# M SERIES MULTI COAX SOLUTION



High frequency up to 26.5 GHz12x coaxial contact configuration (50 Ohm)Compact design for harsh environment



# New multi coaxial model with high frequency performance

LEMO is expanding its field-proven M Series with a new multi coaxial configuration, named LM.232, available in size LM with up to 12x coaxial contacts. These new plugs and fixed sockets have been specifically designed for all applications requiring high frequency performance in harsh environments.

This new insert configuration integrates 12x coaxial contacts type 0R (50 Ohm) allowing a frequency up to 26.5 GHz with a low Voltage Standing Wave Ratio (VSWR).

The coaxial contact is easy to mount, thanks to its crimp contact and retaining clip. It is designed to be terminated with flexible low-loss communication cable LMR-100A or MULTIFLEX 86.

Typical applications are wireless network 5G wireless networks, radar systems, battlefield communications or UAV anti-drone technology, essentially any system where space saving and easy disconnection may be required.







## Multi coaxial

This new configuration is available with all standard models presented in M Series catalogue, and follow the standard models part numbering system.

Male insert	Female insert	Reference	Number of contacts	Impedance ( $\Omega$ )	Type	Cable group	Cond. ø max.	Dielectric ø max.	Sheath ø max.	VSWR (max.)	Test voltage (kV rms) (contact/screen)	Rated current (A)
		LM.232	12	50	OR	1	0.54	1.54	2.8	< 1.25 DC to 8 GHz < 1.5 8 to 26.5	0.95	2.5

# **Coaxial contact type OR**

Coaxial contacts type OR with an impedance of 50 Ohm offer the best compromise in term of compacity and high frequency performance. Crimp contacts and retaining clips allow an easy termination and maintenance process.



# VSWR performance & recommended cable

Able to transmit high frequency signal with low VSWR at a frequency up to 26.5 GHz when terminated with cable LMR-100A, MULTIFLEX\_86 or equivalent.





# **Main benefits**



Reliable and proven performance in harsh environments (extreme temperatures, humidity, vibrations)

# Cabling instructions and stripping length



**Typical assembly of coax contact (Coax types—RG-174/U, RG-188 A/U, RG-316/U, LMR-100A, MULTIFLEX\_86) = Cable Group 1** Coax contacts: Fit the crimp ferrule onto the cable. Crimp the central contact using tool DPC.91.701.V fitted with positioner DCE.91.050.RVCM, set to position 3. Fit by turning the coax sub-assembly on the central contact until the stop is reached, check that the central contact is in the correct position in relation to the sub-assembly (0.5 mm), fold back the cable screen, place the crimp ferrule over the crimping area and complete the crimp using tool DPE.99.003.1K.

Applications								
CT⊚T5 Automotive	Communication	Defense	Unmanned vehicles					



#### **About LEMO**

LEMO is the industry pioneer in the design and manufacture of high-quality and high-performance interconnect solutions. LEMO's Push-Pull and ratchet coupling connectors are found in a variety of challenging application environments including medical, industrial & machines, automotive, test & measurement, defense, audio-video and telecommunications. LEMO has been designing precision connectors for more than 75 years. Offering over 90,000 combinations of product that continue to grow through custom specific designs, LEMO and its brand REDEL, NORTHWIRE and COELVER currently serve more than 150,000 customers in over 80 countries around the world.



### **Cable assembly**

LEMO is renowned for the quality of the connector solutions and this is matched by the cable assemblies supplied.

Commitment to quality is supported by 100% testing of all assemblies. Capabilities include potting and overmold to support rapid prototype and development through to high volume series production. LEMO subsidiaries are equipped with modern equipment, much of it custom built specifically for customer needs. These include cut and strip machinery, robotic assembly and automatic test equipment to ensure maximum reliability and confidence in LEMO cable assemblies.

### **Custom solutions**

Contacts, connectors and integrated cable assembly solutions meet the most demanding technical market requirements. LEMO's connector solutions and value-added services are characterized by their exclusive focus on meeting the customer's needs.

- Precise implementation of application-specific requirements regarding design, functionality, cost and exclusivity
- Custom connector solutions derived from standard products
- One-to-one local expertise
- Quick prototyping and production turn around

#### Custom interconnect solutions based on your requirements



Discover the wide range of configurations in our catalog





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