



Image for illustrative purpose only

Summary

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[See video assembly instructions](#)

| | |
|------------------------------------|--------------------------------|
| Number of contacts Low Voltage | 7 |
| Wire Size/AWG | 26 - 22 |
| Gender | Standard |
| Plug | Plug - Straight |
| Locking system | Ratchet |
| Jacket cable outside diameter [mm] | 4.85 - 9.70 mm |
| Size | 1M |
| Suggested matching part | EGN.1M.307.XLM |
| Series | M - Rugged Ratchet coupling |

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

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Technical details

Electrical Configuration

| | |
|---------------------------------------|-------------------------------|
| Contact Termination Low voltage | Crimp |
| R (max) | 6.1 mOhm |
| Insert configuration value | 1M.307 - 7 Low Voltage |
| Insulator | L: PEEK |
| Rated current | 7 A |
| Test voltage (kV rms) Contact-contact | 1.45 |
| Test voltage (kV rms) Contact-shell | 1.2 |
| Contact retention | 22 N |
| Contact Type | Crimp |
| Max. Conductor | 0.34 mm ² (AWG 22) |
| Min. Conductor | 0.14 mm ² (AWG 26) |
| Bucket Dia. | 0.8 mm (0.031in) |
| Contact Dia. | 0.7 mm (0.028in) |
| Number of contacts Low Voltage | 7 |
| Wire Size/AWG | 26 - 22 |
| 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 and MIL-DTL-38999L shell thread |
| 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 | N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts) |
| Colour | Grey |
| Weight | 7.25 g |

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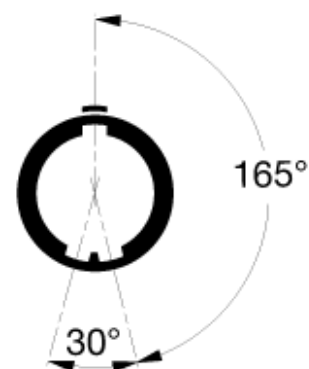
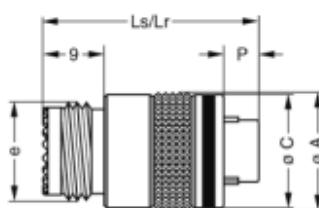
Environment

| | |
|-----------------------------------|--|
| 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 backshell MIL-DTL-38999M |
| Fixation type | MIL-DTL-38999M |
| Jacket cable outside diameter [mm] | 4.85 - 9.70 mm |

Drawings



Dimensions

| | A | C | e | Ls | Lr | P |
|-----|------|------|---------|------|------|------|
| mm. | 14.6 | 14.2 | M12x1.0 | 26.4 | 26.4 | 3.9 |
| in. | 0.57 | 0.56 | | 1.04 | 1.04 | 0.15 |

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Recommended By Lemo

Accessories

Replacement contact [FGN.0M.555.ZZC](#)

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

Tools

Positionner [DCE.91.070.5MVC](#)

Extraction tool [DCF.93.070.4LT](#)

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

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