRAIN PLUGS, POLYAMIDE

## Drain Plugs

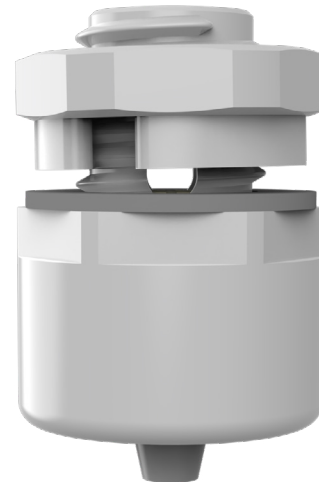
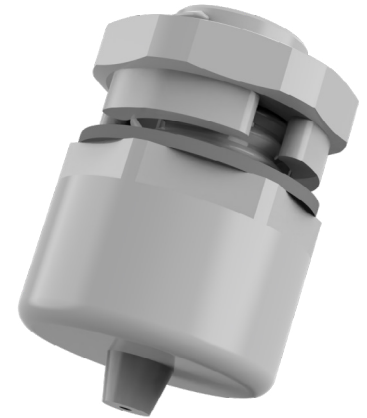
- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Membrane properties: hydrophobic, oleophobic.

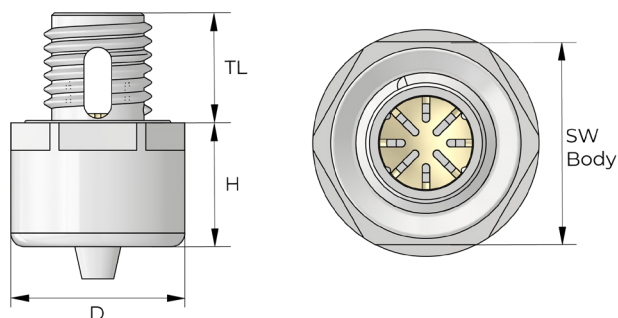
## Technical Details

|                           |                                                                                                                                                                                                              |                 |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Material Body             | PA 66                                                                                                                                                                                                        |                 |
| Ingress Protection Rating | IP 56/IP 66 (Category 2)                                                                                                                                                                                     |                 |
| Flammability              | V2 according to UL94                                                                                                                                                                                         |                 |
| Operating Temperature     | Permanent                                                                                                                                                                                                    | Intermittent    |
|                           | -20°C to +80°C                                                                                                                                                                                               | -30°C to +150°C |
| Thread Type               | Metric EN 60423 and EN 62444                                                                                                                                                                                 |                 |
| Accessories               | Locknuts<br>Gaskets (Washers)                                                                                                                                                                                |                 |
| Remarks                   | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |                 |

## Order Coding

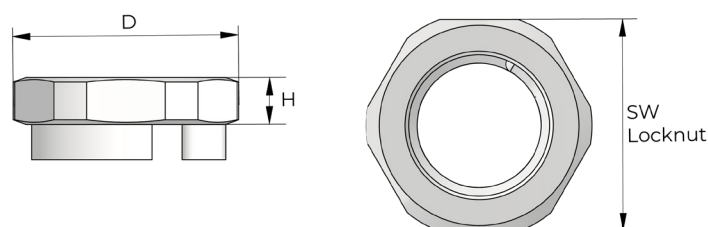
|                |   |             |
|----------------|---|-------------|
| Part Number    | - | Locknut     |
| Mandatory      | - | -Option     |
| See table      | - | -L Lock nut |
| Example        |   |             |
| AIO-BPCSDRP-11 | - | L           |





## DRAIN PLUGS, POLYAMIDE

| Thread Type Metric Acc. to EN 60423 |                        |           |           |                        |                  |                   |
|-------------------------------------|------------------------|-----------|-----------|------------------------|------------------|-------------------|
| Outer Thread Size<br>(Male)         | Outer Thread<br>Length | Outer Ø   | Height    | Part Number            |                  |                   |
|                                     | TL<br>(mm)             | D<br>(mm) | h<br>(mm) | RAL 7035<br>Light Gray | RAL 7001<br>Gray | RAL 9005<br>Black |
| M12x1.5                             | 12.0                   | 19.0      | 17.0      | AIO-BPCSDRP-11         | AIO-BPCSDRP-01   | AIO-BPCSDRP-21    |



## SPECIAL LOCK NUTS FOR DRAIN PLUGS

| Outer Thread Size<br>(Female) | Spanner Width    | Outer Ø   | Height    | Part Number            |                   |                   |
|-------------------------------|------------------|-----------|-----------|------------------------|-------------------|-------------------|
|                               | Lock nut<br>(mm) | D<br>(mm) | h<br>(mm) | RAL 7035<br>Light Gray | RAL 7001<br>Gray  | RAL 9005<br>Black |
| M12x1.5                       | 18               | 19.2      | 7.0       | AIO-BMCSL-1S(DRP)      | AIO-BMCSL-0S(DRP) | AIO-BMCSL-2S(DRP) |

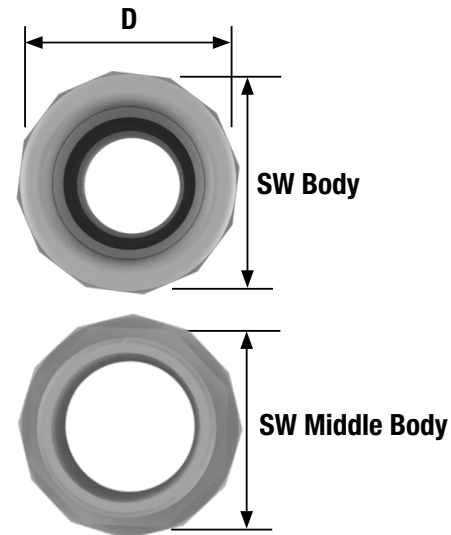
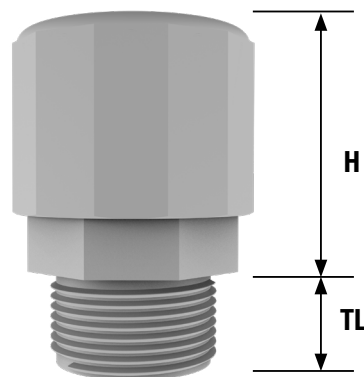
# ENCLOSURE COUPLERS, POLYAMIDE

## Enclosure Couplers

- Halogen free.
- No toxic fumes when involved in a fire.
- No conduit tubes
- One side with standard metric threads and special fitting for conduit spiral on the other side.

### Technical Details

|                           |                                                                                                                                                                                                  |                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| Material                  | Fitting Seal                                                                                                                                                                                     | Polyamide 6 Halogen free<br>TPE Halogen free |
| Ingress Protection Rating | IP 67                                                                                                                                                                                            |                                              |
| Operating Temperature     | Permanent<br>-20°C to +80°C                                                                                                                                                                      |                                              |
| Thread Type               | Metric, according to EN 60423 and EN 62444                                                                                                                                                       |                                              |
| Accessories               | <ul style="list-style-type: none"> <li>• Locknuts</li> </ul>                                                                                                                                     |                                              |
| Remarks                   | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |                                              |



### Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | For Conduit Nominal Size | Outer Thread Length | Spanner Width |                  | Outer Ø | Inner Ø | Height | Part Number<br>RAL 7035<br>Light Gray |
|--------------------------|--------------------------|---------------------|---------------|------------------|---------|---------|--------|---------------------------------------|
|                          |                          | TL (mm)             | Body (mm)     | Middle Body (mm) | D (mm)  | ID (mm) | H (mm) |                                       |
| M16x1.5                  | 16.0                     | 14.0                | 26.0          | 21.0             | 26.3    | 16.5    | 34.5   | AIO-BRCSCF-01                         |
| M20x1.5                  | 20.0                     | 14.0                | 30.0          | 25.0             | 31.1    | 20.5    | 33.6   | AIO-BRCSCF-02                         |
| M25x1.5                  | 25.0                     | 14.0                | 35.0          | 30.0             | 35.7    | 25.1    | 34.7   | AIO-BRCSCF-03                         |
| M32x1.5                  | 32.0                     | 14.0                | 42.0          | 37.0             | 43.0    | 32.6    | 34.5   | AIO-BRCSCF-04                         |
| M40x1.5                  | 40.0                     | 19.0                | 50.0          | 45.0             | 51.5    | 40.4    | 42.2   | AIO-BRCSCF-05                         |
| M50x1.5                  | 50.0                     | 19.0                | 61.0          | 55.0             | 63.4    | 50.7    | 42.1   | AIO-BRCSCF-06                         |
| M63x1.5                  | 63.0                     | 19.0                | 74.0          | 68.0             | 77.2    | 58.2    | 42.2   | AIO-BRCSCF-07                         |

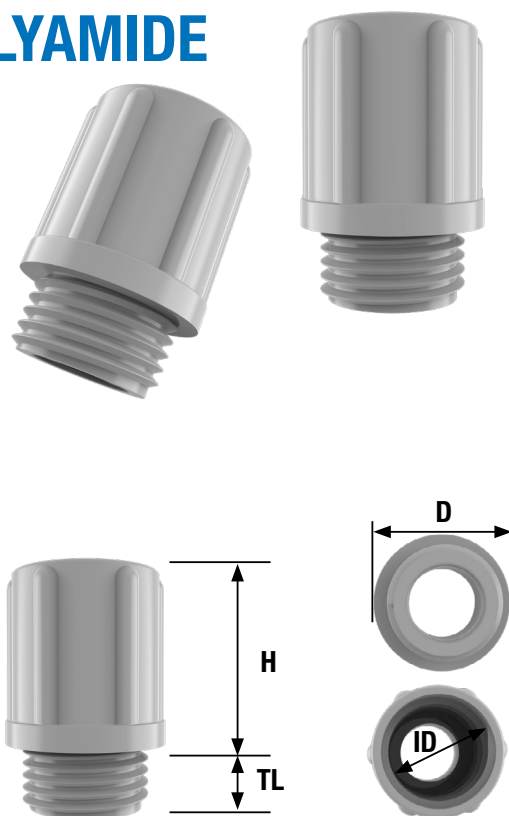
# STRAIGHT CONDUIT FITTINGS, POLYAMIDE

## Straight Conduit Fittings, Polyamide

- Halogen free.
- No toxic fumes when involved in a fire.
- No flexible spiral conduits.
- One side with standard metric or PG thread and special thread for conduit spiral on the other side.

### Technical Details

|                           |                                                                                                                                                                                                              |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Polyamide 6 Halogen free                                                                                                                                                                                     |
| Ingress Protection Rating | IP 54                                                                                                                                                                                                        |
| Operating Temperature     | Permanent<br>-20°C to +80°C                                                                                                                                                                                  |
| Thread Type               | Metric, according to EN 60423<br>PG, according to DIN 40430                                                                                                                                                  |
| Accessories               | <ul style="list-style-type: none"> <li>• Locknuts</li> </ul>                                                                                                                                                 |
| Remarks                   | <ul style="list-style-type: none"> <li>• We recommend the use of locknuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Accessories must be ordered separately.</li> </ul> |



### Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | For Conduit Nominal Size | Outer Thread Length | Outer Ø | Inner Ø | Height | Part Number         |               |                |
|--------------------------|--------------------------|---------------------|---------|---------|--------|---------------------|---------------|----------------|
|                          |                          | TL (mm)             | D (mm)  | ID (mm) | H (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| M12x1.5                  | 12.8                     | 8.0                 | 17.4    | 7.0     | 21.2   | AIO-BCCSM-1S        | AIO-BCCSM-0S  | AIO-BCCSM-2S   |
| M16x1.5                  | 15.0                     | 8.0                 | 20.0    | 10.0    | 21.3   | AIO-BCCSM-11        | AIO-BCCSM-01  | AIO-BCCSM-21   |
| M20x1.5                  | 19.0                     | 8.0                 | 24.1    | 15.0    | 24.5   | AIO-BCCSM-12        | AIO-BCCSM-02  | AIO-BCCSM-22   |
| M20x1.5                  | 21.0                     | 9.0                 | 26.0    | 13.0    | 25.5   | AIO-BCCSM-13        | AIO-BCCSM-03  | AIO-BCCSM-23   |
| M25x1.5                  | 22.0                     | 10.0                | 28.9    | 18.0    | 25.5   | AIO-BCCSM-14        | AIO-BCCSM-04  | AIO-BCCSM-24   |
| M32x1.5                  | 28.3                     | 11.0                | 36.0    | 27.0    | 27.5   | AIO-BCCSM-15        | AIO-BCCSM-05  | AIO-BCCSM-25   |
| M40x1.5                  | 36.4                     | 11.0                | 44.2    | 31.5    | 32.5   | AIO-BCCSM-16        | AIO-BCCSM-06  | AIO-BCCSM-26   |
| M50x1.5                  | 46.2                     | 14.0                | 54.1    | 40.5    | 39.8   | AIO-BCCSM-17        | AIO-BCCSM-07  | AIO-BCCSM-27   |
| M63x1.5                  | 57.0                     | 14.0                | 67.0    | 51.0    | 43.5   | AIO-BCCSM-18        | AIO-BCCSM-08  | AIO-BCCSM-28   |

# STRAIGHT CONDUIT FITTINGS, POLYAMIDE

## Thread Type PG Acc. to DIN 40430

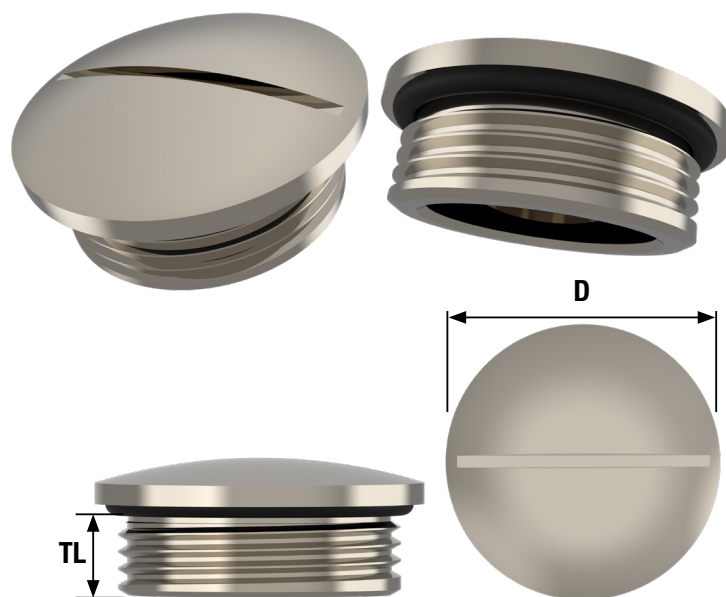
| Outer Thread Size (Male) | For Conduit Nominal Size | Outer Thread Length | Outer Ø | Inner Ø | Height | Part Number         |               |                |
|--------------------------|--------------------------|---------------------|---------|---------|--------|---------------------|---------------|----------------|
|                          |                          | TL (mm)             | D (mm)  | ID (mm) | H (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| PG 7                     | 12.8                     | 8.0                 | 17.4    | 7.0     | 21.2   | AIO-BCCSF-11        | AIO-BCCSF-01  | AIO-BCCSF-21   |
| PG 9                     | 15.0                     | 8.0                 | 20.0    | 10.0    | 21.3   | AIO-BCCSF-12        | AIO-BCCSF-02  | AIO-BCCSF-22   |
| PG 11                    | 19.0                     | 8.0                 | 24.0    | 13.5    | 24.5   | AIO-BCCSF-13        | AIO-BCCSF-03  | AIO-BCCSF-23   |
| PG 13.5                  | 21.0                     | 9.0                 | 25.9    | 14.5    | 25.3   | AIO-BCCSF-14        | AIO-BCCSF-04  | AIO-BCCSF-24   |
| PG 16                    | 22.0                     | 10.0                | 28.9    | 16.0    | 25.5   | AIO-BCCSF-15        | AIO-BCCSF-05  | AIO-BCCSF-25   |
| PG 21                    | 28.3                     | 11.0                | 36.0    | 21.5    | 27.5   | AIO-BCCSF-16        | AIO-BCCSF-06  | AIO-BCCSF-26   |
| PG 29                    | 36.4                     | 11.0                | 44.2    | 31.5    | 32.4   | AIO-BCCSF-17        | AIO-BCCSF-07  | AIO-BCCSF-27   |
| PG 36                    | 46.2                     | 14.0                | 53.0    | 41.0    | 39.9   | AIO-BCCSF-18        | AIO-BCCSF-08  | AIO-BCCSF-28   |
| PG 48                    | 57.0                     | 14.0                | 67.8    | 51.0    | 43.3   | AIO-BCCSF-19        | AIO-BCCSF-09  | AIO-BCCSF-29   |

## Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Spanner Width | Part Number         |                 |                 |
|--------------------------|---------------|---------------------|-----------------|-----------------|
|                          | Locknut (mm)  | RAL 7035 Light Gray | RAL 7001 Gray   | RAL 9005 Black  |
| M16x1.5                  | 22.0          | AIO-BRCSCF-11-L     | AIO-BRCSCF-01-L | AIO-BRCSCF-21-L |
| M20x1.5                  | 26.0          | AIO-BRCSCF-12-L     | AIO-BRCSCF-02-L | AIO-BRCSCF-22-L |
| M25x1.5                  | 32.0          | AIO-BRCSCF-13-L     | AIO-BRCSCF-03-L | AIO-BRCSCF-23-L |
| M32x1.5                  | 41.0          | AIO-BRCSCF-14-L     | AIO-BRCSCF-04-L | AIO-BRCSCF-24-L |
| M40x1.5                  | 50.0          | AIO-BRCSCF-15-L     | AIO-BRCSCF-05-L | AIO-BRCSCF-25-L |
| M50x1.5                  | 60.0          | AIO-BRCSCF-16-L     | AIO-BRCSCF-06-L | AIO-BRCSCF-26-L |
| M63x1.5                  | 75.0          | AIO-BRCSCF-17-L     | AIO-BRCSCF-07-L | AIO-BRCSCF-27-L |

# ROUND PLUGS, METAL

| Technical Details         |                 |                                                                                                                                               |
|---------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Material                  | Body            | Brass, Brass Nickel Plated, Stainless Steel, Galvanised Steel                                                                                 |
|                           | O-Ring          | NBR, Silicone                                                                                                                                 |
| Ingress Protection Rating |                 | IP 68 (5 bar, 30 min), according to EN 60 529                                                                                                 |
| Operating Temperature     | O-Ring Material |                                                                                                                                               |
|                           | NBR             | Silicone                                                                                                                                      |
|                           | -30°C to +100°C | 60°C to +140°C                                                                                                                                |
| Thread Type               |                 | Metric, according to EN 60423<br>PG, according to DIN 40430                                                                                   |
| Accessories               |                 | Locknuts<br>Gaskets (Washers)                                                                                                                 |
| Remarks                   |                 | <ul style="list-style-type: none"> <li>Accessories must be ordered separately.</li> <li>O-ring available in Metric and PG threads.</li> </ul> |



| Thread Type Metric Acc. to EN 60423 |                     |         |        |                   |
|-------------------------------------|---------------------|---------|--------|-------------------|
| Outer Thread Size (Male)            | Outer Thread Length | Outer Ø | Height | Part Number       |
|                                     | TL (mm)             | D (mm)  | H (mm) |                   |
| M12x1.5                             | 6.0                 | 15.0    | 2.5    | AIO-ITSCSR-0SMBNN |
| M16x1.5                             | 7.0                 | 19.0    | 3.0    | AIO-ITSCSR-01MBNN |
| M20x1.5                             | 8.0                 | 23.0    | 3.0    | AIO-ITSCSR-02MBNN |
| M25x1.5                             | 8.0                 | 29.0    | 4.0    | AIO-ITSCSR-03MBNN |
| M32x1.5                             | 9.0                 | 36.0    | 4.0    | AIO-ITSCSR-04MBNN |
| M40x1.5                             | 9.0                 | 44.0    | 4.0    | AIO-ITSCSR-05MBNN |
| M50x1.5                             | 9.0                 | 54.0    | 5.0    | AIO-ITSCSR-06MBNN |
| M63x1.5                             | 10.0                | 69.0    | 6.0    | AIO-ITSCSR-07MBNN |

| Thread Type PG Acc. to DIN 40430 |                     |         |        |                   |
|----------------------------------|---------------------|---------|--------|-------------------|
| Outer Thread Size (Male)         | Outer Thread Length | Outer Ø | Height | Part Number       |
|                                  | TL (mm)             | D (mm)  | H (mm) |                   |
| PG 7                             | 6.0                 | 16.0    | 3.0    | AIO-ITSCSR-01PBNN |
| PG 9                             | 6.0                 | 19.0    | 3.0    | AIO-ITSCSR-02PBNN |
| PG 11                            | 6.0                 | 22.0    | 3.0    | AIO-ITSCSR-03PBNN |
| PG 13.5                          | 6.5                 | 24.0    | 3.0    | AIO-ITSCSR-04PBNN |
| PG 16                            | 6.5                 | 26.0    | 3.0    | AIO-ITSCSR-05PBNN |
| PG 21                            | 7.0                 | 33.0    | 4.0    | AIO-ITSCSR-06PBNN |
| PG 29                            | 8.0                 | 42.0    | 4.0    | AIO-ITSCSR-07PBNN |
| PG 36                            | 9.0                 | 52.0    | 6.0    | AIO-ITSCSR-08PBNN |
| PG 42                            | 10.0                | 59.0    | 6.0    | AIO-ITSCSR-09PBNN |
| PG 48                            | 10.0                | 66.0    | 6.0    | AIO-ITSCSR-10PBNN |

| Order Coding      |                                                        |   |                     |
|-------------------|--------------------------------------------------------|---|---------------------|
| Part Number       | Material                                               | - | O-Ring              |
| Mandatory         | Mandatory                                              | - | Option              |
| See table         | B-Brass<br>BN-Brass Nickel plated<br>X-Stainless steel | - | N-NBR<br>S-Silicone |
| Example           |                                                        |   |                     |
| AIO-ITSCSR-01MBNN | X                                                      | - | N                   |

# VENTILATION PLUGS, POLYAMIDE

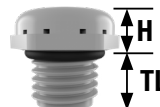
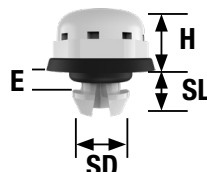
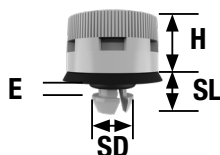
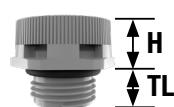
## Ventilation Plugs

- Balances pressure differences between inner housing and the outside environment.
- Prevents damages according to pressure differences.
- Prevents the formation of water condensation in tightly-sealed standard housings.
- Membrane properties: hydrophobic, oleophobic.

### Technical Details

|                                                                                     |                                                                                                                                                                                                                        |                                                                                         |                           |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------|
| Material                                                                            | Body, Cap                                                                                                                                                                                                              | PA 6 (Polyamide 6)                                                                      |                           |
|                                                                                     | Sealing                                                                                                                                                                                                                | Acrylic co-polymer on nylon-support                                                     |                           |
|                                                                                     | O-Ring                                                                                                                                                                                                                 | NBR                                                                                     |                           |
|                                                                                     | Gaskets                                                                                                                                                                                                                | NBR (standard for B and J types)                                                        |                           |
| Ingress Protection Rating                                                           |                                                                                                                                                                                                                        | IP 68 / IP 67 (for water intrusion pressure 0.1 bar)<br>IP 69K (only for J and D types) |                           |
| Flammability                                                                        |                                                                                                                                                                                                                        | V2 according to UL94                                                                    |                           |
| Operating Temperature                                                               | Permanent                                                                                                                                                                                                              |                                                                                         | Intermittent              |
|                                                                                     | -20 °C to +100 °C                                                                                                                                                                                                      |                                                                                         | -30 °C to +150 °C         |
| Thread Type                                                                         | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• Without thread</li> </ul>                                                                                                                          |                                                                                         |                           |
| Accessories                                                                         | <ul style="list-style-type: none"> <li>• Lock nuts</li> <li>• Gaskets</li> </ul>                                                                                                                                       |                                                                                         |                           |
| Remarks                                                                             | <ul style="list-style-type: none"> <li>• We recommend the use of lock nuts and gaskets to ensure IP rating for rough surfaces or through holes.</li> <li>• Same approvals do not cover all colors or sizes.</li> </ul> |                                                                                         |                           |
| Approvals                                                                           |                                                                                                                                                                                                                        | Certificate Number                                                                      | Standards                 |
|  |                                                                                                                                                                                                                        | E542804                                                                                 | CAN/CSA C22.2 No. 14-2010 |
| TYPE 4X                                                                             |                                                                                                                                                                                                                        |                                                                                         |                           |

For more approvals: see our webpage.



# VENTILATION PLUGS, POLYAMIDE

## Thread Type Metric Acc. to EN 60423

| Outer Thread Size (Male) | Average Air Flow<br>( $\Delta P = 70$ mbar/1 psi)<br>l/h | Water Intrusion Pressure<br>mbar | Outer Thread Length | Spanner Width | Outer $\varnothing$ | Height | Design Type | Part Number         |                  |                  |
|--------------------------|----------------------------------------------------------|----------------------------------|---------------------|---------------|---------------------|--------|-------------|---------------------|------------------|------------------|
|                          |                                                          |                                  | TL (mm)             | SW (mm)       | D (mm)              | H (mm) |             | RAL 7035 Light Gray | RAL 7001 Gray    | RAL 9005 Black   |
| M6x0.75                  | 8                                                        | 0.5                              | 10.0                | 10.0          | 11.0                | 6.15   | D           | AIO-MBCSVPG-11      | AIO-MBCSVPG-01   | AIO-MBCSVPG-21   |
| M8x1.0                   | 15                                                       | 0.5                              | 10.0                | 12.0          | 13.0                | 6.15   | D           | AIO-MBCSVPG-12      | AIO-MBCSVPG-02   | AIO-MBCSVPG-22   |
| M12x1.0                  | 16                                                       | 0.9                              | 6.6                 | 17.0          | 18.5                | 7.6    | A           | AIO-SBCSVPA-11      | AIO-SBCSVPA-01   | AIO-SBCSVPA-21   |
|                          | 25                                                       | 0.5                              | 6.6                 | 17.0          | 18.5                | 7.6    | A           | AIO-MBCSVPA-11      | AIO-MBCSVPA-01   | AIO-MBCSVPA-21   |
|                          | 120                                                      | 0.2                              | 6.6                 | 17.0          | 18.5                | 7.6    | A           | AIO-HBCSVPA-11      | AIO-HBCSVPA-01   | AIO-HBCSVPA-21   |
|                          | 300                                                      | 0.1                              | 6.6                 | 17.0          | 18.5                | 7.6    | A           | AIO-UHBCSVPA-11     | AIO-UHBCSVPA-01  | AIO-UHBCSVPA-21  |
| M12x1.5                  | 25                                                       | 0.5                              | 10.0                | 17.0          | 18.8                | 6.15   | D           | AIO-MBCSVPG-13      | AIO-MBCSVPG-03   | AIO-MBCSVPG-23   |
|                          | 16                                                       | 0.9                              | 6.0                 | 17.0          | 18.5                | 7.6    | A           | AIO-SBCSVPB-11      | AIO-SBCSVPB-01   | AIO-SBCSVPB-21   |
|                          | 16                                                       | 0.9                              | 10.0                | 17.0          | 18.5                | 7.6    | A           | AIO-SBCSVPB-11L     | AIO-SBCSVPB-01L  | AIO-SBCSVPB-21L  |
|                          | 25                                                       | 0.5                              | 6.0                 | 17.0          | 18.5                | 7.6    | A           | AIO-MBCSVPB-11      | AIO-MBCSVPB-01   | AIO-MBCSVPB-21   |
|                          | 25                                                       | 0.5                              | 10.0                | 17.0          | 18.5                | 7.6    | A           | AIO-MBCSVPB-11L     | AIO-MBCSVPB-01L  | AIO-MBCSVPB-21L  |
|                          | 42                                                       | 0.9                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-SBCSVPD-11      | AIO-SBCSVPD-01   | AIO-SBCSVPD-21   |
|                          | 120                                                      | 0.5                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-MBCSVPD-11      | AIO-MBCSVPD-01   | AIO-MBCSVPD-21   |
|                          | 120                                                      | 0.2                              | 6.0                 | 17.0          | 18.5                | 7.6    | A           | AIO-HBCSVPB-11      | AIO-HBCSVPB-01   | AIO-HBCSVPB-21   |
|                          | 120                                                      | 0.2                              | 10.0                | 17.0          | 18.5                | 7.6    | A           | AIO-HBCSVPB-11L     | AIO-HBCSVPB-01L  | AIO-HBCSVPB-21L  |
|                          | 300                                                      | 0.1                              | 6.0                 | 17.0          | 18.5                | 7.6    | A           | AIO-UHBCSVPB-11     | AIO-UHBCSVPB-01  | AIO-UHBCSVPB-21  |
|                          | 300                                                      | 0.1                              | 10.0                | 17.0          | 18.5                | 7.6    | A           | AIO-UHBCSVPB-11L    | AIO-UHBCSVPB-01L | AIO-UHBCSVPB-21L |
|                          | 450                                                      | 0.2                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-HBCSVPD-11      | AIO-HBCSVPD-01   | AIO-HBCSVPD-21   |
|                          | 750                                                      | 0.1                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-UHBCSVPD-11     | AIO-UHBCSVPD-01  | AIO-UHBCSVPD-21  |
| M16x1.5                  | 42                                                       | 0.9                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-SBCSVPF-11      | AIO-SBCSVPF-01   | AIO-SBCSVPF-21   |
|                          | 120                                                      | 0.5                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-MBCSVPF-11      | AIO-MBCSVPF-01   | AIO-MBCSVPF-21   |
|                          | 450                                                      | 0.2                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-HBCSVPF-11      | AIO-HBCSVPF-01   | AIO-HBCSVPF-21   |
|                          | 750                                                      | 0.1                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-UHBCSVPF-11     | AIO-UHBCSVPF-01  | AIO-UHBCSVPF-21  |
| M20x1.5                  | 42                                                       | 0.9                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-SBCSVPE-11      | AIO-SBCSVPE-01   | AIO-SBCSVPE-21   |
|                          | 120                                                      | 0.5                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-MBCSVPE-11      | AIO-MBCSVPE-01   | AIO-MBCSVPE-21   |
|                          | 450                                                      | 0.2                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-HBCSVPE-11      | AIO-HBCSVPE-01   | AIO-HBCSVPE-21   |
|                          | 750                                                      | 0.1                              | 10.0                | 24.0          | 26.0                | 11.7   | E           | AIO-UHBCSVPE-11     | AIO-UHBCSVPE-01  | AIO-UHBCSVPE-21  |
| M40x1.5                  | 120                                                      | 0.9                              | 18.0                | -             | 55.3                | 15.5   | F           | AIO-SBCSVPX-18S     | AIO-SBCSVPX-08S  | AIO-SBCSVPX-28S  |
|                          | 375                                                      | 0.5                              | 18.0                | -             | 55.3                | 15.5   | F           | AIO-MBCSVPX-18S     | AIO-MBCSVPX-08S  | AIO-MBCSVPX-28S  |
|                          | 1350                                                     | 0.2                              | 18.0                | -             | 55.3                | 15.5   | F           | AIO-HBCSVPX-18S     | AIO-HBCSVPX-08S  | AIO-HBCSVPX-28S  |
|                          | 2200                                                     | 0.1                              | 18.0                | -             | 55.3                | 15.5   | F           | AIO-UHBCSVPX-18S    | AIO-UHBCSVPX-08S | AIO-UHBCSVPX-28S |

## Wall Thickness (E): 2.5mm

| Snap Size | Average Air Flow<br>( $\Delta P = 70$ mbar/1 psi)<br>l/h | Water Intrusion Pressure<br>bar | Snap Length | Snap $\varnothing$ | Outer $\varnothing$ | Spanner Width | Height | Design Type | Part Number         |                 |                 |
|-----------|----------------------------------------------------------|---------------------------------|-------------|--------------------|---------------------|---------------|--------|-------------|---------------------|-----------------|-----------------|
|           |                                                          |                                 | SL (mm)     | SD (mm)            | D (mm)              | (mm)          | H (mm) |             | RAL 7035 Light Gray | RAL 7001 Gray   | RAL 9005 Black  |
| 5.5       | 16                                                       | 0.9                             | 7.5         | 5.4                | 18.5                | -             | 9.3    | B           | AIO-SBCSVQ-M11      | AIO-SBCSVQ-M01  | AIO-SBCSVQ-M21  |
|           | 25                                                       | 0.5                             | 7.5         | 5.4                | 18.5                | -             | 9.3    | B           | AIO-MBCSVQ-M11      | AIO-MBCSVQ-M01  | AIO-MBCSVQ-M21  |
|           | 120                                                      | 0.2                             | 7.5         | 5.4                | 18.5                | -             | 9.3    | B           | AIO-HBCSVQ-M11      | AIO-HBCSVQ-M01  | AIO-HBCSVQ-M21  |
|           | 300                                                      | 0.1                             | 7.5         | 5.4                | 18.5                | -             | 9.3    | B           | AIO-UHBCSVQ-M11     | AIO-UHBCSVQ-M01 | AIO-UHBCSVQ-M21 |

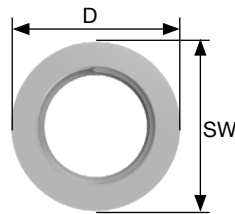
## Wall Thickness (E): 3.2 mm

|     |    |     |     |     |      |    |     |   |                 |                 |                 |
|-----|----|-----|-----|-----|------|----|-----|---|-----------------|-----------------|-----------------|
| 5.5 | 15 | 0.5 | 7.5 | 5.4 | 18.5 | 12 | 6.5 | J | AIO-MBCSVPGQ-12 | AIO-MBCSVPGQ-02 | AIO-MBCSVPGQ-22 |
|     | 25 | 0.5 | 7.5 | 5.4 | 18.5 | 17 | 6.5 | J | AIO-MBCSVPGQ-13 | AIO-MBCSVPGQ-03 | AIO-MBCSVPGQ-23 |

# LOCK NUTS, POLYAMIDE

## Lock Nuts, Flanged

- For standard industrial applications.
- Safe fastening of cable glands.
- Flanged design offers safe sealing.



### Technical Details

|                       |                                                   |                   |
|-----------------------|---------------------------------------------------|-------------------|
| Material              | PA 6 GF (Polyamide 6, 30% Glass Fiber Reinforced) |                   |
| Flammability          | HB according to UL94                              |                   |
| Operating Temperature | Permanent                                         | Intermittent      |
|                       | -20 °C to +100 °C                                 | -30 °C to +150 °C |
| Thread Type           | • Metric EN 60423                                 |                   |
|                       | • NPS ANSI B1.20.1                                |                   |
|                       | • PG DIN 40430                                    |                   |
|                       | • Gas ISO 228                                     |                   |

## Lock Nut for Metric Applications Acc. to EN 604 Lock N 23

| Inner Thread Size (Female) | Spanner Width | Outer Ø | Height | Part Number         |               |                |
|----------------------------|---------------|---------|--------|---------------------|---------------|----------------|
|                            | (mm)          | D (mm)  | h (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| M12x1.5                    | 18            | 19.5    | 5.0    | AIO-BMCSL-1S        | AIO-BMCSL-0S  | AIO-BMCSL-2S   |
| M16x1.5                    | 22            | 24.2    | 5.0    | AIO-BMCSL-11        | AIO-BMCSL-01  | AIO-BMCSL-21   |
| M20x1.5                    | 26            | 28.6    | 6.0    | AIO-BMCSL-12        | AIO-BMCSL-02  | AIO-BMCSL-22   |
| M25x1.5                    | 32            | 35.0    | 6.0    | AIO-BMCSL-13        | AIO-BMCSL-03  | AIO-BMCSL-23   |
| M32x1.5                    | 41            | 46.1    | 7.0    | AIO-BMCSL-14        | AIO-BMCSL-04  | AIO-BMCSL-24   |
| M40x1.5                    | 50            | 55.3    | 7.0    | AIO-BMCSL-15        | AIO-BMCSL-05  | AIO-BMCSL-25   |
| M50x1.5                    | 60            | 65.7    | 8.0    | AIO-BMCSL-16        | AIO-BMCSL-06  | AIO-BMCSL-26   |
| M63x1.5                    | 75            | 82.5    | 8.0    | AIO-BMCSL-17        | AIO-BMCSL-07  | AIO-BMCSL-27   |
| M75x2.0                    | 85            | 94.0    | 15.0   | AIO-BMCSL-18        | AIO-BMCSL-08  | AIO-BMCSL-28   |

## Lock Nut for NPT Applications Acc. to ANSI B1.20.1

| Inner Thread Size (Female) | Spanner Width | Outer Ø | Height | Part Number         |               |                |
|----------------------------|---------------|---------|--------|---------------------|---------------|----------------|
|                            | (mm)          | D (mm)  | h (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| for NPT 3/8"               | 22            | 25.0    | 7.0    | AIO-BPCSL-11        | AIO-BPCSL-01  | AIO-BPCSL-21   |
| for NPT 1/2"               | 27            | 30.5    | 7.0    | AIO-BPCSL-12        | AIO-BPCSL-02  | AIO-BPCSL-22   |
| for NPT 3/4"               | 33            | 37.5    | 7.0    | AIO-BPCSL-13        | AIO-BPCSL-03  | AIO-BPCSL-23   |
| for NPT 1"                 | 41            | 46.2    | 7.0    | AIO-BPCSL-14        | AIO-BPCSL-04  | AIO-BPCSL-24   |

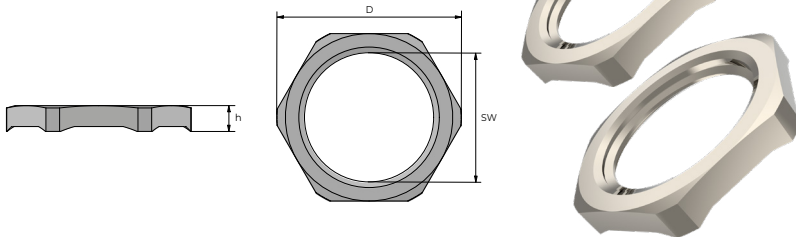
## Lock Nut for PG Applications Acc. to DIN 40430

| Inner Thread Size (Female) | Spanner Width | Outer Ø | Height | Part Number         |               |                |
|----------------------------|---------------|---------|--------|---------------------|---------------|----------------|
|                            | (mm)          | D (mm)  | h (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| PG 7                       | 19            | 20.9    | 5.0    | AIO-BLCS-11         | AIO-BLCS-01   | AIO-BLCS-21    |
| PG 9                       | 22            | 23.9    | 5.0    | AIO-BLCS-12         | AIO-BLCS-02   | AIO-BLCS-22    |
| PG 11                      | 24            | 25.9    | 5.0    | AIO-BLCS-13         | AIO-BLCS-03   | AIO-BLCS-23    |
| PG 13.5                    | 27            | 28.9    | 6.0    | AIO-BLCS-14         | AIO-BLCS-04   | AIO-BLCS-24    |
| PG 16                      | 30            | 32.9    | 6.0    | AIO-BLCS-15         | AIO-BLCS-05   | AIO-BLCS-25    |
| PG 21                      | 36            | 38.8    | 7.0    | AIO-BLCS-16         | AIO-BLCS-06   | AIO-BLCS-26    |
| PG 29                      | 46            | 49.8    | 7.0    | AIO-BLCS-17         | AIO-BLCS-07   | AIO-BLCS-27    |
| PG 36                      | 60            | 65.7    | 8.0    | AIO-BLCS-18         | AIO-BLCS-08   | AIO-BLCS-28    |
| PG 42                      | 65            | 72.7    | 8.0    | AIO-BLCS-19         | AIO-BLCS-09   | AIO-BLCS-29    |
| PG 48                      | 70            | 77.7    | 8.0    | AIO-BLCS-20         | AIO-BLCS-10   | AIO-BLCS-30    |

## Lock Nut for G Applications Acc. to G ISO 228

| Inner Thread Size (Female) | Spanner Width | Outer Ø | Height | Part Number         |               |                |
|----------------------------|---------------|---------|--------|---------------------|---------------|----------------|
|                            | (mm)          | D (mm)  | h (mm) | RAL 7035 Light Gray | RAL 7001 Gray | RAL 9005 Black |
| G 3/8"                     | 22            | 25.0    | 6.0    | AIO-BFCSL-11        | AIO-BFCSL-01  | AIO-BFCSL-21   |
| G 1/2"                     | 27            | 30.5    | 6.0    | AIO-BFCSL-12        | AIO-BFCSL-02  | AIO-BFCSL-22   |
| G 3/4"                     | 33            | 37.5    | 6.4    | AIO-BFCSL-13        | AIO-BFCSL-03  | AIO-BFCSL-23   |
| 1"                         | 42            | 47.5    | 6.5    | AIO-BFCSL-14        | AIO-BFCSL-04  | AIO-BFCSL-24   |

# LOCK NUTS, METAL



## Lock Nuts, Metal

- For standard industrial applications in harsh environments.
- Safe fastening of cable glands.

### Technical Details

|             |                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material    | Brass Nickel plated, Stainless Steel                                                                                                                   |
| Thread Type | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPSL ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• G (PF) Din ISO 228</li> </ul> |

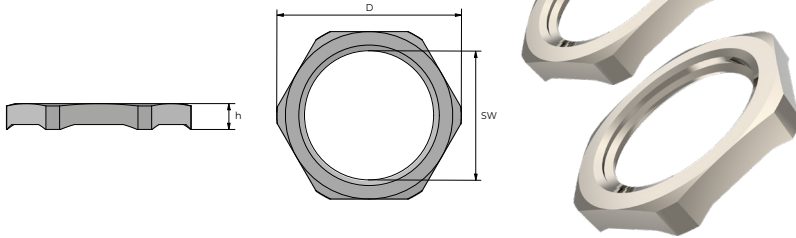
## Thread Type Metric Acc. to EN 60423

| Inner Thread Size (Female) | Brass Nickel Plated |         |        |                | Stainless Steel |         |        |                 |
|----------------------------|---------------------|---------|--------|----------------|-----------------|---------|--------|-----------------|
|                            | Spanner Width       | Outer Ø | Height | Part Number    | Spanner Width   | Outer Ø | Height | Part Number     |
|                            | (mm)                | D (mm)  | H (mm) |                | (mm)            | D (mm)  | H (mm) |                 |
| M12x1.5                    | 15                  | 16.6    | 2.8    | AIO-BMCSBL-01  | 15              | 16.6    | 2.8    | AIO-BMCSBLS-01  |
| M16x1.5                    | 19                  | 21.0    | 3.0    | AIO-BMCSBL-02  | 19              | 21.0    | 3.0    | AIO-BMCSBLS-02  |
| M20x1.5                    | 24                  | 26.5    | 3.5    | AIO-BMCSBL-03  | 24              | 26.5    | 3.5    | AIO-BMCSBLS-03  |
| M25x1.5                    | 30                  | 33.0    | 4.0    | AIO-BMCSBL-04  | 30              | 33.0    | 4.0    | AIO-BMCSBLS-04  |
| M32x1.5                    | 36                  | 39.5    | 5.0    | AIO-BMCSBL-05  | 36              | 39.5    | 5.0    | AIO-BMCSBLS-05  |
| M40x1.5                    | 46                  | 51.0    | 5.0    | AIO-BMCSBL-06  | 46              | 51.0    | 5.0    | AIO-BMCSBLS-06  |
| M50x1.5                    | 60                  | 66.0    | 5.0    | AIO-BMCSBL-07  | 60              | 66.0    | 5.0    | AIO-BMCSBLS-07  |
| M63x1.5                    | 70                  | 77.0    | 6.0    | AIO-BMCSBL-08  | 70              | 77.0    | 6.0    | AIO-BMCSBLS-08  |
| M70x1.5                    | 75                  | 83.0    | 7.0    | AIO-BMCSBL-09S | 75              | 83.0    | 7.0    | AIO-BMCSBLS-09S |
| M72x2.0                    | 77                  | 86.0    | 7.0    | AIO-BMCSBL-09  | 77              | 86.0    | 7.0    | AIO-BMCSBLS-09  |
| M75x1.5                    | 80                  | 89.0    | 7.0    | AIO-BMCSBL-10S | 80              | 89.0    | 7.0    | AIO-BMCSBLS-10S |
| M75x2.0                    | 80                  | 89.6    | 7.0    | AIO-BMCSBL-10  | 80              | 89.6    | 7.0    | AIO-BMCSBLS-10  |
| M80x2.0                    | 90                  | 100.0   | 8.0    | AIO-BMCSBL-11  | 90              | 100.0   | 8.0    | AIO-BMCSBLS-11  |
| M85x1.5                    | 95                  | 106.2   | 8.0    | AIO-BMCSBL-12S | 95              | 106.2   | 8.0    | AIO-BMCSBLS-12S |
| M85x2.0                    | 95                  | 106.2   | 8.0    | AIO-BMCSBL-12  | 95              | 106.2   | 8.0    | AIO-BMCSBLS-12  |
| M90x1.5                    | 100                 | 112.0   | 8.0    | AIO-BMCSBL-13S | 100             | 112.0   | 8.0    | AIO-BMCSBLS-13S |
| M90x2.0                    | 100                 | 112.0   | 8.0    | AIO-BMCSBL-13  | 100             | 112.0   | 8.0    | AIO-BMCSBLS-13  |
| M100x1.5                   | 120                 | 128.0   | 10.0   | AIO-BMCSBL-14  | 120             | 128.0   | 10.0   | AIO-BMCSBLS-14  |
| M110x1.5                   | 130                 | 145.0   | 10.0   | AIO-BMCSBL-15  | 130             | 145.0   | 10.0   | AIO-BMCSBLS-15  |
| M115x2.0                   | 135                 | 151.0   | 10.0   | AIO-BMCSBL-16  | 135             | 151.0   | 10.0   | AIO-BMCSBLS-16  |
| M130x2.0                   | 150                 | 167.0   | 12.0   | AIO-BMCSBL-18  | 150             | 167.0   | 12.0   | AIO-BMCSBLS-18  |

## Thread Type NPSL Acc. to ANSI B1.20.1

| Inner Thread Size (Female) | Brass Nickel Plated |         |        |                | Stainless Steel |         |        |                 |
|----------------------------|---------------------|---------|--------|----------------|-----------------|---------|--------|-----------------|
|                            | Spanner Width       | Outer Ø | Height | Part Number    | Spanner Width   | Outer Ø | Height | Part Number     |
|                            | (mm)                | D (mm)  | H (mm) |                | (mm)            | D (mm)  | H (mm) |                 |
| NPSL 1/4"                  | 17.0                | 18.8    | 5.0    | AIO-BNCSLN-01S | 17.0            | 18.8    | 5.0    | AIO-BNCSLNS-01S |
| NPSL 3/8"                  | 24.0                | 26.5    | 5.0    | AIO-BNCSLN-01  | 24.0            | 26.5    | 5.0    | AIO-BNCSLNS-01  |
| NPSL 1/2"                  | 24.0                | 26.5    | 5.0    | AIO-BNCSLN-02  | 24.0            | 26.5    | 5.0    | AIO-BNCSLNS-02  |
| NPSL 3/4"                  | 34.0                | 37.5    | 6.0    | AIO-BNCSLN-03  | 35.0            | 39.0    | 6.0    | AIO-BNCSLNS-03  |
| NPSL 1"                    | 42.0                | 46.4    | 6.0    | AIO-BNCSLN-04  | 46.0            | 51.0    | 6.0    | AIO-BNCSLNS-04  |
| NPSL 1 1/4"                | 52.0                | 57.4    | 7.0    | AIO-BNCSLN-05  | 55.0            | 61.0    | 7.0    | AIO-BNCSLNS-05  |
| NPSL 1 1/2"                | 60.0                | 65.1    | 7.0    | AIO-BNCSLN-06  | 60.0            | 65.1    | 7.0    | AIO-BNCSLNS-06  |
| NPSL 2"                    | 74.0                | 81.8    | 8.0    | AIO-BNCSLN-07  | 74.0            | 81.8    | 8.0    | AIO-BNCSLNS-07  |
| NPSL 2 1/2"                | 80.0                | 89.0    | 10.0   | AIO-BNCSLN-08  | 80.0            | 89.0    | 10.0   | AIO-BNCSLNS-08  |
| NPSL 3"                    | 95.0                | 105.0   | 10.0   | AIO-BNCSLN-09  | 95.0            | 105.0   | 10.0   | AIO-BNCSLNS-09  |
| NPSL 3 1/2"                | 115.0               | 128.5   | 10.0   | AIO-BNCSLN-10  | 115.0           | 128.5   | 10.0   | AIO-BNCSLNS-10  |
| NPSL 4"                    | 130.0               | 145.0   | 10.0   | AIO-BNCSLN-11  | 130.0           | 145.0   | 10.0   | AIO-BNCSLNS-11  |
| NPSL 5"                    | 160.0               | 178.5   | 12.0   | AIO-BNCSLN-12  | 160.0           | 178.5   | 12.0   | AIO-BNCSLNS-12  |

# LOCK NUTS, METAL



## Lock Nuts, Metal

- For standard industrial applications in harsh environments.
- Safe fastening of cable glands.

### Technical Details

|             |                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material    | Brass Nickel plated, Stainless Steel                                                                                                                   |
| Thread Type | <ul style="list-style-type: none"> <li>• Metric EN 60423</li> <li>• NPSL ANSI B1.20.1</li> <li>• PG DIN 40430</li> <li>• G (PF) Din ISO 228</li> </ul> |

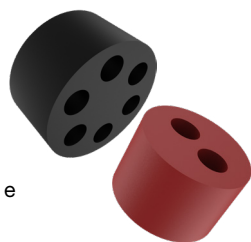
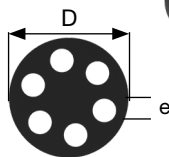
## Thread Type PG Acc. to DIN 40430

| Inner Thread Size (Female) | Brass Nickel Plated |         |        |              | Stainless Steel |         |        |              |
|----------------------------|---------------------|---------|--------|--------------|-----------------|---------|--------|--------------|
|                            | Spanner Width       | Outer Ø | Height | Part Number  | Spanner Width   | Outer Ø | Height | Part Number  |
|                            | (mm)                | D (mm)  | H (mm) |              | (mm)            | D (mm)  | H (mm) |              |
| PG 7                       | 15                  | 16.6    | 2.8    | AIO-BSCSL-01 | 17              | 18.6    | 2.8    | AIO-BSCSL-01 |
| PG 9                       | 18                  | 20.0    | 2.8    | AIO-BSCSL-02 | 19              | 21.0    | 2.8    | AIO-BSCSL-02 |
| PG 11                      | 21                  | 23.5    | 3.0    | AIO-BSCSL-03 | 22              | 24.5    | 3.0    | AIO-BSCSL-03 |
| PG 13.5                    | 23                  | 25.5    | 3.0    | AIO-BSCSL-04 | 24              | 26.5    | 3.0    | AIO-BSCSL-04 |
| PG 16                      | 26                  | 29.0    | 3.0    | AIO-BSCSL-05 | 27              | 30.0    | 3.0    | AIO-BSCSL-05 |
| PG 21                      | 32                  | 35.5    | 3.5    | AIO-BSCSL-06 | 32              | 35.5    | 3.5    | AIO-BSCSL-06 |
| PG 29                      | 41                  | 45.0    | 4.0    | AIO-BSCSL-07 | 41              | 45.0    | 4.0    | AIO-BSCSL-07 |
| PG 36                      | 51                  | 56.0    | 5.0    | AIO-BSCSL-08 | 60              | 66.0    | 5.0    | AIO-BSCSL-08 |
| PG 42                      | 60                  | 66.0    | 5.0    | AIO-BSCSL-09 | 60              | 66.0    | 5.0    | AIO-BSCSL-09 |
| PG 48                      | 64                  | 70.5    | 5.5    | AIO-BSCSL-10 | 65              | 71.5    | 5.5    | AIO-BSCSL-10 |

## Thread Type G Acc. to DIN ISO 228

| Inner Thread Size (Female) | Brass Nickel Plated |         |        |               | Stainless Steel |         |        |               |
|----------------------------|---------------------|---------|--------|---------------|-----------------|---------|--------|---------------|
|                            | Spanner Width       | Outer Ø | Height | Part Number   | Spanner Width   | Outer Ø | Height | Part Number   |
|                            | (mm)                | D (mm)  | H (mm) |               | (mm)            | D (mm)  | H (mm) |               |
| G 3/8"                     | 22                  | 24.5    | 5.0    | AIO-BPCSFL-01 | 22              | 24.5    | 5.0    | AIO-BPCSFL-01 |
| G 1/2"                     | 27                  | 30.0    | 5.0    | AIO-BPCSFL-02 | 27              | 30.0    | 5.0    | AIO-BPCSFL-02 |
| G 3/4"                     | 33                  | 36.5    | 5.0    | AIO-BPCSFL-03 | 36              | 39.5    | 5.0    | AIO-BPCSFL-03 |
| G 1"                       | 43                  | 46.5    | 5.0    | AIO-BPCSFL-04 | 46              | 51.0    | 5.0    | AIO-BPCSFL-04 |
| G 1 1/4"                   | 48                  | 53.0    | 5.0    | AIO-BPCSFL-05 | 50              | 55.5    | 5.0    | AIO-BPCSFL-05 |
| G 1 1/2"                   | 55                  | 61.0    | 5.0    | AIO-BPCSFL-06 | 55              | 61.0    | 5.0    | AIO-BPCSFL-06 |
| G 2"                       | 64                  | 70.5    | 5.5    | AIO-BPCSFL-07 | 65              | 71.5    | 5.5    | AIO-BPCSFL-07 |
| G 4"                       | 130                 | 145.0   | 8.0    | AIO-BPCSFL-11 | 130             | 145.0   | 8.0    | AIO-BPCSFL-11 |

# MULTIHOLE SEALS



## Multihole Seals

- To use a number of small cables in one cable gland.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

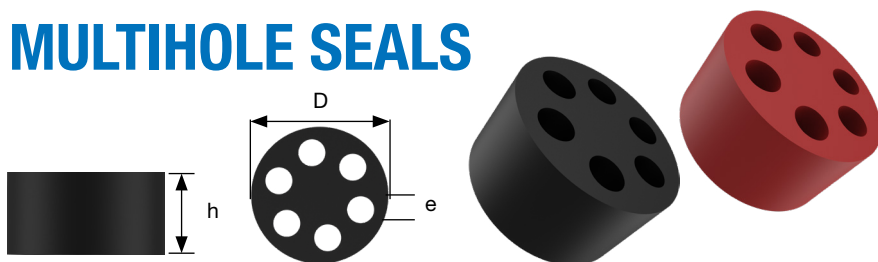
### Technical Details

#### Material

- CR (Chloroprene)
- NBR
- Silicone
- EPDM

| Replaced Standard Seal |                      | No. of Cores<br>n | Core Ø<br>e (mm)  | Outer Ø Height |        | Part Number     |                 |
|------------------------|----------------------|-------------------|-------------------|----------------|--------|-----------------|-----------------|
| #1<br>Ø min-max (mm)   | #2<br>Ø min-max (mm) |                   |                   | D (mm)         | h (mm) | CR Black        | NBR Black       |
| 4.0-8.0                | 2.0-6.0              | 2                 | 3.0               | 10.9           | 7.0    | AIO-MMSCS-012C  | AIO-MMSCS-012N  |
|                        |                      |                   | 4.0               | 10.9           | 7.0    | AIO-MMSCS-011C  | AIO-MMSCS-011N  |
|                        |                      | 4                 | 3.0               | 10.9           | 7.0    | AIO-MMSCS-013C  | AIO-MMSCS-013N  |
| 5.0-10.0               | 3.0-7.0              | 2                 | 3.0               | 13.7           | 10.4   | AIO-MMSCS-017C  | AIO-MMSCS-017N  |
|                        |                      |                   | 4.0               | 13.7           | 10.4   | AIO-MMSCS-014C  | AIO-MMSCS-014N  |
|                        |                      |                   | 4.5               | 13.7           | 10.4   | AIO-MMSCS-015C  | AIO-MMSCS-015N  |
|                        |                      |                   | 5.0               | 13.7           | 10.4   | AIO-MMSCS-018C  | AIO-MMSCS-018N  |
|                        |                      | 3                 | 4.0               | 13.7           | 10.4   | AIO-MMSCS-019C  | AIO-MMSCS-019N  |
| 6.0-12.0               | 5.0-9.0              | 2                 | 1x4.7-1x6.6       | 16.0           | 8.0    | AIO-MMSCS-02M1C | AIO-MMSCS-02M1N |
|                        |                      |                   | 5.0               | 16.0           | 8.4    | AIO-MMSCS-025C  | AIO-MMSCS-025N  |
|                        |                      |                   | 6.0               | 16.0           | 8.4    | AIO-MMSCS-021C  | AIO-MMSCS-021N  |
|                        |                      | 3                 | 4.0               | 16.0           | 8.4    | AIO-MMSCS-022C  | AIO-MMSCS-022N  |
|                        |                      |                   | 5.0               | 16.0           | 8.4    | AIO-MMSCS-023C  | AIO-MMSCS-023N  |
|                        |                      | 4                 | 3.0               | 16.0           | 8.4    | AIO-MMSCS-024C  | AIO-MMSCS-024N  |
|                        |                      |                   | 4.0               | 16.0           | 8.4    | AIO-MMSCS-026C  | AIO-MMSCS-026N  |
| 10.0-14.0              | 7.0-12.0             | 2                 | 1x6.8-1x7.8       | 18.0           | 9.3    | AIO-MMSCS-02LC  | AIO-MMSCS-02LN  |
|                        |                      |                   | 4.0               | 18.0           | 9.3    | AIO-MMSCS-02AC  | AIO-MMSCS-02AN  |
|                        |                      |                   | 6.0               | 18.0           | 9.3    | AIO-MMSCS-02CC  | AIO-MMSCS-02CN  |
|                        |                      |                   | 6.5               | 18.0           | 9.3    | AIO-MMSCS-02GC  | AIO-MMSCS-02GN  |
|                        |                      |                   | 7.0               | 18.0           | 9.3    | AIO-MMSCS-28C   | AIO-MMSCS-028N  |
|                        |                      | 3                 | 2x7.0-1x4.0       | 18.0           | 9.3    | AIO-MMSCS-02HC  | AIO-MMSCS-02HN  |
|                        |                      |                   | 4.0               | 18.0           | 9.3    | AIO-MMSCS-029C  | AIO-MMSCS-029N  |
|                        |                      |                   | 5.6               | 18.0           | 9.3    | AIO-MMSCS-02JC  | AIO-MMSCS-02JN  |
|                        |                      |                   | 6.0               | 18.0           | 9.3    | AIO-MMSCS-02DC  | AIO-MMSCS-02DN  |
|                        |                      | 4                 | 5.0               | 18.0           | 9.3    | AIO-MMSCS-02BC  | AIO-MMSCS-02BN  |
|                        |                      |                   | 6.0               | 18.0           | 9.3    | AIO-MMSCS-02KC  | AIO-MMSCS-02KN  |
|                        |                      | 5                 | 4.0               | 18.0           | 9.3    | AIO-MMSCS-02EC  | AIO-MMSCS-02EN  |
|                        |                      |                   | 4.0               | 18.0           | 9.3    | AIO-MMSCS-02MC  | AIO-MMSCS-02MN  |
| 11.0-17.0              | 9.0-13.0             | 2                 | 6.0               | 20.4           | 10.7   | AIO-MMSCS-03CC  | AIO-MMSCS-03CN  |
|                        |                      |                   | 5.0               | 20.4           | 10.7   | AIO-MMSCS-03EC  | AIO-MMSCS-03EN  |
|                        |                      | 3                 | 6.0               | 20.4           | 10.7   | AIO-MMSCS-03DC  | AIO-MMSCS-03DN  |
|                        |                      |                   | 7.0               | 20.4           | 10.7   | AIO-MMSCS-03FC  | AIO-MMSCS-03FN  |
|                        |                      | 4                 | 5.0               | 20.4           | 10.7   | AIO-MMSCS-03GC  | AIO-MMSCS-03GN  |
|                        |                      | 5                 | 4.0               | 20.4           | 10.7   | AIO-MMSCS-03HC  | AIO-MMSCS-03HN  |
|                        |                      | 6                 | 4.0               | 20.4           | 10.7   | AIO-MMSCS-03IC  | AIO-MMSCS-03IN  |
| 13.0-18.0              | 9.0-16.0             | 2                 | 3.0               | 20.4           | 10.7   | AIO-MMSCS-03JC  | AIO-MMSCS-03JN  |
|                        |                      |                   | 6.6               | 22.9           | 12.2   | AIO-MMSCS-032C  | AIO-MMSCS-032N  |
|                        |                      |                   | 7.0               | 22.9           | 12.2   | AIO-MMSCS-033C  | AIO-MMSCS-033N  |
|                        |                      |                   | 8.0               | 22.9           | 12.2   | AIO-MMSCS-034C  | AIO-MMSCS-034N  |
|                        |                      | 3                 | 9.0               | 22.9           | 12.2   | AIO-MMSCS-035C  | AIO-MMSCS-035N  |
|                        |                      |                   | 6.6               | 22.9           | 12.2   | AIO-MMSCS-036AC | AIO-MMSCS-036AN |
|                        |                      |                   | 7.0               | 22.9           | 12.2   | AIO-MMSCS-03BC  | AIO-MMSCS-03BN  |
|                        |                      | 4                 | 8.0               | 22.9           | 12.2   | AIO-MMSCS-037C  | AIO-MMSCS-037N  |
|                        |                      |                   | 6.6               | 22.9           | 12.2   | AIO-MMSCS-039C  | AIO-MMSCS-039N  |
|                        |                      | 8                 | 7.0               | 22.9           | 12.2   | AIO-MMSCS-039AC | AIO-MMSCS-039AN |
|                        |                      |                   | 4x2.0-2x4.0-2x6.0 | 22.9           | 12.2   | AIO-MMSCS-039DC | AIO-MMSCS-039DN |

# MULTIHOLE SEALS



## Multihole Seals

- To use a number of small cables in one cable gland.
- High quality strain relief and sealing, reliable performance for standard industrial applications.

### Technical Details

|          |                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------|
| Material | <ul style="list-style-type: none"> <li>• CR (Chloroprene)</li> <li>• NBR</li> <li>• Silicone</li> <li>• EPDM</li> </ul> |
|----------|-------------------------------------------------------------------------------------------------------------------------|

| Replaced Standard Seal |                         | No. of Cores | Core Ø                   | Outer Ø   | Height    | Part Number     |                 |
|------------------------|-------------------------|--------------|--------------------------|-----------|-----------|-----------------|-----------------|
| #1<br>Ø min-max        | #2<br>Ø min-max<br>(mm) | n<br>(mm)    | e<br>(mm)                | D<br>(mm) | h<br>(mm) | CR<br>Black     | NBR<br>Black    |
| 15.0-21.0              | 11.0-15.0               | 2            | 7.0                      | 25.4      | 14.2      | AIO-MMSCS-04CC  | AIO-MMSCS-04CN  |
|                        |                         |              | 8.0                      |           |           | AIO-MMSCS-04AC  | AIO-MMSCS-04AN  |
|                        |                         |              | 9.0                      |           |           | AIO-MMSCS-04DC  | AIO-MMSCS-04DN  |
|                        |                         | 3            | 8.0                      |           |           | AIO-MMSCS-04BC  | AIO-MMSCS-04BN  |
|                        |                         |              | 2x9.0-1x6.2              |           |           | AIO-MMSCS-043AC | AIO-MMSCS-043AN |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-04HC  | AIO-MMSCS-04HN  |
|                        |                         | 4            | 7.0                      |           |           | AIO-MMSCS-04IC  | AIO-MMSCS-04IN  |
|                        |                         |              | 8.0                      |           |           | AIO-MMSCS-04EC  | AIO-MMSCS-04EN  |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-04FC  | AIO-MMSCS-04FN  |
|                        |                         | 5            | 5.0                      |           |           | AIO-MMSCS-04JC  | AIO-MMSCS-04JN  |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-04KC  | AIO-MMSCS-04KN  |
|                        |                         |              | 4.0                      |           |           | AIO-MMSCS-04MC  | AIO-MMSCS-04MN  |
|                        |                         | 8            | 5.0                      |           |           | AIO-MMSCS-04NC  | AIO-MMSCS-04NN  |
|                        |                         |              | 3.0                      |           |           | AIO-MMSCS-04LC  | AIO-MMSCS-04LN  |
|                        |                         |              | 4.0                      |           |           | AIO-MMSCS-040C  | AIO-MMSCS-040N  |
|                        |                         | 9            | 4.0                      |           |           |                 |                 |
|                        |                         |              |                          |           |           |                 |                 |
|                        |                         |              |                          |           |           |                 |                 |
| 18.0-25.0              | 12.0-20.0               | 2            | 8.0                      | 30.4      | 14.0      | AIO-MMSCS-041C  | AIO-MMSCS-041N  |
|                        |                         |              | 9.0                      |           |           | AIO-MMSCS-042C  | AIO-MMSCS-042N  |
|                        |                         | 3            | 7.5                      |           |           | AIO-MMSCS-043C  | AIO-MMSCS-043N  |
|                        |                         |              | 8.0                      |           |           | AIO-MMSCS-045C  | AIO-MMSCS-045N  |
|                        |                         | 4            | 8.0                      |           |           | AIO-MMSCS-046C  | AIO-MMSCS-046N  |
|                        |                         |              | 8.5                      |           |           | AIO-MMSCS-046AC | AIO-MMSCS-046AN |
|                        |                         | 5            | 5.0                      |           |           | AIO-MMSCS-049C  | AIO-MMSCS-049N  |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-047C  | AIO-MMSCS-047N  |
|                        |                         | 6            | 7.5                      |           |           | AIO-MMSCS-048C  | AIO-MMSCS-048N  |
|                        |                         |              |                          |           |           |                 |                 |
|                        |                         |              |                          |           |           |                 |                 |
|                        |                         |              |                          |           |           |                 |                 |
| 19.0-28.0              | 16.0-23.0               | 2            | 10.0                     | 33.4      | 17.0      | AIO-MMSCS-051C  | AIO-MMSCS-051N  |
|                        |                         |              | 10.0                     |           |           | AIO-MMSCS-052C  | AIO-MMSCS-052N  |
|                        |                         | 3            | 2x10.8-1x7.0             |           |           | AIO-MMSCS-052AC | AIO-MMSCS-052AN |
|                        |                         |              | 8.0                      |           |           | AIO-MMSCS-053C  | AIO-MMSCS-053N  |
|                        |                         | 4            | 8.0                      |           |           | AIO-MMSCS-054C  | AIO-MMSCS-054N  |
|                        |                         |              | 9.0                      |           |           | AIO-MMSCS-055C  | AIO-MMSCS-055N  |
|                        |                         | 5            | 7.0                      |           |           | AIO-MMSCS-056C  | AIO-MMSCS-056N  |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-057C  | AIO-MMSCS-057N  |
|                        |                         | 8            | 7.0                      |           |           | AIO-MMSCS-058C  | AIO-MMSCS-058N  |
|                        |                         |              | 6.0                      |           |           | AIO-MMSCS-059BC | AIO-MMSCS-059BN |
|                        |                         | 10           | 5.3                      |           |           | AIO-MMSCS-060AC | AIO-MMSCS-060AN |
|                        |                         |              |                          |           |           |                 |                 |
| 22.0-32.0              | 20.0-26.0               | 5            | 9.0                      | 40.0      | 16.8      | AIO-MMSCS-071C  | AIO-MMSCS-071N  |
|                        |                         | 8            | 8.0                      |           |           | AIO-MMSCS-072C  | AIO-MMSCS-072N  |
| 30.0-38.0              | 25.0-31.0               | 9            | 6x3.4-2x6.9-1x8.3        | 45.0      | 16.5      | AIO-MMSCS-082C  | AIO-MMSCS-082N  |
|                        |                         |              | 6x3.6-1x7.9-1x7.2-1x9.2  |           |           | AIO-MMSCS-082AC | AIO-MMSCS-082AN |
|                        |                         | 11           | 1x7.1-4x6.2-5x5.2-1x10.8 |           |           | AIO-MMSCS-083C  | AIO-MMSCS-083N  |
|                        |                         |              | 5x6.0-5x5.0-1x10.5       |           |           | AIO-MMSCS-083AC | AIO-MMSCS-083AN |

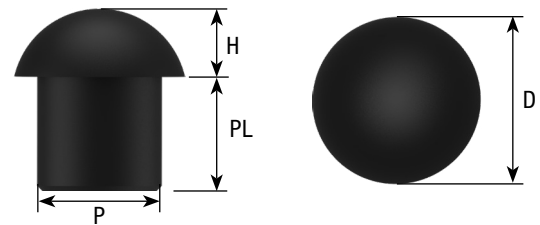
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### Plugs for Sealing Cable Insert

- For standard industrial applications.
- Sealing of cable glands when no cable is used.

#### Technical Details

|                       |                    |                   |
|-----------------------|--------------------|-------------------|
| Material              | PA 6 (Polyamide 6) |                   |
| Flammability          | V2 acc. to UL94    |                   |
| Operating Temperature | Permanent          | Intermittent      |
|                       | -20 °C to +100 °C  | -30 °C to +150 °C |



| Size | Plug     |                | Outer Ø | Max. Height | Dome Plug Fit Into Clamping Range Ø min-max |                    |                  |                 | Part Number         |                  |                  |
|------|----------|----------------|---------|-------------|---------------------------------------------|--------------------|------------------|-----------------|---------------------|------------------|------------------|
|      | Ø P (mm) | Length PL (mm) |         |             | Standard Seal (mm)                          | Reducing Seal (mm) | Double Seal (mm) | Outer Seal (mm) | RAL 7035 Light Gray | RAL 7001 Gray    | RAL 9005 Black   |
| 9    | 4.0      | 12.0           | 9.2     | 4.0         | -                                           | 2.0-5.0            | 2.0-6.5          | -               | AIO-BDPCS-09-11     | AIO-BDPCS-09-01  | AIO-BDPCS-09-21  |
|      | 6.4      | 12.0           | 9.2     | 4.0         | 3.0-6.5                                     | -                  | -                | 3.0-6.5         | AIO-BDPCS-09-12     | AIO-BDPCS-09-02  | AIO-BDPCS-09-22  |
| 11   | 5.0      | 14.0           | 10.5    | 5.0         | -                                           | 2.0-6.0            | 3.0-8.0          | -               | AIO-BDPCS-11-11     | AIO-BDPCS-11-01  | AIO-BDPCS-11-21  |
|      | 8.0      | 13.7           | 10.5    | 4.7         | 4.0-8.0                                     | -                  | -                | 4.0-8.0         | AIO-BDPCS-11-12     | AIO-BDPCS-11-02  | AIO-BDPCS-11-22  |
| 13   | 7.0      | 15.0           | 13.3    | 5.7         | -                                           | 3.0-7.0            | 3.0-10.0         | -               | AIO-BDPCS-13-11     | AIO-BDPCS-13-01  | AIO-BDPCS-13-21  |
|      | 9.7      | 9.0            | 13.3    | 5.3         | 5.0-10.0                                    | -                  | -                | 5.0-10.0        | AIO-BDPCS-13-12     | AIO-BDPCS-13-02  | AIO-BDPCS-13-22  |
|      | 9.7      | 15.0           | 13.3    | 5.7         | 5.0-10.0                                    | -                  | -                | 5.0-10.0        | AIO-BDPCS-13-12S    | AIO-BDPCS-13-02S | AIO-BDPCS-13-22S |
| 16   | 7.0      | 14.0           | 15.8    | 7.5         | -                                           | -                  | 3.0-13.0         | -               | AIO-BDPCS-16-10     | AIO-BDPCS-16-00  | AIO-BDPCS-16-20  |
|      | 8.5      | 13.0           | 15.8    | 7.7         | -                                           | 5.0-9.0            | 5.0-12.0         | -               | AIO-BDPCS-16-11     | AIO-BDPCS-16-01  | AIO-BDPCS-16-21  |
|      | 12.0     | 13.0           | 15.8    | 8.0         | 6.0-12.0                                    | -                  | -                | 6.0-12.0        | AIO-BDPCS-16-12     | AIO-BDPCS-16-02  | AIO-BDPCS-16-22  |
|      | 13.0     | 14.0           | 15.8    | 7.5         | 7.0-13.0                                    | -                  | -                | 7.0-13.0        | AIO-BDPCS-16-13     | AIO-BDPCS-16-03  | AIO-BDPCS-16-23  |
| 18   | 11.0     | 13.5           | 18.0    | 8.5         | -                                           | 7.0-12.0           | 7.0-14.0         | -               | AIO-BDPCS-18-11     | AIO-BDPCS-18-01  | AIO-BDPCS-18-21  |
|      | 13.6     | 13.5           | 18.0    | 8.7         | 10.0-14.0                                   | -                  | -                | 10.0-14.0       | AIO-BDPCS-18-12     | AIO-BDPCS-18-02  | AIO-BDPCS-18-22  |
| 20   | 13.0     | 14.5           | 20.0    | 7.0         | -                                           | 9.0-13.0           | 8.0-17.0         | -               | AIO-BDPCS-20-11     | AIO-BDPCS-20-01  | AIO-BDPCS-20-21  |
|      | 16.4     | 14.5           | 19.9    | 7.3         | 11.0-17.0                                   | -                  | -                | 11.0-17.0       | AIO-BDPCS-20-12     | AIO-BDPCS-20-02  | AIO-BDPCS-20-22  |
| 22   | 14.0     | 14.0           | 22.0    | 9.5         | -                                           | 11.0-15.0          | 9.0-18.0         | -               | AIO-BDPCS-22-11     | AIO-BDPCS-22-01  | AIO-BDPCS-22-21  |
|      | 17.8     | 14.0           | 22.0    | 10.0        | 13.0-18.0                                   | -                  | -                | 13.0-18.0       | AIO-BDPCS-22-12     | AIO-BDPCS-22-02  | AIO-BDPCS-22-22  |
| 24   | 16.1     | 15.5           | 24.0    | 9.0         | -                                           | 9.0-16.0           | 11.0-21.0        | -               | AIO-BDPCS-24-11     | AIO-BDPCS-24-01  | AIO-BDPCS-24-21  |
|      | 20.4     | 15.5           | 24.1    | 9.2         | 15.0-21.0                                   | -                  | -                | 15.0-21.0       | AIO-BDPCS-24-12     | AIO-BDPCS-24-02  | AIO-BDPCS-24-22  |
| 29   | 19.7     | 15.0           | 28.5    | 9.7         | -                                           | 12.0-20.0          | 13.0-25.0        | -               | AIO-BDPCS-29-11     | AIO-BDPCS-29-01  | AIO-BDPCS-29-21  |
|      | 25.0     | 15.0           | 28.5    | 9.7         | 18.0-25.0                                   | -                  | -                | 18.0-25.0       | AIO-BDPCS-29-12     | AIO-BDPCS-29-02  | AIO-BDPCS-29-22  |
| 32   | 20.5     | 15.8           | 31.5    | 9.2         | -                                           | 16.0-23.0          | 16.0-28.0        | -               | AIO-BDPCS-32-11     | AIO-BDPCS-32-01  | AIO-BDPCS-32-21  |
|      | 27.3     | 15.8           | 31.5    | 9.2         | 19.0-28.0                                   | -                  | -                | 19.0-28.0       | AIO-BDPCS-32-12     | AIO-BDPCS-32-02  | AIO-BDPCS-32-22  |
| 37   | 25.7     | 17.0           | 36.8    | 10.7        | -                                           | 20.0-26.0          | 20.0-32.0        | -               | AIO-BDPCS-37-11     | AIO-BDPCS-37-01  | AIO-BDPCS-37-21  |
|      | 31.8     | 17.0           | 36.8    | 10.7        | 22.0-32.0                                   | -                  | -                | 19.0-28.0       | AIO-BDPCS-37-12     | AIO-BDPCS-37-02  | AIO-BDPCS-37-22  |
| 45   | 30.6     | 20.2           | 43.3    | 11.9        | -                                           | 25.0-31.0          | 21.0-38.0        | -               | AIO-BDPCS-45-11     | AIO-BDPCS-45-01  | AIO-BDPCS-45-21  |
|      | 38.0     | 20.2           | 43.3    | 11.9        | 30.0-38.0                                   | -                  | -                | 30.0-38.0       | AIO-BDPCS-45-12     | AIO-BDPCS-45-02  | AIO-BDPCS-45-22  |
| 52   | 34.6     | 22.5           | 51.0    | 16.0        | -                                           | 29.0-35.0          | 27.0-44.0        | -               | AIO-BDPCS-52-11     | AIO-BDPCS-52-01  | AIO-BDPCS-52-21  |
|      | 44.2     | 22.5           | 51.0    | 16.0        | 34.0-44.0                                   | -                  | -                | 34.0-44.0       | AIO-BDPCS-52-12     | AIO-BDPCS-52-02  | AIO-BDPCS-52-22  |

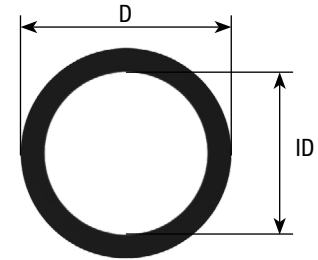
# GASKETS (WASHERS)

## Gaskets

•To ensure IP rating for rough surfaces or through holes.

### Technical Details

|          |                    |
|----------|--------------------|
| Material | • CR (Chloroprene) |
|          | • NBR              |
|          | • Silicone         |
|          | • Polyamide 6      |
|          | • Fiber            |



## Gaskets (Washers) for Metric Size

| For Thread<br>Size Metric | Outer Ø   | Inner Ø    | Height    | Part Number     |                 |                  |                    |                 |
|---------------------------|-----------|------------|-----------|-----------------|-----------------|------------------|--------------------|-----------------|
|                           | D<br>(mm) | ID<br>(mm) | H<br>(mm) | CR<br>Black     | NBR<br>Black    | Silicone<br>Red  | Polyamide<br>White | Green           |
| M12                       | 15.5      | 10.3       | 1.5       | AIO-BMCSSW-21C  | AIO-BMCSSW-21N  | AIO-BMCSSW-21SR  | -                  | -               |
|                           | 15.5      | 12.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-1PA     | AIO-BMCSSW-1FB  |
| M16                       | 21.5      | 14.3       | 1.5       | AIO-BMCSSW-22C  | AIO-BMCSSW-22N  | AIO-BMCSSW-22SR  | -                  | -               |
|                           | 19.6      | 16.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-2PA     | AIO-BMCSSW-2FB  |
| M20                       | 26.0      | 18.5       | 1.5       | AIO-BMCSSW-23C  | AIO-BMCSSW-23N  | AIO-BMCSSW-23SR  | -                  | -               |
|                           | 23.8      | 20.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-3PA     | AIO-BMCSSW-3FB  |
| M25                       | 31.5      | 23.3       | 1.5       | AIO-BMCSSW-24C  | AIO-BMCSSW-24N  | AIO-BMCSSW-24SR  | -                  | -               |
|                           | 32.2      | 25.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-4PA     | AIO-BMCSSW-4FB  |
| M32                       | 38.5      | 30.5       | 1.5       | AIO-BMCSSW-25C  | AIO-BMCSSW-25N  | AIO-BMCSSW-25SR  | -                  | -               |
|                           | 39.8      | 32.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-5PA     | AIO-BMCSSW-5FB  |
| M40                       | 48.5      | 38.5       | 1.5       | AIO-BMCSSW-26C  | AIO-BMCSSW-26N  | AIO-BMCSSW-26SR  | -                  | -               |
|                           | 49.6      | 40.1       | 1.5       | -               | -               | -                | AIO-BMCSSW-6PA     | AIO-BMCSSW-6FB  |
| M50                       | 58.0      | 48.0       | 1.5       | AIO-BMCSSW-27C  | AIO-BMCSSW-27N  | AIO-BMCSSW-27SR  | -                  | -               |
|                           | 62.0      | 50.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-7PA     | AIO-BMCSSW-7FB  |
| M60                       | 68.0      | 58.0       | 1.5       | AIO-BMCSSW-28SC | AIO-BMCSSW-28SN | AIO-BMCSSW-28SSR | -                  | -               |
|                           | 72.0      | 60.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-60PA    | AIO-BMCSSW-60FB |
| M63                       | 70.0      | 61.2       | 1.5       | AIO-BMCSSW-28C  | AIO-BMCSSW-28N  | AIO-BMCSSW-28SR  | -                  | -               |
|                           | 78.4      | 63.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-8PA     | AIO-BMCSSW-8FB  |
| M70                       | 83.0      | 68.0       | 1.5       | AIO-BMCSSW-29SC | AIO-BMCSSW-29SN | AIO-BMCSSW-29SSR | -                  | -               |
|                           | 82.0      | 70.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-70PA    | AIO-BMCSSW-70FB |
| M75                       | 88.0      | 72.5       | 1.5       | AIO-BMCSSW-29C  | AIO-BMCSSW-29N  | AIO-BMCSSW-29SR  | -                  | -               |
|                           | 93.4      | 75.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-9PA     | AIO-BMCSSW-9FB  |
| M80                       | 92.0      | 78.0       | 1.5       | AIO-BMCSSW-29LC | AIO-BMCSSW-29LN | AIO-BMCSSW-29LSR | -                  | -               |
|                           | 98.0      | 80.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-80PA    | AIO-BMCSSW-80FB |
| M85                       | 97.0      | 83.0       | 1.5       | AIO-BMCSSW-30SC | AIO-BMCSSW-30SN | AIO-BMCSSW-30SSR | -                  | -               |
|                           | 103.0     | 85.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-85PA    | AIO-BMCSSW-85FB |
| M90                       | 102.0     | 88.0       | 1.5       | AIO-BMCSSW-30C  | AIO-BMCSSW-30N  | AIO-BMCSSW-30SR  | -                  | -               |
|                           | 112.0     | 90.2       | 1.5       | -               | -               | -                | AIO-BMCSSW-10PA    | AIO-BMCSSW-10FB |
| M100                      | 112.0     | 98.0       | 1.5       | AIO-BMCSSW-31SC | AIO-BMCSSW-31SN | AIO-BMCSSW-31SSR | -                  | -               |
|                           | 124.5     | 100.2      | 1.5       | -               | -               | -                | AIO-BMCSSW-11PA    | AIO-BMCSSW-11FB |
| M110                      | 122.0     | 108.0      | 1.5       | AIO-BMCSSW-31C  | AIO-BMCSSW-31N  | AIO-BMCSSW-31SR  | -                  | -               |
|                           | 134.0     | 110.2      | 2.0       | -               | -               | -                | AIO-BMCSSW-12PA    | AIO-BMCSSW-12FB |
| M115                      | 127.0     | 113.0      | 1.5       | AIO-BMCSSW-31LC | AIO-BMCSSW-31LN | AIO-BMCSSW-31LSR | -                  | -               |
|                           | 139.0     | 115.2      | 2.0       | -               | -               | -                | AIO-BMCSSW-13PA    | AIO-BMCSSW-13FB |
| M130                      | 142.0     | 128.0      | 1.5       | AIO-BMCSSW-33C  | AIO-BMCSSW-33N  | AIO-BMCSSW-33SR  | -                  | -               |
|                           | 154.0     | 130.2      | 2.0       | -               | -               | -                | AIO-BMCSSW-14PA    | AIO-BMCSSW-14FB |

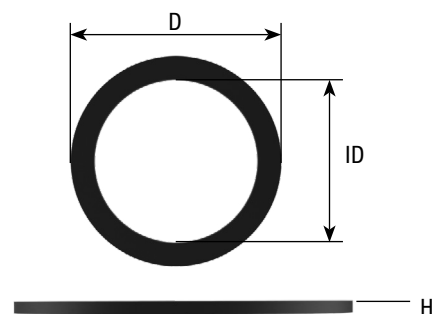
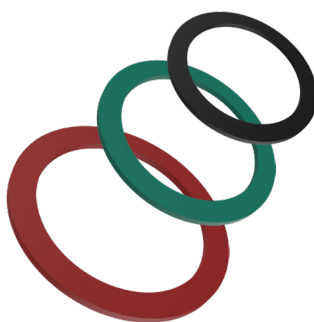
# GASKETS (WASHERS)

## Gaskets

To ensure IP rating for rough surfaces or through holes.

### Technical Details

|          |                    |
|----------|--------------------|
| Material | • CR (Chloroprene) |
|          | • NBR              |
|          | • Silicone         |
|          | • Polyamide 6      |
|          | • Fiber            |



## Gaskets (Washers) for NPT and G Size

| For Thread<br>Size NPT | Outer Ø   | Inner Ø    | Height    | Part Number    |                |                 |                    |                 |
|------------------------|-----------|------------|-----------|----------------|----------------|-----------------|--------------------|-----------------|
|                        | D<br>(mm) | ID<br>(mm) | H<br>(mm) | CR<br>Black    | NBR<br>Black   | Silicone<br>Red | Polyamide<br>White | Green           |
| NPT 1/4"               | 16.8      | 11.7       | 2.0       | AIO-BFCSSW-0SC | AIO-BFCSSW-0SN | AIO-BFCSSW-0SSR | -                  | -               |
|                        | 17.5      | 13.8       | 1.5       | -              | -              | -               | AIO-BNCSSW-1PA     | AIO-BNCSSW-1FB  |
| NPT 3/8"               | 24.0      | 16.4       | 2.0       | AIO-BFCSSW-01C | AIO-BFCSSW-01N | AIO-BFCSSW-01SR | -                  | -               |
|                        | 21.0      | 17.5       | 1.5       | -              | -              | -               | AIO-BNCSSW-2PA     | AIO-BNCSSW-2FB  |
| NPT 1/2"               | 29.0      | 20.4       | 2.0       | AIO-BFCSSW-02C | AIO-BFCSSW-02N | AIO-BFCSSW-02SR | -                  | -               |
|                        | 25.0      | 21.5       | 1.5       | -              | -              | -               | AIO-BNCSSW-3PA     | AIO-BNCSSW-3FB  |
| NPT 3/4"               | 37.0      | 26.0       | 2.0       | AIO-BFCSSW-03C | AIO-BFCSSW-03N | AIO-BFCSSW-03SR | -                  | -               |
|                        | 33.0      | 26.8       | 1.5       | -              | -              | -               | AIO-BNCSSW-4PA     | AIO-BNCSSW-4FB  |
| NPT 1"                 | 45.0      | 32.6       | 2.0       | AIO-BFCSSW-04C | AIO-BFCSSW-04N | AIO-BFCSSW-04SR | -                  | -               |
|                        | 40.5      | 33.5       | 1.5       | -              | -              | -               | AIO-BNCSSW-5PA     | AIO-BNCSSW-5FB  |
| NPT 1 1/4"             | 53.0      | 41.4       | 2.0       | AIO-BFCSSW-05C | AIO-BFCSSW-05N | AIO-BFCSSW-05SR | -                  | -               |
|                        | 50.0      | 42.3       | 1.5       | -              | -              | -               | AIO-BNCSSW-6PA     | AIO-BNCSSW-6FB  |
| NPT 1 1/2"             | 61.0      | 47.2       | 2.0       | AIO-BFCSSW-06C | AIO-BFCSSW-06N | AIO-BFCSSW-06SR | -                  | -               |
|                        | 60.0      | 48.4       | 1.5       | -              | -              | -               | AIO-BNCSSW-7PA     | AIO-BNCSSW-7FB  |
| NPT 2"                 | 75.0      | 59.0       | 2.0       | AIO-BFCSSW-07C | AIO-BFCSSW-07N | AIO-BFCSSW-07SR | -                  | -               |
|                        | 78.4      | 60.5       | 1.5       | -              | -              | -               | AIO-BNCSSW-8PA     | AIO-BNCSSW-8FB  |
| NPT 2 1/2"             | 85.0      | 73.2       | 1.5       | -              | -              | -               | AIO-BNCSSW-9PA     | AIO-BNCSSW-9FB  |
| NPT 3"                 | 110.0     | 89.0       | 1.5       | -              | -              | -               | AIO-BNCSSW-10PA    | AIO-BNCSSW-10FB |
| NPT 3 1/2"             | 125.0     | 101.8      | 1.5       | -              | -              | -               | AIO-BNCSSW-11PA    | AIO-BNCSSW-11FB |
| NPT 4"                 | 138.0     | 114.4      | 2.0       | -              | -              | -               | AIO-BNCSSW-12PA    | AIO-BNCSSW-12FB |
| NPT 5"                 | 165.0     | 141.5      | 2.0       | -              | -              | -               | AIO-BNCSSW-13PA    | AIO-BNCSSW-13FB |

## Gaskets (Washers) for PG Size

| For Thread<br>Size PG | Outer Ø   | Inner Ø    | Height    | Part Number    |                |                 |                    |                 |
|-----------------------|-----------|------------|-----------|----------------|----------------|-----------------|--------------------|-----------------|
|                       | D<br>(mm) | ID<br>(mm) | H<br>(mm) | CR<br>Black    | NBR<br>Black   | Silicone<br>Red | Polyamide<br>White | Green           |
| PG 7                  | 16.8      | 11.8       | 1.5       | AIO-BSCSSW-01C | AIO-BSCSSW-01N | AIO-BSCSSW-01SR | -                  | -               |
|                       | 17.0      | 12.6       | 1.5       | -              | -              | -               | AIO-BSCSSW-1PA     | AIO-BSCSSW-1FB  |
| PG 9                  | 21.8      | 14.5       | 1.5       | AIO-BSCSSW-02C | AIO-BSCSSW-02N | AIO-BSCSSW-02SR | -                  | -               |
|                       | 20.0      | 15.3       | 1.5       | -              | -              | -               | AIO-BSCSSW-2PA     | AIO-BSCSSW-2FB  |
| PG 11                 | 25.8      | 17.5       | 1.5       | AIO-BSCSSW-03C | AIO-BSCSSW-03N | AIO-BSCSSW-03SR | -                  | -               |
|                       | 23.5      | 18.7       | 1.5       | -              | -              | -               | AIO-BSCSSW-3PA     | AIO-BSCSSW-3FB  |
| PG 13.5               | 27.8      | 19.8       | 1.5       | AIO-BSCSSW-04C | AIO-BSCSSW-04N | AIO-BSCSSW-04SR | -                  | -               |
|                       | 27.5      | 20.5       | 1.5       | -              | -              | -               | AIO-BSCSSW-4PA     | AIO-BSCSSW-4FB  |
| PG 16                 | 29.8      | 21.8       | 1.5       | AIO-BSCSSW-05C | AIO-BSCSSW-05N | AIO-BSCSSW-05SR | -                  | -               |
|                       | 29.5      | 22.6       | 1.5       | -              | -              | -               | AIO-BSCSSW-5PA     | AIO-BSCSSW-5FB  |
| PG 21                 | 35.8      | 27.0       | 1.5       | AIO-BSCSSW-06C | AIO-BSCSSW-06N | AIO-BSCSSW-06SR | -                  | -               |
|                       | 35.5      | 28.4       | 1.5       | -              | -              | -               | AIO-BSCSSW-6PA     | AIO-BSCSSW-6FB  |
| PG 29                 | 46.8      | 35.5       | 1.5       | AIO-BSCSSW-07C | AIO-BSCSSW-07N | AIO-BSCSSW-07SR | -                  | -               |
|                       | 46.5      | 37.1       | 1.5       | -              | -              | -               | AIO-BSCSSW-7PA     | AIO-BSCSSW-7FB  |
| PG 36                 | 59.0      | 45.5       | 1.5       | AIO-BSCSSW-08C | AIO-BSCSSW-08N | AIO-BSCSSW-08SR | -                  | -               |
|                       | 57.5      | 47.2       | 1.5       | -              | -              | -               | AIO-BSCSSW-8PA     | AIO-BSCSSW-8FB  |
| PG 42                 | 66.8      | 52.8       | 1.5       | AIO-BSCSSW-09C | AIO-BSCSSW-09N | AIO-BSCSSW-09SR | -                  | -               |
|                       | 66.5      | 54.2       | 1.5       | -              | -              | -               | AIO-BSCSSW-9PA     | AIO-BSCSSW-9FB  |
| PG 48                 | 71.8      | 57.8       | 1.5       | AIO-BSCSSW-10C | AIO-BSCSSW-10N | AIO-BSCSSW-10SR | -                  | -               |
|                       | 72.0      | 59.5       | 1.5       | -              | -              | -               | AIO-BSCSSW-10PA    | AIO-BSCSSW-10FB |



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