



*Image for illustrative purpose only*

## Summary

[Request a quote](#)

[f series](#)

|                                |                                                |
|--------------------------------|------------------------------------------------|
| Number of contacts Low Voltage | 5                                              |
| Gender                         | Standard                                       |
| Socket / Receptacle            | Socket / Receptacle - Fixed Panel Rear Mounted |
| Locking system                 | Push-pull                                      |
| Size                           | 1F                                             |
| Suggested matching part        | <a href="#">FGN.1F.305.XLC</a>                 |
| Series                         | F - Rugged Push-Pull                           |

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

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# Technical details

## Electrical Configuration

|                                           |                                              |
|-------------------------------------------|----------------------------------------------|
| Number of contacts Low Voltage            | 5                                            |
| Contact Termination Low voltage           | PCB - Straight                               |
| R (max)                                   | 4.8 mOhm                                     |
| Insert configuration value                | 1F.305 - 5 Low Voltage                       |
| Footprint IPC Class3 compatibility        | Yes                                          |
| Class3 Productibility Level Compatibility | A (General Design Producibility - Preferred) |
| 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 Dia.                              | 0.9 mm (0.035in)                             |
| Gender                                    | Standard                                     |

## Form & Material

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Shell style / Model id | HE - Fixed receptacle, nut fixing, for printed circuit (back panel mounting)                            |
| 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         | Push-pull                                                                                               |
| Keying                 | 3 keys (beta=165, gamma=30, plug: male contacts, receptacle: female contacts)                           |
| Colour                 | Grey                                                                                                    |
| Variant                | Watertight unmated (connector to device)                                                                |
| Weight                 | 5.27 g                                                                                                  |

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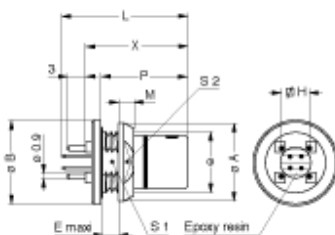
## Environment

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Technical domain                  | Motorsport, Security and Defence |
| Environmental sealing (IP rating) | IP68                             |
| Endurance                         | 1000 mating cycles               |
| Temperature range                 | -15°C / +100°C                   |
| 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]           |
| Pressure                          | 5 bars                           |
| Salt Spray Corrosion              | max. 48 hr                       |

## Cable fixation

|                  |     |
|------------------|-----|
| Panel Drill Hole | M13 |
|------------------|-----|

## Drawings



## Dimensions

|     | A    | B    | e        | E    | H    | L    | M    | P    | S1   | S2   | X    |
|-----|------|------|----------|------|------|------|------|------|------|------|------|
| mm. | 17   | 17   | M13x0.75 | 3    | 7.62 | 21.5 | 3.2  | 14.5 | 11.5 | 14   | 17.5 |
| in. | 0.67 | 0.67 |          | 0.12 | 0.3  | 0.85 | 0.13 | 0.57 | 0.45 | 0.55 | 0.69 |

## Recommended By Lemo

### Accessories

|                |                                |
|----------------|--------------------------------|
| Compatible cap | <a href="#">BRE.1F.200.XAV</a> |
|----------------|--------------------------------|

### Tools

|           |                               |
|-----------|-------------------------------|
| Spanner 2 | <a href="#">DCM.65.140.AZ</a> |
|-----------|-------------------------------|

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Documents

|            |                          |
|------------|--------------------------|
| PCB        | <a href="#">Download</a> |
| PCB Eagle  | <a href="#">Download</a> |
| Kicad      | <a href="#">Download</a> |
| PCB Altium | <a href="#">Download</a> |