

**P R O V E N**

## Quality, Dependability and Reliability

AvtechTyee's 90-42301 Lightplate Connector provides isolated two circuit power to a mated lightplate. The connector has a floating feature to enhance and facilitate lightplate installation. Six different configurations of the 90-42301 series are offered for three panel sizes (.062", .090" and .125") and two different terminations, either spade/snap on or ring tongue terminals.



### PCB PIN LIGHTPLATE CONNECTOR

The 90-42305 connector also has a spring for low force ejection of the lightplate plug and mates with MS90335 lightplate plugs.

- Provides isolated two circuit power to mated lightplates
- Connector "floats" thereby facilitating mating of subassemblies
- Connector is spring loaded for low force ejection of the lightplate plug
- Mates with MS90335 lightplate plugs
- Options available for panel thicknesses of 0.062", 0.090" and 0.125"
- Two different terminations are offered

Part Number	Panel Thickness	Termination Style
90-42301-5	0.062" thick	Ring Tongue Terminals
90-42301-6	0.125" thick	Ring Tongue Terminals
90-42301-7	0.062" thick	Spade Snap On
90-42301-8	0.125" thick	Spade Snap On
90-42301-9	0.090" thick	Ring Tongue Terminals
90-42301-10	0.090" thick	Spade Snap On

AvtechTyee Corporation

6500 Merrill Creek Parkway

Everett, Washington 98203

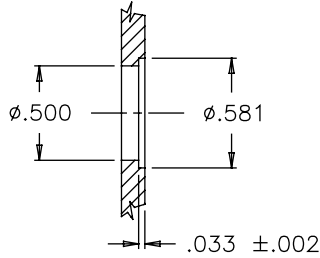
[www.AvtechTyee.com](http://www.AvtechTyee.com)

Tel: (425) 290-3100

Fax: (425) 513-6474



## SUGGESTED PANEL CUT-OUT

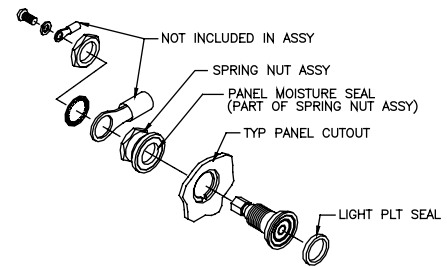


DETAIL 1

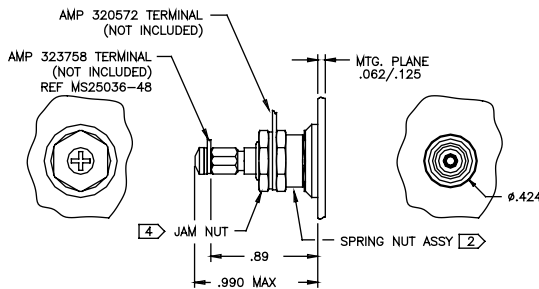
RECOMMENDED CUTOUT FOR ALL PANELS  
(SHOWN SECTIONED THRU)

## TYPICAL INSTALLATION

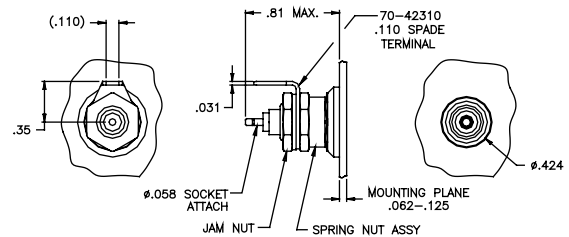
### Terminal Style 1



## TERMINATION STYLES



TERMINATION STYLE 1  
RING TONGUE TERMINALS  
(-1 SHOWN REF. TABLE 1)



TERMINATION STYLE 2  
SPADE/SNAP-ON  
(-3 SHOWN REF. TABLE 1)

## CHARACTERISTICS

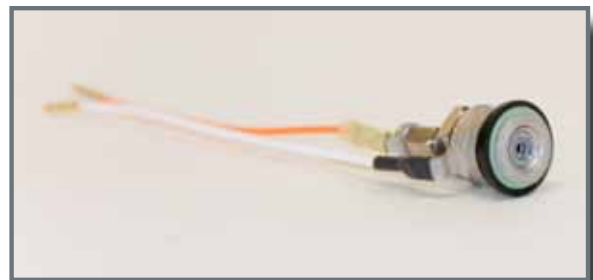
Characteristic	Description
Radial Float	.010 to .015 inches
Axial Grip on Mounting Plate	3 to 5 pounds force
Lightplate Mating Force	4 lbs. Max.
Lightplate Extraction Force	2 lbs. Max.

## MATERIALS FINISHES

Material	Finish
Body	Brass per QQ-B-626 Plated QQ-N-290 (nickel)
Center Contact	Berylco 25 plated MIL-C-26074 (Nickel)
Spring Nut and Jam Nut	Brass per QQ-B-626 plated QQ-N-290 (Nickel)
Float/Insulator	ACETAL

## ELECTRICAL REQUIREMENTS

Requirement	Value	Units
Operating Voltage	5 or 28 5 or 115	Vdc VAC
Output Current	3 Amp 1 Amp	5 or 28 Vdc 120 VAC
Insulation Resistance	50	Mohms
Dielectric Withstanding Voltage (Between insulated circuits)	1200	Vac 60Hz for 1 minute
Dielectric Withstanding Voltage (Between circuits and panel)	1500	Vac 60Hz for 1 minute
Contact Resistance	50	milliohms max



Optional wire pigtails can be installed on the lightplate connector, contact Avtech for additional details