

Excel|Mate Mono

High Voltage with Inter-Lock



CONTENT

ExcelMate Mono (HVBI)

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EX series

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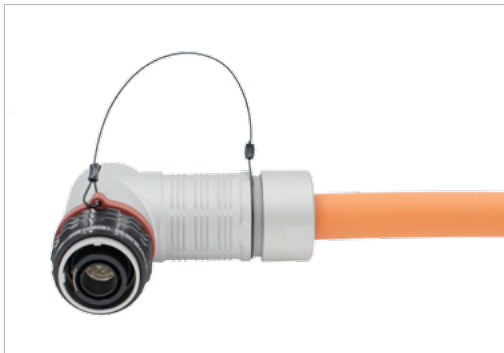
HVG

| | |
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HVS

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ExcelMate Mono (HVBI)



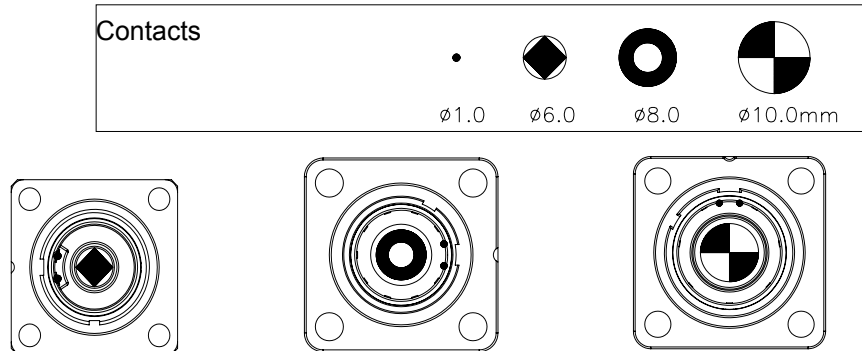
KEY FEATURES

- High voltage with interlock
- Easy to install in a limited space
- Push-pull locking system with audible "click"
- EMI shielding
- No tool required for unmating
- Touch-proof IP2X
- Sealing, IP67, IP6K9K (mated)
- RoHS compliant
- Multiple coding positions

| MECHANICAL | |
|------------------------------|---|
| Durability | > 200 mating cycles |
| Wire range | 16 to 70mm ² |
| Connection type | Crimping |
| ELECTRICAL | |
| Rated voltage | 1000V DC |
| Rated current | 250A Max @ Ambient temperature 70°C |
| Insulator resistance | > 2000MΩ |
| Dielectric withstand voltage | 3000V AC |
| ENVIRONMENTAL | |
| Sealing | IP67, IP6K9K (mated) |
| Operating temperature | -40°C to 125°C |
| Inflammability | UL94V0 |
| Salt spray | 48h, 96h |
| MATERIAL | |
| Shell | Zinc alloy, zinc plating and anodic oxidation |
| Contacts | Copper alloy, silver plating |
| Insulator | Flame-retardant thermoplastic composition |
| Sealing | Rubber |

INSERT ARRANGEMENT

From front face of receptacle

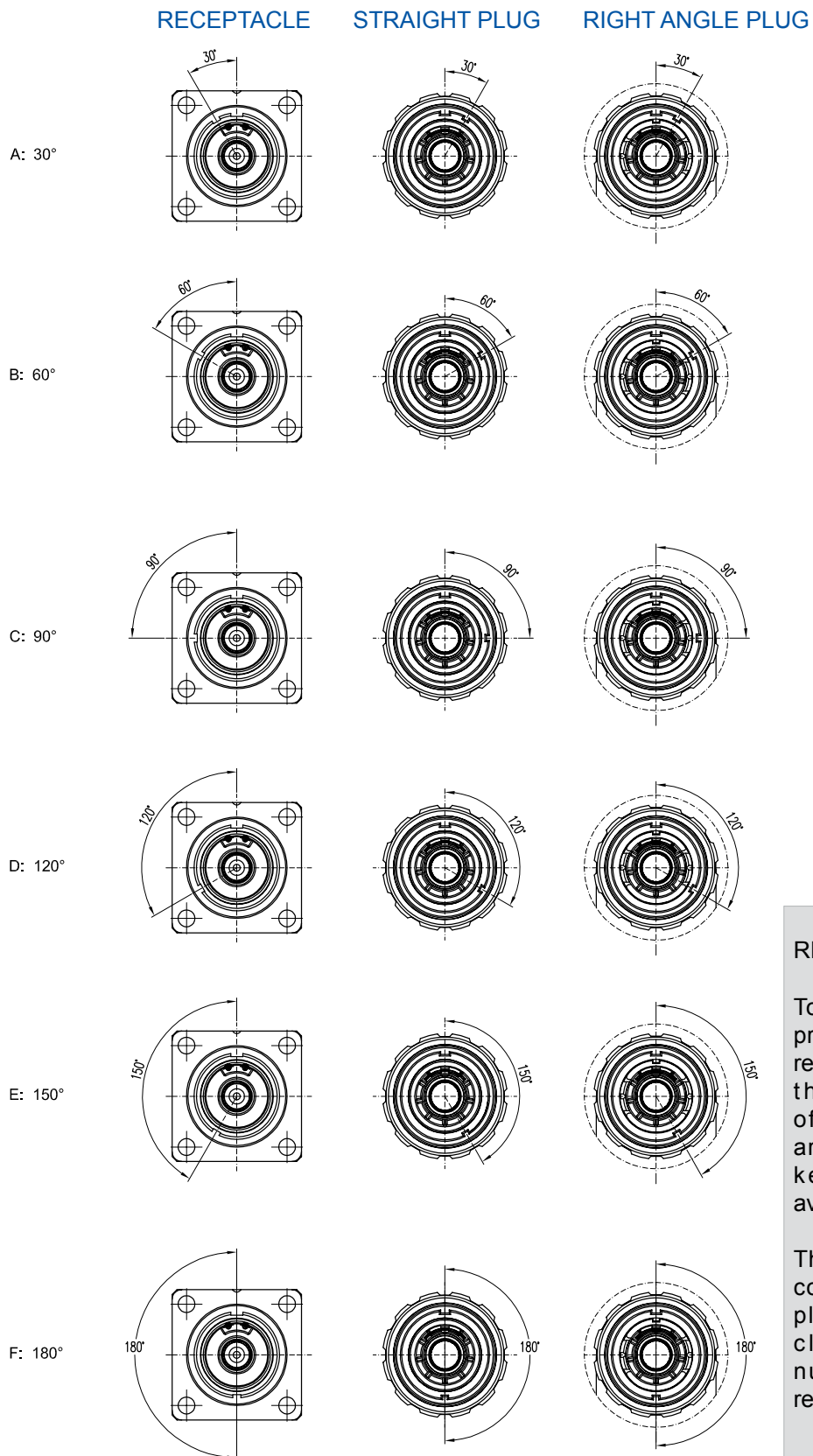


| Insert arrangement | HVBI R6 | HVBI R8 | HVBI R10 |
|----------------------|----------------------|----------------------|----------------------|
| Rated voltage | 1000V DC | 1000V DC | 1000V DC |
| Rated current | 120A +2 x 7.5A | 180A +2 x 7.5A | 250A +2 x 7.5A |
| Contact number | Power: 1 / Signal: 2 | Power: 1 / Signal: 2 | Power: 1 / Signal: 2 |
| Withstanding voltage | 3000V AC | 3000V AC | 3000V AC |

HOW TO ORDER: RECEPTACLE

| | HVBI | 0 | 02R6 | A | M | H | BBK |
|---|------|---|------|---|---|---|-----|
| Shell type: 0: Receptacle | | | | | | | |
| Insert size: 02R6: 6mm Male contact (Rated current 120A) 03R8: 8mm Male contact (Rated current 180A) 05R10: 10mm Male contact (Rated current 250A) | | | | | | | |
| HVIL: A: With HVIL B: Without HVIL | | | | | | | |
| Insert type: M: Male contact | | | | | | | |
| Termination: H: Copper bar T: Screw | | | | | | | |
| Alternate keying positions & Color of locking nut: ARD: 30°, Red BBK: 60°, Black CYL: 90°, Yellow DGR: 120°, Green EBL: 150°, Blue FPU: 180°, Purple | | | | | | | |

ALTERNATE KEYING POSITIONS

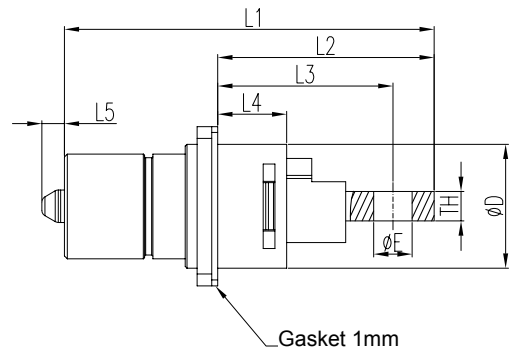
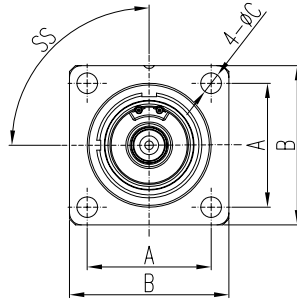


REMARK

To avoid cross-plugging problems in applications requiring the use of more than one connector of the same size and arrangement, alternate keying positions are available.

The shell key is rotated counter-clockwise. The plug would be rotated clockwise the same number of degrees in respect to the shell key.

RECEPTACLE WITH COPPER BAR

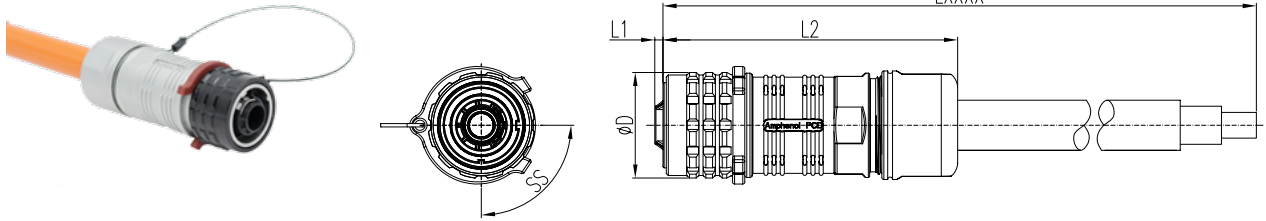


| Part number | A | B | C | D | E | L1 | L2 | L3 | L4 | L5 | TH |
|----------------------|------|------|-----|------|------|------|------|------|------|-----|-----|
| HVBI-0-02R6-XMHX-XX | 21.0 | 27.0 | 3.5 | 21.0 | 6.5 | 62.7 | 37.7 | 30.7 | 12.7 | 3.8 | 5.0 |
| HVBI-0-03R8-XMHX-XX | 23.0 | 31.0 | 4.5 | 23.0 | 8.5 | 76.7 | 43.7 | 35.7 | 15.9 | / | 5.0 |
| HVBI-0-05R10-XMHX-XX | 24.6 | 33.0 | 4.5 | 26.0 | 10.5 | 85.9 | 52.6 | 40.6 | 18.4 | 0.8 | 6.0 |

HOW TO ORDER: PLUG

| | HVBI | 9 | 02R6 | A | F | C | ARD | FG | 25 | LXXXX |
|---|------|---|------|---|---|---|-----|----|----|-------|
| Shell type: | | | | | | | | | | |
| 7: Straight plug | | | | | | | | | | |
| 9: Right angle plug | | | | | | | | | | |
| Insert size: | | | | | | | | | | |
| 02R6: 6mm Radsok (Rated current 120A) | | | | | | | | | | |
| 03R8: 8mm Radsok (Rated current 180A) | | | | | | | | | | |
| 05R10: 10mm Radsok (Rated current 250A) | | | | | | | | | | |
| HVIL: | | | | | | | | | | |
| A: With HVIL | | | | | | | | | | |
| B: Without HVIL | | | | | | | | | | |
| Insert type: | | | | | | | | | | |
| F: Female contact | | | | | | | | | | |
| Contact type: | | | | | | | | | | |
| C: Crimp | | | | | | | | | | |
| Alternate keying positions: | | | | | | | | | | |
| ARD: 30°, Red | | | | | | | | | | |
| BBK: 60°, Black | | | | | | | | | | |
| CYL: 90°, Yellow | | | | | | | | | | |
| DGR: 120°, Green | | | | | | | | | | |
| EBL: 150°, Blue | | | | | | | | | | |
| FPU: 180°, Purple | | | | | | | | | | |
| FG: Shielded | | | | | | | | | | |
| PC: Unshielded | | | | | | | | | | |
| Cable section: | | | | | | | | | | |
| 16: 16mm ² cable | | | | | | | | | | |
| 25: 25mm ² cable | | | | | | | | | | |
| 35: 35mm ² cable | | | | | | | | | | |
| 50: 50mm ² cable | | | | | | | | | | |
| 70: 70mm ² cable | | | | | | | | | | |
| Cable length: | | | | | | | | | | |
| LXXXX: Cable length (Unit in mm) | | | | | | | | | | |

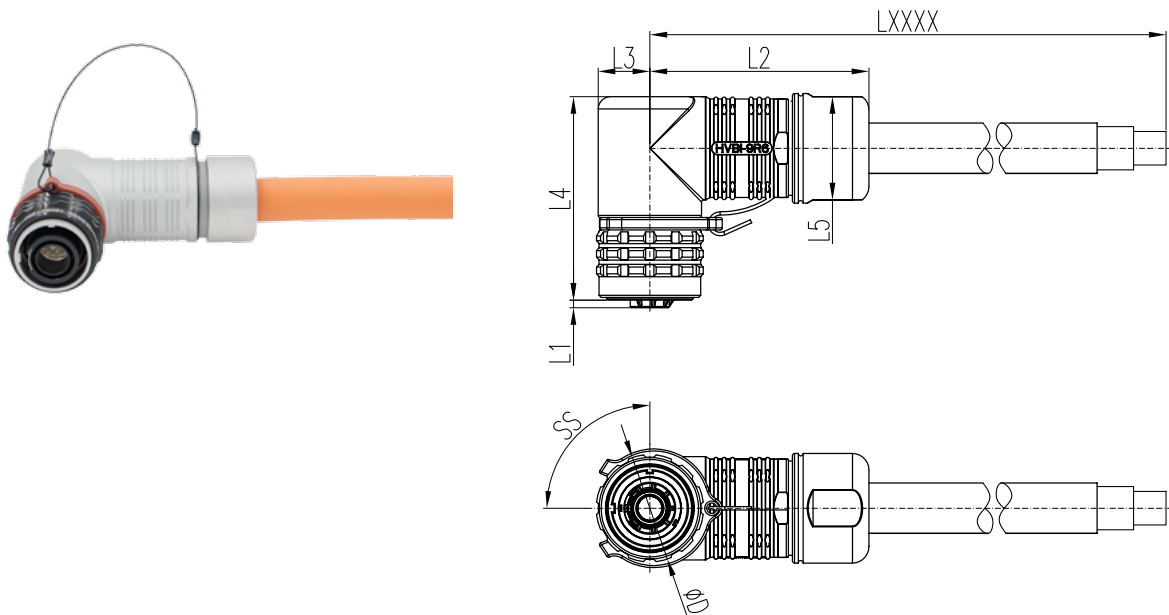
STRAIGHT PLUG



| Part number | D | L1 | L2 | LXXXX | Cable section(mm ²) |
|--------------------------------------|------|-----|----|--|--|
| HVBI-7-02R6-XFC-X-XX-FG / PC-XX.... | 26.0 | 2.0 | 70 | Cable length (mm), custom orders are available | 16mm ² to 25mm ² |
| HVBI-7-03R8-XFC-X-XX-FG / PC-XX.... | 27.5 | 2.0 | 82 | | 35mm ² to 50mm ² |
| HVBI-7-05R10-XFC-X-XX-FG / PC-XX.... | 32.5 | 1.5 | 92 | | 50mm ² to 70mm ² |

Notes: FG: Shielded type PC: Unshielded type

RIGHT ANGLE PLUG



| Part number | D | L1 | L2 | L3 | L4 | L5 | LXXXX | Cable section (mm ²) |
|--------------------------------------|------|-----|------|------|------|------|---|--|
| HVBI-9-02R6-XFC-X-XX-FG / PC-XX.... | 26.0 | 1.8 | 53.0 | 12.5 | 49.3 | 25.0 | Cable length (mm), custom orders are available | 16mm ² to 25mm ² |
| HVBI-9-03R8-XFC-X-XX-FG / PC-XX.... | 27.5 | 2.0 | 62.0 | 13.9 | 58.5 | 27.3 | | 35mm ² to 50mm ² |
| HVBI-9-05R10-XFC-X-XX-FG / PC-XX.... | 32.5 | 1.5 | 69.5 | 16.0 | 64.0 | 31.5 | | 50mm ² to 70mm ² |

Notes: FG: Shielded type PC: Unshielded type

EX series

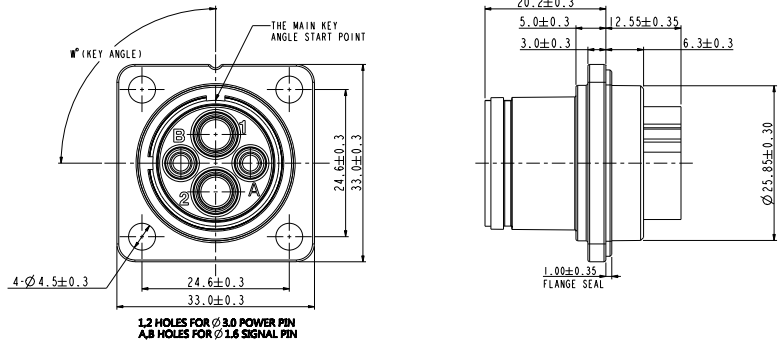


KEY FEATURES

- Easy to install in a limited space
- Push-pull locking system with audible "click"
- EMI shielding
- No tool required to unmate
- Sealing, IP68, IP6K9K (mated)
- Multiple coding positions
- RoHS compliant

| APPLICATIONS | |
|------------------------------|--|
| EV air-conditioner | |
| DCDC | |
| PTC | |
| Power distribution boxes | |
| MECHANICAL | |
| Durability | 50 mating cycles |
| Wire range | 2.5 to 6mm ² (RA plug: 2.5 to 4mm ²) |
| Connection type | Crimping |
| ELECTRICAL | |
| Rated voltage | 800V DC |
| Rated current | 6.0mm ² cable shield: 40A Max @ Ambient temperature 70°C 4.0mm ² cable shield: 32A Max @ Ambient temperature 70°C 2.5mm ² cable shield: 23A Max @ Ambient temperature 70°C |
| Insulator resistance | > 2000MΩ |
| Dielectric withstand voltage | 3000V AC |
| ENVIRONMENTAL | |
| Sealing | IP68, IP6K9K (mated) |
| Operating temperature | -40°C to 125°C |
| Inflammability | UL94V0 |
| Salt spray | 96h |
| MATERIAL | |
| Shell | Aluminum alloy with zinc, nickel plating and anodic oxidation |
| Contacts | Copper alloy, silver plating |
| Insulator | Flame-retardant thermoplastic composition |
| Sealing | Rubber |

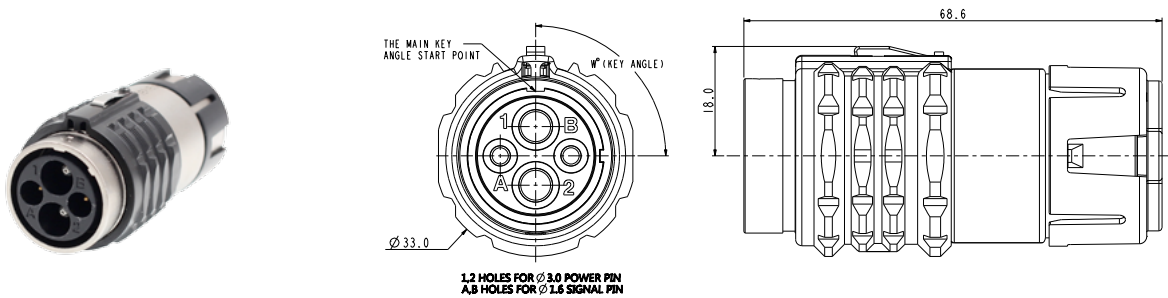
RECEPTACLE EX 402



All connectors do not include contacts. Please order them separately (ref: P/N below)

| Socket contact (Ø 3.0): crimping | Socket signal contact (Ø 1.6) |
|---|-------------------------------|
| P/N: EX30F4 (for 2.5 to 4 mm ²) P/N: EX30F6 (for 6 mm ²) | P/N: EX16F1 |
| | |

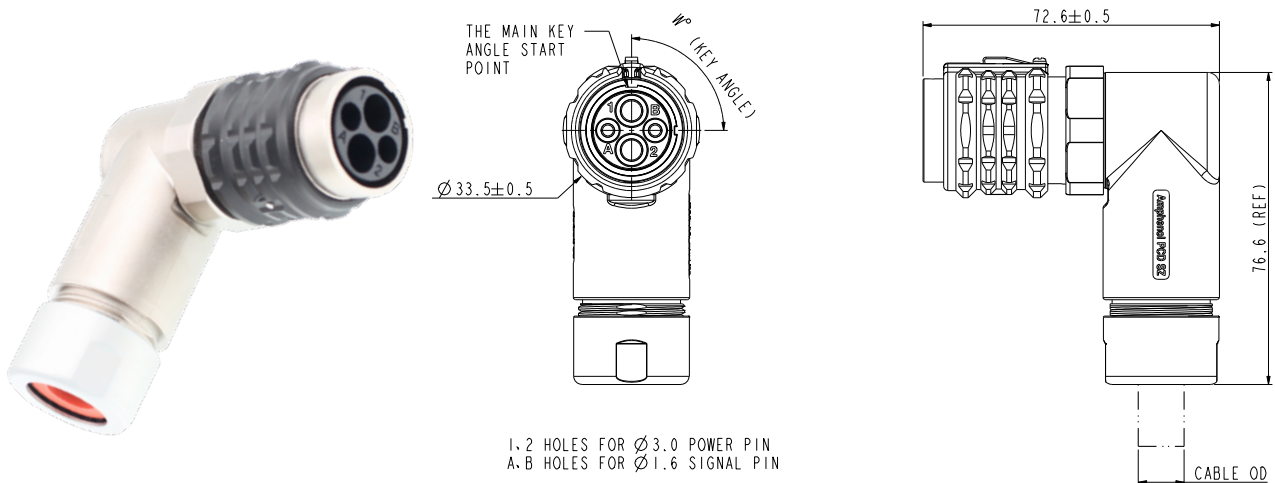
STRAIGHT PLUG EX 402



All connectors do not include contacts. Please order them separately (ref: P/N below)

| Pin contact (Ø 3.0): crimping | Pin signal contact (Ø 1.6) |
|---|----------------------------|
| P/N: EX30M4 (for 2.5 to 4 mm ²) P/N: EX30M6 (for 6 mm ²) | P/N: EX16M1 |
| | |

RIGHT-ANGLE PLUG EX 402



All connectors do not include contacts. Please order them separately (ref: P/N below)

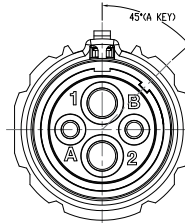
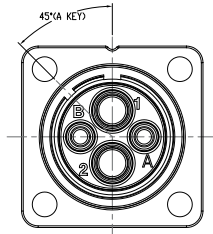
| Pin contact (Ø 3.0): crimping | Pin signal contact (Ø 1.6) |
|--|----------------------------|
| P/N: EX30M4 (for 2.5 to 4 mm ²) | P/N: EX16M1 |
| | |

EX 402: ALTERNATE KEYING POSITIONS

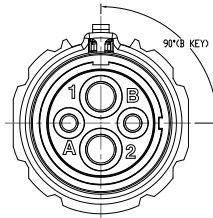
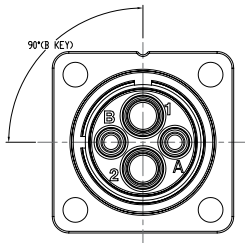
RECEPTACLE

STRAIGHT PLUG

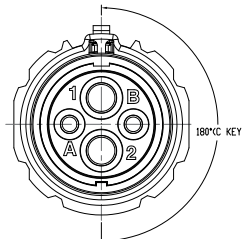
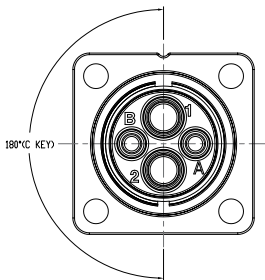
A: 45°



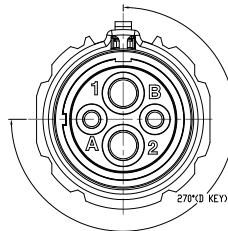
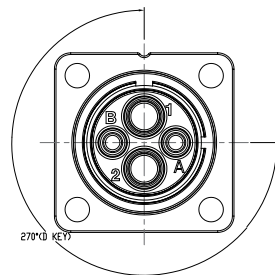
B: 90°



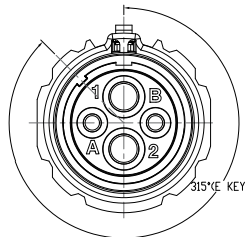
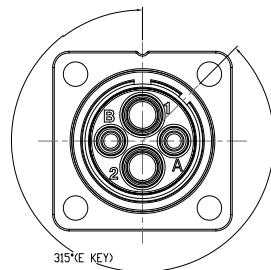
C: 180°



D: 270°



E: 315°

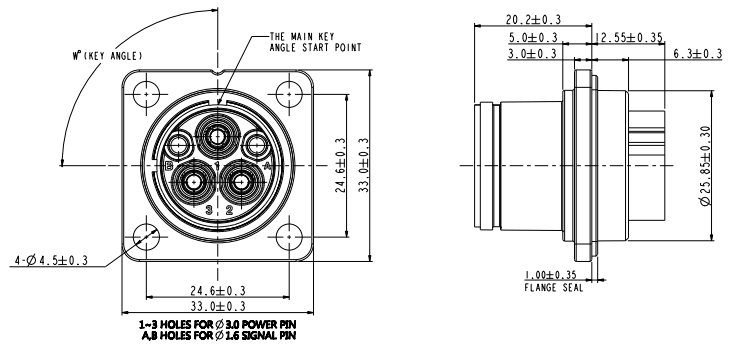


REMARK

To avoid cross-plugging problems in applications requiring the use of more than one connector of the same size and arrangement, alternate keying positions are available.

The shell key is rotated counter-clockwise. The plug would be rotated clockwise the same number of degrees in respect to the shell key.

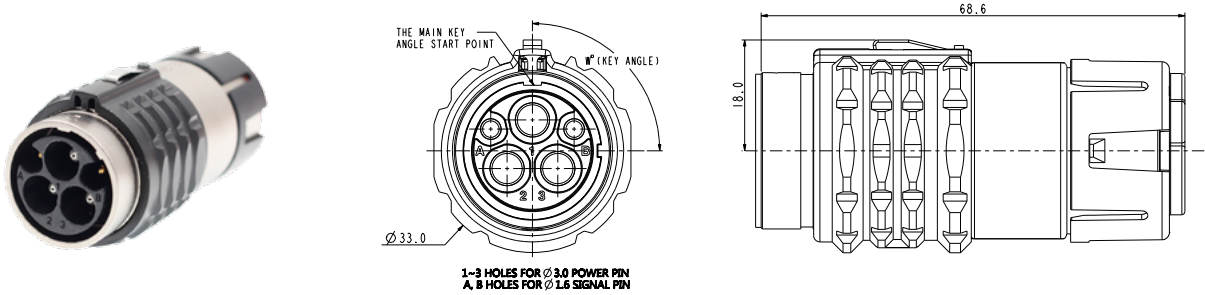
RECEPTACLE EX 403



All connectors do not include contacts. Please order them separately (ref: P/N below)

| Socket contact (Ø 3.0): crimping | Socket signal contact (Ø 1.6) |
|---|-------------------------------|
| P/N: EX30F4 (for 2.5 to 4 mm ²) P/N: EX30F6 (for 6 mm ²) | P/N: EX16F1 |
| | |

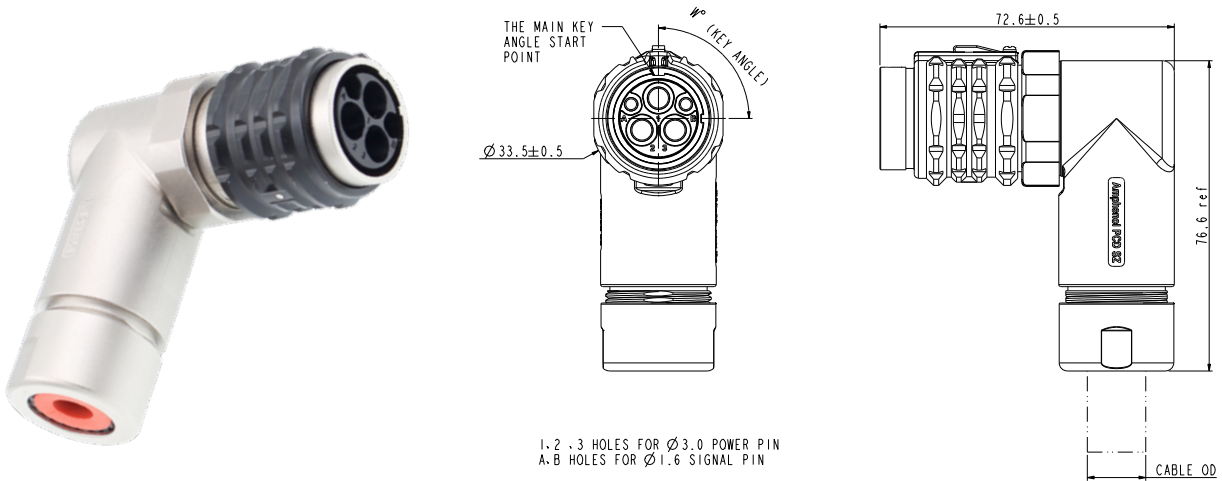
STRAIGHT PLUG EX 403



All connectors do not include contacts. Please order them separately (ref: P/N below)

| Pin contact (Ø 3.0): crimping | Pin signal contact (Ø 1.6) |
|---|----------------------------|
| P/N: EX30M4 (for 2.5 to 4 mm ²) P/N: EX30M6 (for 6 mm ²) | P/N: EX16M1 |
| | |

RIGHT-ANGLE PLUG EX 403



All connectors do not include contacts. Please order them separately (ref: P/N below)

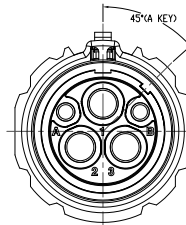
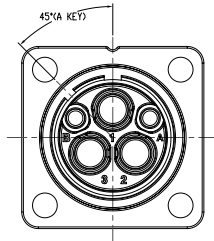
| Pin contact (Ø 3.0): crimping | Pin signal contact (Ø 1.6) |
|--|----------------------------|
| P/N: EX30M4 (for 2.5 to 4 mm ²) | P/N: EX16M1 |
| | |

EX 403: ALTERNATE KEYING POSITIONS

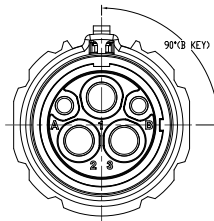
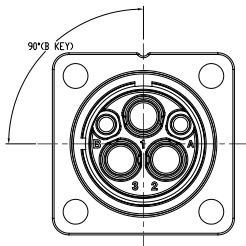
RECEPTACLE

STRAIGHT PLUG

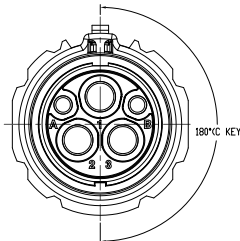
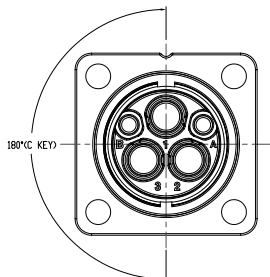
A: 45°



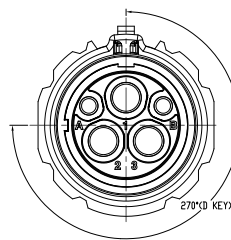
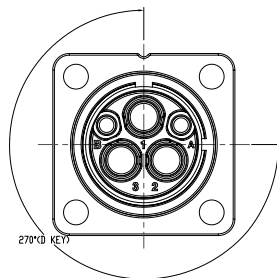
B: 90°



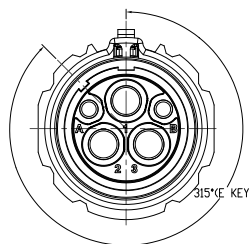
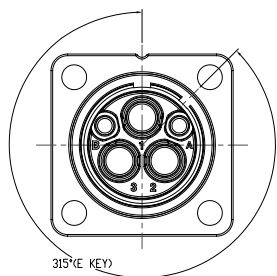
C: 180°



D: 270°



E: 315°



REMARK

To avoid cross-plugging problems in applications requiring the use of more than one connector of the same size and arrangement, alternate keying positions are available.

The shell key is rotated counter-clockwise. The plug would be rotated clockwise the same number of degrees in respect to the shell key.

HOW TO ORDER

PLUG

| EX | 402 | 06 | A | 1 | 2 | I |
|--|-----|----|---|---|---|---|
| Product series: 402 (2 pin) 403 ((3 pin) | | | | | | |
| Product type: 06: Straight plug 08: Right-angle plug | | | | | | |
| Alternate keying positions & Locking nut color: A: Coding A, Red B: Coding B, Black C: Coding C, Yellow D: Coding D, Green E: Coding E, Blue | | | | | | |
| Interlock 0: Without interlock 1: With internal interlock 2: With external interlock | | | | | | |
| Cable section: 2: 2.5mm ² (23A) 4: 4.0mm ² (32A) 6: 6.0mm ² (40A) | | | | | | |
| Cable type: I: Individually | | | | | | |

RECEPTACLE

| EX | 402 | 02 | A |
|--|-----|----|---|
| Product series: 402 (2 pin) 403 ((3 pin) | | | |
| Product type: 02: Flange receptacle | | | |
| Alternate keying positions & Locking nut color: A: Coding A, Red B: Coding B, Black C: Coding C, Yellow D: Coding D, Green E: Coding E, Blue | | | |

HVG SERIES



KEY FEATURES

- Easy to install in a limited space
- Push-pull locking system with audible "click"
- EMI shielding
- No tool required to unmate
- Sealing, IP67, IP6K9K (mated)
- Multiple coding positions
- RoHS compliant

| APPLICATIONS | |
|------------------------------|---|
| EV air-conditioner | |
| DCDC | |
| PTC | |
| Power distribution boxes | |
| MECHANICAL | |
| Durability | > 200 mating cycles |
| Connection type | Crimping |
| ELECTRICAL | |
| Rated voltage | 800V DC |
| Rated current | 2.5mm ² : 23A @Ambient temp. 70°C 4mm ² : 32A @Ambient temp. 70°C 6mm ² : 40A @Ambient temp. 70°C 10mm ² : 50A @Ambient temp. 70°C |
| Insulator resistance | > 2000MΩ |
| Dielectric withstand voltage | 3000V AC |
| Shielding | Yes |
| ENVIRONMENTAL | |
| Sealing | IP67, IP6K9K (mated) |
| Temperature range | -40°C to 125°C, short term to 150°C |
| Inflammability | UL94V0 |
| Salt spray | 96h |
| MATERIAL | |
| Shell | Aluminum alloy with zinc, nickel plating and anodic oxidation |
| Contacts | Copper alloy, silver plating |
| Insulator | Flame-retardant thermoplastic composition |
| Sealing | Rubber |

INSERT ARRANGEMENT

From front face of receptacle

Contacts

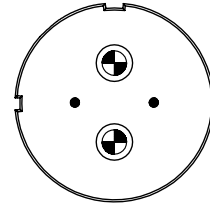
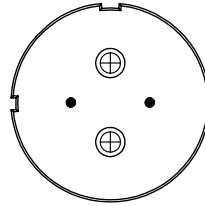
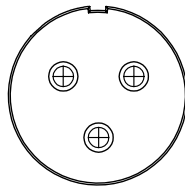


∅1.0

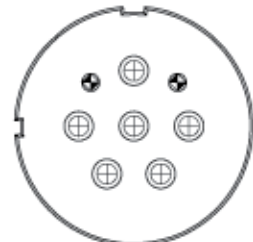
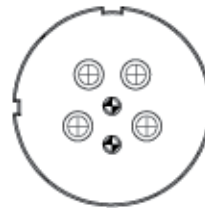
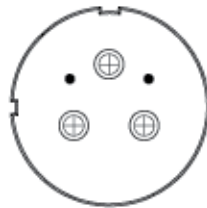
∅1.6

∅3.0

∅3.6mm



| | | | |
|----------------------|----------|----------------------|----------------------|
| Insert arrangement | HVS203 | HVG402 | HVG492 |
| Rated voltage | 800V DC | 800V DC | 800V DC |
| Rated current | 3 x 32A | 2 x 32A + 2 x 7.5A | 2 x 50A + 2 x 7.5A |
| Contact number | Power: 3 | Power: 2 / Signal: 2 | Power: 2 / Signal: 2 |
| Withstanding voltage | 2500V | 3000V | 3000V |



| | | | |
|----------------------|----------------------|----------------------|----------------------|
| Insert arrangement | HVG403 | HVG404 | HVG406 |
| Rated voltage | 800V DC | 800V DC | 800V DC |
| Rated current | 3 x 32A + 2 x 7.5A | 4 x 32A + 2 x 7.5A | 6 x 32A + 2 x 7.5A |
| Contact number | Power: 3 / Signal: 2 | Power: 4 / Signal: 2 | Power: 6 / Signal: 2 |
| Withstanding voltage | 3000V | 3000V | 3000V |

RECEPTACLE

| | HVG | 1S | 402 | M | C | XRD |
|---|-----|----|-----|---|---|-----|
| HVG series | | | | | | |
| Product type: 1S: Flange receptacle | | | | | | |
| Insert arrangement: (HVG Series not include contact, order seperately, P/N please refer to page 30) 402: 2 X (23A to 32A) + 2 X 7.5A 403: 3 X (23A to 32A) + 2 X 7.5A 492: 2 X (40A to 50A) + 2 X 7.5A | | | | | | |
| Contact type: M: Male contact F: Female contact | | | | | | |
| C: Crimp version | | | | | | |
| Alternate keying positions & Shell color: BK: Without, Black XRD: 270°, Red YY: 315°, Yellow ZBL: 90°, Blue WGR: 45°, Green | | | | | | |

HOW TO ORDER: 203

RECEPTACLE

| | HVS | 1S | 203 | M | C | X |
|--|-----|----|-----|---|---|---|
| HVS series | | | | | | |
| Product type: 1S: Flange receptacle | | | | | | |
| Insert arrangement: 203: 3 X 32A | | | | | | |
| Contact type: M: Male contact F: Female contact | | | | | | |
| C: Crimp version | | | | | | |
| Alternate keying positions & Locking nut color: Omit: Without, Black X: 270°, Red Y: 315°, Yellow Z: 90°, Blue W: 45°, Green | | | | | | |

RECEPTACLE

| | | | | | | | | | | |
|---|------------|-----------|------------|----------|----------|------------|----------|----------|----------|--------------|
| | HVG | 1S | 404 | M | C | XRD | 4 | D | 4 | L0000 |
| HVG series | | | | | | | | | | |
| Product type: 1S: Flange receptacle | | | | | | | | | | |
| Insert arrangement: (HVG Series not include contact, order seperately, P/N please refer to page P30) 404: 4 X (23A to 32A) + 2 X 7.5A | | | | | | | | | | |
| Contact type: M: Male contact | | | | | | | | | | |
| C: Crimp version | | | | | | | | | | |
| Alternate keying positions & Shell color: BK: Without, Black XRD: 270°, Red YY: 315°, Yellow ZBL: 90°, Blue WGR: 45°, Green | | | | | | | | | | |
| Cable cores: 4 | | | | | | | | | | |
| Cable gland type: D: Unshielded wire | | | | | | | | | | |
| Cable section: 2: 2.5mm ² (rated voltage of 23A) 4: 4mm ² (rated voltage of 32A) | | | | | | | | | | |
| Cable length: L0000: Cable length (Unit in mm) | | | | | | | | | | |

RECEPTACLE

| | HVG | 1S | 406 | M | C | XRD |
|---|-----|----|-----|---|---|-----|
| HVG series | | | | | | |
| Product type: 1S: Flange receptacle | | | | | | |
| Insert arrangement (HVG series not include contact, order seperately, P/N please refer to page P30) 406: 6 X (23A to 32A) + 2 X 7.5A | | | | | | |
| Contact type: M: Male contact | | | | | | |
| C: Crimp version | | | | | | |
| Alternate keying positions & Locking nut color: BK: Without, Black XRD: 270°, Red YY: 315°, Yellow ZBL: 90°, Blue WGR: 45°, Green | | | | | | |

HOW TO ORDER: 402, 403, 492 - Shielded cable

PLUG - shielded cable

| | HVG | 1P | 402 | M | C | XRD |
|--|-----|----|-----|---|---|-----|
| HVG series | | | | | | |
| Product type: 1P: 1-PIN Plug | | | | | | |
| Insert arrangement: (HVG Series not include contact, order seperately, P/N please refer to page 30) 402: 2 X (23A to 32A) + 2 X 7.5A 403: 3 X (23A to 32A) + 2 X 7.5A 492: 2 X (40A to 50A) + 2 X 7.5A | | | | | | |
| Contact type: M: Male contact F: Female contact | | | | | | |
| C: Crimp version | | | | | | |
| Alternate keying positions & Shell color: Omit: Without, Black XR: 270°, Red YY: 315°, Yellow ZB: 90°, Blue WG: 45°, Green | | | | | | |

HOW TO ORDER: 402, 403, 492 - unshielded cable

PLUG - unshielded cable

| | HVG | 1P | 402 | M | C | XRD | 2 | D | 4 | L0000 |
|--|-----|----|-----|---|---|-----|---|---|---|-------|
| HVG series | | | | | | | | | | |
| Product type: 1P: 1-PIN Plug | | | | | | | | | | |
| Insert arrangement (HVG series not include contact, order seperately, P/N please refer to page 30) 402: 2 X (23A to 32A) + 2 X 7.5A 403: 3 X (23A to 32A) + 2 X 7.5A 492: 2 X (40A to 50A) + 2 X 7.5A | | | | | | | | | | |
| Contact type: M: Male contact F: Female contact | | | | | | | | | | |
| C: Crimp version | | | | | | | | | | |
| Alternate keying positions & Locking nut color: Omit: Without, Black XR: 270°, Red YY: 315°, Yellow ZB: 90°, Blue WG: 45°, Green | | | | | | | | | | |
| Cable cores: 2, 3 | | | | | | | | | | |
| Cable gland type: D: Unshielded wire | | | | | | | | | | |
| Cable section: 2: 2.5mm ² (rated voltage of 23A) 4: 4mm ² (rated voltage of 32A) 6: 6mm ² (rated voltage of 40A) A: 10mm ² (rated voltage of 50A) | | | | | | | | | | |
| Cable length: L0000: Cable length (Unit in mm) | | | | | | | | | | |

HOW TO ORDER : 203

PLUG

| | HVS | 1P | 203 | M | C | X |
|--|-----|----|-----|---|---|---|
| HVS series | | | | | | |
| Product type: 1P: 1-PIN Plug | | | | | | |
| Insert arrangement: 203: 3 X 32A | | | | | | |
| Contact type: M: Male contact F: Female contact | | | | | | |
| C: Crimp version | | | | | | |
| Alternate keying positions & Shell color: Omit: Without, Black X: 270°, Red Y: 315°, Yellow Z: 90°, Blue W: 45°, Green | | | | | | |

PLUG

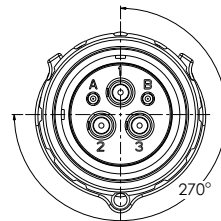
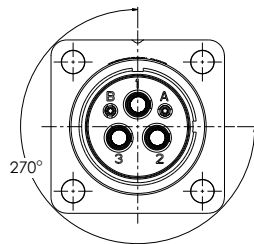
| | HVG | 1P | 404 | F | C | XRD | 4 | D | 4 | L0000 |
|--|-----|----|-----|---|---|-----|---|---|---|-------|
| HVG series | | | | | | | | | | |
| Product type: 1P: 1-PIN Plug | | | | | | | | | | |
| Insert arrangement (HVG series not include contact, order seperately, P/N please refer to page 32) 404: 4 X (23A to 32A) + 2 X 7.5A 406: 6 X (23A to 32A) + 2 X 7.5A | | | | | | | | | | |
| Contact type: F: Female contact | | | | | | | | | | |
| C: Crimp version | | | | | | | | | | |
| Alternate keying positions & Locking nut color: NBK: Without, Black XRD: 270°, Red YGR: 315°, Green ZBL: 90°, Blue WYL: 45°, Yellow | | | | | | | | | | |
| Cable cores: 4, 6 | | | | | | | | | | |
| Cable gland type: A: Shielded cable D: Unshielded wire | | | | | | | | | | |
| Cable section: 2: 2.5mm ² (rated voltage of 23A) 4: 4mm ² (rated voltage of 2A) | | | | | | | | | | |
| Cable length: L0000: Cable length (Unit in mm) | | | | | | | | | | |

ALTERNATE KEYING POSITIONS

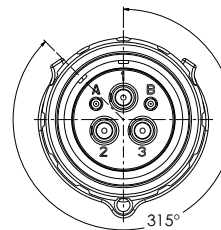
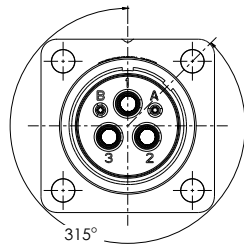
RECEPTACLE

STRAIGHT PLUG

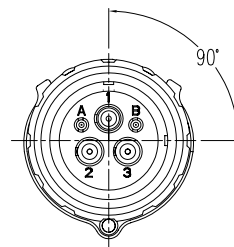
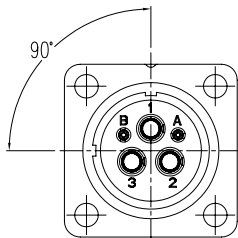
X: 270°



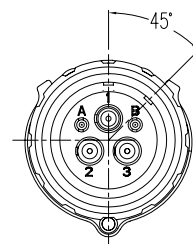
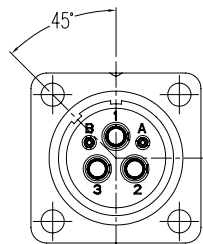
Y: 315°



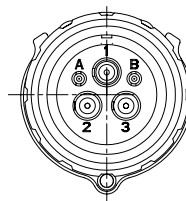
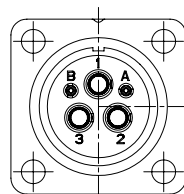
Z: 90°



W: 45°



N: NORMAL

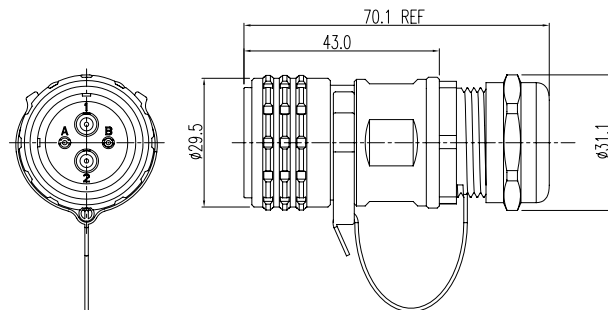
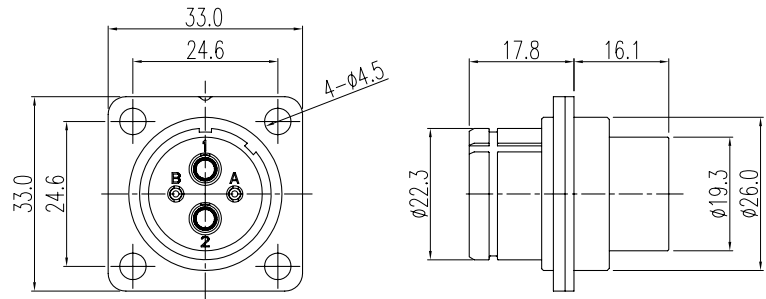


REMARK

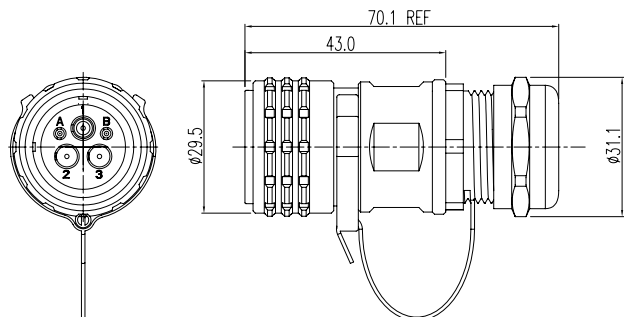
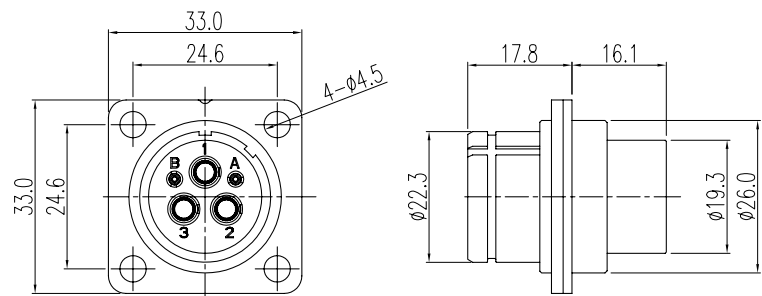
To avoid cross-plugging problems in applications requiring the use of more than one connector of the same size and arrangement, alternate keying positions are available.

The shell key is rotated counter-clockwise. The plug would be rotated clockwise the same number of degrees in respect to the shell key.

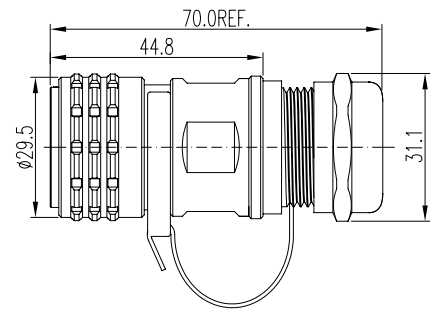
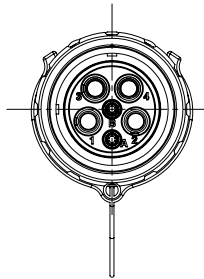
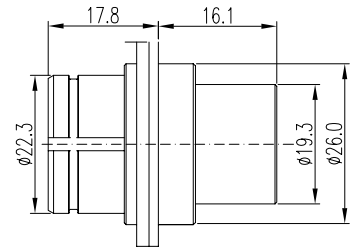
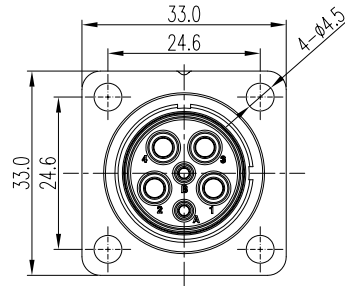
RECEPTACLE AND PLUG: 402



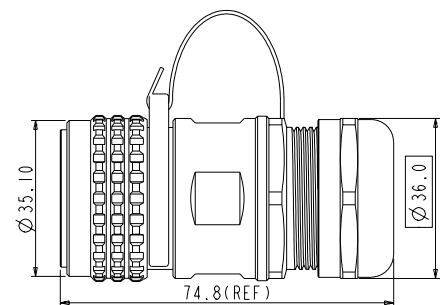
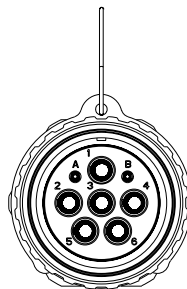
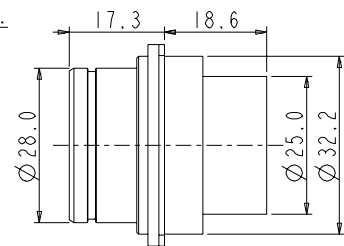
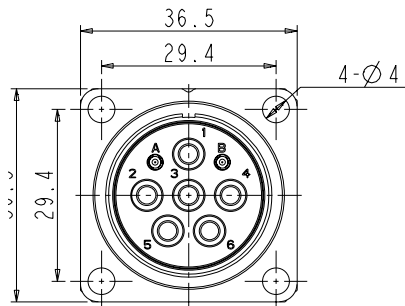
RECEPTACLE AND PLUG: 403



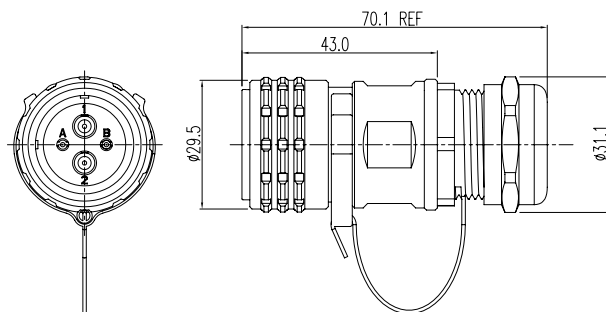
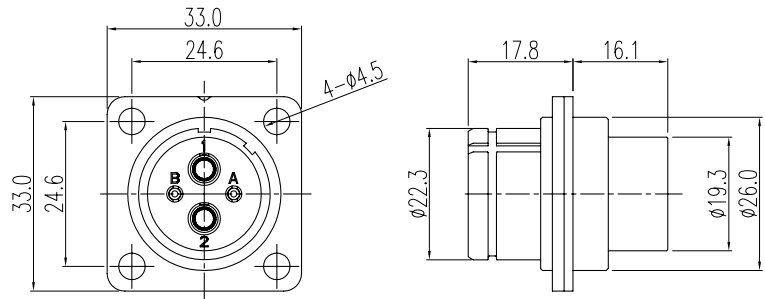
RECEPTACLE AND PLUG: 404



RECEPTACLE AND PLUG: 406



RECEPTACLE AND PLUG: 492



HVS SERIES



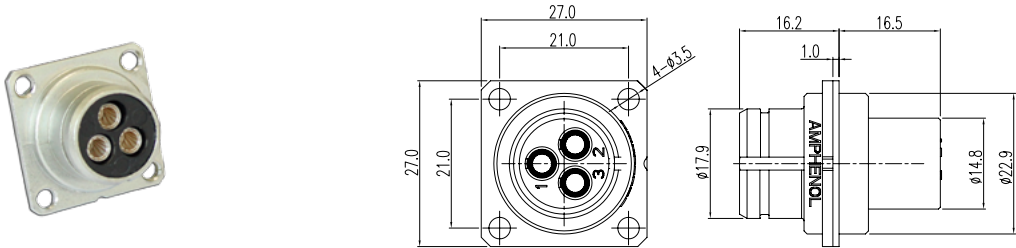
KEY FEATURES

- Easy to install in a limited space
- Push-pull locking system with audible "click"
- EMI shielding
- No tool required for unmating
- Sealing, IP67, IP6K9K (mated)
- Multiple coding positions
- RoHS compliant

| APPLICATIONS | |
|------------------------------|---|
| EV air-conditioner | |
| DCDC | |
| PTC | |
| Power distribution boxes | |
| MECHANICAL | |
| Durability | > 200 mating cycles |
| Connection type | Crimping |
| ELECTRICAL | |
| Rated voltage | 230V AC / 400V DC |
| Rated current | 32A Max @ Ambient temperature 70°C |
| Insulator resistance | > 2000MΩ |
| Dielectric withstand voltage | 2500V AC |
| Shielding | Yes |
| ENVIRONMENTAL | |
| Sealing | IP67, IP6K9K (mated) |
| Temperature range | -40°C to 125°C, short term to 150°C |
| Inflammability | UL94V0 |
| Salt spray | 48h, 96h |
| MATERIAL | |
| Shell | Aluminum alloy with zinc, nickel plating and anodic oxidation |
| Contacts | Copper alloy, silver plating |
| Insulator | Flame-retardant thermoplastic composition |
| Sealing | Rubber |

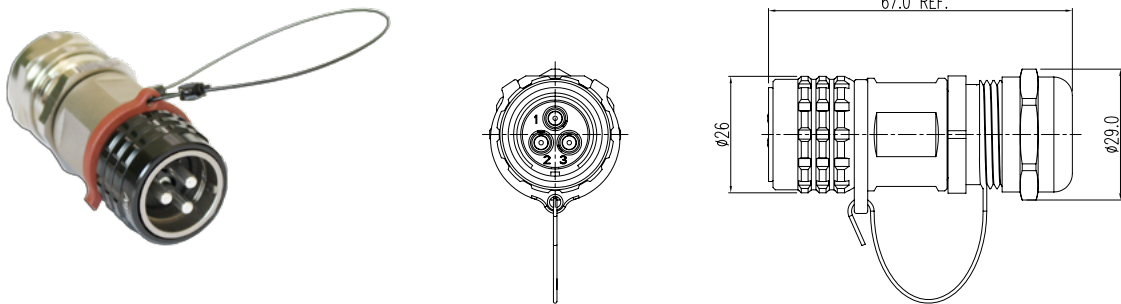
RECEPTACLE

P/N: **HVS1S-203FC** (socket) / **HVS1S-203MC** (pin)



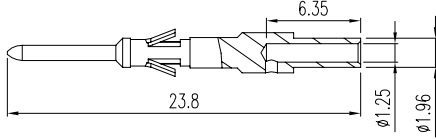
PLUG

P/N: **HVS1P-203MC** (pin) / **HVS1P-203FC** (socket)

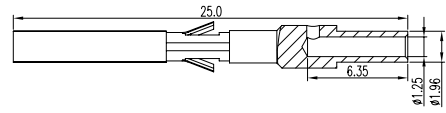


CONTACTS Notice: HVG series connectors are not include contact, please order separately.

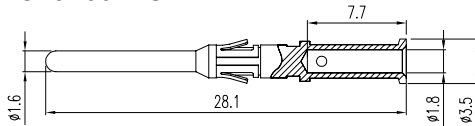
HVG20M1



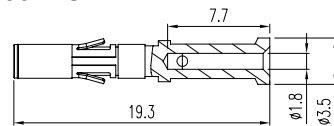
HVG20F1



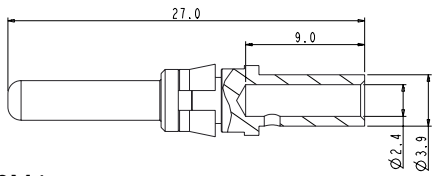
ASRC16P001AU



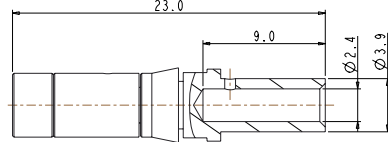
ASRC16SC001AU



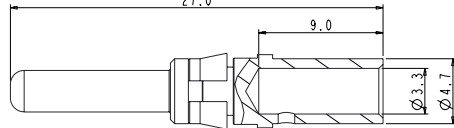
HVG30M2



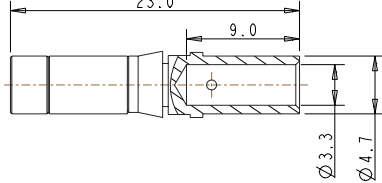
HVG30F2



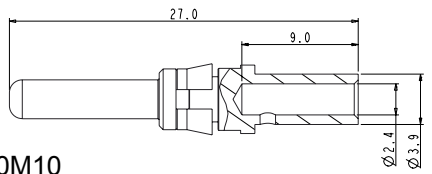
HVG30M4



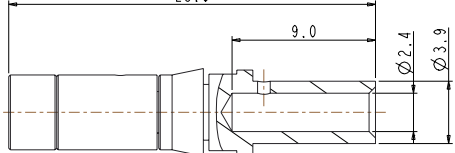
HVG30F4



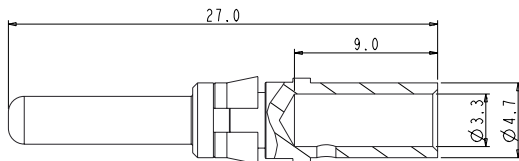
HVG30M6



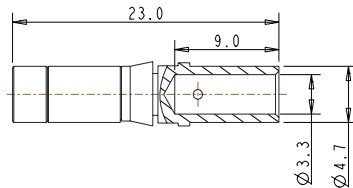
HVG30F6



HVG30M10



HVG30F10

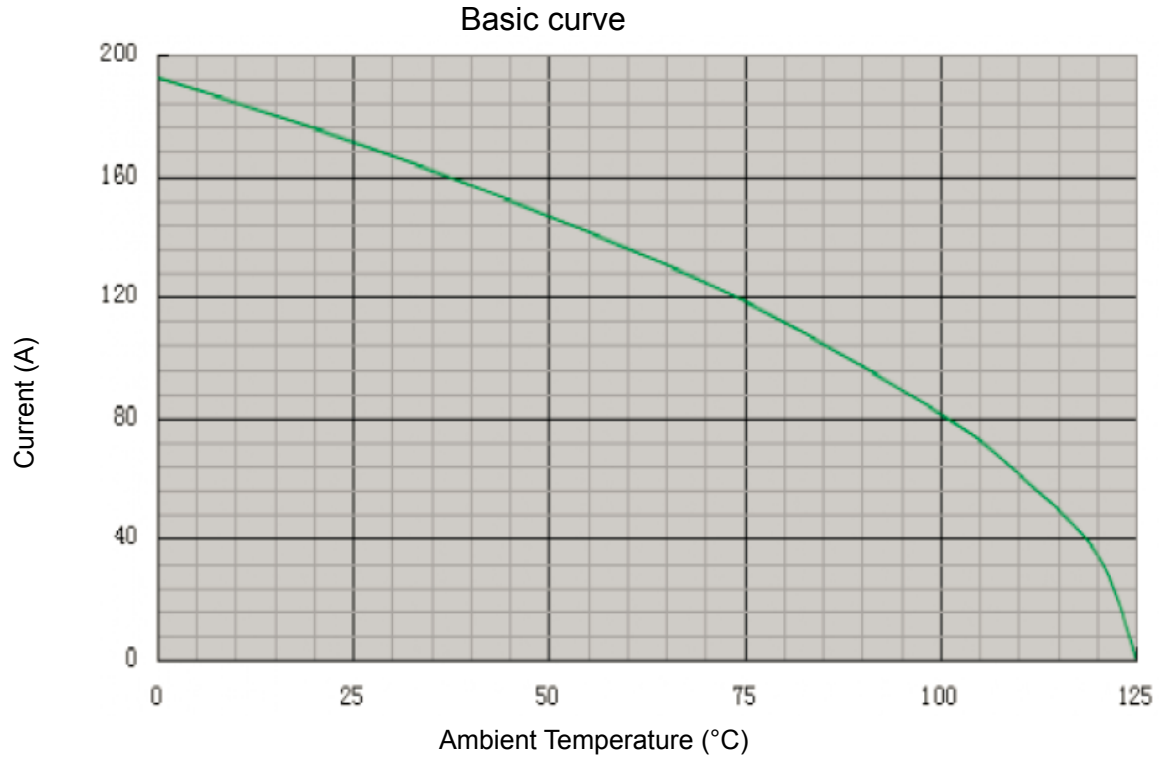


PART NUMBER

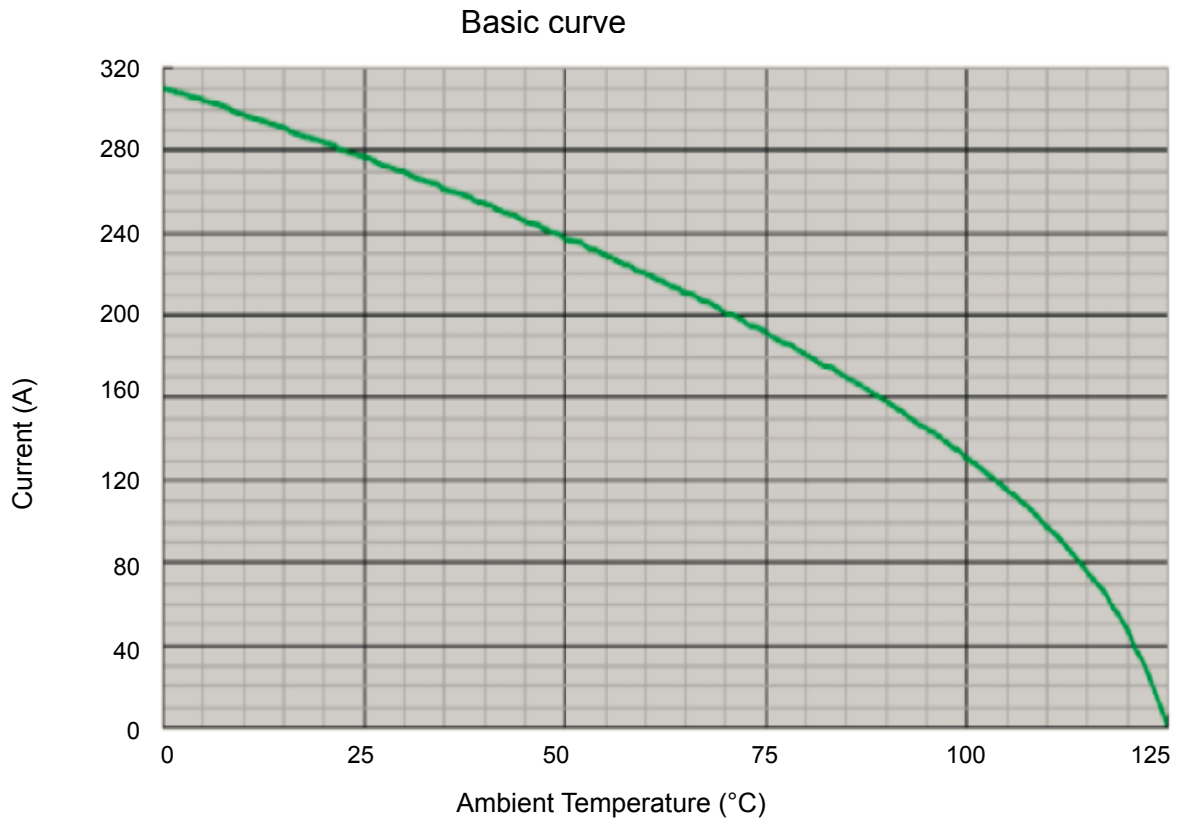
| Contact type for connector | Contact size | Part number | | Rated Current | For cable section | Extraction tool |
|-----------------------------------|--------------|---------------|--------------------|---------------|-----------------------------|-----------------|
| | | Pin | Socket | | | |
| Signal: HVG402/403/492 | 1.0mm | HVG20M1 | HVG20F1 | 7.5A max | 0.5 to 1.0 mm ² | HV-TOOL-20R |
| Signal: HVG404/406 | 1.6mm | ASRC16PC001AU | ASRC16SC001AU | 13A max | 0.75 to 1.5 mm ² | ASGTC-R-16S |
| Power: HVS, HVG402/403/404/406 | 3.0mm | HVG30M2 | HVG30F2 / HVG30FS2 | 23A max | 2.5 mm ² | HV-TOOL-30R |
| Power: HVS HVG402/403/404/406 | 3.0mm | HVG30M4 | HVG30F4 / HVG30FS4 | 40A max | 4.0 mm ² | HV-TOOL-30R |
| Power: HVG492 | 3.6mm | HVG30M6 | HVG30F6 | 50A max | 6.0 mm ² | HV-TOOL-36R |
| | | HVG30M10 | HVG30F10 | | 10.0 mm ² | |

TEMPERATURE RISE CURVE

HVBI R6

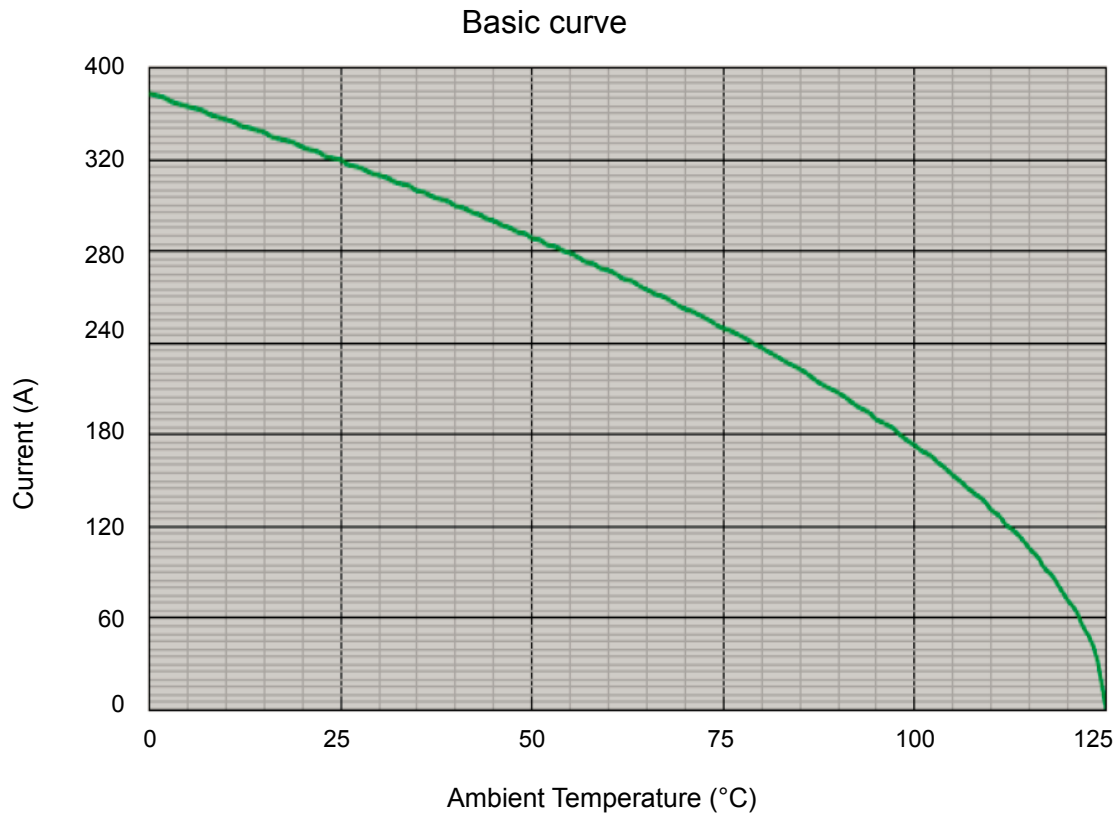


HVBI R8



TEMPERATURE RISE CURVE

HVBI R10



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www.amphenolpcd.com.cn

Notes:

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[121667-0020](#) [RD10A16-19-P6CS051/1](#) [RD16A14-12-S6CS051/2](#) [1301240290](#) [1301240347](#) [1301790476](#)