



Quick Mount Relay Sockets

Reduce Weight and Installation Time

Eliminate Loose Hardware / No FOD

Amphenol Pcd introduces JRS/JRE Quick Mount Relay Sockets. These relay sockets snap mount into standard aircraft panel cutouts and eliminate all socket-to-bulkhead mounting hardware, simplifying installation and dramatically reducing weight and installed cost.

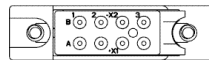
JRS/JRE sockets meet the applicable performance and dimensional requirements of MIL-PRF-12883, are compatible with MIL- approved relays from any manufacturer, and can be used in existing avionic systems with standard slotted panel cutouts.

JRS / JRE Product Series

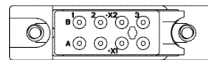
Product Benefits

2 Pole / 5 Amp - Size 20

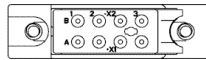
- Replaces M12883 / 45 Sockets
- Mates with Following Relays
 - M83536
 - M6106
- Accepts Following Contacts
 - M39029 / 101 -553 Size 20



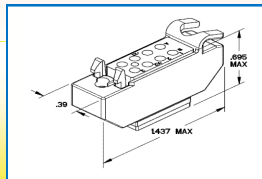
JRE200110



JRE200210

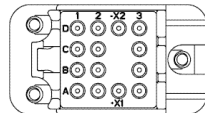


JRE200310

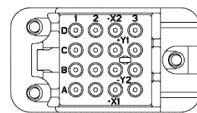


4 Pole / 5 Amp - Size 20

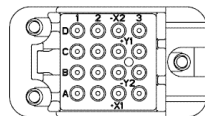
- Replaces M12883 / 44 Sockets
- Mates with Following Relays
 - M83536/5
 - M83536/6
 - M83536/7
- Accepts Following Contacts
 - M39029/101 -553 Size 20



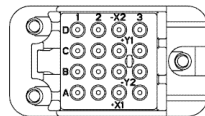
JRE400110



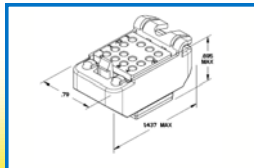
JRE400410



JRE400210

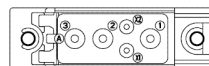


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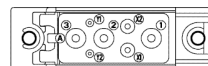


1 Pole / 25 Amp - Size 12 & 16

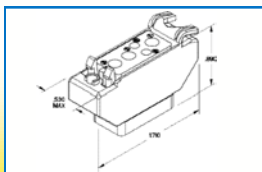
- Replaces M12883 / 55 Sockets
- Mates with Following Relays
 - M6106/19
 - M6106/20
- Accepts Following Contacts
 - M39029 / 92 -533 Size 16
 - M39029 / 92 -535 Size 12



JRS500110



JRS500210

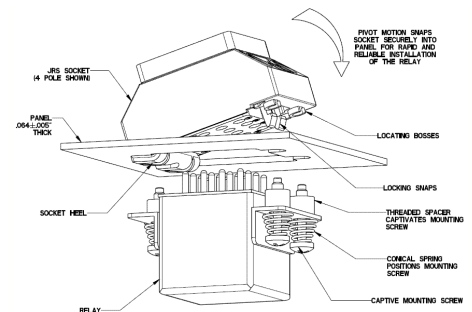


Socket Construction and Installation

JRS/JRE sockets maintain the same MIL mounting configurations and construction (molded polyetherimide bodies and silicone rubber sealing grommets) as Amphenol Pcd's traditional relay sockets.

The installation process consists of partially inserting the socket into a panel cutout, placing the fulcrum ears located at one end of the socket over the bulkhead lip, and then pivoting the socket around the fulcrum ears until the locking tabs at the opposite end of the socket engage the bulkhead and snap in place.

A heel and toe snap-in system allows the socket to be mounted to the panel without hardware and held securely in place. The assembled socket and relay meet all shock and vibration requirements of MIL-PRF-12883.



Lower Installed Cost

Elimination of loose hardware and the time required to assemble individual hardware components to the sockets results in a reduction of over 45% in socket installation time.

Note: mounting hardware supplied with JRS/JRE Relay Sockets.

All Schematics Depict Bottom View, Relay Mating Face

Product Benefits

JRS / JRE Product Series

No Loose Hardware

The combination of snap-in relay -to-panel mounting and pre-assembled relay hardware eliminates all loose hardware from the socket and relay mounting and installation process. The logistical and safety issues related with loose hardware are completely avoided.

Relay Installation

JRE/JRS Relay Sockets feature externally threaded mounting screws and spacer assemblies which are pre-assembled to the relay. These mounting screws are captured and aligned by a conical spring, and are used to fasten the relay to the socket. The screws engage internally threaded bushings captured in the socket and once the relay is secured, the socket snap features are no longer under stress.

Reduced Weight

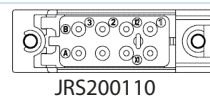
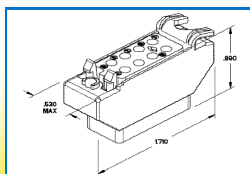
The elimination of socket mounting hardware and a streamlined polyetherimide body combine to reduce the weight of a Quick Mount Relay Socket. When compared to Amphenol Pcd standard MIL-PRF-12883 relay sockets provided with traditional mounting hardware, the weight is reduced by 30 to 40%.

Other Configurations

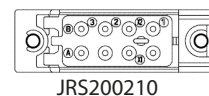
Amphenol Pcd welcomes customer inquiries for snap-in style sockets in military or custom configurations not covered by this publication. Sockets can also be made available in "extended height" version which accept the M39029 contact, if contact standardization is an application priority.

2 Pole / 10 Amp - Size 16

- Replaces M12883 / 41 Sockets
- Mates with Following Relays
 - M83536
- Accepts Following Contacts
 - M39029 / 92-533 Size 16
- Weighs 12 Grams Max



JRS200110



JRS200210

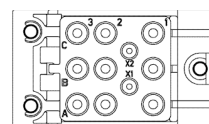
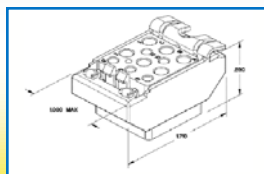


JRS200310

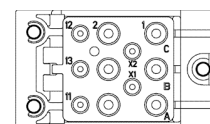


3 Pole / 25 Amp - Size 12 & 16

- Replaces M12883 / 48 Sockets or /54 Sockets
- Mates with Following Relays
 - M6106/13
 - MS27743
- Accepts Following Contacts
 - M39029 / 92-533 Size 16
 - M39029 / 92-535 Size 12
- Weighs 20 Grams Max



JRS300110

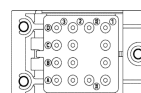
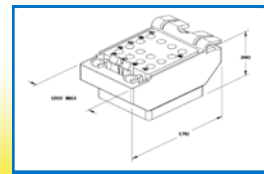


JRS310110

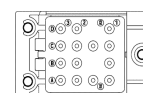


4 Pole / 10 Amp - Size 16

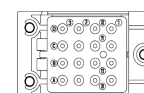
- Replaces M12883 / 40 Sockets
- Mates with Following Relays
 - M83536
 - M83726
 - MS27709
- Accepts Following Contacts
 - M39029 / 92-533 Size 16
- Weighs 20 Grams Max



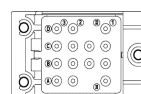
JRS400110



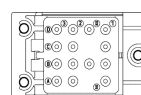
JRS400410



JRS400510



JRS400210



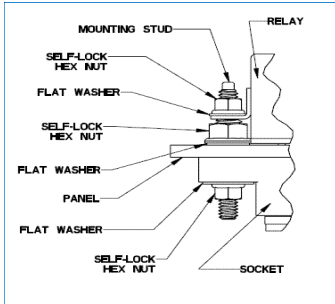
JRS400310



Mounting Hardware Comparison: Conventional Style vs. Quick Mount Style

Conventional Style Socket

Socket and relay mounting require 6-7 loose pieces of hardware



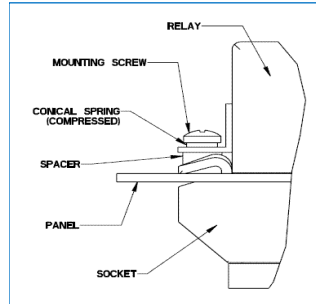
Reduce weight

Reduce installation time

Reduce part count / FOD

JRS/JRE Quick Mount Socket

3 captive pieces of hardware secure both socket and relay



Related Amphenol Products

Amphenol Pcd offers the industry's broadest line of pluggable Relay Sockets and Junction Modules for commercial and military airborne, ground, and shipboard applications and equipment. European Specification Relay Sockets available upon request.

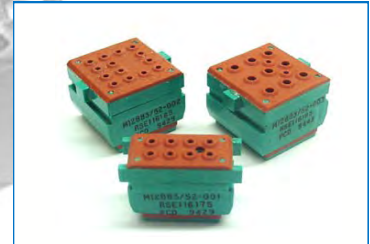
M12883 Relay Sockets

Panel Mount Relay Sockets



Panel mount relay sockets are provided in all military configurations, are designed to minimize size and weight, and accept MIL-C-39029 /92, /101, /5 contact families. Available in low and extended profile styles.

Track Mount Relay Sockets



Track mount relay sockets are available in multiple configurations and designed to meet MIL-PRF-12883 requirements and snap into M12883/53-001 mounting track.

Relay Sockets

Microminiature Relay Sockets



Relay Sockets that are designed to mate with MIL-Spec M39016 and M5757 microminiature relays.

Board Mount Relay Sockets



PC board mount relay sockets that are light weight and pluggable, and allow separate mounting of relays direct to boards in airborne or ground applications.

PERFORMANCE

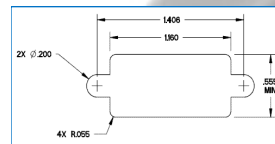
MATERIALS

Socket Body:	Polyetherimide Per ASTM D5205
Grommet:	Silicone Rubber A-A-59588
Contact Retainers:	Stainless Steel
Socket Contacts:	Copper Alloy, Hard Gold Finish Per SAE -AMS -45204
OPERATING RANGE	
Temperature Range:	-65°C to 125°C
Insulation Resistance:	> 1000 Megohms
Vibration:	MIL-STD -202, Method 204, Test Condition G
Shock:	MIL-STD -202, Method 213, Test Condition C

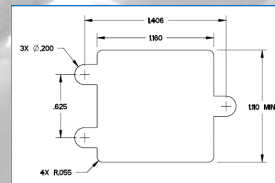
Dielectric Withstanding Voltage

Part Description	@ Sea Level	@ 80,000 ft
JRS 1 Pole / 2 Pole	1500 VRMS	500 VRMS
JRS 3 Pole / 4 Pole	1500 VRMS	500 VRMS
JRE 2 Pole / 4 Pole	1000 VRMS	500 VRMS

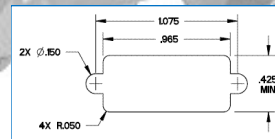
Recommended Cutouts For .064 +/- .005" Thick Panels



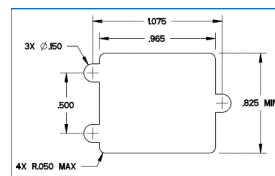
JRS 1 & 2 Pole Sockets



JRS 3 & 4 Pole Sockets



JRE 2 Pole Sockets



JRE 4 Pole Sockets

Socket Contacts and Termination Accessories

Amphenol Pcd Part Series	Military P/N PCD Part No.	Pin Size (AWG)	Color Bands			Crimp Tool		Installation Installation / Removal Tool
			1st	2nd	3rd	Basic Tool	Positioner	
JRS	M39029/92-533 CNS126900	16 16, 18, 20	Green	Orange	Orange	M22520/1-01	M2222520/1-02 Blue	M81969/14-03 or M81969/8-07 & -08
JRS	M39029/92-535 CNS128900	12 12, 14	Green	Orange	Green	M22520/1-01	M2222520/1-02 Yellow	M81969/14-04 or M81969/8-09 & -10
JRE	M39029/101-553	20, 20, 22, 24	Green	Green	Orange	M22520/7/0-01	M22520/7-12	M81969/14-10 or

Mouser Electronics

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