



Image for illustrative purpose only

Summary

Request a quote

Catalog

See video assembly instructions

Number of contacts Low Voltage	25
Wire Size/AWG	24 - 20
Gender	Standard
Plug	Plug - Straight
Locking system	Ratchet
Jacket cable outside diameter [mm]	8.35 - 16.70 mm
Size	ТМ
Suggested matching part	PMR.TM.325.XLM
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmr-tm-325-xlc.html

Technical details

Electrical	Configuration	

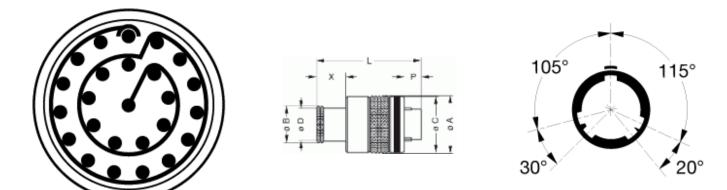
Number of contacts Low Voltage	25
Contact Termination Low voltage	Crimp
R (max)	4.8 mOhm
Insert configuration value	TM.325 - 25 Low Voltage
Insulator	L: PEEK
Rated current	5 A
Test voltage (kV rms) Contact-contact	1.10
Test voltage (kV rms) Contact-shell	1.25
Contact retention	30 N
Max. Conductor	0.5 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
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	R: 5 keys (alpha=105, beta=115, gamma=30, delta=20, plug: male contacts, receptacle: female contacts)
Colour	Grey

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmr-tm-325-xlc.html

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	Heatshrink
Fixation type	Heatshrink
Jacket cable outside diameter [mm]	8.35 - 16.70 mm

Drawings



https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmr-tm-325-xlc.html

Dimensions

	Α	В	С	D	Ls	Lr	Ρ	X
mm.	22.5	17.9	22	16.7	28.6	28.6	3.4	7.6
in.	0.89	0.7	0.87	0.66	1.13	1.13	0.13	0.3

Recommended By Lemo

Accessories

Replacement contact	FGN.0M.560.ZZC
Compatible cap	BMF.TM.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/fmr-tm-325-xlc.html