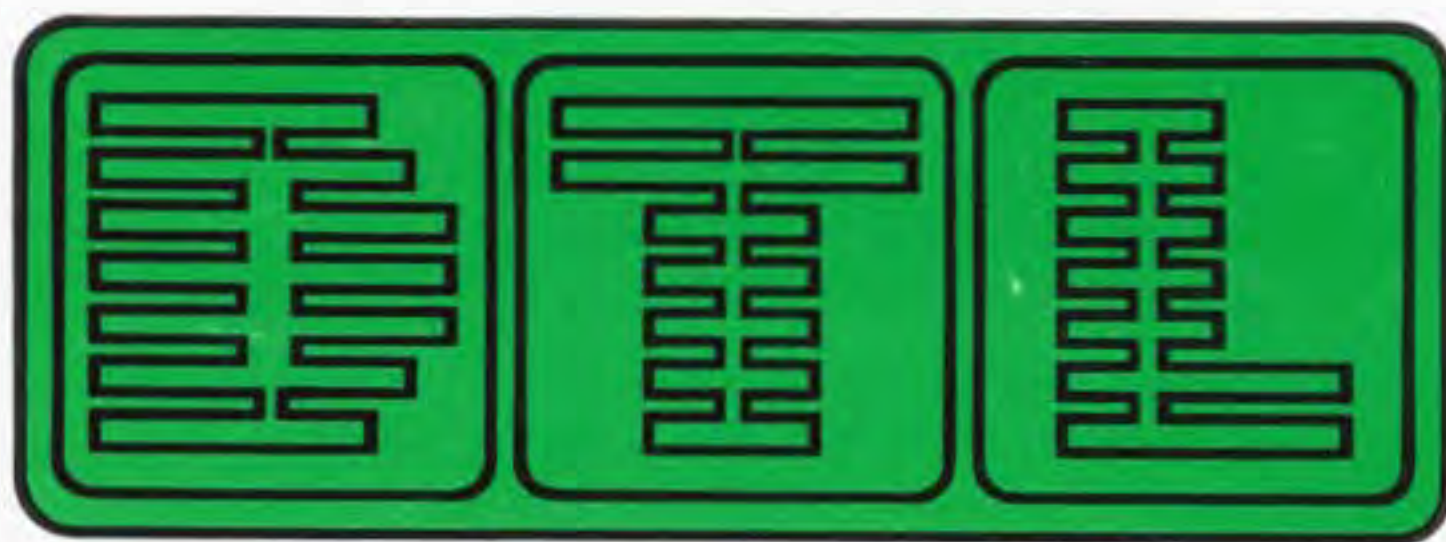




DISTRIBUTED TECHNOLOGY LIMITED
63 BLUEHOUSE LANE, OXTED, SURREY - 01883 716161

SPECIALISE IN
Connectors



Fully approved styles to BS 9522 F0017



Pattern 105
#MIL-C 26482
Connectors



Pattern 105 Connectors

Pattern 105 bayonet coupling connectors are designed to meet the stringent requirements of BS9522F0017, Defence Standard 59-35 (Part 3) Sect. 7 Pattern 105 and MIL-C-26482 (solder).

Initially developed for aircraft applications, Pattern 105 connectors are extensively used in the fighting vehicle, military communications and general industrial markets where high reliability, miniaturisation and cost effectiveness are of prime importance.

Positive coupling is indicated by an audible "click" and by visual alignment of the three bayonet pins within locating "windows" in the coupling nut. Coupling nuts are removable to enable damaged items to be replaced.

Aluminium shells, cadmium plated with an olive drab chromate finish offer high resistance to corrosion.

Insulators are polychloroprene with an operating temperature range of -55°C to + 125°C. Contact arrangements from 2 to 61 ways, feature Size 16 AWG (13 amp) or size 20 AWG (7.5 amp) contacts.

To prevent mismating or cross plugging, shell to shell key and keyway orientations are offered in normal (N) or any of four alternatives (B, C, E or F). Insert orientation, although permissible in Pattern 105 connectors to enable replacement of existing MIL-C-26482 types, is not available except by special request.

Sealing against water ingress is achieved between mating connectors by a square section gasket between shells, by a peripheral seal on the insulators and by grommet wire sealing at the rear of the connector.

How to order PT connectors



PT connectors may be ordered or specified using either the THORN EMI proprietary coding system which carries the prefix 'PT' or the BS 9000 system which has the prefix 'C' for connectors and 'A' for accessories.

CONNECTORS	
PT55A — Free, Straight with Accessory Thread	(C2092)
PTG55A — Free, Straight with Accessory Thread and Grounding Ring	(C2093)
PT55A (T01) — Free, Straight with Accessory Thread and Ribbed Coupling Nut	(C2094)
PTG55A (T01) — Free, Straight with Accessory Thread, Grounding Ring and Ribbed Coupling Nut	(C2095)
PT44A — Line Connecting Receptacle	(C2101)
PT33A — Wall Mounting Receptacle	(C2096)
PT77A — Fixed Receptacle (Jam Nut) with Accessory Thread	(C2100)
PT07E — Fixed Receptacle (Grommet Seal)	(C2098)
PT07A — Fixed Receptacle (No rear Fittings)	(C2099)
PT02 — Fixed Receptacle (No rear Fittings)	(C2097)
ACCESSORIES	
05 - 0114 — Grommet Nut Assembly	(A2102)
05 - 0120 — Cable Clamp Complete with Grommet	(A2103)
10 - 36565 — Cable Grommet	(A2011)
05 - 0507 — Cap for Free Connector	(A2012)
05 - 0517 — Cap for Fixed Connector	(A2013)
05 - 0527 — Cap for Fixed Connector (Jam Nut)	(A2014)



THORN EMI proprietary coding

Select the shell style and classification	PT55A
Add the shell size and contact arrangement	PT55A-10-6
Add the contact style (P = pin contacts, S = socket contacts)	PT55A-10-6P
If polarisation is required, add the relevant letter B, C, E or F.	
If orientation of the insert is required, use the letter W, X, Y or Z	PT55A-10-6PB
Add the applicable variant (T01 = with ribbed coupling nut)	PT55A-10-6PB (T01)

BS 9000 coding



Select the connector style	C2092
Add the shell size and contact arrangement*	C2092-10-06
Add the contact style (M = pin contacts, F = socket contacts)	C2092-10-06M
Add the relevant letter N, B, C, E or F for polarisation, or for orientation of the insert use the letter N, W, X, Y or Z	C2092-10-06MN
Add the letter 'O' for the standard connector or relevant letter denoting a variant	C2092-10-06MNO

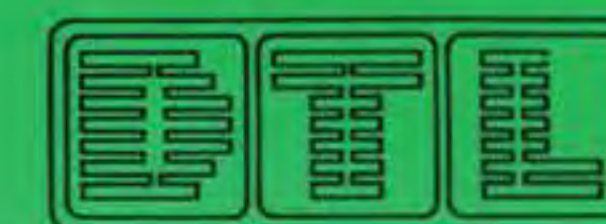
* When using this system, the contact arrangement is always indicated by two digits, using the 'O' as shown.

NOTE: When the connector is to be supplied complete with an accessory, the reference number shall include the applicable accessory style number. ie: C2092 -10-06MNO-A2102.

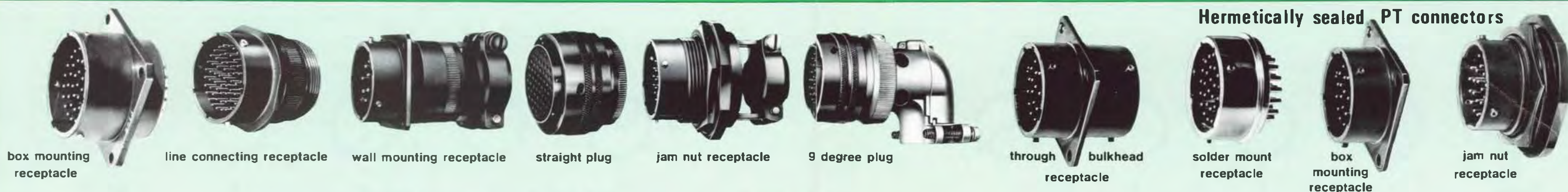


DISTRIBUTED TECHNOLOGY

PT ELECTRICAL CONNECTORS



DISTRIBUTED TECHNOLOGY



Hermetically sealed PT connectors

Connector selection chart

PT connectors are available in the different shell styles illustrated below and can be specified complete with the cable fittings shown opposite. When specified together, the type of cable fitting invariably determines the connector classification. Alternatively, the connector may be specified by its basic style number and the cable fittings ordered separately.



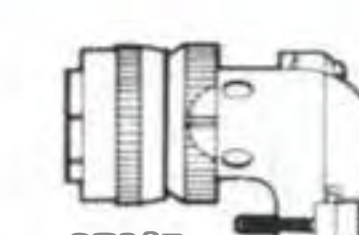
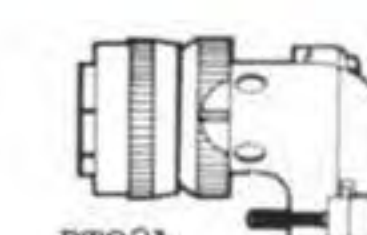
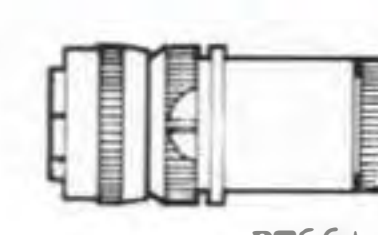
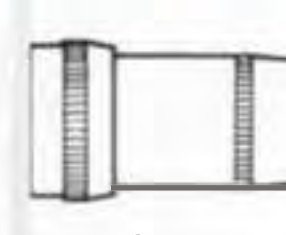
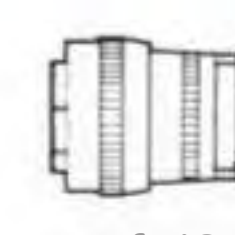
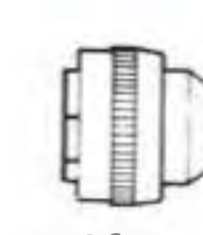
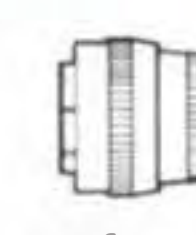
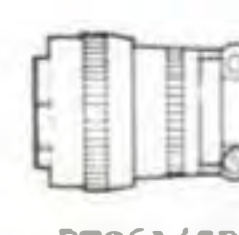
PT solder type connectors

Qualified to BS 9522 F0017 and conform to MIL-C-26482

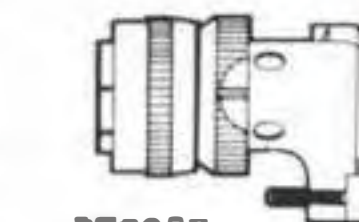
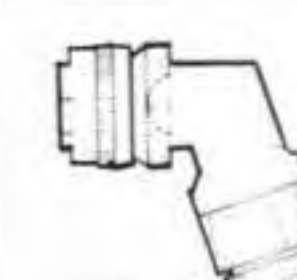
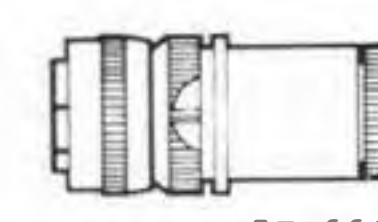
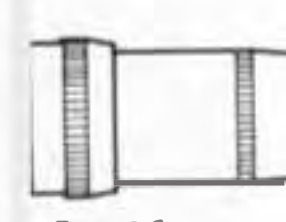
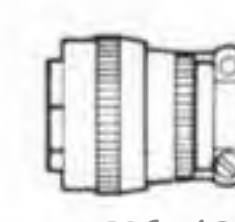
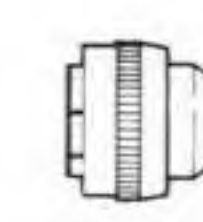
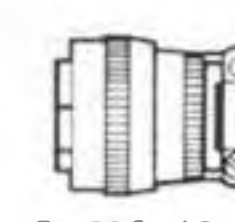
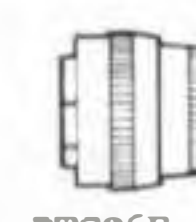
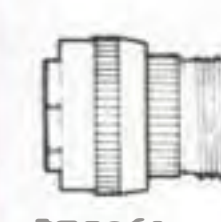
Thorn PT connectors are a modern conception, conforming to internationally accepted design standards and are compatible with similar British, European and American types. PT connectors have resilient inserts and non-removable contacts that are designed for solder connection only.

Standard finish is olive drab over cadmium plate.

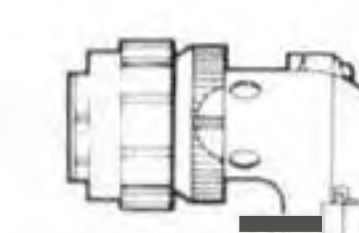
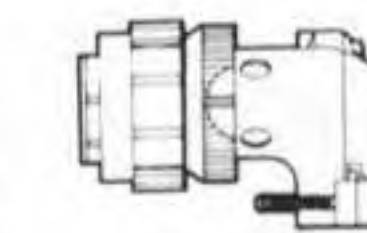
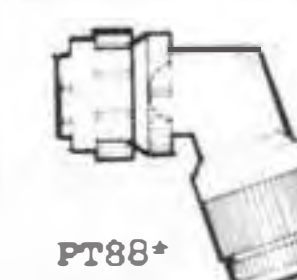
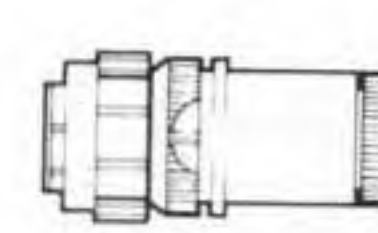
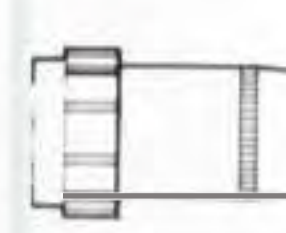
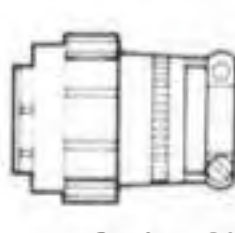
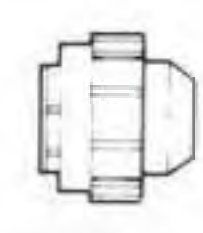
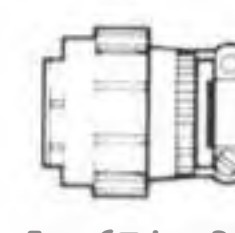
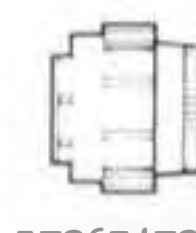
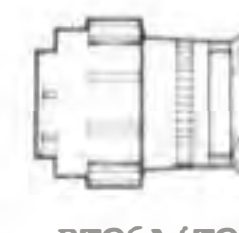
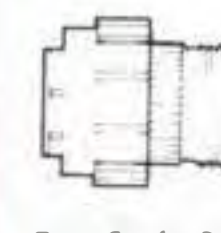
Straight plug PT55A



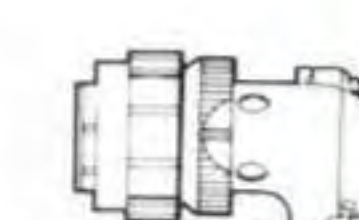
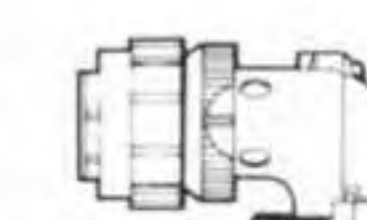
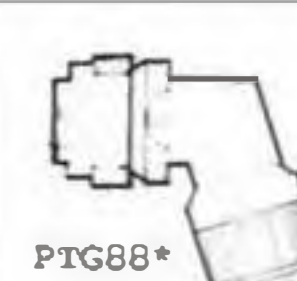
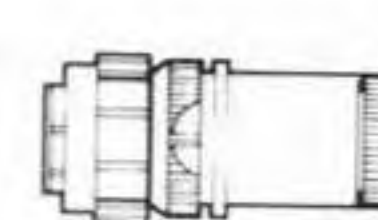
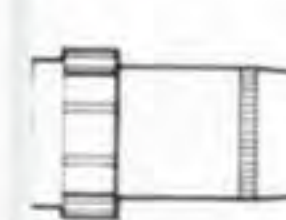
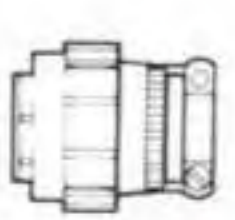
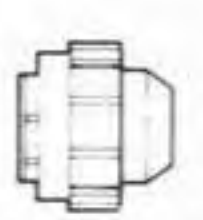
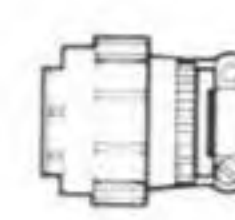
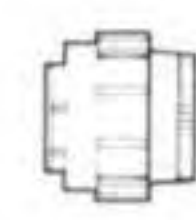
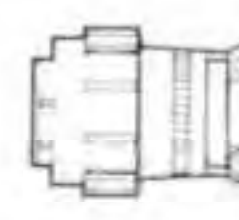
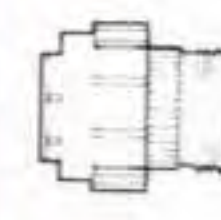
Straight plug with grounding ring PTG55A



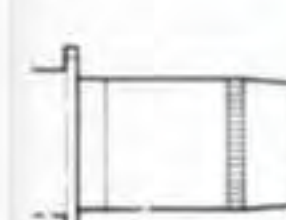
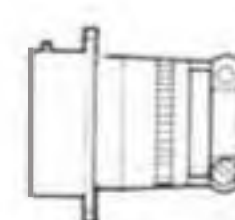
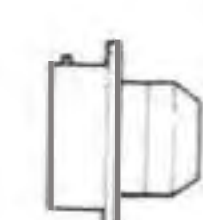
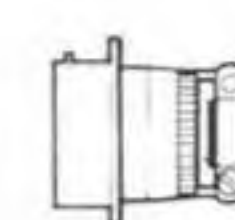
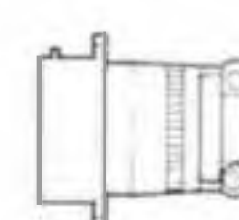
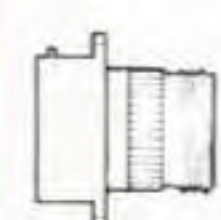
Straight plug with ribbed coupling nut PT55A(T01)



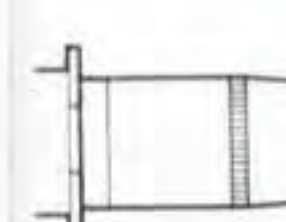
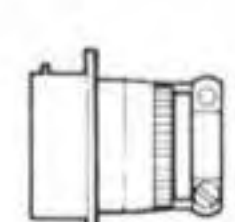
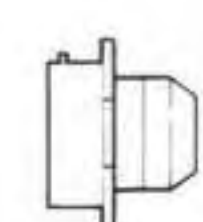
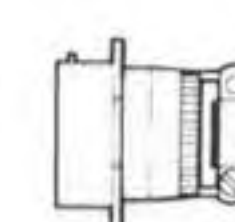
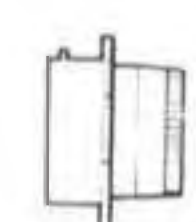
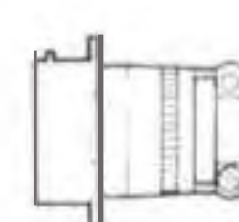
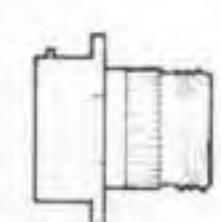
Straight plug with ribbed coupling nut and grounding ring PTG55A(T01)



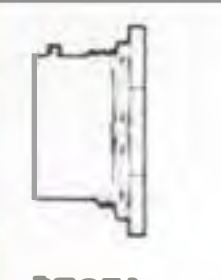
Wall mounting receptacle PT33A



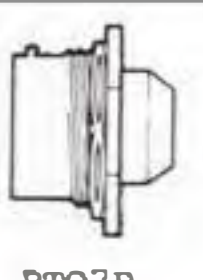
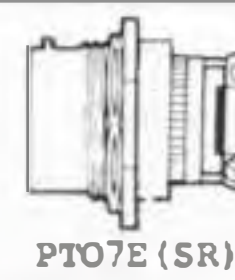
Line connecting receptacle PT44A



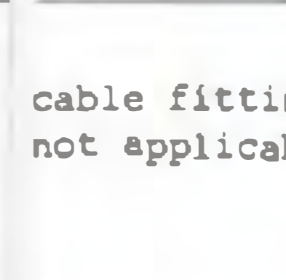
Jam nut receptacle PT07A



cable fittings
not applicable



cable fittings
not applicable



cable fittings
not applicable

connector and fitting supplied only as one complete assembly

How to order PT connectors

- 1 select the shell style and classification, e.g. PTO6E
- 2 add the shell size and contact arrangement, e.g. PTO6E-22-55
- 3 add the contacts, P = pins, S = sockets, e.g. PTO6E-22-55S
- 4 for polarisation, add the relevant letter (E, B, C or F), or for orientation of the insert add W, X, Y or Z, e.g. PTO6E-22-55SB
- 5 add suffix (SR), (T01), (T02) as required.

PT06 E-22-55 SB (SR)

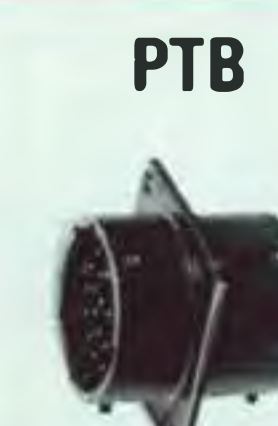
PT	designates a connector to meet the requirements of BS 9522 F0017 and MIL-C-26482
06	specifies the shell style.
E	designates classification.
22-55	specifies shell size and insert arrangement.
S	specifies socket contacts (use P for pin contacts).
B	specifies that polarisation other than Normal is required.
SR	specifies a connector with a strain relief clamp.

Box Mounting Receptacle



PT02

Through Bulkhead Receptacle



PTB

Hermetically Sealed types

for mounting directly on to a panel, using a fillet of good quality solder between the shell and mounting surface



PT1H

solder mount
receptacle



PT02H

box mounting
receptacle



PT07H

jam nut
receptacle

Protection Caps



CAP ONLY for all types
05-0056-xx
with cord
05-0507-xx-L
with chain
05-0057-xx-L



CAP ONLY for all types of receptacles
10-123094-xx-3
with chain
10-101960-xx-3 L
10-101961-xx-3 L
10-101964-xx-3 L
10-0517-xx-L
10-0537-xx-L
10-0527-xx-L

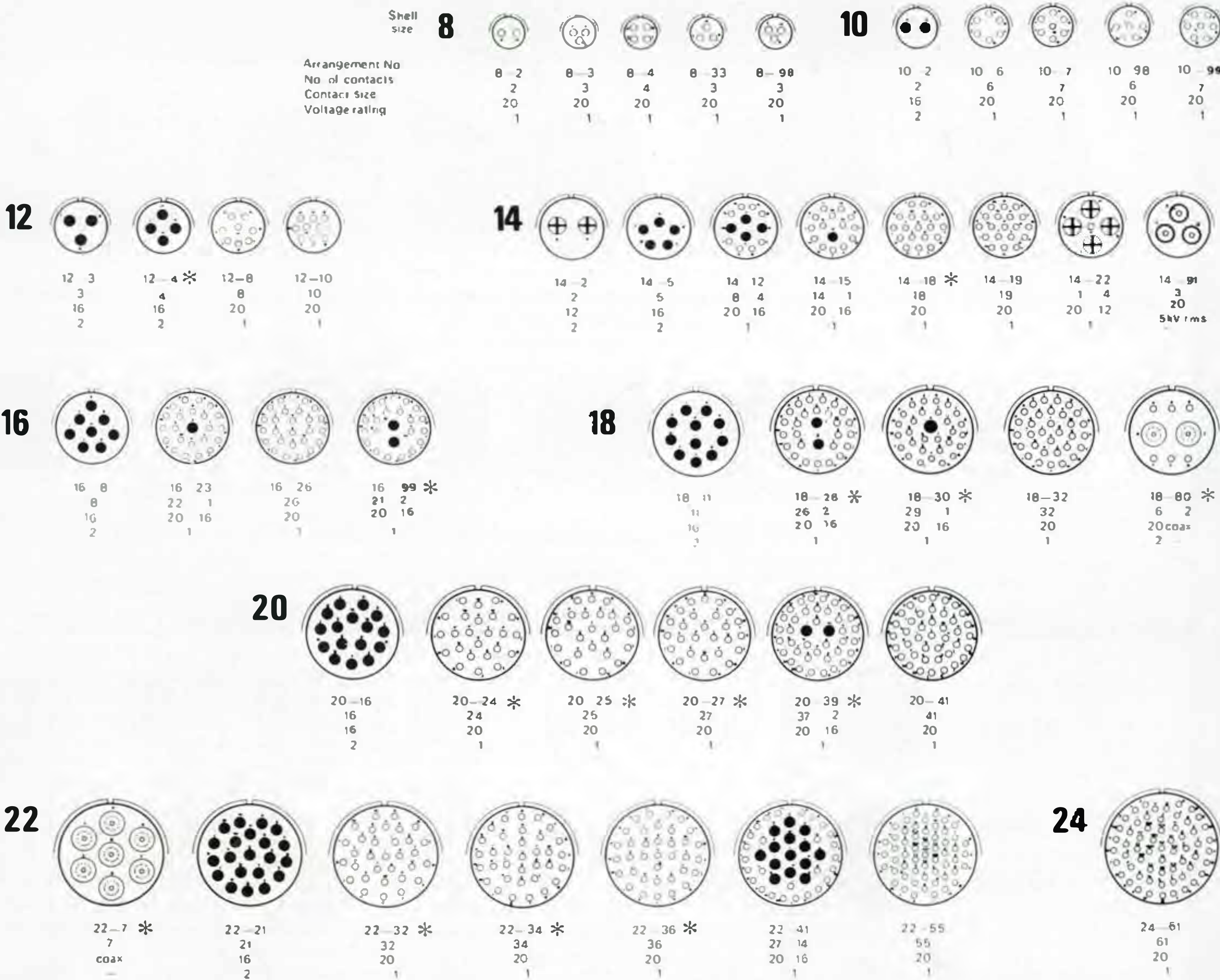
'xx' add shell size to complete the Part number

'L' The length of the cord or chain is indicated as follows
30 = 3', 35 = 3 1/2', 40 = 4', 45 = 4 1/2', 50 = 5', 60 = 6', 70 = 7', 80 = 8'

Contact arrangements

All views are approximate size and looking into the front face of a pin insert

Legend: 20 16 12 coaxial



Electrical ratings

Maximum current per individual contact (in isolation) at a maximum ambient temperature of 85°C: size 20: 7.5A size 16: 13A size 12: 23A

Maximum working current per contact through all contacts simultaneously at 85°C ambient temperature: size 20: 5A size 16: 10A size 12: 20A

The performance of any plug or socket at all times exceeds the maximum continuous bunched rating of the appropriate size wire or cable of equivalent temperature rating, and this bunched rating shall be the determining factor. In the case of mixed loadings, the greatest individual load shall be, for this purpose, taken to be the bunched loading.

Sea Level	Voltage rating	
	1	2
+ working voltage dc or ac peak	700	1250
Voltage proof dc or ac peak	2200	3250

+ the establishment of electrical safety factors when the connector is used at other than the working voltage is the responsibility of the user

Alternative positions

To avoid mis-mating of similar connectors which may be adjacently mounted, polarisation is achieved by shell key/keyways and is available with up to five alternative positions designated N, B, C, E, or F. Where no specific polarisation is requested, then neutral (N) will be supplied.

DTL can also supply connectors incorporating varying orientations of the contact arrangement layout, orientated within the shells, which are designated W, X, Y, or Z. This system defined by early original U.S.A. sources is non preferred.

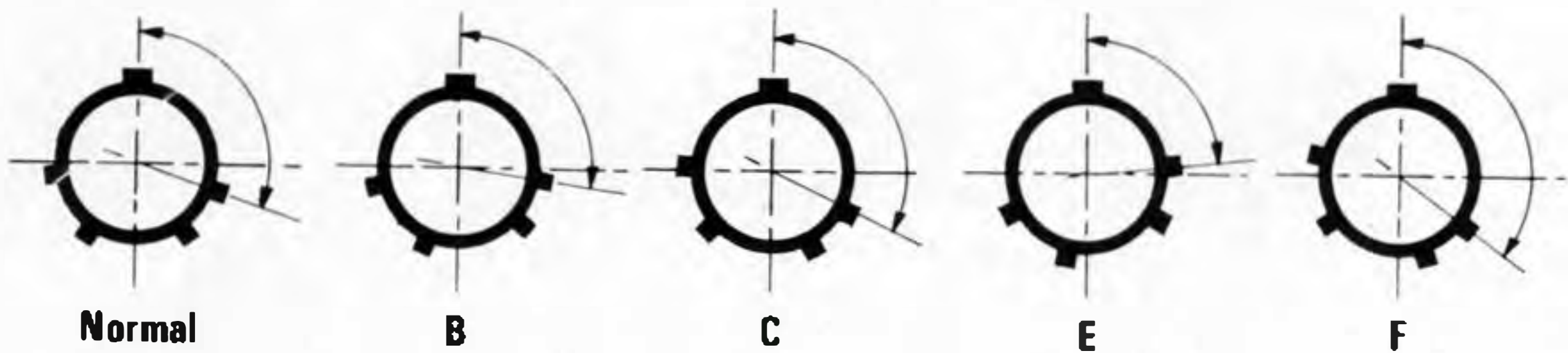
*Consult DTL for availability of the contact arrangement shown.

Polarisation

To avoid mis-mating of similar connectors which may be adjacently mounted, polarisation is achieved by shell key/keyways, giving up to five alternative positions designated N, B, C, E or F. The diagrams illustrate the angular variation of the keys/keyways with the major key being the datum point.

Where no specific polarisation is requested, the neutral position N will always be supplied.

Polarisation availability is shown below



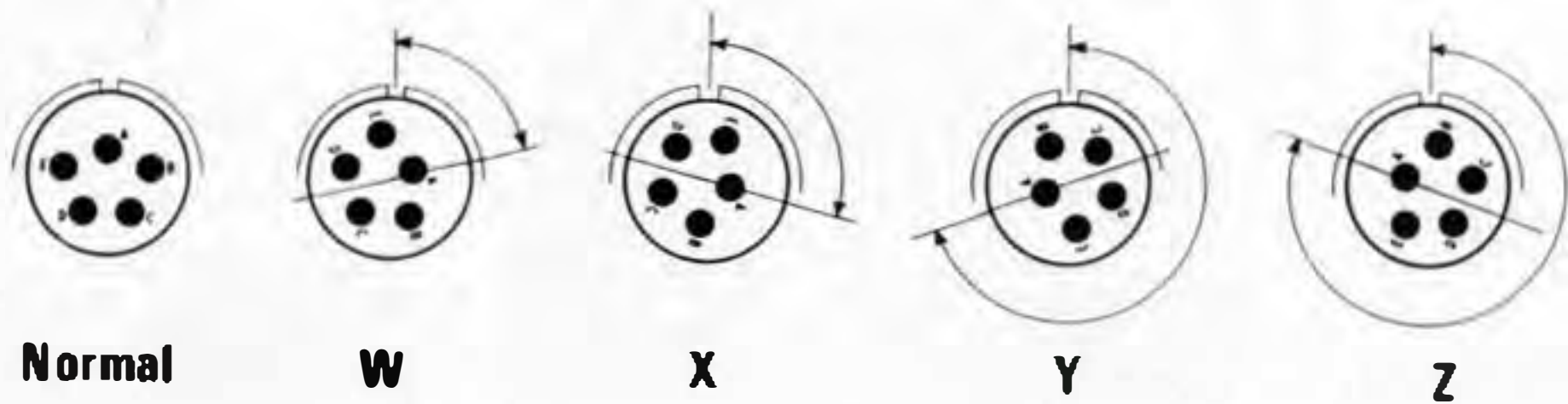
Shell size	Normal	B	C	E	F
8	105	-	-	118	82
10	105	85	125	115	85
12	105	89	121	115	85
14	105	91	119	75	120
16	105	93	117	75	120

Shell size	Normal	B	C	E	F
18	105	95	115	75	120
20	105	95	115	75	120
22	105	97	113	75	120
24	105	97	113	75	120

Insert orientation

Orientation availability is shown below and can only be supplied with 'N' polarisation.

The diagrams illustrate the angular displacement of the insert within the housing, for each orientation in the range. This method is non-preferred and is intended for replacement purposes only.



Availability by contact arrangement

Contact arrangement	Degrees				Contact arrangement	Degrees			
	W	X	Y	Z		W	X	Y	Z
8- 2	58	122	—	—	18- 8	—	—	—	—
8- 3	60	210	—	—	18-11	62	119	241	340
8- 4	45	—	—	—	18-30	180	193	285	350
8-33	90	—	—	—	18-32	85	138	222	265
10- 2	45	90	135	—	18-80	45	90	135	160
10- 6	90	—	—	—	20-16	238	318	333	347
10-98	90	180	240	270	20-24	70	145	215	290
12- 3	—	—	180	—	20-25	72	144	216	288
12- 8	90	112	203	292	20-27	72	144	216	288
12-10	60	155	270	295	20-39	63	144	252	333
14- 2	58	122	—	—	20-41	45	126	225	—
14- 5	40	92	184	273	22- 7	19	41	—	—
14-12	43	90	—	—	22-21	16	135	175	349
14-15	17	110	155	234	22-32	72	145	215	288
14-18	15	90	180	270	22-34	62	144	216	298
14-19	30	165	315	—	22-36	72	144	216	288
14-22	45	—	—	—	22-41	39	—	—	—
16- 8	54	152	180	331	22-55	30	142	226	314
16-23	158	270	—	—	24-61	90	180	270	324
16-26	60	—	275	338					