## : ©hipsmall

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!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email \& Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, \#122 Zhenhua RD., Futian, Shenzhen, China

## M SERIES CONNECTORS RATCHET COUPLING

\# \# \#<br>.. :2 : SERIES



## Introduction

This catalogue gives the complete description of LEMO M series connectors. M series connectors are lightweight triplestart ratchet coupling type connectors designed for avionics, aerospace, military, security, motorsport and heavy duty applications.
The LEMO manufacturing programme has been extended to almost 40 series divided into 7 product families with specific mating and environmental characteristics. Each series includes a wide variety of plug, socket and coupler models, available in contact configurations adapted to all round cables. Watertight models are also available. Since LEMO connectors are perfectly screened and designed to guarantee very low resistance to shell electrical continuity, they are particularly adapted to applications where electromagnetic compatibility (EMC) is important.

## Technical Characteristics

## Materials and Treatments

| Component | Shell material code |  |  | Material (Standard) | Surface treatment ( $\mu \mathrm{m}$ ) |  |  |  | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | chrome | nickel |  | gold |  |
|  | I | X | C |  | I | X |  |  |
| Outer shell |  |  |  | Brass (UNS C 38500) | 0.3 | - | - | - |  |
|  |  |  |  | Aluminium alloy (AA 6262A or AA 6023) | - | 14 | 5 | - | 1) |
| Conical nut |  |  |  | Brass (UNS C 38500) | 0.3 | - | - | - |  |
|  |  |  |  | Aluminium alloy (AA 6262A or AA 6023) | - | 14 | 5 | - | 1) |
| Earthing crown |  |  |  | Bronze (UNS C 54400) or special brass | - | - | - | 1.5 |  |
| Coupling nut |  |  |  | Brass (UNS C 38500) | - | - | 3 | - | - |
|  |  |  |  | Aluminium alloy (AA 6262A or AA 6023) | - | 14 | 3 | - | 1) |
| Ratchet |  |  |  | Special PEEK | - |  |  |  |  |
| Hexagonal nut |  |  |  | Brass (UNS C 38500) | - | - | 3 | - |  |
|  |  |  |  | Aluminium alloy (AA 6262A or AA 6023) | - | - | 5 | - |  |
| Male crimp contact |  |  |  | Brass (UNS C 34500) | - | - | - | 1.0 | - |
| Female crimp contact |  |  |  | Bronze (UNS C 54400) | - | - | - | 1.5 | - |
| Clips |  |  |  | Cu-Be or special steel | without treatment |  |  |  |  |
| Insulator |  |  |  | PEEK | - |  |  |  |  |
| O-ring |  |  |  | Silicone | - |  |  |  |  |
|  |  |  |  | FPM/FKM (Viton®) | - |  |  |  |  |
| Sealing resin |  |  |  | Epoxy (Araldite® or Stycast®) | - |  |  |  |  |
| Cable rear seal |  |  |  | Fluorosilicone | - |  |  |  |  |
| Spring |  |  |  | Stainless steel | - |  |  |  |  |

Notes: standards for surface treatment are as follows: chrome-plated SAE AMS 2460; nickel-plated SAE AMS QQ N 290 or MIL DTL 32119; gold-plated ISO 27874. ${ }^{1)}$ anthracite colour.

## Environmental performance

| Characteristics | Value | IEC international | MIL-spec tests |
| :---: | :---: | :---: | :---: |
| Operating temperature (mated) | $-55^{\circ} \mathrm{C} /+200^{\circ} \mathrm{C}$ (HE® model: $-20^{\circ} \mathrm{C} /+80^{\circ} \mathrm{C}$ ) |  |  |
| Ingress protection index | IP 68 (at $2 \mathrm{~m}, 15 \mathrm{Hr}$ ) | IEC 60529 |  |
| Fungus | Satisfied - by material analysis |  | MIL-STD 810F-508.5 |
| Flammability | 60 sec. front and back face |  | EIA-364-104A |
| Fluid contamination ${ }^{1)}$ | Fuels, gasoline, hydraulic oils, solvents, de-icing |  | MIL-STD-810F method 504 |
| Sand and dust ${ }^{2}$ | $6 \mathrm{hr}, 55^{\circ} \mathrm{C}$, blowing < $150 \mu \mathrm{~m}$ dust |  | MIL-STD 810F-510.4 |
| Lightning strike | 10 K amps - 6 times |  | EIA-364-75 |
| Altitude-low temp ${ }^{3)}$ | $-65^{\circ} \mathrm{C} ; 40$ '000 feet and 400 VAC |  | EIA-364-105A |
| Salt fog 4) | Alum. shell (up to 500 Hr ), Brass shell ( 1000 Hr ) | IEC 60512-6 test 11f | EIA-364-26 |
| Thermal shock | 5 cycles: $-65^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$ | IEC 60512-11-4 | EIA-364-32 test condition IV |
| Altitude immersion | No moisture on contacts |  | EIA-364-03 |
| Humidity | 21 days at 95\% | IEC 60068-2 | EIA-364-31 method IV |

Note: ${ }^{1)}$ Connectors immersed at both $70^{\circ} \mathrm{C}$ and $25^{\circ} \mathrm{C}$ according to specification. Connectors are then inspected, no visual signs of damage seen.
Fuels: Kerosene, JP4, (Nato F40) at $70^{\circ} \mathrm{C}+/-2^{\circ} \mathrm{C}$. Gasoline: ASTM 4814. Hydraulic oils: Mineral oil based MIL-H-5606.
Solvents: Isopropanol. De-icing fluids: 25\% ethylene glycol.
2) No signs of damage, connectors opened and closed without difficulty. Dust or sand was not inside connector.
3) Wired mated connectors = no voltage breakdown, shell to all contacts (connected together) w/400 VAC after 1 hour at $65^{\circ} \mathrm{C}$ at $40^{\prime} 000$ feet altitude.
4) Corrosion resistance. Inspection: salt deposits shall be removed by gentle wash in running water with light brushing using soft brush.

Aluminium Shell (material code: X) max: 48 hours, (material code: I) max: 500 hours. Brass shell (material code: C) over 1000 hours.

## Electrical performance

| Characteristics | Value | IEC international | MIL-spec tests |
| :--- | :--- | :--- | :--- |
| Insulation resist. (at ambient temp.) 6 ) | $>10^{12} \Omega,>10^{10} \Omega$ (after humidity) | IEC 60512-2 test 3a | EIA-364-21 |
| Dielectric withstanding volt. (sea level) | See table page $22-23-24$ | IEC 60512-2 test 4a | EIA-364-20 |
| Contact resistance | See table below 7 ) | IEC 60512-2 test 2a | EIA-364-06 |
| Current rating | See insulator configuration page 22-23-24 | IEC 60512-3 test 5a |  |
| Shell to shell conductivity | $<1.5 \mathrm{~m} \Omega$ | IEC $60512-2-6$ | EIA-364-83 |
| Shielding effectiveness, low frequency | $\geq 80 \mathrm{~dB}$ up to 1 GHz |  | EIA-364-66 |
| Shielding effectiveness, high frequency | $\geq 70 \mathrm{~dB}(3 \mathrm{GHz}), \geq 58 \mathrm{~dB}(6 \mathrm{GHz}), \geq 40 \mathrm{~dB}(10 \mathrm{GHz})$ |  | EIA-364-66 |

Note: ${ }^{6)}$ After humidity test: 21 days at $95 \%$ RH according to IEC 60068-2. Insulation resistance measured between the contacts and contact/shell.

| Contact resistance 7) <br> IEC 60512-2 test 2a |  |  |  | Value |
| :---: | :---: | :---: | :---: | :---: |
| 0.5 | 0.7 | 0.9 | 1.3 | $\varnothing \mathrm{A}$ <br> $(\mathrm{mm})$ |
| $\leq 8.7$ | $\leq 6.1$ | $\leq 4.8$ | $\leq 3.6$ | $\mathrm{~m} \Omega$ |

Notes: ${ }^{7}$ ) after 5000 mating cycles and the salt spray test according to IEC 60512-6 test 11 f .

## Mechanical performance

| Characteristics | Value | IEC international | MIL-spec tests |
| :---: | :---: | :---: | :---: |
| Endurance | 3000 cycles | IEC 60512-5 test 9a | EIA-364-09 |
| Gunfire vibration | 25 to $2000 \mathrm{~Hz}, 3$ axis (Apache helicopter) |  | MIL-STD-810F method 519.5 |
| Vibration-Sine ${ }^{8)}$ | $30 \mathrm{~g}, 3$ axis, 12 hr |  | MIL-STD-202 method 204-G |
| Vibration-Random | $50-2000 \mathrm{~Hz}, 37.8 \mathrm{~g} \mathrm{rms}-3 \mathrm{axes} ; 4 \mathrm{~h} \mathrm{amb}$ | IEC 60512-6-4 | EIA-364-28 test cond. V letter I |
| Shock | $300 \mathrm{~g}-3 \mathrm{msec}$ | IEC 60512-6-3 | EIA-364-27 condition D |
| Acceleration | 50 g acceleration |  | MIL-STD-1344-2011-1, A |
| Contact retention | $>22 \mathrm{~N}(\varnothing 0.7 \mathrm{~mm}),>30 \mathrm{~N}(\varnothing 0.9 \mathrm{~mm})$ | IEC 60512-8 test 15a |  |
| Torque | See table below |  |  |

Note: ${ }^{8)}$ Amplitude: 30G. Frequency: 10 to 2000 Hz. Time per axis: 4 hours (X, Y, Z). No signal discontinuity above $1 \mu \mathrm{~s}$.

| Series | Coupling torque <br> tightning (N.cm) | Coupling torque <br> untightning (N.cm) | Series | Coupling torque <br> tightning (N.cm) | Coupling torque <br> untightning (N.cm) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MM | 8 | 4 |  | 26 | 30 |  |
| OM | 4 | 5 | $4 M$ | 26 | 25 |  |
| $1 M$ | 10 | 11 | LM | $48^{9)}$ | 43 |  |
| 2M | 20 | 14 | $5 M$ | $91^{9)}$ | 54 |  |
| $3 M$ | 34 | 29 |  |  |  |  |

Note: ${ }^{9)}$ Higher contact density = larger torque force.

[^0]
## M Series

The M Series connector offers a new innovative design for avionics, aerospace, military, security, motorsport and heavy duty applications.
Made of high-strength aluminium, this connector is one of the lightest and most compact of the LEMO product line. A one-grip ratchet screw system enables quick and secure coupling of the connectors. The arctic grip makes it easy to manipulate the connector while wearing gloves or when the connector is located in a difficult to access area.

Features

- Ratchet-coupling mechanism
- Compact design for space savings
- Oil and fuel resistant
$-360^{\circ}$ screening for full EMC shielding
- Colour coding / keying
- Scoop proof
- Threaded for MIL-DTL-38999L backshell
- Quick mating: less than 3/4 turn to seat
- Lightweight
- High vibration and shock resistance
- Sealed to IP68 when mated
- Reverse gender configuration
- Pin configuration from 2 to 114 contacts

Metal housing models (page 5)

Straight plugs


USB models (page 21)


Fibre optic models (page 18) Straight plugs Fixed sockets Free sockets

Watertight Fixed socket model
(unmated)



## Part Numbering System



## Part Number Example

## Straight plug:

FMN.1M.305.XLC = straight plug with key ( N ), 1M series, multipole type with 5 contacts, outer shell in anthracite nickelplated aluminium alloy, PEEK insulator, male crimp contacts.

## Straight plug:

FGN.1M.305.XLCM = straight plug with key ( N ), arctic grip, 1M series, multipole type with 5 contacts, outer shell in anthracite nickel-plated aluminium alloy, PEEK insulator, male crimp contacts and with MIL-DTL-38999L thread for additional backshell (not supplied).

## Free socket:

PMN.1M.305.XLMT = free socket with key (N), 1M series, multipole type with 5 contacts, outer shell in anthracite nickelplated aluminium alloy, PEEK insulator, female crimp contacts and mold stop.

## Fixed socket:

HEN.1M.305.XLNP = fixed socket, nut fixing, with key (N), 1M series, multipole type with 5 contacts, outer shell in anthracite nickel-plated aluminium alloy, PEEK insulator, female print contacts, watertight.

Note: ${ }^{1)}$ anthracite colour / 48 hours salt fog resistance. ${ }^{2}$ anthracite colour / 500 hours salt fog resistance RoHS 2/REACH.

## Part Section Showing Internal Components

|  | Fixed socket |
| :--- | :--- |
| (1) | outer shell |
| (2) | o-ring |
| 3 | hexagonal nut |
| 4. | insulator |
| 5 | female contact |
| 6 | earthing crown |



Straight plug


## Metal housing models



FM. Straight plug, key (N) or keys (P, R, S, T, U, V, W and X) with knurled grip

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | Ls | Lr | P | X |
| FM• | MM | 11.1 | 6.4 | 10.7 | 5.6 | 21.3 | 21.3 | 5.5 | 5.8 |
| FM• | OM | 13.1 | 8.8 | 12.7 | 8.0 | 24.1 | 24.1 | 3.9 | 6.7 |
| FM• | 1M | 14.6 | 10.5 | 14.2 | 9.7 | 24.1 | 24.1 | 3.9 | 6.7 |
| FM• | 2M | 17.6 | 14.0 | 17.2 | 13.0 | 24.5 | 24.5 | 3.9 | 7.1 |
| FM• | 3M | 19.6 | 16.0 | 19.2 | 15.0 | 24.5 | 24.5 | 3.9 | 7.1 |
| FM• | TM | 22.5 | 17.9 | 22.0 | 16.7 | 28.6 | 28.6 | 3.4 | 7.6 |
| FM• | 4M | 25.0 | 20.7 | 24.5 | 19.5 | 28.6 | 28.6 | 3.4 | 7.6 |
| FM• | LM | 28.5 | 23.9 | 28.0 | 22.7 | 28.6 | 28.6 | 3.4 | 7.6 |
| FM• | 5M | 34.0 | 29.7 | 33.5 | 28.5 | 28.6 | 28.6 | 3.4 | 7.6 |

Part number example: FMN.1M.305.XLC
Note: Ls = standard gender, Lr = reverse gender


| Reference |  | Dimensions (mm) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | Ls | Lr | P | Code ${ }^{1)}$ |
| FM• | 1M | 14.6 | 14.2 | M12x1.0 | 26.4 | 26.4 | 3.9 | A |
| FM• | 2M | 17.6 | 17.2 | M15x1.0 | 26.4 | 26.4 | 3.9 | B |
| FM• | 3M | 19.6 | 19.2 | M18x1.0 | 26.4 | 26.4 | 3.9 | C |
| FM• | TM | 22.5 | 22.0 | M18x1.0 | 30.0 | 30.0 | 3.4 | C |
| FM• | 4M | 25.0 | 24.5 | M22x1.0 | 30.0 | 30.0 | 3.4 | D |
| FM• | LM | 28.5 | 28.0 | M25x1.0 | 30.0 | 30.0 | 3.4 | E |
| FM• | 5M | 34.0 | 33.5 | M31x1.0 | 30.0 | 30.0 | 3.4 | G |

Part number example: FMN.1M.305.XLCM
Note: Ls = standard gender, Lr = reverse gender. ${ }^{1)}$ MIL-DTL-38999L shell size code (backshell not supplied).


FG• Straight plug，key（ N ）or keys（ $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ） with arctic grip

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | Ls | Lr | P | X |
| FG。 | MM | 12.0 | 6.4 | 10.7 | 5.6 | 21.3 | 21.3 | 5.5 | 5.8 |
| FG。 | OM | 14.4 | 8.8 | 12.7 | 8.0 | 24.1 | 24.1 | 3.9 | 6.7 |
| FG。 | 1M | 15.9 | 10.5 | 14.2 | 9.7 | 24.1 | 24.1 | 3.9 | 6.7 |
| FG。 | 2M | 18.9 | 14.0 | 17.2 | 13.0 | 24.5 | 24.5 | 3.9 | 7.1 |
| FG• | 3M | 20.9 | 16.0 | 19.2 | 15.0 | 24.5 | 24.5 | 3.9 | 7.1 |
| FG• | TM | 23.4 | 17.9 | 22.0 | 16.7 | 28.6 | 28.6 | 3.4 | 7.6 |
| FG• | 4M | 25.9 | 20.7 | 24.5 | 19.5 | 28.6 | 28.6 | 3.4 | 7.6 |
| FG。 | LM | 29.4 | 23.9 | 28.0 | 22.7 | 28.6 | 28.6 | 3.4 | 7.6 |
| FG。 | 5M | 34.9 | 29.7 | 33.5 | 28.5 | 28.6 | 28.6 | 3.4 | 7.6 |

Part number example：FGN．1M．305．XLC
Note：Ls＝standard gender，Lr＝reverse gender
FG• Straight plug，key（ N ）or keys（ $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ） with arctic grip and mold stop

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | F | Ls | Lr | M | P | X |
| FG。 | MM | 12.0 | 6.4 | 10.7 | 5.6 | 7.8 | 24.3 | 24.3 | 8.8 | 5.5 | 5.8 |
| FG。 | OM | 14.4 | 8.8 | 12.7 | 8.0 | 10.7 | 27.1 | 27.1 | 9.7 | 3.9 | 6.7 |
| FG• | 1M | 15.9 | 10.5 | 14.2 | 9.7 | 12.4 | 27.1 | 27.1 | 9.7 | 3.9 | 6.7 |
| FG。 | 2M | 18.9 | 14.0 | 17.2 | 13.0 | 15.5 | 27.5 | 27.5 | 10.1 | 3.9 | 7.1 |
| FG。 | 3M | 20.9 | 16.0 | 19.2 | 15.0 | 17.5 | 27.5 | 27.5 | 10.1 | 3.9 | 7.1 |
| FG。 | TM | 23.4 | 17.9 | 22.0 | 16.7 | 19.8 | 31.6 | 31.6 | 10.6 | 3.4 | 7.6 |
| FG。 | 4M | 25.9 | 20.7 | 24.5 | 19.5 | 22.6 | 31.6 | 31.6 | 10.6 | 3.4 | 7.6 |
| FG。 | LM | 29.4 | 23.9 | 28.0 | 22.7 | 25.8 | 31.6 | 31.6 | 10.6 | 3.4 | 7.6 |
| FG• | 5M | 34.9 | 29.7 | 33.5 | 28.5 | 31.4 | 31.6 | 31.6 | 10.6 | 3.4 | 7.6 |

Part number example：FGN．1M．305．XLCT
Note：Ls＝standard gender，Lr＝reverse gender
FG• Straight plug，key（ $\mathbf{N}$ ）or keys（ $\mathbf{P}, \mathbf{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ） with arctic grip and MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | Ls | Lr | P | Code ${ }^{1)}$ |
| FG。 | 1M | 15.9 | 14.2 | M12x1．0 | 26.4 | 26.4 | 3.9 | A |
| FG。 | 2M | 18.9 | 17.2 | M15x1．0 | 26.4 | 26.4 | 3.9 | B |
| FG。 | 3M | 20.9 | 19.2 | M18x1．0 | 26.4 | 26.4 | 3.9 | C |
| FG。 | TM | 23.4 | 22.0 | M18x1．0 | 30.0 | 30.0 | 3.4 | C |
| FG。 | 4M | 25.9 | 24.5 | M22x1．0 | 30.0 | 30.0 | 3.4 | D |
| FG。 | LM | 29.4 | 28.0 | M25x1．0 | 30.0 | 30.0 | 3.4 | E |
| FG。 | 5M | 34.9 | 33.5 | M31x1．0 | 30.0 | 30.0 | 3.4 | G |

Part number example：FGN．1M．305．XLCM
Note：Ls＝standard gender，Lr＝reverse gender．${ }^{1)}$ MIL－DTL－38999L shell size code （backshell not supplied）．


FXe Straight plug with square flange, key ( N ) or keys (P, R, S, T, U, V, W and X) with knurled grip

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | B | C | D | E | G | H | K | Ls | Lr | N | V |
| FX | MM | 21.5 | 11.1 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 26.1 | 26.1 | 17.0 | 2.7 |
| FX | OM | 26.9 | 13.1 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 29.1 | 29.1 | 20.6 | 2.7 |
| FX | 1M | 31.4 | 14.6 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 29.1 | 29.1 | 23.8 | 3.3 |
| FX | 2M | 34.6 | 17.6 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.3 |
| FX | 3M | 34.6 | 19.6 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.3 |
| FX | TM | 38.0 | 22.5 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 34.8 | 34.8 | 28.5 | 3.3 |
| FX | 4M | 40.3 | 25.0 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 34.8 | 34.8 | 30.1 | 3.3 |
| FX | LM | 43.7 | 28.5 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 34.8 | 34.8 | 32.5 | 3.3 |
| FX | 5M | 47.0 | 34.0 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 34.8 | 34.8 | 37.0 | 3.3 |

Part number example: FXN.1M.305.XLC
Note: The dimensions «P» and « X » are the same as the $\mathrm{FM} \bullet$ models. Ls = standard gender, Lr = reverse gender.

FX. Straight plug with square flange, key ( N ) or keys (P, R, S, T, U, V, W and X) with knurled grip and mold stop

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | B | C | D | E | G | H | K | Ls | Lr | N | V |
| FX | MM | 21.5 | 11.1 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 29.1 | 29.1 | 17.0 | 2.7 |
| FX | OM | 26.9 | 13.1 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 32.1 | 32.1 | 20.6 | 2.7 |
| FX | 1M | 31.4 | 14.6 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 32.1 | 32.1 | 23.8 | 3.3 |
| FX | 2M | 34.6 | 17.6 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.3 |
| FX | 3M | 34.6 | 19.6 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.3 |
| FX | TM | 38.0 | 22.5 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 37.8 | 37.8 | 28.5 | 3.3 |
| FX | 4M | 40.3 | 25.0 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 37.8 | 37.8 | 30.1 | 3.3 |
| FX | LM | 43.7 | 28.5 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 37.8 | 37.8 | 32.5 | 3.3 |
| FX* | 5M | 47.0 | 34.0 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 37.8 | 37.8 | 37.0 | 3.3 |

Part number example: FXN.1M.305.XLCT
Note: The dimensions «F», «M», «P» and «X» are the same as the FM॰ models. Ls = standard gender, Lr = reverse gender.

FX. Straight plug with square flange, key (N) or keys (P, R, S, T, U, V, W and X) with knurled grip and MIL-DTL-38999L shell thread

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | C | e | E | G | H | K | Ls | Lr | Code ${ }^{1)}$ |
| FX | 1M | 31.4 | 14.6 | 14.2 | M12x1.0 | 13.7 | 18.9 | 18.3 | 1.5 | 31.4 | 31.4 | A |
| FX | 2M | 34.6 | 17.6 | 17.2 | M15x1.0 | 16.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | B |
| FX | 3M | 34.6 | 19.6 | 19.2 | M18x1.0 | 18.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | C |
| FX | TM | 38.0 | 22.5 | 22.0 | M18x1.0 | 21.5 | 22.5 | 23.0 | 2.0 | 36.2 | 36.2 | C |
| FX | 4M | 40.3 | 25.0 | 24.5 | M22x1.0 | 24.0 | 22.5 | 24.6 | 2.0 | 36.2 | 36.2 | D |
| FX | LM | 43.7 | 28.5 | 28.0 | M25x1.0 | 27.5 | 22.5 | 27.0 | 2.0 | 36.2 | 36.2 | E |
| FX | 5M | 47.0 | 34.0 | 33.5 | M31x1.0 | 33.0 | 22.5 | 29.4 | 2.0 | 36.2 | 36.2 | F |

Part number example: FXN.1M.305.XLCM
Note: The dimensions « N " and " V » are the same as the $\mathrm{FX} \bullet$ models and the dimension « P » is the same as the FM• models. Ls = standard gender, Lr = reverse gender. 1) MIL-DTL-38999L shell size code (backshell not supplied).

[^1]

FW．Straight plug with square flange，key（N）or keys （P，R，S，T，U，V，W and X）with arctic grip

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | B | C | D | E | G | H | K | Ls | Lr | N | V |
| FW。 | MM | 21.5 | 12.0 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 26.1 | 26.1 | 17.0 | 2.7 |
| FW。 | OM | 26.9 | 14.4 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 29.1 | 29.1 | 20.6 | 2.7 |
| FW。 | 1M | 31.4 | 15.9 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 29.1 | 29.1 | 23.8 | 3.3 |
| FW。 | 2M | 34.6 | 18.9 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.3 |
| FW。 | 3M | 34.6 | 20.9 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.3 |
| FW。 | TM | 38.0 | 23.4 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 34.8 | 34.8 | 28.5 | 3.3 |
| FW。 | 4M | 40.3 | 25.9 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 34.8 | 34.8 | 30.1 | 3.3 |
| FW。 | LM | 43.7 | 29.4 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 34.8 | 34.8 | 32.5 | 3.3 |
| FW。 | 5M | 47.0 | 34.9 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 34.8 | 34.8 | 37.0 | 3.3 |

Part number example：FWN．1M．305．XLC
Note：The dimensions « P » and « X » are the same as the FM• models． Ls＝standard gender，Lr＝reverse gender．

FW．Straight plug with square flange，key（ N ）or keys （P，R，S，T，U，V，W and X）with arctic grip and mold stop

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | B | C | D | E | G | H | K | Ls | Lr | N | V |
| FW。 | MM | 21.5 | 12.0 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 29.1 | 29.1 | 17.0 | 2.7 |
| FW。 | OM | 26.9 | 14.4 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 32.1 | 32.1 | 20.6 | 2.7 |
| FW。 | 1M | 31.4 | 15.9 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 32.1 | 32.1 | 23.8 | 3.3 |
| FW。 | 2M | 34.6 | 18.9 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.3 |
| FW。 | 3M | 34.6 | 20.9 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.3 |
| FW。 | TM | 38.0 | 23.4 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 37.8 | 37.8 | 28.5 | 3.3 |
| FW。 | 4M | 40.3 | 25.9 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 37.8 | 37.8 | 30.1 | 3.3 |
| FW。 | LM | 43.7 | 29.4 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 37.8 | 37.8 | 32.5 | 3.3 |
| FW。 | 5M | 47.0 | 34.9 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 37.8 | 37.8 | 37.0 | 3.3 |

Part number example：FWN．1M．305．XLCT
Note：The dimensions «F»，«M»，«P» and «X» are the same as the FM• models． $\mathrm{Ls}=$ standard gender， $\mathrm{Lr}=$ reverse gender ．

FW．Straight plug with square flange，key（ N ）or keys （P，R，S，T，U，V，W and X）with arctic grip and MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | A1 | C | e | E | G | H | K | Ls | Lr | Code ${ }^{1)}$ |
| FW＊ | 1M | 31.4 | 15.9 | 14.2 | M12x1．0 | 13.7 | 18.9 | 18.3 | 1.5 | 31.4 | 31.4 | A |
| FW | 2M | 34.6 | 18.9 | 17.2 | M15x1．0 | 16.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | B |
| FW＊ | 3M | 34.6 | 20.9 | 19.2 | M18x1．0 | 18.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | C |
| FW＊ | TM | 38.0 | 23.4 | 22.0 | M18x1．0 | 21.5 | 22.5 | 23.0 | 2.0 | 36.2 | 36.2 | C |
| FW＊ | 4M | 40.3 | 25.9 | 24.5 | M22x1．0 | 24.0 | 22.5 | 24.6 | 2.0 | 36.2 | 36.2 | D |
| FW＊ | LM | 43.7 | 29.4 | 28.0 | M25x1．0 | 27.5 | 22.5 | 27.0 | 2.0 | 36.2 | 36.2 | E |
| FW＊ | 5M | 47.0 | 34.9 | 33.5 | M31x1．0 | 33.0 | 22.5 | 29.4 | 2.0 | 36.2 | 36.2 | F |

Part number example：FWN．1M．305．XLCM
Note：The dimensions＂ N ＂and＂ V ＂are the same as the FW• models and the dimen－ sion «P» is the same as the FM• models．Ls＝standard gender，Lr＝reverse gender． 1）MIL－DTL－38999L shell size code（backshell not supplied）．


FA• Straight plug with square flange, non-coupling,
key (N) or keys (P, R,S, T, U, V, W and X)

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | E | G | H | K | Ls | Lr | N | P | V |
| FA | MM | 21.5 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 26.1 | 26.1 | 17.0 | 5.5 | 2.7 |
| FA | OM | 26.9 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 29.1 | 29.1 | 20.6 | 3.9 | 2.7 |
| FA• | 1M | 31.4 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 29.1 | 29.1 | 23.8 | 3.9 | 3.3 |
| FA | 2M | 34.6 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.9 | 3.3 |
| FA | 3M | 34.6 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 29.5 | 29.5 | 26.1 | 3.9 | 3.3 |
| FA | TM | 38.0 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 34.8 | 34.8 | 28.5 | 3.4 | 3.3 |
| FA | 4M | 40.3 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 34.8 | 34.8 | 30.1 | 3.4 | 3.3 |
| FA• | LM | 43.7 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 34.8 | 34.8 | 32.5 | 3.4 | 3.3 |
| FA• | 5M | 47.0 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 34.8 | 34.8 | 37.0 | 3.4 | 3.3 |

Part number example: FAN.1M.305.XLC
Note: The dimension « X » is the same as the FM • models. Ls = standard gender, Lr = reverse gender.

FA• Straight plug with square flange, non-coupling, key ( N ) or keys ( $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ) with mold stop

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | E | G | H | K | Ls | Lr | N | P | V |
| FA• | MM | 21.5 | 6.4 | 10.7 | 5.6 | 9.5 | 17.0 | 12.0 | 1.5 | 29.1 | 29.1 | 17.0 | 5.5 | 2.7 |
| FA• | OM | 26.9 | 8.8 | 12.7 | 8.0 | 12.2 | 18.9 | 15.1 | 1.5 | 32.1 | 32.1 | 20.6 | 3.9 | 2.7 |
| FA• | 1M | 31.4 | 10.5 | 14.2 | 9.7 | 13.7 | 18.9 | 18.3 | 1.5 | 32.1 | 32.1 | 23.8 | 3.9 | 3.3 |
| FA• | 2M | 34.6 | 14.0 | 17.2 | 13.0 | 16.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.9 | 3.3 |
| FA | 3M | 34.6 | 16.0 | 19.2 | 15.0 | 18.7 | 18.9 | 20.6 | 1.5 | 32.5 | 32.5 | 26.1 | 3.9 | 3.3 |
| FA | TM | 38.0 | 17.9 | 22.0 | 16.7 | 21.5 | 22.5 | 23.0 | 2.0 | 37.8 | 37.8 | 28.5 | 3.4 | 3.3 |
| FA | 4M | 40.3 | 20.7 | 24.5 | 19.5 | 24.0 | 22.5 | 24.6 | 2.0 | 37.8 | 37.8 | 30.1 | 3.4 | 3.3 |
| FA | LM | 43.7 | 23.9 | 28.0 | 22.7 | 27.5 | 22.5 | 27.0 | 2.0 | 37.8 | 37.8 | 32.5 | 3.4 | 3.3 |
| FA• | 5M | 47.0 | 29.7 | 33.5 | 28.5 | 33.0 | 22.5 | 29.4 | 2.0 | 37.8 | 37.8 | 37.0 | 3.4 | 3.3 |

Part number example: FAN.1M.305.XLCT
Note: The dimensions «F», «M» and «X» are the same as the FM॰ models. Ls = standard gender, Lr = reverse gender.


FA. Straight plug with square flange, non-coupling, key ( N ) or keys ( $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ) with MIL-DTL-38999L shell thread

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | E | G | H | K | Ls | Lr | N | Code ${ }^{1)}$ |
| FA | 1M | 31.4 | 14.2 | M12x1.0 | 13.7 | 18.9 | 18.3 | 1.5 | 31.4 | 31.4 | 23.8 | A |
| FA | 2M | 34.6 | 17.2 | M15x1.0 | 16.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | 26.1 | B |
| FA | 3M | 34.6 | 19.2 | M18x1.0 | 18.7 | 18.9 | 20.6 | 1.5 | 31.4 | 31.4 | 26.1 | C |
| FA• | TM | 38.0 | 22.0 | M18x1.0 | 21.5 | 22.5 | 23.0 | 2.0 | 36.2 | 36.2 | 28.5 | C |
| FA | 4M | 40.3 | 24.5 | M22x1.0 | 24.0 | 22.5 | 24.6 | 2.0 | 36.2 | 36.2 | 30.1 | D |
| FA• | LM | 43.7 | 28.0 | M25x1.0 | 27.5 | 22.5 | 27.0 | 2.0 | 36.2 | 36.2 | 32.5 | E |
| FA• | 5M | 47.0 | 33.5 | M31x1.0 | 33.0 | 22.5 | 29.4 | 2.0 | 36.2 | 36.2 | 37.0 | F |

Part number example: FAN.1M.305.XLCM
Note: The dimensions " P » and « V » are the same as the FA• models.
Ls = standard gender, Lr = reverse gender. ${ }^{1}$ MIL-DTL-38999L shell size code (backshell not supplied).

[^2]

EG• Fixed socket，nut fixing，key（N）
or keys（P，R，S，T，U，V，W and X）

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | C | D | e | E | Ls | Lr | P | S1 | S2 |
| EG• | MM | 10.7 | 5.2 | M7x0．5 | 4.5 | 15.0 | 15.0 | 3.7 | 6.3 | 9.0 |
| EG• | OM | 12.7 | 6.8 | M9x0．6 | 5.0 | 18.3 | 18.3 | 5.3 | 8.2 | 11.0 |
| EG• | 1M | 14.2 | 6.8 | M11x1．0 | 4.5 | 18.3 | 18.3 | 5.3 | 9.5 | 13.0 |
| EG• | 2M | 17.2 | 6.8 | M14x1．0 | 4.5 | 18.3 | 18.3 | 5.3 | 12.5 | 17.0 |
| EG• | 3M | 19.2 | 6.8 | M16x1．0 | 4.0 | 18.3 | 18.3 | 5.3 | 14.5 | 19.0 |
| EG• | TM | 22.0 | 9.4 | M18x1．0 | 4.0 | 20.0 | 21.9 | 7.9 | 16.5 | 22.0 |
| EG• | 4M | 24.5 | 9.4 | M21x1．0 | 4.0 | 20.0 | 21.9 | 7.9 | 19.5 | 25.0 |
| EG• | LM | 28.0 | 9.4 | M24x1．0 | 4.0 | 20.0 | 21.9 | 7.9 | 22.5 | 30.0 |
| EG• | 5M | 33.5 | 9.4 | M30x1．0 | 4.0 | 20.0 | 21.9 | 7.9 | 28.5 | 36.0 |

Part number example：EGN．1M．305．XLM
Panel cut－out（page 31）．
Note：Ls＝standard gender，Lr＝reverse gender
EG• Fixed socket，nut fixing，key（N） or keys（P，R，S，T，U，V，W and X）for printed circuit

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | C | D | e | E | G | Ls | Lr | P | S1 | S2 |
| EG。 | MM | 10.7 | 5.2 | M7x0．5 | 4.5 | 13.8 | 15.0 | 15.0 | 3.7 | 6.3 | 9.0 |
| EG。 | OM | 12.7 | 6.8 | M9x0．6 | 5.0 | 16.8 | 18.3 | 18.3 | 5.3 | 8.2 | 11.0 |
| EG• | 1M | 14.2 | 6.8 | M11x1．0 | 4.5 | 16.8 | 18.3 | 18.3 | 5.3 | 9.5 | 13.0 |
| EG• | 2M | 17.2 | 6.8 | M14x1．0 | 4.5 | 16.8 | 18.3 | 18.3 | 5.3 | 12.5 | 17.0 |
| EG• | 3M | 19.2 | 6.8 | M16x1．0 | 4.0 | 16.8 | 18.3 | 18.3 | 5.3 | 14.5 | 19.0 |
| EG• | TM | 22.0 | 9.4 | M18x1．0 | 4.0 | 18.9 | 20.0 | 21.9 | 7.9 | 16.5 | 22.0 |
| EG• | 4M | 24.5 | 9.4 | M21x1．0 | 4.0 | 18.9 | 20.0 | 21.9 | 7.9 | 19.5 | 25.0 |
| EG• | LM | 28.0 | 9.4 | M24x1．0 | 4.0 | 18.9 | 20.0 | 21.9 | 7.9 | 22.5 | 30.0 |
| EG。 | 5M | 33.5 | 9.4 | M30x1．0 | 4.0 | 18.9 | 20.0 | 21.9 | 7.9 | 28.5 | 36.0 |

Part number example：EGN．1M．305．XLN
Panel cut－out（page 31）．PCB drilling pattern（page 32）．
Note：Ls＝standard gender，Lr＝reverse gender
EC．Fixed socket with two nuts，key（N） or keys（P，R，S，T，U，V，W and X）

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | E | e | G | Ls | Lr | P | S1 | S2 | S3 |
| EC• | MM | 14 | 2.85 | 13.5 | 5.0 | M10x0．50 | 13.8 | 15.0 | 15.0 | 3.7 | 9.0 | 11.0 | 12.0 |
| EC• | OM | 17 | 4.72 | 18.2 | 5.0 | M13x0．75 | 16.8 | 18.3 | 18.3 | 5.3 | 11.5 | 14.0 | 16.0 |
| EC• | 1M | 18 | 5.95 | 19.2 | 5.0 | M14x1．00 | 16.8 | 18.3 | 18.3 | 5.3 | 12.5 | 16.0 | 17.0 |
| EC• | 2M | 21 | 8.95 | 21.5 | 4.0 | M17x1．00 | 16.8 | 18.3 | 18.3 | 5.3 | 15.5 | 18.0 | 19.0 |
| EC• | 3M | 23 | 10.95 | 25.0 | 4.0 | M19x1．00 | 16.8 | 18.3 | 18.3 | 5.3 | 17.5 | 20.0 | 22.0 |
| EC• | TM | 27 | 12.30 | 28.0 | 2.5 | M22x1．00 | 18.9 | 20.0 | 21.9 | 7.9 | 20.5 | 23.0 | 25.0 |
| EC• | 4M | 29 | 13.95 | 34.0 | 2.5 | M24x1．00 | 18.9 | 20.0 | 21.9 | 7.9 | 22.5 | 25.0 | 30.0 |
| EC• | LM | 33 | 17.95 | 36.0 | 2.5 | M28x1．00 | 18.9 | 20.0 | 21.9 | 7.9 | 26.5 | 29.0 | 32.0 |
| EC• | 5M | 38 | 22.90 | 41.0 | 2.5 | M33x1．00 | 18.9 | 20.0 | 21.9 | 7.9 | 31.5 | 34.0 | 37.0 |

Part number example：ECN．1M．305．XLM
Panel cut－out（page 31）．
Note：Ls＝standard gender，Lr＝reverse gender．
This model is not IP68（no panel sealing）．

[^3] formation．However，LEMO cannot be held responsible for any errors．LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice．


EC. Fixed socket with two nuts, key ( N ) or keys (P, R, S, T, U, V, W and X) for printed circuit

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | E | e | G | Ls | Lr | P | S1 | S2 | S3 |
| EC | MM | 14 | 2.85 | 13.5 | 5.0 | M10x0.50 | 13.8 | 15.0 | 15.0 | 3.7 | 9.0 | 11.0 | 12.0 |
| EC• | OM | 17 | 4.72 | 18.2 | 5.0 | M13x0.75 | 16.8 | 18.3 | 18.3 | 5.3 | 11.5 | 14.0 | 16.0 |
| EC | 1M | 18 | 5.95 | 19.2 | 5.0 | M14x1.00 | 16.8 | 18.3 | 18.3 | 5.3 | 12.5 | 16.0 | 17.0 |
| EC• | 2M | 21 | 8.95 | 21.5 | 4.0 | M17x1.00 | 16.8 | 18.3 | 18.3 | 5.3 | 15.5 | 18.0 | 19.0 |
| EC• | 3M | 23 | 10.95 | 25.0 | 4.0 | M19x1.00 | 16.8 | 18.3 | 18.3 | 5.3 | 17.5 | 20.0 | 22.0 |
| EC | TM | 27 | 12.30 | 28.0 | 2.5 | M22x1.00 | 18.9 | 20.0 | 21.9 | 7.9 | 20.5 | 23.0 | 25.0 |
| EC | 4M | 29 | 13.95 | 34.0 | 2.5 | M24x1.00 | 18.9 | 20.0 | 21.9 | 7.9 | 22.5 | 25.0 | 30.0 |
| EC• | LM | 33 | 17.95 | 36.0 | 2.5 | M28x1.00 | 18.9 | 20.0 | 21.9 | 7.9 | 26.5 | 29.0 | 32.0 |
| EC. | 5M | 38 | 22.90 | 41.0 | 2.5 | M33x1.00 | 18.9 | 20.0 | 21.9 | 7.9 | 31.5 | 34.0 | 37.0 |

Part number example: ECN.1M.305.XLN
Panel cut-out (page 31). PCB drilling pattern (page 32).
Note: Ls = standard gender, Lr = reverse gender.
This model is not IP68 (no panel sealing).


ED. Fixed socket with square flange, key ( N ) or keys (P, R, S, T, U, V, W and X)

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | G | H | K | Ls | Lr | N | P | V |
| ED. | MM | 18.6 | 4.70 | 10.7 | 12.3 | 9.5 | 1.5 | 17.0 | 17.0 | 14.5 | 3.7 | 2.7 |
| ED• | OM | 20.6 | 4.72 | 12.7 | 12.8 | 11.0 | 1.5 | 18.3 | 18.3 | 16.0 | 5.3 | 2.7 |
| ED• | 1M | 23.8 | 5.95 | 14.2 | 12.8 | 12.9 | 1.5 | 18.3 | 18.3 | 18.4 | 5.3 | 3.3 |
| ED• | 2M | 26.9 | 8.95 | 17.2 | 12.8 | 15.1 | 1.5 | 18.3 | 18.3 | 20.6 | 5.3 | 3.3 |
| ED• | 3M | 29.0 | 10.95 | 19.2 | 12.8 | 16.6 | 1.5 | 18.3 | 18.3 | 22.1 | 5.3 | 3.3 |
| ED• | TM | 31.4 | 12.30 | 22.0 | 14.5 | 18.3 | 2.0 | 20.0 | 21.9 | 23.8 | 7.9 | 3.3 |
| ED• | 4M | 34.6 | 13.95 | 24.5 | 14.5 | 20.6 | 2.0 | 20.0 | 21.9 | 26.1 | 7.9 | 3.3 |
| ED• | LM | 38.0 | 17.95 | 28.0 | 14.5 | 23.0 | 2.0 | 20.0 | 21.9 | 28.5 | 7.9 | 3.3 |
| ED• | 5M | 43.7 | 22.90 | 33.5 | 14.5 | 27.0 | 2.0 | 20.0 | 21.9 | 32.5 | 7.9 | 3.3 |

Part number example: EDN.1M.305.XLM
Panel cut-out (page 31)
Note: Ls = standard gender, Lr = reverse gender


ED. Fixed socket with square flange, key ( N ) or keys (P, R, S, T, U, V, W and X) for printed circuit

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | G | H | K | Ls | Lr | N | P | V |
| ED• | MM | 18.6 | 4.70 | 10.7 | 12.3 | 9.5 | 1.5 | 17.0 | 17.0 | 14.5 | 3.7 | 2.7 |
| ED• | OM | 20.6 | 4.72 | 12.7 | 12.8 | 11.0 | 1.5 | 18.3 | 18.3 | 16.0 | 5.3 | 2.7 |
| ED• | 1M | 23.8 | 5.95 | 14.2 | 12.8 | 12.9 | 1.5 | 18.3 | 18.3 | 18.4 | 5.3 | 3.3 |
| ED• | 2M | 26.9 | 8.95 | 17.2 | 12.8 | 15.1 | 1.5 | 18.3 | 18.3 | 20.6 | 5.3 | 3.3 |
| ED• | 3M | 29.0 | 10.95 | 19.2 | 12.8 | 16.6 | 1.5 | 18.3 | 18.3 | 22.1 | 5.3 | 3.3 |
| ED• | TM | 31.4 | 12.30 | 22.0 | 14.5 | 18.3 | 2.0 | 20.0 | 21.9 | 23.8 | 7.9 | 3.3 |
| ED• | 4M | 34.6 | 13.95 | 24.5 | 14.5 | 20.6 | 2.0 | 20.0 | 21.9 | 26.1 | 7.9 | 3.3 |
| ED• | LM | 38.0 | 17.95 | 28.0 | 14.5 | 23.0 | 2.0 | 20.0 | 21.9 | 28.5 | 7.9 | 3.3 |
| ED• | 5M | 43.7 | 22.90 | 33.5 | 14.5 | 27.0 | 2.0 | 20.0 | 21.9 | 32.5 | 7.9 | 3.3 |

Part number example: EDN.1M.305.XLN
Panel cut-out (page 31). PCB drilling pattern (page 32).
Note: Ls = standard gender, Lr = reverse gender

[^4] formation. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.


PE• Fixed socket，nut fixing，key（ N ）or keys（P，R，S，T，U，V， W and $\mathbf{X}$ ）with mold stop（back panel mounting）

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | E | e | Ls | Lr | M | P | R | S1 | S2 |
| PE． | MM | 14 | 6.4 | 13.8 | 5.6 | 4.0 | M10x0．50 | 21.4 | 21.4 | 8.8 | 3.7 | 10.5 | 9.0 | 1 |
| PE＊ | OM | 17 | 8.8 | 16.8 | 8.0 | 5.0 | M13x0．75 | 25.6 | 25.6 | 9.7 | 5.3 | 13.8 | 11.5 | 14 |
| PE． | 1M | 18 | 10.5 | 17.8 | 9.7 | 5.0 | M14x1．00 | 25.6 | 25.6 | 9.7 | 5.3 | 13.8 | 12.5 | 16 |
| PE． | 2M | 21 | 14.0 | 20.8 | 13.0 | 5.0 | M17x1．00 | 26.0 | 26.0 | 10.1 | 5.3 | 13.8 | 15.5 | 18 |
| PE． | 3M | 23 | 16.0 | 22.8 | 15.0 | 5.0 | M19x1．00 | 26.0 | 26.0 | 10.1 | 5.3 | 13.8 | 17.5 | 20 |
| PE． | TM | 27 | 17.9 | 25.8 | 16.7 | 4.0 | M22x1．00 | 29.5 | 30.1 | 10.6 | 7.9 | 16.9 | 20.5 | 23 |
| PE． | 4M | 29 | 20.7 | 27.8 | 19.5 | 4.0 | M24x1．00 | 29.5 | 30.1 | 10.6 | 7.9 | 16.9 | 22.5 | 25 |
| PE• | LM | 33 | 23.9 | 31.8 | 22.7 | 4.0 | M28x1．00 | 29.5 | 30.1 | 10.6 | 7.9 | 16.9 | 26.5 | 29 |
| PE． | 5M | 38 | 29.7 | 36.8 | 28.5 | 4.0 | M33x1．00 | 29.5 | 30.1 | 10.6 | 7.9 | 16.9 | 31.5 | 34 |

Part number example：PEN．1M．305．XLMT
Panel cut－out（page 31）．
Note：this model is only available with mold stop．The dimensions «F» and «X» are the same as the PB• models．Ls＝standard gender，Lr＝reverse gender．

PE．Fixed socket，nut fixing，key（N）or keys（P，R，S，T，U，V， W and X）with MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | E | e | e1 | Ls | Lr | R | S1 | S2 | Code ${ }^{1)}$ |
| PE． | 1M | 18 | 17.8 | 5.0 | M14x1．0 | M12x1．0 | 26.4 | 26.4 | 13.8 | 12.5 | 16 | A |
| PE | 2M | 21 | 20.8 | 5.0 | M17x1．0 | M15x1．0 | 26.4 | 26.4 | 13.8 | 15.5 | 18 | B |
| PE． | 3M | 23 | 22.8 | 5.0 | M19x1．0 | M18x1．0 | 26.4 | 26.4 | 13.8 | 17.5 | 20 | C |
| PE． | TM | 27 | 25.8 | 4.0 | M22x1．0 | M18x1．0 | 28.2 | 30.1 | 16.9 | 20.5 | 23 | C |
| PE． | 4M | 29 | 27.8 | 4.0 | M24x1．0 | M22x1．0 | 28.2 | 30.1 | 16.9 | 22.5 | 25 | D |
| PE． | LM | 33 | 31.8 | 4.0 | M28x1．0 | M25x1．0 | 28.2 | 30.1 | 16.9 | 26.5 | 29 | E |
| PE． | 5M | 38 | 36.8 | 4.0 | M33x1．0 | M31x1．0 | 28.2 | 30.1 | 16.9 | 31.5 | 34 | G |

Part number example：PEN．1M．305．XLMM
Panel cut－out（page 31）．
Note：Ls＝standard gender，Lr＝reverse gender．The dimension «P» is the same as the PB• models．${ }^{1)}$ MIL－DTL－38999L shell size code（backshell not supplied）．

PF• Fixed socket with square flange，key（ N ） or keys（ $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ）with mold stop

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | E | F | G | H | K | N | Ss | Sr | V |
| PF。 | MM | 18.6 | 6.4 | 10.7 | 5.6 | 7.8 | 7.8 | 12.3 | 9.5 | 1.5 | 14.5 | 10.6 | 10.6 | 2.7 |
| PF。 | OM | 20.6 | 8.8 | 12.7 | 8.0 | 10.7 | 10.7 | 12.8 | 11.0 | 1.5 | 16.0 | 11.3 | 11.3 | 2.7 |
| PF。 | 1M | 23.8 | 10.5 | 14.2 | 9.7 | 12.4 | 12.4 | 12.8 | 12.9 | 1.5 | 18.4 | 11.3 | 11.3 | 3.3 |
| PF＊ | 2M | 26.9 | 14.0 | 17.2 | 13.0 | 15.5 | 15.5 | 12.8 | 15.1 | 1.5 | 20.6 | 11.7 | 11.7 | 3.3 |
| PF。 | 3M | 29.0 | 16.0 | 19.2 | 15.0 | 17.5 | 17.5 | 12.8 | 16.6 | 1.5 | 22.1 | 11.7 | 11.7 | 3.3 |
| PF。 | TM | 31.4 | 17.9 | 22.0 | 16.7 | 19.8 | 19.8 | 14.5 | 18.3 | 2.0 | 23.8 | 13.0 | 13.6 | 3.3 |
| PF。 | 4M | 34.6 | 20.7 | 24.5 | 19.5 | 22.6 | 22.6 | 14.5 | 20.6 | 2.0 | 26.1 | 13.0 | 13.6 | 3.3 |
| PF。 | LM | 38.0 | 23.9 | 28.0 | 22.7 | 25.8 | 25.8 | 14.5 | 23.0 | 2.0 | 28.5 | 13.0 | 13.6 | 3.3 |
| PF＊ | 5M | 47.0 | 29.7 | 33.5 | 28.5 | 33.0 | 31.4 | 14.5 | 29.4 | 2.0 | 37.0 | 13.0 | 13.6 | 3.3 |

Part number example：PFN．1M．305．XLMT
Panel cut－out（page 31）．
Note：this model is only available with mold stop．The dimensions «M»，«P» and «X» are the same as the $\mathrm{PB} \bullet$ models． $\mathrm{Ss}=$ standard gender， $\mathrm{Sr}=$ reverse gender．

[^5]

PFe Fixed socket with square flange，key（ N ）or keys（ $\mathrm{P}, \mathrm{R}, \mathrm{S}$ ， T，U，V，W and X）with MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | E | G | H | K | N | Ss | Sr | Code ${ }^{1)}$ |
| PF。 | 1M | 23.8 | 14.2 | M12x1．0 | 12.4 | 12.8 | 12.9 | 1.5 | 18.4 | 12.2 | 12.2 | A |
| PF。 | 2M | 26.9 | 17.2 | M15x1．0 | 15.5 | 12.8 | 15.1 | 1.5 | 20.6 | 12.2 | 12.2 | B |
| PF。 | 3M | 29.0 | 19.2 | M18x1．0 | 17.5 | 12.8 | 16.6 | 1.5 | 22.1 | 12.2 | 12.2 | C |
| PF＊ | TM | 31.4 | 22.0 | M18x1．0 | 19.8 | 14.5 | 18.3 | 2.0 | 23.8 | 11.7 | 13.6 | C |
| PF。 | 4M | 34.6 | 24.5 | M22x1．0 | 22.6 | 14.5 | 20.6 | 2.0 | 26.1 | 11.7 | 13.6 | D |
| PF＊ | LM | 38.0 | 28.0 | M25x1．0 | 25.8 | 14.5 | 23.0 | 2.0 | 28.5 | 11.7 | 13.6 | E |
| PF• | 5M | 47.0 | 33.5 | M31x1．0 | 33.0 | 14.5 | 29.4 | 2.0 | 37.0 | 11.7 | 13.6 | G |

Part number example：PFN．1M．305．XLMM
Panel cut－out（page 31）．
Note：The dimension « P » is the same as the $\mathrm{PB} \bullet$ models． $\mathrm{Ss}=$ standard gender， $\mathrm{Sr}=$ reverse gender．${ }^{1)}$ MIL－DTL－38999L shell size code（backshell not supplied）．


PB．Fixed socket with antivibration flange，key（N） or keys（P，R，S，T，U，V，W and X）， 2 holes fixing

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | G | H | N | P | Ss | Sr | X |
| PB． | MM | 21.0 | 6.4 | 11.3 | 5.6 | 6.7 | 16.2 | 12.5 | 3.7 | 13.2 | 13.2 | 5.8 |
| PB• | OM | 27.0 | 8.8 | 14.5 | 8.0 | 8.3 | 21.4 | 16.0 | 5.3 | 15.3 | 15.3 | 6.7 |
| PB． | 1M | 29.0 | 10.5 | 16.5 | 9.7 | 8.3 | 23.4 | 18.0 | 5.3 | 15.3 | 15.3 | 6.7 |
| PB• | 2M | 32.0 | 14.0 | 19.5 | 13.0 | 8.3 | 26.4 | 21.0 | 5.3 | 15.7 | 15.7 | 7.1 |
| PB• | 3M | 35.0 | 16.0 | 21.5 | 15.0 | 8.3 | 29.0 | 23.0 | 5.3 | 15.7 | 15.7 | 7.1 |
| PB． | TM | 38.5 | 17.9 | 24.5 | 16.7 | 11.0 | 32.5 | 26.0 | 7.9 | 15.2 | 17.1 | 7.6 |
| PB• | 4M | 41.0 | 20.7 | 27.5 | 19.5 | 11.0 | 35.0 | 29.0 | 7.9 | 15.2 | 17.1 | 7.6 |
| PB． | LM | 44.0 | 23.9 | 30.5 | 22.7 | 11.0 | 38.0 | 32.0 | 7.9 | 15.2 | 17.1 | 7.6 |
| PB． | 5M | 51.0 | 29.7 | 37.5 | 28.5 | 11.0 | 45.0 | 39.0 | 7.9 | 15.2 | 17.1 | 7.6 |

Part number example：PBN．1M．305．XLM
Panel cut－out（page 31）．
Note：Ss＝standard gender， $\mathrm{Sr}=$ reverse gender


PB．Fixed socket with antivibration flange，key（ N ）or keys （ $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X）， 2 holes fixing with mold stop

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | F | G | H | M | N | P | Ss | Sr | X |
| PB• | MM | 21.0 | 6.4 | 11.3 | 5.6 | 7.8 | 6.7 | 16.2 | 8.8 | 12.5 | 3.7 | 16.2 | 16.2 | 5.8 |
| PB• | OM | 27.0 | 8.8 | 14.5 | 8.0 | 10.7 | 8.3 | 21.4 | 9.7 | 16.0 | 5.3 | 18.3 | 18.3 | 6.7 |
| PB． | 1M | 29.0 | 10.5 | 16.5 | 9.7 | 12.4 | 8.3 | 23.4 | 9.7 | 18.0 | 5.3 | 18.3 | 18.3 | 6.7 |
| PB． | 2M | 32.0 | 14.0 | 19.5 | 13.0 | 15.5 | 8.3 | 26.4 | 10.1 | 21.0 | 5.3 | 18.7 | 18.7 | 7.1 |
| PB． | 3M | 35.0 | 16.0 | 21.5 | 15.0 | 17.5 | 8.3 | 29.0 | 10.1 | 23.0 | 5.3 | 18.7 | 18.7 | 7.1 |
| PB• | TM | 38.5 | 17.9 | 24.5 | 16.7 | 19.8 | 11.0 | 32.5 | 10.6 | 26.0 | 7.9 | 18.2 | 18.2 | 7.6 |
| PB• | 4M | 41.0 | 20.7 | 27.5 | 19.5 | 22.6 | 11.0 | 35.0 | 10.6 | 29.0 | 7.9 | 18.2 | 18.2 | 7.6 |
| PB• | LM | 44.0 | 23.9 | 30.5 | 22.7 | 25.8 | 11.0 | 38.0 | 10.6 | 32.0 | 7.9 | 18.2 | 18.2 | 7.6 |
| PB• | 5M | 51.0 | 29.7 | 37.5 | 28.5 | 31.4 | 11.0 | 45.0 | 10.6 | 39.0 | 7.9 | 18.2 | 18.2 | 7.6 |

Part number example：PBN．1M．305．XLMT
Panel cut－out（page 31）．
Note： $\mathrm{Ss}=$ standard gender， $\mathrm{Sr}=$ reverse gender

[^6] formation．However，LEMO cannot be held responsible for any errors．LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice．


PB．Fixed socket with antivibration flange，key（N） or keys（P，R，S，T，U，V，W and X）， 2 holes fixing with MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | G | H | N | P | Ss | Sr | Code ${ }^{1)}$ |
| PB． | 1M | 29.0 | 16.5 | M12x1．0 | 8.3 | 23.4 | 18.0 | 5.3 | 17.2 | 17.2 | A |
| PB． | 2M | 32.0 | 19.5 | M15x1．0 | 8.3 | 26.4 | 21.0 | 5.3 | 17.2 | 17.2 | B |
| PB． | 3M | 35.0 | 21.5 | M18x1．0 | 8.3 | 29.0 | 23.0 | 5.3 | 17.2 | 17.2 | C |
| PB． | TM | 38.5 | 24.5 | M18x1．0 | 11.0 | 32.5 | 26.0 | 7.9 | 16.2 | 17.1 | C |
| PB． | 4M | 41.0 | 27.5 | M22x1．0 | 11.0 | 35.0 | 29.0 | 7.9 | 16.2 | 17.1 | D |
| PB． | LM | 44.0 | 30.5 | M25x1．0 | 11.0 | 38.0 | 32.0 | 7.9 | 16.2 | 17.1 | E |
| PB． | 5M | 51.0 | 37.5 | M31x1．0 | 11.0 | 45.0 | 39.0 | 7.9 | 16.2 | 17.1 | G |

Part number example：PBN．1M．305．XLMM
Panel cut－out（page 31）．
Note：Ss＝standard gender， $\mathrm{Sr}=$ reverse gender．${ }^{1)}$ MIL－DTL－38999L shell size code （backshell not supplied）．

## PV．Fixed socket with antivibration square flange，key（N）

 or keys（P，R，S，T，U，V，W and X）| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | G | H | N | P | Ss | Sr | V | X |
| PV． | MM | 21.5 | 6.4 | 11.3 | 5.6 | 6.7 | 12.0 | 17.0 | 3.7 | 13.2 | 13.2 | 2.7 | 5.8 |
| PV。 | OM | 26.9 | 8.8 | 14.5 | 8.0 | 8.3 | 15.1 | 20.6 | 5.3 | 15.3 | 15.3 | 2.7 | 6.7 |
| PV。 | 1M | 31.4 | 10.5 | 16.5 | 9.7 | 8.3 | 18.3 | 23.8 | 5.3 | 15.3 | 15.3 | 3.3 | 6.7 |
| PV• | 2M | 34.6 | 14.0 | 19.5 | 13.0 | 8.3 | 20.6 | 26.1 | 5.3 | 15.7 | 15.7 | 3.3 | 7.1 |
| PV | 3M | 38.0 | 16.0 | 21.5 | 15.0 | 8.3 | 23.0 | 28.5 | 5.3 | 15.7 | 15.7 | 3.3 | 7.1 |
| PV | TM | 40.3 | 17.9 | 24.5 | 16.7 | 11.0 | 24.6 | 30.1 | 7.9 | 15.2 | 17.1 | 3.3 | 7.6 |
| PV＊ | 4M | 43.7 | 20.7 | 27.5 | 19.5 | 11.0 | 27.0 | 32.5 | 7.9 | 15.2 | 17.1 | 3.3 | 7.6 |
| PV | LM | 47.1 | 23.9 | 30.5 | 22.7 | 11.0 | 29.4 | 34.9 | 7.9 | 15.2 | 17.1 | 3.3 | 7.6 |
| PV。 | 5M | 54.9 | 29.7 | 37.5 | 28.5 | 11.0 | 34.9 | 40.4 | 7.9 | 15.2 | 17.1 | 3.3 | 7.6 |

Part number example：PVN．1M．305．XLM
Panel cut－out（page 31）．
Note：Ss＝standard gender， $\mathrm{Sr}=$ reverse gender

## PV．Fixed socket with antivibration square flange，key（ N ）

 or keys（P，R，S，T，U，V，W and X）with mold stop| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | F | G | H | M | N | P | Ss | Sr | X |
| PV。 | MM | 21.5 | 6.4 | 11.3 | 5.6 | 7.8 | 6.7 | 12.0 | 8.8 | 17.0 | 3.7 | 16.2 | 16.2 | 5.8 |
| PV。 | OM | 26.9 | 8.8 | 14.5 | 8.0 | 10.7 | 8.3 | 15.1 | 9.7 | 20.6 | 5.3 | 18.3 | 18.3 | 6.7 |
| PV。 | 1M | 31.4 | 10.5 | 16.5 | 9.7 | 12.4 | 8.3 | 18.3 | 9.7 | 23.8 | 5.3 | 18.3 | 18.3 | 6.7 |
| PV• | 2M | 34.6 | 14.0 | 19.5 | 13.0 | 15.5 | 8.3 | 20.6 | 10.1 | 26.1 | 5.3 | 18.7 | 18.7 | 7.1 |
| PV。 | 3M | 38.0 | 16.0 | 21.5 | 15.0 | 17.5 | 8.3 | 23.0 | 10.1 | 28.5 | 5.3 | 18.7 | 18.7 | 7.1 |
| PV | TM | 40.3 | 17.9 | 24.5 | 16.7 | 19.8 | 11.0 | 24.6 | 10.6 | 30.1 | 7.9 | 18.2 | 18.2 | 7.6 |
| PV | 4M | 43.7 | 20.7 | 27.5 | 19.5 | 22.6 | 11.0 | 27.0 | 10.6 | 32.5 | 7.9 | 18.2 | 18.2 | 7.6 |
| PV。 | LM | 47.1 | 23.9 | 30.5 | 22.7 | 25.8 | 11.0 | 29.4 | 10.6 | 34.9 | 7.9 | 18.2 | 18.2 | 7.6 |
| PV。 | 5M | 54.9 | 29.7 | 37.5 | 28.5 | 31.4 | 11.0 | 34.9 | 10.6 | 40.4 | 7.9 | 18.2 | 18.2 | 7.6 |

Part number example：PVN．1M．305．XLMT
Panel cut－out（page 31）．
Note：Ss＝standard gender， $\mathrm{Sr}=$ reverse gender ．
The dimension «V» is the same as the $\mathrm{PV} \bullet$ models without mold stop．

[^7]

## PV．Fixed socket with antivibration square flange，key（ $\mathbf{N}$ ） or keys（P，R，S，T，U，V，W and X） with MIL－DTL－38999L shell thread

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | G | H | N | P | Ss | Sr | V | Code ${ }^{1}$ |
| PV。 | 1M | 31.4 | 16.5 | M12x1．0 | 8.3 | 18.3 | 23.8 | 5.3 | 17.2 | 17.2 | 3.3 | A |
| PV | 2M | 34.6 | 19.5 | M15x1．0 | 8.3 | 20.6 | 26.1 | 5.3 | 17.2 | 17.2 | 3.3 | B |
| PV | 3M | 38.0 | 21.5 | M18x1．0 | 8.3 | 23.0 | 28.5 | 5.3 | 17.2 | 17.2 | 3.3 | C |
| PV。 | TM | 40.3 | 24.5 | M18x1．0 | 11.0 | 24.6 | 30.1 | 7.9 | 16.2 | 17.1 | 3.3 | C |
| PV。 | 4M | 43.7 | 27.5 | M22x1．0 | 11.0 | 27.0 | 32.5 | 7.9 | 16.2 | 17.1 | 3.3 | D |
| PV。 | LM | 47.1 | 30.5 | M25x1．0 | 11.0 | 29.4 | 34.9 | 7.9 | 16.2 | 17.1 | 3.3 | E |
| PV。 | 5M | 54.9 | 37.5 | M31x1．0 | 11.0 | 34.9 | 40.4 | 7.9 | 16.2 | 17.1 | 3.3 | G |

Part number example：PVN．1M．305．XLMM
Panel cut－out（page 31）．
Note：Ss＝standard gender， $\mathrm{Sr}=$ reverse gender．${ }^{1)}$ MIL－DTL－38999L shell size code （backshell not supplied）．


PM• Free socket，key（ N ）or keys（ $\mathrm{P}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}, \mathrm{V}, \mathrm{W}$ and X ） with knurled grip

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | Ls | Lr | P | X |
| PM• | MM | 11.1 | 6.4 | 10.7 | 5.6 | 21.4 | 21.4 | 3.7 | 5.8 |
| PM• | OM | 13.1 | 8.8 | 12.7 | 8.0 | 25.6 | 25.6 | 5.3 | 6.7 |
| PM• | 1M | 14.6 | 10.5 | 14.2 | 9.7 | 25.6 | 25.6 | 5.3 | 6.7 |
| PM• | 2M | 17.6 | 14.0 | 17.2 | 13.0 | 26.0 | 26.0 | 5.3 | 7.1 |
| PM• | 3M | 19.6 | 16.0 | 19.2 | 15.0 | 26.0 | 26.0 | 5.3 | 7.1 |
| PM• | TM | 22.5 | 17.9 | 22.0 | 16.7 | 28.2 | 30.1 | 7.9 | 7.6 |
| PM• | 4M | 25.0 | 20.7 | 24.5 | 19.5 | 28.2 | 30.1 | 7.9 | 7.6 |
| PM• | LM | 28.5 | 23.9 | 28.0 | 22.7 | 28.2 | 30.1 | 7.9 | 7.6 |
| PM• | 5M | 34.0 | 29.7 | 33.5 | 28.5 | 28.2 | 30.1 | 7.9 | 7.6 |

Part number example：PMN．1M．305．XLM
Note：Ls＝standard gender，Lr＝reverse gender


PM－Free socket，key（ N ）or keys（P，R，S，T，U，V，W and X） with knurled grip and mold stop

| Reference |  | Dimensions（mm） |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | F | Ls | Lr | M | P | X |
| PM• | MM | 11.1 | 6.4 | 10.7 | 5.6 | 7.8 | 24.4 | 24.4 | 8.8 | 3.7 | 5.8 |
| PM• | OM | 13.1 | 8.8 | 12.7 | 8.0 | 10.7 | 28.6 | 28.6 | 9.7 | 5.3 | 6.7 |
| PM• | 1M | 14.6 | 10.5 | 14.2 | 9.7 | 12.4 | 28.6 | 28.6 | 9.7 | 5.3 | 6.7 |
| PM• | 2M | 17.6 | 14.0 | 17.2 | 13.0 | 15.5 | 29.0 | 29.0 | 10.1 | 5.3 | 7.1 |
| PM• | 3M | 19.6 | 16.0 | 19.2 | 15.0 | 17.5 | 29.0 | 29.0 | 10.1 | 5.3 | 7.1 |
| PM• | TM | 22.5 | 17.9 | 22.0 | 16.7 | 19.8 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PM• | 4M | 25.0 | 20.7 | 24.5 | 19.5 | 22.6 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PM• | LM | 28.5 | 23.9 | 28.0 | 22.7 | 25.8 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PM• | 5M | 34.0 | 29.7 | 33.5 | 28.5 | 31.4 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |

Part number example：PMN．1M．305．XLMT
Note：Ls＝standard gender，Lr＝reverse gender

[^8] formation．However，LEMO cannot be held responsible for any errors．LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice．


PMe Free socket, key (N) or keys (P, R, S, T, U, V, W and X) with knurled grip and MIL-DTL-38999L shell thread

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | Ls | Lr | P | Code ${ }^{1)}$ |
| PM• | 1M | 14.6 | 14.2 | M12x1.0 | 27.9 | 27.9 | 5.3 | A |
| PM• | 2M | 17.6 | 17.2 | M15x1.0 | 27.9 | 27.9 | 5.3 | B |
| PM• | 3M | 19.6 | 19.2 | M18x1.0 | 27.9 | 27.9 | 5.3 | C |
| PM• | TM | 22.5 | 22.0 | M18x1.0 | 29.6 | 30.1 | 7.9 | C |
| PM• | 4M | 25.0 | 24.5 | M22x1.0 | 29.6 | 30.1 | 7.9 | D |
| PM• | LM | 28.5 | 28.0 | M25x1.0 | 29.6 | 30.1 | 7.9 | E |
| PM• | 5M | 34.0 | 33.5 | M31x1.0 | 29.6 | 30.1 | 7.9 | G |

Part number example: PMN.1M.305.XLMM
Note: Ls = standard gender, Lr = reverse gender. ${ }^{1)}$ MIL-DTL-38999L shell size code (backshell not supplied).

PHe Free socket, key (N) or keys (P, R, S, T, U, V, W and X) with arctic grip

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | Ls | Lr | P | X |
| PH• | MM | 12.0 | 6.4 | 10.7 | 5.6 | 21.4 | 21.4 | 3.7 | 5.8 |
| PH• | OM | 14.4 | 8.8 | 12.7 | 8.0 | 25.6 | 25.6 | 5.3 | 6.7 |
| PH | 1M | 15.9 | 10.5 | 14.2 | 9.7 | 25.6 | 25.6 | 5.3 | 6.7 |
| PH• | 2M | 18.9 | 14.0 | 17.2 | 13.0 | 26.0 | 26.0 | 5.3 | 7.1 |
| PH | 3M | 20.9 | 16.0 | 19.2 | 15.0 | 26.0 | 26.0 | 5.3 | 7.1 |
| PH. | TM | 23.4 | 17.9 | 22.0 | 16.7 | 28.2 | 30.1 | 7.9 | 7.6 |
| PH• | 4M | 25.9 | 20.7 | 24.5 | 19.5 | 28.2 | 30.1 | 7.9 | 7.6 |
| PH• | LM | 29.4 | 23.9 | 28.0 | 22.7 | 28.2 | 30.1 | 7.9 | 7.6 |
| PH. | 5M | 34.9 | 29.7 | 33.5 | 28.5 | 28.2 | 30.1 | 7.9 | 7.6 |

Part number example: PHN.1M.305.XLM
Note: Ls = standard gender, Lr = reverse gender
PH. Free socket, key (N) or keys (P, R, S, T, U, V, W and X) with arctic grip and mold stop

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | B | C | D | F | Ls | Lr | M | P | X |
| PH• | MM | 12.0 | 6.4 | 10.7 | 5.6 | 7.8 | 24.4 | 24.4 | 8.8 | 3.7 | 5.8 |
| PH | OM | 14.4 | 8.8 | 12.7 | 8.0 | 10.7 | 28.6 | 28.6 | 9.7 | 5.3 | 6.7 |
| PH. | 1M | 15.9 | 10.5 | 14.2 | 9.7 | 12.4 | 28.6 | 28.6 | 9.7 | 5.3 | 6.7 |
| PH. | 2M | 18.9 | 14.0 | 17.2 | 13.0 | 15.5 | 29.0 | 29.0 | 10.1 | 5.3 | 7.1 |
| PH. | 3M | 20.9 | 16.0 | 19.2 | 15.0 | 17.5 | 29.0 | 29.0 | 10.1 | 5.3 | 7.1 |
| PHe | TM | 23.4 | 17.9 | 22.0 | 16.7 | 19.8 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PH. | 4M | 25.9 | 20.7 | 24.5 | 19.5 | 22.6 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PH. | LM | 29.4 | 23.9 | 28.0 | 22.7 | 25.8 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |
| PH | 5M | 34.9 | 29.7 | 33.5 | 28.5 | 31.4 | 31.2 | 31.2 | 10.6 | 7.9 | 7.6 |

Part number example: PHN.1M.305.XLMT
Note: Ls = standard gender, Lr = reverse gender

[^9] formation. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.


PH• Free socket, key (N) or keys (P, R, S, T, U, V, W and X) with arctic grip and MIL-DTL-38999L shell thread

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | Ls | Lr | P | Code ${ }^{1}$ |
| PH。 | 1M | 15.9 | 14.2 | M12x1.0 | 27.9 | 27.9 | 5.3 | A |
| PH | 2M | 18.9 | 17.2 | M15x1.0 | 27.9 | 27.9 | 5.3 | B |
| PH. | 3M | 20.9 | 19.2 | M18x1.0 | 27.9 | 27.9 | 5.3 | C |
| PH. | TM | 23.4 | 22.0 | M18x1.0 | 29.6 | 30.1 | 7.9 | C |
| PH. | 4M | 25.9 | 24.5 | M22x1.0 | 29.6 | 30.1 | 7.9 | D |
| PH. | LM | 29.4 | 28.0 | M $25 \times 1.0$ | 29.6 | 30.1 | 7.9 | E |
| PH• | 5M | 34.9 | 33.5 | M31x1.0 | 29.6 | 30.1 | 7.9 | G |

Part number example: PHN.1M.305.XLMM
Note: Ls = standard gender, Lr = reverse gender. ${ }^{1)}$ MIL-DTL-38999L shell size code (backshell not supplied).


HEe Fixed socket, nut fixing, key (N) or keys (P, R, S, T, U, V, W and X) for printed circuit, watertight (back panel mounting)

| Reference |  | Dimensions (mm) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Series | A | C | e | E | H | Ls | Lr | N | P | R | S1 | S2 |
| HE• | MM | 14 | 13.8 | M10x0.50 | 4.0 | 5.08 | 20.4 | 20.4 | 15.3 | 3.7 | 10.5 | 9.0 | 11 |
| HE• | OM | 17 | 16.8 | M13x0.75 | 5.0 | 5.08 | 20.8 | 21.0 | 16.8 | 5.3 | 13.8 | 11.5 | 14 |
| HE• | 1M | 18 | 17.8 | M14x1.00 | 5.0 | 7.62 | 20.8 | 21.0 | 16.8 | 5.3 | 13.8 | 12.5 | 16 |
| HE• | 2M | 21 | 20.8 | M17x1.00 | 5.0 | 8.89 | 20.8 | 21.0 | 16.8 | 5.3 | 13.8 | 15.5 | 18 |
| HE• | 3M | 23 | 22.8 | M19x1.00 | 5.0 | 10.16 | 20.8 | 21.0 | 16.8 | 5.3 | 13.8 | 17.5 | 20 |
| HE• | TM | 27 | 25.8 | M22x1.00 | 4.0 | 12.70 | 24.6 | 24.6 | 19.9 | 7.9 | 16.9 | 20.5 | 23 |
| HE。 | 4M | 29 | 27.8 | M24x1.00 | 4.0 | 13.97 | 24.6 | 24.6 | 19.9 | 7.9 | 16.9 | 22.5 | 25 |
| HE• | LM | 33 | 31.8 | M28x1.00 | 4.0 | 16.51 | 24.6 | 24.6 | 19.9 | 7.9 | 16.9 | 26.5 | 29 |
| HE• | 5M | 38 | 36.8 | M33x1.00 | 4.0 | 20.32 | 24.6 | 24.6 | 19.9 | 7.9 | 16.9 | 31.5 | 34 |

Part number example: HEN.1M.305.XLNP
Panel cut-out (page 31). PCB drilling pattern (page 32).
Note: Ls = standard gender, Lr = reverse gender.
Operating temperature: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$.


## Fibre optic models



FM• Straight plug, keys (N, S or W) with knurled grip


| Part number | Dimensions (mm) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | C | L | P | S1 | S2 |
| FM•.2M.03A.XLZT•*Z | 17.6 | 17.2 | 100.6 | 3.9 | 14 | 14 |
| FM•.3M.95B.XLCT•*Z | 19.6 | 19.2 | 103.3 | 3.9 | 16 | 16 |
| FM•.5M.03W.XLZT $\bullet \bullet Z$ | 34.0 | 33.5 | 148.4 | 3.4 | 29 | 29 |

Contact part number (to be ordered separately):
PSS.F7.12•LCE23 (2M series).
FFS.F7.12•LCE23 (3M and 5M series).
Note: •• Cable adaptor defined upon request.
The bend relief must be ordered separately (see page 29).
FGe Straight plug, keys (N, S or W) with arctic grip

| Part number |  | Dimensions (mm) |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | C | L | P | S1 | S2 |  |  |
| FG $\cdot 2 \mathrm{M} .03 \mathrm{~A} . \mathrm{XLZT} \bullet \bullet Z$ | 18.9 | 17.2 | 100.6 | 3.9 | 14 | 14 |  |  |
| FG $\cdot 3 \mathrm{M} .95 \mathrm{~B} . \mathrm{XLCT} \bullet \bullet Z$ | 20.9 | 19.2 | 103.3 | 3.9 | 16 | 16 |  |  |
| FG $\cdot .5 \mathrm{M} .03 W . X L Z T \bullet \bullet Z$ | 34.9 | 33.5 | 148.4 | 3.4 | 29 | 29 |  |  |

Contact part number (to be ordered separately):
PSS.F7.12•LCE23 (2M series).
FFS.F7.12•.LCE23 (3M and 5M series).

Note: •• Cable adaptor defined upon request.
The bend relief must be ordered separately (see page 29).
PMe Free socket, keys (N, S or W) with knurled grip

| Part number | Dimensions (mm) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | C | L | P | S1 | S2 |
| PM•.2M.03A.XLZT••Z | 17.6 | 17.2 | 105.8 | 5.3 | 16 | 14 |
| PM•.3M.95B.XLMT••Z | 19.6 | 19.2 | 113.3 | 5.3 | 18 | 16 |
| PM•.5M.03W.XLZT••Z | 34.0 | 33.5 | 155.2 | 7.9 | 32 | 29 |

Contact part number (to be ordered separately):
FFS.F7.12•LCL23 (2M series).
PSS.F7.12•.LCL23 (3M and 5M series).
Note: •• Cable adaptor defined upon request.
The bend relief must be ordered separately (see page 29).


PH. Free socket, keys (S or W) with arctic grip

| Part number | Dimensions (mm) |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | C | L | P | S1 | S2 |  |
| PH $\bullet$.2M.03A.XLZT $\bullet \bullet Z$ | 18.9 | 17.2 | 105.8 | 5.3 | 16 | 14 |  |
| PH $\bullet .5 \mathrm{M} .03 \mathrm{~W} . \mathrm{XLZT} \bullet \bullet Z$ | 34.9 | 33.5 | 155.2 | 7.9 | 32 | 29 |  |

Contact part number (to be ordered separately):
FFS.F7.12•.LCL23 (2M series).
PSS.F7.12•LCL23 (5M series).
Note: •• Cable adaptor defined upon request.
The bend relief must be ordered separately (see page 29).


## EG• Fixed socket, nut fixing, key (N) or keys (P, R, S, T, U, V, W and X)



| Part number | Dimensions (mm) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | C | D | e | E | L | P | S1 | S2 |
| EG•.2M.03A.XLZ | 17.2 | 6.8 | M14x1.0 | 4.5 | 28.9 | 5.3 | 12.5 | 17.0 |
| EG•.5M.03W.XLZ | 33.5 | 9.4 | M30x1.0 | 4.0 | 30.8 | 7.9 | 28.5 | 36.0 |

Panel cut-out (page 31)
Contact part number (to be ordered separately):
FFS.F7.12•.LCE23 (2M series)
PSS.F7.12•LCE23 (5M series)


## ED. Fixed socket with square flange, keys (N, S or W)

| Part number | Dimensions (mm) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | G | H | K | L | N | P |
| ED•2M.03A.XLZT | 26.9 | 8.95 | 17.2 | 12.8 | 15.1 | 1.5 | 28.9 | 20.6 | 5.3 |
| ED•3M.95B.XLM | 29.0 | 10.95 | 19.2 | 12.8 | 16.6 | 1.5 | 32.2 | 22.1 | 5.3 |
| ED•.5M.03W.XLZT | 43.7 | 22.90 | 33.5 | 14.5 | 27.0 | 2.0 | 30.8 | 32.5 | 7.9 |

Panel cut-out (page 31).
Contact part number (to be ordered separately):
FFS.F7.12•LCE23 (2M series)
PSS.F7.12•LCE23 (3M and 5M series).

## More information on F7 fibre optic contact in LEMO F7 catalog.



PSS Alignment device for F7 fibre optic contact


Note：Alignment device should be ordered as replacement item．



DCP Set of flat spanners for collet nuts

| Part number |
| :--- |
| DCP．2M．110．TN |
| DCP．3M．110．TN |
| DCP．5M．110．TN |



## DCS F7 contact alignment device tool

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


## WST Cleaning kit

Fibre optic cleaning kit of 2 cotton buds， 1 dry and 1 being soaked in Isopropyl Alcohol used for cleaning the fibre optic contacts．


See also F7 tooling in the F7 fibre optic catalog．

## USB models

FMo.LM.U2A.XPAT Straight plug, key (W) or key (R) with knurled grip and mold stop


EGe.LM.U2A.XPP
Fixed socket, female to female, nut fixing, key (W) or key (R)


Fixed socket, nut fixing, key (W) or key (R)


## Alignment Key

## Alignment Key and Polarized Keying System

$M$ series connector model part numbers are composed of three letters. The LAST LETTER indicates the keys corresponding to a particular contact type.
For example, straight plugs with N, P, R, U or W keys, are fitted with male contacts; whereas with S, T, V or X keys, plugs are fitted with female contacts. Sockets with N, P, R, U or W keys, are fitted with female contacts; whereas with S, T, V or X keys, sockets are fitted with male contacts.

| $\begin{aligned} & \sum \\ & \text { M } \\ & 0 \\ & \sum \\ & \sum \end{aligned}$ | Front view of a socket | $\begin{aligned} & \text { ס } \\ & \text { D } \end{aligned}$ | Colour code | Contact type |  | $\begin{gathered} \mathrm{Nb} \\ \text { of } \\ \text { keys } \end{gathered}$ | Angles |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Plug | Socket |  | $\beta$ |  | $\gamma$ |  |
|  |  | $\bullet$ - | blue | male | female | 3 | $165^{\circ}$ |  | $30^{\circ}$ |  |
|  |  | $\bullet$ - | yellow |  |  |  | $150^{\circ}$ |  | $60^{\circ}$ |  |
|  |  | $\bullet \cup$ | green |  |  |  | $130^{\circ}$ |  | $100^{\circ}$ |  |
|  |  | $\bullet$ •S | red | female | male | 3 | $155^{\circ}$ |  | $50^{\circ}$ |  |
|  |  | $\bullet$ - $T$ | orange |  |  |  | $135^{\circ}$ |  | $90^{\circ}$ |  |
|  | Front view of a socket | $\begin{aligned} & \overline{0} \\ & \text { D } \end{aligned}$ | Colour code | Contact type |  | $\begin{gathered} \mathrm{Nb} \\ \text { of } \\ \text { keys } \end{gathered}$ | Angles |  |  |  |
| 10 |  |  |  | Plug | Socket |  | $\alpha$ | $\beta$ | $\gamma$ | $\delta$ |
| $\pm$ |  | $\bullet$ - | blue | male | female | 5 | $95^{\circ}$ | $115^{\circ}$ | $35^{\circ}$ | $25^{\circ}$ |
| 1 |  | $\bullet$ R | yellow |  |  |  | $105^{\circ}$ | $115^{\circ}$ | $30^{\circ}$ | $20^{\circ}$ |
|  |  | $\bullet$ - X | red | female | male | 5 | $100^{\circ}$ | $125^{\circ}$ | $40^{\circ}$ | $20^{\circ}$ |
|  |  | $\bullet$ V | orange |  |  |  | $110^{\circ}$ | $120^{\circ}$ | $35^{\circ}$ | $25^{\circ}$ |

DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the information. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.


## Multipole

|  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\Rightarrow$ $\square$ <br> Male crimp contacts for plug | Female crimp contacts for sockets |  |  | $\frac{\widehat{E}}{\frac{E}{E}}$ | 会 |  | $\underset{\text { ¢ }}{\substack{\text { ¢ }}}$ |  |  |  |
| MM |  |  | 303 | 3 | 0.5 | $\bigcirc$ | $\bigcirc$ | 28－30－32 | 1.15 | 0.95 | 3.0 |
|  |  |  | 304 | 4 | 0.5 | $\bigcirc$ | $\bigcirc$ | 28－30－32 | 0.95 | 0.90 | 2.0 |
| OM |  | （2） | 302 | 2 | 0.9 | $\bigcirc$ | $\bigcirc$ | 20－22－24 | 1.45 | 1.00 | 10.0 |
|  |  |  | 303 | 3 | 0.9 | $\bigcirc$ | $\bigcirc$ | 20－22－24 | 1.70 | 1.40 | 8.0 |
|  |  |  | 304 | 4 | 0.7 | － | － | 22－24－26 | 1.35 | 0.90 | 7.0 |
|  |  |  | 305 | 5 | 0.7 | $\bigcirc$ | $\bigcirc$ | 22－24－26 | 1.25 | 1.00 | 6.5 |
| 1 M |  |  | 302 | 2 | 1.3 | $\bigcirc$ | $\bigcirc$ | 16－18－20 | 1.55 | 1.10 | 19.0 |
|  |  |  | 303 | 3 | 1.3 | $\bigcirc$ | $\bigcirc$ | 16－18－20 | 1.05 | 0.95 | 15.5 |
|  |  |  | 305 | 5 | 0.9 | $\bigcirc$ | － | 20－22－24 | 1.30 | 1.30 | 9.0 |
|  |  |  | 307 | 7 | 0.7 | $\bigcirc$ | － | 22－24－26 | 1.45 | 1.20 | 7.0 |
|  |  |  | 308 | 8 | 0.7 | － | － | 22－24－26 | 1.30 | 1.10 | 5.0 |
| 2M |  |  | 304 | 4 | 1.3 | $\bigcirc$ | $\bigcirc$ | 16－18－20 | 1.55 | 1.35 | 15.5 |
|  |  |  | 308 | 8 | 0.9 | $\bigcirc$ | $\bigcirc$ | 20－22－24 | 1.95 | 1.10 | 10.0 |
|  |  |  | 310 | 10 | 0.9 | $\bigcirc$ | － | 20－22－24 | 1.80 | 1.20 | 8.0 |
|  |  |  | 312 | 12 | 0.7 | $\bigcirc$ | $\bigcirc$ | 22－24－26 | 1.65 | 1.15 | 7.0 |
|  |  |  | 319 | 19 | 0.7 | － | － | 22－24－26 | 1.20 | 1.00 | 4.0 |
| 3M |  |  | 322 | 22 | 0.7 | － | $\bigcirc$ | 22－24－26 | 1.25 | 1.15 | 4.0 |
|  |  |  | 330 | 30 | 0.7 | － | $\bigcirc$ | 22－24－26 | 1.10 | 1.00 | 3.5 |

Note：1）Test voltage according to IEC 60512－2 test 4a．2）For EG•，EC•，ED•，HE• socket．

## Multipole

|  | $\Rightarrow$ <br> Male crimp contacts for plug |  |  |  |  | Contact type |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\frac{\underset{Q}{E}}{\stackrel{\varepsilon}{\varepsilon}}$ |  |  | $\underset{~<~}{<}$ |  |  |  |
| TM |  |  | 325 | 25 | 0.9 | $\bigcirc$ | $\bigcirc$ | 20-22-24 | 1.10 | 1.25 | 5.0 |
|  |  |  | 340 | 40 | 0.7 | $\bigcirc$ | $\bigcirc$ | 22-24-26 | 1.05 | 1.20 | 3.0 |
| 4M |  |  | 340 | 40 | 0.7 | $\bigcirc$ | $\bigcirc$ | 22-24-26 | 1.20 | 1.35 | 3.5 |
|  |  |  | 348 | 48 | 0.7 | $\bigcirc$ | - | 22-24-26 | 1.10 | 1.35 | 3.0 |
| LM |  |  | 355 | 55 | 0.9 | - | - | 20-22-24 | 1.65 | 1.95 | 3.5 |
|  |  |  | 368 | 68 | 0.7 | $\bigcirc$ | - | 22-24-26 | 1.40 | 1.65 | 2.5 |
| 5M |  |  | 366 | 66 | 0.9 | $\bigcirc$ | $\bigcirc$ | 20-22-24 | 1.60 | 1.70 | 3.0 |
|  |  |  | 114 | 114 | 0.7 | $\bigcirc$ | $\bigcirc$ | 22-24-26 | 1.37 | 1.34 | 2.0 |

Note: 1) Test voltage according to IEC 60512-2 test 4a. 2) For EG•, EC•, ED•, HE• socket.


[^0]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the in formation. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.

[^1]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the in formation. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.

[^2]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the information. However, LEMO cannot be held responsible for any errors. LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice.

[^3]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products．All reasonable efforts have been made to ensure the accuracy of the in

[^4]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the in

[^5]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products．All reasonable efforts have been made to ensure the accuracy of the in formation．However，LEMO cannot be held responsible for any errors．LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice

[^6]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products．All reasonable efforts have been made to ensure the accuracy of the in－

[^7]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products．All reasonable efforts have been made to ensure the accuracy of the in formation．However，LEMO cannot be held responsible for any errors．LEMO does not warrant the accuracy and reserves the right to make changes to the catalog and its functions at any time without notice．

[^8]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products．All reasonable efforts have been made to ensure the accuracy of the in

[^9]:    DISCLAIMER The information contained within this catalog and the functions offered are intended to provide information about products. All reasonable efforts have been made to ensure the accuracy of the in

