Amphenol®



SurLok Plus™

The SurLok Plus[™] compression lug is a field installable, highly reliable alternative to common compression lugs. Using industry standard crimp, screw, and busbar termination options, thus eliminating the need to purchase special torque tools.

Amphenol's SurLok Plus[™] is an environmentally sealed version of our original SurLok[™] but available in smaller sizes, and features a quick lock and press- to-release design. Incorporating the latest R4 RADSOK® Technology, SurLok Plus[™] is a compact, quick mating, and robust product line.

The RADSOK® high amperage contact technology utilizes high tensile strength properties of a stamped and formed, high conductivity alloy grid to produce low insertion forces while maintaining a large conductive surface area.

The R4 version of the RADSOK® represents the culmination of three years of research and development in laser welding copper based alloys.

Features:

- R4 RADSOK® Technology
- IP67 rated
- Touch Proc
- Quick lock and press-to-release design
- "Keyway" design to prevent incorrect mating
- 360° rotating plug
- Various termination options (Threaded, Crimp, Busbar)
- Compact robust desig

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| Technical Data | | | | | | | | |
|-------------------|-----------------------------------------------|-----------------------------|----------------|--|--|--|--|--|
| Contact Size | 5.7mm (120A) 8.0mm (200A) 10.3mm (300A) | IP Rating | IP 67 | | | | | |
| Current Rating | 120A~300A | Protection | Touch Proof | | | | | |
| Operating Voltage | 1000V AC/DC | AC/DC Flammability UL 94-V0 | | | | | | |
| Operating Temp | -40°C to 125°C | Locking | Spring Locking | | | | | |

в – C Screw Termination

| Cine | Screw Termination | | | | | | | |
|--------|-------------------|------|-----|--|--|--|--|--|
| Size | А | В | С | | | | | |
| 5.7mm | 16 | 37.7 | 1 | | | | | |
| 8.0mm | 19 | 46.2 | 1 | | | | | |
| 10.3mm | 25.8 | 55.9 | 0.3 | | | | | |



| Size | Plug Dimensions | | | | | | | | |
|--------|-----------------|------|------|------|--|--|--|--|--|
| Size | Α | В | С | D | | | | | |
| 5.7mm | 22.6 | 58.8 | 30 | 18 | | | | | |
| 8.0mm | 29 | 75.6 | 38.6 | 21.6 | | | | | |
| 10.3mm | 40.5 | 88.5 | 42.5 | 30.3 | | | | | |



| Size | Crim | p Termina | tion |
|--------|------|-----------|------|
| Size | А | В | С |
| 5.7mm | 16 | 40.7 | 1 |
| 8.0mm | 19 | 53.7 | 1 |
| 10.3mm | 25.8 | 69.2 | 0.3 |



| Size | | Plug Din | nensions | |
|-------|------|----------|----------|------|
| Size | Α | В | С | D |
| 8.0mm | 24.6 | 72.4 | 34.8 | 21.4 |

The markets and applications for the SurLok Plus™ series include but are not limited to the following:

- EV/HEV
- BMS/Energy Storage
- Medical
- Rail Mass Transit
- Process Control/Automation
- Heavy Equipment



| Size | Busb | ar Termina | ation |
|--------|------|------------|-------|
| Size | А | В | С |
| 5.7mm | 16 | 47.6 | 1 |
| 8.0mm | 19 | 62.2 | 1 |
| 10.3mm | 43 | 68.8 | 0.3 |



| Cina | | Press- | Fit Termi | ination | |
|-------|----|--------|-----------|---------|-------|
| Size | Α | В | С | D | E |
| 5.7mm | 16 | 32.8 | 27.7 | 5.1 | 3±0.3 |

| | Product Series: SurLok Plus™ | | Plug | RA | DSOK® Size | Ар | plicable Cable Size | | Backs | hel | ls | | Sealing | | nnector Color | (On | eyway hit for no eyway) | (0) | EMI mit for EMI) | (0 | IVIL mit for HVIL) | | | | | | | | | | |
|--------------|---------------------------------|--------|--------------------|-------------|------------------------|----------------------|----------------------------------------------------------------------------------------|----------|-----------------------------|-------------------|-------------------------|---|----------------------------|---------|-------------------|---------------|---------------------------------------|------------|--------------------------|----------|---------------------------------|------|----------------------------|---|--------|---|-----|--|--|--|--|
| | | | | A | 5.7mm | 16 | 16mm ² : 100 Amps | | | | | | | 0 | Orange | 0 | 90° | | | | | | | | | | | | | | |
| | | P | Right | A | 5.711111 | 25 | 25mm ² : 120 Amps | | W/ Backshells S | B W/ Backshells S | | | | | B M// Back | | D W/ Declark | | D W// Dashahalla | | | | IP67 Sealed (W/ Grommet | 0 | Orange | 0 | 901 | | | | |
| | | P | Angle Plug | в | 8.0mm | 35 | 35mm ² : 150 Amps | | | W/ Dackshells 3 | B W/ Backsh | | B W/ Backsnells | | W/ Backsnells | | 5 | & O-Rings) | в | Black | 4 | 180° | | | | | | | | | |
| g | | | | D | 8.000 | 50 | 50mm ² : 200 Amps | | | | 3-7 | | | DIACK | ' | 180 | | | | | | | | | | | | | | | |
| PLUG | SLP | | | с | 10.3mm | 70 | 70mm ² : 300 Amps | | | | | | | | | 2 | 60° | Е | EMI | Н | HVIL | | | | | | | | | | |
| - | | | Straight | | 10.300 | 85 | 85mm ² : 350 Amps | | W/O B | | | | | | | 2 | 601 | | | | | | | | | | | | | | |
| | | IP | Plug | D | 12mm | 12 | 120mm ² : 400 Amps | N | (For Overmo Only) | | N Non-Sealed | R | Red | 3 | 120° | | | | | | | | | | | | | | | | |
| | | | | Е | 14mm | 18 | 185mm ² : 500 Amps | | | , , , | | | | | 4 | 150° | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Product Series: SurLok Plus™ | R | eceptacle | R | ADSOK® Size | | *Applicable Cable Size | Ter | mination Style | | Panel Mount | | Sealing | Co | onnector Color | (0 | eyway nit for no (eyway) | (0 | EMI mit for o EMI) | (0 | HVIL mit for HVIL) | | | | | | | | | | |
| | | R | eceptacle | | Size | 16 | | | Style | | Mount | | Sealing | | Color | (Oi k | nit for no (eyway) | (0 | mit for | (0 | mit for | | | | | | | | | | |
| | | | Receptacle | Δ | | | Cable Size | Ter B | | r | | | IP67 Sealed | Сс О | | (0 | nit for no | (0 | mit for | (0 | mit for | | | | | | | | | | |
| CLE | | R R | | A | Size 5.7mm | 16 | Cable Size | | Style | | Panel Mount W/ | S | | 0 | Color Orange | (° | 90° | (0 | mit for | (0 | mit for | | | | | | | | | | |
| IACLE | SurLok Plus™ | | Receptacle (W/O | Δ | Size | 16 25 | Cable Size 16mm² : 100 Amps 25mm² : 120 Amps | | Style Busbar | r | Mount Panel Mount | S | IP67 Sealed (W/ Grommet | | Color | (Oi k | nit for no (eyway) | (0 n | mit for o EMI) | (O nc | mit for HVIL) | | | | | | | | | | |
| EPTACLE | | | Receptacle (W/O | AB | Size 5.7mm 8.0mm | 16 25 35 | Cable Size 16mm² : 100 Amps 25mm² : 120 Amps 35mm² : 150 Amps | | Style Busbar Threaded | r | Panel Mount W/ | S | IP67 Sealed (W/ Grommet | 0 | Color Orange | (°) 0 1 | 90° 180° | (0 | mit for | (0 | mit for | | | | | | | | | | |
| RECEPTACLE | SurLok Plus™ | | Receptacle (W/O | A B C | Size 5.7mm | 16 25 35 50 | Cable Size 16mm² : 100 Amps 25mm² : 120 Amps 35mm² : 150 Amps 50mm² : 200 Amps | | Style Busbar Threaded | r | Panel Mount W/ | S | IP67 Sealed (W/ Grommet | 0 | Color Orange | (° | 90° | (0 n | mit for o EMI) | (O nc | mit for HVIL) | | | | | | | | | | |

*Applicable cable size is only for crimping termination

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

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14mm

18

185mm² : 500 Amps

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