

Switchcraft®

Sealed Power Plugs and Jacks



IP68/ NEMA 250 (6P) Sealed Power Plug and Jack

Applications:

- Outdoor power supplies where a weather resistant connection is needed
- Medical equipment where the power plug would need to be water proof
- Lighting connections where a rugged harsh environment connector would provide the most reliable sealed connection

Key Features:

- IP rating of IP68/ NEMA 250 (6P), for properly mated Switchcraft sealed jack and plug, makes the device perfect for harsh environments
- Available in multiple pin diameters
- Automatic switch over from AC to DC permitted by sleeve shunt spring
- Optional IP rated cap (JCAP) protects Jack when not in use
- 5A current rating (carry), up to 30V DC at 65°C
- Overmold options available
- Color coded plug finger

Switchcraft®
*Harsh Environment
Connectivity Solutions*

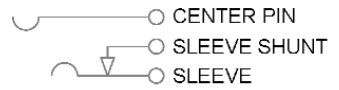
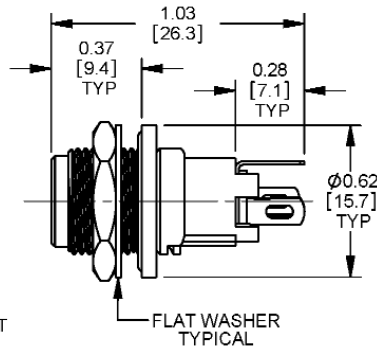
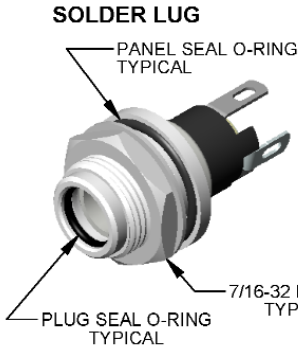


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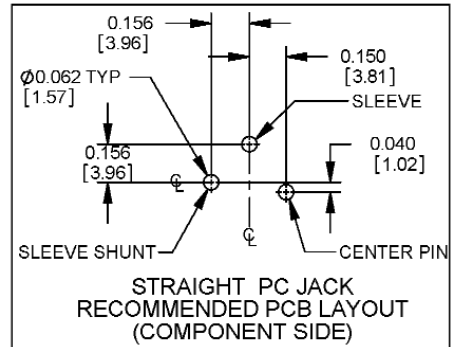
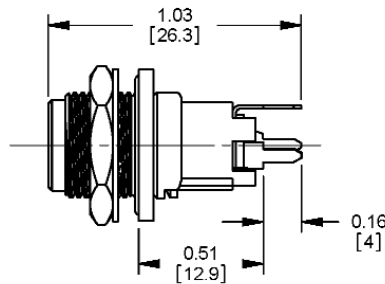
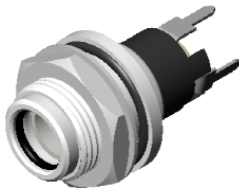
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SCHEMATIC - TYPICAL

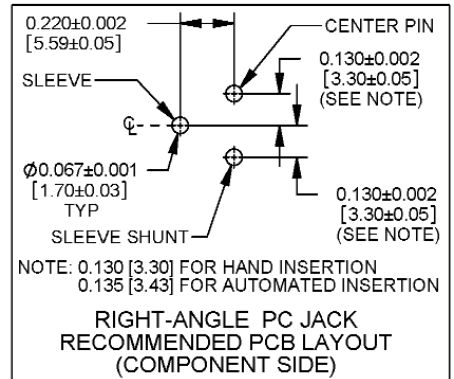
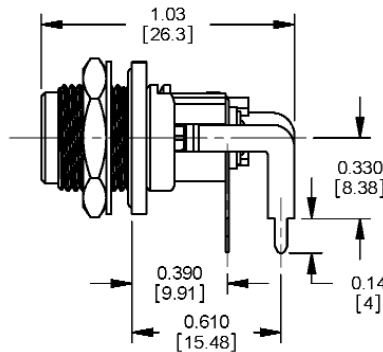
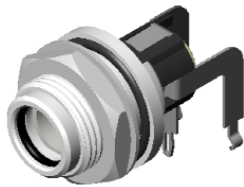
RECOMMENDED PANEL MTG HOLE:
 $\varnothing 0.440 \pm 0.002$ [11.18 ± 0.05] - TYPICAL

STRAIGHT PC

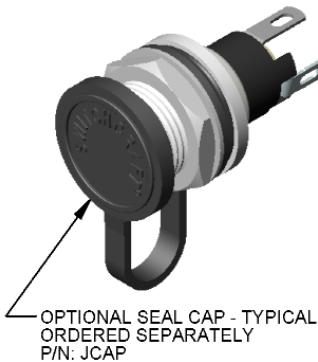


STRAIGHT PC JACK
 RECOMMENDED PCB LAYOUT
 (COMPONENT SIDE)

RIGHT-ANGLE PC



RIGHT-ANGLE PC JACK
 RECOMMENDED PCB LAYOUT
 (COMPONENT SIDE)

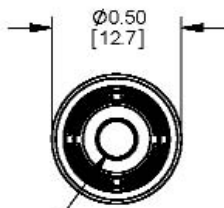
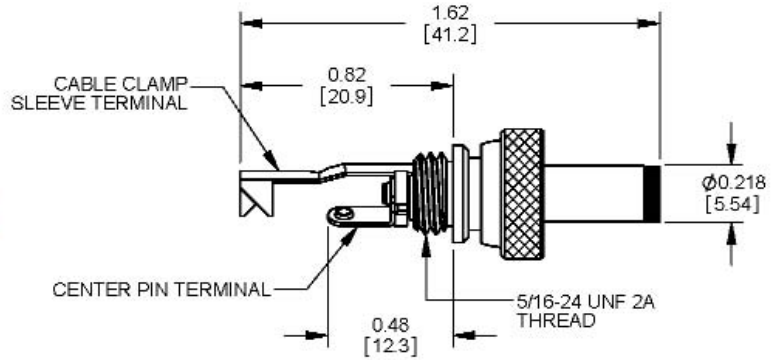


DIMENSIONS SHOWN FOR REFERENCE ONLY, inches [mm]

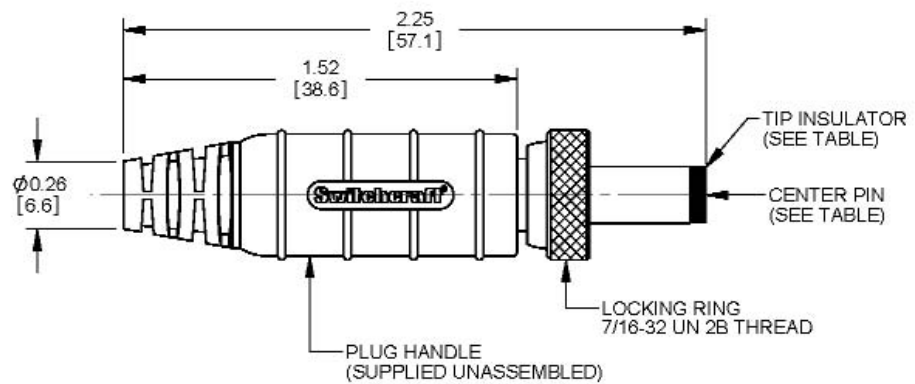
| Part Number | Center Pin/ Jack Size | Terminal Type | Mating Power Plug |
|-------------|--------------------------|----------------|--|
| L712AS | 0.10 [2.5] | Solder Lugs | 761KS12, 761K15, 761K18 |
| PCL712AS | | Straight PC | |
| L712RAS | | Right-angle PC | |
| L722AS | 0.08 [2.0] | Solder Lugs | S761KS12, S761K15, S761K18, 767KS12, 767KS15, 767KS18 |
| PCL722AS | | Straight PC | |
| L722RAS | | Right-angle PC | |
| JCAP | Power Jack Seal Cap | | |

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HANDLE I.D. / CABLE O.D.
(SEE TABLE)



DIMENSIONS SHOWN FOR REFERENCE ONLY, inches [mm]

| Part Number | Center Pin I.D./ Plug Size | Tip Insulator Color | Cable Nominal O.D. Range | Mating Power Jacks |
|-------------|----------------------------|---------------------|-----------------------------|--------------------------|
| 761KS12 | 0.10 [2.5] | Black | 0.125 - 0.150 [3.2 - 3.8mm] | L712AS, L712RAS, PCL712S |
| 761KS15 | | Black | 0.150 - 0.175 [3.8 - 4.4mm] | |
| 761KS17 | | Black | 0.175 - 0.200 [4.4 - 5.1mm] | |
| S761KS12 | 0.08 [2.0] | White | 0.125 - 0.150 [3.2 - 3.8mm] | L722AS, L722RAS, PCL722S |
| S761KS15 | | White | 0.150 - 0.175 [3.8 - 4.4mm] | |
| S761KS17 | | White | 0.175 - 0.200 [4.4 - 5.1mm] | |
| 767KS12 | 0.084 [2.1] | Red | 0.125 - 0.150 [3.2 - 3.8mm] | |
| 767KS15 | | Red | 0.150 - 0.175 [3.8 - 4.4mm] | |
| 767KS17 | | Red | 0.175 - 0.200 [4.4 - 5.1mm] | |

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Power Jack - Specifications

Features:

- IP66, IP67, IP68 / NEMA 250 (6P) when mated
- Automatic switch over from AC to DC permitted by sleeve shunt spring
- Split center pin shaped to hold mating plug firmly
- Right Angle versions offer “kinked” PC terminals for board retention
- Optional IP rated cap (JCAP) protects jack when not in use

Materials:

- Housing: Rigid thermoplastic
- Bushing: Plated copper alloy, with assembled & lubricated o-ring
- Terminals: Plated copper alloy
- Insulators: Rigid Thermoplastic
- Hardware: Supplied with one nickel plated copper alloy hex nut (P1489), one nickel plated steel flat washer (P3031) and one o-ring for sealing jack to panel

Electrical:

- Current Rating (carry): 5A, up to 30V DC at 65°C
- Contact Resistance: 0.01 Ohms max (initial), 0.02 Ohms (after humidity, durability exposure), 0.10 Ohms max. (after salt spray)
- Insulation Resistance: 10,000 Mohms min. (initial), 1,000 Mohms (after humidity, durability exposure)
- Dielectric Withstanding Voltage: 500VAC max.

Seal Cap - Specifications

Features:

- IP66, IP67, IP68 / NEMA 250 (6P) when mated

Material:

Thermoplastic Elastomer

Power Plug - Specifications

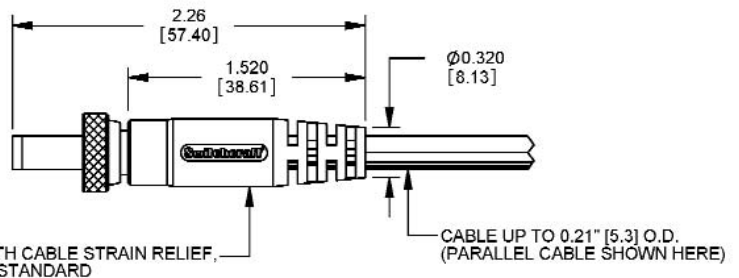
Features:

- IP66, IP67, IP68 / NEMA 250 (6P) when mated
- Hollow center pin available in 3 pin diameters (2.5mm, 2.1mm, 2.0mm)
- Locking ring provides security in critical applications
- Sleeve terminal serves as cord clamp
- Handle/Boot with cable strain relief

Specifications:

- Plug Sleeve and Pin: Plated copper alloy
- Lock Ring: Plated copper alloy
- Lock Ring Thread Size: 7/16-32 UN2B thread
- Finger Insulator: Rigid thermoplastic
- Insulating Washer: Rigid thermoplastic
- Sleeve Terminal: Plated copper alloy, electro-tinned
- Handle: Rigid thermoplastic overmolded with thermoplastic elastomer
- Handle Thread Size: 5/16-24 UNF 2A
- Electrical: Current (carry) 5A at 65°C

Overmold Option



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