

# SURE-SEAL® IP67 SINGLE POLE POWER CONNECTOR



# High Current Capacity

The connector's advanced contact design achieves its 800A\* continuous rating by utilizing an arrangement of 29 transfer bridges. Each transfer bridge is rated at 30A, giving a total of 870A\* per contact.

## International Electrical Color Coding Standards

Region	Earth Key E	Neutral Key N	Line 1 Key 1	Line 2 Key 2	Line 3 Key 3
Europe & UK (Harmonized)	Green	Blue	Brown	Black	Grey
UK (Traditional)	Green	Black	Red	Yellow	Blue
Australia	Green	Black	Red	White	Blue
USA	Green	White	Black	Red	Blue



## Range - Key Specifications

No of Contacts:	1
Maximum Continuous Current Rating*:	Up to 800A
Surge Current:	75kA
Short Circuit Rating:	Up to 35.5kA
Cables Cross Sectional Area C.S.A.:	25 mm <sup>2</sup> to 300 mm <sup>2</sup>
Contact Termination:	Screw or Crimp
Mating Method:	Bayonet Lock
Operating Voltage:	1000V AC
Max Rated Voltage to Earth:	2kV AC / 3kV DC
Minimum Flashover:	9.5kV DC or AC Peak
Insulation Resistance:	> 5M ohms @ 500V DC
Ingress Protection**:	IP67
Protection against Electrical Shock:	IP2X
Flammability:	UL94-V0
Mating Cycles:	> 500
Shell Material:	High Temperature Thermoplastic
Contact Plating:	Silver



\*Subject to environmental factors and cable choice etc.

\*\*In accordance with EN60529.

# Single Pole Connectors

Sure-Seal single pole connectors are a popular choice for engineers working in harsh environments across the globe. With a rugged design and excellent reliability and quality, they are the go-to option for high-power systems in entertainment & industrial applications.

## Design

These connectors are designed with impressive technical capabilities and added safety features in order to connect single and three-phase high-current power circuits. They are available in cable and panel-mount formats with either crimp or screw contacts.

## Safety Features

Safety is of the utmost importance in high-current applications. Every Sure-Seal single pole connector features finger-proofed electrical contacts in order to cut down on the risk of accidental contact when a live current is running through it. They are rated at 500A and 800A for single core cables from 25 – 300 mm<sup>2</sup>, ranking them among the safest connectors in their class. They also feature a secondary locking system which can only be unlocked with a key.



### Key Features:

- IP67 ingress protection
- Flame retardant (UL94-V0)
- High impact bodies & high temperature-resistant materials
- Rubber hand grip for ease of coupling and added impact protection



- 800A maximum (505A UL Product)
- Color coded & mechanically keyed to prevent connection errors
- Locking mechanism to prevent accidental disconnection under load
- Finger-proof contacts to prevent access to electrical contacts when uncoupled (M & F)
- Multipoint, self-wiping contact area
- Integral cable strain relief
- Metric EN-compliant cable glands, with increased cable clamping range
- No special tools required for assembly
- Daisy chain hook-up system
- Panel mount connector & mounting plates
- Rubber protective caps to protect connectors from moisture, dirt and abrasion when uncoupled (optional)



# How to Order

## Sure-Seal Line Connectors

1	2		3		4		5	6		7	8
<b>IPSLS</b>		-	<b>E</b>	-	<b>GN</b>	-	<b>S</b>	<b>120</b>	-	<b>M40A</b>	<b>-UL</b>
SERIES	ORIENTATION		KEY POSITION		COLOR		CONTACT TYPE	CABLE SIZE		CABLE SEALING RANGE	UL RATING

### SERIES

IPSLS = Line Source  
IPSLD = Line Drain

### ORIENTATION

= Straight (leave blank for straight)  
-RA = Right angled\*

### KEY POSITION

E = Earth  
N = Neutral  
1 = Line 1  
2 = Line 2  
3 = Line 3

### COLOR

GN = Green      BK = Black      Y = Yellow  
BL = Blue      GY = Grey      W = White  
BN = Brown      R = Red      OR = Orange

\* Right angled connectors available for 30-240 mm<sup>2</sup> cables

\*\* Bi metal contacts are not available for UL listed product and only available in 120 mm<sup>2</sup> - 150 mm<sup>2</sup>

### CONTACT TYPE

S = Set Screw  
C = Crimp  
L = Cable Lug (RA only)  
AC = Bi Metal Crimp\*\* (for use with Aluminum cable only)

### CABLE SIZE

120 = 120 mm<sup>2</sup>      240 = 240 mm<sup>2</sup>  
150 = 150 mm<sup>2</sup>      300 = 300 mm<sup>2</sup>  
185 = 185 mm<sup>2</sup>

additional sizes available upon request

### CABLE SEALING RANGE

M40S = 15 - 23 mm<sup>2</sup>      M40B = 22 - 32 mm<sup>2</sup>  
M40A = 19 - 28 mm<sup>2</sup>      M50 = 30 - 38 mm<sup>2</sup>

### UL RATING

= Standard (leave blank for non-UL)  
-UL = UL Listed

**non-UL** | Set screw up to 150 mm<sup>2</sup>, Crimp up to 300 mm<sup>2</sup>

**UL** | Set screw contacts up to 120 mm<sup>2</sup> (250 kcmil)  
Crimp up to 150 mm<sup>2</sup> (300 kcmil)

## Sure-Seal Panel Connectors

1		2		3		4	5
<b>IPSPD</b>	-	<b>E</b>	-	<b>GN</b>	-	<b>T5</b>	<b>-UL</b>
SERIES		KEY POSITION		COLOR		CONTACT TYPE	UL RATING

### SERIES

IPSPS = Panel Source  
IPSPD = Panel Drain

### KEY POSITION

E = Earth  
N = Neutral  
1 = Line 1  
2 = Line 2  
3 = Line 3

### COLOR

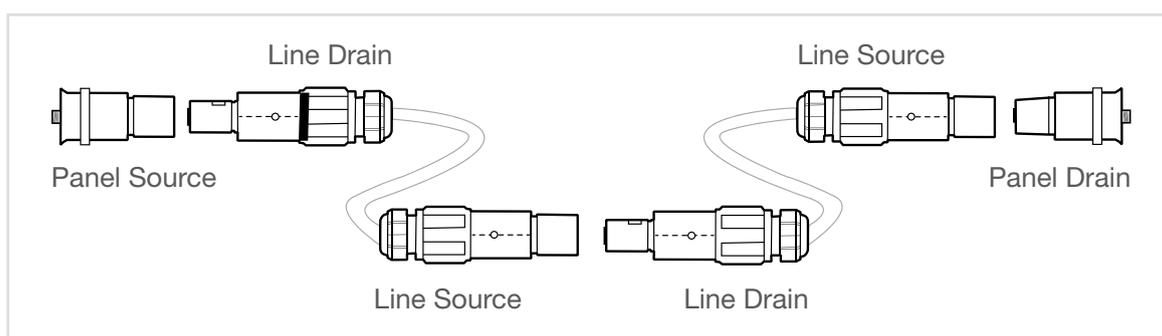
GN = Green      BK = Black      Y = Yellow  
BL = Blue      GY = Grey      W = White  
BN = Brown      R = Red      OR = Orange

### CONTACT TYPE

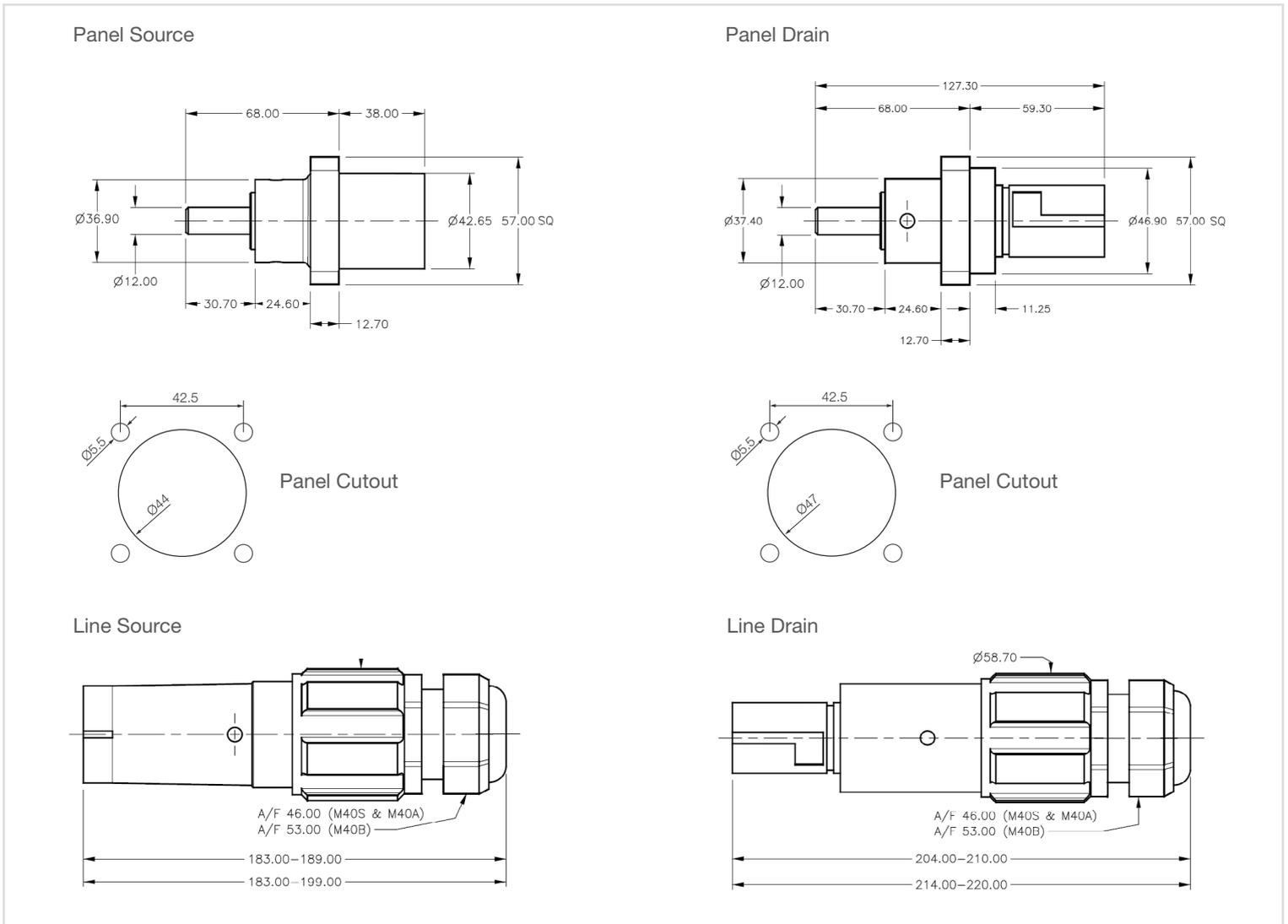
T5 = M12 Threaded Post (500A / 455A UL)  
T8 = M12 Threaded Post (800A / 600A UL)

### UL RATING

= Standard (leave blank for non-UL)  
-UL = UL Listed



# Product Dimensions



# Right Angled Connectors

Sure-Seal Right Angled Connectors allow cables to be hung at 90 degrees when connected to Panel Mount Connectors. The device allows for reduced cable protrusion, this is a useful option where minimal space is available for connection of temporary power cables.

The Right Angled Connector is fully compatible with all other Sure-Seal connectors. Termination of the cable is simple with nothing more than spanner required. A cable lug can be locked onto a threaded post inside the backshell. Standard sizes are supplied with a 120 x M12 Lug. Source, and Drain configurations can be supplied. Other colors and sizes are available.





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