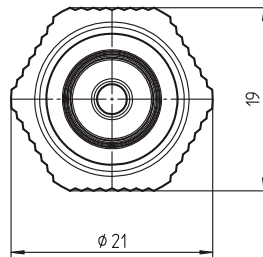
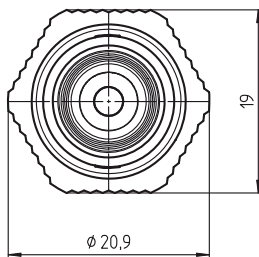
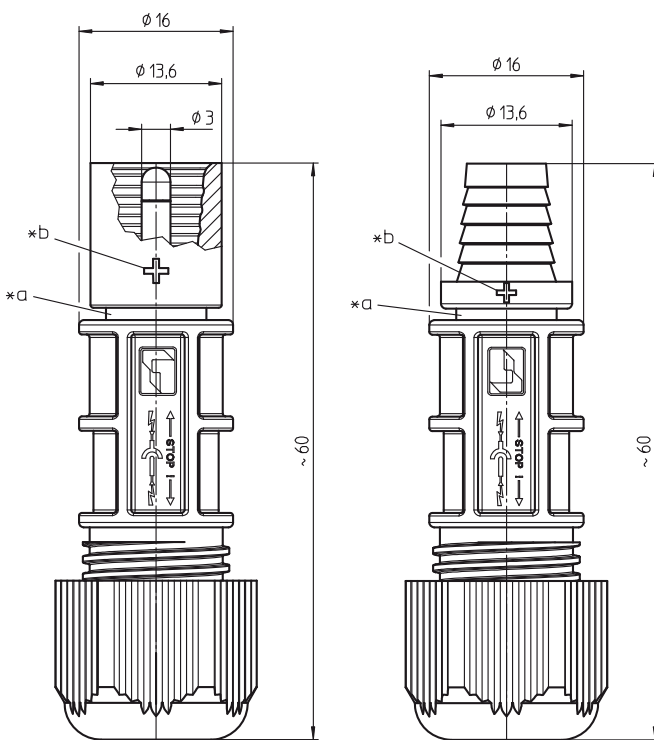



LC3-CP 30

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 force¹ ≤ 89 N
 Withdrawal force¹ ≥ 89 N
 Mating cycles¹ 50
 Tightening torque cap nut² 2–3 Nm
 Mating with photovoltaic connectors LC3
 Protection degree³ IP 68

Connectable conductors crimp terminal

Photovoltaic cable, double-insulated⁴
 Section LC3-CP 3... 2.5 2.5 mm² (AWG 14)
 Section LC3-CP 3... 4.0 4.0 mm² (AWG 12)
 Section LC3-CP 3... 6.0 6.0 mm² (AWG 10)
 Cable diameter 4–8 mm
 Approved cables on the Internet site www.lumberg.com

4. Electrical data (at T_{amb} 20 °C)

Contact resistance¹ ≤ 5 mΩ
 Rated current¹ LC3-CP 3... 2.5 22 A at T_{amb} 85 °C
 Rated current¹ LC3-CP 3... 4.0 35 A at T_{amb} 85 °C
 Rated current¹ LC3-CP 3... 6.0 40 A at T_{amb} 85 °C
 Rated voltage⁵ 1000 V DC
 Overvoltage category⁵ III (8 kV)
 Material group⁵ I (IEC)/0 (UL) (CTI ≥ 600)
 Creepage distance ≥ 12.5 mm
 Clearance ≥ 12.5 mm
 Insulation resistance > 10 GΩ

- ¹ measured with a proper counterpart
² strain relief test according to TÜV specification ensured by use of cable according to Lumberg specification
³ only in mated condition with a proper counterpart
⁴ IP X8 requirements under agreement between manufacturer and user wire construction preferably according to IEC 60228 class 5, otherwise crimp connection must be tested
⁵ 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 mm² (AWG 14)
 4.0 4.0 mm² (AWG 12)
 6.0 6.0 mm² (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