

Special



Image for illustrative purpose only

Summary

[Request a quote](#)

[M series](#)

[Application leaflet Security Defence](#)

[See video assembly instructions](#)

Number of contacts Low Voltage	10
Wire Size/AWG	24 - 20
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Panel Drill Hole	M15
Jacket cable outside diameter [mm]	6.50 - 13.00 mm
Size	2M
Suggested matching part	EGN.2M.310.XLN PHN.2M.310.XLMM
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-310-xlcm.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	10
Contact Termination Low voltage	Crimp
R (max)	4.8 mOhm
Insert configuration value	2M.310 - 10 Low Voltage
Insulator	L: PEEK
Rated current	8 A
Test voltage contact-contact	2 kV DC
Test voltage contact-shell	1.7 kV DC
Contact retention	30 N
Max. Conductor	0.5 mm ² (AWG 20)
Min. Conductor	0.25 mm ² (AWG 24)
Bucket Dia.	1.1 mm (0.043in)
Contact Dia.	0.9 mm (0.035in)
Wire Size/AWG	24 - 20
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	N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)
Colour	Grey
Weight	10 g
Panel Drill Hole	M15

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-310-xlcm.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

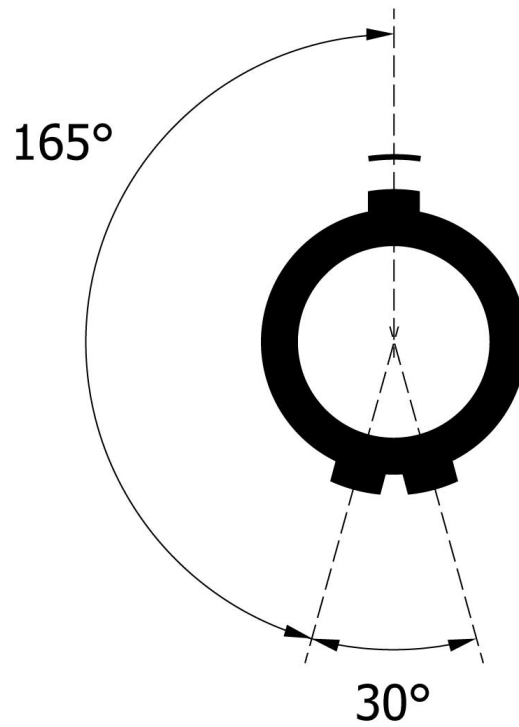
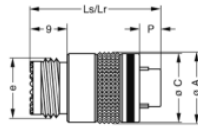
Cable fixation

Cable termination protection	For backshell MIL-DTL-38999M
Fixation type	MIL-DTL-38999M
Jacket cable outside diameter [mm]	6.50 - 13.00 mm

Drawings

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-310-xlcm.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	C	e	Ls	Lr	P
mm.	17.6	17.2	M15x1.0	26.4	26.4	3.9
in.	0.69	0.68		1.04	1.04	0.15

Recommended By Lemo

Contacts

Replacement contact [FGN.0M.560.ZZC](#)

Caps

Compatible cap [BMF.2M.100.XAV](#)

Tools

Positionner [DCE.91.090.5MVC](#)

Extraction tool [DCC.09.05B.LAG](#)

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

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-310-xlcm.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.