

Standard



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Summary

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[M series](#)

[Customer Drawing](#)

Number of contacts Low Voltage	5
Gender	Reverse Gender
Socket / Receptacle	Socket / Receptacle - Fixed Panel Rear Mounted
Locking system	Ratchet
Size	1M
Suggested matching part	FMS.1M.305.XLM
Series	M - Rugged Ratchet coupling

Technical details

Electrical Configuration

Number of contacts Low Voltage	5
Contact Termination Low voltage	PCB - Straight
R (max)	6.1 mOhm
Insert configuration value	1M.305 - 5 Low Voltage
Footprint IPC Class3 compatibility	Yes
Class3 Productibility Level Compatibility	A (General Design Producibility - Preferred)
Insulator	L: PEEK
Rated current	9 A
Test voltage (kV rms) Contact-contact	1.3
Test voltage (kV rms) Contact-shell	1.3
Contact Dia.	0.9
Gender	Reverse Gender

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	S: 3 keys (beta=155, gamma=50, plug: female contacts, receptacle: male contacts)
Colour	Grey
Variant	Watertight unmated (connector to device)
Weight	5.8 g

https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/hes-1m-305-xldp.html

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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%
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

Recommended By Lemo

Accessories

Compatible cap	BGK.1M.200.XAZ
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Tools

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

CAD

Documents

PCB	Download
PCB Eagle	Download
Kicad	Download
PCB Altium	Download

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