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CANNON CONNECTORS TYPE DPD

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J. T. Dunnett

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Chapter 1

CANNON CONNECTORS, TYPE DPD

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TABLES

ILLUSTRATIONS

Introduction

1. The Cannon DPD series of rectangular connectors (fig. 1) is a range of connectors suitable for rack and panel mounting. By selection of appropriate arrangements, from 2 to 128 wires of various gauges may be accommodated in a single connector.

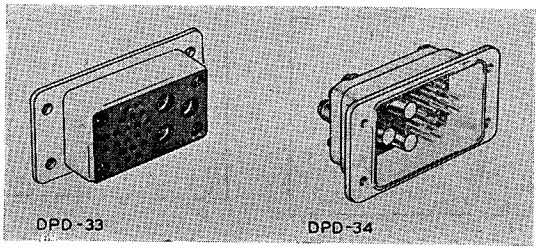
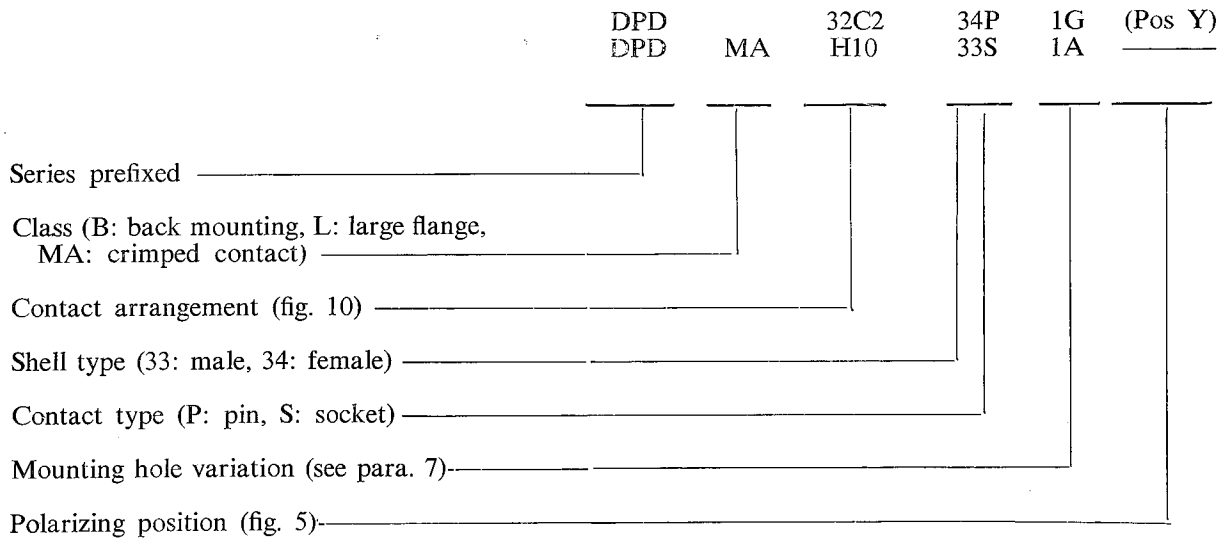


Fig. 1. Typical connectors, Type DPD

DESCRIPTION

Significance of part numbers

2. Each type of connector is completely defined by a manufacturer's part number, as follows:—



Note . . .

There are four variations of mounting holes to suit various screw heads and sizes, the precise screws required for a particular connector should be ascertained by direct measurement, and examination (para. 7).

Standard connectors, Type DPD (fig. 1)

3. The standard DPD connector uses soldered contacts. Selection of the appropriate shell and accessories enables provision to be made for front or back mounting of both pin and socket units and for moisture-resistant mounting.

4. The insert material for the DPD connector is melamine or a fabricated phenolic compound; all shells are of cadmium-plated aluminium alloy, and the contacts are of copper alloy, silver or gold plated.

Crimped contact connectors, Type DPDMA

5. The DPDMA connector is fitted with crimped contacts. The insert material is diallyl phthalate, the shells are of cadmium-plated aluminium alloy and the contacts are of copper alloy, silver or gold plated. The individual contacts may be inserted or extracted from the rear of the connector for wiring or replacement.

TABLE 1

Crimp contact details

Contact size	Current (amps)	Part No. Pin	Part No. Socket
20	5	030–9081–000	031–9134–001
16	10	030–9083–000	031–9084–000
12	15	030–1823–001	030–1822–001
10	30	030–1909–001	031–1059–001
8	40	030–1908–000	030–9201–003

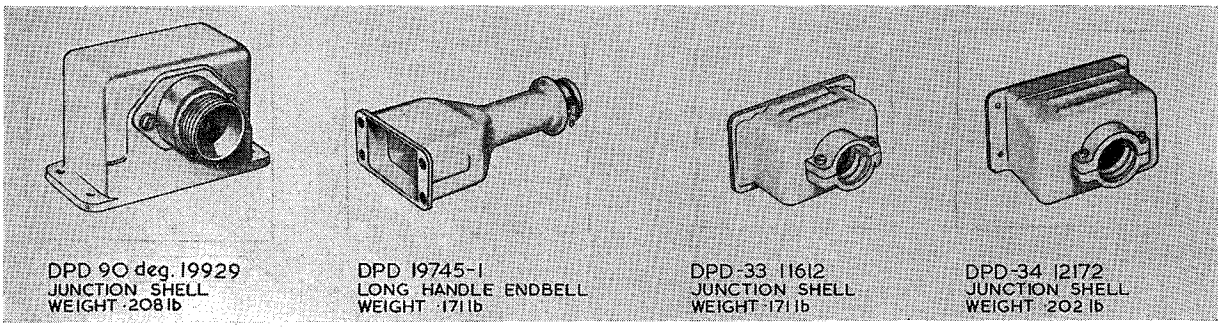


Fig. 2. Junction shell styles

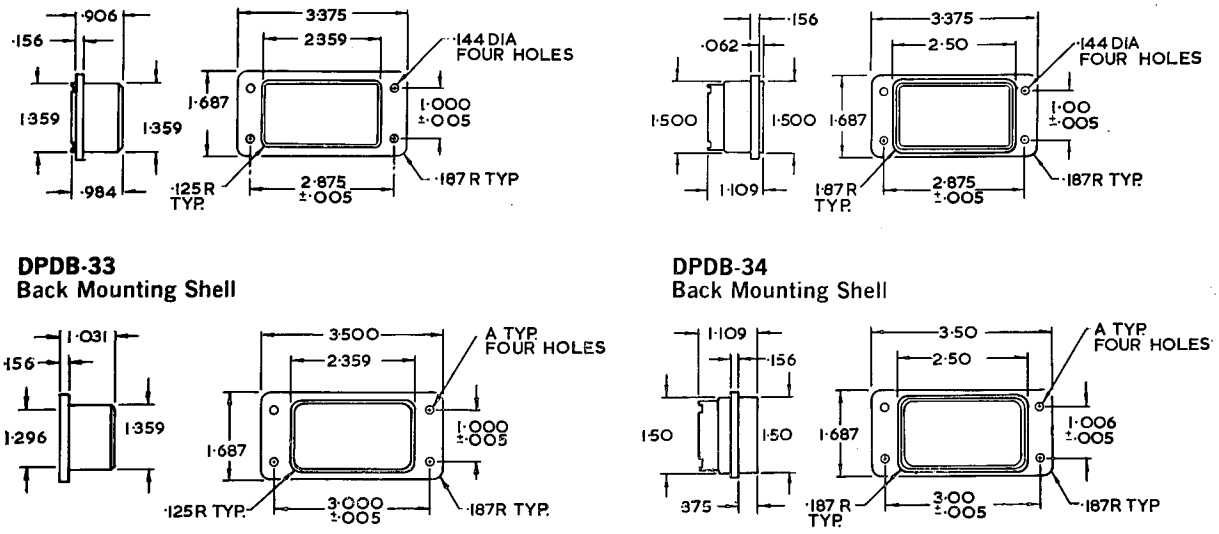


Fig. 3. Shell dimensions

Shell styles

6. Four styles of shell are available, shells, Types DPD33 and DPDB33 are male shells, and shells DPD34 and DPDB34 are female shells. Shells, Types DPD33 and DPD34 are shown in fig. 1 and the dimensions of all shells are shown in fig. 3.

7. The mounting holes for the shells may vary in position and screw types. The basic range of the 1A, 1B, 1G and 1L variations. Variation 1A is standard with 0·144 in. dia. holes. Variation 1B has 0·144 in. dia. holes countersunk at 100 deg. Variation 1G has 0·152 in. dia. holes countersunk at 82 deg. and variation 1L has 0·144 in. dia. holes countersunk at 82 deg.

Contacts and contact arrangements

8. The contact sizes available range from 5 to 200A current carrying capacity (Table 1) ranging from size 0 to 20, the larger sizes 0, 2, 4 and 6 are not applicable to the DPDMA range of connectors. The standard contact arrangements available are shown in fig. 10 and detailed in Table 2.

9. Coaxial, twinax and thermocouple contacts are moulded-in on all contact arrangements (fig. 10). These are solder type contacts and are not removable, with the exception of the snap-in coaxial contacts:—

(1) Contact arrangement T14 cable RG–59–62/U.
Receptacle Pt. No. 249–1332–000
Plug Pt. No. 249–1333–000

(2) Contact arrangement Y14 cable RG–55–223/U.
Receptacle Pt. No. 249–1371–000
Plug Pt. No. 249–1372–000

Polarization

10. DPD connectors can be supplied with polarizing posts to provide protection against cross-plugging. Six standard polarizations are available as shown in fig. 5, and when polarization posts are required the position letter is included in the part number.

Accessories

11. The range of accessories (fig. 2) consists of a long handle endbell and three junction shells, shown, with dimensions, in fig. 6.

INSTRUCTIONS FOR USE

Tools

12. No special tools are required for dismantling the connectors, Type DPD, but the tools listed in Table 3 are required for use with connectors, Type DPDMA.

Wiring connectors

Caution . . .

At all stages of preparation care must be taken that the cables are not damaged when cutting to size, and that neither the cable nor the connector are overheated when soldering.

13. The appropriate connector and termination should be selected to suit the cable or cable-form conductors and the required application.

14. The multi-core or cable-forms should be prepared as follows:—

(1) For multi-core cables, cut back the outer sheath sufficiently to allow the conductors to reach the peripheral contacts, but not so far as to allow the sheath to clear the connector cable clamp.

TABLE 2

Contact arrangements (fig. 10)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
2	32C2				2			All open except 1 and 2
2HV2	2HV2	2						HV kit
4	32C2				4			All open except 1, 2; A1, A2—40 amp remov.
5C3	5C3	2				3		Basic arr. A1-A3—std. R Coax
5HV3	5C3	2					3	A1-A3—HV kit
A5C3	5C3	2				3		A1-A3—90° long coax for RG-59, 62/U
B5C3	5C3	2				3		A1-A3—str. coax for RG-58/U
C5	C6					5		1 str. R coax; 2, 3, 4, 6—90° short coax; 5-open
C5C3	5C3	2				3		A1, A2—str. coax for RG-58/U; A3—str. R coax for RG-8, 225/U
D5C3	5C3	2				3		A1, A2—str. coax for RG-58/U; A3—str. coax for RG-8/U and RG-225/U all insul
D5	C6					5		1, 2—90° short R coax; 3, 4, 6—str. R coax; 5—open
6C4	12C4		2			4		1-4, 7, 8 open; A1-A4 str. R coax
6HV6	C6						6	All cavities—HV kit
C6	C6					6		Basic arr. all cavities—std. R coax
C6·1	C6					6		1-3—90° long R coax; 4-6—90° short R coax
C6A	C6					6		6 coax for RG-180/U
C6B	C6					6		1, 2, 5, 6—std. R coax for RG-58/U; 3, 4—std. R coax for RG-59, 62/U
C6D	P6					6		Plastic insul.; str. R coax for RG-59, 62/U
C6F	C6					6		1, 2, 3—str. R coax for RG-58/U; 4—6—str. R coax for RG-59, 62/U
C6G	C6					6		1-4, 6—RG-8/U; 2, 3, 5—str. R coax for RG-58/U
E6	C6					6		1-5—HV coax for RG-59, 62/U; 6—str. R coax
F6	C6					6		1·4—HV coax for RG-59, 62/U; 5, 6—str. R coax
G6	C6					6		1, 2, 3, 5, 6—str. R coax; 4—coax for UG-250/U
J6	C6					6		90° short coax for RG-59, 62/U
K6	C6					6		3—coax for UG-260/U; 1, 2, 4, 5, 6—HV coax for RG-59/U
L6	C6					6		3, 4—coax for UG-260/U; 1, 2, 5, 6—str. R coax
M6	C6					6		1, 2, 4, 6—HV coax for RG-59/U; 3—str. R coax
P6	P6					6		Same as C6 except plastic insul. & insul. coax as std.
P6B	P6					6		90° short coax for RG-59/U insul. at std.
P6C	P6					6		Coax for RG-58/U
P6D	P6					6		Coax for RG-59/U
P6E	P6					6		Coax for RG-195, 180U
P6H	P6					6		3, 4—coax for RG-9/U; 1, 2, 5, 6—spec. coax for 50 ohm cable
R6	C6					6		1, 2, 3—90° long R coax; 4, 5, 6—90° short R coax

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
S6	C6					6		1, 2—str. R coax; 3-6—90° short R coax
T6	C6					6		1-4—90° short R coax; 5, 6—90° long R coax
U6	C6					6		1, 2, 4, 5, 6—str. R coax; 3—coax for UG-260/U
V6	C6					6		1, 3, 4, 5, 6—str. R coax; 2—90° short R coax
W6	C6					6		1—90° short R coax; 2-6—str. R coax
X6	P6					6		R coax for RG-59, 62/U; plastic insul. coax
Y6	C6					6		Six str. R coax for RG-59, 62/U
Z6	C6					6		6 std. R coax for RG-58/U
N8	N10	6					2	2, 3—80 amp; 9, 10—open
9	9	6					3	Basic arr. 200 amp cont. for # 0 crimp wire
9HV4		3	2				4	A1, A2, A3, A4—HV 80 amp kits; 2, 4 & 8—open
10			6				4	Mod. N10; 15 amp replace 10 amp
10HV1	12C3	7	1			1	1	A1—HV 10 amp kit; A2—str. R coax; 8 & A3 open
N10	N10	6					4	Basic arr; 2, 3, 9, 10—80 amp
12	32C2	10			2			Basic arr. re-numbered; only cavities used are identified
12C2HV1	12C3	7	2			2	1	A1—coax for RG-8/U; A2—HV 10 amp; A3—coax for RG-58/U
12C3	12C3	7	2			3		Basis arr; A1, A2, A3—std. R coax
12C4	12C4	4	4			4		Basic arr.; A1, A2, A3, A4—std. R coax
12HV3	12C3	7	2			3		A1, A2, A3—HV contact kits
12HV4	12C4	4	4			4		A1, A2, A3, A4—HV cont. kits
B12	12C3	7	2		3			A1, A2, A3—40 amp remov.
B12C3	12C3	7	2			3		Str. R coax for RG-58/U
B12C4	12C4	4	4			4		A1-A4—HV coax for RG-58/U
C12C4	12C4	4	4			4		A1-A4—90° short coax
D12	12C4	4	4		4			A1-A4—40 amp remov.
D12C4	12C4	4	4			4		A1-A3—str. R coax; A4—90° short coax
E12C4	12C4	4	4			4		90° short coax for RG-58/U; insul. from shell
F12C4	12C4	4	4			4		Str. R coax. insul. from shell
G12C4	12C4	4	4			4		Str. R coax for RG-58/U
H12C4	12C4	4	4			4		90° long coax for RG-8/U
J12C4	12C4	4	4			4		HV for RG-59/U
K12C4	12C4	4	4			4		R coax for RG-180, 195/U; insul, from shell
L12C4	12C4	4	4			4		A1-A4—str. R coax for RG-59, 62/U
M12	M12		12					Basic arr.
M12A	M12		12					Brass contacts
14	32C2	14						1-4, 6, 9, 10, 13, 16-19, 21, 22, 24, 25; A1, A2—open

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
14C2HV1	23C3	11				2	1	21, 22—90° short coax for RG-62/U; 23—HV 10 amp kit; 6, 9, 12, 13, 15, 16, 18, 19, 20—open
14HV2C2	A14	6	4			2	2	A1, A2—HV cont.; A3, A4—str. R coax
14HV3C1	A14	6	4			1	3	A1—HV coax for RG-59/U; A2, A3, A4—HV kits
14HV4	A14	6	4				4	A1-A4—HV kits
A14	A14	6	4			4		Basic arr.; A1, A2, A3, A4—str. R coax
B14	A14	6	4			4		A1—HV coax; A2-A4—str. R coax
C14	A14	6	4			4		A1-A4—HV coax for RG-59/U
D14	A14	6	4			3	1	A1, A3, A4—str. R coax; A2—HV kit
E14	A14	6	4			4		A1-A4—90° short R coax
F14	A14	6	4			4		A1-A3—str. R coax; A4—90° short R coax
G14	A14	6	4			4		A1-A4—HV coax for RG-58/U
H14	A14	6	4			4		A1—HV coax for RG-59/U; A2—coax for UG-260/U; A3, A4—str. R coax
J14	A14	6	4			4		A1-A4—str. R coax for RG-59, 62/U
K14	A14	6	4			4		A1, A4—90° short R coax; A2, A3—str. R coax
M14	A14	6	4			4		Coax for RG-180/U
N14	A14	6	4			4		A1, A4—str. R coax for RG-58/U
R14	A14	6	4			4		Std. R coax, insul.
T14	T14					14		14 min. snap in coax for RG-59, 62/U
U14	A14	6	4			4		A1-A4—R coax for RG-58/U, insul.
Y14	T14					14		14 min. snap in coax for RG-55, 223/U
15C1	32C1	12			2	1		3-10, 18-25, A1—open; A2—str. R coax, insul.
15C2	15C2		10	3		2		Basic arr.; A1, A2—str. R coax
15HV2	15C2		10	3			2	A1, A2—HV kit
A15	15C2		10	3	2			A1, A2—40 amp remov.
B15	15C2		10	3	1	1		A1—40 amp remov.; A2—str. R coax
C15	15C2		10	3	1	1		A1—40 amp remov.; A2—HV coax for RG-59/U
D15	15C2		10	3		2		A1, A2—HV coax for RG-59/U
E15	15C2		10	3	1	1		A1—40 amp remov.; A2—coax for UG-260/U
F15	15C2		10	3		2		A1—coax for UG-260/U; A2—str. R coax
H15	15C2		10	3		2		A1—str. R coax; A2—90° short R coax
K15	15C2		10	3		2		A1—str. R coax; A2—coax for UG-260/U
N15	15C2		10	3		2		A1, A2—str. R coax for RG-59/U
P15	15C2		10	3		2		A1, A2—coax for UG-260/U
R15	15C2		10	3		2		A1, A2—90° short R coax
T15	15C2		10	3		2		A1, A2—str. R coax, insul.
16	32C2	12			4			3-10, 16-20, 23-25—open; A1, A2—40 amp remov.
16C1	32C2	13			2	1		3-10, 18-25—open; A1—str. R coax; A2—10 amp remov.

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
16C2	32C2	12			2	2		3-10, 18-25—open; A1, A2—str. R coax
18	32C2	16			2			11-17, 26-30, A1, A2—open
A18	A18	16					2	Basic arr.; 17, 18—twin axials
B18	B18	13	3		2		2	60 amp contact
C18	B20C2	12	6					coax cavities—open
M18	32C2	16			2			1—iron cont.; 2—constantan cont.; 3, 4, 6, 7, 9, 10, 18, 19, 21, 22, 24, 25, A1, A2—open
19	32C2	15			2			4, 5, 8, 11, 12, 14, 21, 23, 26-28, A1, A2—open
19C1	32C2	16			2	1		A1—str. R coax; 11-17, 26-30, A2—open
A19	32C2	19						1-3, 12-14, 18, 25, 27, 29, A1, A2—open
A19C1	32C2	16			2	1		A1—str. R coax, insul.; 10-14, 25-29, 16, 17, A2—open
B19C1	32C2	16			2	1		A1—str. R coax insul: 11-17, 26-30, A2—open
M19	32C2	15			4			1, 2,—30 amp remov. constantan; A1, A2—40 amp remov. iron; 3-5, 8-10, 13, 18-20, 23-25—open
20	32C2	18			2			5, 7, 9, 12-17, 29, A1, A2—open
20C1HV1	32C2	16			2		2	A1—HV 10 amp kit; A2—twinax; 11-17, 26-30—open
20C2	32C2	16			2	2		A1, A2—str. R coax; 11-17, 26-30—open
A20	23C3	20						21, 22, 23—open
B20C2	B20C2	12	6			2		Basic arr.; A1, A2—str. R coax
C20C2	B20C2	12	6			2		A1, A2—str. R coax for RG-59/U
D20C2	32C2	16			2	2		A1—insul.; A2—grounded; 11-17, 26-30—open
F20	B20C2	12	6		2			A1, A2—40 amp remov.
G20	G20		10	2	8			Basic arr.
G20C2	B20C2	12	6			2		A1, A2—HV coax for RG-58/U
H20C2	B20C2	12	6			2		A1, A2—str. R coax for RG-58/U
J20C2	B20C2	12	6			2		A1, A2—mod. R coax for RG-196/U
21	32C2	21						1-4, 10, 18, 19, 25, 28, A1, A2—open
21C1	32C2	18			2	1		A2—str. R coax; 3-10, 18-25, A1—open
22	22	20					1	21, 22—one large twinax
22C2	32C2	18			2	2		A1, A2—str. R coax for RG-58/U; 11-15, 26-30—open
A22C2	32C2	18			2	2		A1, A2—str. R coax for RG-58/U; 11-14, 16, 17, 26-29—open
B22C2	32C2	18			2	2		A1—90° short coax for RG-58/U; A2—str. R coax for RG-58/U; 11-14, 16, 17, 26-29—open
C22C2	32C2	18			2	2		A1, A2—90° short coax for RG-58/U; 11-14, 16, 17, 26-29—open
D22C2	32C2	18			2	2		A1, A2—str. R coax; 11-14, 16, 17, 26-29—open

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
23C1	23C3	20			2	1		21, 23—40 amp remov.; 22—str. R coax
23C3	23C3	20				3		Basic arr.; 21-23—str. R coax
23HV1	23C3	20			2		1	21, 23—40 amp remov.; 22—HV kit
23HV3	23C3	20					3	21-23—HV 10 amp kit
A23C3	23C3	20				3		21-23—90° short coax
B23C2HV1	23C3	20				2	1	22—HV 10 amp kit; 23, 24—R coax for RG-55, 58/U
B23C3	23C3	20				3		Str. R coax with spec. 90Ω adapter
C23C3	23C3	20				3		21-23—str. R coax for RG-62A/U
D23C3	23C3	20				3		Str. R coax, insul.
E23C3	23C3	20				3		90° long coax for RG-59, 62, 71/U
F23C3	23C3	20				3		Coax for RG-180, 195/U
G23C3	23C3	20				3		21-23—str. R coax for RG-59/U
H23C3	23C3	20				3		21-23—str. R coax for RG-58/U
J23C3	23C3	20				3		21-23—90° short coax, insul.
24C2	23C3	20			2	2		A1—90° short coax for RG-58/U; A2—90° short coax for RG-62/U; 11-14, 26-29—open
26	32C2	24	2					A1—15 amp remov. iron; A2—15 amp remov. copper; 1, 2, 27-30—open
B26	32C2	24	2					A1—15 amp remov. iron; A2—15 amp remov. constantan; iron—odd no.; constantan—even no.
28	32C2	28						1, 2, A1, A2—open
B28	B28	28						Basic arr.
C28	C28	22	6					12-17—MS size 12
29C1HV1	29HV2	24		3		1	1	13—str. R coax; 17—HV 10 amp kit
29C2	29HV2	24		3		2		13, 17—str. R coax
29HV2	29HV2	24		3			2	Basic arr.; 13, 17—HV 10 amp kit
B29C1HV1	29HV2	24		3		1	1	13—str. R coax for RG-59, 62/U; 17—HV 10 amp kit
C29C1HV1	29HV2	24		3		1	1	13—str. R coax for RG-58/U; 17—HV 10 amp; coax to be insul.
30	32C2	28			2			A1, A2—open
30T1	32C2	28			2		1	A1—tuning shaft; A2—open
30T2	32C2	28			2		2	A1, A2—tuning shaft
31	32C2	28			3			A2—40 amp remov.; A1—open
31C1	32C2	28			2		1	A1—str. R coax; A2—open
31T1	32C2	28			3			A1—tuning shaft; A2—40 amp remov.
A31C1	32C2	28			2		1	A1—90° short coax for RG-50/U; A2—open
B31C1	32C2	28			2		1	A2—90° short R coax for RG-58/U; A1—open
32	32C2	28			4			A1, A2—40 amp remov.
32C1	32C2	28			3		1	A1—str. R coax; A2—40 amp remov.
32C1HV1	32C2	28			2		1	A1—str. R coax; A2—HV 10 amp kit
32C2	32C2	28			2		2	Basic arr.; A1, A2—str. R coax

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax.	Spec.	Notes
32HV2	32C2	28			2			A1, A2—HV 10 amp kits
A32	32C2	30			2			A1, A2—10 amp remov.
A32C1	32C2	28			3		1	A1—40 amp remov.; A2—str. R coax
AE32C2	32C2	28			2		2	A1, A2—HV coax for RG-59, 62/U insul.
B32	32C2	28			4			A1, A2—40 amp remov., iron; 1, 2—40 amp constantan
B32C1	32C2	28			3	1		A1, A2—90° long R coax
D32	32C2	28			2		2	A1, A2—80 amp remov.
D32C2	32C2	28			2	2		A1, A2—90° short R coax
E32C2	32C2	28			2	2		A1, A2—str. R coax for RG-58/U
F32C2	32C2	28			2	2		A1, A2—HV coax for RG-59, 62/U
J32C2	32C2	28			2	2		A1, A2—90° long R coax for RG-58/U
K32C2	32C2	28			2	2		A1, A2—90° long R coax for RG-8/U
MC32C2	32C2	28			2	2		A1, A2—str. R coax for 92 ohm cable
N32C2	32C2	28			2	2		A1, A2—HV coax for RG-58/U
R32C2	32C2	28			2	2		A1—str. R coax; A2—90° short R coax
S32C2	32C2	28			2	2		A1—90° short R coax; A2—str. R coax
T32C2	32C2	28			2	2		A1, A2—str. R coax for RG-58/U insul.
U32C2	32C2	28			2	2		A1, A2—str. R coax for RG-59, 62/U
V32C2	32C2	28			2	2		Basic arr. except R coax insul.
W32C2	32C2	28			2	2		A1, A2—90° short coax insul.
40	40	40						Basic arr. insul.
A44	A44	17		5				Plus 16·5a; 6·20a
45	45	43		2				Basic arr.
C45	45	43		2				10 amp contacts accom # 20 wire
50	50	50						Basic arr.
D54	D54	48		6				Snap in cont. only
E54	E54	52		2				Snap in cont. only
F54	F54	48						Plus 6·20a
58	58	48		10				Basic arr.
65	65T1	65					1	Tuning shaft cav. left open
65C1	65C1	65				1		A1—str. R coax
65T1		65					1	Tach shaft in A1 cav.
A65C1	65C1	65				1		A1—90° short R coax for RG-59, 62/U
B65C1	65C1	65				1		A1—str. R coax for RG-58/U
D65C1	65C1	65					1	A1—HV coax for RG-59, 62/U
E65C1	65C1	65				1		A1—str. R coax for RG-59, 62/U

TABLE 2 (contd.)

Contact Arr. No.	Variations Basic Arr.	No. of Contacts (amperes) 10	15	30	40	Coax. Spec.	Notes
G65C1	65C1	65				1	A1—R coax for RG-58/U insul.
66	65C1	66					A1—10 amp remov.
76		3				78	5 amp cont.
78	78	78					Basic arr.
C78	78	78					Contact accom # 20 wire
90	90	90					Insert used only in DPD. 33S, 34P
112	112					112	5 amp contacts
128	128					128	5 amp contacts

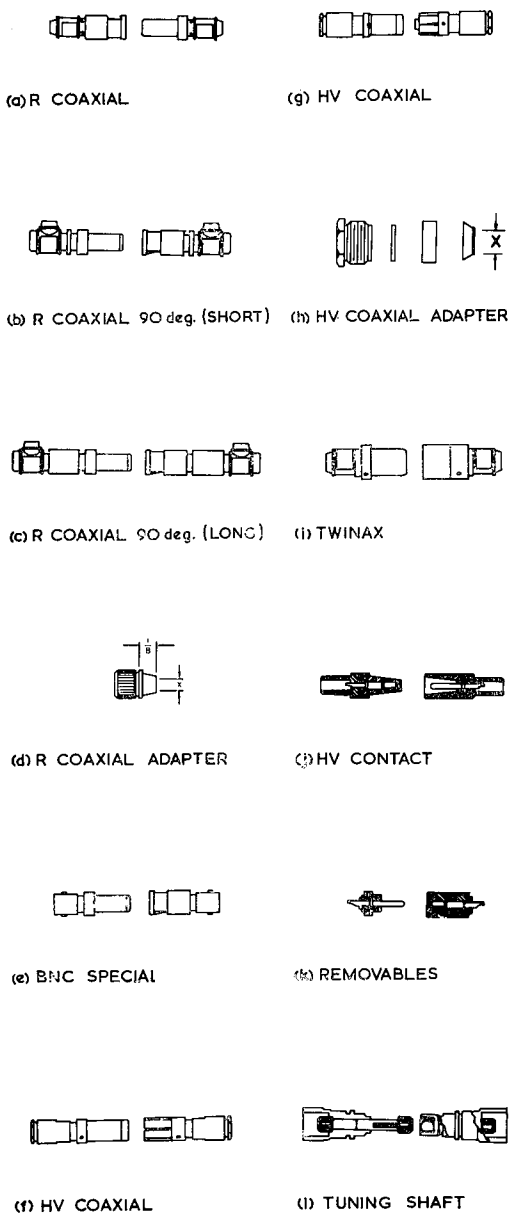


Fig. 4. Patterns of contact

(2) Slide the endbell and any other components required over the cable, clear of the end.

(3) Cut the conductor insulations, and bare the conductors to length as follows:—

Contact size	Crimp	Solder
20	$\frac{3}{16}$ in.	$\frac{3}{16}$ in.
16	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.
12	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.
10	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.
8	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.
6		$\frac{1}{4}$ in.
4		$\frac{11}{32}$ in.
2		$\frac{11}{32}$ in.
0		$\frac{11}{32}$ in.

Connector assembly to cables

15. The multi-core cable and cable-form conductors should be assembled to the connectors, in accordance with the following procedures, and preferably wiring one row at a time on a connector carrying a large number of contacts.

(1) Solder contacts: Fit suitable insulating sleeves over each conductor and insert each conductor into the solder cup, soldering in turn. After soldering, slide the sleeve down over the joint. After completion of soldering, whip the end of the cable if necessary, slide the endbell or other fitting into place and complete the assembly.

(2) Crimp contacts: Remove the contacts from the connector, fitting the endbell over the cable and insulating sleeves over the conductors. Fit the barrel of the appropriate contact over the bared conductor ensuring that all the strands of the conductor enter

the barrel. Using the correct crimping tool locator (Table 3) crimp the barrel on to the conductor, ensuring that the conductor is visible through the inspection hole after the crimping cycle is completed. Slide the insulating sleeves over the crimped joint and insert the contacts into their correct position in the insert. Fit the cable termination on to the rear of the connector.

(3) R coaxial contacts (fig. 7).

(a) Cut the end of the cable squarely and evenly.

(b) Cut completely around the sheath at a distance from the end of the cable shown as dimension C in Table 4, and remove the cut portion of the sheath.

(c) Trim the cable to the dimensions shown as A and B in Table 4 and fig. 7 (a).

(d) Comb out the braid, tin the conductor. If a 90 deg. contact is being wired, bend the conductor at right angles (fig. 8 (b)).

(e) Remove the solder pot cover. Insert the prepared end of the cable and solder the conductor to the contact. If a straight contact is used the dielectric should butt against the contact solder pot (fig. 7 (c)).

(f) Replace the solder pot cover and solder the braid to the ferrule.

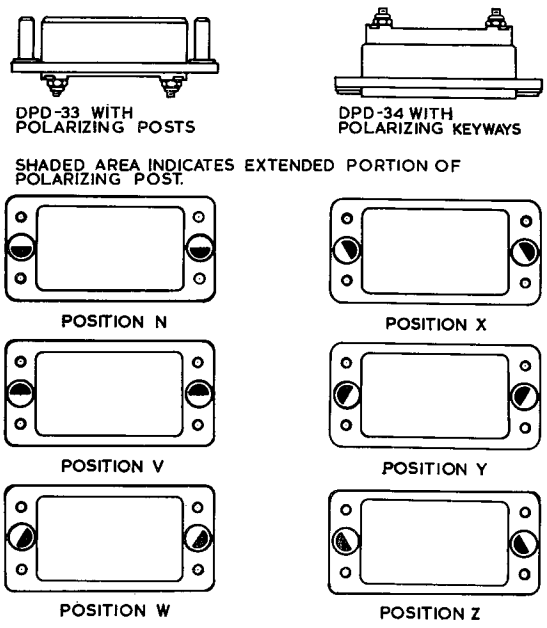
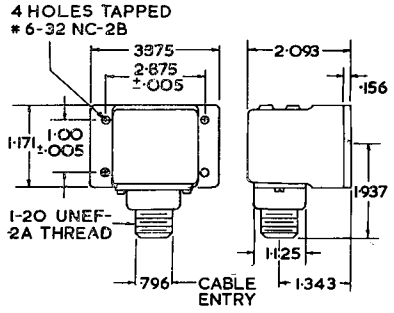


Fig. 5. Polarization



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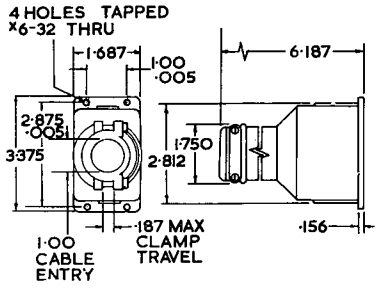

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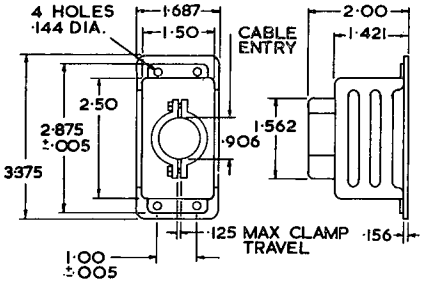

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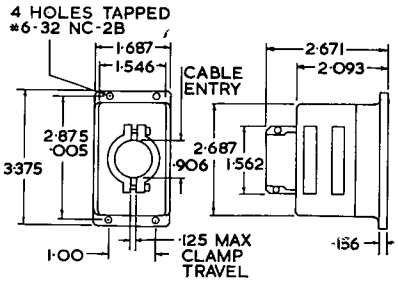

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Fig. 6. Accessory dimensions

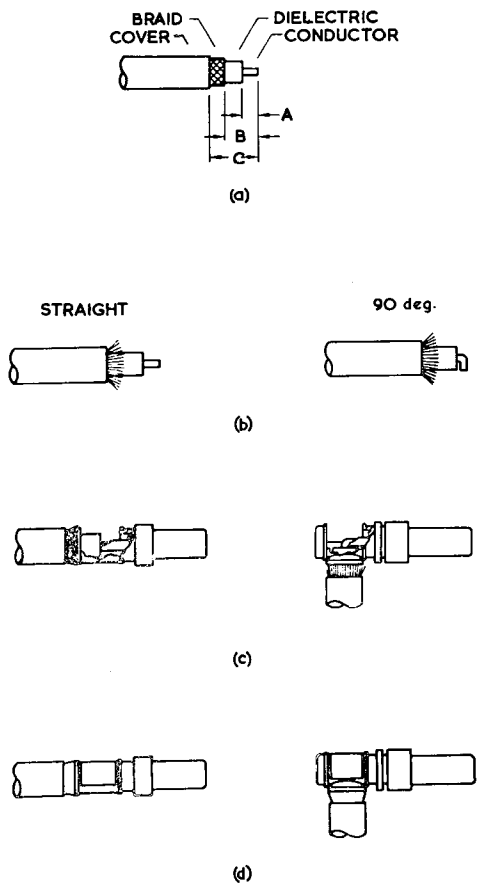

Fig. 7. Wiring method for R coaxial connectors

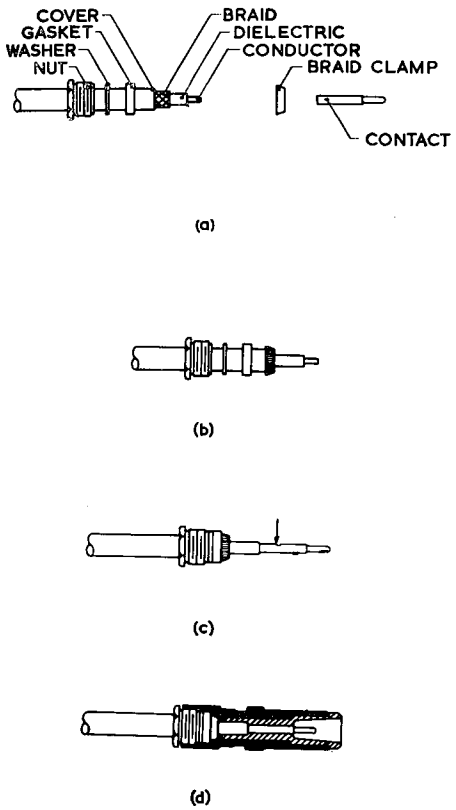

Fig. 8. Wiring method for HV coaxial connectors

(4) HV coaxial sockets (fig. 8).

(a) Cut the end of the cable squarely and evenly.

(b) Slide the nut, washer and gasket over the cable, clear of the end.

(c) Trim the cable to the dimensions shown (fig. 8 (a) and Table 4).

(d) Slide the braid clamp over the braid. Fold the braid over the clamp, and tin the end of the conductor (fig. 8 (b)).

(e) Insert the tinned end of the conductor into the solder pot on the contact, and solder, making certain that the dielectric butts against the end of the solder pot. Remove any loose material from the contact (fig. 8 (c)).

(f) Fold the braid evenly over the braid clamp. Slide the body into place, ensuring that the contact enters the hole in the insulator. Slide the gasket and washer forward by pushing the nut, and tighten the nut (fig. 8 (d)).

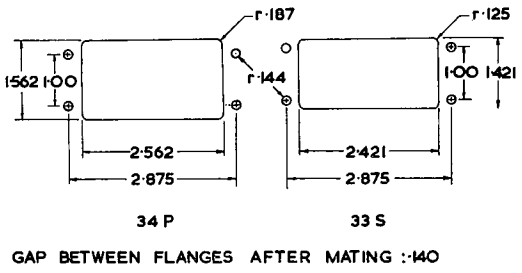

Fig. 9. Panel cut-out

TABLE 3

Tools

Description	Pt. No.	NAS/MS Ref. No.	Ref. No.
Crimping tool		MS3191	1H/279
Locator size 20 (Red)	611062		1H/414
Locator size 16			
Locator size 12			
Locator size 10			
Extraction tool size 20	CET 28		
Extraction tool size 16	CET 16–15		
Extraction tool size 12	CET 12–4		
Extraction tool size 8	CET 8–2		

TABLE 4

Cable trimming dimensions (fig. 4)

Coax type	Cable size	Trim in. A	Trim in. B	Trim in. C
Straight R. coax	RG–7/U	0·171	0·421	0·515
	RG–58/U	0·171	0·546	0·671
	RG–59/U	0·171	0·546	0·671
	RG–62/U	0·171	0·546	0·671
90 deg. R. coax	RG–7/U	0·218	0·312	0·437
	RG–58/U	0·218	0·531	0·593
	RG–59/U	0·218	0·531	0·593
	RG–62/U	0·218	0·531	0·593
High voltage coax	RG–8/U	0·312	0·406	0·562
	RG–59/U	0·125	0·468	0·640
Coax snap-in receptacle Pt. No. 249–1332–000	RG–59–62/U	0·078	0·138	0·478
Coax snap-in plug Pt. No. 249–1333–000	RG–59–62/U	0·078	0·138	0·478
Coax snap-in receptacle Pt. No. 249–1371–000	RG–55–223/U	0·078	0·156	0·436
Coax snap-in plug Pt. No. 249–1372–000	RG–55–233/U	0·078	0·156	0·396

TABLE 5

Coaxial cable cross reference

Item	U.S. & Canadian	British	French	Amphenol	Nato
1	RG–7/0	Uniradio			
2	RG–58/0	Uniradio 43		21–024	NNR 2
3	RG–59/0	Uniradio 90		21–025	NNR 11
4	RG–62/U	Uniradio 96		21–026	NNR 12
5	RG–8/U	Uniradio 67	KX4 or KX50	21–004	NWR 15

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