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Summary

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Number of contacts Low Voltage	12
Wire Size/AWG	26 - 22
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Ratchet
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Suggested matching part	FMN.2M.312.XLCT
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/pen-2m-312-xlmt.html

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Technical details

Electrical Configuration

Contact Termination Low voltage	Crimp
R (max)	6.1 mOhm
Insert configuration value	2M.312 - 12 Low Voltage
Insulator	L: PEEK
Rated current	7 A
Test voltage (kV rms) Contact-contact	1.65
Test voltage (kV rms) Contact-shell	1.15
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	12
Wire Size/AWG	26 - 22
Gender	Standard

Form & Material

Shell style / Model id	PE - Fixed receptacle, nut fixing and mold stop
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	3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	13.26 g

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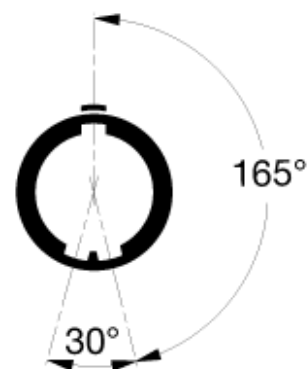
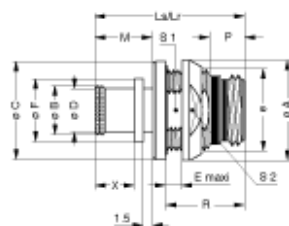
Environment

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 overmolding
Fixation type	T type cable adapter
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

Drawings



Dimensions

	A	B	C	D	E	e	Ls	Lr	M	P	R	S1	S2
mm.	21	14	20.8	13	5	M17x1.00	26	26	10.1	5.3	13.8	15.5	18
in.	0.83	0.55	0.82	0.51	0.2		1.02	1.02	0.4	0.21	0.54	0.61	0.71

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