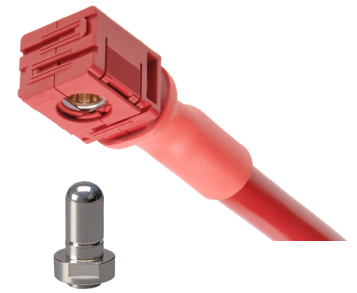


SW1 High-Current Wire-to-Board and Busbar Interconnects

SW1 Wire-to-Board/Wire-to-Busbar Interconnects incorporate COEUR socket technology which enables a high-current-carrying capacity in three sizes: 6.00mm (120.0A), 8.00mm (185.0A) and 11.00mm (300.0A) with a unique positive-locking design for secure mating.



SW1 Cable Assembly and Locking Pin

FEATURES AND ADVANTAGES

Multiple contact beams with optimal current-carrying capacity

Provides low contact resistance, low voltage drop, and minimal heat generation at the contact interface



Housing	PBT
Voltages	1,000V
Currents	120.0A (6.00mm), 185.0A (8.00mm) and 300.0A (11.00mm)
Operating temperatures	-40 to +125°C
Mating Forces	50N (6.00mm), 60N (8.00mm) and 70N (11.00mm)

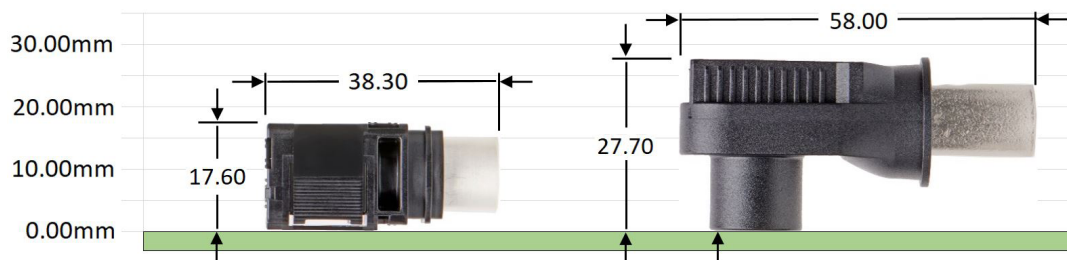
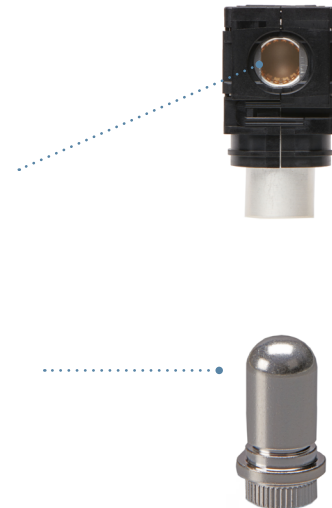
Color-coded receptacle housings

Help to differentiate circuits and to prevent mis-mating when multiple cable assemblies are used on the same application



Positive-locking stainless steel spring clips

Help secure mating to prevent cable assemblies from backing off pins due to shock, vibration or mishandling; stainless steel spring clips retract when pressed and engage once the pressure is released to lock into groove on pin

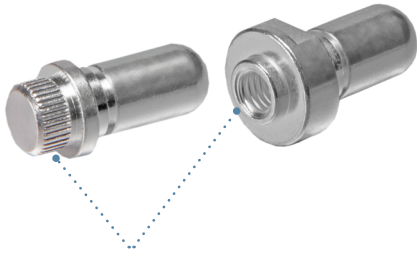


Compact Design

Offers significantly lower height and significantly shorter length than competitor's 8.00mm size receptacle assemblies, resulting in a connector that is better suited for applications requiring tight spaces.

SW1 High-Current Wire-to-Board and Busbar Interconnects >

FEATURES AND ADVANTAGES



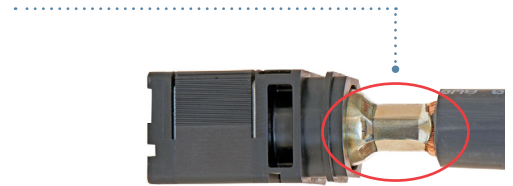
Design flexibility

Offers designers options for attaching pins to different substrates

- Screw-mount pins attach to either printed circuit boards or busbars
- Knurled press-fit pins attach to busbars

Reliable crimp geometry with high-quality 8-sided crimp profile

Helps ensure minimal contact resistance at the interface between the wire and the crimp barrel; contributes to the system's minimal heat generation in higher current-carrying capacity compared to other designs



Quick connect/pinch-to-release cable assemblies

Offers enhanced functionality in tight spaces; can be mated, locked or unlocked and unmated with a single hand by pinching the ergonomic ribs



MARKETS AND APPLICATION

Energy Storage

Battery storage systems
Power conditioning equipment

Industrial Automation

Factory equipment
Robotics



Energy Storage



Industrial Equipment

SW1 High-Current Wire-to-Board and Busbar Interconnects >

SPECIFICATIONS

Reference Information

Packaging:

Cable Assemblies: Bag

Locking Pin: Bag, vacuum-sealed

UL File No.: E29179

CSA File No.: 70184994

Use With: Printed circuit boards and busbars

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Physical

Receptacle Housing: PBT

Contact: High-performance Copper (Cu) Alloy

Plating:

Socket Contact Area—Gold (Au)

Pin - Silver (Ag)

PCB Thickness (min.): 1.58mm

Busbar Thickness (min.): 1.50mm

Flammability: UL 94V-0

Operating Temperature: -40 to +125°C

Electrical (6.00mm Size)

Voltage (max.): 1,000V

Current (max.): 120.0A

Contact Resistance (max.): 0.25 milliohms

Mechanical (6.00mm Size)

Mating Force (max.): 50N

Unmating Force (min.): 5N

Durability (min.): 200 mating cycles

Electrical (8.00mm Size)

Voltage (max.): 1,000V

Current (max.): 185.0A

Contact Resistance (max.): 0.25 milliohms

Mechanical (8.00mm Size)

Mating Force (max.): 60N

Unmating Force (min.): 6N

Durability (min.): 200 mating cycles

Electrical (11.00mm Size)

Voltage (max.): 1,000V

Current (max.): 300.0A

Contact Resistance (max.): 0.25 milliohms

Mechanical (11.00mm Size)

Mating Force (max.): 70N

Unmating Force (min.): 7N

Durability (min.): 200 mating cycles

www.molex.com/link/SW1.html