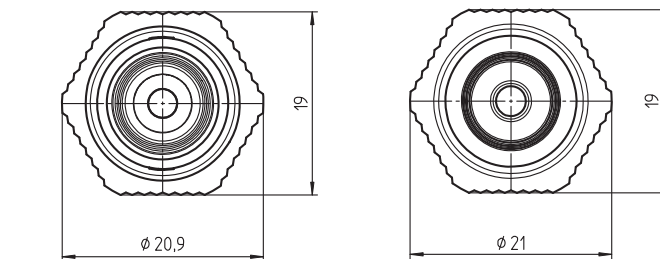
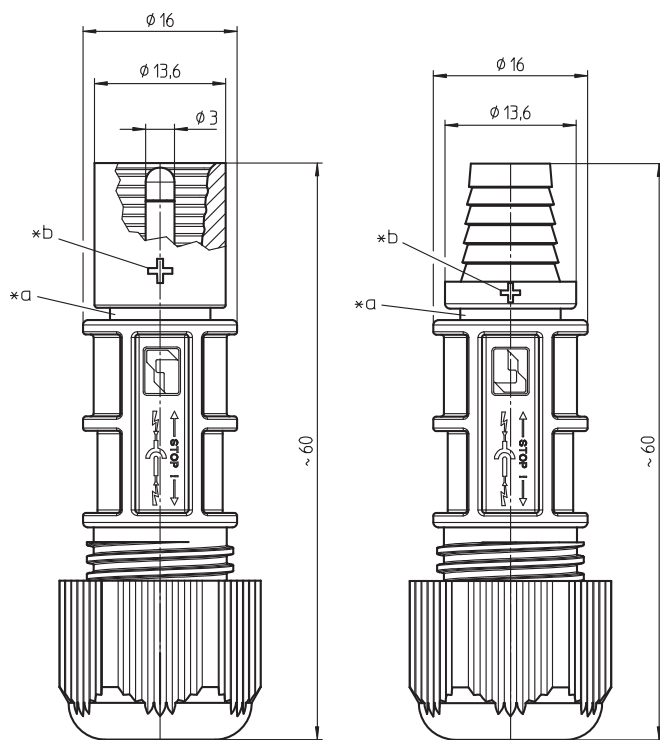




LC3-CP 30



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 tin-plated
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

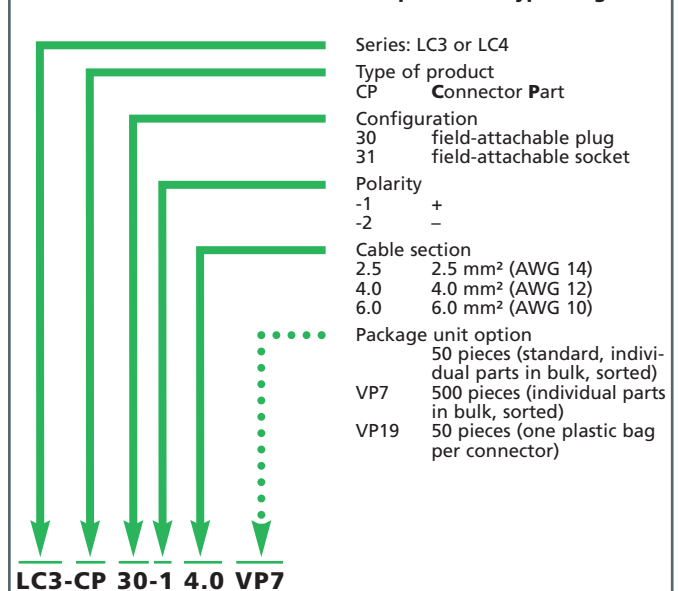
4. Electrical data (at T_{amb} 20 °C)

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, for more details see separate data sheet on request
⁵ according to DIN EN 60664/IEC 60664 resp. according to ANSI/UL 746A



Composition of type designation



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