

Special

*Image for illustrative purpose only*

Summary

[Request a quote](#)[M series](#)[Application leaflet Security Defence](#)

Number of contacts Low Voltage	7
Protocol	USB 2.0 (480Mb/s)
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Front Mounted
Locking system	Ratchet
Panel Drill Hole	M14
Size	1M
Suggested matching part	FMN.1M.307.XLC
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/ecn-1m-307-xln.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	7
Contact Termination Low voltage	PCB - Straight
R (max)	6.1 mOhm
Insert configuration value	1M.307 - 7 Low Voltage
Footprint IPC Class3 compatibility	Yes
Class3 Productibility Level Compatibility	A (General Design Producibility - Preferred)
Insulator	L: PEEK
Rated current	7 A
Test voltage contact-contact	2 kV DC
Test voltage contact-shell	1.7 kV DC
Contact Dia.	0.7 mm (0.028in)
Protocol	USB 2.0 (480Mb/s)
Gender	Standard

Form & Material

Shell style / Model id	EC - Fixed receptacle with two nuts, for printed circuit
Socket / Receptacle	Fixed Panel Front Mounted
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	11.22 g
Panel Drill Hole	M14

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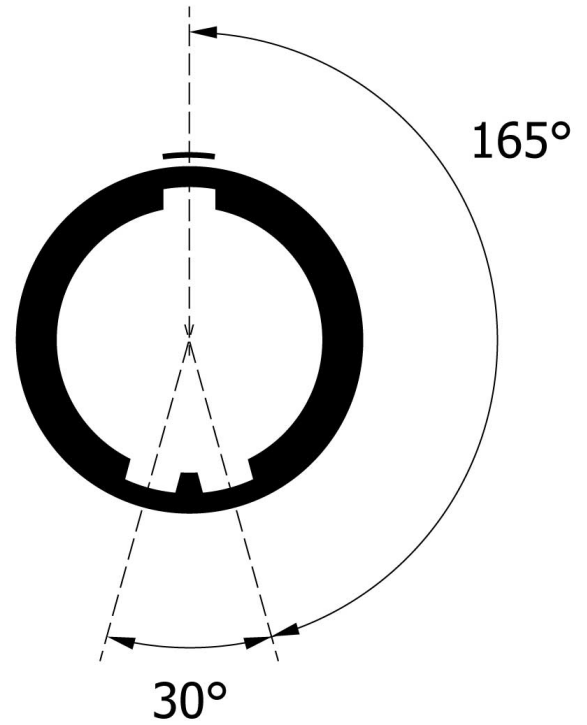
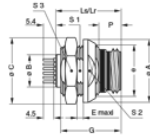
Environment

Technical domain	Motorsport, Security and Defence, Transportation, Aerospace and UAV
Environmental sealing (IP rating)	IP50
Endurance	3000 mating cycles
Temperature range	-20°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

Drawings

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Dimensions

	A	B	C	E	e	G	Ls	Lr	P	S1	S2	S3
mm.	18	5.95	19.2	5	M14x1.00	16.8	18.3	18.3	5.3	12.5	16	17
in.	0.71	0.23	0.76	0.2		0.66	0.72	0.72	0.21	0.49	0.63	0.67

Recommended By Lemo

Caps

Compatible cap	BGK.1M.200.XAZ
Cap 2	BMK.1M.200.XAZ

Tools

Spanner 2	DCM.65.160.AZ
Spanner wrench	DCM.65.160.AZ

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Documents

PCB Eagle

[Download](#)

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