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Summary

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Number of contacts Low Voltage	10
Wire Size/AWG	24 - 20
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Suggested matching part	ECN.2M.310.XRM8
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fgn-2m-310-xrc8.html

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Technical details

Electrical Configuration

Contact Termination Low voltage	Crimp
R (max)	4.8 mOhm
Insert configuration value	2M.310_8 - 8 (0.7 mm) + 2 (1.3 mm) Low Voltage
Insulator	R: PEEK (mixed multipole)
Rated current	8 A
Test voltage (kV rms) Contact-contact	1.8
Test voltage (kV rms) Contact-shell	1.2
Contact retention	30 N
Contact Type	Crimp
Max. Conductor	0.5 mm ² (AWG 20)
Min. Conductor	0.25 mm ² (AWG 24)
Bucket Dia.	1.1 mm (0.043in)
Contact Dia.	0.9 mm (0.035in)
Number of contacts Low Voltage	10
Wire Size/AWG	24 - 20
Gender	Standard

Form & Material

Shell style / Model id	FG - Straight plug with arctic grip
Plug	Straight
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Ratchet
Keying	3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	10.14 g

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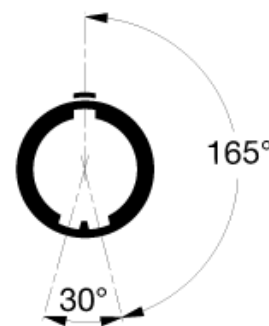
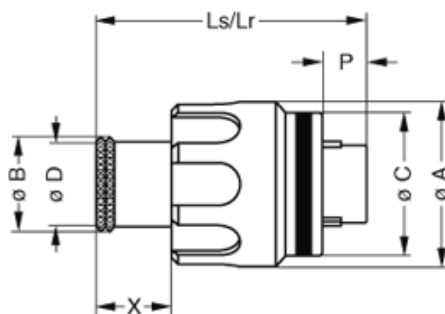
Environment

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	Heatshrink
Fixation type	Cable collet
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

Drawings



Dimensions

	A	B	C	D	Ls	Lr	P	X
mm.	18.9	14	17.2	13	24.5	24.5	3.9	7.1
in.	0.74	0.55	0.68	0.51	0.96	0.96	0.15	0.28

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