# **Amphenol**

62IN Series Miniature Circular Bayonet-Coupled Connectors AC6201 0313



**Amphenol** 

# Introduction

Amphenol 62IN series connectors are general purpose, environment resistant, miniature circular connectors with three-point bayonet coupling and five-key polarisation. Designed to meet the requirements of MIL-C-26482, Series I solder type, these connectors are widely used in applications calling for quick disconnect connectors.

62IN connectors are intermateable and interchangeable with all MII-C-26482 connectors, whether solder or crimp type. These connectors are used worldwide in military and industrial applications and are available in a variety of sizes, styles and configurations.

Amphenol 62IN series connectors are also approved to Indian Defence Standard Joint Services Specifications JSS50813, certified by the Electronic Components Standardisation Organisation (LCSO), Bangalore, India.

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G eneral Description

Amphenol 62IN series miniature circular bayonet-coupled solder connectors meet the most critical application needs. Design versatility and high reliability performance makes this series ideal for environmental sealing.

#### Shell

Shell hardware is manufactured from aluminum alloy and cadmium plated with an olive drab chromate finish. This finish has excellent conductivity; it is non-reflectiing and corrosion resistant. Black anodised finish and cadmium-free zinc cobalt plating are also available. For details, contact factory.

Shell styles consist of wall and box mounting receptacles, jam nut receptacles, cable mounting receptacles and straight plugs. Connectors are available in 9 shell sizes: 8, 10, 12, 14, 1, 18, 20, 22 and 24.

Positive shell-to-shell keying is provided with keys and keyways in a choice of either normal (N) or any of the preferred alternate positions: W,X,Y and Z. this prevents mismating between shells of different orientations and overcomes the difficulties associated with rotated inserts and standard key/keyway orientation. in the latter system, damage to inserts or contacts can result if excessive force is used to engage non-mating halves.

## Insert and grommet

The insert and grommet are moulded from resilient neoprene, offering high dielectric strength and resistance to oils, gasoline and low temperature. This provides electrical isolation of the contacts in the insert and excellent moisture sealing.

#### **Contacts**

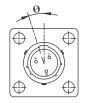
Gold over nickel plated and socket contacts are machined from brass and designed for solder connections. Industrial version crimp contacts are also available on request.

#### **Specifications**

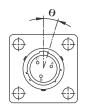
Number of contacts	2 thru 61 in discrete ste	eps	
Operating temperature	-55° C to +125°	С	
Current rating			
Contact size	Rated current	Test current	Potential drop
20	7.5A	7.5A	≤ 55mV
16	13A	13A	≤ 50mV
Voltage rating (max. operating vo	Itage at sea level)		
Service rating	AC (rms)		
<u> 1</u>	600V		
II	1000V		
Insulation resistance	≥ 5000 Mohm		
Voltage proof			
Service rating	Test voltage (rms)		
I	1500V		
II	2300V		
Wire range accomodations			
Contact size	AWG wire size		
20	24, 22 and 20		
16	20, 18 and 16		



Normal position of insert with pin contacts



Alternate position of insert with socket contacts (θ counterclockwise)



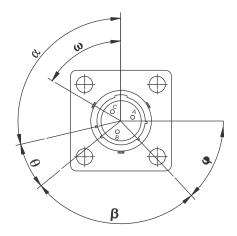
Alternate position of insert with pin contacts (θ clockwise)

Each diagram shows mating face of insert

Insert irrangement	Orientation Angles in degrees									
Trangement	W	X Angles I	n degrees Y	Y Z						
8-2	58	122	-	-						
8-3	60	210	-	-						
8-4	45	-	-	-						
8-33	90	-	-	-						
8-98	-	-	-	-						
10-2	-	-	-	-						
* 10-5	90	-	-	-						
10-6	90	-	-	-						
10-7	-	-	-	-						
10-8	-	-	-	-						
12-3	-	-	180	-						
12-4	38	-	-	-						
12-8	90	112	203	292						
12-10	60	155	270	295						
12-12	-	-	-	-						
12-14	-	-	-	-						
*14-02	-	-	-	-						
*14-04	40	92	184	273						
14-05	40	92	184	273						
*14-08	43	90	-	-						
14-12	43	90	-	-						
*14-14	17	110	155	234						
14-15	17	110	155	234						
14-18	15	90	180	270						
14-19	30	165	315	-						
16-8	54	152	180	331						
16-23	158	270	-	-						
16-26	60	-	275	338						
*18-02	62	119	241	340						
18-11	62	119	241	340						
18-32	85	138	222	265						
20-16	238	318	333	347						
20-27	72	144	216	288						
20-29	63	144	252	333						
20-39	45	126	225	-						
20-41	45	126	225	-						
22-21	16	135	175	349						
*22-36	16	135	175	349						
22-41	39	135	264	-						
*22-44	30	142	226	314						
22-55	30	142	226	314						
24-31	90	225	225	-						
24-61	90	180	270	324						

<sup>\*</sup> Special insert arrangements consult factory





Q									Ang	gles ir	n degi	rees								
Shell size	$\perp$ $\alpha$							θ			β					φ				
SIZE	Ν	В	С	Е	F	Ν	В	С	Е	F	Ν	В	С	Е	F	Ν	В	С	Е	F
8	105	-	-	118	82	35	-	-	30	50	75	-	-	100	75	50	-	-	30	45
10	105	85	125	115	85	35	35	35	30	50	75	75	75	100	75	50	50	50	30	45
12	105	89	121	115	85	35	35	35	30	50	75	75	75	100	75	50	50	50	30	45
14	105	91	119	75	120	35	35	35	30	50	75	75	75	100	75	50	50	50	30	35
16	105	93	117	75	120	35	35	35	30	50	75	75	75	100	75	50	50	50	30	35
18	105	95	115	75	120	35	35	35	30	50	75	75	75	100	75	50	50	50	30	35
20	105	95	115	75	120	35	35	35	30	50	75	75	75	100	75	50	50	50	30	35
22	105	97	113	75	120	35	35	35	30	50	75	75	75	75	75	50	50	50	30	35
24	105	97	113	75	120	35	35	35	30	50	75	75	75	100	75	50	50	50	30	35

Shell	Angle in degrees												
size		ω											
	N	Е	F										
8	60	-	-	73	47								
10	60	40	80	70	50								
12	60	44	76	70	50								
14	60	46	74	30	75								
16	60	48	72	30	75								
18	60	50	70	30	75								
20	60	50	70	30	75								
22	60	52	68	30	75								
24	60	54	68	30	75								

Angles shown are with reference to the major key or keyway. In receptacles, the major keyway always remains fixed in relation to the mounting flange. For B, C, E and F orientations, the three bayonet locations and associated minor keyways are rotated completely as shown in the tables. The accompanying diagram shows a receptacle shell with keyways. Corresponding key orientations for a mating plug shell are therefore always clockwise.

# nsert Arrangements

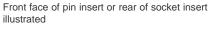
#### **Contact Legend**

Symbol

0 16

Contact size

20









20















Insert arrangement Service rating Number of contacts Contact size

8-2 2 20

8-3 3 20

8-33 8-4 1 1 3 4

20

10-2 Ш 2 16

10-6 6 20

12-3 Ш 3 16

12-4 Ш 4 16



















Insert arrangement 12-8 Service rating Ι Number of contacts 8 Contact size 20

12-10 1 10 20

12-12 -12 20

14-5 Ш 5 16

14-14 -14 20

14-18 - 1 18 20

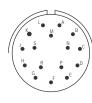












Insert arrangement Service rating Number of contacts Contact size

19 20 16-8 Ш 8 16

18-11 Ш 11 16

20-16 Ш 16 16



Insert arrangement

20-41 41

22-55

24-31 31 16

Service rating Number of contacts Contact size

20

22-21  $\parallel$ 21 16

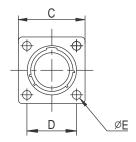
55 20

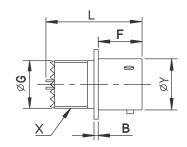
24-61 61 20

Onnector Styles

# **Wall Mounting Receptacles**





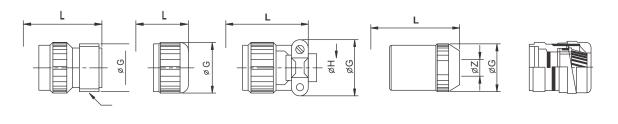


## Without termination assemblies

All dimensions in mm

Shell size	В	С	D	E Dia	F	G Dia	L	Y Dia	X threads in inches
8	1.58	20.75	15.09	3.05	11.30	11.02	24.84	12.02	7/16-28 UNEF
10	1.58	23.93	18.26	3.05	11.30	14.17	24.84	14.99	9/16-24 NEF
12	1.58	26.32	20.63	3.05	11.30	17.35	24.84	19.05	11/16-24 NEF
14	1.58	28.70	23.10	3.05	11.30	20.52	24.84	22.23	13/16-20 UNEF
16	1.58	31.07	24.61	3.05	11.30	23.70	24.84	25.40	15/16-20 UNEF
18	1.58	33.45	26.58	3.05	11.30	26.85	24.84	28.58	1 1/16-18 NEF
20	2.03	36.63	29.36	3.05	14.10	30.02	26.62	31.75	1 3/16-18 NEF
22	2.03	39.80	31.75	3.05	14.10	30.02	26.62	34.93	1 5/16-18 NEF
24	2.03	42.98	34.93	3.74	14.99	36.37	26.62	38.10	1 7/16-18 NEF

Note: Serrations / antirotation feature is not provided on shells for 10A, 10E and 10F styles.



Style 10A Style 10E Style 10F Style 10J 10PHM/EGM

## With termination assemblies

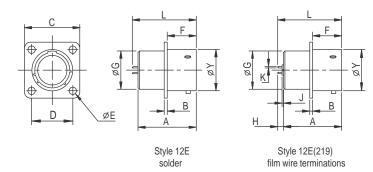
All dimensions in mm

		Style	10A	Style	10E	,	Style 10F		Style 10J			
Shell size	G	L	M thread	G	L	G	H	L	G	L	For cab	
	Dia		in inches	Dia		Dia	Dia		Dia		min	max
8	14.25	41.25	1/2-28 UNEF	14.25	32.54	21.03	3.96	44.76	14.25	46.89	4.28	5.84
10	17.43	41.25	5/8-24 NEF	17.43	32.54	22.63	4.78	44.76	17.43	46.89	5.21	7.93
12	20.60	41.25	3/4-20 UNEF	20.60	32.54	25.81	7.93	44.76	20.80	49.45	8.59	11.23
14	23.78	41.25	7/8-20 UNEF	23.78	32.54	28.98	9.58	44.10	23.78	54.54	10.57	13.69
16	26.98	41.25	1-20 UNEF	26.98	32.54	30.56	12.70	47.65	26.98	59.61	13.97	15.65
18	30.12	41.25	1 3/16-18 NEF	30.12	32.54	36.22	15.87	47.65	30.12	64.70	15.24	17.07
20	33.30	42.85	1 3/16-18 NEF	33.30	35.13	36.22	15.87	53.80	33.30	71.91	16.13	18.98
22	36.47	42.85	1 7/16-18 NEF	36.47	35.13	39.80	19.05	53.80	36.47	76.99	17.02	21.49
24	39.65	43.94	1 7/16-18 NEF	39.65	35.13	44.07	30.32	57.15	39.65	78.08	18.80	22.71

Onnector Styles

## **Box Mounting Receptacles**

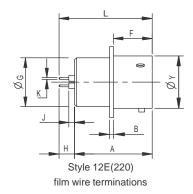




All dimensions in mm

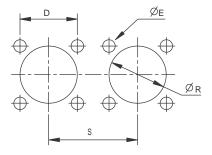
Chall	Ь	С		E	F		V	Style	12E		Style 12E(219)						
Shell	В		D		-	G	Y	Α	L	_	H	1	J	k	(	L	
size				Dia		Dia	Dia			A	min	max		min	max		
8	1.58	20.75	15.09	3.05	11.30	11.02	12.02	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
10	1.58	23.93	18.26	3.05	11.30	14.17	14.99	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
12	1.58	26.32	20.63	3.05	11.30	17.35	19.05	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
14	1.58	28.70	23.10	3.05	11.30	20.52	22.23	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
16	1.58	31.07	24.61	3.05	11.30	23.70	25.40	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
18	1.58	33.45	26.58	3.05	11.30	26.85	28.58	20.32	24.84	20.32	4.22	5.03	2.26	0.70	0.76	24.95	
20	2.03	36.63	29.36	3.05	14.10	30.02	31.75	22.23	26.62	22.23	3.89	4.70	1.93	0.70	0.76	26.85	
22	2.03	39.80	31.75	3.05	14.10	30.02	34.93	22.23	26.62	22.23	3.89	4.70	1.93	0.70	0.76	26.85	
24	2.03	42.98	34.93	3.74	14.99	36.37	38.10	22.23	26.62	22.23	3.89	4.70	1.93	0.70	0.76	26.85	

# Mounting data Panel cutouts Wall mounting receptacles



All dimensions in mm

Shell	Α	H	1	J	ŀ	<	L
size		min	max		min	max	
8	20.32	7.95	8.00	4.60	0.70	0.76	28.32
10	20.32	7.95	8.00	4.60	0.70	0.76	28.32
12	20.32	7.95	8.00	4.60	0.70	0.76	28.32
14	20.32	7.95	8.00	4.60	0.70	0.76	28.32
16	20.32	7.95	8.00	4.60	0.70	0.76	28.32
18	20.32	7.95	8.00	4.60	0.70	0.76	28.32
20	22.23	7.95	8.00	4.60	0.70	0.76	30.23
22	22.23	7.95	8.00	4.60	0.70	0.76	30.23
24	22.23	7.95	8.00	4.60	0.70	0.76	30.23



All dimensions in mm

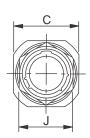
Shell	D	Е	R	S
size		Dia	Dia	
8	15.09	3.05	14.42	31.73
10	18.29	3.05	17.53	34.52
12	20.75	3.05	21.84	38.89
14	23.11	3.05	25.15	42.06
16	24.64	3.05	28.19	45.24
18	26.92	3.05	31.49	48.03
20	29.46	3.05	35.54	51.59
22	31.75	3.05	37.85	52.76
24	35.05	3.05	41.15	57.84

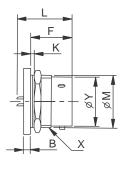
Note: Style 220 is also available for 57A type receptacles with similar termination dimensions as 12E(220) style shown above.

onnector Styles

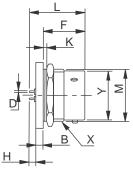
## **Jam Nut Receptacles**







Style 57A solder

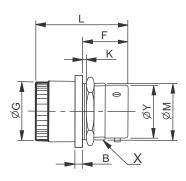


Style 57A(219) film wire terminators

## Without termination assemblies

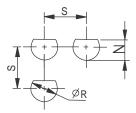
All dimensions in mm

	В	С		D	F	ŀ	+	J	l Par	< 201	Style	Style 57A	М	Υ	Х
Shell size			Min.	Max.		Min.	Max.		Thick		57A	(219)	Dia.	Dia.	Thread in
3126									Min.	Max.	_	_			inches
8	2.97	23.93	0.70	0.76	17.93	3.38	4.40	19.05	1.58	3.18	24.84	24.84	13.39	12.03	9/16-24 NEF
10	2.97	27.10	0.70	0.76	17.93	3.38	4.40	22.23	1.58	3.18	24.84	24.84	16.56	14.99	1/16-24 NEF
12	2.97	31.88	0.70	0.76	17.93	3.38	4.40	26.98	1.58	3.18	24.84	24.84	20.70	19.05	7/8-20 UNEF
14	2.97	35.05	0.70	0.76	17.93	3.38	4.40	30.15	1.58	3.18	24.84	24.84	23.85	22.23	1-20 UNEF
16	2.97	38.23	0.70	0.76	17.93	3.38	4.40	33.32	1.58	3.18	24.84	24.84	27.00	25.40	1 1/8-18 NEF
18	2.97	41.40	0.70	0.76	17.932	3.38	4.40	36.50	1.58	3.18	24.84	24.84	30.18	28.58	1 1/4-18 NEF
20	3.76	46.15	0.70	0.76	22.71	3.38	4.40	38.68	1.58	6.35	26.62	30.35	33.35	31.75	1 3/8-18 NEF
22	3.76	49.33	0.70	0.76	22.71	3.38	4.40	42.85	1.58	6.35	26.62	30.35	36.53	34.93	1 1/2-18 NEF
24	3.76	52.50	0.70	0.76	23.55	3.38	4.40	46.05	1.58	6.35	26.62	30.35	39.70	38.10	1 5/8-18 NEF



Style 14E

# Mounting data Panel cutouts



With termination assemblies

Shell size	G Dia.	L
8	18.11	34.14
10	21.29	34.14
12	24.46	34.14
14	27.63	34.14
16	30.81	34.14
18	33.98	34.14
20	37.16	40.03
22	40.33	40.03
24	43.51	40.87

All dimensions in mm

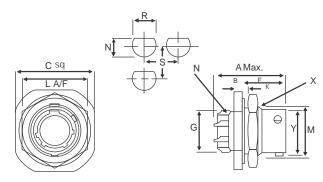
		7 111 0111	
Shell size	N	R Dia.	S
8	13.72	14.53	31.75
10	16.89	17.70	34.52
12	21.03	22.48	38.89
14	24.18	25.65	42.06
16	27.33	28.83	45.24
18	30.50	32.00	48.03
20	33.68	35.18	51.59
22	36.86	38.35	54.76
24	40.03	41.45	57.84

onnector Styles

## **Jam Nut Receptacles**



62 IN - 57T Single hole mounting with threaded shell to accept accessories

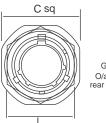


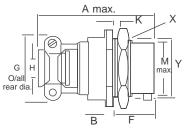
All dimensions in mm

Shell Size	A max	B ±0.05 (±0.13)	C max sq.	F ±0.005 (±0.13)	G Dia. Max.	min	( Max	L	M -0.005 (-0.13)	N	Y	X Thread
08	0.978 24.84	0.117 2.97	0.942 23.93	0.595 15.12	0.426 10.82	0.062 1.58	0.125 3.58	0.750 19.05	0.527 13.3	7/16 - UNEF	0.473 12.03	9/16-24 NEF
10	0.978 24.84	0.117 2.97	1.067 27.10	0.595 15.12	0.552 14.02	0.062 1.58	0.125 3.18	0.875 22.23	0.652 16.56	9/16 - UNEF	0.590 14.99	11/16-24 NEF
12	0.978 24.84	0.117 2.97	1.255 31.88	0.595 15.12	0.677 17.20	0.062 1.58	0.125 3.18	1.062 26.98	0.825 20.70	11/16 - UNEF	0.750 19.05	7/8-20 UNEF
12	0.978 24.84	0.117 2.97	1.380 35.05	0.595 15.12	0.802 20.37	0.062 1.58	0.125 3.18	1.187 30.15	0.939 23.85	13/16 - UNEF	0.875 22.23	1-20 UNEF
16	0.978 24.84	0.117 2.97	1.505 38.23	0.595 15.12	0.927 23.55	0.062 1.58	0.125 3.18	1.312 33.32	1.063 27.00		1.000 25.40	1.1/18-18 NEF
18	0.978 24.84	0.117 2.97	1.630 41.40	1.595 15.12	1.052 26.72	0.062 1.58	0.125 3.18	1.437 36.50	1.188 30.18	15/16 - UNEF	1.125 28.58	1.1/4-18 NEF
20	1.048 26.62	0.148 3.76	1.817 46.15	0720 18.29	1.167 29.65	0.062 1.58	0.250 6.35	1.562 38.68	1.313 33.35	1.3/16 - UNEF	1.250 31.75	1.3/8-18 NEF
22	1.048 26.62	0.148 3.76	1.942 49.33	0720 18.29	1.292 32.82	0.062 1.58	0.250 6.35	1.687 42.85	1.438 36.53	1.5/16 - UNEF	1.375 34.93	1.1/2-18 NEF
24	1.048 26.62	0.148 3.76	2.067 52.50	0.753 19.13	1.416 35.97	0.062 1.58	0.250 6.35	1.812 46.05	1.563 39.70	1.7/16 - UNEF	1.500 38.10	1.5/8-18 NEF



62 IN - 14F Single hole mounting with grommet and grommet nut fitted with integral strain relief clamp has panel 'O' ring seal



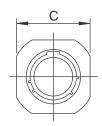


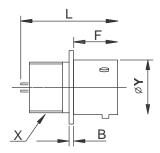
Shell	А	В	С	F	G	Н	К		L	М	N	R	S	Υ	Х
Size	max	+0.05 (+0.13)		±0.005 (±0.13)		±0.005 (±0.13)	min	max		1	I —	±0.005 (±0.13)			Thread
08	1.762 44.75	0.117 2.97	0.942 23.93	0.706 17 93	0.828 21.03		0.062 1.58	l .	0.125 3.175		0.540 1372		1.250 31.75	0.473 12.03	9/16-24 NEF
10	1.762 44.75	0.117 2.97	0.067 27.10	0.706	0.891	0.188	0.062 1.58		0.875	0.652 16.56	0.665	0.697	1.359	0.590 14.99	11/16-124 NEF
12	1.762 44.75	0.117 2.97	1.255 31.88	0.706 17.93	1.016 25.81	0.312 7.93	0.062 1.58		1.062 26.98			0.885 22.48	1.531 38.89	0.750 19.05	7/8-20 UNEF
14	1.876 47.65	0.117 2.97	1.380 35.05	0.706 17.93	1.141 28.97	0.375 9.35	0.062 1.58	0.125 3.18	1.187 30.15			1.010 25.65	1.656 42.06	0.875 22.23	1-20 UNEF
16	1.876 47.65	0.117 2.97	1.505 38.23	0.706 17.93	1.203 30.56		0.062 1.58	0.125 3.18	1.312 33.32	1.063 27.00	1.076 27.33	1.135 28.83	1.781 45.24	1.000 25.40	1.1/8-18 NEF
18	1.876 47.65	0.117 2.97	1.630 41.40	0.706 17.93	1.426 36.22	0.625 15.88	0.062 1.58	0.125 3.175	1.437 36.50			1.260 32.00	1.891 48.03	1.125 28.58	1.1/4-18 NEF
20	2.118 <b>53.8</b>	0.148 3.76	1.817 46.15	0.894 22.71	1.426 36.22	0.625 15.88		0.250 6.35	1.562 38.68	1.313 33.35		1.385 35.18	2.031 51.59	1.250 31.75	1.3/8-18 NEF
22	2.118 53.8	0.148 3.76	1.942 49.33	0.894 22.71	1.567 39.80	0.750 19.05		0.250 6.35	1.687 42.85	1.438 36.53	1.451 36.86	1.510 38.35	2.156 54.76	1.375 34.93	1.1/2-18 NEF
24	2.250 57.15	0.148 3.76		0.927 23.55	1735 44.07		0.062 1.58	0.250 6.35	1.812 46.05	1.563 39.70		1.635 41.45	2.277 57.84	1.500 38.10	1.5/8-18 NEF

Onnector Styles

## **Cable Mounting Receptacles**



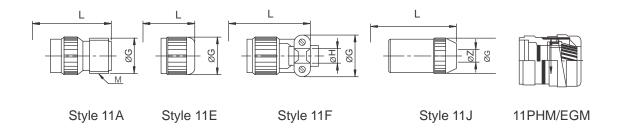




## Without termination assemblies

All dimensions in mm

Shell size	В	С	F	L	Y Dia	X thread in inches
8	2.39	20.75	10.54	24.84	12.03	7/16-28 UNEF
10	2.39	23.93	10.54	24.84	14.99	9/16-24 NEF
12	2.39	26.32	10.54	24.84	19.05	11/16-24 NEF
14	2.39	28.70	10.54	24.84	22.23	13/16-20 UNEF
16	2.39	31.07	10.54	24.84	25.40	15/16-20 UNEF
18	2.39	33.45	10.54	24.84	28.58	1 1/16-18 NEF
20	2.59	36.63	13.59	26.62	31.75	1 3/16-18 NEF
22	2.59	39.80	13.59	26.62	34.93	1 5/16-18 NEF
24	2.59	42.98	14.53	26.62	38.10	1 7/16-18 NEF



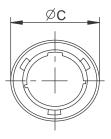
## With termination assemblies

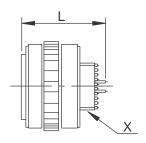
All dimensions in mm

	Style 11A			Style	11E	Style 11F				Style	e 11J	
Shell	G	L	М	G	L	G	Н	L	G	L	For cal	ole size
size	Dia		thread	Dia		Dia	Dia		Dia		Ζſ	Dia
			in inches									
8	14.25	41.25	1/2-28 UNEF	14.25	32.54	21.03	3.96	44.76	14.25	46.89	4.28	5.84
10	17.43	41.25	5/8-24 NEF	17.43	32.54	22.63	4.78	44.76	17.43	46.89	5.21	7.93
12	20.60	41.25	3/4-20 UNEF	20.60	32.54	25.81	7.93	44.76	20.60	49.45	8.59	11.23
14	23.78	41.25	7/8-20 UNEF	23.78	32.54	28.97	9.53	44.10	23.78	54.54	10.57	13.69
16	26.95	41.25	1-20 UNEF	26.95	32.54	30.56	12.70	47.65	26.95	59.61	13.97	15.65
18	30.13	41.25	1 3/16-18 NEF	30.13	32.54	36.22	15.88	47.65	30.13	64.70	15.24	17.07
20	33.30	42.85	1 3/16-18 NEF	33.30	35.13	36.22	15.88	53.80	33.30	71.91	16.13	18.98
22	36.75	42.85	1 7/16-18 NEF	36.75	35.13	39.80	19.05	53.80	36.75	76.99	17.02	21.49
24	39.65	43.95	1 7/16-18 NEF	39.65	35.13	44.07	20.32	57.15	39.65	78.03	18.80	22.71

## 16



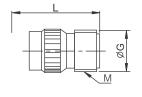


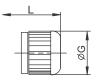


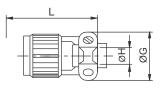
#### Without termination assemblies

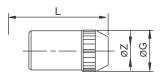
All dimensions in mm

Shell size	C Dia	L	X in inches
8	19.05	24.79	7/16-28 UNEF
10	21.82	24.79	9/16-24NEF
12	26.19	24.79	11/16-24 NEF
14	29.36	24.79	13/16-20 UNEF
16	32.54	24.79	15/16-20 UNEF
18	35.33	24.79	11/16-18 NEF
20	38.89	26.79	1 3/16-18 NEF
22	42.06	26.79	1 5/16-18 NEF
24	45.14	26.79	1 7/16-18 NEF











Style 16A

Style 16E

Style 16F

Style 16J

16PHM/EGM

## With termination assemblies

		Style	16 A	Style	16 E	,	Style 16	F	Style 16 J			
Shell	G Dia	L	M Thread	G Dia	L	G Dia	H Dia	L	G Dia	L	For cable Z Dis	а
8	14.25	41.00	1/2-28 UNEF	- 101	32.54	21.03	3.96	44.50	14.25	46.64	min 4.28	5.84
10	17.43	41.00	5/8-24 NEF	17.43	32.54	22.63	4.78	44.50	17.43	46.64	5.21	7.93
12	20.60	41.00	3/4-20 UNEF	20.60	32.54	25.81	7.93	44.50	20.60	49.20	8.59	11.23
14	23.78	41.00	7/8-20 UNEF	23.78	32.54	28.97	9.53	43.84	23.78	54.28	10.57	13.69
16	26.95	41.00	1-20 UNEF	26.95	32.54	30.56	12.70	47.40	26.95	59.36	13.97	15.65
18	30.13	41.00	1 3/16-18 NEF	30.13	32.54	36.22	15.88	47.40	30.13	64.45	15.24	17.07
20	33.30	41.00	1 3/16-18 NEF	33.30	32.54	36.22	15.88	51.81	33.30	70.05	16.13	18.98
22	36.75	41.00	1 7/16-18 NEF	36.75	32.54	39.80	19.05	51.81	36.75	75.13	17.02	21.49
24	39.61	42.11	1 7/16-18 NEF	39.61	32.54	44.07	20.32	55.32	39.61	76.25	18.80	22.71

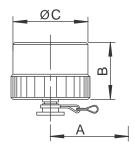
Notes: 1. Plugs are also available with heavy duty ribbed coupling ring, to order, add deviation (044) at the end of plug part number.

## **Metallic Dust Covers**

Standard is olive drab chromate finish over cadmium plating with straight knurling. To order add suffix **-XX** to required style, where XX specifies shell size. It is strongly recommended that these are fitted to provide protection when connectors are not in use. For alternate finishes or dust covers with heavy duty ribs, contact factory for further details and part number. Dust cap with Nylon cord is also available. Contact factory for further details.

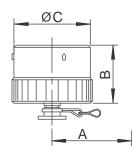
## For receptacles

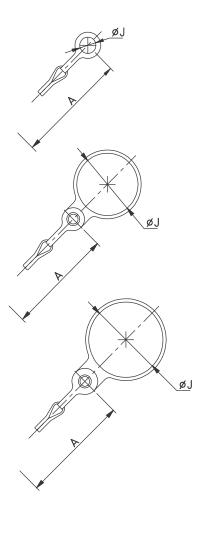
Dust cov	To fit receptacle	
with chain	with chain with nylon cord	
62IN-736	62IN-813	Jam nut
62IN-737	62IN-814	Cable mounting
62IN-738	62IN-812	Wall and box mounting



## For plugs

Dust cover style						
with chain with nylon cord						
62IN-742	62IN-810					





All dimensions in mm

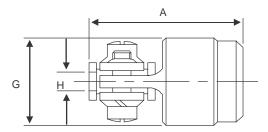
		В				J Dia	
Shell	A			С	736	737	738
size	chain / cord	for	for	Dia	813	814	812
	length	receptacles	plugs				742
							810
8	76.20	15.21	15.03	18.64	14.68	11.63	4.40
10	76.20	15.21	15.03	21.82	17.86	14.81	4.40
12	88.90	15.21	15.03	25.40	22.63	17.98	4.40
14	88.90	15.21	15.03	28.57	25.81	22.76	4.40
16	88.90	15.21	15.03	31.75	29.39	25.93	4.40
18	88.90	15.21	15.03	34.92	32.16	29.11	4.40
20	101.60	15.21	15.03	38.10	35.33	32.28	4.40
22	101.60	15.21	15.03	41.27	38.51	35.46	4.40
24	101.60	15.21	15.03	44.45	41.68	38.63	4.40

## **Strain Relief Clamp With Grommet**

(Replace XX-XX with the required insert arrangement)



## 62IN-585-XX-XXS or XXP



All dimensions in mm

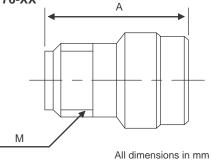
Shell size	A max	G max	H max
8	25.17	21.03	4.09
10	25.17	22.63	4.90
12	25.17	25.81	8.05
14	24.51	28.98	9.65
16	28.07	30.56	12.83
18	28.07	36.22	16.00
20	32.64	36.22	16.00
22	32.64	39.80	19.18
24	34.88	44.07	20.45

## **Shell To Accept Conduit**

(Replace XX with the required shell size)





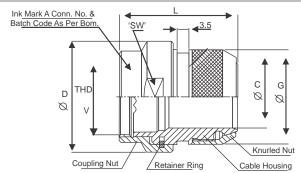


Shell size	A max	M Thread in inches
8	23.80	1/2-28 UNEF
10	23.80	5/8-24 NEF
12	23.80	3/4-20 UNEF
14	23.80	7/8-20 UNEF
16	23.80	1-20 UNEF
18	23.80	1 3/16-18 NEF
20	23.80	1 3/16-18 NEF
22	23.80	1 7/16-18 NEF
24	23.80	1 7/16-18 NEF

## 62IN - SQ Adaptors

For Shielded Cables



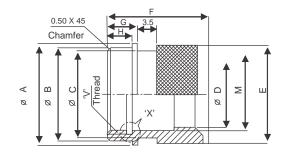


SIZE	AT'X P/NO.	'V' THD. UNEF-2B	Ø C MIN.	Ø D MAX.	Ø G +0.5 -0.0	L MAX.	SW -0.2	RECOMME NDED TORQUE'S (Nm)
08	62IN-08-SQ	7/16 -28	6.6	20	16	36	18	4 +0.50
10	62IN-10-SQ	9/16 -24	9.2	23	18	36	21	6 +0.50
12	62IN-12-SQ	11/16 -24	12.2	27	22	36	24	8 <u>+</u> 1.0
14	62IN-14-SQ	13/16 -20	15.2	30	25	37	28	10.10
16	62IN-16-SQ	15/16 -20	18.3	33	28		31	10+1.0
18	62IN-18-SQ	1 1/16 -18	20.0	36	32		34	
20	62IN-20-SQ	1 3/16 -18	23.0	40	34		37	12.10
22	62IN-22-SQ	1 5/16 -18	26.0	43	38	1	41	13 <u>+</u> 1.0
24	62IN-24-SQ	1 7/16 -18	28.8	46	41	37	44	

## **62IN - Shrink Boot Adaptors**

For Unshielded Cables





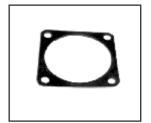
SIZE	ATX P/NO	ø 'A'	Ø 'B'	ø 'C'	ø 'D'	ø 'E'	'F'	'G'	'H'	'V' THREAD.	'M'
SIZE	ATA P/NO	-0.3		-0.2	+0.2	+0.5				UNEF -2B	+0.1
08	62IN-108559	15.4	14.0	13.1	9.2	15.1				7/16 -28	10.2
10	62IN-108560	18.6	17.0	15.9	12.1	17.9	17.5			9/16 -24	13.3
12	62IN-108561	21.8	20.3	21.2	15.1	23.2	17.5			11/16 -24	16.5
14	62IN-108562	25.0	23.3	22.1	18.4	24.0		5.50	4.50	13/16 -20	19.5
16	62IN-108563	28.2	26.4	26.0	21.6	29.3	20.0	5.50	4.50	15/16 -20	22.6
18	62IN-108564	31.3	29.5	28.4	24.1	31.5	20.0			1 1/16 -18	25.6
20	62IN-108565	34.5	32.7	32.3	27.3	35.6	21.3			1 3/16 -18	28.8
22	62IN-108566	37.7	35.8	34.7	30.5	38.0	21.3			1 5/16 -18	32.0
24	62IN-108567	40.9	39.0	37.9	33.7	41.0	20.0	5.00	4.00	1 7/16 -18	35.2

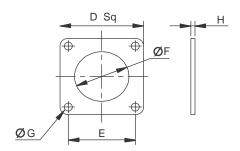


# **Flange Mounting Gasket**

## 62IN-760-XX

(Replace XX with the required shell size)



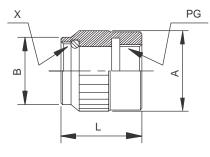


All dimensions in mm

Shell size	D	E	F Dia	G Dia	H max
8	20.62	15.08	12.90	3.30	1.06
10	23.82	18.26	16.07	3.30	1.06
12	26.18	20.65	19.25	3.30	1.06
14	28.57	23.01	22.42	3.30	1.06
16	30.96	24.61	25.60	3.30	1.06
18	33.32	27.00	28.77	3.30	1.06
20	36.52	29.36	31.95	3.30	1.06
22	39.70	31.75	35.13	3.30	1.06
24	42.87	34.92	38.30	3.96	1.06

# PG Adaptors with 'O' ring

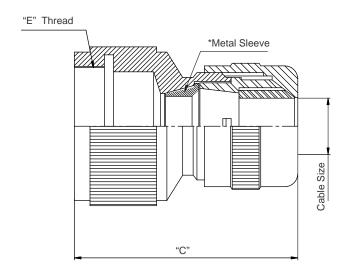




All dimensions in mm

Part number	For shell size	X Thread in inches	А	В	L	PG Thread
62IN08-PG7	8	7/16-28 UNEF	16.50	14.50	20.00	PG7
62IN10-PG9	10	9/16-24 NEF	22.00	17.70	20.00	PG9
62IN12-PG9	12	11/16-24 NEF	22.00	21.00	20.00	PG9
62IN14-PG13.5	14	13/16-20UNEF	28.00	23.50	25.00	PG13.5
62IN16-PG9	16	15/16-20 UNEF	29.00	27.80	30.00	PG 9
62IN18-PG16	18	1/16-18 NEF	31 .50	31.00	35 .00	PG16
62IN20-PG21	20	13/16-18 NEF	35 .00	34.00	40.00	Pg21
62IN24-PG16	24	17/16-18 NEF	41.50	40.50	40.00	PG16

## **EGM/PHM** Adaptor

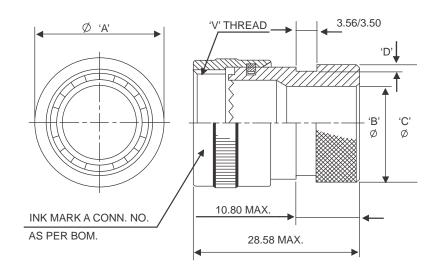


\*EGM - Supplied with metal sleeve for shielded cable PHM - Supplied without metal sleeve for unshielded cable

Shell size	"C" Ref.	PG Size (Cable Size in mm)	"E" Thread For Straight
8		PG 11 (4 to 10)	7/16" -28 UNEF
10		PG 11 (4 to 10)	9/16" -24 NEF
12	30.00	PG 11 (4 to 10)	11/16" -24 NEF
14		PG 21 (11 to 18)	13/16" -20 UNEF
16		PG 21 (11 to 18)	15/16" -20 UNEF
18		PG 21 (11 to 18)	1 1/16" -20 UNEF
20		PG 21 (11 to 18)	1 3/16" -18 UNEF
22	35.00	PG 21 (11 to 18)	1 5/16" -18 NEF
24		PG 21 (11 to 18)	1 7/16" -18 UNEF

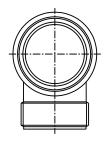
EGM/PHM11 Can accept cable Min 5.70 mm & Max 10.85 mm EGM/PHM21 Can accept cable Min 12.70 mm & Max 17.85 mm

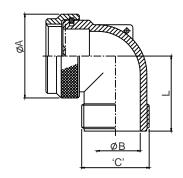
# **Shrink Boot Adaptor**



SHELL SIZE	ØA MAX.	ØB MIN.	ØC + 0.0 - 0.51	D + 0.20 - 0.0	'V' THREAD UNEF-2B	CONNECTORS P/NO.
08	15.67	6.35	13.54		7 / 16" -28	M85049 / 60-1-W-8-IN
10	18.64	9.02	15.37	1.12	9 / 16" -24	M85049 / 60-1-W-10-IN
12	21.79	12.47	19.66		11 / 16" -24	M85049 / 60-1-W-12-IN
14	24.99	14.35	21.29		13 / 16" -20	M85049 / 60-1-W-14-IN
16	28.24	17.53	24.46		15 / 16" -20	M85049 / 60-1-W-16-IN
18	30.94	19.53	26.47		1 1/16"-18	M85049 / 60-1-W-18
20	34.16	22.71	30.91		1 3/16"-18	M85049 / 60-1-W-20
22	32.79	25.88	34.42	1.75	1 5 / 16" -18	M85049 / 60-1-W-22
24	40.46	28.80	36.65		1 7/16"-18	M85049 / 60-1-W-24

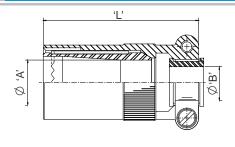
# Right Angle Backshell

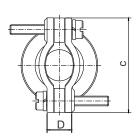




Shell Size	DRG. No.	ØA MAX.	ØB ±0.13	'C' -2A THREAD.	L MAX.
8	500238-8	18.85	7.30	9/16"-24NEF	20.80
10	500238-10	21.70	10.18	5/8"-24UNEF	21.70
12	500238-12	24.60	13.35	3/4"-20UNEF	23.35
14	500238-14	27.85	16.26	7/8"=20UNEF	24.85
16	500238-16	31.2.	19.40	1"-20UNEF	26.45
18	500238-18	34.15	22.00	1 3/16"-18UNEF	28.70
20	500238-20	37.25	24.20	1 3/10 -100NL1	29.60
22	500238-22	40.65	28.50	1 7/16"-18NEF	31.60
24	500238-24	44.00	31.65	1 7/10 - TOINET	33.60

# JC Clamp Backshell





Shell		A	В	С	D	'L'	
Size	MIN.	MAX.	±0.13	MAX.	MAX Closed	MAX.	
8	4.28	5.84	3.96	21.03	4.75		
10	5.21	7.93	4.78	22.63	4.75	40.50	
12	8.59	11.23	7.93	25.81	7.14		
14	10.57	13.69	9.58	28.97	8.26	48.00	
16	13.97	15.65	12.70	30.56	9.04	54.50	
18	15.24	17.07	15.88	36.22	11.58	59.00	
20	16.13	18.98	15.88	36.22	40.40	67.00	
22	17.02	21.49	19.05	39.80	13.18	73.40	
24	18.80	22.71	20.32	44.07	16.69	77.00	

Specials and Deviations

## **Industrial Version Crimp Contacts**

62IN series connectors are also available with rear release crimp contacts for industrial applications. These contacts can be crimped to wires outside the connector and then inserted into place with the help of designated tools. Connector maintenance is simplified because damaged contacts can be removed by using the designated removal tool and replaced with a new contact. Spare contacts are also available.

#### Standard deviations for finishes & features

Deviation number	Description
(4)	Gold flash on contacts
(5)	Crimp contact
(044)	Rough grip heavy duty coupling ring (for plugs only)
(218)	Coupling ring with lever arrangement
(219)	Film wire termination (short) for flexible printed wiring (57A and 12E styles only)
(220)	Film wiretermination(long) for flexible printedwiring(57A and 12E styles only)
(416)	Electroless Nickel Plating
*(608)	Black anodised finish
(622)	Cadmium free zinc-cobalt Plating-olive drab finish
(624)	Cadmium free zinc-cobaltPlating-black finish
(0PX)	Premating contact(X denotes premating contact designation)
(714)	Cadmium over electroless Nickel
(720)	Cadmium plating with black chromate
(725)	Zinc plating with olive drab finish
(726)	Electrophoratic Finish
(56T)	Plug connector with threaded shell & serration to accept the cable accessories
(15A)	Plug connector with threaded shell to accept the cable accessories
(LC)	Less contact
(N00)	Connector without marking
(N01)	Connector with customer requested marking

C04:-Crimp connectors with few solder contact (Position need to mention)

#### Specials

For special requirements, please contact factory with specifications and drawings. Amphenol has in-house capability to meet and custom build your special requirements for its range of MIL-C-26482 62IN series connectors.

\* Consult factory for availability.

#### **Recommended Tightening Torques**

## A) Single hole Fixing Receptacle ( Panel Nut tightening)

Shell Size	8	10	12	14	16	18	20	22	24
Nm	3.73	4.07	6.78	7.34	8.25	9.26	11.98	13.9	15.03
Lbf.ins	33	36	60	65	73	82	106	123	133

## **B) Accessory Tightening**

Shell Size	8	10	12	14	16	18	20	22	24
Nm	3.79-3.96	3.96-4.52	4.52-5.09	5.09-5.65	5.65-6.78	6.78-7.91	8.48-9.04	9.61-10.17	10.74-11.3
Lbf.ins	25-40	35-40	40-45	45-50	55-60	65-70	75-80	85-90	95-100

#### **Crimping Tool**

MILITARY P/N	DMC P/N	DESCRIPTION		
M22520/1-01	Af8	Tool Frame	16	
M22520/1-02	TH1A	Turret		



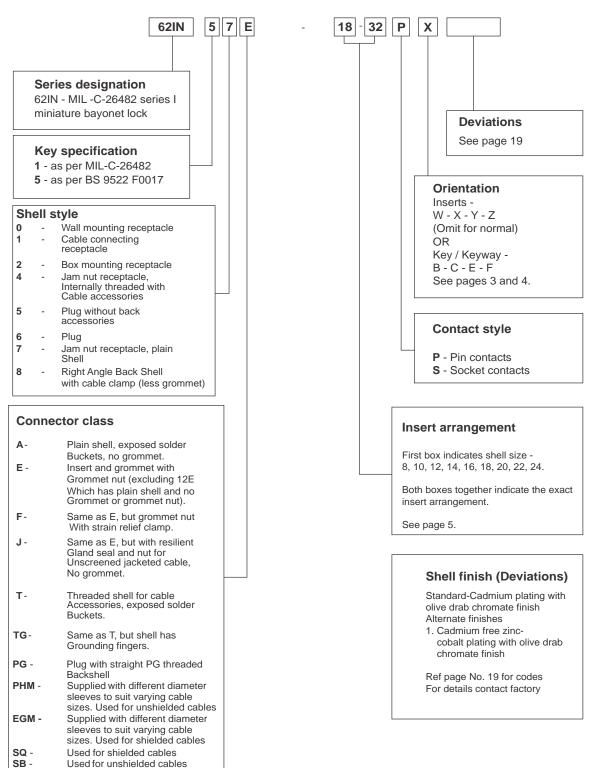




Contact size	Insertion Removal Tool Part Number
20	62IN-IR-20
16	62IN-IR-16

# rdering 62IN Series Connectors

To obtain a specific connector number, write down the connector number from the typical example below. Only inserts shown on page 5 can be specified. Connectors are delivered with protective dust caps. Deviations specified on page 15 must be included at the end of the connector number whenever required.



Notice: All information, including illustrations given herein is believed to be accurate at the time of printing. In lieu of design advances, Amphenol reserves the right to change specifications without notice. This publication AC6201 03/13 supersedes all existing Amphenol literature on 62IN series connectors.

# **Amphenol**

# A Global Company







**Bangalore Operations** 

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