



## Summary

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[See video assembly instructions](#)

Number of contacts Low Voltage	4
Wire Size/AWG	20 - 16
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Matching parts	<a href="#">EGN.2M.304.XLM</a>
Series	M - Rugged Ratchet coupling

## Technical details

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/fmn-2m-304-xlcm.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-304-xlcm.html)

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## Electrical Configuration

Contact Termination Low voltage	Crimp
R (max)	3.6 mOhm
Insert configuration value	2M.304 - 4 Low Voltage
Insulator	L: PEEK
Rated current	15.5 Amps
Test voltage (kV rms) Contact-contact	1.55
Test voltage (kV rms) Contact-shell	1.55
Contact retention	40 N
Contact Type	Crimp
Max. Conductor	1 mm <sup>2</sup> (AWG 18)
Min. Conductor	0.5 mm <sup>2</sup> (AWG 20)
Bucket Dia.	1.4 mm (0.055in)
Contact Dia.	1.3 mm (0.051in)
Number of contacts Low Voltage	4
Wire Size/AWG	20 - 16
Gender	Standard

## Form & Material

Shell style / Model id	FM - Straight plug, key (N) or keys (P, R, S, T, U, V, W and X) with knurled grip and MIL-DTL-38999L shell thread
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	9.3 g

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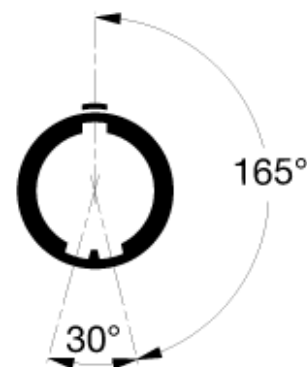
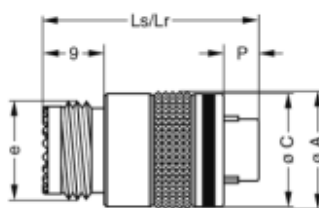
## Environment

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	>= 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 backshell MIL-DTL-38999M
Fixation type	MIL-DTL-38999M
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

## Drawings



## Dimensions

	<b>A</b>	<b>C</b>	<b>e</b>	<b>Ls</b>	<b>Lr</b>	<b>P</b>
mm.	17.6	17.2	M15x1.0	26.4	26.4	3.9
in.	0.69	0.68		1.04	1.04	0.15

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# Recommended By Lemo

## Accessories

Replacement contact	<a href="#">FGN.0M.565.ZZC</a>
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## Tools

Positionner	<a href="#">DCE.91.130.5MVC</a>
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Extraction tool	<a href="#">DCF.93.131.4LT</a>
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Crimp tool	<a href="#">DPC.91.701.V</a>
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# Cables

Cable PartNumber	Material	Colour	Cable image
240750	PVC	Grey	
417920	PVC	Grey	
CTR.75.030.121870G	PVC	Grey	

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