

## T-LINE® SERIES CONNECTORS

Push-Pull Mating Connectors for Military and Industrial Applications

PDS - 307

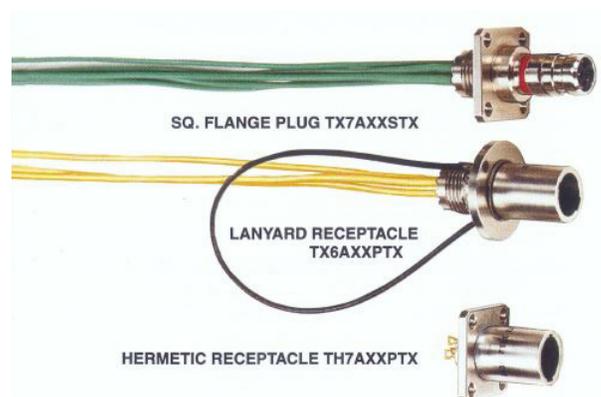
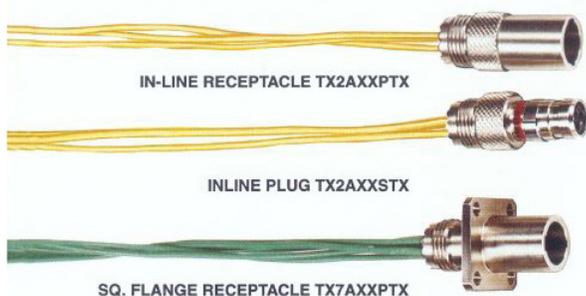


### Trim Your Electrical System Requirements with the Amphenol/Pyle-National space-saving T-Line Series subminiature cylindrical connector.

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 shell 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.

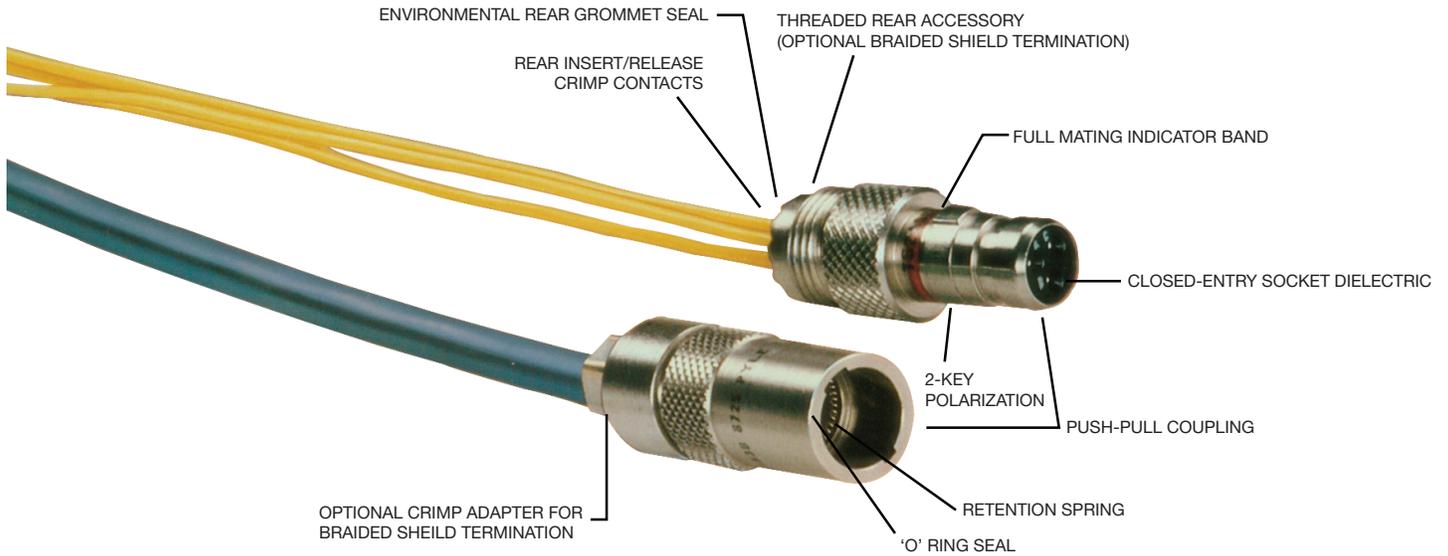
#### FEATURES & BENEFITS:

- Rugged construction
- Lanyard release applications
- Push-pull mating
- Rugged Environmental design
- Accepts T9-R-5309-10( ) crimp shield adapter
- Satinless steel or aluminum shells
- Various plating options
- MIL-C-38999 Series Inserts
- M39029-56/-58 Series Contacts
- Space-Saving size

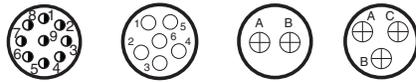


# T-Line® Series

## Features, Insert Arrangements/Alternate Keying Positions



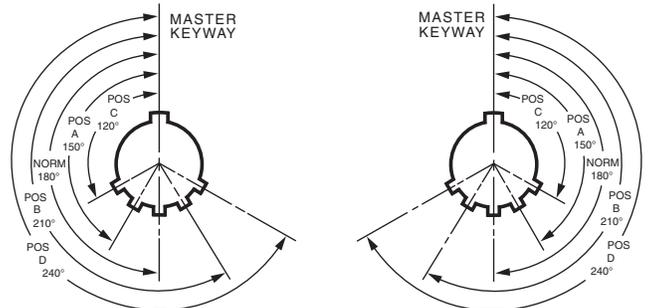
### Insert Arrangements



Insert Arrangement	A23	A35	A94	A98
Service Rating*	N	M	M	I
Number of Contacts	9	6	2	3
Contact Size	23	22D	20	20

\* See how to order page for service rating descriptions.

### Alternate Keying Positions



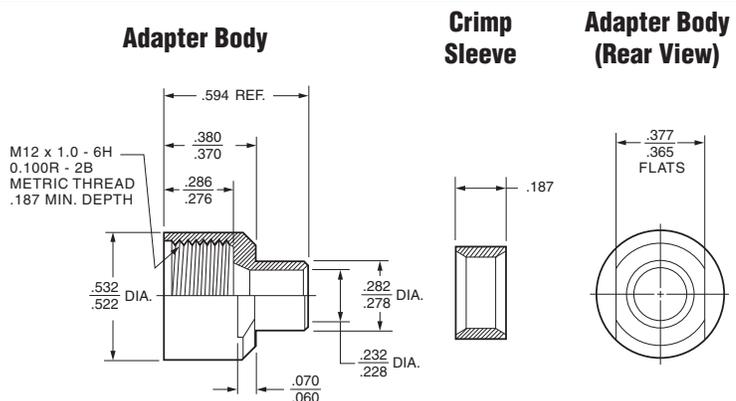
# T-Line® Series

## Contact Information, Optional Crimp Shield Adapter

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	0.760	0.054	1.370	27488-22	T3-4022-59L	Black
20	.047 ± .001	.209	24, 22, 20	0.040	1.020	0.083	2.110	27488-20	T3-4020-59L	Red

### Optional Crimp Shield Adapter



Order optional by part number T9-R-5309-10( ).

Complete last digit of part number with the desired shell material from the following options:

- F- Designates aluminum, electroless nickel plated
- W- designates aluminum, olive drab cadmium plated
- K- designates stainless steel, passivated

Crimping Tools for the T9-R-5309-10( ) adapter can be ordered by the following part numbers:

	Basic Crimping Tool	Die Set
Military Spec. Part Number	M22520/5-01	M22520/5-37
Amphenol/Pyle Part Number	TP-201380-T0	TP-201450

The above crimping tools are available from an approved tool manufacturer

# T-Line® Series

## How to Order, Connector Service Ratings

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

1.	2.	3.	4.	5.	6.	7.	8.	9.
Connector Series Prefix	Shell Material	Shell Type	Shell Size	Insert Arrangement	Gender/Style	Rear Accessory Style	Alternate Keying Positions	Lanyard Length
T	S	6	A	35	P	T	N-E	

### 1. Connector Series Prefix

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

### 2. Shell Material

**W** Aluminum with Cadmium olive drab over nickel  
**F** Aluminium with electroless nickel finish  
**S** Stainless Steel  
**N** Stainless Steel, nickel plated  
**H** Stainless Steel Hermetic

### 3. Shell Type

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

### 4. Shell Size

**A** 09

### 5. Insert Arrangement

**23** 9 #23 contacts  
**35** 6 #22 contacts  
**94** 2 #20 contacts  
**98** 3 #20 contacts

### 6. 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

### 7. Rear Accessory Style

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

### 8. Alternate Keying Positions

A,B,C,D or N for normal

### 9. Lanyard Length (Dimensions in inches)

<b>A</b> 4.0	<b>F</b> 6.5
<b>B</b> 4.5	<b>G</b> 7.0
<b>C</b> 5.0	<b>H</b> 7.5
<b>D</b> 5.5	<b>I</b> 8.0
<b>E</b> 6.0	

### Service Rating\*

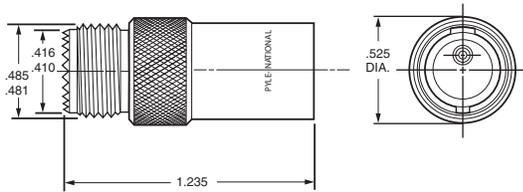
Service Rating	Suggested Operating Voltage (Sea Level)		Test Voltage (Sea Level)	Test Voltage 50,000 ft.	Test Voltage 70,000 ft.	Test Voltage 100,000 ft.
	AC (AMS)	DC				
I	600	850	1800 V RMS	600 V RMS	400 V RMS	200 V RMS
M	400	550	1300 V RMS	550 V RMS	350 V RMS	200 V RMS

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

# T-Line® Series

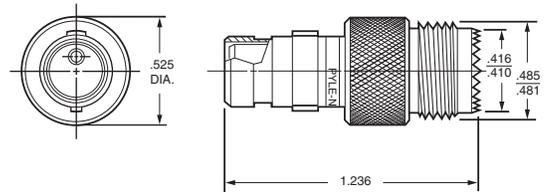
## Shell Styles, Dimensional Information

### In-Line Receptacle



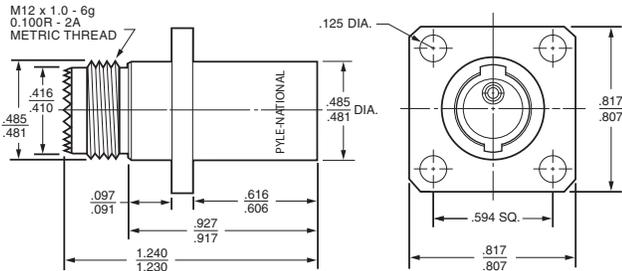
Typical part number\*: TS2A35PTN

### In-Line Plug



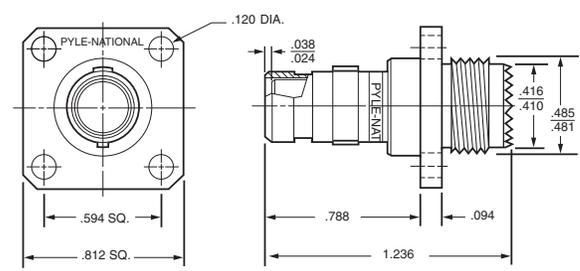
Typical part number\*: TS2A35STN

### Square Flange Receptacle



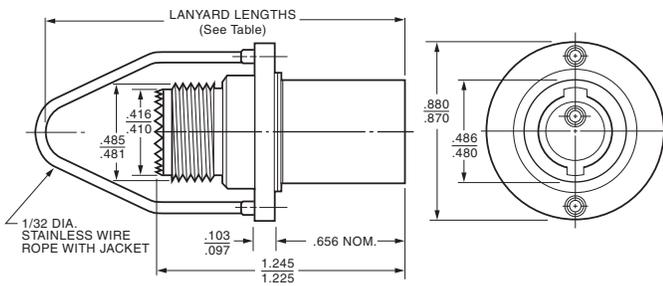
Typical part number\*: TS7A98PTA

### Square Flange Plug



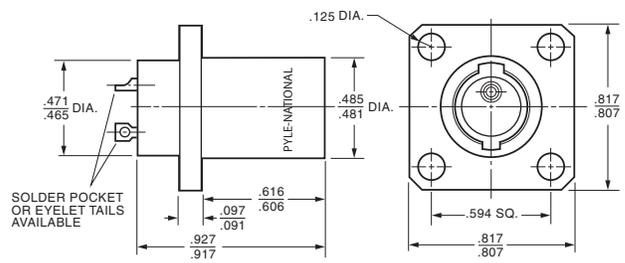
Typical part number\*: TS7A98STA

### Lanyard Receptacle



Typical part number\*: TS6A35PTB

### Hermetic Receptacle



Typical part number\*: TH7A35PN

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





