

Standard



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Summary

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[M series](#)

[Application leaflet Security Defence](#)

Number of contacts Low Voltage	10
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Ratchet
Panel Drill Hole	M17
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Suggested matching part	FGN.2M.310.XRCT8
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/pen-2m-310-xrmt8.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	10
Contact Termination Low voltage	Crimp
R (max) - electrical contact resistance	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	0.7 mm : 6 A, 1.3 mm : 23 A
Test voltage contact-contact	1.9 kV DC
Test voltage contact-shell	1.6 kV DC
Contact retention	30 N
Bucket Dia.	8 x 0.87 mm (0.034 in) and 2 x 1.6 mm (0.063 in)
Contact Dia.	8 x 0.7 mm (0.028 in) and 2 x 1.3 mm (0.051 in)
Wire Size/AWG details	0.7 mm : 26-22, 1.3 mm : 20-16
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	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	14.85 g
Panel Drill Hole	M17

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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 (max. temperature valid for short periods of use.)
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

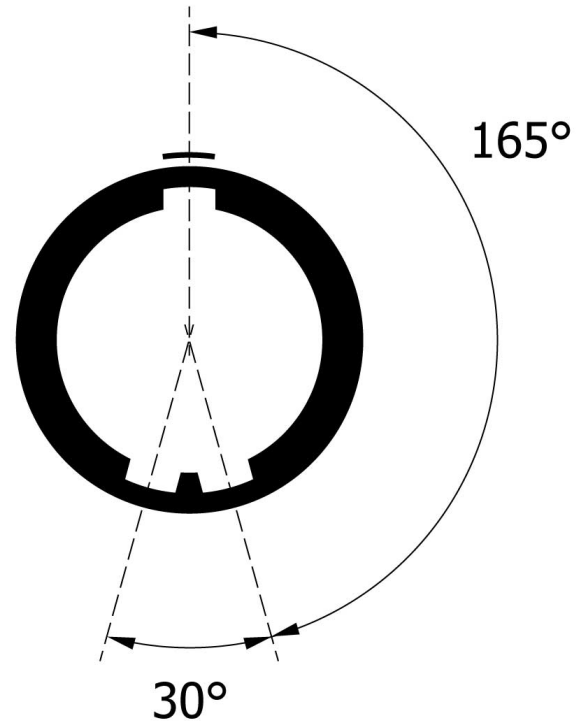
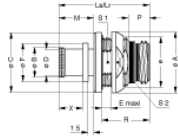
Cable fixation

Cable termination protection	For overmolding
Fixation type	Mold stop (overmolding)
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

Drawings

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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

Recommended By Lemo

Contacts

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

Caps

Compatible cap [BGK.2M.200.XAZ](#)

Cap 2 [BMK.2M.200.XAZ](#)

Tools

Spanner 2 [DCM.65.180.AZ](#)

Positionner [DCE.91.070.3MVM](#)

Positionner 2 [DCE.91.130.5MVM](#)

Extraction tool [DCF.93.131.4LT](#)

Extraction tool 2 [DCF.93.070.4LT](#)

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

Spanner wrench [DCM.65.180.AZ](#)

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