

Standard



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Summary

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Number of contacts Low Voltage	12
Gender	Standard
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Ratchet
Size	2M
Suggested matching part	FMP.2M.312.XLC
Series	M - Rugged Ratchet coupling

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/hep-2m-312-xlnp.html

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Technical details

Electrical Configuration

Number of contacts Low Voltage	12
Contact Termination Low voltage	PCB - Straight
R (max)	6.1 mOhm
Insert configuration value	2M.312 - 12 Low Voltage
Insulator	L: PEEK
Rated current	7 A
Test voltage (kV rms) Contact-contact	1.65
Test voltage (kV rms) Contact-shell	1.15
Contact Dia.	0.7 mm (0.028in)
Gender	Standard

Form & Material

Shell style / Model id	HE - Fixed receptacle, nut fixing for printed circuit, watertight
Socket / Receptacle	Fixed Panel Rear Mounted
Housing material	Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass
Locking system	Ratchet
Keying	P: 3 keys (beta=150, gamma=60, plug: male contacts, receptacle: female contacts)
Colour	Grey
Variant	Watertight unmated (connector to device)
Weight	9.94 g

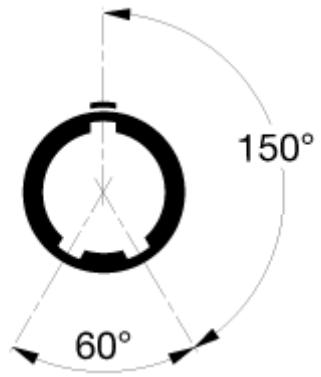
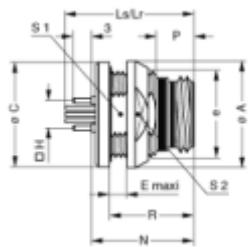
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Environment

Technical domain	Motorsport, Security and Defence, Transportation, Aerospace and UAV
Environmental sealing (IP rating)	IP68
Endurance	3000 mating cycles
Temperature range	-20°C / +80°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%
Lightning strike EIA 364-76	10K amps - 6 times
Shock Resistance	300 g [3 ms]
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



Dimensions

	A	C	e	E	H	Ls	Lr	N	P	R	S1	S2
mm.	21	20.8	M17x1.00	5	8.89	20.8	21	16.8	5.3	13.8	15.5	18
in.	0.83	0.82		0.2	0.35	0.82	0.83	0.66	0.21	0.54	0.61	0.71

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Recommended By Lemo

Accessories

Compatible cap	BGK.2M.200.XAZ
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Tools

Spanner 2	DCM.65.180.AZ
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Spanner wrench	DCM.65.180.AZ
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CAD

Documents

PCB	Download
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PCB Eagle	Download
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Kicad	Download
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PCB Altium	Download
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