

LEMO interconnect solutions

Trusted for **Security and Defence** applications

In today's rapidly evolving security geopolitical landscape, modern defence and security solutions demand uncompromising reliability and performance. As global threats become more complex and defence strategies more sophisticated, the need for cutting-edge, fail-safe technologies is greater than ever.

LEMO is a global leader in high-performance connector solutions, trusted by leading defence contractors and system integrators across the world. With over 75 years of engineering excellence, our connectors are built to perform in the most demanding conditions — where failure is not an option.

Our interconnect solutions combine compactness, durability, and precision, delivering mission-critical performance for land, air, and sea applications.

MIL environment compliant connectors

LEMO provides high-performance connectivity solutions for military and defence applications, ensuring reliability in extreme environments. Our connectors are engineered for mission-critical operations and tested under harsh environmental conditions, in compliance with military standards such as MIL-STD-810 and MIL-STD-202.

In addition to IP68 sealing, rugged mechanical design, and superior signal integrity, LEMO connectors offer key advantages over traditional MIL-Spec products. They are significantly more compact and lightweight, helping to reduce the overall size and weight of tactical systems. All LEMO products are non-ITAR, offering easier international integration and export flexibility.

LEMO also offers miniature connectors that are electrically compatible with Nett Warrior/Stanag4695/GOSSRA systems, ensuring interoperability with modern soldier-worn electronics. Our durable cable assemblies, with options for potting and overmoulding, along with field-replaceable and repairable solutions, provide long-term reliability and easy maintenance in the field.



LEMO's offering for Defence & Security

LEMO offers a comprehensive range of precision connectors specifically engineered for the defence and security sector, where reliability is mission-critical. Our three main series dedicated to this market are the **M Series**, **F Series**, and **D Series**, each designed to meet the demanding requirements of defence applications.

Series	M - Rugged Ratchet Coupling	F - Rugged Push-Pull	Coming soon
			D - Rugged Push-Pull
Product pictures			
Description	LEMO lightweight, compact, high vibration resistant (MIL STD 202 & 810F), IP68 screw locking connector	LEMO lightweight, compact, high vibration resistant (MIL STD 810F), IP67 Push-Pull connector	LEMO compact and miniature, high vibration resistance (MIL STD 810H), IP68 Push-pull connector
Locking	Triple start, 3/4 turn ratchet coupling	Push-Pull	Push-Pull and Break-away
Size	9 sizes from ø 11.1 to ø 34.0 mm (plugs)	8 sizes from ø 8.5 to ø 36.1 mm (plugs)	5 sizes from ø 7.0 to ø 18.8mm (plugs)
Keying	10 keyway options	6 keyway options	3 keyway options
Shell Types	Over 40 shell styles	Over 12 shell styles	Over 3 shell types
Shell Material	Aluminium or Brass	Aluminium or Brass	Brass
Plating	Anthracite nickel or Chrome	Anthracite nickel or Chrome	Anthracite nickel
Cable Diameter	2.2 to 34 mm • 4 backshell options available	2.2 to 34 mm • 1 backshell option	3.2 to 11.7 mm • Overmolded backshell
Nb of contact	3 to 114	3 to 66	2 to 32
AWG	LV 16 to 32 • High power 1 to 8	18 to 32	10 to 30
Contact types	Multipole • Coax • Fibre Optic • Mixed • High power	Multipole • Fibre Optic	Multipole • Coax • Mixed
Contact Termination	Crimp / Print (PCB)	Crimp / Print (PCB)	Crimp / Print (PCB) / Solder
Data Protocols	SPE / Ethernet Cat6 / USB 2.0	SPE / Ethernet / USB 2.0 / USB 3.2 *	SPE / Ethernet / USB 2.0 / USB 3.2
Sealing level	IP68 mated / hermetic sockets	IP67 / hermetic sockets	IP68 unmated
Temperature range	-55°C to 200°C	-55°C to 200°C	-55°C to 150°C
Mating Cycles	> 3000	300 / 5000 acc. to sizes/material	> 5000

* Pending validation

Product benefits



- Miniature & compact, optimised for high-density integration
- High-speed protocols for higher data rates
- Lightweight & low-profile
- Stealth, non-reflective, conductive surface treatment
- Up to 1000h salt mist resistance
- High shock & vibration resistance
- Extended temperature range up to -55/+200 °C
- IP68 sealing (20m/2h)
- Tested to MIL-STD 810H / EIA-364
- No planned product obsolescence, lifetime availability

Applications

LEMO connectors are integrated into critical defence applications worldwide, ensuring operational success in:

Soldier-worn	Ground vehicles	Aerospace / UAVs	Naval / Maritime	Radar / EW / Missile Systems
				
<ul style="list-style-type: none"> • Tactical radios • Night vision goggles • Power distribution units • Helmet-mounted devices 	<ul style="list-style-type: none"> • In-vehicle communication systems • Navigation displays • Command-and-control terminals • RF distribution 	<ul style="list-style-type: none"> • Onboard avionics • Drone flight controls • EO/IR payload interfaces • Telemetry links & mission computers • Navigation systems 	<ul style="list-style-type: none"> • Sonar processing units • Navigation systems • Underwater control modules • Radar integration 	<ul style="list-style-type: none"> • Mobile radar units • Electronic warfare pods • Fire control interfaces • Antenna couplers • Guidance and targeting modules

From connector to complete cable assembly

In today's evolving and demanding defence and security environments, LEMO and Northwire deliver integrated interconnect solutions combining precision connectors, PCB-Flex solutions, custom-engineered cables, and high-quality cable assemblies. This complete offering provides a one-stop solution, ensuring signal integrity, electrical performance, mechanical durability, and compliance with military standards.



End-to-end solutions partner:

- **Consultative sales and technical support**
- **In-house design and applications engineering support**
- **Custom Solutions:** Expert in complex cable harnesses, assemblies, and thermoplastic overmoulding
- **Private Labelling:** Tailored branding for sensitive projects
- **Certifications:** IPC-620, ISO 9001, AS9100, and more
- **Sustainability:** Eco-friendly manufacturing aligned with strict industry standards
- **End-to-End Support:** From design to delivery, with timely and reliable service
- **Global cable assembly services** available through LEMO's international network, with local support and logistics

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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Product safety
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