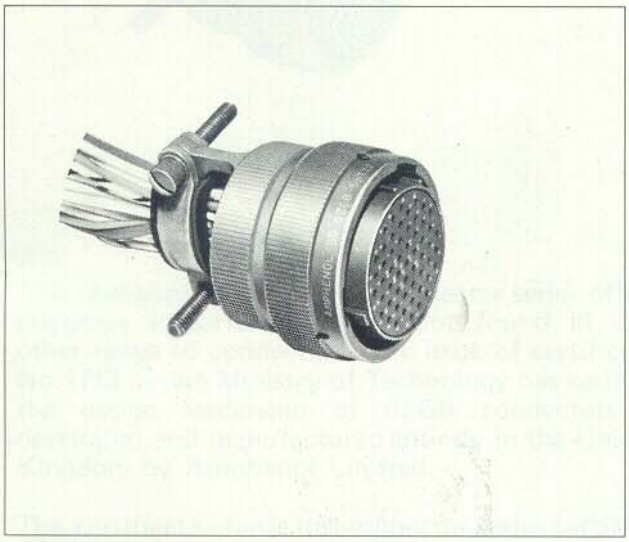
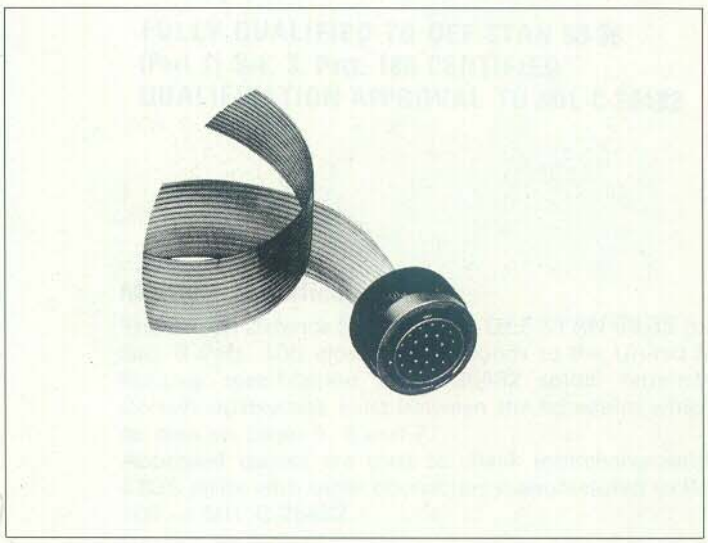
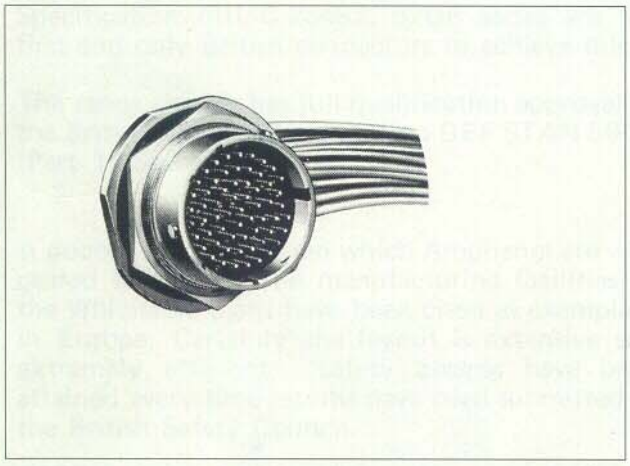
62/162 GB Series

CE-2

Miniature Bayonet Lock Connectors
MIL-C-26482



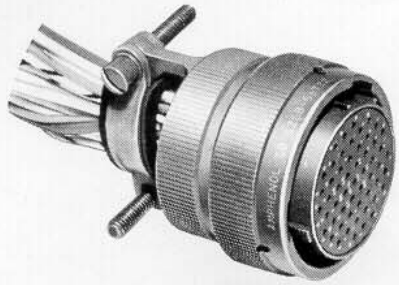




CONTENTS

Amphenol

an LPL company



Amphenol 62GB solder connectors

FULLY QUALIFIED TO DEF STAN 59-35 (Part 1) Sec. 3. Patt. 105 CERTIFIED QUALIFICATION APPROVAL TO MIL-C-26482

This miniature bayonet lock connector series offers designers important features not found in any other range of connectors. The issue of certificate No. 1713 by the Ministry of Technology has verified the design leadership of 62GB connectors – developed and manufactured entirely in the United Kingdom by Amphenol Limited.

The certificate grants the connector series certified qualification approval to the United States Military Specification MIL-C-26482. 62GB series are the first and only British connectors to achieve this.

The range already has full qualification approval to the British Defence Specification DEF STAN 59-35 (Part 1) Sec. 3 Patt. 105.

A doubly strong position which Amphenol are well geared to handle. The manufacturing facilities of the Whitstable plant have been cited as exemplary in Europe. Certainly the layout is extensive and extremely efficient; safety awards have been attained every time returns have been submitted to the British Safety Council.

62GB Series connectors have been well established with Government authorities on an international scale and users can be found in Sweden, Denmark, Norway, Finland, Germany, Spain, Holland, India, Canada and Italy.

Derating

Connectors must be derated under the following operating conditions :

1. At elevated temperatures, the current ratings are reduced as shown in the table on page 10.
2. At high altitudes, revised voltage ratings become effective as shown on page 11.
3. When connectors to different specifications are intermated (e.g. Pattern 105 and MIL-C-26482), the combination must not be operated under conditions more severe than the less stringent clause of either specification.

Amphenol 62GB connectors are designed to meet the most stringent requirements of both specifications.

Military Specifications

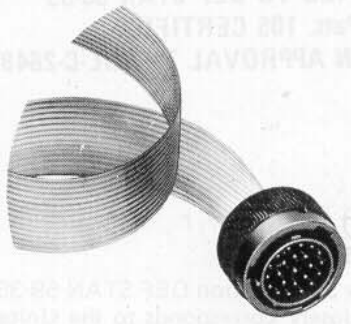
The British Defence Specification DEF STAN 59-35 (part 1) Sec. 3 Patt. 105 closely corresponds to the United States Military specification MIL-C-26482 solder terminations. Certain differences exist between the schedules which can be seen on pages 5, 6 and 7.
Approved gauges are used to check interchangeability of 62GB series with other connectors manufactured to Pattern 105 or MIL-C-26482.

Basic Construction

Connector shells are machined from solid aluminium bar stock–not forged or extruded as in competitive designs. Machining has inherent advantages in terms of strength and adaptability. 62GB Series can be supplied in brass or stainless steel, for instance.
The normal shell finish used, which has a high resistance to corrosion, is cadmium plating with an olive-drab chromate treatment. Other finishes may be supplied to special order, such as bright cadmium plate.
Inserts are of polychloroprene rubber compounded to an Amphenol specification. Operating temperature range is −55°C to +125°C, and the connectors have gold-plated contacts designed for soldered connections. Configurations for size 20 contacts range between 2 contacts in the size 8 12·7mm (0·5in diameter) shell up to a maximum of 61 contacts in the size 24 36·1mm (1·5in diameter) shell. Intermediate sizes, and contact data for heavier current ratings are shown in the insert availability chart on page 10 and 11.

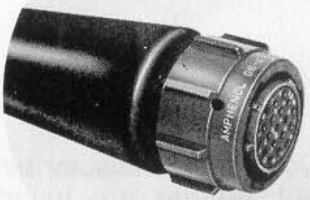
Protection Against Mis-mating or Cross-Plugging

In Pattern 105 positive shell-to-shell keying is provided with keys and keyways in a choice of either the normal (N) or any of the four preferred alternate positions: B, C, E and F. This prevents mismating between shells of different orientations and overcomes the difficulties associated with rotated inserts and a standard key/keyway orientation. In the latter system, damage to the inserts or contacts can result if excessive force is used to engage non-mating pairs.
Rotated inserts are, however, permissible in Pattern 105 connectors if required to mate with or replace units to MIL-C-26482 mounted in existing equipment. Connectors having *normal* orientations manufactured to Pattern 105 or MIL-C-26482 are fully intermateable as also are connectors with inserts in positions W, X, Y or Z.



Film Wire

Receptacles may be supplied with pin or socket contacts to suit flexible printed wiring under deviation (219).



Rough-grip Heavy Duty Coupling Rings

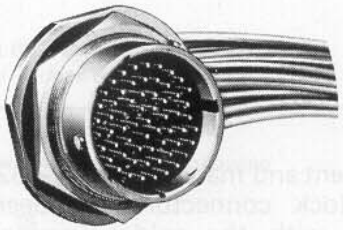
Designed for use in difficult situations such as arctic temperatures where gloves would be worn or in muddy conditions where an equal 'grip' problem exists. The rough-grip style of coupling ring has been found so useful that it is now incorporated into the Defence Standard. Deviation (044).

Front Demountable Coupling Rings

This feature is unique to Amphenol's connectors and has important users benefits. A damaged coupling ring can be replaced or the bayonet track cleansed of dirt and the ring refitted. Both these operations can be carried out in the field as an emergency.

Lever Coupling Rings

Amphenol's lever coupling ring design allows extremely close mounting of connectors. Mating and unmating is achieved with a 120° movement and it is easy to apply torque to the lever when connectors are mounted in confined spaces. Deviation (218).

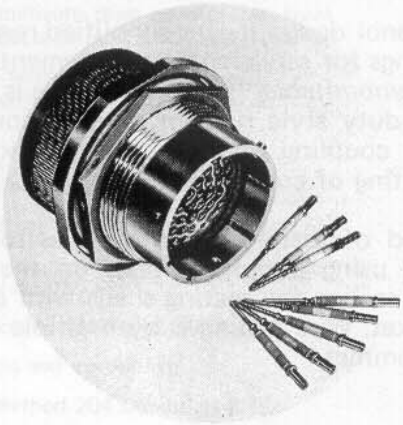


Sealing

Peripheral seals are provided on the rubber inserts and the mating shells are sealed by a square-section gasket. Wire-sealing is achieved by the use of multiple risers in the rear grommet. Leakage rate for 62GB connectors is less than 1 cc per hour, 96.6 kN/m^2 (14 p.s.i.) for 62GB connectors.

Hermetic Seal Connectors

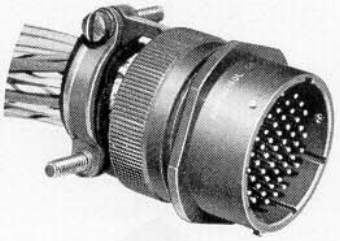
Single hole fixing, solder mounting and square flange receptacles with pin contacts are available with Amphenol one-piece glass-to-metal hermetic seals. Identoseal permanent coding is used for contact identification. Leakage rate is less than ·003 cm^3 (0·1 micron cubic feet) of helium per hour. Hermetic connectors have the lowest silhouette of any connector in the range; thus they are particularly useful in non-hermetic applications where space is at a premium. Hermetic styles are also designed to comply with MIL-C-26482.



Potting

Plugs and certain receptacles may be supplied with nylon potting moulds as listed on pages 8 and 9. Potting moulds with location rings are also available separately and are shown in the cable accessories section on page 26. These moulds are intended to be left in position after the compound has cured. Potting compounds which have given satisfactory results are Silcoset 102 and British Paints PR 1201 Q.
Amphenol is fully equipped to undertake all aspects of potting.

Connectors with built-in filtering against conducted electro magnetic interference can be ordered under the series number 482. These are environmentally and electrically compatible with 62GB series. As well as being intermateable they can also be mounted within the same cut-out dimensions.



Amphenol 162 GB crimp connectors

DESIGNED TO COMPLY WITH MIL-C-26482 AND BS 9522-N001, THE SUCCESSOR TO DEF 5326 Patt.603

Development and manufacture of 162GB miniature bayonet lock connectors has been closely co-ordinated with the solder version. The entire programme has been carried out at Amphenol's Whitstable Plant. The precision machinery and measurement control processes used for the production of 162GB crimp connectors are the same as those used to produce 62GB solder connectors.

Full intermountability and intermateability are absolutely guaranteed.

162GB Series crimp connectors share many of the features of 62GB solder connectors. Coupling is achieved with a triple-track bayonet locking system which gives positive alignment on all shell sizes. When connector halves are fully mated there is a definite click. Inspection holes in the coupling ring will then reveal the bayonet pins on the receptacle which are clearly marked in yellow.

The Amphenol design means simplified removal of coupling rings for servicing or replacement as they are *front demountable.* In addition there is a rough grip heavy duty style ring for arduous conditions and a lever coupling ring which allows extremely close mounting of connectors.

The method of sealing is the same as for 62GB connectors; using peripheral seals on the rubber inserts and sealing the mating shells with a square section gasket. Wire sealing is by multiple risers in the rear grommet.

Derating

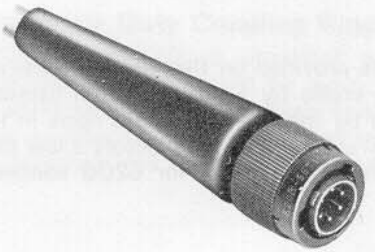
Connectors must be derated under the following operating conditions :

1. At elevated temperatures, the current ratings are reduced as shown in the table on page 10.
2. At high altitudes, revised voltage ratings become effective as shown on page 11.
3. When connectors to different specifications are intermated (e.g. BS 9522-N001 and MIL-C-26482), the combination must not be operated under conditions more severe than the less stringent clause of either specification.

Amphenol 162GB connectors are designed to meet the most stringent requirements of both specifications.

Audio Applications

Contacts are suitable for tinsel cord applications.



Cable Assemblies

Amphenol is fully equipped to undertake the preparation of all types of cable assemblies complying with the military vehicles and engineering establishments and fighting vehicles requirements of the Ministry of Defence – the Ministry of Environment (Motorways) for motorway control equipment – the Post Office manufacturing code and to the British Standards Institute when applicable to Cable systems. Control procedures carried out in accordance with MIN DEF 05-21. Approval numbers BS 9000, 1043/M and CAA AD/1450/58. Moulded terminations form a specialised service by the company. The process offers such advantages as a waterproof seal between cable and connector back-end, mechanical protection, and a homogeneous joint between moulding and cable.

Other Amphenol Products

Amphenol products include: printed circuit, rack and panel, microminiature, audio; hermetic and r.f. connectors; integrated circuit components; trimming and precision potentiometers; concentric and digital microdials; cable, cable assemblies; fans and blowers; relays and keys; chokes and coils; r.f. coaxial switches.

62GB and 162GB Series

DESIGNED TO COMPLY WITH MIL-26482- SCHEDULE OF TESTS REQUIRED FOR QUALIFICATION APPROVAL

Tests	Brief Description
Examination of product	
Maintenance aging	Crimp only There is no damage to the contacts or connectors after 10 removals and insertions of the contacts.
Contact insertion and removal forces	Crimp only Insertion – does not exceed 66.7 N (15lbf.) For individual contacts. Removal – does not exceed 44.5N (10lbf.)
Contact retention	Crimp contact –Contact locking mechanisms withstands the following minimum axial forces: CONTACT SIZE 20 16 12 FORCE (N) 89 111 133 (LBF) 20 25 30 Axial displacement does not exceed 0.304mm (0.012in) when pressure is applied from face side.
Contact retention	Solder contacts. 4.45N (1 lbf. per second until specified load reached 66.7N (15 lbf.) for size 20, 111.0 N (25 lbf.) for size 16 and 111.0 N (25 lbf.) for size 12.
Operating forces	Torque measurement of mating and un-mating. Ranges from 0.905 Nm. (8 lbf.in.) on shell size 8 to 4.971 Nm. (44 lbf.in.) on shell size 24 couplings.
Insulation resistance, room temperature	Unmated connectors tested in accordance with Method 302 test condition B of MIL-STD-202.
Dielectric withstanding voltage (sea level)	Mated and unmated connectors tested in accordance with Method 301 of MIL-STD-202.
Dielectric withstanding voltage (altitude)	Tested in accordance with Method 105, test condition C of MIL-STD-202. After 30 minutes tested in accordance with Method 301 of MIL-STD-202 unmated and mated.
Initial contact resistance	Between 45 and 95 millivolts drop on wire sizes from 24 to 12. Crimp contacts to meet MIL-C-23216.
Thermal shock	Unmated connectors tested in accordance with Method 107, condition B of MIL-STD-202 except min temp is –55°C.
Air leakage	62GB items no more than 16.387 cm^3/hr. (1 atmospheric cu in/hr)
Air leakage hermetic	No more than 0.0003 cm^3 (0.01 micron cubic feet) of helium per hour.
Insulation resistance at elevated temps (short time)	Greater than 3 megohms 250 hr at 125°C.
(long time)	Greater than 12 megohms 1000 hr at 105°C.
Durability	500 cycles of coupling and uncoupling.
Vibration	In accordance with Method 204 Condition B of MIL-STD-202.
Shock	Impulses of 50 G's duration of 11 ±1 milliseconds
Moisture resistance	In accordance with Method 106 of MIL-STD-202.
Corrosion	Salt spray to Method 101 Condition B of MIL-STD-202.
Operating forces	From 0.905 Nm. (8 lb.in.) for shell size 8 to 4.971 Nm. (44 lb.in.) for shell size 24.
Contact resistance	As per contact resistance test of MIL-C-23216.

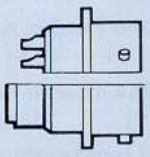
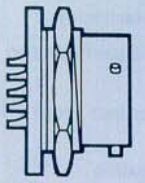
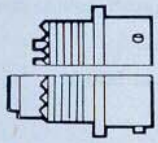
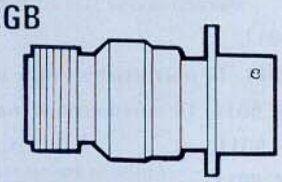
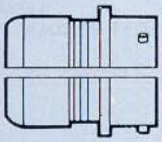
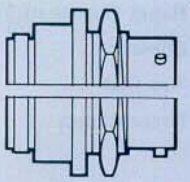
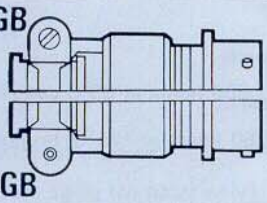
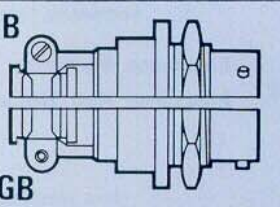
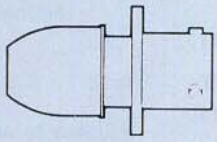
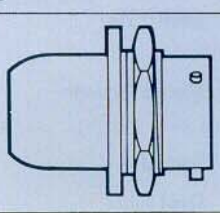
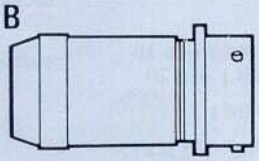
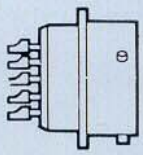
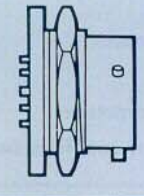
Tests	Brief Description
(a) Solvent immersion hydraulic fluid	Conforming to MIL-H-5606 20 hrs
(b) Solvent immersion lubricating oil	Conforming to MIL-H-7808 20 hrs
Insert retention	Effective pressure differential of 5 17.0 KN/m^2 (75 p.s.i.)
Insert retention hermetic	Effective pressure differential of 13 80.0 KN/m^2 (200 p.s.i.)
Contact retention crimp	Axial loads between 6 6.67 N (15 lbf.) and 111.2 N (25 lbf.)
Contact retention solder. Post examination of product	Axial loads between 6 6.67 N (15 lbf.) and 111.2 N (25 lbf.)
Solder Contacts	
Contact engagement and separation	In accordance with MIL-C-23216.
Resistance to test probe damage	In accordance with MIL-C-23216
Protective Covers and Storage	
	Components suitability after storage and use of recommended protective covers.
Examination of product Operating forces	Measurement of receptacles, plugs and protective covers mating and unmating forces.
Moisture resistance	Crimp contacts to Method 106 of MIL-STD-202 Solder contacts tested installed in heavy condensation.
Corrosion	Salt spray to Method 101, condition B of MIL-STD-202.
Cover chains tensile strength	111.2 N (25 lbf.) from various directions.
Air leakage	69.0 KN/m^2 (10 p.s.i.) applied to inside of protective covers.
Crimp Contact Retention Feature	
Examination of product	*Test to establish crimp effectiveness*
Maintenance aging (contacts only)	Involves repeated insertion/removal of contacts and mating and unmating of connectors.
Contact retention	Loads applied in both directions.
Connector Assembly – Class J	
Examination of product	
Thermal shock	In accordance with Method 107 Condition B of MIL-STD-202.
Water pressure	Immersion 1.829 m (6 ft.) under water for solder type connectors.
Air leakage	Solder receptacles 206.9 KN/m2 (30 p.s.i.) across connectors. Others to Method 112 Condition C, procedure I of MIL-STD-202.

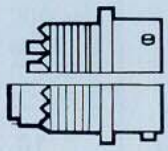
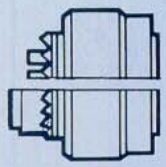
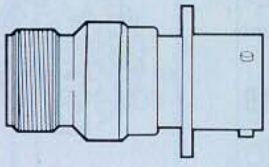
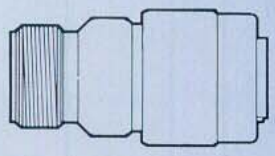
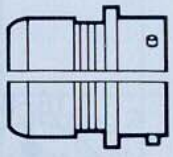
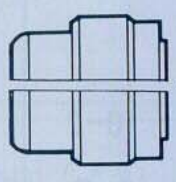
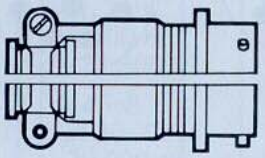
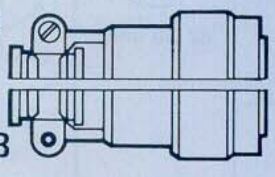
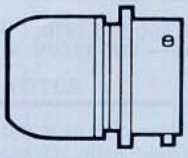
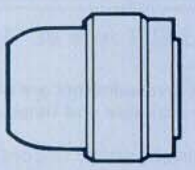
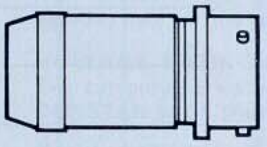
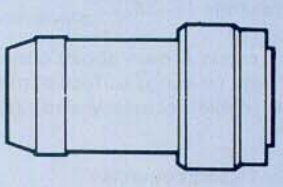
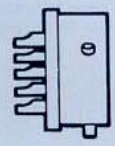
62GB Series

FULLY QUALIFIED TO DEF STAN 59-35 (Part 1) Sec. 3 – SCHEDULE OF TESTS REQUIRED FOR QUALIFICATION APPROVAL.

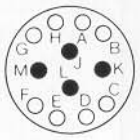
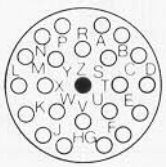
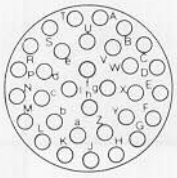
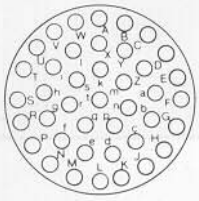
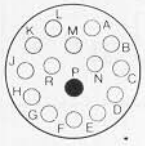
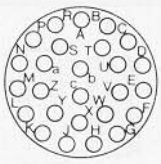
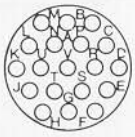
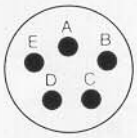
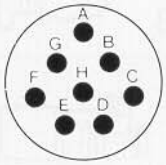
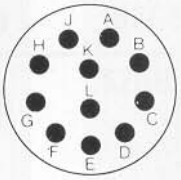
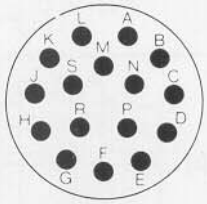
General Examination	
Compatibility (Gauging)	
Polarisation	
Engagement and Disengagement Force	0.904Nm – 4.067Nm (8.36 lbf.in.) torque according to shell size.
Contact Hold Force	.343N (.077 lbf.) size 20 .981N (.22 lbf.) size 16
Sealing	Max leakage: 1 cc per hour at 96.6 KN/m^2 (14 p.s.i.) differential
Contact Resistance	5 milliohms max.
Screen Continuity	5 milliohms max.
Insulation Resistance	5000 megohms at 500 V
Ionisation	Unspecified
Voltage Proof	See page 11
Soldering	As DEF 5011.
Bumping	As DEF 5011. 10 microseconds max intermittency
Vibrating	V3 as DEF 5011. 10 microseconds max intermittency
Shock	S2 as DEF 5011.
Acceleration	A2 as DEF 5011.
Rapid Change of Temperature	T5 as DEF 5011.
Climatic	D1/H5 as DEF 5011 21 days
Fire Risk	Not applicable
Fireproofness	Not applicable
Damp Heat Long Term	H6. 56 days.
Endurance, Mechanical	500 operations
Endurance, High Temperature	Batch 1 : 1,000 hours at 85°C carrying the specified current. Batch 2 : 250 hours at 125°C, no current
Shelf Life	per DEF 5011, 3 year test
Mould Growth	per DEF 5011.
Salt Mist	per DEF 5011.
Dust	per DEF 133.
Robustness of Terminations	44.5N (10 lbf.) size 16 22.3N (5 lbf.) size 20
Contact Retention (in insert)	44.5N (10 lbf.)
Insert Retention (in shell)	516.5 KN/m^2 (75 p.s.i.)
Test Prod Damage	.056 Nm (0.5 lbf.in.) size 20 .225 Nm (2 lbf.in.) size 16
Impact	5 impacts from 0.914 m (3 ft.)
Immersion	1.524 m (5 ft.) water for 1 hour
Solvent Resistance	14 fluids

Table of shell styles

	BOX MOUNTING RECEPTACLES (4-hole Fixing) Page 14 & 15	BOX MOUNTING RECEPTACLES (4-hole Fixing) Page 14 & 15)	SINGLE HOLE FIXING RECEPTACLES Page 16-17
PLAIN SHELL		62GB 12E 162GB 	CC 1301 62GB 57A 
THREADED SHELL	CC 1303 62GB 50T 30T 162GB 		
GENERAL DUTY	62GB 10A 		
GROMMET SEAL	62GB 10E 162GB 		CC 1302 62GB 14E 162GB 
STRAIN RELIEF CLAMP (For details of right angle strain relief clamps. see page 26)	62GB 10F 162GB 		62GB 14F 162GB 
POTTED SEAL	62GB 10P 		62GB 17P 
UNSCREENED JACKETED CABLE CLAMP	62GB 10J 		
HERMETIC SEAL Page 18 & 19		62GB 12H 	62GB 17H 

SOLDER MOUNTED RECEPTACLES Page 18 & 19	CABLE MOUNTING RECEPTACLES Page 20 & 21	PLUGS Page 22 & 23
	CC 1304 62GB 51T 162GB 31T 	CC 1305 62GB 56T 162GB 36T 
	62GB 11A 	62GB 16A 
	62GB 162GB 11E 	62GB 162GB 16E 
	62GB 162GB 11F 	62GB 162GB 16F 
	62GB 11P 	62GB 16P 
	62GB 11J 	62GB 16J 
62GB 13H 	62GB ONLY Styles marked with CC numbers are approved to DEF STAN 59-35 (Part 1) Sec. 3.	

Insert Availability

8	10	12	14	16	18	20
8-2*  62 GB only	**10-6** 	**12-10** 	**14-12†** 	**16-23*** 	**18-32** 	**20-41** 
8-3*  -62 GB only	**10-7** 		**14-15**  62 GB only	**16-26** 		
8-3 3 			**14-19** 			
8-4*  62 GB only						
8-98 	**10-2**  62 GB only	**12-3**  62 GB only	**14-5** 	**16-8** 	**18-11** 	**20-16**  62 GB only

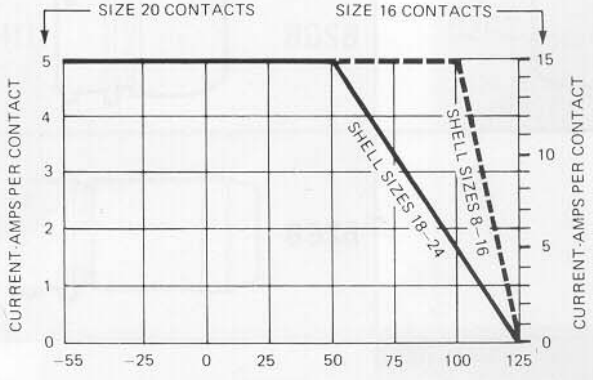
NOTES

* These insert arrangements are not included in Pattern 105 but are available and listed in MIL-C-26482.

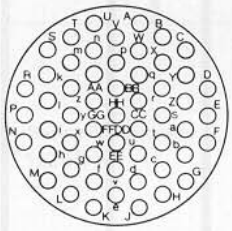
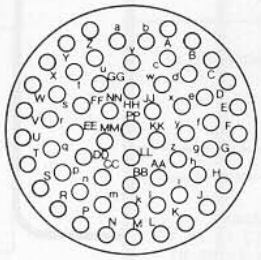
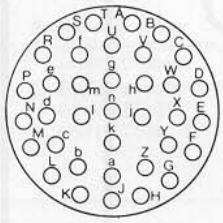
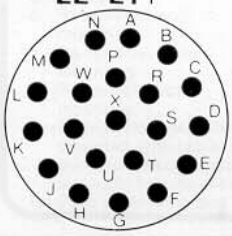
† Due to the arrangement of contacts in the 14–12 insert arrangement it is classified, for current derating, in the shell size range 18–24.

Lettering of inserts shown above corresponds to views of front (mating) surface of pin inserts or rear face (cable accessory end) of socket inserts.

KEY ● No. 16 size contacts
O No. 20 size contacts



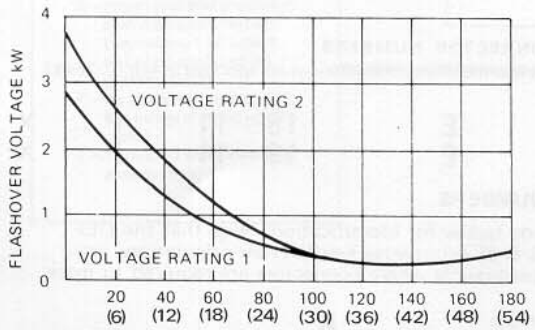
Current-temperature derating curve

22	24
22-55 	**24-61** 
22-36  162 GB only	
22-21†  † Available to special order only	

VOLTAGE RATINGS

Altitude	d.c. working voltage	a.c. working voltage r.m.s.	Proof voltage
Rating 1			
Sea level	**700**	**500**	**2200**
300 mb at 20 C 8,500m (27,800 ft)	375	265	1250
44 mb at 20 C 20,000 m (66,000 ft.)	200	140	530
Rating 2			
Sea level	**1250**	**900**	**3250**
300 mb at 20°C. 8,500 m (27,800 ft)	550	390	1750
44 mb at 20 C 20,000 m (66,000 ft)	300	210	775

(Figures in bold type are from DEF STAN 59–35 (Part 1) Sec. 3 Patt. 105)



Relationship between flashover voltage and altitude for each voltage rating

NOTES

* Because safe working voltages at altitudes above sea-level are dependent upon individual conditions of use, these values are not specified in DEF STAN 59-35 (Part 1) Sect. 3 Patt. 105 but approximate values are included here for the guidance of designs.

VOLTAGE RATINGS

Two categories of voltage rating are specified in DEF STAN 59-35 (Part 1) Sec. 3 Patt. 105.

Rating 1 (700V d.c. working at sea-level) Applicable to the high contact density inserts shown in the upper section of the insert availability diagram above.

Rating 2 (1250V d.c. working at sea-level) Applicable to the inserts shown in the lower section of the insert availability diagram.

Altitude derating. Information on voltage derating for operation at altitudes above sea-level can be obtained from the flashover voltage.altitude curves on the left.

Ordering Amphenol 62GB Series Connectors

To obtain the specific connector required, write down the connector number from the typical example below. Only inserts shown in the availability chart on p. 10&11 can be specified. All connectors are delivered with protective dust covers.

Shell Style

Insert Arrangement

62GB — 1 4 E — 18 — 11 P B (044)

Series designation
62 GB — Aluminium shell
62 GB SS — Stainless steel shell*
62 GB CU — Brass shell*
*consult factory for availability

Specification key
1 — Styles originally specified in MIL-C-26482
5 — Styles exclusive to DEF STAN 59-35 (Part 1) Sec. 3.

Shell style
0 — Receptacle, wall mounting
1 — Receptacle, cable mounting
2 — Receptacle, box mounting
3 — Receptacle, solder flange mounting.
4 — Receptacle, internally threaded, with cable accessories as illustrated, for single hole mounting.
6 — Plug, cable mounting
7 — Receptacle, plain shell, single hole mounting

Environmental code
A — Plain shell, exposed solder buckets. No grommet
E — Insert seal and grommet seal with grommet nut (excluding 12E which has plain shell and no grommet or nut)
F — As (E) but grommet nut has integral strain relief clamp
H — Hermetic seal, no cable accessories
J — As (E) but with resilient gland seal and nut for unscreened jacketed cable. No grommet supplied. See pp. 26–27 for accessory to accept screened jacketed cable
P — Potting construction complete with potting mould
T — Exposed solder buckets. Threaded shell for cable accessories

Shell size (in sixteenths of an inch)
8, 10, 12, 14, 16, 18, 20, 22, 24

Number of contacts
2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 16, 19, 21*, 23, 26, 32, 41, 55, 61
*consult factory for availability

Contact Style
P — Pins
S — Sockets
For hermetic connectors, P2 denotes pin contacts with flattened and pierced terminations. P3 denotes pin contacts with solder bucket terminations

Orientation
(Omit if normal orientation)
Keys/Keyways: A*, B, C, D*, E, F. (see p. 31)
Inserts: W, X, Y, Z. (see p. 30)
*Inactive for new designs

Deviations
(044) Rough grip heavy duty coupling ring
(046) Box mounting plug
(214) Fitted with extension back shell and strain relief clamp without grommet on F types only.
(218) Lever coupling ring.
(219) Contacts for flexible printed wiring (57A and 12E only)
(639) Bright cadmium plated shells

HOW TO ORDER FROM MS CONNECTOR NUMBERS

Connector numbers in the AMPHENOL and MS numbering systems. Only alternative insert orientations are specified in MIL-C-26482 which does not include alternative key/keyway orientations.

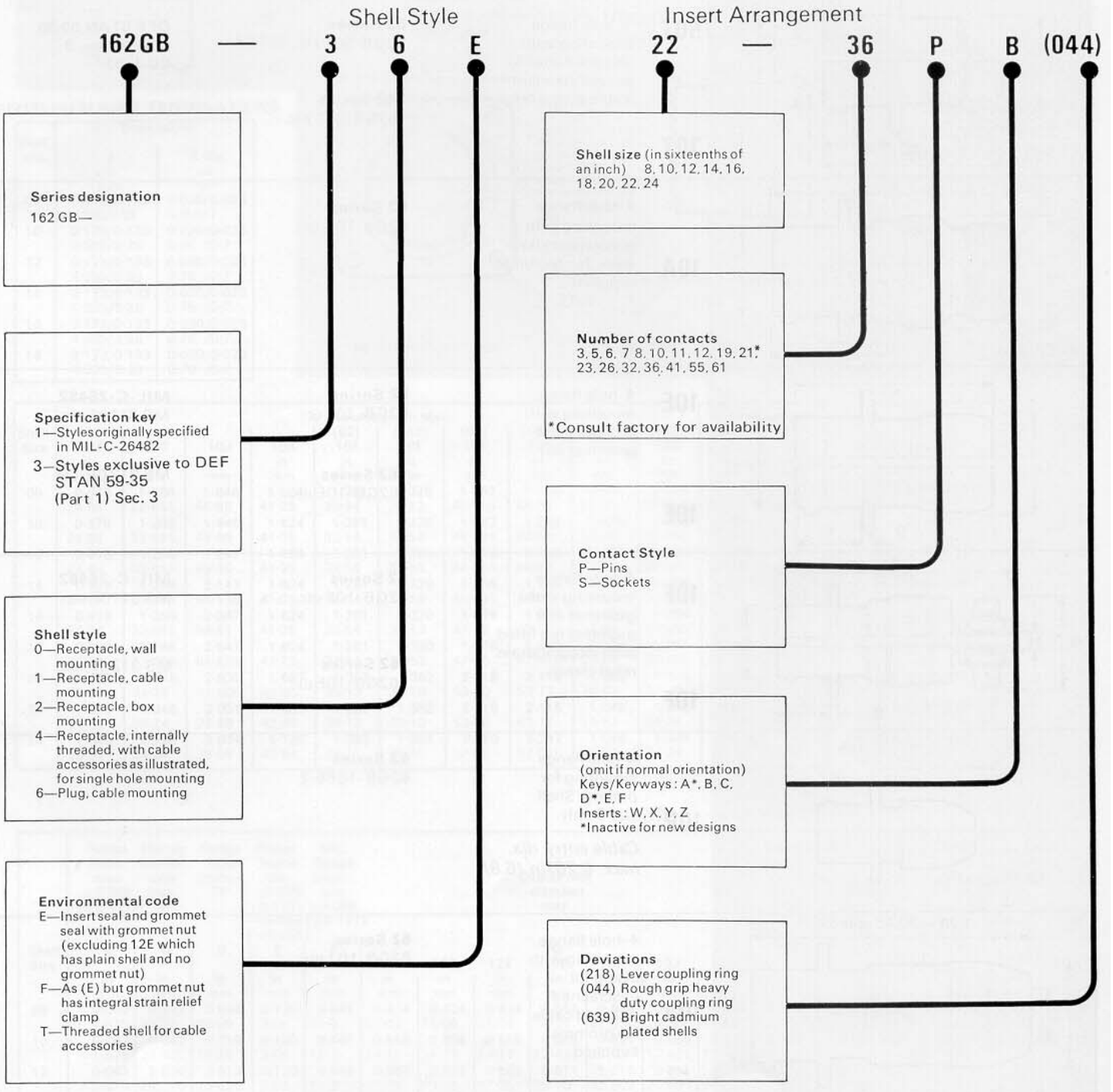
MS31		14	E	18 - 11	P	X
62GB	—	14	E	18 - 11	P	X

HOW TO ORDER FROM DEF CONNECTOR NUMBERS

Select the connector style by reference to DEF STAN 59-35 (Part 1) Sec. 3 using the code below for identification. Note that the DEF Specification includes only certain connectors from the table of styles as shown on pp. 8 & 9. Alternative key/keyway orientations are preferred in the DEF Specification to prevent mis-mating. Rotated inserts are, however, permissible where connectors are required to mate with or replace items to MIL-C-26482 on existing equipment.

62GB —	14E	18-11	P	B
CC	1304	18-11	P	B
	Style	Insert Arrangement, see above	P — Pin contacts S — Socket contacts	Alternative Key/Key way orientation

Ordering Amphenol 162GB Series Connectors

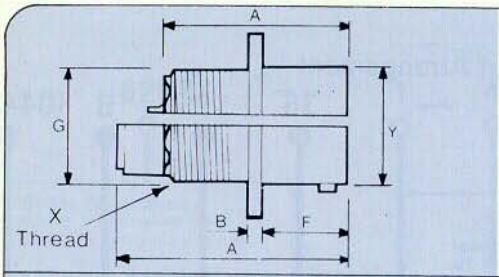
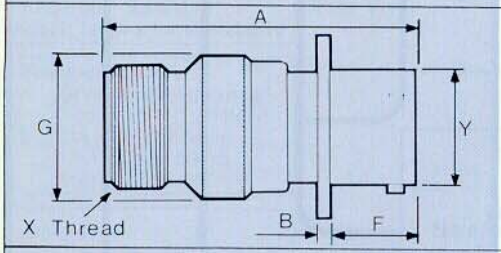
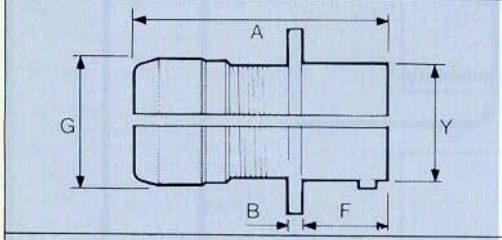
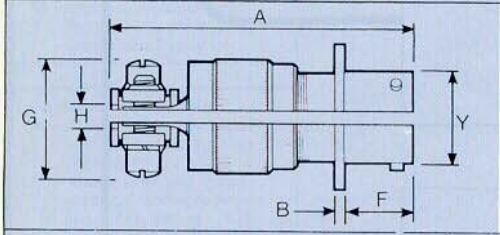
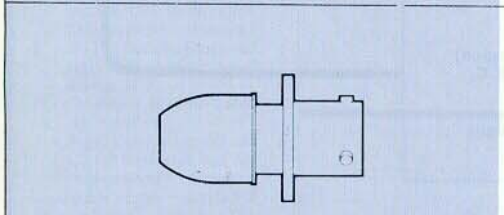
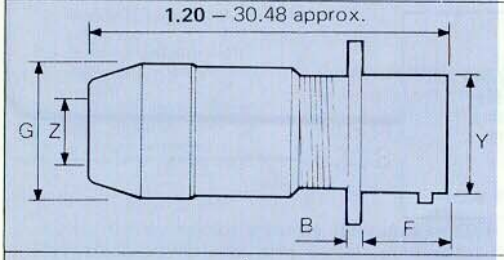
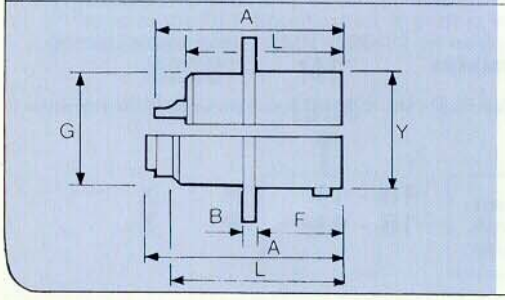


HOW TO ORDER FROM MS CONNECTOR NUMBERS

Connector numbers in the AMPHENOL and MS numbering systems. Only alternative insert orientations are specified in MIL-C-26482 which does not include alternative key/keyway orientations.

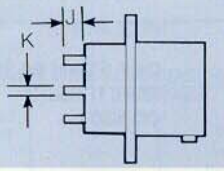
MS31	—	24	E	18 - 11	P	X
162GB		14	E	18 - 11	P	X

Box Mounting Receptacles

	Description	Amphenol Part No.	Military No.
	**50T** 4-hole flange mounting with threaded shell to accept standard cable accessories. **30T**	**62 Series** 62GB-50T etc. **162 Series** 162GB-30T etc.	**DEF STAN 59-35 (Part 1) Sec. 3 CC 1303**
	**10A** 4-hole flange mounting with general duty back shell. No grommet supplied.	**62 Series** 62GB-10A etc.	
	**10E** 4-hole flange mounting with grommet and grommet nut. **10E**	**62 Series** 62GB-10E etc. **162 Series** 162GB-10E etc.	MIL-C-26482 MS 3110E etc. MS 3120E, etc.
	**10F** 4-hole flange mounting with grommet and grommet nut fitted with integral strain relief clamp. **10F**	**62 Series** 62GB-10F etc. **162 Series** 162GB-10F etc.	MIL-C-26482 MS 3110F etc. MS 3120F, etc.
	**10P** 4-hole flange mounting for potting. Shell size 8 only. *Cable entry dia. max. 0.267in (6.8)*	**62 Series** 62GB-10P8-2	
	**10J** 4-hole flange mounting with clamp for unscreened jacketed cable. No grommet supplied.	**62 Series** 62GB-10J etc.	
	**12E** 4-hole flange mounting with plain shell for direct wiring to exposed solder buckets. Film wire terminations available on 62 Series as deviation (219). 162 Series style has integral grommet. **12E**	**62 Series** 62GB-12E etc. **162 Series** 162GB-12E etc.	MIL-C-26482 MS 3112E etc. MS 3122E, etc.

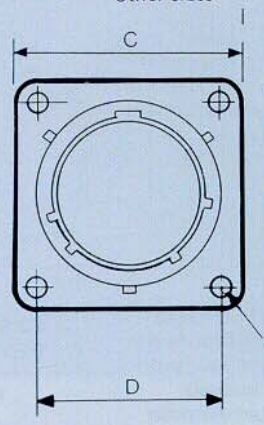
Dimensions and Mounting Details

62/162 OVERALL MATED DIMENSIONS

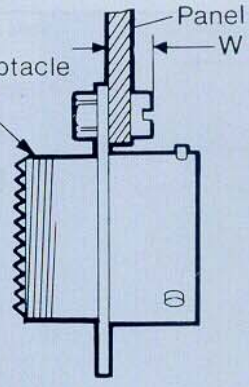


12E (219)

Add the two relevant plug and receptacle overall dimensions and deduct – 0.365 (9.271mm) for shell sizes 20, 22, 24
– 0.303 (7.696mm) for all other sizes



When receptacles are mounted on the rearface of the panel, the maximum value for dimension W must not be exceeded otherwise the receptacle cannot be mated to a plug.



Panel piercing details on Page 19 as 12H

Panel thickness with screw head W max.

Shell size	in. mm.	Shell size	in. mm.
08-18	0.100 2.540	20 - 24	0.210 5.330

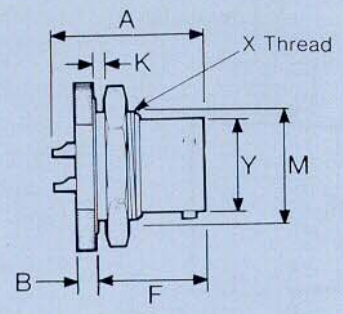
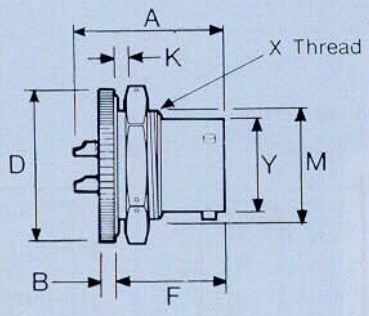
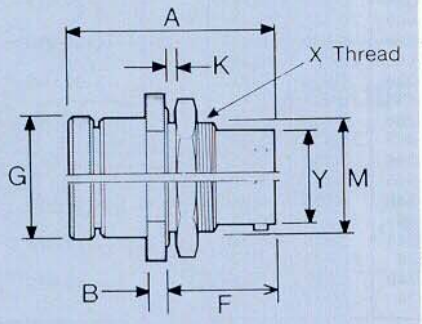
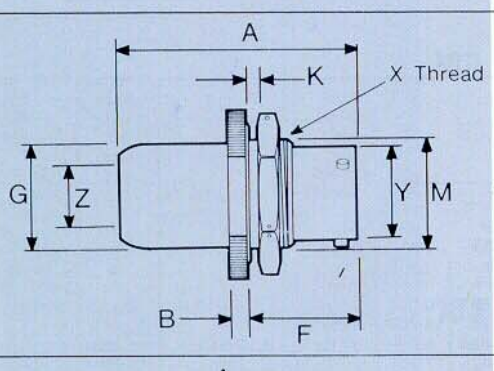
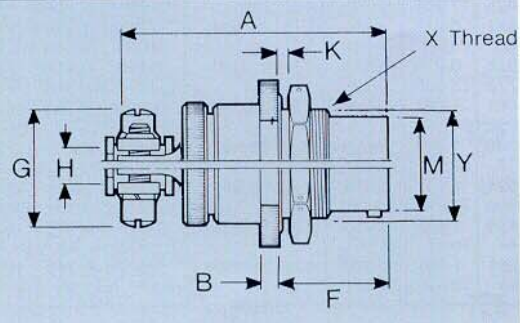
12E(219) FILM WIRE TERMINATIONS

Shell size	Dimensions J in mm	K dia. in mm
08	0.173/0.133 4.395/3.38	0.030/0.028 0.76/0.7
10	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
12	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
14	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
16	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
18	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7

Shell Size	'A' Overall Length Max. 50T in mm	30T in mm	10J in mm	10A in mm	(62) 10E in mm	(162) 10E in mm	(62) 10F in mm	(162) 10F in mm	(62) 12E in mm	(162) 12E in mm	'L' Shell Lengths (62) 12E in mm	(162) 12E in mm	Thread X 10A only
08	0·978 24·84	1·286 32·665	1·846 46·89	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·755	1·759 44·68	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	$\frac{1}{2}$–28 UNEF
10	0·978 24·84	1·286 32·665	1·846 46·89	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·755	1·759 44·68	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	$\frac{5}{8}$–24 NEF
12	0·978 24·84	1·286 32·665	1·947 49·45	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·755	1·759 44·68	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	$\frac{3}{4}$–20 UNEF
14	0·978 24·84	1·286 32·665	2·147 54·535	1·624 41·25	1·281 32·54	1·320 33·53	1·736 44·095	1·733 44·02	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	$\frac{7}{8}$–20 UNEF
16	0·978 24·84	1·286 32·665	2·347 59·61	1·624 41·25	1·281 32·54	1·320 33·53	1·876 47·65	1·873 47·575	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	1–20 UNEF
18	0·978 24·84	1·286 32·665	2·547 64·695	1·624 41·25	1·281 32·54	1·320 33·53	1·876 47·65	1·873 47·575	0·978 24·84	1·286 32·665	0·800 20·32	0·917 23·29	$1\frac{3}{16}$–18 NEF
20	1·048 26·62	1·348 34·24	2·831 71·905	1·687 42·85	1·383 35·13	1·382 35·10	2·118 53·80	2·115 53·72	1·048 26·62	1·348 34·24	0·875 22·225	0·980 24·89	$1\frac{3}{16}$–18 NEF
22	1·048 26·62	1·348 34·24	3·031 76·99	1·687 42·85	1·383 35·13	1·382 35·10	2·118 53·80	2·115 53·72	1·048 26·62	1·348 34·24	0·875 22·225	0·980 24·89	$1\frac{7}{16}$–18 NEF
24	1·048 26·62	1·348 34·24	3·074 78·08	1·730 43·94	1·383 35·13	1·382 35·10	2·250 57·15	2·247 57·075	1·048 26·62	1·348 34·24	0·875 22·225	1·023 29·895	$1\frac{7}{16}$–18 NEF

Shell Size	Flange Thickness ±0·005 (±0·127) B in mm	Flange Dimension max. sq. C in mm	Flange Hole centres TP D in mm	Flange Holes dia. +0·005 (+0·127) −0·002 (−0·051) E in mm	Mtg. Flange Location ±0·005 (±0·127) F in mm	Overall rear diameter max. G 50T in mm	30T in mm	12E in mm	10E in mm	10F in mm	10J in mm	10A in mm	Cable sleeve int. dia. ±0·005 (±0·127) H 10F only in mm	Thread X	Shell ext. dia. max. Y in mm	Cable Entry dia. Z min. closed 10J in mm	Z max. free 10J in mm
08	0·062 1·575	0·817 20·75	0·594 15·09	0·120 3·05	0·445 11·3	0·434 11·02	0·434 11·02	0·434 11·02	0·561 14·25	0·828 21·03	0·561 14·25	0·561 14·25	0·156 3·96	$\frac{7}{16}$–28 UNEF	0·473 12·015	0·168 4·275	0·230 5·84
10	0·062 1·575	0·942 23·925	0·719 18·26	0·120 3·05	0·445 11·3	0·558 14·17	0·558 14·17	0·558 14·17	0·686 17·425	0·891 22·63	0·686 17·425	0·686 17·425	0·188 4·775	$\frac{9}{16}$–24 NEF	0·590 14·99	0·205 5·205	0·312 7·925
12	0·062 1·575	1·036 26·315	0·812 20·625	0·120 3·05	0·445 11·3	0·683 17·35	0·683 17·35	0·683 17·35	0·811 20·60	1·016 25·805	0·811 20·60	0·811 20·60	0·312 7·925	$\frac{11}{16}$–24 NEF	0·750 19·05	0·338 8·585	0·442 11·23
14	0·062 1·575	1·130 28·70	0·906 23·10	0·120 3·05	0·445 11·3	0·808 20·52	0·808 20·52	0·808 20·52	0·936 23·775	1·141 28·98	0·936 23·775	0·936 23·775	0·375 9·575	$\frac{13}{16}$–20 UNEF	0·875 22·225	0·416 10·565	0·539 13·69
16	0·062 1·575	1·223 31·065	0·969 24·61	0·120 3·05	0·445 11·3	0·933 23·7	0·933 23·70	0·933 23·70	1·061 26·975	1·203 30·555	1·061 26·975	1·061 26·975	0·500 12·7	$\frac{15}{16}$–20 UNEF	1·000 25·4	0·550 13·97	0·616 15·65
18	0·062 1·575	1·317 33·45	1·062 26·575	0·120 3·05	0·445 11·3	1·057 26·85	1·057 26·85	1·057 26·85	1·186 30·12	1·426 36·22	1·186 30·12	1·186 30·12	0·625 15·875	1$\frac{1}{16}$–18 NEF	1·125 28·575	0·600 15·24	0·672 17·07
20	0·080 2·03	1·442 36·625	1·156 29·36	0·120 3·05	0·555 14·095	1·182 30·02	1·182 30·02	1·182 30·02	1·311 33·30	1·426 33·22	1·311 33·30	1·311 33·30	0·625 15·875	1$\frac{3}{16}$–18 NEF	1·250 31·75	0·635 16·13	0·747 18·975
22	0·080 2·03	1·567 39·80	1·250 31·75	0·120 3·05	0·555 14·095	1·307 33·20	1·307 33·20	1·307 33·20	1·436 36·47	1·567 39·80	1·436 36·47	1·436 36·47	0·750 19·05	1$\frac{5}{16}$–18 NEF	1·375 34·925	0·670 17·02	0·846 21·49
24	0·080 2·03	1·692 42·98	1·375 34·925	0·147 3·735	0·590 14·985	1·432 36·37	1·432 36·37	1·432 36·37	1·561 39·65	1·735 44·07	1·561 39·65	1·561 39·65	0·800 20·32	1$\frac{7}{16}$–18 NEF	1·500 38·1	0·740 18·80	0·894 22·71

Single Hole Fixing Receptacles

		Description	Amphenol Part No.	Military No.
	**57A**	Single hole fixing with plain shell for direct wiring to exposed solder buckets. Has panel O-ring seal. Film wire terminations available as deviation (219).	**62 Series** 62GB-57A etc.	**DEF STAN 59-35 (Part 1) Sec. 3 CC 1301**
	**5016** **5005** **5024**	Single hole fixing plain shell for direct wiring to exposed solder buckets. Reduced diameter flange with panel 'O' ring seal. Sizes 8, 10, 12 and 14 only. *5016 Solder buckets. Size 10 only.* *5005 P.C. pins. Size 10 only.* *5024 Solder buckets. Size 8, 12,& 14 only.*	**62 Series** 62GB-5024-XX-XX	
	**14E** **14E**	Single hole fixing with grommet and grommet nut. Has panel 'O' ring seal.	**62 Series** 62GB-14E etc. **162 Series** 162GB-14E etc.	**MIL-C-26482** MS 3114E etc. **DEF STAN 59-35 (Part 1) Sec. 3 CC 1302**
	**17P**	Single hole fixing for potting. Supplied complete with potting mould, locating ring and panel 'O' ring seal.	**62 Series** 62GB-17P etc.	**MIL-C-26482** MS 3114P etc.
	**14F** **14F**	Single hole fixing with grommet and grommet nut fitted with integral strain relief clamp. Has panel 'O' ring seal.	**62 Series** 62GB-14F etc. **162 Series** 162GB-14F etc.	**MIL-C-26482** MS 3114F

Dimensions and Mounting Details

57A (219)

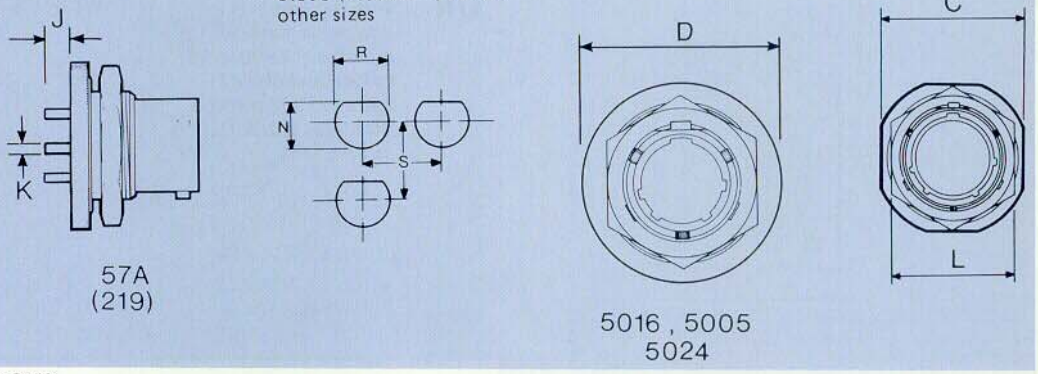
FILM WIRE TERMINATIONS

Shell size	Dimensions J in mm	K in mm
08	0.173/0.133 4.395/3.38	0.030/0.028 0.76/0.7
10	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
12	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
14	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
16	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7
18	0·173/0·133 4·395/3·38	0·030/0·028 0·76 /0·7

62/162 OVERALL MATED DIMENSIONS

Add the two relevant plug and receptacle overall dimensions and deduct — 0.365 (9.271mm) for shell sizes 20, 22, 24

— 0.303 (7.696mm) for all other sizes



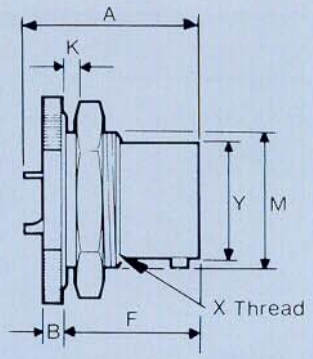
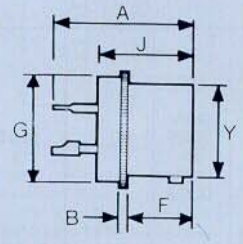
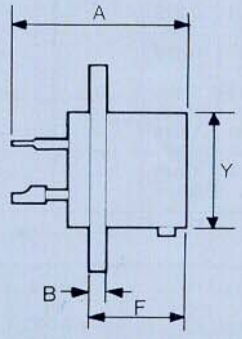
SINGLE HOLE FIXING RECEPTACLES
PANEL PIERCING DETAILS

Shell size	Mounting hole dia. ·0·005 (±0·127) R in mm	Mounting hole crs. min. S in mm	Diameter across flat ·0·005 (±0·127) N in mm	Panel thickness min. K in mm	Panel thickness max. K in mm
8	0·572 14·53	1·250 31·75	0·540 13·72	0·062 1·575	0·125 3·175
10	0·697 17·70	1·359 34·52	0·665 16·89	0·062 1·575	0·125 3·175
12	0·885 22·48	1·531 38·885	0·828 21·03	0·062 1·575	0·125 3·175
14	1·010 25·65	1·656 42·06	0·952 24·18	0·062 1·575	0·125 3·175
16	1·135 28·83	1·781 45·24	1·076 27·33	0·062 1·575	0·125 3·175
18	1·260 32·00	1·891 48·03	1·201 30·50	0·062 1·575	0·125 3·175
20	1·385 35·18	2·031 51·59	1·326 33·68	0·062 1·575	0·250 6·35
22	1·510 38·35	2·156 54·76	1·451 36·855	0·062 1·575	0·250 6·35
24	1·635 41·45	2·277 57·835	1·576 40·03	0·062 1·575	0·250 6·35

Shell size	Overall length max. A (62) 14E in mm	(162) 14E in mm	(62) 14F in mm	(162) 14F in mm	17P in mm	57A 5024 in mm	5016 in mm	5005 in mm
08	1·344 34·14	1·355 34·42	1·762 44·75	1·759 44·68	1·391 35·33	0·978 24·84	—	—
10	1·344 34·14	1·355 34·42	1·762 44·75	1·759 44·68	1·391 35·33	0·978 24·84	1·067 27·61	0·887 22·53
12	1·344 34·14	1·355 34·42	1·762 44·75	1·759 44·68	1·391 35·33	0·978 24·84	—	—
14	1·344 34·14	1·355 34·42	1·736 44·095	1·733 44·02	1·391 35·33	0·978 24·84	—	—
16	1·344 34·14	1·355 34·42	1·876 47·65	1·873 44·575	1·391 35·33	0·978 24·84	—	—
18	1·344 34·14	1·355 34·42	1·876 47·65	1·873 44·575	1·391 35·33	0·978 24·84	—	—
20	1·576 40·03	1·576 40·03	2·118 53·8	2·105 53·47	1·641 41·68	1·048 26·62	—	—
22	1·576 40·03	1·576 40·03	2·118 53·8	2·105 53·47	1·641 41·68	1·048 26·62	—	—
24	1·609 40·87	1·609 40·87	2·250 57·15	2·247 57·075	1·674 42·52	1·048 20·62	—	—

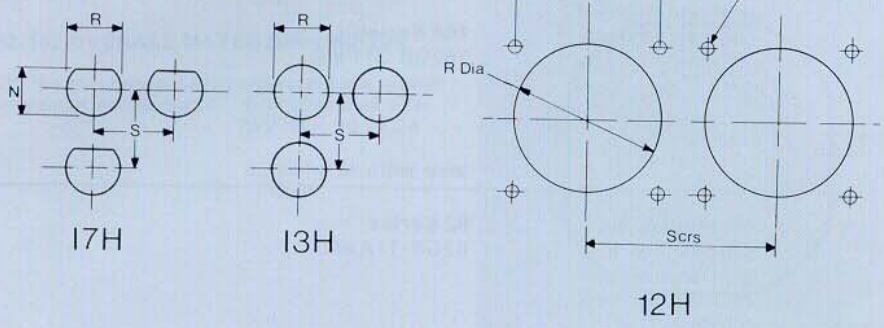
Shell Size	Flange thickness ±0·005 (±0·127) B 14E 14F 57A 17P in mm	Flange dimensions max. sq C 57A in mm	Flange Dia. max. D 5016 5005 5024 in mm	Mounting flange location ±0·005 (±0·127) F in mm	Overall rear dia. (max.) G 14E in mm	14F in mm	17P in mm	Cable sleeve int. dia. ±0·005 (±0·127) H 14F in mm	Fixing nut A/F L in mm	Fixing nut thread X	Thread flat +0·000 −0·005 (−0·127) M in mm	Shell ext. dia. max. Y in mm	Cable entry dia. min. Z 17P in mm
08	0·117 2·97	0·942 23·93	0·830 21·08	0·706 17·93	0·713 18·11	0·828 21·03	0·572 14·53	0·156 3·96	0·750 19·05	$\frac{9}{16}$–24 NEF	0·527 13·3	0·473 12·025	0·260 6·60
10	0·117 2·97	1·067 27·10	0·880 22·35	0·706 17·93	0·838 21·29	0·891 22·63	0·666 16·915	0·188 4·775	0·875 22·225	$\frac{11}{16}$–24 NEF	0·652 16·56	0·590 14·99	0·463 11·76
12	0·117 2·97	1·255 31·875	1·130 28·70	0·706 17·93	0·963 24·46	1·016 25·805	0·822 20·88	0·312 7·925	1·062 26·975	$\frac{7}{8}$–20 UNEF	0·815 20·70	0·750 19·05	0·557 14·15
14	0·117 2·97	1·380 35·05	1·260 32·00	0·706 17·93	1·088 27·625	1·141 28·97	0·907 23·06	0·375 9·525	1·187 30·15	1–20 UNEF	0·939 23·85	0·875 22·225	0·590 14·99
16	0·117 2·97	1·505 38·225	—	0·706 17·93	1·213 30·81	1·203 30·555	1·040 26·415	0·500 12·7	1·312 33·32	$1\frac{1}{8}$–18 NEF	1·063 27·00	1·000 25·40	0·713 18·11
18	0·117 2·97	1·630 41·40	—	0·706 17·93	1·338 33·975	1·426 36·22	1·165 29·59	0·625 15·875	1·437 36·50	$1\frac{1}{4}$–18 NEF	1·188 30·175	1·125 28·575	0·835 21·21
20	0·148 3·76	1·817 46·15	—	0·894 22·71	1·463 37·16	1·426 36·22	1·285 32·64	0·625 15·875	1·562 38·675	$1\frac{3}{8}$–18 NEF	1·313 33·35	1·250 31·75	1·015 25·78
22	0·148 3·76	1·942 49·33	—	0·894 22·71	1·588 40·325	1·567 39·80	1·400 35·56	0·750 19·05	1·687 42·85	$1\frac{1}{2}$–18 NEF	1·438 36·53	1·375 34·925	1·015 25·78
24	0·148 3·76	2·067 52·50	—	0·927 23·55	1·713 43·51	1·735 44·07	1·540 39·115	0·800 20·32	1·812 46·05	$1\frac{5}{8}$–18 NEF	1·563 39·70	1·500 38·10	1·265 32·13

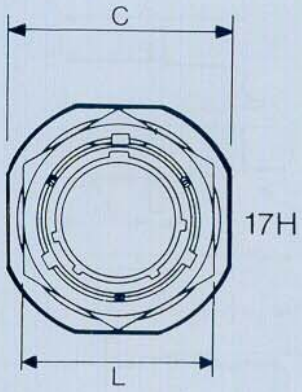
Hermetic Seal Receptacles

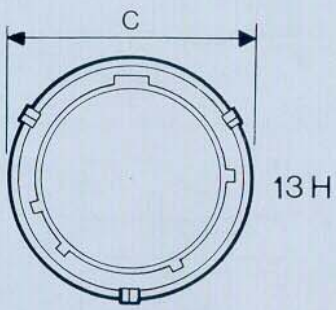
		Description	Amphenol Part No.	Military No.
	**17H**	Single hole fixing with pin contacts in one piece glass-to-metal seal. Exposed solder buckets or flattened and pierced pins. Has panel 'O' ring seal.	**62 Series** 62GB-17H etc.	**MIL-C-26482** MS 3114H etc.
	**13H**	Solder mounting with plain shell and exposed solder buckets or flattened and pierced pins.	**62 Series** 62GB-13H etc.	**MIL-C-26482** MS 3113H etc.
	**12H**	4-hole square mounting with exposed solder buckets or flattened and pierced pins.	**62 Series** 62GB-12H etc.	

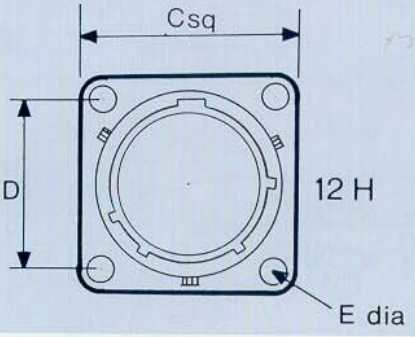
62/162 OVERALL MATED DIMENSIONS –

Add the two relevant plug and receptacle overall dimensions and deduct – 0.365 (9.271mm) for shell sizes 20, 22, 24
– 0.303 (7.696mm) for all other sizes







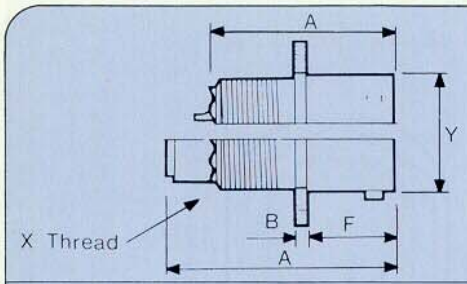
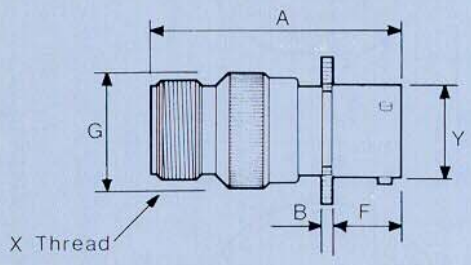
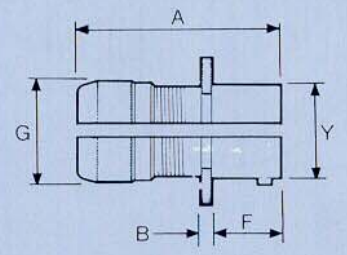
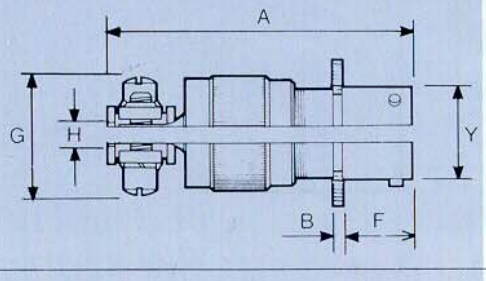
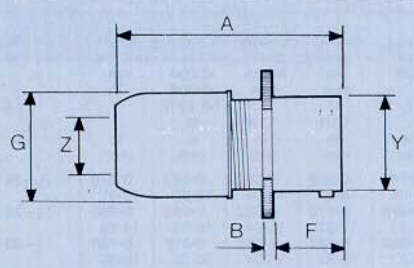
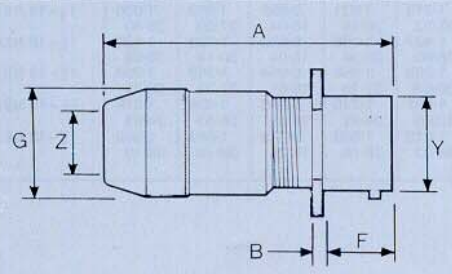


PANEL PIERCING DETAILS

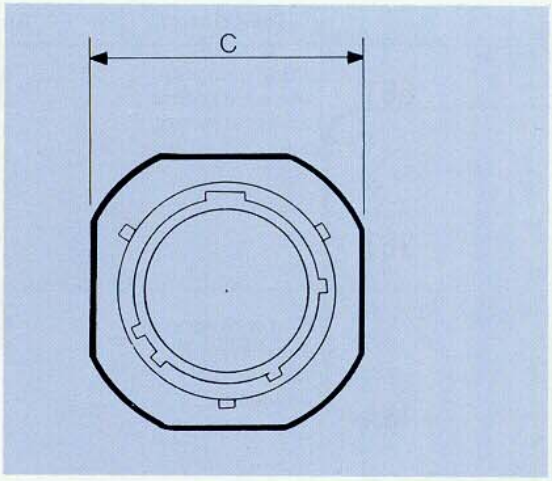
Shell size	Mounting hole dia. ±0·005 (±0·127) R 12H in / mm	13H in / mm	17H in / mm	Hole crs. D 12H in / mm	Mounting hole crs. min. S in / mm	Fixing hole dia. E 12H in / mm	Dimension across flat ±0·005 (±0·127) N 17H in / mm	Panel thickness over screw W 12H in / mm	Panel thickness min. K 17H in / mm	max. in / mm
08	0·565 14·47	0·578 14·68	0·572 14·53	0·594 14·99	1·250 31·75	0·120 3·05	0·540 13·72	0·100 2·54	0·062 1·57	0·125 3·18
10	0·695 17·53	0·687 17·45	0·697 17·70	0·719 18·29	1·359 34·52	0·120 3·05	0·665 16·89	0·100 2·54	0·062 1·57	0·125 3·18
12	0·864 21·84	0·797 20·24	0·885 22·48	0·812 20·57	1·531 38·89	0·120 3·05	0·828 21·03	0·100 2·54	0·062 1·57	1·125 3·18
14	0·989 25·15	0·922 23·42	1·010 25·65	0·906 23·11	1·656 42·06	0·120 3·05	0·952 24·18	0·100 2·54	0·062 1·57	0·125 3·18
16	1·113 28·19	1·047 26·59	1·135 28·83	0·969 24·64	1·781 45·24	0·120 3·05	1·076 27·33	0·100 2·54	0·062 1·57	0·125 3·18
18	1·238 31·49	1·172 29·77	1·260 32·00	1·062 26·92	1·891 48·03	0·120 3·05	1·201 30·51	0·100 2·54	0·062 1·57	0·125 3·18
20	1·363 34·54	1·266 32·16	1·385 35·18	1·156 29·46	2·031 51·59	0·120 3·05	1·326 33·68	0·210 5·33	0·062 1·57	0·250 6·35
22	1·488 37·85	1·390 35·31	1·510 38·35	1·250 31·75	2·156 54·76	1·120 3·05	1·451 36·86	0·210 5·33	0·062 1·57	0·250 6·35
24	1·615 41·15	1·516 38·51	1·635 41·53	1·375 35·05	2·277 57·84	0·147 3·81	1·576 40·03	0·210 5·33	0·062 1·57	0·250 6·35

Shell size	Overall length max A 12H in / mm	13H in / mm	17H in / mm	Flange thickness B 12H in / mm	13H in / mm	17H in / mm	Flange dimension max C 12H in / mm	13H in / mm	17H in / mm	Mounting flange location F 12H in / mm	13H in / mm	17H in / mm	Fixing nut A/F L in / mm	Overall rear dia max G 13H in / mm	Overall Shell length max J 13H in / mm	Thread flat -0·000 -0·005 (-0·127) M in / mm	Shell ext. dia. max Y in / mm	Fixing nut thread X
08		0·828 21·03	0·828 21·03		0·036 0·91	0·094 2·39	0·817 20·83	0·630 16·00	0·942 23·93		0·426 10·82	0·706 17·93	0·750 19·05	0·562 14·27	0·592 15·04	0·527 13·39	0·473 12·01	$\frac{3}{16}$–24 NEF
10		0·828 21·03	0·828 21·03		0·036 0·91	0·094 2·39	0·942 23·88	0·755 19·18	1·067 27·10		0·426 10·82	0·706 17·93	0·875 22·23	0·672 17·07	0·592 15·04	0·652 16·56	0·590 14·99	$\frac{11}{16}$–24 NEF
12		0·828 21·03	0·828 21·03		0·036 0·91	0·094 2·39	1·036 26·42	0·849 21·56	1·255 31·88		0·426 10·82	0·706 17·93	1·062 26·97	0·781 19·84	0·592 15·04	0·815 20·70	0·750 19·05	$\frac{7}{8}$–20 UNEF
14	0·828 21·03	0·828 21·03	0·828 21·03	0·062 1·57	0·036 0·91	0·094 2·39	1·130 28·70	0·974 24·74	1·380 35·05	0·505 12·83	0·426 10·82	0·706 17·93	1·187 30·15	0·906 23·01	0·592 15·04	0·939 23·85	0·875 22·23	1–20 UNEF
16		0·828 21·03	0·828 21·03		0·036 0·91	0·094 2·39	1·223 30·99	1·099 27·91	1·505 38·23		0·426 10·82	0·706 17·93	1·312 33·32	1·031 26·19	0·592 15·04	1·063 27·00	1·000 25·40	$1\frac{1}{8}$–18 NEF
18		0·828 21·03	0·828 21·03		0·036 0·91	0·094 2·39	1·317 33·53	1·223 31·06	1·630 41·40		0·426 10·82	0·706 17·93	1·437 36·50	1·156 29·36	0·592 15·04	1·188 30·18	1·125 28·58	$1\frac{1}{4}$–18 NEF
20		0·890 22·61	0·890 22·61		0·036 0·91	0·125 3·18	1·442 36·58	1·317 33·45	1·817 46·15	0·654 16·61	0·488 12·40	0·894 22·71	1·562 39·67	1·250 31·75	0·654 16·61	1·313 33·35	1·250 30·75	$1\frac{3}{8}$–18 NEF
22	0·890 22·61	0·890 22·61	0·890 22·61	0·093 2·36	0·036 0·91	0·125 3·18	1·567 39·88	1·443 36·65	1·942 49·33		0·488 12·40	0·894 22·71	1·687 42·85	1·375 34·93	0·686 16·61	1·438 36·53	1·375 34·93	$1\frac{1}{2}$–18 NEF
24		0·890 22·61	0·890 22·61		0·036 0·91	0·125 3·18	1·692 42·93	1·567 39·80	2·067 52·50	0·686 17·42	0·521 13·23	0·927 23·55	1·812 46·02	1·500 38·10	0·719 18·26	1·563 39·70	1·500 38·10	$1\frac{5}{8}$–18 NEF

Cable Mounting Receptacles

	Description	Amphenol Part No.	Military No.
 **51T** **31T**	Basic cable mounting receptacle with threaded shell to accept standard cable accessories.	**62 Series** 62GB-51T etc. **162 Series** 162GB-31T etc.	**DEF STAN 59-35 (Part 1) Sec. 3 CC 1304**
 **11A**	Cable mounting receptacle with general duty back shell. No grommet supplied.	**62 Series** 62GB-11A etc.	
 **11E** **11E**	Cable mounting receptacle with grommet and grommet nut.	**62 Series** 62GB-11E etc. **162 Series** 162GB-11Eetc.	**MIL-C-26482** MS 3111E etc. MS 3121E, etc.
 **11F** **11F**	Cable mounting receptacle with grommet and and grommet nut fitted with integral strain relief clamp.	**62 Series** 62GB-11F etc. **162 Series** 162GB-11 Fetc.	**MIL-C-26482** MS 3111F, etc. MS 3121F, etc.
 **11P**	For potted seal, supplied complete with detachable potting mould and location ring.	**62 Series** 62GB-11P etc.	**MIL-C-26482** MS 3111P etc.
 **11J**	With cable clamp for unscreened jacketed cable. No grommet supplied.	**62 Series** 62GB-11J etc.	

Dimensions and Mounting Details



-62/162 OVERALL MATED DIMENSIONS

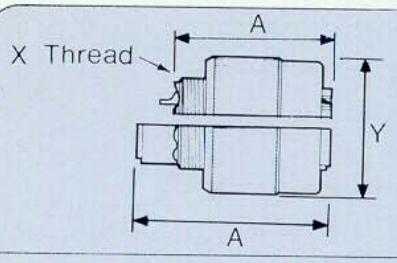
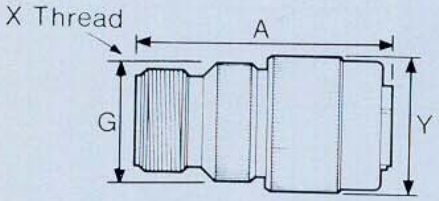
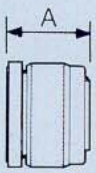
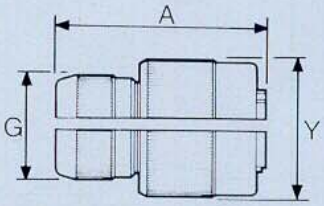
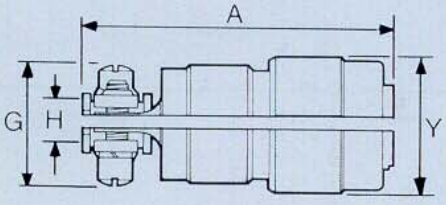
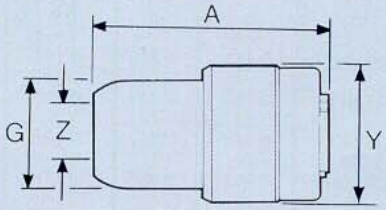
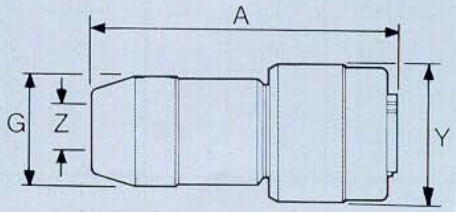
Add the two relevant plug and receptacle overall dimensions and deduct– 0.365 for shell sizes (9.271) 20,22,24

– 0.303 for all other sizes (7.696)

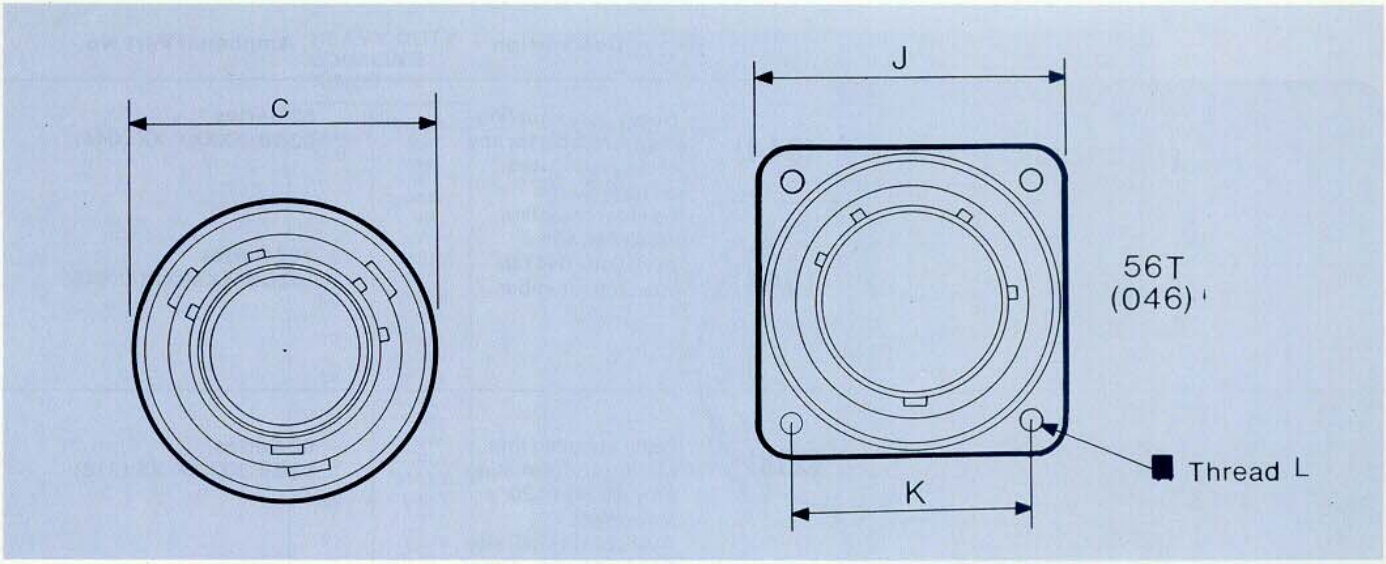
Shell Size	'A' Overall Length max. 51T in / mm	31T in / mm	11J in / mm	11A in / mm	(62) 11E in / mm	(162) 11E in / mm	(62) 11F in / mm	(162) 11F in / mm	11P in / mm
08	0·978 24·84	1·286 32·665	1·846 46·89	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·75	1·759 44·68	1·316 33·43
10	0·978 24·84	1·286 32·665	1·846 46·89	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·75	1·759 44·68	1·425 36·195
12	0·978 24·84	1·286 32·665	1·947 49·45	1·624 41·25	1·281 32·54	1·320 33·53	1·762 44·75	1·759 44·68	1·394 35·41
14	0·978 24·84	1·286 32·665	2·147 54·535	1·624 41·25	1·281 32·54	1·320 33·53	1·736 44·095	1·733 44·02	1·394 35·41
16	0·978 24·84	1·286 32·665	2·347 59·61	1·624 41·25	1·281 32·54	1·320 33·53	1·876 47·65	1·873 47·575	1·394 35·41
18	0·978 24·84	1·286 32·665	2·547 64·695	1·624 41·25	1·281 32·54	1·320 33·53	1·876 47·65	1·873 47·575	1·394 35·41
20	1·048 26·62	1·348 34·24	2·831 71·905	1·687 42·85	1·383 35·13	1·382 35·10	2·118 53·80	2·115 53·72	1·612 40·945
22	1·048 26·62	1·348 34·24	3·031 76·99	1·687 42·85	1·383 35·13	1·382 35·10	2·118 53·80	2·115 53·72	1·612 40·945
24	1·048 26·62	1·348 34·24	3·074 78·03	1·730 43·94	1·383 35·13	1·382 35·10	2·250 57·15	2·247 57·07	1·674 42·52

Thread X 11A only
$\frac{1}{2}$–28 UNEF
$\frac{5}{8}$–24 NEF
$\frac{3}{4}$–20 UNEF
$\frac{7}{8}$–20 UNEF
1–20 UNEF
$1\frac{3}{16}$–18 NEF
$1\frac{3}{16}$–18 NEF
$1\frac{7}{16}$–18 NEF
$1\frac{7}{16}$–18 NEF

Shell size	Flange thickness ±0·005 (±0·127) B in / mm	Flange dimensions max. sq. C in / mm	Flange location ±0·005 (±0·127) F in / mm	Overall rear diameter max. G 11F in / mm	11E, 11A and 11J in / mm	11P in / mm	Cable sleeve int. dia. ±0·005 (±0·127) H 11F in / mm	Thread X 51T,31T	Shell ext. dia. max. Y in / mm	Cable entry diameter Z min. 11P in / mm	min. closed 11J in / mm	max. free 11J in / mm
08	0·094 2·39	0·817 20·75	0·415 10·54	0·828 21·03	0·561 14·25	0·572 14·53	0·156 3·96	$\frac{7}{16}$–28 UNEF	0·473 12·025	0·260 6·60	0·168 4·275	0·230 5·84
10	0·094 2·39	0·942 23·925	0·415 10·54	0·891 22·63	0·686 17·425	0·666 16·915	0·188 4·775	$\frac{9}{16}$–24 NEF	0·590 14·99	0·463 11·76	0·205 5·205	0·312 7·925
12	0·094 2·39	1·036 26·315	0·415 10·54	1·016 25·805	0·811 20·60	0·822 20·88	0·312 7·925	$\frac{11}{16}$–24 NEF	0·750 19·05	0·557 14·15	0·338 8·585	0·442 11·23
14	0·094 2·39	1·130 28·70	0·415 10·54	1·141 28·97	0·936 23·775	0·907 23·04	0·375 9·525	$\frac{13}{16}$–20 UNEF	0·875 22·225	0·590 14·99	0·416 10·565	0·539 13·69
16	0·094 2·39	1·223 31·065	0·415 10·54	1·203 30·555	1·061 26·95	1·040 26·415	0·500 12·7	$\frac{15}{16}$–20 UNEF	1·000 25·40	0·713 18·11	0·550 13·97	0·616 15·65
18	0·094 2·39	1·317 33·45	0·415 10·54	1·426 36·22	1·186 30·125	1·165 29·59	0·625 15·875	$1\frac{1}{16}$–18 NEF	1·125 28·575	0·835 22·21	0·600 15·24	0·672 17·07
20	0·104/0·100 2·64 /2·55	1·442 36·63	0·535 13·59	1·426 36·22	1·311 33·30	1·285 32·64	0·625 15·875	$1\frac{3}{16}$–18 NEF	1·250 31·75	1·015 25·78	0·635 16·13	0·747 18·975
22	0·104/0·100 2·64 /2·55	1·567 39·80	0·535 13·59	1·567 39·80	1·436 36·745	1·400 35·56	0·750 19·05	$1\frac{5}{16}$–18 NEF	1·375 34·925	1·015 25·78	0·670 17·02	0·846 21·49
24	0·104/0·100 2·64 /2·55	1·692 42·98	0·560/ 0·574 14·225/14·58	1·735 44·07	1·561 39·65	1·540 39·115	0·800 20·32	$1\frac{7}{16}$–18 NEF	1·500 38·10	1·265 32·13	0·740 18·80	0·894 22·71

		Description	Amphenol Part No.	Military No.
	**56T** **36T**	Basic plug with threaded shell to accept standard cable accessories.	**62 Series** 62GB-56T etc. **162 Series** 162GB-36T etc.	**DEF STAN 59-35 (Part 1) Sec. 3 CC 1305**
	**16A**	Plug with general duty backshell. No grommet provided.	**62 Series** 62GB-16A etc.	
	**56T (046)**	Box-mounting plug. Available for shell size 16 : other sizes to special order. Cable accessories cannot be fitted.	**62 Series** 62GB-56T16-XX (046)	
	**16E** **16E**	Plug with grommet and grommet nut.	**62 Series** 62GB-16E etc. **162 Series** 162GB-16E etc.	**MIL-C-26482** MS 3116E etc. MS3126E, etc.
	**16F** **16F**	Plug with grommet and grommet nut fitted with integral strain relief clamp.	**62 Series** 62GB-16F etc. **162 Series** 162GB-16F etc.	**MIL-C-26482** MS 3116F etc. MS3126F, etc.
	**16P**	For potted seal. Supplied complete with detachable potting mould and location ring.	**62 Series** 62GB-16P etc.	**MIL-C-26482** MS3116P, etc.
	**16J**	Plug with cable clamp for unscreened jacketed cable. No grommet supplied.	**62 Series** 62GB-16J etc.	

Dimensions and Mounting Details



Shell size	Overall length (max.) A								
	56T in mm	36T in mm	16F n mm	16A in mm	16P in mm	16J in mm	(62) 16E in mm	(162) 16E in mm	56T (046) in mm
08	0·976 24·79	1·277 32·44	1·752 44·50	1·614 40·995	1·306 33·17	1·836 46·635	1·281 32·54	1·310 33·27	—
10	0·976 24·79	1·277 32·44	1·752 44·50	1·614 40·995	1·415 35·94	1·836 46·635	1·281 32·54	1·310 33·27	—
12	0·976 24·79	1·277 32·44	1·752 44·50	1·614 40·995	1·384 35·15	1·937 49·20	1·281 32·54	1·310 33·27	—
14	0·976 24·79	1·277 32·44	1·726 43·84	1·614 40·995	1·384 35·15	2·137 54·28	1·281 32·54	1·310 33·27	—
16	0·976 24·79	1·277 32·44	1·866 47·40	1·614 40·995	1·384 35·15	2·337 59·36	1·281 32·54	1·310 33·27	1·150 29·21
18	0·976 24·79	1·277 32·44	1·866 47·40	1·614 40·995	1·384 35·15	2·537 64·45	1·281 32·54	1·310 33·27	—
20	0·976 24·79	1·277 32·44	2·045 51·94	1·614 40·995	1·539 39·09	2·758 70·05	1·281 32·54	1·310 33·27	—
22	0·976 24·79	1·277 32·44	2·045 51·94	1·614 40·995	1·539 39·09	2·958 75·13	1·281 32·54	1·310 33·27	—
24	0·976 24·79	1·277 32·44	2·178 55·32	1·658 42·11	1·602 40·69	3·002 76·25	1·281 32·54	1·310 33·27	—

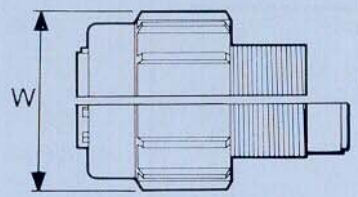
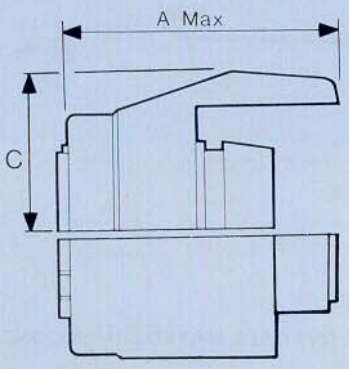
62/162 OVERALL MATED DIMENSIONS

Add the two relevant plug and receptacle overall dimensions and deduct — 0.365 (9.271 mm) for shell sizes 20, 22, 24

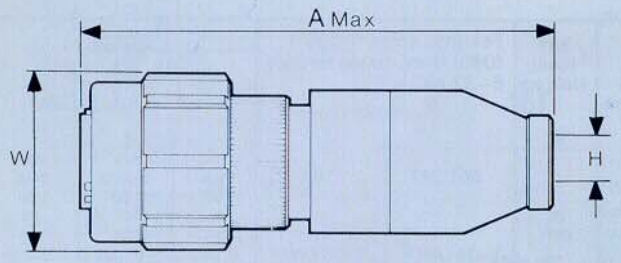
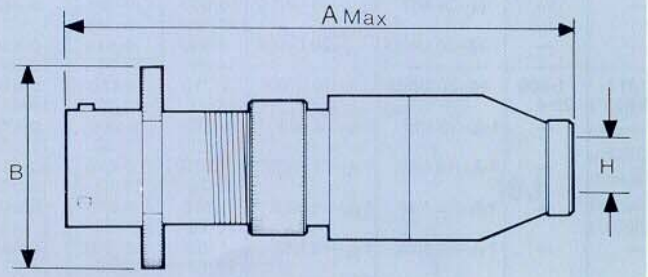
— 0.303 (7.696mm) for all other sizes

Shell size	Overall dia. max. C in mm	Coupling ring dia. max. Y in mm	Overall rear dia. max. G 16E, 16A and 16J in mm	G 16F in mm	G 16P in mm	Cable sleeve int. dia. ±0·005 (±0·127) H 16F in mm	56T (046) Flange dimension max. J in mm	56T (046) Hole crs K in mm	For shell size 16, 56T (046) only, fixing threads 6–32 NC. Thread L 56T, 36T	L 16A	Cable entry dia. min. 16P in mm	Z min. closed 16J in mm	max. free 16J in mm
08	0·750 19·05	0·750 19·05	0·561 14·25	0·828 21·03	0·572 14·53	0·156 3·96	—	—	$\frac{7}{16}$–28 UNEF	$\frac{1}{2}$–28 UNEF	0·260 6·60	0·168 4·275	0·230 5·84
10	0·859 21·82	0·859 21·82	0·686 17·425	0·891 22·63	0·666 16·915	0·188 4·775	—	—	$\frac{9}{16}$–24 NEF	$\frac{5}{8}$–24 NEF	0·463 11·76	0·205 5·205	0·312 7·925
12	1·031 26·19	1·031 26·19	0·811 20·60	1·016 25·805	0·822 20·88	0·312 7·925	—	—	$\frac{11}{16}$–24 NEF	$\frac{3}{4}$–20 UNEF	0·577 14·15	0·388 8·585	0·442 11·23
14	1·156 29·36	1·156 29·36	0·936 23·775	1·141 28·97	0·907 23·04	0·375 9·525	—	—	$\frac{13}{16}$–20 UNEF	$\frac{7}{8}$–20 UNEF	0·590 14·99	0·416 10·565	0·539 13·69
16	1·281 32·54	1·281 32·54	1·061 26·95	1·203 30·555	1·040 26·415	0·500 12·70	1·317 33·45	1·000 25·4	$\frac{15}{16}$–20 UNEF	1–20 UNEF	0·713 18·11	0·550 13·97	0·616 15·65
18	1·391 35·33	1·391 35·33	1·186 30·125	1·426 36·22	1·165 29·59	0·625 15·875	—	—	$1\frac{1}{16}$–18 NEF	$1\frac{3}{16}$–18 NEF	0·835 22·21	0·600 15·24	0·672 17·07
20	1·531 38·89	1·531 38·89	1·311 33·30	1·426 36·22	1·285 32·64	0·625 15·875	—	—	$1\frac{3}{16}$–18 NEF	$1\frac{3}{16}$–18 NEF	1·015 25·78	0·635 16·13	0·747 18·975
22	1·656 42·06	1·656 42·06	1·436 36·745	1·567 39·80	1·400 35·56	0·750 19·05	—	—	$1\frac{5}{16}$–18 NEF	$1\frac{7}{16}$–18 NEF	1·015 25·78	0·670 17·02	0·846 21·49
24	1·777 45·135	1·777 45·135	1·561 39·65	1·735 44·07	1·540 39·115	0·800 20·32	—	—	$1\frac{7}{16}$–18 NEF	$1\frac{7}{16}$–18 NEF	1·265 32·13	0·740 18·80	0·894 22·71

Plugs with optional coupling rings

	Description	Amphenol Part No.
	**(044)** Heavy duty coupling ring. Available for any of the plugs listed on page 22 To order complete assembly, add deviation (044) to connector number.	**62 Series** 62GB-XXXXX-XX (044)
	(044)	**162 Series** 162GB-XXXXX-XX (044)
	**(218)** Lever coupling ring. Mating and unmating only requires 120° movement. Available in shell size 14 and 16 only. Other sizes to special order.	**62 Series** 62GB-XXXXX-XX (218)
	(218)	**162 Series** 162GB-XXXXX-XX (218)

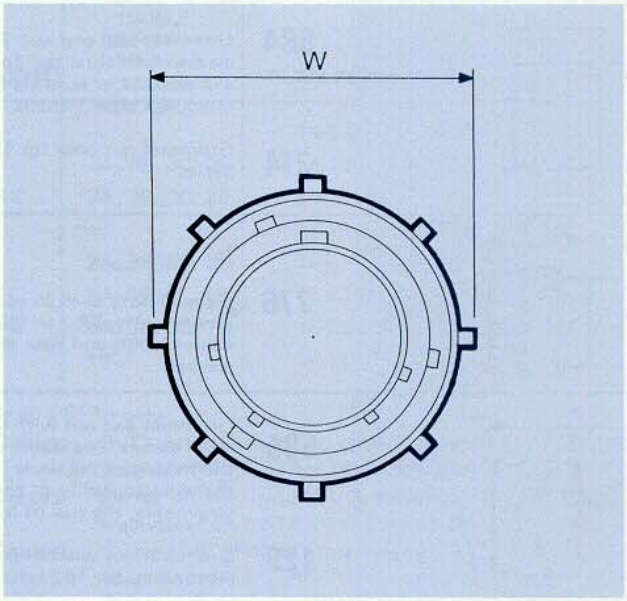
CONNECTORS FOR TINSEL CORDAGE

	Audio plug. Suitable for tinsel cord. Available in shell size 10 only. **0506**	**162 Series** 162GB-0506-10-6PX 162GB-0506-10-7PX
	Audio receptacle. Suitable for tinsel cord. Available in shell size 10 only. **5001**	**162 Series** 162GB-5001-10-7SX

Dimensions and Mounting Details

HEAVY DUTY COUPLING RINGS

Shell Size	Overall dia. max. W (044) in mm
08	0·870 22·1
10	0·979 24·865
12	1·151 29·235
14	1·276 32·41
16	1·401 35·585
18	1·505 38·225
20	1·651 41·935
22	1·776 45·11
24	1·897 48·18



LEVER COUPLING RINGS

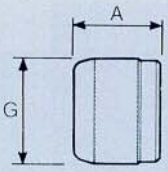
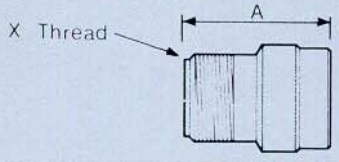
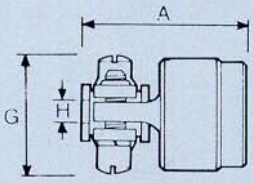
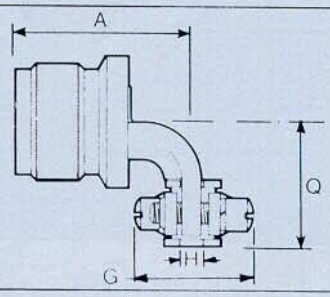
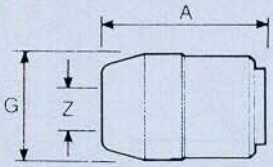
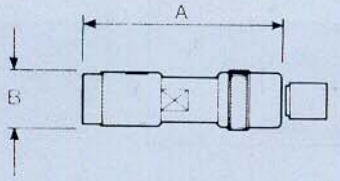
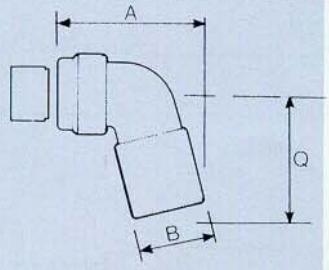
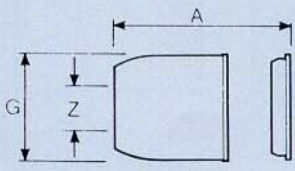
Shell size	A max. in. mm.	C max. in. mm.
14	1·444 36·67	0·787 19·98
16	1·444 36·67	0·844 21·43

AUDIO CONNECTORS FOR TINSEL CORD

Shell size	A max. 162GB-0506-10-6PX 162GB-0506-10-7PX	A max. 162GB-5001-10-7SX	B dia. max.	H cable outlet min.
	in mm	in mm	in mm	in mm
10	2·375 60 325	2·75 69·85	0·875 22·225	0·276 7·01

Cable Accessories

Suitable for all externally threaded Plug or Receptacle shells.

		Description	Amphenol Part No.
	**584**	Grommet seal and nut. Provides an environmental seal for the exposed solder buckets in the openback class T shells.	**62 Series** 62GB-584-XX-XP or S*
	214	Grommet nut only for 162 Series	**162 Series** 162GB-214-XX† For shell sizes 08-24 respectively.
	**776**	'A' type General duty shell to accept conduit, AN 3057 or MS 3057 A cable clamps and heat shrink sleeves.	**62 Series** 62GB-776-XX†
	**585**	Grommet and nut with strain relief clamp. The clamp prevents the flexing of the wires in the immediate vicinity of the risers, so avoiding the risk of leaks.	**62 Series** 62GB-585-XX-XP or S*
	129	Grommet nut with strain relief clamp only for 162 series.	**162 Series** 162GB-129-XX†
	**711**	Grommet and nut with right-angled strain relief clamp. The clamp prevents flexing of the wires in the immediate vicinity of the risers, so avoiding the risk of leaks (these are supplied to separate order only for use with style T shells).	**62 Series** 62GB-711-XX-XP or S*
	201	Grommet nut with strain relief clamp only for 162 series.	**162 Series** 162GB-201-XX†
	**720**	Clamp for unscreened jacketed cable. Cable entry dimensions are given in the table opposite. No grommet is supplied. For use with 50T, 51T and 56T styles 62 Series only.	**62 Series** 62GB-720-XX†
	**587**	Clamp for screened jacketed cable. 62 Series only with grommet. Effective sealing is provided over the range of cables covered by DEF 10 (Pattern C) as specified in DEF 5325-3. These are supplied to separate order only for use with style T shells.	**62 Series** 62GB-587-XX-XP or S*
	151		**162 Series** 162GB-151-XX-†-XX**
	**5028**	75° Clamp for screened jacketed cable. 62 Series only. with grommet. Effective sealing is provided over the range of cables covered by DEF 10 (Pattern C) as specified in DEF 5325-3. These are supplied to separate order only and are intended for use with style T shells.	**62 Series** 62GB-5028-XX-XP or S*
	5000		**162 Series** 162GB-5000-XX-†-XX**
	**586**	Potting mould and ring, supplied together as a set.	**62 Series** 62GB-586-XX†

*The suffix XX-XP or S enables the grommet to be matched to the insert arrangement (e.g. 12-3P)

** The suffix XX specifies the cable size.

† The suffix XX specifies the shell size.

SJ CLAMPS

The 162 series clamps are identical to the 62 series clamps except that the grommet is omitted. It is however, still necessary to quote the full plan form because the piece parts vary to suit the appropriate cable.

S.J. Clamps are available in 62 series **only where there is an appropriate cable to DEF 10 or DEF STAN 61-12 part 5 available for the plan form.**

162 series availability is similar according to the plan forms tooled. These are marked C on the table.

Part Number Examples

62GB-587-14-12P (grommet supplied)

162GB-151-14-12 (no grommet supplied)

CABLES TO DEF 10 and DEF STAN 61-12 part 5 eg. DEF 10-3A or DEF STAN 16-2-3A

PLAN-FORM	CABLE DEF 10-etc DEF STAN 16-2-etc	PLAN-FORM	CABLE DEF 10-etc DEF STAN 16-2-etc	PLAN-FORM	CABLE DEF 10-etc DEF STAN 16-2-etc
8-2	–	14-5 C	4Q●	18-32C	36C,25D
8-3	3A, 3B, 3C, 2B	14-12 C	12A, 12B, 12C	20-16	–
8-3 3 C	3A, 3B, 3C, 2B	14-15	–	20-41 C	36C
8-4	–	14-19 C	18A, 18B, 18C	22-21	–
10-2	2A, 2B, 2C, 2Q●	16-8	–	22-55	–
10-6 C	6A, 6B, 6C, 4C	16-23 C	–	24-61 C	60C
12-3 C	3A, 3B, 3C, 2Q●	16-26	25A, 25B, 25C		
12-10	10C	18-11	–		

●Applicable to DEF10 only

Type A Cables: PVC outer sheath, no overall screen, L.T. (14/.0076) unscreened cores. (equivalent DEF STAN 16–2 wire size)

Type B Cables: Outer screen, inner PVC sheath, L.T. (14/.0076) unscreened cores. (equivalent DEF STAN 16–2 wire size)

Type C Cables: Outer PVC sheath, inner screen, L.T. (14.0076) unscreened cores. (equivalent DEF STAN 16–2 wire size)

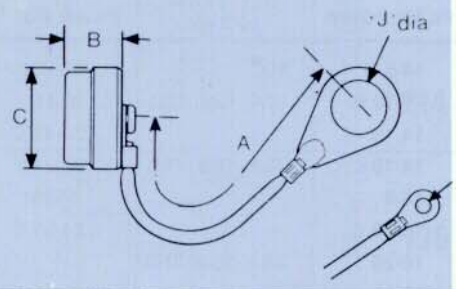
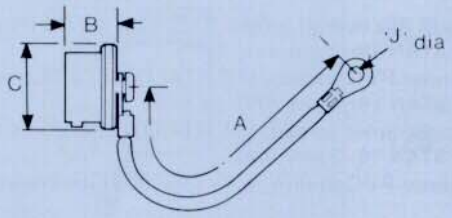
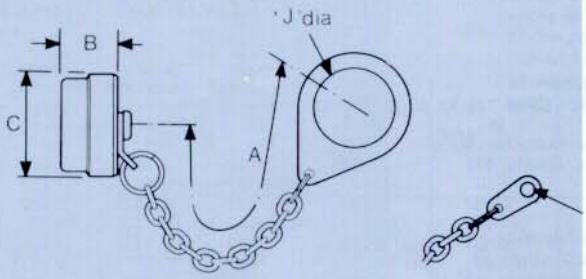
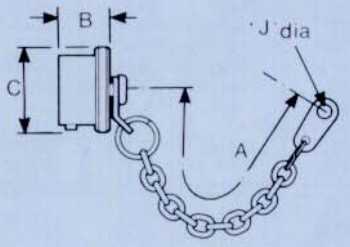
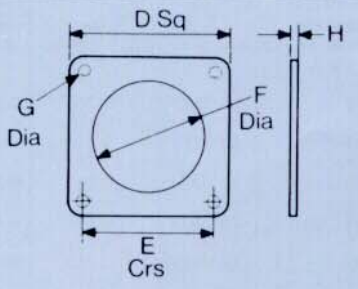
Type Q Cables: Outer screen, inner PVC sheath, L.T. (36/.012) unscreened cores. (DEF 10 only)

Shell size	Overall length (max.) A: 62GB-711-XX-P or S 162GB-201-XX	62GB-720-XX	62GB-585-XX-P or S 162GB-129-XX	62GB-584-XX-P or S 162GB-160 to 168	62GB-776-XX	62GB-586-XX	Straight SJ Clamps 62GB-587-XX-P or S 162GB-151-XX max. length Including plug	Straight SJ Clamps 62GB-587-XX-P or S 162GB-151-XX max. length Including receptacle	75° SJ Clamps 62GB-5028-XX 162GB-5000-XX max. length Including plug	75° SJ Clamps 62GB-5028-XX 162GB-5000-XX max. length Including receptacle
		in mm	- in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm
08	1 $\frac{5}{32}$	1·085 27·56	0·991 25·17	0·545 13·84	0·937 23·80	0·644 16·36	2·732 69·39	2·742 69·64	2·375 60·235	2·416 61·365
10	1 $\frac{3}{16}$	1·060 26·92	0·991 25·17	0·545 13·84	0·937 23·80	0·753 19·125	2·742 69·64	2·752 69·90	2·532 64·39	2·573 65·35
12	1 $\frac{7}{32}$	1·160 29·46	0·991 25·17	0·545 13·84	0·937 23·80	0·722 18·34	3·152 80·06	3·162 80·31	2·625 66·675	2·666 67·715
14	1 $\frac{1}{4}$	1·360 34·54	0·965 24·51	0·545 13·84	0·937 23·80	0·722 18·34	3·152 80·06	3·162 80·31	2·719 69·035	2·760 70·095
16	1 $\frac{5}{16}$	1·585 40·26	1·105 28·065	0·545 13·84	0·937 23·80	0·722 18·34	3·272 83·10	3·282 83·36	2·750 69·80	2·790 70·87
18	1 $\frac{3}{8}$	1·785 45·34	1·105 28·065	0·545 13·84	0·937 23·80	0·722 18·34	— —	— —	— —	— —
20	1 $\frac{3}{8}$	1·981 50·32	1·285 32·64	0·545 13·84	0·937 23·80	0·877 22·30	3·272 83·10	3·345 84·96	3·250 82·55	3·312 84·125
22	1 $\frac{23}{64}$	2·181 55·39	1·285 32·64	0·545 13·84	0·937 23·80	0·877 22·30	— —	— —	— —	— —
24	1 $\frac{13}{32}$	2·216 56·275	1·373 34·875	0·501 12·725	0·937 23·80	0·896 22·76	3·696 93·87	3·768 95·70	3·375 85·725	3·500 88·90

Shell size	B dia. max. 62GB-587-XX-XP or S 162GB-151-XX 62GB-5028-XX-XP or S 162GB-5000-XX in mm	G dia. max. 62GB-711-XX -P or S 162GB-201-XX 62GB-585-XX P or S 62GB-586-XX in mm	G dia. max. 62GB-711-XX -P or S 162GB-201-XX 62GB-585-XX P or S 162GB-129-XX in mm	G dia. max. 62GB-584 -XX- P or S 162GB-214 -XX 62GB-720-XX in mm	G All SJ clamps in mm	H Cable sleeve int. dia. ±0·005 ±0·127 in mm	Q 62GB-711-XX-X P or S 162GB-201-XX in mm	Q 62GB-5028-XX 162GB-5000-XX in mm	X Thread 62GB-776-XX	Z Cable entry dia. min. 62GB-586-XX in mm	Z Cable entry dia. min. closed in mm	Z Cable entry dia. max. free in mm
08	0·676 17·17	0·572 14·54	0·828 21·03	0·561 14·25	0·775 19·68	0·161 4·09	0·733 18·62	1·750 44·45	$\frac{1}{2}$–28 UNEF	0·260 6·60	0·168 4·275	0·230 5·84
10	0·676 17·17	0·666 16·915	0·891 22·63	0·686 17·425	0·902 22·91	0·193 4·90	0·795 20·19	1·875 47·625	$\frac{5}{8}$–24 NEF	0·463 11·76	0·205 5·205	0·312 7·925
12	0·812 20·62	0·822 20·88	1·016 25·805	0·811 20·60	1·030 26·16	0·317 8·05	0·858 21·79	2·125 53·975	$\frac{3}{4}$–20 UNEF	0·557 14·15	0·338 8·585	0·442 11·23
14	0·926 23·52	0·907 23·04	1·141 28·98	0·936 23·775	1·157 29·385	0·380 9·65	0·915 23·24	2·125 53·975	$\frac{7}{8}$–20 UNEF	0·590 14·99	0·416 10·565	0·539 13·69
16	1·051 26·695	1·040 26·415	1·203 30·555	1·061 26·95	1·284 32·61	0·505 12·83	1·010 25·65	2·062 52·375	1 –20 UNEF	0·713 18·11	0·550 13·97	0·616 15·65
18	— —	1·165 29·59	1·426 36·22	1·186 30·125	— —	0·630 16·00	1·070 27·18	— —	1 $\frac{3}{16}$–18 NEF	0·835 21·21	0·600 15·24	0·672 17·57
20	1·280 32·51	1·285 32·64	1·426 36·22	1·311 33·30	1·539 39·09	0·630 16·00	1·140 28·955	2·062 52·375	1 $\frac{3}{16}$–18 NEF	1·015 25·78	0·635 16·13	0·747 18·975
22	— —	1·400 35·56	1·567 39·80	1·436 36·745	— —	0·755 19·175	1·170 29·72	— —	1 $\frac{7}{16}$–18 NEF	1·015 25·78	0·670 17·02	0·846 21·49
24	1·620 41·15	1·540 39·12	1·735 44·07	1·561 39·65	1·783 45·29	0·805 20·45	1·260 32·00	2·187 55·55	1 $\frac{7}{16}$–18 NEF	1·265 32·13	0·740 18·80	0·894 22·71

These cable accessories are suitable for any of the externally threaded class T shells

Accessories

	Description	Amphenol Part No.
	**CAPS AND CORDS** Single hole fixing receptacles Cable mounting receptacles Flange mounting receptacles *'J' Dia. for 62GB-812-08 to 24 only*	**62 Series** 62GB-813-08 to 24 62GB-814-08 to 24 62GB-812-08 to 24
	Plugs	**62 Series** 62GB-810-08 to 24 **Military No.** MS 3180
	**CAPS AND CHAINS** Single hole fixing receptacles Cable mounting receptacles Flange mounting receptacles *'J' Dia. for 62GB-738-08 to 24 only*	**62 Series** 62GB-736-08 to 24 62GB-737-08 to 24 62GB-738-08 to 24
	Plugs	**62 Series** 62GB-742-08 to 24 **Military No.** MS 3180
	**760** Flange mounting gasket for box mounting and hermetic receptacles	**62 Series** 62GB-760-08 to 24

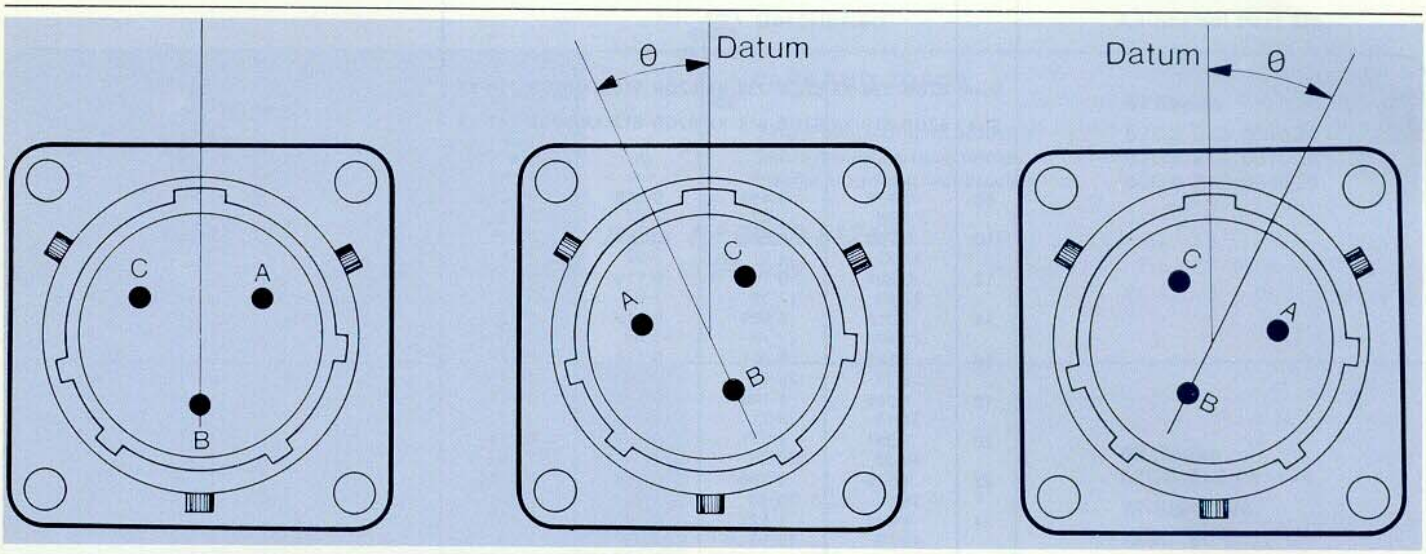
Shell	J dia. ±0·005 (±0·127) 62GB-736-XX	62GB-737-XX	62GB-810-XX	62GB-738-XX
Size	62GB-813-XX	62GB-814-XX	62GB-812-XX	62GB-742-XX
	in mm	in mm	in mm	in mm
08	0·578 14·68	0·458 11·63	0·119 3·02	0·125 3·18
10	0·703 17·86	0·583 14·81	0·119 3·02	0·125 3·18
12	0·891 22·63	0·708 17·98	0·119 3·02	0·125 3·18
14	1·016 25·81	0·896 22·76	0·119 3·02	0·125 3·18
16	1·141 29·39	1·021 25·93	0·119 3·02	0·125 3·18
18	1·266 32·16	1·146 29·11	0·119 3·02	0·125 3·18
20	1·391 35·33	1·271 32·28	0·119 3·02	0·125 3·18
22	1·516 38·51	1·396 35·46	0·119 3·02	0·125 3·18
24	1·641 41·68	1·521 38·63	0·145 3·68	0·147 3·73

Shell size	Tolerance ±0·25 (±6·35) A 62GB-810-XX 62GB-814-XX 62GB-738-XX 62GB-812-XX 62GB-736-XX 62GB-742-XX 62GB-813-XX 62GB-737-XX	B 62GB-810-XX 62GB-742-XX	B 62GB-736-XX 62GB-812-XX 62GB-737-XX 62GB-813-XX 62GB-738-XX 62GB-814-XX	C dia. (max.) 62GB-810-XX 62GB-814-XX 62GB-738-XX 62GB-812-XX 62GB-736-XX 62GB-742-XX 62GB-813-XX 62GB-737-XX
08	3·0 76·2	0·496 12·60	0·521 13·23	0·750 19·05
10	3·0 76·2	0·496 12·60	0·521 13·23	0·859 21·82
12	3·5 88·9	0·496 12·60	0·521 13·23	1·031 26·19
14	3·5 88·9	0·496 12·60	0·521 13·23	1·156 29·36
16	3·5 88·9	0·496 12·60	0·521 13·23	1·281 32·54
18	3·5 88·9	0·496 12·60	0·521 13·23	1·391 35·33
20	4·0 101·6	0·558 14·17	0·521 13·23	1·531 38·88
22	4·0 101·6	0·558 14·17	0·521 13·23	1·656 42·06
24	4·0 101·6	0·558 14·17	0·556 14·12	1·777 45·135

Shell size	D sq. 62GB-760-XX ±0·010 (±0·254)	E crs. 62GB-760-XX ±0·010 (±0·254)	F dia. 62GB-760-XX +0·016 (+0·406) −0·000	G dia. 62GB-760-XX ±0·010 (±0·254)	H
08	0·812 20·62	0·594 15·08	0·500 12·70	0·130 3·30	0·032/0·016 0·81/0·40
10	0·938 23·82	0·719 18·26	0·625 15·87	0·130 3·30	0·032/0·016 0·81/0·40
12	1·031 26·18	0·813 20·65	0·750 19·05	0·130 3·30	0·032/0·016 0·81/0·40
14	1·125 28·57	0·906 23·01	0·875 22·22	0·130 3·30	0·032/0·016 0·81/0·40
16	1·219 30·96	0·969 24·61	1·000 25·40	0·130 3·30	0·032/0·016 0·81/0·40
18	1·312 33·32	1·063 27·00	1·125 28·57	0·130 3·30	0·032/0·016 0·81/0·40
20	1·438 36·52	1·156 29·36	1·250 31·75	0·130 3·30	0·032/0·016 0·81/0·40
22	1·563 39·70	1·250 31·75	1·375 34·92	0·130 3·30	0·032/0·016 0·81/0·40
24	1·688 42·87	1·375 34·92	1·500 38·10	0·156 3·96	0·032/0·016 0·81/0·40

Insert Orientations

For MIL-C-26482 and replacement purposes
in patt. 105 of DEF STAN 59-35 (Part 1) Sec. 3.



Normal position
with pin contacts

Alternative position of insert
with socket contacts
(ø counterclockwise)

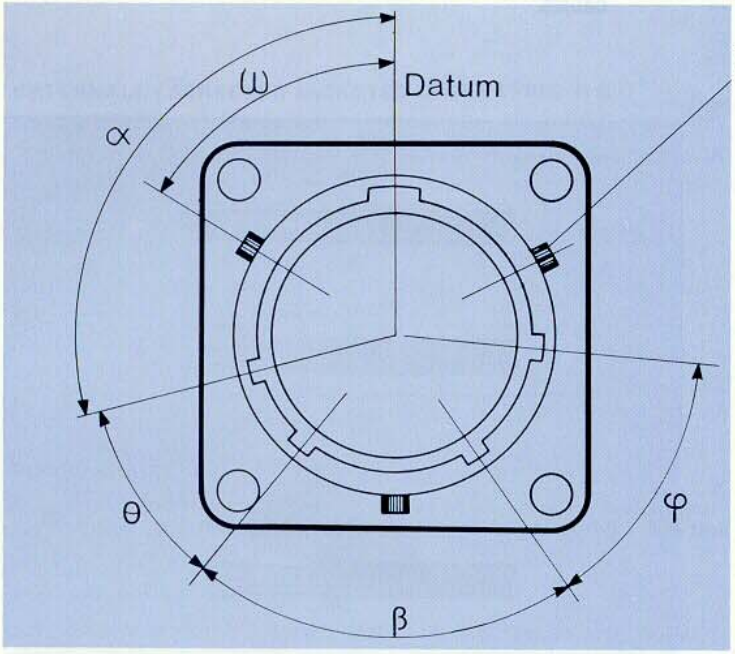
Alternate position of insert
with pin contacts
(ø clockwise)

Each diagram shows mating face of insert.

Insert arrangement	Normal	Orientation θ (degrees)			
		W	X	Y	Z
8–2	0	58	122	–	–
8–3	0	60	210	–	–
8–33	0	90	–	–	–
8–4	0	45	–	–	–
8–98	0	–	–	–	–
10–2	0	–	–	–	–
10–6	0	90	–	–	–
10–7	0	–	–	–	–
12–3	0	–	–	180	–
12–10	0	60	155	270	295
14–5	0	40	92	184	273
14–12	0	43	90	–	–
14–15	0	17	110	155	234
14–19	0	30	165	315	–
16–8	0	54	152	180	331
16–23	0	158	270	–	–
16–26	0	60	–	275	338
18–11	0	62	119	241	340
18–32	0	85	138	222	265
20–16	0	238	318	333	347
20–41	0	45	126	225	–
22–21	0	16	135	175	349
22–55	0	30	142	226	314
24–61	0	90	180	270	324

Key/Keyway Orientations

For patt. 105 DEF STAN 59-35 (Part 1) Sec. 3.



3 Pins spaced 120° apart

Datum is always taken from major key or keyway. In receptacles the major keyway always remains fixed in relation to the mounting flange. For the A*, B, C, D*, E and F orientations, the three bayonet locations and associated minor keyways are rotated complete, in accordance with the table below.

N.B.—The accompanying diagram shows a receptacle shell, with keyways. Corresponding key orientations for a mating plug shell are therefore always clockwise.

Shell Size	VALUES FOR α (degrees)							VALUES FOR θ (degrees)							VALUES FOR β (degrees)						
	N	A*	B	C	D*	E	F	N	A*	B	C	D*	E	F	N	A*	B	C	D*	E	F
8	105	92	–	–	118	118	82	35	35	–	–	35	30	50	75	75*	–	–	75	100	75
10	105	95	85	125	115	115	85	35	35	35	35	35	30	50	75	75	75	75	75	100	75
12	105	97	89	121	113	115	85	35	35	35	35	35	30	50	75	75	75	75	75	100	75
14	105	98	91	119	112	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75
16	105	99	93	117	111	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75
18	105	100	95	115	110	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75
20	105	100	95	115	110	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75
22	105	101	97	113	109	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75
24	105	101	97	113	109	75	120	35	35	35	35	35	30	50	75	75	75	75	75	100	75

Shell Size	VALUES FOR φ (degrees) ORIENTATION							VALUES FOR ω (degrees) ORIENTATION						
	N	A*	B	C	D*	E	F	N	A*	B	C	D*	E	F
8	50	50	–	–	50	30	45	60	47	–	–	73	73	47
10	50	50	50	50	50	30	45	60	50	40	80	70	70	50
12	50	50	50	50	50	30	45	60	52	44	76	68	70	50
14	50	50	50	50	50	30	35	60	53	46	74	67	30	75
16	50	50	50	50	50	30	35	60	54	48	72	66	30	75
18	50	50	50	50	50	30	35	60	55	50	70	65	30	75
20	50	50	50	50	50	30	35	60	55	50	70	65	30	75
22	50	50	50	50	50	30	35	60	56	52	68	64	30	75
24	50	50	50	50	50	30	35	60	56	52	68	64	30	75

*now inactive for new designs against Pattern 105 but available for replacement purposes. Superseded in DEF STAN 59-35 (Part 1) Sec. 3. by orientations E and F.

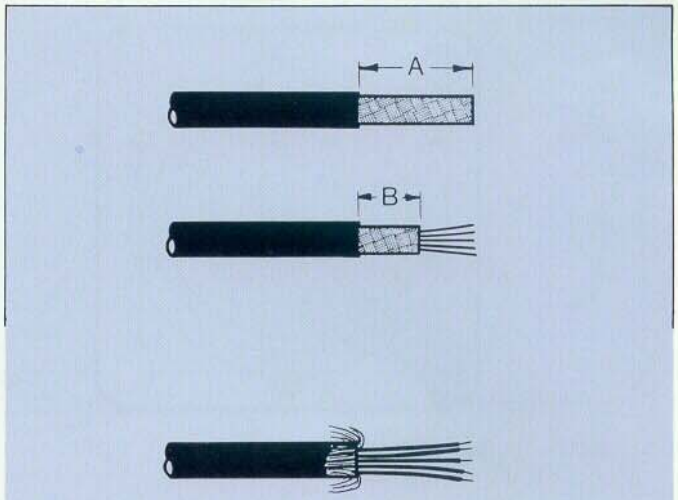
Assembly instructions for Amphenol straight S.J. clamps to DEF STAN 59-35 (Part 1) Sec. 3 for internally and externally screened and unscreened cables.

INTERNALLY SCREENED JACKETED CABLE 'TYPE C'

CABLE AND WIRE STRIPPING

Strip the outer P.V.C. Jacket of the cable back to dim 'A' to expose the internal braid. Trim the braid back to within 19.05mm (0.75 in) of P.V.C. jacket and fold back 'B'.

	A Dimension	
SIZE	mm	in
08	34.93	1.375
10	36.51	1.437
12&14	41.27	1.625
16&20	44.45	1.75
24	49.21	1.937



FOR 62 SERIES

Strip 5.3mm (0.210 in) to 6.1mm (0.240 in) of insulation from each wire to expose centre conductor. Tin the ends. If ends fray twist them back to their original lay before tinning.

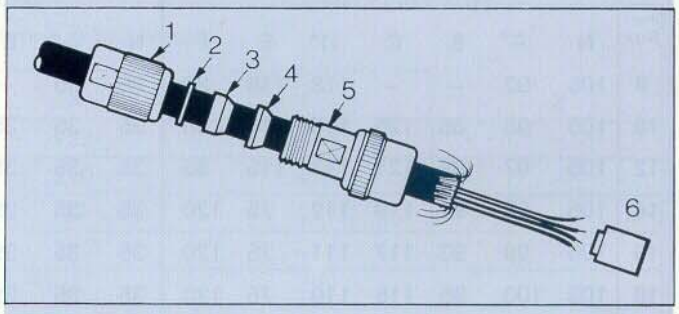
FOR 162 SERIES

Strip 5.6mm (0.220 in) to 6.6mm (0.260 in) of insulation from each wire taking care not to cut or nick strands. If ends fray twist them back to their original lay.

INITIAL ASSEMBLY

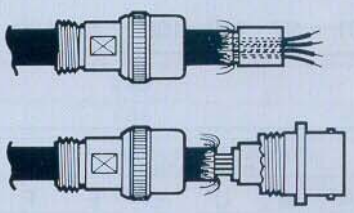
Slide onto the cable the following items in this order (1) Nut (2) Washer (3) Gasket (4) Braid Clamp and (5) Clamp Body.

(6) Grommet, 62 Series only.



SOLDER CONNECTION TO CONTACTS (62 SERIES)

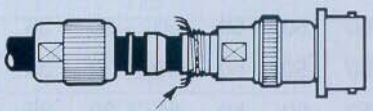
Insert the individual wires into the appropriate grommet holes. At the same time, slide the grommet back as far as possible until the tinned ends of the centre conductors are far enough out of the grommet to permit soldering to the contacts. Insert the tinned ends of wires into the appropriate contacts in 62 series connector and solder into place. Slide the grommet forward over the wired contacts and press firmly into rear of connector shell and against rear face of insert.



CRIMP CONNECTION TO CONTACTS (162 SERIES)

Using the recommended tools, crimp the contacts to the wires and insert them in the connector as described in the Amform instructions, which are supplied with each 162 series assembly.

Bring up clamp body taking care not to drag the braid forward. (If necessary a small amount of thin tape may be used to hold the braid in position whilst carrying out this operation). Screw the clamp body onto the connector accessory thread, making sure that the connector serrations engage with those on clamp body. Fold the braid out at right angles to the cable and slide forward the braid clamp. Smooth back braid onto the braid clamp and trim off the surplus. Slide up gasket, washer, screw on nut and tighten.

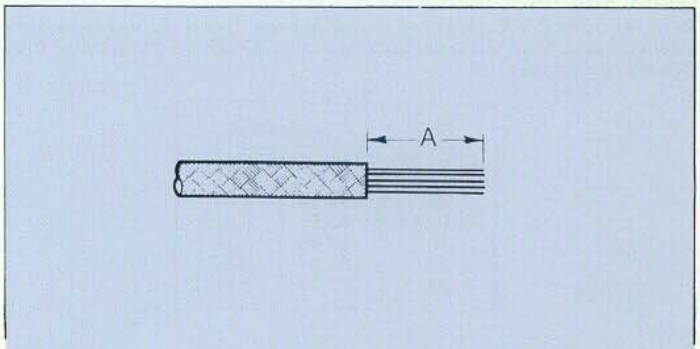


EXTERNALLY SCREENED JACKETED CABLE TYPES 'B & Q'

CABLE AND WIRE STRIPPING

Strip the outer braid and internal P.V.C. jacket of the cable back to dim 'A'

SIZE	A Dimension	
	mm	in
08	33.32	1.312
10	34.93	1.375
12&14	39.7	1.563
16&20	42.85	1.687
24	47.63	1.875



FOR 62 SERIES

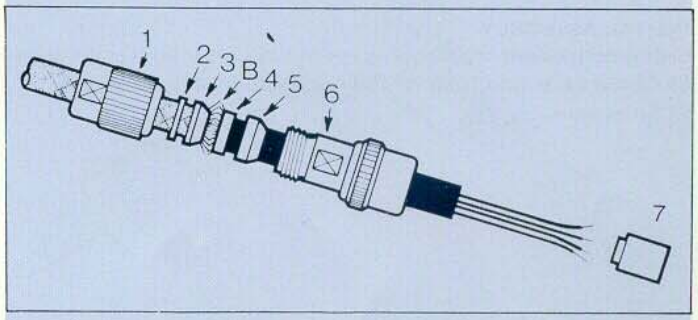
Strip 5.3mm (0.210 in) to 6.1mm (0.240 in) of insulation from each wire to expose centre conductor. Tin the ends. If ends fray twist them back to their original lay before tinning.

FOR 162 SERIES

Strip 5.6mm (0.220) to 6.6mm (0.260 in) of insulation from each wire taking care not to cut or nick strands. If ends fray twist them back to their original lay.

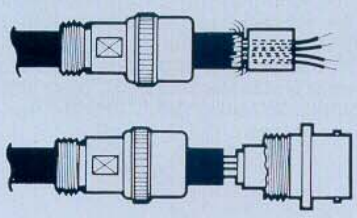
INITIAL ASSEMBLY

Slide onto the cable the following items in this order (1) Nut (2) Washer (3) Male Braid Clamp Convolute Screen (See B) as far as possible, and slide on items (4) Female Braid Clamp (5) Gasket and (6) Clamp Body (7) Grommet, 62 Series only.



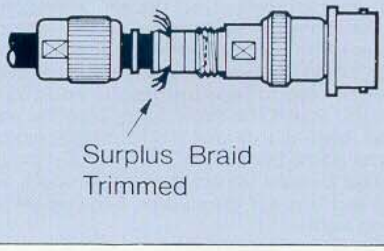
SOLDER CONNECTION TO CONTACTS (62 SERIES)

Insert the individual wires into the appropriate grommet holes. At the same time, slide the grommet back as far as possible, until the tinned ends of the centre conductors are far enough out of the grommet to permit soldering to the contacts. Insert the tinned ends of wires into the appropriate contacts in 62 series connector and solder into place. Slide the grommet forward over the wired contacts and press firmly into the rear of connector shell and against rear face of insert.



CRIMP CONNECTION TO CONTACTS (162 SERIES)

Using the recommended tools, crimp the contacts to the wires and insert them in the connector as described in the Amform instructions, which are supplied with each 162 series assembly. Bring up clamp body and screw onto the connector accessory thread, making sure that the connector serrations engage with those on clamp body. Slide forward gasket and female braid clamp. Push forward screen and fold out at right angles braid which does not return to original position. Slide up male braid clamp. Smooth back braid onto male braid clamp and trim off surplus. Slide up washer. Screw on nut and tighten.



UNSCREENED JACKETED CABLES TYPE A'

All procedures concerning this type of cable to be as for internally screened jacketed cable, but all references to screen (Braid) to be disregarded.

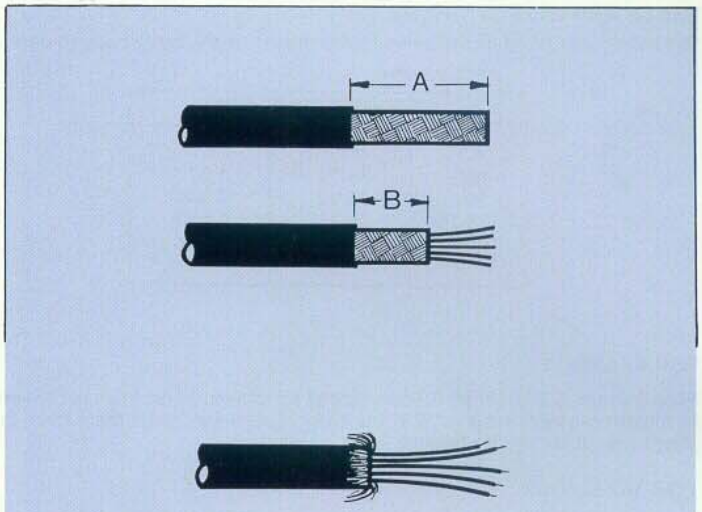
Assembly instructions for Amphenol angled S.J. clamps to DEF STAN 59-35 (Part 1) Sec. 3 for internally and externally screened and unscreened cables.

INTERNALLY SCREENED JACKETED CABLE 'TYPE C'

CABLE AND WIRE STRIPPING

Strip the outer P.V.C. jacket of the cable back to dim 'A' to expose the internal braid. Trim the braid back to within 19.05mm (0.75 in) of P.V.C. jacket and fold back 'B'

Size	A Dimension	
	mm	in
08	58.15	2.89
10,12,14	66.68	2.625
16	69.85	2.75
20	88.9	3.50
24	95.25	3.75



FOR 62 SERIES

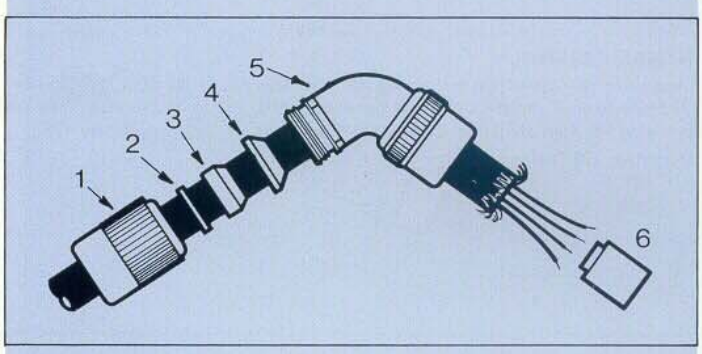
Strip 5.3mm (0.210 in) to 6.1 mm (0.240 in) of insulation from each wire to expose centre conductor. Tin the ends. If ends fray, twist them back to their original lay before tinning.

FOR 162 SERIES

Strip 5.6mm (0.220 in) to 6.6mm (0.260 in) of insulation from each wire taking care not to cut or nick strands. If ends fray, twist them back to their original lay.

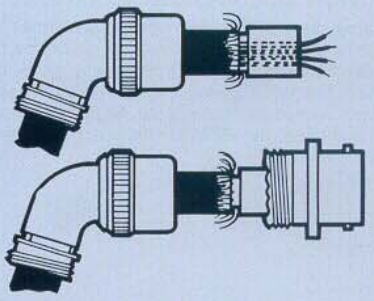
INITIAL ASSEMBLY

Slide onto the cable the following items in this order (1) Nut (2) Washer (3) Gasket (4) Braid Clamp (5) 75° Angled Body (6) Grommet, 62 Series only.



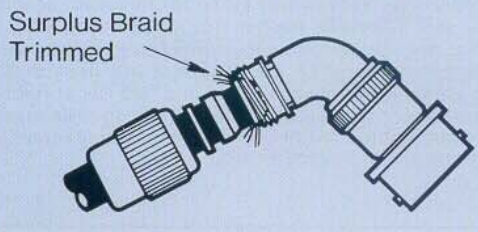
SOLDER CONNECTION TO CONTACTS (62 SERIES)

Insert the individual wires into the appropriate grommet holes. At the same time, slide the grommet back as far as possible, until the tinned ends of the centre conductors are far enough out of the grommet to permit soldering to the contacts. Insert the tinned ends of wires into the appropriate contacts in 62 series connector and solder into place. Slide the grommet forward over the wired contacts and press firmly into the rear of the connector shell and against rear face of insert.



CRIMP CONNECTION TO CONTACTS (162 SERIES)

Using the recommended tools crimp the contacts to the wires and insert them in the connector as described in the Amform instructions, which are supplied with each 162 series assembly. Bring up clamp body taking care not to drag the braid forward. (If necessary a small amount of thin tape may be used to hold the braid in position whilst carrying out this operation). Screw the clamp body onto the connector accessory thread, making sure that the connector serrations engage with those on the clamp body. Fold the braid out at right angles to the cable and slide forward the braid clamp. Smooth back braid onto the braid clamp and trim off the surplus. Slide up gasket, washer, screw on nut and tighten.

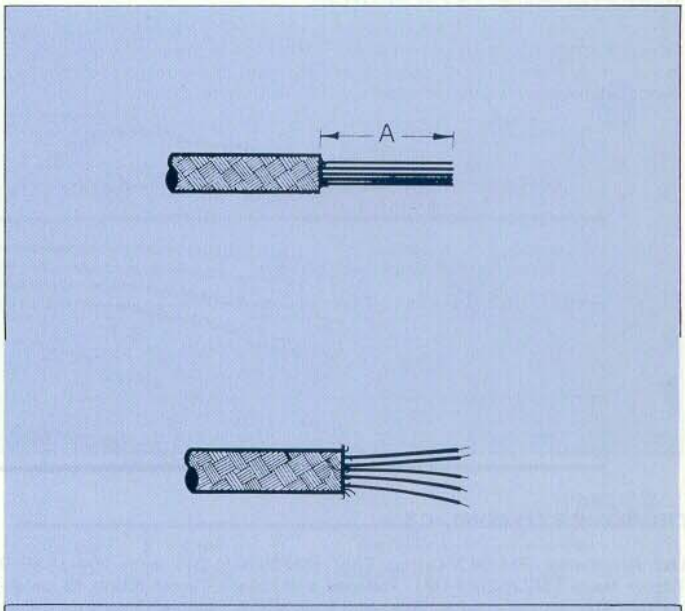


EXTERNALLY SCREENED JACKETED CABLES TYPES 'B & Q'

CABLE AND WIRE STRIPPING

Strip the outer braid and internal P.V.C. jacket of the cable back to dim 'A'.

SIZE	A Dimension	
	mm	in
08	58.15	2.89
10,12,14	66.68	2.625
16	69.85	2.75
20	88.9	3.50
24	95.25	3.75



FOR 62 SERIES

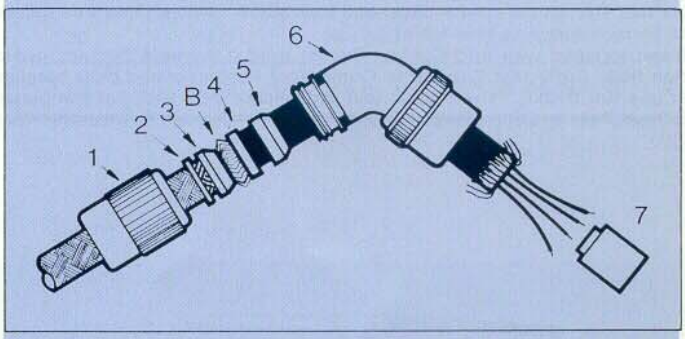
Strip 5.3mm (0.210in) to 6.1mm (0.240in) of insulation from each wire to expose centre conductor. Tin the ends. If ends fray, twist them back to their original lay before tinning.

FOR 162 SERIES

Strip 5.6mm (0.220 in) to 6.6mm (0.260 in) of insulation from each wire taking care not to cut or nick strands. If ends fray twist them back to their original lay.

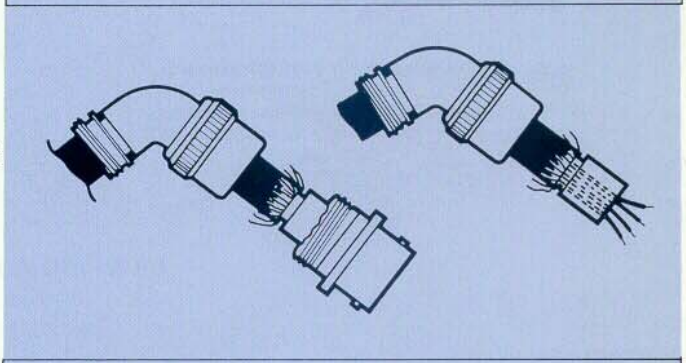
INITIAL ASSEMBLY

Slide onto the cable the following items in this order:-
(1) Nut (2) Washer (3) Male Braid Clamp - Convolute Screen (See B) as far as possible and slide on items:- (4) Female Braid Clamp (5) Gasket (6) 75° Right Angled Body (7) Grommet, 62 Series only.



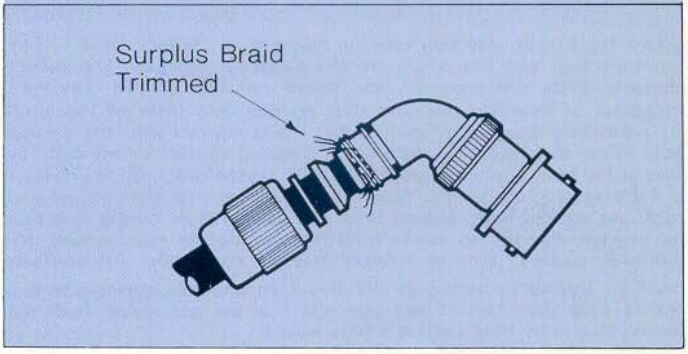
SOLDER CONNECTION TO CONTACTS (62 SERIES)

Insert the individual wires into the appropriate grommet holes. At the same time, slide the grommet back as far as possible, until the tinned ends of the centre conductors are far enough out of the grommet to permit soldering to the contacts. Insert the tinned ends of wires into the appropriate contacts in 62 series connector and solder into place. Slide the grommet forward over the wired contacts and press firmly into the rear of connector shell and against rear face of insert.



CRIMP CONNECTION TO CONTACTS (162 SERIES)

Using the recommended tools, crimp the contacts to the wires and insert them in the connector as described in the Amform instructions which are supplied with each 162 series assembly. Bring up clamp body taking care not to drag the braid forward. (If necessary a small amount of thin tape may be used to hold the braid in position whilst carrying out this operation). Screw the clamp body onto the connector accessory thread, making sure that the connector serrations engage with those on clamp body. Fold the braid out at right angles to the cable and slide forward the braid clamp. Smooth back braid onto the braid clamp and trim off surplus. Slide up gasket, washer, screw on nut and tighten.



UNSCREENED JACKETED CABLES 'TYPE A'

All procedures concerning this type of cable to be as for internally screened jacketed cable, but all references to screen (Braid) to be disregarded.

62GB and 162GB Assembly Instructions

WIRE STRIPPING 62 GB SERIES

Strip 5.3mm (.210in) to 6.1mm (.240in) of insulation from end of wires to expose centre conductor and tin the ends. If ends fray, twist them back to their original lay before tinning.

WIRE STRIPPING 162 GB SERIES

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.

CONTACT AND WIRE DATA 162 GB SERIES

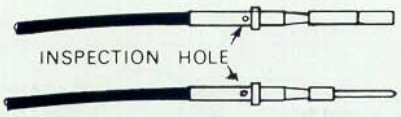
Contact Size	Colour Code	Contact part nos.	Suitable wire sizes		Permissible insulation O.D. range for grommet sealing	Stripping lengths
			A.W.G.	in mm	in mm	in mm
20	RED	pin: 162GB-149--20,000-05 skt: 162GB-101-20,000-05	20;22;24	0.032 - 0.020 0.81 - 0.51	0.047-0.085 1.19-2.16	0.220 - 0.260 5.6 - 6.6
16	BLUE	pin: 162GB-149-16,000-05 skt: 162GB-101-16000-05	16;18;20	0.051-0.032 1.295 - 0.81	0.066-0.109 1.675 - 2.77	0.220-0.260 5.6 - 6.6

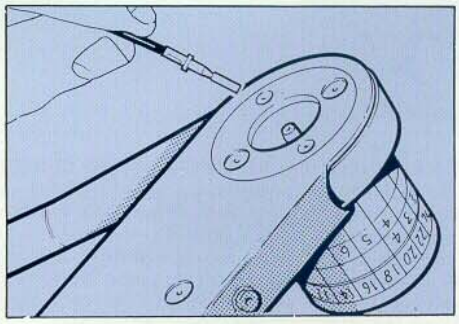
CRIMP WIRE TO CONTACT

Use Amphenol 294-542 Crimp Tool [M22520/1-01] with 294-1889-01 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 Rachet 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





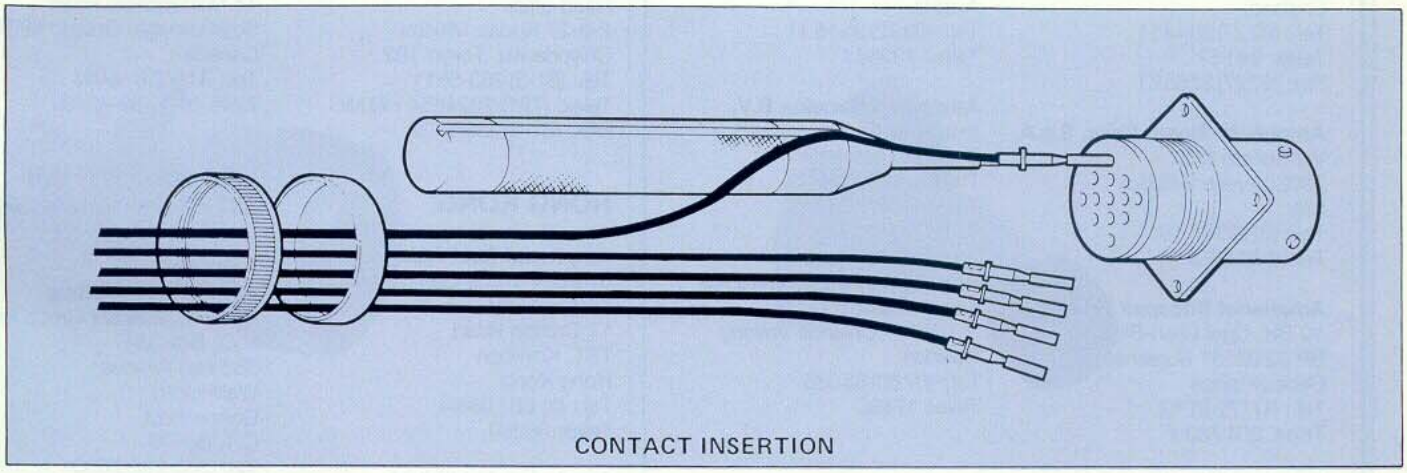
CRIMPING WIRE TO CONTACT

CONTACT INSERTION

Select the proper insertion tool for the size of contact table 1. 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 tool 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 and 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 in by hand until it is fully seated.

TABLE 1

Contact Size	Colour Code	Insertion tool part number Amphenol	M.S.	Grommet Sealing Plug
20	RED	294GB-5000-20	—	162GB-130-20000
16	BLUE	294-96	MS 24256A-16	162GB-130-16000



CONTACT INSERTION

CONTACT REMOVAL

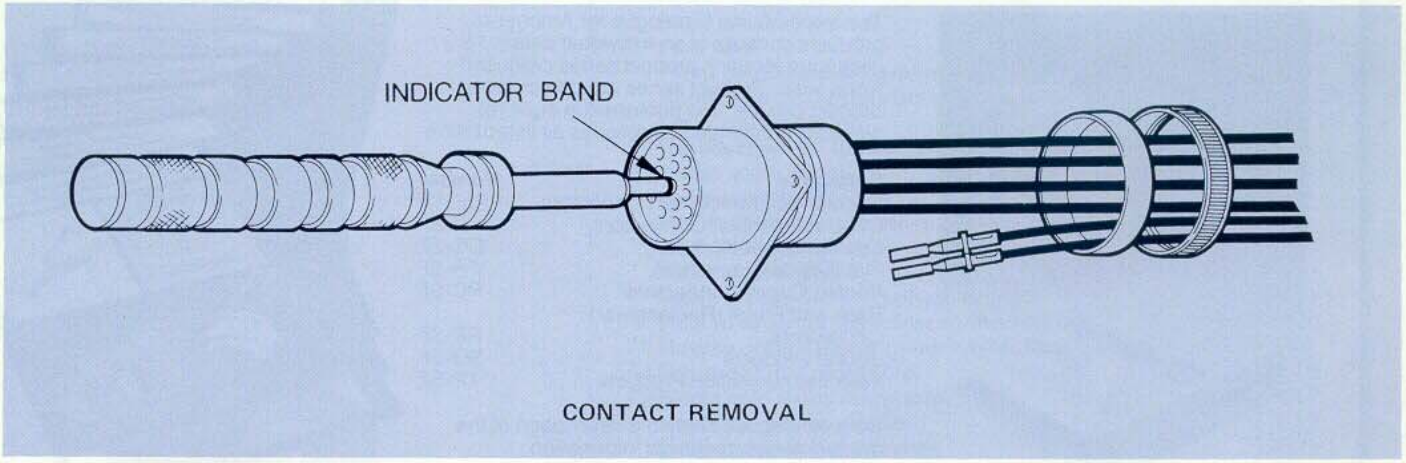
CAUTION: extra care is required in this operation to prevent damage to the connector.

Remove the rear accessory and sleeve and slide back on wire bundle. Select the proper removal tool for the size of contact from table 2. 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.

Details of operator training are available from Amphenol upon request.

TABLE 2

Contact Size	Colour Code	*Removal tool part number Amphenol	M.S.
20	RED	294-89	MS 24256R-20
16	BLUE	294-97	MS 24256R-16



CONTACT REMOVAL

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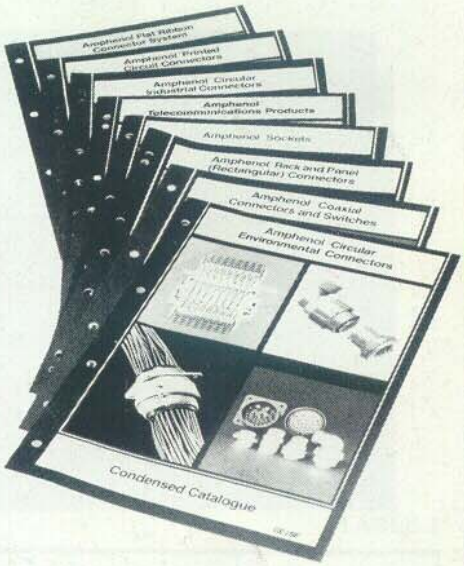
International Catalogue System

Amphenol products produced worldwide are shown in four product catalogue binders.

The International Catalogue for Amphenol products consists of an individual data catalogue for each product series produced world-wide. Product series are combined by product groups, and published in eight (8) separate condensed catalogues as listed below:

Catalogue	Number
Circular Environmental Connectors	CE-SF
Circular Industrial Connectors	CI-SF
Coaxial Connectors	CC-SF
Flat Ribbon Connectors	FR-SF
Printed Circuit Connectors	PC-SF
Rack and Panel (Rectangular) Connectors	RP-SF
Socket Products	SO-SF
Telecommunication Products	TP-SF

Data catalogues contain a description of the product series, technical information, specification data, dimensions and part numbers. A data catalogue or a condensed catalogue can be obtained from any international location listed above. When ordering state the catalogue number.



Eight Condensed Catalogues illustrate the products by series designation.

NOTICE

Products are sold subject to Amphenol's conditions of sale ("the standard conditions"). All specifications and statements contained herein are believed to be correct at the time of printing, but no representation or warranty, express or implied, is given as to any specification or statement contained herein. Product specifications including performance characteristics are typical only and subject to deviation. Specifications are also subject to change without notice. User should not assume that all safety measures are indicated or that other measures may not be required. No representation or warranty, express or implied, is given that any use of products (including any stated or suggested use) does not infringe any patent, registered design or other third party rights and no stated or suggested use of products can be taken to recommend any such infringement.

Amphenol

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