



*Image for illustrative purpose only*

## Summary

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|                                    |                            |
|------------------------------------|----------------------------|
| Number of contacts Low Voltage     | 3                          |
| Wire Size/AWG                      | 20 - 18                    |
| Gender                             | Standard                   |
| Socket / Receptacle                | Socket / Receptacle - Free |
| Locking system                     | Push-pull                  |
| Jacket cable outside diameter [mm] | 6.30 - 7.20 mm             |
| Size                               | 1B                         |
| Series                             | B - Indoor keyed           |

[https://www.lemo.com/int\\_en/solutions/originals/b-indoor-keyed/pha-1b-303-cymd72z.html](https://www.lemo.com/int_en/solutions/originals/b-indoor-keyed/pha-1b-303-cymd72z.html)

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# Technical details

## Electrical Configuration

|                                 |                              |
|---------------------------------|------------------------------|
| Number of contacts Low Voltage  | 3                            |
| Contact Termination Low voltage | Crimp                        |
| R (max)                         | 3.6 mOhm                     |
| Insert configuration value      | 1B.303 - 3 Low Voltage       |
| Insulator                       | Y: PEEK for crimp contacts   |
| Rated current                   | 12 A                         |
| Vtest (contact-contact)         | 2.3 kV (DC)                  |
| Vtest (contact-shell)           | 2.6 kV (DC)                  |
| Contact retention               | 40 N                         |
| Max. Conductor                  | 1 mm <sup>2</sup> (AWG 18)   |
| Min. Conductor                  | 0.5 mm <sup>2</sup> (AWG 20) |
| Bucket Dia.                     | 1.4 mm (0.055in)             |
| Contact Dia.                    | 1.3 mm (0.051in)             |
| Wire Size/AWG                   | 20 - 18                      |
| Gender                          | Standard                     |

## Form & Material

|                        |                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Shell style / Model id | PH - Free receptacle, cable collet and nut for fitting a bend relief                                                          |
| Socket / Receptacle    | Free                                                                                                                          |
| Housing material       | Brass (chrome plated [SAE AMS 2460]) shell and collet nut, nickel plated [SAE AMS QQ N 290] brass latch sleeve and mid pieces |
| Locking system         | Push-pull                                                                                                                     |
| Keying                 | A: 2 keys (alpha=30, plug: male contacts, receptacle: female contacts)                                                        |
| Colour                 | Grey                                                                                                                          |
| Variant                | Nut for fitting a bend relief                                                                                                 |
| Weight                 | 20.8 g                                                                                                                        |

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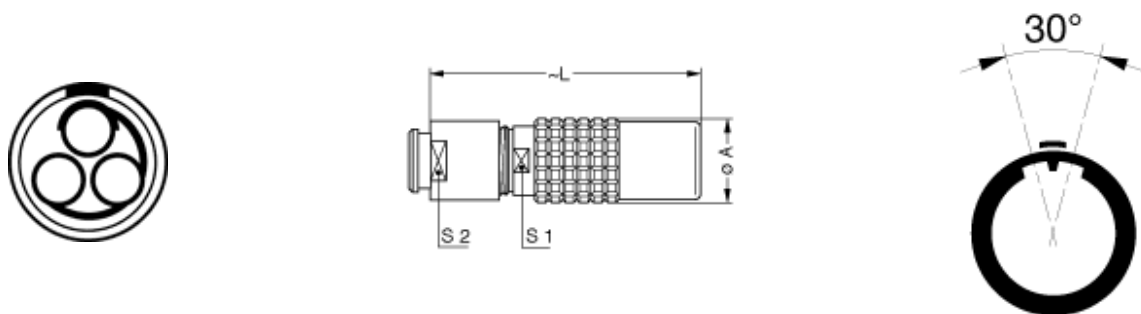
## Environment

|                                   |                                                                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Technical domain                  | Audio Video, Energy and Industrial, Medical, Semiconductor, Specialties and Other, Test and Measurement, Transportation, Aerospace and UAV |
| Environmental sealing (IP rating) | IP50                                                                                                                                       |
| Endurance                         | 5000 mating cycles                                                                                                                         |
| Temperature range                 | -55°C / +250°C                                                                                                                             |
| Climatical Category               | 50/175/21                                                                                                                                  |
| Humidity (max)                    | <=95% [at 60 deg C /140 F]                                                                                                                 |
| Shielding (min)                   | 75 dB (10 MHz)                                                                                                                             |
| Shielding (min)                   | 40 dB (1 GHz)                                                                                                                              |
| Shock Resistance                  | 100 g [ 6 ms]                                                                                                                              |
| Vibration                         | 15 g [10 Hz - 2000 Hz]                                                                                                                     |
| Salt Spray Corrosion              | >1000 hr                                                                                                                                   |

## Cable fixation

|                                    |                       |
|------------------------------------|-----------------------|
| Cable termination protection       | For cable bend relief |
| Fixation type                      | Cable collet          |
| Jacket cable outside diameter [mm] | 6.30 - 7.20 mm        |

## Drawings



## Dimensions

|     | S1   | L    | A    | S2   |
|-----|------|------|------|------|
| mm. | 10   | 39.5 | 12.5 | 9    |
| in. | 0.39 | 1.56 | 0.49 | 0.35 |

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# Recommended By Lemo

| Accessories         |                                  |
|---------------------|----------------------------------|
| Replacement contact | <a href="#">EGG.1B.665.ZZM</a>   |
| Compatible cap      | <a href="#">BRF.1S.200.NAS</a>   |
| Tools               |                                  |
| Spanner             | <a href="#">DCP.91.001.TN</a>    |
| Positionner         | <a href="#">DCE.91.131.BVM</a>   |
| Extraction tool     | <a href="#">DCC.13.15B.LAG</a>   |
| Crimp tool          | <a href="#">DPC.91.701.V</a>     |
| Spanner wrench      | <a href="#">DCD.1B.ZZZ.PA090</a> |