



Image for illustrative purpose only

## Summary

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|                                    |                                 |
|------------------------------------|---------------------------------|
| Number of contacts Low Voltage     | 19                              |
| Wire Size/AWG                      | 26 - 22                         |
| Gender                             | Standard                        |
| Plug                               | Plug - Straight                 |
| Locking system                     | Ratchet                         |
| Jacket cable outside diameter [mm] | 6.50 - 13.00 mm                 |
| Size                               | 2M                              |
| Suggested matching part            | <a href="#">PMN.2M.319.XLMT</a> |
| Series                             | M - Rugged Ratchet coupling     |

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/fmn-2m-319-xlct.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/fmn-2m-319-xlct.html)

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# Technical details

## Electrical Configuration

|                                       |                                |
|---------------------------------------|--------------------------------|
| Number of contacts Low Voltage        | 19                             |
| Contact Termination Low voltage       | Crimp                          |
| R (max)                               | 6.1 mOhm                       |
| Insert configuration value            | 2M.319 - 19 Low Voltage        |
| Insulator                             | L: PEEK                        |
| Rated current                         | 4 A                            |
| Test voltage (kV rms) Contact-contact | 1.2                            |
| Test voltage (kV rms) Contact-shell   | 1                              |
| Contact retention                     | 22 N                           |
| Max. Conductor                        | 0.382 mm <sup>2</sup> (AWG 22) |
| Min. Conductor                        | 0.128 mm <sup>2</sup> (AWG 26) |
| Bucket Dia.                           | 0.87 mm (0.027in)              |
| Contact Dia.                          | 0.7 mm (0.028in)               |
| 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 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                 | N: 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)                        |
| Colour                 | Grey  |
| Weight                 | 10.77 g   |

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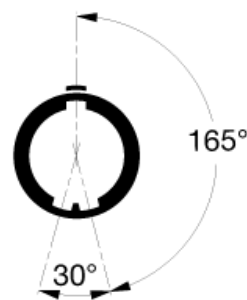
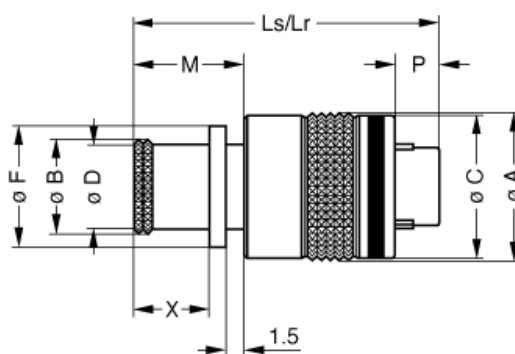
## Environment

|                                   |  |
|-----------------------------------|--|
| 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                      | Mold stop (overmolding) |
| Jacket cable outside diameter [mm] | 6.50 - 13.00 mm         |

## Drawings



## Dimensions

|     | A    | B    | C    | D    | F    | Ls   | Lr   | M    | P    | X    |
|-----|------|------|------|------|------|------|------|------|------|------|
| mm. | 17.6 | 14   | 17.2 | 13   | 15.5 | 27.5 | 27.5 | 10.1 | 3.9  | 7.1  |
| in. | 0.69 | 0.55 | 0.68 | 0.51 | 0.61 | 1.08 | 1.08 | 0.4  | 0.15 | 0.28 |

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# Recommended By Lemo

## Accessories

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

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Compatible cap [BMF.2M.100.XAV](#)

## Tools

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Positionner [DCE.91.070.5MVC](#)

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Extraction tool [DCF.93.070.4LT](#)

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

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