



PowerLok™ Features

- Voltage Rating : 1000V DC
- Current Rating: 20 A~500 A
- Low Contact Resistance
- IP67 & Shielding
- Automatic Secondary Lock
- HVIL
- 1 - 3 Positions Available
- 90° and 180° Plug
- 5 Keys

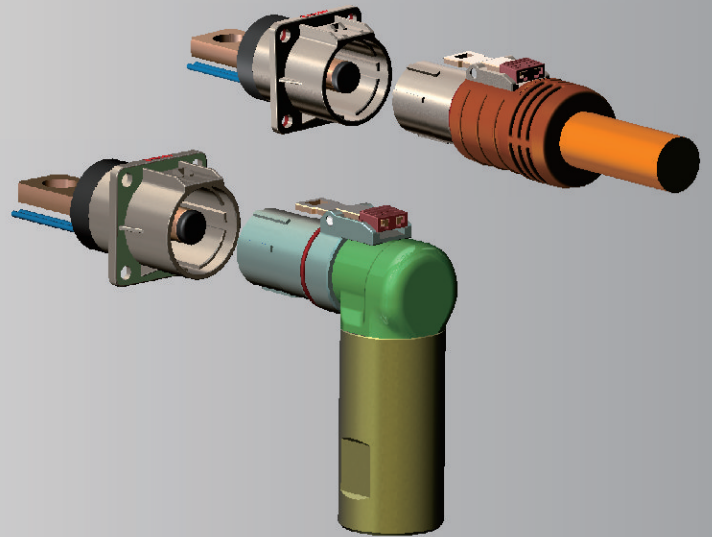
Technical Data and Features

| | |
|--------------------|-----------------|
| DC Current Rating | 20 A~500 A |
| DC Voltage Rating | 1000V |
| Temperature Range | -40°C to +125°C |
| Flammability | UL94 V-0 |
| Mating Cycle | Min. 500 |
| Protection | IP67 |
| Shielding | Fully Shielding |
| HVIL | Optional |
| Multi Polarization | 5 Keys |

PowerLok™

PowerLok™ Recommended Cable Size and Current Rating

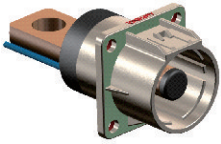
| Current Rating of Connector (A) | Accepted Cbl Size (mm ²) | Current Rating of Cable (A) |
|---------------------------------|--------------------------------------|-----------------------------|
| 60 Series | 2.5 | 20 |
| | 4 | 25 |
| | 6 | 35 |
| | 10 | 60 |
| 120 Series | 16 | 90 |
| | 25 | 120 |
| 300 Series | 35 | 150 |
| | 50 | 200 |
| | 70 | 250 |
| | 95 | 300 |
| 500 Series | 70 | 250 |
| | 95 | 300 |
| | 120 | 400 |
| | 150 | 500 |



PowerLok™ Products Overview

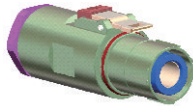
PowerLok™ 1-Position Products

Receptacle:



120 Series/300 Series/500 Series Available

Plug:



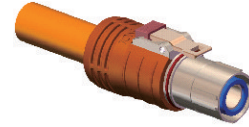
Straight

120 Series / 300 Series Available



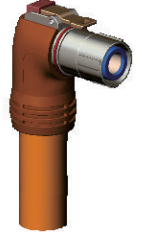
Right Angle

Overmolded Plug:



Straight

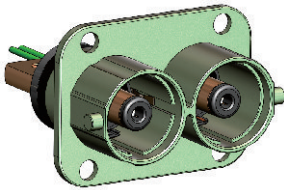
120 Series / 300 Series / 500 Series Available



Right Angle

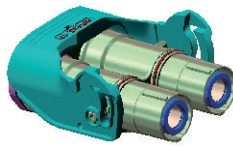
PowerLok™ 2-Position Products

Receptacle:



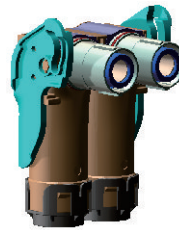
120 Series/300 Series Available

Plug:



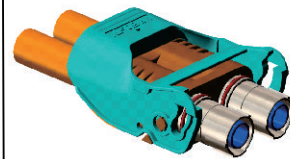
Straight

300 Series Available



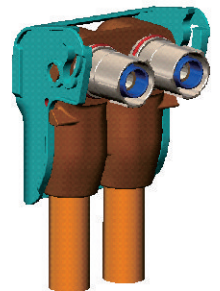
Right Angle

Overmolded Plug:



Straight

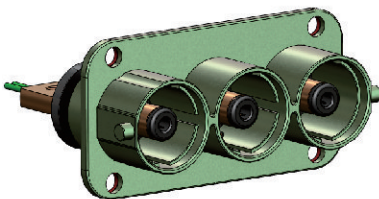
120 Series Available



Right Angle

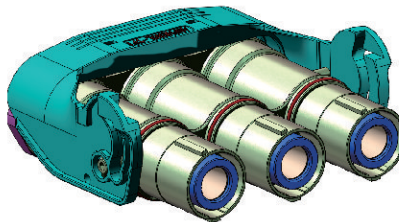
PowerLok™ 3-Position Products

Receptacle:



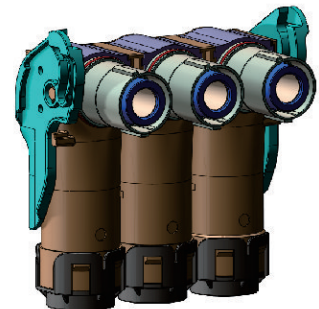
300 Series Available

Straight Plug:



300 Series Available

Right Angle Plug:

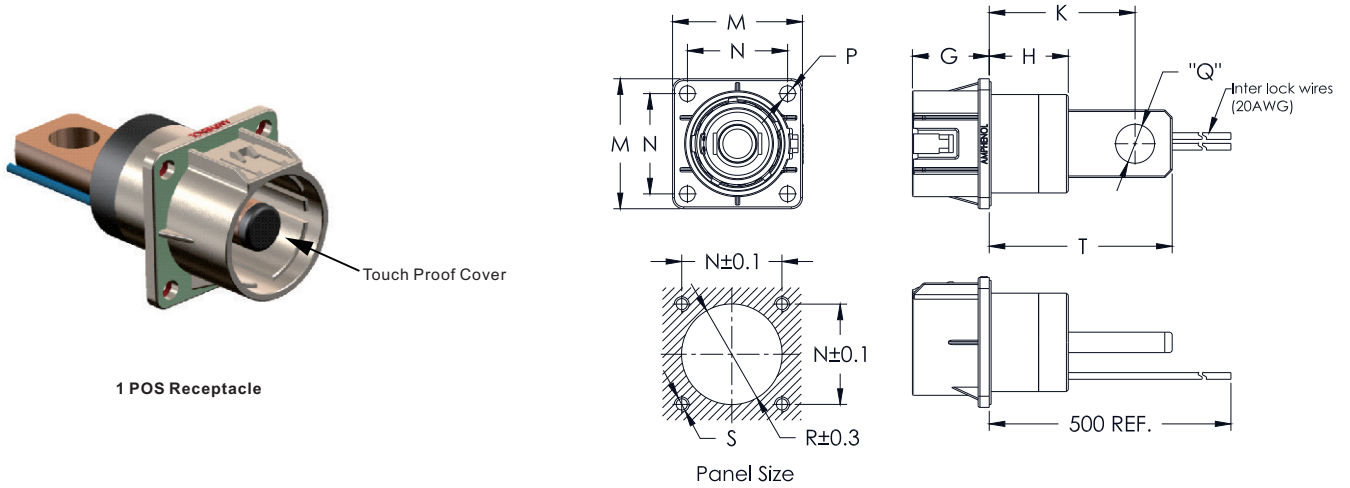


300 Series Available

Amphenol

PowerLok™ 1 POS Products

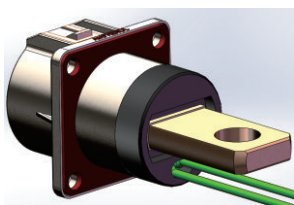
PowerLok™ 1 POS Receptacle



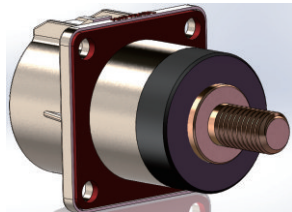
PowerLok™ 1 POS Receptacle Parameter

| Series | PowerLok™ Receptacle Size | | | | | | | | | |
|--------|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | G (mm) | H (mm) | K (mm) | M (mm) | N (mm) | P (mm) | Q (mm) | R (mm) | S (mm) | T (mm) |
| 120 | 18.0 | 13.0 | 25.5 | 28.0 | 20.0 | 3.6 | TBD | Φ 20.5 | M3 | 31.5 |
| 300 | 20.7 | 21.3 | 39.3 | 35.0 | 27.0 | 4.2 | | Φ 27.5 | M4 | 49.3 |
| 500 | 27.2 | 25.0 | 46.0 | 43.0 | 33.5 | 4.3 | | Φ 35.6 | M4 | 56.0 |

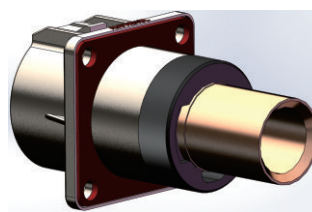
PowerLok™ 1 POS Receptacle Termination Type



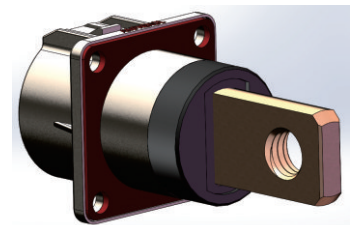
1 POS Receptacle
(Busbar Lug)



1 POS Receptacle
(Thread Pin)



1 POS Receptacle
(Tubular Lug)



1 POS Receptacle
(90 Degree Busbar Lug)

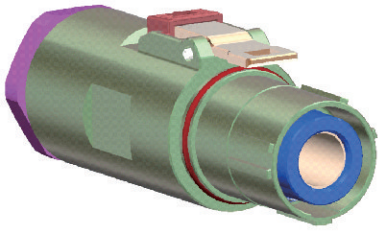
Ordering Example

| | | | | | | | | | | |
|--------------------------|---|-----------------------|----|---|---|-----|---|----|-----|--|
| Powerlok™ | | PL | 00 | X | - | 300 | - | 10 | M10 | |
| (A) Connector Type | : | 1 POS Receptacle | | | | | | | | |
| (B) Polarization & Color | : | 1 POS Key "X", Orange | | | | | | | | |
| (C) Series | : | 300 Series | | | | | | | | |
| (D) Termination Type | : | Lug | | | | | | | | |
| (E) Termination Size | : | Screw Hole, M10 | | | | | | | | |

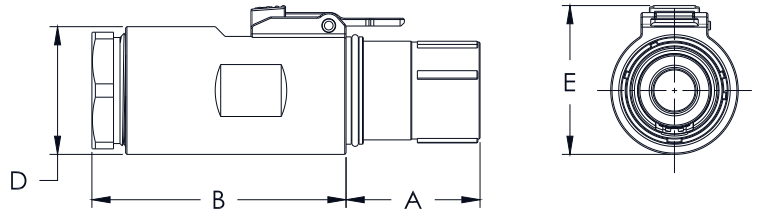
Amphenol

PowerLok™ 1 POS Products

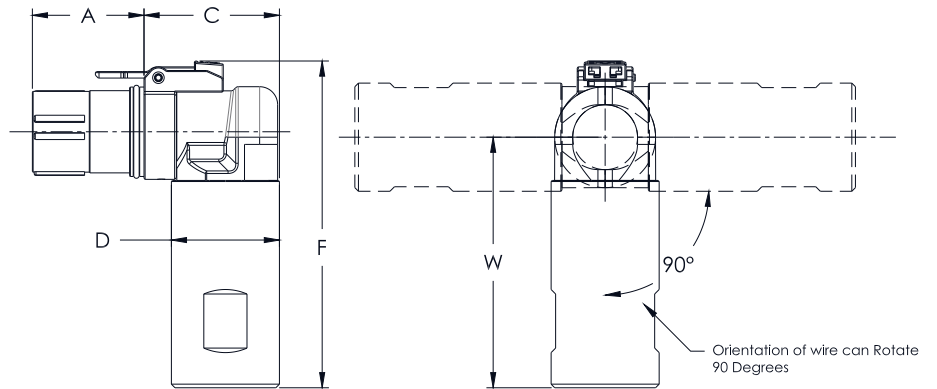
PowerLok™ 1POS Plug Connector



1 POS Plug Straight



1 POS Plug Right Angle



PowerLok™ 1POS Plug Connector Parameter

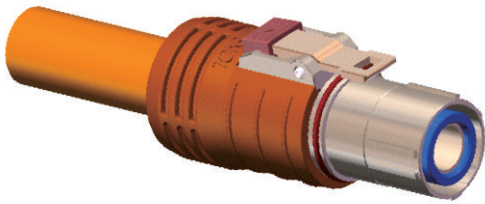
| Series | PowerLok™ 1POS Plug Connector Size | | | | | | |
|--------|------------------------------------|--------|--------|--------|--------|--------|--------|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | W (mm) |
| 120 | 22.5 | 45.0 | 30.0 | Φ 18.0 | 24.8 | 69.3 | 53.5 |
| 300 | 31.0 | 58.8 | 37.6 | Φ 29.5 | 34.4 | 90.6 | 71.0 |

Ordering Example

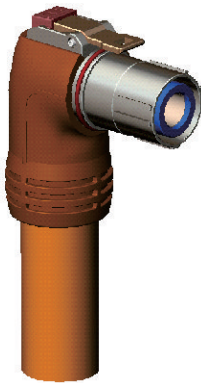
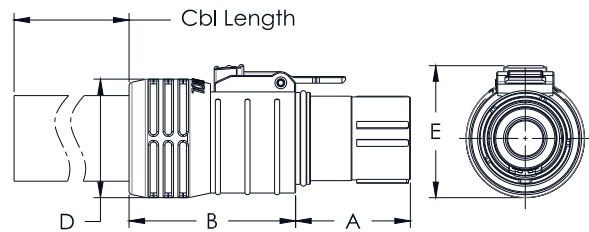
| | | | | | | | |
|--------------------------|----------------------------|----|---|---|-----|---|----|
| Powerlok™ | PL | 18 | X | - | 300 | - | 70 |
| (A) Connector Type | : Plug Connector, Straight | | | | | | |
| (B) Polarization & Color | : 1POS Key "X", Orange | | | | | | |
| (C) Series | : 300 | | | | | | |
| (D) Cable Size | : 70mm ² | | | | | | |

PowerLok™ 1 POS Products

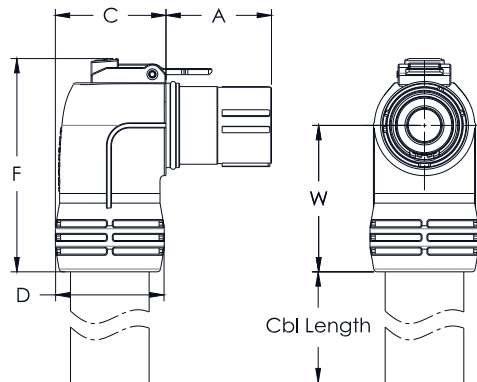
PowerLok™ 1POS Overmolded Plug



1 POS Overmolded Plug Straight



1 POS Overmolded Plug Right Angle



PowerLok™ 1 POS Overmolded Plug Parameter

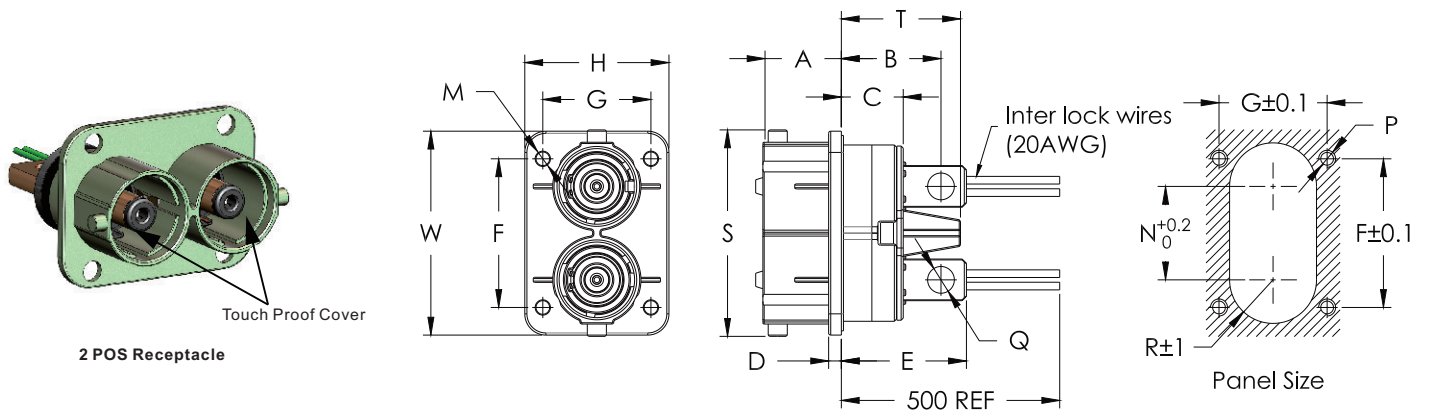
| Series | PowerLok™ 1POS Overmolded Plug Size | | | | | | | Cable Length |
|--------|-------------------------------------|--------|--------|--------|--------|--------|--------|--------------|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | W (mm) | |
| 120 | 22.5 | 39.0 | 25.3 | Φ 24.6 | 28.5 | 50.8 | 35.0 | TBD |
| 300 | 31.0 | 45.0 | 32.5 | Φ 32.0 | 35.6 | 62.6 | 43.0 | |
| 500 | 41.1 | 52.0 | 43.0 | Φ 40.0 | 43.6 | 78.6 | 55.0 | |

Ordering Example

| | | | | | | | | |
|--------------------------|--------------------------------|----|----|---|---|-----|---|----|
| Powerlok™ | | PL | 20 | X | - | 300 | - | 70 |
| (A) Connector Type | : Overmolded Plug, Right Angle | | | | | | | |
| (B) Polarization & Color | : 1POS Key "X", Orange | | | | | | | |
| (C) Series | : 300 | | | | | | | |
| (D) Cable Size | : 70mm ² | | | | | | | |

PowerLok™ 2 POS Products

PowerLok™ 2POS Receptacle



PowerLok™ 2 POS Receptacle Parameter

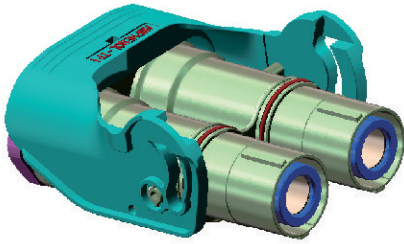
| Series | PowerLok™ 2POS Receptacle Size | | | | | | | | | | | | | | | |
|--------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|--------|--------|--------|--------|-----|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | M (mm) | N (mm) | P | S (mm) | T (mm) | W (mm) | R (mm) | Q |
| 120 | 18.0 | 23.5 | 14.6 | 3.0 | 29.5 | 35.0 | 25.5 | 34.0 | Φ 3.6 | 22.0 | M3 | 48.6 | 27.8 | 48.0 | 10.3 | TBD |
| 300 | 22.0 | 35.0 | 20.7 | 3.0 | 43.0 | 45.0 | 38.0 | 48.0 | Φ 6.2 | 30.0 | M6 | 65.4 | 44.7 | 65.0 | 13.8 | |

Ordering Example

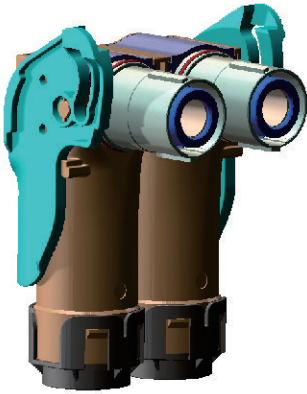
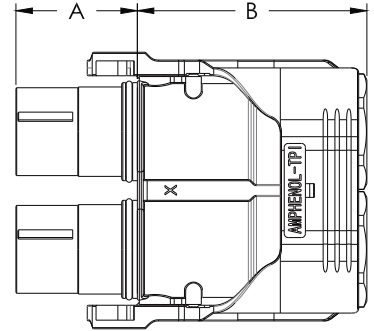
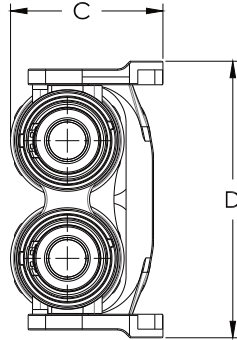
| | | | | | | |
|--------------------------|-------------------------|----|----|-------|------|-----|
| Powerlok™ | PL | 08 | 2X | - 300 | - 10 | M10 |
| (A) Connector Type | : Receptacle | | | | | |
| (B) Polarization & Color | : 2 POS Key "X", Orange | | | | | |
| (C) Series | : 300 | | | | | |
| (D) Termination Type | : Lug | | | | | |
| (E) Stud Size | : Screw Hole, M10 | | | | | |

PowerLok™ 2 POS Products

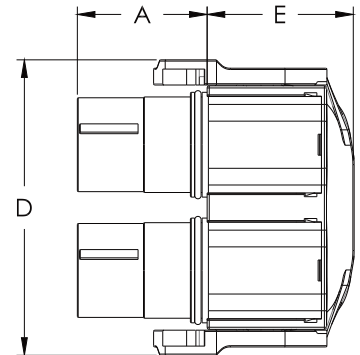
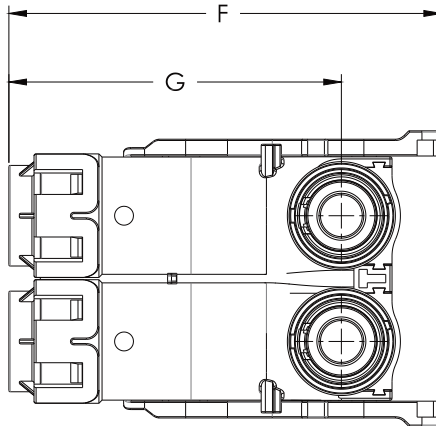
PowerLok™ 2POS Plug Connector



2 POS Plug Straight



2 POS Plug Right Angle



PowerLok™ 2POS Plug Connector Parameter

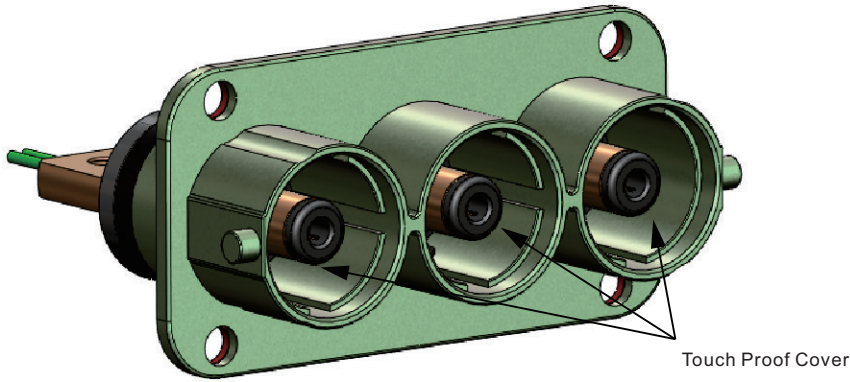
| Series | PowerLok™ 2POS Plug Connector Size | | | | | | |
|--------|------------------------------------|--------|--------|--------|--------|--------|--------|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) |
| 120 | 22.5 | 51.0 | 29.7 | 51.5 | 31.2 | 64.0 | 43.0 |
| 300 | 31.0 | 58.6 | 38.8 | 70.5 | 34.9 | 103.3 | 79.4 |

Ordering Example

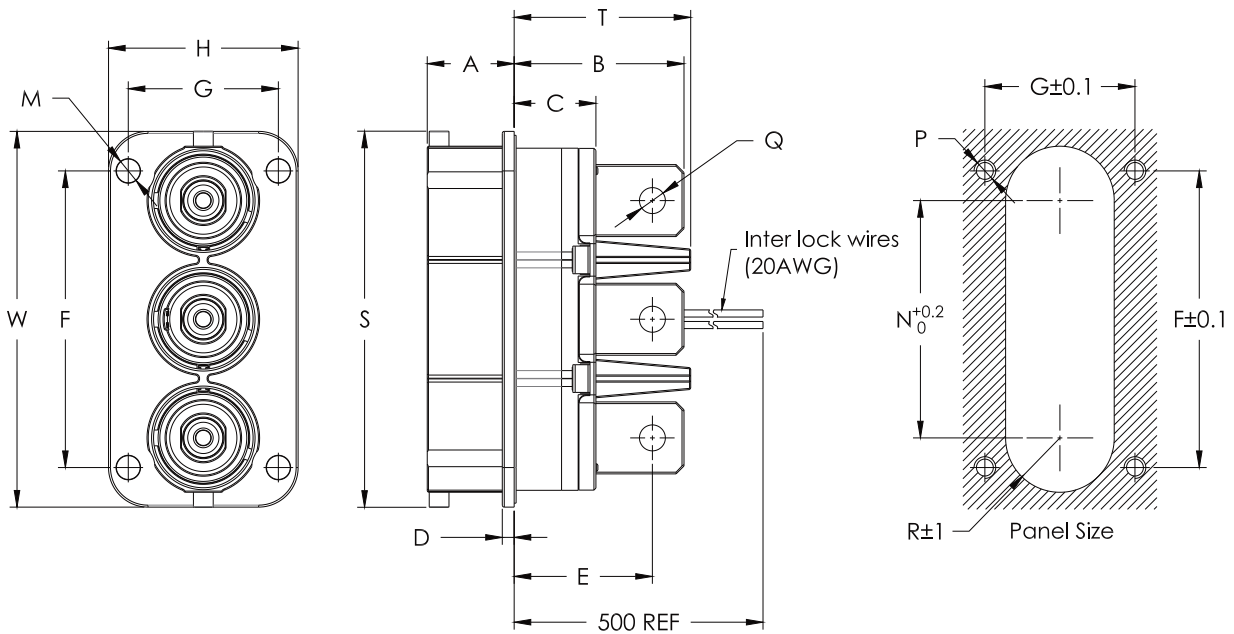
| | | | | | | |
|--------------------------|----------------------------|----|----|---|-----|-----|
| Powerlok™ | PL | 18 | 2X | - | 300 | -70 |
| (A) Connector Type | : Plug Connector, Straight | | | | | |
| (B) Polarization & Color | : 2 POS Key "X" | | | | | |
| (C) Series | : 300 | | | | | |
| (D) Cable Size | : 70mm ² | | | | | |

PowerLok™ 3 POS Products

PowerLok™ 3POS Receptacle



3POS Receptacle



PowerLok™ 3 POS Receptacle Parameter

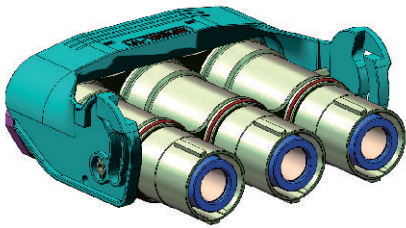
| Series | PowerLok™ 3POS Receptacle Size | | | | | | | | | | | | | | | |
|--------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|--------|--------|--------|--------|-----|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | H (mm) | M (mm) | N (mm) | P | S (mm) | T (mm) | W (mm) | R (mm) | Q |
| 300 | 22.0 | 43.0 | 21.2 | 3.0 | 35.0 | 75.0 | 38.0 | 48.0 | Φ6.2 | 60.0 | M6 | 95.1 | 44.7 | 95.0 | 13.8 | TBD |

Ordering Example

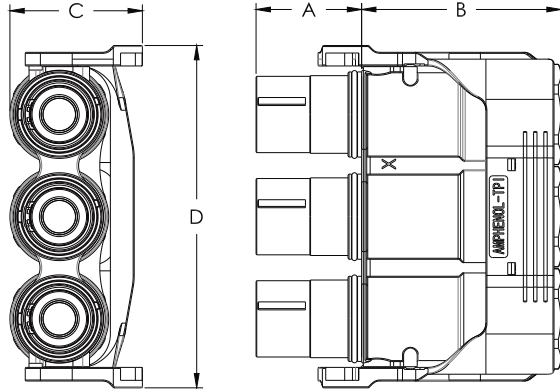
| | | | | | | | | |
|--------------------------|-------------------|----|----|---|-----|---|----|-----|
| Powerlok™ | PL | 08 | 3X | - | 300 | - | 10 | M10 |
| (A) Connector Type | : Receptacle | | | | | | | |
| (B) Polarization & Color | : 3 POS Key "X" | | | | | | | |
| (C) Series | : 300 | | | | | | | |
| (D) Termination Type | : Lug | | | | | | | |
| (E) Stud Size | : Screw Hole, M10 | | | | | | | |

PowerLok™ 3 POS Products

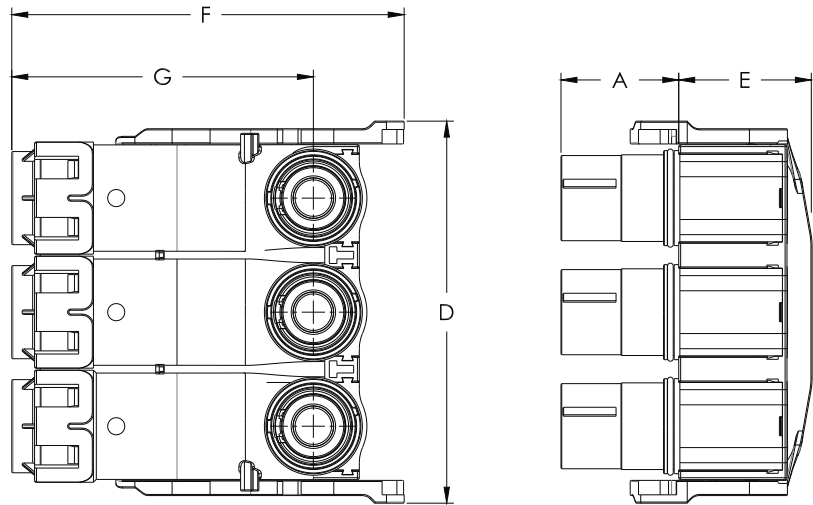
PowerLok™ 3POS Plug Connector



3 POS Plug Straight



3 POS Plug Right Angle



PowerLok™ 3POS Plug Connector Parameter

| Series | PowerLok™ 3POS Plug Shielding Parameter | | | | | | |
|--------|---|--------|--------|--------|--------|--------|--------|
| | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) |
| 300 | 31.0 | 58.6 | 38.9 | 100.5 | 34.9 | 103.3 | 79.4 |

Ordering Example

| | | | | | | |
|-------------------------|----------------------------|----|----|---|-----|-----|
| Powerlok™ | PL | 18 | 3X | - | 300 | -70 |
| (A)Connector Type | : Plug Connector, Straight | | | | | |
| (B)Polarization & Color | : 3 POS Key "X" | | | | | |
| (C)Series | : 300 | | | | | |
| (D)Cable Size | : 70mm ² | | | | | |