



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**HIGH PRESSURE
CONNECTORS
V SERIES**



Precision modular connectors to suit your application

Since its creation in Switzerland in 1946 the LEMO Group has been recognized as a global leader of circular Push-Pull connectors and connector solutions. Today LEMO and its affiliated companies, REDEL and COELVER, are active in more than 80 countries with the help of over 40 subsidiaries and distributors.

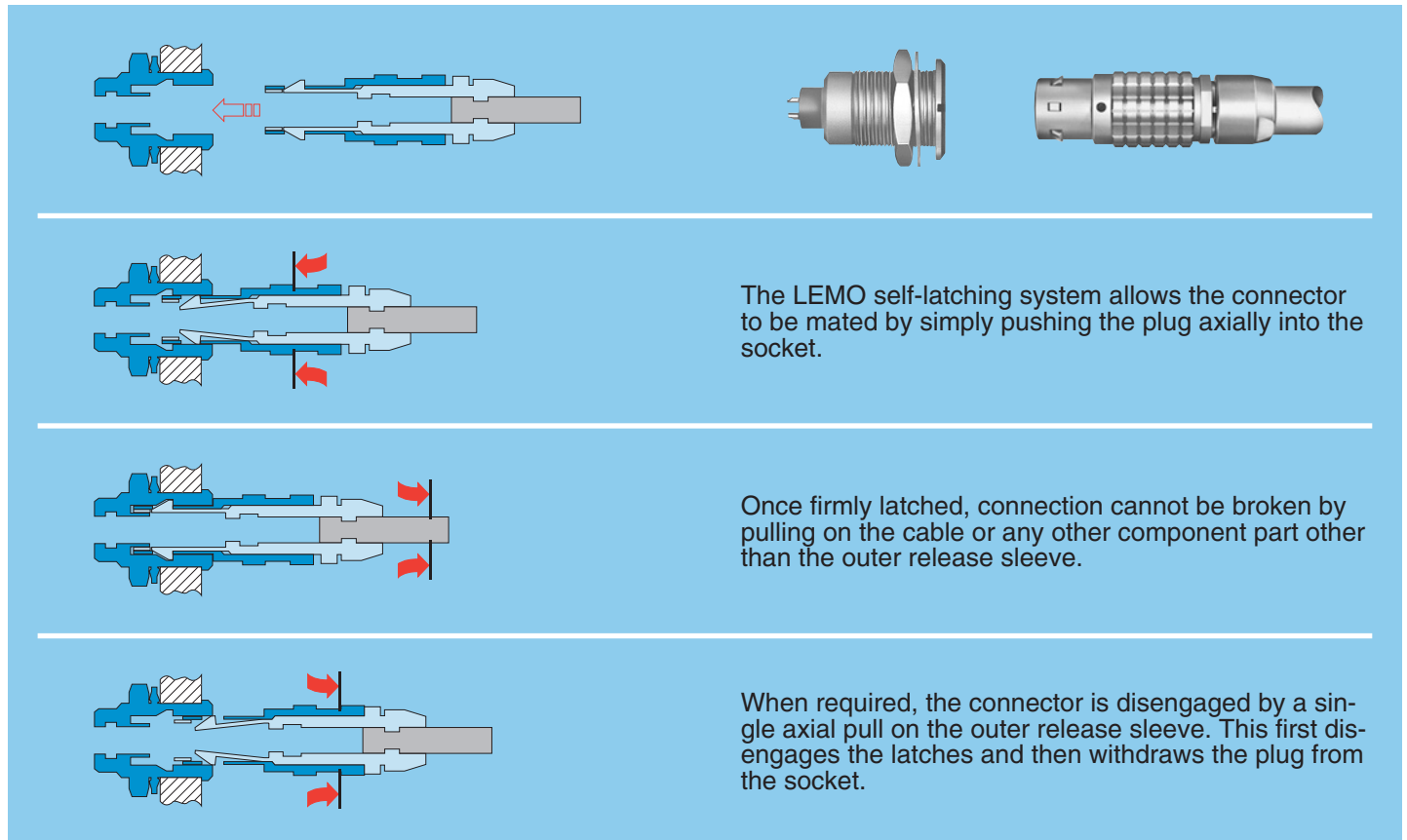
Over 50'000 connectors

The modular design of the LEMO range provides over 50'000 connectors from miniature \varnothing 3 mm to \varnothing 50 mm, capable of handling cable diameters up to 30 mm and for up to 114 contacts.

This vast portfolio enables you to select the ideal connector configuration to suit almost any specific requirement in most markets, including medical devices, test and measurement instruments, machinery, audio video broadcast, telecommunications and military.

LEMO's Push-Pull Self-Latching Connection System (not shown in this catalogue)



This self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable, and facilitates operation in a very limited space.



UL Recognition

LEMO connectors are recognized by the Underwriters Laboratories (UL). The approval of the complete system (LEMO connector, cable and your equipment) will be easier because LEMO connectors are approved.

CE marking

CE marking  means that the appliance or equipment bearing it complies with the protection requirements of one or several European safety directives. CE marking  applies to complete products or equipment, **but not to electromechanical components, such as connectors.**

RoHS

LEMO connector specifications exceed the requirements of the RoHS directives (2002/95/EC) of the European Parliament and the latest amendments. This directive specifies the restrictions of the use of hazardous substances in electrical and electronic equipment marketed in Europe. LEMO guarantees that its connectors are free of mercury, cadmium, lead, hexavalent chromium and polybromide biphenyl (PBB), polybromide diphenyl ether (PBDE), or DecaBDE.

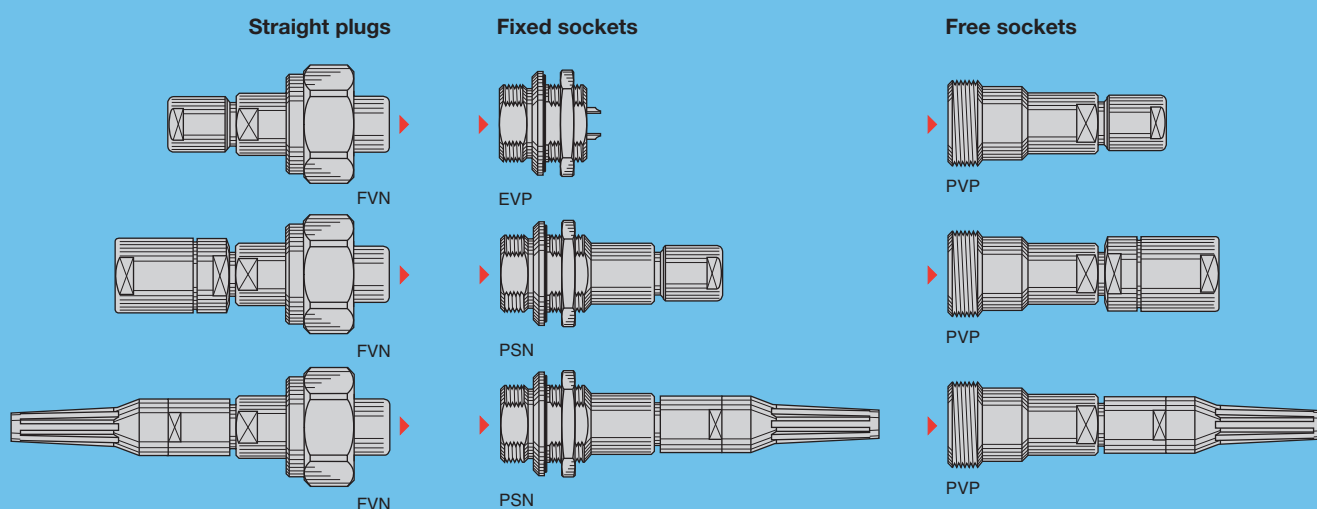
V Series

V series connectors have been developed for utilisation where protection must be guaranteed under high pressures of liquids. The basic elements, insulators, contacts and clamping system are from the S and E series. The push-pull latching system has been replaced by a screw coupling system with watertightness maintained by compression of an O-ring in FPM (Viton®) according to the triangular shaped cavity principle. There are multiple application possibilities, from nuclear physics to the petroleum industry. After cable assembly the rear part must be covered with an adhesive heatshrink boot in order to ensure watertightness on the cable side. V series connectors provide the following main features:

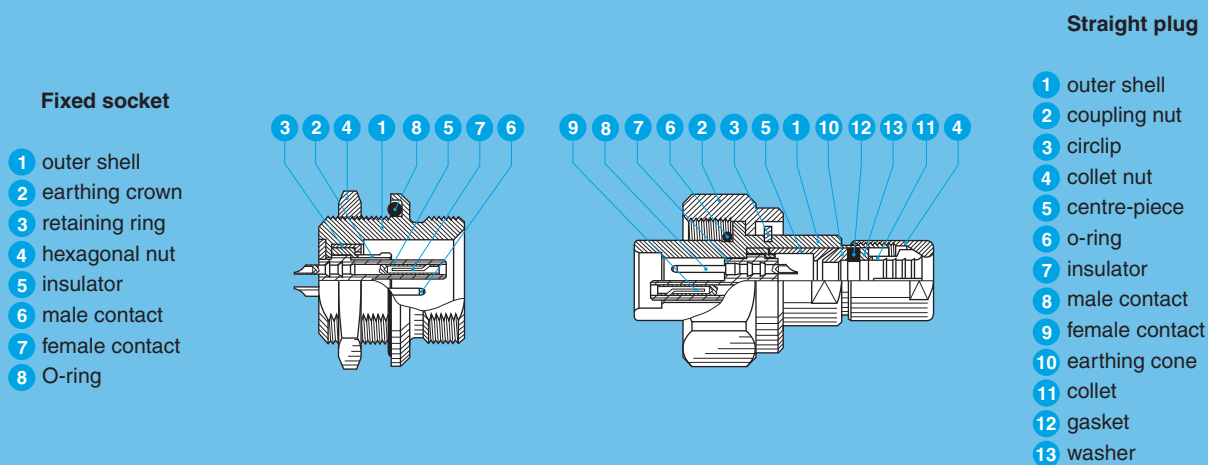
- unipole and multipole type
- coaxial, triaxial or mixed type available upon request
- polarisation by stepped insert (half moon)
- 360° screening for full EMC shielding
- rugged housing for extreme working conditions.

Interconnections

Models (page 3)

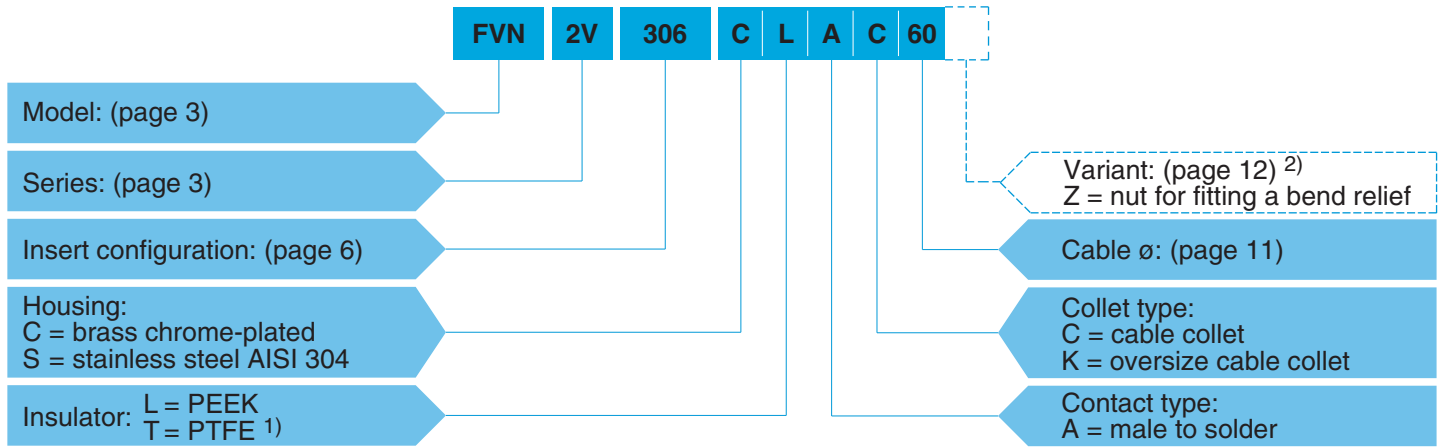


Part Section Showing Internal Components (multipole)



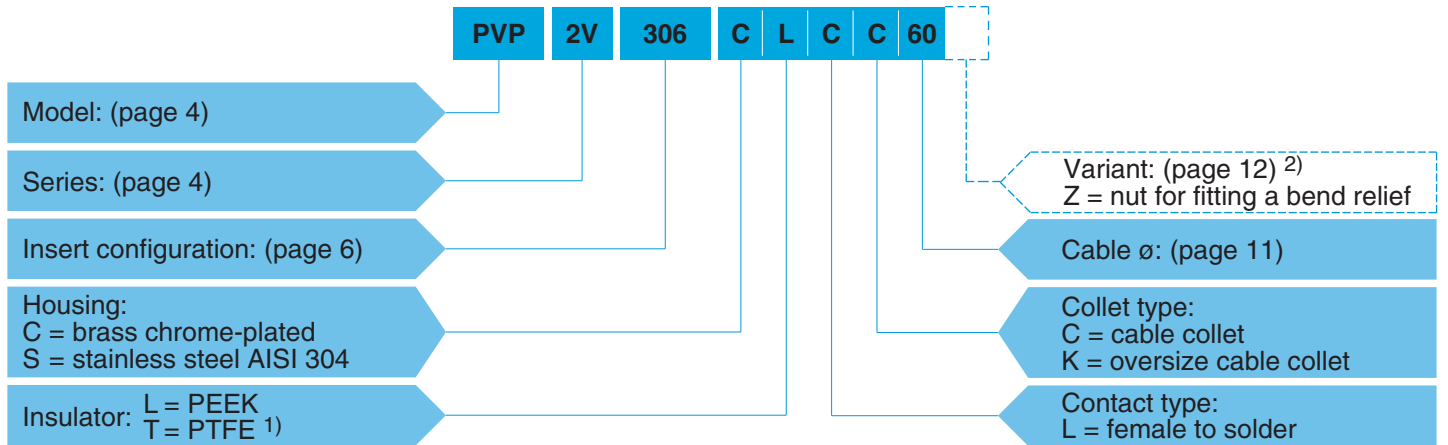
Part Number Example

Straight plug with cable collet



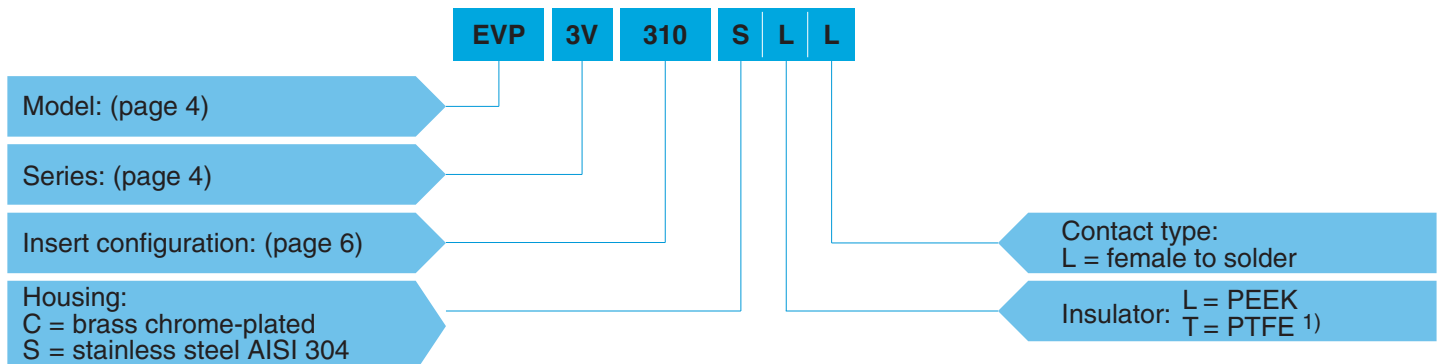
FVN.2V.306.CLAC60 = straight plug with cable collet, 2V series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK insulator, male solder contacts, C type collet for 6 mm diameter cable.

Free socket with cable collet



PVP.2V.306.CLLC60 = free socket with cable collet, 2V series, multipole type with 6 contacts, outer shell in chrome-plated brass, PEEK insulator, female solder contacts, C type collet for 6 mm diameter cable.

Fixed socket

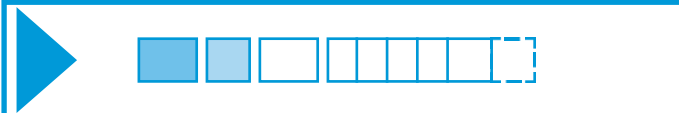


EVP.3V.310.SLL = fixed socket, nut fixing, 3V series, multipole type with 10 contacts, outer shell in stainless steel, PEEK insulator, female solder contacts.

Note: ¹⁾ PTFE insulator for unipole type only.

²⁾ The «Variant» position in the reference is used to specify either the presence of a collet nut for fitting the bend relief.

For models with collet nut for fitting the bend relief, a «Z» should be indicated and a bend relief can be ordered separately. An order for a connector with bend relief should thus include two part numbers.



Models

Technical Characteristics

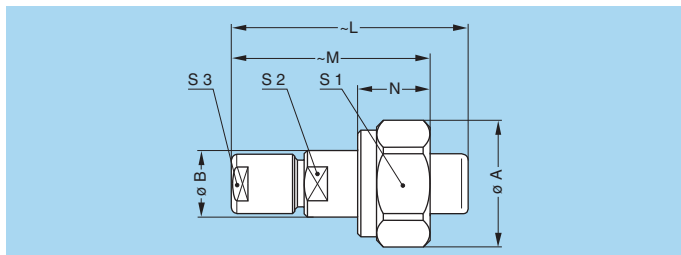
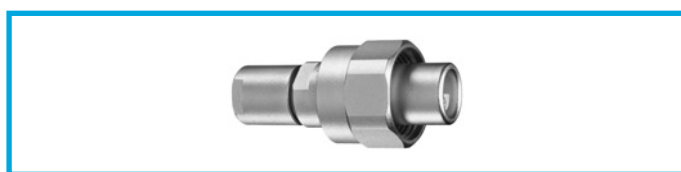
Mechanical and Climatical

| Characteristics | Value | Standard |
|--|-------------------------|----------------------|
| Endurance | > 1000 cycles | IEC 60512-5 test 9a |
| Temperature range | -20° C, +200° C | |
| Salt spray corrosion test | > 144h | IEC 60512-6 test 11f |
| Protection index (mated) | > IP 68 | IEC 60529 |
| Resistance to hydrostatic pressure (mated) | ~ 30 bars ¹⁾ | IEC 60512-7 test 14d |
| Climatical category | 20/200/21 | IEC 60068-1 |

Electrical

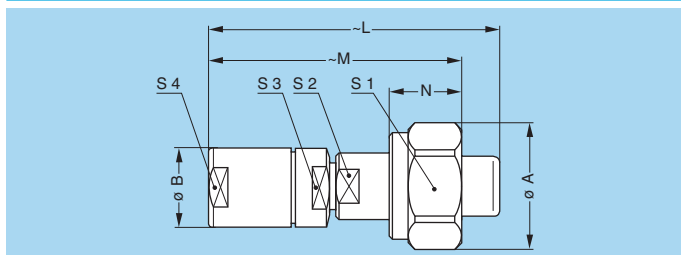
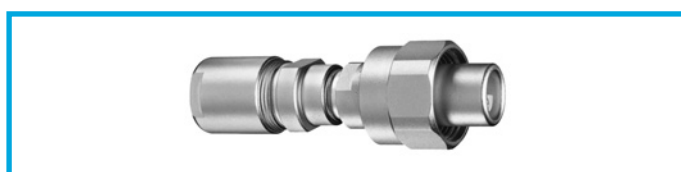
| Characteristics | Value | Standard |
|----------------------|-----------|---------------|
| Shielding efficiency | at 10 MHz | > 95 dB |
| | at 1 GHz | > 80 dB |
| | | IEC 60169-1-3 |
| | | IEC 60169-1-3 |

Note: ¹⁾ in order to perform correctly and withstand the pressure, cable assembly shall be made according to instruction we recommend. See page 15.



FVN Straight plug with cable collet

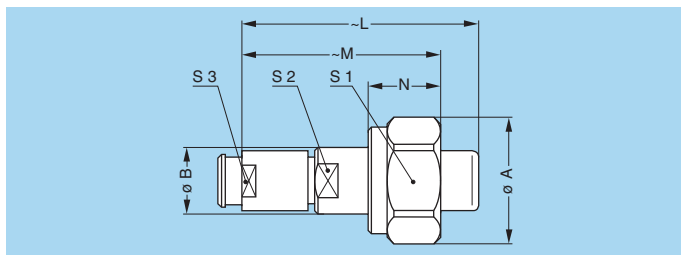
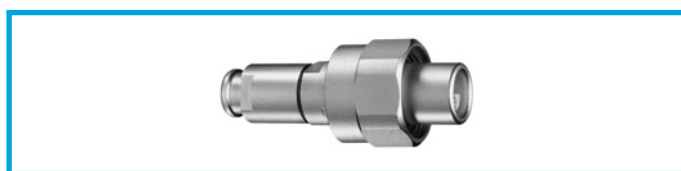
| Reference | | Dimensions (mm) | | | | | | | |
|-----------|--------|-----------------|----|------|----|------|----|----|----|
| Model | Series | A | B | L | M | N | S1 | S2 | S3 |
| FVN | 0V | 17.2 | 10 | 34 | 29 | 13.5 | 16 | 9 | 8 |
| FVN | 1V | 19.3 | 12 | 43 | 35 | 14.0 | 18 | 10 | 9 |
| FVN | 2V | 23.5 | 16 | 52.5 | 42 | 15.5 | 22 | 14 | 12 |
| FVN | 3V | 27.8 | 18 | 61 | 47 | 16.5 | 26 | 16 | 15 |
| FVN | 4V | 34.3 | 24 | 71 | 57 | 17.5 | 32 | 22 | 19 |
| FVN | 5V | 50.0 | 38 | 94 | 78 | 21.0 | 47 | 34 | 30 |



FVN Straight plug with oversize cable collet ¹⁾

| Reference | | Dimensions (mm) | | | | | | | | |
|-----------|--------|-----------------|------|-----|----|------|----|----|----|----|
| Model | Series | A | B | L | M | N | S1 | S2 | S3 | S4 |
| FVN | 1V | 19.3 | 14.5 | 55 | 47 | 14.0 | 18 | 10 | 12 | 12 |
| FVN | 2V | 23.5 | 17.0 | 65 | 55 | 15.5 | 22 | 14 | 15 | 15 |
| FVN | 3V | 27.8 | 22.0 | 80 | 66 | 16.5 | 26 | 16 | 19 | 19 |
| FVN | 4V | 34.3 | 36.0 | 105 | 91 | 17.5 | 32 | 22 | 30 | 32 |

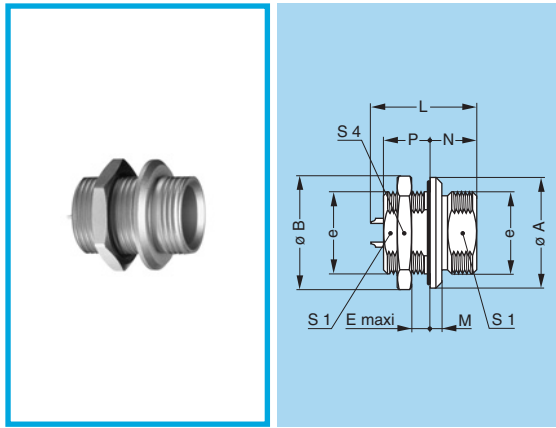
Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 11).



FVN Straight plug, cable collet and nut for fitting a bend relief ¹⁾

| Reference | | Dimensions (mm) | | | | | | | |
|-----------|--------|-----------------|----|----|----|------|----|----|----|
| Model | Series | A | B | L | M | N | S1 | S2 | S3 |
| FVN | 0V | 17.2 | 10 | 34 | 29 | 13.5 | 16 | 9 | 7 |
| FVN | 1V | 19.3 | 12 | 43 | 35 | 14.0 | 18 | 10 | 9 |
| FVN | 2V | 23.5 | 16 | 52 | 42 | 15.5 | 22 | 14 | 12 |
| FVN | 3V | 27.8 | 18 | 60 | 47 | 16.5 | 26 | 16 | 15 |
| FVN | 4V | 34.3 | 24 | 71 | 57 | 17.5 | 32 | 22 | 19 |

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately (see pages 141 and 142 of the unipole/multipole catalog).

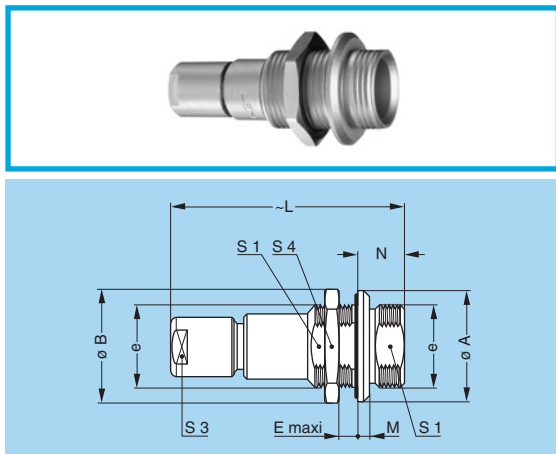


EVP Fixed socket, nut fixing

| Reference | | Dimensions (mm) | | | | | | | | | |
|-----------|--------|-----------------|------|---------|------|------|-----|------|------|------|----|
| Model | Series | A | B | e | E | L | M | N | P | S1 | S4 |
| EVP | 0V | 19 | 19.2 | M14x1.0 | 5.5 | 19.0 | 2.0 | 8.0 | 8.0 | 12.5 | 17 |
| EVP | 1V | 21 | 21.5 | M16x1.0 | 10.5 | 26.0 | 2.0 | 8.0 | 13.5 | 14.5 | 19 |
| EVP | 2V | 26 | 27.0 | M20x1.0 | 11.0 | 29.0 | 2.5 | 9.0 | 15.0 | 18.5 | 24 |
| EVP | 3V | 31 | 34.0 | M24x1.0 | 15.0 | 34.5 | 3.0 | 9.5 | 20.0 | 22.5 | 30 |
| EVP | 4V | 38 | 40.5 | M30x1.0 | 14.5 | 35.0 | 3.5 | 10.0 | 21.5 | 28.5 | 36 |
| EVP | 5V | 55 | 54.0 | M45x1.5 | 15.5 | 44.5 | 4.5 | 12.5 | 24.5 | 42.5 | - |

Panel cut-out (page 13)

Note: the 5V series is delivered with a round nut.

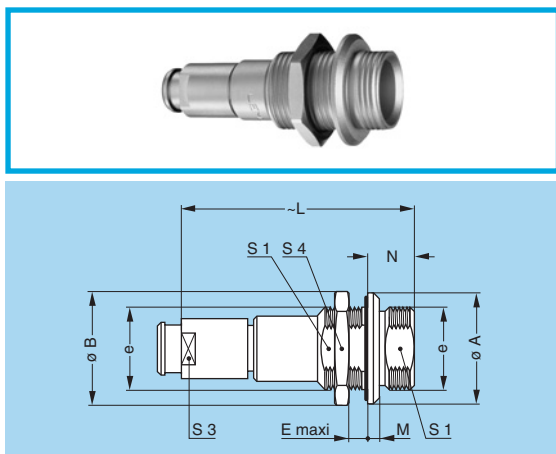


PSN Fixed socket, cable collet, nut fixing

| Reference | | Dimensions (mm) | | | | | | | | | |
|-----------|--------|-----------------|------|---------|------|------|-----|------|------|----|----|
| Model | Series | A | B | e | E | L | M | N | S1 | S3 | S4 |
| PSN | 0V | 19 | 19.2 | M14x1.0 | 5.5 | 34.0 | 2.0 | 8.0 | 12.5 | 8 | 17 |
| PSN | 1V | 21 | 21.5 | M16x1.0 | 10.5 | 46.0 | 2.0 | 8.0 | 14.5 | 9 | 19 |
| PSN | 2V | 26 | 27.0 | M20x1.0 | 11.0 | 54.0 | 2.5 | 9.0 | 18.5 | 12 | 24 |
| PSN | 3V | 31 | 34.0 | M24x1.0 | 15.0 | 65.0 | 3.0 | 9.5 | 22.5 | 15 | 30 |
| PSN | 4V | 38 | 40.5 | M30x1.0 | 14.5 | 75.5 | 3.5 | 10.0 | 28.5 | 19 | 36 |
| PSN | 5V | 56 | 54.0 | M45x1.5 | 15.5 | 95.0 | 4.5 | 12.5 | 42.5 | 30 | - |

Panel cut-out (page 13)

Note: the 5V series is delivered with a round nut.

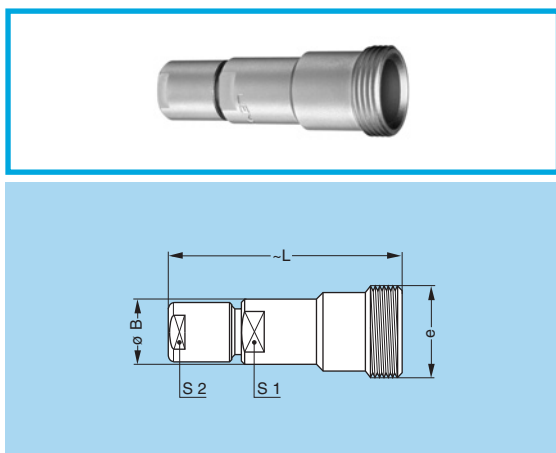


PSN Fixed socket, cable collet, nut fixing and nut for fitting a bend relief ¹⁾

| Reference | | Dimensions (mm) | | | | | | | | | |
|-----------|--------|-----------------|------|---------|------|------|-----|------|------|----|----|
| Model | Series | A | B | e | E | L | M | N | S1 | S3 | S4 |
| PSN | 0V | 19 | 19.2 | M14x1.0 | 5.5 | 34.0 | 2.0 | 8.0 | 12.5 | 7 | 17 |
| PSN | 1V | 21 | 21.5 | M16x1.0 | 10.5 | 46.0 | 2.0 | 8.0 | 14.5 | 9 | 19 |
| PSN | 2V | 26 | 27.0 | M20x1.0 | 11.0 | 54.0 | 2.5 | 9.0 | 18.5 | 12 | 24 |
| PSN | 3V | 31 | 34.0 | M24x1.0 | 15.0 | 64.0 | 3.0 | 9.5 | 22.5 | 15 | 30 |
| PSN | 4V | 38 | 40.5 | M30x1.0 | 14.5 | 75.5 | 3.5 | 10.0 | 28.5 | 19 | 36 |

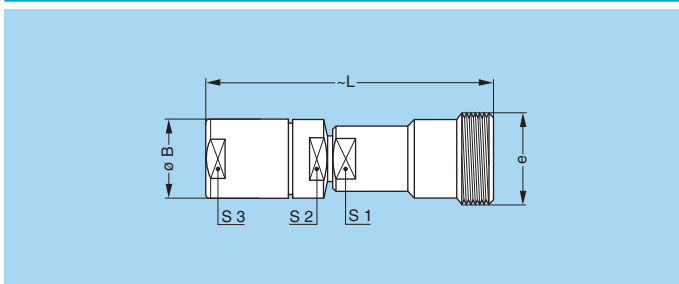
Panel cut-out (page 13)

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately (see pages 141 and 142 of the unipole/multipole catalog).



PVP Free socket with cable collet

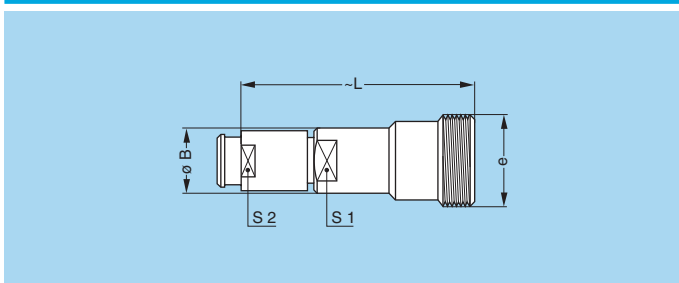
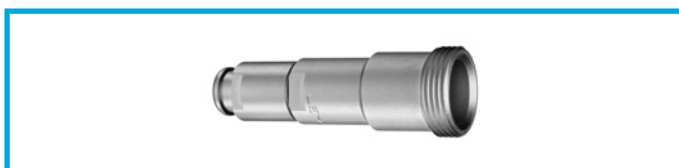
| Reference | | Dimensions (mm) | | | | |
|-----------|--------|-----------------|---------|------|----|----|
| Model | Series | B | e | L | S1 | S2 |
| PVP | 0V | 10 | M14x1.0 | 34.0 | 9 | 8 |
| PVP | 1V | 12 | M16x1.0 | 45.0 | 10 | 9 |
| PVP | 2V | 16 | M20x1.0 | 54.0 | 14 | 12 |
| PVP | 3V | 19 | M24x1.0 | 65.0 | 16 | 15 |
| PVP | 4V | 24 | M30x1.0 | 75.5 | 22 | 19 |
| PVP | 5V | 38 | M45x1.5 | 95.0 | 34 | 30 |



PVP Free socket with oversize cable collet ¹⁾

| Reference | | Dimensions (mm) | | | | | |
|-----------|--------|-----------------|---------|-----|----|----|----|
| Model | Series | B | e | L | S1 | S2 | S3 |
| PVP | 1V | 14.5 | M16x1.0 | 58 | 10 | 12 | 12 |
| PVP | 2V | 17.0 | M20x1.0 | 67 | 14 | 15 | 15 |
| PVP | 3V | 22.0 | M24x1.0 | 84 | 16 | 19 | 19 |
| PVP | 4V | 36.0 | M30x1.0 | 109 | 22 | 30 | 32 |

Note: ¹⁾ correspond to K type of collet, the fitting of oversize collets onto this model allows them to be fitted to the cables that can be accommodated by the next housing size up (see page 12).



PVP Free socket, cable collet and nut for fitting a bend relief ¹⁾

| Reference | | Dimensions (mm) | | | | |
|-----------|--------|-----------------|---------|------|----|----|
| Model | Series | B | e | L | S1 | S2 |
| PVP | 0V | 10 | M14x1.0 | 34.0 | 9 | 7 |
| PVP | 1V | 12 | M16x1.0 | 46.0 | 10 | 9 |
| PVP | 2V | 16 | M20x1.0 | 54.0 | 14 | 12 |
| PVP | 3V | 19 | M24x1.0 | 64.0 | 16 | 15 |
| PVP | 4V | 24 | M30x1.0 | 75.5 | 22 | 19 |

Note: ¹⁾ to order, add a «Z» at the end of the reference. The bend relief must be ordered separately (see pages 141 and 142 of the unipole/multipole catalog).

Unipole

| | Male solder contacts | Female solder contacts | Reference | ø A (mm) | Contact type | | Test voltage (kV rms) ¹⁾ | Test voltage (kV dc) ¹⁾ | Rated current (A) ¹⁾ |
|-----------|--------------------------|----------------------------|-----------|----------|-----------------|-------|-------------------------------------|------------------------------------|---------------------------------|
| | | | | | Solder | Crimp | | | |
| 0V | | | 116 | 1.6 | ● ²⁾ | - | 1.5 | 2.1 | 12 |
| 1V | | | 120 | 2.0 | ● ²⁾ | - | 1.7 | 2.4 | 18 |
| | | | 130 | 3.0 | ● | - | 1.5 | 2.1 | 25 |
| 2V | | | 130 | 3.0 | ● | - | 2.1 | 3.0 | 30 |
| | | | 140 | 4.0 | ● | - | 1.7 | 2.4 | 40 |
| 3V | | | 140 | 4.0 | ● | - | 2.3 | 3.3 | 43 |
| | | | 160 | 6.0 | ● | - | 1.7 | 2.4 | 65 |
| 4V | | | 160 | 6.0 | ● | - | 2.7 | 3.9 | 70 |
| 5V | | | 112 | 12.0 | ● | - | 1.5 | 2.1 | 230 |

Note: ¹⁾ see calculation method, caution and suggested standard.
²⁾ also available with inversed contacts: plug = female, socket = male.

Coaxial, Triaxial, Mixed

A wide choice of those types is available, please consult us.



Multipole

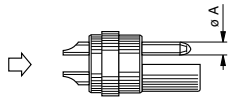
| | Male solder contacts | Female solder contacts | Reference | Number of contacts | ø A (mm) | Contact type | | | | Test voltage (kV rms) ^{1) 2)} | Test voltage (kV dc) ^{1) 2)} | Rated current (A) ¹⁾ |
|----|----------------------|------------------------|-----------|--------------------|------------|--------------|-------|------------------|---------------|--|---------------------------------------|-------------------------------------|
| | | | | | | Solder | Crimp | Print (straight) | Print (elbow) | | | |
| 0V | | | 302 | 2 | 0.9 | ● | ● | ● | ● | 1.5 | 2.1 | 10 ³⁾ |
| | | | 303 | 3 | 0.7 | ● | ○ | ● | ● | 1.0 | 1.5 | 7 ³⁾ |
| | | | 304 | 4 | 0.7 | ● | ● | ● | ● | 1.0 | 1.5 | 7 ³⁾ |
| 1V | | | 302 | 2 | 1.3 | ● | ● | ● | ● | 1.2 | 1.8 | 15 ³⁾ |
| | | | 303 | 3 | 0.9 | ● | ○ | ● | ● | 1.2 | 1.8 | 10 ³⁾ |
| | | | 304 | 4 | 0.9 | ● | ● | ● | ● | 1.2 | 1.8 | 10 ³⁾ |
| | | | 305 | 2 3 | 0.9 0.7 | ● | ○ | ● | ● | 1.5 1.5 | 2.1 2.1 | 10 ³⁾ 7 ³⁾ |
| | | | 306 | 6 | 0.7 | ● | ○ | ● | ● | 1.5 | 2.1 | 7 ³⁾ |
| | | | | | | | | | | | | |
| 2V | | | 302 | 2 | 1.6 | ● | ○ | ○ | ○ | 1.7 | 2.4 | 20 ⁴⁾ |
| | | | 303 | 3 | 1.3 | ● | ○ | ● | ○ | 1.5 | 2.1 | 15 ⁴⁾ |
| | | | 304 | 4 | 1.3 | ● | ○ | ● | ● | 1.7 | 2.4 | 15 ⁴⁾ |
| | | | 305 | 5 | 1.3 | ● | ○ | ● | ● | 1.5 | 2.1 | 13 ⁴⁾ |
| | | | 306 | 6 | 1.3 | ● | ○ | ● | ● | 1.5 | 2.1 | 12 |
| | | | 307 | 3 4 | 1.3 0.9 | ● | ○ | ● | ● | 0.8 0.8 | 1.2 1.2 | 12 ³⁾ 9 ³⁾ |
| | | | 308 | 8 | 0.9 | ● | ○ | ● | ● | 0.8 | 1.2 | 9 ³⁾ |
| | | | 310 | 10 | 0.9 | ● | ○ | ● | ● | 0.8 | 1.2 | 7 ³⁾ |
| | | | | | | | | | | | | |
| 3V | | | 302 | 2 | 2.0 | ● | - | ○ | - | 3.0 | 4.2 | 23 |
| | | | 303 | 3 | 2.0 | ● | - | ○ | - | 1.5 | 2.1 | 20 |
| | | | 304 | 4 | 2.0 | ● | - | ○ | - | 1.5 | 2.1 | 18 |
| | | | 305 | 2 3 | 2.0 1.3 | ● | - | ○ | - | 1.5 1.5 | 2.1 2.1 | 18 14 |
| | | | 306 | 6 | 1.3 | ● | - | ● | - | 2.1 | 3.0 | 14 |
| | | | 307 | 7 | 1.3 | ● | - | ● | - | 1.0 | 1.5 | 12 |
| | | | | | | | | | | | | |

Note:

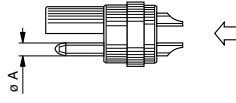
- 1) see calculation method, caution and suggested standard.
- 2) lowest measured value; contact to contact or contact to shell.
- 3) rated current = 6A for socket with elbow (90°) contacts for printed circuit.
- 4) rated current = 12A for socket with elbow (90°) contacts for printed circuit.

● First choice alternative ○ Special order alternative

Multipole



Male solder contacts



Female solder contacts

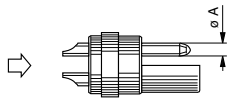
| | Reference | Number of contacts | ø A (mm) | Contact type | | | | Test voltage (kV rms) ¹⁾²⁾ | Test voltage (kV cd) ¹⁾²⁾ | Rated current (A) ¹⁾ |
|-----------|-----------|--------------------|------------|--------------|-------|------------------|---------------|---------------------------------------|--------------------------------------|---------------------------------|
| | | | | Solder | Crimp | Print (straight) | Print (elbow) | | | |
| 3V | 308 | 8 | 1.3 | ● | ○ | ● | ○ | 1.0 | 1.5 | 10 |
| | 310 | 10 | 1.3 | ● | ○ | ● | ● | 1.0 | 1.5 | 9 |
| | 312 | 12 | 0.9 | ● | ○ | ● | ● | 1.5 | 2.1 | 8 |
| | 313 | 13 | 0.9 | ● | ○ | ● | ○ | 1.5 | 2.1 | 8 |
| | 314 | 14 | 0.9 | ● | ○ | ● | ● | 1.5 | 2.1 | 7 |
| | 316 | 16 | 0.9 | ● | ○ | ● | ● | 1.0 | 1.5 | 7 |
| | 318 | 18 | 0.9 | ● | ○ | ● | ○ | 1.0 | 1.5 | 6 |
| 4V | 302 | 2 | 4.0 | ● | - | ○ | - | 2.1 | 3.0 | 35 |
| | 303 | 3 | 3.0 | ● | - | ○ | - | 2.1 | 3.0 | 25 |
| | 304 | 4 | 3.0 | ● | - | ○ | - | 2.1 | 3.0 | 22 |
| | 305 | 2 3 | 3.0 2.0 | ● | - | ○ | - | 2.1 2.1 | 3.0 3.0 | 22 16 |
| | 306 | 6 | 2.0 | ● | - | ○ | - | 2.1 | 3.0 | 16 |
| | 307 | 3 4 | 2.0 1.3 | ● | - | ○ | - | 2.1 2.1 | 3.0 3.0 | 16 13 |
| | 308 | 8 | 1.3 | ● | - | ○ | - | 2.7 | 3.9 | 13 |
| | 309 | 9 | 1.3 | ● | - | ○ | - | 2.1 | 3.0 | 12 |
| | 310 | 10 | 1.3 | ● | - | ○ | - | 2.1 | 3.0 | 11 |
| | 312 | 12 | 1.3 | ● | - | ○ | - | 2.1 | 3.0 | 9 |

Note: 1) see calculation method, caution and suggested standard.
 2) lowest measured value; contact to contact or contact to shell.

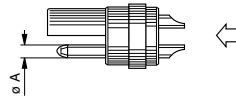
● First choice alternative ○ Special order alternative



Multipole



Male solder contacts



Female solder contacts

Reference

Number of contacts

ø A (mm)

Contact type

Solder

Print (straight)

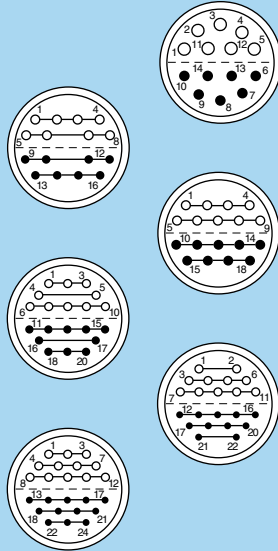
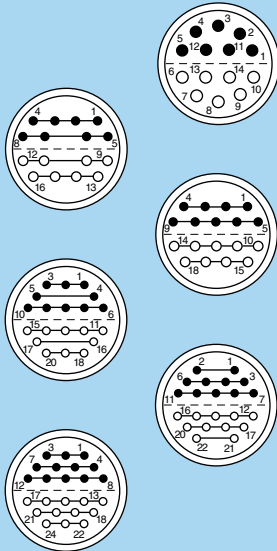
Print (elbow)

Test voltage (kV rms)^{1) 2)}

Test voltage (kV dc)^{1) 2)}

Rated current (A)¹⁾

4V



314

14

1.3

●

○

-

2.1

3.0

9

316

16

0.9

●

○

-

2.1

3.0

7

318

18

0.9

●

○

-

2.1

3.0

7

320

20

0.9

●

○

-

2.1

3.0

7

322

22

0.9

●

○

-

2.1

3.0

7

324

24

0.9

●

○

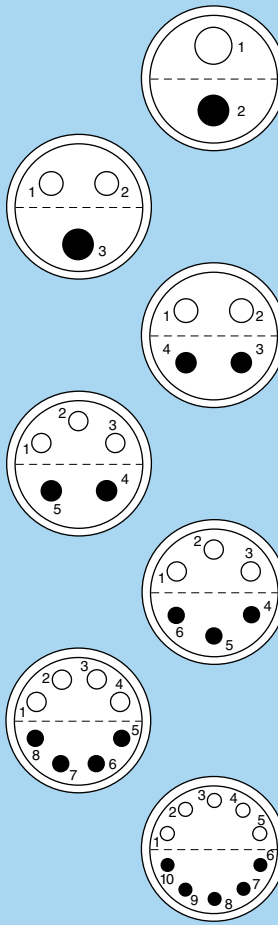
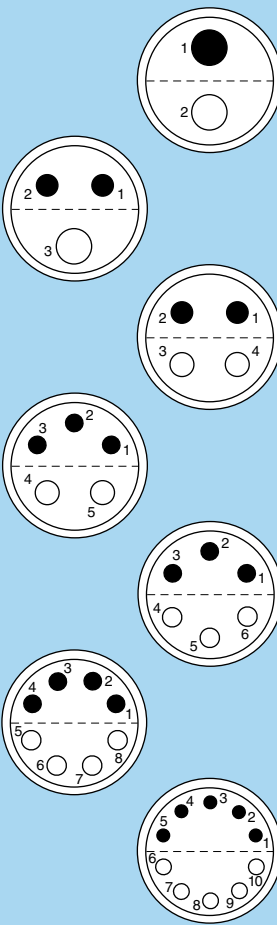
-

2.1

3.0

7

5V



302

2

6.0

●

-

-

3.7

5.2

50

303

1
2

6.0
4.0

●

-

-

3.7
3.7

5.2
5.2

50
35

304

4

4.0

●

-

-

3.7

5.2

35

305

2
3

4.0
3.0

●

-

-

3.0
3.0

4.2
4.2

35
25

306

6

3.0

●

-

-

3.0

4.2

25

308

8

3.0

●

-

-

2.1

3.0

22

310

10

2.0

●

-

-

2.1

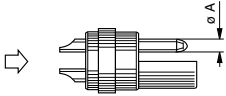
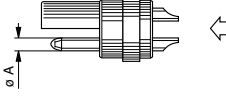
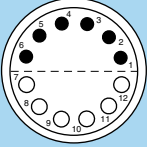
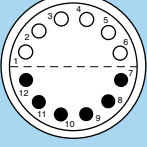
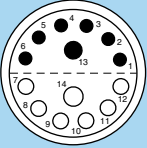
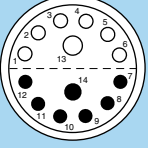
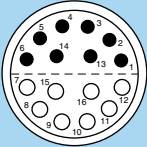
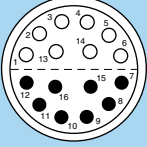
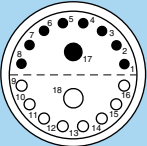
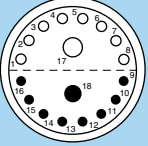
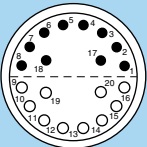
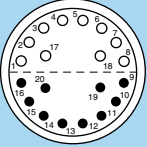
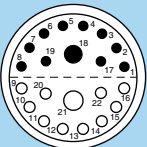
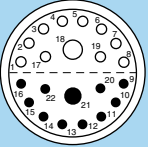
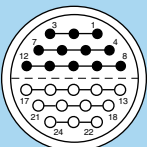
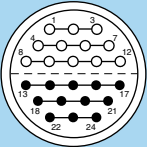
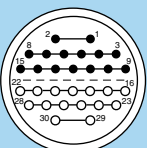
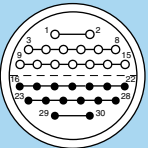
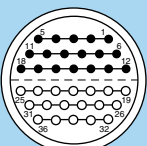
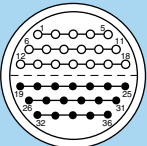
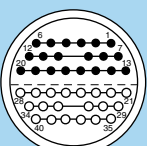
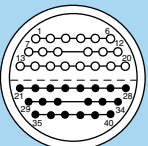
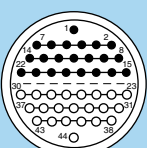
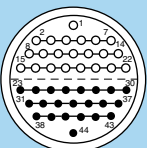
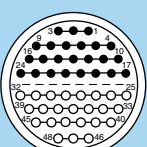
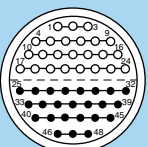
3.0

18

Note: ¹⁾ see calculation method, caution and suggested standard.
²⁾ lowest measured value; contact to contact or contact to shell.

Multipole

5V

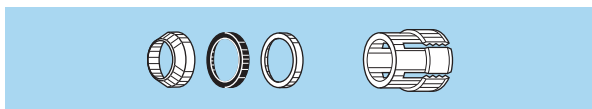
| |  Male solder contacts | |  Female solder contacts | | Reference | Number of contacts | ø A (mm) | Contact type | | | Test voltage (kV rms) ^{1) 2)} | Test voltage (kV dc) ^{1) 2)} | Rated current (A) ¹⁾ |
|---|---|------------------|---|------------|-----------|--------------------|----------|--------------|------------|----------|--|---------------------------------------|---------------------------------|
| | Solder | Print (straight) | Print (elbow) | | | | | | | | | | |
|  |  | 312 | 12 | 2.0 | ● | - | - | 2.1 | 3.0 | 18 | | | |
|  |  | 314 | 2 12 | 3.0 2.0 | ● | - | - | 1.8 1.8 | 2.4 2.4 | 20 15 | | | |
|  |  | 316 | 16 | 2.0 | ● | - | - | 1.8 | 2.4 | 15 | | | |
|  |  | 318 | 2 16 | 3.0 1.6 | ● | - | - | 1.8 1.8 | 2.4 2.4 | 18 11 | | | |
|  |  | 320 | 20 | 1.6 | ● | - | - | 1.8 | 2.4 | 11 | | | |
|  |  | 322 | 2 20 | 3.0 1.6 | ● | - | - | 1.8 1.8 | 2.4 2.4 | 16 9 | | | |
|  |  | 324 | 24 | 1.6 | ● | - | - | 2.7 | 3.9 | 9 | | | |
|  |  | 330 | 30 | 1.3 | ● | - | - | 1.8 | 2.4 | 8 | | | |
|  |  | 336 | 36 | 1.3 | ● | - | - | 1.8 | 2.4 | 7 | | | |
|  |  | 340 | 40 | 1.3 | ● | - | - | 1.2 | 1.8 | 7 | | | |
|  |  | 344 | 44 | 1.3 | ● | - | - | 1.2 | 1.8 | 6 | | | |
|  |  | 348 | 48 | 1.3 | ● | - | - | 1.2 | 1.8 | 6 | | | |

Note: 1) see calculation method, caution and suggested standard.
 2) lowest measured value; contact to contact or contact to shell.



Collets

C and K type collets



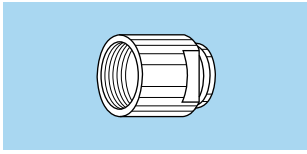
| | Reference | | Cable ø | |
|-----------|-----------|------|---------|--------|
| | Type | Code | max. | min. |
| 0V | C | 40 | 4.2 | > 3.2 |
| | C | 50 | 5.2 | > 4.2 |
| 1V | C | 40 | 4.2 | > 3.2 |
| | C | 50 | 5.2 | > 4.2 |
| | C | 60 | 6.2 | > 5.2 |
| | C | 65 | 7.2 | > 6.2 |
| | K | 70 | 7.2 | > 6.2 |
| | K | 75 | 8.2 | > 7.2 |
| | K | 80 | 8.2 | > 7.2 |
| | K | 85 | 9.2 | > 8.2 |
| 2V | C | 70 | 7.2 | > 6.2 |
| | C | 80 | 8.2 | > 7.2 |
| | C | 85 | 9.2 | > 8.2 |
| | K | 90 | 10.2 | > 8.7 |
| | K | 95 | 10.2 | > 8.7 |
| | K | 10 | 10.2 | > 8.7 |
| | K | 11 | 11.2 | > 10.2 |
| 3V | C | 70 | 7.2 | > 5.7 |
| | C | 80 | 8.7 | > 7.2 |
| | C | 10 | 10.2 | > 8.7 |
| | C | 11 | 11.2 | > 10.2 |
| | K | 11 | 12.0 | 10.6 |
| | K | 12 | 12.8 | 12.1 |
| | K | 13 | 13.5 | 12.9 |
| | K | 14 | 14.0 | 13.6 |
| K | 15 | 15.0 | 14.1 | |

| | Reference | | Cable ø | |
|-----------|-----------|------|---------|------|
| | Type | Code | max. | min. |
| 4V | C | 65 | 6.5 | 6.1 |
| | C | 70 | 7.0 | 6.6 |
| | C | 75 | 7.5 | 7.1 |
| | C | 80 | 8.0 | 7.6 |
| | C | 85 | 8.5 | 8.1 |
| | C | 90 | 9.0 | 8.6 |
| | C | 95 | 9.5 | 9.1 |
| | C | 10 | 10.5 | 9.6 |
| | C | 11 | 12.0 | 10.6 |
| | C | 12 | 12.8 | 12.1 |
| | C | 13 | 13.5 | 12.9 |
| | C | 14 | 14.0 | 13.6 |
| | C | 15 | 15.0 | 14.1 |
| 5V | K | 16 | 16.5 | 15.6 |
| | K | 17 | 17.5 | 16.6 |
| | K | 18 | 18.5 | 17.6 |
| | K | 19 | 19.5 | 18.6 |
| | K | 20 | 20.5 | 19.6 |
| | K | 21 | 21.5 | 20.6 |
| | K | 22 | 22.5 | 21.6 |
| | K | 23 | 23.5 | 22.6 |
| | C | 14 | 14.5 | 13.6 |
| | C | 15 | 15.5 | 14.6 |
| C | 16 | 16.5 | 15.6 | |
| C | 17 | 17.5 | 16.6 | |
| C | 18 | 18.5 | 17.6 | |
| C | 19 | 19.5 | 18.6 | |
| C | 20 | 20.5 | 19.6 | |
| C | 21 | 21.5 | 20.6 | |
| C | 22 | 22.5 | 21.6 | |
| C | 23 | 23.5 | 22.6 | |

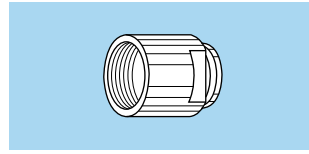
Note: all dimensions are in millimetres.

Variant

Bend relief for models with collet



| | Ref. | Collet | |
|-----------|------|--------|----------|
| | | Type | Code |
| 0V | Z | C | 40 to 50 |
| 1V | Z | C | 40 to 65 |
| | | K | 70 to 85 |
| 2V | Z | C | 70 to 85 |
| | | K | 90 to 10 |

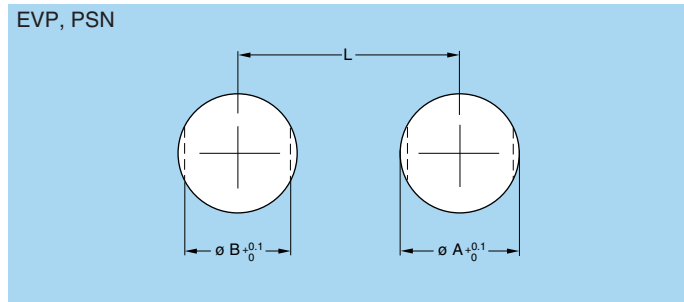


| | Ref. | Collet | |
|-----------|------|--------|----------|
| | | Type | Code |
| 3V | Z | C | 70 to 10 |
| | | K | 11 to 15 |
| 4V | Z | C | 65 to 15 |

Note: The bend relief must be ordered separately (see pages 141 and 142 of the unipole/multipole catalog). All dimensions are in millimetres.

Panel cut-outs

Panel Cut-outs



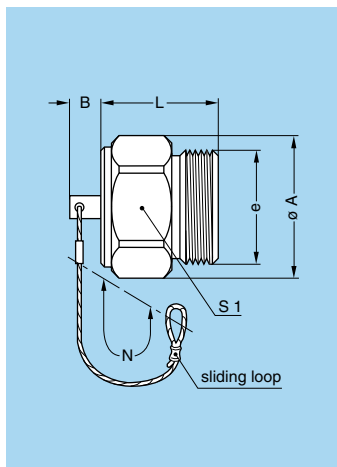
| Series | Dimensions (mm) | | |
|--------|-----------------|------|------|
| | A | B | L |
| 0V | 14.1 | 12.6 | 19.0 |
| 1V | 16.1 | 14.6 | 21.0 |
| 2V | 20.2 | 18.6 | 25.5 |
| 3V | 24.2 | 22.6 | 30.0 |
| 4V | 30.2 | 28.6 | 37.0 |
| 5V | 45.2 | 42.6 | 53.0 |

Mounting nuts torque

| Component | Torque (Nm) | | | | | |
|------------------------------|-------------|-----|----|----|----|----|
| | 0V | 1V | 2V | 3V | 4V | 5V |
| Collet nut for F●● and P●● | 0.7 | 0.8 | 2 | 3 | 5 | 8 |
| Mounting hex nut for sockets | 5 | 7 | 9 | 12 | 17 | 22 |
| Coupling nut | 5 | 7 | 9 | 12 | 17 | 22 |

1N = 0.102 kg

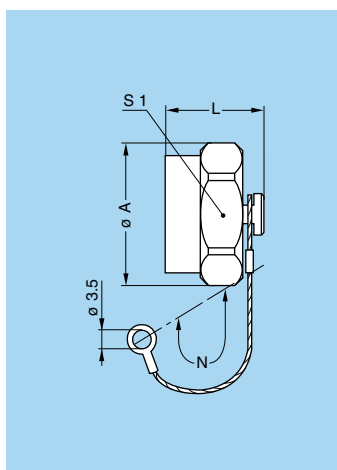
Accessories



BFA Plug caps

| Part number | Series | Dimensions (mm) | | | | | |
|----------------|--------|-----------------|----|---------|------|-----|----|
| | | A | B | e | L | N | S1 |
| BFA.0V.100.●AZ | 0V | 17.2 | 6 | M14x1.0 | 12.5 | 85 | 16 |
| BFA.1V.100.●AZ | 1V | 19.3 | 6 | M16x1.0 | 15.5 | 85 | 18 |
| BFA.2V.100.●AZ | 2V | 23.5 | 6 | M20x1.0 | 17.5 | 85 | 22 |
| BFA.3V.100.●AZ | 3V | 27.8 | 6 | M24x1.0 | 22.0 | 120 | 26 |
| BFA.4V.100.●AZ | 4V | 34.3 | 10 | M30x1.0 | 22.5 | 120 | 32 |
| BFA.5V.100.●AZ | 5V | 50.0 | 10 | M45x1.5 | 27.0 | 120 | 47 |

- Body material: ● = N, nickel-plated brass (Ni 3µm)
● = S, stainless steel
- Lanyard material: Stainless steel
- Crimp ferrule material: Nickel-plated brass

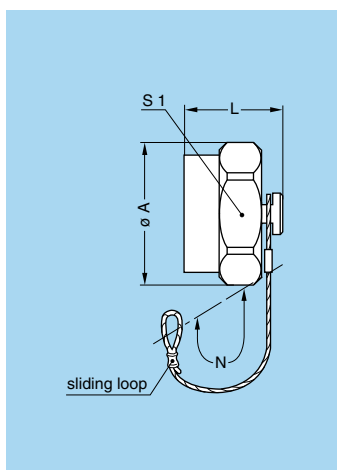


BRE Blanking caps for fixed sockets

This cap is only IP68 when installed

| Part number | Series | Dimensions (mm) | | | |
|----------------|--------|-----------------|------|-----|----|
| | | A | L | N | S1 |
| BRE.0V.200.●AV | 0V | 17.2 | 13.7 | 85 | 16 |
| BRE.1V.200.●AV | 1V | 19.3 | 13.7 | 85 | 18 |
| BRE.2V.200.●AV | 2V | 23.5 | 14.7 | 85 | 22 |
| BRE.3V.200.●AV | 3V | 27.8 | 14.7 | 120 | 26 |
| BRE.4V.200.●AV | 4V | 34.3 | 14.7 | 120 | 32 |
| BRE.5V.200.●AV | 5V | 50.0 | 16.2 | 120 | 47 |

- Body material: ● = N, nickel-plated brass (Ni 3µm)
● = S, stainless steel
- Lanyard material: Stainless steel
- Crimp ferrule material: Nickel-plated brass
- O-ring: FPM (Viton®)

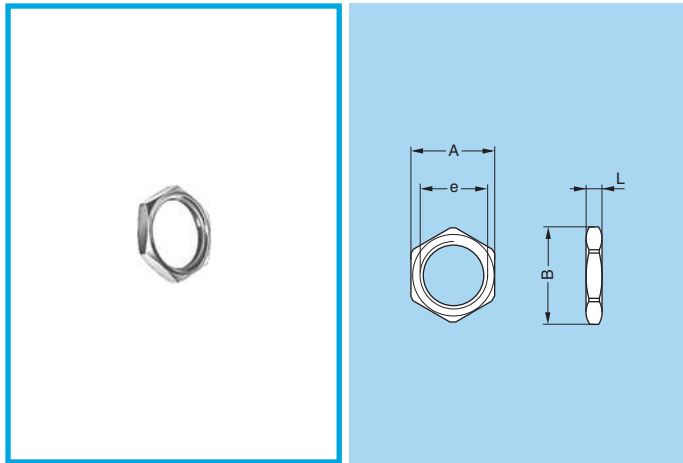


BRF Blanking caps for free sockets

This cap is only IP68 when installed

| Part number | Series | Dimensions (mm) | | | |
|----------------|--------|-----------------|------|-----|----|
| | | A | L | N | S1 |
| BRF.0V.200.●AV | 0V | 17.2 | 13.7 | 85 | 16 |
| BRF.1V.200.●AV | 1V | 19.3 | 13.7 | 85 | 18 |
| BRF.2V.200.●AV | 2V | 23.5 | 14.7 | 85 | 22 |
| BRF.3V.200.●AV | 3V | 27.8 | 14.7 | 120 | 26 |
| BRF.4V.200.●AV | 4V | 34.3 | 14.7 | 120 | 32 |
| BRF.5V.200.●AV | 5V | 50.0 | 16.2 | 120 | 47 |

- Body material: ● = N, nickel-plated brass (Ni 3µm)
● = S, stainless steel
- Lanyard material: Stainless steel
- Crimp ferrule material: Nickel-plated brass
- O-ring: FPM (Viton®)

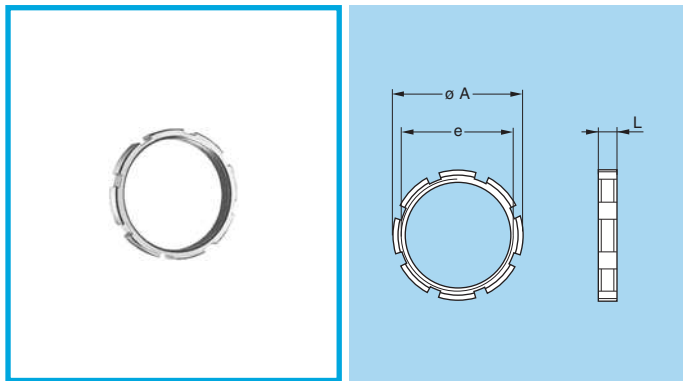


GEA Hexagonal nuts

| Part number | Series | Dimensions (mm) | | | |
|---------------|--------|-----------------|------|------------|-----|
| | | A | B | e | L |
| GEA.0E.240.LN | 0V | 17 | 19.2 | M14 x 1.00 | 2.5 |
| GEA.1E.240.LN | 1V | 19 | 21.5 | M16 x 1.00 | 3.0 |
| GEA.2E.240.LN | 2V | 24 | 27.0 | M20 x 1.00 | 4.0 |
| GEA.3E.240.LN | 3V | 30 | 34.0 | M24 x 1.00 | 5.0 |
| GEA.4E.240.LN | 4V | 36 | 40.5 | M30 x 1.00 | 7.0 |

Note: to order this part separately, use the above part numbers. The last letters «LN» of the part number refer to the nut material and treatment. If a nut in stainless steel is desired, replace the last letters of the part number by «AZ».

- Material:
 - Nickel-plated brass (3 µm)
 - Stainless steel

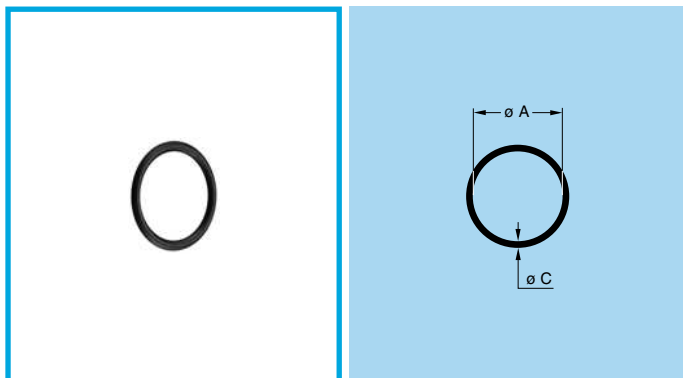


GEB Round nuts

| Part number | Series | Dimensions (mm) | | |
|---------------|--------|-----------------|-----------|-----|
| | | A | e | L |
| GEB.5E.240.LN | 5V | 54 | M45 x 1.5 | 8.0 |

Note: to order this part separately, use the above part numbers. The last letters «LN» of the part number refer to the nut material and treatment. If a nut in stainless steel is desired, replace the last letters of the part number by «AZ».

- Material:
 - Nickel-plated brass (3 µm)
 - Stainless steel



GDA O-ring for plug

| Part number | Series | Dim. (mm) | |
|------------------|--------|-----------|-----|
| | | A | C |
| GDA.99.080.100VK | 0V | 8.0 | 1.0 |
| GDA.99.100.100VK | 1V | 10.0 | 1.0 |
| GDA.99.130.150VK | 2V | 13.0 | 1.5 |
| GDA.99.165.150VK | 3V | 16.5 | 1.5 |
| GDA.99.210.200VK | 4V | 21.0 | 2.0 |
| GDA.99.330.250VK | 5V | 33.0 | 2.5 |

- Material: FPM (Viton®)

Cable assembly

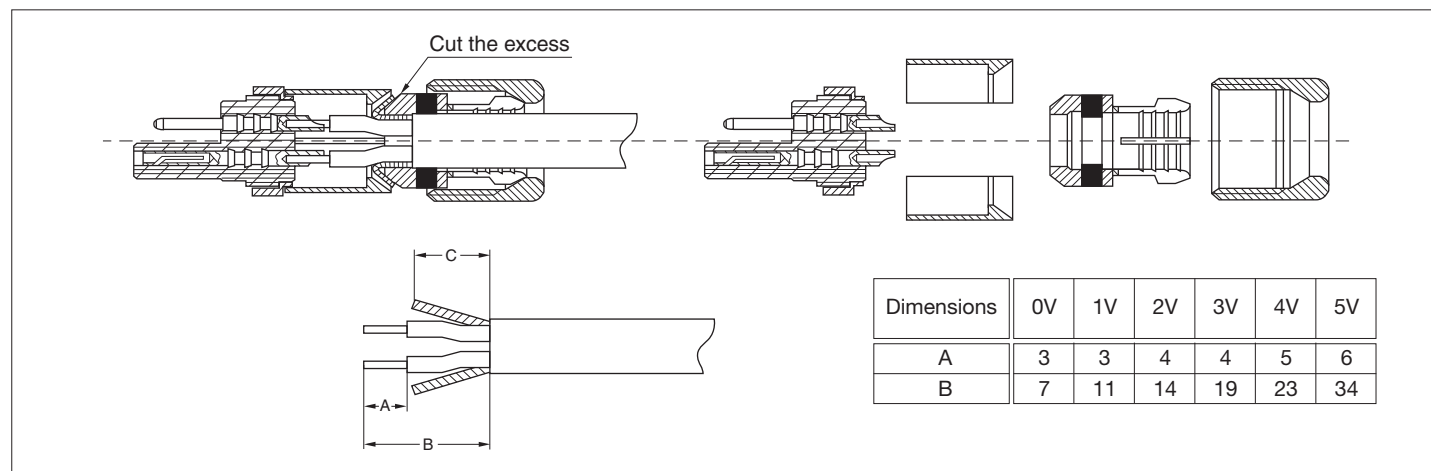
Assembly instructions

In order to ensure the sealing of plugs and sockets on the cable side, it is imperatively necessary to complete their assembly by realizing it with an adapted technique.

We recommend the fitting of an heatshrink boot with inner melting coating of type ATUM (manufactured by the RAY-CHEM company) or similar.

This heatshrink boot is not provided with the connector.

For multiconductors cables, the assembly instructions are the followings:



- 1) Preparation and stripping of cable (see above).
- 2) Slide the heatshrink boot over the cable; types and dimensions to have are:

| Series | 0V | 1V | 2V | 3V | 4V | 5V |
|--|--------|--------|--------|--------|---------|---------|
| Type of heatshrink boot | 12/3-0 | 12/3-0 | 19/6-0 | 19/6-0 | 24/6-0 | 40/13-0 |
| Length of the boot | 30 | 35 | 40 | 45 | 50 | 65 |
| Oversize collet | - | 16/4-0 | 19/6-0 | 24/8-0 | 40/13-0 | - |
| Length of the boot for oversize collet | - | - | 70 | - | - | - |

- 3) After having soldered the conductors on the contacts of the plug/socket insulator, bring the earthing cone against the centre-piece. Cut the excess of screen.
- 4) Locate the insulator, the centre-piece, the earthing cone, the gland, the compression ring and the collet in the plug/socket shell.
- 5) Screw the collet nut at the recommended torque value.
- 6) Remove all grease left on plug/socket shells with acetone.
- 7) Place the heatshrink boot of the correct dimensions onto the rear end of the plug/socket against the coupling nut.
- 8) Heat the heatshrink boot until the melting coating totally melts and adheres perfectly onto the cable jacket.

LEMO complete product range

| | B | S | K | E | F | 00 | 01 | 0A | 3T | 4A | 4M | 3K.93C | 1D | Y | 05 | 5G | 2G | 2C | L | H | R | N | 03 | V | W | U | F | P | D | K/S | 01 | DIN | |
|--------------------|---|---|---|---|---|----|----|----|----|----|----|--------|----|---|----|----|----|----|---|---|---|---|----|---|---|---|---|---|---|-----|----|-----|--|
| Unipole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multipole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coaxial 50 Ω | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coaxial 75 Ω | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi Coaxial | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Coax + LV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Triaxial 50 Ω | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Triaxial 75 Ω | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Triax + LV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quadrax | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| High Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi High Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed HV + LV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fibre Optic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi Fibre Optic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed FO + LV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thermocouple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fluidic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multi Fluidic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixed Fluidic + LV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Most frequently used in darker colour

• included in this catalogue

| | | | | | | |
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| | | | | | | |
| 0A Series | 3T Series | 4A Series | 4M Series <small>Keyed</small> | 3K.93C Series <small>Keyed</small> | 1D Series | Y Series |
| | | | | | | |
| 05 Series | 5G Series <small>Keyed</small> | 2G Series <small>Keyed</small> | 2C Series | L Series <small>Keyed</small> | H Series | R Series <small>Keyed</small> |
| | | | | | | |
| N Series <small>Keyed</small> | 03 Series <small>Keyed</small> | V Series | W Series <small>Keyed</small> | U Series <small>Keyed</small> | Cable assembly | K/S Series <small>Keyed</small> |
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