

M Series Multi-Coax

High-frequency performance for harsh environments

- **High frequency
up to 26.5 GHz**
- **Up to 12x coaxial
contact configuration
(50 Ohm) in < 30mm Ø**
- **Compact design
for harsh environment**

LEMO's multi-coaxial connector solution is specifically designed to deliver **high-performance data transmission** in a **compact, lightweight, and rugged format**, ideal for modern defense and communication platforms.

Smaller and lighter than standard **MIL-DTL-38999** connectors, this solution provides a space-efficient alternative while fully meeting the mechanical and environmental robustness expected for harsh environment applications.

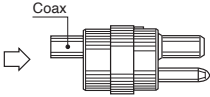
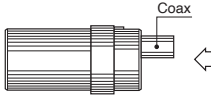
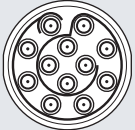

With **coaxial contacts supporting frequencies up to 26.5 GHz** and **low VSWR**, it offers **superior signal integrity** for high-speed digital and RF applications.

Optimised for **SWaP-C sensitive environments**, the solution comes in **4x and 12x coax configurations**, ensuring compact and reliable connectivity for mission-critical systems.

Designed with versatility in mind, this solution now includes a **dummy contact**, allowing users to seal unused cavities for more flexible and customized configurations, while maintaining full environmental protection.

Multi-Coaxial solution

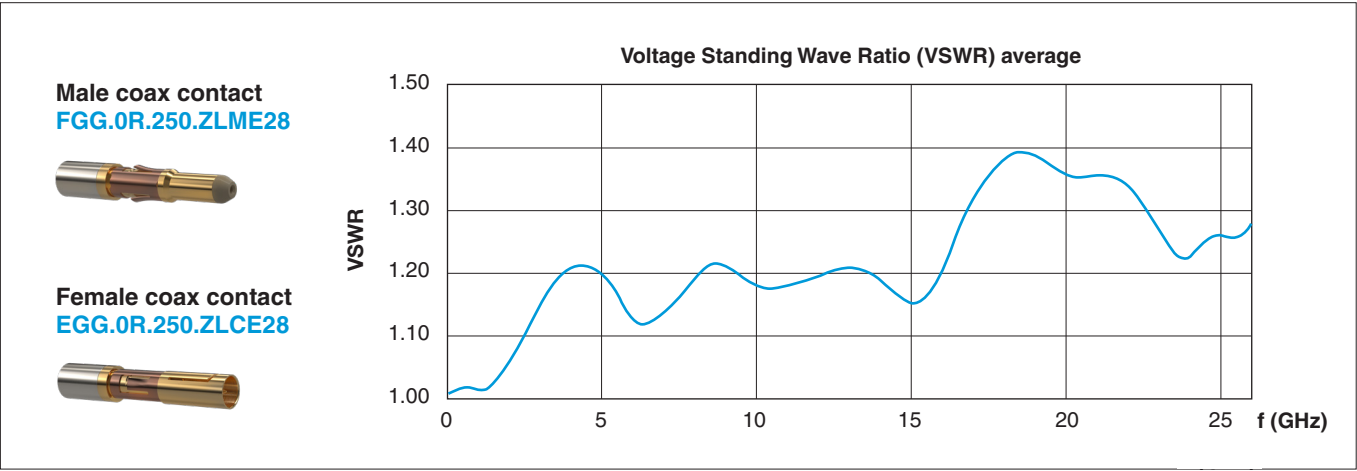
This new configuration is available with all standard models presented in M Series catalogue, and follow the standard models part numbering system.

	Male insert	Female insert	Reference	Number of contacts	Impedance [Ω]	Type	Cable group	Cond. \varnothing max.	Dielectric \varnothing max.	Sheath \varnothing max.	VSWR max.	Test voltage (kV rms) [contact/screen]	Rated current (A)
3M			204	4	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
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 50 Ohms

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

Capable of reaching frequencies up to 8 GHz with a VSWR of 1.25 and up to 26.5 GHz with a VSWR of 1.5 when terminated with 1 meter Times microwaves LMR100 or Multiflex_86.



Coaxial contacts must be ordered separately.

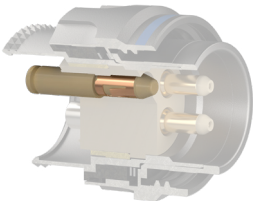
Dummy contacts

The use of a dummy contact allows sealing of unused cavities in both LM.232 (12x coax) and 3M.204 (4x coax) configurations, enabling greater flexibility in system design. A single dummy contact is compatible with both plug and socket connectors and provides enhanced protection up to IP 68 when potted.

Part number

FGG.2B.247.LLZ





User's benefits

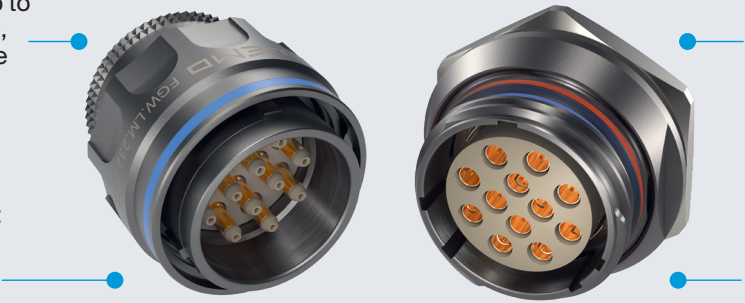
LEMO's multi-coaxial connectors deliver high-frequency performance up to 26.5 GHz in a compact, MIL-tested design – offering flexible configurations and rugged reliability for SWaP-C (Size, Weight, and Power - Cost) sensitive applications.

High Data Performance:
Supports frequencies up to **26.5 GHz** with low VSWR, ensuring fast and reliable signal transmission for demanding applications

Compact & Lightweight:
Smaller and lighter than MIL-DTL-38999, ideal for systems with strict **Size and Weight** constraints.

Rugged & Reliable:
Designed and tested to **MIL-STD standards**, with a robust **ratchet coupling system** for secure connections in high-vibration environments.

Flexible Configurations:
Available in **12x and 4x coaxial contact versions**, with a **dummy contact option** to seal unused cavities for customized layouts.



Main applications

Perfect for **5G networks, radar, high-speed imaging**, and mission-critical communications in **UAVs, vehicles, and defense** systems.



UAVs



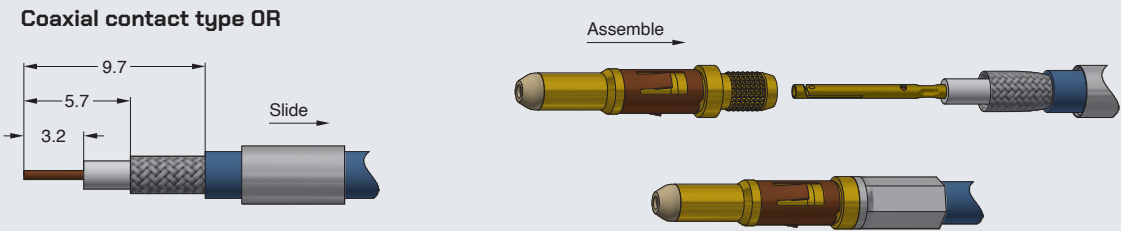
Defense



Vehicles

Cable assembly information

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. LEMO also offers cable assembly services worldwide, and each assembly undergoes thorough electrical, mechanical, and visual testing to guarantee both performance and reliability.



Reference	Coaxial contact part number		Tooling reference		
	For male contacts	For female contacts	Crimping tool with die	Spanner for tightening the contact	Extractor
3M.204	FGG.0R.250.ZLME28	EGG.0R.250.ZLCE28	DPE.99.003.1K	DPC.91.701.V	DCC.91.C0R.LAG
LM.232					

Detailed instructions for coax contact cable assembly can be found in the cable instruction drawings.

Empowering connectivity

About LEMO

With a strong legacy of excellence and innovation, the LEMO Group is a global leader in providing high performance custom interconnect solutions. From the depth of the oceans to the far reaches of outer space, no matter how harsh the environment may be, our connectors and cable solutions are chosen, wherever connections are too critical, precious, or vital to fail. Offering over 90,000 product combinations that continue to grow through custom specific designs, our

subsidiaries and 20 distributors have built a global network of strong, dedicated local resources with unmatched technical expertise and understanding of customer requirements. Thanks to our global network, we serve more than 150,000 customers in over 80 countries worldwide. All our staff of 2,000 people are united to accomplish the same mission: to guarantee to our customers interconnect solutions that exceed their current requirements and anticipate their future expectations.

Years of experience	+75
Employees	+2000
Custom solutions	+90000
Subsidiaries	20
Distributors	+20
Customers worldwide	+150000
Countries	+80

LEMO, your ideal partner

One-on-One local engineering expertise and technical support for system integration

Strong supply chain and global distribution network

Custom interconnect solutions for specific project requirements including rapid prototyping

Certified interconnect solutions in compliance with industry standards

Vertical integration ensuring reliable, high-quality interconnect solutions and sustained availability



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Product finder



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