

Standard



Image for illustrative purpose only

Summary

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[M series](#)

[Application leaflet Security Defence](#)

Number of contacts Low Voltage	4
Wire Size/AWG	32 - 28
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Free
Locking system	Ratchet
Jacket cable outside diameter [mm]	2.80 - 5.60 mm
Size	MM
Suggested matching part	FMN.MM.304.XLC
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/pmnm-mm-304-xlm.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	4
Contact Termination Low voltage	Crimp
R (max)	8.7 mOhm
Insert configuration value	MM.304 - 4 Low Voltage
Insulator	L: PEEK
Rated current	2 A
Test voltage contact-contact	1.35 kV DC
Test voltage contact-shell	1.27 kV DC
Contact retention	12 N
Max. Conductor	0.09 mm ² (AWG 28)
Min. Conductor	0.035 mm ² (AWG 32)
Bucket Dia.	0.45 mm (0.018in)
Contact Dia.	0.5 mm (0.02in)
Wire Size/AWG	32 - 28
Gender	Standard

Form & Material

Shell style / Model id	PM - Free receptacle with knurled grip
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	5.63 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 (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)
F ret (max)	150 N
F ret (min)	50 N
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

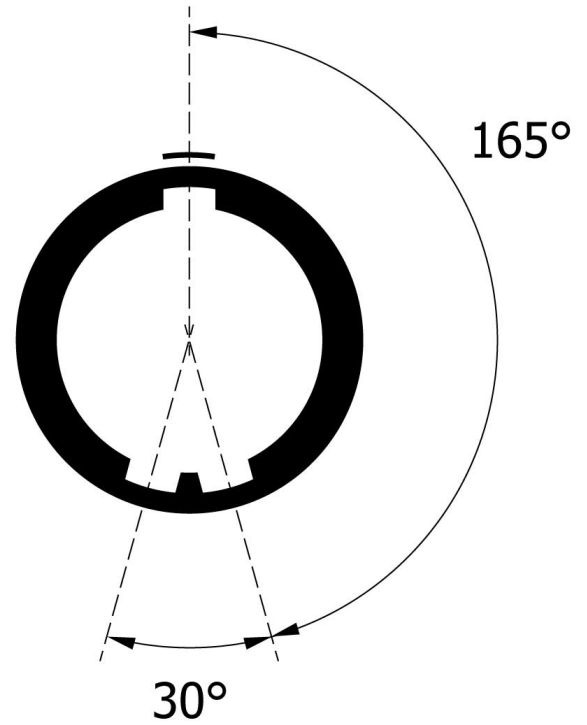
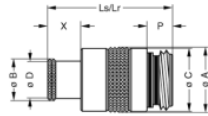
Cable fixation

Cable termination protection	Heatshrink
Fixation type	Heatshrink
Jacket cable outside diameter [mm]	2.80 - 5.60 mm

Drawings

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Dimensions

	A	B	C	D	Ls	Lr	P	X
mm.	11.1	6.4	10.7	5.6	21.4	21.4	3.7	5.8
in.	0.44	0.25	0.42	0.22	0.84	0.84	0.15	0.23

Recommended By Lemo

Caps

Compatible cap	BMF.MM.200.XAZ
Cap 2	BMF.MM.200.XAZ

Tools

Positionner	DCE.91.050.0VM
Extraction tool	DCC.05.02B.LAG
Insertion tool	DCV.05.05M.LA
Crimp tool	DPC.91.701.V

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