

# Russellstoll®

## Control Circuit Connectors Overview

### Defined

- Any application where electrical connections need protection from water and/or dust entering the contacts or the wiring compartment
- Cable or conduit sealing and device locking designs are critical
- Metal connectors are usually preferred for long service life

### Russellstoll Line Selections for Indoor and Outdoor Applications

#### SK/SKW Multi-Pin Control Circuit to 11P12W 20A

The toughest multi-circuit, screw-termination circular connector system; use self-locking SK components indoor and collar-locking SKW components outdoor; load breaking at 20 amps. Solid brass (silver-plated) contacts ensure long life and interiors can be rebuilt. All pin counts are available from 3P4W through 11P12W, gasketed interiors in SKW.

#### Switches 125/250VAC 10A, 20A and 30A

SPST and SPDT Tumbler Switches are offered in industrial and hazardous-duty styles. Heavy-duty, copper-free aluminum housings (brass available) around selected common ratings. Switches carry AC-only ratings (see Hazardous Duty section for explosion-proof switches).

#### Interlocks through 4P5W 30A through 400A

A broad offering of performance interlocks in sheet steel, cast aluminum or brass. Automotive/Industrial welding units include 60A and 100A versions, both Heavy Service Ever-Lok® and MaxGuard® lines. Switched, fused and circuit breaker versions are available as well as switchgear selections. Custom enclosures wall-mount or column-mount in standard 8" I-beam webs.



### Typical Application Groups

#### General Industrial Marine

Lighting Systems  
Shore-to-Ship Power  
Welding Stations  
Portable Distribution Centers  
Shipboard Power Outlets  
Telephone Shore-to-Ship

#### Government, Municipal and Utilities

Portable Building Power  
Army Corps of Engineers  
Utilities Panels  
Emergency Power Systems  
Sewage Pumping Stations  
Lighting and Controls

#### Construction and Agriculture

Generator Sets and Systems  
Portable Tools and Equipment  
Irrigation System Panels  
Portable Lighting  
and Equipment

#### Industrial and OEM

Factory Power Outlets  
HVACR Controls  
Machine Tool Controls  
Amusement Park Systems

## Control Circuit Connectors — Types SK and SKW Overview

20 Amp, 250 Volts AC or DC, 600 Volts AC Maximum Rating  
Load-Breaking Multi-Circuit Receptacles, Plugs, Connectors and Inlets

### Features and Benefits



#### Type SK

Type SK multi-circuit receptacles, plugs, inlets and connectors are designed for indoor or NEMA 1 automatic press, tool control and welder applications requiring rugged, shock-resistant devices capable of safely interrupting rated currents under load.

Receptacles and connectors have Neoprene gasket mounts and positive grounding path through separate contact. Equipment grounding contacts "make first" and "break last." Wiring space is generous. Listed ratings are for interrupting currents under load.

The time-tested Ever-Lok® automatic locking feature provides positive connections under the most severe conditions of shock and vibration. Yet a twist of the wrist instantly disengages the plug when required.

#### Type SKW

Type SKW multi-circuit receptacles, plugs, inlets and connectors are designed for outdoor NEMA 4, rough service and critical environment machinery, HVACR systems, servo control and other automatic/controlled functions requiring rugged, shock-resistant devices capable of safely breaking rated loads. These watertight and oil-tight devices are equipment grounded with ground contacts that "make first" and "break last." Wiring space is generous. Listed ratings are for full load interrupting currents.

Both series feature simple set-screw wiring termination in a circular connector with up to 11-pole 12-wire circuit capability. A wide selection of cable bushings can be specified upon ordering at no additional charge. Conduit adapters are also available for shielded or construction usage for both SK and SKW series.

**NOTE:** For more than 12 circuits, miniature connectors or rectangular format, ask about T&B Pos-E-Kon® line.

Indoor, NEMA1  
 20 Amp Load Breaking  
 250 Volts DC  
 600 Volts AC (Maximum Rating)

### Standard Service

### Connector

### Reverse Service

POLES/ WIRES	FEMALE RECEPTACLE STYLE SKR	MALE PLUG STYLE SKP	FEMALE CONNECTOR STYLE SKC	MALE RECEPTACLE STYLE SKRR	CONNECTOR*/ FEMALE PLUG STYLE SKCU	CABLE BUSHING HOLE ID
2P3W	SKR3G	SKP3G	SKC3G	SKRR3G	SKCU3G	5/8"
3P4W	SKR4G	SKP4G	SKC4G	SKRR4G	SKCU4G	5/8"
4P5W	SKR5G	SKP5G	SKC5G	SKRR5G	SKCU5G	3/4"
5P6W	SKR6G	SKP6G	SKC6G	SKRR6G	SKCU6G	3/4"
6P7W	SKR7G	SKP7G	SKC7G	SKRR7G	SKCU7G	3/4"
7P8W	SKR8G	SKP8G	SKC8G	SKRR8G	SKCU8G	7/8"
8P9W	SKR9G	SKP9G	SKC9G	SKRR9G	SKCU9G	7/8"
9P10W	SKR10G	SKP10G	SKC10G	SKRR10G	SKCU10G	1"
10P11W	SKR11G	SKP11G	SKC11G	SKRR11G	SKCU11G	1"
11P12W	SKR12XG	SKP12XG	SKC12XG	SKRR12XG	SKCU12XG	1"

\* Connectors: Both SKCU and SKC connectors will mate with standard service SKP plugs. SKC devices offer external shroud protection for female contacts. Both devices will lock with plug.

NOTE: With conduit fittings, plugs and connectors can be furnished with adapters to accommodate rigid conduit or standard connectors for armored and non-metallic cable or flexible conduit. See **page 153**. Special construction: press control lockout dummy, Cat. #SKPD-

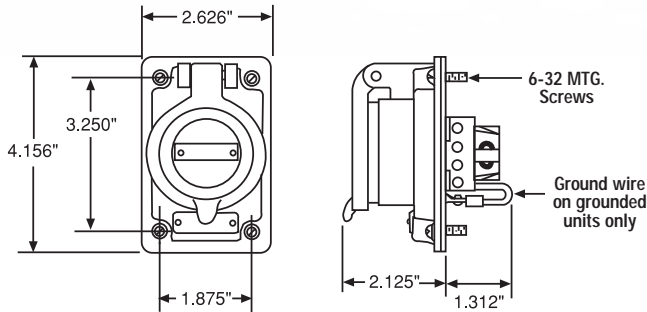
### Specifications

- Receptacle Housing: Furnished with Neoprene gasket and 6-32 mounting screws  
 Type SKWR — Cast aluminum, corrosion-resistant copper free alloy  
 Style SKR — Heavy-gauge steel, plated
- Plug Housing:  
 Type SKP — Steel, zinc-plated with heavy cast aluminum alloy cable clamp and cable bushing  
 Type SKWP — Cast aluminum, corrosion-resistant copper-free alloy, epoxy powder coat finish. Furnished with heavy cast cable clamp and cable bushing
- Connector Housing: Cast aluminum, corrosion-resistant copper-free alloy, epoxy powder coat finish. Furnished with heavy cast cable clamp and cable bushing
- Conduit Boxes: Cast boxes for above receptacles are listed on **page 150**. Type SK receptacles require FD series or DSFD box; can be furnished with single-gang outlet box at additional cost. When required, add suffix catalog number of box to catalog number of receptacle
- Cable Bushing: Oil-resistant Neoprene strain relief cable bushing regularly furnished with hole size as listed; other hole sizes available at no extra cost if specified on order. See **page 153** for additional sizes
- Interiors: Contacts are removable and have pressure-type terminals for 12 AWG maximum conductors
- Insulating Bodies: Arc- and impact-resisting mold composition
- Contacts: Silver-plated with fully insulated pressure screw-type terminals
- Repair Kits: Pins/Sleeves Repair — Components for rebuild of 2-4 interiors

Male Devices      CAT. NO. SKX12MS  
 Female Devices    CAT. NO. SKX12FA

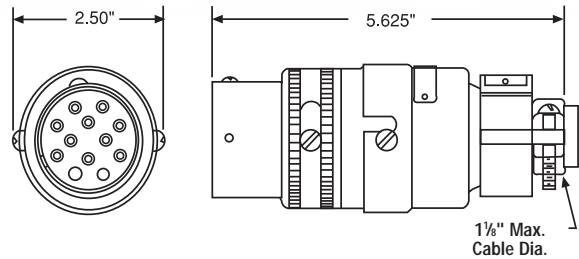
### Standard Service

Female Receptacle — Style SKR



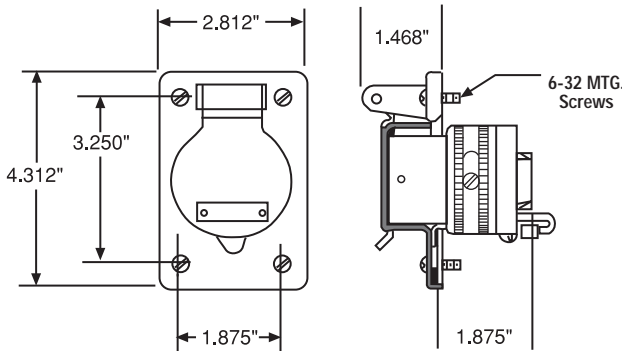
NOTE: All require FD or DSFD series box mounting.

Male Plug — Style SKP

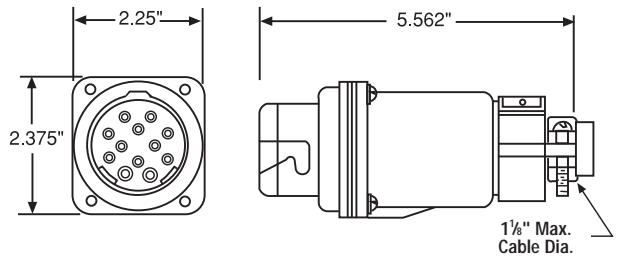


### Reverse Service

Male Receptacle — Style SKRR

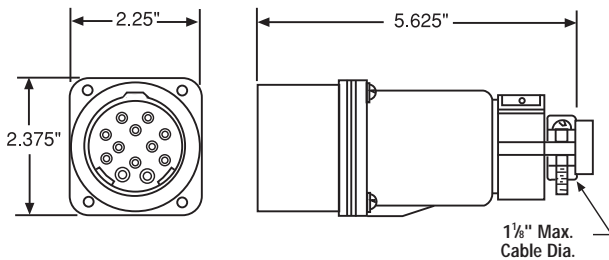


Female Plug — Style SKCU (non-shrouded connection)



### Connector





Female Connector — Style SKC (shrouded style)





### Ordering Information

Outdoor, NEMA 4 (with screw cap)  
 20 Amp Load Breaking  
 600 Volts AC Max.  
 250 Volts DC

					
POLES/ WIRES	FEMALE RECEPTACLE STYLE SKWR	MALE PLUG STYLE SKWP	FEMALE CONNECTOR STYLE SKWC	MALE MOTOR PLUG STYLE SKWM	CABLE BUSHING HOLE ID
2P3W	<b>SKWR3G</b>	<b>SKWP3G</b>	<b>SKWC3G</b>	<b>SKWM3G</b>	5/8"
3P4W	<b>SKWR4G</b>	<b>SKWP4G</b>	<b>SKWC4G</b>	<b>SKWM4G</b>	5/8"
4P5W	<b>SKWR5G</b>	<b>SKWP5G</b>	<b>SKWC5G</b>	<b>SKWM5G</b>	3/4"
5P6W	<b>SKWR6G</b>	<b>SKWP6G</b>	<b>SKWC6G</b>	<b>SKWM6G</b>	3/4"
6P7W	<b>SKWR7G</b>	<b>SKWP7G</b>	<b>SKWC7G</b>	<b>SKWM7G</b>	3/4"
7P8W	<b>SKWR8G</b>	<b>SKWP8G</b>	<b>SKWC8G</b>	<b>SKWM8G</b>	7/8"
8P9W	<b>SKWR9G</b>	<b>SKWP9G</b>	<b>SKWC9G</b>	<b>SKWM9G</b>	7/8"
9P10W	<b>SKWR10G</b>	<b>SKWP10G</b>	<b>SKWC10G</b>	<b>SKWM10G</b>	1"
10P11W	<b>SKWR11G</b>	<b>SKWP11G</b>	<b>SKWC11G</b>	<b>SKWM11G</b>	1"
11P12W	<b>SKWR12XG</b>	<b>SKWP12XG</b>	<b>SKWC12XG</b>	<b>SKWM12XG</b>	1 1/8"

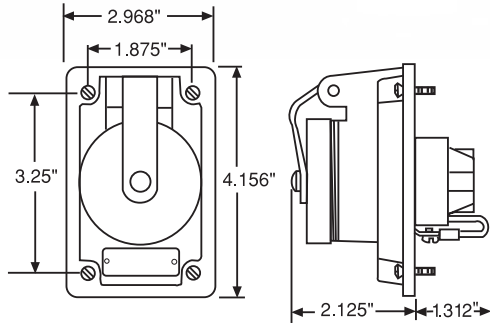
**NOTE:** SKWM male inlet accommodates SKWC Connector (Female). Plugs and connectors can be furnished with adapters to accommodate rigid conduit or standard connectors for armored and non-metallic cable or flexible conduit. See **page 153**.

### Specifications

- Receptacle Housing: Type SKWR — Cast aluminum, corrosion-resistant copper-free alloy. Furnished with Neoprene gasket and stainless steel 6-32 mounting screws
- Plug and Connector Housing: Heavy cast aluminum, corrosion-resistant copper-free alloy, epoxy powder coat finish; furnished with heavy cast cable clamp and cable bushing
- Conduit Boxes: Cast boxes for above receptacles are on **page 150**. Can be furnished with single-gang outlet box at additional cost. When required, add suffix catalog number of box to catalog number of receptacle
- Cable Bushing: Oil-resistant, Neoprene strain relief cable bushing regularly furnished with hole size as listed. Other hole sizes available at no extra cost if specified on order. See **page 153** for additional sizes
- Protective Caps: Waterproof caps complete with mounting cable
  - Male Devices **CAT. NO. F26874C** (Cup Cap)
  - Female Devices **CAT. NO. F04077** (Screw Cap)
- Repair Kits: Pins/Sleeves Repair — Components for rebuild of 2-4 interiors
  - Male Devices **CAT. NO. SKX12MW**
  - Female Devices **CAT. NO. SKX12FA**

### Receptacle

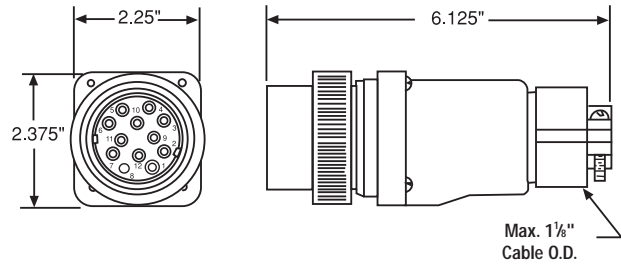
Style SKWR



NOTE: All require FD or DSFD series box mounting.

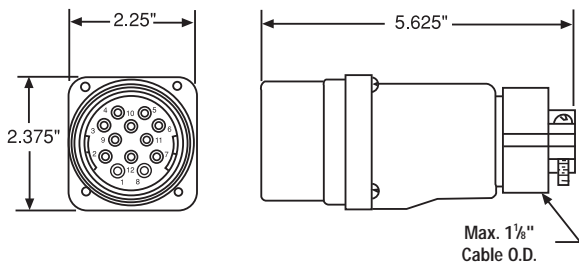
### Plug

Style SKWP



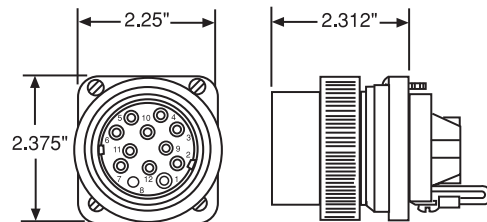
### Connector

Style SKWC



### Motor Plug

Style SKWM



# Russellstoll®

## Control Circuit Connector Accessories

### Type FS (Shallow) and Type FD (Deep)

Aluminum boxes have 6-32 cover mounting holes tapped to accommodate all FS and FD cover assemblies.

Brass boxes have 10-24 cover mounting holes tapped to accommodate all FS and FD cover assemblies.



Single-Gang



Two-Gang



DSFD

GANGS	TYPE	CAST ALUMINUM	CAST BRASS	OVERALL DIMENSIONS*
Single	FS	3701A	3721	4.12" x 2.62" x 2.31"
	FD	3711A	3731	4.12" x 2.62" x 2.94"
	DSFD	3781A	3782	4.12" x 3.62" x 4.12"
Two	FS	3702A	3722	4.12" x 5.5" x 2.25"
	FD	3712A	3732	4.12" x 5.62" x 2.87"

\* Dimensions are overall exclusive of conduit pads and mounting lugs.

**NOTE:**

When Type FD devices are to be mounted in boxes, Type FD boxes should be used. FS boxes will not accommodate FD devices.

Mounting — All the above boxes are for surface mounting. For flush mounting, see **page 151**.

Boxes — Cast brass, natural finish. Cast aluminum, corrosion-resistant, copper-free alloy, epoxy powder coat finish.

Outlets — Unless otherwise specified, furnished with one .75" outlet per gang, top or bottom. Additional outlets charged extra — see price list. Specify size and location.

Maximum Conduit — FS and FD: 1"; one per gang top and bottom and one each side.

DSFD — One 1.5" or two .5" top and bottom.

Cast iron available on special order — consult your Thomas & Betts representative.

### Type FSWS and FDWS (with Mounting Shelf for Box-Mounted Devices)

Aluminum Die-Cast Boxes with cover mounting holes tapped for 6-32 screws to accommodate all FS and FD cover assemblies.

CAT. NO.	STANDARD OUTLETS	
	TOP	BOTTOM
FSWS-62	¾"	NA
FDWS-62	¾"	NA
FDWS-622	¾"	¾"
FDWS-63	1"	NA
FDWS-633	1"	1"



**NOTE:**

Boxes — Aluminum die-cast, corrosion-resistant copper-free alloy, epoxy powder coat finish.

Outlets — Standard as listed.

Mounting — All of the above boxes are for surface mounting.

### Control Circuit Connector Accessories

#### Adapter Flush Frames\*

GANGS	CAST ALUMINUM	CAST BRASS	OVERALL DIMENSIONS
1	3671A	3681	5" x 3.5"
2	3672A	3682	5" x 6.5"



#### Blank Cover\*

Covers standard FS/FD™ box openings.

CAT. NO.	MATERIAL
3677A	Cast Aluminum
3687	Cast Brass



#### Flush Wall Mounting Extension\*

CAT. NO.	MATERIAL
3679A	Cast Aluminum
3679B	Cast Brass



#### 45° Angle Adapter\*

Mounts to any FS/FD™ box.

CAT. NO.	MATERIAL
3678A	Cast Aluminum
3678B	Cast Brass



#### Adapter Sub-Plate

The addition of this adapter sub-plate will permit the use of Ever-Lok® conduit box-type receptacles in switch boxes or outlet boxes with raised covers, as listed. Used on standard (deep) stamped metal conduit boxes. Adapts two-hole to four-hole patterns.

CAT. NO.	MATERIAL
8091A	Cast Aluminum



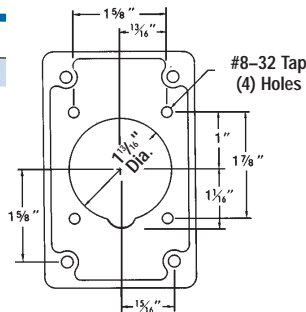
\* Furnished complete with gasket and screws.

Material — Cast aluminum, corrosion-resistant copper-free alloy, epoxy powder coat finish.  
Cast brass, natural finish.

#### SKWM Mount Adapter Plate

Used to mount SKWM to FS/FD™ standard series boxes.

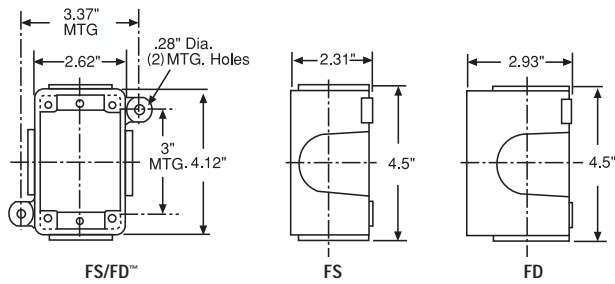
CAT. NO.	MATERIAL
SKWMFS	Aluminum



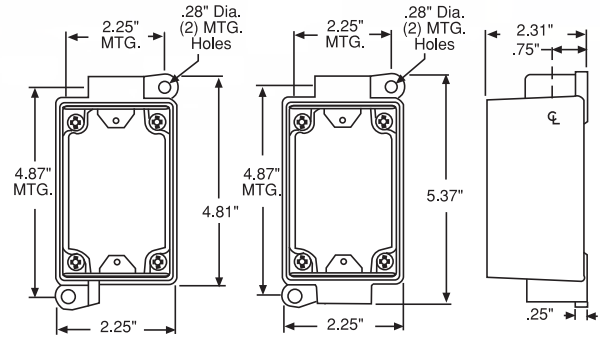


### Type FS and FD

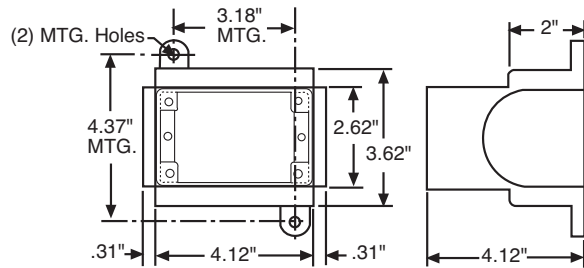
#### Single-Gang



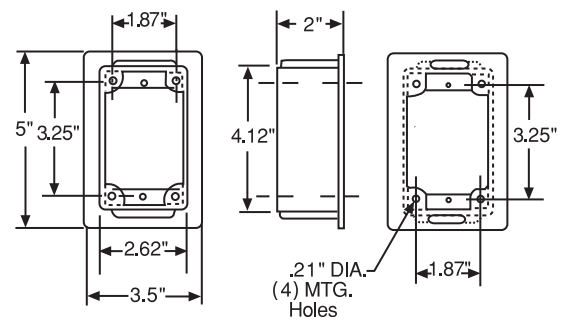
### Type FSWS and FDWS



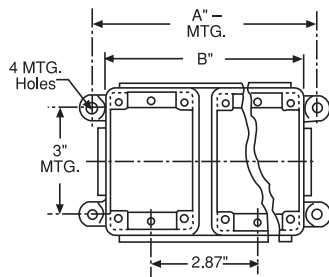
### DSFD



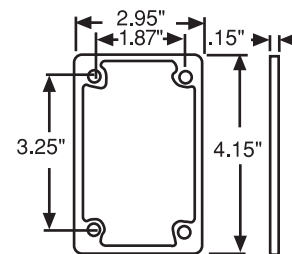
### Flush Mounting Extension



### Multiple-Gang



### Blank Cover



#### Multiple-Gang Dimensions

NO. OF GANGS	A		B	
	FS	FD	FS	FD
2-Gang	6.50"	6.50"	5.50"	5.62"

### 45° Angle Adapter

