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## Summary

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Number of contacts Low Voltage	8
Wire Size/AWG	26 - 22
Gender	Reverse Gender
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Ratchet
Jacket cable outside diameter [mm]	4.85 - 9.70 mm
Size	1M
Suggested matching part	<a href="#">FGS.1M.308.XLMM</a>
Series	M - Rugged Ratchet coupling

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/pes-1m-308-xlcm.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/pes-1m-308-xlcm.html)

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# Technical details

## Electrical Configuration

Contact Termination Low voltage	Crimp
R (max)	6.1 mOhm
Insert configuration value	1M.308 - 8 Low Voltage
Insulator	L: PEEK
Rated current	5 A
Test voltage (kV rms) Contact-contact	1.3
Test voltage (kV rms) Contact-shell	1.1
Contact retention	22 N
Contact Type	Crimp
Max. Conductor	0.34 mm <sup>2</sup> (AWG 22)
Min. Conductor	0.14 mm <sup>2</sup> (AWG 26)
Bucket Dia.	0.8 mm (0.031in)
Contact Dia.	0.7 mm (0.028in)
Number of contacts Low Voltage	8
Wire Size/AWG	26 - 22
Gender	Reverse Gender

## Form & Material

Shell style / Model id	PE - Fixed receptacle, nut fixing with MIL-DTL38999L shell thread
Socket / Receptacle	Fixed Panel Rear Mounted
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Ratchet
Keying	S: 3 keys (beta=155, gamma=50, plug: female contacts, receptacle: male contacts)
Colour	Grey
Weight	8.42 g

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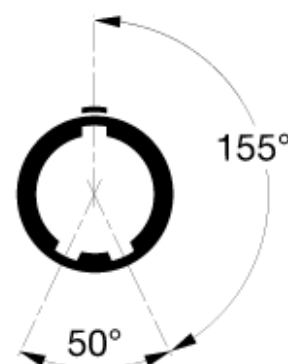
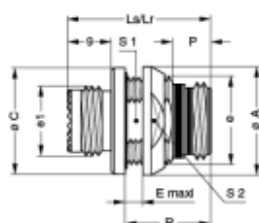
## Environment

Technical domain	Motorsport, Security and Defence, Transportation, Aerospace and UAV
Environmental sealing (IP rating)	IP68
Endurance	3000 mating cycles
Temperature range	-20°C / +200°C
EMI Shielding EIA 364-66A	>= 80 dB (1 GHz), >=70 dB (3 GHz), >= 58 dB (6 GHz), >= 40 dB (10 GHz)
Gunfire vibration	25 Hz - 2000 Hz, 3 axis (Apache helicopter)
Humidity (max)	21 days at 95%
Lighting strike EIA 364-76	10K amps - 6 times
Shock Resistance	300 g [ 3 ms]
Thermal shock	5 cycles: -65°C to +150°C
Vibration-Random	37.8 g rms - 3 axes, 4 hr amb [50 Hz - 2000 Hz]
Vibration-Sine	30 g, 3 axes, 12 hr [10 Hz - 2000 Hz]
Salt Spray Corrosion	max. 48 hr

## Cable fixation

Cable termination protection	For backshell MIL-DTL-38999M
Fixation type	MIL-DTL-38999M
Jacket cable outside diameter [mm]	4.85 - 9.70 mm

## Drawings



## Dimensions

	A	C	E	e	e1	Ls	Lr	R	S1	S2
mm.	18	17.8	5	M14x1.0	M12x1.0	26.4	26.4	13.8	12.5	16
in.	0.71	0.7	0.2			1.04	1.04	0.54	0.49	0.63

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# Recommended By Lemo

## Accessories

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Replacement contact [FGN.0M.555.ZZC](#)

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Compatible cap [BGK.1M.200.XAZ](#)

## Tools

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Positionner [DCE.91.070.5MVC](#)

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Extraction tool [DCF.93.070.4LT](#)

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Crimp tool [DPC.91.701.V](#)

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Spanner wrench [DCM.65.160.AZ](#)

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