



## Summary

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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
Matching parts	<a href="#">EGN.3M.330.XLM</a>
Series	M - Rugged Ratchet coupling

## Technical details

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/fgn-3m-330-xlcm.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fgn-3m-330-xlcm.html)

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## Electrical Configuration

Contact Termination Low voltage	Crimp
R (max)	6.1 mOhm
Insert configuration value	3M.330 - 30 Low Voltage
Insulator	L: PEEK
Rated current	3.5 Amps
Test voltage (kV rms) Contact-contact	1.10
Test voltage (kV rms) Contact-shell	1.00
Contact retention	22 N
Contact Type	Crimp
Max. Conductor	0.34 mm <sup>2</sup> (AWG 22)
Min. Conductor	0.14 mm <sup>2</sup> (AWG 26)
Bucket Dia.	0.8 mm (0.031in)
Contact Dia.	0.7 mm (0.028in)
Number of contacts Low Voltage	30
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	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)
Weight	16.33 g

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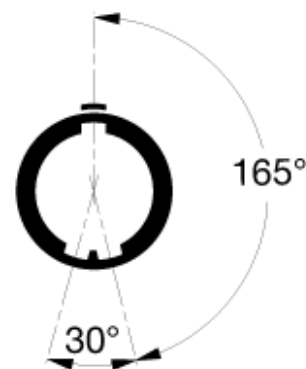
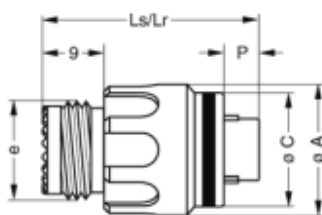
## Environment

Technical domain	Motorsport, Security and Defence, Transportation, Aerospace and UAV
Environmental protection (IP rating)	IP68
Minimal temperature	-20°C / +200°C
EMI Shielding EIA 364-66A	$\geq 80$ dB (1 GHz), $\geq 70$ dB (3 GHz), $\geq 58$ dB (6 GHz), $\geq 40$ 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 backshell MIL-DTL-38999M
Fixation type	MIL-DTL-38999M
Jacket cable outside diameter [mm]	7.50 - 15.00 mm

## Drawings



## Dimensions

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

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