

711 Series Single/Multi Way Bayonet Coupled Connectors

DB2

Data Bus Interconnection System



This high density Data Bus Interconnection System has been designed specifically for use with data transmission as defined MIL-STD-15538, STANAG 3838 and DEF STAN 00-18 (Part 2).

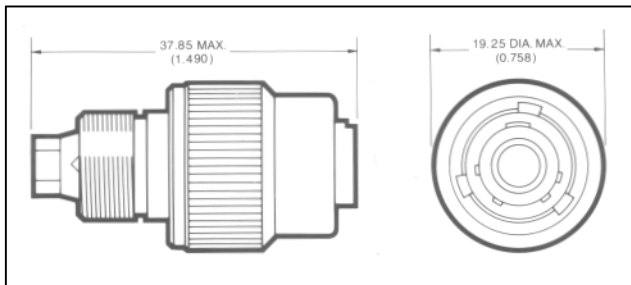
Approved to BS 9522 F0042 and qualified to PAN 6484/6499 this interconnection system is also ideal for use with video transmission systems and the termination of screened twisted pairs.

Amphenol

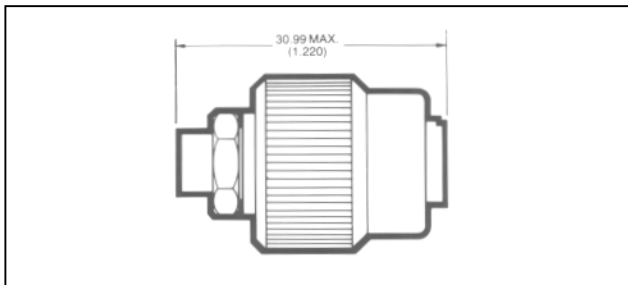
Single/Multi Way Bayonet Coupling Connectors

(All crimp contact. All contacts grounded to shell)

Single Way Plug (to accept EL 2112 Patt.
602 back end accessories) - 06E08-1 S

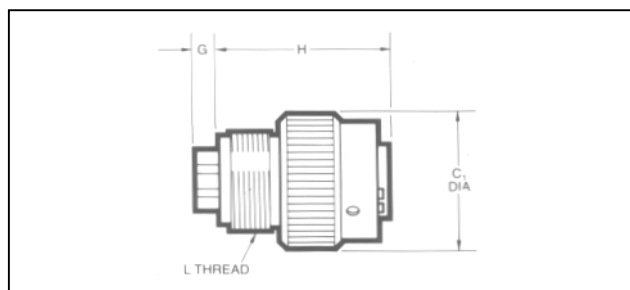


Single Way Plug 06E 08-1 S (510)

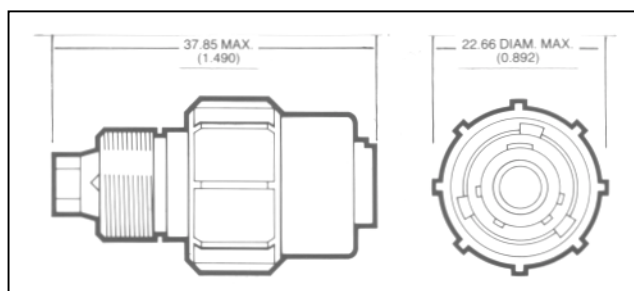


Multi Way Plug - 06E /C2811-/PAN 6486 F

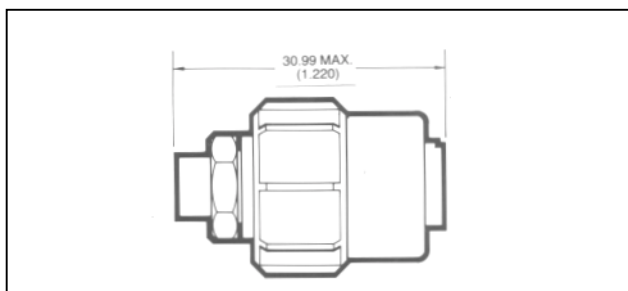
Shell Size	C max. Dia.	G max.	H max.	L Thd UNEF 2A
14	30.05 (1.183)	7.50 (0.295)	31.24 (1.230)	7/8 - 20
16	33.15 (1.305)	7.50 (0.295)	31.24 (1.230)	1 - 20
18	35.33 (1.391)	7.50 (0.295)	31.24 (1.230)	1 1/16 - 18
20	38.89 (1.531)	7.50 (0.295)	31.24 (1.230)	1 3/16 - 18
22	42.06 (1.656)	7.50 (0.295)	31.24 (1.230)	1 5/16 - 18
24	45.14 (1.777)	7.50 (0.295)	31.24 (1.230)	1 7/16 - 18



Single Way Plug with heavy duty Coupling Ring -
05E08-1 S (To accept EL 2112 Patt. 602 back end
accessories)

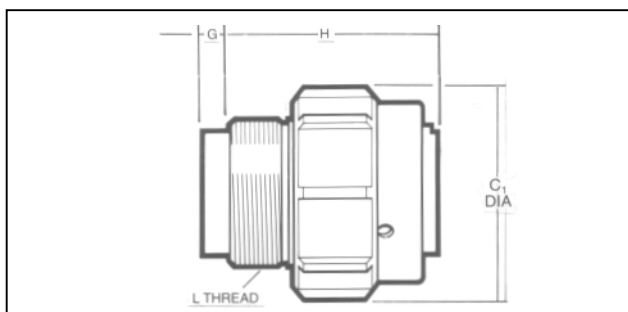


Single way plug with heavy duty coupling ring
05E08-1 S(510)

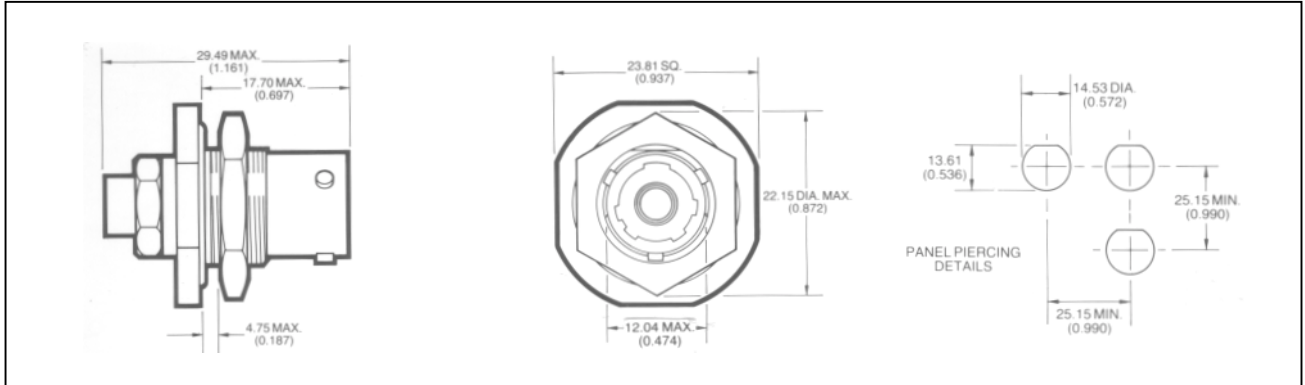


Multi Way Plug with heavy duty Coupling Ring - 05E /C2812

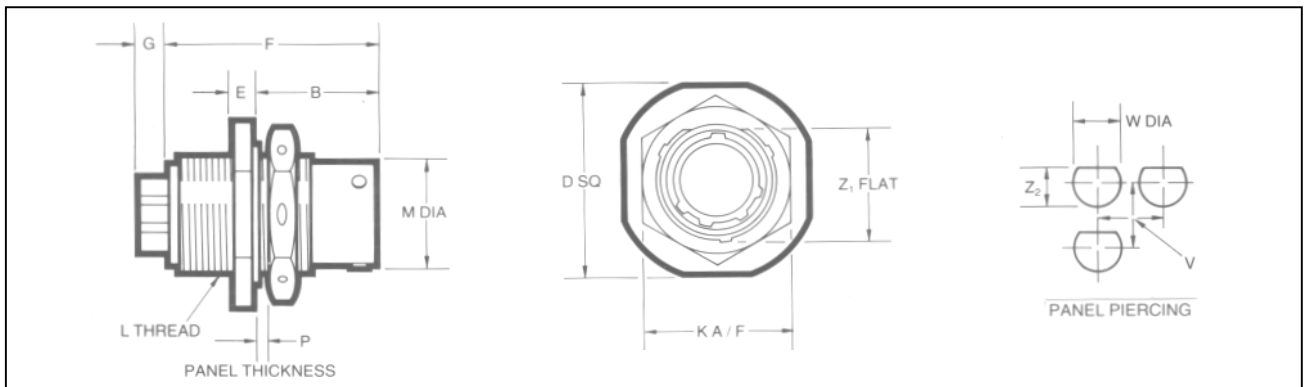
Shell Size	C2 Max. Dia.	G max.	H max.	L Thd UNEF 2A
14	31.18 (1.267)	7.50 (0.295)	31.24 (1.230)	7/8 - 20
16	36.93 (1.454)	7.50 (0.295)	31.24 (1.230)	1 - 20
18	39.70 (1.563)	7.50 (0.295)	31.24 (1.230)	1 1/16 - 18
20	42.85 (1.687)	7.50 (0.295)	31.24 (1.230)	1 3/16 - 18
22	45.64 (1.797)	7.50 (0.295)	31.24 (1.230)	1 5/16 - 18
24	48.82 (1.922)	7.50 (0.295)	31.24 (1.230)	1 7/16 - 18



Single Way Single Hole Mtg. Receptacle - 07E08-1 P

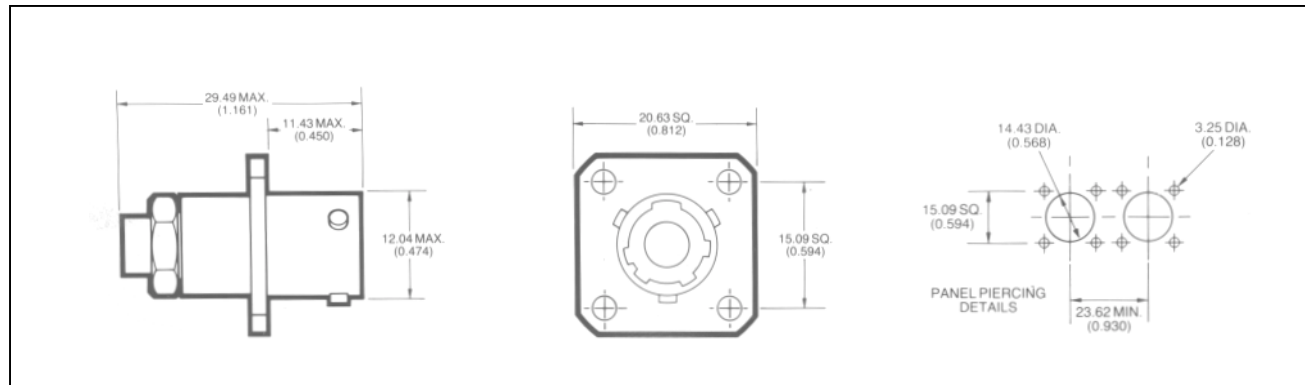


Multi Way Single Hole Mtg. Receptacle - 07E /C2814-/PAN 6486A

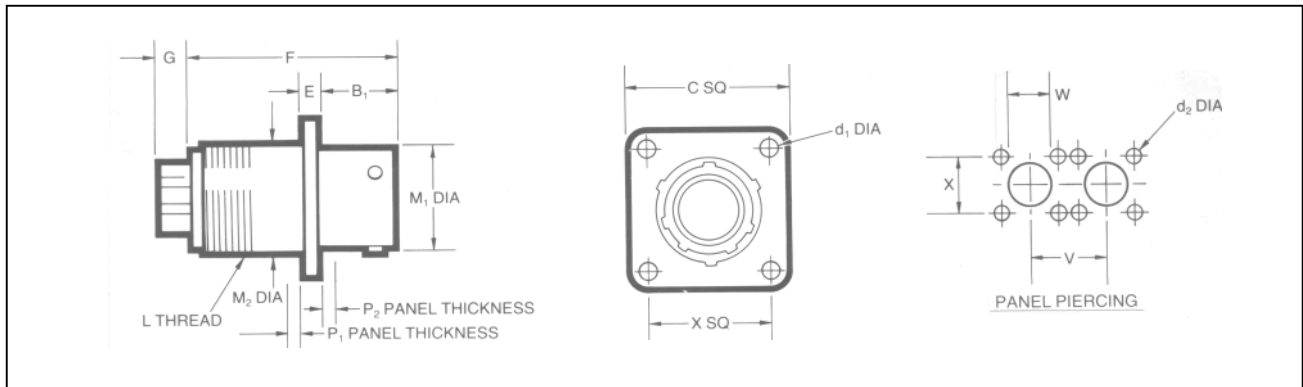


Shell Size	B Max.	D SQ	E max.	F max.	G max.	KA/F max.	L Thd UNEF 2A	M max. dia.	P Panel thickness max. min.	V min.	W dia ± 0.13 (± .005)	Z ₁ ± 0.13 (± .005)	Z ± 0.13 (± .005)
14	17.96 (0.707)	35.33 (1.391)	2.87 (0.113)	30.86 (1.215)	7.50 (0.295)	30.61 (1.205)	7/8 - 20	22.25 (0.876)	4.75 (0.187) 1.57 (0.062)	36.32 (1.430)	25.65 (1.010)	23.80 (0.937)	24.08 (0.948)
16	17.96 (0.707)	38.51 (1.516)	2.87 (0.113)	30.86 (1.215)	7.50 (0.295)	33.76 (1.329)	1 - 20	25.43 (1.001)	4.75 (0.187) 1.57 (0.062)	39.88 (1.570)	28.83 (1.135)	26.95 (1.061)	27.23 (1.072)
18	17.96 (0.707)	41.68 (1.641)	2.87 (0.113)	30.86 (1.215)	7.50 (0.295)	36.96 (1.455)	1 1/16 - 18	28.60 (1.126)	4.75 (0.187) 1.57 (0.062)	43.69 (1.720)	32.00 (1.260)	30.12 (1.186)	30.40 (1.197)
20	19.61 (0.772)	46.43 (1.828)	3.76 (0.148)	32.38 (1.275)	7.50 (0.295)	40.11 (1.579)	1 3/16 - 18	31.78 (1.251)	6.35 (0.250) 1.57 (0.062)	47.37 (1.865)	35.18 (1.385)	33.30 (1.311)	33.58 (1.322)
22	19.61 (0.772)	49.63 (1.954)	3.76 (0.148)	32.38 (1.275)	7.50 (0.295)	43.31 (1.705)	1 9/16 - 18	34.95 (1.376)	6.35 (0.250) 1.57 (0.062)	50.93 (2.005)	38.35 (1.510)	36.47 (1.436)	36.75 (1.447)
24	19.61 (0.772)	52.78 (2.078)	3.76 (0.148)	32.38 (1.275)	7.50 (0.295)	46.46 (1.829)	1 7/16 - 18	38.13 (1.501)	5.56 (0.219) 1.57 (0.062)	54.61 (2.150)	41.53 (1.635)	39.65 (1.561)	39.93 (1.572)

Single Way Flange Mtg. Receptacle - OOE08-1 P

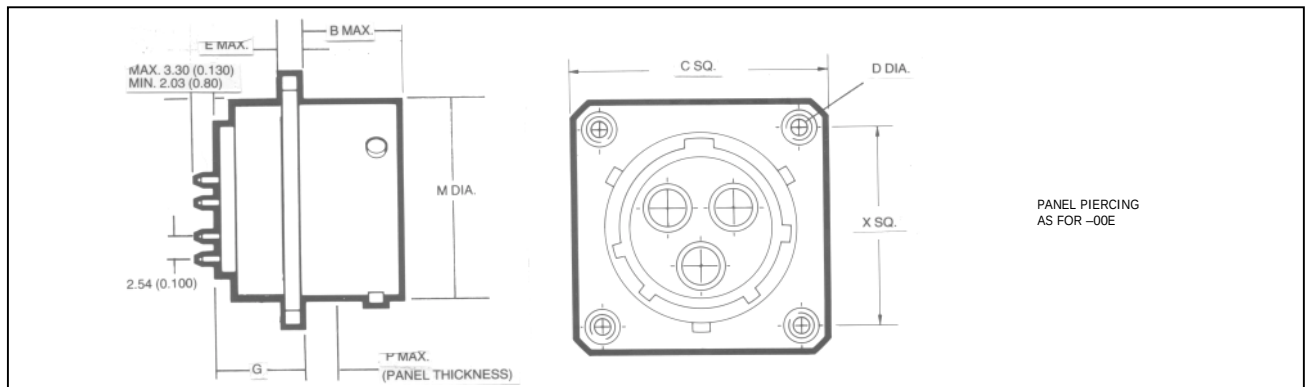


Multi Way Flange Mtg. Receptacle - OOE /C2813-/PAN 6486B-



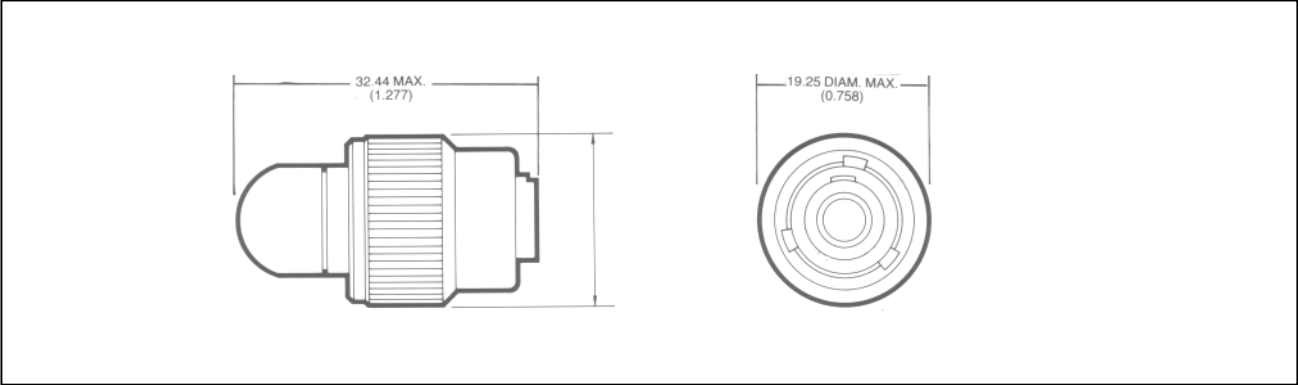
Shell Size	B ± 0.38 (± .015)	C sq. max.	d ₁ dia ± 0.05 (± .002)	d ₂ dia ± 0.13 (± .005)	E ± 0.41 (± .016)	F max.	G max.	L Thd UNE F 2A	M ₁ Dia. max.	M ₂ Dia. max.	P ₁ max.	P ₂ max.	V min.	W dia ± 0.13 (± .005)	x sq ± 0.13 (± .005)
14	11.33 (0.446)	28.98 (1.141)	3.18 (0.125)	3.25 (0.128)	1.57 (0.062)	30.86 (1.215)	7.50 (0.295)	7/8 - 20	22.25 (0.876)	22.22 (0.875)	3.18 (0.125)	2.21 (0.087)	33.15 (1.305)	25.12 (0.989)	23.01 (0.906)
16	11.33 (0.446)	31.34 (1.234)	3.18 (0.125)	3.25 (0.128)	1.57 (0.062)	30.86 (1.215)	7.50 (0.295)	1 - 20	25.43 (1.001)	25.40 (1.000)	3.18 (0.125)	2.21 (0.087)	37.85 (1.490)	28.27 (1.113)	24.61 (0.969)
18	11.33 (0.446)	33.73 (1.328)	3.18 (0.125)	3.25 (0.128)	1.57 (0.062)	30.86 (1.215)	7.50 (0.295)	1 1/16 - 18	28.60 (1.126)	26.97 (1.062)	3.18 (0.125)	2.21 (0.087)	40.64 (1.600)	31.45 (1.238)	26.97 (1.062)
20	14.50 (0.571)	36.91 (1.453)	3.18 (0.125)	3.25 (0.128)	2.39 (0.094)	32.38 (1.275)	7.50 (0.295)	1 3/16 - 18	31.78 (1.251)	30.15 (1.187)	3.18 (0.125)	5.38 (0.212)	43.81 (1.725)	34.62 (1.363)	29.36 (1.156)
22	14.50 (0.571)	40.08 (1.578)	3.18 (0.125)	3.25 (0.128)	2.39 (0.094)	32.38 (1.275)	7.50 (0.295)	1 5/16 - 18	34.95 (1.376)	33.32 (1.312)	3.18 (0.125)	5.38 (0.212)	46.61 (1.835)	37.80 (1.488)	31.75 (1.250)
24	15.37 (0.605)	43.26 (1.703)	3.86 (0.152)	3.94 (0.155)	2.39 (0.094)	32.38 (1.275)	7.50 (0.295)	1 7/16 - 18	38.13 (1.501)	36.50 (1.437)	3.18 (0.125)	5.38 (0.212)	49.78 (1.960)	41.02 (1.615)	34.92 (1.375)

Multi Way Flange Mtg. Receptacle with P.C. Termination Contacts - 02A (219) Deviation /C2815-



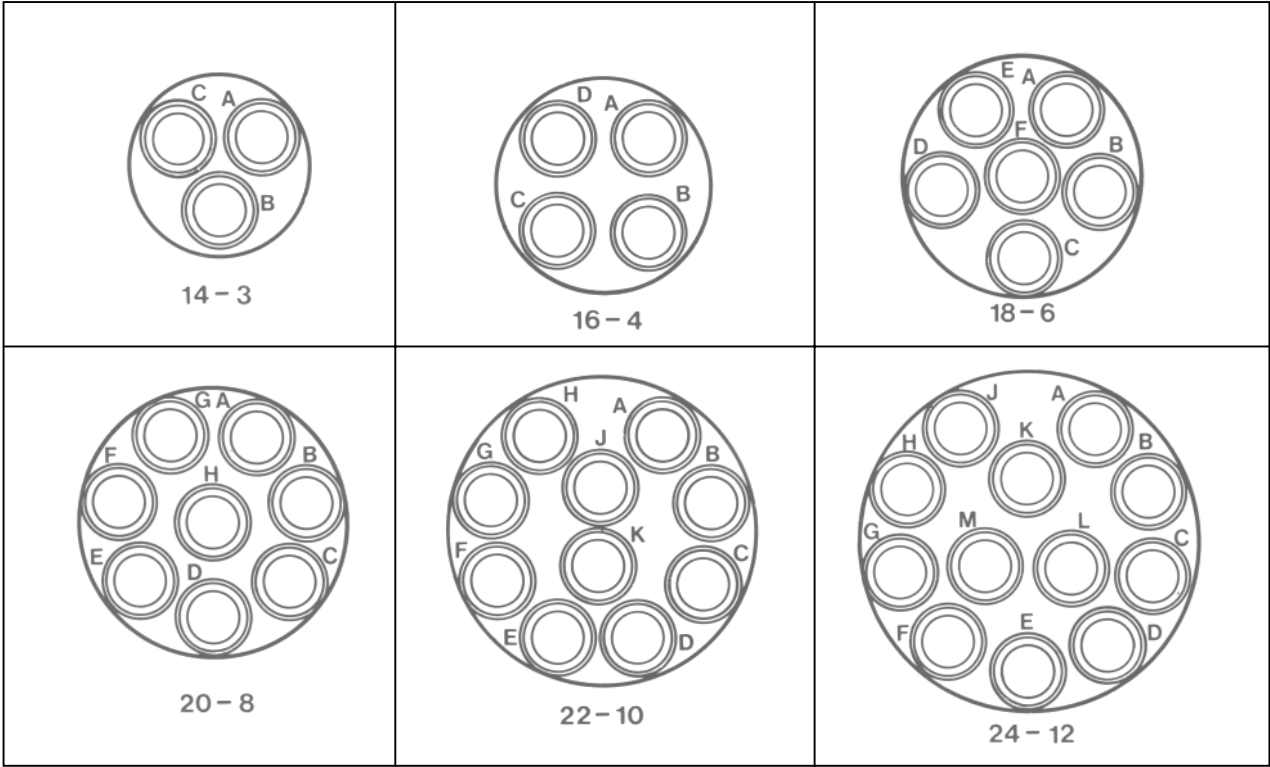
Shell Size	B max.	C Sq. max.	D Dia. ±0.05 (±0.002)	E max.	G max.	M Dia. max.	P max.
14	11.71 (0.461)	28.98 (1.141)	3.18 (0.125)	1.96 (0.077)	9.37 (0.369)	22.25 (0.876)	2.21 (0.087)
16	11.71 (0.461)	31.34 (1.234)	3.18 (0.125)	1.96 (0.077)	9.37 (0.369)	25.43 (1.001)	2.21 (0.087)
18	11.71 (0.461)	33.73 (1.328)	3.18 (0.125)	1.96 (0.077)	9.37 (0.369)	28.60 (1.126)	2.21 (0.087)

Single Way Plug Terminator 77± 1%-06ET08-1S (77)



Multi Way Insert Availability

Lettering of inserts shown here corresponds to views of front (mating) surface of pin inserts.



Protective Caps and Backshells

This series of connectors is designed to use EL2112 Patt. 602 accessories.

Terminating Contacts (for use with multi way connectors)Pin terminator $3K\Omega \pm 5\%$ - 711-0176-3K also $77\Omega \pm 1\%$ Socket terminator $3K\Omega \pm 5\%$ - 711-0125-3K also $77\Omega \pm 1\%$ **Dummy Contact and Seal Plug Kit** (for use with multi way connectors)

Pin 711-0174-P

Socket 711-0174-S

Contacts

Pin 711-0013-1 Socket 711-0014-1

Tools for 711 Series Connectors

Centre contact crimp-Crimp tool M22520/2-01.

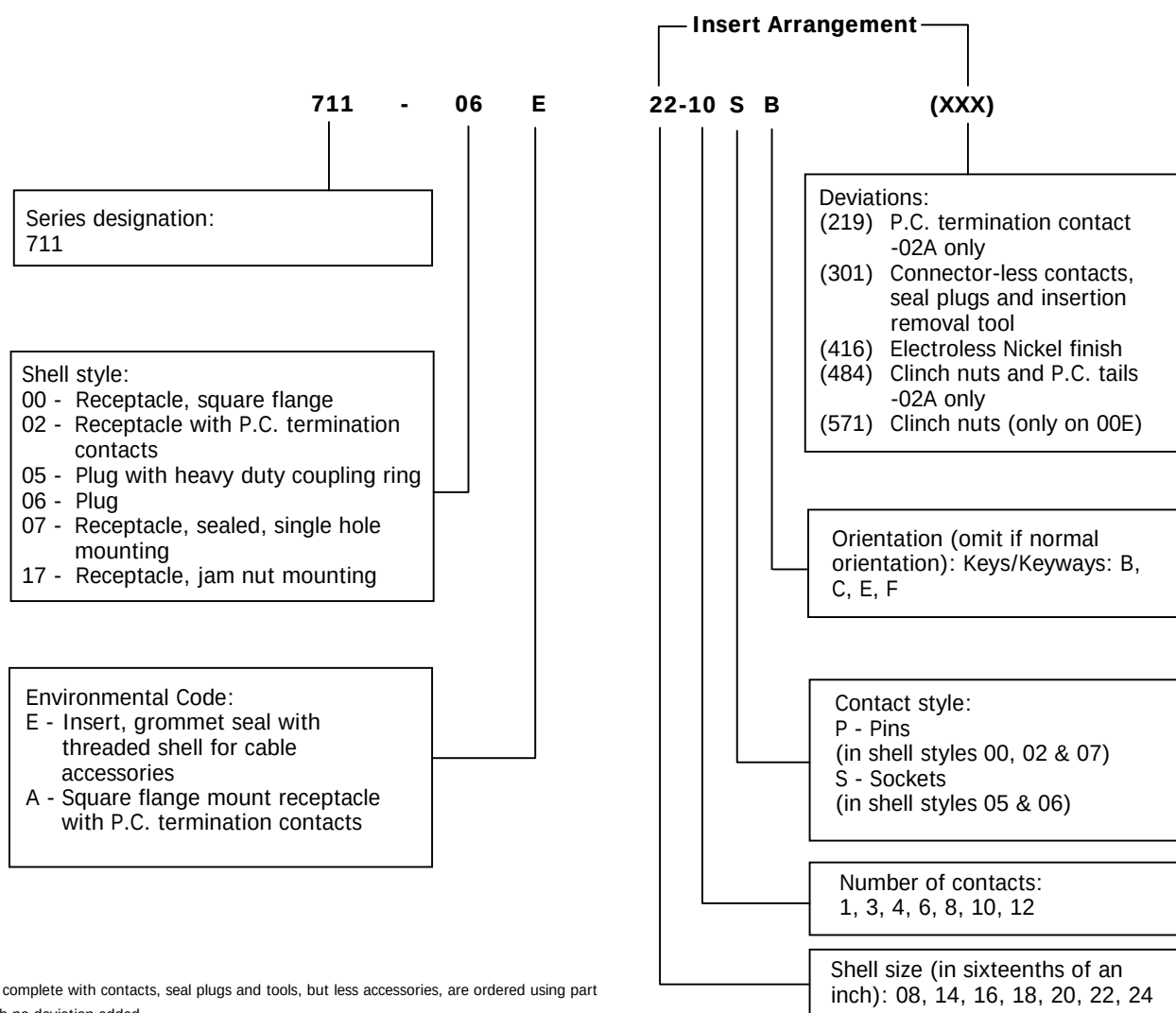
Positioner 2946 B-5027-1.

Intermediate/Outer crimp - Crimp tool 227-944 (M22520/5-01).

Die Set 294GB-5026-1.

Insertion/Removal tool -294GB-5028.

Metal removal tool - 294GB-5047.

Single / Multi Way**Ordering by Amphenol Part Numbers**

Connectors complete with contacts, seal plugs and tools, but less accessories, are ordered using part number with no deviation added.

Ordering by BS Part Number

BS 9522 F0042 C2811 14 03 F N 0

Basic Number

Variant
0 = CAD/Olive drab
1 = Electroless nickel
2 = Zinc Cobalt/Olive drab

Key polarisation
N = Normal
B,C,E,F available

Contact Type F =
Socket contact M = Pin
contact (All plugs have
socket contacts) All
recepts have Pin
contacts)

Contact arrangement

Shell size

Shell Style

C2811 as per shell style	06E-
C2812 as per shell style	05E-
C2813 as per shell style	00E-
C2814 as per shell style	07E-
C2815 as per shell style	02A-

Ordering by Pan Part Number

PAN 6486 F 14 03 S N (XXX)

Basic number

Deviation
No = CAD/olive drab
416 = Electroless nickel
586 = Zinc Cobalt/Olive drab
301 = Less contacts/Seal
 plugs and removal tools
543 = Less contacts

Orientation
N = Normal
B,C,E,F available

Contact Type
S = Socket
P = Pin

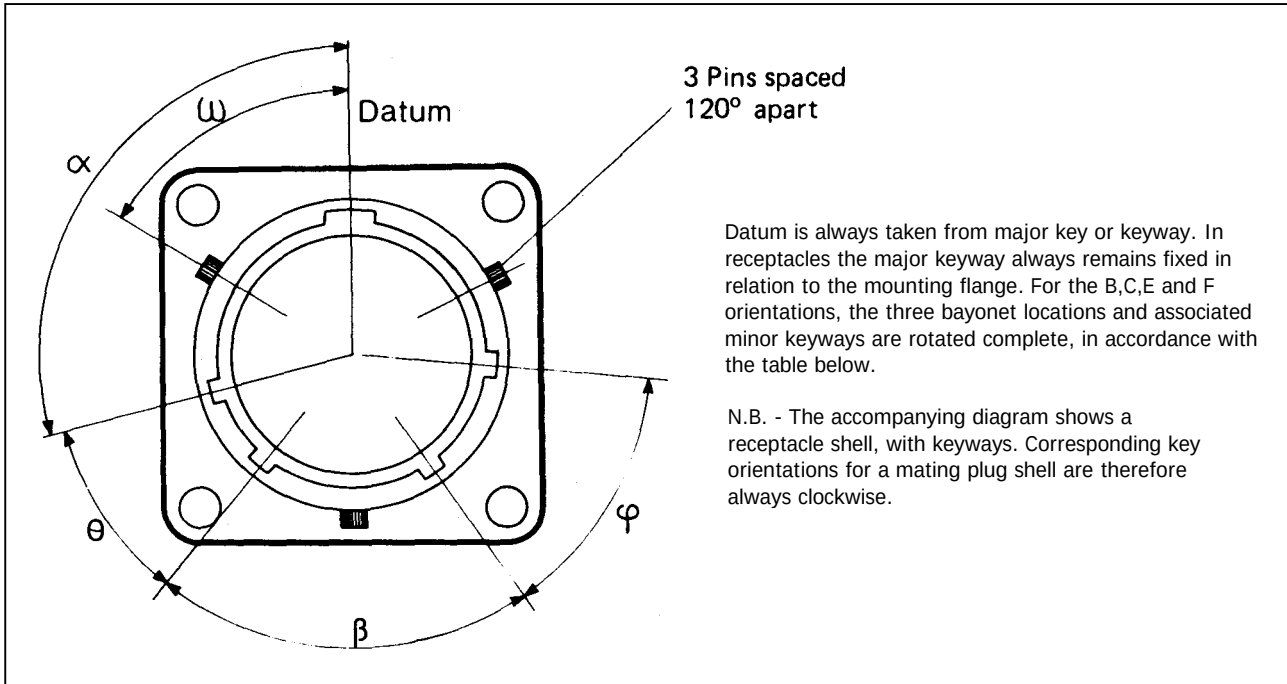
Contact arrangements

Shell size

Shell Style

Pan 6486A as per shell style	07E
Pan 6486B	00E
Pan 6486E	06E

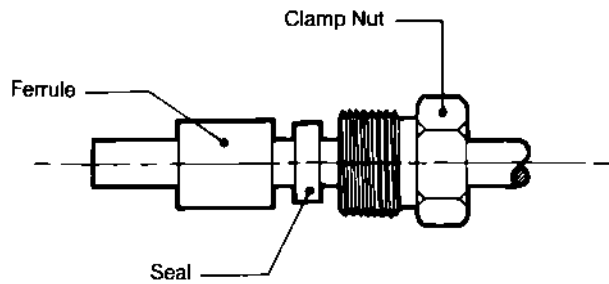
Key/Keyway Orientations



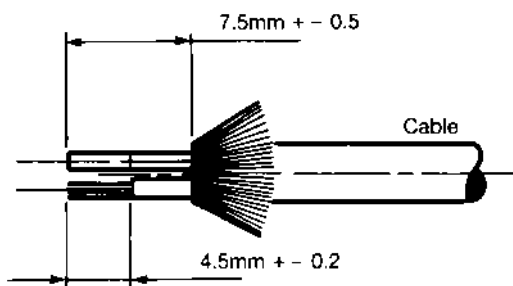
Shell Size	VALUES FOR α (degrees)					VALUES FOR θ (degrees)					VALUES FOR β (degrees)				
	N	B	C	E	F	N	B	C	E	F	N	B	C	E	F
14	105	91	119	75	120	35	35	35	30	50	75	75	75	100	75
16	105	93	117	75	120	35	35	35	30	50	75	75	75	100	75
18	105	95	115	75	120	35	35	35	30	50	75	75	75	100	75
20	105	95	115	75	120	35	35	35	30	50	75	75	75	100	75
22	105	97	113	75	120	35	35	35	30	50	75	75	75	100	75
24	105	97	113	75	120	35	35	35	30	50	75	75	75	100	75

Shell Size	VALUES FOR ϕ (degrees)					VALUES FOR ω (degrees)				
	N	B	C	E	F	N	B	C	E	F
14	50	50	50	30	35	60	46	74	30	75
16	50	50	50	30	35	60	48	72	30	75
18	50	50	50	30	35	60	50	70	30	75
20	50	50	50	30	35	60	50	70	30	75
22	50	50	50	30	35	60	52	68	30	75
24	50	50	50	30	35	60	52	68	30	75

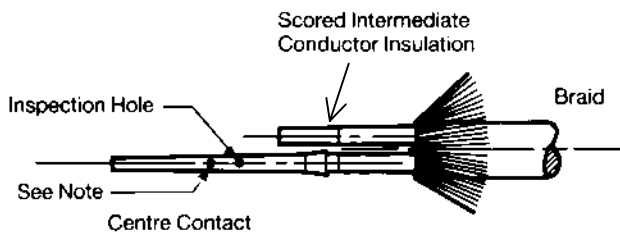
Size #10 Data Bus Contact Assembly Instructions



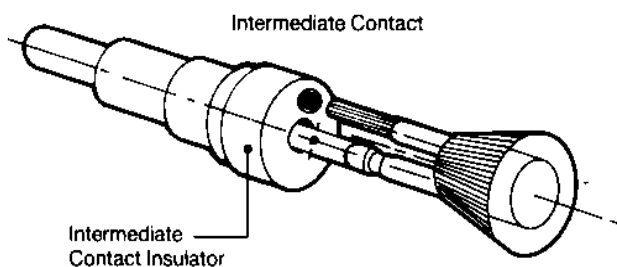
Slide clamp nut, seal and ferrule over cable. (Nut & seal only applicable on single way connector).



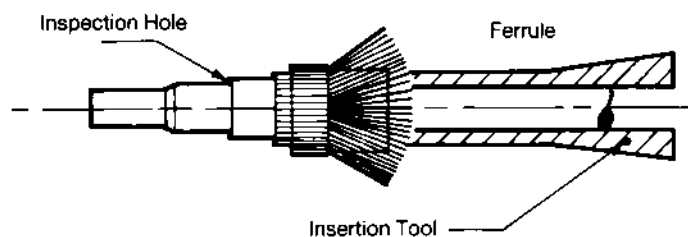
Remove outer sheath of cable to 7.5mm comb out all braids evenly and fold back. Remove cable fillers from stripped length. Strip the centre contact conductor to 4.5mm. Note: It is recommended that both intermediate and centre contact conductors are scored at the correct stripping length. The intermediate conductor insulation should not be removed until the centre contact has been crimped.



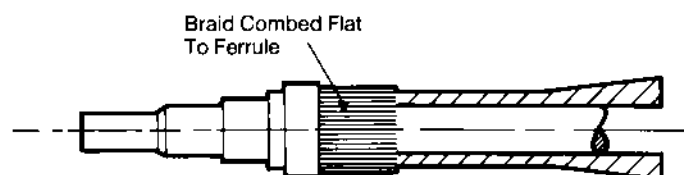
Crimp centre contact (Pin or Socket) on to the stripped wire using tool M22520/2-01 and crimp positioner 294GB-5027-1 (setting No. 4 for 24AWG) butting rear end of contact to wire insulation. The conductor end should be visible in the inspection hole. Note: A second hole is permissible in the socket contact for manufacturing purposes. It is not required to be on the same centre line as the inspection hole.



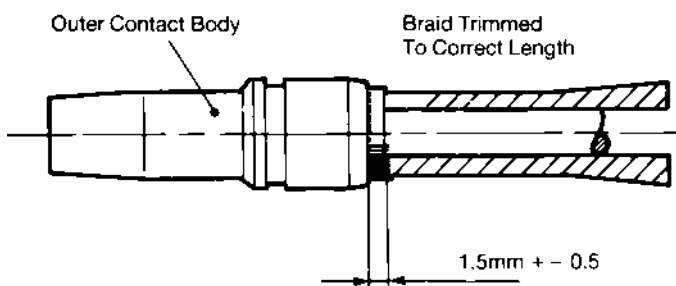
Strip intermediate contact conductor to 4.5mm. Insert centre contact into centre hole of intermediate contact conductor into the outer hole of the intermediate contact assembly. Push firmly home until the centre contact is felt to snap into place and ensure that the insulation of each conductor is fully inserted into the intermediate contact insulator. The intermediate conductor should be visible in the inspection hole in the intermediate contact. There should be no loose cable strands visible. Crimp the intermediate contact assembly using the appropriate cavity of crimp jaw 294GB-5026-1 fitted into M22520/5-01 tool.



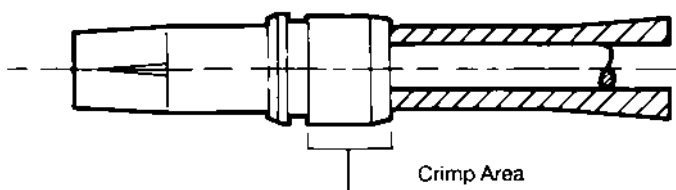
Slide the ferrule forward under the braid to trap the braid against the rear of the intermediate contact insulator, for all succeeding operations keep the ferrule firmly against the rear of the insulator using insertion tool (294GB-5028).



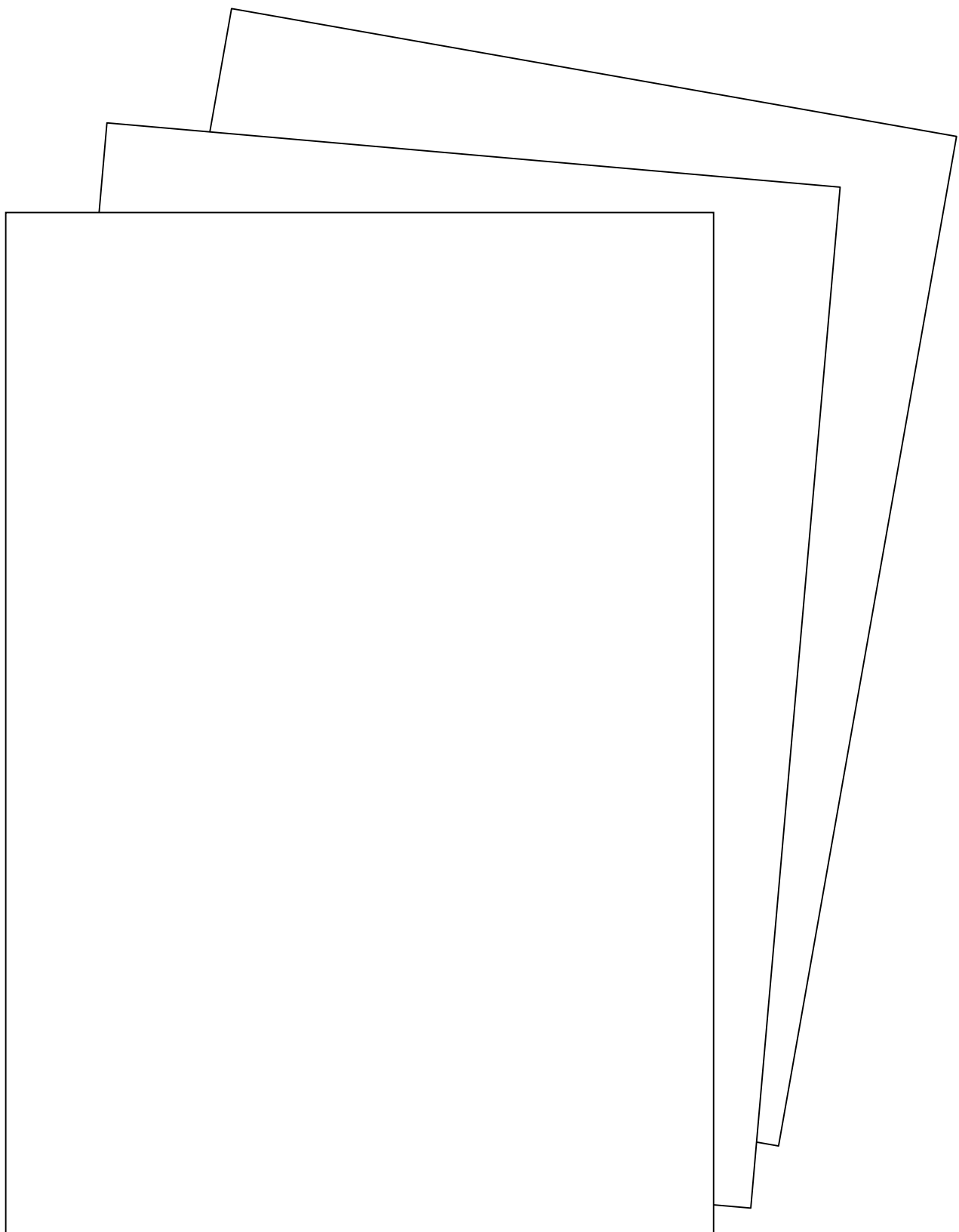
Comb the braid back evenly and flatten it onto the ferrule.



Slide the outer contact body over the intermediate contact assembly and ferrule until approximately 1.5 mm of the ferrule is visible. Trim off the excess braid using the rear of the outer contact body as a guide. Ensure that there are no loose braid clippings at the rear of the ferrule.



Place the outer contact body into the hexagonal cavity of the crimp jaws (294GB-5026-1). Slide the intermediate contact assembly and ferrule fully into the outer body using the insertion tool. The rear of the ferrule should be -0.5 or ± 0.5 mm to the rear of the outer contact body when fully inserted. Complete the hexagonal crimp.



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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
Fibre Optics	-

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.



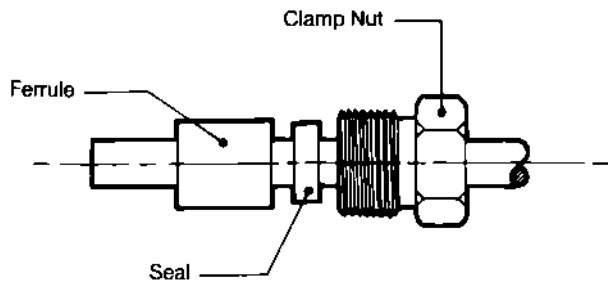
Seven Condensed Catalogues illustrate the products by series designation.

NOTICE

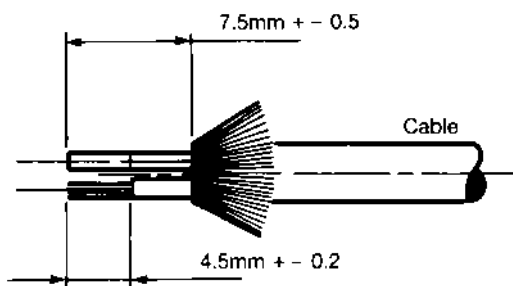
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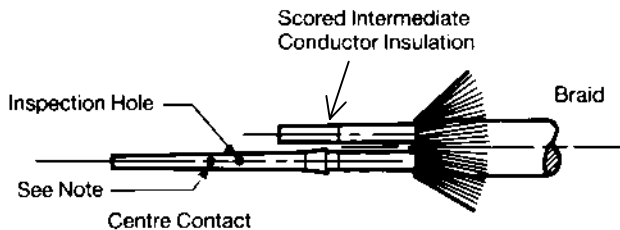
Size #10 Data Bus Contact Assembly Instructions



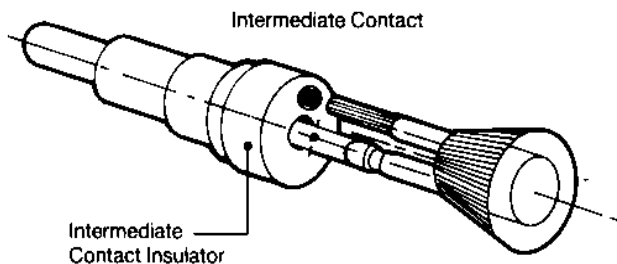
Slide clamp nut, seal and ferrule over cable. (Nut & seal only applicable on single way connector).



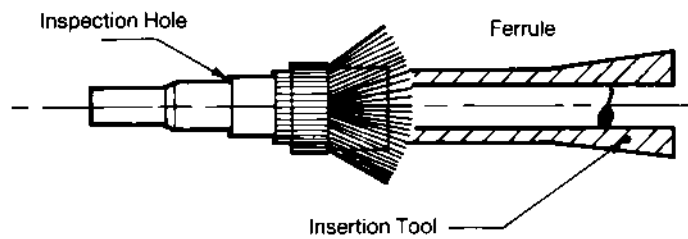
Remove outer sheath of cable to 7.5mm comb out all braids evenly and fold back. Remove cable fillers from stripped length. Strip the centre contact conductor to 4.5mm. Note: It is recommended that both intermediate and centre contact conductors are scored at the correct stripping length. The intermediate conductor insulation should not be removed until the centre contact has been crimped.



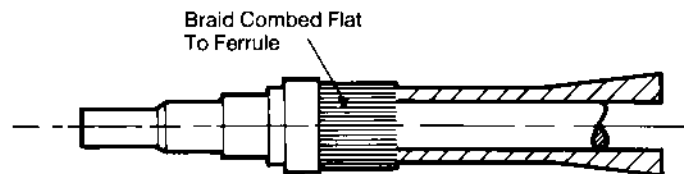
Crimp centre contact (Pin or Socket) on to the stripped wire using tool M22520/2-01 and crimp positioner 294GB-5027-1 (setting No. 4 for 24AWG) butting rear end of contact to wire insulation. The conductor end should be visible in the inspection hole. Note: A second hole is permissible in the socket contact for manufacturing purposes. It is not required to be on the same centre line as the inspection hole.



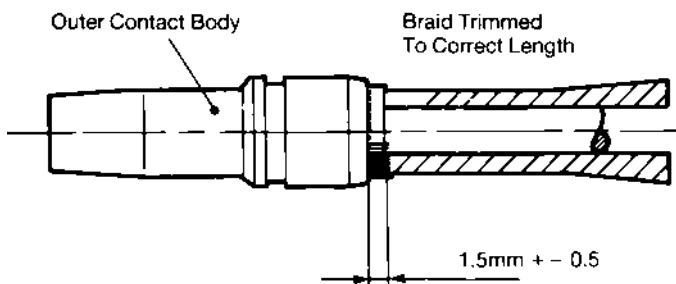
Strip intermediate contact conductor to 4.5mm. Insert centre contact into centre hole of intermediate contact conductor into the outer hole of the intermediate contact assembly. Push firmly home until the centre contact is felt to snap into place and ensure that the insulation of each conductor is fully inserted into the intermediate contact insulator. The intermediate conductor should be visible in the inspection hole in the intermediate contact. There should be no loose cable strands visible. Crimp the intermediate contact assembly using the appropriate cavity of crimp jaw 294GB-5026-1 fitted into M22520/5-01 tool.



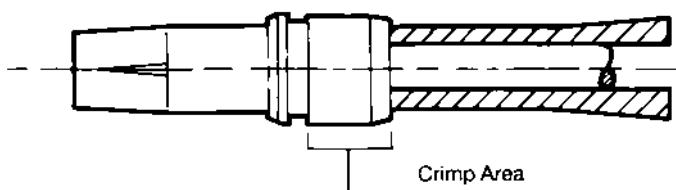
Slide the ferrule forward under the braid to trap the braid against the rear of the intermediate contact insulator, for all succeeding operations keep the ferrule firmly against the rear of the insulator using insertion tool (294GB-5028).



Comb the braid back evenly and flatten it onto the ferrule.



Slide the outer contact body over the intermediate contact assembly and ferrule until approximately 1.5 mm of the ferrule is visible. Trim off the excess braid using the rear of the outer contact body as a guide. Ensure that there are no loose braid clippings at the rear of the ferrule.



Place the outer contact body into the hexagonal cavity of the crimp jaws (294GB-5026-1). Slide the intermediate contact assembly and ferrule fully into the outer body using the insertion tool. The rear of the ferrule should be -0.5 or ± 0.5 mm to the rear of the outer contact body when fully inserted. Complete the hexagonal crimp.