# 711 Series Single Way

DB-1a

Data Bus Interconnection System



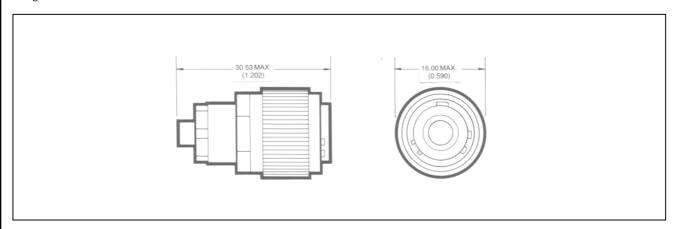
Data Bus Interconnection System designed for data transmission as defined by MIL-STD-1553B, STANAG 3838 and DEF STAN 00-18 (Part 2). This system is also ideal for video transmission systems and the termination of screened twisted pairs.

BS 9522 F0043 approved and qualified to PAN 6484/6499. 711 series connectors incorporate an anti-vibration locking mechanism. The triaxial, all crimp contact used in the 711 series single way connectors is common to the multi-way connector housing allowing up rating of equipment at any time.

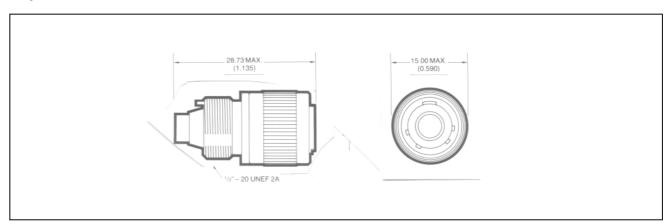
# **Amphenol**

# Plugs

Plug - 711-5000/C2832-

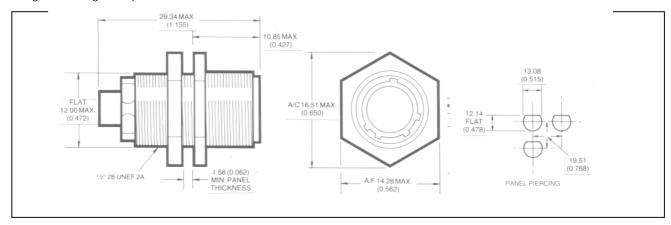


Plug-711-5011/C2831-/PAN 6484 F

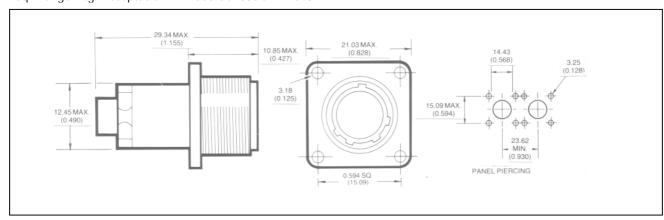


## **Receptacles**

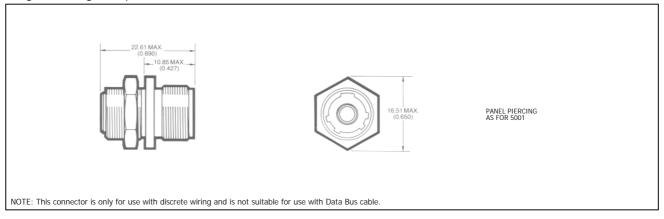
Single Hole Mtg. Receptacle -711-5001/C2834-



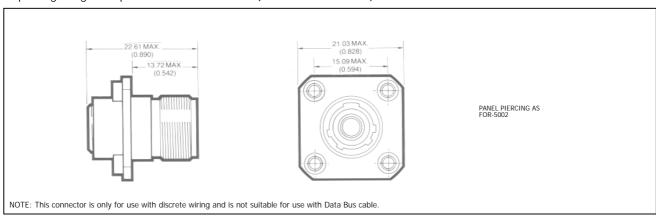
Sq. Flange Mtg. Receptacle - 711-5002/C2835-/PAN 6484 B



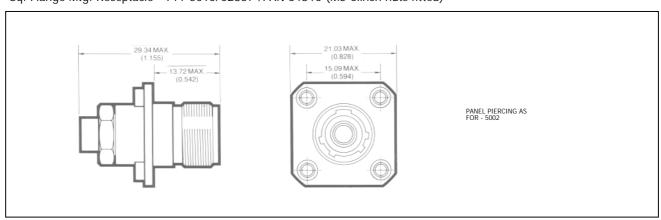
#### Single Hole Mtg. Receptacle - 711-5008/C2844-



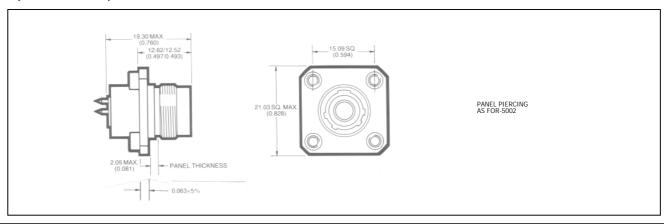
#### Sq. Flange Mtg. Receptacle - 711-5009/C2838-(M3 Clinch nuts fitted)



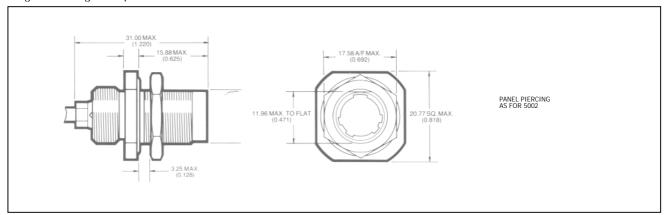
#### Sq. Flange Mtg. Receptacle - 711-5010/C2837-/PAN 6484C (M3 Clinch nuts fitted)



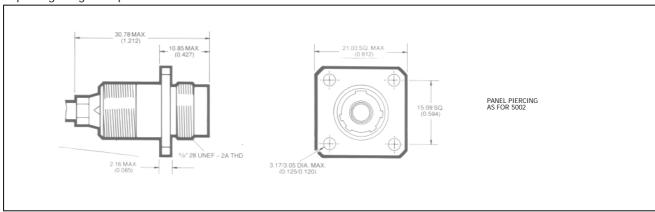
# Sq. Flange Mtg. Receptacle with P.C. Termination Contacts - 711-5015/C2839 (clinch nuts fitted)



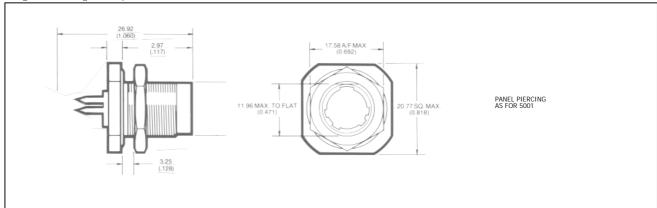
#### Single Hole Mtg. Receptacle with bulkhead seal - 711-5016/C2833-/PAN 6484A



#### Sq. Flange Mtg. Receptacle - 711-5024/C2836-

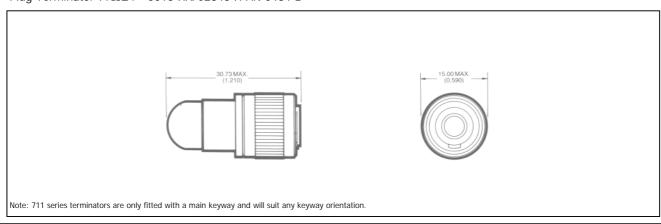


Single Hole Mtg. Receptacle with bulkhead seal and P.C. Termination Contacts-711-5038-

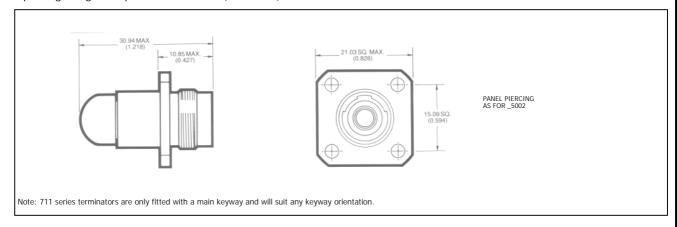


#### **Terminators**

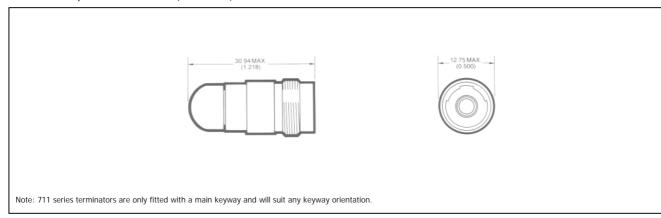
Plug Terminator 77 $\Omega\pm1$  - 5013-XX/C2843-/PAN 6484 L



#### Sq. Flange Mtg. Receptacle Terminator (3K $\Omega\pm5\%$ ) - 5017 - XX/C2845-/PAN 6484 M



In Line Receptacle Terminator (3K $\Omega\pm5\%$ ) - 5028 - XX/C2846-/



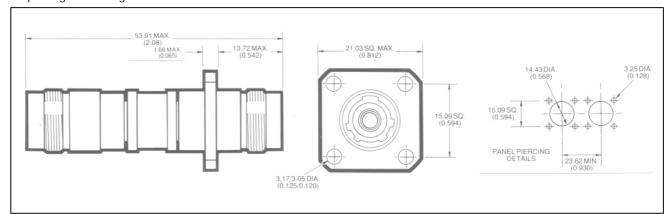
XX Refers to the terminator impedance value. This value can be selected according to the characteristic impedance of the data bus transmission line or to simulate the RT internal impedance. Amphenol standard terminators come fitted with two impedance values.

BUS terminators = 77 ohm STUB terminators = 3K ohm e.g. Order 711-5017-77, 711-5028-3K etc.

For special requirements contact Amphenol Technical Support and Product Management team.

#### Loads

Sq. Flange Mounting 10K $\Omega\pm5\%$  in line load - 5020 /PAN 6484 N



## **Ordering**

Ordering by Amphenol

**Part Numbers** 

Series designation 711

#### **Shell Style**

5000-Plug, with socket contact.

5001-Receptacle, sealed. Single hole mounting.

5002-Receptacle, square flange.

5008-Single hole mounting

receptacle for discrete wiring.

5009-Receptacle, square flange.

Low profile, clinch nuts fitted

for discrete wiring.

5010-Receptacle, square flange.

Clinch nuts fitted.

5011-Plug to take cable accessories.

5013-Plug terminator 750.

5015-Receptacle, square flange.

P.C. termination contacts. Clinch nuts fitted.

5016-Receptacle, single hole mount with

bulkhead seal, to take cable accessories.

5017-Receptacle terminator 3Kfl.

Square flange mounting.

5020-In line load 1 OKSZ square

flange mounting.

5024-Receptacle, square flange mount,

to take cable accessories.

5028-In line receptacle terminator3Kfl.

5038-Receptacle, single hole mounting with

bulkhead seal, P.C. termination.

5000 - 1 (XXX)

711 -

**Deviation Code** 

(462) Cadmium Olive drab plating

(473) Less clinch nuts

Orientation (1 for normal orientation) Keys/Keyways 1,2,3,4 and 5)

#### Ordering by B.S. Part Numbers BS9522 F0043 C2831 08 01 0 (XXXX) Supp. load details Basic number Shell style Variant O-Electroless nickel C2831 as per shell style 5011 1-CAD/Olive drab 2-Zinc Cobalt C2832 as per shell style 5000 5016 C2833 as per shell style C2834 as per shell style 5001 C2835 as per shell style 5002 C2836 as per shell style 5024 C2837 as per shell style 5010 Polarisation 1-Normal orientation 2,3,4,5 5009 C2838 as per shell style Also available C2839 as per shell style 5015 0-Universal - only major keyway fitted C2843 as per shell style 5013 C2844 as per shell style 5008 C2845 as per shell style 5017 C2846 as per shell style 5028 C2847 as per shell style 5020 Contact style F - Female M - Male Housing arrangement Ordering by Pan Number PAN 6484 Χ Basic number Polarisation 1 -Normal orientation 2,3,4,5 No Shell style designation - only major keyway fitted A as per shell style 5016 B as per shell style 5002 C as per shell style 5010 F as per shell style 5011 L as per shell style 5013 Only available in CAD/Olive drab M as per shell style 5017 N as per shell style 5020

### **Protective Caps**

#### **Caps and Cords**

711-0100-XX For use with all single way receptacles.

711-0112-XX For use with all single way plugs.

XX denotes the length of cord or chain required.

01 = 3"

02 = 3.5"

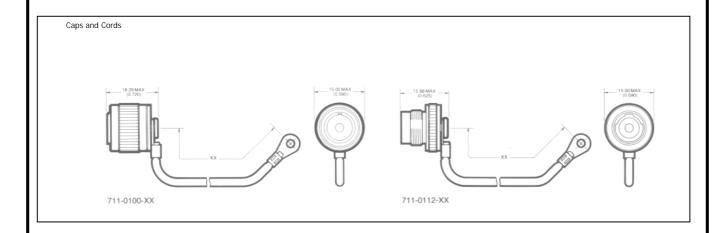
03=4"

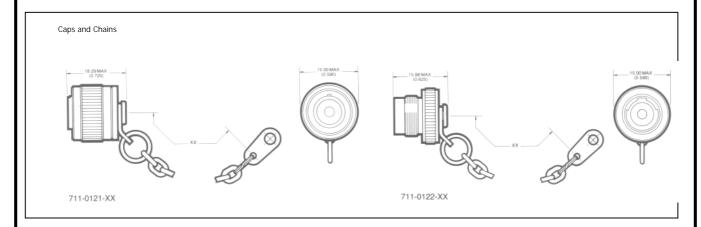
#### **Caps and Chains**

711-0121-XX For use with all single way receptacles.

711-0122-XX For use with all single way plugs.

Use deviation (462) for Cadmium Olive drab finish.





#### Contacts

Contacts may be ordered separately under the following Part No.'s:.

711-0013-1 - Pin contact. 711-0014-1 - Socket contact. 711-0037 -Pin contact for use with discrete wire.

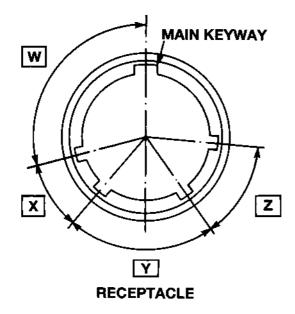
#### **Crimp Tools for 711 Series Connectors**

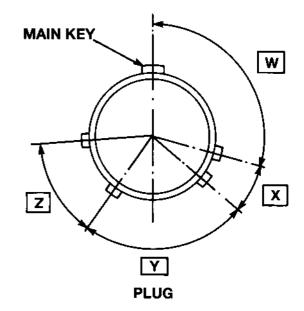
Centre contact crimp - Crimp tool M22520/2-01.
Positioner 294GB-5027-1.

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

Die Set 294GB-5026-1.

# **Key/Keyway Orientations**



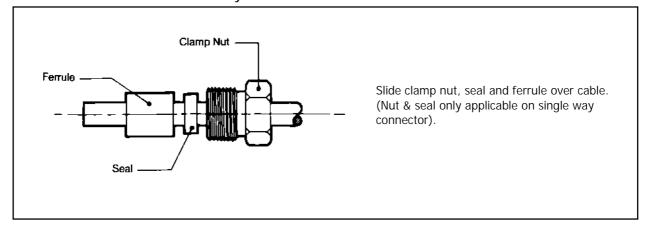


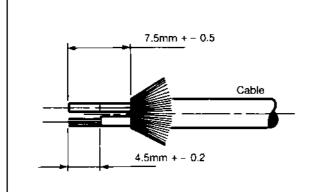
	ANGLES			
POS	W	Χ	Υ	Z
1	105	35	75	50
2	118	30	100	30
3	82	50	75	45
4	92	35	75	50
5	118	35	75	50
0*				

Datum is always taken from major key or keyway. In receptacles the major keyway always remains fixed in relation to the mounting flange.

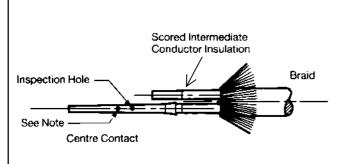
<sup>\*</sup>O is a universal keyway. Only the major keyway is fitted.

#### Size #10 Data Bus Contact Assembly Instructions

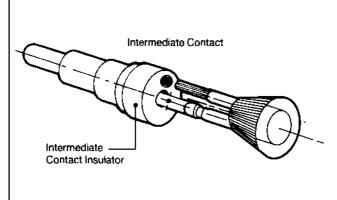




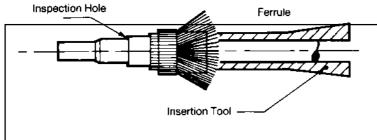
Remove outer sheath of cable to 7.5mm comb out all braids evenly and fold back. Remove cable fillers from stripped length. Strip the centre contact conductor to 4.5mm. Note: It is recommended that both intermediate and centre contact conductors are scored at the correct stripping length. The intermediate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



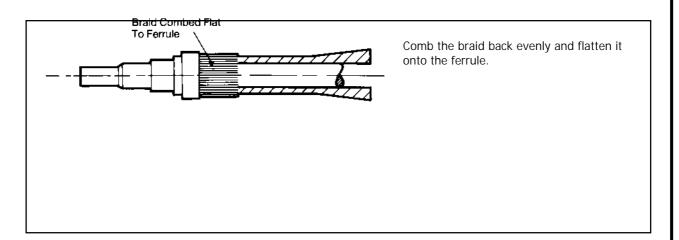
Crimp centre contact (Pin or Socket) on to the stripped wire using tool M22520/2-01 and crimp positioner 294GB-5027-1 (setting No. 4 for 24AWG) butting rear end of contact to wire insulation. The conductor end should be visible in the inspection hole. Note: A second hole is permissible in the socket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

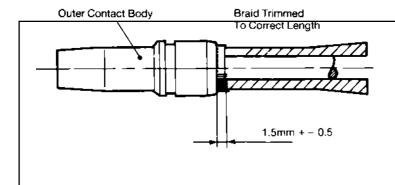


Strip intermediate contact conductor to 4.5mm. Insert centre contact into centre hole of intermediate contact conductor into the outer hole of the intermediate contact assembly. Push firmly home until the centre contact is felt to snap into place and ensure that the insulation of each conductor is fully 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.

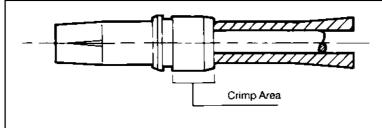


Slide the ferrule forward under the braid to trap the braid against the rear of the intermediate contact insulator, for all succeeding operations keep the ferrule firmly against the rear of the insulator using insertion tool (294GB-5028).





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  $\pm$  0.5 mm to the rear of the outer contact body when fully inserted. Complete the hexagonal crimp.