







Precision modular connectors to suit your application

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

LEMO has set several 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 Ø 2 mm to Ø 50 mm, capable of handling cable diameters up to 30 mm and for up to 106 contacts.

This vast portfolio enables you to select the ideal connector configuration to suit almost any specific requirement in most markets, including medical devices, test and measurement instruments,

machinery, audio video broadcast, telecommunications and military.

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.



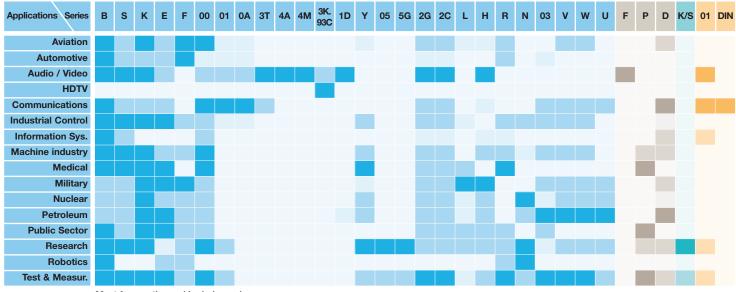
Selecting the right connector for any project is an important and sometimes challenging process. LEMO offers dedicated professional support to help you choose the best suitable solution. LEMO invites you to call our local partner for technical support. Consider the following checklist as a starting point for finding the best specific solution:



Checklist for the most common connector configurations

	Unipole / Multipole Low voltage (<3kV)	High voltage (>3kV) + Multi	Coaxial + Multi	Triaxial
Basic Specs	Cable diameter Number of contacts Wire gauge Metal or plastic Type of contacts (solder, crimp, print)	Cable diameter Max. test voltage Number of contacts Grounding needs	 Cable type (RG ?) Cable diameter Number of contacts Impedance 50, 75 and 120 Ω Max. working frequency 	• Cable type • Cable diameter • Impedance 50, 75 and 120 Ω • Max. working frequency
Indoor	00, B, S, 2C, 2G, H	05, B, S, Y, 5G, K/S	01, 00, R0, 0A, B, S, 2C, DIN	00, S
Plastic	REDEL P, R, (B)		(B)	
Outdoor	E, K, N, H, F	E, K	E, N, K, 3T	E, 3T, 4M, N, REDEL F, 4A
Underwater	03, V, W, U		03, V, U, W	V
Basic Specs	New York Nax. connector size (length, diameter) Environment (harsh, EMC, shock, vibration,) Plug model (straight, elbow, panel mount,) Socket model (free, fixed, PCB mount,) Vacuumtight	Conductor + dielectric diameter Max. connector size (length, diameter) Max. operating voltages Plug model (straight,) Socket model (free, fixed, back panel,) Vacuumtight	Max. connector size (length, diameter) Plug model (straight, elbow, fixed, bridge,) Screening efficiency Socket model (free, fixed, PCB mount,) Vacuumtight	Max. connector size (length, diameter) Plug model (straight,) Screening efficiency Socket model (free, fixed, back panel,) Vacuumtight

Most popular LEMO series by market segment



Most frequently used in darker colour

LEMO Push-Pull self-latching system









01. 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.

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

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

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

Options to consider

Fibre Optic Hybrid + Multi + Other specialities Number of fibres • Low + High voltage • Fibre type (singlemode, multimode) · Coaxial + Low voltage • Triax + Low voltage • Fibre optic + Low voltage Fibre optic + Low + High voltage

00, B, COELVER 01, REDEL D

K, N, F, H

w II

- Fibre core & cladding
- Environment (harsh, dust, shock, vibration...)
- Max. connector size (length, diameter) • Cable diameter
- Plug model (straight, fixed...)
- Socket model (free, fixed, back panel....

- . Fluidic + Low voltage
- Thermo + Low voltage
- Quadrax
- Thermocouple
- Fluidic & Pneumatic • RF coaxial (12 Ghz)
- · Remote handling
- · Nuclear environment Non-magnetic shell
- · Hermanhroditic connectors
- · Rectangular connectors · Screw thread coupling
- · Patch panels
- Adapters
- Cable assemblies
- Custom Design

Contact LEMO

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.

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

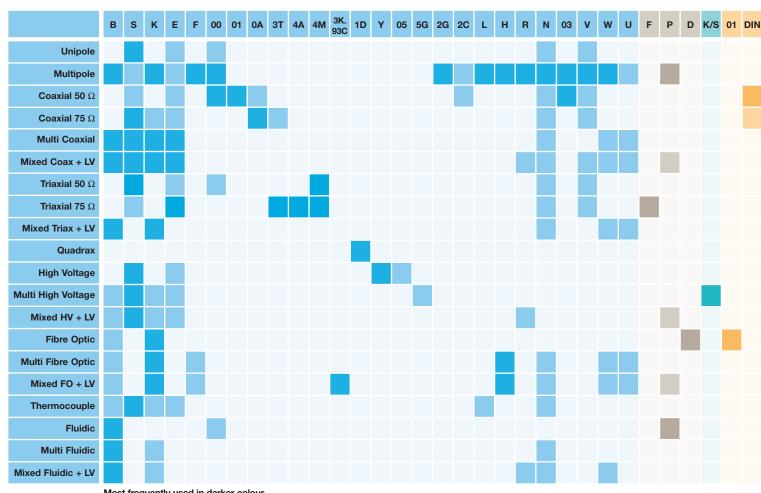
Long-term availability: LEMO guarantees to supply your connector, however specific, over a very long period of time since most LEMO connectors are produced with standard components.



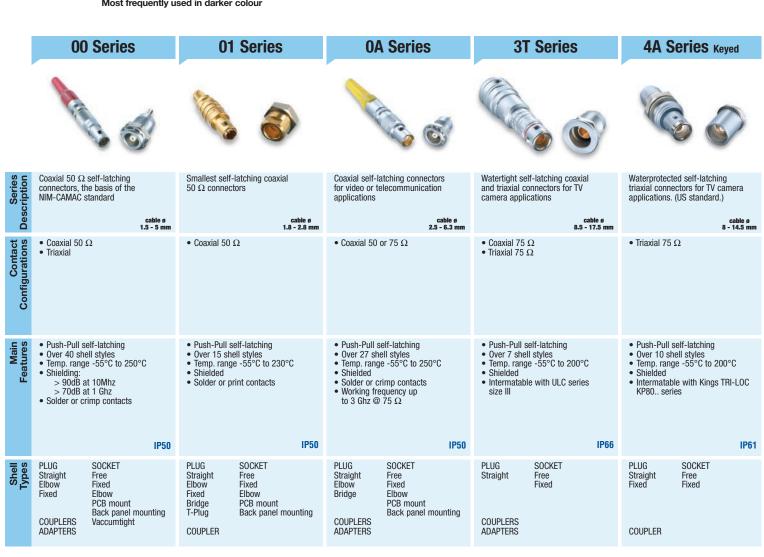




Contact availability within connector series



Most frequently used in darker colour





Standard self-latching multipole connectors with alignment key.

. Multipole 2 to 64 contacts

Multi or mixed contacts with Coaxial 1 to 14 contacts

Fluidic 1 to 4 contacts
Fluidic 1 to 4 contacts
High voltage 2 to 21 contacts
Fibre optic 1 to 14 contacts
Thermocouple 2 to 6 contacts



The original standard self-latching connectors with stepped inserts for alignment (of multipole version).

Coaxial 50 and 75 Ω Multipole 2 to 106 contacts

Multi or mixed contacts with: Coaxial 1 to 8 contacts

High voltage 2 to 8 contacts
Thermocouple 2 to 6 contacts

Triaxial 50 and 75 Ω

High voltage



Watertight self-latching multipole connectors with alignment key and rugged housing for extreme working conditions

cable ø 1 - 23.5 mm

- . Multipole 2 to 64 contacts
- Multi or mixed contacts with: Coaxial 1 to 14 contacts Fluidic 1 to 14 contacts
 High voltage 1 to 21 contacts
 Fibre optic 1 to 14 contacts
- Fibre optic
- Thermocouple 2 to 6 contacts

Watertight self-latching connectors with stepped inserts for alignment (of multipole version) and rugged housing for extreme working conditions.

Unipole

- Coaxial 50 and 75 Ω
 Multipole 2 to 106 contacts
- Triaxial 50 and 75 ΩHigh voltage
- Multi or mixed contacts with: Coaxial 1 to 8 contacts
- High voltage 1 to 8 contacts Thermocouple 2 to 6 contacts

upon request

Compact self-latching multipole

. Multipole 2 to 66 contacts

Multi or mixed contacts with: Fibre optic 2 contacts

Other mixed versions

connectors, with multiple alignment keys, for harsh environment.

- · Push-Pull self-latching
- 7 sizes4 keying optionsCompact and lightweight
- Over 12 shell styles Temp. range -50°C to 200°C
- Shielded
- Crimp or print contacts
- High shock resistance
- Dark finish

IP67

· Push-Pull self-latching

Fibre optic

- 7 sizes
 13 keying options
 9 colour codings
- Over 60 shell styles
- UL recognized

 Temp. range -55°C to 250°C

 Solder, crimp or print contacts
- Shielding: > 75dB at 10Mhz

 - > 40dB at 1 Ghz

Vacuumtight

· Push-Pull self-latching

Unipole

- 8 sizes Multipole with stepped inserts
- 9 colour codings
- Over 50 shell styles
- UL recognized
 Temp. range -55°C to 250°C
 Solder or print contacts
- Shielding: > 75dB at 10Mhz

> 40dB at 1 Ghz

IP50

· Push-Pull self-latching

- 6 sizes9 keying optionsOver 28 shell styles
- UL recognized Temp. range -55°C to 200°C
- Solder, crimp or print contacts
- Shielding: > 95dB at 10Mhz

SOCKET

Vacuumtight

Free

Fixed

- - > 80dB at 1 Ghz

· Push-Pull self-latching 7 sizesMultipole with stepped inserts

- Over 22 shell styles
- UL recognizedTemp. range -55°C to 200°C
- Solder or print contacts

- Shielding: > 95dB at 10Mhz > 80dB at 1 Ghz

- High vibration resistance

Straight Elbow Fixed

PLUG SOCKET Free Fixed Elbow PCB mount Back panel mounting

COUPLERS

IP50

PLUG Straight Fixed

Fixed Elbow PCB mount Back panel mounting COUPLERS

ADAPTERS

SOCKET Free

Vacuumtight

T-Plug COUPLERS

PLUG

Elbow

Fixed

Straight

PLUG **SOCKET** Straight Free Fixed Fixed

Back panel mounting

Vacuumtight

COUPLERS

PLUG Straight

Free Back panel mounting

SOCKET

Watertight

4M Series Keyed

3K.93C Series Keyed

1D Series

Back panel mounting

Y Series

05 Series





connectors with alignment key for TV camera applications.

Hybrid electrical-fibre optic self-latching connector for HDTV applications (ARINC / ARIB / EBU Standard).

Self-latching connectors with 4 concentric contacts

(4 concentric contacts)

Quadrax

cable ø 3 - 7.5 mm

IP50

Single contact self-latching high voltage connector with a test voltage from 5 to 70 kV d.c.

· Single HV contact

cable ø 1 - 29 mm

Miniature single contact High voltage self-latching connector with a test voltage of 12kV d.c.

cable ø 1.1 - 3.3 mm

IP50

Contact Configurations

· Push-Pull self-latching

• Triaxial 50 and 75 Ω

Shielded

KeyingOver 10 shell styles

• Temp. range -55°C to 200°C

• Push-Pull self-latching

• Hybrid with:

2 fibre optic contacts

2 signal contacts 2 power contacts and

Keying W code Over 11 shell styles Stainless steel shell

Temp. range -55°C to 90°C

Shielded UL approved Conform to ARIB standard · Push-Pull self-latching 8 colour coding Over 7 shell styles

· Solder contacts

Temp. range -40°C to 120°C

Shielding: > 70dB at 10Mhz > 35dB at 1 Ghz

· Push-Pull self-latching Test voltage from 5 to 70kV d.c.

• 3 sizes • Temp. range -55°C to 250°C

Solder contacts · Optional safety locking device · Push-Pull self-latching

· Single HV contact

Test voltage of 12kV d.c.
Over 2 shell styles
Temp. range -20°C to 125°C
Safety locking device

Crimp contacts

Aluminium alloy shell

PLUG Straight Fixed

COUPLER

SOCKET Fixed

PLUG

IP66

SOCKET Fixed

Conform to SMPTE standard

PLUG

SOCKET Fixed

PLUG Straight

SOCKET

PLUG

IP50

SOCKET

Straight Fixed

IP68

Straight Fixed Bridge

Fixed



5G Series κeyed REDEL F Series P REDEL Series κeyed D REDEL Series κeyed

Series Description	Compact and lightweight High voltage self-latching connector in multicontact version with alignment key and test voltage of 12kV d.c.	Waterprotected self-latching triaxial connectors for TV camera applications.	Self-latching plastic connectors with alignment key for medical applications.	Smallest snap-on subminiature fibre optic connector.	Multi High Voltage rectangular connectors for research applications.
	• Multi HV 50 contacts	8 - 14 mm • Triaxial 75 Ω	• Multipole 2 to 32 contacts	• Fibre optic single channel	Multi High voltage
Contact Configurations	mut 11 00 outlead	masa 70 II	Fluidic Mixed contacts in 3P series with: Coaxial 1 contact High voltage 1 contact Fibre optic 1 contact	risto opue dinglo ditalilo.	K series with 22 contacts S series with 51 contacts
Main Features	Push-Pull self-latching Test voltage of 12kV d.c. Over 2 shell styles 2 keying options Temp. range -20°C to 125°C Safety locking device Crimp contacts Aluminium alloy shell Compact design	Push-pull self-latching Over 11 shell styles Temp. range -55°C to 200°C Shielded Intermatable with 1051A004 series	Push-Pull self-latching sizes Several keying options colour codings Over 12 shell styles Temp. range -50°C to 170°C IP 64/66 options	Snap-on fastening Sub-miniature size Low mass Mating endurance up to 30 cycles Ceramic floating ferrule 1.25 mm For singlemode and multimode fibres	Self-latching fastener Test voltage 12kV D.C. Crimp contacts Keying Temp. range -20°C to 125°C

IP50

PLUG

Straight

COUPLER

PLUG

Straight

SOCKET

Free Fixed

IP66

PLUG

Straight

SOCKET

Square flange Back panel mounting

Fixed

DISPOSABLE MODELS

IP50

PLUG

Straight Fixed

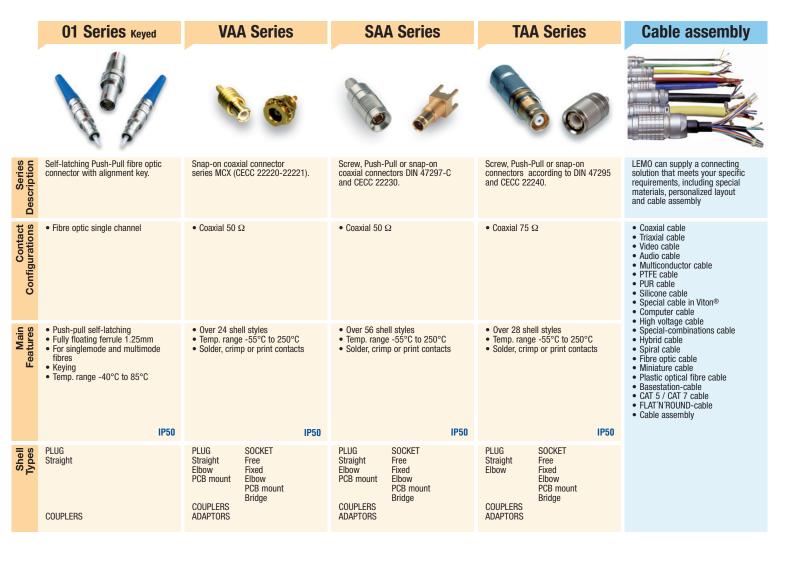
COUPLERS ADAPTERS SOCKET

Fixed

PLUG

SOCKET





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