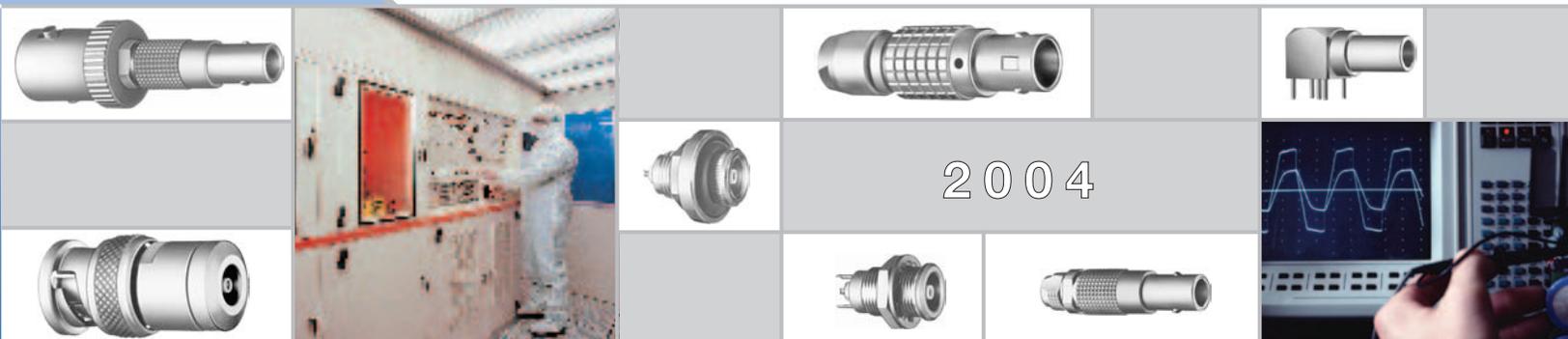
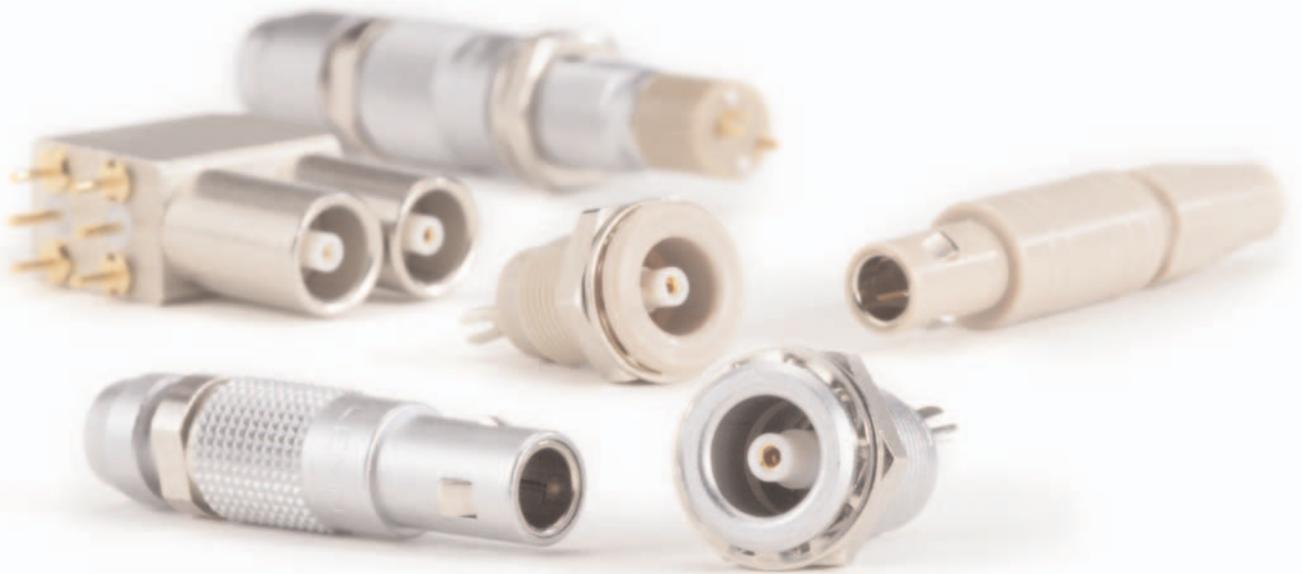


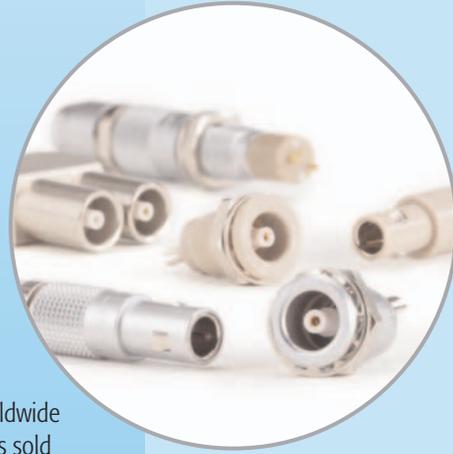
# LEMO's Miniature Coaxial Connectors ●

NIM-CAMAC NBS-549

00 Series Connectors for  
Test & Measurement and  
Nuclear Applications



# Expect Success. Spec LEMO®



## • A Global Leader

Since its beginning in Switzerland in 1946, LEMO® has evolved into a worldwide leader in the design and manufacture of circular connectors, with products sold in more than 80 countries.

Today, LEMO offers a product line for almost any application, from medical equipment to test and measurement instrumentation.

## • LEMO Means "Quality"

The name LEMO has become synonymous with quality and customer service in the connector industry, setting standards that others strive to meet. Our connectors are designed in an ISO 9001:2000 business environment, ensuring the highest quality products for our customers.

## • LEMO – We Deliver Reliability

Ask for LEMO connectors for any application where quality, safety and ruggedness are essential; where reliability is critical or where connectors are frequently engaged and disengaged, even in the toughest environments.

LEMO Connectors offer a unique combination of benefits:

**Original QUICK-LOK™** push-pull, self-latching system saves space and time while ensuring durable connections.

**Precision construction** from machined brass, stainless steel or aluminum ensures safety and uniform mating.

**Gold plated contacts** assure excellent electrical performance.

**Collet-type strain relief** securely grips circumference of any round cable, protecting connection even under extreme stress.

**Bend relief option** offers additional cable protection, including color-coding for easy identification.



## Custom Design

If we don't have it, we'll build it. Although we offer the most extensive product line in the industry, we understand that some application needs are unique. If we don't have exactly what you need, LEMO will design and build a connector that's just right for your application.

## Cable Assembly

Expand the quality of the connector to the cable assembly with our one-stop shop value-added service. LEMO's skilled technicians build and test assemblies to your specifications.

## Customer Support

Customer Support when you need it. Only LEMO offers extended customer service hours so you get technical support when you need it. LEMO's Customer Support Team includes in-house Product Specialists, plus a nationwide network of sales representatives and distributors.



**LEMO®**

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## LEMO's Product Line

Connectors, accessories and tools found in this catalog.

### Connectors

- Single contact from 2 to 150 Amps
- Coaxial 50 and 75 Ω
- Coaxial 50 Ω (NIM-CAMAC)
- Coaxial 50 Ω for frequency → 12 GHz
- Multicoaxial 50 and 75 Ω
- Multicontact from 2 to 66 contacts
- High Voltage 3, 5, 8, 10, 15, 30 and 50 kV cc
- Multi High Voltage 3, 5, and 10 kV cc
- Triaxial 50 and 75 Ω
- Quadrax
- Mixed: High Voltage (HV) + Low Voltage (LV)
- Mixed: Coax + LV
- Mixed: Triax + LV
- Thermocouple
- Multithermocouple
- Fiber optic singlemode
- Fiber optic multimode
- Mixed: fiber optic + LV
- Mixed: fiber optic + coax + LV
- Fiber optic singlemode OPTABALL®
- Fluidic
- Multifluidic
- Mixed: fluidic + LV
- Subminiature
- Miniature
- Plastic
- Printed circuit board
- Remote handling
- Watertight
- Sealed (pressure and/or vacuum)
- With plastic outer shell
- With aluminium outer shell
- With stainless steel outer shell
- With special radiation resistant insulator material
- With screw thread coupling for very high pressure
- With microswitch

### Patch Panels

- For audio-mono applications: triax
- For audio-mono applications: 3 contacts
- For audio-stereo applications: quadrax
- For audio-stereo applications: 6 contacts
- For video applications: coax 75 Ω

### Patch Panels

- For video HDTV applications: 3 coax 75 Ω + 2LV
- For fiber optic applications

### Adaptors

- For BNC, C, UHF, N, CINCH, GEN-RADIO connectors
- For TNC, SMA connectors

### Accessories

- Insulator for crimp contacts
- Crimp contacts
- Coaxial contacts
- Triaxial contacts
- Fiber optic contacts
- Fiber optic ferrules
- Caps and bend relief
- Heatshrink boot
- Insulating washers
- Double plastic panel washers
- Locking washers
- Tapered washers
- Hexagonal nuts
- Conical nuts
- Round nuts
- Notched nuts
- Grounding washers
- Lead-through with cable collet

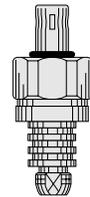
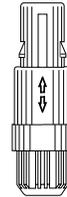
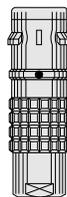
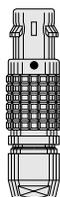
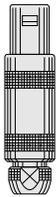
### Tooling

- Wrenches
- Wrenches for assembling plug
- Assembly tool
- Pliers
- Tap
- Crimping tools
- Positioners
- Crimping dies
- Banding Tool
- Extractors
- Insertion testing tool for crimp contacts
- Fiber optic termination workstation
- Fiber optic polishing tools

### On request

- Filtered connectors
- Connectors with special alloy housing
- Mixed special connectors
- Assembly onto cable

## Characteristics of Primary Series



Series	STANDARD	WATERTIGHT	KEYED	KEYED WATERTIGHT	PLASTIC	SCREW
	01 (Minax)	0E to 6E	00 (multicontact)	0K to 5K	REDEL® 1P	03
	00 (NIM-CAMAC)	3T	0B to 5B	2N to 5N	REDEL® 2P	0V to 5V
	00 (single contact)	4M	2G/5G	FF to 5F	REDEL® 3P	0W to 5W
	05 / R0	REDEL® F				2U to 5U
	0S to 6S					
	0A / 4A					
	1D / 2C					
	1Y-3Y-6Y					
Latching	Push-Pull					Screw
Key	Stepped insert (Half-Moon)		Key (G) or other key-way code	Key (G) or other key-way code	Key (G) or other key-way code	Key (G) or stepped insert (Half-Moon)
Shell	Metal or plastic	Metal	Metal or plastic	Metal	Metal	Plastic
Insert	Hermaphroditic or cylindrical		Cylindrical			Hermaphroditic or cylindrical
Contact	Solder or printed circuit		Solder, crimp or printed circuit			Solder (crimp or PC)

# LEMO's Line of Series by Types

**Note:**

- = included in this catalog
- = available but not included in this catalog.

		Types																				
Series		Single contact	Coaxial 50 Ω	Coaxial 75 Ω	Multicontact	High Voltage	Triaxial 50 Ω	Triaxial 75 Ω	Quadrax	Multi HV	Multi Coaxial	Mixed HV+LV	Mixed Coax+LV	Mixed Triax+LV	Fiber Optic	Multi FO	Mixed FO+LV	Fluidic	Multi fluidic	Mixed fluidic+LV	Thermocouple	
Hermaphroditic Keying	01		●																			
	00	●	■				●												●			
	05					●																
	R0		●																			
	0A		●	●																		
	0S	●	●		●	●	●	●														●
	1S	●	●	●	●	●	●	●														●
	2S	●	●	●	●	●	●	●	●				●									●
	3S	●	●	●	●	●	●	●	●		●		●	●								●
	4S	●	●	●	●	●	●	●	●		●	●	●	●								●
	5S	●	●	●	●	●	●	●	●		●	●	●	●								●
	6S				●							●		●								●
	1D									●												
	2C		●		●																	
4A							●															
1Y-3Y-6Y					●																	
Hermaphroditic Keying — Watertight	0E	●	●		●	●	●														●	
	1E	●	●	●	●	●	●														●	
	2E	●	●	●	●	●	●	●				●									●	
	3E	●	●	●	●	●	●	●		●		●	●								●	
	4E	●	●	●	●	●	●	●				●	●	●							●	
	5E	●			●					●	●	●	●	●							●	
	6E				●						●		●	●							●	
3T			●				●															
4M						●	●															
Mechanical Keying	00				●										●						●	
	0B				●										●			●			●	
	1B				●							●									●	
	2B				●					●	●	●	●	●			●	●		●	●	
	3B				●						●	●	●	●		●	●		●	●	●	
	4B				●					●	●	●	●	●		●	●		●	●	●	
	5B				●					●	●	●	●	●		●	●		●	●	●	
	2G				●																	
5G									●													
Mechanical Keying — Watertight	0K				●										●			●			●	
	1K				●							●									●	
	2K				●						●	●	●	●			●			●	●	
	3K			●	●						●	●	●	●		●	●		●	●	●	
	4K				●					●	●	●	●	●		●	●		●	●	●	
	5K				●					●	●	●	●	●		●	●		●	●	●	
FF to 5F				●																		
3N to 5N				●																		
Plastic	1P to 3P				●						●	●	●	●			●	●				
Screw	03		●		●																	
	0V	●	●		●		●														●	
	1V	●	●	●	●		●														●	
	2V	●	●	●	●		●	●				●									●	
	3V	●	●	●	●		●	●		●		●	●								●	
	4V	●	●	●	●		●	●				●	●								●	
	5V	●			●					●	●	●	●								●	
	0W to 5W				●						●	●	●	●			●				●	
2U to 5U				●										●	●	●				●		

## ● QUICK-LOK™ Push-Pull Self-Latching System



LEMO's Original QUICK-LOK push-pull, self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable, and facilitates operation in a very limited space, and offers unique advantages for all applications:

**Speed** – Engage connectors simply and quickly by pushing plugs axially into mating receptacles. Pull on outer shell to remove plug easily.

**Space Savings** – Just one finger clearance on two sides is needed to engage and disengage connectors, so there's no need to twist or turn a locking ring.

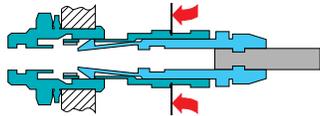
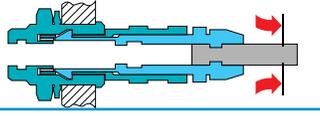
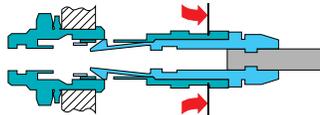
**Reliability** – Connections are reliable and assured when locking mechanism is engaged.

**Ruggedness** – Sturdy design, with sealed models to various IP levels.

### How QUICK-LOK™ Works



#### Latching Characteristics for 00 Series Connectors

	<p><b>Engaging</b> QUICK-LOK allows the connector to be mated by simply pushing the plug straight into the receptacle.</p>	<table border="1"> <thead> <tr> <th>Force (N)</th> <th>00</th> </tr> </thead> <tbody> <tr> <td>Fv</td> <td>9</td> </tr> </tbody> </table>	Force (N)	00	Fv	9
Force (N)	00					
Fv	9					
	<p><b>Latched</b> Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>	<table border="1"> <thead> <tr> <th>Force (N)</th> <th>00</th> </tr> </thead> <tbody> <tr> <td>Fa</td> <td>120</td> </tr> </tbody> </table>	Force (N)	00	Fa	120
Force (N)	00					
Fa	120					
	<p><b>Disengaging</b> When required, the connector is disengaged by a single straight pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the receptacle.</p>	<table border="1"> <thead> <tr> <th>Force (N)</th> <th>00</th> </tr> </thead> <tbody> <tr> <td>Fd</td> <td>7</td> </tr> </tbody> </table>	Force (N)	00	Fd	7
Force (N)	00					
Fd	7					

#### Key:

Fv = average latching force.

Fd = average unmating force with axial pull on the outer release

Fa = average pull force with axial pull on the collet nut.

**Notes:** the forces were measured on outer shell not fitted with contacts. The mechanical endurance represents the number of cycles after which the latching system is still effective (1 cycle = 1 latching/unlatching – 300 cycles per hour).

Mechanical endurance: 5000 cycles.

The values were measured according to the standard MIL-STD-1344A method 2013.1.

1N = 0.102kg.

# ● 00 Series – General Characteristics

## Materials and Surface Treatment

### Outer Shell

#### Brass

LEMO series 00 connectors have a brass outer shell as standard, and this is suitable for most general purpose applications, including civilian and military. The brass outer shells have a nickel-plated surface which ensures very good protection against most environments. Alternative protective coatings available are:

- Nickel-chrome offering higher protection against salt air and most corrosive agents
- Nickel-gold
- Nickel-black chrome. After the black chrome treatment, the part is coated with a protective film.

#### Aluminum Alloy

Aluminum alloy outer shells find numerous applications where light weight is a predominant factor; such as in the aeronautics and space industries, and for portable and mobile equipment.

These materials have high mechanical strength and

excellent resistance to corrosion. The shell surface is protected by anodizing which is available in six colors: blue, yellow, black, red, green, and natural.

#### Plastic Materials

A PEEK outer shell is available which offers excellent insulating properties and is mostly used in the medical industry. This material is suitable for gas or steam sterilization.

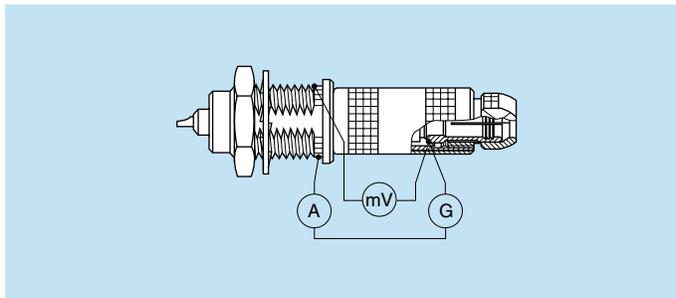
#### Other Metallic Components

In general, other components are manufactured from brass. However, bronze is used where good elasticity is required (for example: earthing crown). These parts are nickel or nickel-gold plated depending on the utilization.

Component	Material (Standard)	Surface Treatment (µm)											
		Nickel		Chrome			Gold			Black Chrome			
		Cu	Ni	Cu	Ni	Cr	Cu	Ni	Au	Cu	Ni	Cr	
Outer shell, collet nut, conical nut	Brass (UNS C 38500)	0.5	3	0.5	3	0.3	0.5	3	0.5	-	1	2	<b>Notes:</b> The surface treatment standards are as follows: - nickel QQ-N-290A, or MIL-C-26074C - chrome QQ-N-320B - gold per ISO 4523 - black chrome MIL-C-14538C 1) supplied only with aluminum alloy free or fixed receptacles.
	Al. alloy (AA 6012)	anodized											
	PEEK (MIL-P-46183)	beige colored											
Earthing crown	Cu-Be (UNS C 17300)	0.5	3	-	-	-	0.5	3	1.5	-	-	-	
Latch sleeve	Special Brass	0.5	3	-	-	-	0.5	3	1.5	-	-	-	
Crimp ferrule	Copper (UNS C 18700)	0.5	3	-	-	-	0.5	3	1.5	-	-	-	
Locking washer	Bronze (UNS C 52100)	0.5	3	-	-	-	0.5	3	0.5	-	-	-	
Hexagonal nut	Brass (UNS C 38500)	0.5	3	-	-	-	0.5	3	0.5	-	-	-	
	Al. alloy (AA 6012) 1)	anodized											
Other metallic components	Brass (UNS C 38500)	0.5	3	-	-	-	0.5	3	0.5	-	-	-	
Seals	Silicone or FPM	without treatment											

### Electrical Characteristics

Screen continuity: according to test MIL-STD-1344A, method 3007.



- R<sub>1</sub>** Values with earthing crown and latch sleeve or inner-sleeve nickel plated.
- R<sub>2</sub>** Values with gold-plated earthing crown and nickel plated latch sleeve or inner-sleeve.
- R<sub>3</sub>** Values with earthing crown and gold-plated latch sleeve or inner-sleeve.

R <sub>1</sub> (mΩ)	R <sub>2</sub> (mΩ)	R <sub>3</sub> (mΩ)	Testing current: 1A A = Ammeter mV = Millivoltmeter G = Generator
3.5	2.8	2.0	

## Insulator

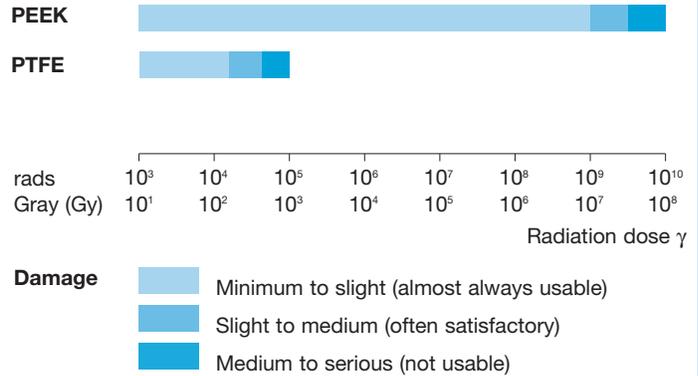
Plastic material used by LEMO for manufacturing insulators is selected according to the electric and thermal properties required for the various connector types. Characteristics examined for the two connector types are:

- Dielectric strength;
- Comparative tracking index;
- Surface and volume resistivity;
- Continuous service temperature;
- Water absorption;
- Radiation resistance;
- Flammability rating;
- Resistance to hydrocarbon.

### Mechanical and Electrical Properties

LEMO uses PEEK (Polyether Etherketone) for the insulator material. The performance of this thermo-plastic material is enhanced by the addition of glass fibers in the resin to achieve very high mechanical strength, to increase dielectric strength and to reduce water absorption rate. The above features of PEEK, plus its excellent chemical and radiation resistance, make it ideal for most applications. Sealing grommets are molded from Viton®. Such polymer has inherently excellent electrical insulating properties which do not change when exposed to adverse environments. Insulating resistance  $>10^{12}\Omega$  (per MIL-STD-1344A method 3003.1).

### Radiation resistance



**Note:** Technical data in this chapter provide general information on plastics used by LEMO as electrical insulators. LEMO reserves the right to propose new materials with better technical characteristics, and to withdraw, without notice, any material mentioned in the present catalog or any other publications edited by LEMO S.A. and/or its subsidiaries. LEMO SA and its subsidiaries use only plastic granules, powder or bars supplied by specialized companies, and thus cannot in any case take responsibility with regard to this material.

## Technical Characteristics

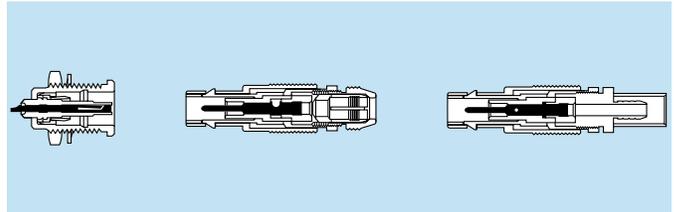
Property	Test method	Unit	PEEK	PTFE
Dielectric strength	ASTM D 149	kV/mm	19 - 25	17.2 - 24
Volume resistivity at 50% HR and 23°C	ASTM D 257	$\Omega \cdot \text{cm}$	$10^{16}$	$10^{18}$
Surface resistivity	ASTM D 257	$\Omega$	$10^{15}$	$10^{17}$
Thermal conductivity	ASTM C 177	W/K · m	0.25	0.23
Comparative tracking index	IEC 112	V	CTI 150	CTI 500
Dielectric constant (10 <sup>6</sup> Hz)	ASTM D 150	-	3.2 - 3.5	2 - 2.1
Dissipation factor (10 <sup>6</sup> Hz)	ASTM D 150	-	< 0.005	< 0.0003
Continuous service temperature	-	°C	250	260
Water absorption in 24h at 23°C	ASTM D 570	%	< 0.3	< 0.01
Radiation resistance	-	Gy	$10^7$	$2 \cdot 10^2$
Flammability rating	UL 94	-	V 0	V 0

## Electrical Contact

### Technical Description

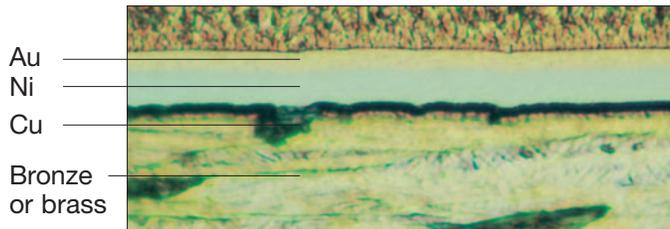
The secure reliable electromechanical connection achieved with LEMO female cylindrical contacts is mainly due to two important design features:

1. *Prod proof entry* on the mating side which ensures perfect concentric mating even with carelessly handled connectors; and
2. *The pressure spring*, with good elasticity, maintains a constant even force on the male contact when mated. The leading edge of the pressure spring preserves the surface treatment (gold-plated) and prevents undue wear.



### Contact Material and Treatment

LEMO female contacts are made of bronze (UNS C 54400). This material is chosen because of its high modulus of elasticity, their excellent electrical conductivity and high mechanical strength.

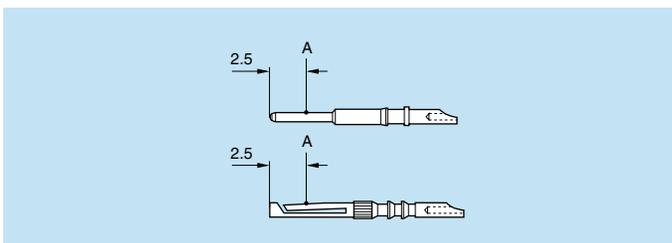


LEMO male solder and printed circuit contacts are made of brass (UNS C 38500). Male crimp contacts are made of brass (UNS C 34500) or annealed brass (UNS C 38500) with optimum hardness (HV) for crimping onto the wire.

Type	Material (Standard)	Surface treatment (µm)		
		Cu	Ni	Au
Male solder	Brass (UNS C 38500)	0.5	3	1.5
Male crimp	Brass (UNS C 34500)			
Male print	Brass (UNS C 38500)			
Female solder	Bronze (UNS C 54400)	0.5	3	2.0
Female crimp				
Female print				

**Notes:** The standard surface treatment are as follows:  
 Nickel: FS QQ-N-290A or MIL-C-26074C; and  
 Gold: ISO 4523.

### Thickness comparison between the outside and the inside of female contacts



Gold thickness <sup>1)</sup>		
male (µm)	female	
	outside (µm)	inside (%)
1.5	2	60

**Note:** <sup>1)</sup> minimal thickness according to ISO 4523.  
 A = test point

### Contact resistance with relation to the number of mating cycles

Corrosion according to MIL-STD-202, method 101D.

Contact resistance (mΩ)		
1000 cycles	3000 cycles	5000 cycles
5.6	5.7	6.1

### Insulation resistance between the contacts and contact/shell

(measured according to IEC 60512-2 test 3a)

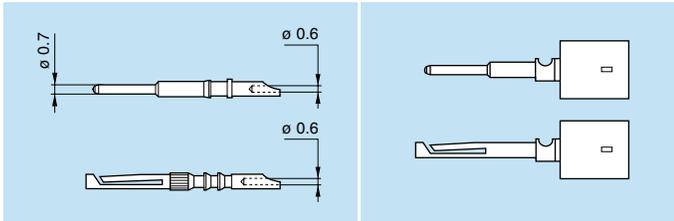
Insulating material	Multicontact
	PEEK
new	> 10 <sup>12</sup> Ω
after humidity test <sup>1)</sup>	> 10 <sup>10</sup> Ω

**Note:**  
<sup>1)</sup> 21 days at 95% RH according to IEC 60068-2-3.

## Electrical Contact

### Solder Contacts

The conductor bucket of these contacts is machined at an angle to form a cup into which the solder can flow.



### Crimp Contacts

The square form crimp method is used (MIL-C-22520F, type 2) (photo 1).

The crimp method requires a controlled compression to obtain a symmetrical deformation of the conductor strand and of the contact material. The inspection hole in the side of the contact verifies correct positioning of the conductor within the contact. A good crimping is characterized by a small conductor section reduction and by the quite closed free spaces.

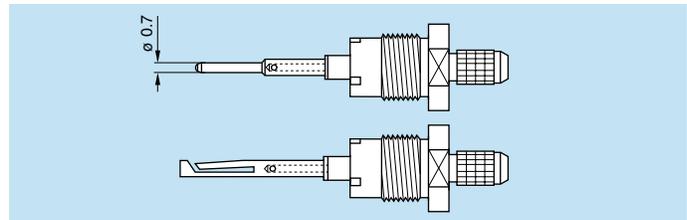
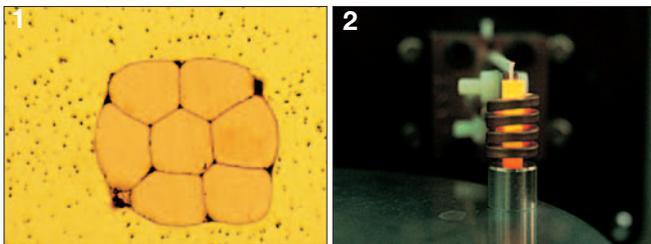
The LEMO crimp contacts are factory annealed to relieve internal stresses, and reduce the risk of the material work hardening during the crimping process. During this process, an induction heating machine designed by LEMO's Research and Development Department is used (photo 2).

### Advantages of Crimping

- practical, quick contact fixing outside the insulator
- possible use at high temperature
- no risk of heating the insulator during the conductor-contact fixing
- high tensile strength

Crimp contacts are available in standard version (figure 1) for mounting maximum size conductors.

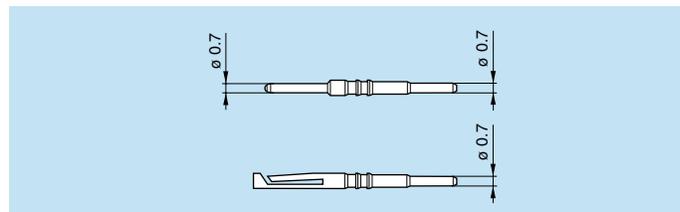
For some dimensions, these crimp contacts can be produced with reduced crimp barrels (figure 2, below) for mounting reduced size conductors.



### Printed Circuit Contacts

Printed circuit contacts are available in straight or elbow versions for certain connector types, mostly for straight and elbow receptacle models. Connection is made on flexible or rigid printed circuits by soldering.

Printed circuit contacts are gold-plated which guarantees optimum soldering, even after long-term storage. However for wave soldering, we recommend removal of the gold-plating from the contact end on the printed circuit side before soldering according to the assembly procedures.



## Technical Characteristics

### Mechanical and Climatical

Characteristics	Value	Standard	Method
Contact retention force	> 18 N	MIL-STD-1344A	2007.1
Cable pull off force	> 100 N	MIL-STD-1344A	2009.1
Connector pull off force	> 90 N		
Endurance	> 1000 cycles	MIL-STD-1344A	2016
Operating temperature <sup>1)</sup>	- 55°C + 260°C		

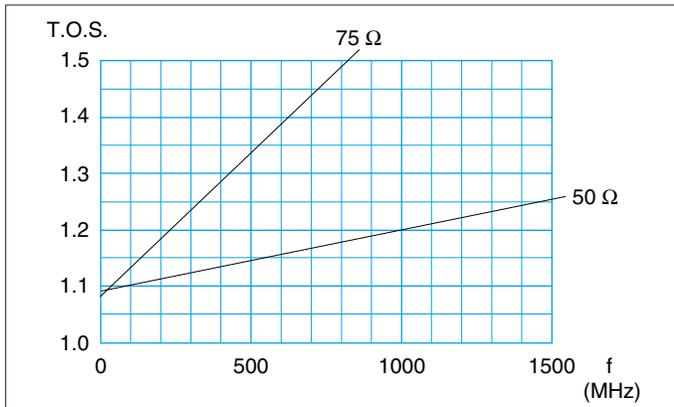
**Note:** 1) to seal both the watertight and vacuumtight models, LEMO uses an epoxy resin. The operating temperature is -20°C and +80°C for sealed models.

### Electrical

Characteristics	Value	Standard	Method
Impedance	50 Ω		
Operating voltage (50 Hz)	0.7 kV AC	IEC 130-1 1 <sup>ere</sup> ed.	§ 14.5
Test voltage (50 Hz)	2.1 kV AC	MIL-STD-1344A	3001.1
Rated current	4 A	IEC 512-3	
Contact resistance	< 6 mΩ	MIL-STD-202 F	307
Screen resistance	< 3.5 mΩ	MIL-STD-1344A	3007
Insulating resistance	> 10 <sup>12</sup> Ω	MIL-STD-1344A	3003.1
VSWR (f. in GHz)	50 Ω	1.09+0.11f	IEC 169-1-1
	75 Ω	1.08+0.51f	IEC 169-1-1

### Voltage Standing Wave Ratio

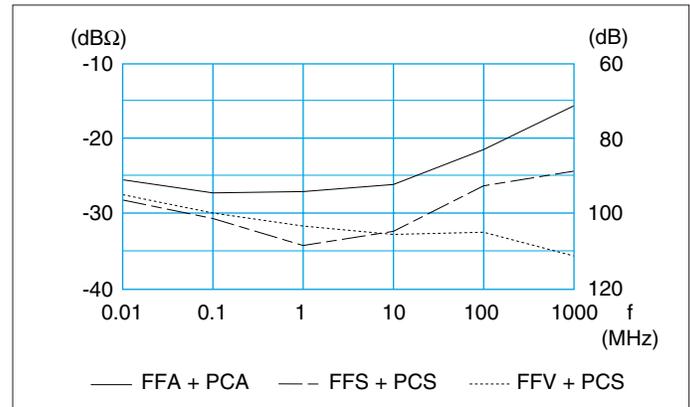
The VSWR (Voltage Standing Wave Ratio) is the value representing the power reflected in a connection. In most cases, the working frequency range is where  $VSWR \leq 1.25$



**Note:** value for FFS plug and PCS receptacle mated (with PTFE insulator). Impedance measured 50 Ω with a RG-174 A/U cable and 75 Ω with a RG-179 B/U cable.

### Screening Efficiency (EMC properties) in dB (transfer impedance in dBohm)

The screening efficiency is the ratio between the electromagnetic field inside the connector and a power source at the outside of the connector (or vice versa).



**Note:** measured according to IEC-169-1-3 standard.

### Recommended Cables

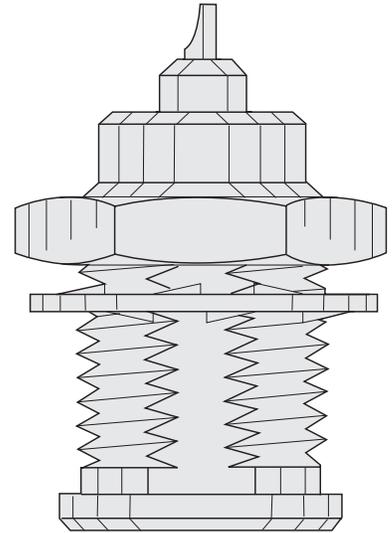
Cable group	Standard			Other cable	Imp. (Ω)
	MIL-C-17	IEC 96-2	CCTU 10-01A		
6	RG.58 C/U	50.3.1	KX 15	Belden 8262	50 ± 2 Ω
7	RG.142 B/U				50 ± 2 Ω
3	RG.174 A/U	50.2.1	KX 3A	Belden 8216	50 ± 2 Ω
				Lemo CCH.99.281.505	50 ± 2 Ω
1	RG.178 B/U	50.1.1	KX 21A	Belden 83265	50 ± 2 Ω
2	RG.179 B/U	75.2.1			75 ± 3 Ω
5	RG.180 B/U				95 ± 5 Ω
2	RG.187 A/U	75.2.2			75 ± 3 Ω
4	RG.188 A/U	50.2.3		Belden 83269	50 ± 2 Ω
1	RG.196 A/U	50.1.2			50 ± 2 Ω
4	RG.316 /U	50.2.2	KX 22A	Belden 83284	50 ± 2 Ω
3				Dätwyler HF-2114	50 ± 2 Ω
8				Storm 421 099	50 ± 2 Ω
8				H+S G02232D-60	50 ± 2 Ω

### Color of connectors in anodized aluminum alloy

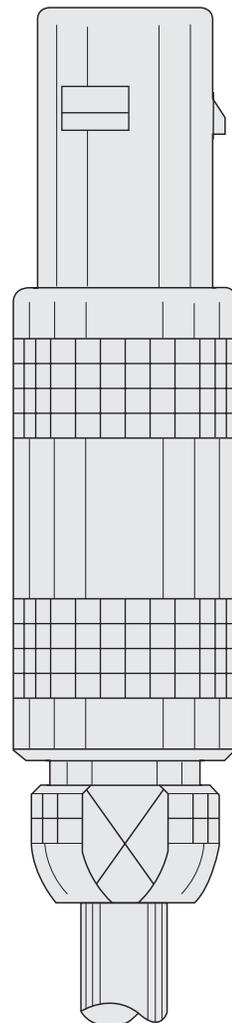
When ordering a connector with an aluminum alloy, the outer shell color must be chosen from the table variant listed below and included in the variant position of the part number.

Reference	Color
A	blue
J	yellow
N	black
R	red
T	natural
V	green





- **NIM-CAMAC Connectors**





## Models Description

<b>ABA</b> Adapter from LEMO receptacle to BNC plug	<b>EPE</b> Straight receptacle with two nuts for printed circuit	<b>FFF</b> Straight plug, non-latching, with cable collet
<b>ABB</b> Adapter from LEMO fixed receptacle to BNC receptacle	<b>EPK</b> Elbow receptacle (90°) for printed circuit with clearance under the body	<b>FFS</b> Straight plug with cable crimping
<b>ABC</b> Adapter from LEMO receptacle to BNC receptacle	<b>EPL</b> Elbow receptacle (90°) for printed circuit	<b>FFY</b> Straight plug with cable collet
<b>ABD</b> Adapter from LEMO receptacle to BNC fixed receptacle	<b>EPM</b> Elbow receptacle (90°) for printed circuit (long studs)	<b>FFV</b> Straight plug for cable crimping with improved screen efficiency
<b>ABF</b> Adapter from LEMO plug to BNC receptacle	<b>EPN</b> Straight receptacle for press mounting in pair on printed circuit,	<b>FLA</b> Elbow plug (90°) with cable collet
<b>ACA</b> Adapter from LEMO receptacle to C plug	<b>EPS</b> Elbow receptacle (90°) with two nuts for printed circuit	<b>FLR</b> Elbow plug (90°) with resistor
<b>ACB</b> Adapter from LEMO receptacle to C receptacle	<b>EPY</b> Elbow receptacle (90°) for printed circuit with two vertical receptacles	<b>FLS</b> Elbow plug (90°) for cable crimping
<b>AGG</b> Adapter from LEMO receptacle to General-Radio receptacle type 874	<b>ERA</b> Fixed receptacle, nut fixing	<b>FLV</b> Elbow plug (90°) for cable crimping with improved screen efficiency
<b>AGH</b> Adapter from LEMO receptacle to UHF plug	<b>ERC</b> Fixed receptacle, nut fixing, with slots in flange	<b>FPA</b> Straight plug, non-latching, for printed circuit
<b>ANA</b> Adapter from LEMO receptacle to N plug	<b>ERE</b> Fixed receptacle, nut fixing, with conical lead in	<b>FPL</b> Elbow plug (90°) non-latching for printed circuit
<b>ANB</b> Adapter from LEMO receptacle to N receptacle	<b>ERM</b> Fixed receptacle, nut fixing, with microswitch	<b>FRT</b> Straight plug with resistor or shorted
<b>ANC</b> Adapter from LEMO receptacle to N fixed receptacle	<b>ERN</b> Fixed receptacle, nut fixing, with tags	<b>FTA</b> T-plug with two receptacles in line
<b>APF</b> Adapter from LEMO plug to CINCH receptacle	<b>ERT</b> Straight receptacle without thread, force or adhesive fit	<b>FTL</b> T-plug with two receptacles (90°)
<b>ASA</b> Adapter from LEMO receptacle to SMA plug	<b>EWF</b> Fixed receptacle, nut fixing, with tags, vacuumtight, (back panel mounting)	<b>FTR</b> Elbow plug (90°) with one receptacle
<b>ASB</b> Adapter from LEMO receptacle to SMA receptacle	<b>EWV</b> Fixed receptacle, vacuumtight	<b>FTY</b> Straight plug with two parallel receptacles
<b>ASF</b> Adapter from LEMO plug to SMA receptacle	<b>FAA</b> Straight plug, non-latching, nut fixing	<b>HGP</b> Fixed receptacle, nut fixing, watertight
<b>ASG</b> Adapter from LEMO plug to SMA plug	<b>FAB</b> Straight plug, non-latching, riveted fixing	<b>HGW</b> Fixed receptacle, nut fixing, with rear sealing ring
<b>ECP</b> Straight receptacle with two nuts	<b>FAF</b> Straight plug with cable collet	<b>PCA</b> Free receptacle with cable collet
<b>EPA</b> Straight receptacle for printed circuit	<b>FFA</b> Straight plug with cable collet PEEK outer shell	<b>PCS</b> Free receptacle with cable crimping
<b>EPB</b> Straight receptacle for printed circuit (long studs)	<b>FFB</b> Straight plug with cable collet PEEK outer shell	<b>PES</b> Fixed receptacle, nut fixing, with cable crimping (back panel mounting)
<b>EPC</b> Straight receptacle for printed circuit with clearance under the body	<b>FFC</b> Straight plug with cable collet and nut for fitting a bend relief	<b>PSA</b> Fixed receptacle, nut fixing, with cable collet
	<b>FFD</b> Straight plug with cable collet and nut for fitting a bend relief	<b>PSS</b> Fixed receptacle, nut fixing, with cable crimping
	<b>FFE</b> Straight plug with front sealing ring, cable collet and nut for fitting a bend relief	<b>RAD</b> Fixed coupler, nut fixing
		<b>RMA</b> Fixed coupler
		<b>SWH</b> Fixed coupler, nut fixing, vacuumtight

## Part Section Showing Internal Components

**Fixed receptacle**

- 1 outer shell
- 2 earthing crown
- 3 retaining ring
- 4 hexagonal nut
- 5 locking washer
- 6 insulator
- 7 female contact

**Plug with cable clamping**

- 1 outer shell
- 2 latch sleeve
- 3 collet nut
- 4 earthing sleeve
- 5 rear insulator
- 6 insulator
- 7 male contact
- 8 collet

**Plug with cable crimping**

- 1 outer shell
- 2 latch sleeve
- 3 crimp backnut
- 4 rear insulator
- 5 insulator
- 6 male contact
- 7 crimp ferrule

### Models with collet nut for fitting a bend relief

To order models with a collet nut for fitting a bend relief, add a "Z" in the "variant" position (see page 15) of the part number. Bend reliefs are available in nine colors and several sizes to accommodate different cable outside diameters. They are ordered separately as indicated in the "Accessories" section.

### Watertight/Vacuumtight models

The fixed receptacles and couplers, models HGP, HGW, EWF, EWW, SWH allow the device on which they are

fitted to reach a protection index of IP66 as per IEC 529 (unmated). They are fully compatible with the non watertight models of the same series and are widely used for portable radios, ship installations and in aircraft.

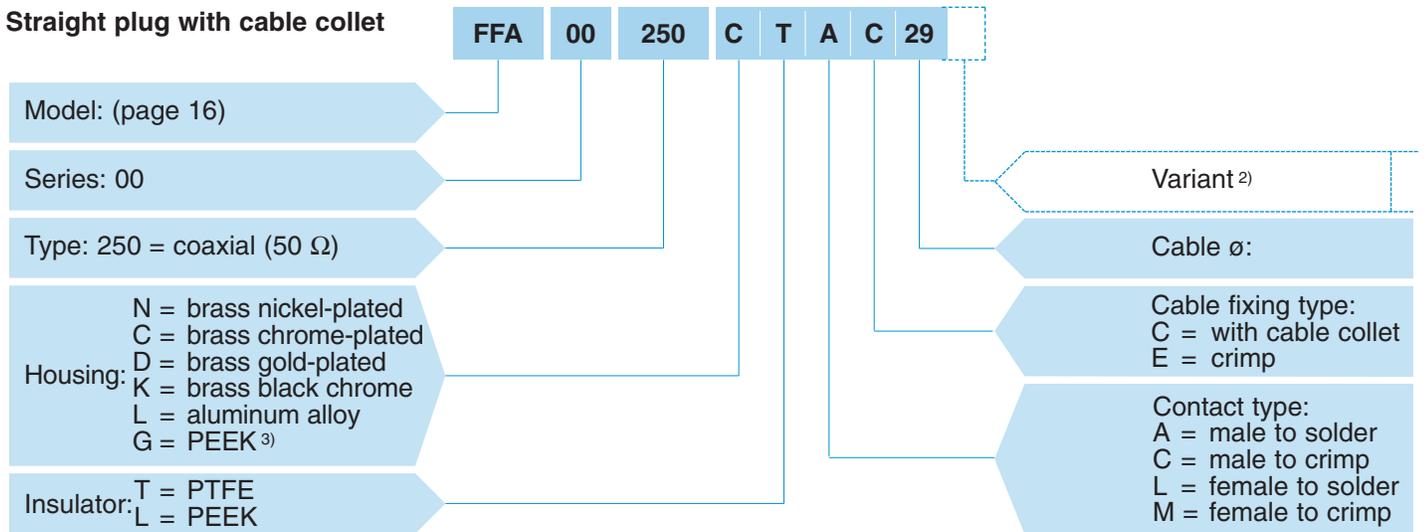
Specially prepared & tested versions of these models are available for vacuumtight applications guaranteeing a leakage level of less than 10<sup>-6</sup> mbar.l.s<sup>-1</sup> (as per MIL-STD-1344A standard method 1008). A vacuumtight model is identified by the letter V at the end of the part number (certificate on request). To seal both the watertight and vacuumtight models, LEMO uses an epoxy resin.

### Available Models (series and types)

Model	00	Model	00	Model	00
ECP	●	EWF	●	FRT	●
EPA	●	EWV	●	FTA	●
EPB	●	FAA	●	FTL	●
EPC	●	FAB	●	FTR	●
EPE	●	FFA	●	FTY	●
EPK	●	FFC	●	HGP	●
EPL	●	FFE	●	HGW	●
EPM	●	FFF	●	PCA	●
EPN	●	FFS	●	PCS	●
EPS	●	FFV	●	PES	●
EPY	●	FFY	●	PSA	●
ERA	●	FLA	●	PSS	●
ERC	●	FLR	●	RAD	●
ERE	●	FLS	●	RMA	●
ERM	●	FLV	●	SWH	●
ERN	●	FPA	●		
ERT	●	FPL	●		

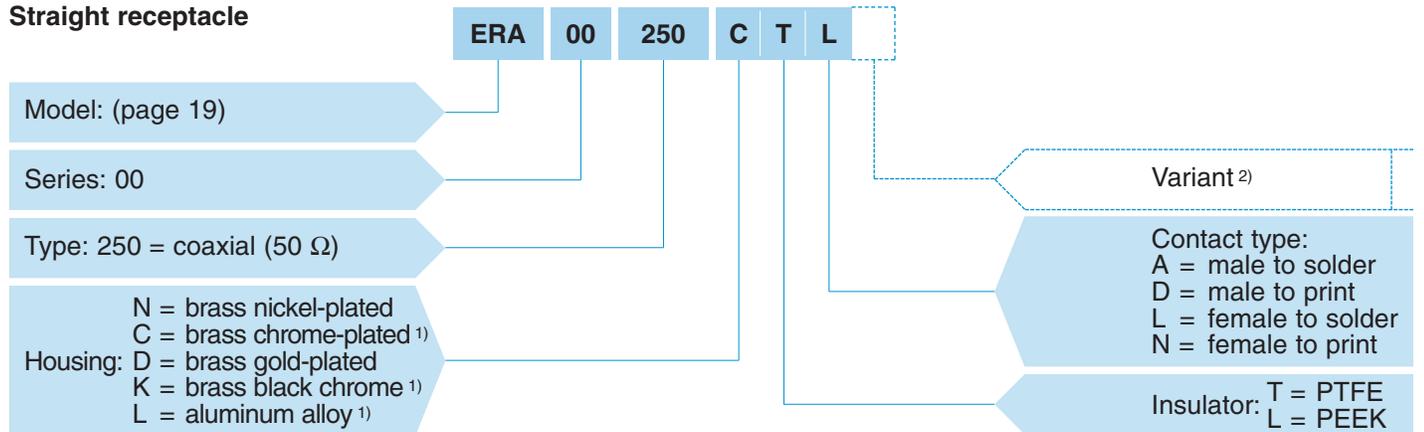
## ● Part Number Example

### Straight plug with cable collet



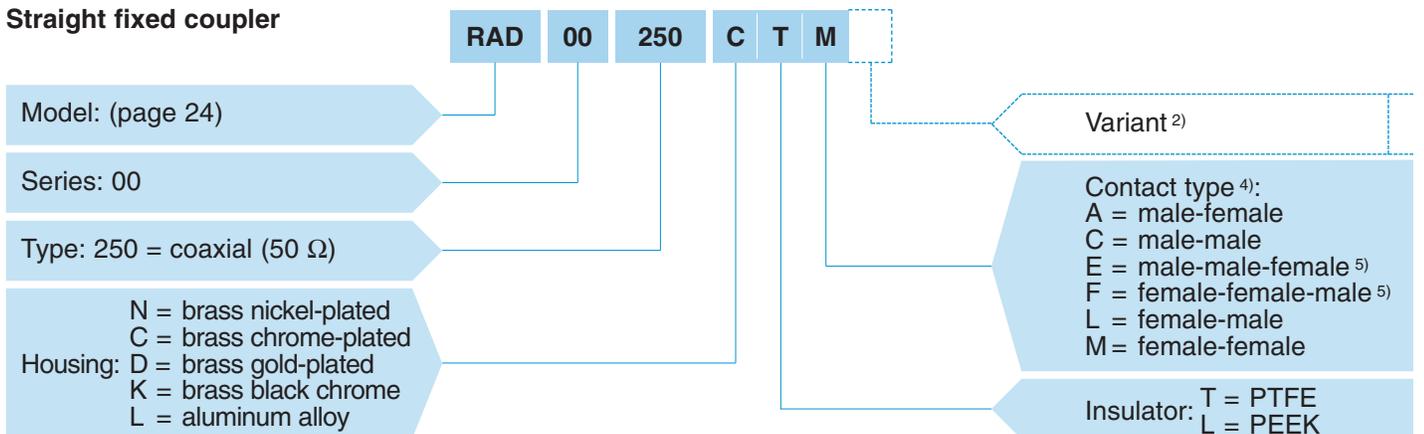
**FFA.00.250.NTAC29** = straight plug with cable collet, series 00, coaxial type (50 Ω), outer shell in chrome-plated brass, PTFE insulator, male solder contact, C type collet of 2.9 mm diameter.

### Straight receptacle



**ERA.00.250.NTL** = fixed receptacle, nut fixing, series 00, coaxial type (50 Ω), outer shell in chrome-plated brass, PTFE insulator, female solder contact.

### Straight fixed coupler



**RAD.00.250.CTM** = straight fixed coupler, nut fixing, series 00, coaxial type (50 Ω), outer shell in chrome-plated brass, PTFE insulator, female-female contact.

**Note:** 1) treatment not available for the printed circuit models

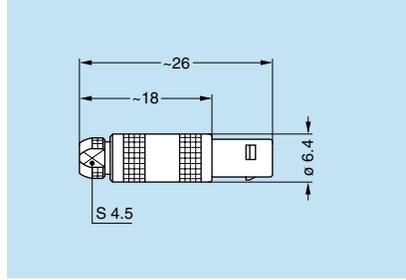
2) the "variant" position in the reference is used to specify the anodized color of the housing in aluminum alloy (page 9) or models with a collet nut for fitting a bend relief "Z". The bend relief can be ordered separately as indicated in the "Accessories" section.

3) available for the FFA model only

4) concerning the straight fixed couplers with nut fixing RAD and SWH, the first contact type mentioned is always the contact at the flange end.

5) used only for models: FTA, FTL and FTY.

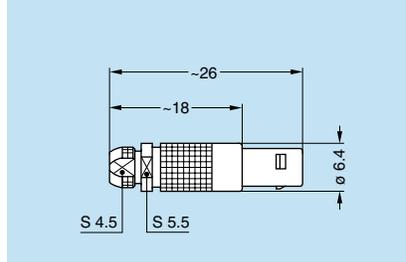
## ● Models



### FFA Straight plug with cable collet

Part number	Cable group	Availability
FFA.00.250.CTAC22	1	●
FFA.00.250.CTAC29	2-3-4	●
FFA.00.250.CTAC31	8	●

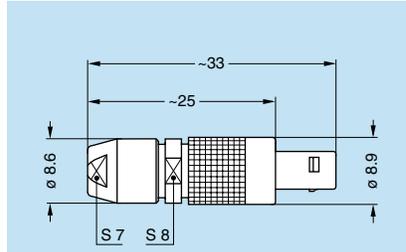
**M1** Cable assembly



### FFC Straight plug with flats on latch sleeve and cable collet

Part number	Cable group	Availability
FFC.00.250.CTAC22	1	○
FFC.00.250.CTAC27	2-4	●
FFC.00.250.CTAC31	3-8	●

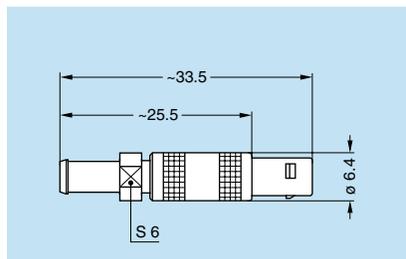
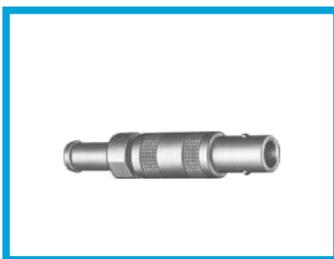
**M3** Cable assembly



### FFY Straight plug with cable collet

Part number	Cable group	Availability
FFY.00.250.CTAC52	6-7	○

**M2** Cable assembly

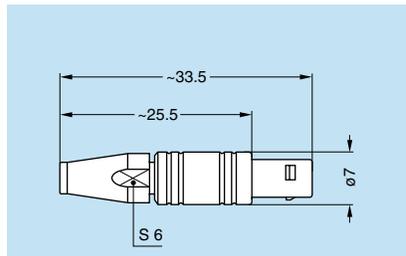


### FFA Straight plug with cable collet and nut for fitting a bend relief

Part number	Cable group	Availability
FFA.00.250.CTAC22Z	1	●
FFA.00.250.CTAC29Z	2-3-4	●
FFA.00.250.CTAC31Z	8	●

**Note:** the bend relief must be ordered separately (see page 32).

**M1** Cable assembly

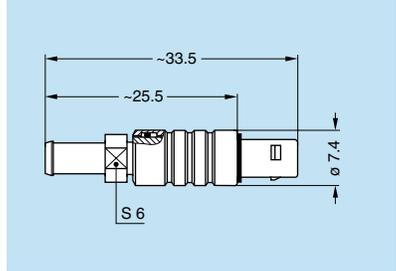
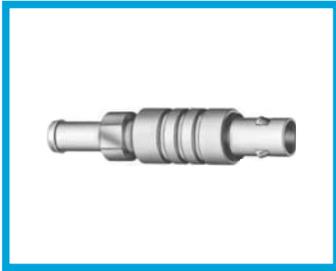


### FFA Straight plug with cable collet, PEEK outer shell

Part number	Cable group	Availability
FFA.00.250.GTAC22	1	○
FFA.00.250.GTAC29	2-3-4	○
FFA.00.250.GTAC31	8	○

**M1** Cable assembly

**Note:** use with model ERN, available in PEEK outer shell (see page 19)

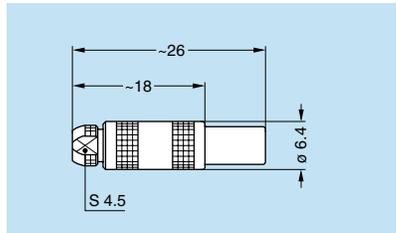


**FFE Straight plug with front sealing ring, cable collet and nut for fitting a bend relief**

Part number	Cable group	Availability
FFE.00.250.CTAC22Z	1	○
FFE.00.250.NTAC29Z	2-3-4	○
FFE.00.250.NTAC31Z	8	○

**Note:** the bend relief must be ordered separately (see page 32).

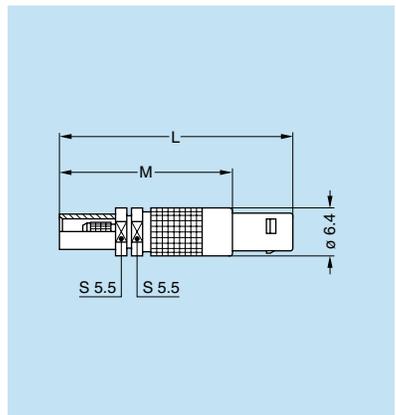
**M1** Cable assembly



**FFF Straight plug, non-latching, with cable collet**

Part number	Cable group	Availability
FFF.00.250.CTAC22	1	○
FFF.00.250.CTAC29	2-3-4	○
FFF.00.250.CTAC31	8	○

**M1** Cable assembly

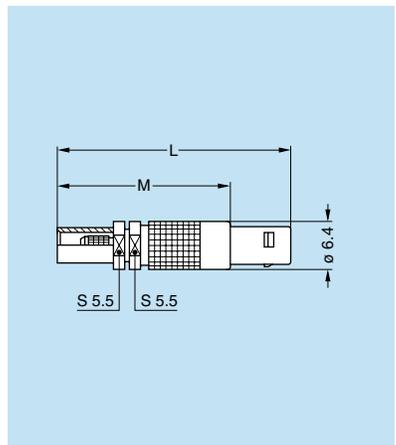


**FFS Straight plug with cable crimping**

Part number	Cable group	Dim.		Availability
		L	M	
FFS.00.250.CTCE24	1	31	23	○
FFS.00.250.CTCE30	2	31	23	○
FFS.00.250.CTCE31	3-4	31	23	●
FFS.00.250.CTCE35	8	31	23	○
FFS.00.250.CTCE44	5	31	23	○
FFS.00.250.CTCE52	6	34	26	○
FFS.00.250.CTCE56	7	31	23	○

**M4** Cable assembly, crimp contact

**M5** Cable assembly, solder contact (on request)

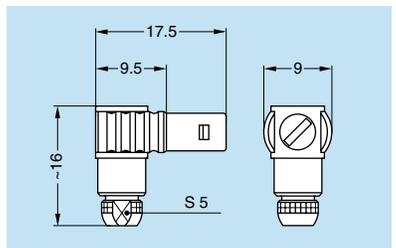


**FFV Straight plug for cable crimping with improved screen efficiency**

Part number	Cable group	Dim.		Availability
		L	M	
FFV.00.250.NTCE24	1	31	23	○
FFV.00.250.NTCE30	2	31	23	○
FFV.00.250.NTCE31	3-4	31	23	○
FFV.00.250.NTCE35	8	31	23	○
FFV.00.250.NTCE44	5	31	23	○
FFV.00.250.NTCE52	6	34	26	○
FFV.00.250.NTCE56	7	31	23	○

**M4** Cable assembly, crimp contact

**M5** Cable assembly, solder contact (on request)

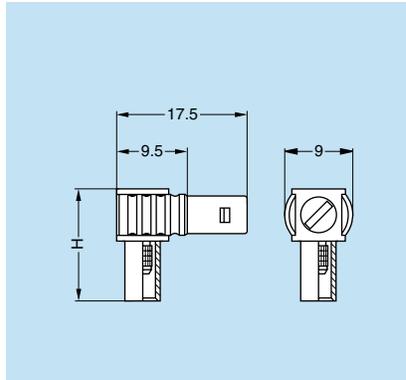


**FLA Elbow plug (90°) with cable collet**

Part number	Cable group	Availability
FLA.00.250.CTAC22	1	○
FLA.00.250.CTAC27	2-4	●
FLA.00.250.CTAC31	3-8	●

**M6** Cable assembly

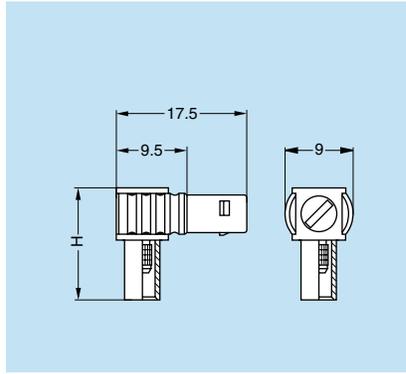
● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



### FLS Elbow plug (90°) cable crimping

Part number	Cable group	H (mm)	Availability
FLS.00.250.NTAE24	1	15	○
FLS.00.250.CTAE31	3-4	15	○
FLS.00.250.NTAE35	8	15	○
FLS.00.250.NTAE52	6	18	○
FLS.00.250.NTAE56	7	15	○

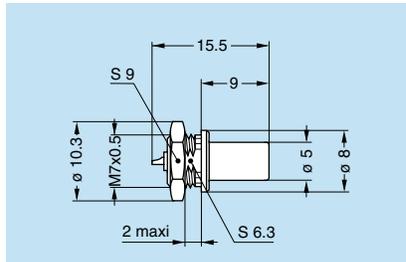
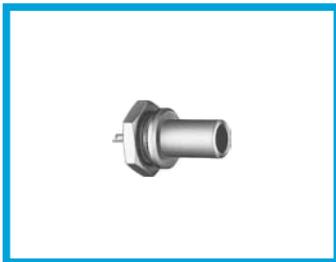
**M7** Cable assembly



### FLV Elbow plug (90°) cable crimping with improved screen efficiency

Part number	Cable group	H (mm)	Availability
FLV.00.250.NTAE24	1	15	○
FLV.00.250.NTAE30	2	15	○
FLV.00.250.NTAE31	3-4	15	○
FLV.00.250.NTAE35	8	15	○
FLV.00.250.NTAE52	6	18	○
FLV.00.250.NTAE56	7	15	○

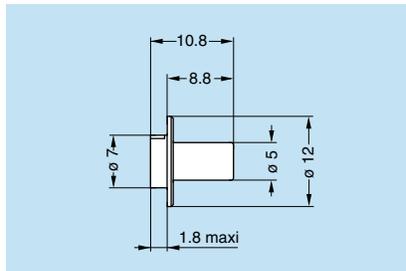
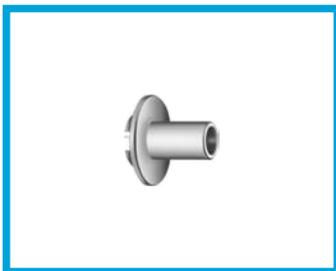
**M7** Cable assembly



### FAA Straight plug, non-latching, nut fixing

Part number	Weight (g)	Availability
FAA.00.250.NTA	2.5	○

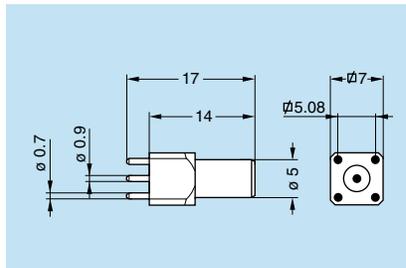
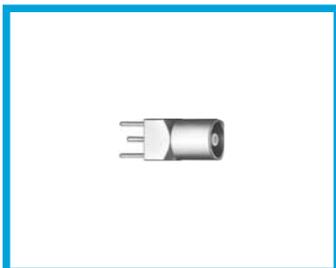
**P5** Panel cut-out



### FAB Straight plug, non-latching, riveted fixing

Part number	Weight (g)	Availability
FAB.00.250.NTA	2.5	○

**P1** Panel cut-out

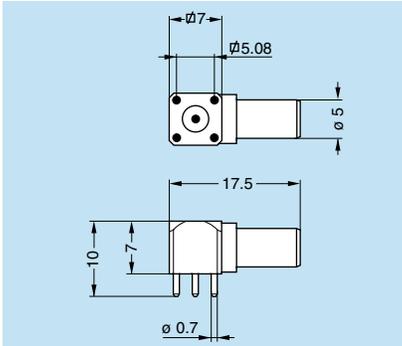
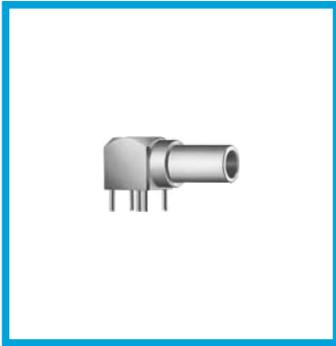


### FPA Straight plug, non-latching, for printed circuit

Part number	Weight (g)	Availability
FPA.00.250.NTD	2.5	○

**P11** PCB drilling pattern

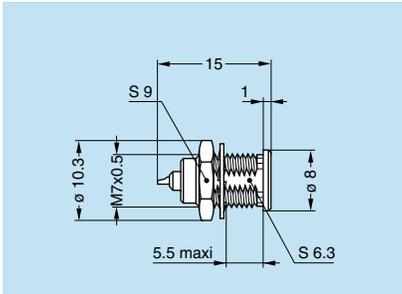
● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



**FPL Elbow plug (90°), non-latching for printed circuit**

Part number	Weight (g)	Availability
FPL.00.250.NTD	2.5	○

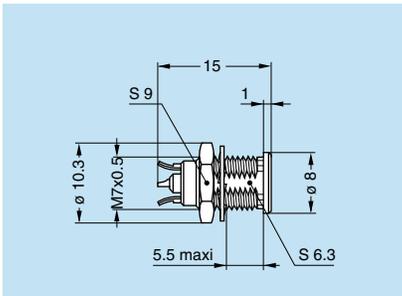
**P10** PCB drilling pattern



**ERA Fixed receptacle, nut fixing**

Part number	Weight (g)	Availability
ERA.00.250.CTL	2.8	●

**P5** Panel cut-out

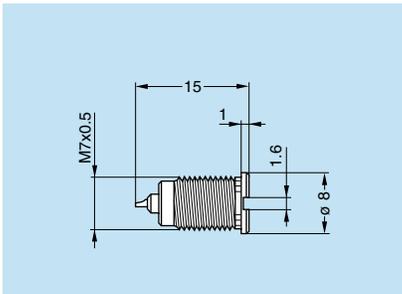
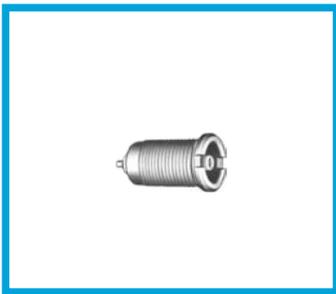


**ERN Fixed receptacle, nut fixing, with earthing tags**

Part number	Weight (g)	Availability
ERN.00.250.CTL	2.8	●

**P5** Panel cut-out

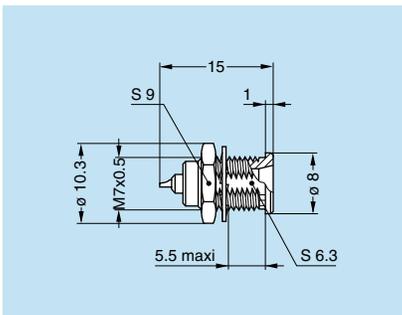
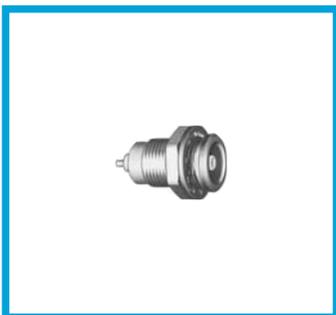
**Note:** available in PEEK outer shell for use with model FFA with PEEK outer shell (see page 16)



**ERC Fixed receptacle, nut fixing, with slots in flange**

Part number	Weight (g)	Availability
ERC.00.250.CTL	2.2	○

**P3** Panel cut-out

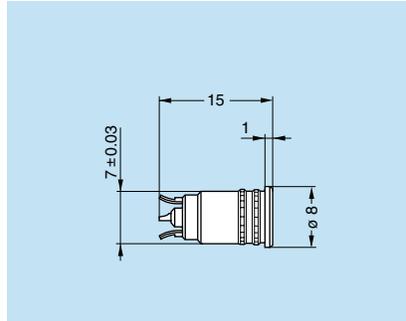


**ERE Fixed receptacle, nut fixing, with conical lead-in**

Part number	Weight (g)	Availability
ERE.00.250.CTL	2.8	○

**P5** Panel cut-out

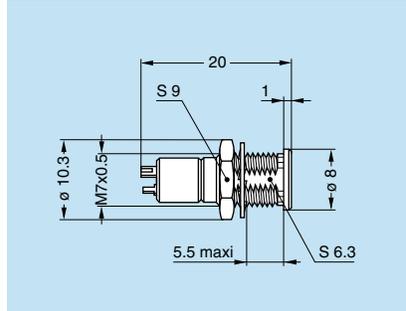
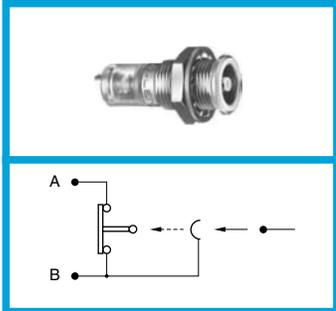
● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



### ERT Straight receptacle without thread, force or adhesive fit

Part number	Weight (g)	Availability
ERT.00.250.CTL	2.2	○

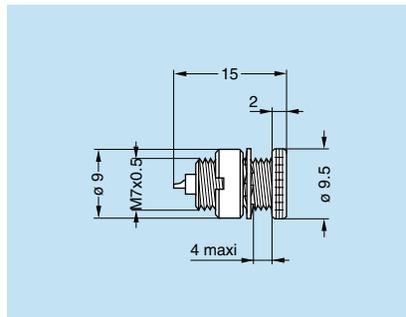
**P4** Panel cut-out



### ERM Fixed receptacle, nut fixing, with microswitch

Part number	Weight (g)	Availability
ERM.00.250.CTL	3.0	○

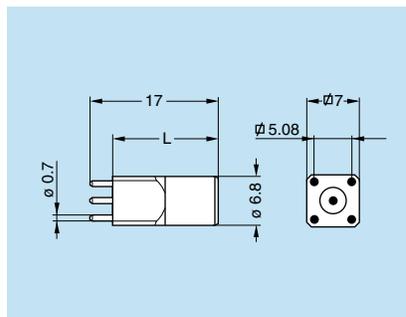
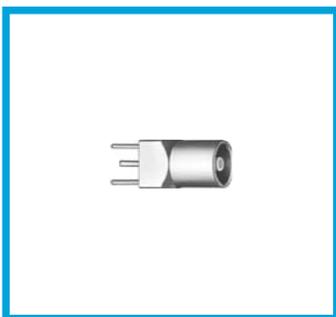
**P5** Panel cut-out



### ECP Fixed receptacle with two nuts

Part number	Weight (g)	Availability
ECP.00.250.CTL	3.3	○

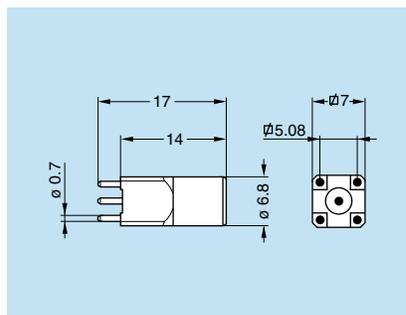
**P1** Panel cut-out



### EPA-EPB Straight receptacle for printed circuit

Part number	L (mm)	Weight (g)	Availability
EPA.00.250.NTN	14	3.4	●
EPB.00.250.NTN	12	3.3	●

**P10** PCB drilling pattern

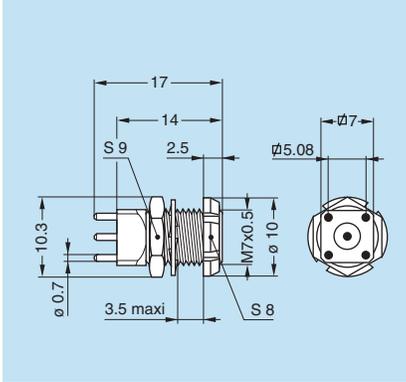


### EPC Straight receptacle for printed circuit with clearance under the body

Part number	Weight (g)	Availability
EPC.00.250.NTN	3.3	○

**P10** PCB drilling pattern

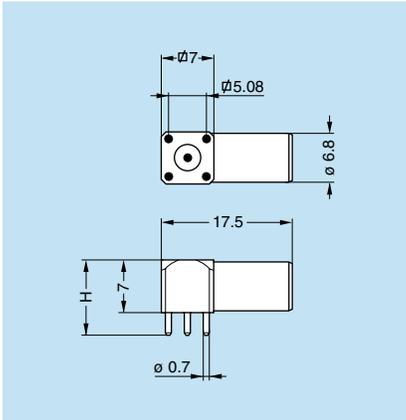
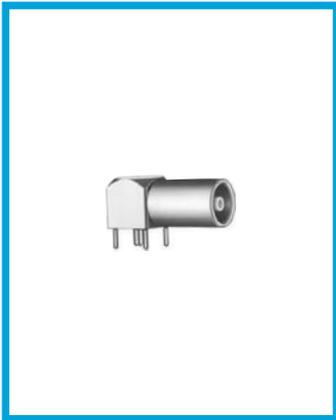
● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



**EPE Fixed receptacle with two nuts, for printed circuit**

Part number	Weight (g)	Availability
EPE.00.250.NTN	4.2	○

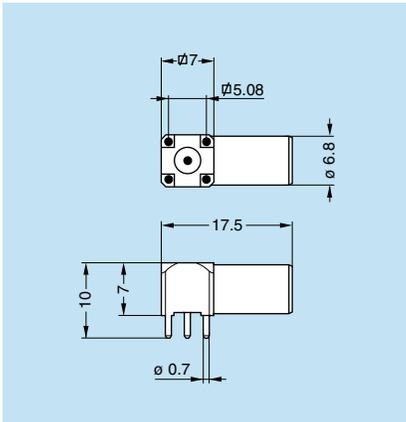
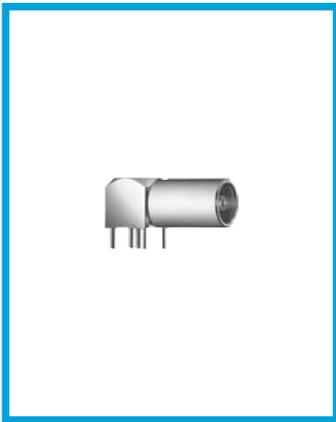
- P1** Panel cut-out
- P12** PCB drilling pattern



**EPL-EPM Elbow receptacle (90°) for printed circuit**

Part number	H (mm)	Weight (g)	Availability
EPL.00.250.NTN	10	4.3	●
EPM.00.250.NTN	13	4.5	○

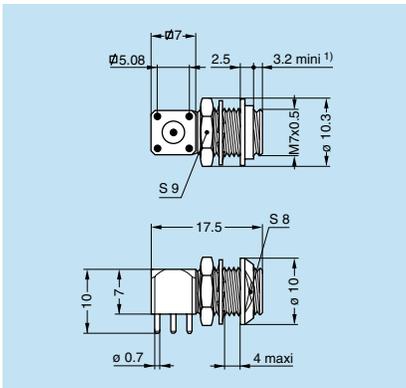
- P10** PCB drilling pattern



**EPK Elbow receptacle (90°) for printed circuit with clearance under the body**

Part number	Weight (g)	Availability
EPK.00.250.NTN	4.2	●

- P10** PCB drilling pattern

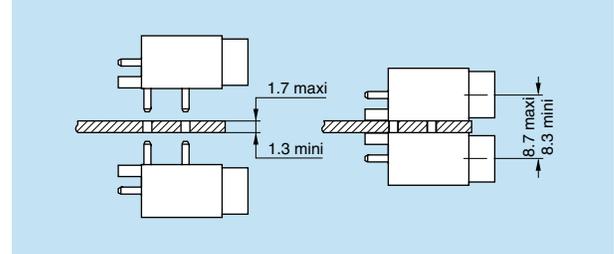
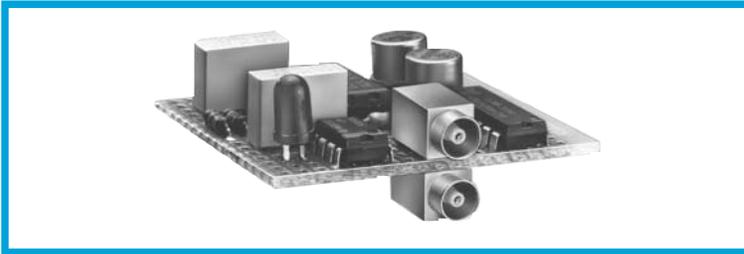


**EPS Elbow receptacle (90°) with two nuts, for printed circuit**

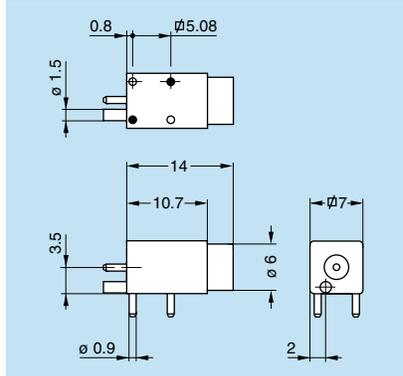
Part number	Weight (g)	Availability
EPS.00.250.NTN	5.3	●

- P1** Panel cut-out
- P12** PCB drilling pattern

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.

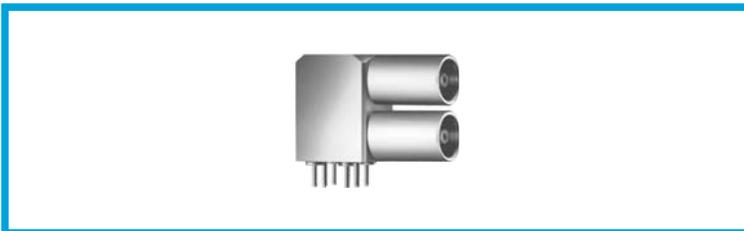


**EPN Straight receptacle for press mounting in pair on printed circuit**

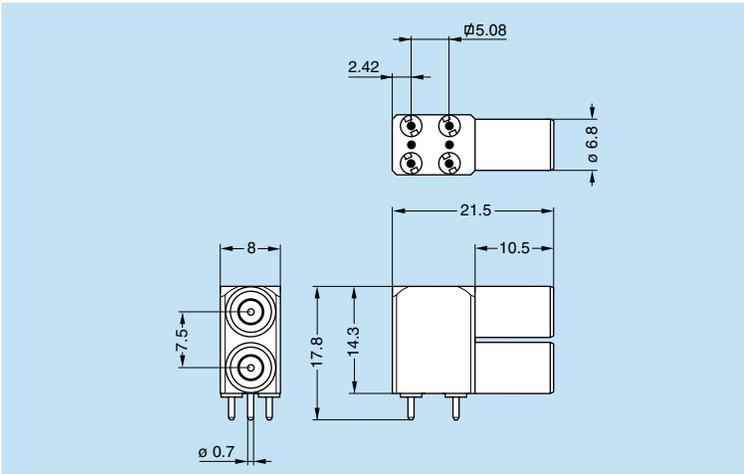


Part number	Weight (g)	Availability
EPN.00.250.NTN	3.6	●

**P9** PCB drilling pattern



**EPY Elbow receptacle (90°) for printed circuit, with two vertical receptacles**

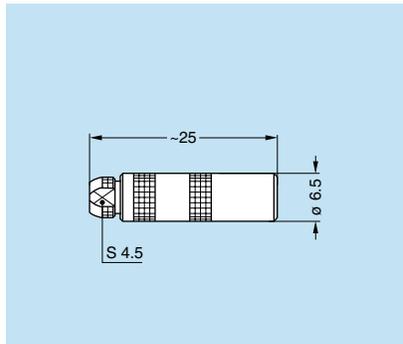


Part number	Weight (g)	Availability
EPY.00.250.NTN	12.8	●

**P13** PCB drilling pattern



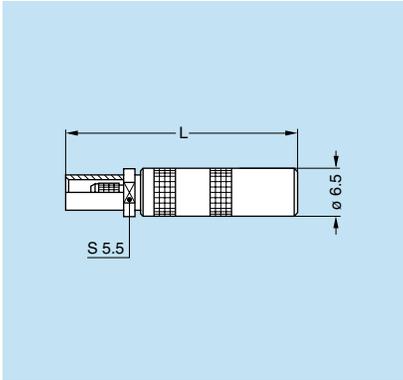
**PCA Free receptacle with cable collet**



Part number	Cable group	Availability
PCA.00.250.CTLC22	1	●
PCA.00.250.CTLC29	2-3-4	●
PCA.00.250.CTLC31	8	●

**M1** Cable assembly

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.

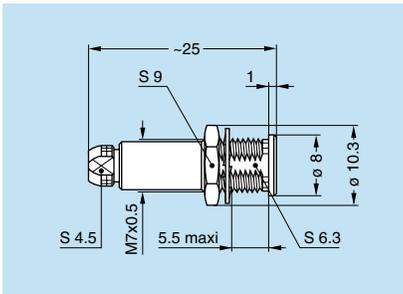
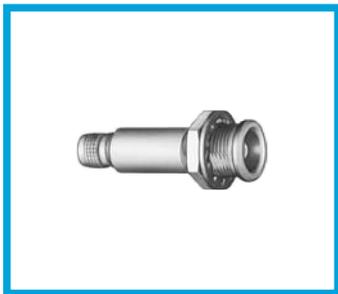


**PCS Free receptacle with cable crimping**

Part number	Cable group	Dim.	Availability
		L	
PCS.00.250.CTME24	1	30	●
PCS.00.250.CTME30	2	30	●
PCS.00.250.CTME31	3-4	30	●
PCS.00.250.CTME35	8	30	○
PCS.00.250.CTME44	5	30	●
PCS.00.250.CTME52	6	33	●

**M4** Cable assembly, crimp contact

**M5** Cable assembly, solder contact (on request)

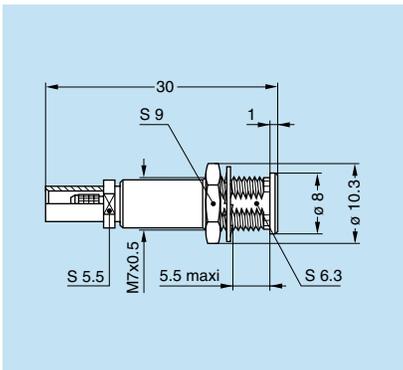


**PSA Fixed receptacle, nut fixing, with cable collet**

Part number	Cable group	Availability
PSA.00.250.CTLC22	1	●
PSA.00.250.CTLC29	2-3-4	●
PSA.00.250.CTLC31	8	●

**M1** Cable assembly

**P5** Panel cut-out



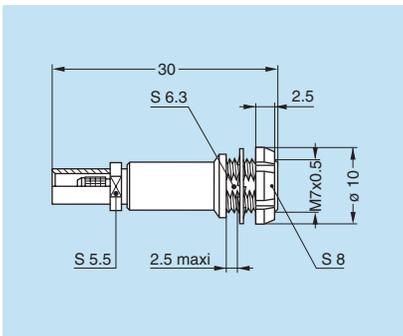
**PSS Fixed receptacle, nut fixing, with cable crimping**

Part number	Cable group	Availability
PSS.00.250.CTME24	1	●
PSS.00.250.CTME30	2	●
PSS.00.250.CTME31	3-4	●
PSS.00.250.CTME35	8	○

**M4** Cable assembly, crimp contact

**M5** Cable assembly, solder contact (on request)

**P5** Panel cut-out



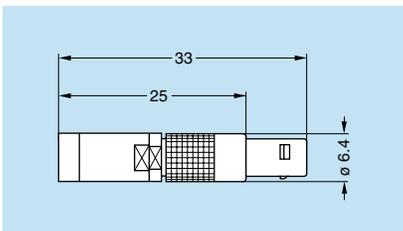
**PES Fixed receptacle, nut fixing, with cable crimping (back panel mounting)**

Part number	Cable group	Availability
PES.00.250.NTME31	3-4	○
PES.00.250.NTME35	8	○

**M4** Cable assembly, crimp contact

**M5** Cable assembly, solder contact (on request)

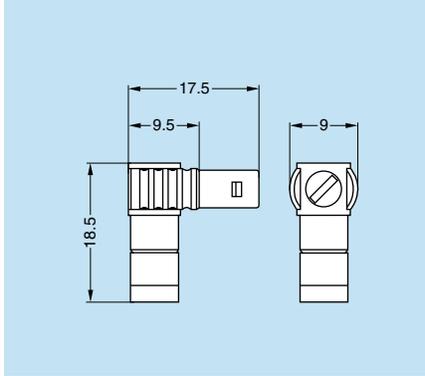
**P5** Panel cut-out



**FRT Straight plug with resistor or shorted**

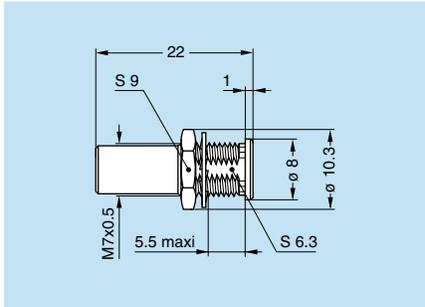
Part number	Resistor	Weight (g)	Availability
FRT.00.250.CTA00	shorted	4.4	○
FRT.00.250.CTA50	50 Ω 1/8W	4.4	○

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
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### FLR Elbow plug (90°) with resistor

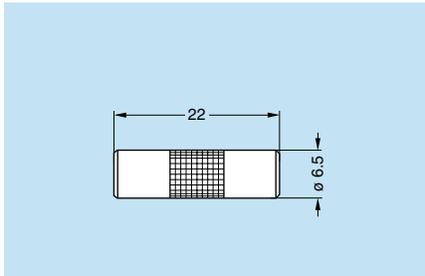
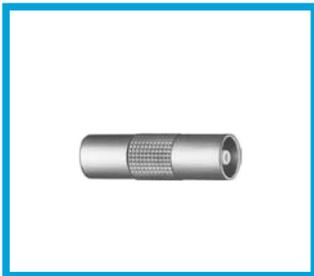
Part number	Resistance	Weight (g)	Availability
FLR.00.250.NTA50	50 Ω 1/8W	5.6	○



### RAD Fixed coupler, nut fixing

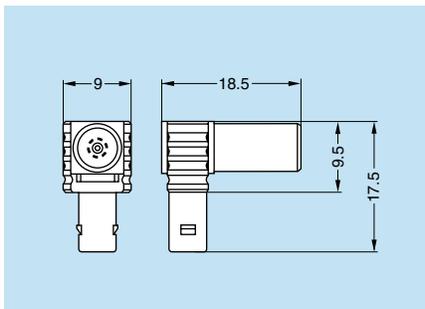
Part number	Weight (g)	Availability
RAD.00.250.CTM	3.8	●

**P5** Panel cut-out



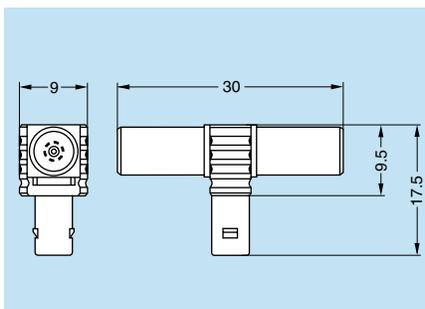
### RMA Free coupler

Part number	Weight (g)	Availability
RMA.00.250.CTM	2.7	●



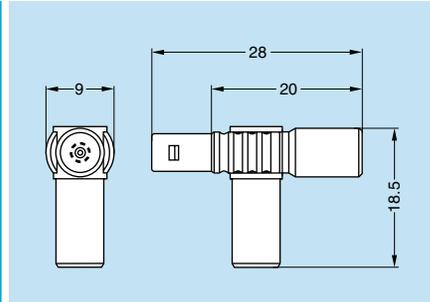
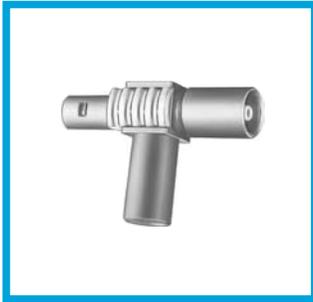
### FTR Elbow plug (90°) with receptacle

Part number	Weight (g)	Availability
FTR.00.250.CTA	5.4	○



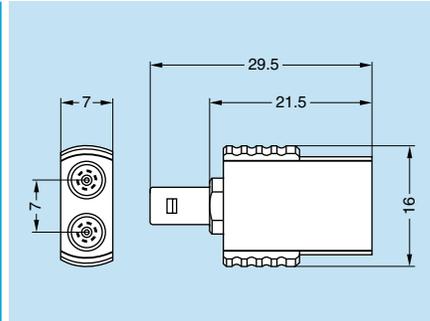
### FTA T-plug with two in-line receptacles

Part number	Weight (g)	Availability
FTA.00.250.CTF	7.8	○



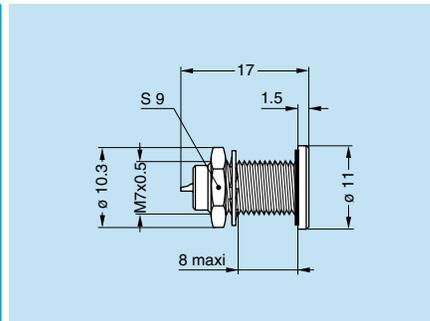
**FTL T-plug with two receptacles (90°)**

Part number	Weight (g)	Availability
FTL.00.250.CTF	7.1	○



**FTY Straight plug with two parallel receptacles**

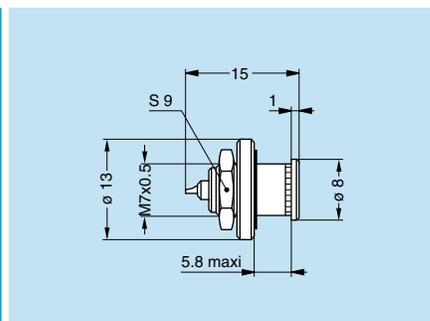
Part number	Weight (g)	Availability
FTY.00.250.CTF	12.5	○



**HGP Fixed receptacle, nut fixing, watertight**

Part number	Weight (g)	Availability
HGP.00.250.CTLP	4.2	○

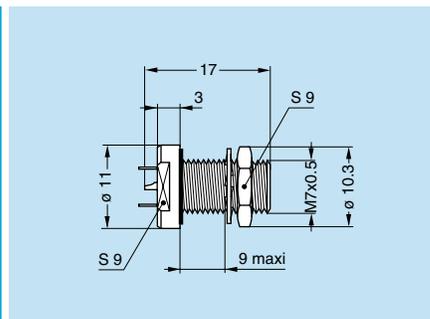
**P1** Panel cut-out



**HGW Fixed receptacle, nut fixing, with rear sealing ring**

Part number	Weight (g)	Availability
HGW.00.250.CTLP	4.2	○

**P1** Panel cut-out

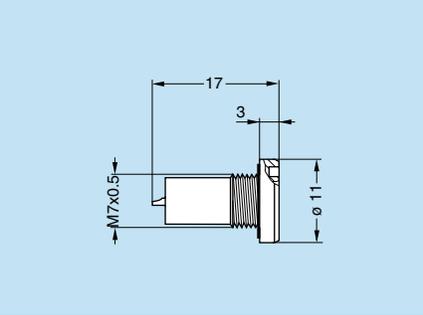
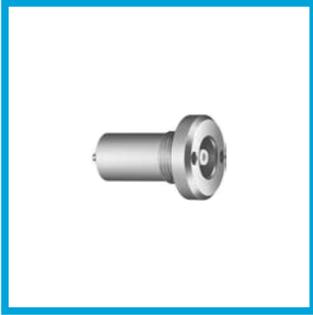


**EWF Fixed receptacle, nut fixing, vacuumtight (back panel mounting)**

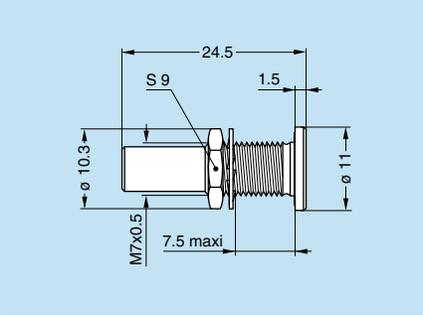
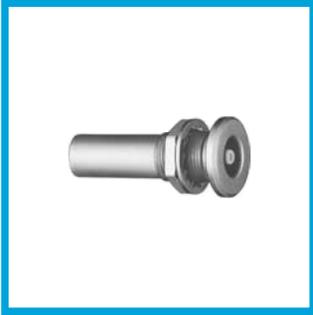
Part number	Weight (g)	Availability
EWF.00.250.CTLPV	4.2	○

**P1** Panel cut-out

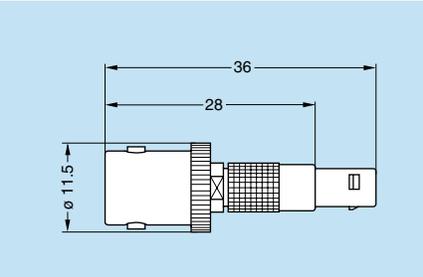
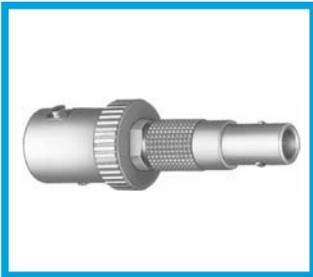
● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.


**EWV Fixed receptacle, vacuumtight**

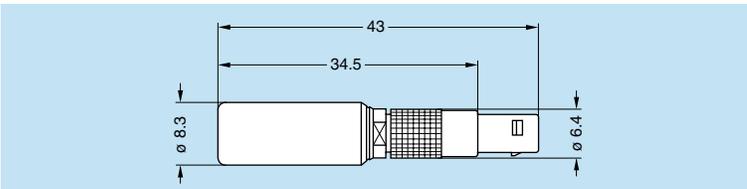
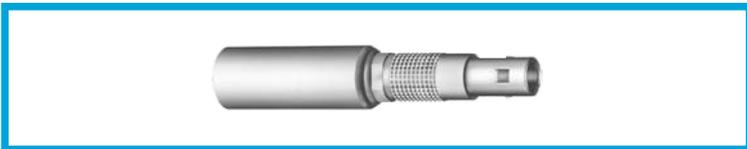
Part number	Weight (g)	Availability
EWV.00.250.CTLPV	3.7	○

**P2** Panel cut-out

**SWH Fixed coupler, nut fixing, vacuumtight**

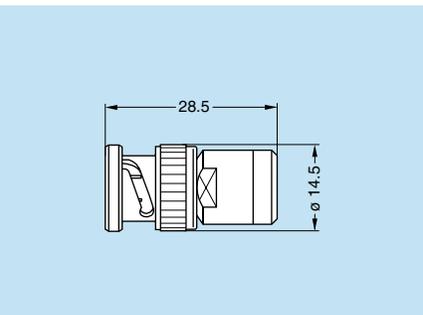
Part number	Weight (g)	Availability
SWH.00.250.CTMV	5.2	○

**P1** Panel cut-out

**ABF Adapter from LEMO plug to BNC receptacle**

Part number	Weight (g)	Availability
ABF.00.250.CTA	8.3	○

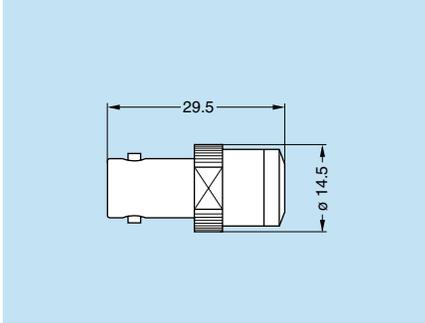

**APF Adapter from LEMO plug to CINCH receptacle (Phono Plug)**

Part number	Ring Color	Weight (g)	Availability
APF.00.250.DTAB	white	7	○
APF.00.250.DTAR	red	7	○


**ABA Adapter from LEMO receptacle to BNC plug**

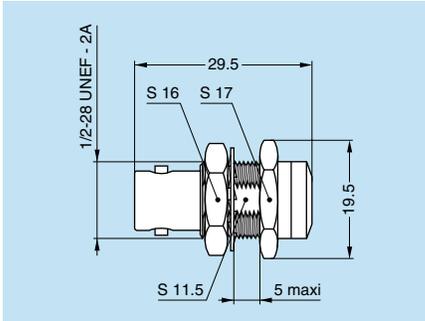
Part number	Weight (g)	Availability
ABA.00.250.NTL	18.7	●

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



**ABC Adapter from LEMO receptacle to BNC receptacle**

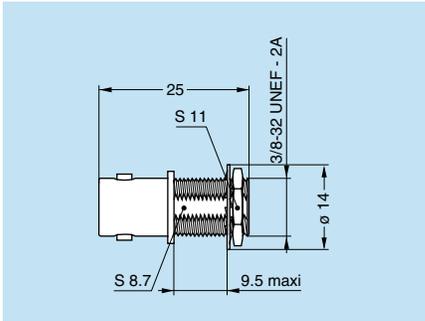
Part number	Weight (g)	Availability
ABC.00.250.NTM	17	○



**ABD Adapter from LEMO receptacle to BNC fixed receptacle**

Part number	Weight (g)	Availability
ABD.00.250.NTM	21.4	○

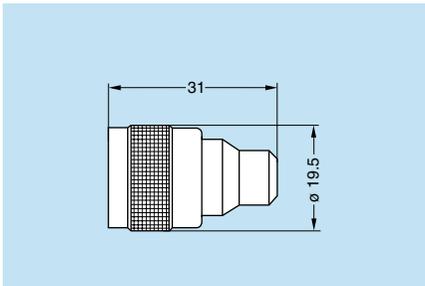
**P7** Panel cut-out



**ABB Adapter from LEMO fixed receptacle to BNC receptacle**

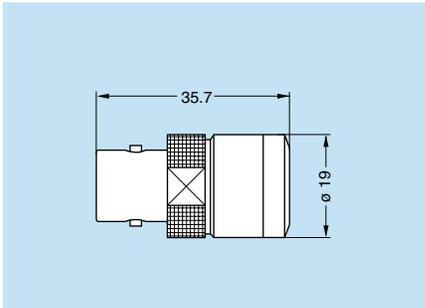
Part number	Weight (g)	Availability
ABB.00.250.NTM	9.4	○

**P6** Panel cut-out



**ACA Adapter from LEMO receptacle to C plug**

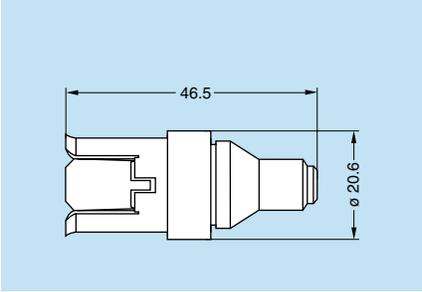
Part number	Weight (g)	Availability
ACA.00.250.NTL	32	○



**ACB Adapter from LEMO receptacle to C receptacle**

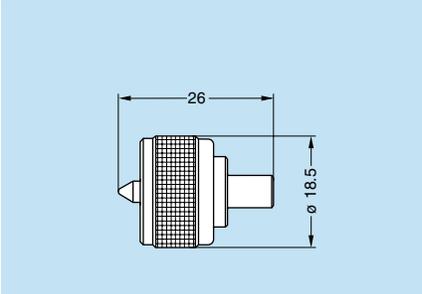
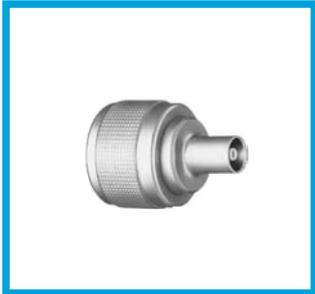
Part number	Weight (g)	Availability
ACB.00.250.NTM	50.3	○

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



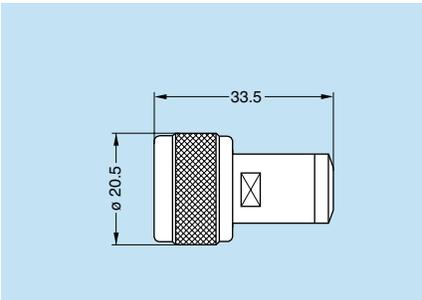
### AGG Adapter from LEMO receptacle to General-Radio receptacle type 874

Part number	Weight (g)	Availability
AGG.00.250.NTM	20	○



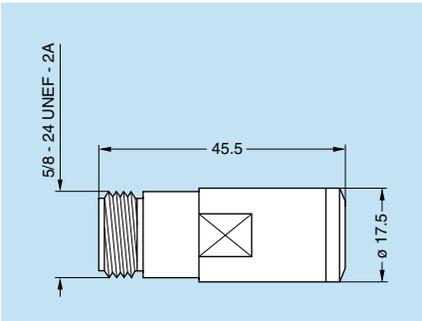
### AGH Adapter from LEMO receptacle to UHF plug

Part number	Weight (g)	Availability
AGH.00.250.NTL	13.8	○



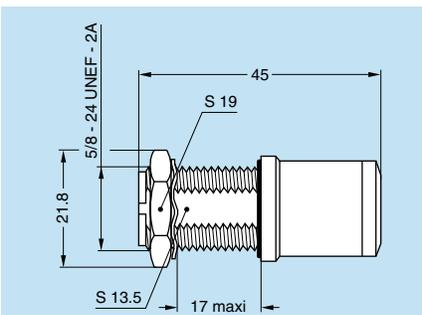
### ANA Adapter from LEMO receptacle to N plug

Part number	Weight (g)	Availability
ANA.00.250.NTL	38	○



### ANB Adapter from LEMO receptacle to N receptacle

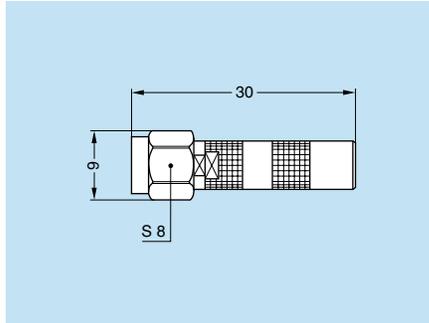
Part number	Weight (g)	Availability
ANB.00.250.NTM	61.7	○



### ANC Adapter from LEMO receptacle to N fixed receptacle

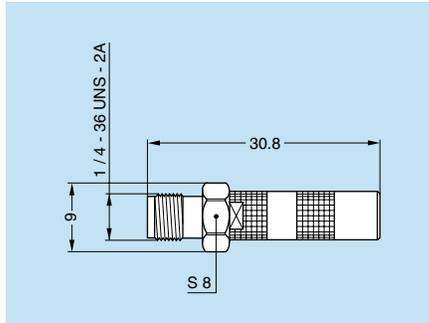
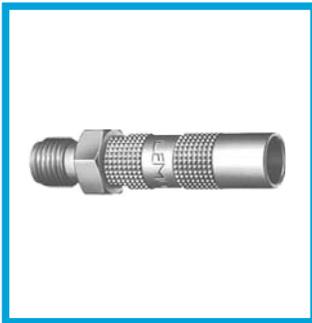
Part number	Weight (g)	Availability
ANC.00.250.NTM	63.5	○

**P8** Panel cut-out



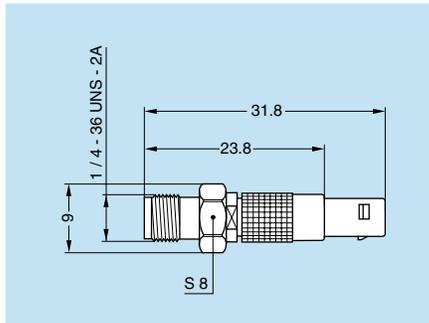
**ASA Adapter from LEMO receptacle to SMA plug**

Part number	Weight (g)	Availability
ASA.00.250.NTL	4.9	○



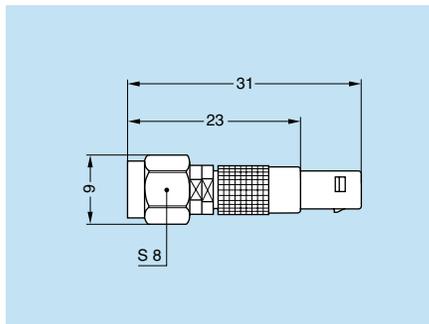
**ASB Adapter from LEMO receptacle to SMA receptacle**

Part number	Weight (g)	Availability
ASB.00.250.NTM	4.6	○



**ASF Adapter from LEMO plug to SMA receptacle**

Part number	Weight (g)	Availability
ASF.00.250.NTA	4.6	○

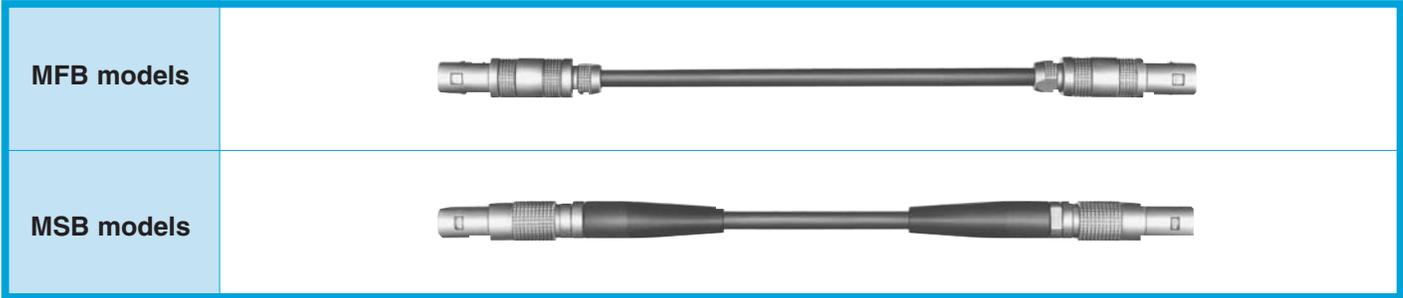


**ASG Adapter from LEMO plug to SMA plug**

Part number	Weight (g)	Availability
ASG.00.250.NTC	4.9	○

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.

## ● Assembled Cables



### Delay lines

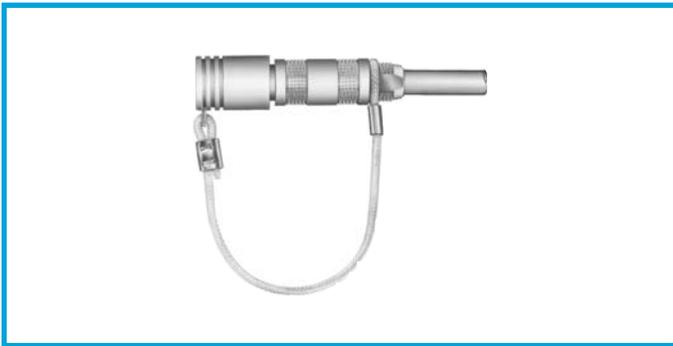
Part number	Delay (ns)	Part number
MFB.00.250.RTE005	0.5	MSB.00.250.RTE005
MFB.00.250.RTE010	1.0	MSB.00.250.RTE010
MFB.00.250.RTE020	2.0	MSB.00.250.RTE020
MFB.00.250.RTE030	3.0	MSB.00.250.RTE030
MFB.00.250.RTE040	4.0	MSB.00.250.RTE040
MFB.00.250.RTE050	5.0	MSB.00.250.RTE050
MFB.00.250.RTE060	6.0	MSB.00.250.RTE060
MFB.00.250.RTE080	8.0	MSB.00.250.RTE080
MFB.00.250.RTE100	10.0	MSB.00.250.RTE100
MFB.00.250.RTE160	16.0	MSB.00.250.RTE160
MFB.00.250.RTE200	20.0	MSB.00.250.RTE200
MFB.00.250.RTE320	32.0	MSB.00.250.RTE320
MFB.00.250.RTE640	64.0	MSB.00.250.RTE640

### Assembled Cables

Part number	Length (cm)	Part number
MFB.00.250.LTE010	10	MSB.00.250.LTE010
MFB.00.250.LTE020	20	MSB.00.250.LTE020
MFB.00.250.LTE030	30	MSB.00.250.LTE030
MFB.00.250.LTE040	40	MSB.00.250.LTE040
MFB.00.250.LTE050	50	MSB.00.250.LTE050
MFB.00.250.LTE060	60	MSB.00.250.LTE060
MFB.00.250.LTE080	80	MSB.00.250.LTE080
MFB.00.250.LTE100	100	MSB.00.250.LTE100
MFB.00.250.LTE150	150	MSB.00.250.LTE150
MFB.00.250.LTE200	200	MSB.00.250.LTE200
MFB.00.250.LTE300	300	MSB.00.250.LTE300
MFB.00.250.LTE400	400	MSB.00.250.LTE400
MFB.00.250.LTE500	500	MSB.00.250.LTE500

**Note:** the standard cable used to manufacture these cable assemblies is CCH.99.281.505 (LEMO) as per IEC.50.2.1 standard. On request, this type of cable can be replaced by other coaxial cables. Other cable lengths are available on request.

## ● Accessories



### Fitting of the cord

Slide the plug into the loop of the cord. Place the loop into the groove in front of the collet nut and tighten the loop.

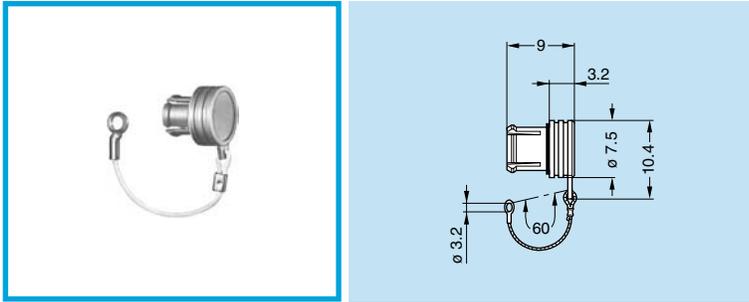
### BFA Plug Caps

Part number	Weight (g)	Availability
BFA.00.100.PCSG	0.7	○

**Note:** upon request, this cap can be supplied in black and the last letter "G" of the part number should be replaced with "N".

- Body material: Polyoxymethylen (POM) grey
- Cord material: Polyamid 6, white
- O ring material: Silicone rubber
- Maximum operating temperature: 100°C
- Watertightness: IP61 according to IEC 529

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
 Non-standard product is defined as any product which contains one or more components which are not standard.



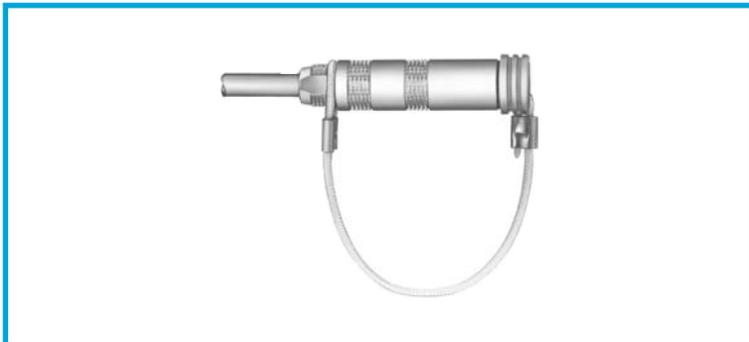
- Body material: Polyoxymethylen (POM) grey
- Cord material: Polyamid 6, white

### BRA Blanking cap for fixed receptacle and free straight receptacle

Part number	Weight (g)	Availability
BRA.00.200.PCSG	0.6	○

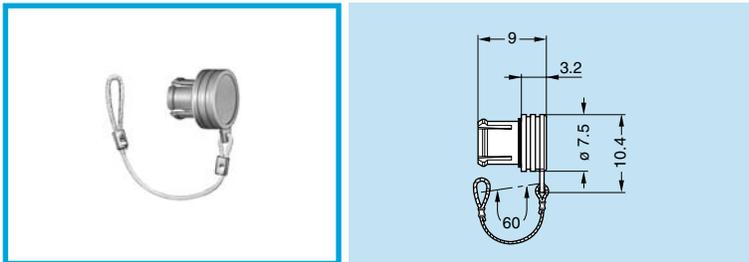
**Note:** upon request, this cap can be supplied in black and the last letter "G" of the part number should be replaced with "N".

- O-ring material: Silicone rubber
- Maximum operating temperature: 100°C
- Watertightness: IP61 according to IEC 529



### Fitting of the cord

Slide the receptacle into the loop of the cord. Place the loop into the groove in front of the collet nut and tighten the loop.

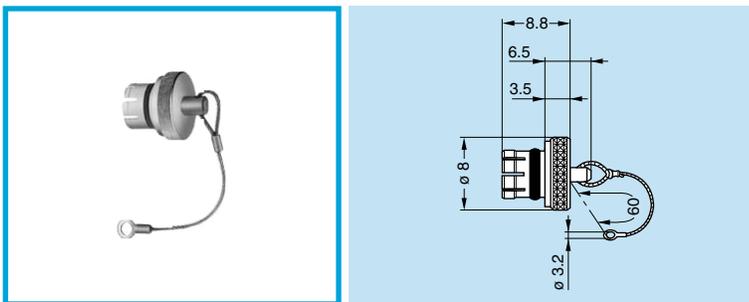


### BRD Blanking cap for free receptacle

Part number	Weight (g)	Availability
BRD.00.200.PCSG	0.5	○

**Note:** upon request, this cap can be supplied in black and the last letter "G" of the part number should be replaced with "N".

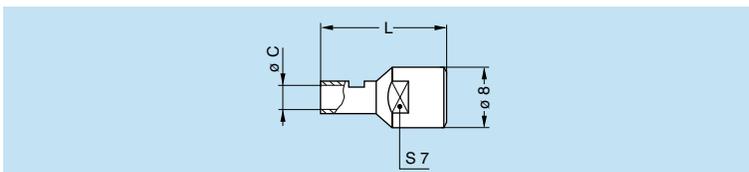
- Body material: Polyoxymethylen (POM) grey
- Cord material: Polyamid 6, white
- O-ring material: Silicone rubber
- Maximum operating temperature: 100°C
- Watertightness: IP61 according to IEC 529



### BRE Blanking cap for fixed receptacle, free receptacle and coupler

Part number	Weight (g)	Availability
BRE.00.200.NAS	6.5	○

- Body material: Brass (UNS C 38500), nickel-plated (3 µm)
- Cable material: Stainless steel
- O-ring material: Silicone rubber or FPM
- Maximum operating temperature: 250°C
- Watertightness: IP61 according to IEC 529



### GCD Earthing cap

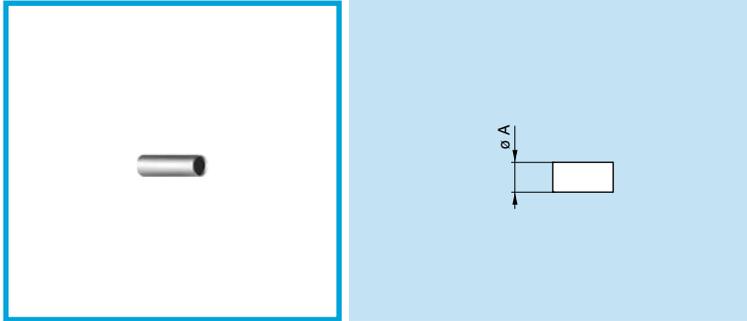
Part number	Cable group	Dim.		Availability
		L	C	
GCD.00.020.LA	1	12	2.0	●
GCD.00.032.LA	2-3-4	16	3.2	○
GCD.00.050.LA	6	19	5.0	○

**Note:** the braid of the cable should be soldered onto the back of the cap.

- Material: Brass (UNS C 38500) gold-plated (0.5 µm)



● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
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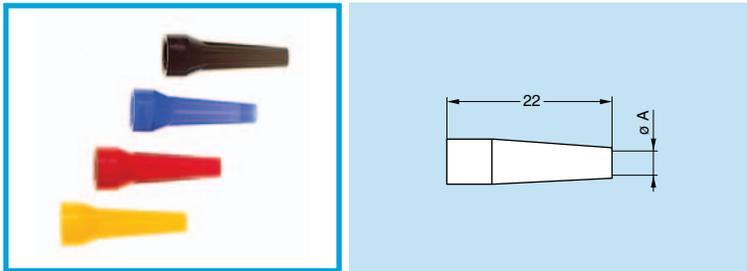


- Material: Copper (UNS C 18700) nickel-plated (3µm)

### FFS Crimp ferrule

Part number	Cable group	Dim.	Availability
		$\phi A$	
FFS.00.160.DN	1	3.1	○
FFS.00.161.MN	2-3-4	3.8	○
FFS.00.162.DN	8	4.4	○
FFS.00.163.DN	5	5.3	○
FFS.00.164.DN	6	6.2	○
FFV.00.160.DN	7	6.3	○

**Note:** receptacles and plugs to be crimped are always supplied with a crimp ferrule. To order this accessory separately, use the above part numbers.



Ref.	Color	Ref.	Color	Ref.	Color
A	blue	J	yellow	R	red
B	white	M	brown	S	orange
G	grey	N	black	V	green

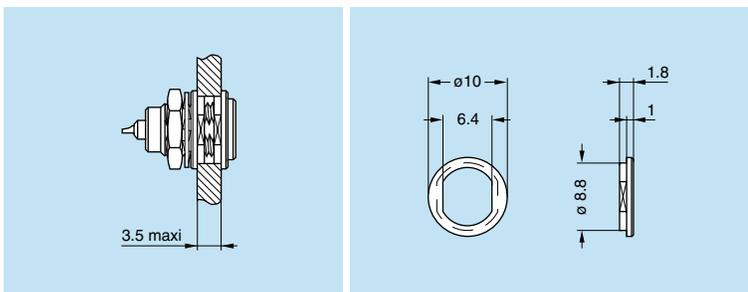
### GMD Bend relief

Part number	$\phi$ Cable		Dim. A	Nut for fitting the bend relief part	Availability
	max	min			
GMD.00.025.DG	2.8	2.5	2.5	FFM.00.130.LN	●
GMD.00.028.DG	3.1	2.8	2.8	FFM.00.130.LN	●
GMD.00.032.DG	3.5	3.2	3.2	FFM.00.130.LN	●

**Note:**

- for use with all crimp models and nut for fitting a bend relief
- the last letter of the part number "G" specifies the color grey. Refer to the table to the left to define another color and replace the letter "G" by the one corresponding to the color required.

- Material: Polyurethane (Desmopan 786)
- Operating temperature: -40°C + 80°C



### GRA Insulating washers

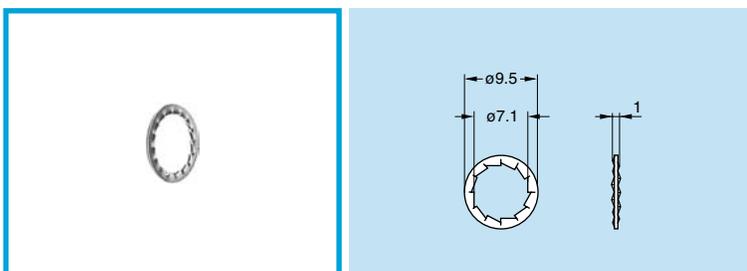
Part number	Weight (g)
GRA.00.269.GG	0.1

**Note:**

- receptacles and plugs mounted on panels can be fitted with insulating washers. The nine colors available combined with those for the bend reliefs makes color coding possible.
- the last letter of the part number "G" specifies the color grey. Refer to the table below to define another color and replace the letter "G" with the one corresponding to the color required.

- Material: Polyamid (PA.6)
- Operating temperature: -40°C + 80°C

Ref.	Color	Ref.	Color	Ref.	Color
A	blue	J	yellow	R	red
B	white	M	brown	S	orange
G	grey	N	black	V	green



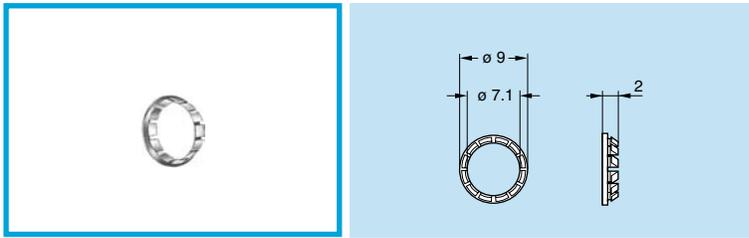
### GBA Locking washer

Part number	Weight (g)	Availability
GBA.00.250.FN	0.2	●

**Note:** receptacles and plugs are always supplied with a locking washer. To order this accessory separately, use the above part number.

- Material: Brass (UNS C 52100) nickel-plated (3 µm)

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
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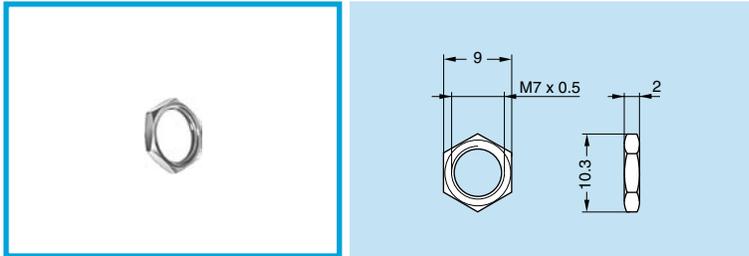


### GBB Tapered washer

Part number	Weight (g)	Availability
GBB.00.250.LN	0.2	●

**Note:** to order this accessory separately, use the above part number.

- Material: Brass (UNS C 38500) nickel-plated (3  $\mu$ m)

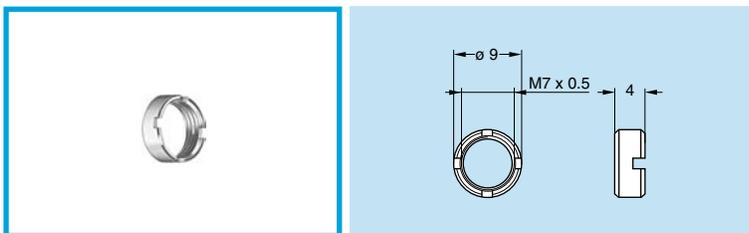


### GEA Hexagonal nut

Part number	Weight (g)	Availability
GEA.00.240.LN	0.6	●

**Note:** receptacles and plugs are supplied with a hexagonal nut as standard. To order this accessory separately, use the above part number. The last letters "LN" of the part number refer to the nut material and treatment. If a nut in aluminum alloy is desired, replace the last letters of the part number by "PT".

- Material:
  - Brass (UNS C 38500) nickel-plated (3  $\mu$ m)
  - Aluminum alloy (AA 6012) natural anodized

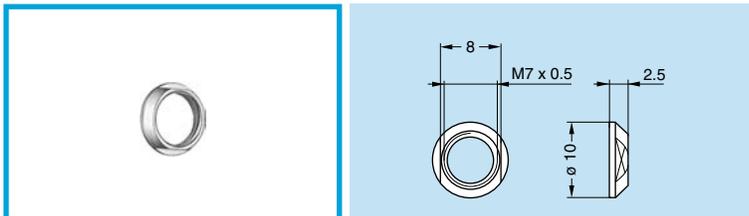


### GEB Round nut

Part number	Weight (g)	Availability
GEB.00.240.LN	0.8	●

**Note:** to order this accessory separately, use this part number.

- Material: Brass (UNS C 38500) nickel-plated (3  $\mu$ m)

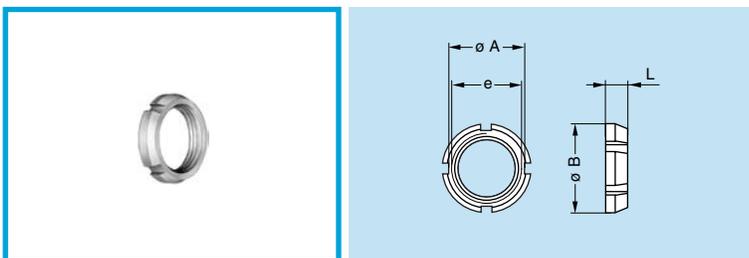


### GEC Conical nut

Part number	Weight (g)	Availability
GEC.00.240.LN	0.6	●

**Note:** to order this accessory separately, use this part number.

- Material: Brass (UNS C 38500) nickel-plated (3  $\mu$ m)

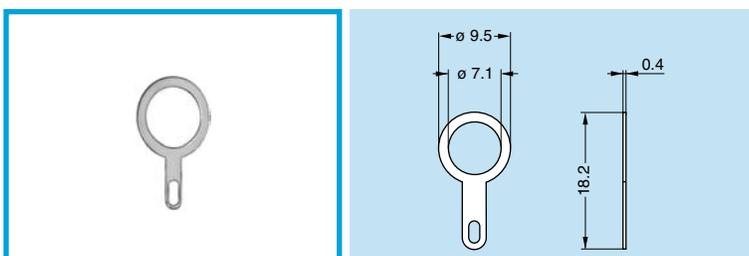


### GEG Notched Nut

Part number	Weight (g)	Dimensions (mm)				Availability
		A	B	e	L	
GEG.00.240.LC	0.8	8.7	10	M7x0.5	2.5	○

**Note:** to order this accessory separately, use the above part number.

- Material: Chrome-plated brass (Ni 3 $\mu$ m + Cr 0.3 $\mu$ m)



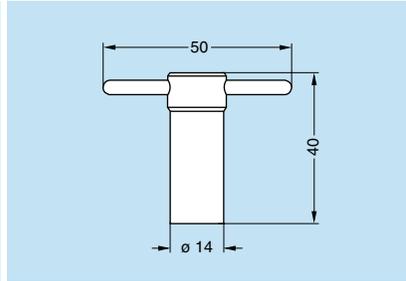
### GCA Grounding Washer

Part number	Weight (g)	Availability
GCA.00.255.LT	0.2	●

- Material: Brass (UNS C 27400) treated CuSnZn (2  $\mu$ m)

● Standard, typically 0-6 weeks delivery for quantities of 250 or less.  
 ○ Non-standard product, contact LEMO USA, typically 6-12 weeks delivery for quantities of 250 or less.  
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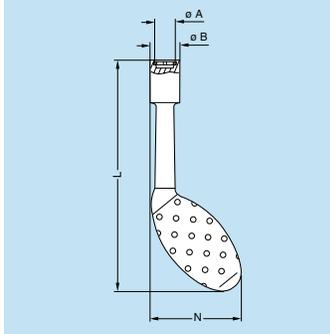
## ● Tooling



### DCG Spanner for hexagonal nut

Part number	Part number of the nut
DCG.91.149.0TN	GEA.00.240.LN

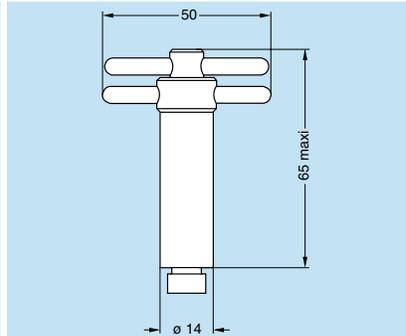
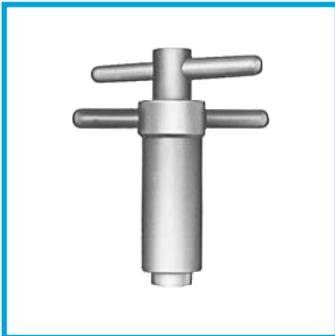
- Material: Blackened steel



### DCH Spanner for notched nut

Part number	Part number of the nut
DCH.91.101.PA	GEG.00.240.LC

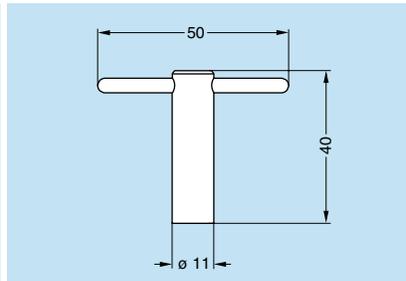
- Material: Blue polyurethane



### DCA Spanner for hexagonal nut with locator for flats on receptacle thread

Part number	Part number of the nut
DCA.91.149.0TN	GEA.00.240.LN

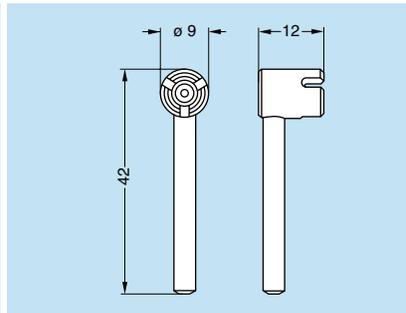
- Material: Blackened steel



### DCB Spanner for round nut

Part number	Part number of the nut
DCB.91.119.0TN	GEB.00.240.LN

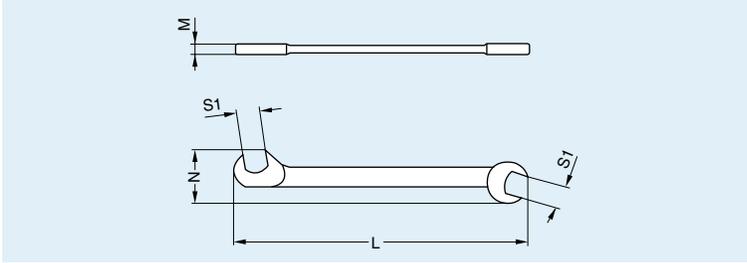
- Material: Blackened steel



### DCN Spanner for assembling plug with 3 latches

Part number
DCN.91.905.0TK

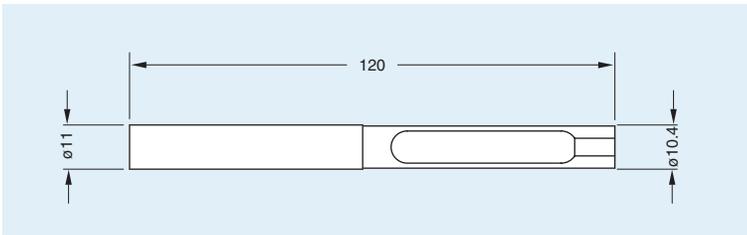
- Material: Blackened steel



### DCP Collet nut wrench

Part number	Dimensions			
	L	M	N	S1
DCP.99.045.TC	70	2	10.5	4.5
DCP.99.050.TC	78	2	12.6	5.0
DCP.99.055.TC	78	2	12.6	5.5
DCP.99.060.TC	78	2	12.6	6.0

- Material: Chrome-plated steel



### DCR Extraction tool for plugs

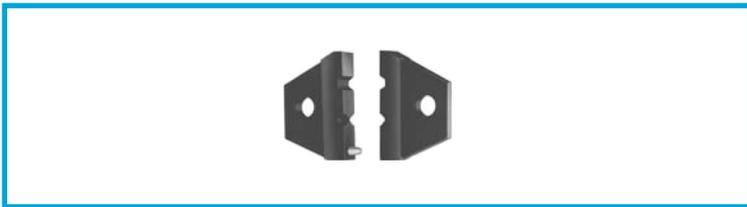
Part number
DCR.91.106.0PN

**Note:** this type of tool has been produced in order to facilitate the mating and unmating of plugs and is particularly useful in high density applications.



### DPE Crimping tool with die

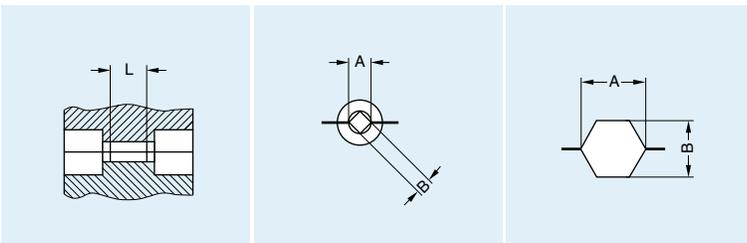
Part number	Cable group	Availability
DPE.99.123.1K	1	○
DPE.99.123.8K	2-3-4	○
DPE.99.124.3K	8	○
DPE.99.125.2K	5	○
DPE.99.176.2K	6-7	○



### DPN Dies

Part number	Cable group	Die dimension					
		For contacts			For shield		
		A	B	L	A	B	
DPN.99.123.1K	1	1.29	0.91	2.0	3.10	2.70	
DPN.99.123.8K	2-3-4	1.29	0.91	2.0	3.80	3.30	
DPN.99.124.3K	8	1.29	0.91	2.0	4.36	3.78	
DPN.99.125.2K	5	1.29	0.91	2.0	5.20	4.50	
DPN.99.176.2K	6-7	1.71	1.21	2.5	6.20	5.37	

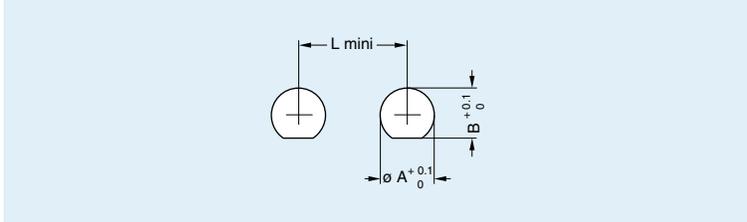
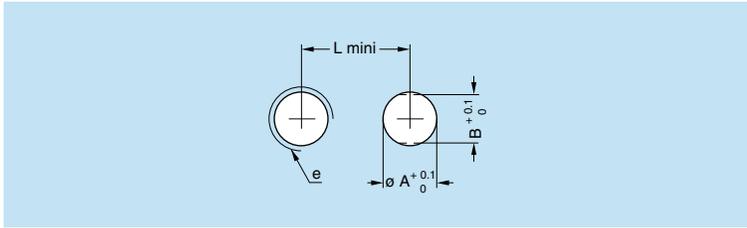
- Die material: Blackened steel



for contacts

for shield

## Panel cut-out

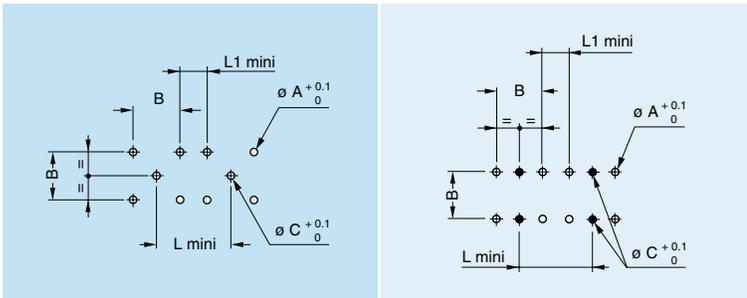


**Note:** 1) If these models are used with a tapered washer GBB, the panel cut-out must be according P1.

**Recommended mounting nut torque:** 2.5 Nm.

Cut-out	Model	Dimensions			
		A	B	L	e
P1	HGP-HGW-SWH-ECP EPE-EPS-FAB-EWF	7.1	–	14.5	–
P2	EWV	–	–	12.0	M7x0.5
P3	ERC	–	–	9.0	M7x0.5
P4	ERT	7.0 <sup>0.02</sup>	–	–	–
P5	Other models 1)	7.1	6.5	14.5	–
P6	ABB	9.7	9.0	15.0	–
P7	ABD	12.9	11.7	20.5	–
P8	ANC	16.1	13.7	24.0	–

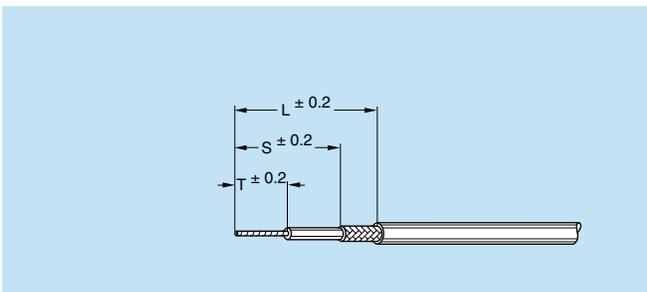
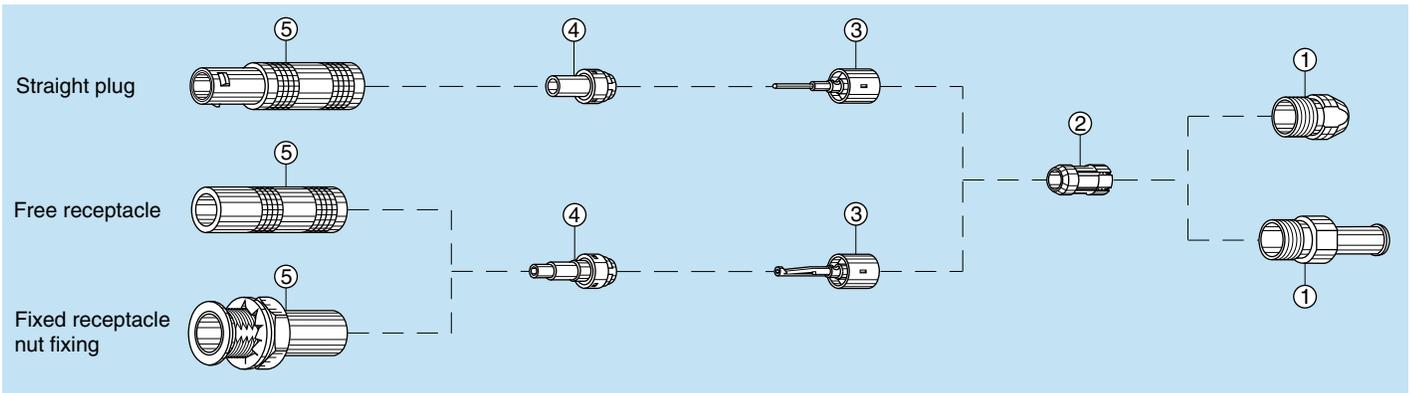
## PCB drilling pattern



Cut-out	Model	Dimensions				
		A	B	L	L1	C
P9	EPN	0.9	5.08	–	2.0	–
P10	Other models	0.8	5.08	8.0	2.9	0.8
P11	FPA	0.8	5.08	8.0	2.9	1.0
P12	EPE-EPS	0.8	5.08	14.5	9.4	0.8
P13	EPY	0.8	5.08	9.0	3.9	0.8

# ● Assembly Instructions

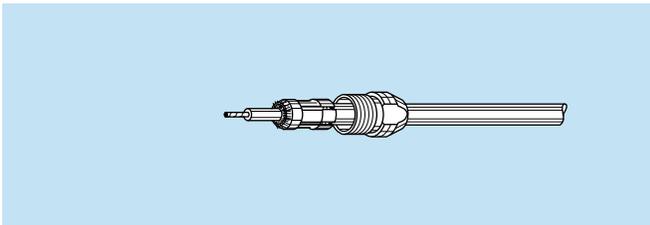
## Terminating of plugs and straight receptacles with cable collet M1 M2 M3



### 1. Cable preparation

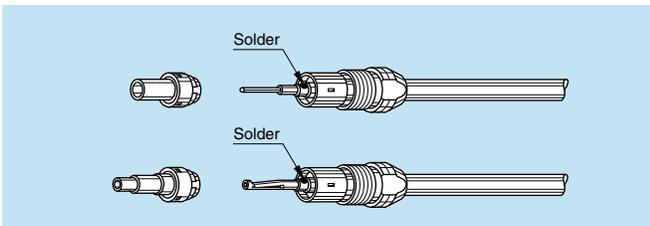
First place the bend relief (if to be used) on the cable. Strip the cable according to dimensions below.

Cable group	M1			M2			M3		
	T	S	L	T	S	L	T	S	L
1-2-3-4-8	4	4.5	8	–	–	–	5	5	8
6-7	–	–	–	7.5	8.5	13	–	–	–

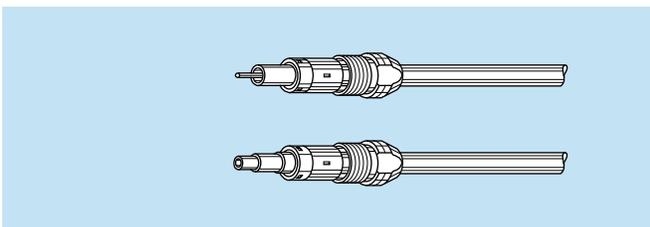


### 2. Cable termination

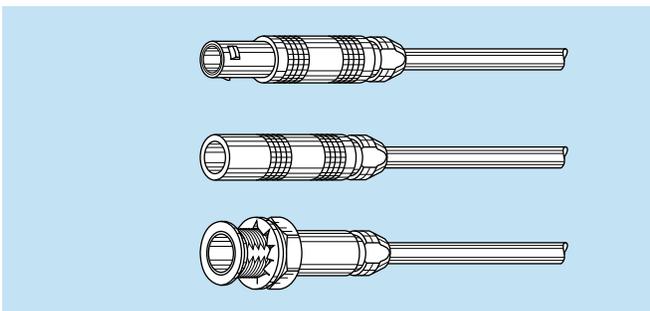
2.1 Place the collet nut ① and the collet ② on the cable. Fold back the shield braid onto the conical part of the collet, and trim to the outer edge of the collet



2.2 Slide the subassembly ③ to trap the shield braid and solder the center conductor into the contact.

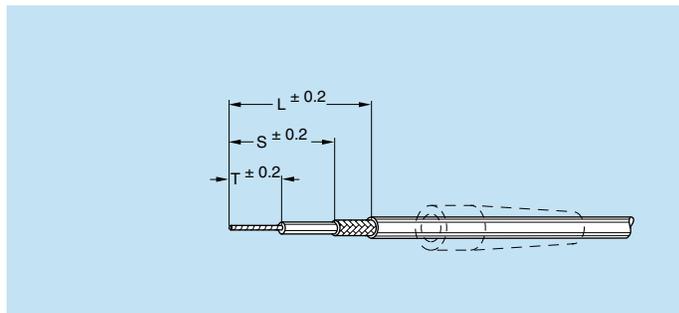
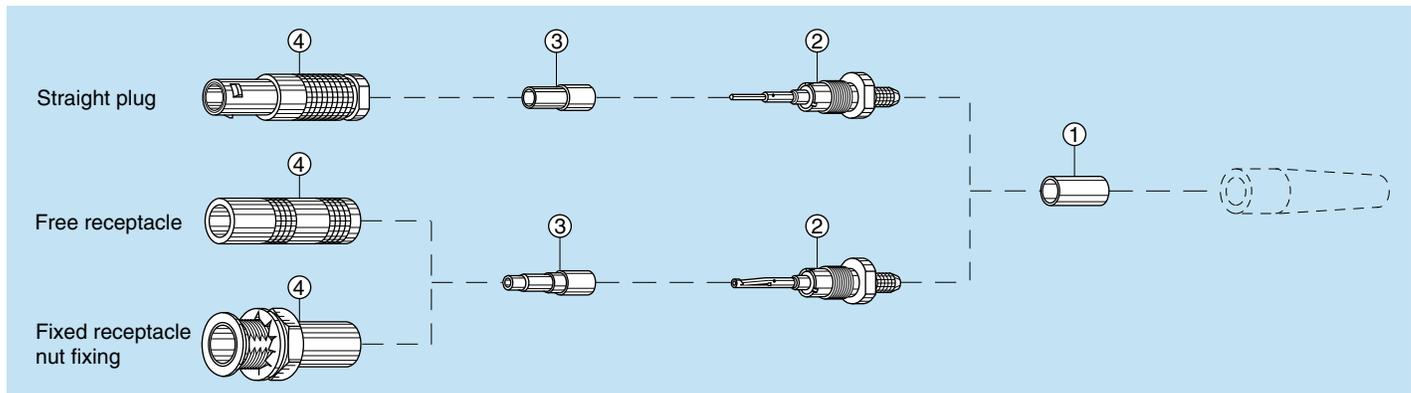


2.3 Slide the insulator ④ onto the subassembly ③ until it rests against the earthing sleeve of the subassembly ③.



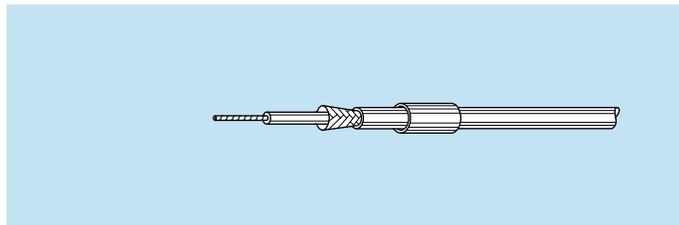
2.4 Slide the assembly into the connector outer shell ⑤. Screw the collet nut ① into the connector outer shell ⑤ using the appropriate tool and tighten to a torque of 0.25 Nm (see "Tooling" on page 34 and 35). Push the bend relief (if used) onto the collet nut.

**Note:** these terminating instructions apply to the following models:  
 M1 = FFA, FFE, FFF, PCA, PSA  
 M2 = FFY  
 M3 = FFC

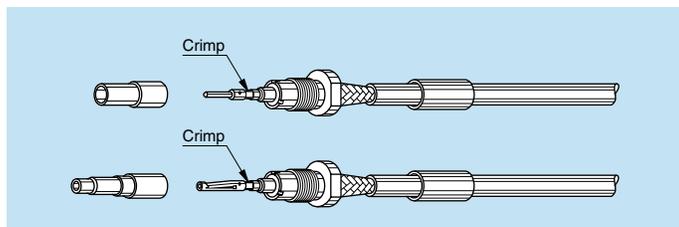
**Terminating of plugs and straight receptacles with cable crimping (crimp contact) M4**

**1. Cable preparation**

First place the bend relief (if to be used) on the cable. Strip the cable according to dimensions below.

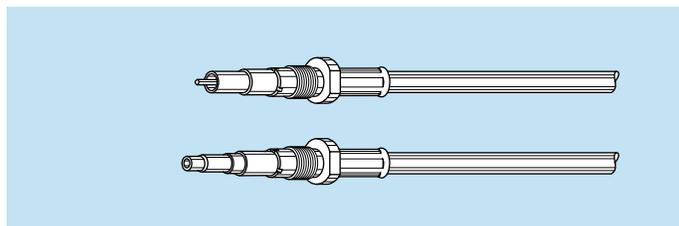
Cable group	M4		
	T	S	L
1-2-3-4-5-8	7	15	19.5
6-7	7	15	21.5


**2. Cable termination**

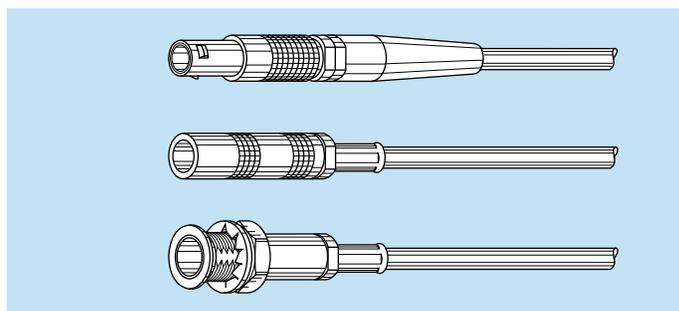
2.1 Place crimp ferrule ① on the cable. Widen the shield braid. Slide the subassembly ② into the cable until the insulator rests against the dielectric and the cable conductor is visible through the contact inspection hole.



2.2 Crimp the contact with the LEMO crimping tool using the square hole (see "Tooling" on page 34). Gently pull the cable in order to check the crimping.



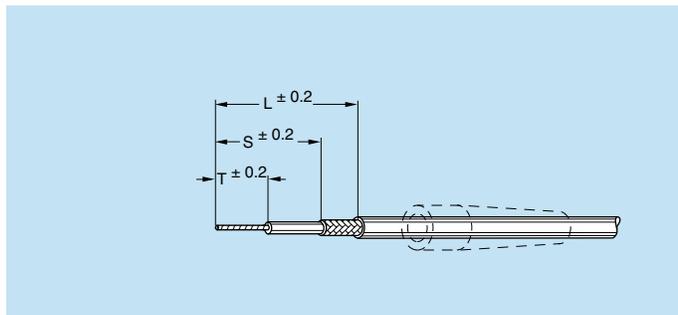
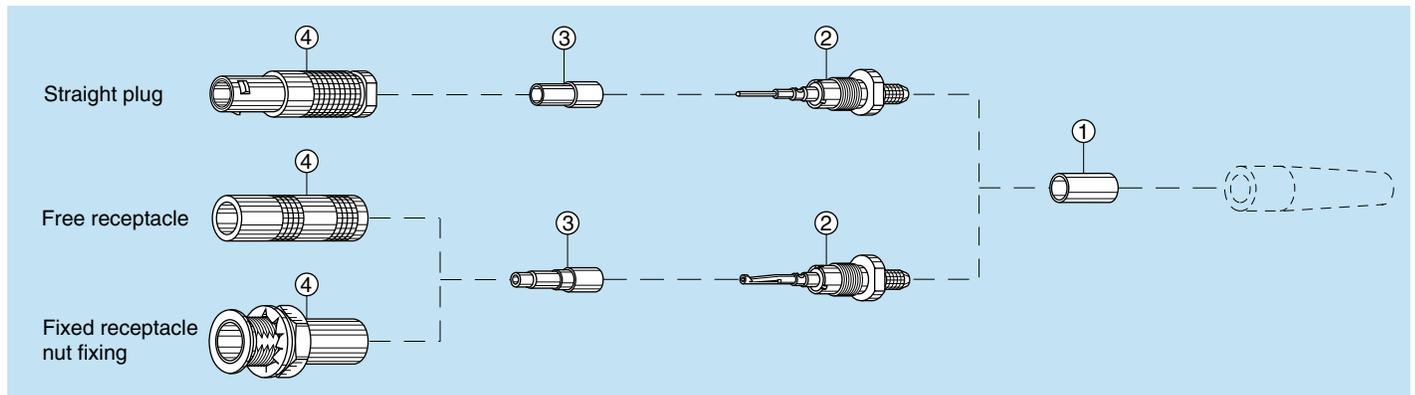
2.3 Slide the crimp ferrule ① onto the braiding until it rests against the crimp backnut of the subassembly ②. Crimp with the same LEMO crimping tool using the hexagonal opening. Slide the insulator ③ onto the subassembly ②.



2.4 Slide the assembly into the connector shell ④ and screw it onto the subassembly ②. Tighten using the appropriate tool to a torque of 0.25 Nm (see "Tooling" on page 34 and 35). Push the bend relief (if used) onto the crimp ferrule ①.

**Note:** these terminating instructions apply to the following models:  
M4 = FFS, FFV, PCS, PSS, PES

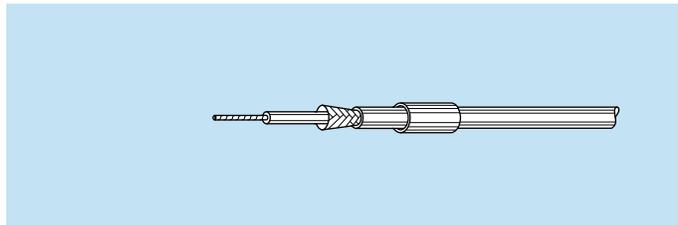
## Terminating of plugs and straight receptacles with cable crimping (solder contact) M5



### 1. Cable preparation

First place the bend relief (if to be used) on the cable. Strip the cable according to dimensions below.

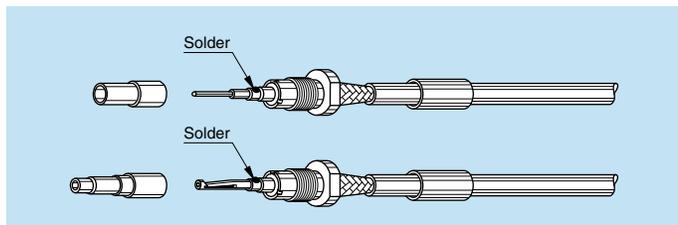
Cable group	M5		
	T	S	L
1-2-3-4-5-8	5	12	17
6-7	5	12	19



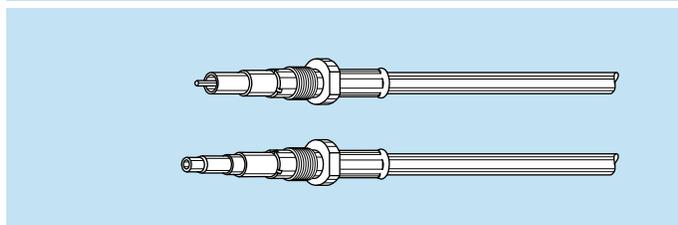
### 2. Cable terminating

2.1 Place the crimp ferrule ① on the cable. Widen the shield braid. Slide the subassembly ② over the cable until the insulator rests against the dielectric and the cable conductor is visible through the contact solder hole.

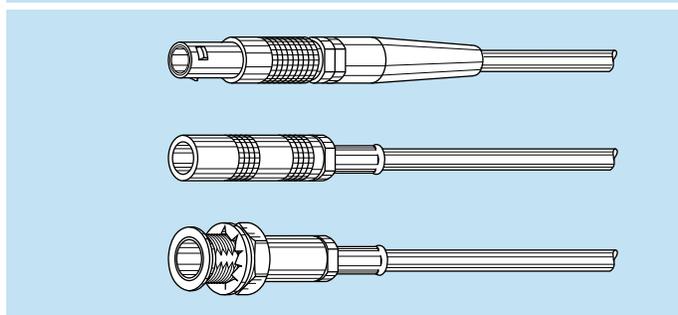
2.2 Solder the conductor through the hole.



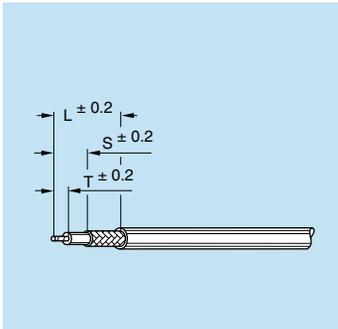
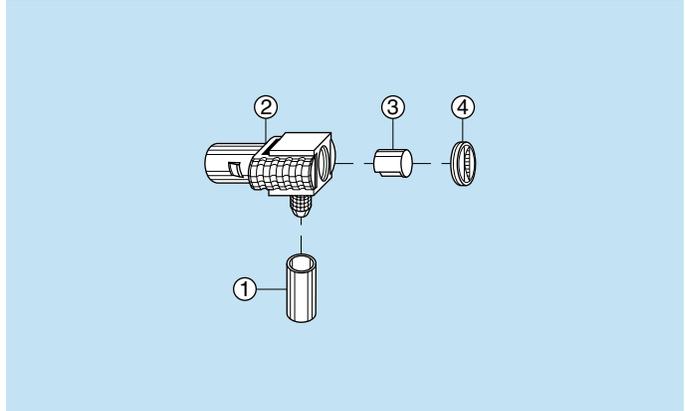
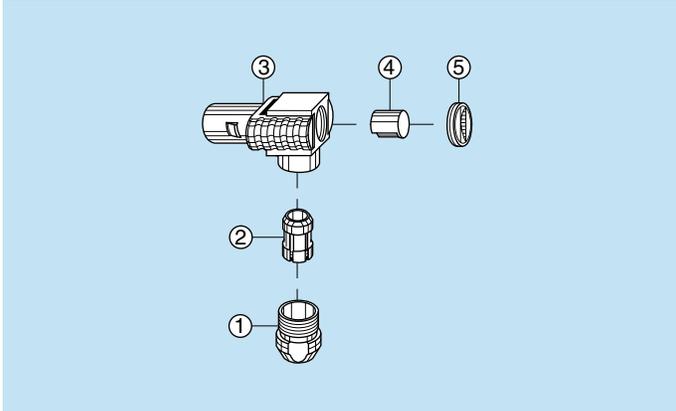
2.3 Slide the crimp ferrule ① onto the shield until it rests against the crimp backnut of the subassembly ②. Crimp with the LEMO crimping tool using the hexagonal opening (see "Tooling" on page 34). Slide the insulator ③ onto the subassembly ②.



2.4 Slide the assembly into the connector shell ④ and screw it onto the subassembly ②. Tighten using the appropriate tool to a torque of 0.25 Nm (see tooling on pages 34 and 35). Push the bend relief (if used) onto the crimp ferrule.

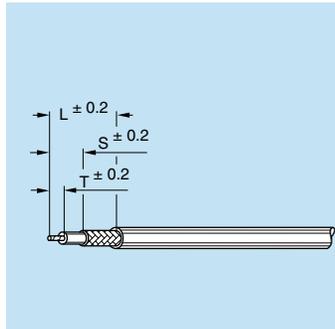


**Note:** these terminating instructions apply to the following models:  
M5 = FFS, FFV, PCS, PSS, PES

**Terminating of elbow plugs (90°) with cable collet M6 and cable crimp M7**

**1. Cable preparation**

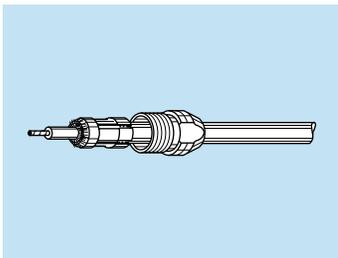
First place the bend relief (if to be used) on the cable. Strip the cable according to dimensions below.

Cable group	M6		
	T	S	L
1-2-3-4-8	1	3.5	6.5

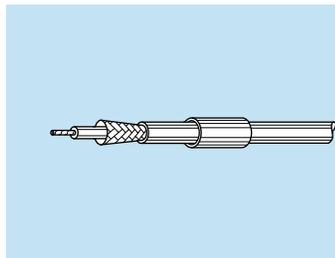

**1. Cable preparation**

First place the bend relief (if to be used) on the cable. Strip the cable according to dimensions below.

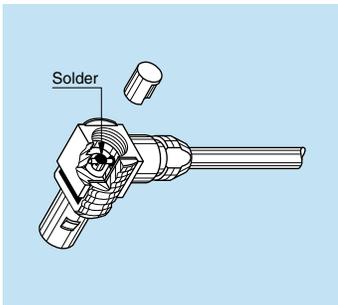
Cable group	M7		
	T	S	L
1-2-3-4-8	1	4.5	9
6-7	3	4.5	11


**2. Cable terminating**

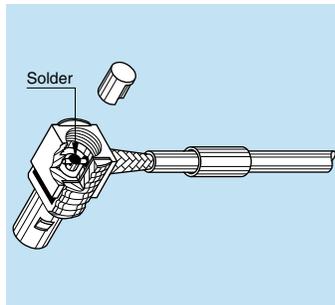
2.1 Place the crimp ferrule ① and collet ② on the cable. Fold back the shield braid onto the conical part of the collet, and trim to outer edge of the collet.


**2. Cable terminating**

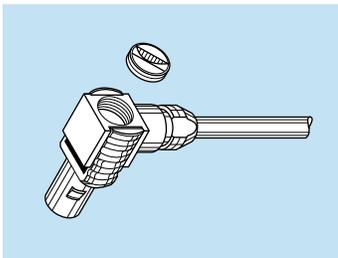
2.1 Place the cable crimp ferrule ① on the cable and widen the braiding.



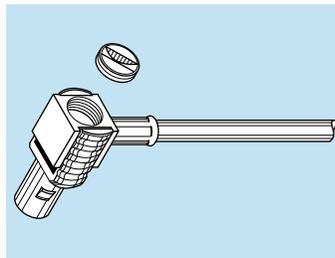
2.2 Slide the assembly into the connector shell ③ and tighten the collet nut ① using the appropriate tool to a torque of 0.25 Nm (see "Tooling" on page 34 and 35). Check that the cable conductor rests in the contact slot, solder the conductor through the hole.



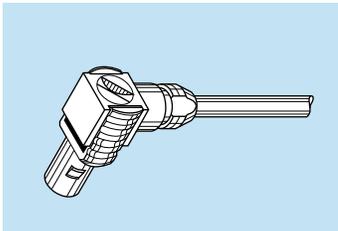
2.2 Slide the cable into the connector shell ②. Check that cable conductor rests in the contact slot, tin solder the conductor through the hole. Slide the crimp ferrule ① over the braiding until it reaches the connector shell ②. Crimp with the LEMO crimp tool using the hexagonal opening (see "Tooling" on page 34).



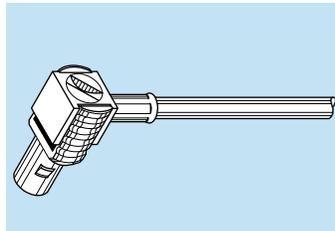
2.3 Place the insulating sleeve ④ over the soldered contact.



2.3 Place the insulating sleeve ③ over the soldered contact.



2.4 Close the access hole with the flat screw ⑤. Push the bend relief (if used) onto the collet nut ①.



2.4 Close the connector hole with the flat screw ④. Push the bend relief (if used) onto the crimping tube ①.

**Note:** these terminating instructions apply to the following models:

M6 = FLA

**Note:** these terminating instructions apply to the following models:

M7 = FLS, FLV

# ● Recommended Coaxial Cables



## Dimensions and characteristics

Standard / Part number (supplier)			Imp. (Ω)	Construction and dimensions								Weight kg/100 m	
				Conductor			Dielectric		Shield		Sheath		
MIL-C-17	CCTU 10-01A	CEI 96-2		Construction	Mat.	ø	Mat.	ø	Mat.	ø	Mat.		ø
RG.58C/U	KX 15	50-3-1	50 ± 2 Ω	19x0.18	CuSn	0.90	PE	2.95	CuSn	3.60	PVC*	4.95	3.80
RG.142B/U		-	50 ± 2 Ω	solid	CuStAg	0.95	PTFE	2.95	CuAg CuAg	2 <sup>nd</sup> : 4.20	FEP	4.95	6.60
RG.174A/U	KX 3A	50-2-1	50 ± 2 Ω	7x0.16	CuSt	0.48	PE	1.50	CuSn	2.00	PVC*	2.60	1.10
RG.178B/U	KX 21A	50-1-1	50 ± 2 Ω	7x0.10	CuStAg	0.30	PTFE	0.87	CuAg	1.40	FEP	1.80	0.85
RG.179B/U		75-2-1	75 ± 3 Ω	7x0.10	CuStAg	0.30	PTFE	1.50	CuAg	2.00	FEP	2.50	1.50
RG.180B/U		-	95 ± 5 Ω	7x0.10	CuStAg	0.30	PTFE	2.60	CuAg	3.10	FEP	3.60	3.20
RG.187A/U		75-2-2	75 ± 3 Ω	7x0.10	CuStAg	0.30	PTFE	1.50	CuAg	2.00	PTFE	2.60	1.60
RG.188A/U		50-2-3	50 ± 2 Ω	7x0.18	CuStAg	0.54	PTFE	1.50	CuAg	2.00	PTFE	2.60	1.60
RG.196A/U		50-1-2	50 ± 2 Ω	7x0.10	CuStAg	0.30	PTFE	0.87	CuAg	1.37	PTFE	2.10	1.10
RG.316/U	KX 22A	50-2-2	50 ± 2 Ω	7x0.18	CuStAg	0.54	PTFE	1.50	CuAg	2.10	FEP	2.50	1.60
8216	(Belden)	50-2-1	50 ± 2 Ω	7x0.16	CuSt	0.48	PE	1.52	CuSn	-	PVC	2.55	-
8262	(Belden)	50-3-1	50 ± 2 Ω	19x0.18	CuSn	0.90	PE	2.95	CuSn	-	PVC	4.95	-
83265	(Belden)	50-1-1	50 ± 2 Ω	7x0.10	CuStAg	0.30	PTFE	0.86	CuAg	-	FEP	1.85	-
83269	(Belden)	-	50 ± 2 Ω	7x0.17	CuStAg	0.51	PTFE	1.52	CuAg	-	PTFE	2.60	-
83284	(Belden)	50-2-2	50 ± 2 Ω	7x0.17	CuStAg	0.51	PTFE	1.52	CuAg	-	FEP	2.50	-
HF-2114	(Dätwyler)	-	50 ± 2 Ω	7x0.16	Cu	0.48	PE	1.32	Cu	1.9	PVC	2.70	1.15
CCH.99.281.505	(Lemo) <sup>1)</sup>	50-2-1	50 ± 2 Ω	7x0.18	Cu	0.54	PE	1.50	Cu	2.2	PoF	2.80	1.30
421.099	(Storm)	-	50 ± 2 Ω	7x0.16	CuStAg	0.50	PTFE	1.52	CuAg CuAg	1 <sup>st</sup> : 2.00 2 <sup>nd</sup> : 2.50	FEP	3.05	1.95
G02232D-60	(H+S)	-	50 ± 2 Ω	7x0.16	Cu	0.50	PE	1.50	CuAg CuSn	1 <sup>st</sup> : 1.95 2 <sup>nd</sup> : 2.50	PVC	3.10	2.10

Notes: all dimensions are in millimeters.  
<sup>1)</sup> Fire resistant according IEC 332-1.

- |        |                              |      |                                |      |                     |
|--------|------------------------------|------|--------------------------------|------|---------------------|
| Cu     | Bare copper                  | FEP  | Extruded Fluorethylenpropylene | PVC  | Polyvinylchloride   |
| CuAg   | Silver-plated copper         | PE   | Polyethylene                   | PVC* | Polyvinylchloride   |
| CuSn   | Tinned copper                | PoF  | Polyolefin                     |      | (Qual.IIa MIL-C-17) |
| CuSt   | Copper-plated steel          | PTFE | Wrapped or extruded            |      |                     |
| CuStAg | Silvered copper plated steel |      | Polytetrafluorethylene         |      |                     |

# ● Technical Tables

## VSWR effect on transmitted power

VSWR	VSWR (dB)	Return loss (dB)	Transmiss. loss (dB)	Reflected voltage coefficient	Transmit. power (%)	Reflected power (%)
1.00	0		0.000	0.00	100.0	0.0
1.01	0.1	46.1	0.000	0.00	100.0	0.0
1.02	0.2	40.1	0.000	0.01	100.0	0.0
1.03	0.3	36.6	0.001	0.01	100.0	0.0
1.04	0.3	34.2	0.003	0.03	100.0	0.0
1.05	0.4	32.3	0.003	0.02	99.9	0.1
1.06	0.5	30.7	0.004	0.03	99.9	0.1
1.07	0.6	29.4	0.005	0.03	99.9	0.1
1.08	0.7	28.3	0.006	0.04	99.9	0.1
1.09	0.7	27.3	0.008	0.04	99.8	0.2
1.10	0.8	26.4	0.010	0.05	99.8	0.2
1.11	0.9	25.7	0.012	0.05	99.7	0.3
1.12	1.0	24.9	0.014	0.06	99.7	0.3

VSWR	VSWR (dB)	Return loss (dB)	Transmiss. loss (dB)	Reflected voltage coefficient	Transmit. power (%)	Reflected power (%)
1.13	1.1	24.3	0.016	0.06	99.6	0.4
1.14	1.1	23.7	0.019	0.07	99.6	0.4
1.15	1.2	23.1	0.021	0.07	99.5	0.5
1.16	1.3	22.6	0.024	0.07	99.5	0.5
1.17	1.4	22.1	0.027	0.08	99.4	0.6
1.18	1.4	21.7	0.030	0.08	99.3	0.7
1.19	1.5	21.2	0.033	0.09	99.2	0.8
1.20	1.6	20.8	0.036	0.09	99.2	0.8
1.21	1.7	20.4	0.039	0.10	99.1	0.9
1.22	1.7	20.1	0.043	0.10	99.0	1.0
1.23	1.8	19.7	0.046	0.10	98.9	1.1
1.24	1.9	19.4	0.050	0.11	98.9	1.1
1.25	1.9	19.1	0.054	0.11	98.8	1.2

## ● Conversion Tables — millimeters/inches

(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
0.02	0.0007	1.37	0.0539	3.90	0.1535	8.90	0.3504	16.00	0.6299	29.50	1.1614
0.03	0.0011	1.40	0.0551	4.00	0.1575	9.00	0.3543	16.10	0.6338	30.00	1.1811
0.10	0.0039	1.50	0.0590	4.36	0.1716	9.40	0.3701	17.00	0.6693	30.80	1.2125
0.16	0.0062	1.52	0.0598	4.50	0.1771	9.50	0.3740	17.50	0.6889	31.00	1.2204
0.18	0.0071	1.60	0.0629	5.00	0.1968	9.60	0.3779	17.80	0.7007	31.80	1.2519
0.20	0.0078	1.70	0.0669	5.08	0.1999	9.70	0.3818	18.00	0.7086	32.00	1.2598
0.30	0.0118	1.71	0.0673	5.20	0.2047	10.00	0.3937	18.20	0.7165	33.00	1.2992
0.40	0.0157	1.80	0.0708	5.37	0.2114	10.30	0.4055	18.50	0.7283	33.50	1.3188
0.48	0.0188	2.00	0.0787	5.50	0.2165	10.40	0.4094	19.00	0.7480	34.00	1.3385
0.50	0.0196	2.10	0.0826	5.80	0.2283	10.50	0.4134	19.50	0.7677	34.50	1.3582
0.51	0.0201	2.20	0.0866	6.00	0.2362	10.70	0.4212	20.00	0.7874	35.70	1.4055
0.54	0.0212	2.42	0.0953	6.20	0.2441	10.80	0.4252	20.50	0.8071	36.00	1.4173
0.60	0.0236	2.50	0.0984	6.30	0.2480	11.00	0.4331	20.60	0.8110	40.00	1.5748
0.70	0.0275	2.60	0.1023	6.40	0.2519	11.50	0.4527	21.00	0.8267	41.00	1.6141
0.80	0.0315	2.70	0.1063	6.50	0.2559	11.70	0.4606	21.50	0.8464	42.00	1.6535
0.86	0.0338	2.80	0.1102	6.80	0.2677	12.00	0.4724	21.80	0.8582	43.00	1.6929
0.87	0.0342	2.95	0.1161	7.00	0.2755	12.60	0.4961	22.00	0.8661	45.00	1.7716
0.90	0.0354	3.00	0.1181	7.10	0.2795	12.90	0.5078	23.00	0.9055	45.50	1.7913
0.91	0.0358	3.05	0.1201	7.40	0.2913	13.00	0.5118	23.80	0.9370	46.50	1.8307
0.95	0.0374	3.10	0.1220	7.50	0.2952	13.70	0.5393	24.00	0.9448	50.00	1.9685
1.00	0.0393	3.20	0.1259	8.00	0.3149	14.00	0.5512	25.00	0.9842	60.00	2.3622
1.21	0.0476	3.30	0.1299	8.30	0.3267	14.30	0.5629	25.50	1.0039	65.00	2.5590
1.29	0.0507	3.50	0.1378	8.60	0.3385	14.50	0.5708	26.00	1.0236	70.00	2.7559
1.30	0.0512	3.78	0.1488	8.70	0.3425	15.00	0.5905	28.00	1.1023	78.00	3.0708
1.32	0.0519	3.80	0.1496	8.80	0.3464	15.50	0.6102	28.50	1.1220	150.00	5.9055

## ● Terms and Conditions

- 1. Acceptance:** If Buyer's order contains written, printed or stamped provisions or conditions inconsistent with the written, printed or stamped provisions of this Agreement attached hereto, the provisions and conditions of this Agreement shall prevail. Buyer shall contact LEMO USA within 10 days of receipt of LEMO USA Terms and Conditions if any objection is raised. Failure of Buyer to timely object shall be deemed an acceptance by Buyer of LEMO USA's Terms and Conditions. If a timely objection is raised by the Buyer to the LEMO USA Terms and Conditions, the order(s) will not be entered until agreement in writing is reached. All orders are subject to acceptance by Seller. Seller's acceptance is expressly conditional upon Buyer's acceptance of LEMO USA Terms and Conditions.
- 2. Pricing:** Prices are based on continuous manufacture rates of delivery specified. Buyer will be charged any direct additional cost to which Seller is put by reason of any interruption of production due to Buyer's request, act or default.
- 3. Applicable Law:** Purchase Order is subject to the applicable provisions of the Uniform Commercial Code, under the laws of the State of California.
- 4. Buyer's Liability:** Buyer is liable for all costs associated with completed units, shipped or unshipped, labor and materials on work in process, and raw materials on hand and/or specific to Buyer's Order and all reasonable direct damages, for lead time specified in advance of requested date of cancellation.
- 5. License:** The submission of a quotation or order acknowledgment does not grant or imply a license under any patents now owned or controlled by Seller, or which may become owned or controlled by Seller.
- 6. Buyer's Default:** In the event Buyer cancels the contract embodied by Buyer's Order and this acceptance thereof, in whole or in part, or such contract is canceled by Seller because of default by the Buyer, the Buyer shall pay Seller by reason of such cancellation or default for reasonable direct damages sustained, including costs associated with completed units, shipped or unshipped, labor and materials on work in process, and raw materials on hand and/or specific to Buyer's Order and all reasonable direct damages, for lead time specified in advance of requested date of cancellation, at the current price applicable to the total quantity ordered at the time of default. Notwithstanding the foregoing, if item or items ordered are NON-CANCELABLE/NON-RETURNABLE, the Buyer shall purchase 100% of quantity ordered.  
  
In the event Seller does not meet the confirmed delivery date agreed to with the Buyer as evidenced in writing, Seller shall be allowed one opportunity to reschedule the delivery and Buyer shall not be entitled to cancel the Order for such reason. In the event Seller does not meet said rescheduled delivery, Buyer may cancel the Order and not be in default under the Agreement, including the terms of this Section 6.
- 7. Indemnity:** Buyer hereby specifically agrees to save Seller harmless and indemnify Seller against all claims for damage or profits and for all costs and attorney fees incurred by Seller resulting from any suit or suits arising from alleged infringements of patents, design copyrights, or trademarks with respect to all goods manufactured, either in whole or in part, to Buyer's specifications.  
  
Seller, at its expense, will defend Buyer and its customer against any reasonable and good faith claim based on an allegation that an unaltered LEMO USA product infringes a patent or copyright of another; provided however, that no such obligation shall apply to (i) any LEMO USA product manufactured to Buyer's specifications and/or designs or (ii) any product that has been modified, altered, misused or damaged by Buyer or a third party. Seller shall pay any reasonable resulting costs, damages and attorney's fees finally awarded against Buyer or its customer that are attributable to such claim or will pay the part of any settlement that is attributable to such claim, provided that: (a) Buyer notifies Seller promptly in writing of the claim; (b) Seller is permitted to control the defense or settlement of the claim; and (c) Buyer and its customer cooperate reasonably in such defense or settlement.
- 8. Returns:** All NON-CANCELABLE/NON-RETURNABLE products shall not be returned. Subject to Section D, Subsection 3 of the Distribution Agreement, If Buyer intends to return standard product, a return authorization number is required prior to return shipment and the product may be subjected to a restocking fee. Seller reserves the right not to issue a return authorization. Product must be returned (with shipping costs prepaid) in original packaging and in original condition as when purchased, undamaged, not reconfigured, not obsolete, fit for use, and shall not have been previously shipped from Seller to Buyer or its customer more than one year prior to the date of return. Seller reserves the right to not accept damaged product for credit, replacement, or substitution. If damaged product is accepted by Seller for credit, and damage is caused by the negligence of the Buyer, the Buyer will pay all costs for refurbishment of damaged product. Discovery of product defect and return of product shall be made in the period of time following delivery as provided in the applicable sections of the Uniform Commercial Code. In the event of a return, Seller shall have the right, in its sole discretion, to replace, substitute, or issue a credit to Buyer.
- 9. Payment:** All invoices are delinquent at 30 days past invoice date and will be subject to 1% per month finance charge. Overdue accounts may be placed on credit hold and shipments held. Buyer agrees to pay all reasonable collection charges, including attorney fees, in the event his account is delinquent more than 30 days.
- 10. Payment Taxes:** In the event any sales tax, manufacturer's tax, or other tax is applicable to any shipment made by the Buyer on Buyer's order, such tax shall be added to the selling price and shall be paid by the Buyer.

**11. Title/Risk of Loss:** All prices are F.O.B. Rohnert Park, California, 1% 10 days/Net 30 days and all Seller obligations hereunder are completed when Seller delivers the items, properly consigned, to a common carrier, Seller's delivery to such carrier shall constitute delivery thereof to the Buyer.

**12. Warranties:** Seller warrants to Buyer that the Goods will conform to the applicable drawings or design standards. The express warranty set forth in this agreement is exclusive and is in lieu of all other express or implied warranties, but not limited to, warranties of merchantability and fitness for a particular purpose.

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE SELLER DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES, WARRANTIES OF MERCHANTABILITY AND WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR USE.

**13. Disputes and Resolution; Attorney's Fees:** The parties agree that any disputes or questions arising hereunder including the construction or application of the Agreement, including these Terms and Conditions shall be settled in the State of California, according to the laws of the State of California. The parties hereto hereby consent to jurisdiction and venue in the Superior Court of Sonoma County, California, and in the Federal District Court for the Northern District of California, with respect to all disputes or disagreements under the Agreement, including these Terms and Conditions and agree that any action with respect to any of the foregoing shall be brought and maintained only in such courts sitting in the Northern District of California or Sonoma County, as appropriate. In any court action at law or in equity, which is brought by one of the parties to enforce or interpret the provisions of the Agreement, including these Terms and Conditions, the prevailing party will be entitled to costs and reasonable attorney's fees, in addition to any other relief to which that party may be entitled.

**14. Confidentiality:** Both parties acknowledge that during the course of business, each may obtain confidential information regarding the other party's business. Both parties agree to treat all such information as confidential and to take all reasonable precautions against disclosure of such information to unauthorized third parties during and for five (5) years after the term of all orders. Upon request by an owner, all documents relating to the confidential information will be returned to such owner.

**15. Assignment:** It is agreed by the parties that there will be no assignment or transfer of any order or any interest in any orders. Action by a party in violation of this provision will dismiss the other party from any further obligations arising from any orders.

**16. Entire Terms & Conditions:** These Terms & Conditions, together with the Agreement contain the entire agreement of the parties and there are no other promises or conditions in any other agreements whether oral or written. This document, together with the Agreement, supersedes any prior written or oral agreements between the parties.

**17. Amendment:** These Terms & Conditions may be modified or amended if the amendment is made in writing and is signed by both parties; provided however, that the terms of the Agreement shall control in any case where there is a conflict between these Terms & Conditions and the Agreement.

**18. Severability:** If any provision of these Terms & Conditions shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable. If a court finds that any provision is invalid or unenforceable, but that by limiting such provision it would become valid and enforceable, then such provision shall be deemed to be written, construed and enforced as so limited.

**19. Waiver of Contractual Right:** The failure of either party to enforce any provision of these Terms & Conditions shall not be construed as a waiver or limitation of that party's right to subsequently enforce and compel strict compliance with every provision of this Contract.

**20. Limitation on Damages:** Buyer's consequential or incidental damages for any Seller breach of the contract, except for Seller's gross negligence or willful misconduct, will be limited to the purchase price. Subject to Section 7 hereof, Seller will have no liability to Buyer for any damages, losses, liabilities, injuries, claims, demands or expenses arising out of or directly or indirectly connected with the use of the product. Seller shall not be liable for any exemplary, indirect, incidental, or consequential damages sustained or incurred in connection with the use of the product regardless of the form of action, whether in contract, tort (including negligence) or strict liability.

SELLER SHALL NOT BE LIABLE FOR ANY DAMAGES DUE TO CAUSES BEYOND THE REASONABLE CONTROL OF SELLER OR ATTRIBUTABLE TO ANY SERVICE, PRODUCTS, OR ACTIONS OF ANY PERSON OTHER THAN SELLER REGARDLESS OF THE FORM OF ACTION AND WHETHER OR NOT SUCH DAMAGES ARE FORESEEABLE.

NEITHER PARTY SHALL BE LIABLE IN ANY WAY TO THE OTHER PARTY FOR DELAYS, FAILURE IN PERFORMANCE, OR LOSS OR DAMAGE DUE TO FORCE MAJEURE CONDITIONS SUCH AS: FIRE; LIGHTENING; STRIKE; EMBARGO; EXPLOSION; POWER SURGE OR FAILURE; ACTS OF GOD; WAR; TERRORIST ATTACKS, LABOR DISPUTES; CIVIL DISTURBANCES; ACTS OF CIVIL OR MILITARY AUTHORITY; INABILITY TO SECURE MATERIALS, FUEL, PRODUCTS OR TRANSPORTATION FACILITIES; ACTS OR OMISSIONS OF SUPPLIERS, OR ANY OTHER CAUSES BEYOND ITS REASONABLE CONTROL, WHETHER OR NOT SIMILAR TO THE FOREGOING.

## ● Product Safety Notice

**PLEASE READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY AND CONSULT ALL RELEVANT NATIONAL AND INTERNATIONAL SAFETY REGULATIONS FOR YOUR APPLICATION. IMPROPER HANDLING, CABLE ASSEMBLY, OR USE OF CONNECTORS CAN RESULT IN HAZARDOUS SITUATIONS.**

### 1. SHOCK AND FIRE HAZARD

Incorrect wiring, the use of damaged components, foreign objects (such as metal debris), and / or the presence of residue (such as cleaning fluids), can result in short circuits, overheating, and / or risk of electric shock. Mated components should never be disconnected while live as this may result in an exposed electric arc and local overheating, resulting in possible damage to components.

### 2. HANDLING

Connectors and their components should be visually inspected for damage prior to installation and assembly. Suspect components should be rejected or returned to the factory for verification. Connector assembly and installation should only be carried out by properly trained personnel. Proper tools must be used during installation and / or assembly in order to obtain safe and reliable performance.

### 3. USE

Connectors with exposed contacts should never be live (or on the current supply side of a circuit). Under general conditions voltages above 30 VAC and 42 VDC are considered hazardous and proper measures should be taken to eliminate all risk of transmission of such voltages to any exposed metal part of the connector.

### 4. TEST AND OPERATING VOLTAGES

The maximum admissible operating voltage depends upon the national or international standards in force for the application in question. Air and creepage distances impact the operating voltage; reference values are indicated in the catalog however these may be influenced by PC board design and / or wiring harnesses. The test voltage indicated in the catalog is 75% of the mean breakdown voltage; the test is applied at 500 V/s and the test duration is 1 minute.

### 5. CE MARKING

CE Marking is applied to a complete product or device, and implies that the device complies with one or several European safety directives. CE Marking can NOT be applied to electromechanical components such as connectors.

### 6. PRODUCT IMPROVEMENTS

The LEMO Group reserves the right to modify and improve to our products or specifications without providing prior notification.

## ● Design Engineering Services

DATE: \_\_\_\_\_

LEMO creates custom designs to fit your unique application, ranging from connector to multi-component assemblies.

- **Custom Connectors** - Precision designs tested to your specifications
- **Cable Assembly** - Electronic and hybrid fiber optic cable assemblies to meet a wide variety of demanding applications
- **Cable Assembly Integration** - Consultation on routing of cable and connections within your product
- **Rapid Prototyping** - Onsite engineering and rapid prototyping capabilities to assist in the high demands of product development
- **Pro/ENGINEER®** 3D solid CAD models available

## Manufacturing Services

Outsource your manufacturing challenges. LEMO's capable engineering staff can create solutions for your cable assembly or component sub-assembly designs.

- **Cable Assembly** - Expertise in both electronic and fiber optic connector termination
- **Overmolding Design and Manufacture** - Custom overmold designs to enhance aesthetics while providing durability and strength
- **Sub-Assembly Build** - Combine our connectors and cable assemblies with your sub-assemblies to provide a tested and proven module

### I am interested in:

- Design Engineering Services**  
 **Manufacturing Services**

### Please send me information on:

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Name		Rep. Name	
Title		Telephone	Fax
Company Name		Email	
Street			
City	State	Zip	

Please detach and fax directly to LEMO at (707) 578-0869,  
 or mail to LEMO USA, Attn.: Engineering, P.O. Box 2408, Rohnert Park, CA 94927-2408

# ● Cable Assembly Request Form

DATE: \_\_\_\_\_  BID  BUY  BUDGETARY

Name		Rep. Name	
Title		Telephone	Fax
Company Name		Email	
Street			
City	State	Zip	

ASSEMBLY QUANTITIES \_\_\_\_\_ LENGTH (TIP TO TIP) \_\_\_\_\_

CONNECTORS: \_\_\_\_\_

STRAIN RELIEF:  NO  YES IF YES, SPECIFY COLOR \_\_\_\_\_

OVERMOLDING:  NO  YES IF YES, PROVIDE DETAILED DRAWING AND MATERIAL SPECIFICATION \_\_\_\_\_

END #1 \_\_\_\_\_ END #2 \_\_\_\_\_

END #1 \_\_\_\_\_ END #2 \_\_\_\_\_

WHAT IS YOUR APPLICATION? \_\_\_\_\_ LENGTH (TIP TO TIP) \_\_\_\_\_

CUSTOMER SUPPLIED CABLE:  NO  YES IF YES, PLEASE SUPPLY CABLE SPECIFICATIONS \_\_\_\_\_

IF NO, DO YOU REQUIRE CABLE SELECTION ASSISTANCE?  NO  YES

IF NO, PLEASE PROVIDE PART NUMBER AND MANUFACTURER OF CABLE YOU WISH LEMO TO USE: \_\_\_\_\_

IF YES, PLEASE FILL IN THE INFORMATION BELOW:

NUMBER OF CONDUCTORS \_\_\_\_\_ TWISTED PAIRS:  NO  YES WIRE GAUGE: \_\_\_\_\_

SHIELDING:  NO  YES IF YES, PLEASE SPECIFY TYPE: \_\_\_\_\_

JACKET MATERIALS / JACKET COLOR (GREY IS STANDARD)

OPERATING ENVIRONMENT: VOLTAGE: \_\_\_\_\_ CURRENT: \_\_\_\_\_ TEMPERATURE RANGE: HIGH: \_\_\_\_\_ LOW: \_\_\_\_\_

UNDERWATER: DEPTH: \_\_\_\_\_

CLEAN  WASH DOWN OR SPLASH  SALT WATER SPRAY  DIRT  OTHER: \_\_\_\_\_

STERILIZATION:  NO  YES IF YES, NUMBER OF CYCLES: \_\_\_\_\_

AUTOCLAVING: \_\_\_\_\_  RADIATION: TYPE: \_\_\_\_\_

FLUIDS: TYPE: \_\_\_\_\_  CHEMICALS: TYPE: \_\_\_\_\_

GASES: TYPE: \_\_\_\_\_

PROTOTYPE ORDER QUANTITY: \_\_\_\_\_ EXPECTED DELIVERY DATE: \_\_\_\_\_

PRODUCTION ORDER QUANTITY: \_\_\_\_\_ EXPECTED DELIVERY DATE: \_\_\_\_\_

EAU: \_\_\_\_\_ TARGET PRICING \$ \_\_\_\_\_

PLEASE ATTACHED DRAWING IF POSSIBLE

Please detach and fax directly to LEMO at (707) 578-0869,  
or mail to LEMO USA, Attn.: Cable Assembly, P.O. Box 2408, Rohnert Park, CA 94927-2408

# Connector Specification Request Form

DATE: \_\_\_\_\_

Name		Rep. Name	
Title	Telephone	Fax	Email
Company Name			
Street			
City	State	Zip	

## Customer Profile

APPLICATION DESCRIPTION: \_\_\_\_\_

 BUDGET: IS THE PROJECT FUNDED?  YES  NO EXPLANATION: \_\_\_\_\_

 SECOND SOURCE: DOES THE CUSTOMER REQUIRE A SECOND SOURCE?  YES  NO

WHY IS LEMO BEING CONSIDERED? DOES LEMO HAVE A COMPETITIVE ADVANTAGE ACKNOWLEDGED BY THE CUSTOMER? \_\_\_\_\_

## Connector Description

SHELL CONFIGURATION: \_\_\_\_\_ NUMBER OF CONTACTS: \_\_\_\_\_

 SERIES/SIZE: \_\_\_\_\_ IS BEND RELIEF REQUIRED:  YES  NO

 TYPE OF TERMINATION PREFERRED:  SOLDER  CRIMP  PRINTED CIRCUIT  OTHER

JACKET O.D. OF THE CABLE AND TYPE OF MATERIAL: \_\_\_\_\_

 CONDUCTOR DIAMETER OF THE CABLE (AWG) \_\_\_\_\_  IF COAX, CABLE TYPE \_\_\_\_\_

## Electrical Characteristics

WORKING VOLTAGE: \_\_\_\_\_ PEAK: \_\_\_\_\_ CURRENT (AMPS) \_\_\_\_\_

IMPEDANCE (OHMS): \_\_\_\_\_ MAXIMUM VSWR AT MAX. FREQUENCY: \_\_\_\_\_

WORKING FREQUENCY: NORMAL \_\_\_\_\_ MAXIMUM \_\_\_\_\_

NUMBER OF INSERTION CYCLES (1 CYCLE = 1 INSERTION = 1 WITHDRAWAL): \_\_\_\_\_

## Environment

OPERATING TEMPERATURES: \_\_\_\_\_

 ENVIRONMENT:  CLEAN  WASH DOWN OR SPLASH  SALT WATER SPRAY  UNDERWATER

 DIRT  FLUIDS \_\_\_\_\_  DUST  GASES \_\_\_\_\_

 CHEMICALS  IP RATING \_\_\_\_\_  EXPLOSIVES  RADIATION

 STERILIZATION:  YES  NO METHOD \_\_\_\_\_ CYCLES \_\_\_\_\_ TEMP \_\_\_\_\_

## Purchase Projections

PROTOTYPE ORDER QUANTITY (3 OR LESS): \_\_\_\_\_ EXPECTED DELIVERY DATE: \_\_\_\_\_

PRODUCTION ORDER QUANTITY: \_\_\_\_\_ EXPECTED DELIVERY DATE: \_\_\_\_\_

PREPRODUCTION ORDER QUANTITY: \_\_\_\_\_ EXPECTED DELIVERY DATE: \_\_\_\_\_

EXPECTED QUANTITY INVOLVED EACH YEAR: \_\_\_\_\_ TARGET PRICING: \$ \_\_\_\_\_

 APPLICABLE STANDARDS:  UL  IEC  OTHER \_\_\_\_\_

PLEASE ATTACH DRAWING IF POSSIBLE OR NECESSARY

Please detach and fax directly to LEMO at (707) 578-0869, or mail to LEMO USA, Attn.: Engineering, P.O. Box 2408, Rohnert Park, CA 94927-2408





Located 50 miles north of San Francisco, LEMO USA offers a nationwide network of product specialists, sales consultants and distributors, who work closely with customers in offering sales and technical support.



635 Park Court, Rohnert Park, CA 94928-7940  
P.O. Box 2408, Rohnert Park, CA 94927-2408  
**(800) 444-5366** • (707) 578-8811 • fax: (707) 578-0869  
**www.LEMOusa.com** • e-mail: [info@lemousa.com](mailto:info@lemousa.com)