

Special



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Summary

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[M series](#)

[Application leaflet Security Defence](#)

[Customer Drawing](#)

Number of contacts Low Voltage	3
Wire Size/AWG	20 - 16
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Front Mounted
Locking system	Ratchet
Panel Drill Hole	M11
Jacket cable outside diameter [mm]	4.85 - 9.70 mm
Size	1M

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/egn-1m-303-xlm.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	3
Contact Termination Low voltage	Crimp
R (max)	3.6 mOhm
Insert configuration value	1M.303 - 3 Low Voltage
Insulator	L: PEEK
Rated current	15.5 A
Test voltage contact-contact	1.5 kV DC
Test voltage contact-shell	1.33 kV DC
Contact retention	40 N
Max. Conductor	1.43 mm ² (AWG 16)
Min. Conductor	0.62 mm ² (AWG 20)
Bucket Dia.	1.6 mm (0.055in)
Contact Dia.	1.3 mm (0.051in)
Wire Size/AWG	20 - 16
Gender	Standard

Form & Material

Shell style / Model id	EG - Fixed receptacle, nut fixing
Socket / Receptacle	Fixed Panel Front 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	4.92 g
Panel Drill Hole	M11

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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

Jacket cable outside diameter [mm]	4.85 - 9.70 mm
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Recommended By Lemo

Contacts

Replacement contact	EGN.0M.665.ZZM
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Caps

Compatible cap	BGE.1M.200.XAZ
Cap 2	BME.1M.200.XAZ

Tools

Positionner	DCE.91.130.5MVM
Extraction tool	DCC.13.15B.LAG
Insertion tool	DCV.13.05M.LA

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Cables

Cable PartNumber	Material	Colour	Cable image
CMN.03.T18.055PGZE		grey	
CMN.03.T18.055PNZE			
CMN.03.T18.055QGZE	TPR (medical)	Grey	
CMN.03.T20.049PGZE		grey	
CMN.03.T20.049PNZE			
CMN.03.T28.031PGCE	PVC	GREY	
CMN.03.T28.031PGZE		grey	
CMN.03.T28.031PNCE	PVC	Black	
CMN.03.T28.031PNZE			
130240	PVC	Black	
130250	PVC	Grey	
230500	PVC	Grey	
230750	PVC	Grey	
30110	PVC	Grey	
30141	PVC	Grey	
30260	PVC	Black	
3041	PVC	Grey	
3050	PVC	Black	
3081	PVC	Black	
3220	PVC	Black	

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Cable PartNumber	Material	Colour	Cable image
3280	PVC	Black	
330150	PVC	Grey	
60080	PVC	Grey	

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