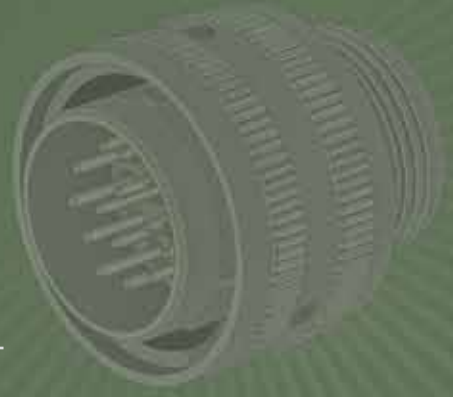


# Amphenol MIL-DTL-26500, Pyle<sup>®</sup>



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 New/Featured



### MIL-DTL-26500, Pyle<sup>®</sup> Typical Markets:

- Military & Commercial Aviation
- High Temperature Applications
- Meets Boeing Specifications
- Missiles & Ordnance

**Amphenol**  
Aerospace

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH  
SPEED

Fiber  
Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

High quality and dependability are the earned reputations of the Amphenol/Pyle Series of connectors designed to meet the specification requirements of MIL-DTL-26500. Serving such diverse fields as avionics, missile systems, aircraft general-purpose applications, aircraft engines and firewalls.

Amphenol /Pyle MIL-DTL-26500 Connectors are medium sized connectors with a rugged design, lightweight construction and continuously dependable performance. This product family provides the following design features and options:

**Aluminum Connectors - Military Classes R and G; Proprietary (ZZY, ZZW)**

- General purpose, environmentally resistant
- Threaded or bayonet coupling
- Square flange or single hole receptacles, and straight plug shell styles
- Black anodize non-conductive finish for class R and a conductive finish in class G that provides a minimum resistance path through the shell for grounding purposes
- Coupling nuts are hard coat treated for added protection against wear
- Rear accessory threads accommodate standard MS27291 series cable supports or related accessory hardware



**Stainless Steel Connectors - Military Class E; Proprietary (ZZY, ZZW)**

- Machined from 300-series stainless steel providing superior strength and wear characteristics
- Threaded or bayonet coupling
- Shells experience a less than 10% loss in yield strength at elevated temperatures, 204°C (399°F)
- Shell hardware resists corrosion for the life of the connector without the need of additional finishes
- Same shell styles offered as in aluminum
- Variety of stainless steel accessories are available



**Firewall Connectors – Military Class K; Proprietary (FPK, FYL)**

- Meets the fireproof requirements of MIL-DTL-5015, Class K
- Threaded or bayonet coupling
- FPL - threaded coupling; same as FPK; used on Lockheed Aircraft
- FP5K - threaded coupling; same as FPK; qualified for General Electric
- Non-magnetic stainless steel shells designed for superior strength and elevated temperatures up to 460°F for extended periods
- Same shell styles as stainless steel and aluminum versions

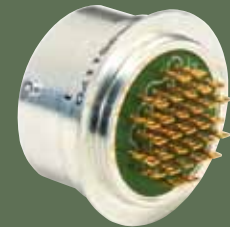


**48 Series Receptacle Short Skirt - Amphenol special application connector**

- Low profile design for restricted installation requirements
- Wire Splice Connector
- Space saving, single contact, wire splice module

**Hermetic Connectors - Military Class H; Proprietary (ZZL, ZZB)**

- See page 421 for brief description
- See page 421 for hermetic insert availability
- Consult Amphenol Aerospace for availability and ordering information.



**Contacts and Accessories for MIL-DTL-26500 connectors**

- SAE AS39029 qualified contacts and special application contacts including thermocouple, printed circuit board and shielded/coaxial types
- Boeing specification contacts
- Aluminum and stainless steel cable supports; aluminum dummy receptacles
- Contact crimping/ installation/removal tools for Amphenol 48 series and Pyle-National MIL-DTL-26500 series

**Commercial Design with PC Tail Contacts**

- Single piece insert construction
- PC Tail Contacts
- Special shell geometries
- For high volume cost sensitive applications



# MIL-DTL-26500, Pyle® Connectors

## Features and Class Descriptions

Amphenol®/Pyle MIL-DTL-26500 Connectors are qualified to Military Specification MIL-DTL-26500, as well as numerous high performance customer specifications. These connectors are available in aluminum or stainless steel shells, with bayonet or threaded coupling, and are qualified to meet the specifications of the following MIL-DTL-26500 classes:

MIL-DTL-26500 Classes	Amphenol/Pyle Series Classes	Hardware Description	Finish
Class R: (Environmental Resistant)	A	Aluminum Alloy	Black Anodize
Class G	M	Aluminum Alloy	Chromium
Class E	R	Stainless Steel	Passivated
Class K Firewall	FPK/FYL	Stainless Steel	Passivated
Class H Hermetic	HC	CRS/Stainless Steel	Various

### Crimp Contacts

Rear-insertable, front-releasable, crimp style contacts are machined from a copper alloy material, plated gold over nickel, and are qualified to specification SAE AS39029.

Contacts are crimp terminated outside the connector assembly and inserted into the appropriate cavity by means of a hand tool. Socket contacts utilize a multi-tined construction and feature a “C” spring which grips the tines, and ensures consistent and repetitive insertion/withdrawal forces. Contact tines are protected by a stainless steel shroud.

An optional pencil-clip thermocouple socket design is also offered. See page 422 for more information on thermocouple contacts.

### Alternate Keying

All MIL-DTL-26500 Series Connector shells can be furnished with normal or any of five alternate key positions. (See page 400). Each plug shell has a master key and four alternate keys. The position of the alternate keys in relation to the fixed master key determines the key identification. Inserts are bonded to the shell in relation to the master key, thus allowing positive protection against mis-mating when differing circuits exist side by side.

### Connector Sealing

The insert design utilizes a combination of resilient and rigid insulators to offer a connector with total sealing capabilities. Bonded interfaces between the resilient and rigid dielectric components eliminate air voids and thus protect the connector from potential degradation due to moisture and altitude conditions.

In Firewall Class K connectors, the resilient insert forms the primary contact seal and is bonded to a molded ceramic rigid insert. The insert assembly is physically bonded and mechanically retained to the inside surface of the stainless steel shell, providing a void-less, mono-block configuration impervious to adverse environments.

A pressure seal at the connector interface is accomplished through the aid of a coupling device which compresses the front resilient insulations and thus offers a seal around each contact which prevents the passage of air or moisture through the contact cavity.

Back resilient insulators are designed with a triple sealing grip at each wire hole to offer positive sealing and prevent wicking of moisture through the connector without the use of external clamping rings or adapters.



In addition, a dynamic “O” ring seal engages the front of the plug shell when connectors are mated and offers yet another barrier to moisture and containments.

### Fluid/Temperature Resistance

The fluorosilicone compound elastomer, developed by Pyle-National, exceeds all specification requirements and provides excellent resistance to tear, compression set, fluids, and high temperatures.

Amphenol/Pyle’s fluorosilicone compound offered in Class R, G, E and K is capable of reliability resisting:

- MIL-H-5606 hydraulic fluid
- MIL-L-9236 lubricating oil
- MIL-L-7808 and MIL-L-23699 lubricating oils
- MIL-J-5624 (JP-5) jet fuel
- Glycol
- Alkaline cleaning solutions of pH 10 or higher.

Test methods are as defined in MIL-DTL-26500 specification. Alternate compounds have been developed by Pyle-National to solve unique user requirements not addressed by the specifications.

Connectors have the capability of resisting high ambient temperatures up to 200°C (392°F) for long periods of time, thus contributing to an extended connector life. Connectors will withstand a combined ambient and internal temperature due to thermal rise of current carrying capacity of 238°C (469°F).

Amphenol®/Pyle® Firewall, Class K, connectors have the inherent ability to resist high temperatures up to 460°F (total temperature) for extended periods of time and can resist short time exposures (20 minutes) to prevent passage of a direct 2000°F flame.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class I

Back-  
Shells

Options  
Others

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

- EMI Filter Transient

- 26482 Matrix 2

- 83723 III Matrix | Pyle

- 26500 Pyle

- 5015 Crimp Rear Release Matrix

- 22992 Class I

- Back-Shells

- Options Others

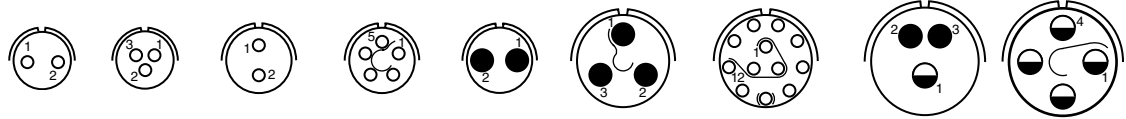
TEST REQUIREMENTS	MILITARY SPECIFICATIONS	PYLE CONNECTOR CAPABILITIES
Air Leakage (Classes E, G, R & K)	1 cu. inch per hr. max. -55°C (-67°F)	Comply
Altitude Immersion (Classes E, G, R & K)	Sea level 1 inch of mercury, 3 cycles (IR 5000 megohms hi-pot 1500 volts-submerged)	Comply
Contact Retention (Classes E, G, R & K)	Size 20 contact 20 lbs. min. Size 16 contact 25 lbs. min. Size 12 contact 30 lbs. min.	Exceeds specifications
Collet Retention	No requirement	Without damage to the collet or its Size 20 – 75 lbs. min. Size 16 – 140 lbs. min. Size 12 – 160 lbs. min.
Contact Insertion Force (Classes E, G, R & K)	All size contacts 10 lbs. max.	Comply
Coupling Forces	Torque required to couple and uncouple mating plugs and receptacles is not to exceed the values listed: Shell size Torque inch lbs. 8 10 12 14 16 18 20 22 24 9 10 14 17 23 26 31 38 46	Comply
Fluid Resistance (Classes E, G, R & K)	20 hrs. immersion in MIL-H-5606 hydraulic fluid and MIL-L-9236 lubrication oil. Must meet hi-pot.	20 hrs. min., fully functional physically and electrically after immersion. No deterioration of resilient material.
Ground Resistance (Class G)	.250 ohms backshell of plug to rear of receptacle flange.	Comply
High Potential (Classes E, G, R & K)	1500 VRMS mated & unmated at sea level 1000 VRMS mated to 110,000 ft. altitude	Exceed with ample margin of safety.
Insert Retention (Classes E, G, R & K)	75 psi. from either direction for 5 seconds.	Exceeds specifications.
Insulation Resistance (Classes E, G, R & K)	21°C (70°F), 5000 megohms between adjacent contacts and any contact and shell.	Exceeds specifications.
Low Temperature (Classes E, G, R & K)	-55°C (-67°F)	Comply
Magnetic Permeability (Classes E, G, R & K)	2 mu. maximum	Comply
Moisture Resistance (Classes E, G, R & K)	1000 megohms min. per MIL-STD. 202 method 106	Comply
Ozone Exposure (Classes E, G, R & K)	0.10 to .015% ozone exposure	Comply
Physical Shock (Classes E, G, R & K)	50 G's, 3 axis, per MIL-STD-202, method 213, test condition C, wired to monitor 1 microsecond discontinuity.	Comply
Sand & Dust Exposure (Classes E, G, R & K)	No requirement.	Meet MIL-E-5272 condition "B"
Temperature Life (Classes E, G, R & K)	Connector fully functional for 1000 hours at 200°C (392°F) ambient internal temperature 238°C (460°F)	Comply
Thermal Shock (Mated) (Classes E, G, R & K)	Cycled five times from -55°C to 260°C, held for 30 minutes at each temperature and transferred to the other in 2 minutes or less, with no evidence of damage.	Comply
Vibration (Classes E, G, R & K)	MIL-Std. 202 method 204 condition "D" at R. T., -55°C (-67°F) and +200°C (+392°F).	Comply - monitored for a max. of 1 microsecond discontinuity.
Flame Resistance (Class K)	Performance requirements of Paragraph 4.5.18 Fireproof (Class K of MIL-DTL-5015D)	Exceeds specifications

# MIL-DTL-26500, Pyle® Insert Arrangements

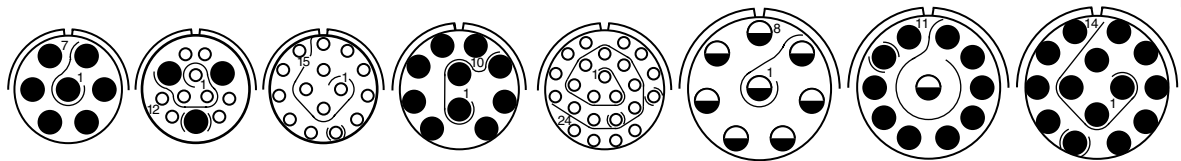


## Front Face of Pin Insert or Rear Face of Socket Insert Illustrated

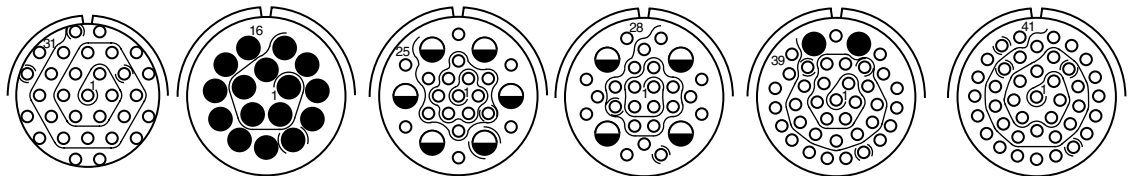
Contact cavities are identified with a spiral guide line indicating cavity sequence. The first and last cavities are numbered and every tenth cavity is bracketed. Symmetrical about center line.



Insert Arrangement	08-02	08-03 <sup>H</sup>	10-02 <sup>**</sup>	10-05 <sup>H</sup>	10-20 <sup>H</sup>	12-03 <sup>KH</sup>	12-12 <sup>H</sup>	14-03	14-04 <sup>K</sup>
Service Rating	I	I	I	I	I	I	I	I	I
Number of Contacts	2	3	2	5	2	3	12	2	4
Contact Size	20	20	20	20	16	16	20	16	12
								12 Shielded Coaxial	



Insert Arrangement	14-07 <sup>KH</sup>	14-12	14-15 <sup>KH</sup>	16-10 <sup>KH</sup>	16-24 <sup>KH</sup>	18-08 <sup>KH</sup>	18-11	18-14 <sup>KH</sup>
Service Rating	I	I	I	I	I	I	1	I
Number of Contacts	7	9	3	15	10	24	8	10
Contact Size	16	20	16	20	16	20	12	16
								12 Shielded Coaxial



Insert Arrangement	18-31 <sup>KH</sup>	20-16	20-25	20-28 <sup>**</sup>	20-39	20-41
Service Rating	I	I	I	I	I	I
Number of Contacts	31	16	19	6	24	4
Contact Size	20	16	20	12	20	12
					37	2
					20	16
						41
						20

† Designates Non-MS Configurations.  
K designates Firewall Class K inserts.  
H designates Hermetic inserts.

CONTACT LEGEND

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle

- 5015 Crimp Rear Release Matrix
- 22992 Class I

- Back-Shells
- Options Others

### Front Face of Pin Insert or Rear Face of Socket Insert Illustrated

Contact cavities are identified with a spiral guide line indicating cavity sequence. The first and last cavities are numbered and every tenth cavity is bracketed. Symmetrical about centerline.

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts
- Connectors
- Cables

- EMI Filter
- Transient

- 26482
- Matrix 2

- 83723 III
- Matrix | Pyle

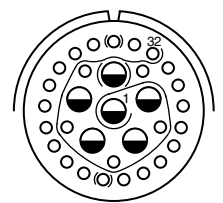
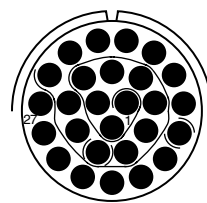
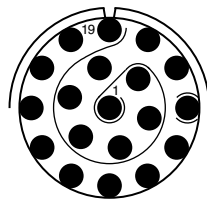
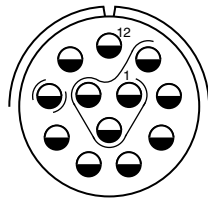
- 26500
- Pyle

- 5015
- Crimp Rear Release Matrix

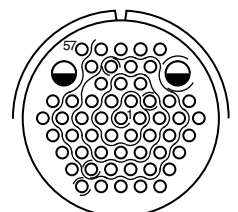
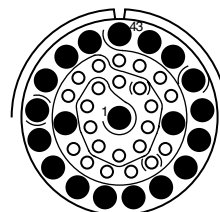
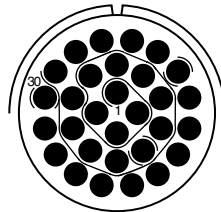
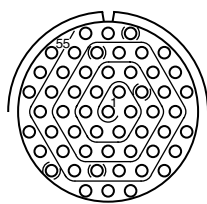
- 22992
- Class I

- Back-Shells

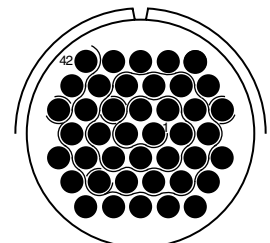
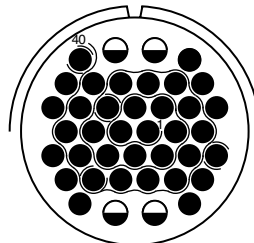
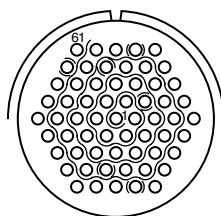
- Options
- Others



Insert Arrangement	22-12 <sup>K</sup>	22-19 <sup>KH</sup>	22-27 <sup>†</sup>	22-32
Service Rating				
Number of Contacts	12	19	27	26    6
Contact Size	12	16	16	20    12



Insert Arrangement	22-55 <sup>KH</sup>	24-30 <sup>†K</sup>	24-43 <sup>**</sup>	24-57
Service Rating				
Number of Contacts	55	30	23    20	55    2
Contact Size	20	16	20    16	20    12



Insert Arrangement	24-61	28-40 <sup>†K</sup>	28-42 <sup>†K</sup>
Service Rating			
Number of Contacts	61	36    4	42
Contact Size	20	16    12	16

† Designates Non-MS Configurations.  
K designates Firewall Class K inserts.  
H designates Hermetic inserts.

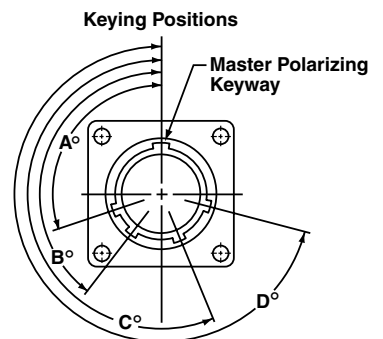


### Alternate Keying Positions of Shells

ALTERNATE POLARITY KEYWAY ARRANGEMENTS (Shell sizes 12, 14, 16, 18, 20, 22, 24, 28) View of front face of receptacle shell. Angles are counter-clockwise from "N" keyway. For plug shell, the key locations are clockwise when viewed from front of plug.

Position	For Connectors Size 8 and 10				For Connectors Size 12, 14, 16, 18, 20, 22, 24 and 28			
	A	B	C	D	A	B	C	D
Normal	105°	140°	215°	265°	105°	140°	215°	265°
6	102°	132°	248°	320°	18°	149°	192°	259°
7	80°	118°	230°	312°	92°	152°	222°	342°
8	35°	140°	205°	275°	84°	152°	204°	334°
9	64°	155°	234°	304°	24°	135°	199°	240°
Y or 10*	25°	115°	220°	270°	98°	152°	268°	338°

\* Y is used for all Military part number call-outs - aluminum/stainless steel and firewall; 10 is used for Amphenol/Pyle part number call-outs - aluminum/stainless steel only. (See how to order pages 403, 404 and 414).






Shown is Engaging Face View of Receptacle Shell with Keyways (Plug Shell Keys would be Opposite)

### THREADED COUPLING

#### PYLE ZZY




#### MS2426X( )TXX

Shell Style (Stainless Steel pictured)	Basic Performance Level	Hardware Description*	Class*	Basic Part Number**
 Square Flange Mounted Receptacle Threaded Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24264(R or G)XXTXX
			Pyle A or M Series	ZZY-(A or M)X-17XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24264EXXTXX
			Pyle R Series	ZZY-RX-17XX
 Single Hole (D-Hole) Mounted Receptacle Threaded Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24265(R or G)XXTXX
			Pyle A or M Series	ZZY-(A or M)X-15XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24265EXXTXX
			Pyle R Series	ZZY-RX-15XX
 Straight Plug Threaded Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24266(R or G)XXTXX
			Pyle A or M Series	ZZY-(A or M)X-10XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24266EXXTXX
			Pyle R Series	ZZY-RX-10XX

### BAYONET COUPLING

#### PYLE ZZW

#### MS2426X( )BXX

Shell Style (Stainless Steel pictured)	Basic Performance Level	Hardware Description*	Class*	Basic Part Number**
 Square Flange Mounted Receptacle Bayonet Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24264(R or G)XXBXX
			Pyle A or M Series	ZZW-(A or M)X-17XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24264EXXTXX
			Pyle R Series	ZZW-RX-17XX
 Single Hole (D-Hole) Mounted Receptacle Bayonet Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24265(R or G)XXBXX
			Pyle A or M Series	ZZW-(A or M)X-15XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24265EXXTXX
			Pyle R Series	ZZW-RX-15XX
 Straight Plug Bayonet Coupling	General Purpose, Environmental Resistant	Aluminum	Military Class R or G	MS24266(R or G)XXBXX
			Pyle A or M Series	ZZW-(A or M)X-10XX
	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel	Military Class E	MS24266EXXTXX
			Pyle R Series	ZZW-RX-10XX

NA designates not available

\* See how to order, page 403, for further description of hardware classes.

\*\* See how to order, page 403, to complete part numbers.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix


22992 Class 1

Back-Shell's

Options Others

38999

**RATCHET LOCK PLUG, BAYONET  
PYLE ZZY**

Shell Style (Stainless steel only)	Basic Performance Level	Hardware Description*	Class*	Basic Part Number**
 <p>Ratchet Lock Plug Non-Decoupling</p>	Superior Strength, Corrosion Resistance up to 204°C (399°F) Employs ratchet feature in last 120° of rotation to eliminate need for safety-wiring	Stainless Steel only	Pyle R Series (Commercial only)	ZZY-RX-12XX
<p>NNDC Plug New Non-Decoupling</p>	Superior Strength, Corrosion Resistance up to 204°C (399°F)	Stainless Steel only	Pyle R Series (Commercial only)	ZZY-RX-13XX

\* See how to order, page 403, for further description of hardware classes.  
\*\* See how to order, page 403, to complete part numbers.



III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

**RATCHET LOCK PLUG & MATING FLANGE MOUNTED, THREADED RECEPTACLE  
PYLE ZZY**

Shell Style (Stainless steel pictured)	Basic Performance Level	Hardware Description*	Class*	Pyle Basic Part Number**
 <p>Ratchet Lock Plug Non-Decoupling</p>	Designed to meet high vibration requirements beyond MIL-DTL-26500.	Aluminum	Pyle A Series	ZZY (A, D, F, M) X-12 (D, E or F) XX
		Stainless Steel	Pyle R Series	ZZY-RX-12 (D, E or F)XX
 <p>Square Flange Mounted Receptacle Threaded Coupling</p>	Designed to meet high vibration requirements beyond MIL-DTL-26500.	Aluminum	Pyle A Series	ZZY (A or F) X-17(D, E or F) XX
		Stainless Steel	Pyle R Series	ZZY-RX-17 (D, E or F) XX

\* See how to order, page 404, for further description of hardware classes.  
\*\* See how to order, page 404, to complete part numbers.

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class 1

Back-Shells

Options  
Others



## Easy steps to build a part number... Military

1. Shell Style	2. Service Class	3. Shell Size	4. Coupling Type	5. Insert Arrangement	6. Contact Type	7. Alternate Keying
MS24266	R	22	T	55	P	6

### Step 1. Select a Shell Style

	Designates
MS24264	Square Flange Mounted Receptacle
MS24265	Single D-Hole Mounted Receptacle
MS24266	Straight Plug

### Step 5. Select an Insert Arrangement from page 399 & 400

Arrangements. First number represents Shell Size, second number is the Insert Arrangement.

### Step 2. Select a Service Class

	Designates
R	Aluminum, non-conductive (black anodize finish)
G	Aluminum, conductive (chromium finish)
E	Stainless steel, Passivated

### Step 6. Select a Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

### Step 3. Select a Shell Size

8	10	12	14	16	18	20	22	24
---	----	----	----	----	----	----	----	----

### Step 7. Select an Alternate Keying Position of Shell

6, 7, 8, 9, Y (N for Normal) See page 400.

### Step 4. Select a Coupling Type

	Designates
T	Threaded
B	Bayonet

38999

III
HD
Dualok
II
I
SJT
Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class 1

Back-Shell's

Options  
Others

## Easy steps to build a part number... Pyle Commercial

1. Shell Style	2. Service Class	3. Contacts/Accessories	4. Shell Style	5. Shell Size	6. Insert Arrangement	7. Contact Type	8. Alternate Keying	9. Contact Plating	10. Deviations/Specials
ZZY	A	C	10	22	55	P	6	D	XXX

### Step 1. Select a Shell Style

	Designates
ZZY	Threaded Coupling
ZZW	Bayonet Coupling

### Step 4. Select a Shell Style

	Designates
10	Straight Plug
12	Non-Decoupling Plug(Ratchet Lock)
13	New Non-Decoupling Plug (NNDC) (SS only)
15	Single Hole Mounting Receptacle
17	Square Flange Receptacle

### Step 8. Select an Alternate Keying Position of Shell

06, 07, 08, 09, 10 (Omit for Normal) See page 400.

### Step 2. Select a Service Class

	Designates
A	Aluminum, non-conductive (black anodize finish)
D	Aluminum, O.D. CAD/Ni
F	Aluminum, Clear Cadmium plated
M	Aluminum, conductive (chromium finish)
R	Stainless steel, Passivated

### Step 5. Select a Shell Size

8	10	12	14	16	18	20	22	24	28
---	----	----	----	----	----	----	----	----	----

### Step 9. Select a Contact Plating

	Designates
D	Gold
T	Rhodium

### Step 3. Select Contacts & Accessories

	Designates
No Digit	with contacts and cable support
C	without cable support, with contacts
D	Without contacts, with cable support
O	Without contacts or cable support

### Step 6. Select an Insert Arrangement from page 399 & 400

Arrangements. First number represents Shell Size, second number is the Insert Arrangement.

### Step 7. Select a Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

### Step 10. Deviation/Specials

Consult Amphenol for more information.

Accessory threads for aluminum and stainless steel hardware differ, and care should be taken in selection of alternate accessory hardware that will conform to the threads noted in the dimensional tables within this catalog.

38999

Amphenol®/Pyle® connectors are specifically designed to meet high vibration requirements above and beyond the specification requirements of MIL-DTL-26500. The plug connector features a unique non-decoupling device which offers a ratchet mechanism designed to engage as the threaded connectors approach a bottomed condition. Connector coupling assembly continues to ratchet for approximately 120 degrees until the mated connectors reach a complete metal-to-metal bottomed condition. The ratchet device maintains the connectors in a fully coupled condition, thus eliminating the need for safety wiring.



**Additional features include:**

- Modified accessory thread to accommodate MIL-DTL-83723 backshell hardware.
- Rear accessory teeth are featured on both the plug and receptacle shell to assure non-rotation of accessory hardware
- Intermateable with all MIL-DTL-26500 threaded connectors of like insert arrangement and key position

## Easy steps to build a part number... Pyle Commercial

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Shell Style	Service Class	Contacts & Accessories	Shell Style	Accessory Style	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/ Specials
ZZY	A	C	12	D	14	04	P	06	D

**Step 1. Select a Shell Style**

	Designates
ZZY	Threaded Coupling

**Step 5. Select a Shell Size**

10	12	14	16	18	20	22	24	28
----	----	----	----	----	----	----	----	----

**Step 2. Select a Service Class**

	Designates
A	Aluminum, non-conductive (black anodize finish)
D	Aluminum, O.D. CAD/Ni
F	Aluminum, Clear Cadmium plated
M	Aluminum, conductive (chromium finish)
R	Stainless steel, Passivated

**Step 6. Select an Insert Arrangement from Page 399 & 400**

First number represents Shell Size, second number is the Insert Arrangement.

**Step 3. Select Contact & Accessory**

	Designates
No Digit	With contacts and clamp
C	With contacts
O	Without contacts

**Step 7. Select a Contact Type**

	Designates
P	Pin Contacts
S	Socket Contacts

**Step 4. Select a Shell Style**

	Designates
12	Non-Decoupling Plug, (Ratchet Lock)
13	New Non-Decoupling Plug (NNDC) (SS only)
17	Square Flange Mounted Receptacle

**Step 8. Select an Alternate Keying Position of Shell**  
06, 07, 08, 09, 10 (Omit for Normal) See page 400

**Step 5. Select Accessory Style**

	Designates
D	Rear accessories per MIL-DTL-83723, 3 Accessory Serrations.
E	Rear accessories per MS 3155 (360° Accessory Serrations)
F	Rear accessories per MS 3155 with EMI Band (360° Accessory Serrations)

**Step 9. Select a Contact Plating**

	Designates
D	Gold plate per MIL-DTL-39029
T	Rhodium plate per MIL-DTL-26636

**Step 10. Deviations/Specials**

Consult Amphenol for more information.

Accessory threads for aluminum and stainless steel hardware differ, and care should be taken in selection of alternate accessory hardware that will conform to the threads noted in the dimensional tables within this catalog.

# MS24264, Pyle® ZZY, MIL-DTL-26500

## Square Flange Mounted Receptacle, Threaded



### Part #

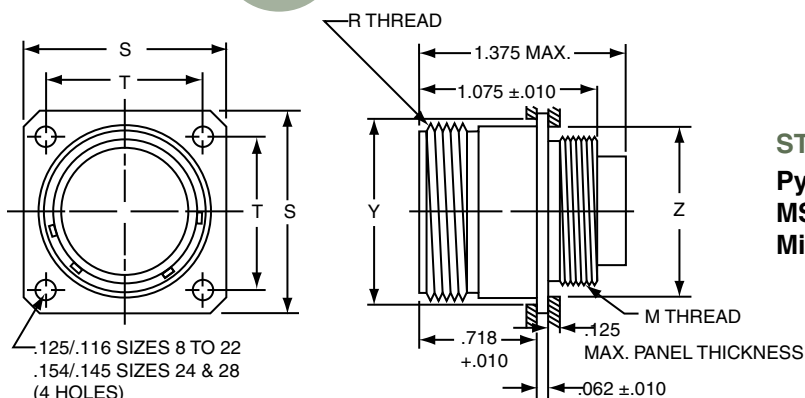
To complete see how to order page 403.

### Military

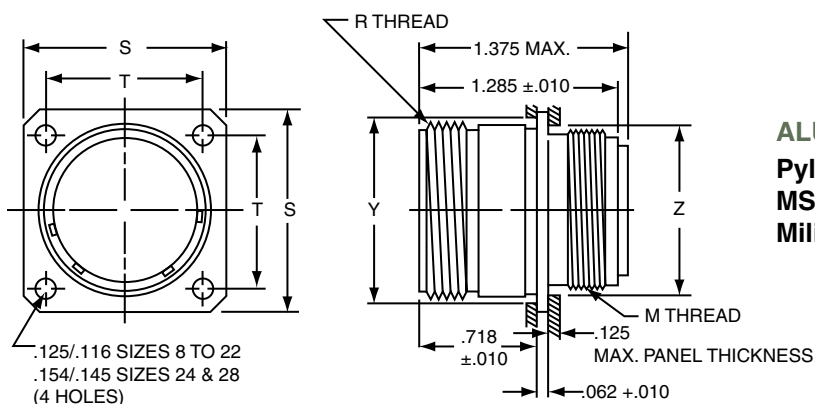
Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying
MS24264	E, R, G	XX	T	XX	X	X

### Commercial

Shell Style	Service Class	Contacts & Accessories	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/ Specials
ZZY	X	X	17	XX	XX	X	X	X	XXX



**STAINLESS STEEL**  
**Pyle ZZY-RX-17XX Series**  
**MS24264EXXTXX**  
**Military Class E**



**ALUMINUM**  
**Pyle ZZY-XX-17XX Series**  
**MS24264RXXTXX**  
**Military Class R and G**

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		R Coupling Thread	S Flange Width ±.005	T Mounting Hole Centers ±.005	Y Back Mount Min. Hole	Z Front Mount Min. Hole
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert					
08**	NA	.437-28	.025	.026	.562-24	.812	.594	.606	.443
10	.563-36	.562-24	.042	.044	.687-24	.937	.719	.748	.572
12	.733-36	.750-20	.061	.062	.875-20	1.031	.812	.913	.760
14	.803-36	.812-20	.072	.074	.937-20	1.125	.906	.980	.822
16	.930-36	.937-20	.087	.090	1.062-18	1.250	.969	1.107	.948
18	1.036-36	1.062-18	.110	.112	1.187-18	1.343	1.062	1.209	1.072
20	1.161-36	1.187-18	.130	.134	1.312-18	1.437	1.156	1.325	1.197
22	1.286-36	1.312-18	.152	.159	1.437-18	1.562	1.250	1.452	1.322
24	1.411-36	1.437-18	.181	.188	1.562-18	1.703	1.375	1.577	1.448
28†	1.661-36	NA	NA	NA	1.812-16	2.000	1.562	1.827	1.700

NA designates not available. \*\* Not available in Stainless Steel. † Not available in Aluminum. All dimensions for reference only.

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crmp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shell's

Options  
Others

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables
- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle
- 5015 Crimp Rear Release Matrix
- 22992 Class I
- Back-Shells
- Options Others

**Part #**

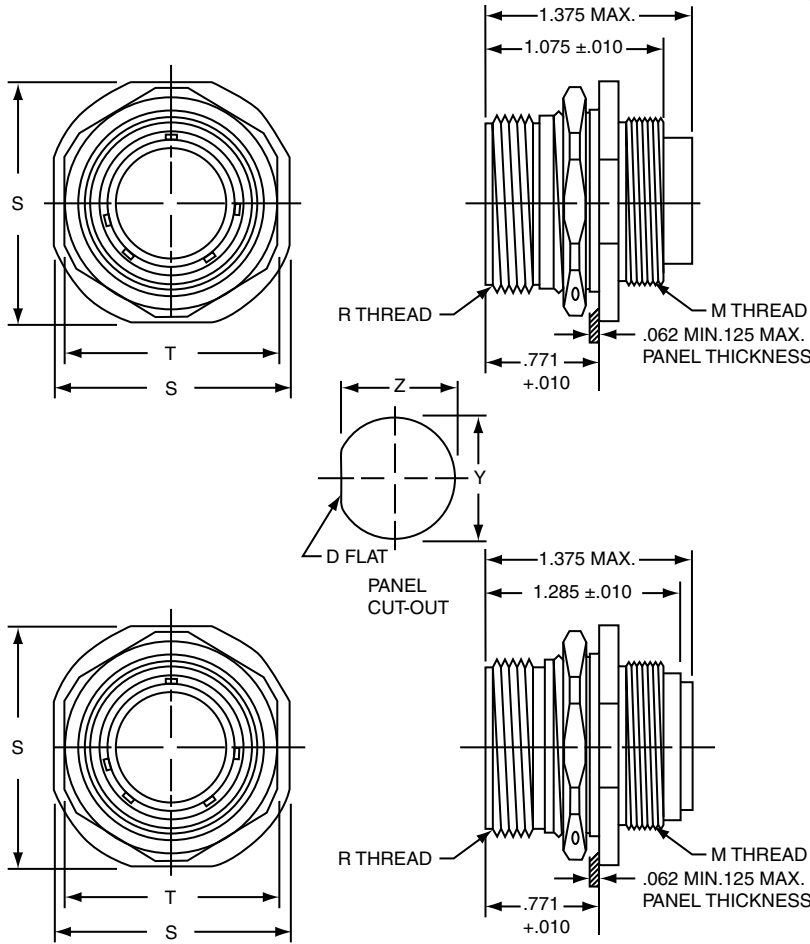
To complete see how to order page 403.

**Military**

Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying
MS24265	E or R	XX	T	XX	X	X

**Commercial**

Shell Style	Service Class	Contacts & Accessories	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/ Specials
ZZY	X	X	15	XX	XX	X	X	X	XXX



**STAINLESS STEEL**  
**Pyle ZZY-RX-15XX Series**  
**MS24265EXXTXX**  
**Military Class E**

**ALUMINUM**  
**Pyle ZZY-XX-15XX Series**  
**MS24265RXXTXX**  
**Military Class R**

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		R Coupling Thread	S Flange Width ±.005	T Lock Nut Flats		Y Dia Mounting Hole	Z Flat Mounting Hole	Rec. min. Torque Jam Nut Inch/Lbs.
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert			Steel	Alum.			
08	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	.563-36	.562-24	.049	.050	1.171-24	1.104	.937	.937	.760	.730	36
12**	NA	.750-20	.069	.070	.875-20	1.291	1.125	1.125	.947	.917	56
14	.803-36	.812-20	.087	.089	.937-20	1.391	1.062	1.187	1.010	.980	65
16	.930-36	.937-20	.104	.106	1.062-18	1.516	1.187	1.312	1.135	1.105	69
18	1.036-36	1.062-18	.131	.133	1.187-18	1.614	1.312	1.437	1.260	1.225	81
20	NA	NA	.152	.157	NA	NA	NA	NA	NA	NA	100
22	1.286-36	1.312-18	.181	.187	1.312-18	1.954	1.562	1.687	1.510	1.475	123
24	1.411-36	1.437-18	.208	.212	NA	NA	NA	NA	NA	NA	133
28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

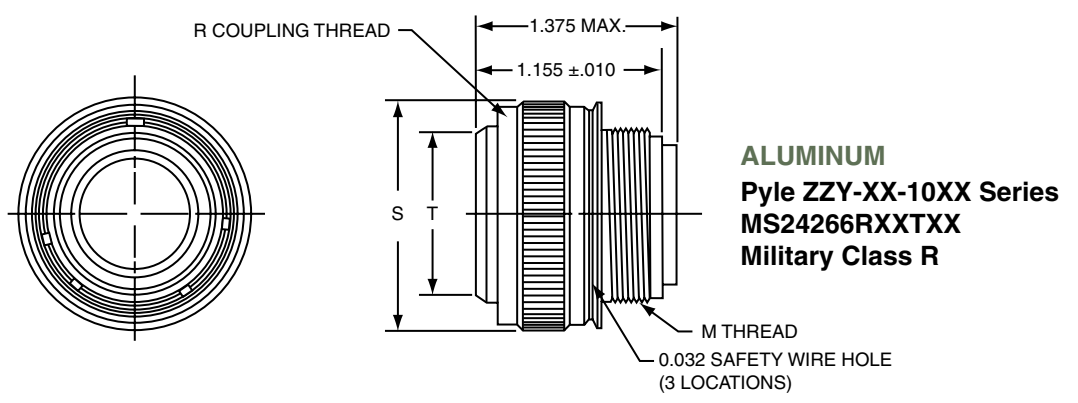
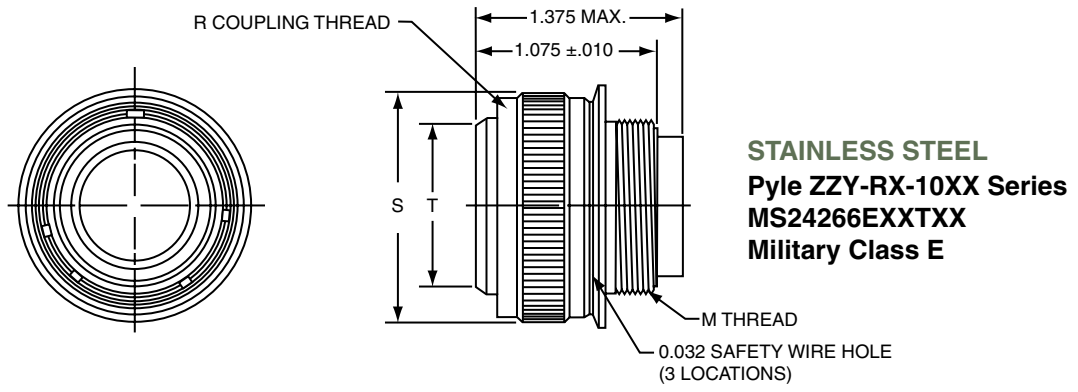
NA designates not available. \*\* Not available in Stainless Steel. All dimensions for reference only.

# MS24266, Pyle® ZZY, MIL-DTL-26500

## Straight Plug, Threaded

<b>Part #</b>		<b>Military</b>								
To complete see how to order page 403.										
<b>Shell Style</b>	<b>Service Class</b>	<b>Shell Size</b>	<b>Coupling Type</b>	<b>Insert Arrangement</b>	<b>Contact Type</b>	<b>Alternate Keying</b>				
MS24266	E or R	XX	T	XX	X	X				
<b>Commercial</b>										
<b>Shell Style</b>	<b>Service Class</b>	<b>Contacts &amp; Accessories</b>	<b>Shell Style</b>	<b>Shell Size</b>	<b>Insert Arrangement</b>	<b>Contact Type</b>	<b>Alternate Keying</b>	<b>Contact Plating</b>	<b>Deviations/Specials</b>	
ZZY	X	X	10	XX	XX	X	X	X	XXX	

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB



- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		R Coupling Thread	S Dia. Max Coupling Nut		T Shell Dia. +.000 - .005
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert		Steel	Alum.	
08**	NA	.437-28	.030	.031	.562-24	NA	.776	.424
10	.563-36	.562-24	.044	.045	.687-24	.826	.906	.526
12	.733-36	.750-20	.063	.064	.875-20	.996	1.078	.696
14	.803-36	.812-20	.074	.076	.937-20	1.066	1.141	.765
16	.930-36	.937-20	.091	.094	1.062-18	1.193	1.266	.892
18	1.036-36	1.062-18	.110	.112	1.187-18	1.299	1.375	.998
20	1.161-36	1.187-18	.133	.136	1.312-18	1.424	1.510	1.123
22	1.286-36	1.286-18	.154	.160	1.437-18	1.549	1.625	1.248
24	1.411-36	1.437-18	.184	.188	1.562-18	1.674	1.760	1.373
28†	1.661-36	NA	NA	NA	1.812-16	1.912	NA	1.623

NA designates not available. \*\* Not available in Stainless Steel. † Not available in Aluminum. All dimensions for reference only.

- 5015 Crimp Rear Release Matrix
- 22992 Class 1
- Back-Shell's
- Options Others

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables
- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle
- 5015 Crimp Rear Release Matrix
- 22992 Class I
- Back-Shells
- Options Others

### Part #

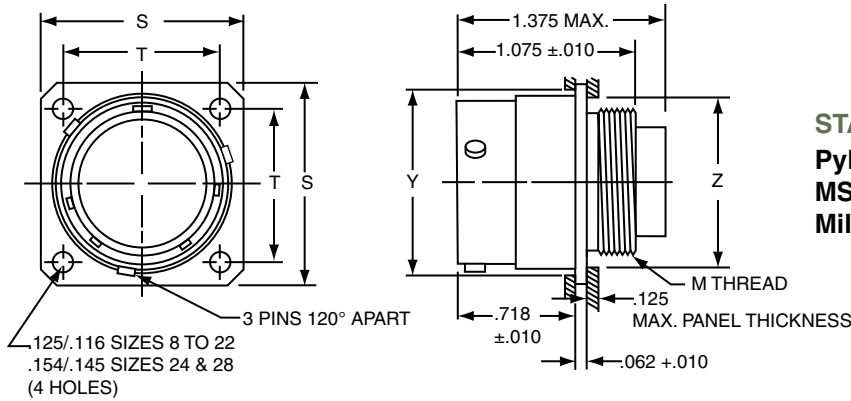
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### Military

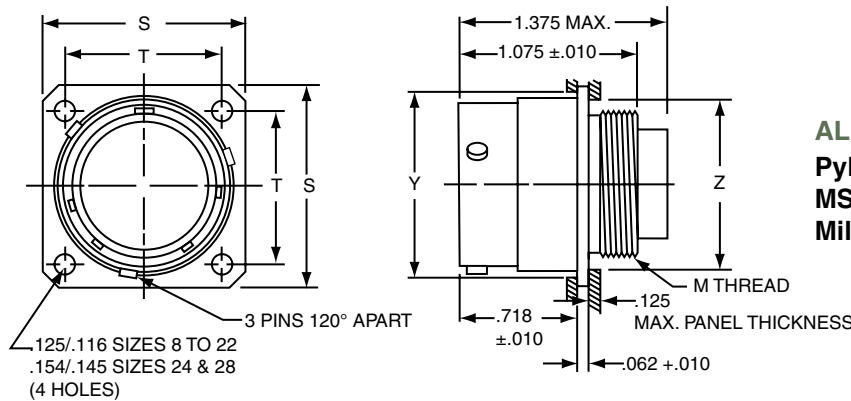
Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying
MS24264	E or R	XX	B	XX	X	X

### Commercial

Shell Style	Service Class	Contacts & Accessories	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/ Specials
ZZW	X	X	17	XX	XX	X	X	X	XXX



**STAINLESS STEEL**  
Pyle ZZW-RX-17XX Series  
MS24264EXXBXX  
Military Class E



**ALUMINUM**  
Pyle ZZW-XX-17XX Series  
MS24264RXXBXX  
Military Class R

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		S Flange Width ±.005	T Mounting Hole Centers ±.005	Y Back Mount Min. Hole	Z Front Mount Min. Hole
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert				
08**	NA	.437-28	.025	.026	.812	.594	.606	.443
10	.563-36	.562-24	.042	.044	.937	.719	.748	.572
12	.733-36	.750-20	.061	.062	1.031	.812	.913	.760
14	.803-36	.812-20	.072	.074	1.125	.906	.980	.822
16	.930-36	.937-20	.087	.090	1.250	.969	1.107	.948
18	1.036-36	1.062-18	.110	.112	1.343	1.062	1.209	1.072
20	1.161-36	1.187-18	.130	.134	1.437	1.156	1.325	1.197
22	1.286-36	1.312-18	.152	.159	1.562	1.250	1.452	1.322
24**	NA	1.437-18	.181	.188	1.703	1.375	1.577	1.447
28	NA	NA	NA	NA	NA	NA	NA	NA

NA designates not available. \*\* Not available in Stainless Steel. All dimensions for reference only.

# MS24265, Pyle® (ZZW), MIL-DTL-26500

## Single Hole (D-Hole) Mounted Receptacle, Bayonet



### Part #

To complete see how to order page 403.

### Military

Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying
MS24265	E or R	XX	B	XX	X	X

### Commercial

Shell Style	Service Class	Contacts & Accessories	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/Specials
ZZW	X	X	15	XX	XX	X	X	X	XXX

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

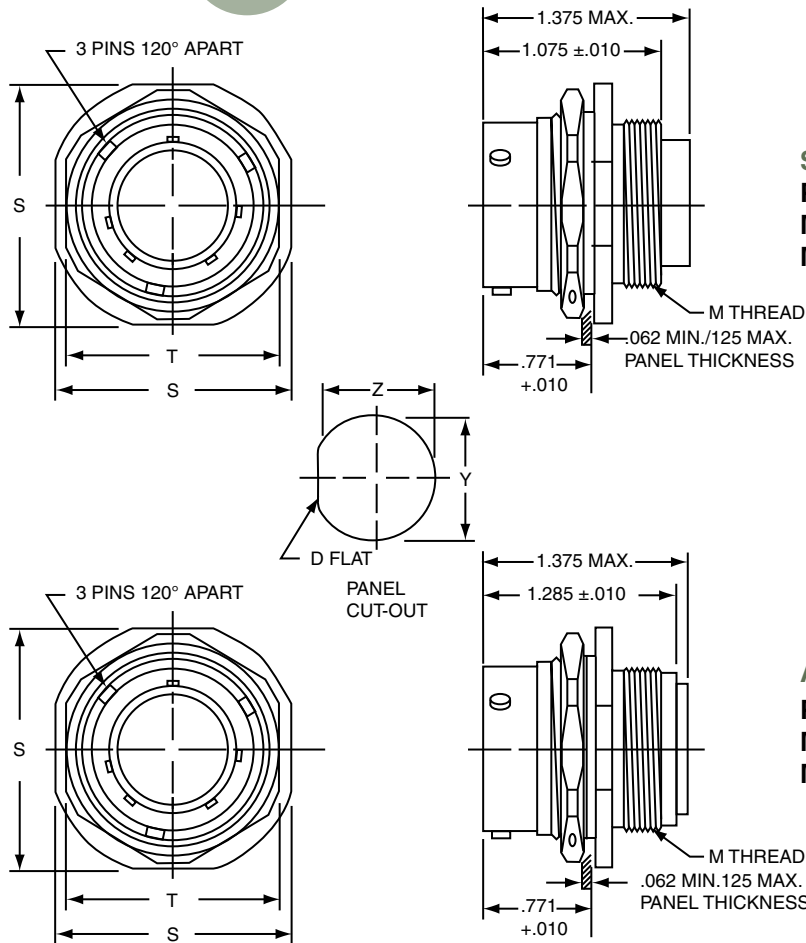
26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others



**STAINLESS STEEL**  
**Pyle ZZW-RX-15XX Series**  
**MS24265EXXBXX**  
**Military Class E**

**ALUMINUM**  
**Pyle ZZW-XX-15XX Series**  
**MS24265RXXBXX**  
**Military Class R**

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		S Flange Width ±.005	T Lock Nut Flats		Y Dia Mounting Hole	Z Flat Mounting Hole	Recom. min. Torque Jam Nut Lb. - inches
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert		Steel	Alum.			
08**	NA	.437-28	.029	.030	.979	NA	.812	.635	.605	33
10	.563-36	.562-24	.049	.050	1.104	.937	.937	.760	.730	36
12**	NA	.750-20	.069	.070	1.291	1.125	1.125	.947	.917	56
14	.803-36	.812-20	.087	.089	1.391	1.062	1.187	1.010	.980	65
16	.930-36	.937-20	.104	.106	1.561	1.187	1.312	1.135	1.105	69
18	1.036-36	1.062-18	.131	.133	1.641	1.312	1.437	1.260	1.225	81
20	1.161-36	1.187-18	.152	.157	1.766	1.562	NA	1.385	1.350	100
22	1.286-36	1.312-18	.181	.187	1.954	1.585	1.687	1.510	1.475	123
24	1.411-36	1.437-18	.208	.212	2.079	1.687	1.812	1.635	1.600	133
28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA designates not available. \*\* Not available in Stainless Steel. All dimensions for reference only.

**Part #**

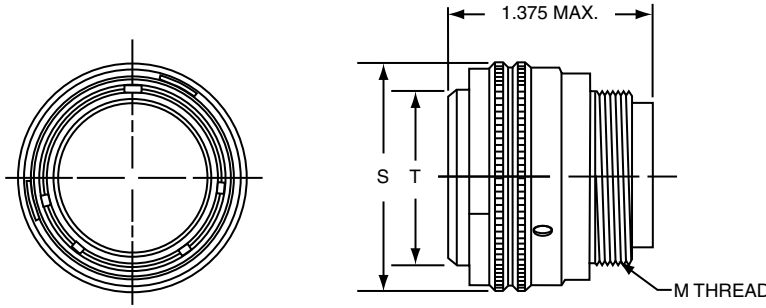
To complete see how to order page 403.

**Military**

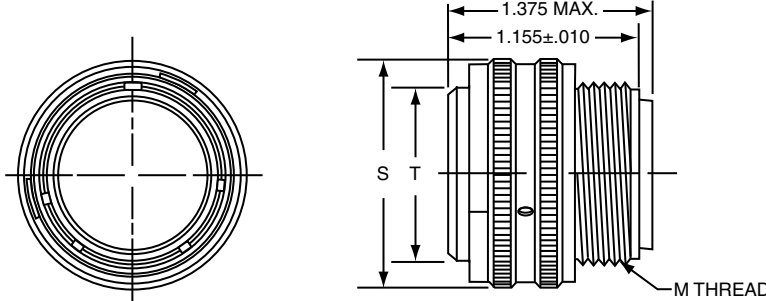
Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying
MS24266	E or R	XX	B	XX	X	X

**Commercial**

Shell Style	Service Class	Contacts & Accessories	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/Specials
ZZW	X	X	10	XX	XX	X	X	X	XXX



**STAINLESS STEEL**  
**Pyle ZZW-RX-10XX Series**  
**MS24266EXXBXX**  
**Military Class E**



**ALUMINUM**  
**Pyle ZZW-XX-10XX Series**  
**MS24266RXXBXX**  
**Military Class R**

Shell Size	M Cable Support Thread		Aluminum Connector Weight (lbs.) max including Contacts		S Dia Max. Coupling Nut		T Shell Dia. +.000 - .005
	Steel NS-2A	Alum. UNEF-2A Modified	Pin Insert	Socket Insert	Steel	Alum.	
08**	NA	.437-28	.030	.031	NA	.762	.424
10	.563-36	.562-24	.044	.045	.848	.904	.526
12	.733-36	.750-20	.063	.064	1.018	1.076	.696
14	.803-36	.812-20	.074	.076	1.087	1.122	.765
16	.930-36	.937-20	.091	.094	1.214	1.264	.892
18	1.036-36	1.062-18	.110	.112	1.320	1.373	.998
20	1.161-36	1.187-18	.133	.136	1.445	1.503	1.123
22	1.286-36	1.312-18	.154	.160	1.570	1.623	1.248
24	1.411-36	1.437-18	.184	.188	1.695	1.752	1.373
28	NA	NA	NA	NA	NA	NA	NA

NA designates not available. \*\* Not available in Stainless Steel. All dimensions for reference only.

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables
- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle
- 5015 Crimp Rear Release Matrix
- 22992 Class 1
- Back-Shells
- Options Others

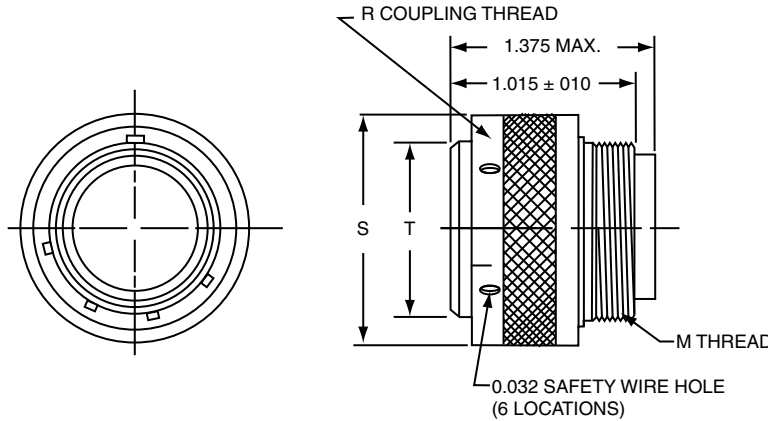


# Pyle® (ZZY), MIL-DTL-26500 Ratchet Lock Plug, Non-Decoupling Plug

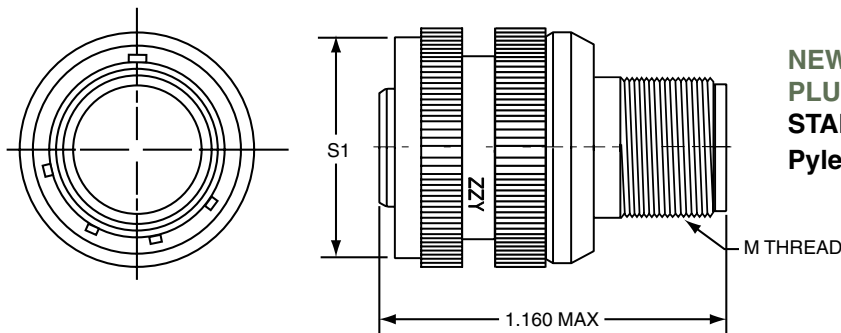
**Part #** To complete see how to order page 404.

**Commercial**

Shell Style	Service Class	Contacts & Accessories*	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/Specials
ZZY	X	X	12	XX	XX	X	X	X	XXX
ZZY	X	X	13	XX	XX	X	X	X	XXX



**RATCHET LOCK PLUG  
STAINLESS STEEL/  
ALUMINUM  
Pyle ZZY-XX-12XX  
Series**



**NEW NON-DECOUPLING  
PLUG  
STAINLESS STEEL  
Pyle ZZY-RX-13XX Series**

Shell Size	M Thread Cable Support	R Thread Coupling	S Dia Coupling Nut	S1 Dia Coupling Nut	T Shell Dia.
08	.434-36	.562-24	.800	.820	.424
10	.563-36	.687-24	.934	.946	.526
12	.733-36	.875-20	1.114	1.088	.696
14	.803-36	.937-20	1.178	1.191	.765
16	.930-36	1.062-18	1.305	1.314	.892
18	1.036-36	1.312-18	1.411	1.420	.998
20	1.161-36	1.312-18	1.550	1.545	1.123
22	1.286-36	1.437-18	1.661	1.670	1.248
24	1.411-36	1.562-18	1.786	1.805	1.373
28	1.661-36	1.812-16	2.041	2.110	1.623

All dimensions for reference only.

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class 1

Back-Shells

Options Others

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

HIGH SPEED

- Fiber Optics
- Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class I

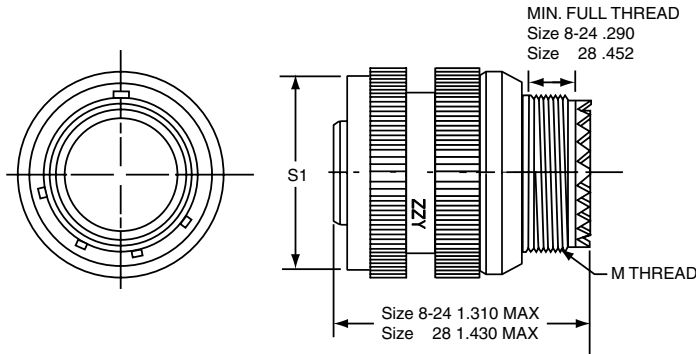
Back-Shells

Options Others

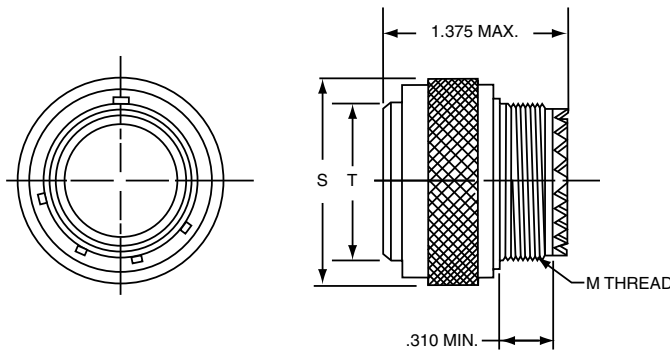
**Part #** To complete see how to order page 404.

**Commercial**

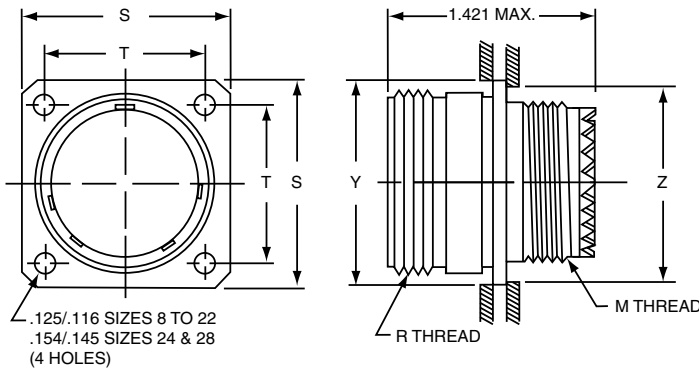
Shell Style	Service Class	Contacts & Accessories*	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Deviations/Specials
ZZY	X	X	12 or 13	XX	XX	X	X	X	XXX



**NEW NON-DECOUPLING PLUG MATING**  
Serrations per MS3155  
STAINLESS STEEL/ALUMINUM  
Pyle ZZY- XX-13XXX Series



**RATCHET LOCK PLUG**  
With MIL-DTL-83723 Accessory  
Serrations per MS3155  
STAINLESS STEEL/ALUMINUM  
Pyle ZZY- XX-12XXX Series







**MATING SQUARE FLANGE MOUNTED, THREADED RECEPTACLE**  
STAINLESS STEEL/ALUMINUM  
Pyle ZZY-XX-17XX Series

Shell Size	M Thread Cable Support	Plug				Receptacle			
		S Dia Max. Coupling Nut	T Shell Dia. +.000 -0.005	R Coupling Thread	S Flange Width ±.005	S1 Dia Coupling Nut	T Mounting Hole Centers ±.005	Y Back Mount Hole (min.)	Z Front Mount Hole (min.)
08	NA	NA	NA	NA	NA	.820	NA	NA	NA
10	.6250-24	.945	.526	.6875-24	.937	.946	.719	.706	.635
12	.7500-20	1.165	.696	.8750-20	1.031	1.088	.812	.885	.760
14	.8750-20	1.230	.765	.9375-20	1.125	1.191	.906	.947	.885
16	1.0000-20	1.353	.892	1.0625-18	1.250	1.314	.969	1.072	1.010
18	1.0625-18	1.468	.998	1.1875-18	1.343	1.420	1.062	1.197	1.072
20	1.1875-18	1.607	1.123	1.3125-18	1.437	1.545	1.156	1.322	1.197
22	1.3125-18	1.733	1.248	1.4375-18	1.562	1.670	1.250	1.447	1.322
24	1.4375-18	1.858	1.373	1.5625-18	1.703	1.805	1.375	1.572	1.448
28	1.7500-18	2.113	1.623	1.8120-16	2.000	2.110	1.562	1.822	1.760




NA designates not available. All dimensions for reference only.

38999

## THREADED COUPLING, FIREWALL, PYLE FPK, FPL, FP5K, MS2761X-KXXTXX

Shell Style (Firewall stainless steel only)	Basic Performance Level	Hardware Description*	Class*	Basic Part Number**
 <p>Square Flange Mounted Receptacle Threaded Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27613-KXXTXX
			Pyle FPK or FPL or FP5K Series	FPK-17( ) or FPL-17( ) or FP5K-17( )
 <p>Single Hole (D-Hole) Mounted Receptacle Threaded Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27614-KXXTXX
			Pyle FPK or FPL or FP5K Series	FPK-19( ) or FPL-19( ) or FP5K-19( )
 <p>Straight Plug Threaded Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27615-KXXTXX
			Pyle FPK or FPL	FPK-11( ) or FPL-11( )
 <p>Ratchet Locking Plug Threaded Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Meets Military Class K	Consult Amphenol
			Pyle FPK or FPL or FP5K Series	FPK-12( ) or FPL-12( ) or FP5K-12( )

## BAYONET COUPLING, FIREWALL, PYLE FYL, MS2761X-KXXBXX

Shell Style (Firewall stainless steel only)	Basic Performance Level	Hardware Description*	Class*	Basic Part Number**
 <p>Square Flange Mounted Receptacle Bayonet Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27613-KXXBXX
			Pyle FYL Series	FYL-17( )
 <p>Single Hole (D-Hole) Mounted Receptacle Bayonet Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27614-KXXBXX
			Pyle FYL Series	FYL-19( )
 <p>Straight Plug Bayonet Coupling</p>	High performance. Environmentally sealed. Resists high temperatures up to 238°C (460°F).	Class K Firewall Stainless Steel	Military Class K	MS27615-KXXBXX
			Pyle FYL Series	FYL-11( )

\* See how to order, page 414, for further description of hardware classes.

\*\* See how to order, page 414, to complete part numbers.

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

- EMI Filter
- Transient

- 26482
- Matrix 2

- 83723 III
- Matrix | Pyle

- 26500
- Pyle

- 5015
- Crimp Rear Release Matrix

- 22992
- Class 1

- Back-Shell's

- Options
- Others

38999

## Easy Steps to build a part number... Military

1. Shell Style	2. Service Class	3. Shell Size	4. Coupling Type	5. Insert Arrangement	6. Contact Type	7. Alternate Keying	8. Cable Support
MS27613	K	14	T	7	P	6	D

### Step 1. Select a Shell Style

	Designates
MS27613	Square Flange Receptacle
MS27614	Single Hole Mounting Receptacle
MS27615	Straight Plug

### Step 4. Select a Coupling Type

	Designates
T	Threaded
B	Bayonet

For Ratchet Lock Plug and New Non-Decoupling Consult Amphenol

### Step 6. Select a Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

### Step 2. Select a Service Class

	Designates
K	Firewall - Stainless steel, passivated

### Step 5. Select an Insert Arrangement on pages 399 & 400

First number represents Shell Size, second number is the Insert Arrangement.

### Step 7. Select an Alternate Keying Position

6, 7, 8, 9, Y (N for Normal) See page 400.

### Step 8. Select a Cable Support

	Designates
D	Long Straight (MS27658)
P	Standard Straight (MS27657)
J	Right Angle (MS27659)

(Omit for normal)  
See page 429

### Step 3. Select a Shell Size

12	14	16	18	22	24	28
----	----	----	----	----	----	----

## Easy Steps to build a part number... Commercial

1. Connector Type	2. Shell Style	3. Shell Size	4. Insert Arrangement	5. Contact Type	6. Less Contact/Contact Plating	7. Alternate Keying	8. Cable Support	9. Deviations/Specials
FPK	11	28	42	S	T	06	D	XXX

### Step 1. Select a Shell Style

	Designates (Firewall, Class K Styles)
FPK	Threaded coupling, qualified to MIL-DTL-26500 and BACC63 Series
FPL	Threaded coupling, same as FPK, but used on Lockheed Aircraft
FP5K	Threaded Coupling, qualified for General Electric
FYL	Bayonet Coupling, qualified to MIL-DTL-26500

### Step 4. Select an Insert Arrangement on pages 399 & 400

First number represents Shell Size, second number is the Insert Arrangement.

### Step 7. Select an Alternate Keying Position

6, 7, 8, 9, Y (N for Normal) See page 400.

### Step 8. Select a Cable Support

	Designates
D	Long Straight
P	Standard Straight
J	Right Angle

(Omit for normal)  
See page 429

### Step 2. Select a Shell Type

	Designates
11	Straight Plug
12	Ratchet Locking Threaded Plug
13	Improved Non-Decoupling Plug
17	Square Flange Receptacle
19	D-Hole Mounting Receptacle

### Step 5. Select a Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

### Step 6. Select a Contact/Contact Plating

	Designates
E	No Contacts
T	Rhodium
D	Gold Contacts

### Step 9. Deviations/Specials

Please consult Amphenol for more information.

### Step 3. Select a Shell Size

12	14	16	18	22	24	28
----	----	----	----	----	----	----

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class I

Back-Shells

Options Others

### Easy Steps to build a part number... Per Boeing Company

1. Boeing Aircraft	2. Electrical Connector	3. Shell Type	4. Shell Size	5. Accessories	6. Insert Arrangement	7. Contact Type	8. Alternate Keying
BAC	C	63X	14	S	T	06	D

#### Step 1. Boeing Aircraft

	Designates
BAC	Boeing Aircraft Company

#### Step 2. Electrical Connector

	Designates
E	Electrical Connector

#### Step 3. Select a Shell Type

	Designates
63X	Plug, Threaded, Fire Barrier
63Y	Receptacle, Threaded Fire Barrier
63AE	Plug, Threaded, for use with No. 20 Wire Fire Barrier
63AF	Receptacle, Flange Mount, Threaded, Fire Barrier, For use with No. 20 Wire Fire Barrier.

Note: AE & AF require W11 variation on Pyle Number.

#### Step 4. Select a Shell Size

12	14	16	18	22	24	28
----	----	----	----	----	----	----

#### Step 5. Accessories

	Designates
C	To order with D Cable Clamp replace – with Letter C

#### Step 6. Select an Insert Arrangement on pages 399 & 400

First number represents Shell Size, second number is the Insert Arrangement.

#### Step 7. Select a Contact Type

	Designates
P	Pin Contacts
S	Socket Contacts

#### Step 8. Select an Alternate Keying Position

6, 7, 8, 9, Y (N for Normal) See page 400

38999

III
HD
Dualok
II
I
SJT
Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter Transient
26482 Matrix 2
83723 III Matrix   Pyle
26500 Pyle

5015 Crimp Rear Release Matrix
22992 Class 1

Back-Shells
-------------

Options Others
----------------

38999

**Part #**

To complete see how to order page 414.

**Military**

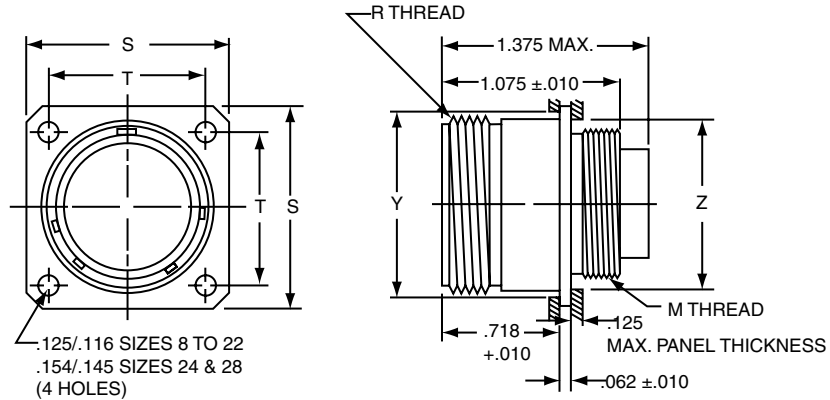
Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying	Cable Support
MS27613	K	XX	B or T	XX	X	X	X

**Commercial**

Connector Type	Shell Style	Shell Size	Insert Arrangement	Contact Type	Contact Style	Alternate Keying	Cable Support	Deviations/Specials
FPK or FYL	17	X	XX	XX	X	X	X	XXX

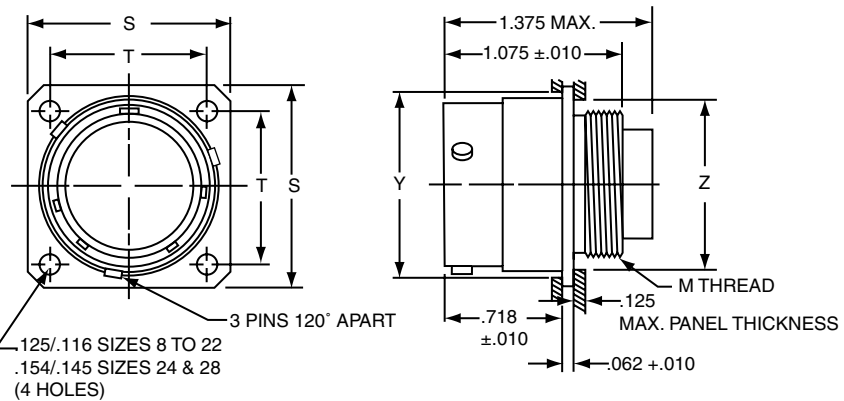
**THREADED COUPLING**

**Class K Stainless Steel**  
**Pyle FPK-17XX Series**  
**MS27613KXXTXX**  
**Military Class K**



**BAYONET COUPLING**

**Class K Stainless Steel**  
**Pyle FYL-17XX Series**  
**MS27613KXXBXX**  
**Military Class K**



Shell Size	M Cable Support Thread	R Coupling Thread	S Flange Width ±.005	T Mounting Hole Centers ±.005	Y Back Mount Min. Hole	Z Front Mount Min. Hole
08	NA	NA	NA	NA	NA	NA
10	NA	NA	NA	NA	NA	NA
12**	.733-36	.875-20	1.031	.812	.913	.760
14	.803-36	.937-20	1.125	.906	.980	.822
16	.930-36	1.062-18	1.250	.969	1.107	.948
18	1.036-36	1.187-18	1.343	1.062	1.209	1.072
20	NA	NA	NA	NA	NA	NA
22	1.286-36	1.437-18	1.562	1.250	1.452	1.322
24**	1.411-36	1.562-18	1.703	1.375	1.577	1.422
28**	1.661-36	1.812-16	2.000	1.562	1.827	1.700

NA designates not available. \*\* Available in Threaded Coupling only. All dimensions for reference only.

# MS27614, Pyle® FPK or FYL, Firewall Class K Single Hole (D-Hole) Mounted Receptacle



## Threaded or Bayonet

### Part #

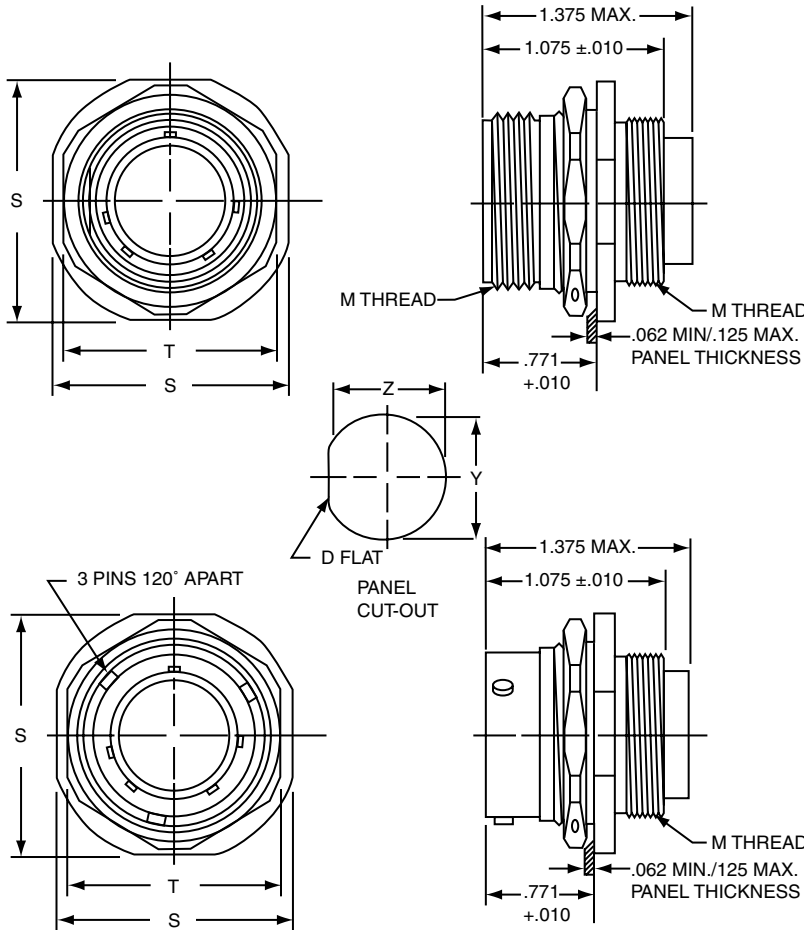
\*To complete see how to order page 414.

### Military

Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying	Cable Support
MS27614	K	XX	B or T	XX	X	X	X

### Commercial

Connector Type	Shell Style	Shell Size	Insert Arrangement	Contact Type	Contact Style	Alternate Keying	Cable Support	Deviations/ Specials
FPK or FYL	19	X	XX	XX	X	X	X	XXX



**THREADED COUPLING**  
Class K Stainless Steel  
Pyle FPK-19XX Series  
MS27614KXXTXX  
Military Class K

**BAYONET COUPLING**  
Class K Stainless Steel  
Pyle FYL-19XX Series  
MS27614KXXBXX  
Military Class K

Shell Size	M Cable Support Thread	R Coupling Thread	S Flange Width	T Lock Nut Flats	Y Mounting Hole Dia.	Z Mounting Hole Flat	Recom. min. Torque Jam Nut
08	NA	NA	NA	NA	NA	NA	33
10	NA	NA	NA	NA	NA	NA	36
12**	.733-36	.875-20	1.291	1.215	.947	.917	56
14	.803-36	.937-20	1.391	1.062	1.010	.980	65
16	.930-36	1.062-18	1.516	1.187	1.135	1.105	69
18	1.036-36	1.187-18	1.614	1.312	1.260	1.225	81
20	NA	NA	NA	NA	NA	NA	100
22**	1.286-36	1.437-18	1.954	1.562	1.510	1.475	123
24	NA	NA	NA	NA	NA	NA	133
28	NA	NA	NA	NA	NA	NA	NA

NA designates not available. \*\* Available in Threaded Coupling only. All dimensions for reference only.

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

EMI Filter Transient

26482 Matrix 2

83723 III Matrix | Pyle

26500 Pyle

5015 Crimp Rear Release Matrix

22992 Class 1

Back-Shell's

Options Others

38999  
III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB  
HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables  
EMI Filter  
Transient  
26482  
Matrix 2  
83723 III  
Matrix | Pyle  
26500  
Pyle  
5015  
Crimp Rear  
Release  
Matrix  
22992  
Class I  
Back-  
Shells  
Options  
Others

**Part #**

**Military**

To complete see how to order page 414.

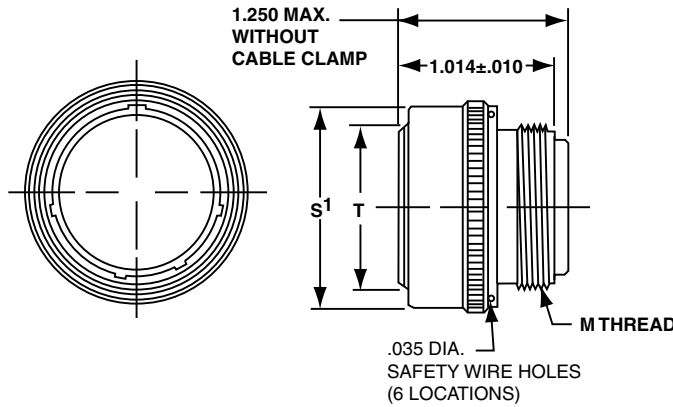
Shell Style	Service Class	Shell Size	Coupling Type	Insert Arrangement	Contact Type	Alternate Keying	Cable Support
MS27615	K	XX	B or S	XX	X	X	X

**Commercial**

Connector Type	Shell Style	Shell Style	Insert Arrangement	Contact Type	Contact Style	Alternate Keying	Cable Support	Deviations/ Specials
FPK or FYL	11 or 12	X	XX	XX	X	X	X	XXX

**THREADED COUPLING**

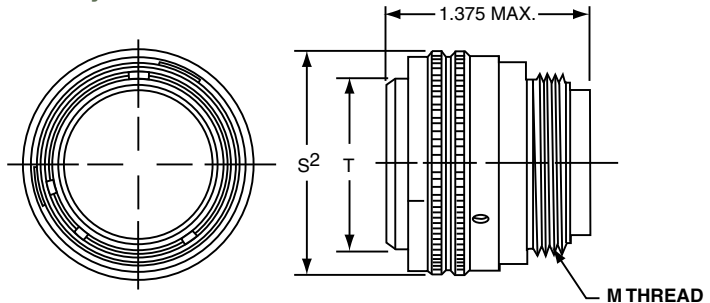
**Class K Stainless Steel**  
**Pyle FPK-11XX Series**  
**MS27615KXXTXX**  
**Military Class K**



Shell Size	M Cable Support Thread	R Coupling Thread	Coupling Nut		T Shell Dia.
			S <sup>1</sup> Dia.	S <sup>2</sup> Dia.	
08	NA	NA	NA	NA	NA
10	NA	NA	NA	NA	NA
12	.733-36	.875-20	.984	1.018	.696
14	.803-36	.937-20	1.054	1.087	.765
16	.930-36	1.062-18	1.181	1.214	.892
18	1.036-36	1.187-18	1.287	1.320	.998
20	NA	NA	NA	NA	NA
22	1.286-36	1.437-18	1.537	1.570	1.248
24	1.411-36	1.562-18	1.662	1.695	1.373
28**	1.661-36	1.812-16	1.912	NA	1.623

\*\* Available in Threaded Coupling only.

**BAYONET COUPLING Class K Stainless Steel**  
**Pyle FYL-11XX Series MS27615KXXBXX**  
**Military Class K**



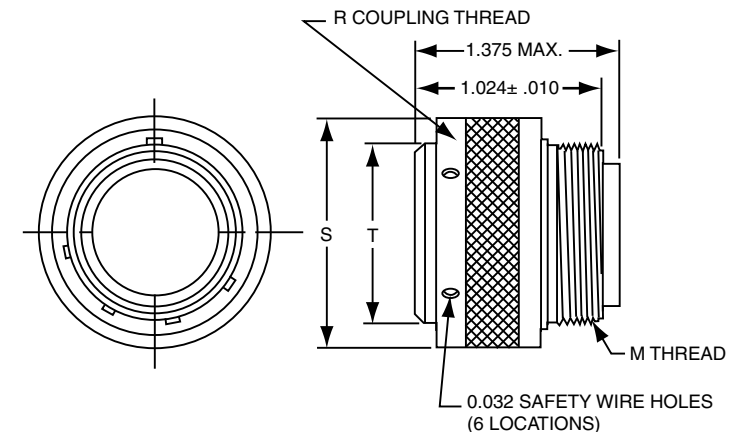
**MS27615, Pyle® FPK, Firewall Class K**

**Ratchet Lock Plug, Threaded**

**RATCHET LOCK PLUG**

**Threaded Coupling**  
**Class K Stainless Steel Pyle FPK-12XX Series**  
**MS27615KXXSXX**  
**Military Class K**

Shell Size	M Cable Support Thread	R Coupling Thread	S Coupling Nut Dia.	T Shell Dia.
08	NA	NA	NA	NA
10	.563-36	.687-24	.931	.526
12	.733-36	.875-20	1.111	.696
14	.803-36	.937-20	1.175	.765
16	.930-36	1.062-18	1.302	.892
18	1.036-36	1.187-18	1.408	.998
20	NA	NA	NA	NA
22	1.286-36	1.437-18	1.658	1.248
24	1.411-36	1.562-18	1.783	1.373
28	1.661-36	1.812-16	2.038	1.623



NA designates not available.  
All dimensions for reference only.



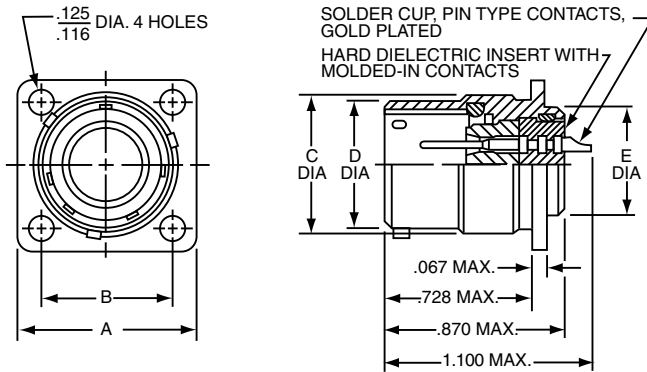
# MIL-DTL-26500 Type – 48 Series

## Receptacle Short Skirt

### Receptacle Short Skirt – Aluminum – Bayonet Coupling

Shorter, lighter, and more economical than the standard MIL-DTL-26500 connector receptacles, the 48 Series receptacle short skirt comes in two versions: with standard flange and with reduced flange. Both versions are 1.100" long which is .275" shorter than the length of the standard MIL-DTL-26500 connector.

They have molded epoxy fiberglass inserts and can operate continuously up to 125°C (257°F), but otherwise they offer the same environmental sealing, from the panel out, as standard MIL-DTL-26500 connectors. They have bayonet coupling and mate with standard MIL-DTL-26500 plugs. The hard dielectric inserts, with resilient face seal and molded-in gold plated solder cup pin type contacts, are available in insert arrangements shown in the chart below.



AVAILABLE WITH PIN CONTACTS ONLY

### Receptacle Short Skirt with Standard Flange

Insert Arrangement	Amphenol Part Number*	A ±.005	B ±.005	C Max.	D +.000 -.005	E Max.
10-5	48-7115-XX	.937	.719	.696	.659	.562
12-3	48-7116-XX	1.031	.812	.875	.829	.750
12-12	48-7117-XX	1.031	.812	.875	.829	.750
14-4	48-7118-XX	1.125	.906	.935	.898	.812
14-7	48-7119-XX	1.125	.906	.935	.898	.812
14-15	48-7120-XX	1.125	.906	.935	.898	.812
16-24	48-7121-XX	1.250	.969	1.062	1.025	.938
18-8	48-7122-XX	1.343	1.062	1.187	1.131	1.062
18-14	48-7123-XX	1.343	1.062	1.187	1.131	1.062
18-31	48-7124-XX	1.343	1.062	1.187	1.131	1.062
20-25	48-7251-XX	1.437	1.156	1.312	1.256	1.182
20-28	48-7175-XX	1.437	1.156	1.312	1.256	1.182
22-12	48-7125-XX	1.562	1.250	1.437	1.381	1.312
22-19	48-7126-XX	1.562	1.250	1.437	1.381	1.312
22-55	48-7127-XX	1.562	1.250	1.437	1.381	1.312

### Receptacle Short Skirt with Reduced Flange

Insert Arrangement	Amphenol Part Number*	A Max.	B ±.005	C Max.	D +.000 -.005	E Max.
10-5	48-7132-XX	.870	.647	.696	.659	.562
12-3	48-7133-XX	.996	.773	.875	.829	.750
12-12	48-7134-XX	.996	.773	.875	.829	.750

\* To complete part number: Replace XX with alternate keying positions (omit for normal position). See page 400.

For more information on other Amphenol®/Pyle® 48 Series products consult Amphenol Aerospace.



48 Series



### Commercial Design with PCB Contacts:

- Intermateable with standard 26500 plugs
- Non-removable PC tail contacts
- Special shell geometries and clinch nut available
- Single piece insert
- Ideal for high volume cost sensitive applications

38999

III

HD

Dualok

II

I

SJT

Accessories

Aquacon

Herm/Seal

PCB

HIGH SPEED

Fiber Optics

Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others

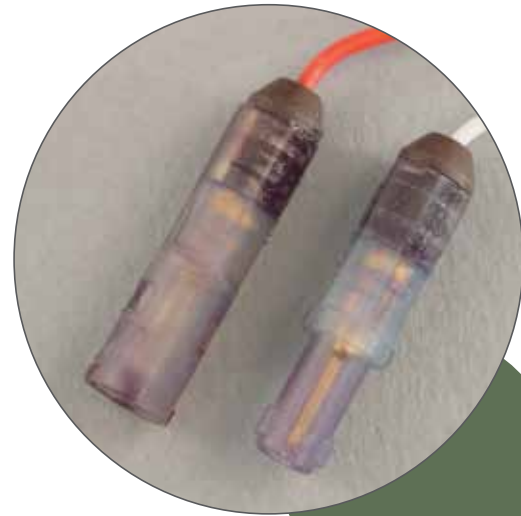
- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED**
- Fiber Optics
- Contacts Connectors Cables

**Special Application Wire Splice Connector**

The Amphenol® 48 Series Wire Splice Connector is a low cost, space-saving connector design that can be used for various applications. The push-mating/twist-pull-unmating feature provides a simple solution to many design requirements without sacrificing performance. This wire splice connector utilizes a metal retention clip for a single size 16 pin and socket contact.

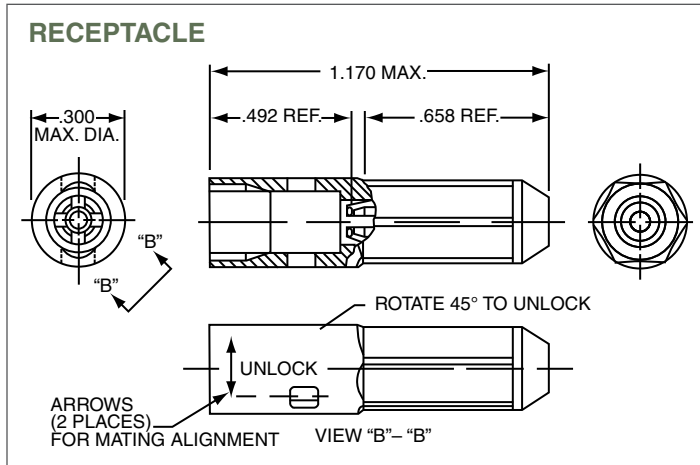
Features and benefits include:

- Push-mating/twist-pull-unmating
- Uses standard M39029/31-229 pin and M39029/32-248 socket contacts
- Incorporates environmental sealing grommet
- Metal collet retention
- Uses standard MIL-DTL-26500 contact removable tools
- Low cost
- Weight savings design
- Space savings design
- Color coded connector halves - red or blue



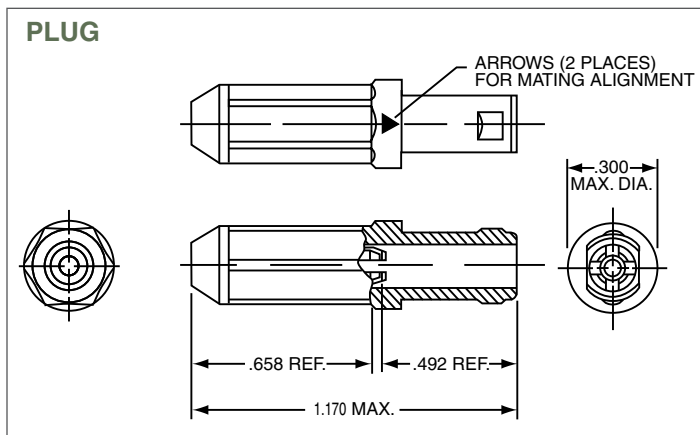
**Receptacle Wire Splice**

Amphenol 48 Series Part Number	Amphenol 10- Part Number	Color	Size 16 Contact Part Number
48-7191	10-804342	Blue	Pin ZZL-4016-36LD Socket ZZL-4116-36LD
48-7191-1	10-804342-1	Red	



**Plug Wire Splice**

Amphenol 48 Series Part Number	Amphenol 10- Part Number	Color	Size 16 Contact Part Number
48-7190	10-804341	Blue	Pin ZZL-4016-36LD Socket ZZL-4116-36LD
48-7190-1	10-804341-1	Red	



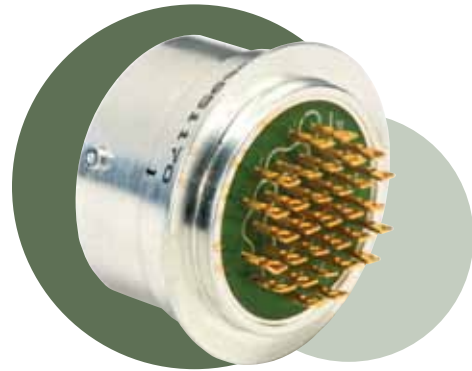
# Pyle® ZZL/ZZB, MIL-DTL-26500 Type Hermetic (three styles), Threaded or Bayonet



Amphenol®/Pyle® is an experienced supplier of highly reliable hermetic connectors for the aircraft industry. Amphenol's ZZL and ZZB series of hermetic receptacles are designed to the requirements of MIL-DTL-26500, they are available in stainless steel shells with gold-plated, nickel-iron alloy contacts.

Hermetic receptacles are available in shell sizes 8, 10, 12, 14, 16, 18, 22, 24 and 28. The hermetic series is offered in a variety of receptacle shell styles, which include solder mount, square flange and "D" hole mount. These connectors can be ordered with either eyelet, solder-well or printed circuit tail pin contacts.

Consult Amphenol Aerospace for more information on hermetic connectors, and for optional connector designs.



38999

III
HD
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II
I
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Accessories
Aquacon
Herm/Seal
PCB

HIGH SPEED
Fiber Optics
Contacts Connectors Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class 1

Back-Shell's

Options Others

## Easy Steps to build a part number for Hermetic Connectors... Commercial

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

Series	Service Class	Shell Style	Shell Size	Insert Arrangement	Contact Type	Alternate Keying	Contact Plating	Variations
ZZY	A	C	T	55	P	6	D	H45

### Step 1. Select a Series

	Designates
ZZL	Threaded Coupling
ZZB	Bayonet Coupling

### Step 2. Service Class

	Designates
HC	Hermetic Class

### Step 3. Select a Shell Style

	Designates
14	Solder Mount Receptacle
15	Single Hole Mounting Receptacle
17	Square Flange Receptacle

### Step 5. Select a Shell Size

8	10	12	14	16	18	22	24	28
---	----	----	----	----	----	----	----	----

### Step 6. Select an Insert Arrangement

See inserts labeled with an "H" on page 399 & 400

### Step 7. Select a Contact Type

	Designates
P	Male Pin Contacts with standard gold plate

### Step 8. Select an Alternate Keying Position

06, 07, 08, 09, 10 (Omit for Normal)  
See page 400

### Step 9. Select a Contact Plating

	Designates
E	Eyelet
W	Solderwell

Consult Amphenol Aerospace for ordering information of printed circuit tail contacts.

### Step 10. Select a Variation

	Designates
H45	304L Stainless Steel Shell
H52	Tinned Termination Tails
H56	Same as standard; gold contacts
H77	304L Stainless Steel Shell, Inconel Contacts
H127	Same as H125 except 304L Stainless Steel Shell
H146	303 Stainless Steel Shell, 100 Micro-inch Gold
H152	304L Stainless Steel Shell with Individual Beads, Loose Seals
H177	303 Stainless Steel Shell, Loose Seals
H181	Tin Plated Contacts

38999

### Crimp Contacts per MIL-DTL-39029 – Copper Alloy, Gold Plating

PIN CONTACTS				
Contact Size	Spec. Number	Bin Code	MS Number	Amphenol/Pyle No.
20	M39029/31	627	MS24254-20P	ZZL-4020-36LD*
16	M39029/31	229	MS24254-16P	ZZL-4016-36LD*
12	M39029/31	235	MS24254-12P	ZZL-4012-36LD*

SOCKET CONTACTS				
Contact Size	Spec. Number	Bin Code	MS Number	Amphenol/Pyle No.
20	M39029/32	260	MS24255-20S	ZZL-4120-36LD*
16	M39029/32	248	MS24255-16S	ZZL-4116-36LD*
12	M39029/32	254	MS24255-12S	ZZL-4112-36LD*

\* Add – H139 for Boeing Marking for Pin/Socket, Standard Plating.  
Add – H148 for Boeing Marking for Pin/Socket, Select Plate.

### Amphenol®/Pyle® Special Application Contacts

Copper Alloy, Rhodium plated Contacts†			
Contact Size	Description	Amphenol/Pyle Pin No.	Amphenol/Pyle Socket No.
20	Copper Alloy/Rhodium plated	ZZL-4020-36LT	ZZL-4120-36LT
16	Copper Alloy/Rhodium plated	ZZL-4016-36LT	ZZL-4116-36LT
12	Copper Alloy/Rhodium plated	ZZL-4012-36LT	ZZL-4112-36LT

† Contacts qualified to Boeing BACC47CN/CP.

Thermocouple Contacts					
Contact Size	Material	Amphenol/Pyle Pin No.	Amphenol/Pyle Socket No.		Color Code
			Pencil Clip Design*	Split Tine Design**	
20	Alumel Chromel Constantan	ZZL-4020-10R	ZZL-4120-10R	ZZY-4120-10R	Green
		ZZL-4020-10P	ZZL-4120-10P	ZZY-4120-10P	White
		ZZL-4020-10N	ZZL-4120-10N	ZZY-4120-10N	Yellow
16	Alumel Chromel Constantan	ZZL-4016-10R	ZZL-4116-10R	ZZY-4116-10R	Green
		ZZL-4016-10P	ZZL-4116-10P	ZZY-4116-10P	White
		ZZL-4016-10N	ZZL-4116-10N	ZZY-4116-10N	Yellow
12	Alumel Chromel Constantan	ZZL-4012-10R	ZZL-4112-10R	ZZY-4112-10P	Green
		ZZL-4012-10P	ZZL-4112-10P	ZZY-4112-10P	White
		ZZL-4012-10N	ZZL-4112-10N	ZZY-4112-10N	Yellow

\* Pencil clip socket design - see page 397 for description.

\*\* Split tine socket with napkin ring design - see page 397 for description.

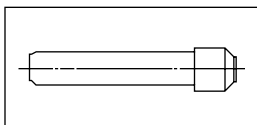
### Printed Circuit Board/Wire-Wrap Contacts

A variety of different designs are available; please consult Amphenol Aerospace for more information.

### Reel Contacts

2000 contacts per reel (gold or rhodium plated) are available. Consult Amphenol Aerospace for more information.

### Sealing Plugs

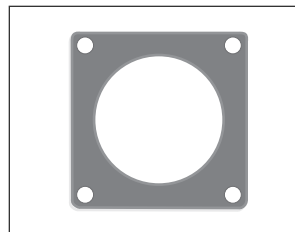


For sealing spare contact holes. Same sealing plug is used in both plug and receptacle.

Contact Size	Amphenol/Pyle No.	MS Number	Color Code
20	10-405996-20	MS-27488-20	Red
16	10-405996-16	MS-27488-16	Blue
12 & #1 Shielded	10-405996-12	MS-27488-12	Yellow
# 2 Shielded	10-405996-8	MS27187-4	White

### Sealing Gaskets

For use with square flange mounted receptacles. Provide waterproofing and pressure sealing features.



Contact Size	Amphenol/Pyle No.
08	ZZL-6508-10D
10	ZZL-6510-10D
12	ZZL-6512-10D
14	ZZL-6514-10D
16	ZZL-6516-10D
18	ZZL-6518-10D
20	ZZL-6520-10D
22	ZZL-6522-10D

# Shielded/Coaxial Contacts

## For MIL-DTL-26500 Connectors

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class 1

Back-Shell

Options  
Others

Drawing (See below and on next page)	Shielded Contact Part No./ Contact Type	Cable Stripping Dim.***			Amphenol Crimp Tools (Center Contact)			Outer Ferrule Crimping Tool††	Cable Application
		A	B	C	Tool	Nest Bushing	Crimp Setting		
<b>Type 1</b> #1 Shielded	48-1226-02 Pin 48-1227-02 Socket 48-1227-50 Socket	.2189	.0781	.1094	294-268* 294-289**	294-1631	#3	294-529	#22 AWG per MIL-C-7078 Type II and MIL-C-27500-22 KING RG-174/U, -188/U
	48-1226-57 Pin 48-1227-57 Socket	.2189	.0781	.1094	294-268* 294-289**	294-1631	#1	294-529	RG-161/U, -179/U, -179A/U, -187/U
	48-1226-57 Pin 48-1227-57 Socket	.2189	.0781	.1094	294-268* 294-289**	294-1631	#1	294-528	Raychem 9530A11
<b>Type 2</b> #1 Shielded	48-1226-51, -54 Pin 48-1227-51, -54, -56 Socket	.2189	.0313	.1563	294-268* 294-289**	294-1631	#1	294-528	RG-180/U, -180A/U, -180B/U, -195/U
<b>Type 3</b> #1 Shielded	48-1226-55 Pin 48-1227-55 Socket	.2344	.0313	.1563	294-268* 294-289**	294-1631	#1	294-529	RG-178/U, -178A/U, -178B/U, -196-U
<b>Type 4</b> #2 Shielded	48-2187-02 Pin 48-2188-02 Socket	.2189	.1094	.1406	294-126** 294-243** 294-1166**† 294-358** 294-268*	294-1014 Turret Head 294-1014 294-1015 299-1630	.030 -.040	294-528	#18, 20, 22 AWG per MIL-C-7078, Type II and MIL-C-27500-18, -20, -22 KING Extruded Jacket
	48-2187-50, -51 Pin 48-2188-50, -51, -53, -54 Socket	.2189	.1094	.1406	294-1166**† 294-358** 294-268*	294-1014 294-1015 294-1630	.030 .040 #3	294-528	RG-180/U, -180A/U, -180B/U, -195/U
<b>Type 5</b> #2 Shielded	48-2187-52 Pin 48-2188-52 Socket	.3125	.1094	.1406	294-358** 294-268*	294-1015 294-1630	.037 -.041	294-530	RG-59/U and 21-541

\* Conforms to MIL-C-22520/2 specification.

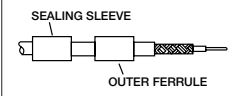
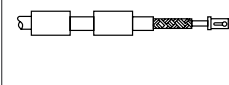
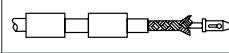
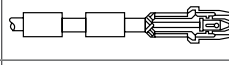
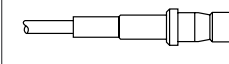
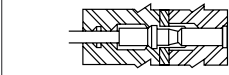
\*\* MS3191 tools are inactive for new procurement, but can be used if available.

\*\*\* Refer to illustration on page 424

† Same as 294-126, less positioners.

†† Including Hex Die Set

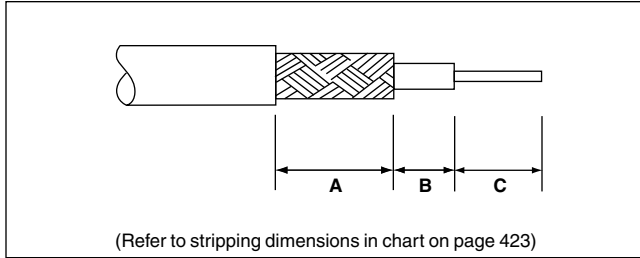
### Shielded Contact Assembly Procedure

Step 1	Slide sealing boot or sleeve and outer ferrule onto cable and strip cable as shown at right. After stripping, slide spacer over center conductor as shown for <b>Type 2</b> and <b>Type 3</b> . For <b>Type 3</b> slide spacer under wire braid.	
Step 2	Insert stripped center conductor into contact until wire shows through inspection hole and dielectric ( <b>Type 1</b> , <b>Type 4</b> and <b>Type 5</b> ) or spacer ( <b>Type 2</b> and <b>Type 3</b> ) butts against contact. Fully seat contact in nest bushing of crimp tool and crimp in one full stroke. (Follow same crimping procedures except use nest bushing crimping tool from table above).	
Step 3	Slightly flair out ends of wire braid to facilitate insertion of inner ferrule of body assembly. Do not comb braid.	
Step 4	Install center contact in body assembly and slide inner ferrule underneath wire braid as shown. Push center contact until it is locked in place in the body assembly. Pull lightly on cable to make sure that contact is securely locked in place.	
Step 5	Slide outer ferrule over braid and up against body as shown. There should be no slack in the wire braid. Crimp the outer ferrule with proper tool from table above. Then for <b>Type 1</b> , <b>Type 3</b> and <b>Type 5</b> slide sealing sleeve toward contact until sleeve touches outer ferrule.	
Step 6	Insert the assembled shielded contact into the connector in the same way as the standard contact using applicable insertion tool (see page 427). This completes assembly for <b>Type 1</b> , <b>Type 2</b> , <b>Type 3</b> and <b>Type 5</b> .	
Step 7	To complete assembly for <b>Type 4</b> , push sealing boot into connector grommet until O-ring riser of boot snaps into place and seals the assembly.	

- 38999
- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB
- HIGH SPEED
- Fiber Optics
- Contacts Connectors Cables

**Cable Stripping**

Strip cable jacket, braid and dielectric to the dimensions shown in the table on page 423. Make all cuts square and sharp, being careful not to nick braid, dielectric, or center conductor when cutting. If conductor ends fray, twist them to their normal lay.



**Shielded Contact Assembly Procedure, cont.**

Type 2	Type 3	Type 4	Type 5

- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle
- 5015 Crimp Rear Release Matrix
- 22992 Class I
- Back-Shells
- Options Others

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

**HIGH SPEED**  
Fiber Optics  
Contacts Connectors Cables

- EMI Filter Transient
- 26482 Matrix 2
- 83723 III Matrix | Pyle
- 26500 Pyle**

5015 Crimp Rear Release Matrix

22992 Class I

Back-Shells

Options Others

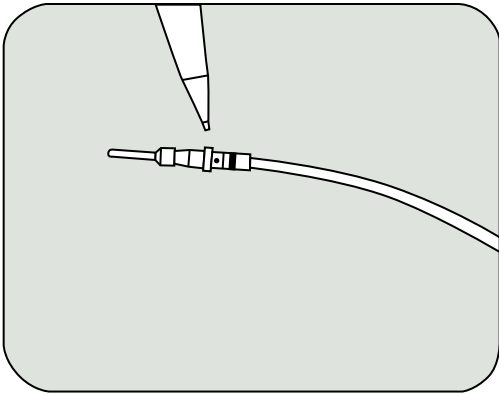
## Contact Termination

Contacts should be crimped to the wire with MS Standard hand crimping tools or specification automatic crimping machines.

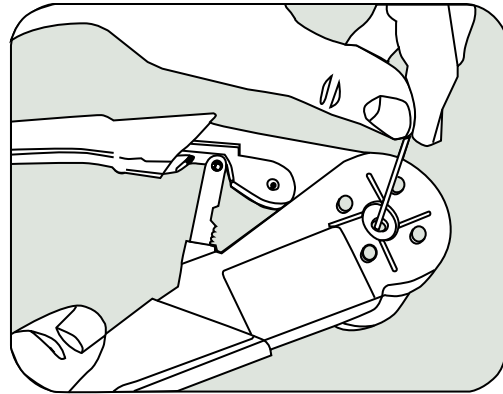
When stripping the wire, avoid nicking wires or damaging the insulation as it is a functional part of the sealing system.

Contact Size	Wire Size	Stripping Length
20	20 to 24	.170" – .201"
16	16 to 18	.207" – .238"
12	12 to 14	.207" – .238"

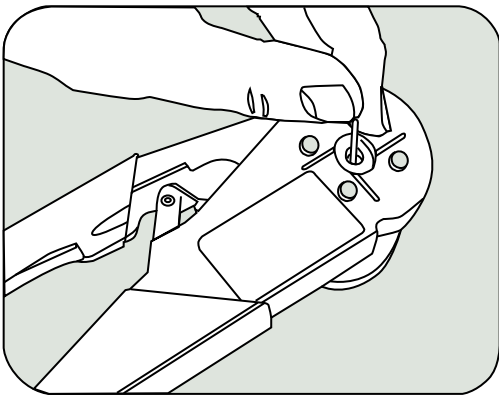
Follow steps 1 – 4, as shown below, for proper contact crimping:



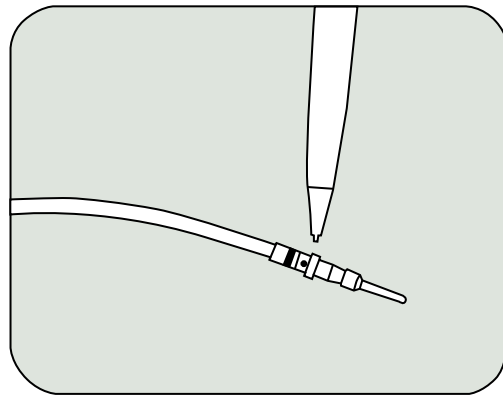
1. Insert stripped wire into contact pocket until it is visible through inspection hole.



2. Carefully seat contact in crimp tool positioner.



3. Crimp in one full stroke. (The ratchet will not release jaws until tool has completed stroke).



4. Inspect crimp for wire visibility through inspection hole.

38999

III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

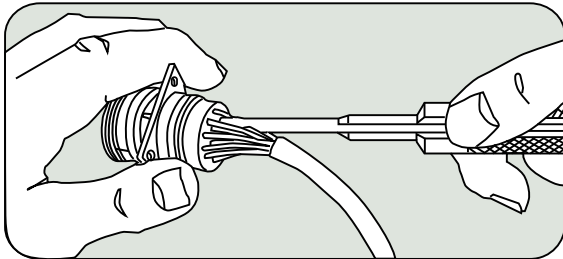
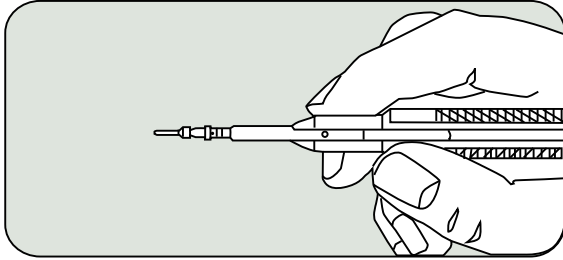
22992  
Class I

Back-  
Shells

Options  
Others

### Contact Insertion into the Connector

The following steps are recommended for assembly.



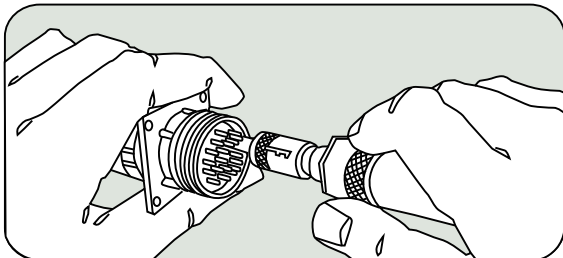
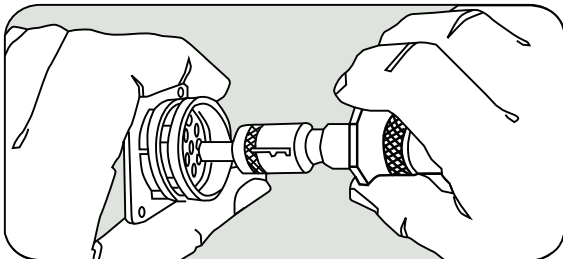
**NOTE:**

The Pyle Miniature Connector is designed with a unique sealing principle. Assembly of contacts into the connector must be made with reasonable care to avoid damage to the silicone rubber insert.

1. Lubricate wire cavities in back face of insert with a very thin film of DC-200 Silicone Oil or equal before inserting contacts.
2. Locate contact in insertion tool (as shown in illustration).
3. Align contact with hole in rear face of insert. The alignment of insertion tool with contact must be coaxial with the axis of the connector. When contact has entered rear seal portion of insert, maintain alignment of contact and tool parallel to, and in line with hole. Insert contact to full depth. Seating of the contact in the retention collet is audible. The contact insertion force is less than five pounds.
4. Extract insertion tool, keeping it aligned with hole.

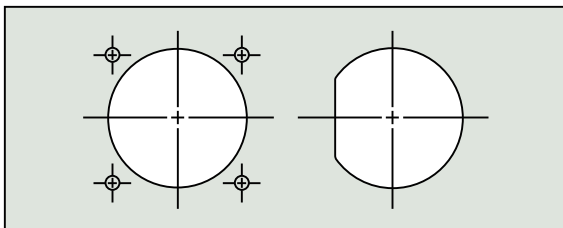
### Contact Removal from the Connector

A contact is removed from the connector insert with the extraction tool as follows:



1. Set the spacer sleeve in the proper position for removal of male or female contact.
2. Place tool over the contact and insert into front face of cavity. The alignment of removal tool with contact must be coaxial with axis of connector.
3. Exert a nominal force axially (from 5 to 10 lbs.) to release retention collet. Spacer sleeve will shoulder at front face of insulation when tool is inserted to proper depth.
4. Push extraction plunger to force the contact out of the rear of the insert.
5. Grasp contact or wire at rear face of insert and complete the extraction.
6. Remove extraction tool axially.
7. After using extraction tool the spacer sleeve should be set forward in last notch to protect the end of the plunger guide.

### Panel Mounting



Two receptacle shell styles, flange mount and D-hole mount, are available for panel mounting. See the applicable drawings for mounting hole dimensions. The square flange receptacle, sizes 10 through 22, is fastened to the panel with four size #4-40 machine screws. The 24 and 28 size shells are fastened with #6-32 machine screws.



## Contact Insertion Tools



Contact Size	Insertion Tool			Insertion Tool Replacement Tip & Pin	
	Amphenol/ Pyle No.	Mil. No.	Color Code	Amphenol/ Pyle No.	Mil. No.
20	ZZL-R-9510-A-20	MIL-I-81969/17-9	Red	ZZL-R-9531-A-20	–
16	ZZL-R-9510-16	MIL-I-81969/17-4	Blue	ZZL-R-9531-16	–
12	ZZL-R-9510-12	MIL-I-81969/17-5	Yellow	ZZL-R-9531-12	–

## Contact Removal Tools



Contact Size	Removal Tool			Removal Tool Replacement Tip	
	Amphenol/ Pyle No.	Mil. No.	Color Code	Amphenol/ Pyle No.	Mil. No.
20	ZZL-R-9511-20	MS-24256-R-20	Red	ZZL-R-9557-20	–
16	ZZL-R-9511-16	MS-24256-R-16	Blue	ZZL-R-9557-16	–
12	ZZL-R-9511-12	MS-24256-R-12	Yellow	ZZL-R-9557-12	–

## Contact Crimping Tools



Contact Size	Crimping Tool with Indenters		Adjustable Turret		Checking Gauge for Crimping Tool	
	Amphenol/ Pyle No.	Mil. No.	Amphenol/ Pyle No.	Mil. No.	Amphenol/ Pyle No.	Mil. No.
20	TP-201354	M22520/1-01 (Class 1)	TP-201355	M22520/1-02 (Class 1)	TP-201356	M22520/3
16						
12						

## Contact Termination

Use table below to determine correct wire stripping length for your wire sizes. When stripping the wire, avoid nicking wires or damaging insulation, as it is a functional part of the sealing system.

Contact Size	Wire Size	Stripping Length
20	20 to 24	.170" – .201"
16	16 to 18	.207" – .238"
12	12 to 14	.207" – .238"

See pages 425 and 426 for assembly instructions for proper contact termination and contact insertion/removal.

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III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

HIGH SPEED  
Fiber Optics  
Contacts  
Connectors  
Cables

EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear  
Release  
Matrix

22992  
Class 1

Back-  
Shells

Options  
Others

38999

### Crimping Tools for Shielded Contacts

Amphenol Tool 357-100



Amphenol Tool 294-529 or 294-528



Shielded Contact Size	For Crimping Center Contact		For Crimping Outer Ferrule	
	Basic Crimp Tool	Contact Positioner	Basic Crimp Tool (Hex dies included)	Hex Dimension
# 1 Shielded	357-100	294-1631	294-529	.128 Hex
# 2 Shielded		294-1630	294-528	.160 Hex

### Contact Insertion Tools



Contact Size	Amphenol Part No.	Military Part No.
20	294-88	MS2456A20
16	294-96	MS2456A16
#12, # 1 Shielded	294-72	MS24256R12
#2 Shielded	294-128	–

### Contact Removal Tools



Contact Size	Amphenol Part No.	Military Part No.
20	294-89	MS2456R20
16	294-97	MS2456R16
#12, # 1 Shielded	294-73	MS2456R12
#2 Shielded	294-127	–

For more information on other tools available consult Amphenol Aerospace. NOTE: Amphenol and Pyle tools are interchangeable.

### Standard Crimping Tool for Power Contacts



Basic Crimp Tool		Use with Turret Head
Amphenol Part No.	Military Part No.	
294-542	M22520/1-01	M22520/1-02

Contact Size	Color Code	Wire Size
20	Red	20–22–24
16	Blue	16–18–20
12	Yellow	12–14

III  
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Class 1

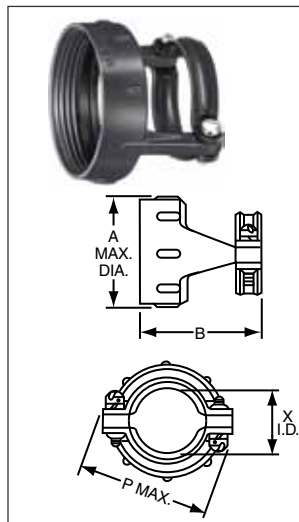
Back-  
Shells

Options  
Others

# Accessories - Cable Supports

## For MIL-DTL-26500 Connectors

### Cable Supports - Aluminum



Cable clamps support cable or wire at the plug or receptacle and prevent twisting and pulling.

Shell Size	Non-Conductive, Black Anodize Finish		Conductive, Chromium Finish		A Max. Dia.	B ±.015	X I.D. ±.38	Thread UNEF-2B	P Max.
	MS. No.	Amphenol/Pyle No.	MS No.	Amphenol/Pyle No.					
08	*MS27291-13	*ZZL-R-5308-A	*MS27291-701	*ZZL-M-5308	.582	.935	.180	.4375-28	.785
10	*MS27291-1	*ZZL-R-5310-A	*MS27291-101	*ZZL-M-5310	.731	.935	.270	.5625-24	.914
12	MS27291-2	ZZL-R-5312-A	*MS27291-201	*ZZL-M-5312	.919	.935	.400	.7500-20	1.026
14	MS27291-3	ZZL-R-5314-A	*MS27291-301	*ZZL-M-5314	.981	1.170	.460	.8125-20	1.090
16	MS27291-4	ZZL-R-5316-A	MS27291-401	10-804941-16E	1.106	1.170	.610	.9375-20	1.250
18	*MS27291-5	*ZZL-R-5318-A	*MS27291-501	*ZZL-M-5318	1.231	1.170	.690	1.0625-18	1.358
20	*MS27291-14	*ZZL-R-5320-A	*MS27291-801	*ZZL-M-5320	1.356	1.170	.830	1.1875-18	1.496
22	*MS27291-6	*ZZL-R-5322-A	*MS27291-601	*ZZL-M-5322	1.481	1.170	.940	1.3125-18	1.604
24	MS27291-15	ZZL-R-5324-A	*MS27291-901	*ZZL-M-5324	1.606	1.170	1.040	1.4375-18	1.740

### Cable Supports - Stainless Steel, Straight



Shell Size	Standard Straight Support (L = .781)						Long Straight Support				
	MS No.	Amphenol/Pyle No.	A Dia.	MS No.	Amphenol/Pyle No.	A Dia.	Similar to MS No.	Amphenol/Pyle No.	A Dia.	L Max Overall Length	Thread
10	NA	NA	NA	NA	NA	NA	NA	*FPL-R-5310L	NA	NA	.563-36
12	NA	NA	NA	NA	NA	NA	MS27658-12	FPL-R-5312L	.435	1.070	.753-36
14	MS27657-14	ZZL-R-5314	.230	MS27657-1	FPL-R-5314	.382	MS27658-14	FPL-R-5314L	.504	1.170	.803-36
16	*MS27657-16	*ZZL-R-5316	.292	*MS27657-2	*FPL-R-5316	.462	MS27658-16	FPL-R-5316L	.686	1.270	.930-36
18	MS27657-18	ZZL-R-5318	.392	MS27657-3	FPL-R-5318	.556	*MS27658-18	*FPL-R-5318L	.794	1.370	1.036-36
20	NA	NA	NA	NA	NA	NA	NA	*FPL-R-5320L	NA	NA	NA
22	MS27657-22	ZZL-R-5322	.516	MS27657-4	FPL-R-5322	.608	MS27658-22	FPL-R-5322L	1.038	1.570	1.286-36
24	NA	NA	NA	NA	NA	NA	MS27658-24	FPL-R-5324L	1.162	1.670	1.411-36
28	NA	NA	NA	NA	NA	NA	MS27658-28	FPL-R-5328L	1.412	1.870	1.661-36

### Cable Supports - Stainless Steel, Right Angle



Shell Size	Cable Support, Right Angle				
	Similar to MS No.	Amphenol/Pyle No.	A Dia.	L Max Overall Length	Thread
10	NA	*FPL-R-5210	NA	NA	.563-36
12	MS27659-12	FPL-R-5212	.435	1.298	.753-36
14	MS27659-14	FPL-R-5214	.504	1.388	.803-36
16	*MS27659-16	*FPL-R-5216	.686	1.523	.930-36
18	MS27659-18	FPL-R-5218	.794	1.622	1.036-36
22	MS27659-22	FPL-R-5222	1.038	1.878	1.286-36
24	*MS27659-24	*FPL-R-5224	1.162	2.000	1.411-36
28	*MS27659-28	*FPL-R-5228	1.412	2.250	1.661-36

\*Consult Amphenol Aerospace for availability

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- HD
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- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

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Contacts  
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EMI Filter  
Transient

26482  
Matrix 2

83723 III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release Matrix

22992  
Class 1

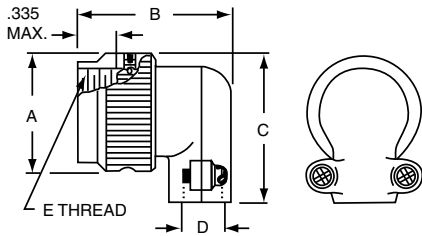
Back-Shell's

Options  
Others

38999

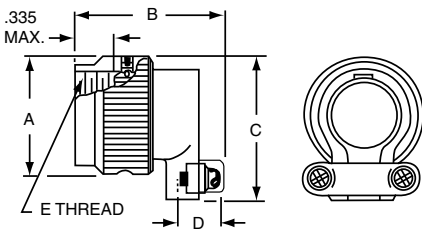
Additional right angle conduit adapters and cable support clamps are available which provide added protection for the cable or wiring. Closed back cable support clamps have a removable cover; while open back cable support clamps have a strap to protect the wires at the right angle bend.

### Cable Supports - Aluminum, Closed Right Angle



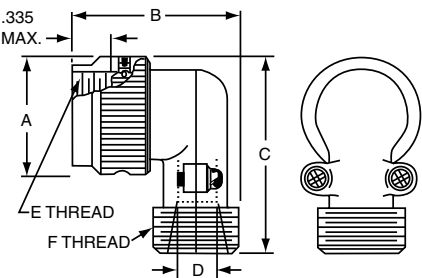
Shell Size	Cable Support - Closed Right Angle						
	MS No.	Amphenol No.	A Dia. Max.	B Max.	C Max	D Max	E Thread UNEF-2B
8	MS27558-1	48-2222-08100	.672	1.200	.938	.245	.4375-28
10	MS27558-2	48-2222-10100	.797	1.320	1.049	.370	.5625-24
12	MS27558-3	48-2222-12100	1.016	1.320	1.248	.370	.7500-20
14	MS27558-4	48-2222-14100	1.110	1.487	1.330	.520	.8125-20
16	MS27558-5	48-2222-16100	1.234	1.470	1.447	.520	.9375-20
18	MS27558-6	48-2222-18100	1.360	1.588	1.577	.645	1.0625-18
20	MS27558-7	48-2222-20100	1.485	1.759	1.698	.780	1.1875-18
22	MS27558-8	48-2222-22100	1.610	1.759	1.820	.780	1.3125-18
24	MS27558-9	48-2222-24100	1.735	2.027	1.945	1.065	1.4375-18

### Cable Supports - Aluminum, Open Right Angle



Shell Size	Cable Support - Open Right Angle						
	MS No.	Amphenol No.	A Dia. Max.	B Max.	C Max	D Max	E Thread UNEF-2B
8	MS27559-1	48-2222-08200	.672	1.173	.938	.201	.4375-28
10	MS27559-2	48-2222-10200	.797	1.293	1.049	.328	.5625-24
12	MS27559-3	48-2222-12200	1.016	1.293	1.248	.328	.7500-20
14	MS27559-4	48-2222-14200	1.110	1.460	1.330	.452	.8125-20
16	MS27559-5	48-2222-16200	1.234	1.443	1.447	.508	.9375-20
18	MS27559-6	48-2222-18200	1.360	1.561	1.577	.571	1.0625-18
20	MS27559-7	48-2222-20200	1.485	1.732	1.698	.748	1.1875-18
22	MS27559-8	48-2222-22200	1.610	1.732	1.819	.748	1.3125-18
24	MS27559-9	48-2222-24200	1.735	2.000	1.945	.996	1.4375-18

### Conduit Adapter- Aluminum, Right Angle

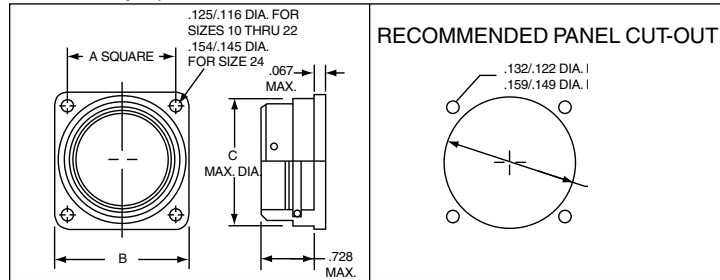


Shell Size	Conduit Adapter - Right Angle							
	Equivalent MS No.	Amphenol No.	A Dia. Max.	B Max.	C Max	D Max	E Thread UNEF-2B	F Thread UNEF-2A
8	MS27557-1	48-2222-08000	.672	1.300	1.403	.245	.4375-28	.6250-24
10	MS27557-2	48-2222-10000	.797	1.420	1.514	.370	.5625-24	.7500-20
12	MS27557-3	48-2222-12000	1.016	1.420	1.713	.370	.7500-20	.7500-20
14	MS27557-4	48-2222-14000	1.110	1.575	1.795	.520	.8125-20	.8750-20
16	MS27557-5	48-2222-16000	1.234	1.558	1.912	.520	.9375-20	.8750-20
18	MS27557-6	48-2222-18000	1.360	1.675	2.042	.645	1.0625-18	1.0000-20
20	MS27557-7	48-2222-20000	1.485	1.863	2.163	.780	1.1875-18	1.1875-18
22	MS27557-8	48-2222-22000	1.610	1.863	2.285	.780	1.3125-18	1.1875-18
24	MS27557-9	48-2222-24000	1.735	2.118	2.410	1.065	1.4375-18	1.4375-18

## Dummy Receptacles - Aluminum Threaded or Bayonet

Used as an anchoring place for disconnected plugs, dummy receptacles eliminate the problems involved in letting plugs swing freely. They also provide a limited air seal and prevent accumulation of foreign material on the face of the plug. Order by part numbers in chart below.

Threaded Style pictured

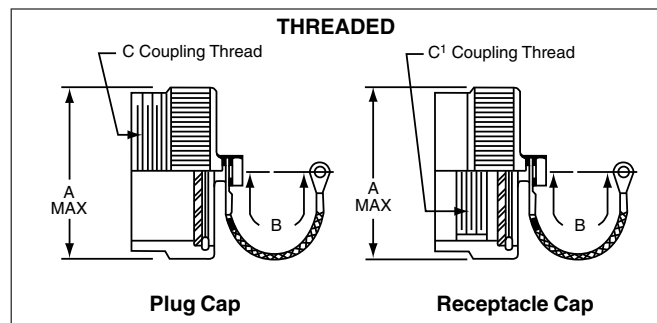
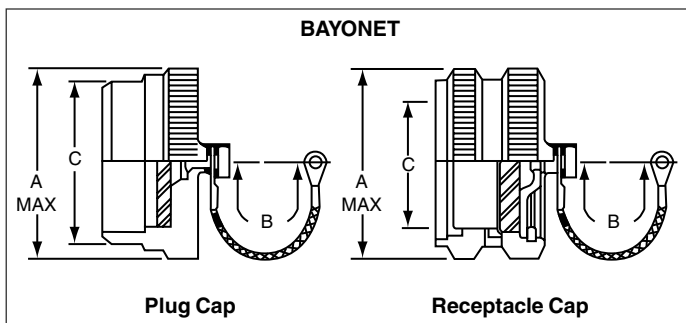


Size	Dimensional Data					How to Order			
	Thread Size UNEF-2A	A Square ±.005	B ±.005	C Max. Dia.	D Min. Dia.	Bayonet		Threaded	
						Amphenol Part No.	Equivalent MS Part No.	Amphenol Part No.	Equivalent MS Part No.
10	.6875-24	.719	.937	.696	.748	48-149-10000	MS27297-1	48-172-10000	MS27296-1
12	.8750-20	.812	1.031	.875	.913	48-149-12000	MS27297-2	48-172-12000	MS27296-2
14	.9375-20	.906	1.125	.935	.980	48-149-14000	MS27297-3	48-172-14000	MS27296-3
16	1.0625-18	.969	1.250	1.062	1.107	48-149-16000	MS27297-4	48-172-16008	MS27296-4
18	1.1875-18	1.062	1.343	1.187	1.209	48-149-18000	MS27297-5	48-172-18000	MS27296-5
20	1.3125-18	1.156	1.437	1.312	1.337	48-149-20000	MS27297-8	48-172-20000	MS27296-8
22	1.4375-18	1.250	1.562	1.437	1.452	48-149-22000	MS27297-6	48-172-22000	MS27296-6
24	1.5625-18	1.375	1.703	1.562	1.577	48-149-24000	MS27297-9	48-172-24000	MS27296-9

## Protection Caps and Chains - Threaded or Bayonet

Protective metal caps provide an environmental seal for the connector face. They exclude dirt, dust, moisture and other foreign materials from the face of unmated plugs and receptacles. The caps have a woven steel strap so they can be easily attached.

Size	Dimensional Data					
	A Max. Dia.	B ±.250 Chain Length	Bayonet Cap		Threaded Cap	
			Plug C +.000 -.005	Receptacle C' +.005 -.000	Plug C Thread UNEF-2A	Receptacle C' Thread UNEF-2B
10	.906	3.00	.659	.662	.6875-24	.6875-24
12	1.078	3.00	.829	.832	.8750-20	.8750-20
14	1.141	5.00	.898	.901	.9375-20	.9375-20
16	1.266	5.00	1.025	1.028	1.0625-18	1.0625-18
18	1.375	5.00	1.131	1.134	1.1875-18	1.1875-18
20	1.510	5.00	1.256	1.263	1.3125-18	1.3125-18
22	1.625	5.00	1.381	1.384	1.4375-18	1.4375-18
24	1.760	5.00	1.506	1.511	1.5625-18	1.5625-18



How to Order Bayonet Cap & Chain				
Size	Plug		Receptacle	
	Amphenol Part No.	Equivalent MS Part No.	Amphenol Part No.	Equivalent MS Part No.
10	48-2144	MS27293-1	48-2150	MS27295-1
12	48-2143	MS27293-2	48-2149	MS27295-2
14	48-2142	MS27293-3	48-2148	MS27295-3
16	48-2141	MS27293-4	48-2147	MS27295-4
18	48-2140	MS27293-5	48-2146	MS27295-5
20	48-2773	MS27293-8	48-2774	MS27295-8
22	48-2139	MS27293-6	48-2145	MS27295-6
24	48-2767	MS27293-9	48-2768	MS27295-9

How to Order Threaded Cap & Chain				
Size	Plug		Receptacle	
	Amphenol Part No.	Equivalent MS Part No.	Amphenol Part No.	Equivalent MS Part No.
10	48-2340-10	MS27292-1	48-2301-10	MS27294-1
12	48-2340-12	MS27292-2	48-2301-12	MS27294-2
14	48-2340-14	MS27292-3	48-2301-14	MS27294-3
16	48-2340-16	MS27292-4	48-2301-16	MS27294-4
18	48-2340-18	MS27292-5	48-2301-18	MS27294-5
20	48-2340-20	MS27292-8	48-2301-20	MS27294-8
22	48-2340-22	MS27292-6	48-2301-22	MS27294-6
24	48-2340-24	MS27292-9	48-2301-24	MS27294-9

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- III
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- I
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- Fiber Optics
- Contacts
- Connectors
- Cables

- EMI Filter
- Transient
- 26482
- Matrix 2
- 83723 III
- Matrix | Pyle

26500

5015

22992

Back-

Options

Others

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