

Aero Industrial Products

A.I.P. is a manufacturer and value added entity for high quality interconnect products. Situated in Mt. Clemens, Michigan our facility is poised to address a wide variety of connector, cable and wire harness assembly applications. As part of Conesys' Total Quality Management Program, every phase of our manufacturing process is stringently controlled to meet our customers' requirements as well as our own ISO Certified procedures.

Connectors

A.I.P. offers a vast selection of connector and accessory products for your interconnect needs. Our connectors are manufactured and designed to meet a wide variety of applications, from power, control, signal, data, military, aerospace transportation, stage & lighting, petrochemical to telecommunications. A.I.P. has the connector products to meet your needs.

Value-Added Services

A.I.P. features an extensive selection of connector and cable/wire products to satisfy the requirements of your interconnect applications. Governed by company instituted T.Q.M., U.L., CSA, Military and ISO Certifications, all of our assemblies are, tested and certified for compliance to yours, as well as our own, requirements and standards. From high power to low signal, A.I.P. is focused to provide your cable assembly solutions.

Product Cross Reference

Circular Series

AE1 (standard duty type connector) 26482 II style Application basically for non flexing stationary situations Control panels, light duty, 1/4 turn bayonet style coupling, rear release (contacts).

Nickel plated hardware available in anodize. Equivalent to Sine A line, Pyle Commandor.

AE32 (medium duty type connector) 26482 II style Application basically for robotics, auto motive flexing, Triple start coupling, self locking plug, rear release contacts, 38999 III style, ratchet coupling, quick coupling and vibration resistant.

Black Martin Hard coat finish.

Equivalent to Sine/Pyle.

AE24 (heavy duty type connector) power cable support type hardware Designed to relieve physical line or ground load weight, Applications: presses, machine tool, automotive manufacturing and stage and lighting.

Martin Hard coat finish.

Equivalent to Pyle Starline, Sine X line.

RC Series

Rapid Change (robotics weld control quick disconnect type connector) Power applications designed to eliminate down time in the automotive plants. Before the connectors were designed the plants hard wired the power cables directly into the robot and weld control systems. Aero product name Rapid Change, Veam is known by Rapi Change.

Black Martin Hard coat finish.

Performance Specifications

The AE1 Connector line is built in conformance with Series 1 of MIL-DTL-83723 and Series 2 of MIL-C-26482, AE32 is built in accordance with MIL-DTL-38999 Series III coupling style with the same insert layouts of AE1 series in respect to compatibility and conformance. AE1 varies, in respect to the heavy mounting flange and the addition of a heavier coupling ring. 28-41 and 36-60 layouts are unique 16 AWG pin configurations to this line but share the same design and features. The contact system conforms to MIL-C-39029 and uses standard tooling per MIL-DTL-22520. The cable adapters have been designed to accommodate heavy duty commercial wire and cable while withstanding the rugged physical condition found in many industrial, construction and commercial applications.

Service Rating

	I	II
Sea Level	1500	2300
50,000 Feet	500	750
70,000 Feet	375	500

When the voltage as indicated above is applied between shell and closest contact to the shell or between the two closest contacts for a period of one minute. there shall be no evidence of flashover or breakdown.

Current Rating

Size 20 contacts	7.5 amperes max. Voltage drop 55 millivolts max.
Size 16 contacts	13.0 amperes max Voltage drop 50 millivolts max.
Size 12 contacts	23 amperes max. Voltage drop 50 millivolts max.

Contact Retention:

Strength (Either Direction less than .020 displacement)
 Size 20 contacts 20 pounds axial load
 Size 16 contacts 25 pounds axial load
 Size 12 contacts 30 pounds axial load

Contact Durability:

Connector halves mated and unmated 500 times under normal operating service.

Shock & Vibration

Wired mated connectors shall not be damaged, nor shall there be a current interruption longer than one microsecond when subjected to the following:

Random Vibration: per MIL-STD-202, method 214 test condition II, letter J.

Shock: Mated connectors withstand a pulse of approximate half sine wave of 300g magnitude with duration of 3 milliseconds applied in 3 axes per MIL-STD-1344, method 204.

Operating Temperature Range

-67 F (-55 C) to 392 F (200 C)

Environmental Seal:

Wired mated connectors with the specified accessory attached will meet the altitude immersion test specified in MIL-C-26482, Series 2.

Fluid Resistance:

Connectors resist specified immersions in the fluids listed below and solvents specified in method 215 of MIL-STD-202.

Fluid

LUBRICATING OIL, TURBOSHAFT, SYNTHETIC BASE
 HYDRAULIC FLUID, PETROLEUM BASE
 TURBINE FUEL (JP-4 and JP-5)
 LUBRICATING OIL, GENERAL PURPOSE, LOW TEMP.
 LUBRICATING OIL, AIRCRAFT TURBINE ENGINE, SYNTHETIC BASE

Specifications

MIL-PRF-23699
 MIL-PRF-5606
 MIL-DTL-5624
 MIL-PRF-7870
 MIL-PRF-7808

Connector Kits (For Field Installation) Catalog Numbers

AE25 -	4	21	3K00 -	A6
	Insert Type	Insert Configuration Pages	Connector Type and Hardware	Entry Number This Page (Cable O.D. for grommet and/or weave I.D.)
AE24*	1=12GA ungrd	pp.14-19	"00" If None	
AE25	2=12 GA grd	page 6	Page 5	
AE32	3=16 GA ungrd	page 6		
	4=16 GA grd	page 6		
	5=20 GA ungrd	page 6		

O.D. Cable Dia. (For Cable Adaptors)		OR	NPT Size (Pipe) For Threaded Adaptor	Entry Number
Min.	Max.			
.062	.125		1/8	A1
.125	.250		1/4	A2
.250	.375		3/8	A3
.375	.500		1/2	A4
.500	.625			A5
.625	.750		3/4	A6
.750	.875			A7
.875	1.000		1"	A8
1.000	1.125			B1
1.125	1.250		1 1/4	B2
1.250	1.375			B3
1.375	1.500		1 1/2	B4
1.500	1.625			B5
1.625	1.750			B6
1.750	1.875			B7
1.875	2.000		2	B8
2.000	2.125			C1
2.125	2.250			C2
2.250	2.375			C3
			2 1/2	C4
			3"	C8
			4"	D8
			5"	E8
			6"	F8

* Consult factory for additional layout designators



Assembly Part Number Logic

Receptacle Assembly

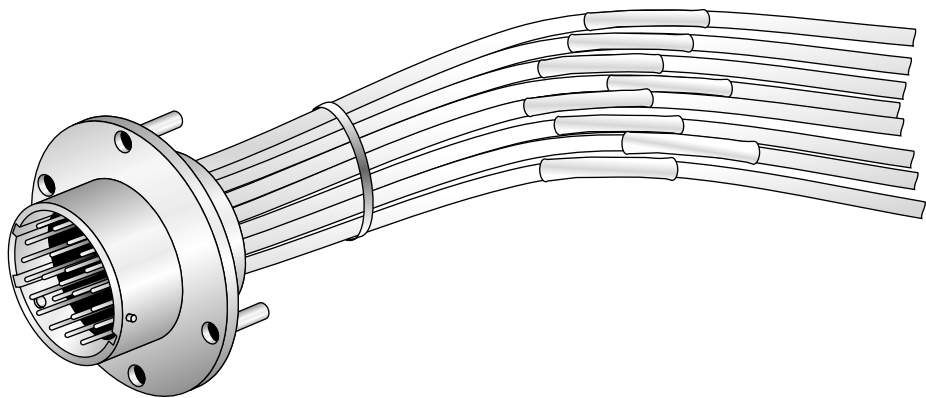
AE25 -	4	21	X P-0X-XXXX	-E XX
	Insert GA	Insert Configuration Pages	1=Make 2=Female 3=Male 4=Female	Length E=Feet H=Inches M=Meters
AE24*	1=12GA ungrd			
AE25	2=12 GA grd			
AE32	3=16 GA ungrd 4=16 GA grd 5=20 GA		3=Male Plug Panel Adapter 4=Female Plug Panel Adapter	

Sample Part Number: AE25421-1P04-TR16-E3

Logic=A-Style 16GA, 21 Position, Male Panel, Mount Receptacle, TFFN Wired Red, 16 AWG, Three Feet Long with the wrap every 1" of wire, Marked to Print.

The following are the assigned numbers for finishing details on receptacle assemblies and/or single ended cables.

- (3) Receptacle Assembly, with the wrap every 1 foot of wire, marked 1 or A thru
- (4) Receptacle Assembly, with the wrap every 1 foot of wire, marked to print.



* Consult factory for additional layout designators

Cable Assembly

AE25 -	4	21	3K4K -	XX-	16-	EXXX
Product Type	Insert GA	Insert Configuration pages	Connector Type and Hardware Pages	Cable Type Consult Factory	Wire AWG	Length E=Feet H=Inches M=Meters
AE24*	1=12GA ungrd					
AE25	2=12 GA (GRD)					
AE32	3=16 GA ungrd					
	4=16 GA (GRD)					
	5=20 GA					

Sample Part Number: AE25421-3K4K-CR16-E25

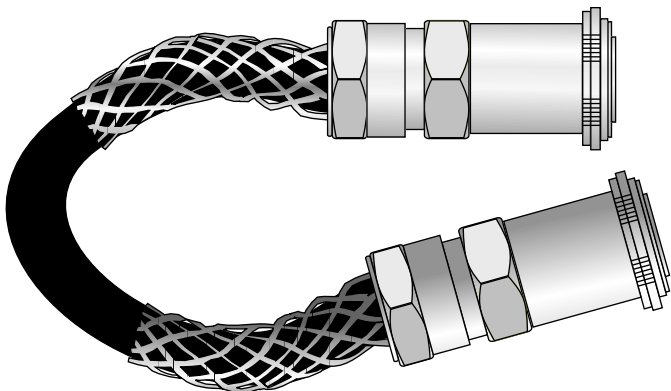
Logic=A-Style 16GA, 21 Position, Double Ended Male Female Cable Assembly with Backend Hardware and Strain Relief on both ends. 16GA Control Cable with Red Conductors 25 Feet Long.

The following are the assigned numbers for finishing details on receptacle assemblies and/or single ended cables.

- (1) Jacket stripped 12", wire marked 1 or A thru
- (2) Jacket stripped 12", wire marked to print.

Sample Part Number: AE25421-3K01-CR16-E25

Logic=A-Style, Grounded 21 Position, Single Ended Male Cable Assembly with Backend Hardware and Strain Relief. 16GA Control Cable with Red Conductors, Cable 25 Feet long, Wire Marked as 1 or A Thru. Jacket stripped 12", wire marked 1 or A thru.

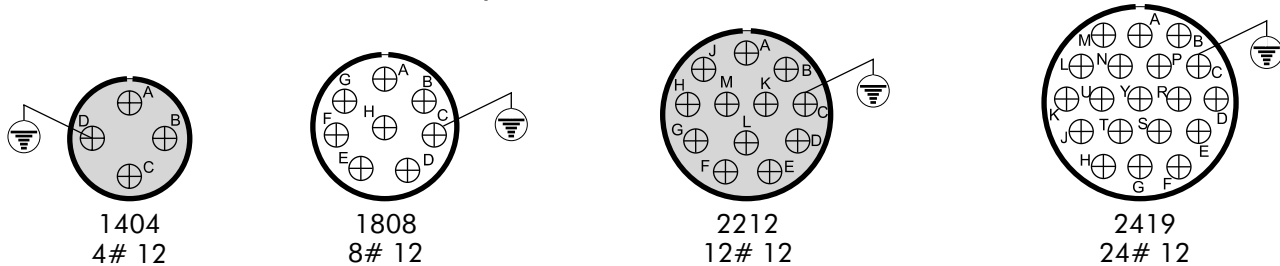


* Consult factory for additional layout designators

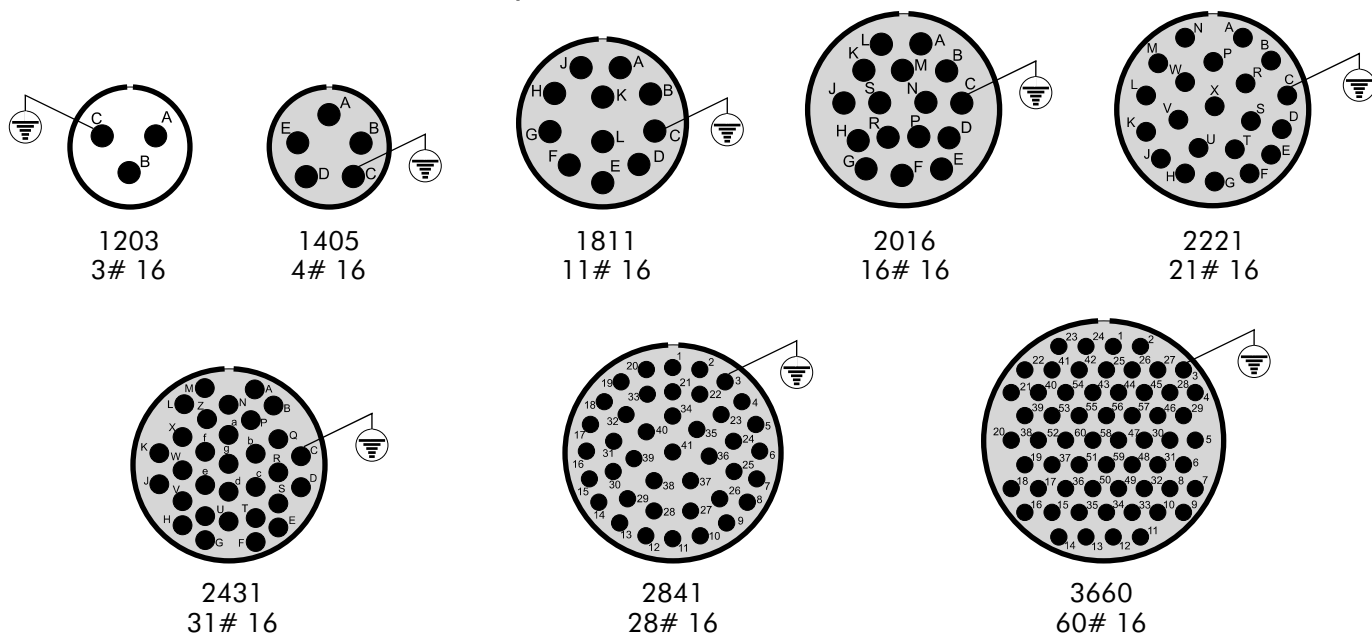


AE25/AE32 Insert Configurations

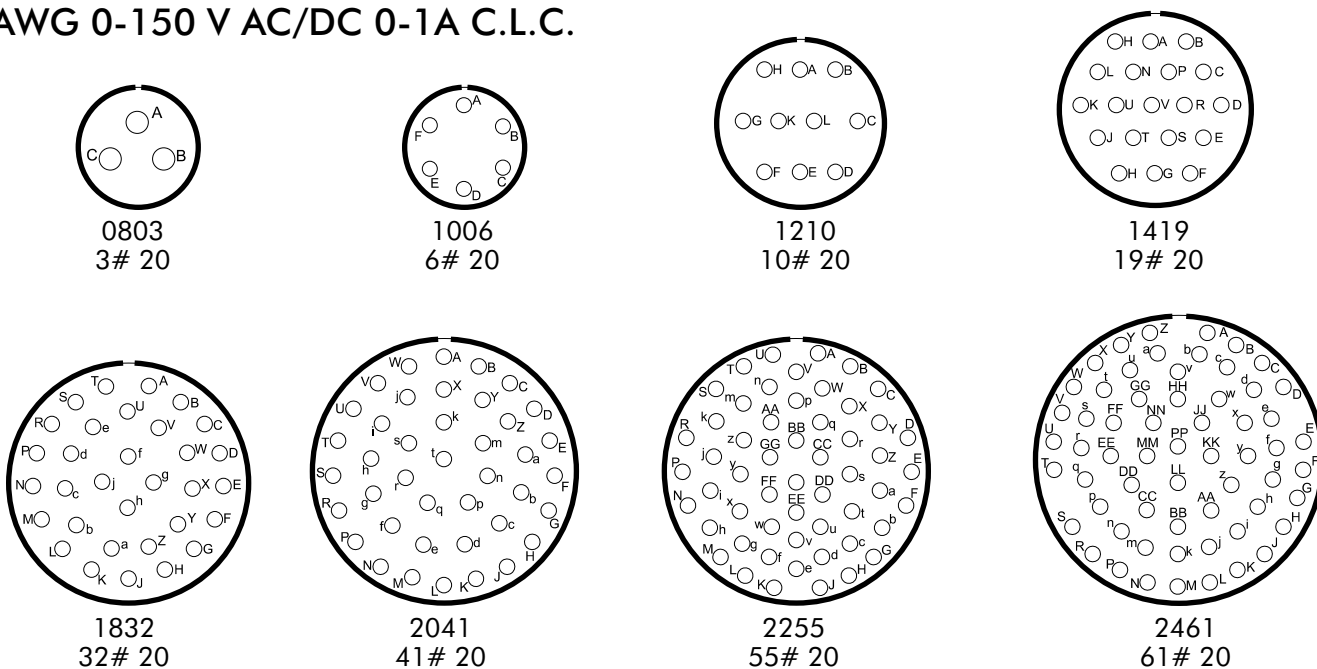
12 AWG Grounded 0-250 V AC/DC



16 AWG Grounded 0-300 V AC/DC



20 AWG 0-150 V AC/DC 0-1A C.L.C.

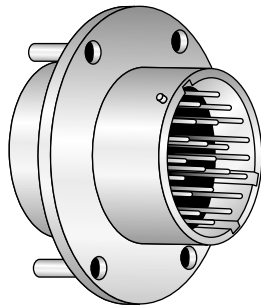


Connector Part Number Type Cross Reference

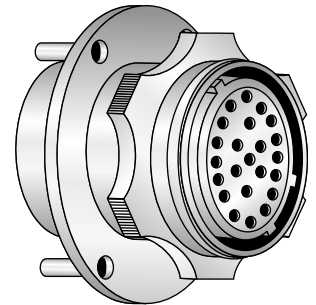
AE32/AE25/AE24



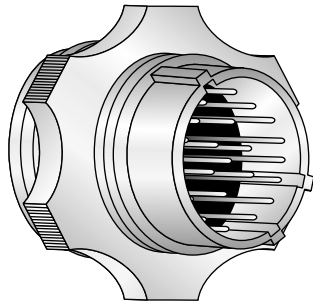
One Piece Panel Mount
Receptacle
"1" P Male (Pins)
"2" P Female (Sockets)



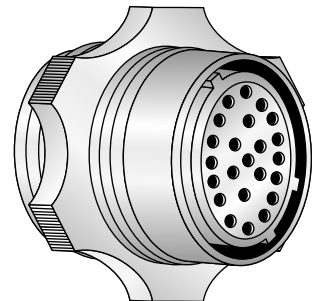
Panel Mount Plugs
"3" P Male (Pins)
"4" P Female (Sockets)



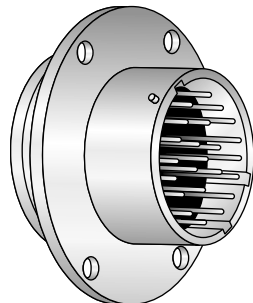
"3" P Plug
Male (Pin)



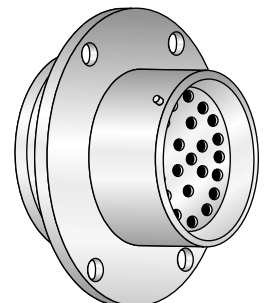
"4" Plug
Female (Socket)



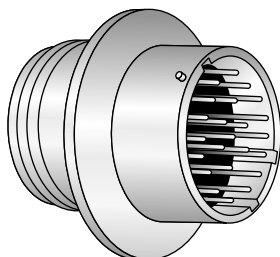
"5" Flanged Receptacle
Male (Pin)



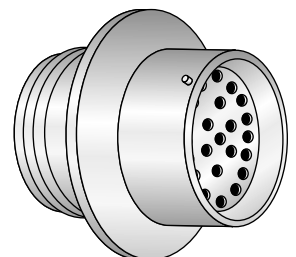
"6" Flanged Receptacle
Female (Socket)



"7" Inline Receptacle
Male (Pin)



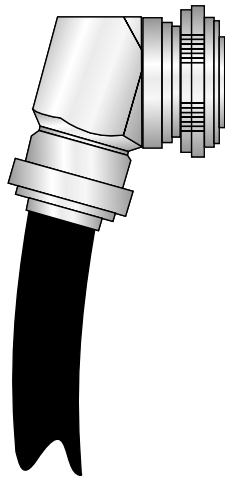
"8" Inline Receptacle
Female (Socket)



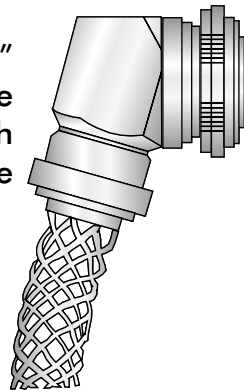


Connector Hardware

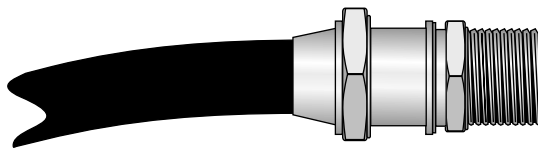
"X"
70° Angle
Cable Adapter
Plain



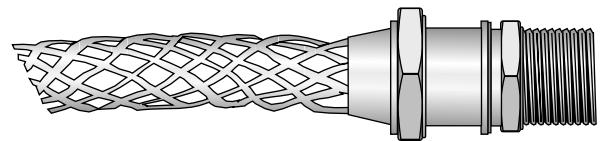
"Y"
70° Angle
Cable Adapter with
Basket Weave



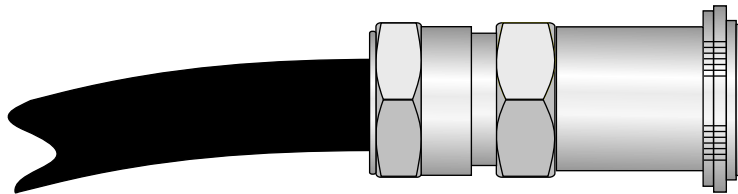
Straight Cord Grip
Plain Type "E"



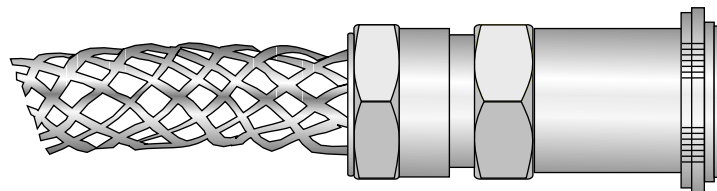
Straight Cord Grip
with Basket Weave
Type "F"



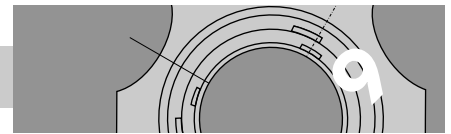
"D"
Straight Straight Cable Adapter
No Basket Weave



"K"
Straight Straight Cable Adapter
with Basket Weave

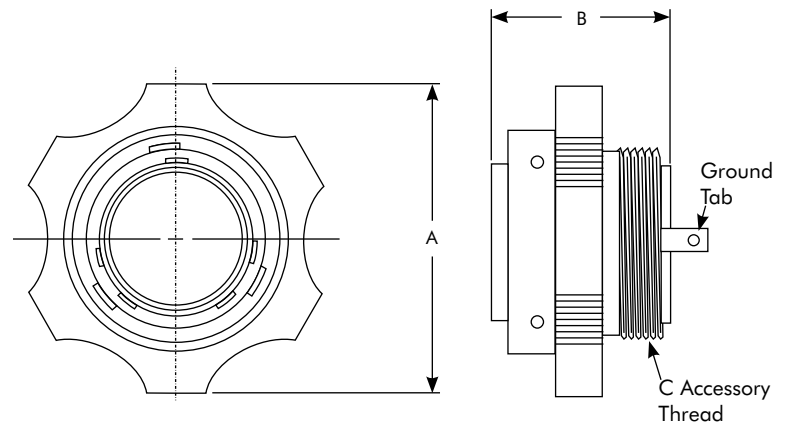


AE25 Connector



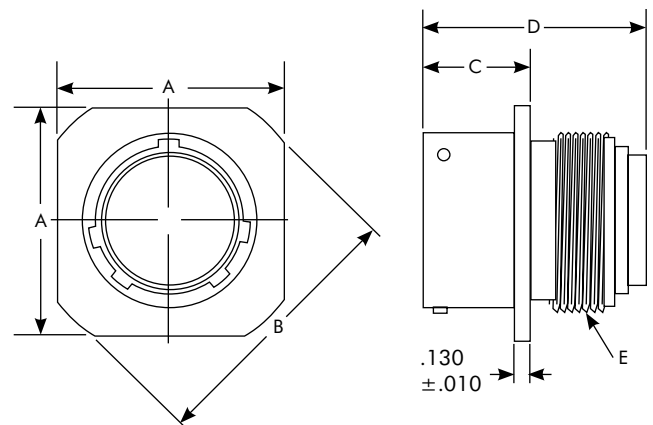
Shell Size	A ±.030	B Max.	C Thread Class 2A
8	1.125	1.375	1/2-20 UNF
10	1.250	1.375	5/8-24 UNEF
12	1.450	1.375	3/4-20 UNEF
14	1.540	1.375	7/8-20 UNEF
16	1.650	1.375	1-20 UNEF
18	1.750	1.375	1 1/16-18 UNEF
20	1.890	1.375	1 3/16-18 UNEF
22	2.010	1.375	1 5/16-18 UNEF
24	2.130	1.375	1 7/16-18 UNEF
28	2.420	1.375	1 3/4-18 UNS
36	3.220	1.520	2 1/4-16 UN

AE 141 Bayonet Thumb Wheel Plug



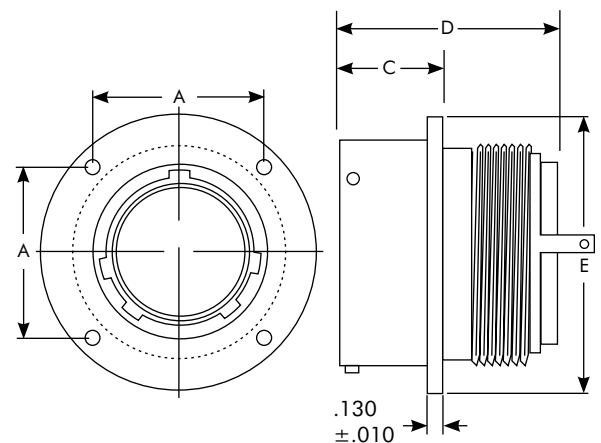
Shell Size	A ±.010	B ±.015	C ±.010	D Max.	E Thread Class 2A
8	.815	.930	.524	1.400	1/2-20 UNF
10	.940	1.060	.524	1.400	5/8-24 UNEF
12	1.034	1.150	.524	1.400	3/4-20 UNEF
14	1.128	1.245	.524	1.400	7/8-20 UNEF
16	1.222	1.340	.524	1.400	1-20 UNEF
18	1.315	1.435	.524	1.400	1 1/16-18 UNEF
20	1.440	1.560	.650	1.450	1 3/16-18 UNEF
22	1.565	1.685	.665	1.450	1 5/16-18 UNEF
24	1.690	1.810	.683	1.450	1 7/16-18 UNEF
28	2.960	2.125	.842	1.450	1 3/4-18 UN
36	2.400	2.600	.890	1.750	2 1/4-16 UN

AE 198 In-Line Receptacle

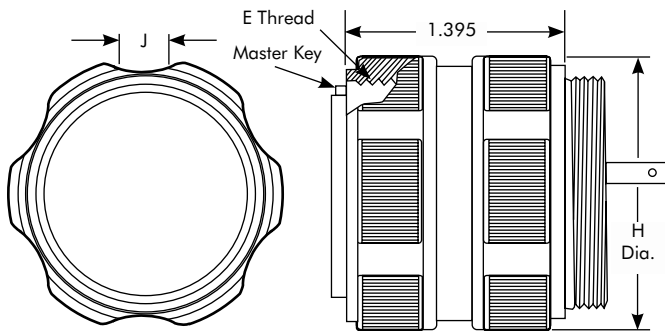


Shell Size	A ±.005	B ±.015	C ±.010	D Max.	E Thread Class 2A	F Max.
8	.772	.125	.524	1.400	1/2-20 UNF	1.312
10	.800	.125	.524	1.400	5/8-24 UNEF	1.414
12	.924	.125	.524	1.400	3/4-20 UNEF	1.594
14	1.020	.187	.524	1.400	7/8-20 UNEF	1.724
16	1.114	.187	.524	1.400	1-20 UNEF	1.858
18	1.191	.187	.524	1.400	1 1/16-18 UNEF	1.968
20	1.286	.187	.650	1.450	1 3/16-18 UNEF	2.100
22	1.362	.187	.665	1.450	1 5/16-18 UNEF	2.210
24	1.424	.218	.683	1.450	1 7/16-18 UNEF	2.390
28	1.625	.218	.842	1.450	1 3/4-18 UN	2.666
36	2.094	.275	.890	1.750	2 1/4-16 UN	3.425

AE 143 Bayonet Flange Mount Receptacle

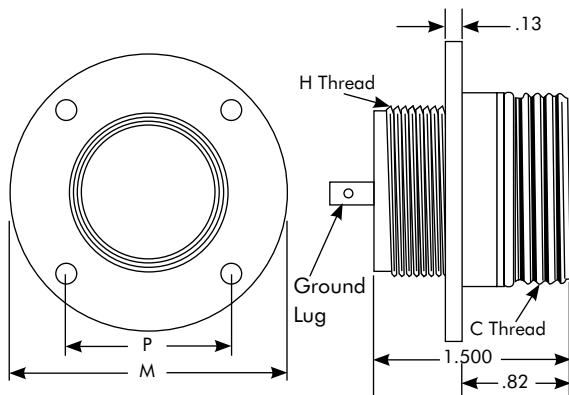


AE1329R Self Locking Plug



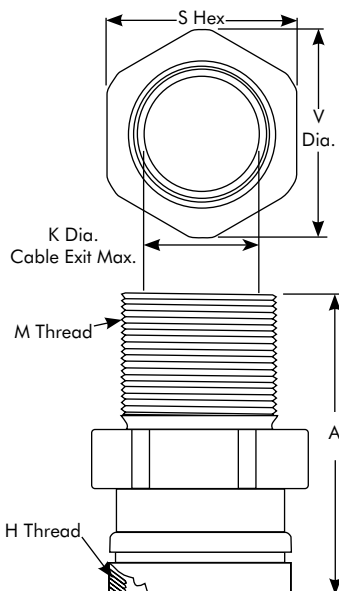
Shell Size	Aero Part Number	E Thread 0.1-.3L- TS-2B	H Max.	J # of Flats
8	AE1329R8-XXX	0.625	1.120	4
10	AE1329R10-XXX	0.750	1.246	4
12	AE1329R12-XXX	0.875	1.371	4
14	AE1329R14-XXX	1.000	1.524	4
16	AE1329R16-XXX	1.187	1.681	4
18	AE1329R18-XXX	1.250	1.758	4
20	AE1329R20-XXX	1.375	1.858	6
22	AE1329R22-XXX	1.500	2.000	6
24	AE1329R24-XXX	1.625	2.181	6
28	AE1329R28-XXX	1.875	2.438	6
36	AE1329R36-XXX	2.375	2.952	6

AE1320R Flange Receptacle



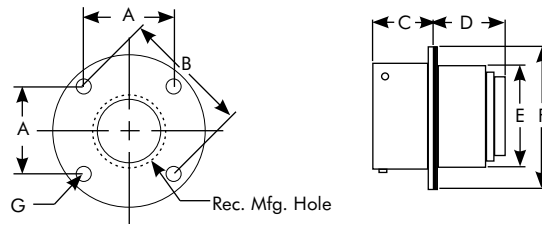
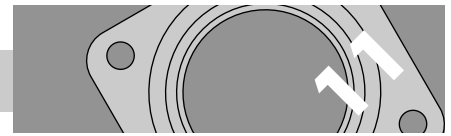
Shell Size	Aero Part Number	C Thread 0.1-.3L- TS-2B	M Dia. ±.010	P ±.005	H Thread
8	AE1320R8-XXX	0.625	1.207	0.590	1/2-20 UNF-2A
10	AE1320R10-XXX	0.750	1.504	0.800	5/8-24 UNEF-2A
12	AE1320R12-XXX	0.875	1.680	0.924	3/4-20 UNEF-2A
14	AE1320R14-XXX	1.000	1.816	1.020	7/8-20 UNEF-2A
16	AE1320R16-XXX	1.187	1.948	1.114	1-20 UNEF-2A
18	AE1320R18-XXX	1.250	2.057	1.191	1 1/16-18 UNE-2A
20	AE1320R20-XXX	1.375	2.192	1.286	1 3/16-18 UNEF-2A
22	AE1320R22-XXX	1.500	2.299	1.362	1 5/16-18 UNEF-2A
24	AE1320R24-XXX	1.625	2.387	1.424	1 7/16-18 UNEF-2A
28	AE1320R28-XXX	1.875	2.910	1.750	1 3/4-18 UNS-2A
36	AE1320R36-XXX	2.375	3.458	2.094	2 1/4-16 UN-2A

AE32/25 Series Cable Adapter Assembly



Shell Size	Aero Part #	A Max.	K Dia. Min.	M Thread 2A	S Hex ±.005	V Dia. Max.	H Thread 2B
8	AE132CA-08L	2.06	.437	3/4-18 UNEF	.813	.840	1/2-20 UNF-2A
10	AE132CA-10L	2.06	.640	1-14 UNS	1.063	1.226	5/8-24 UNEF-2A
12	AE132CA-12L	2.06	.761	1-14 UNS	1.188	1.339	3/4-20 UNEF-2A
14	AE132CA-14L	2.06	.755	1 1/8-12 UNF	1.313	1.476	7/8-20 UNEF-2A
16	AE132CA-16L	2.06	.755		1.375	1.586	1-20 UNEF-2A
18	AE132CA-18L	2.06	1.072		1.500	1.636	1 1/16-18 UNE-2A
20	AE132CA-20L	2.56	1.062	1 3/8-12 UNF	1.625	1.766	1 3/16-18 UNEF-2A
22	AE132CA-22L	2.56	1.062		1.750	1.901	1 5/16-18 UNEF-2A
24	AE132CA-24L	2.86	1.062		1.875	2.031	1 7/16-18 UNEF-2A
28	AE132CA-28L	3.36	1.437	1 7/8-12 UNF	2.250	2.361	1 3/4-18 UNS-2A
36	AE132CA-36L	3.86	1.950	2 3/8-12 UNF	2.750	2.896	2 1/4-16 UN-2A

AE25/AE32 Mounting and Physical Dimensions



Insert	Shell Size	A	B	C	D	E	F	Recommended Mfg. Hole	G Clearance for Screw
04	14	1.019	1.441	.524	.850	.875	1.724	1.125	#8-32

Insert	Shell Size	A	B	C	D	E	F	Recommended Mfg. Hole	G
03	12	.925	1.308	.524	.850	.750	1.593	.968	#8-32
05	14	1.019	1.441	.524	.850	.875	1.724	1.125	#8-32
11	18	1.191	1.684	.524	.850	1.062	1.967	1.312	#8-32
16	20	1.285	1.817	.650	.780	1.187	2.100	1.500	#8-32
21	22	1.362	1.926	.650	.780	1.312	2.210	1.625	#8-32
31	24	1.424	2.013	.683	.750	1.437	2.389	1.718	#10-24
41	28	1.625	2.298	.840	.600	1.75	2.686	1.968	1/4-20
60	36	1.880	2.658	.890	1.015	2.250	3.125	2.265	1/4-20

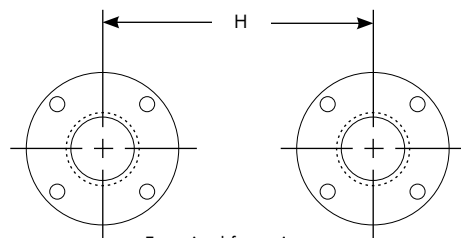
**For back mounting this 60 pin recetacle, it is recommended that an adapter plate be used

Insert	Shell Size	A	B	C	D	E	F	Recommended Mfg. Hole	G
03	8	.590	.834	.510	.810	.500	.816	.641	#4-40
06	10	.800	1.131	.524	.850	.625	1.141	.828	#8-32
10	12	.925	1.308	.524	.850	.750	1.593	.968	#8-32
19	14	1.019	1.441	.524	.850	.875	1.724	1.125	#8-32
32	18	1.191	1.684	.524	2850	1.062	1.967	1.312	#8-32
41	20	1.285	1.817	.650	.780	1.187	2.100	1.500	#8-32
55	22	1.362	1.926	.650	.780	1.312	2.210	1.625	#8-32
61	24	1.424	2.013	.683	.750	1.437	2.389	1.718	#8-32

***Form size 8 has square flange

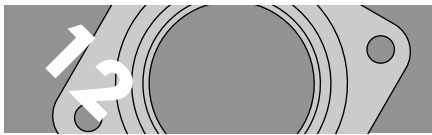
Insert	Shell Size	A	B	C	D	E	F	Recommended Mfg. Hole	G
41	22	1.362	1.926	.650	.780	1.312	2.210	1.625	#8-32
15	14	1.019	1.441	.524	.850	.875	1.724	1.125	#8-32

Recommended Mounting Clearances



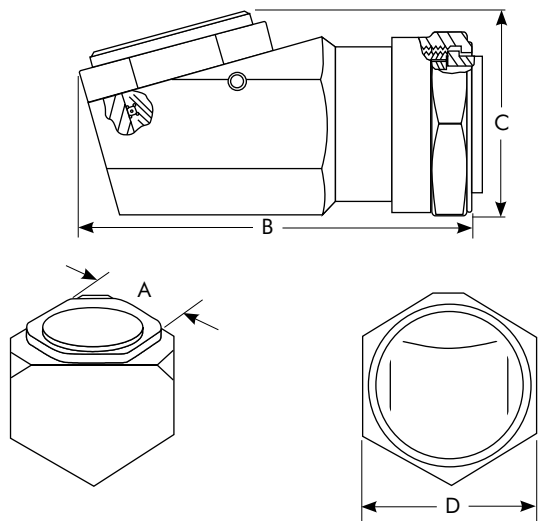
For mixed form sizes
add clearance for each
and divide by 2

Form Size	Min. Mounting Dist. Between Centers (DIM. H)
8	1.8
10	2.7
12	2.8
14	2.9
18	3.2
20	3.4
22	3.5
24	3.6
28	4.2
36	4.6



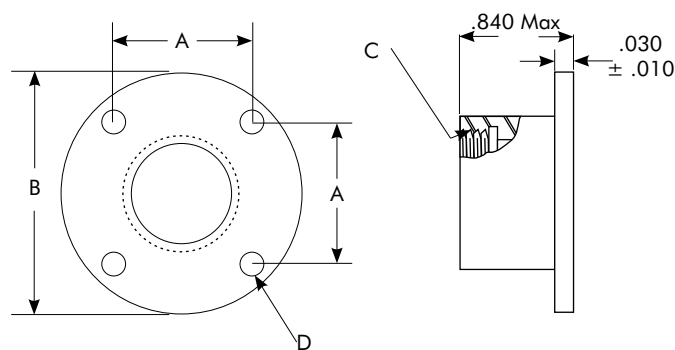
AE25, AE32 Series

AE149 70° Cable Adapter Assembly



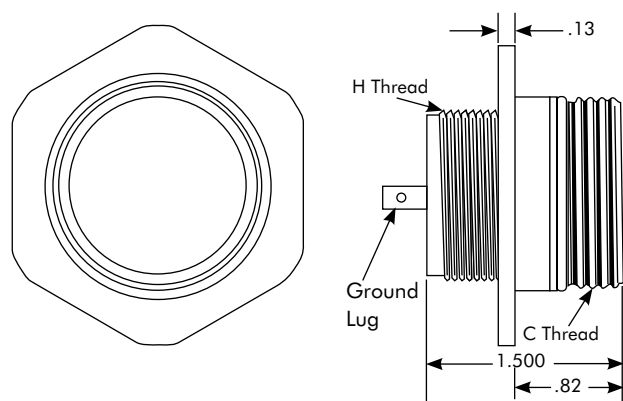
Shell Size	A $\pm .010$ Hex Across Flats	B $\pm .030$	C Max.	D Hex Across Flats
18	1.25	3	1.85	1.25
20	1.375	3.5	2	1.38
22	1.5	3.5	2.1	1.5
24	1.625	3.5	2.25	1.63
28	2	4.1	2.7	2
36	2.5	4.8	3.2	2.500

AE163 Panel Adapter



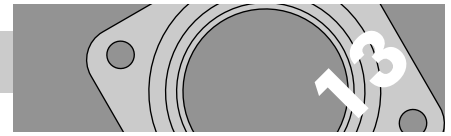
Shell Size	A $\pm .005$	B $\pm .015$	C Thread Class 2B	D $\pm .005$
14	1.020	1.724	7/8-20 UNEF	.187
16	1.114	1.858	1-20 UNEF	.187
18	1.191	1.968	1 1/16-18 UNEF	.187
20	1.286	2.100	1 3/16-18 UNEF	.187
22	1.362	2.210	1 5/16-18 UNEF	.187
24	1.424	2.390	1 7/16-18 UNEF	.218
28	1.625	2.686	1 3/4-18 UNS	.218
36	1.945	3.120	2 1/4-16 UN	.275

AE32 Inline Receptacle



Shell Size	A $\pm .005$	B $\pm .015$	C $\pm .010$	D Max.	E Thread Class 2A
8	.815	.930	.524	1.400	1/2-20 UNF
10	.940	1.060	.524	1.400	5/8-24 UNEF
12	1.034	1.150	.524	1.400	3/4-20 UNEF
14	1.128	1.245	.524	1.400	7/8-20 UNEF
16	1.222	1.340	.524	1.400	1-20 UNEF
18	1.315	1.435	.524	1.400	1 1/16-18 UNEF
20	1.440	1.560	.650	1.450	1 3/16-18 UNEF
22	1.565	1.685	.665	1.450	1 5/16-18 UNEF
24	1.690	1.810	.683	1.450	1 7/16-18 UNEF
28	2.960	2.125	.842	1.450	1 3/4-18 UN
36	2.400	2.600	.890	1.750	2 1/4-16 UN

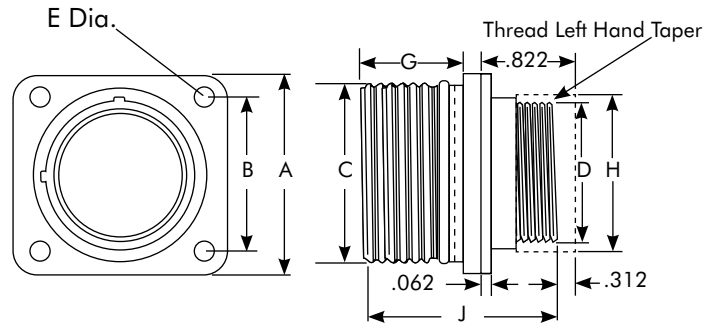
AE24 Series Extended Cable Housing Hardware



Receptacle, Square Flange

1124-012-XX0 N, P or J

Plating
Shell Size (12, 16, 20 or 24)
Basic Product Identifier



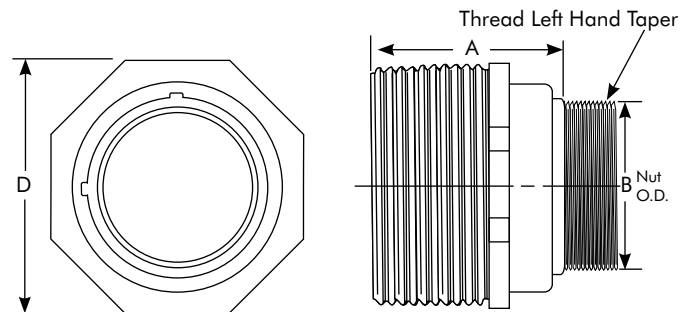
Shell Size	Dimensions								
	A	B	C	D	E	F	G	H	J
12	1.750	1.375	1.5	1.093	.171	2.625	1.000	1.343	2.015
16	2.250	1.687	2.000	1.593	.203	2.625	1.000	1.843	2.015
20	2.750	2.093	2.500	2.093	.218	3.125	1.000	2.343	2.015
24	3.250	2.531	3.000	2.593	.281	2.625	1.000	2.843	2.015

1124-040-XX0 N, P or J

Plating
Shell Size (12, 16, 20 or 24)
Basic Product Identifier

Shell Size	Dimensions			
	A	B	C	D
12	2.016	1.094	1.500	1.375
16	2.016	1.533	2.000	2.250
20	2.016	2.094	2.500	2.750
24	2.016	2.533	3.000	3.250

Receptacle, Inline



Plug

T024-017-XX N or J

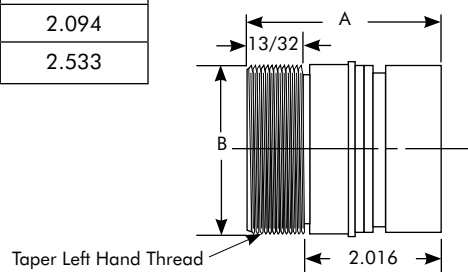
Plating
Shell Size (12, 16, 20 or 24)
Basic Product Identifier

Shell Size	Dimensions	
	D	E
12	2.016	1.094
16	2.016	1.533
20	2.016	2.094
24	2.016	2.533

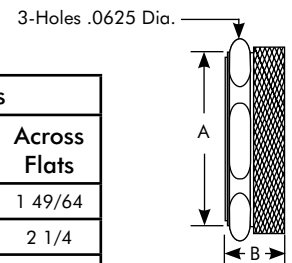
2024-XXX-XXXX-P or J

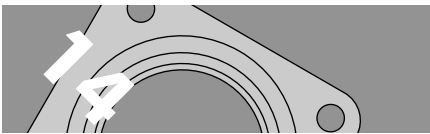
Plating
Shell Size (12, 16, 20 or 24)
018 Standard / 031 Short
Basic Product Identifier

Standard and Short Coupling Nuts



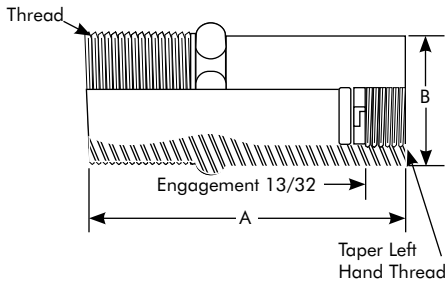
Shell Size	Dimensions		
	A	B	Across Flats
12	1 23/32	47/32	1 49/64
16	2 7/32	47/32	2 1/4
20	2 23/32	47/32	2 3/4
24	3 7/32	47/32	3 1/4
Short			
12	1 23/32	1 1/32	1 49/64
16	2 7/32	1 1/32	2 1/4
20	2 23/32	1 1/32	2 3/4
24	3 7/32	1 1/32	3 1/4





AE24 Series Extended Cable Housing Hardware

Cable Adapter



2924-035-XX-XX

Length Codes

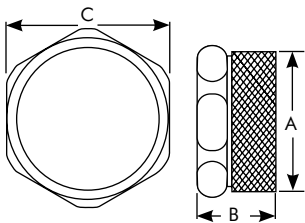
01=Short
02=Medium
03=Long

Length varies with shell size. See tabulation

Shell Size (12, 16, 20 or 24)
Basic Product Identifier

Shell Size	A Length Code			B
	Code 1	Code 2	Code 3	
12	3.006	6.312	7.407	1.438
16	4.282	6.407	7.657	1.932
20	4.657	6.006	8.282	2.438
24	5.312	7.407	8.657	2.932

Panel Adapter

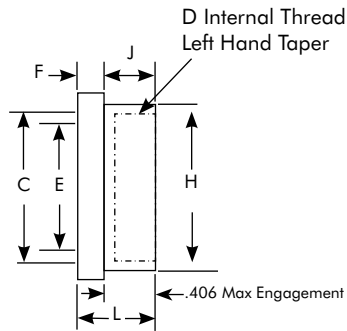
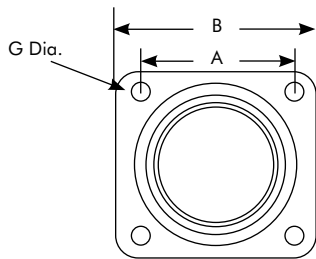


2625-013-XX 0N, 0J, 02

Plating
Shell Size (12, 16, 20 or 24)
Basic Product Identifier

Shell Size	Thread Size	Dimensions		
		A	B	C
12	1 3/8-12	1 38/64	1 5/32	1 41/64
16	1 7/8-12	2	1 5/32	2 1/32
20	12 3/8-12	2 1/2	1 5/32	2 17/32
24	2 7/8-12	3	1 5/32	3 1/32

Wall Panel Adaptor



1324-057-16 XX

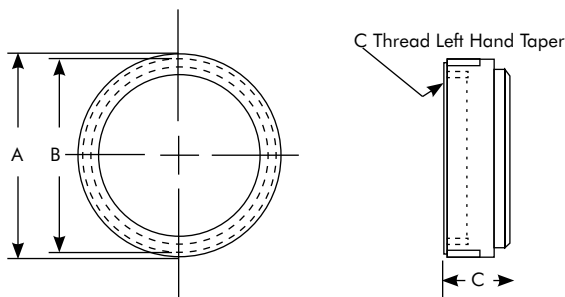
Shell Size (12, 16, 20 or 24)
Basic Product Identifier

Shell Size	Dimensions									
	A	B	C	D	E	F	G	H	J	L
12	1.625	1.250	1.125	1.093	.937	.093	.187	1.375	.562	.750
16	2.125	1.062	1.625	1.593	1.437	.125	.0218	1.875	.562	.781
20	2.625	2.093	2.125	2.093	1.937	.156	.281	2.375	.562	.812
24	3.125	2.531	2.625	2.593	2.437	.187	.343	2.875	.562	.843

Insertion Retention Nut (E Nut)

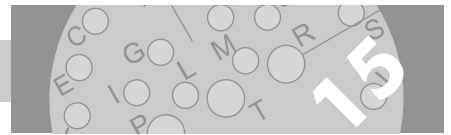
2524-049-20 XX

Shell Size (12, 16, 20 or 24)
Basic Product Identifier



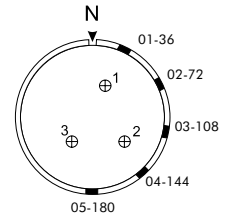
Shell Size	A	B Flat	C Thread
12	1.344	1.125	1.094
16	1.906	1.625	1.658
20	2.344	2.125	2.094
24	2.906	2.675	2.658

AE24 Series Insert Arrangements & Polarization



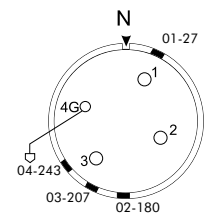
3 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	12	Pin Socket	1203	3824-093-1203 3924-094-1203	3	12	D



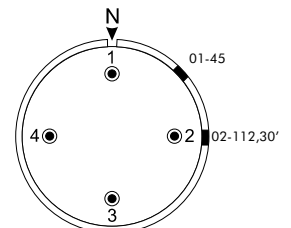
4 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	12	Pin Socket	1204	3824-349-1204 3924-350-1204	4	10	D



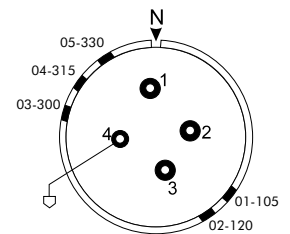
4 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1604	3824-251-1604 3924-252-1604	4	8	D



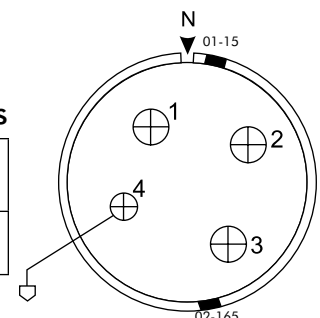
4 Contacts

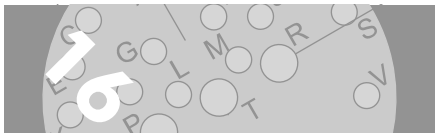
Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Pressure	16	Pin Socket	1604	3824-251-16G4 3924-252-16G4	4	4	D



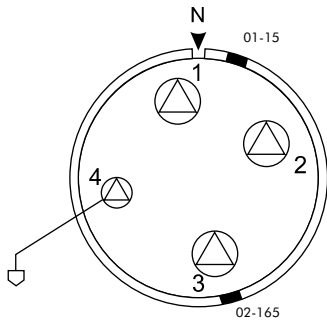
4 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Pressure	C20	Pin Socket	C2004	3824-251-20G4 3924-252-20G4	4	1/0	D



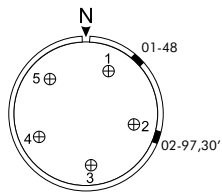


AE24 Series Insert Arrangement & Polarization



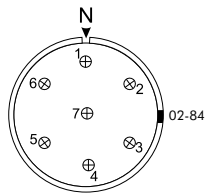
4 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Pressure	C24	Pin Socket	C2404	3824-251-24G4 3824-252-24G4	4	4/0	D



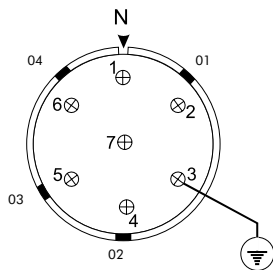
5 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	12	Pin Socket	1205	3824-093-1205 3824-094-1205	5	12	D



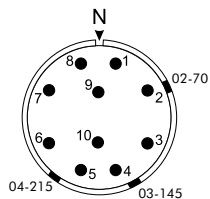
7 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	12	Pin Socket	1209	3824-093-1207 3824-094-1207	7	12	A



7 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1607	3824-105-1607 3924-106-1607	37	16	A



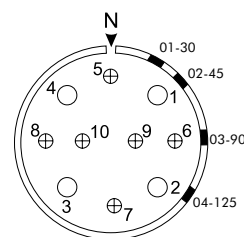
10 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	12	Pin Socket	1210	3824-105-1210 3824-106-1210	10	16	D

AE24 Series Insert Arrangements & Polarization

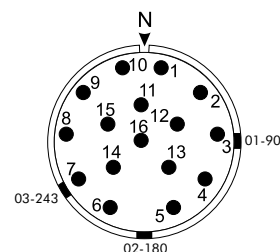
10 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1610	3824-367-1610 3924-368-1610	4 6	10 12	E D



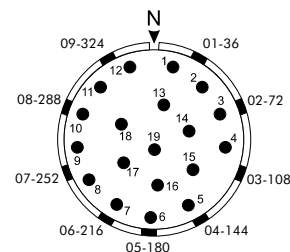
16 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1616	3824-105-1616 3924-106-1616	16	16	D



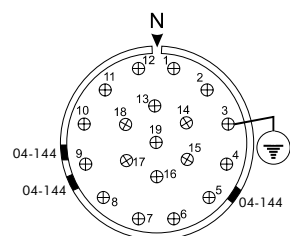
19 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1619	3824-105-1619 3924-106-1619	19	16	A



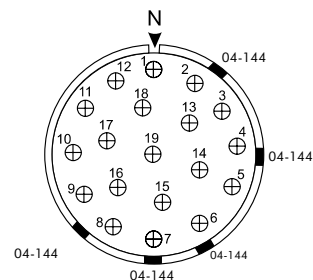
19 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1619	3824-105-1619 3924-106-1619	19	12	A

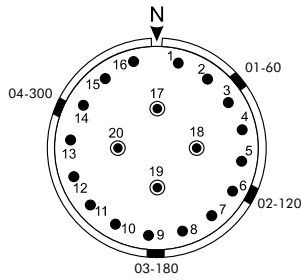


19 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2019	3824-093-2019 3824-094-2019	19	12	A

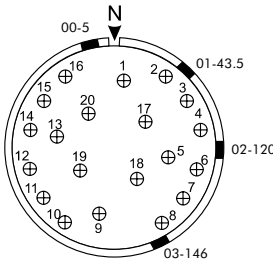


AE24 Series Insert Arrangements & Polarization



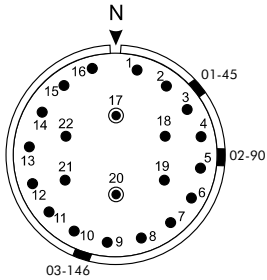
20 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2020	3824-343-2020 3924-344-2020	4 16	8 16	D



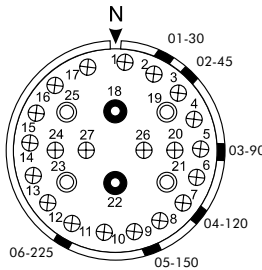
20 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2020	3824-093-2020 3924-094-2020	20	12	B Center A Outer



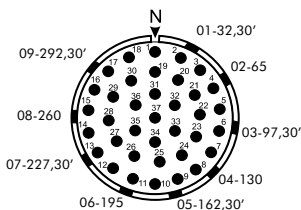
22 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2022	3824-276-2022 3924-277-2022	2 20	8 16	E D



27 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2027	3824-249-2027 3924-250-2027	2 4 21	4 10 12	D A A



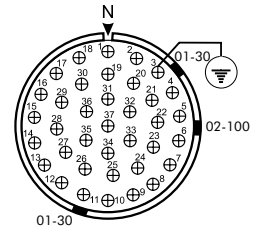
37 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1637	3824-105-1637 3924-106-1637	37	16	A

AE24 Series Standard Insert Arrangements & Polarization

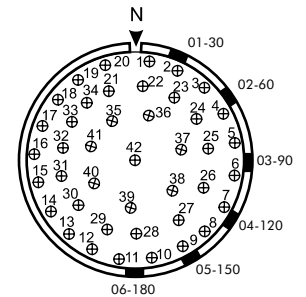
37 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2037	3824-051-2037 3924-053-2037	37	12	A



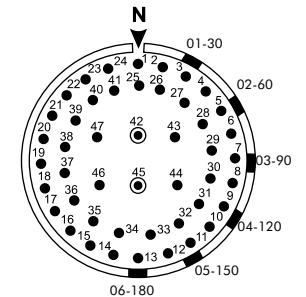
42 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	28	Pin Socket	2047	3824-105-2842 3924-106-2842	42	12	D



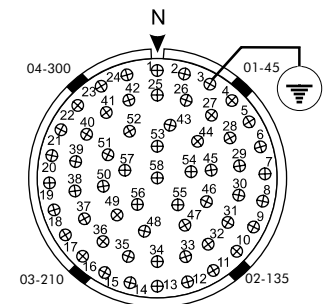
47 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2047	3824-278-2047 3924-279-2047	2 45	8 16	D A



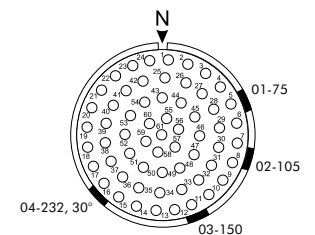
58 Contacts

Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	24	Pin Socket	2458	3824-051-2458 3924-053-2458	58	12	A



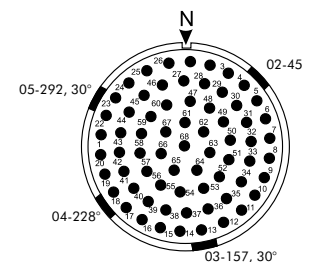
61 Contacts

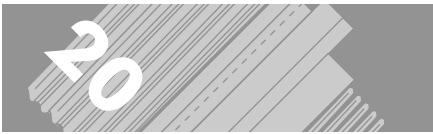
Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	16	Pin Socket	1661	3824-245-1661 3924-246-1661	61	18	Inst.



68 Contacts

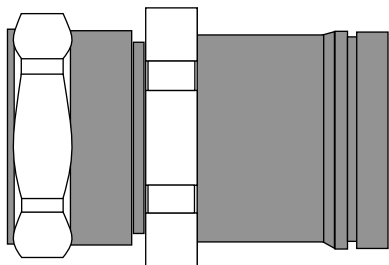
Wire Terminal Type	Shell Size	Insert Type	Dash Number	Catalog Number	Qty.	Size (AWG)	Service Voltage Rating
Crimp	20	Pin Socket	2068	3824-245-2068 3924-246-2068	68	16	A





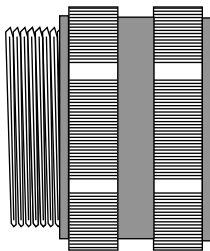
Industrial Circular Connectors (Aero RC Series)

Heavy Duty
Threaded Coupling



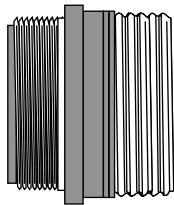
Gland Nut Cable Adapter

Rapid Change
Rear Release



Plug

High Voltage
Cable Adaptor Accessories



Receptacle

This heavy duty, rugged connector series is the answer for those high voltage and high ampere requirements of larger industrial machine applications. "Rapid Change" mating and unmating is accomplished by the fast engagement of wide Acme type triple start threads. There are eight shell sizes (16, 18, 20, 22, 24, 28, 32, and 36)*, with a choice of 40 standard insert arrangements, utilizing contact sizes 4, 2, and 0. Designed to fulfill the needs of typical installations, the series consists of six basic components: Self locking plug, Straight or 90° backshell, Flange mount adapter, and two receptacles, the Wall mount and the Cable connecting version.

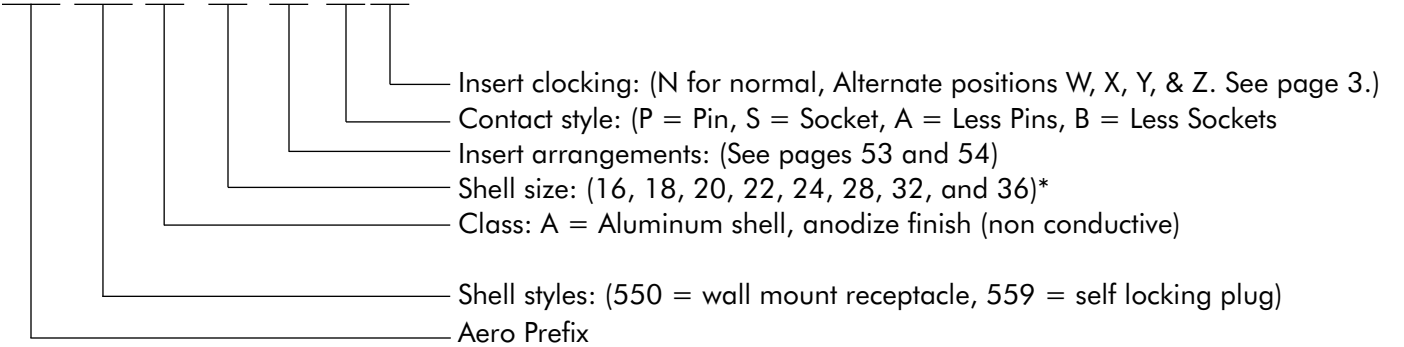
This rugged package is not only ideal for assembly / sub assembly interconnection, but also long cable runs, on the ground or suspended applications. It is highly resistant to vibration and shock, and also resistant to a wide variety of industrial solvents, cutting and machining oils, paint, and many other industrial chemicals common to factory environments.

Special Features

- Enlarged square receptacle shell flange**.....provides stable mounting on thin wall panels, mounting holes compatible with standard bolts
- Heavy duty backshells**providing support of heavy harnesses, available 'in straight, or 90° configurations
- Self locking plug**spring loaded, ratchet mechanism will not "back off" under vibration
- Cable connecting receptacle**... ideal for long cable runs, with your predetermined standard cable lengths
- Environmental fluorosilicone elastomers**.....impervious to the majority of industrial solvents

Aero RC Series Part Numbering System

AERC 55* A 28 - 22 P X



* Size 28 shown in catalog, for other sizes consult factory

Note: if ground pin desired, consult factory for placement and designation (ref: p/n 5205 264 xx xx)

RC Series Standard Insert Arrangements

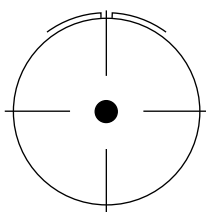


Shell Size	Insert	Contacts	
		Qty	Size
16	16-12	1	4
18	18-06	1	4
	18-07	1	8
	18-13	2 1	16 0
	18-14	4	8
20	20-02	1	0
	20-08	4 2	16 8
	20-22	3 3	16 8
	20-24	2 2	16 8
22	22-02	3	8
	22-06	1 2	16 8
	22-07	1	0
	22-21	2 1	16 0
	22-22	4	8
	22-27	1 8	8 16
24	24-01	1 1	12 0
	24-04	3 1	16 0
	24-10	7	8
	24-11	6 3	12 8

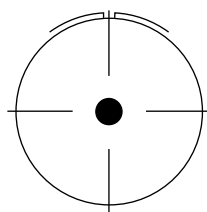
Shell Size	Insert	Contacts	
		Qty	Size
24	24-12	3 2	2 8
	24-16	3 1 3	16 8 12
	24-21	9 1	16 8
	24-22	4	8
28	28-01	6 3	12 8
	28-03	3	8
	28-05	2 1 2	16 12 4
	28-10	3 2 2	12 8 4
	28-22	3 3	16 4
	32-01	3 2	12 0
32	32-02	2 3	16 4
	32-03	4 2 2 1	16 12 4 0

Shell Size	Insert	Contacts	
		Qty	Size
32	32-06	16 2 3 2	16 12 6 4
	32-09	12 2	16 4
	32-16	32-06 Insert Rotated 100°	
	32-17	4	4
	32-20	32-06 Insert Rotated 260°	
	32-63	5	4
36	36-03	3 3	12 0
	36-05	5	4
	36-06	4 2	4 0
	36-09	14 14 2 1	16 12 8 4
	36-18	32-06 Insert Rotated 100°	
	36-21	32-06 Insert Rotated 260°	

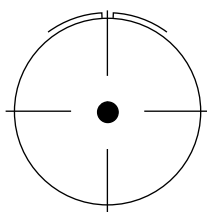
Consult Factory for Availability of Other Insert Arrangements



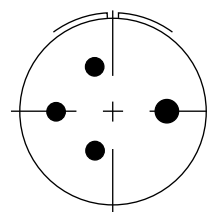
16-12
1-#4



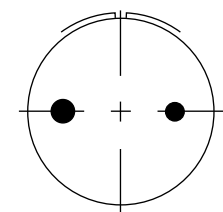
18-06
1-#4



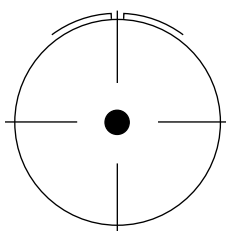
18-07
1-#8



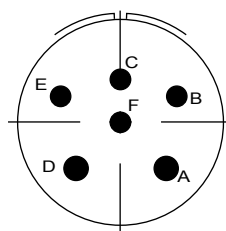
18-13
3-#12, 1-#8



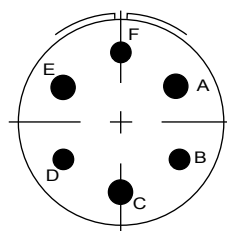
18-14
1-#16, 1-#4



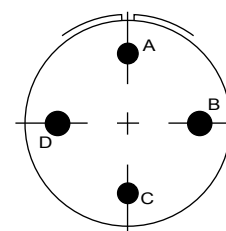
18-06
1-#4



18-07
1-#8



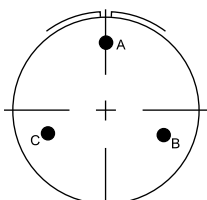
18-13
3-#12, 1-#8



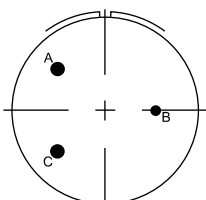
18-14
1-#16, 1-#4



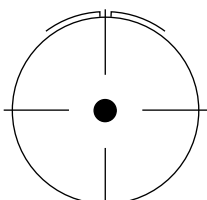
RC Series Standard Insert Arrangements...Continued



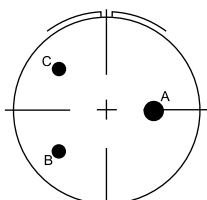
22-2
3-#8



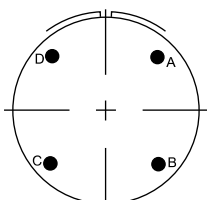
22-6"
1-#16, 2-#8



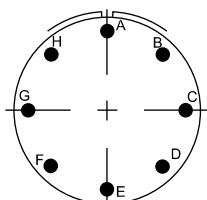
22-7"
1-#0



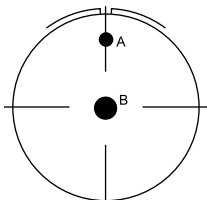
22-21
2-#16, 1-#0



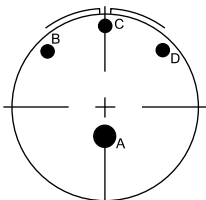
22-22
4-#8



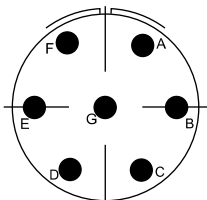
22-27"
1-#8, 8-#16



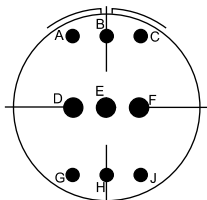
24-1"
1-#12, 1-#0



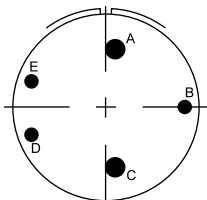
24-4"
3-#16, 1-#0



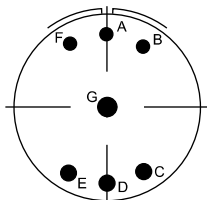
24-10
7-#8



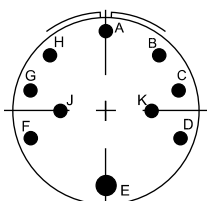
24-11
6-#12, 3-#8



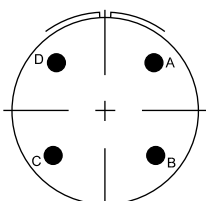
24-12
3-#12, 2-#4



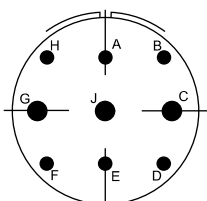
24-16
3-#16, 1-#8, 3-#12,



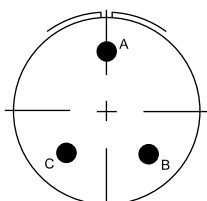
24-21"
9-#16, 1-#8



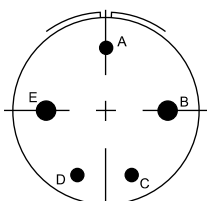
24-22
4-#8



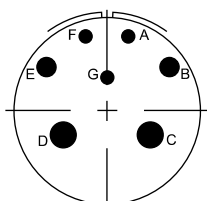
28-1
6-#12, 3-#8



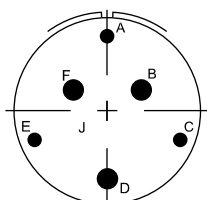
28-3"
3-#8



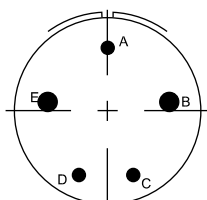
28-5"
2-#16, 1-#12, 2-#4



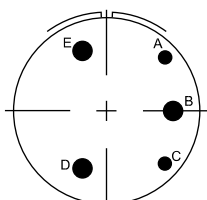
28-10
3-#12, 2-#8, 2-#4



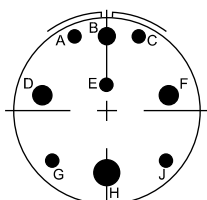
28-22
12-#16, 3-#4



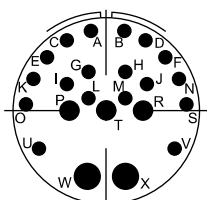
32-1
3-#12, 2-#0



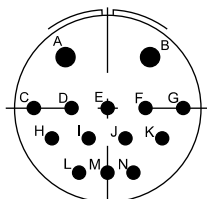
32-2"
2-#16, 3-#4



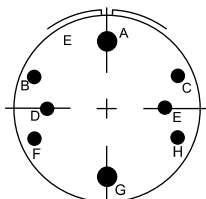
32-3"
4-#16, 2-#12
2-#4, 1-#0



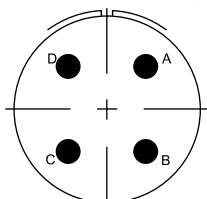
32-6
16-#16, 2-#12
3-#8, 2-#4



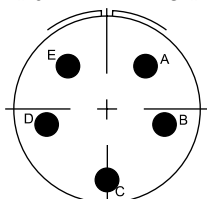
32-9
12-#16, 2-#4



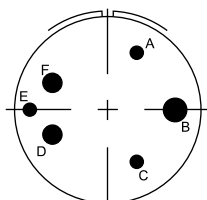
32-15
6-#12, 2-#0



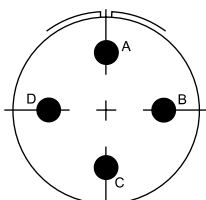
32-17
4-#4



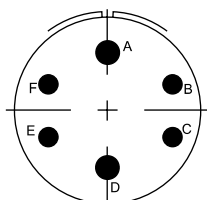
32-63
5-#4



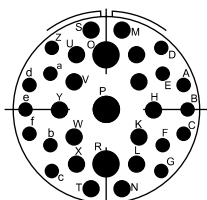
36-3
3-#12, 3-#0



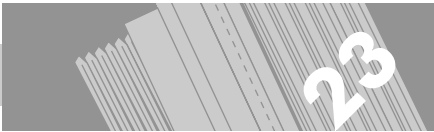
36-5
4-#0



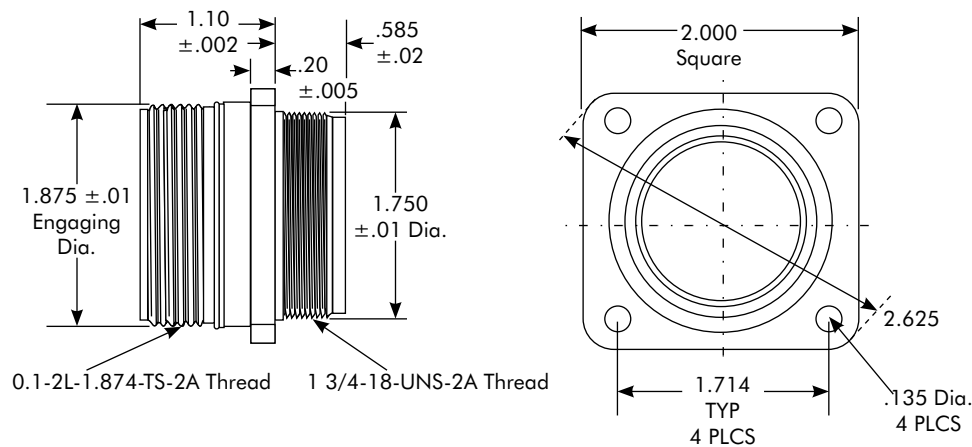
36-6
4-#4, 2-#0



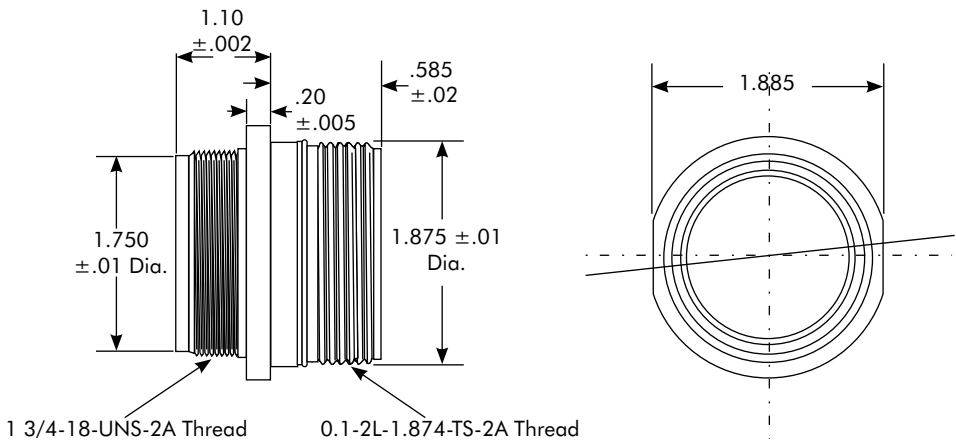
36-9
14-#16, 14-#12
2-#8, 1-#4



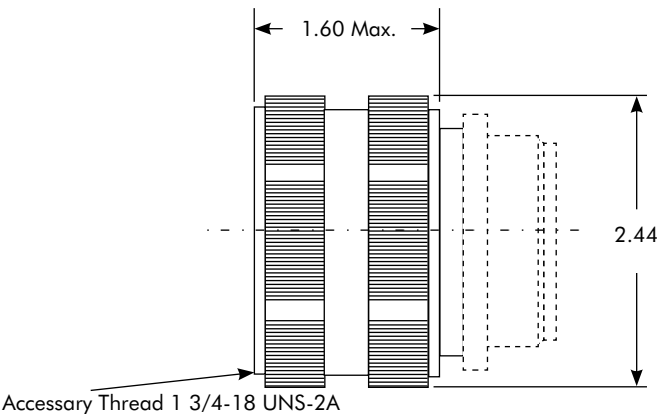
AERC550A28 Wall Mount Receptacle



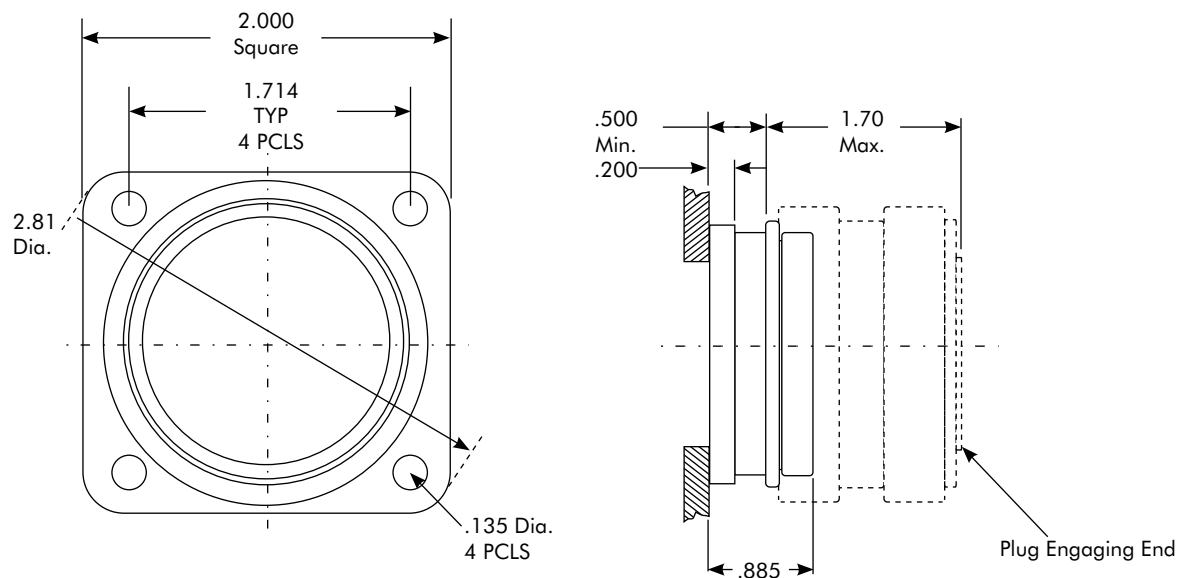
AERC551A28 Cable Connecting Receptacle



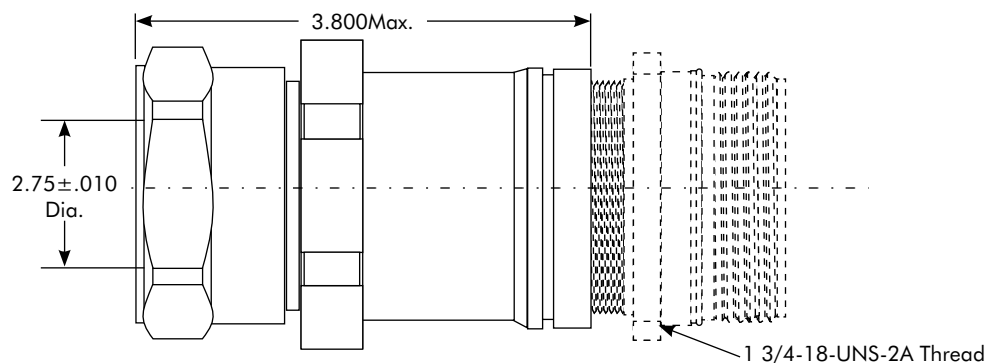
AERC559A28 Self Locking Plug



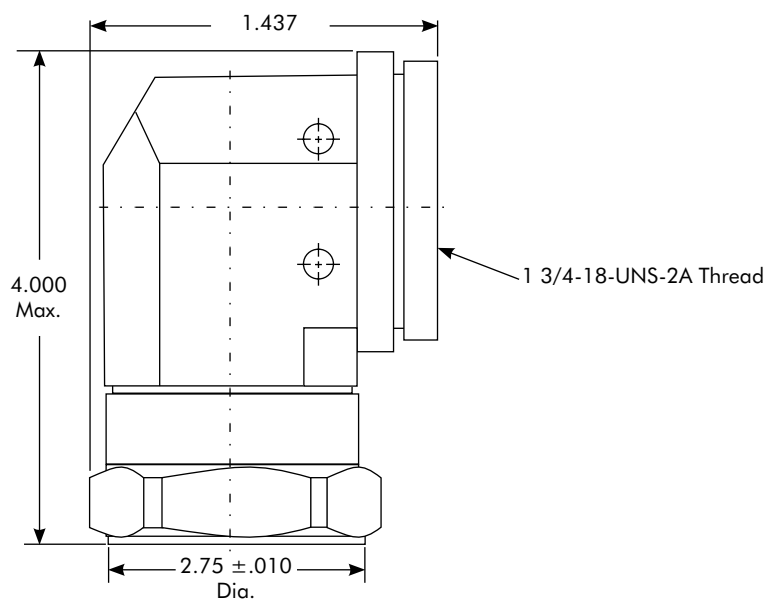
AERC28PA Flange Mount Adaptor



AERCCA0A28 Straight Backshell



AERCCA90A28 90° Backshell





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