



*Image for illustrative purpose only*

## Summary

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|                                    |                                |
|------------------------------------|--------------------------------|
| Number of contacts Low Voltage     | 5                              |
| Wire Size/AWG                      | 24 - 20                        |
| Gender                             | Standard                       |
| Socket / Receptacle                | Socket / Receptacle - Free     |
| Locking system                     | Push-pull                      |
| Jacket cable outside diameter [mm] | 3.80 - 10.70 mm                |
| Size                               | 1F                             |
| Suggested matching part            | <a href="#">FGN.1F.305.XLC</a> |
| Series                             | F - Rugged Push-Pull           |

# Technical details

## Electrical Configuration

|                                 |                               |
|---------------------------------|-------------------------------|
| Number of contacts Low Voltage  | 5                             |
| Contact Termination Low voltage | Crimp                         |
| R (max)                         | 4.8 mOhm                      |
| Insert configuration value      | 1F.305 - 5 Low Voltage        |
| Insulator                       | L: PEEK (UL 94 / V-0/1.5)     |
| Rated current                   | 9 A                           |
| Vtest (contact-contact)         | 1300 V (AC), 1840 V (DC)      |
| Vtest (contact-shell)           | 1550 V (AC), 2200 V (DC)      |
| Contact retention               | 30 N                          |
| Max. Conductor                  | 0.5 mm <sup>2</sup> (AWG 20)  |
| Min. Conductor                  | 0.25 mm <sup>2</sup> (AWG 24) |
| Bucket Dia.                     | 1.1 mm (0.043in)              |
| Contact Dia.                    | 0.9 mm (0.035in)              |
| Wire Size/AWG                   | 24 - 20                       |
| Gender                          | Standard                      |

## Form & Material

|                        |   |
|------------------------|---|
| Shell style / Model id | PH - Straight receptacle  |
| Socket / Receptacle    | Free  |
| Housing material       | Aluminium (nickel plated [SAE AMS QQ N 290], anthracite color) shell and nut, other pieces bronze/brass |
| Locking system         | Push-pull   |
| Keying                 | 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)                           |
| Colour                 | Grey  |
| Weight                 | 6.94 g  |

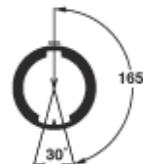
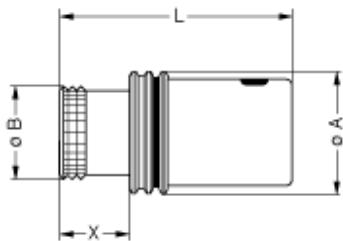
## Environment

|                                   |   |
|-----------------------------------|---|
| Technical domain                  | Motorsport, Security and Defence                                  |
| Environmental sealing (IP rating) | IP67  |
| Endurance                         | 1000 mating cycles  |
| Temperature range                 | -15°C / +200°C (max. temperature valid for short periods of use.) |
| Climatic Category                 | 15/200/21 (Aluminium shell)                                       |
| Humidity (max)                    | <=95% [at 60 deg C /140 F]  |
| Shock Resistance                  | 100 g [ 6 ms]   |
| Vibration                         | 15 g [10 Hz - 2000 Hz]  |
| Salt Spray Corrosion              | max. 48 hr  |

## Cable fixation

|                                    |                 |
|------------------------------------|-----------------|
| Cable termination protection       | Heatshrink      |
| Fixation type                      | Heatshrink      |
| Jacket cable outside diameter [mm] | 3.80 - 10.70 mm |

## Drawings



## Dimensions

|     | <b>B</b> | <b>L</b> | <b>A</b> | <b>X</b> |
|-----|----------|----------|----------|----------|
| mm. | 10.7     | 26.7     | 14       | 8        |
| in. | 0.42     | 1.05     | 0.55     | 0.31     |

# Recommended By Lemo

## Accessories

|                     |                |
|---------------------|----------------|
| Replacement contact | EGG.0B.660.ZZM |
| Compatible cap      | BRF.1F.200.XAV |

## Tools

|                 |                |
|-----------------|----------------|
| Positionner     | DCE.91.090.BVM |
| Extraction tool | DCC.09.05B.LAG |
| Crimp tool      | DPG.91.701.V   |

## Cables

| Cable PartNumber   | Material      | Colour | Cable image   |
|--------------------|---------------|--------|---|
| CMN.05.T20.057PGZE |               | grey   |    |
| CMN.05.T20.057PNZE |               |        |    |
| CMN.05.T20.057QGZE | TPR (medical) | Grey   |  |
| CMN.05.T22.051QGZE | TPR (medical) | Grey   |  |
| 150250             | PVC           | Grey   |  |
| 250500             | PVC           | Grey   |  |
| 50090              | PVC           | Black  |   |
| 50140              | PVC           | Grey   |  |

[https://www.lemo.com/int\\_en/solutions/optima/f-rugged-push-pull/phn-1f-305-xlm.html](https://www.lemo.com/int_en/solutions/optima/f-rugged-push-pull/phn-1f-305-xlm.html)

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