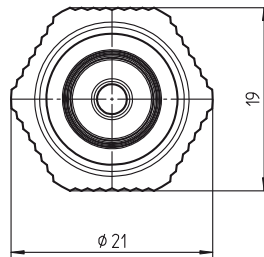
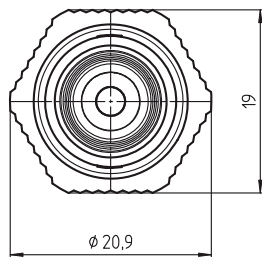
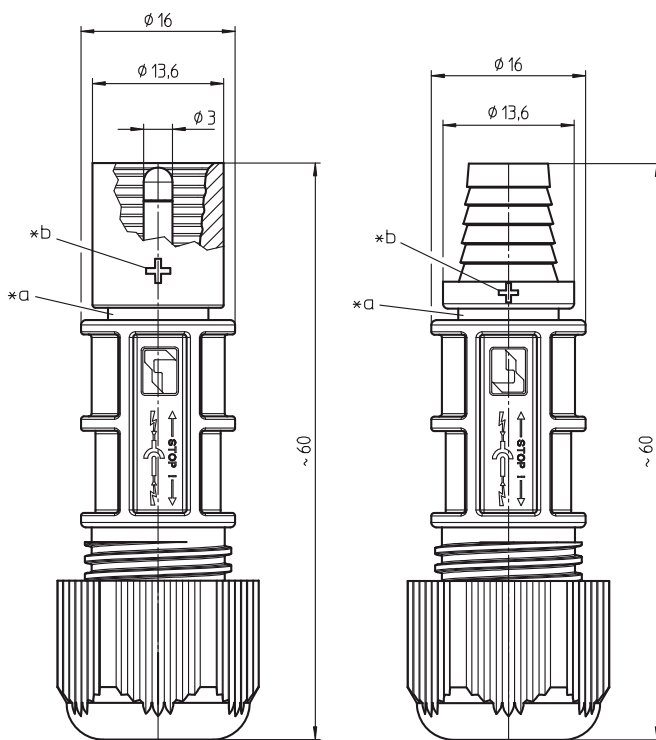




LC3-CP 30



LC3-CP 31



\*a recess for optional unmating preventer LC3-CX 90 according to NEC 2008 NFPA 70

\*b marking + on LC3-CP ...-1, - on LC3-CP ...-2

**LC3-CP 30**  
**LC3-CP 31**

LC3® photovoltaic connector, field-attachable, with crimp contact

LC3-CP 30: plug

LC3-CP 31: socket

**1. Temperature range** -40 °C/+85 °C  
(+110 °C upper limit temperature)

**2. Materials** halogen-free, UV-resistant  
Insulating body/housing TPU, V0 according to UL 94  
Contact pin/bush CuZn, pre-nickel and tinned  
Contact protection (plugs only) PA, V0 according to UL 94  
Sleeve (sockets only) CuZn, vernickelt  
Cap nut PA, V0 according to UL 94  
Seal NBR

**3. Mechanical data**  
Insertion force<sup>1</sup> ≤ 89 N  
Withdrawal force<sup>1</sup> ≥ 89 N  
Mating cycles<sup>1</sup> 50  
Tightening torque cap nut<sup>2</sup> 2–3 Nm  
Mating with photovoltaic connectors LC3  
Protection degree<sup>3</sup> IP 68

**Connectable conductors crimp terminal**

Photovoltaic cable, double-insulated<sup>4</sup>  
Section LC3-CP 3... 2.5 2.5 mm<sup>2</sup> (AWG 14)  
Section LC3-CP 3... 4.0 4.0 mm<sup>2</sup> (AWG 12)  
Section LC3-CP 3... 6.0 6.0 mm<sup>2</sup> (AWG 10)  
Cable diameter 4–8 mm  
Approved cables on the Internet site [www.lumberg.com](http://www.lumberg.com)

**4. Electrical data** (at T<sub>amb</sub> 20 °C)

Contact resistance<sup>1</sup> ≤ 5 mΩ  
Rated current<sup>1</sup> LC3-CP 3... 2.5 22 A at T<sub>amb</sub> 85 °C  
Rated current<sup>1</sup> LC3-CP 3... 4.0 35 A at T<sub>amb</sub> 85 °C  
Rated current<sup>1</sup> LC3-CP 3... 6.0 40 A at T<sub>amb</sub> 85 °C  
Rated voltage<sup>5</sup> 1000 V DC  
Overvoltage category<sup>5</sup> III (8 kV)  
Material group<sup>5</sup> I (IEC)/0 (UL) (CTI ≥ 600)  
Creepage distance ≥ 12.5 mm  
Clearance ≥ 12.5 mm  
Insulation resistance > 10 GΩ

- <sup>1</sup> measured with a proper counterpart  
<sup>2</sup> strain relief test according to TÜV specification ensured by use of cable according to Lumberg specification  
<sup>3</sup> only in mated condition with a proper counterpart  
<sup>4</sup> IP X8 requirements under agreement between manufacturer and user wire construction preferably according to IEC 60228 class 5, otherwise crimp connection must be tested  
<sup>5</sup> according to DIN EN 60664/IEC 60664 resp. according to ANSI/UL 746A



**Composition of type designation**

Series: LC3 or LC4  
Type of product  
CP Connector Part  
Configuration  
30 field-attachable plug  
31 field-attachable socket

Polarity  
-1 +  
-2 -

Cable section  
2.5 2.5 mm<sup>2</sup> (AWG 14)  
4.0 4.0 mm<sup>2</sup> (AWG 12)  
6.0 6.0 mm<sup>2</sup> (AWG 10)

Package unit option  
50 pieces (standard, individual parts in bulk, sorted)  
VP7 500 pieces (individual parts in bulk, sorted)  
VP19 50 pieces (one plastic bag per connector)

LC3-CP 30-1 4.0 VP7

**Standard packaging: individual parts in bulk, sorted in plastic bags of 50 pieces, in a cardboard box**