

Special



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Summary

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[M series](#)

[Application leaflet Security Defence](#)

[See video assembly instructions](#)

Number of contacts Low Voltage	30
Wire Size/AWG	26 - 22
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Jacket cable outside diameter [mm]	7.50 - 15.00 mm
Size	3M
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fgn-3m-330-clcm.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	30
Contact Termination Low voltage	Crimp
R (max) - electrical contact resistance	6.1 mOhm
Insert configuration value	3M.330 - 30 Low Voltage
Insulator	L: PEEK
Rated current	3.5 A
Test voltage contact-contact	1.54 kV DC
Test voltage contact-shell	1.4 kV DC
Contact retention	22 N
Max. Conductor	0.34 mm ² (AWG 22)
Min. Conductor	0.14 mm ² (AWG 26)
Bucket Dia.	0.8 mm (0.031 in)
Contact Dia.	0.7 mm (0.028 in)
Wire Size/AWG	26 - 22
Gender	Standard

Form & Material

Shell style / Model id	FG - Straight plug with arctic grip and MIL spec backend
Plug	Straight
Housing material	Brass (chrome plated [SAE AMS 2460]) shell and collet nut, nickel plated [SAE AMS QQ N 290] brass latch sleeve and mid pieces
Locking system	Ratchet
Keying	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	16.33 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	-55°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	>1000 hr

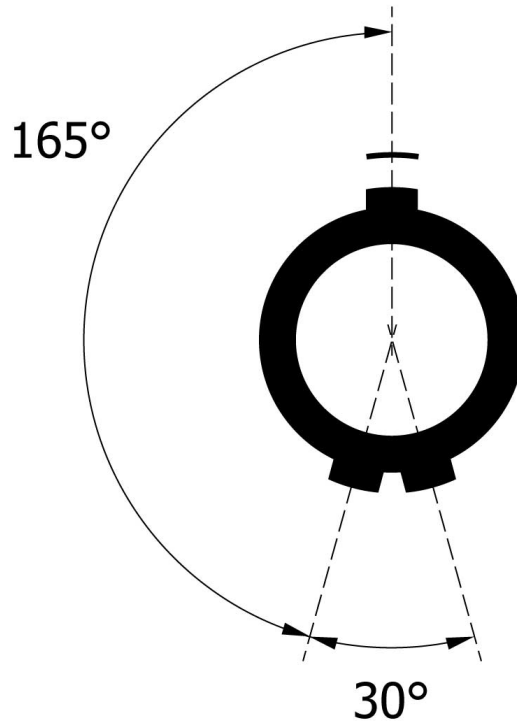
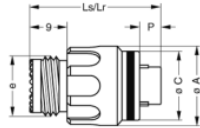
Cable fixation

Cable termination protection	For backshell MIL-DTL-38999M
Fixation type	MIL-DTL-38999M
Jacket cable outside diameter [mm]	7.50 - 15.00 mm

Drawings

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Dimensions

	A	C	e	Ls	Lr	P
mm.	20.9	19.2	M18x1.0	26.4	26.4	3.9
in.	0.82	0.76		1.04	1.04	0.15

Recommended By Lemo

Contacts

Replacement contact [FGN.0M.555.ZZC](#)

Tools

Positionner [DCE.91.070.5MVC](#)

Extraction tool [DCC.07.04B.LAG](#)

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

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