

Amphenol®/Pyle-National® T-Line® Series Connectors

TL-100-1

**Push-Pull Mating Connectors
for Military and Industrial Applications**



Space-Saving Size and Weight

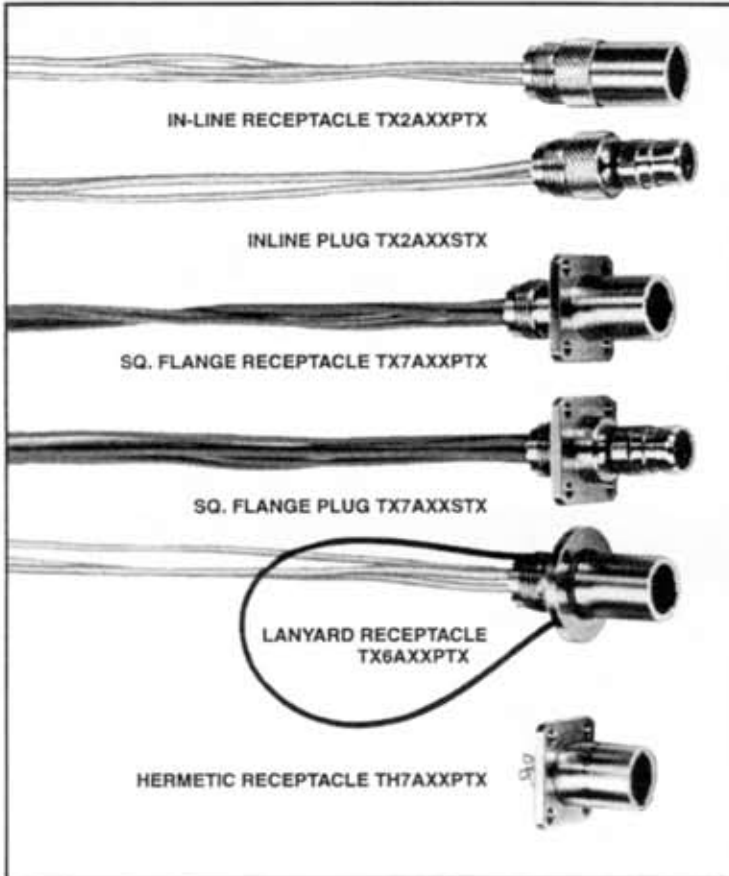


- Rugged Environmental Design
- MIL-C-38999 Series III Inserts
- M39029-56/-58 Series Contacts

Amphenol Aerospace

Amphenol® /Pyle-National® T-Line® Series Subminiature Connectors

for push-pull mating, space-saving applications



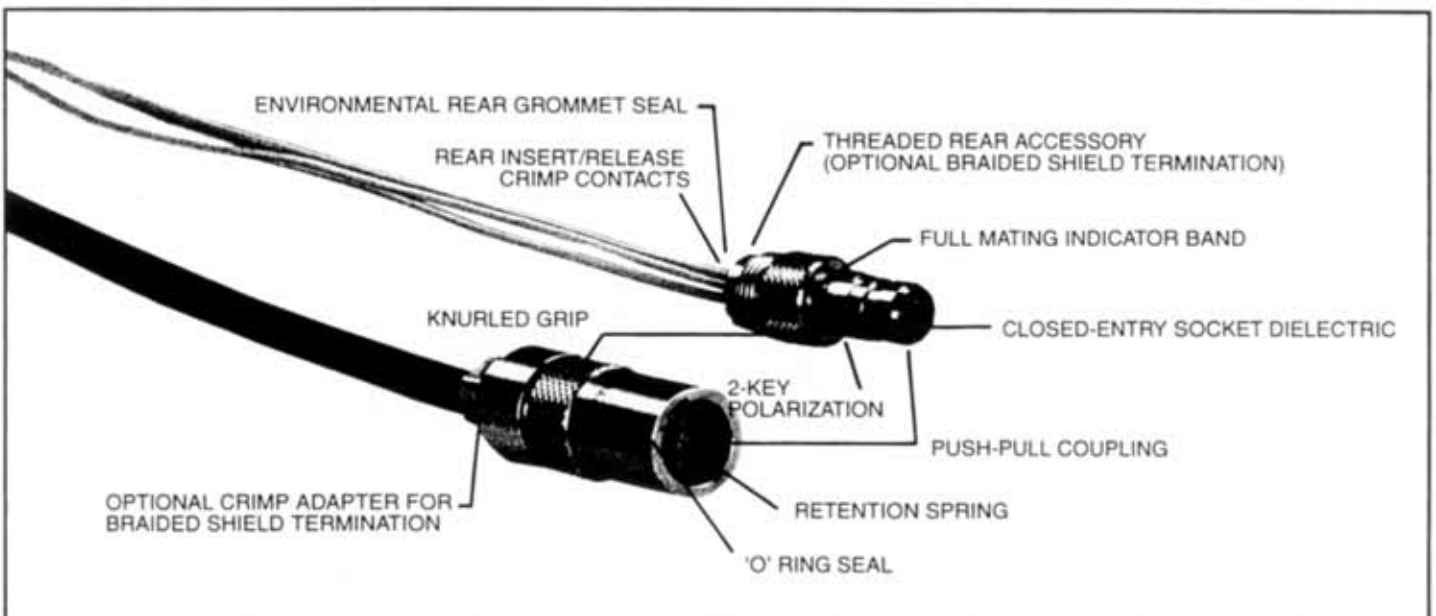
Trim your electrical system requirements with the Amphenol/Pyle-National space-saving T-Line Series subminiature cylindrical connector. A push-pull mating connector, the T-Line incorporates a retention spring in the receptacle and a full-mating indicator band on the plug. Inserts are qualified to MIL-C-38999 Series III and accept standard M39029-56/-58 series contacts in either six #22D or three #20 contact arrangements.

Trim, rugged shells will accommodate standard M85049/38 series backshells and are easily adapted for lanyard release applications.

The T-Line Series of connectors are designed to reduce the size and weight of your electrical systems without sacrificing performance.



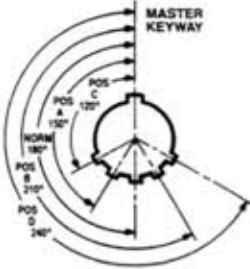
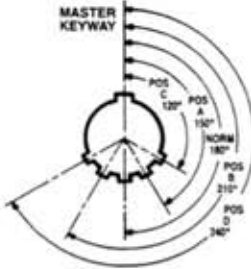
T-LINE FEATURES & BENEFITS

- Space-Saving size
- Rugged construction
- Lanyard release applications
- Push-pull mating
- Environmental design
- Accepts T9-R-5309-10() crimp shield adapter
- Stainless steel or aluminum shells
- Various plating options



T-Line® Series

insert availability, contact information,
optional crimp shield adapter

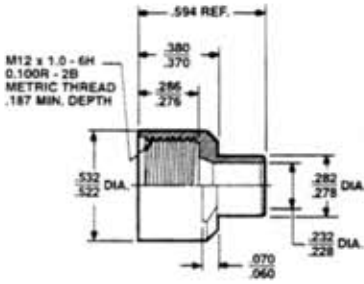

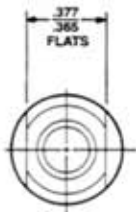
INSERT ARRANGEMENTS			ALTERNATE KEYING POSITIONS	
				
Insert Arrangement	A35	A98		
Service Rating*	M	I		
Number of Contacts	6	3		
Contact Size	22D	20		
* See how to order page for service rating descriptions.				
				

CONTACT & SEALING PLUG INFORMATION

Contact Size	PINS			SOCKETS		
	Military Spec. Part Number	Superceded MS Part Number	Amphenol/Pyle Part Number	Military Spec. Part Number	Superceded MS Part Number	Amphenol/Pyle Part Number
22D	M39029/58-360	27493-22D	T3-4022-36LD	M39029/56-348	27490-22D	T3-4122-36LD
20	M39029/58-363	27493-20	T3-4020-36LD	M39029/56-351	27490-20	T3-4120-36LD

Contact Size	Crimp Well Data		Wire Size (AWG)	Finished wire outside dimensions				SEALING PLUGS		
	Well Diameter	Minimum Well Depth		Minimum		Maximum		Superceded MS Number	Amphenol/Pyle Number	Color
				Inches	mm	Inches	mm			
22D	.0345 ± .001	.141	28, 26, 24, 22	0.030	0.76	0.054	1.37	27488-22	T3-4022-59L	Black
20	.047 ± .001	.209	24, 22, 20	0.040	1.02	0.083	2.11	27488-20	T3-4020-59L	Red

OPTIONAL CRIMP SHIELD ADAPTER

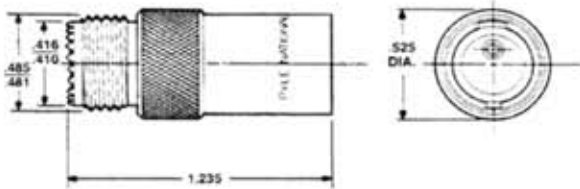
ADAPTER BODY	CRIMP SLEEVE	ADAPTER BODY (Rear View)										
			<p>Order optional crimp shield adapter by part number T9-R-5309-10().</p> <p>Complete last digit of part number with the desired shell material from the following options:</p> <ul style="list-style-type: none"> F - designates aluminum, electroless nickel plated W - designates aluminum, olive drab cadmium plated K - designates stainless steel, passivated <p>Crimping Tools for the T9-R-5309-10() adapter can be ordered by the following part numbers:</p> <table border="1"> <thead> <tr> <th></th> <th>Basic Crimping Tool</th> <th>Die Set</th> </tr> </thead> <tbody> <tr> <td>Military Spec. Part Number</td> <td>M22520/5-01</td> <td>M22520/5-37</td> </tr> <tr> <td>Amphenol/Pyle Part Number</td> <td>TP-201380-TO</td> <td>TP-201450</td> </tr> </tbody> </table>		Basic Crimping Tool	Die Set	Military Spec. Part Number	M22520/5-01	M22520/5-37	Amphenol/Pyle Part Number	TP-201380-TO	TP-201450
	Basic Crimping Tool	Die Set										
Military Spec. Part Number	M22520/5-01	M22520/5-37										
Amphenol/Pyle Part Number	TP-201380-TO	TP-201450										

The above crimping tools are available from an approved tool manufacturer.

T-Line® Series

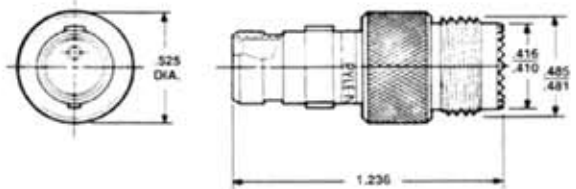
shell styles, dimensional information

IN-LINE RECEPTACLE



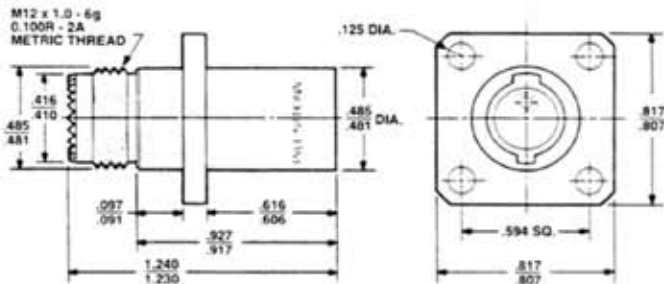
Typical part number*: TS2A35PTN

IN-LINE PLUG



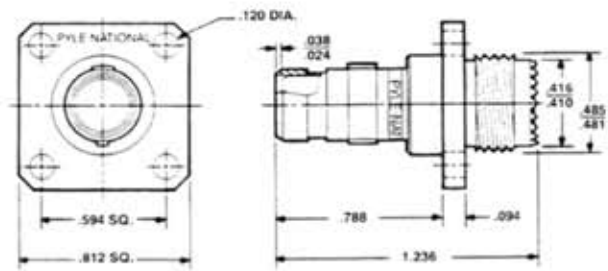
Typical part number*: TS2A35STN

SQUARE FLANGE RECEPTACLE



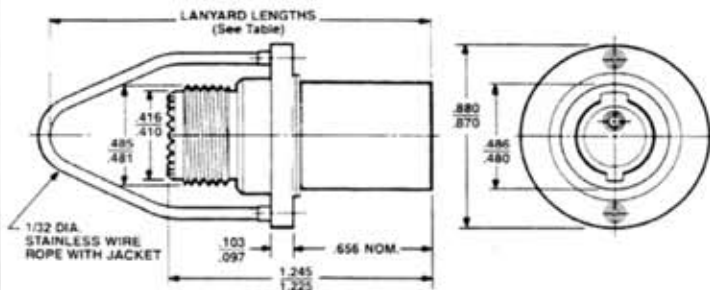
Typical part number*: TS7A98PTA

SQUARE FLANGE PLUG



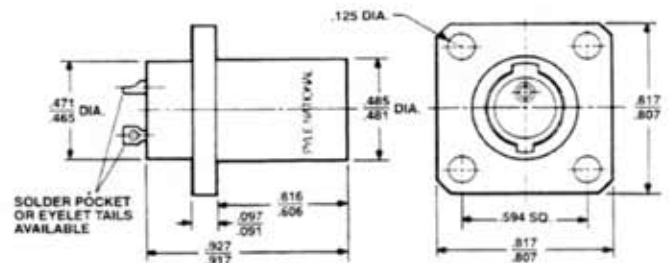
Typical part number*: TS7A98STA

LANYARD RECEPTACLE



Typical part number*: TS6A35PTB

HERMETIC RECEPTACLE



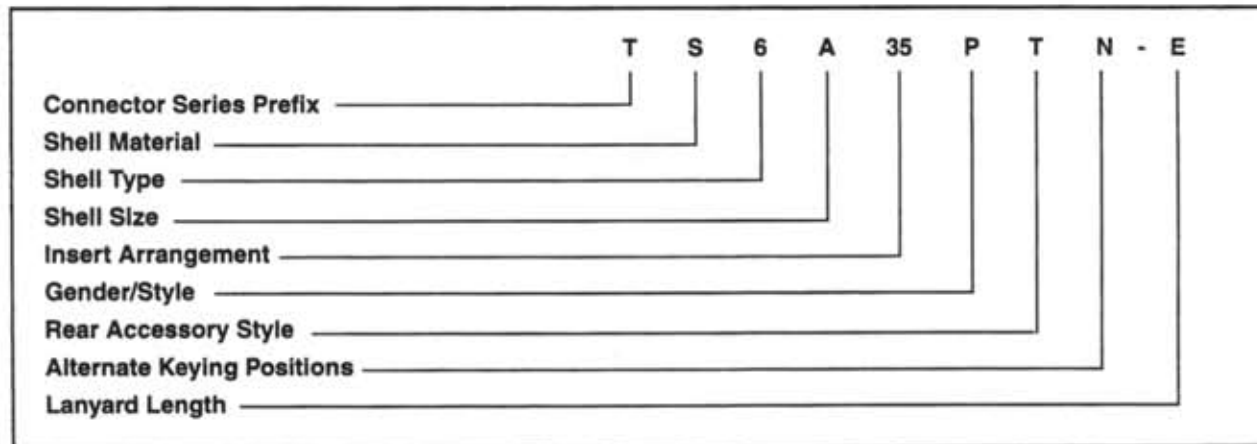
Typical part number*: TH7A35PN

* See how to order page for full description of ordering procedure and options.

T-Line® Series

how to order, connector service ratings

T-Line Series Subminiature Cylindrical Connectors can be ordered by coded part number as shown below. Typical part number TS6A35PTN-E is given as an example.



Connector Series Prefix

T - designates Amphenol®/Pyle-National® T-Line® Series Connectors

Shell Material

W - Aluminum with cadmium olive drab over nickel
 F - Aluminum with electroless nickel finish
 S - Stainless Steel
 N - Stainless Steel, nickel plated
 H - Stainless Steel Hermetic

Shell Type

2 - In-line Cable
 6 - Lanyard
 7 - Square flange
 9 - Jam nut mount

Shell Size

A - 09

Insert Arrangement

35 - 6 #22 contacts
 98 - 3 #20 contacts

Gender/Style

Environmental

P - Pin contacts only in a receptacle shell body
 S - Socket contacts only in a plug shell body

Hermetic

P - Pin, Solderwell termination
 X - Pin, Eyelet termination
 D - Pin, PC termination

Rear Accessory Style

T - Threaded
 omit for Hermetic
 (for optional crimping application, use crimp shield adapter T9-R-5309-10()

Alternate Keying Positions

A, B, C, D or N for normal

Lanyard Length (Dimensions in inches)

A - 4.0 F - 6.5
 B - 4.5 G - 7.0
 C - 5.0 H - 7.5
 D - 5.5 I - 8.0
 E - 6.0 (omit without lanyard)

SERVICE RATING*

Service Rating	Suggested Operating Voltage (Sea Level)		Test Voltage (Sea Level)	Test Voltage 50,000 ft.	Test Voltage 70,000 ft.	Test Voltage 100,000 ft.
	AC (AMS)	DC				
I	600	850	1800 V RMS	600 V RMS	400 V RMS	200 V RMS
M	400	550	1300 V RMS	550 V RMS	350 V RMS	200 V RMS

* Please note that the establishment of electrical safety factors is left entirely in the designer's hands, since he is in the best position to know what peak voltages, switching surges, transients, etc. can be expected in a particular circuit.