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Summary

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Number of contacts Low Voltage	8
Wire Size/AWG	26 - 22
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Free
Locking system	Ratchet
Jacket cable outside diameter [mm]	4.85 - 9.70 mm
Size	1M
Suggested matching part	FMN.1M.308.XLCM
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/phn-1m-308-xlmm.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 ² (AWG 22)
Min. Conductor	0.14 mm ² (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	Standard

Form & Material

Shell style / Model id	PH - Free receptacle with arctic grip and MIL-DTL-38999L shell thread
Socket / Receptacle	Free
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Ratchet
Keying	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	8.82 g

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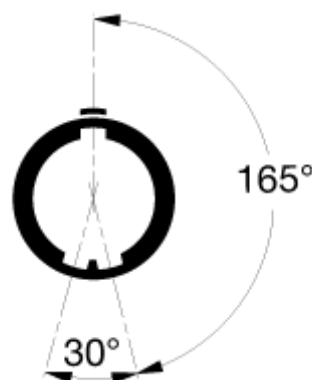
Environment

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



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Dimensions

	A	C	e	Ls	Lr	P
mm.	15.9	14.2	M12x1.0	27.9	27.9	5.3
in.	0.63	0.56		1.1	1.1	0.21

Recommended By Lemo

Accessories

Replacement contact [EGN.0M.655.ZZM](#)

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

Tools

Positionner [DCE.91.070.3MVM](#)

Extraction tool [DCF.93.070.4LT](#)

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

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