

Amphenol

608 Series

Circular Environmental Connectors

Approved to BS9522 F0020 (Pattern 608)

CE30

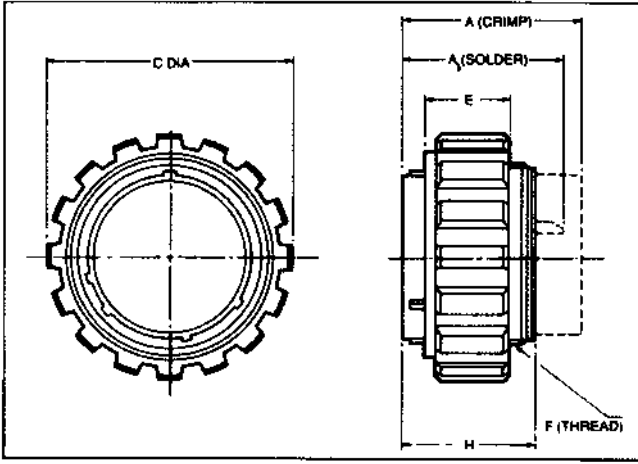


Design Features

- Keyway Polarisation.
- Ni Aluminium Bronze Shells.
- Threaded Anti Vibration coupling mechanism.
- Crimp or Solder Contacts.
- -55° to + 125° C Temp Range
- High Impact Strength

The Amphenol 608 series is a range of nickel aluminium bronze connectors with a 2 start acme thread coupling mechanism. The rugged design features and highly corrosion resistant materials make this connector series ideal for marine applications where equipment is continually exposed to rough treatment and salt laden atmosphere.

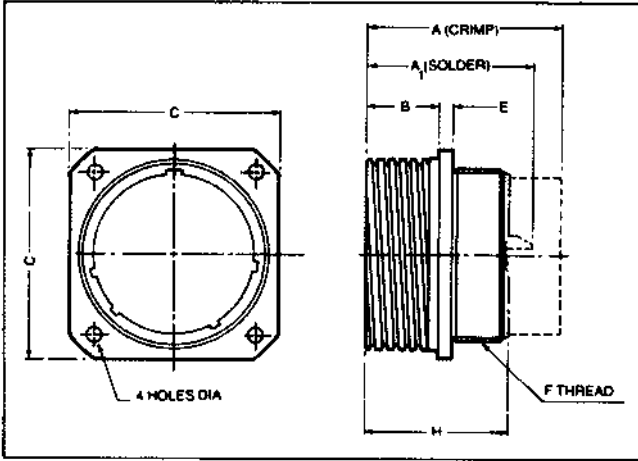
Connector Styles



Straight Plug

British Standard Part No C2560-xx-xx-xxxx
Amphenol Part No (Crimp) 608-36T-xx-xxxx
(Solder) 608-56T-xx-xxxx

SHELL SIZE	A MAX.		A ₁ MAX.		C DIA MAX.		E MAX.		F THREAD (CLASS 2A)	H MAX.	
	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.
8					21.1	.83			14.8 .58		22.98 .905
10					23.8	.94					
12					28.2	1.11					
14					31.4	1.24					
16	32.9	1.30	25.4	1.00	36.5	1.44					
18					39.3	1.55					
20					42.5	1.67			16.3 .64	24.89 .980	
22					45.3	1.78					
24					48.4	1.91					



Wall Mount Receptacle

British Standard Part No C2561-xx-xx-xxxx
Amphenol Part No (Crimp) 608-30T-xx-xxxx
(Solder) 608-50T-xx-xxxx
Max Panel Thickness, Shell Size 8-18, 0.10in (2.6mm)
20-24, 0.24in (6.1mm)

SHELL SIZE	A MAX.		A ₁ MAX.		B MAX.		C MAX.		E MAX.		F THREAD (CLASS 2A)	MAX.		D DIA ± .13 ± .005			
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.	mm	in.		
8							21.1	.83			22.98 .905	3.1	.12				
10							24.3	.96									
12							26.6	1.05									
14	32.9	1.30	25.6	1.01	11.7	.46	29.0	1.15	1.8	.07							
16							31.2	1.23									
18							33.8	1.33									
20							37.0	1.46			26.41	1.040					
22	34.6	1.37	27.2	1.07	14.8	.58	40.1	1.58	2.6	.10							
24							43.3	1.71							15.5	.61	43.3

Jam Nut Receptacle

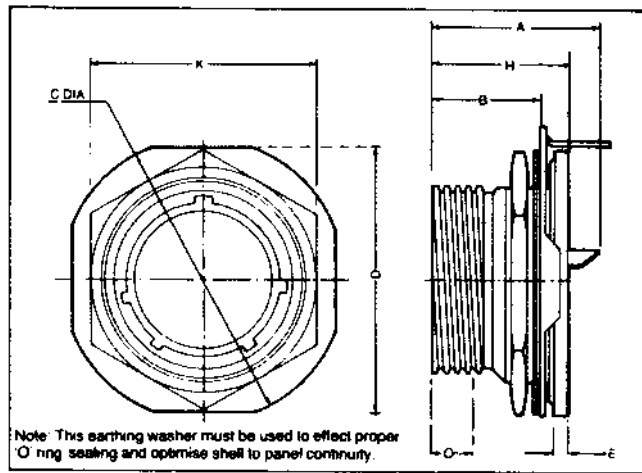
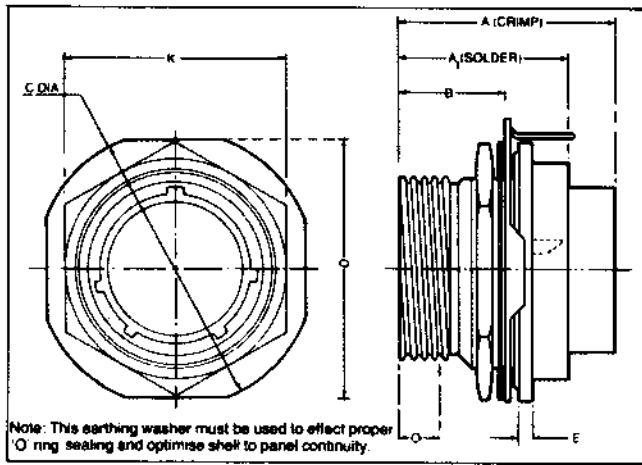
Single Hole Fixing (With Accessory Thread)
British Standard Part No C2562
Amphenol Part No (Crimp) 608-37T-xx-xxxx
(Solder) 608-57T-xx-xxxx
Max Panel Thickness, Shell Size 8-18, 0.10 in (2.6mm)
20-24, 0.24in (6.1mm)

SHELL SIZE	A MAX.		A ₁ MAX.		B MAX.		C MAX.		D MAX.		E MAX.		K MAX.	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
8							27.4	1.08	24.3	.96			19.3	.76
10							30.5	1.20	27.4	1.08			22.7	.89
12	32.9	1.30	30.0	1.18	17.7	.70	35.4	1.39	32.2	1.27	3.3	.13	27.2	1.07
14							38.4	1.51	35.4	1.39			30.5	1.20
16	41.7	1.64	38.5	1.52	33.6	1.32								
18	44.7	1.76	41.6	1.64	36.9	1.45								
20							49.6	1.95	46.5	1.83			39.9	1.57
22	34.6	1.37	32.7	1.29	22.5	.89	57.6	2.07	49.7	1.96	4.1	.16	43.2	1.70
24							23.6	.93	55.8	2.20			52.8	2.08

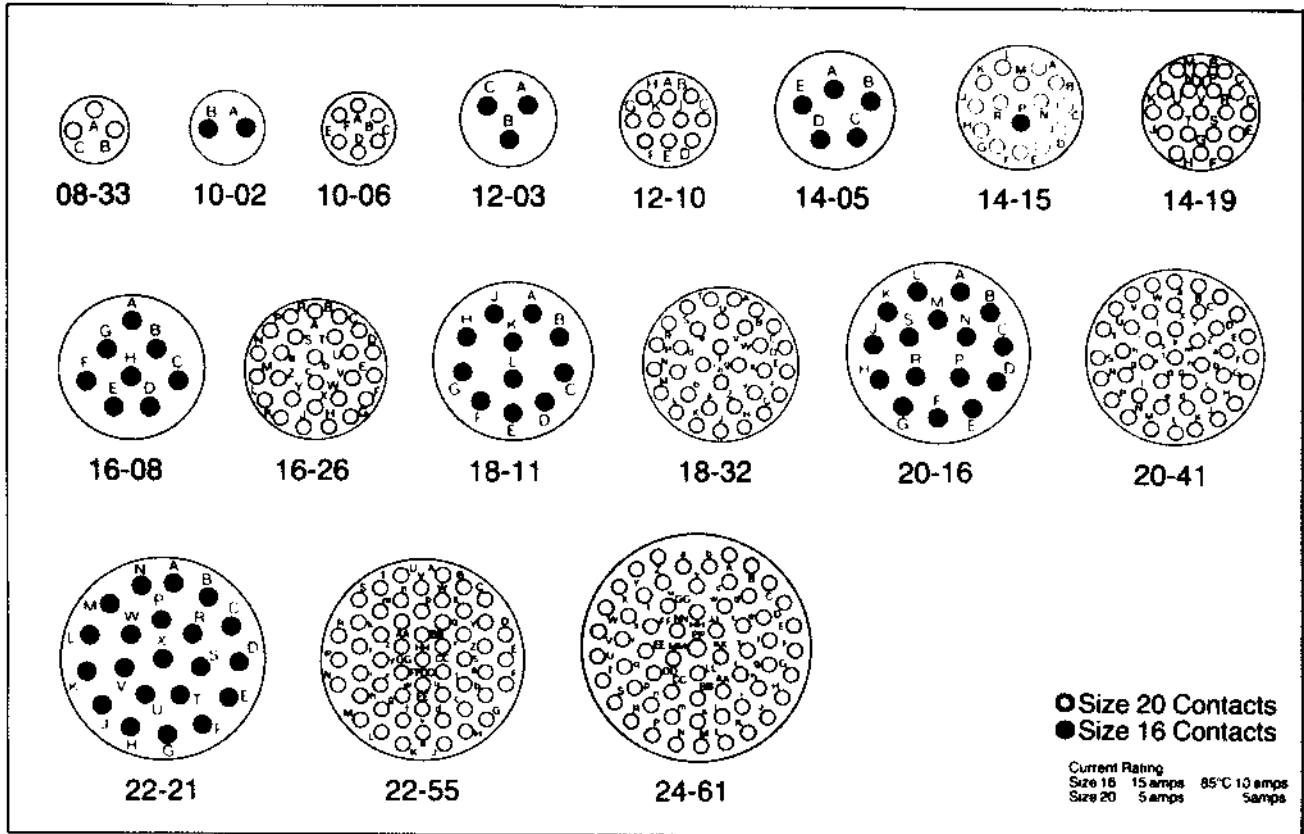
Jam Nut Receptacle

Single Hole Fixing (No Accessory Thread, Solder Contacts only)
British Standard Part No C2563-xx-xx-xxxx
Amphenol Part No (Solder) 608-57A-xx-xxxx
Max Panel Thickness, Shell Size 8-18, 0.10in (2.6mm)
20-24, 0.24in (6.1mm)

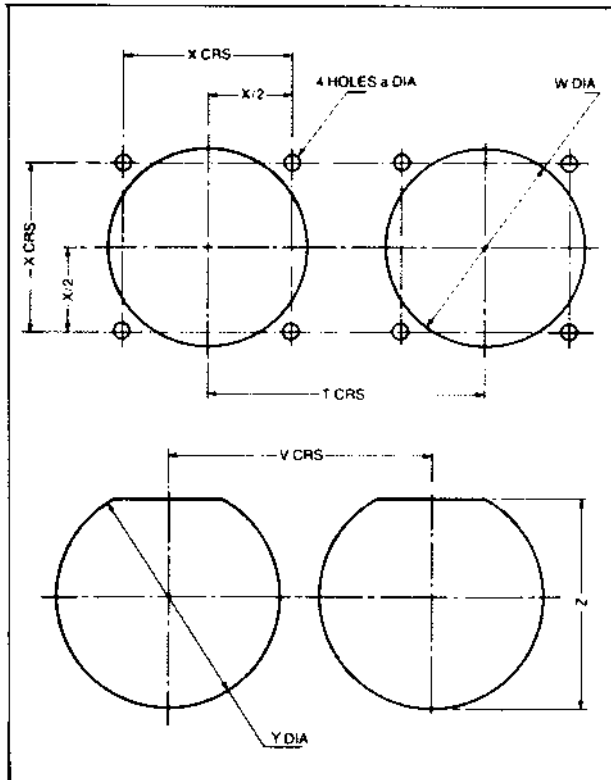
SHELL SIZE	A MAX.		B MAX.		C MAX.		D MAX.		E MAX.		H MAX.		K MAX.	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
8					27.4	1.08	24.3	.96					19.3	.76
10					30.5	1.2	27.4	1.08					22.7	.89
12	25.6	1.01	17.7	.70	35.4	1.39	32.2	1.27	3.3	.13	21.4	.84	27.2	1.07
14					38.4	1.51	35.4	1.4					30.5	1.2
16	41.7	1.64	38.5	1.52	33.6	1.32								
18	44.7	1.76	41.6	1.64	36.9	1.45								
20					49.6	1.95	46.5	1.83					39.9	1.57
22	27.2	1.07	22.5	.89	52.6	2.07	49.7	1.96	4.1	.16	27.0	1.06	43.2	1.7
24					23.6	.93	55.8	2.20					52.8	2.08



Insert Arrangements



Panel Mounting Details



Arrangement	Crimp	Solder	No Contacts	Contact	Size	Rating
08-33	X	X	3	20		1
10-02	X	X	2		16	2
10-06	X	X	6	20		1
12-03	X	X	3	16		2
12-10	X	X	10	20		1
14-05	X	X	5	16		2
14-15	X	X	15	20	16	1
14-19	X	X	19	20		1
16-08	X	X	8	16		2
16-26	X	X	26	20		1
18-11	X	X	11	16		2
18-32	X	X	32	20		1
20-16	X	X	16	16		2
20-41	X	X	41	20		1
22-21	X	X	21	16		2
22-55	X	X	55	20		1
24-61	X	X	61	20		1

SHELL SIZE	a dia		T CRS MIN		W DIA		X		V CRS MIN		Y DIA		Z	
	±.13	±.005	±.25	±.010	±.25	±.010	CRS	(T.P.)	±.13	±.005	±.13	±.005	±.13	±.005
	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.
8			22.7	.89	14.3	.56	15.09	.954	27.4	1.08	15.90	.626	14.94	.588
10			25.4	1.00	17.3	.68	18.26	.719	30.5	1.2	18.92	.745	17.91	.705
12			29.8	1.18	21.4	.84	20.62	.812	35.4	1.39	23.70	.933	22.33	.879
14			33.0	1.30	24.4	.96	23.01	.906	38.4	1.51	26.77	1.054	25.45	1.002
16			38.1	1.50	27.7	1.09	24.61	.969	41.7	1.64	29.95	1.179	28.65	1.128
18			40.9	1.61	30.8	1.21	26.97	1.062	44.7	1.76	33.12	1.304	31.83	1.253
20			44.0	1.74	3.41	1.34	29.36	1.156	49.3	1.94	36.30	1.429	35.00	1.378
22			46.8	1.85	37.1	1.46	31.75	1.250	52.8	2.08	39.47	1.554	38.18	1.503
24	4.2	.17	50.0	1.97	40.1	1.59	34.93	1.375	55.8	2.20	42.65	1.679	41.35	1.628

Voltage Rating	1	2
Sea Level		
Working Voltage DC	700	1250
Voltage Proof DC	2100	3000

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

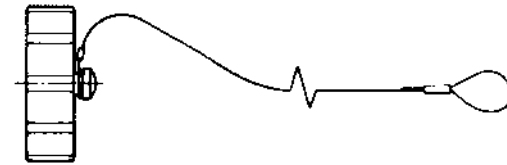
Accessories

Protective Cap (Straight Plug)



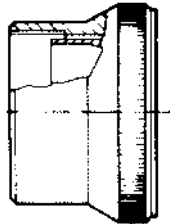
Terylene Cord
 British Standard Part No. A2567-xx
 Amphenol Part No. 608-567-xx
 Plastic Coated S/Steel Wire
 British Standard Part No. A2569-xx
 Amphenol Part No. 608-569-xx

Protective Cap (Receptacle)



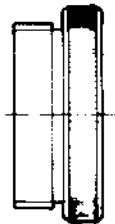
Terylene Cord
 British Standard Part No. A2566-xx
 Amphenol Part No. 608-566-xx
 Plastic Coated S/Steel Wire
 British Standard Part No. A2568-xx
 Amphenol Part No. 608-568-xx

Grommet Nut and Ferrule Assy (Straight Plug and Wall Mount Receptacle)



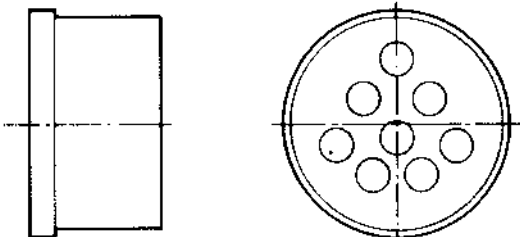
British Standard Part No. A2581-xx-x
 Amphenol Part No. 608-581-xx

Grommet Nut and Ferrule Assy (Jam Nut Receptacle)



British Standard Part No. A2580-xx-x
 Amphenol Part No. 608-580-xx

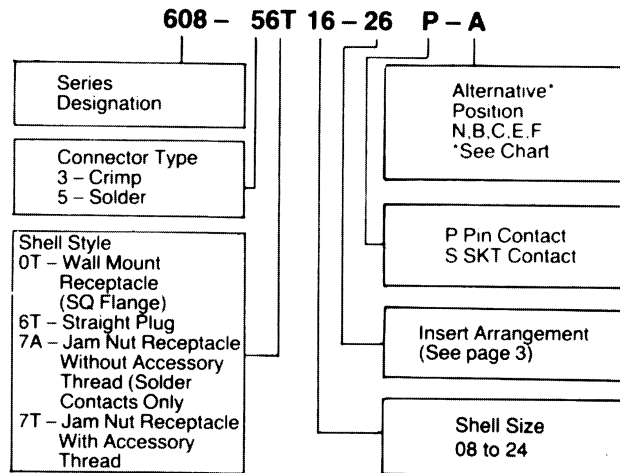
Grommet Seal (Solder Contact Connectors Only)



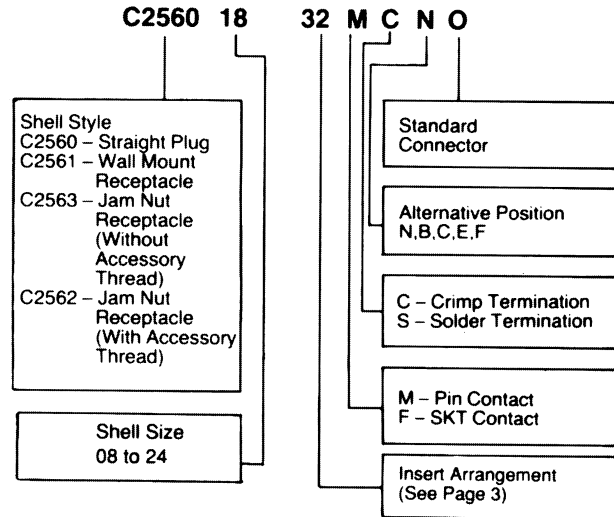
British Standard Part No. A2584-xx-xx
 Amphenol Part No. 608-584-xx-xx

Connector Ordering Codes

Amphenol Part No

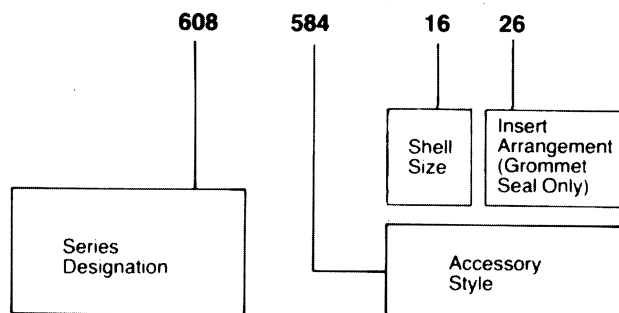


British Standard Part No

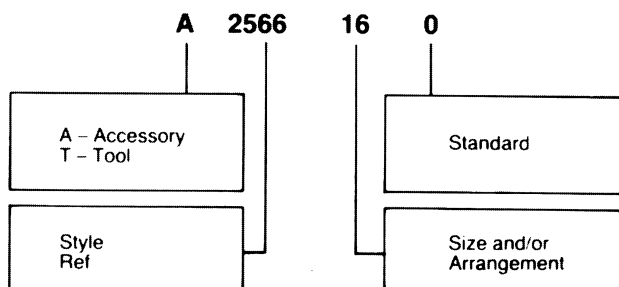


Accessory and Tool Ordering Code

Amphenol Part No

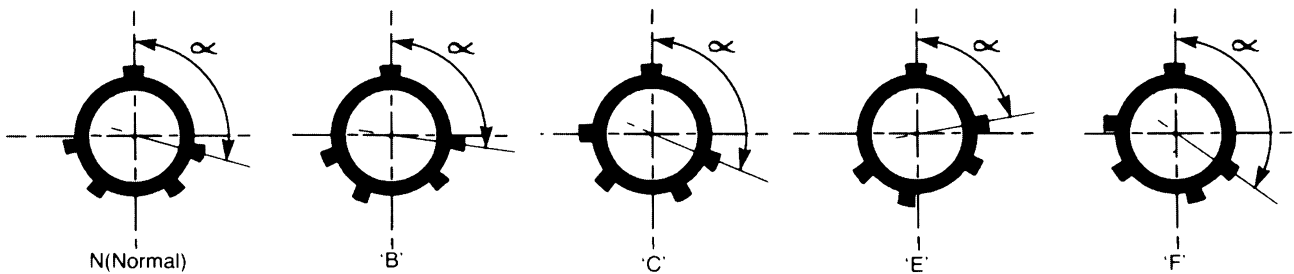


BS Part No



Keyway Orientation

ANGLE SHELL SIZE	∞°				
	'N'	'B'	'C'	'E'	'F'
08	105	-	-	118	82
10	105	85	125	115	85
12	105	89	121	115	85
14	105	91	119	75	120
16	105	93	117	75	120
18	105	95	115	75	120
20	105	95	115	75	120
22	105	97	113	75	120
24	105	97	113	75	120



Assembly Instructions

Connectors are supplied with a full complement of contacts but can be supplied separately.

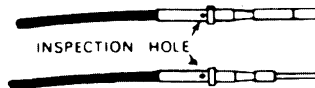
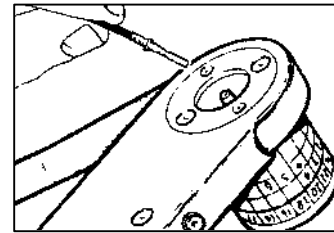
Contact Size	Colour Code	Contact Part Nos	Quantity Per Pack	Suitable Wire Sizes		Permissible Insulation O.D. range for Grommet sealing	Stripping Lengths
				A W G	in mm		
20	RED	pin: 162GB-149-20,000-05-pk25	25	2012224	0.032 - 0.020	0.047 - 0.085	0.220 - 0.260
		skt: 16268-101-20,000-05-pk25	25		0.81 - 0.51		
16	BLUE	pin: 162GB-149-16,000-05-pk25	25	16:18:20	0.051 - 0.032	0.066 - 0.109	0.220 - 0.260
		skt: 16268-101-16,000-05-pk25	25		1.295 - 0.81		

Wire Stripping

Strip 5.6mm (.220 in.) to 6.6mm (.260 in.) of insulation from end of wire for both size 20 and 16 contacts taking care not to cut or nick strands. If ends fray twist them back to their original lay.

Crimp Wire to Contact

Use (M22520 1-01) with Turret Head (M22520/1-02). Release and rotate Turret Knob to proper contact size (as per colour code) and lock adjust Selector Knob on handle to correct wire size (see table). Insert stripped wire into Contact Pocket until it is visible through inspection hole. Fully seat Contact in Crimp Tool Positioner and close handles in one full stroke (The Rachel will not release until tool has completed full stroke). Inspect Crimp for wire visibility through Inspection Hole.



Crimping Jaw Setting

Contact Size	Wire Size	Crimp Jaw Setting
20	24	No 2
	22	No 3
	20	No 4
16	20	No 4
	18	No 5
	16	No 6

Contact Size	Insertion Tool Part No	Removal Tool Part No	Grommet Sealing Plug
20	MS 24256A-20 (T 2594-20)	MS 242568-20 (T 2018-20)	162GB-130-20000
16	MS 24256A-16 (T 2594-16)	MS24256R-16 (T 2018-16)	162GB-130-16000

Contact Insertion

Select the proper insertion tool for the size of contact as per table. The insertion tool and procedure are the same for both pin and socket contacts. Slide rear accessory and sleeve over wire bundle. Lay wire in groove of insertion tool and slide contact into front of 1001 until it is properly located in tool probe. Insert contact into the correct hole in the rear face of the grommet. Keeping contact in line with the axis of the hole, apply a smooth even push on the tool until the contact is fully seated in position. Note it is essential that the contact and tool are correctly aligned with the axis of hole during insertion to prevent damage to contacts. Withdraw tool at right angles to grommet surface until completely free of connector. All contacts must be inserted whether in circuit or not and the appropriate size sealing plug used behind any contacts that are not wired. Push the sealing plug by hand until it is fully seated.

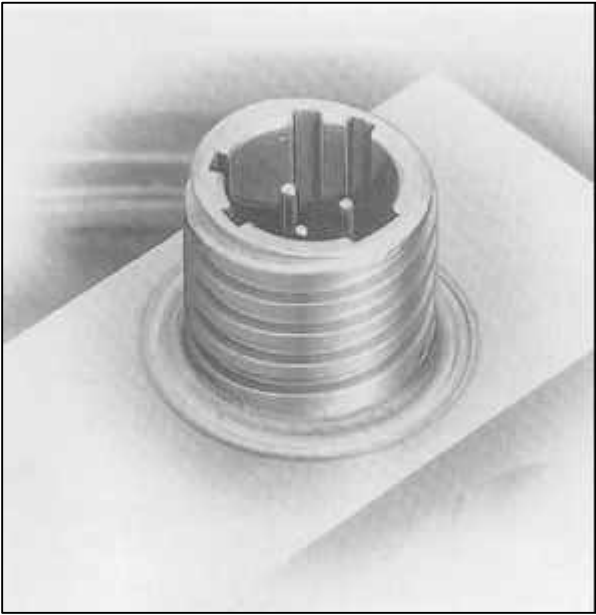
Contact Removal

CAUTION extra care is required in this operation to prevent damage to the connector. Remove the rear accessory and sleeve and slide back on wire bundle. Select the proper removal tool for the size of contact from table. The same tool is used for both pin and socket contacts. Position the removal tool over the contacts to be removed and push until tool probe is fully bottomed, shown when indicator band enters insert hole. Tool is inserted to first band only when removing pin contacts and to second band for socket contacts removal. Slide the plunger knob forward to remove contact. NB removed tool is inserted into hole of connector.

Amphenol® 608 Specials

Hermetic Receptacles

Wall Mount, Jam Nut, Soldermount



Consult Factory for Availability.

Combat Serial Highway

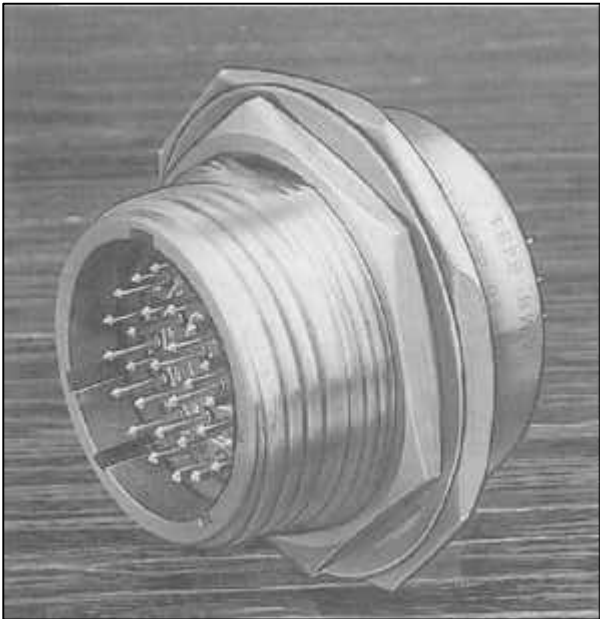
100Ω Data Bus, DEF Stan 00-19

Amphenol 716 Series



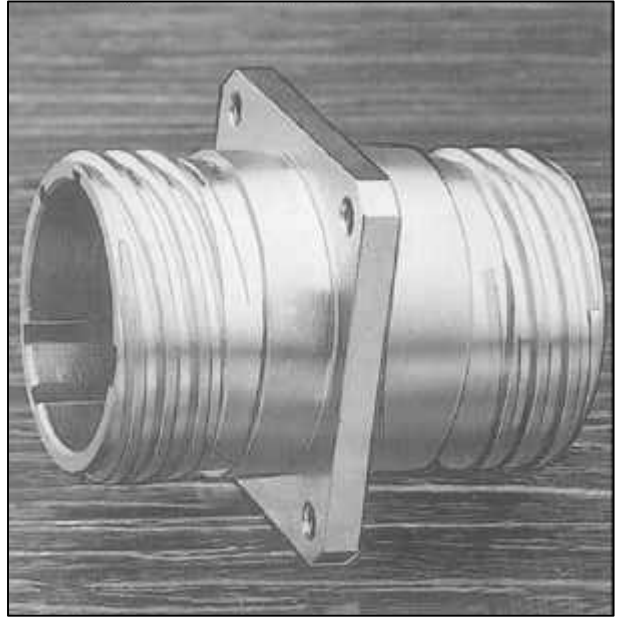
Full Range Tooled - Consult Factory for Data.

Low Pass EMI Filter Receptacles



Consult Factory for Availability.

Through Bulkhead Receptacles



Consult Factory for Availability.

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Amphenol Limited

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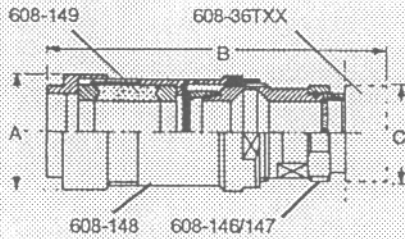
Telephone: (01227) 773200 Fax: (01227) 276571

Amphenol

608 Series

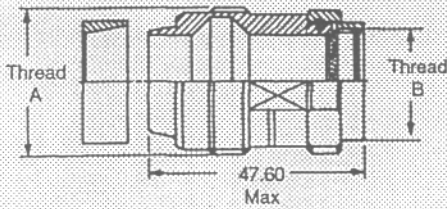
RFI sealed backshells for
608 crimp connectors

Sealed straight outlet



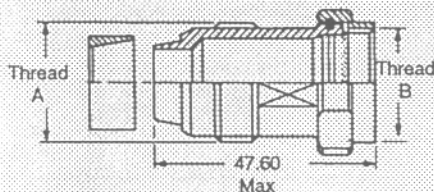
Shell size	Dia 'A' max	Length 'B' max	Dia 'C' max
8	21.00	106.70	21.03
10	23.8	106.70	23.80
12	28.15	106.70	28.27
14	31.30	106.70	31.34
16	36.45	111.70	36.50
18	39.25	111.70	39.27
20	42.40	113.40	42.42
22	45.34	113.40	45.21
24	48.00	113.40	48.39

Front sub-assembly



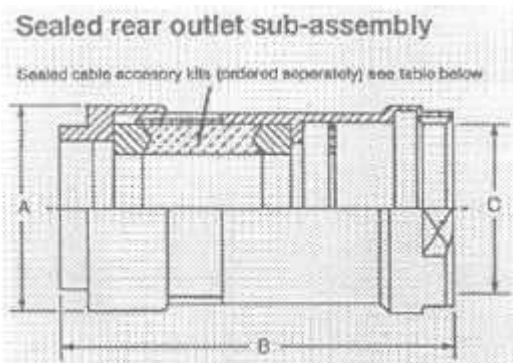
Shell size	Thread 'A'	Thread 'B'	Part No	Nato No 5935-99-654-
8	$1\frac{1}{16}$ X 20 UN-2A	$\frac{7}{16}$ X 28 UNEF-2B	608-146-08	6250
10	$\frac{13}{16}$ X 20 UNEF-2A	$\frac{9}{16}$ X 24 UNEF-2B	608-146-10	6251
12	$\frac{11}{16}$ X 20 UNEF-2A	$\frac{11}{16}$ X 24 UNEF-2B	608-146-12	6252
14	$1\frac{1}{16}$ X 20 UN-2A	$\frac{13}{16}$ X 20 UNEF-2B	608-146-14	6253
16	$1\frac{1}{4}$ X 20 UN-2A	$\frac{15}{16}$ X 20 UNEF-2B	608-146-16	6254
18	$1\frac{3}{8}$ X 20 UN-2A	$1\frac{1}{16}$ X 18 UNEF-2B	608-146-18	6255
20	$1\frac{1}{2}$ X 20 UN-2A	$1\frac{3}{16}$ X 18 UNEF-2B	608-146-20	6256
22	$1\frac{9}{16}$ X 20 UN-2A	$1\frac{5}{16}$ X 18 UNEF-2B	608-146-22	6257
24	$1\frac{11}{16}$ X 20 UN-2A	$1\frac{7}{16}$ X 18 UNEF-2B	608-146-24	6258

Reduced front outlet sub-assembly



Shell size	Thread 'A'	Thread 'B'	Part No	Nato No. 5935-99-654	
Connector	Outlet				
10	8	$\frac{11}{16}$ X 20 UN-2A	$\frac{9}{16}$ X 24 UNEF-2B	608-147-10	6268
12	10	$\frac{13}{16}$ X 20 UNEF-2A	$\frac{11}{16}$ X 24 UNEF-2B	608-147-12	6269
14	10	$\frac{13}{16}$ X 20 UNEF-2A	$\frac{13}{16}$ X 20 UNEF-2B	608-147-14	6270
16	12	$\frac{15}{16}$ X 20 UNEF-2A	$\frac{15}{16}$ X 20 UNEF-2B	608-147-16	6271
18	14	$1\frac{13}{16}$ X 20 UN-2A	$1\frac{1}{16}$ X 20 UNEF-2B	608-147-18	6272
20	16	$1\frac{1}{4}$ X 20 UN-2A	$1\frac{5}{16}$ X 18 UNEF-2B	608-147-20	6273
22	16	$1\frac{1}{4}$ X 20 UN-2A	$1\frac{5}{16}$ X 18 UNEF-2B	608-147-22	6274
24	18	$\frac{3}{8}$ X 20 UN-2A	$1\frac{11}{16}$ X 18 UNEF-2B	608-147-24	6275

Amphenol Ltd
Marine Products



Shell Size	'A' dia max.	Length 'A' max.	Thread 'C'	Part No	Nato No 5935-99-654-
8	21.00	65.55	1 ¹ / ₁₆ X 20 UN-2B	608-148-08	6284
10	23.80	65.55	1 ³ / ₁₆ X 20 UNEF-2B	608-148-10	6285
12	28.15	65.55	1 ⁵ / ₁₆ X 20 UNEF-2B	608-148-12	6286
14	31.30	65.55	1 1 ¹ / ₁₆ X 20 UN-2B	608-148-14	6287
16	36.45	70.55	1 1 ¹ / ₄ X 20 UN-2B	608-148-16	6288
18	39.25	70.55	1 3 ³ / ₈ X 20 UN-2B	608-148-18	6289
20	42.40	70.55	1 1 ¹ / ₂ X 20 UN-2B	608-148-20	6290
22	45.34	70.55	1 9 ¹ / ₁₆ X 20 UN-2B	608-148-22	6291
24	48.00	70.55	1 1 ¹ / ₁₆ X 20 UN-2B	608-148-24	6292

Rear section Shell size	Cable diameter (mm)	Part Number	Nato number 5935-99-654
8	8mm to 4mm	608-149-6302	6302
10	11mm to 7mm	608-149-6303	6303
	8mm to 4mm	608-149-6305	6305
12	14mm to 10mm	608-149-6310	6310
	11 mm to 7mm	608-149-6311	6311
14	17mm to 13mm	608-149-6537	6537
	14mm to 10mm	608-149-6314	6314
	11mm to 7mm	608-149-6316	6316
16	20mm to 16mm	608-149-6320	6320
	17mm to 13mm	608-149-6322	6322
	14mm to 10mm	608-149-6325	6325
	11 mm to 7mm	608-149-6538	6538
18	23mm to 19mm	608-149-6360	6360
	20mm to 16mm	608-149-6361	6361
	17mm to 13mm	608-149-6539	6539
20	14mm to 10mm	608-149-6541	6541
	26mm to 22mm	608-149-6542	6542
	23mm to 19mm	608-149-6543	6543
	20mm to 16mm	608-149-6335	6335
	17mm to 13mm	608-149-6337	6337
	14mm to 10mm	608-149-6544	6544
22	29mm to 25mm	608-149-6545	6545
	26mm to 22mm	608-149-6343	6343
	23mm to 19mm	608-149-6546	6546
	20mm to 16mm	608-149-6344	6344
	17mm to 13mm	608-149-6547	6547
24	32mm to 28mm	608-149-6548	6548
	29mm to 25mm	608-149-6549	6549
	26mm to 22mm	608-149-6550	6550
	23mm to 19mm	608-149-6348	6348
	20mm to 16mm	608-149-6349	6349
	17mm to 13mm	608-149-6551	6551

Note: Size 20 seal plugs are supplied with each seal kit

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