

MINIATURE FIBRE-OPTIC F7 CONTACT FOR MULTIFIBRE OR MIXED OPTICAL/ELECTRICAL OF THE 1K-5K AND 1B-5B SERIES

In addition to the existing F2 fibre optic contact shown in our catalogue of Fibre-Optic connectors No 5, the B and K series can now also be fitted with the new miniature F7 contact. The main benefits of using this contact are:

- Reduced size allowing increased contact density. As an example, a 4-channel fibre optic connector is now possible in series 3K/3B.
- Use of industry standard 1.25 mm diameter ferrule and polishing processes.

Contact design is based on the well-proven F2. Contacts fit onto buffered fibres or semitight jacket cables up to 2 mm in diameter.

This brochure shows only a sample of the available models of connectors. Refer to our catalogue No 5 for more detailed information of the full range of LEMO fibre optic connectors. Refer also to catalogue No 5 for accessories or tools specific to the electrical contacts used in hybrid connectors.



5 Fibre Optic Connectors

F7 Fibre Optic Contact

Introduction

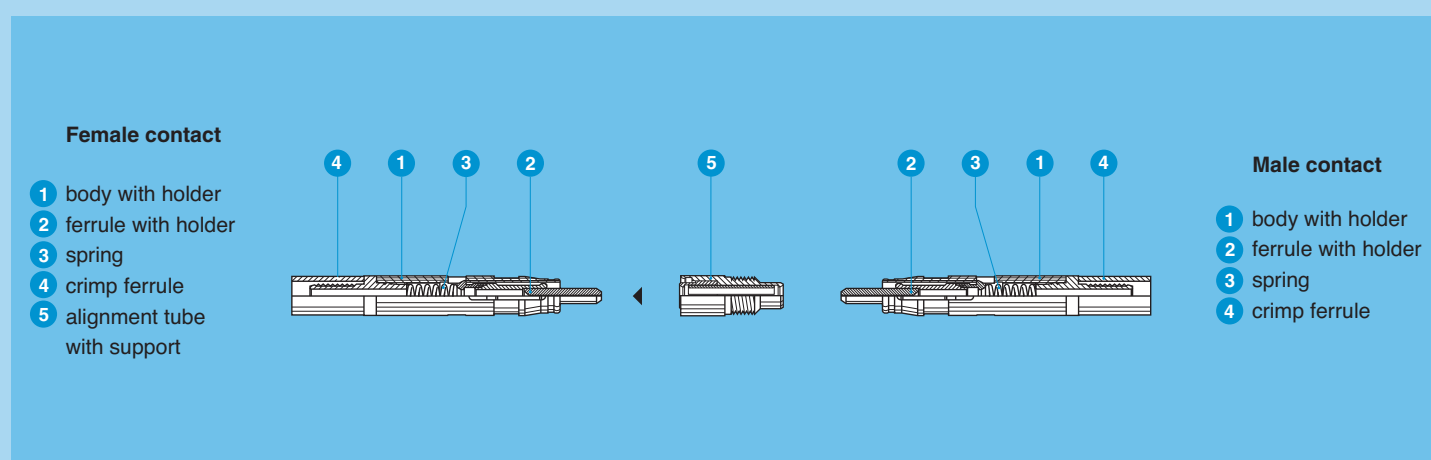
The F7 type contact is designed to fit multi fibre connectors or mixed fibre optical/electrical connectors from 1B to 5B, 1K to 5K series. The design is based on the well proven F2 contact.

Its main features are as follows:

- Ceramic ferrules diameter 1.25 mm
- Simple and fast polishing ensuring the physical contact of the fibre end face
- After mounting on the cable, the contact is very easily installed in the main connector insulator, the particular shape of the contact body retains it in the insulator
- Single type of cable assembly, regardless of connector shell used
- The alignment tube can be easily removed in order to clean the fibre end face.

This contact makes it possible to use single fibre cables with single-mode or multi-mode fibres of the following sizes; 9/125, 50/125 and 62.5/125.

Part Section Showing Internal Components



Technical Characteristics

Material and Treatment

| Component | Material | Surface treatment (µm) | |
|----------------|-----------------|------------------------|----|
| | | Cu | Ni |
| Body | PEEK | without treatment | |
| Ferrule | Ceramic | without treatment | |
| Holder | Alloy CuNiZn | without treatment | |
| Crimp holder | Brass | 0.5 | 3 |
| Spring | Stainless steel | without treatment | |
| Crimp ferrule | Cu 99 | 0.5 | 3 |
| Support | Alloy CuNiZn | without treatment | |
| Alignment tube | Ceramic | without treatment | |

Optical

| Characteristic | Value | Standard | Method |
|--|---------|-----------------|----------------|
| Average insertion loss fibre 9/125 µm | 0.18 dB | IEC 61300-03-34 | Method 2 |
| Average insertion loss fibre 50/125 µm | 0.25 dB | IEC 61300-03-34 | Method 2 |
| Return loss fibre 9/125 µm (UPC) | ≥45 dB | IEC 61300-03-06 | Coupler Method |
| Return loss fibre 9/125 µm (Hand polish) | >25 dB | IEC 61300-03-06 | Coupler Method |

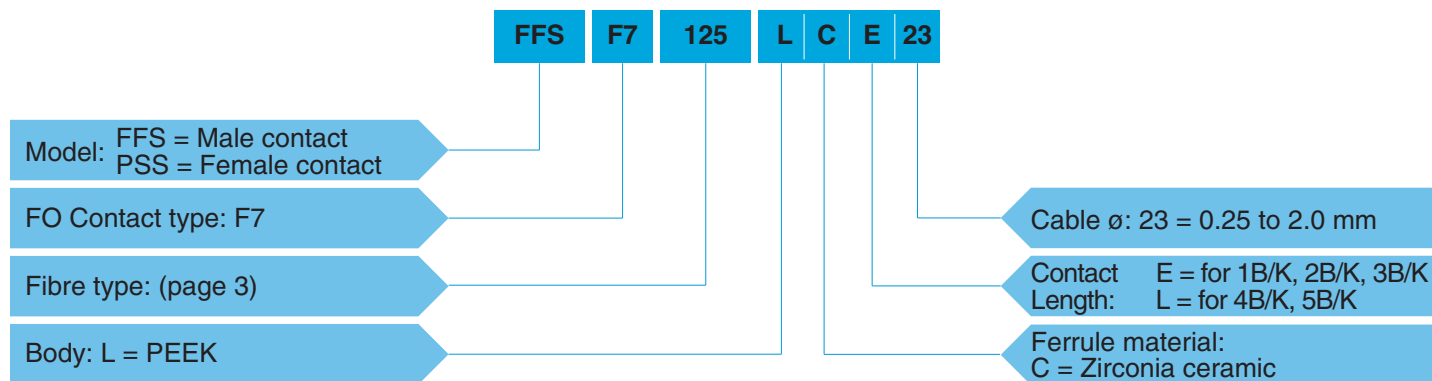
Mechanical and Environmental

| Characteristic | Value | Standard |
|------------------------|-------------------------|-----------------|
| Mating durability | > 1000 cycles | IEC 61300-02-02 |
| Damp heat steady state | up to 93 % RH at 40°C | IEC 61300-02-19 |
| High temperature | +85°C | IEC 61300-02-18 |
| Low temperature | -40°C | IEC 61300-02-17 |
| Cable retention | 100 N | IEC 61300-02-04 |
| Vibration (3 axes) | 100 to 2000 Hz, 2 hrs | – |
| Change of temperature | -40 to +75°C | IEC 61300-02-22 |
| Temperature/humidity | -10 to +65°C at 93 % RH | IEC 61300-02-21 |

Part Number Example

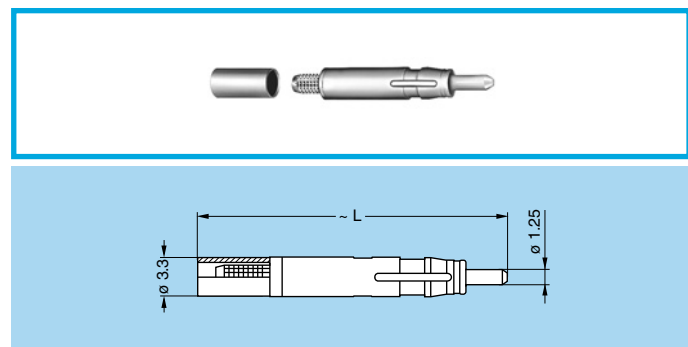
F7 contacts are designed in 2 different lengths:

- the short version for 1B/K, 2B/K and 3B/K series, code E.
- the long version for 4B/K and 5B/K series, code L.



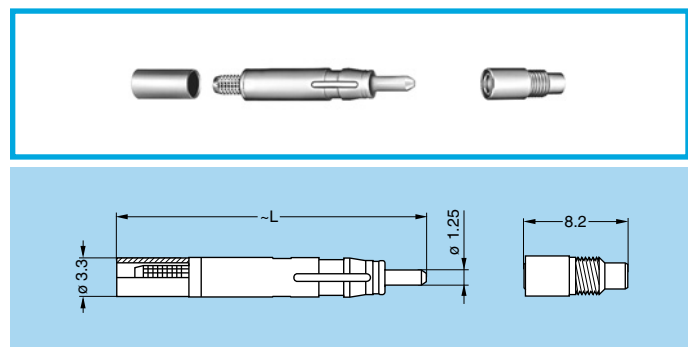
FFS.F7.125.LCE23 = Male F7 type fibre optic contact, ferrule bore diameter of 125 μm , PEEK body, Zirconia ceramic ferrule, contact length for 1B/K, 2B/K or 3B/K series, for cable with diameter max = 2.0 mm.

Model - FO Contact Type



FFS.F7 Male F7 Fibre Optic Contact

| Reference | | Dimensions (mm) |
|-----------|------------------------|-----------------|
| Model | Series | L |
| FFS.F7 | 1B, 1K, 2B, 2K, 3B, 3K | 25.8 |
| FFS.F7 | 4B, 4K, 5B, 5K | 32.8 |



PSS.F7 Female F7 Fibre Optic Contact

| Reference | | Dimensions (mm) |
|-----------|------------------------|-----------------|
| Model | Series | L |
| PSS.F7 | 1B, 1K, 2B, 2K, 3B, 3K | 25.8 |
| PSS.F7 | 4B, 4K, 5B, 5K | 32.8 |

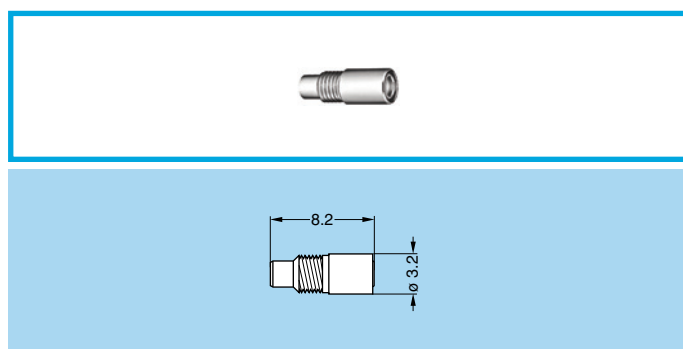
Fibre Type

The choice of the ferrule hole diameter is dependent upon the fibre cladding size. LEMO offers a range of ferrule hole diameters to suit the users' specific requirements.

| Reference | ø Core/Cladding (µm) | Ferrule hole diameter (µm) | Note 1) |
|-----------|-----------------------------|----------------------------|---------|
| 125 | 9/125 50/125 62.5/125 | 125 | ● |
| 126 | | 126 | ● |
| 128 | | 128 | ○ |

● First choice alternative ○ Special order alternative

Accessories



PSS Alignment device for F7 fibre optic contact

| Part number |
|----------------|
| PSS.F7.290.NZZ |

Note: Alignment device should be ordered as replacement item.



FGG-EGG Insulators

Insulators for 1B-5B and 1K-5K series vary according to the fibre optic contact type. For the new F7 contact insulators are:

| | FO Contact Type F7 | Insulator part number | |
|-------|-----------------------|-----------------------|----------------|
| | | Male contact | Female contact |
| 1B/1K | 92A | FGG.1B.302.FL | EGG.1B.402.FL |
| | | | |
| 2B/2K | 03A | FGG.2B.302.FL | EGG.2B.402.FL |
| | 93B | FGG.2B.324.FL | EGG.2B.424.FL |
| 3B/3K | 03C | FGG.3B.304.FL | EGG.3B.404.FL |
| | 95B | FGG.3B.344.FL | EGG.3B.444.FL |
| 4B/4K | 03G | FGG.4B.308.FL | EGG.4B.408.FL |
| | 03H | FGG.4B.309.FL | EGG.4B.409.FL |
| | 97B | FGG.4B.362.FL | EGG.4B.462.FL |
| 5B/5K | 03Q | FGG.5B.316.FL | EGG.5B.416.FL |
| | 03V | FGG.5B.321.FL | EGG.5B.421.FL |

1K-5K Series

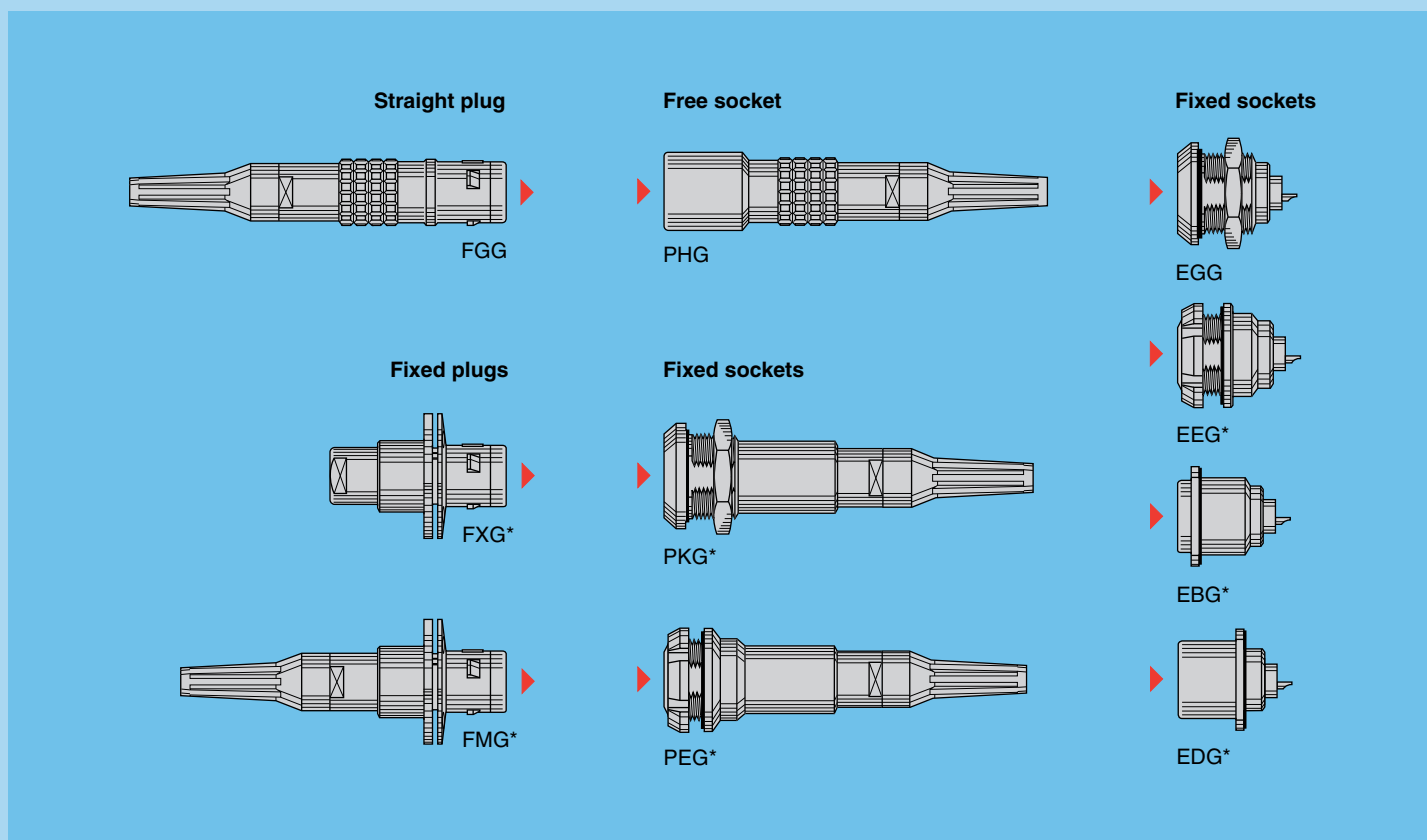
The new **F7** fibre optic contact has been designed to work in the 1K-5K series.

The main features of these series are as follows:

- Security of the LEMO Push-Pull self-latching system
- Specially designed for outdoors applications. All these models are waterproof when mated and reach a protection index of IP 66-IP 68, according to the IEC 60529 standard
- Protection against accidental contamination or damage to the fibre end face because the ferrules are recessed within the connector shell
- The alignment key (G, A...F, L and R) ensures excellent repeatability of performance during frequent matings
- A choice of configurations of multi fibre or mixed optical/electrical contacts
- The new miniature F7 contact allows hybrid configuration in the 1K series and multi fibre up to 21 channels in the 5K series.

The 1K-5K series consists of ten models which will accept outer cable diameters ranging from 2.6 mm to 23.5 mm.

Interconnections



Model Description

EBG Fixed socket with square flange, key (G) or keys (A...F, L and R), four holes fixing

EDG Fixed socket with square flange, key (G) or keys (A...F, L and R), protruding shell and earthing tag, screw fixing

EEG Fixed socket, nut fixing, key (G) or keys (A...F, L and R) (back panel mounting)

EGG Fixed socket, nut fixing, key (G) or keys (A...F, L and R)

FGG Straight plug, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

FMG Fixed plug with round flange, four holes fixing, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

FXG Fixed plug with round flange, four holes fixing, key (G) or keys (A...F, L and R)

PEG Fixed socket, nut fixing, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief (back panel mounting)

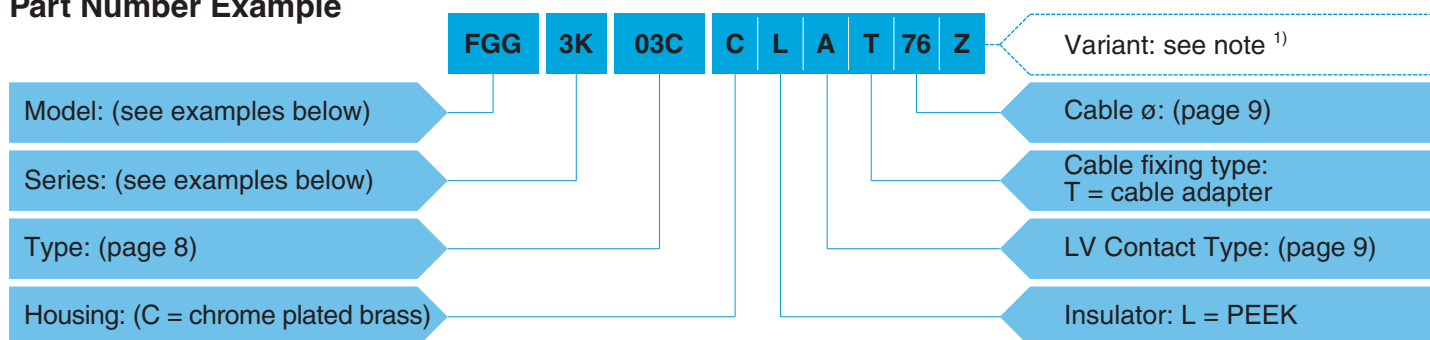
PHG Free socket, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

PKG Fixed socket, nut fixing, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

* Not show in this catalogue. Refer to our catalogue No 5.

Certain models and certain key-ways may not be available in all series. Please consult us.

Part Number Example

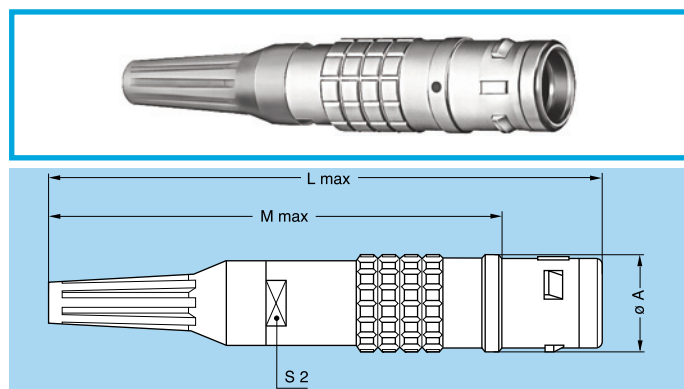


FGG.3K.03C.CLAT76Z = Straight plug with key (G), 3K series, multi-fibre type to accept 4 F7 type fibre optic contacts, chrome-plated brass housing, PEEK insulator, cable fixing type T for 7.5 mm diameter cable, and nut for fitting a bend relief.

Connectors are delivered without fibre optic contacts. F7 fibre optic contacts must be ordered separately according to size and type of fibre (see pages 1 to 3).

Note: ¹⁾ The «Variant» position in the reference is used to indicate the presence of a collet nut for fitting the bend relief. The bend relief must be ordered separately.

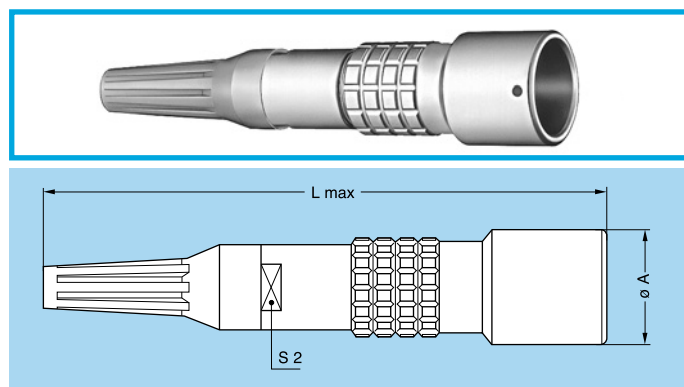
Sample Models



FGG Straight plug, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

| Reference | | Dimensions (mm) | | | |
|-----------|--------|-----------------|-----|-------|----|
| Model | Series | A | L | M | S2 |
| FGG | 1K | 13 | 92 | 78.0 | 9 |
| FGG | 2K | 16 | 101 | 85.0 | 12 |
| FGG | 3K | 19 | 109 | 89.0 | 15 |
| FGG | 4K | 25 | 131 | 110.5 | 19 |
| FGG | 5K | 38 | 160 | 135.0 | 30 |

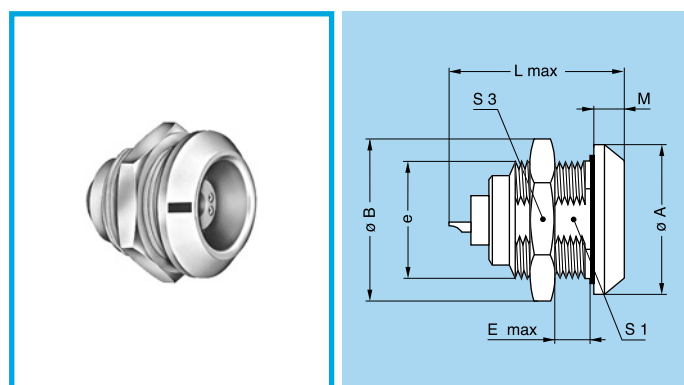
Note: The overall length dimension is with Desmopan bend relief



PHG Free socket, key (G) or keys (A...F, L and R), cable adapter and nut for fitting a bend relief

| Reference | | Dimensions (mm) | | |
|-----------|--------|-----------------|-------|----|
| Model | Series | A | L | S2 |
| PHG | 1K | 15 | 95.0 | 9 |
| PHG | 2K | 19 | 103.0 | 12 |
| PHG | 3K | 23 | 113.0 | 15 |
| PHG | 4K | 29 | 135.5 | 19 |
| PHG | 5K | 42 | 164.0 | 30 |

Note: The overall length dimension is with Desmopan bend relief



EGG Fixed socket, nut fixing, key (G) or keys (A...F, L and R)

| Reference | | Dimensions (mm) | | | | | | | | |
|-----------|--------|-----------------|------|---------|----|---------------------|------|-----|------|----|
| Model | Series | A | B | e | E | L max ¹⁾ | | M | S1 | S3 |
| | | | | | | F1 | F2 | | | |
| EGG | 1K | 20 | 21.5 | M16x1.0 | 9 | 31.0 | 41.0 | 4.5 | 14.5 | 19 |
| EGG | 2K | 25 | 27.0 | M20x1.0 | 9 | 31.0 | 41.0 | 5.0 | 18.5 | 24 |
| EGG | 3K | 31 | 34.0 | M24x1.0 | 11 | 35.5 | 42.5 | 6.0 | 22.5 | 30 |
| EGG | 4K | 37 | 40.5 | M30x1.0 | 9 | 37.0 | 41.0 | 6.5 | 28.5 | 36 |
| EGG | 5K | 55 | 54.0 | M45x1.5 | 10 | 40.5 | 42.0 | 9.0 | 42.5 | — |

Note: ¹⁾ The overall length (L) may vary depending upon the type of electrical LV or fibre optic contact fitted.

1B-5B Series

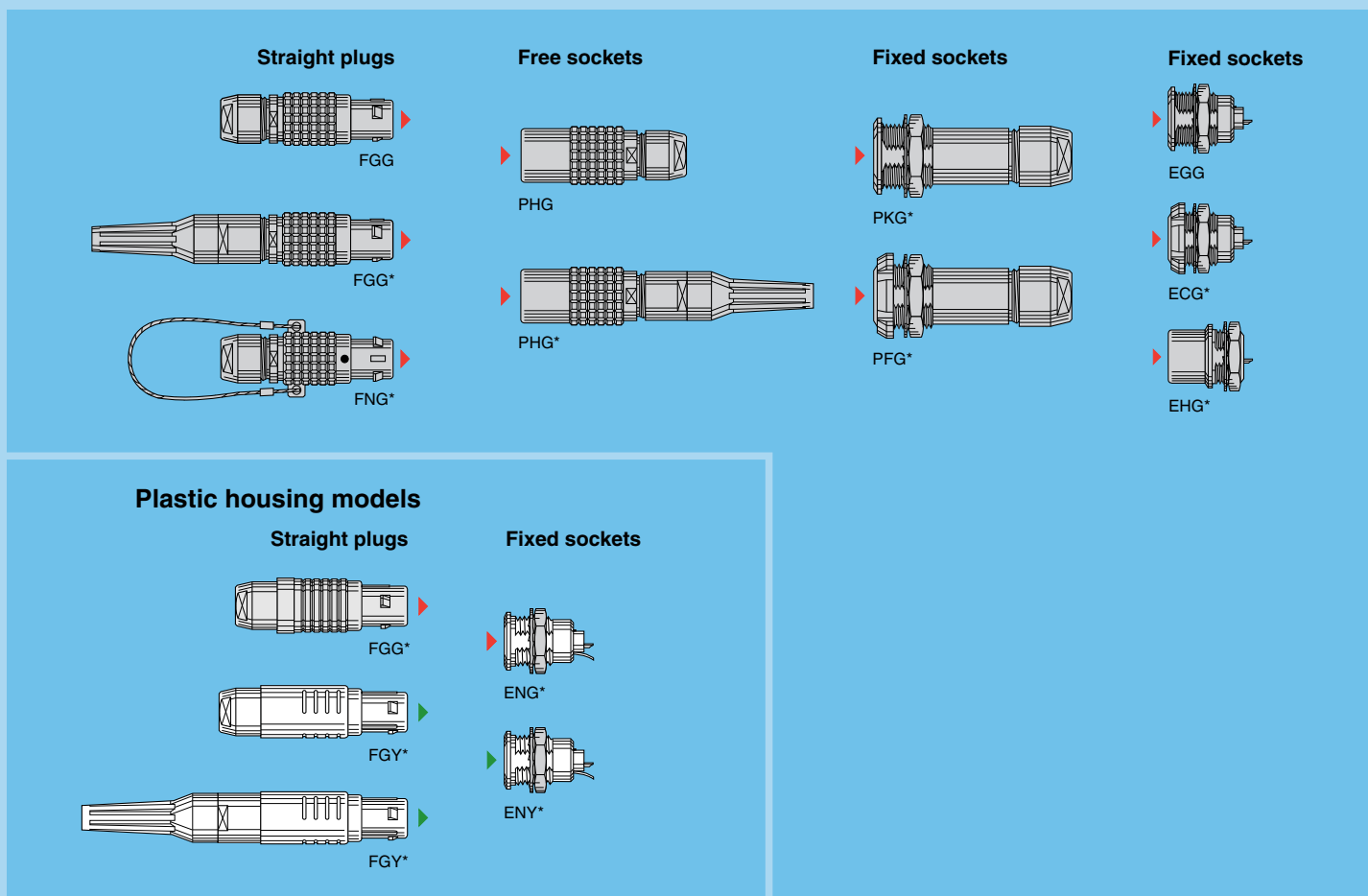
The new **F7** fibre optic contact has been designed to work in the 1B-5B series.

The main features of these series are as follows:

- Security of the LEMO Push-Pull self-latching system
- Protection against accidental contamination or damage to the fibre end face because the ferrules are recessed within the connector shell
- The alignment key (G, A...L, Y and R) ensures excellent repeatability of performance during frequent matings
- A choice of configurations of multi fibre or mixed optical/electrical contacts
- The new miniature F7 contact allows hybrid configuration in the 1B series and multi fibre up to 21 channels in the 5B series.

The 1B-5B series consist of fifteen models. The possible outer cable diameters range from 2.1 to 25 mm.

Interconnections

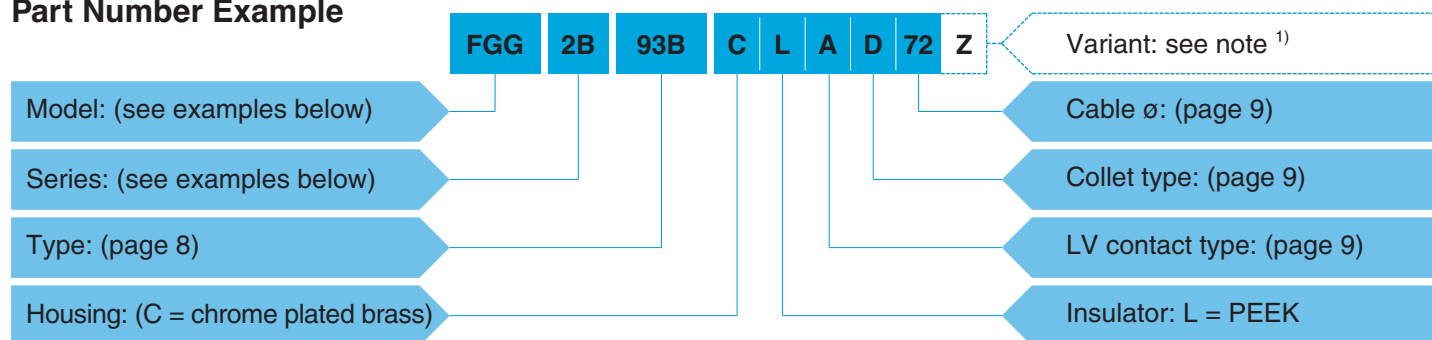


Model Description

| | | | | | |
|------------|---|------------|---|------------|---|
| ECG | Fixed socket, with two nuts, key (G) or keys (A...L and R), (back panel mounting) | FGG | Straight plug, key (G or J), cable collet, PEEK outer shell | PHG | Free socket, key (G) or keys (A...L) and cable collet and nut for fitting a bend relief |
| EGG | Fixed socket, nut fixing, key (G) or keys (A...L and R) | FGY | Straight plug, keys (Y), cable collet and PSU or PPSU outer shell | PKG | Fixed socket, nut fixing, key (G) or keys (A...L and R) and cable collet |
| EHG | Fixed socket, nut fixing, key (G) or keys (A...L and R) with visible shell | FGY | Straight plug, keys (Y), cable collet and PSU or PPSU outer shell and nut for fitting a bend relief | | |
| ENG | Fixed socket with grounding tab, nut fixing, key (G or J), PEEK outer shell | FNG | Straight plug, key (G) or keys (A...L and R) and cable collet with lanyard release | | |
| ENY | Fixed socket with grounding tab, nut fixing, keys (Y), PSU or PPSU outer shell | PFG | Fixed socket, with two nuts, key (G) or keys (A...L and R) and cable collet (back panel mounting) | | |
| FGG | Straight plug, key (G) or keys (A...L and R) and cable collet | PHG | Free socket, key (G) or keys (A...L and R) and cable collet | | |
| FGG | Straight plug, key (G) or keys (A...L) cable collet and nut for fitting a bend relief | | | * | Not show in this catalogue. Refer to our catalogue No 5. |

Certain models and certain key-ways may not be available in all series. Please consult us.

Part Number Example

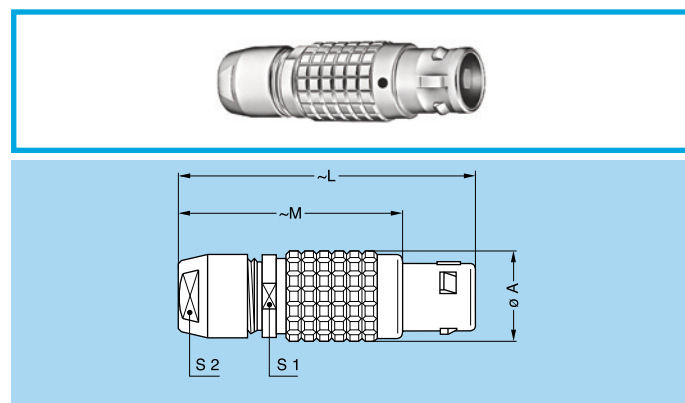


FGG.2B.93B.CLAD72Z = Straight plug with key (G), 2B series, mixed type to accept 2 F7 fibre optic contact and 4 low voltage electrical contacts, chrome-plated brass housing, PEEK insulator, 4 male solder electrical contacts, type D collet system to suit a 7.0 to 6.1 mm diameter cable, and a nut for fitting a bend relief.

Connectors are delivered without fibre optic contacts. F7 fibre optic contacts must be ordered separately according to size and type of fibre (see pages 1 to 3).

Note: ¹⁾ The «Variant» position in the reference is used to indicate the presence of a collet nut for fitting the bend relief. The bend relief must be ordered separately.

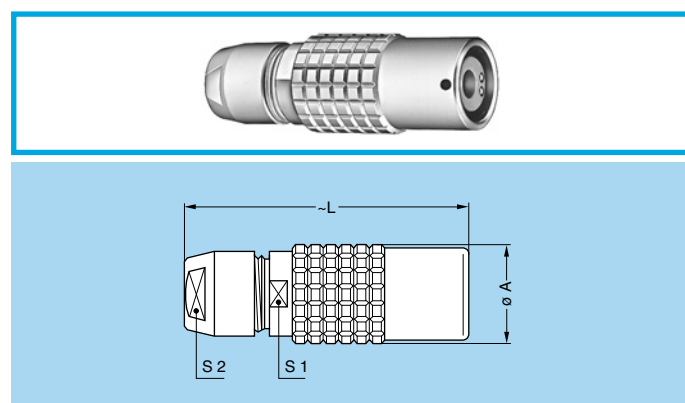
Sample Models



FGG Straight plug, key (G) or keys (A...L and R) and cable collet

| Reference | | Dimensions (mm) | | | | |
|-------------------|--------|-----------------|------------------|------------------|----|----|
| Model | Series | A | L | M | S1 | S2 |
| FGG ¹⁾ | 1B | 12 | 72 ²⁾ | 61 ²⁾ | 10 | 9 |
| FGG | 2B | 15 | 50 | 38 | 13 | 12 |
| FGG | 3B | 18 | 58 | 43 | 15 | 14 |
| FGG | 4B | 25 | 75 | 57 | 21 | 20 |
| FGG | 5B | 35 | 103 | 78 | 31 | 30 |

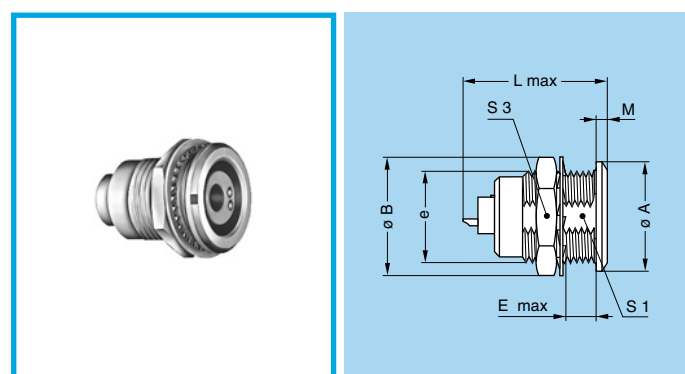
Note: ¹⁾ Models can be delivered only with «T» type of cable adapter and nut for fitting a bend relief.
²⁾ Lengths include the bend relief.



PHG Free socket, key (G) or keys (A...L and R) and cable collet

| Reference | | Dimensions (mm) | | | |
|-------------------|--------|-----------------|--------------------|----|----|
| Model | Series | A | L | S1 | S2 |
| PHG ¹⁾ | 1B | 12.5 | 69.5 ²⁾ | 10 | 9 |
| PHG | 2B | 16.5 | 47.0 | 13 | 12 |
| PHG | 3B | 19.0 | 56.0 | 15 | 14 |
| PHG | 4B | 24.4 | 73.0 | 21 | 20 |
| PHG | 5B | 34.2 | 99.0 | 31 | 30 |

Note: ¹⁾ Models can be delivered only with «T» type of cable adapter and nut for fitting a bend relief.
²⁾ Lengths include the bend relief.



EGG Fixed socket, nut fixing, key (G) or keys (A...L and R)

| Reference | | Dimensions (mm) | | | | | | | | |
|-----------|--------|-----------------|------|-------|------|---------------------|------|-----|------|----|
| Model | Series | A | B | e | E | L max ¹⁾ | | M | S1 | S3 |
| | | | | | | F1 | F2 | | | |
| EGG | 1B | 14 | 16 | M12x1 | 7.5 | 27.0 | 37.0 | 1.5 | 10.5 | 14 |
| EGG | 2B | 18 | 19.2 | M15x1 | 8.5 | 27.0 | 37.0 | 1.8 | 13.5 | 17 |
| EGG | 3B | 22 | 25.0 | M18x1 | 11.5 | 30.0 | 37.0 | 2.0 | 16.5 | 22 |
| EGG | 4B | 28 | 34.0 | M25x1 | 12.0 | 34.5 | 38.5 | 2.5 | 23.5 | 30 |
| EGG | 5B | 40 | 40.0 | M35x1 | 11.0 | 36.5 | 38.0 | 3.0 | 33.5 | — |

Note: ¹⁾ The overall length (L) may vary depending upon the type of electrical LV or fibre optic contact fitted.

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Electrical Contact

Contact for plug, socket, and fixed socket

| Ref. | Contact type |
|------|---------------|
| A | male solder |
| C | male crimp |
| L | female solder |
| M | female crimp |
| Z | no contact |



Collets (K and B series)

T type cable adapter

| | Reference | | Cable ø | | Bend relief to be used ¹⁾ |
|-----------|-----------|----|---------|------|--------------------------------------|
| | Type | ø | max. | min. | |
| 1B | T | 36 | 3.5 | 2.6 | GMA.1B.030.D● |
| | T | 46 | 4.5 | 3.6 | GMA.1B.040.D● |
| 2K | T | 46 | 4.5 | 3.6 | GMA.2B.040.D● |
| | T | 56 | 5.5 | 4.6 | GMA.2B.050.D● |
| | T | 66 | 6.5 | 5.6 | GMA.2B.060.D● |
| 3K | T | 46 | 4.5 | 3.6 | GMA.2B.040.D● |
| | T | 56 | 5.5 | 4.6 | GMA.2B.050.D● |
| | T | 66 | 6.5 | 5.6 | GMA.2B.060.D● |
| | T | 76 | 7.5 | 6.6 | GMA.3B.070.D● |
| | T | 86 | 8.5 | 7.6 | GMA.3B.080.D● |
| 4K | T | 91 | 9.0 | 8.1 | GMA.3B.080.D● |
| | T | 46 | 4.5 | 3.6 | GMA.2B.040.D● |
| | T | 56 | 5.5 | 4.6 | GMA.2B.050.D● |
| | T | 66 | 6.5 | 5.6 | GMA.2B.060.D● |
| | T | 76 | 7.5 | 6.6 | GMA.3B.070.D● |
| | T | 86 | 8.5 | 7.6 | GMA.3B.080.D● |
| | T | 96 | 9.5 | 8.6 | GMA.4B.010.D● ²⁾ |
| 5K | T | 11 | 11.5 | 10.6 | GMA.4B.011.D● |
| | T | 13 | 13.5 | 12.6 | GMA.4B.013.D● |
| | T | 61 | 6.0 | 5.1 | GMA.2B.057.R● |
| | T | 71 | 7.0 | 6.1 | GMA.3B.060.D● |
| | T | 81 | 8.0 | 7.1 | GMA.3B.070.D● |
| | T | 91 | 9.0 | 8.1 | GMA.3B.080.D● |
| | T | 96 | 9.5 | 8.6 | GMA.4B.010.D● ²⁾ |
| | T | 10 | 10.5 | 9.6 | GMA.4B.010.D● |
| | T | 11 | 11.5 | 10.6 | GMA.4B.011.D● |
| | T | 12 | 12.5 | 11.6 | GMA.4B.012.D● |
| | T | 13 | 13.5 | 12.6 | GMA.4B.013.D● |
| 5K | T | 14 | 14.5 | 13.6 | GMA.4B.013.D● |
| | T | 15 | 15.5 | 14.6 | heat-shrink tube ³⁾ |
| | T | 16 | 16.5 | 15.6 | heat-shrink tube |
| | T | 17 | 17.5 | 16.6 | heat-shrink tube |
| | T | 18 | 18.5 | 17.6 | heat-shrink tube |
| | T | 19 | 19.5 | 18.6 | heat-shrink tube |
| | T | 20 | 20.5 | 19.6 | heat-shrink tube |
| | T | 21 | 21.5 | 20.6 | heat-shrink tube |
| | T | 22 | 22.5 | 21.6 | heat-shrink tube |
| | T | 23 | 23.5 | 22.6 | heat-shrink tube |

D and M type collets

| | Reference | | Cable ø | |
|-----------|-----------|----|---------|--------|
| | Type | ø | max. | min. |
| 2B | M | 31 | 3.2 | > 2.2 |
| | D | 42 | 4.2 | > 3.2 |
| | D | 52 | 5.2 | > 4.2 |
| | D | 62 | 6.2 | > 5.2 |
| | D | 72 | 7.2 | > 6.2 |
| 3B | D | 82 | 8.2 | > 7.2 |
| | D | 92 | 9.2 | > 8.2 |
| | M | 52 | 5.2 | > 4.2 |
| | D | 62 | 6.2 | 4.9 |
| | D | 72 | 7.7 | > 6.2 |
| 4B | D | 92 | 9.2 | > 7.7 |
| | D | 10 | 10.7 | > 9.2 |
| | D | 12 | 11.9 | > 10.7 |
| | M | 62 | 6.0 | 5.1 |
| | M | 72 | 7.0 | 6.1 |
| 5B | M | 82 | 8.0 | 7.1 |
| | M | 92 | 9.0 | 8.1 |
| | D | 10 | 10.5 | 9.1 |
| | D | 12 | 12.0 | 10.6 |
| | D | 13 | 13.5 | 12.1 |
| 5B | D | 15 | 15.0 | 13.6 |
| | D | 11 | 11.5 | 9.6 |
| | D | 13 | 13.5 | 11.6 |
| | D | 15 | 15.5 | 13.6 |
| | D | 17 | 17.5 | 15.6 |
| | D | 19 | 19.5 | 17.6 |
| | D | 21 | 21.5 | 19.6 |
| | D | 23 | 23.5 | 21.6 |
| | D | 25 | 25.0 | 23.6 |

Note:

- ¹⁾ The bend relief is to be ordered separately.
- ²⁾ Add a short piece of heat-shrink tubing under the bend relief.
- ³⁾ The heat-shrink tube is supplied.

All dimensions are in millimeters.

Fibre Optic Tooling

We offer a complete range of tools for fibre optic connector cable assembly. Some tools are specific to each fibre optic contact type. When selecting necessary tooling, make sure you identify correctly the contact type used in the selected product.



DRV Complete workstation for fibre optic contact

Description

Comprehensive range of tools for terminating both single-mode and multi-mode fibres. Includes specific tools for F7 fibre optic contacts. Detachable termination case lid for use as polishing platform during field termination. Rugged but aesthetically pleasing termination case which is ideal for field use or in-house terminations. Curing oven and inspection microscope should be ordered separately.

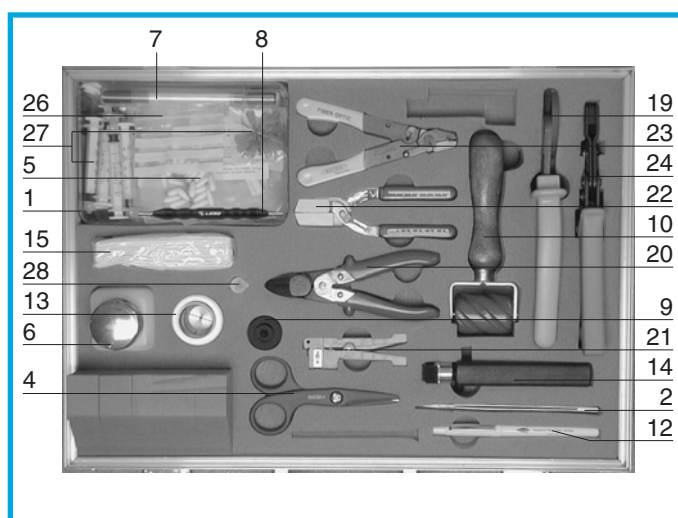
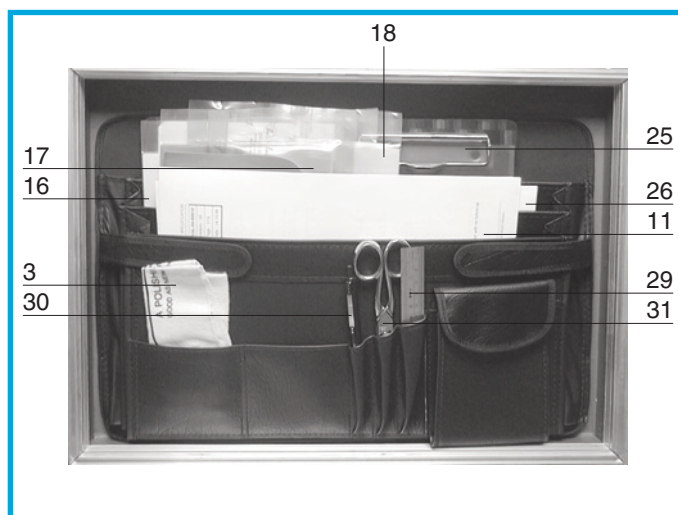
Part number

DRV.91.CF7.PN

Workstation Contents

| Part Number | Description | Quantity | Number |
|------------------|--|----------|--------|
| WST.BT.175.55PT | Plastic box | 1 | 1 |
| WST.BR.150.8AC | Tweezers | 1 | 2 |
| WST.CH.252.5SR | Lint-free Cloth | 1 | 3 |
| WST.CS.125.CE | Kevlar cutters | 1 | 4 |
| WST.CO.020.52 | Cotton bud (sachet of 20 pcs) | 1 | 5 |
| WST.DS.290.PT | Alcohol dispenser (supplied empty) | 1 | 6 |
| DCC.91.307.5LA | Extraction tool for F7 contact | 1 | 7 |
| DCS.F7.035.PN | Alignment device tool | 1 | 8 |
| DCS.91.G90.6E125 | Microscope adapter for F7 contacts | 1 | 9 |
| WST.ME.354.8R | Epoxy mixer and pad | 1 | 10 |
| DOC.FO.CF7.0000 | Terminating instructions for F7 contacts | 1 | 11 |
| WST.OU.135.10SZ | Fibre scribe | 1 | 12 |
| DCS.91.D01.LC | Polishing tool for F7 contacts | 1 | 13 |
| WST.OU.452.5MN | Large cable stripper | 1 | 14 |
| WST.PA.105.5525 | Cleaning tissues | 1 | 15 |
| WST.PA.012.AOJ | Lapping film 12µm (yellow) | 20 | 16 |
| WST.PA.005.AOM | Lapping film 5µm (brown) | 20 | 17 |
| WST.PA.001.DIL | Lapping film 1µm (lavender) diamond | 5 | 18 |
| WST.PN.210.AS | Armoured cable cutter | 1 | 19 |
| WST.PN.145.AR | Cable cutter | 1 | 20 |
| WST.PN.103.0PG | Outer jacket stripper | 1 | 21 |
| WST.PN.203.CR | Buffer coating stripping tool | 1 | 22 |
| WST.PN.102.3CR | Primary coat stripper | 1 | 23 |
| DPE.99.003.1K | Crimp tool | 1 | 24 |
| WST.PL.322.5PT | Polishing platform | 1 | 25 |
| WST.RE.353.EPO | Epoxy resin + safety instructions | 10 | 26 |
| WST.SE.305.8PH | Syringe with needle # 19 & # 20 | 10 | 27 |
| WST.TU.193.LN | Fibre shield for F7 contacts | 4 | 28 |
| WST.RG.150.AZ | Steel rule 6" (152 mm) | 1 | 29 |
| WST.SY.135.PA | Fibre length marking pen | 1 | 30 |
| WST.CS.155.AZ | Scissors | 1 | 31 |

Note: The interior of the case is fitted with pre-formed plastic foam to provide secure storage of the tools.





DPE Crimping tool for F7 fibre optic contact

Description

Crimping tool for capturing KEVLAR® strand on contact body.

Part number

DPE.99.003.1K ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.



WST Epoxy curing oven

Description

Oven for assisting in curing epoxy.

Part number

Voltage

WST.FR.220.VA

220 volts

WST.FR.110.VA

110 volts



DCS Polishing tool for fibre optic contacts

Description

Precision tool for polishing terminated fibre optic contacts with 1.25 mm ferrule.

Part number

DCS.91.D01.LC ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.



WST Fibre Inspection Microscope

Description

Microscope to assist in viewing termination operations and verifying fibre end finish. Zoom with 200 → 400 x magnification. See adaptor below.

Part number

WST.FB.G00.301



DCS Microscope adaptor for fibre optic contacts

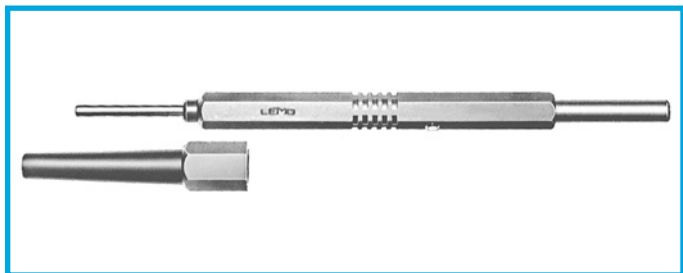
Description

Adaptor for final inspection of fibre optic contacts with 1.25 mm ferrule. To be used with microscope WST.FB.G00.301.

Part number

DCS.91.G90.6E125 ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.



DCC Extractor for F7 fibre optic contact

Description

Manual tool for the extraction of the F7 contact.

Part number

DCC.91.307.5LA ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.



DCS F7 contact alignment device tool

Description

Simple tool with two threaded end for installation/extraction of the F7 contact alignment device.

Part number

DCS.F7.035.PN ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.



WST Fibre shield for F7 fibre optic contact

Description

To protect ferrule when curing epoxy.

Part number

WST.TU.193.LN ¹⁾

Note: ¹⁾ Included in the LEMO F7 workstation.

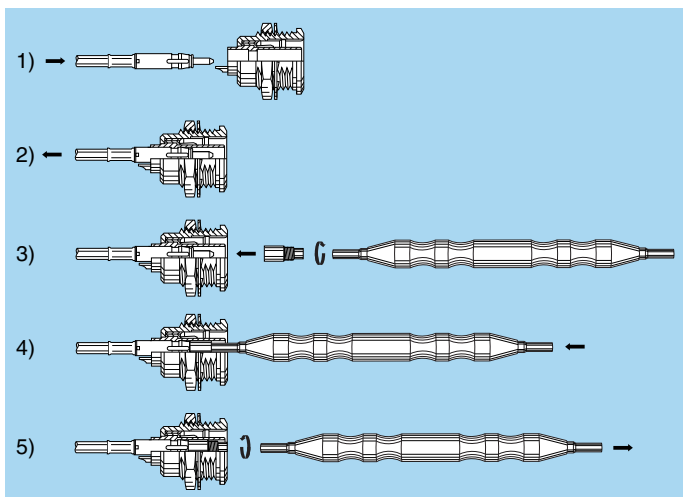
Cable Termination

Detailed instructions for terminating single fibre cables with LEMO F7 fibre optic contacts are given in the reference manual DOC.FO.CF7.0000 supplied with the complete termination workstation (see page 10). After termination contacts shall be introduced in the main insulator as shown below. For purpose of cleaning they can also be removed.

Installation of F7 contact and alignment device

Insertion

The male fibre optic contact terminated on the cable must be inserted into the connector insulator from the back end until it comes to a stop. Make sure that the contact is correctly positioned into the inner antirotation key. Key is in line with the red dot on the rear of the contact (step 1). Check that the contact is correctly retained by gently pulling on it (step 2).

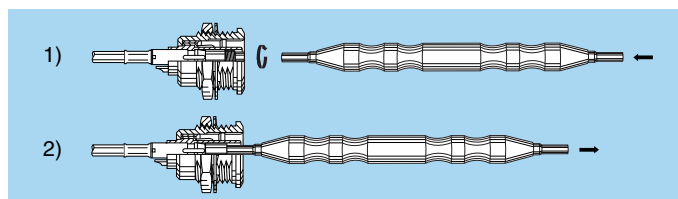


For female contacts, the alignment device shall be clipped onto the fibre optic contacts which is already fitted into female insulator. This procedure is performed using the tool, reference DCS.F7.035.PN.

The alignment device shall be first installed onto threaded end of the tool (step 3). Then clip the adapter (step 4), unscrew and remove the tool (step 5).

Extraction of alignment device

Screw the threaded end of the tool reference DCS.F7.035.PN (step 1) onto the alignment device. Pull out strongly (step 2).



Extraction of F7 contact

Possible only for fixed socket, using the manual tool DCC.91.307.5LA. Shall be made with great care.

Note: The life time installation of the alignment device is minimum 300 cycles.

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