

Standard



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## Summary

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[M series](#)

[Application leaflet Security Defence](#)

[Customer Drawing](#)

|                                    |                                                |
|------------------------------------|------------------------------------------------|
| Number of contacts Low Voltage     | 10                                             |
| Wire Size/AWG                      | 24 - 20                                        |
| Gender                             | Standard                                       |
| Socket / Receptacle                | Socket / Receptacle - Fixed Panel Rear Mounted |
| Locking system                     | Ratchet                                        |
| Panel Drill Hole                   | M17                                            |
| Jacket cable outside diameter [mm] | 6.50 - 13.00 mm                                |
| Size                               | 2M                                             |
| Suggested matching part            | <a href="#">FMP.2M.310.XLCT</a>                |
| Series                             | M - Rugged Ratchet coupling                    |

[https://www.lemo.com/int\\_en/solutions/optima/m-ratchet-coupling/pep-2m-310-xlmt.html](https://www.lemo.com/int_en/solutions/optima/m-ratchet-coupling/pep-2m-310-xlmt.html)

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# Technical details

## Electrical Configuration

|                                         |                                |
|-----------------------------------------|--------------------------------|
| Number of contacts Low Voltage          | 10                             |
| Contact Termination Low voltage         | Crimp                          |
| R (max) - electrical contact resistance | 4.8 mOhm                       |
| Insert configuration value              | 2M.310 - 10 Low Voltage        |
| Insulator                               | L: PEEK                        |
| Rated current                           | 8 A                            |
| Test voltage contact-contact            | 2 kV DC                        |
| Test voltage contact-shell              | 1.7 kV DC                      |
| Contact retention                       | 30 N                           |
| Max. Conductor                          | 0.616 mm <sup>2</sup> (AWG 20) |
| Min. Conductor                          | 0.204 mm <sup>2</sup> (AWG 24) |
| Bucket Dia.                             | 1.1 mm (0.043 in)              |
| Contact Dia.                            | 0.9 mm (0.035 in)              |
| Wire Size/AWG                           | 24 - 20                        |
| Gender                                  | Standard                       |

## Form & Material

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Shell style / Model id | PE - Fixed receptacle, nut fixing and mold stop                                                         |
| 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                                                                                                    |
| Weight                 | 13.24 g                                                                                                 |
| Panel Drill Hole       | M17                                                                                                     |

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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 / +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         |

# Recommended By Lemo

## Contacts

|                     |                                |
|---------------------|--------------------------------|
| Replacement contact | <a href="#">EGN.0M.660.ZZM</a> |
|---------------------|--------------------------------|

## Caps

|                |                                |
|----------------|--------------------------------|
| Compatible cap | <a href="#">BGK.2M.200.XAZ</a> |
| Cap 2          | <a href="#">BMK.2M.200.XAZ</a> |

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## Tools

|                 |                                 |
|-----------------|---------------------------------|
| Spanner 2       | <a href="#">DCM.65.180.AZ</a>   |
| Positionner     | <a href="#">DCE.91.090.3MVM</a> |
| Extraction tool | <a href="#">DCC.09.05B.LAG</a>  |
| Insertion tool  | <a href="#">DCV.09.05M.LA</a>   |
| Crimp tool      | <a href="#">DPC.91.701.V</a>    |
| Spanner wrench  | <a href="#">DCM.65.180.AZ</a>   |

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