Amphenol Industrial Reverse Bayonet – AIB

AIB Series is basically a MIL-DTL-5015 (MIL-C-5015) connector, but with an improved coupling system. AIB Series replaces the threaded coupling used in MIL-DTL-5015 with a positive, quick-mating, 3-point reverse bayonet lock. AIB Series shares the same shell dimensions, contact layouts, contacts, and performance characteristics as the MIL-DTL-5015 threaded connectors; however, the two series do not intermate. Over 180 contact layouts are available from 1 to 85 circuits and up to 150 amps per contact. The standard MIL-DTL-5015 layouts allow the mixing of power and signal contacts, power only, or signal only. Contacts are available in solder, crimp, or PC termination covering wire gauges from size 26 to size 0 AWG. Thermocouple (J, Y, K, T) and coax contacts are also available. These connectors are completely sealed to withstand moisture, condensation, vibration, and flash-over across a broad range of wire diameters. When the two connector halves are mated, the dynamic interfacial seal at the front creates an environmentally sealed assembly.

Commercial and Military

AIB Series connectors are made in accordance with German military specification VG 95 234 and MIL-DTL-5015. Originally designed for NATO combat vehicles, aircraft, and airborne equipment, these rugged connectors are now widely used in a broad range of demanding commercial applications from trucks to industrial robots.

Applications

Industrial environments requiring extreme environmental reliability and ease of mating and unmating, such as:

- Power Generators
- Battery Systems
- Engines
- Sensors
- Motion Control
- Off-road Vehicles
- Earth Moving Equipment
- Ships
- Railroad Equipment
- Mobile Equipment
- Industrial Machinery
- Telecommunications
- Mass Transit

Features

Audible, Visual, and Tactile Confirmation of Mating

AIB Series connectors provide the user with three independent checks that the connector halves are mated. When the coupling nut is fully rotated, the three studs snap into the end of the ramps with a loud "click" (audible confirmation). At that same moment, the user can actually feel the bolts click into the grooves (tactile confirmation). Blue dots on the receptacle and on the coupling nut are aligned when the connector is properly mated (visual confirmation).

Environmental

The sealing of this connector is not compromised by any of the operating conditions defined in MIL-DTL-5015. The connector is completely watertight when mated.

Broad Temperature Range

These connectors will operate in temperatures from -67˚ to +257˚F (-55˚ to +125˚C). High temperature and zero halogen insulators are also available. Call for ordering information.

Wide Range of Wire Gauges and Current Carrying Capability

Up to 150 amps with accommodations for wire gauges from size 26 up to size 0 AWG wire.

Wide Variety of Contacts

High reliability screw machine contacts with silver or gold plating are available in sizes from 20 through 0 to accommodate wire gauges from 26 to 0 AWG. Solder, Crimp, PC, Coax, and Thermocouple contacts are available.

AIB Series connectors use rail industry standard crimp contacts which are completely interchangeable with other rail connectors such as Veam CIR series.

Intermateable and Intermountable with all VG 95 234 Connectors

The standard MIL-DTL-5015 layouts and dimensions ensure intermateability and intermountability with all connectors made in accordance with VG 95 234.

All AIB Series connectors are intermountable with standard threaded MIL-DTL-5015 connectors, making it possible to upgrade without the need to change panel cutouts or clearances in most cases.

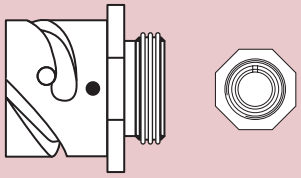
Amphenol®

For Assistance in Europe – Please See the Back Cover For a Complete Listing of Our Branch Offices and Contact Numbers. • Specifications subject to change.

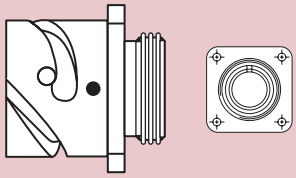
AIB – Amphenol Industrial Reverse Bayonet

STEP 1
Choose Shell Style: Receptacle or Plug
(See Connector Solutions Guide)

Cable Mount Receptacle
AIB1 with Accessory Threads

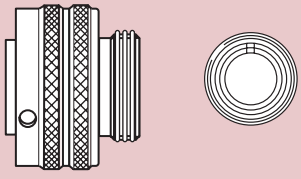


Rear Wall Mount
AIB30 with Accessory Threads (Most Popular)



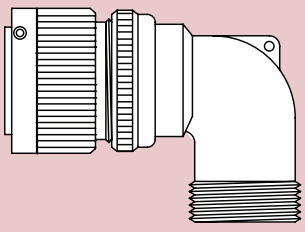
mates with

Straight Plug
AIB6



Right Angle Plug
not available in shell sizes 8, 32, or 36
not used with RU endbell option

AIB8



Note: Call for more information

STEP 2 Choose Endbell

Potted
- **U** = Unshielded
- **US** = with shielding spring
- **UT** = with shielding tape
- **UW** = with shielding tape & spring

For use with grommets (wire seals)
- **D** = Unshielded
- **DS** = with shielding spring
- **DT** = with shielding tape
- **DW** = with shielding tape & spring

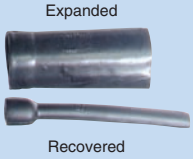
RU Right Angle
NEW!

Call for more info

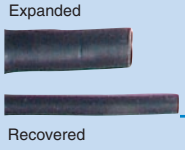
Boot options

Note: Cable outside diameter must be between expanded and recovered dimensions.

SB – Straight Boot



HST – Heat Shrink Tubing



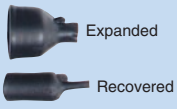
Most Popular

Heat Shrink Product	SB 1	SB 2	SB 3	SB 4	SB 5	SB 6	SB 7	SB 8	HST 1	HST 2	HST 3	HST 4
Expanded ID inch (mm)	0.88 (22.4)	1.01 (25.7)	1.16 (29.5)	1.35 (34.3)	1.47 (37.3)	1.72 (43.7)	1.97 (50.5)	2.47 (62.7)	0.750 (19.1)	1.000 (25.4)	1.250 (31.8)	1.570 (39.9)
Recovered ID inch (mm)	0.25 (6.4)	0.29 (7.4)	0.33 (8.4)	0.38 (9.7)	0.41 (10.4)	0.44 (11.2)	0.51 (13.0)	0.67 (17.0)	0.250 (6.4)	0.320 (8.1)	0.416 (10.6)	0.510 (13.0)
Length Max inch (mm)	4.17 (105.9)	4.77 (121.2)	5.46 (138.7)	6.28 (159.5)	7.00 (177.8)	8.00 (203.2)	8.00 (203.2)	8.00 (203.2)	6.00 (152.4)			
Shell Size 10SL	◆								◆			
14S		◆	◆							◆		
16/16S			◆	◆							◆	
18			◆	◆								◆
20				◆								◆
22				◆								◆
24					◆	◆						◆
28					◆	◆						◆
32					◆	◆	◆					◆
36							◆					
40								◆				

adhesive lined heat shrink tubing

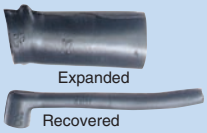
CSB – Convoluted Shrink Boot

BSB/HBSB – Bottle Shaped Shrink Boot
(High Ratio Bottle Shaped Boot)



Heat Shrink Product	CSB2	CSB3	CSB4	CSB5	BSB1	HBSB2	BSB2	BSB3	BSB4	BSB5	BSB6	BSB7
Expanded ID inch (mm)	0.70 (17.8)	1.06 (26.9)	1.44 (36.6)	1.80 (45.7)	0.94 (23.9)	0.35 (8.9)	1.18 (30.0)	1.22 (31.0)	1.42 (36.1)	1.69 (42.9)	2.36 (59.9)	2.00 (50.8)
Recovered ID inch (mm)	0.32 (8.1)	0.50 (12.7)	0.69 (17.5)	0.88 (22.4)	0.24 (6.1)	0.14 (3.6)	0.24 (6.1)	0.28 (7.1)	0.33 (8.4)	0.39 (9.9)	0.63 (16.0)	0.67 (17.0)
Length Max inch (mm)	5.25 (133.4)	5.75 (146.1)	6.25 (158.8)	6.75 (171.5)	1.50 (38.1)	2.17 (55.1)	2.17 (55.1)	2.64 (67.1)	3.15 (80.0)	3.90 (99.1)	5.12 (130.0)	6.73 (170.9)
Shell Size 10SL	◆				◆	◆	◆					
14S		◆			◆	◆	◆	◆	◆			
16/16S		◆	◆				◆	◆	◆			
18		◆	◆				◆	◆	◆			
20		◆	◆					◆	◆			
22		◆	◆						◆			
24			◆	◆						◆		
28			◆	◆						◆		
32			◆	◆						◆	◆	
36											◆	
40											◆	◆

RSB – Right Angle Shrink Boot



Heat Shrink Product	RSB1	RSB2	RSB3	RSB4	RSB5	RSB6	RSB7	RSB8
Expanded ID inch (mm)	0.88 (22.4)	1.01 (25.7)	1.16 (29.5)	1.35 (34.3)	1.47 (37.3)	1.72 (43.7)	1.97 (50.0)	2.47 (62.7)
Recovered ID Inch (mm)	0.23 (5.8)	0.26 (6.6)	0.30 (7.6)	0.35 (8.9)	0.37 (9.4)	0.44 (11.2)	0.51 (13.0)	0.69 (17.5)
Length Max inch (mm)	4.14 (105.2)	4.88 (124.0)	5.76 (146.3)	6.78 (172.2)	7.29 (185.2)	8.41 (213.6)	8.84 (224.5)	8.95 (227.3)
Shell Size 10SL	◆	◆						
14S		◆	◆	◆				
16/16S			◆	◆				
18				◆				
20				◆				
22					◆	◆		
24					◆	◆		
28					◆	◆		
32					◆	◆	◆	
36							◆	
40								◆

Amphenol Industrial Reverse Bayonet – AIB

STEP 2 Choose Endbell

CG = Straight Adapter Endbell

NEW!

RG = Right Angle Adapter Endbell

Please call for more information

STEP 3 Choose Conduit Adapter or Cord Grip

Unshielded Conduits

CA* = conduit adapter for plastic flexible conduit. Add size code i.e. CGCA10

Note: Normal recommended conduit fill is 40% of Conduit ID or less.

Size Code		07	10	12	14	17	23	29	36
Conduit ID Inch (mm)		0.256 (6.5)	0.394 (10.0)	0.472 (12.0)	0.563 (14.3)	0.650 (16.5)	0.906 (23.0)	1.142 (29.0)	1.417 (36.0)
Conduit OD Inch (mm)		0.394 (10.0)	0.512 (13.0)	0.622 (15.8)	0.728 (18.5)	0.835 (21.2)	1.122 (28.5)	1.358 (34.5)	1.673 (42.5)
Shell Size	10SL	♦	♦						
	14S	♦	♦	♦	♦	♦			
	16/16S			♦	♦	♦	♦		
	18			♦	♦	♦	♦		
	20			R		R	♦		
	22			R		R	♦		
	24			R		R	♦		
	28			R		R	R	♦	
	32			R		R	R	♦	
	36							R	♦
	40							R	♦

R = with reducer

OR Shielded Cord Grip

Size Code		1		2		3		4	
	MSS*	Min mm	Max mm	Min mm	Max mm	Min mm	Max mm	Min mm	Max mm
Shell Size 10SL	♦	4.0	6.5	6.5	9.5	8.0	10.5	-	-
14S	♦	6.5	9.5	7.0	10.5	9.0	13.0	-	-
16/16S	♦	6.5	9.5	7.0	10.5	9.0	13.0	11.5	15.5
18	♦	6.5	9.5	7.0	10.5	9.0	13.0	11.5	15.5
20	♦	9.0	13.0	11.5	15.5	17.0	20.0	20.0	25.0
22	♦	9.0	13.0	11.5	15.5	17.0	20.0	20.0	25.0
24	♦	9.0	13.0	11.5	15.5	17.0	20.0	20.0	25.0
28	♦	20.0	25.0	24.0	28.0	17.0	32.0	29.0	34.0
32	♦	20.0	25.0	24.0	28.0	17.0	32.0	29.0	34.0
36	♦	24.0	28.0	29.0	34.0	-	-	-	-
40	♦	24.0	28.0	29.0	34.0	-	-	-	-

Conduit Adapter and Cord Grip Types

CA*= Conduit Adapter
MSS*= Metal Short Shielded - Nickel Plated Brass
PF*= Plastic with Flex Spring
PS*= Plastic Short
MS*= Metal Short - Nickel Plated Brass
PL*= Plastic Long
ML*= Metal Long - Nickel Plated Brass
*= add size code per chart i.e. CGPFA or CGMSS4
Min/Max refers to cable diameter.

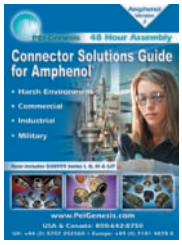
Note: Cable jacket and shield diameters must be between Min/Max of cord grip.

For detailed info on shield diameters, see MSS table on page 232.

OR Unshielded Cord Grip

		PF*	PS*	MS*	Size Code A Min mm	A Max mm	R Min mm	R Max mm	PL*	ML*	Size Code 1 Min mm	1 Max mm	2 Min mm	2 Max mm	3 Min mm	3 Max mm
Shell Size	10SL	♦	♦	♦	4.0	8.0	2.0	6.0	♦	♦	4.0	6.5	7.5	9.5	-	-
	14S	♦	♦	♦	6.0	12.0	5.0	9.0	♦	♦	6.5	9.5	8.5	10.5	-	-
	16/16S	♦	♦	♦	10.0	14.0	7.0	12.0	♦	♦	6.5	9.5	7.0	10.5	9.5	13.0
	18	♦	♦	♦	10.0	14.0	7.0	12.0	♦	♦	6.5	9.5	7.0	10.5	9.5	13.0
	20	♦	♦	♦	13.0	18.0	9.0	16.0	♦	♦	9.0	13.0	13.0	15.5	14.0	18.0
	22	♦	♦	♦	13.0	18.0	9.0	16.0	♦	♦	9.0	13.0	13.0	15.5	14.0	18.0
	24	♦	♦	♦	13.0	18.0	9.0	16.0	♦	♦	9.0	13.0	13.0	15.5	14.0	18.0
	28		♦	♦	18.0	25.0	12.0	20.0	♦	♦	17.0	21.0	21.0	25.0	-	-
	32		♦	♦	18.0	25.0	12.0	20.0	♦	♦	17.0	21.0	21.0	25.0	-	-
	36		♦	♦	22.0	32.0	20.0	26.0			-	-	-	-	-	-
	40		♦	♦	22.0	32.0	20.0	26.0			-	-	-	-	-	-

STEP 4 Choose Connector Layout



See Connector Solutions Guide

STEP 5 Choose Contact

P = Pin
S = Socket

STEP 6 Choose Rotation

(omit for normal)

W X Y Z

STEP 7 Choose Contact Type

S = Solder
C = Crimp
0 = Less contacts

STEP 8 Choose Platings/ Modifications

CONTACTS

Omit = silver plated contacts
B30 = Gold 50µ Gold over Nickel

SHELLS

Standard Plating = Conductive olive drab chromate over cadmium

023 = Conductive Nickel (RoHS❖ with crimp contacts)
025 = Non-Conductive Black Zinc (RoHS❖ with crimp contacts)
027 = Conductive Black Zinc (RoHS❖ with crimp or 116 contacts)
116 = Solder Style Contacts less Pretinned Solder Cups
472 = 116 + 025 (RoHS❖)
548 = 116 + 023 (RoHS❖)
G96 = Non-Conductive Anodized✦

MATERIALS

Omit = Standard Neoprene

For Low Smoke, Zero Halogen, High Temperature Viton®, and other materials call.

Note: ✦ Endbells U & CG will be Black Anodized.
❖ As reported by Amphenol, please call for more info.

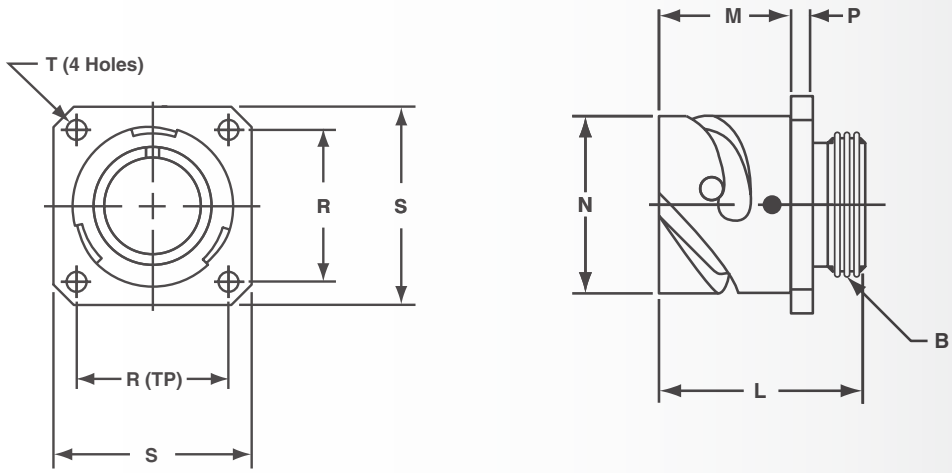
Example of part description:

1	2	3	4	5	6	7	8
AIB6	US	CSB2-	18-1	S	Y	C	-B30-023
Shell Style	Endbells/ Shielding	Wire Protection	Connector Layout	Contact	Rotation	Contact Type	Platings

See Connector Solutions Guide

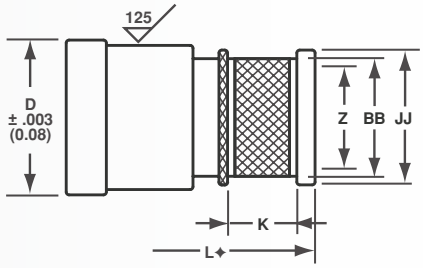
AIB – Dimensions

Style 30 Receptacle

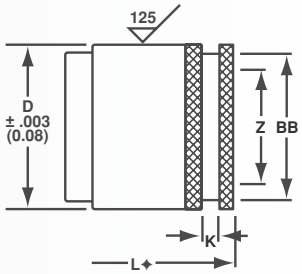


Shell Size	M +.016-.000 (+0.4-0.0)	N +.000-.006 (+0.00-0.15)	P ± .008 (±0.2)	R ± .004 (±0.1)	S ± .012 (±0.3)	TØ +.004-.000 (+0.1-0.0)	B Thread Class 2A	L + .012 (+ 0.3)
10SL	.717 (18.20)	.717 (18.2)	.110 (2.8)	.717 (18.2)	1.000 (25.4)	.126 (3.2)	.6250-24 UNEF	1.087 (27.6)
14S	.717 (18.20)	.969 (24.6)	.126 (3.2)	.906 (23.0)	1.181 (30.0)	.126 (3.2)	.7500-20 UNEF	1.087 (27.6)
16S	.717 (18.20)	1.079 (27.4)	.126 (3.2)	.969 (24.6)	1.280 (32.5)	.126 (3.2)	.8750-20 UNEF	1.087 (27.6)
16	.846 (21.50)	1.079 (27.4)	.126 (3.2)	.969 (24.6)	1.280 (32.5)	.126 (3.2)	.8750-20 UNEF	1.331 (33.8)
18	.907 (23.05)	1.213 (30.8)	.157 (4.0)	1.063 (27.0)	1.378 (35.0)	.126 (3.2)	1.0000-20 UNEF	1.331 (33.8)
20	.907 (23.05)	1.346 (34.2)	.157 (4.0)	1.157 (29.4)	1.496 (38.0)	.126 (3.2)	1.1250-18 UNEF	1.331 (33.8)
22	.907 (23.05)	1.472 (37.4)	.157 (4.0)	1.252 (31.8)	1.614 (41.0)	.126 (3.2)	1.2500-18 UNEF	1.331 (33.8)
24	.907 (23.05)	1.610 (40.9)	.157 (4.0)	1.374 (34.9)	1.752 (44.5)	.146 (3.7)	1.3750-18 UNEF	1.331 (33.8)
28	.947 (24.05)	1.839 (46.7)	.157 (4.0)	1.563 (39.7)	2.000 (50.8)	.146 (3.7)	1.6250-18 UNEF	1.406 (35.7)
32	.947 (24.05)	2.102 (53.4)	.157 (4.0)	1.752 (44.5)	2.244 (57.0)	.169 (4.3)	1.8750-16 UN	1.469 (37.3)
36	.947 (24.05)	2.346 (59.6)	.157 (4.0)	1.937 (49.2)	2.500 (63.5)	.169 (4.3)	2.0625-16 UN	1.469 (37.3)
40	.947 (24.05)	2.579 (65.5)	.157 (4.0)	2.185 (55.5)	2.752 (69.9)	.169 (4.3)	2.3125-16 UN	1.469 (37.3)

All dimensions in inches (millimeters in parenthesis)



Universal Heat Shrink							
Shell Size	L✦ Max	DØ	K Max	ZØ Cable Max*	BBØ Max	JJØ Max	C Code
10SL	2.422 (61.5)	0.740 (18.8)	0.433 (11.0)	0.337 (8.6)	0.493 (12.5)	0.587 (14.9)	B
14S	2.424 (61.6)	0.865 (22.0)	0.476 (12.1)	0.506 (12.9)	0.665 (16.9)	0.783 (19.9)	C
16S	2.514 (63.9)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
16	2.758 (70.1)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
18	2.817 (71.6)	1.146 (29.1)	0.476 (12.1)	0.619 (15.7)	0.821 (20.9)	0.939 (23.9)	E
20	2.927 (74.3)	1.271 (32.3)	0.476 (12.1)	0.675 (17.1)	0.891 (22.6)	1.010 (25.6)	F
22	3.033 (77.0)	1.428 (36.3)	0.476 (12.1)	0.731 (18.6)	0.954 (24.2)	1.072 (27.2)	G
24	3.187 (80.9)	1.552 (39.4)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
28	3.050 (77.5)	1.740 (44.2)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
32	3.745 (95.1)	1.990 (50.6)	0.476 (12.1)	1.125 (28.6)	1.417 (36.0)	1.536 (39.0)	-
36	3.628 (92.2)	2.291 (58.2)	0.476 (12.1)	1.238 (31.5)	1.542 (39.2)	1.661 (42.2)	-
40	3.846 (97.7)	2.520 (64.0)	0.476 (12.1)	1.463 (37.1)	1.792 (45.5)	1.911 (48.5)	-



Cord Grip						
Shell Size	L✦ Max	DØ	K Max	ZØ Cable Max*	BBØ Max	C Code
10SL	2.085 (53.0)	0.865 (22.0)	0.118 (3.0)	0.376 (9.5)	0.707 (18.0)	C
14S	2.097 (55.3)	0.990 (25.2)	0.118 (3.0)	0.475 (12.1)	0.887 (22.6)	D
16S	2.246 (57.0)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
16	2.490 (63.2)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
18	2.510 (63.8)	1.217 (32.3)	0.118 (3.0)	0.687 (17.5)	1.114 (28.3)	F
20	2.620 (66.5)	1.428 (36.3)	0.118 (3.0)	0.787 (20.0)	1.270 (32.3)	G
22	2.620 (66.5)	1.428 (36.3)	0.118 (3.0)	0.875 (22.2)	1.270 (32.3)	G
24	2.561 (65.0)	1.552 (39.4)	0.118 (3.0)	0.958 (24.3)	1.395 (35.4)	H
28	2.695 (68.5)	1.820 (46.2)	0.118 (3.0)	1.113 (28.3)	1.661 (42.2)	-
32	2.801 (71.1)	2.055 (52.2)	0.118 (3.0)	1.266 (32.2)	1.898 (48.2)	-
36	2.852 (72.4)	2.291 (58.2)	0.118 (3.0)	1.605 (40.8)	2.130 (54.2)	-
40	2.974 (75.5)	2.520 (64.0)	0.118 (3.0)	1.620 (41.2)	2.362 (60.0)	-

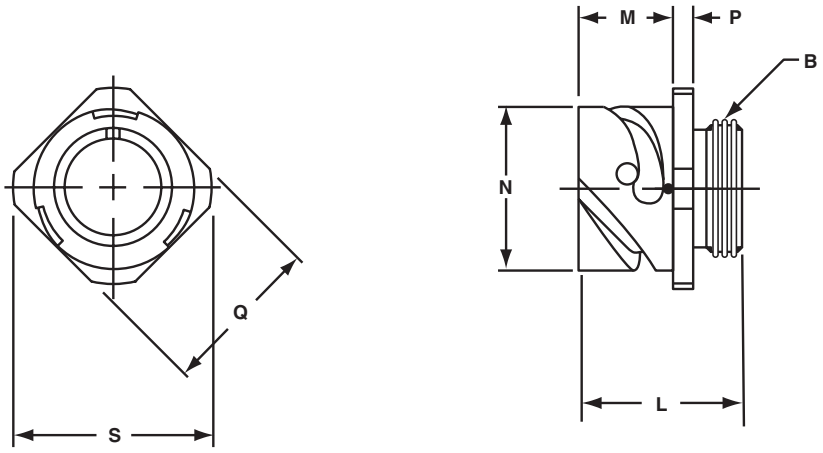
✦ L is the maximum reference length from the mating face of the connector

* Recommended cable maximum is 90% of actual endbell I.D.*

All dimensions in inches (millimeters in parenthesis)

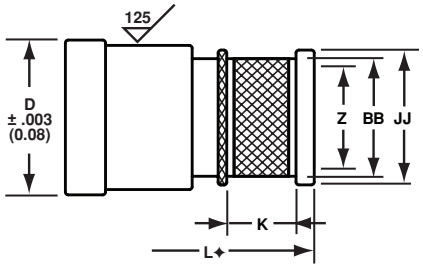
AIB – Dimensions

Style 1 Cable Receptacle

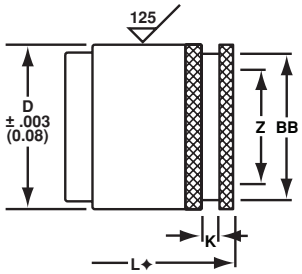


Shell Size	M +.016-.000 (+0.4-0.0)	N +.000-.006 (+0.00-0.15)	P ± .008 (+0.2)	Q ± .008 (±0.2)	S Max	B Thread Class 2A	L + .012 (+ 0.3)
10SL	.717 (18.20)	.717 (18.2)	.110 (2.8)	.811 (20.6)	.992 (25.2)	.6250-24 UNEF	1.087 (27.6)
14S	.717 (18.20)	.969 (24.6)	.126 (3.2)	1.000 (25.4)	1.173 (29.8)	.7500-20 UNEF	1.087 (27.6)
16S	.717 (18.20)	1.079 (27.4)	.126 (3.2)	1.126 (28.6)	1.272 (32.3)	.8750-20 UNEF	1.087 (27.6)
16	.8461 (21.50)	1.079 (27.4)	.126 (3.2)	1.126 (28.6)	1.272 (32.3)	.8750-20 UNEF	1.331 (33.8)
18	.907 (23.05)	1.213 (30.8)	.157 (4.0)	1.248 (31.7)	1.370 (34.8)	1.0000-20 UNEF	1.331 (33.8)
20	.907 (23.05)	1.346 (34.2)	.157 (4.0)	1.374 (34.9)	1.488 (37.8)	1.1250-18 UNEF	1.331 (33.8)
22	.907 (23.05)	1.472 (37.4)	.157 (4.0)	1.500 (38.1)	1.618 (41.1)	1.2500-18 UNEF	1.331 (33.8)
24	.907 (23.05)	1.610 (40.9)	.157 (4.0)	1.626 (41.3)	1.756 (44.6)	1.3750-18 UNEF	1.331 (33.8)
28	.947 (24.05)	1.839 (46.7)	.157 (4.0)	1.874 (47.6)	2.004 (50.9)	1.6250-18 UNEF	1.406 (35.7)
32	.947 (24.05)	2.102 (53.4)	.157 (4.0)	2.126 (54.0)	2.248 (57.1)	1.8750-16 UN	1.469 (37.3)
36	.947 (24.05)	2.346 (59.6)	.157 (4.0)	2.386 (60.6)	2.504 (63.6)	2.0625-16 UN	1.469 (37.3)
40	.947 (24.05)	2.579 (65.5)	.157 (4.0)	2.618 (66.5)	2.756 (70.0)	2.3125-16 UN	1.469 (37.3)

All dimensions in inches (millimeters in parenthesis)



Universal Heat Shrink							
Shell Size	L✦ Max	DØ	K Max	ZØ Cable Max*	BBØ Max	JJØ Max	C Code
10SL	2.422 (61.5)	0.740 (18.8)	0.433 (11.0)	0.337 (8.6)	0.493 (12.5)	0.587 (14.9)	B
14S	2.424 (61.6)	0.865 (22.0)	0.476 (12.1)	0.506 (12.9)	0.665 (16.9)	0.783 (19.9)	C
16S	2.514 (63.9)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
16	2.758 (70.1)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
18	2.817 (71.6)	1.146 (29.1)	0.476 (12.1)	0.619 (15.7)	0.821 (20.9)	0.939 (23.9)	E
20	2.927 (74.3)	1.271 (32.3)	0.476 (12.1)	0.675 (17.1)	0.891 (22.6)	1.010 (25.6)	F
22	3.033 (77.0)	1.428 (36.3)	0.476 (12.1)	0.731 (18.6)	0.954 (24.2)	1.072 (27.2)	G
24	3.187 (80.9)	1.552 (39.4)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
28	3.050 (77.5)	1.740 (44.2)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
32	3.745 (95.1)	1.990 (50.6)	0.476 (12.1)	1.125 (28.6)	1.417 (36.0)	1.536 (39.0)	-
36	3.628 (92.2)	2.291 (58.2)	0.476 (12.1)	1.238 (31.5)	1.542 (39.2)	1.661 (42.2)	-
40	3.846 (97.7)	2.520 (64.0)	0.476 (12.1)	1.463 (37.1)	1.792 (45.5)	1.911 (48.5)	-



Cord Grip						
Shell Size	L✦ Max	DØ	K Max	ZØ Cable Max*	BBØ Max	C Code
10SL	2.085 (53.0)	0.865 (22.0)	0.118 (3.0)	0.376 (9.5)	0.707 (18.0)	C
14S	2.097 (55.3)	0.990 (25.2)	0.118 (3.0)	0.475 (12.1)	0.887 (22.6)	D
16S	2.246 (57.0)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
16	2.490 (63.2)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
18	2.510 (63.8)	1.217 (32.3)	0.118 (3.0)	0.687 (17.5)	1.114 (28.3)	F
20	2.620 (66.5)	1.428 (36.3)	0.118 (3.0)	0.787 (20.0)	1.270 (32.3)	G
22	2.620 (66.5)	1.428 (36.3)	0.118 (3.0)	0.875 (22.2)	1.270 (32.3)	G
24	2.561 (65.0)	1.552 (39.4)	0.118 (3.0)	0.958 (24.3)	1.395 (35.4)	H
28	2.695 (68.5)	1.820 (46.2)	0.118 (3.0)	1.113 (28.3)	1.661 (42.2)	-
32	2.801 (71.1)	2.055 (52.2)	0.118 (3.0)	1.266 (32.2)	1.898 (48.2)	-
36	2.852 (72.4)	2.291 (58.2)	0.118 (3.0)	1.605 (40.8)	2.130 (54.2)	-
40	2.974 (75.5)	2.520 (64.0)	0.118 (3.0)	1.620 (41.2)	2.362 (60.0)	-

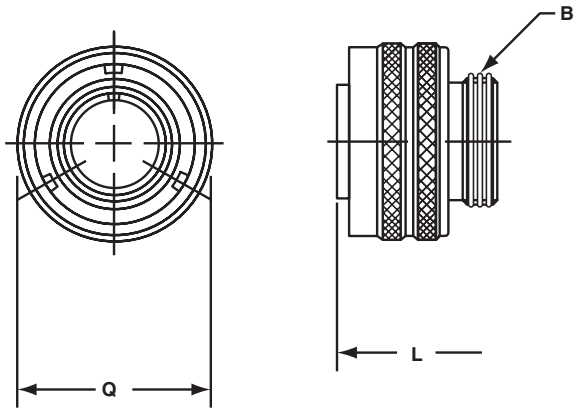
✦ L is the maximum reference length from the mating face of the connector

* Recommended cable maximum is 90% of actual endbell I.D.*

All dimensions in inches (millimeters in parenthesis)

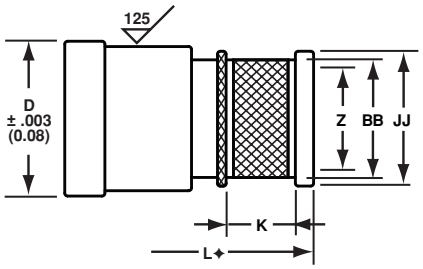
AIB – Dimensions

Style 6 Plugs

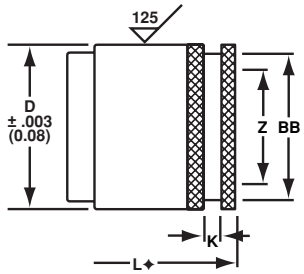


Shell Size	Q Max	B Thread Class 2A	L + .012 (+.03)
10SL	.898 (22.8)	.6250-24 UNEF	1.087 (27.6)
14S	1.150 (29.2)	.7500-20 UNEF	1.087 (27.6)
16S	1.260 (32.0)	.8750-20 UNEF	1.087 (27.6)
16	1.260 (32.0)	.8750-20 UNEF	1.331 (33.8)
18	1.437 (36.5)	1.0000-20 UNEF	1.331 (33.8)
20	1.571 (39,9)	1.1250-18 UNEF	1.331 (33.8)
22	1.697 (43.1)	1.2500-18 UNEF	1.331 (33.8)
24	1.835 (46.6)	1.3750-18 UNEF	1.331 (33.8)
28	2.102 (53.4)	1.6250-18 UNEF	1.406 (35.7)
32	2.366 (60.1)	1.8750-16 UN	1.469 (37.3)
36	2.610 (66.3)	2.0625-16 UN	1.469 (37.3)
40	2.850 (72.4)	2.3125-16 UN	1.469 (37.3)

All dimensions in inches (millimeters in parenthesis)



Universal Heat Shrink							
Shell Size	**L✦ Max**	**DØ**	**K Max**	**ZØ Cable Max***	**BBØ Max**	**JJØ Max**	**C Code**
10SL	2.325 (59.1)	0.740 (18.8)	0.433 (11.0)	0.337 (8.6)	0.493 (12.5)	0.587 (14.9)	B
14S	2.337 (59.4)	0.865 (22.0)	0.476 (12.1)	0.506 (12.9)	0.665 (16.9)	0.783 (19.9)	C
16S	2.486 (63.7)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
16	2.787 (70.8)	0.990 (25.2)	0.476 (12.1)	0.619 (15.7)	0.807 (20.5)	0.926 (23.5)	D
18	2.866 (72.8)	1.146 (29.1)	0.476 (12.1)	0.619 (15.7)	0.821 (20.9)	0.939 (23.9)	E
20	2.977 (75.6)	1.271 (32.3)	0.476 (12.1)	0.675 (17.1)	0.891 (22.6)	1.010 (25.6)	F
22	3.977 (75.6)	1.428 (36.3)	0.476 (12.1)	0.731 (18.6)	0.954 (24.2)	1.072 (27.2)	G
24	2.901 (73.7)	1.552 (39.4)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
28	3.036 (77.1)	1.740 (44.2)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
32	3.073 (78.1)	1.990 (50.6)	0.476 (12.1)	0.843 (21.4)	1.095 (27.8)	1.213 (30.8)	H
36	3.674 (93.3)	2.291 (58.2)	0.476 (12.1)	1.238 (31.5)	1.542 (39.2)	1.661 (42.2)	-
40	3.882 (98.6)	2.520 (64.0)	0.476 (12.1)	1.463 (37.1)	1.792 (45.5)	1.911 (48.5)	-



Cord Grip						
Shell Size	**L✦ Max**	**DØ**	**K Max**	**ZØ Cable Max***	**BBØ Max**	**C Code**
10SL	2.018 (51.3)	0.865 (22.0)	0.118 (3.0)	0.376 (9.5)	0.707 (18.0)	C
14S	2.030 (51.6)	0.990 (25.2)	0.118 (3.0)	0.475 (12.1)	0.887 (22.6)	D
16S	2.179 (55.3)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
16	2.555 (64.9)	1.146 (29.1)	0.118 (3.0)	0.581 (14.8)	0.989 (25.1)	E
18	2.575 (65.4)	1.217 (32.3)	0.118 (3.0)	0.687 (17.5)	1.114 (28.3)	F
20	2.685 (68.2)	1.428 (36.3)	0.118 (3.0)	0.787 (20.0)	1.270 (32.3)	G
22	2.685 (68.2)	1.428 (36.3)	0.118 (3.0)	0.875 (22.2)	1.270 (32.3)	G
24	2.685 (68.2)	1.552 (39.4)	0.118 (3.0)	0.958 (24.3)	1.395 (35.4)	H
28	2.748 (69.8)	1.820 (46.2)	0.118 (3.0)	1.113 (28.3)	1.661 (42.2)	-
32	2.847 (72.3)	2.055 (52.2)	0.118 (3.0)	1.266 (32.2)	1.898 (48.2)	-
36	2.898 (73.6)	2.291 (58.2)	0.118 (3.0)	1.605 (40.8)	2.130 (54.2)	-
40	3.010 (76.5)	2.520 (64.0)	0.118 (3.0)	1.620 (41.2)	2.362 (60.0)	-

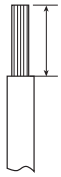
✦ L is the maximum reference length from the mating face of the connector

* Recommended cable maximum is 90% of actual endbell I.D.*

All dimensions in inches (millimeters in parenthesis)

AIB – Contacts

Pin & Socket Crimp Contacts

Pin Contact	Socket Contact	Wire Strip Lengths	Wire Range
			

Contact Size	Wire Size	Part Number					Wire Strip Lengths Inches (mm)	Wire Sealing Lengths Inches (mm)
		Pin Contact		Socket Contact				
		Silver	Gold	Silver	Gold			
16S†	16-18-20	**AIC16S-16P**	**AIC16S-16PG**	**AIC16S-16S**	**AIC16S-16SG**		.312 (7.9)	.090-.118 (2.3-3.0)
	12-14	AIC16S-12P	AIC16S-12PG	AIC16S-12S	AIC16S-12SG	C4		
	14-16	AIC16S-14P	AIC16S-14PG	AIC16S-14S	AIC16S-14SG	C3		
	18-20	AIC16S-20P	AIC16S-20PG	AIC16S-20S	AIC16S-20SG	C13		
	20-22	AIC16S-22P	AIC16S-22PG	AIC16S-22S	AIC16S-22SG	C14		
	22-24	AIC16S-24P	AIC16S-24PG	AIC16S-24S	AIC16S-24SG	C2		
16	16-18-20	**AIC16-16P**	**AIC16-16PG**	**AIC16-16S**	**AIC16-16SG**			
	12-14	AIC16-12P	AIC16-12PG	AIC16-12S	AIC16-12SG	C4		
	14-16	AIC16-14P	AIC16-14PG	AIC16-14S	AIC16-14SG	C3		
	18-20	AIC16-18P	AIC16-18PG	AIC16-18S	AIC16-18SG	C13		
	20-22	AIC16-20P	AIC16-20PG	AIC16-20S	AIC16-20SG	C14		
	20-24	AIC16-2024P	AIC16-2024PG	AIC16-2024S	AIC16-2024SG	C36		
	22-24	AIC16-22P	AIC16-22PG	AIC16-22S	AIC16-22SG	C2		
12	12-14	**AIC12-12P**	**AIC12-12PG**	**AIC12-12S**	**AIC12-12SG**		.312 (7.9)	.126-.177 (3.2-4.5)
	12 High Power	-	-	AIC12-12SRAD	-			
	8-10	AIC12-8P	AIC12-8PG	AIC12-8S	AIC12-8SG	C5		
	10-12	AIC12-10P	AIC12-10PG	AIC12-10S	AIC12-10SG	C8		
	14-16	AIC12-14P	AIC12-14PG	AIC12-14S	AIC12-14SG	C9		
	16-18	AIC12-16P	AIC12-16PG	AIC12-16S	AIC12-16SG	C7		
	18-20	AIC12-18P	AIC12-18PG	AIC12-18S	AIC12-18SG	C6		
	20-22	AIC12-20P	AIC12-20PG	AIC12-20S	AIC12-20SG	C40		
8	8	**AIC8-8P**	**AIC8-8PG**	**AIC8-8S**	**AIC8-8SG**		.563 (14.3)	.150-.256 (3.8-6.5)
	8 High Power	-	-	AIC8-8SRAD	-			
	10-12	AIC8-10P	AIC8-10PG	AIC8-10S	AIC8-10SG	C10		
	12-14	AIC8-12P	AIC8-12PG	AIC8-12S	AIC8-12SG	C38		
4	4	**AIC4-4P**	**AIC4-4PG**	**AIC4-4S**	**AIC4-4SG**		.500 (12.7)	.279-.366 (7.1-9.3)
	4 High Power	-	-	AIC4-4SRAD	-			
	8	AIC4-8P	AIC4-8PG	AIC4-8S	AIC4-8SG	C15		
0	0	**AIC0-0P**	**AIC0-0PG**	**AIC0-0S**	**AIC0-0SG**		.750 (19.0)	.394-.539 (10.0-13.7)
	0 High Power	-	-	AIC0-0SRAD	-			
	0-2	AIC0-2P	AIC0-2PG	AIC0-2S	AIC0-2SG	C11		
	4	AIC0-4P	AIC0-4PG	AIC0-4S	AIC0-4SG	C12		

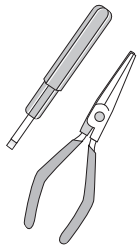
Bolded items are standard crimp contacts

Solder Thermocouple Contacts			
	Type	Pins	Sockets
16S†	Alumel	10-040799-02P*	10-040799-02S*
	Chromel	10-040799-01P*	10-040799-01S*
	Iron	10-040799-03P*	10-040799-03S*
	Constantan	10-040799-04P*	10-040799-04S*
16	Alumel	10-040799-12P*	10-040799-12S*
	Chromel	10-040799-11P*	10-040799-11S*
	Iron	10-040799-13P*	10-040799-13S*
	Constantan	10-040799-14P*	10-040799-14S*

Solder Thermocouple Contacts			
	Type	Pins	Sockets
12	Alumel	10-040799-42P*	10-040799-42S*
	Chromel	10-040799-41P*	10-040799-41S*
	Iron	10-040799-43P*	10-040799-43S*
	Constantan	10-040799-44P*	10-040799-44S*

Thermocouple Types: J = Iron-Constantan K = Alumel-Chromel
T = Copper-Constantan E = Chromel-Constantan

*Call for availability
† 16S contacts are used in 8S, 10S, 10SL, 12S, 14S and 16S connector sizes only.

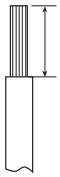
Accessories	Tools						
Head goes in first, trim excess.						
Wire Hole Filler (Color)	**Crimp Tools**	**Crimp Locator & Die Sets**	**Locator Color**	**Pilot Pin/Insertion Guide for Sockets**	**Insertion Tool**	**Extraction Tool**
MS27488-16-3 (Blue)	AF8 (hand) WA27F (pneumatic) ††	TH29-1	Red	10-242758-016	DAK168-16	DRK59 Kit with Multiple Tips
			Pin-Blue Socket-Green			
MS27488-12-3 (Yellow)			Green	10-242758-012	DAK168-12	
MS27488-8-3 (White)	400BHD	**Die Set** 414DA-8N **Locator** 4025-Pin 4026-Socket	-	10-242758-008	DAK282	
MS27488-4-3 (Blue)		**Die Set** 414DA-4N **Locator** 4043	-	-	AIC4INS	AIC4EXT
MS27488-0-3 (Yellow)		**Die Set** 414DA-0N **Locator** 4042	-	-	AIC0INS	AIC0EXT

†† Call for additional tool accessories.

All dimensions in inches (millimeters in parenthesis)

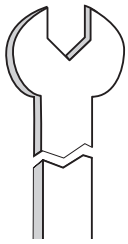
AIB – Contacts

Pin & Socket Coax Contacts

	Coax Pin	Coax Socket	Wire Strip Length	Wire Range	Accessories
					Head goes in first, trim excess.

Coax Contact Size	Coax Wire Size	Part Number				Wire Strip Lengths Inches (mm)	Wire Sealing Range Inches (mm)		Wire Hole Filler
		Pin Contact		Socket Contact					
		Silver	Gold	Silver	Gold		Min.	Max.	
12	RG161/U RG174A/U RG179B/U RG187A/U RG188A/U RG316/U	21-33034-1	21-33014-21 21-33048-1() 21-33130-1()	21-33033-1	21-33013-21 21-33047-1() 21-33129-1()	Call for details	0.126 (3.2 mm)	0.177 (4.5 mm)	Yellow 10-405996-12
	RG178B/U RG196A/U		21-33014-22		21-33013-22				
8	RG58C/U RG141A/U RG303/U	21-33034-2(1)	21-33014-1(5) 21-33016-5(3) 21-33130-2()	21-33033-2(1) 21-33048-2()	21-33013-1(5) 21-33047-2() 21-33015-5(3) 21-33129-2()	Call for details	0.150 (3.8 mm)	0.256 (6.5 mm)	White 10-405996-8
	RG59B/U RG62A/U RG62B/U RG210/U	31-33034-5(1)	21-33014-5(5) 21-33016-2(3) 21-33130-5() 21-33064-21()	21-33033-3(1)	21-33013-5(5) 21-33015-2(3) 21-33129-3() 21-33063-21()				
	RG161/U RG174A/U RG179B/U RG187A/U RG188A/U RG316/U	21-33034-3(1)	21-33014-3(5) 21-33016-1(3) 21-33130-3 () 21-33064-20()	21-33033-3(1)	21-33013-3(5) 21-33015-1(3) 21-33129-3() 21-33063-20()				
	RG180B/U RG195A/U	21-33034-6	21-33014-6(5) 21-33048-3() 21-33130-6()	21-33033-6	21-33013-(6) 21-33047-3() 21-33129-6()				
	RG140/U RG302/U	21-33034-8	21-33014-8(5) 21-33033-8 21-33130-8()		21-33013-8(5) 21-33129-8()				
	RG55B/U RG142A/U RG142B/U RG223/U	21-33034-4	21-33014-5(5) 21-33130-4()	21-33033-4	21-33013-5(5) 21-33129-4()				
4	RG59B/U RG62A/U RG62B/U RG210/U		21-33060-10()		21-33059-10()	Call for details	0.279 (7.1 mm)	0.366 (9.3 mm)	Blue 10-405996-4
	RG212/U		21-33060-11()		21-33059-11()				
	RG55B/U RG142A/U RG142B/U RG223/U		31-33060-12()		21-33059-12()				

( ) Various platings available. Availability of coax contacts varies widely. Call for details.

	Tools				
	M22520/10-01	M22520/5-01	Crimp Dies		

Coax Contact Size	Coax Wire Size	Hand Crimp Tool	Crimp Die/Locator	Use Locator	Coax Clamp Nut Wrench
12	RG161/U RG174A/U RG179B/U RG187A/U RG188A/U RG316/U	M22520/10-01	M22520/10-05	A	11-8676-1
	RG178B/U RG196A/U			B	
8	RG58C/U RG141A/U RG303/U	M22520/10-01	M22520/10-07	B	11-8676-2
	RG59B/U RG62A/U RG62B/U RG210/U	M22520/5-01	M22520/5-45	B	11-8676-3
	RG161/U RG174A/U RG179B/U RG187A/U RG188A/U RG316/U	M22520/10-01	M22520/10-05	A	11-8676-2
	RG180B/U RG195A/U		M22520/10-07	B	
	RG140/U RG302/U			A	
	RG55B/U RG142A/U RG142B/U RG223/U				
4	RG59B/U RG62A/U RG62B/U RG210/U	M22520/5-01	M22520/5-45	B	11-8676-4
	RG212/U	M22520/5-01	M22520/5-39	A	
	RG55B/U RG142A/U RG142B/U RG223/U	M22520/10-01	M22520/10-07	A	

AIB – At-A-Glance

Name:
Company:
Email:
Phone:
Qty: EAU:

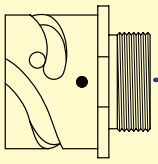
Additional Connector Information

CONNECTOR Part #:_____
OR
# of Contacts:_____ Sizes & Type:_____

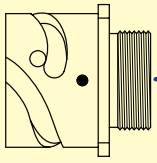
CABLE Manufacturer: _____
(If Known)
CABLE Part #: _____ OR Cable OD:_____

PEI-Genesis

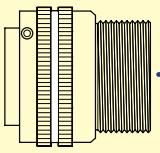
Choose One Connector



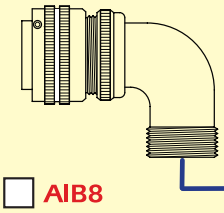
☐ AIB1
GT*01 Type
Cable Mount
Receptacle



☐ AIB30
GT*030 Type
Rear Wall Mount
Receptacle



☐ AIB6
GT*06 Type
Standard Plug



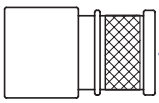
☐ AIB8
GT*08 Type
Right Angle
Plug†

†Option NOT available for shell sizes 32 & 36

Choose One Endbell

Use endbell "U" for Menus A, B, C, D & E

☐ U

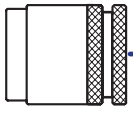


- ☐ Omit for Unshielded
- ☐ S — Shielding Spring
- ☐ T — Shielding Tape
- ☐ W — Shielding Tape & Spring

Contact Termination
☐ Crimp ☐ Solder

Use endbell "CG" for Menus F, G & H

☐ CG

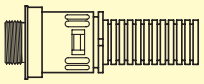


Comments/Notes:

_____
_____
_____
_____
_____
_____

Choose One Wire Protection

- ☐ HST — Heat Shrink Tubing
- ☐ SB — Straight Boot
- ☐ BSB — Bottle Shaped Shrink Boot
- ☐ HBSB — High Ratio Bottle Shaped Shrink Boot
- ☐ CSB — Convoluted Shrink Boot
- ☐ RSB — Right Angle Shrink Boot



- ☐ CA — Conduit Adapter & Conduit
- ☐ MSS — Metal Short Shielded
- ☐ PF — Plastic with flex Relief
- ☐ PS — Plastic Short
- ☐ MS — Metal Short
- ☐ PL — Plastic with Long Boot
- ☐ ML — Metal with Long Boot