

Pluggable Telephone Connectors

146-990 to 992

Pluggable telephone connectors



This range of telephone connectors is suitable for use with the British style of telephone connection system. It was **St. Helens** who, in 1979, designed the connectors for British Telecom to specification D 2902 and D 2931. Since then the connectors have been widely used both in the U.K. and overseas. The connectors now have a British Standard BS 6312. The system offers many benefits to the telephone user which are highlighted in the pages of this catalogue. These same benefits are available to the general electronics industry by using the Pluggable Cord Connector.

Features

The telephone connector will give benefits beyond those offered by other types of connector.

- Working 'snatch-out' facility for safety if user trips over cord
- Life of 1,000 cycles under the most severe conditions
- Will not allow insertion of the BS test finger thus giving increased safety
- The cross section of the 6-way is smaller than the American 6-way connector
- Plug is longer than the American style and has a side latch making for easier handling

In addition to this, **St. Helens** offers an increased range of plugs, sockets and accessories and will give engineering help and support to design teams using the system.

Approvals and specifications

Approved to British Telecom specifications D 2902 and D 2931, British Standard BS 6312 for use with cordage to British Telecom specification CW 1311.

Because the system was approved prior to the existence of B.A.B.T., they do not list approvals, but **St. Helens** is in fact approved under the 'grandfathering' system.

Specification and performance data

Mechanical

Durability:	1000 operations
Snatch out and still retain:	10 times
Engagement force:	4-way 10 N Max 6-way 15 N Max
Plug retention in socket:	50 N
Safety:	British standard test finger No. 1 to BS 3042 will not enter into the socket for enough to touch contacts

Electrical

Max. current:	2,5 A per contact depending on cordage and climatic conditions
Max. working voltage:	350 Vd.c.
Insulation resistance:	100 M Ω at 500 Vd.c.
Circuit resistance*:	100 m Ω max. (tinsel) or 40 m Ω max. (stranded TACW) with 20 m Ω max. rise after conditioning

* Contact resistance plus bulk resistance of contacts and 75 mm of cord
Care to be taken to avoid 'live plug' for safety reasons

Environmental

Dry heat:	500 hours at 70°C
Damp heat:	21 days
Thermal shock:	5 cycles +70°C to -25°C

N.B. Resistant to most domestic and industrial cleaners

Material

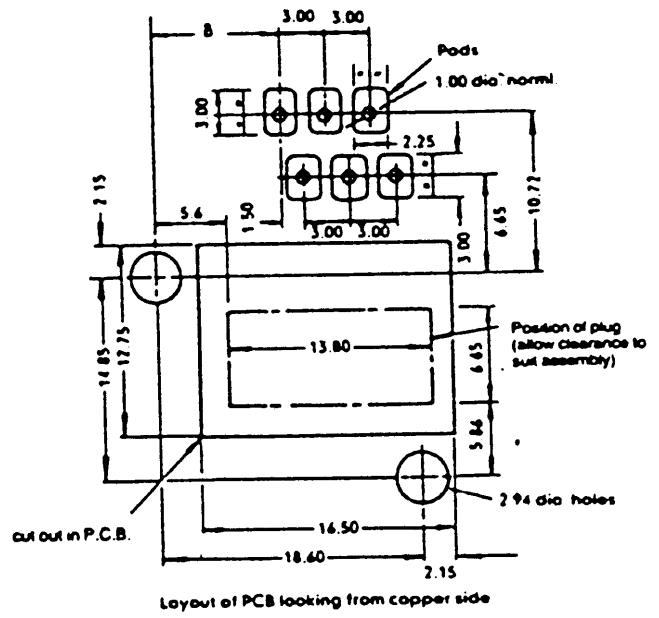
Contact:	Copper alloy
Mouldings:	Thermoplastic polyester to UL94V-0
Contact plating:	Gold
Line jack units:	ABS
Cordage:	PVC sheathed PVC insulated, tinsel or stranded TACW

way left hand	900-75603B	900-71066A
way right hand	900-75608J	900-71028L

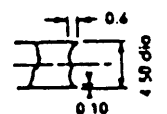
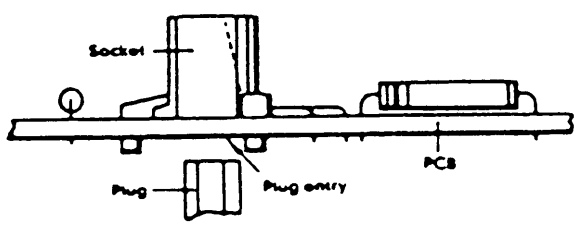
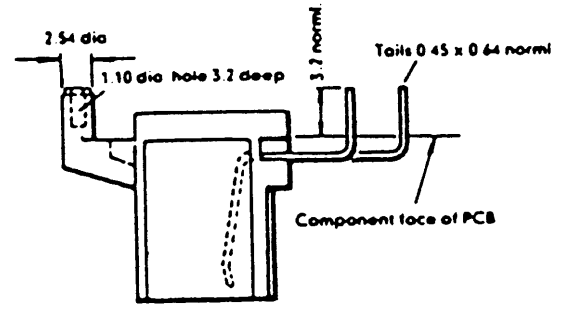
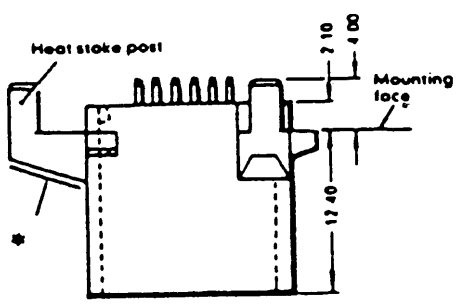
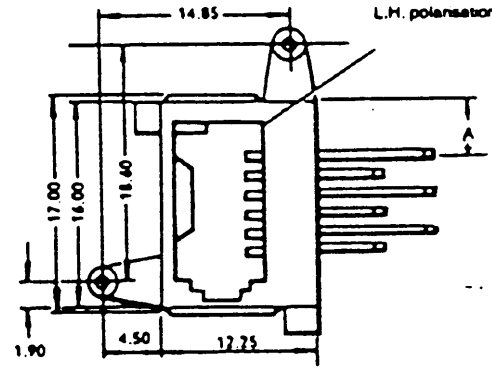
3 wall boxes on Page 7.10
of 10

Straight plug entry from solder (601A, 602A)

PCB layout



View from plug entry end of socket with R.H. polarisation. L.H. polarisation is mirror image.

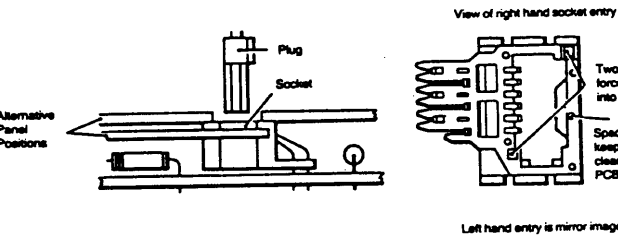
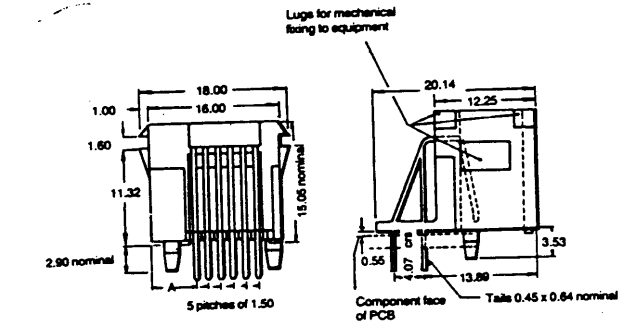


Suggested section through tool tip for heat staking or spin forming of retention studs
Material Brass Temp. 275°C

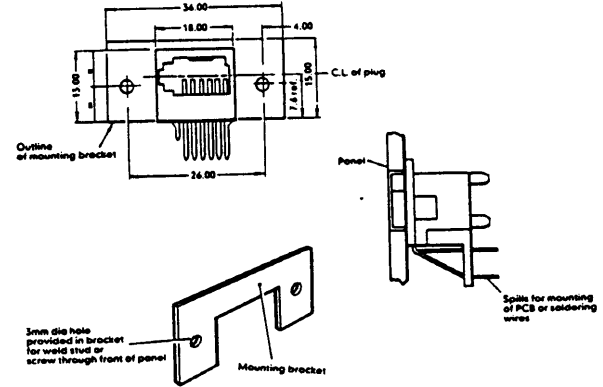
* **IMPORTANT** Legs must be supported along this length during heat staking or spin forming

Pluggable Telephone Connectors

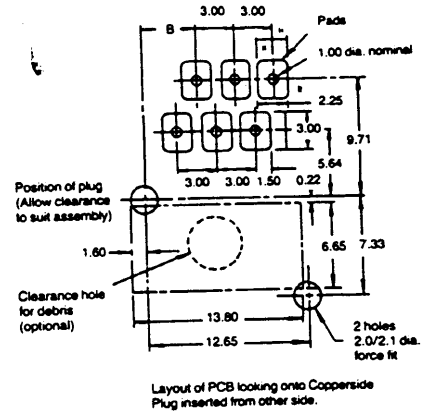
Straight plug entry from component side (605A, 612A)



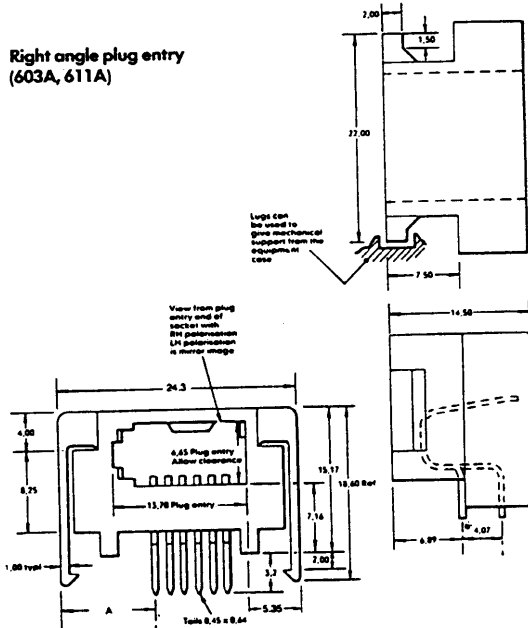
Mounting bracket for 605A and 612A



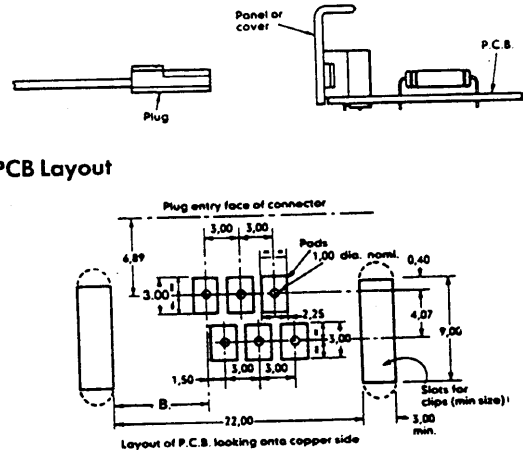
PCB layout



Right angle plug entry (603A, 611A)



PCB Layout



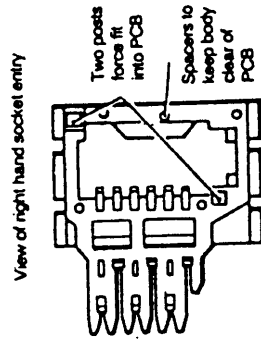
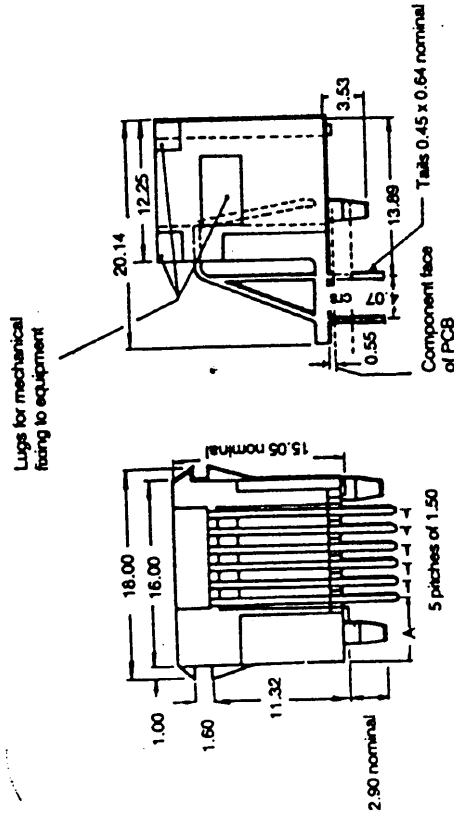
Ordering Information

B.T. Code	Description	Dimensions		Order code
		A	B	
601A	R.H. pcb Socket	3,08	7,58	900-71021K
602A	L.H. pcb Socket	5,42	9,92	900-71022G
603A	R.H. 90° pcb Socket	9,57	8,42	900-71023D
605A	R.H. pcb Socket	5,47	4,47	900-71025J
611A	L.H. 90° pcb Socket	7,23	6,08	900-71027C
612A	L.H. pcb Socket	3,08	2,13	900-71061E*
-	Mounting bracket	-	-	900-71026F

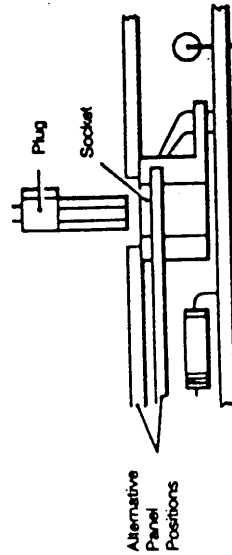
* Consult the factory for availability
 Note: Sockets are normally supplied in boxes of 1,000

Pluggable Telephone Connectors

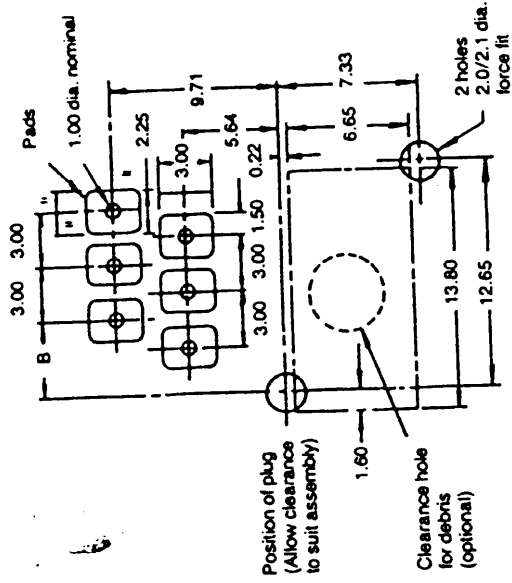
Straight plug entry from component side (605A, 612A)



Left hand entry is mirror image

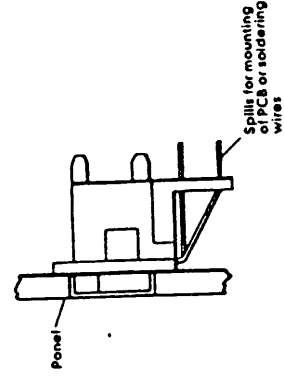
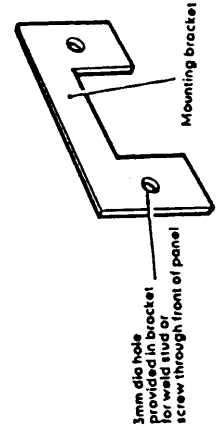
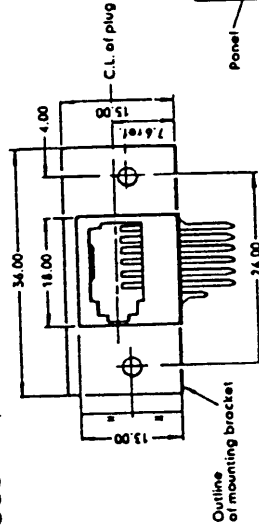


PCB layout



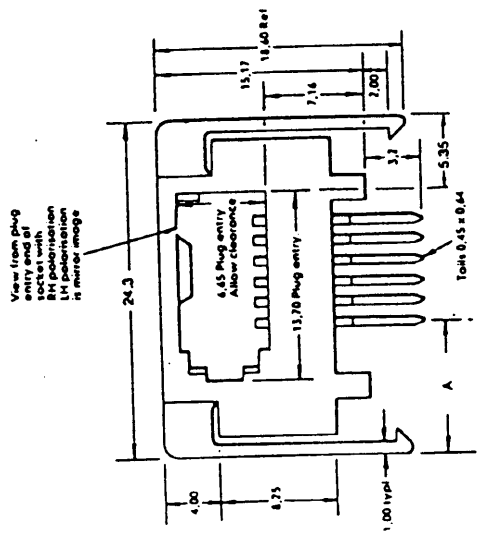
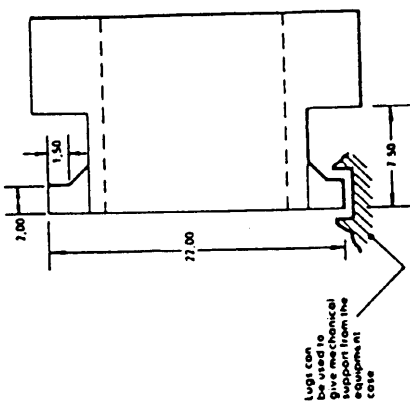
Layout of PCB looking onto Copperside Plug inserted from other side.

Mounting bracket for 605A and 612A

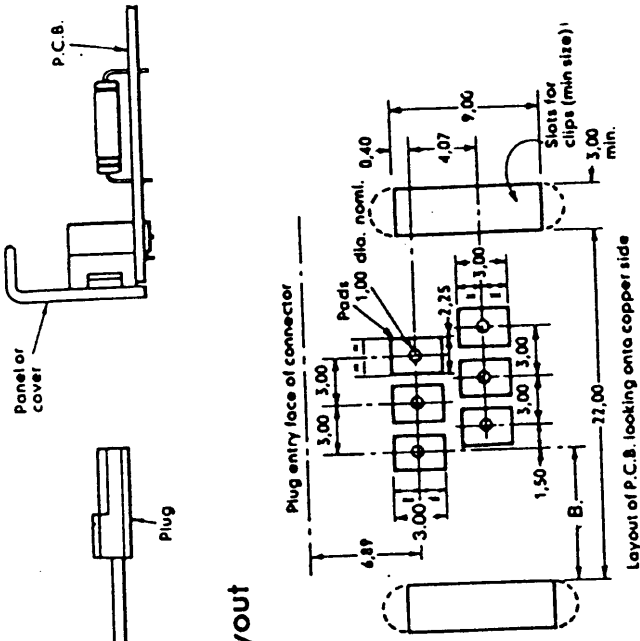


7.00

**Right angle plug entry
(603A, 611A)**



PCB Layout



Ordering Information

B.T. Code	Description	Dimensions		Order code
		A	B	
601A	R.H. pcb Socket	3,08	7,58	900-71021K
602A	L.H. pcb Socket	5,42	9,92	900-71022G
603A	R.H. 90° pcb Socket	9,57	8,42	900-71023D
605A	R.H. pcb Socket	5,47	4,47	900-71025J
611A	L.H. 90° pcb Socket	7,23	6,08	900-71027C
612A	L.H. pcb Socket	3,08	2,13	900-71061E*
-	Mounting bracket	-	-	900-71026F

* Consult the factory for availability
Note: Sockets are normally supplied in boxes of 1,000