



Image for illustrative purpose only

## Summary

[Request a quote](#)

[Catalog](#)

[See video assembly instructions](#)

Number of contacts Low Voltage	4
Wire Size/AWG	32 - 28
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Jacket cable outside diameter [mm]	2.80 - 5.60 mm
Size	MM
Suggested matching part	<a href="#">EGN.MM.304.XLM</a>
Series	M - Rugged Ratchet coupling

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

LEMO products and services are provided "as is". LEMO makes no warranties or representations with regard to LEMO product & services or use of them, express, implied or statutory, including for accuracy, completeness, or security. The user is fully responsible for his products and applications using LEMO components.

# 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 (kV rms) Contact-contact	0.95
Test voltage (kV rms) Contact-shell	0.9
Contact retention	12 N
Max. Conductor	0.09 mm <sup>2</sup> (AWG 28)
Min. Conductor	0.035 mm <sup>2</sup> (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	FM - Straight plug, key (N) or keys (P, R, S, T, U, V, W and X) with knurled grip and mold stop
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	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	4.25 g

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

LEMO products and services are provided "as is". LEMO makes no warranties or representations with regard to LEMO product & services or use of them, express, implied or statutory, including for accuracy, completeness, or security. The user is fully responsible for his products and applications using LEMO components.

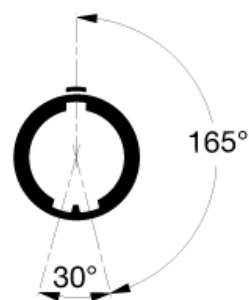
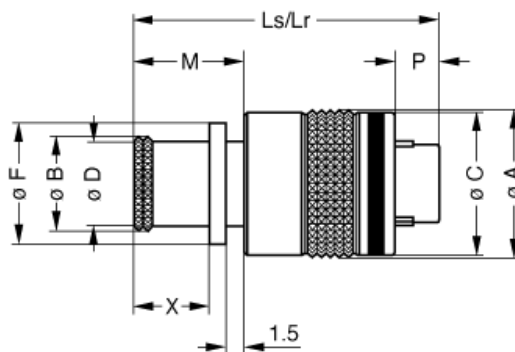
## Environment

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	max. 48 hr

## Cable fixation

Cable termination protection	For overmolding
Fixation type	Mold stop (overmolding)
Jacket cable outside diameter [mm]	2.80 - 5.60 mm

## Drawings



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

LEMO products and services are provided "as is". LEMO makes no warranties or representations with regard to LEMO product & services or use of them, express, implied or statutory, including for accuracy, completeness, or security. The user is fully responsible for his products and applications using LEMO components.

## Dimensions

	A	B	C	D	F	Ls	Lr	M	P	X
mm.	11.1	6.4	10.7	5.6	7.8	24.3	24.3	8.8	5.5	5.8
in.	0.44	0.25	0.42	0.22	0.31	0.96	0.96	0.35	0.22	0.23

## Recommended By Lemo

### Accessories

Replacement contact	<a href="#">FGG.00.554.ZZC</a>
---------------------	--------------------------------

Compatible cap	<a href="#">BMF.MM.100.XAV</a>
----------------	--------------------------------

### Tools

Positionner	<a href="#">DCE.91.050.0VC</a>
-------------	--------------------------------

Extraction tool	<a href="#">DCC.05.02B.LAG</a>
-----------------	--------------------------------

Crimp tool	<a href="#">DPC.91.701.V</a>
------------	------------------------------

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

LEMO products and services are provided "as is". LEMO makes no warranties or representations with regard to LEMO product & services or use of them, express, implied or statutory, including for accuracy, completeness, or security. The user is fully responsible for his products and applications using LEMO components.