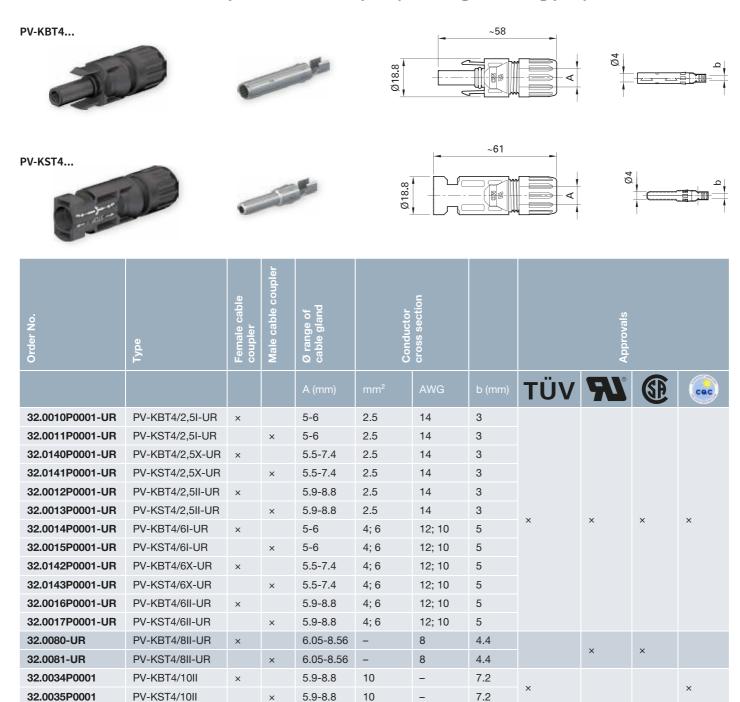
Female and male cable coupler MC4

Female and male cable coupler as individual part (including insulating part)



Note:

For more detailed information concerning the suitable cable gland range, please consult MA231



Assembly Instructions MA231

www.staubli.com/electrical



Sealing caps page 53
Assembly tools page 58



- Snap-in lock
- In accordance with NEC 2014, requires a tool to open
- Proven MULTILAM technology with high long-term stability, which ensures consistently low performance loss through-
- out the entire service life of the plug connector
- Tried and tested plug connectors, over 15 years of experience in the field
- Available for assembly with crosssections of 10 mm²
- Also available as ready made leads
- Mating compatibility with MC4 connector family
- Leads made to customer's specifications, see page 60

| Technical data | |
|---|---|
| | |
| Connector system | Ø 4 mm |
| Rated voltage | 1000 V DC (IEC 62852) 1500 V DC (2Pfg2330) ¹⁾ 1500 V DC (UL) ²⁾ |
| Rated current TÜV (85°C) | 22.5 A (2.5 mm²) 39 A (4 mm²/6 mm²) 45 A (10 mm²) |
| Rated current UL | 30 A (14 AWG) 30 A (12 AWG/10 AWG) 50 A (8 AWG) |
| Rated impulse voltage | 12 kV (1000 V DC (TÜV)) 16 kV (1500 V DC (TÜV)) |
| Ambient temperature range | -40°C+85°C (TÜV) -40°C+75°C (UL) |
| Upper limiting temperature | 105°C (TÜV) |
| Degree of protection, mated unmated | IP65, IP68 (1 h/1 m) IP2X |
| Overvoltage category/Pollution degree | CATIII/3 |
| Contact resistance of plug connectors | ≤0.25 mΩ |
| Safety class | 1000 V DC: II 1500 V DC: 0 |
| Contact system | MULTILAM |
| Type of termination | Crimping |
| Contact material | Copper, tin plated |
| Insulation material | PC/PA |
| Locking system (UL) | Locking type |
| Flame class | UL94-V0 |
| Ammonia resistance (acc. to DLG) | 1500 h, 70°C/70% RH, 750 ppm |
| Salt mist spray test, degree of severity 6 | IEC 60068-2-52 |
| TÜV-Rheinland certified, in accordance with IEC 62852 | R60127190 ³⁾ |
| TÜV-Rheinland certified, in accordance with 2PfG2330 | R60087448 |
| UL recognized component, in accordance with UL 6703 | E343181 |
| CSA certified, in accordance with UL 6703 CQC certified according CNCA/CTS0002-2012 | 250725 CQC16024138286 |

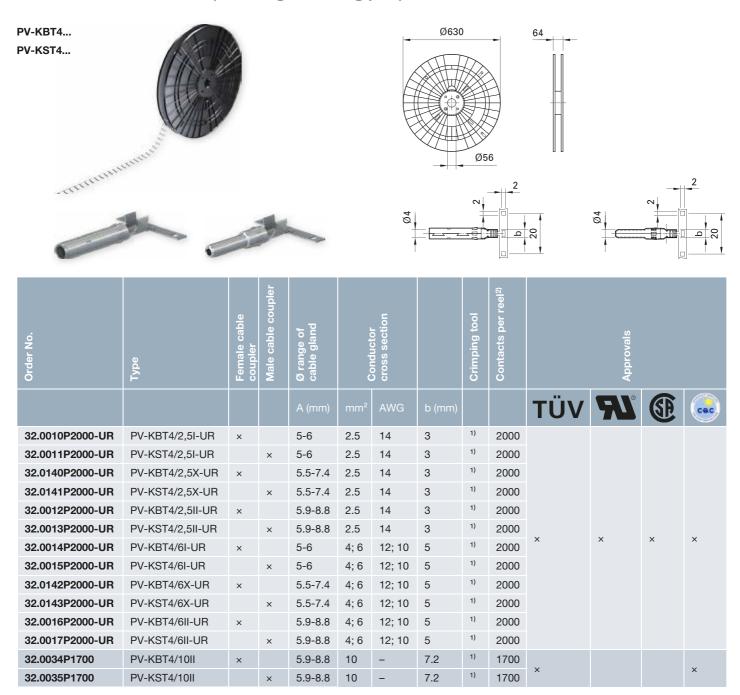
 ²Pfg2330: only approved for locations with restricted access

²⁾ for selected configurations; see assembly instructions MA231 for details

³⁾ For PV junction boxes in accordance with IEC62790, lines in accordance with EN50618 must be used

Female and male cable coupler MC4

Contacts on carrier band (including insulating part)



Note:

For more detailed information concerning the suitable cable gland range, please consult MA231



Assembly Instructions MA231

www.staubli.com/electrical



Sealing caps page 53 Assembly tools page 58



- Feeder bands for fully automatic assembly
- Tools specially designed for MC4 are available for automatic crimping
- Process reliability as result of specially developed supply reel
- Mating compatibility with MC4 connector family

| Technical data | |
|---|---|
| Connector system | Ø 4 mm |
| Rated voltage | 1000 V DC (IEC 62852) 1500 V DC (2Pfg2330) ³⁾ 1500 V DC (UL) ⁴⁾ |
| Rated current TÜV (85°C) | 22.5 A (2.5 mm²) 39 A (4 mm²/6 mm²) 45 A (10 mm²) |
| Rated current UL | 30 A (14 AWG) 30 A (12 AWG/10 AWG) 50 A (8 AWG) |
| Rated impulse voltage | 12 kV (1000 V DC (TÜV)) 16 kV (1500 V DC (TÜV)) |
| Ambient temperature range | -40°C+85°C (TÜV); -40°C+75°C (UL) |
| Upper limiting temperature | 105°C (TÜV) |
| Degree of protection, mated unmated | IP65, IP68 (1 h/1 m) IP2X |
| Overvoltage category/Pollution degree | CATIII/3 |
| Contact resistance of plug connectors | ≤0.25 mΩ |
| Safety class | 1000 V DC: II 1500 V DC: 0 |
| Contact system | MULTILAM |
| Type of termination | Crimping |
| Contact material | Copper, tin plated |
| Insulation material | PC/PA |
| Locking system (UL) | Locking type |
| Flame class | UL94-V0 |
| Ammonia resistance (acc. to DLG) | 1500 h, 70°C/70% RH, 750 ppm |
| Salt mist spray test, degree of severity 6 | IEC 60068-2-52 |
| TÜV-Rheinland certified, in accordance with IEC 62852 | R60127190 ⁵⁾ |
| TÜV-Rheinland certified, in accordance with 2PfG2330 | R60087448 |
| UL recognized component, in accordance with UL 6703 | E343181 |
| CSA certified, in accordance with UL 6703 CQC certified according CNCA/CTS0002-2012 | 250725 CQC16024138286 |

¹⁾ Information about a semi-automatic crimp device or assembly device on request

²⁾ Reel type subject to alterations

³⁾ 2Pfg2330: Only for use in PV-systems with restricted access locations

⁴⁾ For selected configurations; see assembly instructions MA231 for details

⁵⁾ For PV junction boxes in accordance with IEC62790, lines in accordance with EN50618 must be used



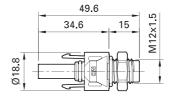
Female and male panel receptacle MC4

Female and male panel receptacles as individual part (including insulating part)

PV-ADBP4-S2...





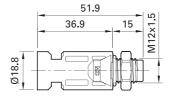




PV-ADSP4-S2...









| Order No. | Туре | Female cable coupler | Male cable coupler | | | | Approvals | | |
|-----------------|--------------------|-------------------------|-----------------------|------|--------|--------|-----------|----------|---|
| | | | | mm² | AWG | b (mm) | TÜV | A | |
| 32.0076P0001-UR | PV-ADBP4-S2/2.5-UR | × | | 2.5 | 14 | 3 | × | × | × |
| 32.0077P0001-UR | PV-ADSP4-S2/2.5-UR | | × | 2.5 | 14 | 3 | | | |
| 32.0078P0001-UR | PV-ADBP4-S2/6-UR | × | | 4; 6 | 12; 10 | 5 | | | |
| 32.0079P0001-UR | PV-ADSP4-S2/6-UR | | × | 4; 6 | 12; 10 | 5 | | | |
| 32.0150P0001 | PV-ADBP4-S2/10 | × | | 10 | | 7.2 | | | |
| 32.0151P0001 | PV-ADSP4-S2/10 | | × | 10 | | 7.2 | × | | |

Note:

For more detailed information concerning the suitable cable gland range, please consult MA275.



Sealing caps page 53 Special socket wrench insert page 57 Unlocking tool page 58



Assembly Instructions MA275

www.staubli.com/electrical



- MC4 panel-receptacle connectors are the interface between an inverter or junction box or junction and a branch cable
- Mounting directly by means of screw thread or in perforated plate with plastic nut (included in delivery)
- Rapid, precise plugging
- Protection class IP68 (1 m/1 h) guarantees the highest connection safety
- Mating compatibility with MC4 connector family
- Includes sealing element for enclosure

| Technical data | |
|---|---|
| Connector system | Ø 4 mm |
| Rated voltage | 1250 V DC (TÜV) 1500 V DC (UL) |
| Rated current TÜV (85°C) | 22.5 A (2.5 mm²; 14 AWG) 39 A (4 mm²; 12 AWG) 45 A (6 mm²; 10 AWG) 51 A (10 mm²) |
| Rated impulse voltage | 16 kV (1250 V) |
| Ambient temperature range | -40°C+85°C (TÜV/UL) |
| Upper limiting temperature | 105°C (TÜV) |
| Degree of protection, mated unmated | IP65; IP68 (1 m/1 h) IP2X |
| Overvoltage category/Pollution degree | CATIII/3 |
| Contact resistance of plug connectors | ≤0.25 mΩ |
| Safety class | II |
| Contact system | MULTILAM |
| Type of termination | Crimping |
| Contact material | Copper, tin plated |
| Insulation material | PC/PA |
| Locking system (UL) | Locking type |
| Flame class | UL94-V0 |
| TÜV-Rheinland certified, in accordance with IEC 62852 | R60127181 |
| UL recognized component, in accordance with UL 6703 | E343181 |
| CSA certified, in accordance with UL 6703 | 250725 |

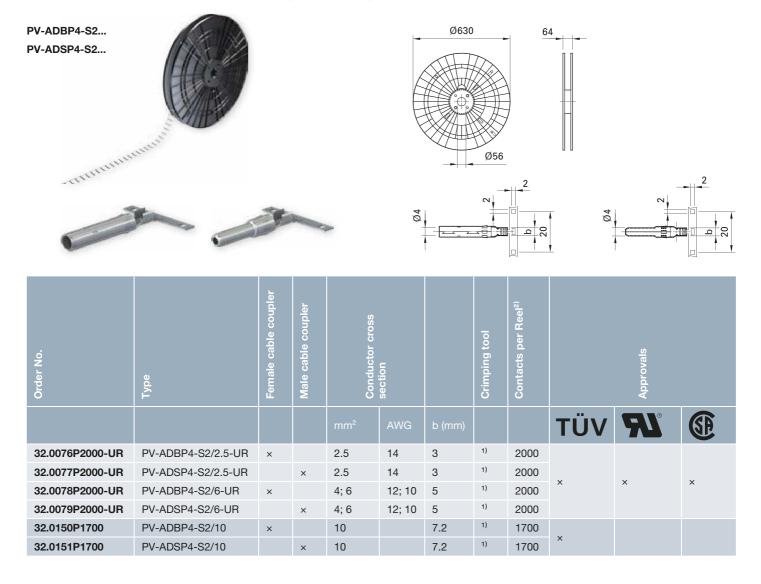
Note:

Custom made special versions with cable are also available. Lengths and choice of cable ends on request, see page 60



Female and male panel receptacle MC4

Contacts on carrier band (including insulating part)



Note:

For more detailed information concerning the suitable cable gland range, please consult MA275.



Sealing caps page 53
Special socket wrench insert page 57
Unlocking tool page 58



Assembly Instructions MA275

www.staubli.com/electrical



- Feeder bands for fully automatic assembly
- Tools specially designed for MC4 available for automatic crimping
- Process reliability as result of specially developed supply reel

| Technical data | |
|--|---|
| Connector system | Ø 4 mm |
| Rated voltage | 1250 V DC (TÜV) 1500 V DC (UL) |
| Rated current TÜV (85°C) | 22.5 A (2.5 mm²; 14 AWG) 39 A (4 mm²; 12 AWG) 45 A (6 mm²; 10 AWG) 51 A (10 mm²) |
| Rated impulse voltage | 16 kV (1250 V) |
| Ambient temperature range | -40°C+85°C (TÜV/UL) |
| Upper limiting temperature | 105°C (TÜV) |
| Degree of protection, mated unmated | IP65; IP68 (1 m/1 h) IP2X |
| Overvoltage category/Pollution degree | CATIII/3 |
| Contact resistance of plug connectors | ≤0.25 mΩ |
| Safety class | II |
| Contact system | MULTILAM |
| Type of termination | Crimping |
| Contact material | Copper, tin plated |
| Insulation material | PC/PA |
| Locking system (UL) | Locking type |
| Flame class | UL94-V0 |
| TÜV-Rheinland certified, in accordance with IEC 62852 | R60127181 |
| UL recognized component, in accordance with UL 6703 | E343181 |
| CSA certified, in accordance with UL 6703 | 250725 |

Information about a semi-automatic crimp device or assembly device on request

²⁾ Reel type subject to alterations