## Amphenol Pcd Relay Sockets JRS/JRE Quick Mount Relay sockets

#### **Amphenol Pcd Quick Mount Relay Sockets**

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



JRS 4 Pole Relay Sockets

JRS 3 Pole Relay Sockets

JRS 2 Pole Relay Sockets



JRE 2 Pole Relay Sockets

JRE 4 Pole Relay Sockets

#### **Key Features and Benefits**

#### **Socket Construction & 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. 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

#### **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.

#### No Loose Hardware

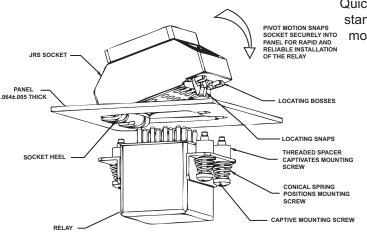
The combination of snap-in relay-to-panel mounting and pre-assembled relay hardware eliminates all loose hardware from the socket and relay mounting and installation process. The logistical and safety issues related with loose hardware are completely avoided.

#### **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 utilized 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%.

## **Amphenol Pcd**

#### **Quick Mount Relay Sockets**



Replaces MIL-PRF-12883/55 Mates with M6106 Relays

## Quick Mount Relay Sockets JRS 1 Pole / 25 Amp / Size 12 & 16

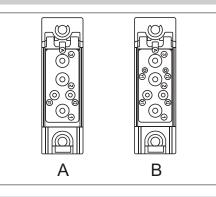
#### **Operating Range**

Temperature: -65°C to 125°C Insulation Resistance: 1000 Megaohms Min. Dielectric Withstanding Voltage: 1500 VRMS at Sea Level 500 VRMS at 80,000 ft. Vibration: MIL-STD-202, Method 204 Test Condition G Shock: MIL-STD-213, Method 213 Test Condition C

#### **Materials**

Socket Body: Polythermide per ASTM-D5205 Grommet: Silicone Rubber per A-A-59588 Contact Retainers: Stainless Steel Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422

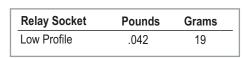
#### **Socket Configurations**



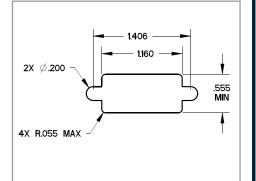
#### Extended Height Relay Sockets

| APCD P/N  | QTY | Size                               | Contact | Mating Relay       | Configuration |
|-----------|-----|------------------------------------|---------|--------------------|---------------|
| ID6500100 | 2   | 2 16/16 /92-533 M6106/19, M6106/20 |         | А                  |               |
| JRS500100 | 3   | 12/12                              | /92-535 | 100/10/19, 100/20  | A             |
| IBS500200 | 2   | 16/16                              | /92-533 | M6106/19, M6106/20 | в             |
| JRS500200 | 3   | 12/12                              | /92-535 | 100/19, 100/20     | В             |

**Relay Socket Weight** 

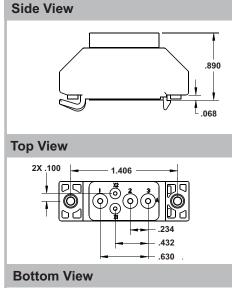


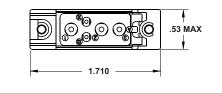
#### Required Mounting Panel Cutout

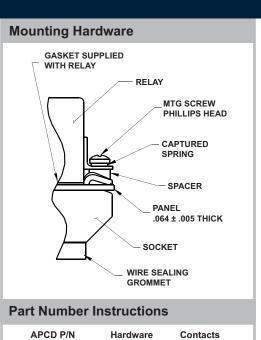


**Amphenol Pcd** 

**Relay Socket Dimensions** 







| Hardware | Contacts            |  |
|----------|---------------------|--|
| NONE     | NONE                |  |
| NONE     | YES                 |  |
| YES      | NONE                |  |
| YES      | YES                 |  |
|          | NONE<br>NONE<br>YES |  |

28

## Quick Mount Relay Sockets JRS 2 Pole / 10 Amp / Size 16

#### **Operating Range**

Temperature: -65°C to 125°C Insulation Resistance: 1000 Megaohms Min. Dielectric Withstanding Voltage: 1500 VRMS at Sea Level 500 VRMS at 80,000 ft. Vibration: MIL-STD-202, Method 204 Test Condition G Shock: MIL-STD-213, Method 213 Test Condition C

#### **Materials**

Socket Body: Polythermide per ASTM-D5205 Grommet: Silicone Rubber per A-A-59588 Contact Retainers: Stainless Steel Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422

#### **Extended Height Relay Sockets**

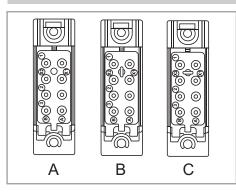
| _ | APCD P/N  | QTY | Size <sup>1</sup> | Contact | Mating Relay | Configuration |
|---|-----------|-----|-------------------|---------|--------------|---------------|
|   | JRS200100 | 8   | 16/16             | /92-533 | M83536       | A             |
|   | JRS200200 | 8   | 16/16             | /92-533 | M83536       | В             |
|   | JRS200300 | 8   | 16/16             | /92-533 | M83536       | С             |

#### **Quick Mount Relay Sockets**



Replaces MIL-PRF-12883/41 Mates with M83536 Relays

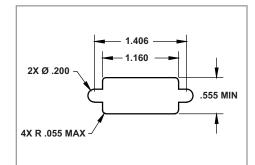
#### Socket Configurations



#### **Relay Socket Weight**

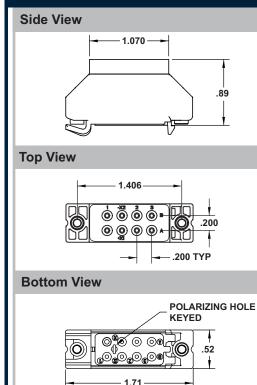
| Relay Socket | Pounds | Grams |
|--------------|--------|-------|
| Low Profile  | .042   | 19    |

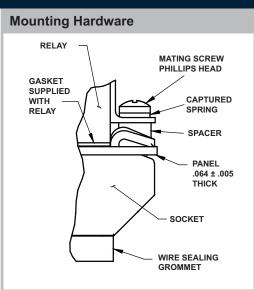
#### Required Mounting Panel Cutout



**Amphenol Pcd** 

#### **Relay Socket Dimensions**





#### Part Number Instructions

| <br>APCD P/N | Hardware | Contacts |
|--------------|----------|----------|
| JRS200100    | NONE     | NONE     |
| JRS200101    | NONE     | YES      |
| JRS200110    | YES      | NONE     |
| JRS200111    | YES      | YES      |

#### **Quick Mount Relay Sockets**



Replaces MIL-PRF-12883/48 Mates with M6106 & MS27743 Relays

## Quick Mount Relay Sockets JRS 3 Pole / 25 Amp / Size 12 & 16

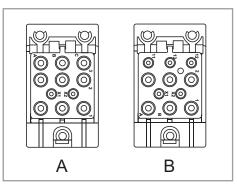
#### **Operating Range**

Temperature: -65°C to 125°C Insulation Resistance: 1000 Megaohms Min. Dielectric Withstanding Voltage: 1500 VRMS at Sea Level 500 VRMS at 80,000 ft. Vibration: MIL-STD-202, Method 204 Test Condition G Shock: MIL-STD-213, Method 213 Test Condition C

#### **Materials**

Socket Body: Polythermide per ASTM-D5205 Grommet: Silicone Rubber per A-A-59588 Contact Retainers: Stainless Steel Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422

#### **Socket Configurations**



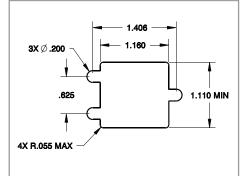
#### Extended Height Relay Sockets

| APCD P/N  | QTY | Size <sup>1</sup> | Contact | Mating Relay      | Configuration |
|-----------|-----|-------------------|---------|-------------------|---------------|
| ID6200100 | 2   | 16/16             | /92-533 | M6106/13, MS27743 | A             |
| JRS300100 | 9   | 12/12             | /92-535 | W0100/13, W327743 |               |
| 100040400 | 5   | 16/16             | /92-533 | MC40C/42 MC27742  | Р             |
| JRS310100 | 6   | 12/12             | /92-535 | M6106/13, MS27743 | В             |

**Relay Socket Weight** 

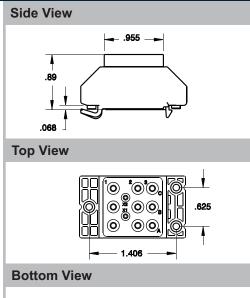
| Relay Socket | Pounds | Grams |
|--------------|--------|-------|
| Low Profile  | .075   | 34    |

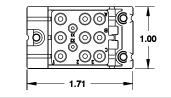
#### Required Mounting Panel Cutout

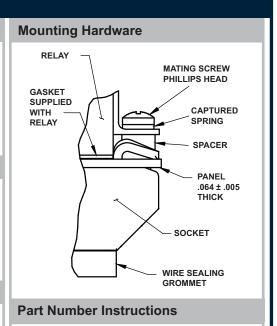


**Amphenol Pcd** 

#### **Relay Socket Dimensions**







# APCD P/NHardwareContactsJRS300100NONENONEJRS300101NONEYESJRS300110YESNONEJRS300111YESYES

www.amphenolpcd.com

Milaero@amphenolpcd.com

## Quick Mount Relay Sockets JRS 4 Pole / 10 Amp / Size 16

#### **Operating Range**

Temperature: -65°C to 125°C Insulation Resistance: 1000 Megaohms Min. Dielectric Withstanding Voltage: 1500 VRMS at Sea Level 500 VRMS at 80,000 ft. Vibration: MIL-STD-202, Method 204 Test Condition G Shock: MIL-STD-213, Method 213 Test Condition C

#### **Materials**

Socket Body: Polythermide per ASTM-D5205 Grommet: Silicone Rubber per A-A-59588 Contact Retainers: Stainless Steel Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422

#### **Quick Mount Relay Sockets**

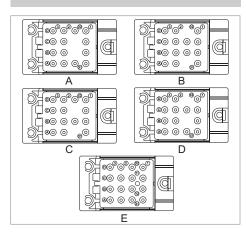


Replaces MIL-PRF-12883/40 Mates with M83536, 83726 & MS27709 Relays

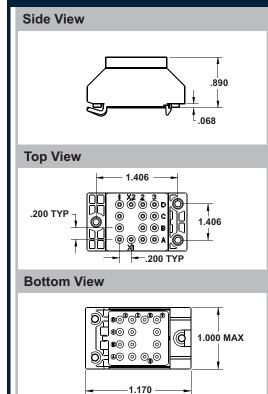
#### Extended Height Relay Sockets

| APCD P/N  | QTY | Size <sup>1</sup> | Contact | Mating Relay            | Configuration |
|-----------|-----|-------------------|---------|-------------------------|---------------|
| JRS400100 | 14  | 16/16             | /92-533 | M83536, M83726, MS27709 | А             |
| JRS400200 | 14  | 16/16             | /92-533 | M83536, M83726, MS27709 | В             |
| JRS400300 | 14  | 16/16             | /92-533 | M83536, M83726, MS27709 | С             |
| JRS400400 | 14  | 16/16             | /92-533 | M83536, M83726, MS27709 | D             |
| JRS400500 | 16  | 16/16             | /92-533 | M83536, M83726, MS27709 | E             |

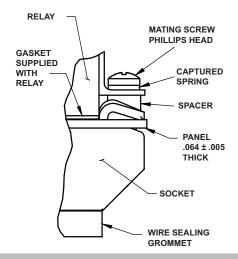
#### Socket Configurations



#### **Relay Socket Dimensions**



#### Mounting Hardware



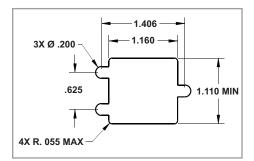
#### **Part Number Instructions**

| APCD P/N  | Hardware | Contacts |
|-----------|----------|----------|
| JRS400100 | NONE     | NONE     |
| JRS400101 | NONE     | YES      |
| JRS400110 | YES      | NONE     |
| JRS400111 | YES      | YES      |

#### **Relay Socket Weight**

| Relay Socket | Pounds | Grams |  |
|--------------|--------|-------|--|
| Low Profile  | .068   | 31    |  |

#### Required Mounting Panel Cutout



# **Amphenol Pcd**

www.amphenolpcd.com

#### **Quick Mount Relay Sockets**



Replaces MIL-PRF-12883/41 Mates with M83536 & M6106 Relays

## Quick Mount Relay Sockets JRE 2 Pole / 5 Amp / Size 20

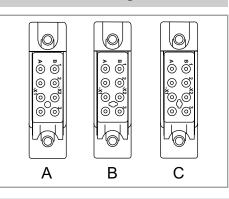
#### **Operating Range**

Temperature: -65°C to 125°C Insulation Resistance: 1000 Megaohms Min. Dielectric Withstanding Voltage: 1000 VRMS at Sea Level 500 VRMS at 80,000 ft. Vibration: MIL-STD-202, Method 204 Test Condition G Shock: MIL-STD-213, Method 213 Test Condition C

#### **Materials**

Socket Body: Polythermide per ASTM-D5205 Grommet: Silicone Rubber per A-A-59588 Contact Retainers: Stainless Steel Internal Socket Contacts: Copper Alloy, Hard Gold Finish per SAE-AMS-2422

#### Socket Configurations



#### Extended Height Relay Sockets

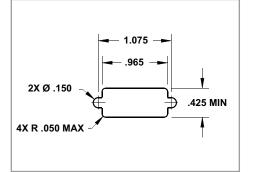
| APCD P/N  | QTY | Size  | Contact  | Mating Relay  | Configuration |
|-----------|-----|-------|----------|---------------|---------------|
| JRE200100 | 8   | 20/20 | /101-533 | M83536, M6106 | А             |
| JRE200200 | 8   | 20/20 | /101-533 | M83536, M6106 | В             |
| JRE200300 | 8   | 20/20 | /101-533 | M83536, M6106 | С             |

Applies to all plug-in type relays of these documents

#### **Relay Socket Weight**

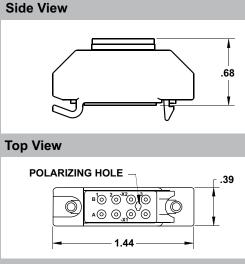
| Relay Socket | Pounds | Grams |
|--------------|--------|-------|
| Low Profile  | .042   | 19    |

#### Recommended Mounting Panel Cutout

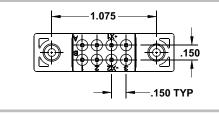


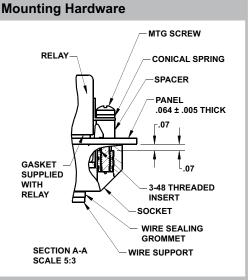
Amphenol Pcd

#### Relay Socket Dimensions



#### **Bottom View**





#### **Part Number Instructions**

| APCD P/N  | Hardware | Contacts |
|-----------|----------|----------|
| JRE200100 | NONE     | NONE     |
| JRE200101 | NONE     | YES      |
| JRE200110 | YES      | NONE     |
| JRE200111 | YES      | YES      |

www.amphenolpcd.com