

# CONNECTOR SELECTION GUIDE





# Precision modular connectors to suit your application

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

LEMO has set connector standards, such as the 3K.93C connector for HDTV and the 00.250 connector for NIM.CAMAC.

## Over 50'000 connector combinations

The modular design of the LEMO range provides over 50'000 combinations of connectors from miniature  $\varnothing$  2 mm to  $\varnothing$  50 mm, capable of handling cable diameters up to 30 mm and for up to 114 contacts.

## Some good reasons to choose a LEMO connector

**Extensive product range:** The modular design and extensive range of Lemo connectors enables you to select the ideal connector for your application.

**Reliability:** due to the high quality of their design and manufacture, LEMO connectors usually last as long as the equipment.

**Ruggedness:** Suitable for use in high vibration and shock environments.

**Aesthetics:** the attractive high tech design of LEMO connectors enhances any front panel design and contributes significantly to the appearance of your product.

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

## Custom design and cable assembly

LEMO offers the most extensive product line, but some applications require a unique design. LEMO can supply a connecting solution that meets your specific requirements, including special materials, personalized layout and cable assembly.

**EMC protection:** the metallic outer shell offers screen efficiency superior to that of standard screened cables and most other connectors.

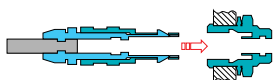
**Long-term availability:** LEMO guarantees to supply your connector, however specific, over a very long period of time since most LEMO connectors are produced with standard components.

## Local LEMO team: your best support

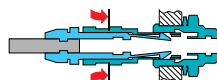
Selecting the right connector for any project is an important and sometimes challenging process. LEMO offers dedicated professional support to help you choose the best suitable solution.

LEMO invites you to call our local partner for technical support.

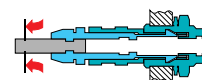
## LEMO Push-Pull self-latching system



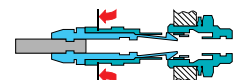
1. This self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable.



2. The LEMO self-latching system allows the connector to be mated by simply pushing the plug axially into the socket.



3. Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer shell release sleeve.



4. When required, the connector is disengaged by a single axial pull on the outer shell release sleeve. This first disengages the latches and then withdraws the plug from the socket.

## Standard range

### B Series



### S Series



### K Series



### E Series



### 2C/2G Series



Series Description	Standard self-latching multipole connectors with alignment key.	The original standard self-latching connectors with stepped inserts for alignment (of multipole version).	Watertight self-latching multipole connectors with alignment key and rugged housing for extreme working conditions.	Watertight self-latching connectors with stepped inserts for alignment (of multipole version) and rugged housing for extreme working conditions.	Short self-latching multipole connector with key (2G series) or stepped inserts alignment (2C series).
Contact Configurations	<ul style="list-style-type: none"> <li>Multipole 2 to 64 contacts</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Coaxial 1 to 14 contacts</li> <li>Fluidic 1 to 14 contacts</li> <li>High voltage 2 to 21 contacts</li> <li>Fibre optic 1 to 14 contacts</li> </ul> </li> <li>Thermocouple 2 to 64 contacts</li> <li>Fibre optic</li> <li>Fluidic</li> </ul>	<ul style="list-style-type: none"> <li>Unipole</li> <li>Coaxial 50 and 75 Ω</li> <li>Multipole 2 to 106 contacts</li> <li>Triaxial 50 and 75 Ω</li> <li>High voltage</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Coaxial 1 to 8 contacts</li> <li>High voltage 2 to 8 contacts</li> </ul> </li> <li>Thermocouple 2 to 6 contacts</li> </ul>	<ul style="list-style-type: none"> <li>Multipole 2 to 64 contacts</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Coaxial 1 to 14 contacts</li> <li>Fluidic 1 to 14 contacts</li> <li>High voltage 1 to 21 contacts</li> <li>Fibre optic 1 to 14 contacts</li> </ul> </li> <li>Fibre optic</li> <li>Thermocouple 2 to 64 contacts</li> </ul>	<ul style="list-style-type: none"> <li>Unipole</li> <li>Coaxial 50 and 75 Ω</li> <li>Multipole 2 to 106 contacts</li> <li>Triaxial 50 and 75 Ω</li> <li>High voltage</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Coaxial 1 to 8 contacts</li> <li>High voltage 1 to 8 contacts</li> </ul> </li> <li>Thermocouple 2 to 6 contacts</li> </ul>	<ul style="list-style-type: none"> <li>Multipole 18 contacts (2G series)</li> <li>Multipole 2 to 14 contacts</li> <li>Coaxial 50 Ω (2C series)</li> </ul>
Main Features	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>8 sizes</li> <li>13 keying options</li> <li>9 colour codings</li> <li>Over 60 shell styles</li> <li>UL recognized</li> <li>Temp. range -55°C to 250°C</li> <li>Solder, crimp or print contacts</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 75dB at 10Mhz</li> <li>&gt; 40dB at 1 Ghz</li> </ul> </li> </ul> <p>• IP50 • For cable ø 1 to 25 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>8 sizes</li> <li>Multipole with stepped inserts</li> <li>9 colour codings</li> <li>Over 50 shell styles</li> <li>UL recognized</li> <li>Temp. range -55°C to 250°C</li> <li>Solder or print contacts</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 75dB at 10Mhz</li> <li>&gt; 40dB at 1 Ghz</li> </ul> </li> </ul> <p>• IP50 • For cable ø 1 to 30 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>6 sizes</li> <li>9 keying options</li> <li>Over 28 shell styles</li> <li>UL recognized</li> <li>Temp. range -55°C to 200°C</li> <li>Solder, crimp or print contacts</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> </ul> <p>• IP66 / IP68 • For cable ø 1 to 23.5 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>7 sizes</li> <li>Multipole with stepped inserts</li> <li>Over 22 shell styles</li> <li>UL recognized</li> <li>Temp. range -55°C to 200°C</li> <li>Solder or print contacts</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> </ul> <p>• IP66 / IP68 • For cable ø 1 to 30 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>9 colour codings</li> <li>Over 13 shell styles (2C series)</li> <li>Temp. range -55°C to 250°C</li> <li>Solder or print contacts</li> </ul> <p>• IP50 • For cable ø 1.7 to 7.9 mm</p>

## Military (harsh environment)

### L Series



### F Series



### M Series








### H Series








### 1D Series



Series Description	Watertight self-latching connectors with alignment key, stepped inserts and rugged housing for extreme working conditions.	Compact self-latching multipole connectors, with multiple alignment keys, for harsh environment.	Ratchet screw system enables quick and secure coupling of the connectors. Connectors for harsh environment with multiple alignment keys.	Genderless connectors with patented push-pull hermaphroditic self-latching system.	Self-latching connectors with 4 concentric contacts.
Contact Configurations	<ul style="list-style-type: none"> <li>Multipole 2 to 10 contacts</li> <li>Thermocouple 2 to 6 contacts</li> </ul>	<ul style="list-style-type: none"> <li>Multipole 2 to 68 contacts</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Fibre optic 2 contacts</li> <li>Other mixed versions upon request</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Multipole 2 to 114 contacts</li> </ul>	<ul style="list-style-type: none"> <li>Multipole 6 or 12 contacts</li> <li>Multi or mixed contacts with:                             <ul style="list-style-type: none"> <li>Fibre optic 2, 4 or 6 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Quadrax (4 concentric contacts)</li> </ul>
Main Features	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>3 sizes</li> <li>Stepped inserts</li> <li>5 keying options</li> <li>Over 20 shell styles</li> <li>Temp. range -55°C to 200°C</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> <li>Solder or print contacts</li> </ul> <p>• IP66 / IP68 • For cable ø 1 to 10.5 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>3 sizes</li> <li>4 keying options</li> <li>Compact and lightweight</li> <li>Over 12 shell styles</li> <li>Temp. range -50°C to 200°C</li> <li>Shielded</li> <li>Crimp or print contacts</li> <li>High vibration resistance</li> <li>High shock resistance</li> <li>Dark finish</li> </ul> <p>• IP67 • For cable ø 2 to 34 mm</p>	<ul style="list-style-type: none"> <li>Ratchet coupling mechanism</li> <li>6 keying options</li> <li>Compact and lightweight</li> <li>Oil and fuel resistant</li> <li>9 shell styles</li> <li>Temp. range -50°C to 200°C</li> <li>Shielded</li> <li>Crimp or print contacts</li> <li>High vibration resistance (gunfire test)</li> <li>High shock resistance</li> <li>Optional anti-vibration flange fixing</li> <li>Dark finish</li> </ul> <p>• IP68 • For cable ø 2 to 27 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>2 sizes</li> <li>Hermaphroditic blind mating</li> <li>Lightweight</li> <li>Over 4 shell styles</li> <li>Temp. range -55°C to 125°C</li> <li>Solder or crimp contacts</li> <li>Dark finish</li> <li>Aluminium alloy shell</li> </ul> <p>• IP50 / IP68 • For cable ø 3.6 to 10 mm</p>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>2 sizes</li> <li>8 colour coding</li> <li>Over 7 shell styles</li> <li>Temp. range -40°C to 120°C</li> <li>Shielding:                             <ul style="list-style-type: none"> <li>&gt; 70dB at 10Mhz</li> <li>&gt; 35dB at 1 Ghz</li> </ul> </li> <li>Solder contacts</li> </ul> <p>• IP50 • For cable ø 3 to 7.5 mm</p>

	Plastic		Miniature		
	R Series	REDEL® P Series	00 Series	01 Series	0A Series
					
<b>Series Description</b>	Rectangular self-latching connectors with plastic shell.	Self-latching plastic connectors with alignment key for medical applications.	Coaxial 50 Ω self-latching connectors, the basis of the NIM-CAMAC standard.	Smallest self-latching coaxial 50 Ω connectors.	Coaxial self-latching connectors for video or telecommunication applications.
<b>Contact Configurations</b>	<ul style="list-style-type: none"> <li>• Multipole 10 to 65 contacts</li> <li>• Mixed contacts with:               <ul style="list-style-type: none"> <li>Coaxial 1 to 8 contacts</li> <li>Fluidic 1 to 8 contacts</li> <li>High voltage 1 to 8 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Multipole 2 to 34 contacts</li> <li>• Voltage mains</li> <li>• Fluidic</li> <li>• Mixed contacts in 2P and 3P series with:               <ul style="list-style-type: none"> <li>Coaxial 1 contact</li> <li>High voltage 1 contact</li> <li>Fibre optic 1 contact</li> <li>Fluidic 1 or 3 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 Ω</li> <li>• Triaxial</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 Ω</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 or 75 Ω</li> </ul>
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• 3 sizes</li> <li>• 2 keying options</li> <li>• Available in 4 colours</li> <li>• 5 shell styles</li> <li>• Temp. range -30°C to 150°C</li> <li>• Compact and lightweight</li> <li>• Solder, crimp or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 1 to 9.2 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• 3 sizes</li> <li>• Several keying options</li> <li>• 6 colour codings</li> <li>• Over 12 shell styles</li> <li>• Temp. range -50°C to 170°C</li> <li>• IP 64/66 options</li> <li>• White, gray or black outershell</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 2.7 to 9.5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Over 40 shell styles</li> <li>• Temp. range -55°C to 250°C</li> <li>• Shielding:               <ul style="list-style-type: none"> <li>&gt; 90dB at 10Mhz</li> <li>&gt; 70dB at 1 Ghz</li> </ul> </li> <li>• Solder or crimp contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 1.5 to 5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Over 15 shell styles</li> <li>• Temp. range -55°C to 230°C</li> <li>• Shielded</li> <li>• Solder or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 1.8 to 2.8 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Over 27 shell styles</li> <li>• Temp. range -55°C to 250°C</li> <li>• Shielded</li> <li>• Solder or crimp contacts</li> <li>• Working frequency up to 3 Ghz @ 75 Ω</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 2.5 to 6.3 mm</li> </ul>

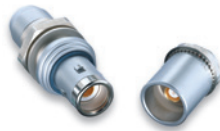
	High voltage				Other
	Y Series	05 Series	5G Series	REDEL® K/S Series	REDEL® D Series
					
<b>Series Description</b>	Single contact self-latching high voltage connector with a test voltage from 5 to 70 kV d.c.	Miniature single contact high voltage self-latching connector with a test voltage of 12kV d.c.	Compact and lightweight high voltage self-latching connector in multicontact version with alignment key and test voltage of 12kV d.c.	Multi high voltage rectangular connectors for research applications.	Smallest snap-on subminiature fibre optic connector.
<b>Contact Configurations</b>	<ul style="list-style-type: none"> <li>• Single HV contact</li> </ul>	<ul style="list-style-type: none"> <li>• Single HV contact</li> </ul>	<ul style="list-style-type: none"> <li>• Multi HV 50 contacts</li> </ul>	<ul style="list-style-type: none"> <li>• Multi high voltage               <ul style="list-style-type: none"> <li>K series with 22 contacts</li> <li>S series with 51 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Fibre optic single channel</li> </ul>
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Test voltage from 5 to 70kV d.c.</li> <li>• 3 sizes</li> <li>• Temp. range -55°C to 250°C</li> <li>• Solder contacts</li> <li>• Optional safety locking device</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 1 to 29 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Test voltage of 12kV d.c.</li> <li>• Over 2 shell styles</li> <li>• Temp. range -20°C to 125°C</li> <li>• Safety locking device</li> <li>• Crimp contacts</li> <li>• Aluminium alloy shell</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 1.1 to 3.3 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• Test voltage of 12kV d.c.</li> <li>• Over 2 shell styles</li> <li>• 2 keying options</li> <li>• Temp. range -20°C to 125°C</li> <li>• Safety locking device</li> <li>• Crimp contacts</li> <li>• Aluminium alloy shell</li> <li>• Compact design</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> <li>• For cable ø 4.5 to 16.5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Self-latching fastener</li> <li>• Test voltage 12kV D.C.</li> <li>• Crimp contacts</li> <li>• Keying</li> <li>• Temp. range -20°C to 125°C</li> </ul>	<ul style="list-style-type: none"> <li>• Snap-on fastening</li> <li>• Sub-miniature size</li> <li>• Low mass</li> <li>• Mating endurance up to 30 cycles</li> <li>• Ceramic floating ferrule 1.25 mm</li> <li>• For singlemode and multimode fibres</li> </ul> <ul style="list-style-type: none"> <li>• For cable ø 0.25 to 0.9 mm</li> </ul>

## Audio-Video

### 3T Series



### 4A Series



### 4M Series



### 3K.93C Series



### REDEL® F Series



Series Description	Contact Configurations	Main Features
Watertight self-latching coaxial and triaxial connectors for TV camera applications.	<ul style="list-style-type: none"> <li>Coaxial 75 Ω</li> <li>Triaxial 75 Ω</li> </ul>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>Over 7 shell styles</li> <li>Temp. range -55°C to 200°C</li> <li>Shielded</li> <li>Intermatable with ULC series size III</li> </ul>
Waterprotected self-latching triaxial connectors for TV camera applications. (US standard.)	<ul style="list-style-type: none"> <li>Triaxial 75 Ω</li> </ul>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>Over 10 shell styles</li> <li>Temp. range -55°C to 200°C</li> <li>Shielded</li> <li>Intermatable with Kings TRI-LOC KP80.. series</li> </ul>
Watertight self-latching triaxial connectors with alignment key for TV camera applications (UK standard).	<ul style="list-style-type: none"> <li>Triaxial 50 and 75 Ω</li> </ul>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>Keying</li> <li>Over 10 shell styles</li> <li>Temp. range -55°C to 200°C</li> <li>Shielded</li> </ul>
Hybrid electrical-fibre optic self-latching connector for HDTV applications (SMPTE / ARIB / EBU Standard).	<ul style="list-style-type: none"> <li>Hybrid with:                             <ul style="list-style-type: none"> <li>2 fibre optic contacts</li> <li>2 signal contacts</li> <li>2 power contacts and ground</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>Keying W code</li> <li>Over 11 shell styles</li> <li>Stainless steel shell</li> <li>Temp. range -55°C to 90°C</li> <li>Shielded</li> <li>UL approved</li> <li>Conform to ARIB standard</li> <li>Conform to SMPTE standard</li> <li>Pre-terminated contacts available</li> <li>Fusion splice</li> </ul>
Waterprotected self-latching triaxial connectors for TV camera applications.	<ul style="list-style-type: none"> <li>Triaxial 75 Ω</li> </ul>	<ul style="list-style-type: none"> <li>Push-pull self-latching</li> <li>Over 11 shell styles</li> <li>Temp. range -55°C to 200°C</li> <li>Shielded</li> <li>Intermatable with 1051A004 series</li> </ul>
		<ul style="list-style-type: none"> <li>IP66</li> <li>For cable ø 8.5 to 17.5 mm</li> </ul>
		<ul style="list-style-type: none"> <li>IP61</li> <li>For cable ø 8 to 14.5 mm</li> </ul>
		<ul style="list-style-type: none"> <li>IP66</li> <li>For cable ø 6 to 14.5 mm</li> </ul>
		<ul style="list-style-type: none"> <li>IP68</li> <li>For cable ø 8.6 to 16 mm</li> </ul>
		<ul style="list-style-type: none"> <li>IP66</li> <li>For cable ø 8 to 14 mm</li> </ul>

## Media converter (active components)

## Other

### MEERKAT™



### SERBAL™



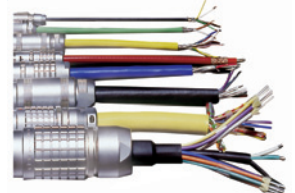
### SHACK™








### Ethernet Converter







### Cable assembly



Series Description	Contact Configurations	Main Features
The LEMO MEERKAT™ is a triax to fibre media converter. The unit encodes the camera's triaxial signal and sends it to the OB van using SMPTE 311M cable.	<ul style="list-style-type: none"> <li>Triaxial 50 or 75 Ω (see our Audio/Video connectors)</li> <li>Hybrid with: (see the 3K.93C series)                             <ul style="list-style-type: none"> <li>2 fibre optic contacts</li> <li>2 signal contacts</li> <li>2 power contacts and ground</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Digital encoding and transmission</li> <li>Works in a pair of units</li> <li>Lightweight and portable</li> <li>Immune to EMI</li> <li>CE certified</li> <li>No repeaters needed</li> <li>SD and HD models available</li> </ul>
The LEMO SERBAL™ is a 4 channel multiplexer that makes HD/SDI to fibre conversion possible.	<ul style="list-style-type: none"> <li>BNC connectors (4x)</li> <li>Hybrid with (see the 3K.93C series)                             <ul style="list-style-type: none"> <li>2 fibre optic contacts</li> <li>2 signal contacts</li> <li>2 power contacts and ground</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Converts from coaxial BNC input transmission over standard 3K.93C cable assemblies</li> <li>Multiple transmission options available: 4 x Tx, 2 x Tx + 2 x Rx, 3 x Tx + 1 x Rx</li> <li>Audio/Data: passes pre-embedded Audio</li> <li>Supports all NRZI data formats from 10 Mb/s to 1.5 Gb/s</li> <li>Signal format: HD/SDI SMPTE 292M, SDI, DVB-ASI, 19.4 Mb/s SMPTE 310, 142-540 Mb/s SMPTE 259M, SDTI</li> </ul>
The LEMO SHACK™ is a conversion unit from SMPTE cable to single mode optical fibres.	<ul style="list-style-type: none"> <li>SC, ST, FC or LC fibre optic (single-mode)</li> <li>Hybrid with (see the 3K.93C series)                             <ul style="list-style-type: none"> <li>2 fibre optic contacts</li> <li>2 signal contacts</li> <li>2 power contacts and ground</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>SMPTE elimination unit</li> <li>For use in pre-fibred venues</li> <li>Lightweight and portable</li> </ul>
The LEMO Ethernet to fibre media converter ensure reliable conversion in harsh environments.	<ul style="list-style-type: none"> <li>Single mode fibre</li> </ul>	<ul style="list-style-type: none"> <li>Push-Pull self-latching</li> <li>Temp. range -20°C to 85°C</li> <li>High shock and vibration resistance</li> <li>Reliable and secure</li> <li>Easy to deploy and operate</li> <li>LED indicators TX signal / RX signal / Power</li> <li>10/100 BaseT ethernet</li> <li>Distance over 20 km</li> </ul>
LEMO can supply a connecting solution that meets your specific requirements, including special materials, personalized layout and cable assembly	<ul style="list-style-type: none"> <li>Coaxial cable</li> <li>Triaxial cable</li> <li>Video cable</li> <li>Audio cable</li> <li>Multiconductor cable</li> <li>PTFE cable</li> <li>PUR cable</li> <li>Silicone cable</li> <li>Special cable in Viton®</li> <li>Computer cable</li> <li>High voltage cable</li> <li>Special-combinations cable</li> <li>Hybrid cable</li> <li>Spiral cable</li> <li>Fibre optic cable</li> <li>Miniature cable</li> <li>Plastic optical fibre cable</li> <li>Basestation-cable</li> <li>CAT 5 / CAT 7 cable</li> <li>FLAT'N'ROUND-cable</li> <li>Cable assembly</li> </ul>	<ul style="list-style-type: none"> <li>IP68</li> <li>For cable ø 2.6 to 10.5 mm</li> </ul>

	Other	Underwater (deep sea)			
	N Series	03 Series	V Series	W Series	U Series
					
<b>Series Description</b>	Remote handling self latching connectors suitable for operating in nuclear environments.	Screw coupling miniature underwater connectors suitable for pressure up to 60 bars.	Screw coupling underwater connectors with stepped inserts for alignment (of multipole version) suitable for pressure up to 30 bars.	Screw coupling underwater connectors with alignment key suitable for pressure up to 30 bars.	Screw coupling underwater connectors with alignment key for pressure up to 300 bars.
<b>Contact Configurations</b>	<ul style="list-style-type: none"> <li>• Multipole 2 to 64 contacts</li> <li>• Coaxial 50 and 75 Ω</li> <li>• Triaxial 50 and 75 Ω</li> <li>• Thermocouple 2 to 6 contacts</li> <li>• Multi or mixed contacts with:               <ul style="list-style-type: none"> <li>Coaxial 1 to 14 contacts</li> <li>High voltage 1 to 21 contacts</li> <li>Fibre optic 1 to 14 contacts</li> <li>Fluidic 1 to 14 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Multipole 2 to 4 contacts</li> <li>• Coaxial 50 Ω</li> </ul>	<ul style="list-style-type: none"> <li>• Unipole</li> <li>• Coaxial 50 or 75 Ω</li> <li>• Multipole 2 to 48 contacts</li> <li>• Triaxial 50 or 75 Ω</li> <li>• Multi or mixed contacts with:               <ul style="list-style-type: none"> <li>Coaxial 1 to 4 contacts</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Multipole 2 to 64 contacts</li> <li>• Multi or mixed contacts with:               <ul style="list-style-type: none"> <li>Coaxial 1 to 14 contacts</li> <li>Fluidic 1 to 14 contacts</li> <li>Fibre optic 1 to 14 contacts</li> </ul> </li> <li>• Thermocouple 2 to 6 contacts</li> <li>• Fibre optic</li> </ul>	<ul style="list-style-type: none"> <li>• Multipole 2 to 64 contacts</li> <li>• Multi or mixed contacts with:               <ul style="list-style-type: none"> <li>Coaxial 1 to 14 contacts</li> <li>Fibre optic 1 to 14 contacts</li> </ul> </li> </ul>
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• Push-Pull self-latching</li> <li>• 4 sizes</li> <li>• Special shell design for manipulator handling</li> <li>• Temp. range -55°C to 200°C</li> <li>• Stainless steel shell as a standard</li> <li>• Solder, crimp or print contacts</li> <li>• Resistance to 10<sup>6</sup> Gray</li> <li>• EPDM glands</li> </ul> <ul style="list-style-type: none"> <li>• IP66</li> <li>• For cable ø 7.5 to 28.5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Screw coupling</li> <li>• 2 keying options for multipole</li> <li>• Over 20 shell styles</li> <li>• Temp. range -55°C to 200°C</li> <li>• Shielding:               <ul style="list-style-type: none"> <li>&gt; 100dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> <li>• Solder or crimp contacts</li> <li>• Rugged housing</li> </ul> <ul style="list-style-type: none"> <li>• &gt; IP68</li> <li>• For cable ø 2.4 to 5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Screw coupling</li> <li>• Multipole with stepped inserts</li> <li>• 6 sizes</li> <li>• Over 9 shell styles</li> <li>• Temp. range -20°C to 200°C</li> <li>• Shielding:               <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> <li>• Solder contacts</li> <li>• Rugged housing</li> </ul> <ul style="list-style-type: none"> <li>• &gt; IP68</li> <li>• For cable ø 1 to 23.5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Screw coupling</li> <li>• 4 keying options</li> <li>• 6 sizes</li> <li>• Over 9 shell styles</li> <li>• Temp. range -20°C to 200°C</li> <li>• Shielding:               <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> <li>• Solder or crimp contacts</li> <li>• Rugged housing</li> </ul> <ul style="list-style-type: none"> <li>• &gt; IP68</li> <li>• For cable ø 1 to 23.5 mm</li> </ul>	<ul style="list-style-type: none"> <li>• Screw coupling</li> <li>• 4 sizes</li> <li>• Over 3 shell styles</li> <li>• Temp. range -20°C to 120°C</li> <li>• Shielding:               <ul style="list-style-type: none"> <li>&gt; 95dB at 10Mhz</li> <li>&gt; 80dB at 1 Ghz</li> </ul> </li> <li>• Solder, crimp or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• &gt; IP68</li> <li>• For cable ø 9 to 23 mm</li> </ul>

## DIN and CECC standards

	COELVER® 01 Series	COELVER® VAA Series	COELVER® SAA Series	COELVER® SBA Series	COELVER® TAA Series
					
<b>Series Description</b>	Self-latching Push-Pull fibre optic connector with alignment key.	Snap-on coaxial connector series MCX (CECC 22220-22221).	Screw, Push-Pull or snap-on coaxial connectors DIN 47297-C and CECC 22230. (1.0/2.3)	Snap-on connectors according to DIN 41626.	Screw, Push-Pull or snap-on connectors according to DIN 47295 and CECC 22240. (1.6/5.6)
<b>Contact Configurations</b>	<ul style="list-style-type: none"> <li>• Fibre optic single channel</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 Ω</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 and 75 Ω</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 50 Ω</li> </ul>	<ul style="list-style-type: none"> <li>• Coaxial 75 Ω</li> </ul>
<b>Main Features</b>	<ul style="list-style-type: none"> <li>• Push-pull self-latching</li> <li>• Fully floating ferrule 1.25mm</li> <li>• For singlemode and multimode fibres</li> <li>• Keying</li> <li>• Temp. range -40°C to 85°C</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> </ul>	<ul style="list-style-type: none"> <li>• Over 24 shell styles</li> <li>• Temp. range -55°C to 250°C</li> <li>• Solder, crimp or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> </ul>	<ul style="list-style-type: none"> <li>• Over 56 shell styles</li> <li>• Temp. range -55°C to 250°C</li> <li>• Solder, crimp or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> </ul>	<ul style="list-style-type: none"> <li>• Over 11 shell styles</li> <li>• Temp. range -50°C to 155°C</li> <li>• Crimp contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> </ul>	<ul style="list-style-type: none"> <li>• Over 28 shell styles</li> <li>• Temp. range -55°C to 250°C</li> <li>• Solder, crimp or print contacts</li> </ul> <ul style="list-style-type: none"> <li>• IP50</li> </ul>

# Most popular LEMO series by market segment

Applications	Series																																					
	B	S	K	E	2C / 2G	L	F	M	H	R	REDEL® P	00	01	0A	Y	05	5G	REDEL® K/S	REDEL® D	3T	4A	4M	3K.93C	REDEL® F	MEERKAT™	SERBAL™	SHACK™	Ethernet	1D	N	03	V	W	U	COELVER® 01	COELVER® DIN		
Aviation																																						
Automotive																																						
Audio / Video																																						
HDTV																																						
Communications																																						
Industrial Control																																						
Information Sys.																																						
Machine industry																																						
Medical																																						
Military																																						
Nuclear																																						
Petroleum																																						
Public Sector																																						
Research																																						
Robotics																																						
Test & Measur.																																						

Most frequently used in darker colour

# Checklist to select the best connector solution

Contact type	Criteria						
Unipole / Multipole HV + Multi Coaxial + Multi Triaxial FO + Multi	cable diameter	nb of contacts	Wire gauge, metal or plastic shell, contacts (solder, crimp, print)			models	Keying, environment (harsh, shock,...), vacuumtight
			Max. test voltage, grounding needs				Conductor + dielectric ø, vacuumtight, max. operating voltages
			Cable type (RG?), impedance (50, 75, 120 Ω), max. working frequency				Screening efficiency, vacuumtight
			Cable type, impedance (50, 75 Ω), max. working frequency				Screening efficiency, vacuumtight
			Fibre type (singlemode, multimode)				Fibre core & cladding, environment (harsh, shock, ...)
Hybrid + Other specialities	low + high voltage		FO + low + high voltage	thermocouple	nuclear environment	screw thread coupling	custom design
	coaxial + low voltage		fluidic + low voltage	fluidic & pneumatic	non-magnetic shell	patch panels	
	triaxial + low voltage		thermocouple + low volt.	RF coaxial (12 Ghz)	hermaphroditic conn.	adapters	
	fibre optic + low voltage		quadrax	remote handling	rectangular connectors	cable assemblies	

# Contact availability within connector series

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

Most frequently used in darker colour

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