



Image for illustrative purpose only

Summary

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| | |
|------------------------------------|---------------------------------|
| Number of contacts Low Voltage | 5 |
| Wire Size/AWG | 24 - 20 |
| Gender | Reverse Gender |
| Plug | Plug - Straight |
| Locking system | Ratchet |
| Jacket cable outside diameter [mm] | 4.85 - 9.70 mm |
| Size | 1M |
| Suggested matching part | PMS.1M.305.XLCT |
| Series | M - Rugged Ratchet coupling |

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

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Technical details

Electrical Configuration

| | |
|---------------------------------------|-------------------------------|
| Contact Termination Low voltage | Crimp |
| R (max) | 4.8 mOhm |
| Insert configuration value | 1M.305 - 5 Low Voltage |
| Insulator | L: PEEK |
| Rated current | 9 A |
| Test voltage (kV rms) Contact-contact | 1.3 |
| Test voltage (kV rms) Contact-shell | 1.3 |
| Contact retention | 30 N |
| Contact Type | Crimp |
| 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) |
| Number of contacts Low Voltage | 5 |
| Wire Size/AWG | 24 - 20 |
| Gender | Reverse Gender |

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 mold stop |
| 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 | S: 3 keys (beta=155, gamma=50, plug: female contacts, receptacle: male contacts) |
| Colour | Grey |
| Weight | 7.13 g |

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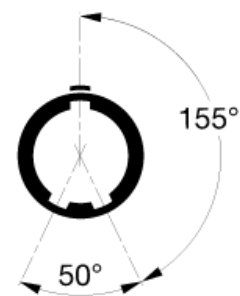
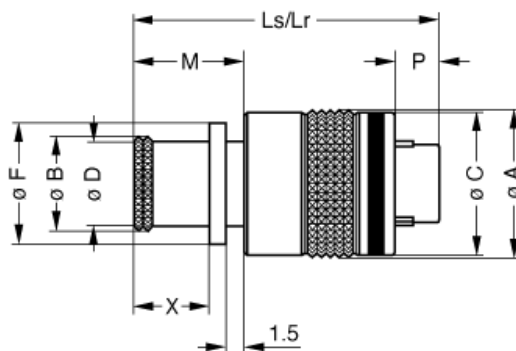
Environment

| | |
|-----------------------------------|------------------------------------------------------------------------|
| Technical domain | Motorsport, Security and Defence, Transportation, Aerospace and UAV |
| Environmental sealing (IP rating) | IP68 |
| Endurance | 3000 mating cycles |
| Temperature range | -55°C / +200°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 |

Cable fixation

| | |
|------------------------------------|----------------------|
| Cable termination protection | For overmolding |
| Fixation type | T type cable adapter |
| Jacket cable outside diameter [mm] | 4.85 - 9.70 mm |

Drawings



Dimensions

| | A | B | C | D | F | Ls | Lr | M | P | X |
|-----|------|------|------|------|------|------|------|------|------|------|
| mm. | 14.6 | 10.5 | 14.2 | 9.7 | 12.4 | 27.1 | 27.1 | 9.7 | 3.9 | 6.7 |
| in. | 0.57 | 0.41 | 0.56 | 0.38 | 0.49 | 1.07 | 1.07 | 0.38 | 0.15 | 0.26 |

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Recommended By Lemo

Accessories

Replacement contact [EGN.0M.660.ZZM](#)

Compatible cap [BMF.1M.100.XAV](#)

Tools

Positionner [DCE.91.090.3MVM](#)

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

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

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