



# 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 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.



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 114 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.



## 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.

# Local LEMO team: your best support

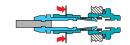
Selecting the right connector for any project is an important and sometimes challenging process. LEMO offers dedicated professional support to help you choose the best suitable solution.

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

# LEMO Push-Pull self-latching system



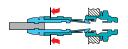
1. This self-latching system is renowned worldwide for its easy and quick mating and unmating features. It provides absolute security against vibration, shock or pull on the cable.



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

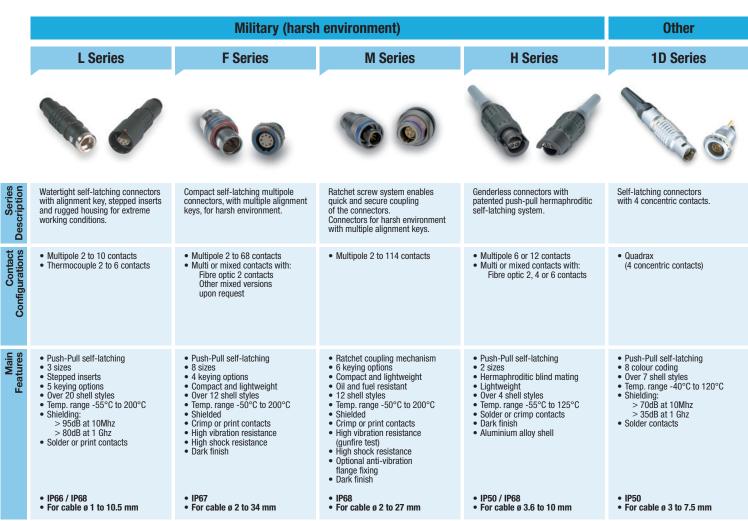


3. Once firmly latched, connection cannot be broken by pulling on the cable or any other component part other than the outer shell release sleeve.

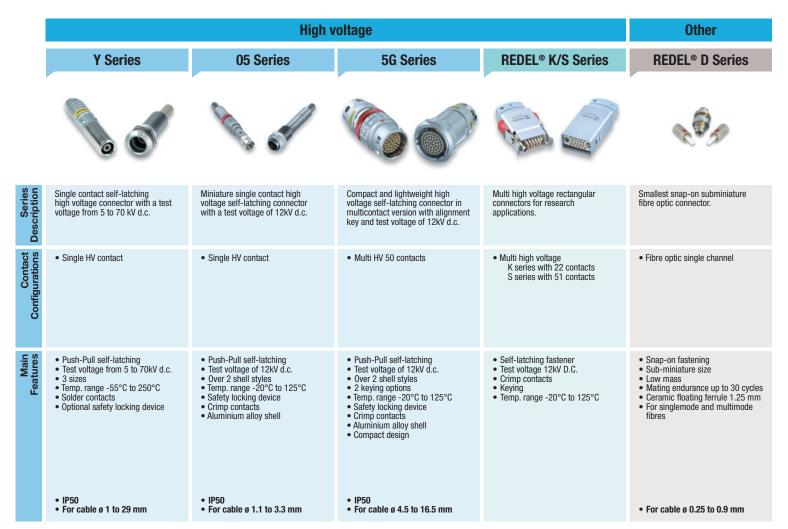


4. When required, the connector is disengaged by a single axial pull on the outer shell release sleeve. This first disengages the latches and then withdraws the plug from the socket.

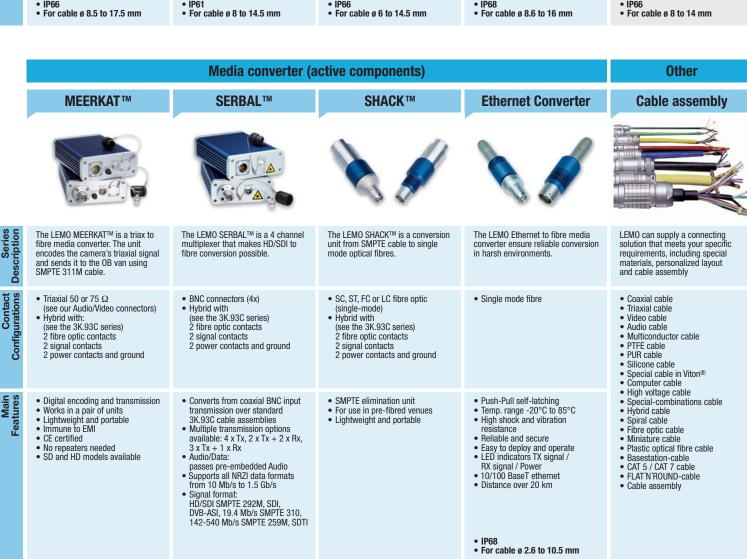
			Standard range			
	B Series	S Series K Series		E Series	2C/2G Series	
Description	Standard self-latching multipole connectors with alignment key.	The original standard self-latching connectors with stepped inserts for alignment (of multipole version).	Watertight self-latching multipole connectors with 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).	
Configurations	Multipole 2 to 64 contacts  Multi or mixed contacts with: Coaxial 1 to 14 contacts Fluidic 1 to 14 contacts High voltage 2 to 21 contacts Fibre optic 1 to 14 contacts Thermocouple 2 to 64 contacts Fibre optic Fluidic	$ \begin{array}{ll} \bullet & \text{Unipole} \\ \bullet & \text{Coaxial 50 and 75 } \Omega \\ \bullet & \text{Multipole 2 to 106 contacts} \\ \bullet & \text{Triaxial 50 and 75 } \Omega \\ \bullet & \text{High voltage} \\ \bullet & \text{Multi or mixed contacts with:} \\ & \text{Coaxial 1 to 8 contacts} \\ & \text{High voltage 2 to 8 contacts} \\ \bullet & \text{Thermocouple 2 to 6 contacts} \\ \end{array} $	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 64 contacts	$ \begin{tabular}{lll} & Unipole \\ & Coaxial 50 and 75 $\Omega$ \\ & Multipole 2 to 106 contacts \\ & Triaxial 50 and 75 $\Omega$ \\ & High voltage \\ & Multi or mixed contacts with: Coaxial 1 to 8 contacts High voltage 1 to 8 contacts \\ & Thermocouple 2 to 6 contacts \\ \end{tabular} $	• Multipole 18 contacts (2G series) • Multipole 2 to 14 contacts • Coaxial 50 $\Omega$ (2C series)	
Features	Push-Pull self-latching 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	<ul> <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> <li>75dB at 10Mhz</li> <li>40dB at 1 Ghz</li> </ul> </li> </ul>	<ul> <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> <li>95dB at 10Mhz</li> <li>80dB at 1 Ghz</li> </ul> </li> <li>Push-Pull self-latching</li> <li>7 sizes</li> <li>Multipole with stepped insert</li> <li>UL recognized</li> <li>Temp. range -55°C to 200°C</li> <li>Solder or print contacts</li> <li>Shielding: <ul> <li>95dB at 10Mhz</li> <li>80dB at 1 Ghz</li> </ul> </li> </ul>		Push-Pull self-latching     9 colour codings     Over 13 shell styles (2C series)     Temp. range -55°C to 250°C     Solder or print contacts	
	<ul><li> IP50</li><li> For cable ø 1 to 25 mm</li></ul>	<ul><li>IP50</li><li>For cable ø 1 to 30 mm</li></ul>	<ul> <li>IP66 / IP68</li> <li>For cable ø 1 to 23.5 mm</li> </ul>	<ul> <li>IP66 / IP68</li> <li>For cable ø 1 to 30 mm</li> </ul>	<ul><li>IP50</li><li>For cable ø 1.7 to 7.9 mm</li></ul>	
		Military (harsh	environment)		Other	



	Plas	stic	Miniature						
	R Series	REDEL® P Series	00 Series	01 Series	OA Series				
			Control of						
Description	Rectangular self-latching connectors with plastic shell.	Self-latching plastic connectors with alignment key for medical applications.	Coaxial 50 $\Omega$ self-latching connectors, the basis of the NIM-CAMAC standard.	Smallest self-latching coaxial 50 $\Omega$ connectors.	Coaxial self-latching connectors for video or telecommunication applications.				
Configurations	Multipole 10 to 65 contacts     Mixed contacts with:     Coaxial 1 to 8 contacts     Fluidic 1 to 8 contacts     High voltage 1 to 8 contacts	Multipole 2 to 34 contacts     Voltage mains     Fluidic     Mixed contacts in 2P and 3P series with:     Coaxial 1 contact     High voltage 1 contact     Fibre optic 1 contact     Fluidic 1 or 3 contacts	Coaxial 50 Ω     Triaxial	• Coaxial 50 Ω	$ullet$ Coaxial 50 or 75 $\Omega$				
Features	<ul> <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> • IP50 <ul> <li>For cable ø 1 to 9.2 mm</li> </ul>	Push-Pull self-latching sizes Several keying options colour codings Over 12 shell styles Temp. range -50°C to 170°C P 64/66 options White, gray or black outershell  P50 For cable Ø 2.7 to 9.5 mm	Push-Pull self-latching Ver 40 shell styles Temp. range -55°C to 250°C Shielding: > 90dB at 10Mhz > 70dB at 1 Ghz Solder or crimp contacts  IP50 For cable ø 1.5 to 5 mm	Push-Pull self-latching Ver 15 shell styles Temp. range -55°C to 230°C Shielded Solder or print contacts  IP50 For cable Ø 1.8 to 2.8 mm	<ul> <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> <li>IP50</li> <li>For cable Ø 2.5 to 6.3 mm</li> </ul>				



		Audio-Video						
	3T Series	4A Series	3K.93C Series	REDEL® F Series				
Description	Watertight self-latching coaxial and triaxial connectors for TV camera applications.	Waterprotected self-latching triaxial connectors for TV camera applications. (US standard.)	Watertight self-latching triaxial connectors with alignment key for TV camera applications (UK standard).	Hybrid electrical-fibre optic self-latching connector for HDTV applications (SMPTE / ARIB / EBU Standard).	Waterprotected self-latching triaxial connectors for TV camera applications.			
• Coaxial 75 Ω • Triaxial 75 Ω		• Triaxial 75 Ω	$\bullet$ Triaxial 50 and 75 $\Omega$	Hybrid with:     2 fibre optic contacts     2 signal contacts     2 power contacts and ground	• Triaxial 75 Ω			
Features	Push-Pull self-latching Over 7 shell styles Temp. range -55°C to 200°C Shielded Intermatable with ULC series size III	Push-Pull self-latching Ver 10 shell styles Temp. range -55°C to 200°C Shielded Intermatable with Kings TRI-LOC KP80 series	Push-Pull self-latching Keying Over 10 shell styles Temp. range -55°C to 200°C Shielded	Push-Pull self-latching Keying W code Over 11 shell styles Stainless steel shell Temp. range -55°C to 90°C Shielded UL approved Conform to ARIB standard Conform to SMPTE standard Pre-terminated contacts available Fusion splice	Push-pull self-latching     Over 11 shell styles     Temp. range -55°C to 200°C     Shielded     Intermatable with 1051A004 series			
	• IP66 • For cable ø 8.5 to 17.5 mm	• IP61 • For cable ø 8 to 14.5 mm	• IP66 • For cable ø 6 to 14.5 mm	• IP68 • For cable ø 8.6 to 16 mm	• IP66 • For cable ø 8 to 14 mm			

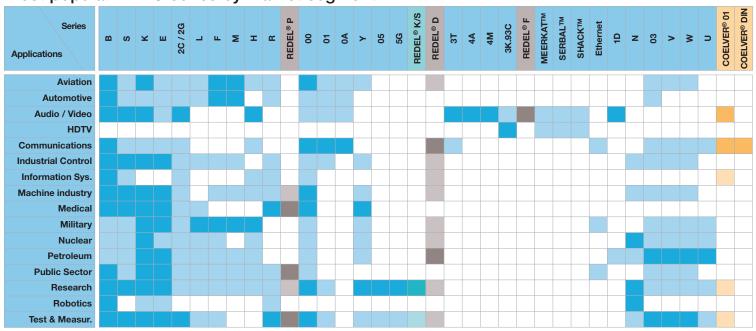


	Other	Underwater (deep sea)						
	N Series	03 Series	V Series	W Series	U Series			
Series Description	Remote handling self latching connectors suitable for operating in nuclear environments.	Screw coupling miniature underwater connectors suitable for pressure up to 60 bars.	Screw coupling underwater 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.			
Configurations	• Multipole 2 to 64 contacts • Coaxial 50 and 75 $\Omega$ • Triaxial 50 and 75 $\Omega$ • Triaxial 50 and 75 $\Omega$ • Thermocouple 2 to 6 contacts • Multi or mixed contacts with: Coaxial 1 to 14 contacts High voltage 1 to 21 contacts Fibre optic 1 to 14 contacts Fluidic 1 to 14 contacts	• Multipole 2 to 4 contacts • Coaxial 50 $\Omega$	• Unipole • Coaxial 50 or 75 $\Omega$ • Multipole 2 to 48 contacts • Triaxial 50 or 75 $\Omega$ • Multi or mixed contacts with: Coaxial 1 to 4 contacts	Multipole 2 to 64 contacts     Multi or mixed contacts with:     Coaxial 1 to 14 contacts     Fluidic 1 to 14 contacts     Fibre optic 1 to 14 contacts     Thermocouple 2 to 6 contacts     Fibre optic	Multipole 2 to 64 contacts     Multi or mixed contacts with:     Coaxial 1 to 14 contacts     Fibre optic 1 to 14 contacts			
Main Features	Push-Pull self-latching  4 sizes Special shell design for manipulator handling Temp. range -55°C to 200°C Stainless steel shell as a standard Solder, crimp or print contacts Resistance to 10° Gray EPDM glands  IP66	Screw coupling Let keying options for multipole Ver 20 shell styles Temp. range -55°C to 200°C Shielding: > 100dB at 10Mhz > 80dB at 1 Ghz Solder or crimp contacts Rugged housing	Screw coupling Multipole with stepped inserts Services Over 9 shell styles Temp. range -20°C to 200°C Shielding: > 95dB at 10Mhz > 80dB at 1 Ghz Solder contacts Rugged housing	Screw coupling 4 keying options 6 sizes Over 9 shell styles Temp. range -20°C to 200°C Shielding: > 95dB at 10Mhz > 80dB at 1 Ghz Solder or crimp contacts Rugged housing	Screw coupling 4 sizes Over 3 shell styles Temp. range -20°C to 120°C Shielding: > 95dB at 10Mhz > 80dB at 1 Ghz Solder, crimp or print contacts			
	• For cable ø 7.5 to 28.5 mm	• For cable ø 2.4 to 5 mm	• For cable ø 1 to 23.5 mm	• For cable Ø 1 to 23.5 mm	• For cable ø 9 to 23 mm			

**DIN and CECC standards** 



# Most popular LEMO series by market segment

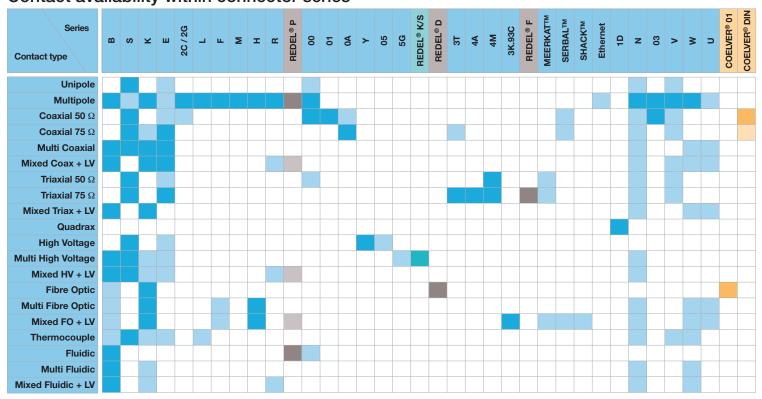


Most frequently used in darker colour

### Checklist to select the best connector solution

Contact type		Criterias																										
Unipole / Multipole	5	S	Wire gauge, me	etal or plastic shell, contacts	s (solder, crimp, print)			Keying, enviror	nment (harsh, shock,), vacuumtight																			
HV + Multi	nete	cable diameter nb of contacts	dian	Max. test voltage	ge, grounding needs			<u>s</u>	Conductor + dielectric ø, vacuumtight, max. operating voltages																			
Coaxial + Multi																					Cable type (RG	?), impedance (50, 75, 120	$\Omega$ ), max. working frequence	су	nodels	Screening effic	ency, vacuumtight	
Triaxial	gple								Cable type, imp	oedance (50, 75 Ω), max. wo	orking frequency		Ε	Screening effic	ency, vacuumtight													
FO + Multi	ö	=	Fibre type (sing	lemode, multimode)				Fibre core & cladding, environment (harsh, shock,)		shock,)																		
	Hybrid + coaxi		high voltage	FO + low + high voltage	thermocouple	nu	clea	r environment	screw thread coupling	custom design																		
Hybrid +			+ low voltage	fluidic + low voltage	fluidic & pneumatic	nc	non-magnetic shell		patch panels																			
Other specialities			+ low voltage	thermocouple + low volt.	RF coaxial (12 Ghz)	her	map	hroditic conn.	adapters																			
	fib	re opti	ic + low voltage	quadrax	remote handling	recta	angı	ılar connectors	cable assemblies																			

# Contact availability within connector series



Most frequently used in darker colour

#### **LEMO** HEADQUARTERS

SWITZERLAND LEMO SA Chemin des Champs-Courbes 28 - P.O. Box 194 - CH-1024 Ecublens Tel. (+41 21) 695 16 00 - Fax (+41 21) 695 16 02 - e-mail: info@lemo.com

#### **LEMO** SUBSIDIARIES

AUSTRIA LEMO Elektronik GesmbH Lemböckgasse 49/E6-3 1230 Wien Tel: (+43 1) 914 23 20 0 Fax:(+43 1) 914 23 20 11 sales@lemo.at

CANADA LEMO Canada Inc 111 Esna Park Drive, Unit 1, Markham, Ontario L3R 1H2 Tel: (+1 905) 477 77 22 Fax: (+1 905) 477 78 13 info-canada@lemo.com

CHINA
LEMO Electronics (Shanghai) Co., Ltd
5th Floor, Block 6, City of ELITE,
1000 Jinhai Road, Pudong
Shanghai, China 201206
Tel: (+86 21) 5899 7721
Fax: (+86 21) 5899 7727
cn.sales@lemo.com

DENMARK LEMO Denmark A/S Gammel Mosevej 46 2820 Gentofte Tel: (+45) 45 20 44 00 Fax: (+45) 45 20 44 01 info-dk@lemo.com

FRANCE LEMO France Sàrl 24/28 Avenue Graham Bell Bâtiment Balthus 4 Bussy Saint Georges 77607 Marne la Vallée Cedex 3 Tel: (+33 1) 60 94 60 94 Fax: (+33 1) 60 94 60 90 info-fr@lemo.com

GERMANY LEMO Elektronik GmbH Hanns-Schwindt-Str. 6 81829 München Tel: (+49 89) 42 77 03 Fax: (+49 89) 420 21 92 info@lemo.de

HONG KONG LEMO Hong Kong Ltd Unit 1207, 12/F, Corporation Square, 8 Lam Lok Street, Kowloon Bay, Kowloon - Hong Kong Tel: (+852) 2174 0468 Fax: (+852) 2174 0492 hk.sales@lemo.com

HUNGARY REDEL Elektronika Kft Vágóhíd u. 26 1201 Budapest XX. Tel: (+36 1) 421 47 10 Fax: (+36 1) 421 47 57 info-hu@lemo.com

ITALY LEMO Italia srl Viale Lunigiana 25 20125 Milano Tel: (+39 02) 66 71 10 46 Fax: (+39 02) 66 71 10 66 sales.it@lemo.com

JAPAN LEMO Japan Ltd 2-7-22, Mita, Minato-ku, Tokyo, 108-0073 Tel: (+81 3) 54 46 55 10 Fax: (+81 3) 54 46 55 11 lemoinfo@lemo.co.jp

NETHERLANDS / BELGIUM LEMO Connectors Benelux De Trompet 1060 1967 DD Heemskerk Tel. (+31) 251 25 78 20 Fax (+31) 251 25 78 21 info@lemo.nl

NORWAY / ICELAND LEMO Norway A/S Stanseveien 6B 0975 Oslo Tel: (+47) 22 91 70 40 Fax: (+47) 22 91 70 41 info-no@lemo.com

SINGAPORE LEMO Asia Pte Ltd 4 Leng Kee Road, #06-09 SiS Building Singapore 159088 Tel: (+65) 6476 0672 Fax: (+65) 6474 0672 sg.sales@lemo.com

SPAIN / PORTUGAL IBERLEMO SAU Brasil, 45, 08402 Granollers Barcelona Tel: (+34 93) 860 44 20 Fax: (+34 93) 879 10 77 info-es@lemo.com

Madrid Office Antonio López, 96, 28019 Madrid Tel: (+34 91) 469 99 19 Fax: (+34 91) 469 99 59

SWEDEN / FINLAND LEMO Nordic AB Mariehällsvägen 39A 168 65 Bromma Tel: (+46 8) 635 60 60 Fax: (+46 8) 635 60 61 info-se@lemo.com

SWITZERLAND LEMO Verkauf AG Grundstrasse 22 B 6343 Rotkreuz Tel: (+41 41) 790 49 40 Fax: (+41 41) 790 49 43 ch.sales@lemo.com

UNITED KINGDOM LEMO UK Ltd 12-20 North Street Worthing, West Sussex, BN11 1DU Tel: (+44 1903) 23 45 43 Fax: (+44 1903) 20 62 31 lemouk@lemo.com

USA LEMO USA Inc P.O. Box 2408 Rohnert Park, CA 94927-2408 Tel: (+1 707) 578 88 11 (+1 800) 444 53 66 Fax:(+1 707) 578 08 69 info@lemousa.com



# LEMO DISTRIBUTORS

AUSTRALIA, BRAZIL, CZECH REPUBLIC, GREECE, INDIA, ISRAEL, NEW ZEALAND, PAKISTAN, POLAND, RUSSIA, SOUTH AFRICA, SOUTH KOREA, TAIWAN, TURKEY, UKRAINE

www.lemo.com

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## LEMO:

FFS.00.161.MN FGG.00.303.CLAD35Z PSA.00.250.CTLC29 FGG.00.304.CLAD35Z ERN.00.250.NTL ASF.00.250.NTA FRT.00.250.CTA50 FFV.00.250.NTAE31 RMA.00.250.NTM HGG.00.304.CLLPV FPL.00.250.NTD EGG.00.302.CYM EHG.00.302.CLL EHP.00.250.CTL EPE.00.250.NTN EPE.00.250.NTNZ EPL.00.650.NLNY EPS.00.250.NTN ERN.00.650.CLL EWF.00.250.CTLPV EWF.00.250.NTLPV EZG.00.302.NLN GMD.00.025.DA GRA.00.269.GJ GRA.00.269.GR GRA.00.269.GV HGP.00.250.NTLPV FLA.00.250.CTAC29 FLA.00.250.CTAC31Z GBA.00.250.FN RAD.00.113.CTM RAD.00.250.NTM VPS.00.250.CTLE31 XRB.00.303.NLN XAN.M13.GLA.6G XAN.M22.GLA.6G XKN.M13.GLLG XKN.M22.GLLG XRN.M13.GLL.6G XRN.M22.GLL.6G XAN.M08.GLA.6A XAN.M22.GLA.6A XKN.M08.GLLA XRN.M08.GLL.6A XRN.M13.GLL.6A XRN.M22.GLL.6A XAN.M22.GLA.6R XKN.M13.BLLB XKN.M22.GLMG XAN.M13.BLA.6BZ ERA.00.250.NTL ERA.00.250.CTL ERN.00.250.CTL FFS.00.250.NTCE52 PCA.00.250.CTLC29 FFS.00.250.NTCE31 FGG.00.302.CLAD27 FGG.00.304.CLAD35 EGG.00.302.CLL EGG.00.304.CLL RAD.00.250.CTM PHG.00.304.CLLZ PFG.00.304.CLLD35 ABC.00.250.NTM APF.00.250.DTAR ASA.00.250.NTL ASB.00.250.NTM ASG.00.250.NTC EEG.00.302.CLL EEG.00.303.CLL FFF.00.250.CTAC22 FFS.00.250.CTAE24 FFS.00.250.CTAE45 FFY.00.113.CTAC52Z FGG.00.303.ZLA PFB.00.303.CLLD27 PHG.00.304.CLLD35 FFC.00.250.CTAC22Z GSC.00.290.CD35 XAN.M08.GLA.3G XAN.M10.GLA.3G XAN.M13.GLA.3G XAN.M08.GLA.3GZ XAN.M22.GLA.5G XAN.M06.GLA.6G XAN.M08.GLA.6G XAN.M08.GLA.6GZ XAN.M13.GLA.6GZ XAN.M22.GLA.6GZ XRN.M22.GLL.5G XRN.M08.GLL.6G XRN.M08.GLL.6GZ XRN.M13.GLL.6GZ XRN.M22.GLL.6GZ XLN.M08.GLLG XLN.M10.GLLG XLN.M13.GLLG XLN.M22.GLLG XKN.M06.GLLG XKN.M08.GLLG