AB06-3100-10-76-SF-221
receptacle, panel cut out detail with solder contacts

'O' Ring Seal

Hex. Panel Nut

0.825" Max. A/F

Bucket ID =
0.033" / 0.031

0.135"

0.210"

0.743"

0.285"

0.880"

Max. Panel Thickness 3mm.

1.071"

1.017"

0.695"
0.685"

0.662"
0.656"
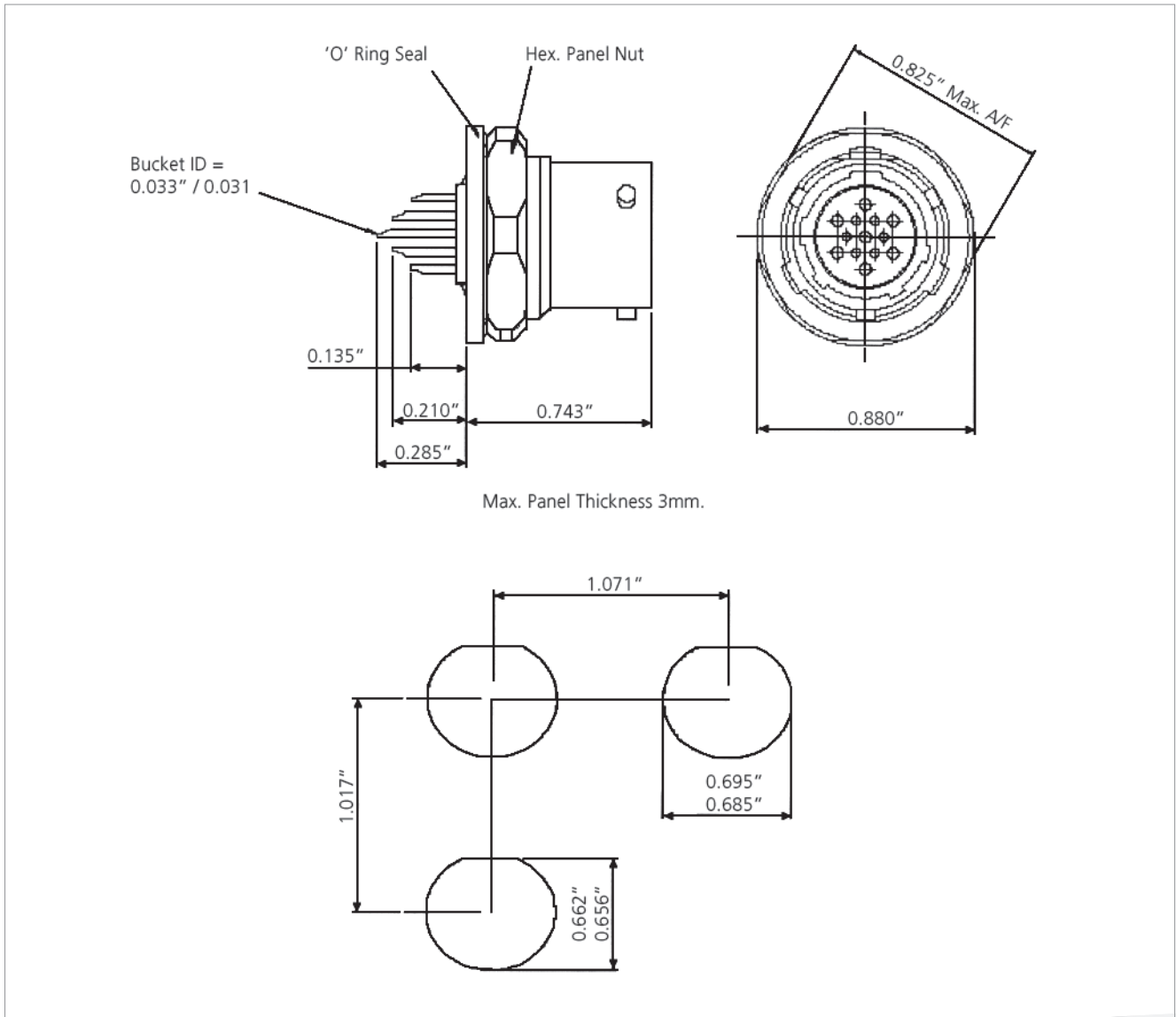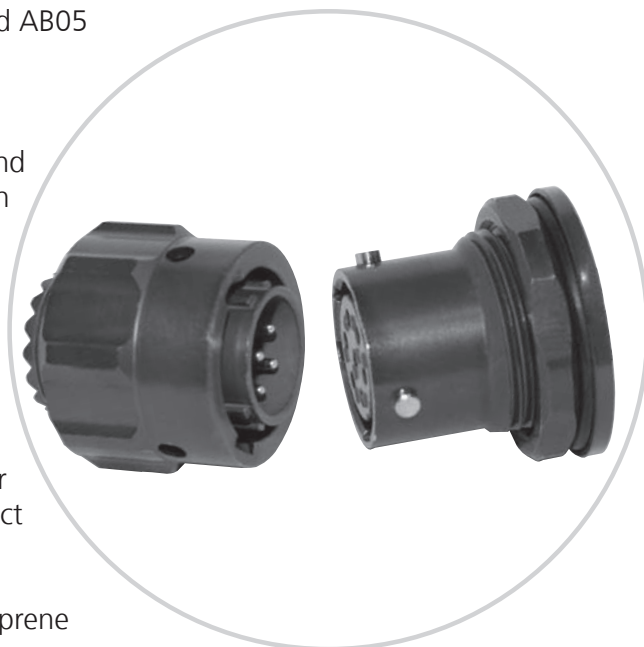
All measurements in mm.

AB06
Audio Miniature Bayonet Lock Connectors

AB06 connectors are a development of the established AB05 (Patt, 105) range and are particularly suitable for tinsel cordage applications in audio equipment.

Designed to requirements of the Royal Signals and Radar Establishment, AB06 connectors are available in shell sizes 8, 10 and 12, and offer all performance characteristics and design features of AB05 connectors. An alternative 'snatch' type coupling nut for quick release applications is available in shell size 10.

Shell styles available are: free cable mounted with course ribbed or 'snatch' coupling nut, fixed single hole mount. fixed single hole mount 'audio' (thinner mounting flange) and free coupler connector. Contact styles are solder bucket, crimp and p.c.b mounted.

Accessories include a straight outlet with a polychloroprene sleeve for tinsel cordage, 90º outlets and protective caps.

AB06
Audio Miniature Bayonet Lock Connectors

Contents: **Page:**

AB06
technical information

Mechanical Features

Shell Size:	8 to 12
Coupling:	Three pin bayonet (optional 'snatch' in size 10)
Contact Types:	Solder bucket, crimp, pin tails for P.C.B. applications and flexible printing wiring.
Sealing:	Barrier, or barrier and panel seal. Dynamic peripheral seal between mating shells.
Polarization:	Insulator or key/keyway
Contact Arrangements:	4 available, 2 to 10 contacts

Materials

Shell:	Aluminium alloy
Insulator:	Polychloroprene
Contacts:	Copper alloy
Accessories Hardware:	Aluminium alloy

Plating Finishes

Shell:	Cadmium/cadmium free plated, choice of passivation colour
Contacts:	Gold plated
Accessory Hardware:	Cadmium/cadmium free plated, choice of passivation colour

Technical Data

Temperature Range:	-55ºC to +125ºC

Voltage Rating:	a) Working Voltage - d.c. or a.c. peak:
	           Size 20 Contacts: 700V (Voltage rating 1)
	           Size 16 Contacts: 1200V (Voltage rating 2)
	b) Proof Voltage - d.c. or a.c. peak:
	           Size 20 Contacts: 700V (Voltage rating 1)
	           Size 16 Contacts: 3000V (Voltage rating 2)
	The establishment of electrical safety factors when the connector is used at other than the working voltage is the responsibility of the user.

Electrical Data:	Max. current between 7.5 and 13 amps per contact

AB06
part number explanation

To illustrate the ordering procedure, part number AB0662101007PN00 is shown in the table below:

Product Range:		AB06	62	10	10	07	P	N	00
Shell Style:	10 : Coupler connector with accessory thread								
	31 : Fixed connector single hole mounting								
	32 : Fixed connector single hole mounting with accessory thread.								
	33 : Fixed audio connector (thinner mounting flange)								
	34 : Fixed connector single hole mounting (modified flange)								
	62 : Free connector with coarse ribbed coupling nut								
	64 : Free connector 'snatch' release coupling nut								
Accessory Class:	10 : 90° angled outlet								
	11 : 90° angled outlet (non-standard, #10 accepts #12 cable)								
	20 : Straight outlet, large bore short boot								
	21 : Straight outlet, small bore short boot								
	22 : Straight outlet, small bore long boot								
Shell size:	08, 10, 12								
Contact layout:	See page 40								
Contact type:	P : Pin								
	S : Socket								
Orientation:	N, B, C, E, F								
Modification:	(For modifications and special requirements please consult factory.)								

AB06
arrangement spec

Contact Arrangement Service Ratings

	Sea Level 1013 mbar		8,500 m (27800 ft.) 300 mbar		20,000 m (66,000 ft) 44 mbar	
Service Rating	1	2	1	2	1	2
Working Voltage (nominal) d.c. or a.c. peak	700	1200	550	650	330	380
Voltage Proof d.c. or a.c. peak	2100	3000	1100	1300	660	760

Current Service Ratings

Contact Size	Max. Current	* Rated Current
20 AWG	7.5A	5A
16 AWG	13A	10A

*Maximum working current per contact when all contacts are working simultaneously at 85ºC ambient temperature.

Contact Arrangement Alternative Orientations

Contact Arrangement	Available Orientations
08-33	N, E, F
10-02	N, B, C, E, F
10-07	N, B, C, E, F
12-10	N, B, C, E, F

AB06
contact arrangements

Shell Size 08
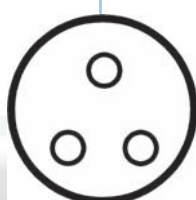
08-33
Service rating 1
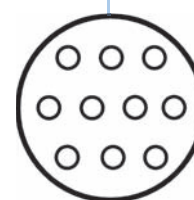3 Contacts,
Size 20

Shell Size 10
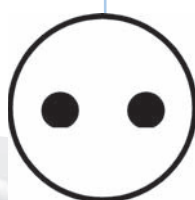
10-02
Service rating 2
2 Contacts,
Size 16
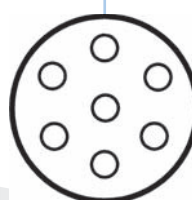
10-07
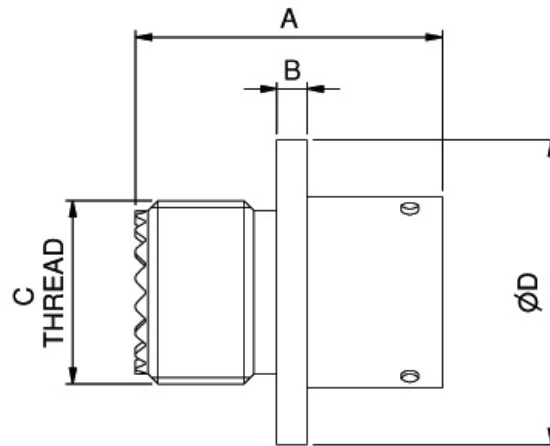Service rating 1
7 Contacts,
Size 20

Shell Size 12

12-10
Service rating 1
12 Contacts,
Size 20

○ Size 20 Contacts

● Size 16 Contacts

AB06-1000
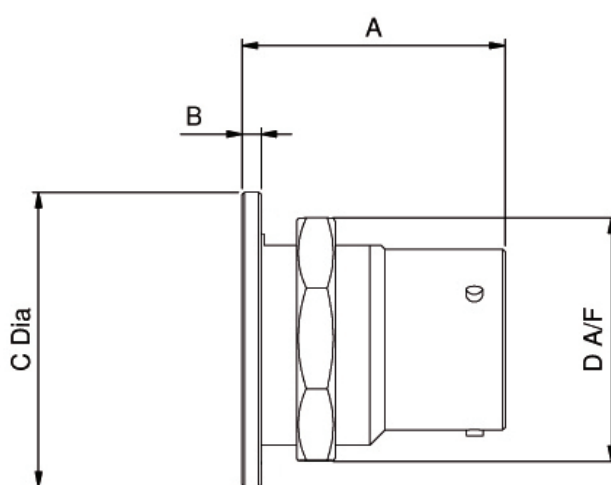## coupler connector with accessory thread

Shell Size	A	B	C thread UNEF 2A	D Ø
10	22.96	2.49	$^9/_{16}$ - 24	24.00
12	22.96	2.49	$^{11}/_{16}$ - 24	26.42

Thread measurement is imperial, all other measurements in mm.

AB06-3100
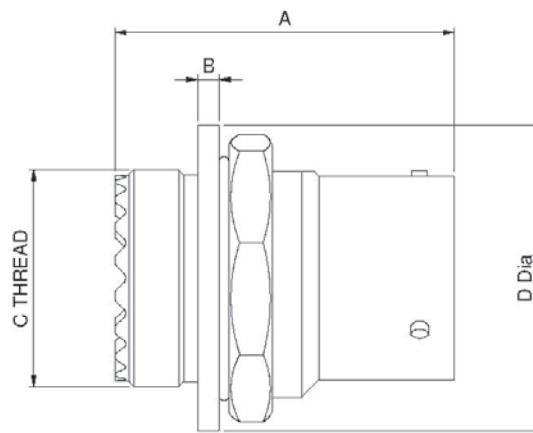## fixed connector single hole mounting

Shell Size	A	B	C Ø	D A/F
10	19.00	1.70	22.35	20.96
12	21.11	2.97	28.70	27.10

All measurements in mm.

ab Connectors

AB06-3200
fixed connector single hole mounting with accessory thread

Shell Size	A	B	C thread UNEF 2A	D Ø
10	24.26	1.70	$^5/_8''$ - 24	22.35

Thread measurement is imperial, all other measurements in mm.
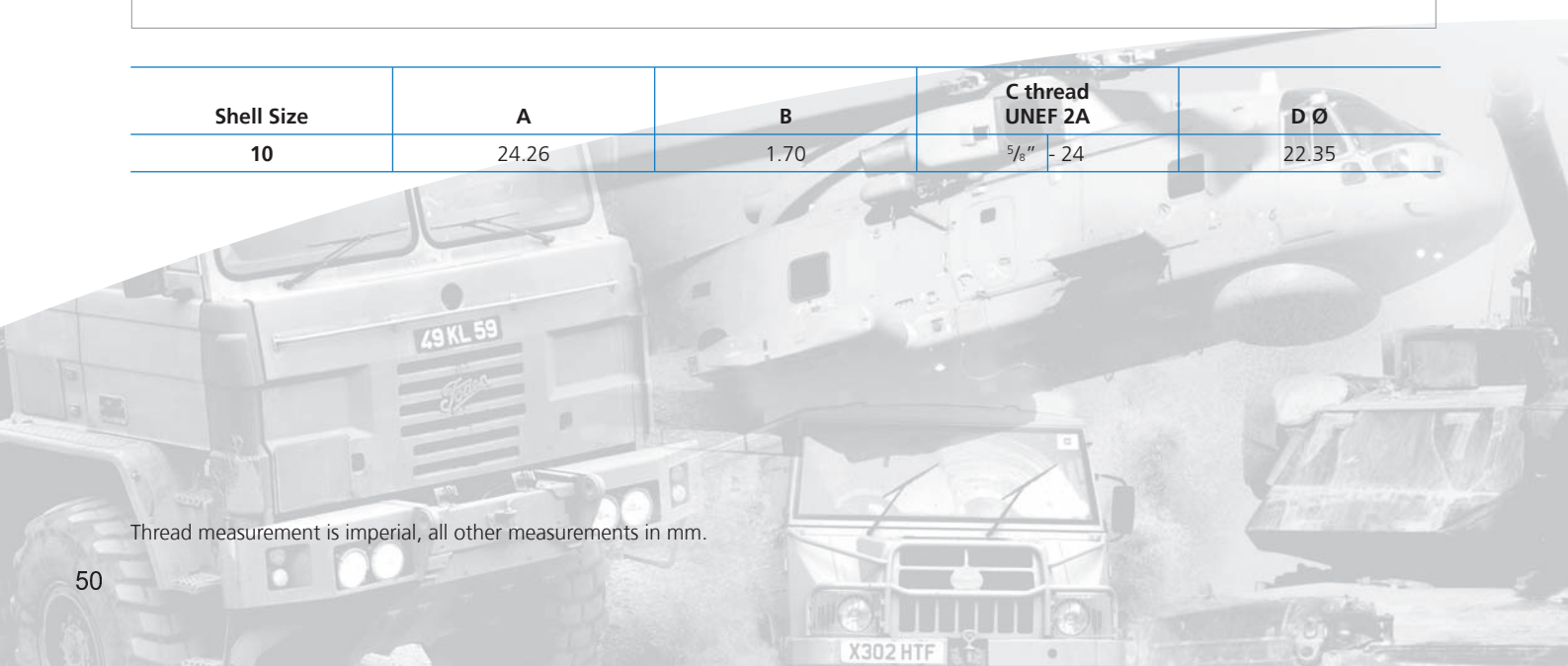
AB06-3300
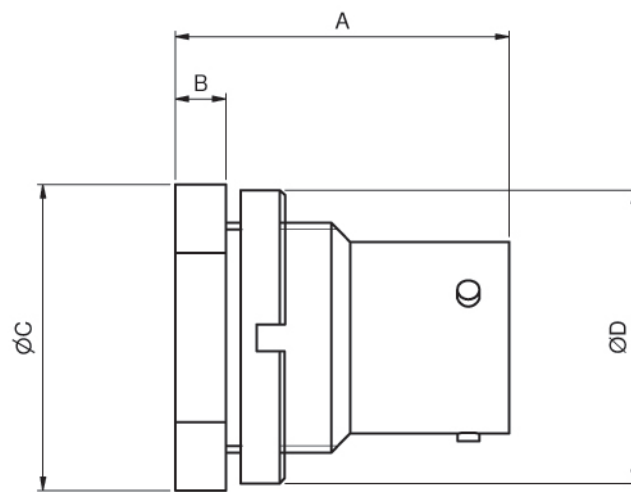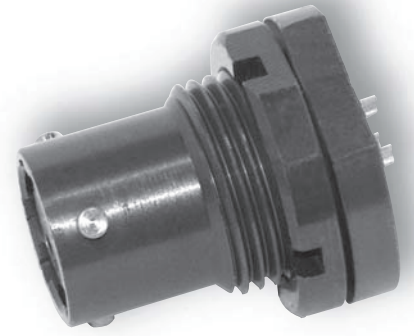## fixed audio connector (thinner mounting flange)
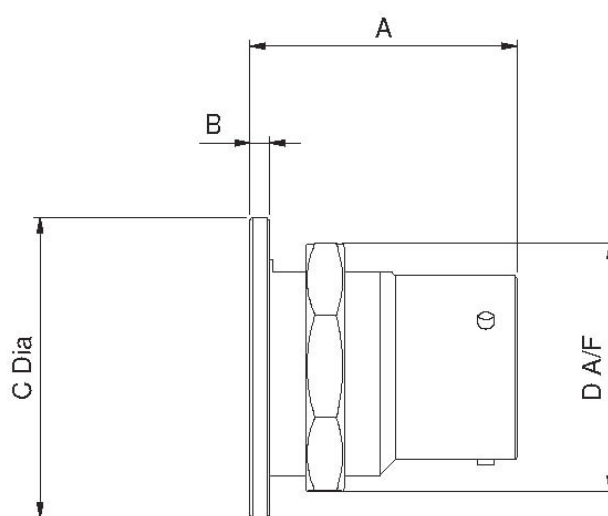
Shell Size	A	B	C Ø	D A/F
10	18.92	0.66	22.35	20.96

All measurements in mm.

![ab Connectors logo]

AB06-3400
fixed connector single hole mounting (modified flange)

Shell Size	A	B	C Ø	D A/F
8	21.06	3.18	19.15	17.78

All measurements in mm.
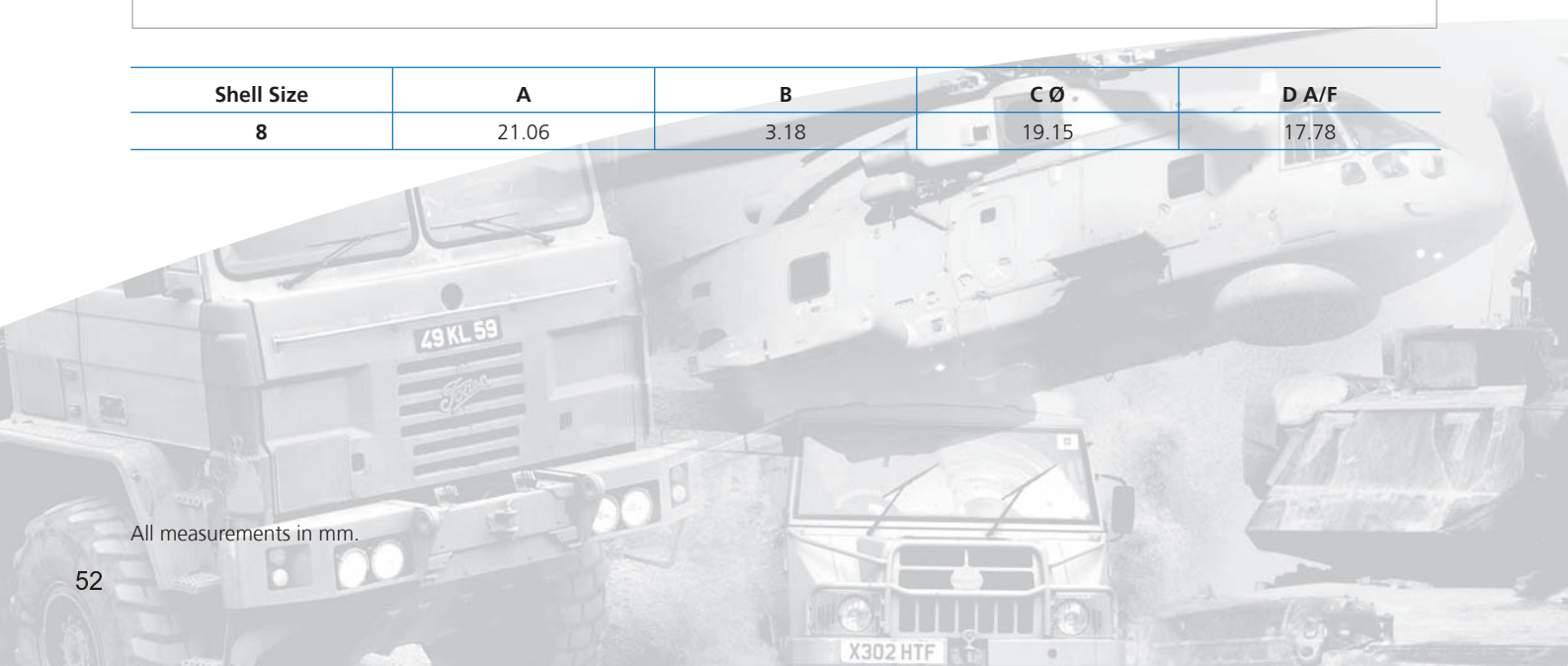
AB06-6200

free connector with coarse ribbed coupling nut
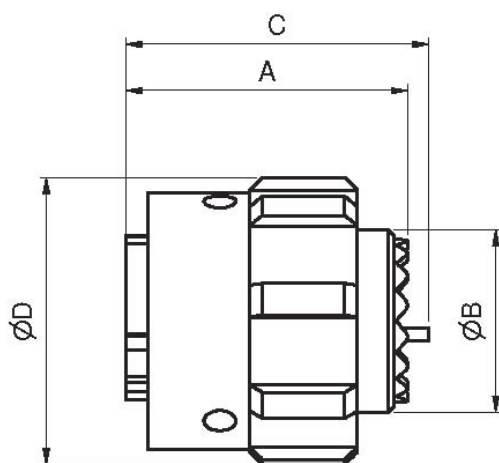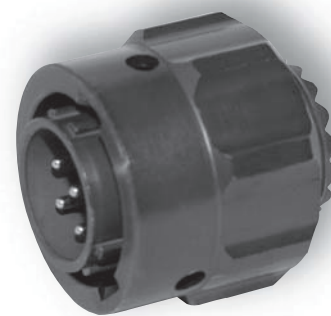
Shell Size	A	B thread Ø	C	D Ø
8	21.92	$^{7}/_{16}$ x 28 UNEF	23.27	21.94
10	21.92	$^{9}/_{16}$ x 24 UNEF	23.27	22.35
12	21.92	$^{11}/_{16}$ x 24 UNEF	23.27	28.58

Thread measurement is imperial, all other measurements in mm.

AB06-6400
free connector 'snatch' release coupling nut
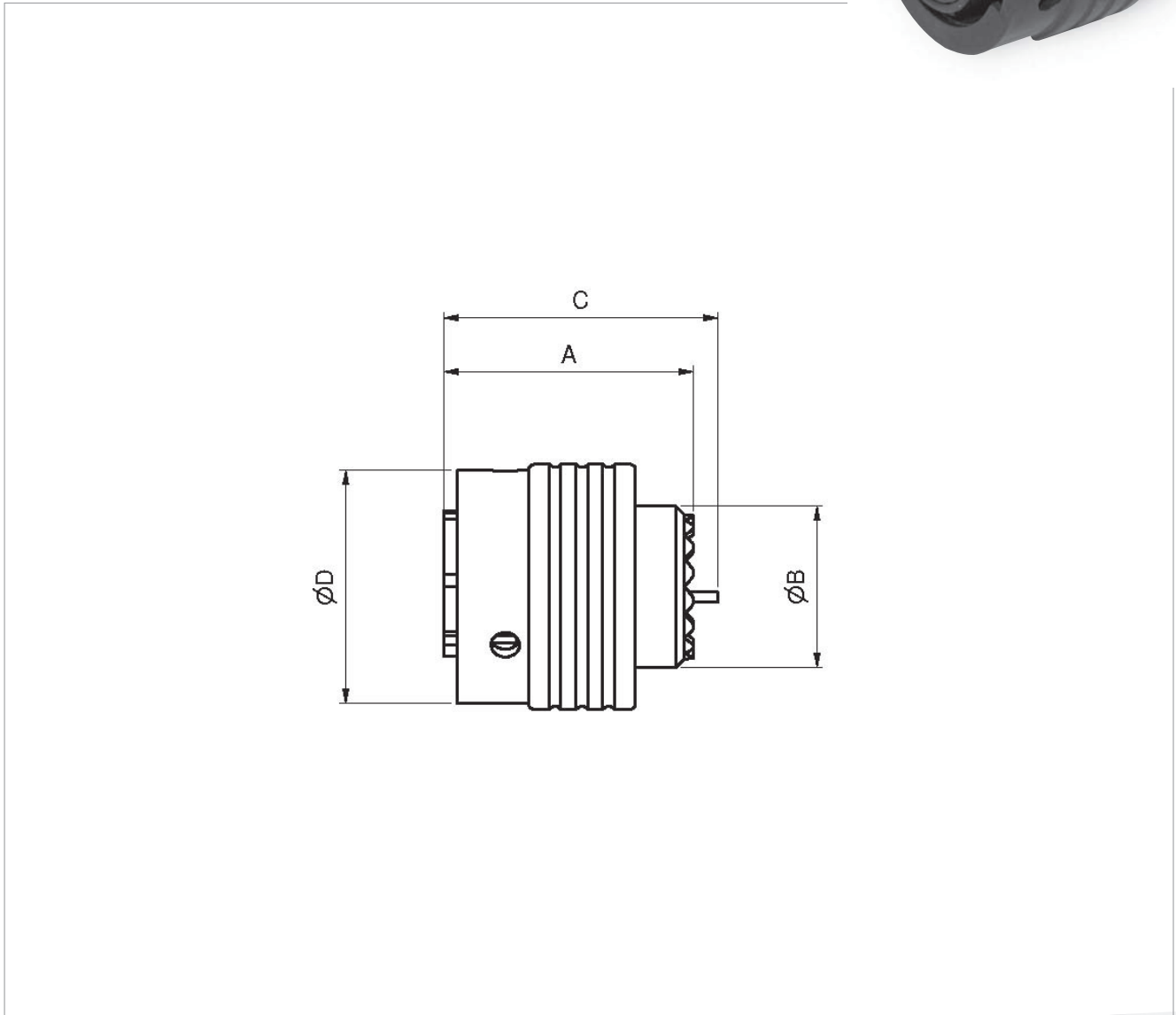
Shell Size	A	B thread Ø	C	D Ø
10	21.92	$^9/_{16}$" x 24 UNEF	23.27	21.59

Thread measurement is imperial, all other measurements in mm.
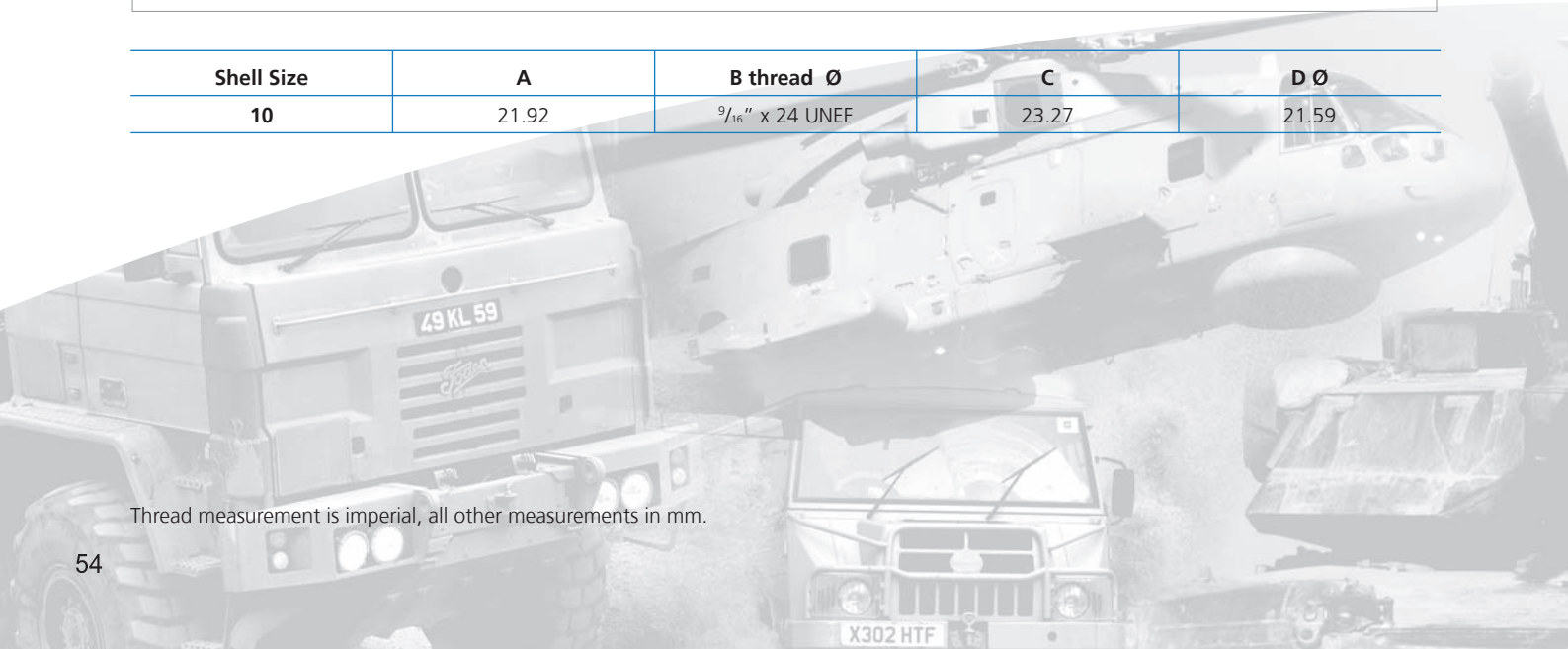
AB06
accessories part number explanation

Accessories can also be ordered separately.
To illustrate the ordering procedure, part number AB06002010070021 is shown in the table below:

Product Range:		AB06	00	20	10	07	00	21
Shell Style:	00 No connector. Accessory only.							
Accessory Class	10 : 90° angled outlet							
	11 : 90° angled outlet (non standard, #10 accepts #12 cable)							
	20 : Straight outlet, large bore short boot							
	21 : Straight outlet, small bore short boot							
	22 : Straight outlet, small bore long boot							
Accessory Size:	08, 10, 12, (Increase in sixteenths of an inch)							
Contact Layout:	Refers to grommet where fitted.							
	00 No grommet supplied.							
Orientation:	00 No orientation.							
Modification:	21 Anodised black def 151 type 1.							

ab Connectors

AB06-0010
90° angled outlet
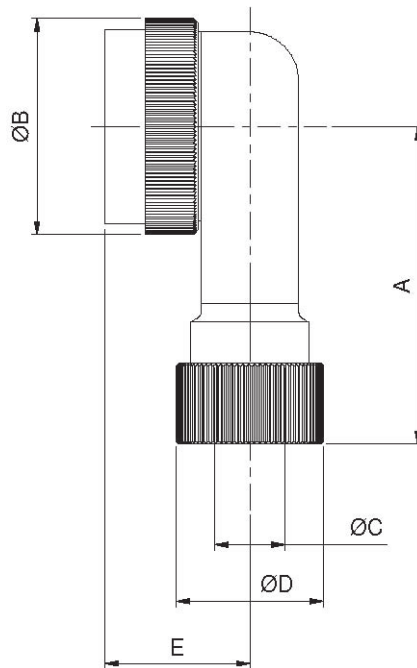
Shell Size	A	B Ø	C Ø	D Ø	E
10	25.25	20.32	7.74	13.72	13.56
12	26.51	21.23	8.03	16.64	15.08

All measurements in mm.
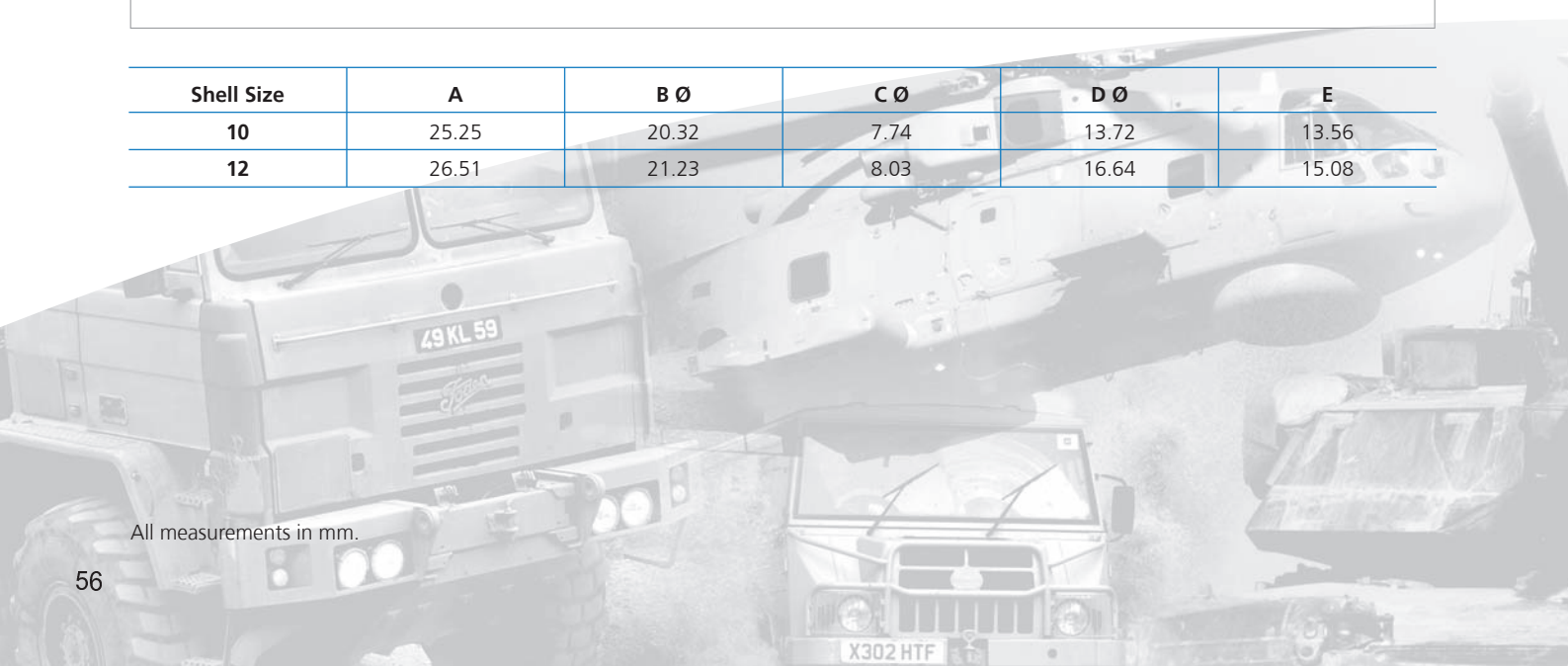
AB06-0011

90º angled outlet
(non-standard, #10 acccepts #12 cable)
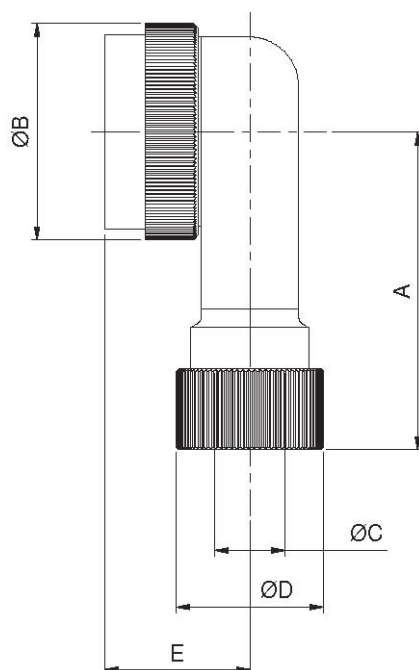
Shell Size	A	B Ø	C Ø	D Ø	E
10	25.25	20.32	8.03	16.64	13.56

All measurements in mm.

AB06-0020
straight outlet, large bore short boot
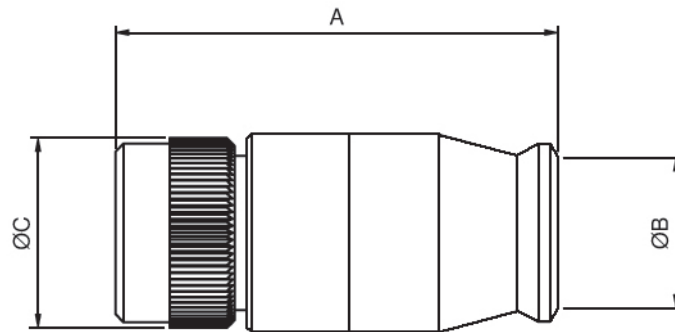
Shell Size	A	B Ø	C Ø
8	34.13	7.26	15.88
10	42.25	7.26	17.70
12	42.44	7.26	21.46

All measurements in mm.
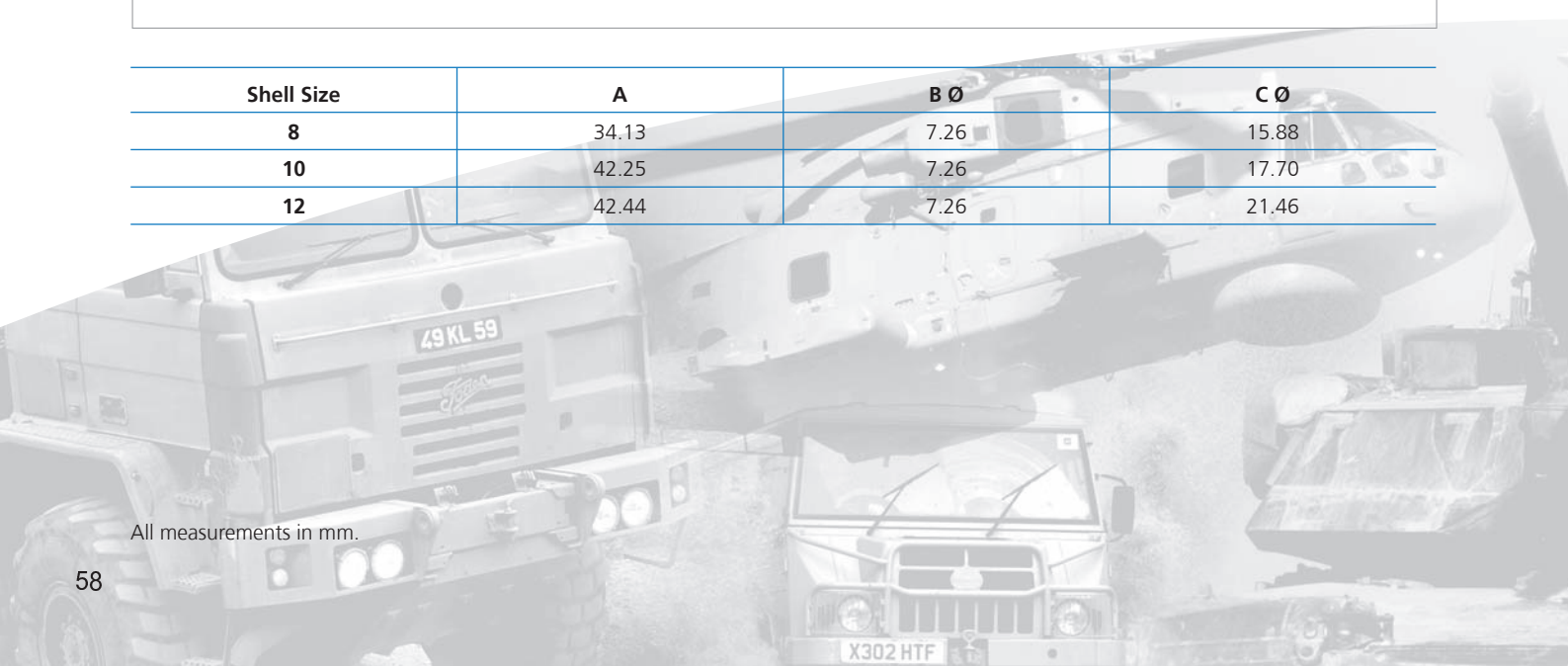
AB06-0021
straight outlet, small bore short boot
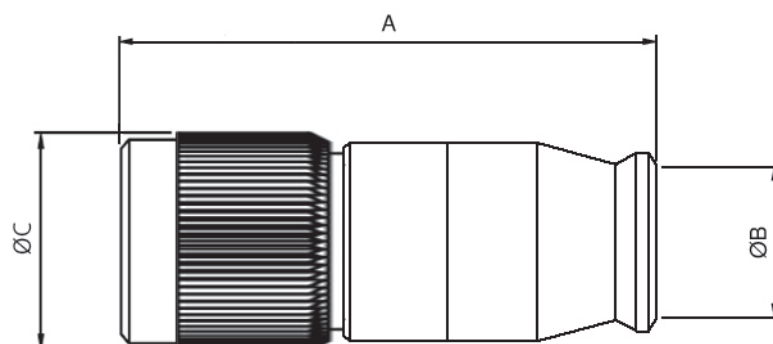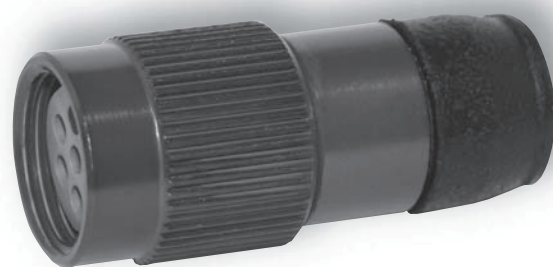
Shell Size	A	B Ø	C Ø
8	34.13	5.08	15.88
10	42.25	5.08	17.70
12	42.44	5.08	21.46

All measurements in mm.

AB06-0022
straight outlet, small bore long boot
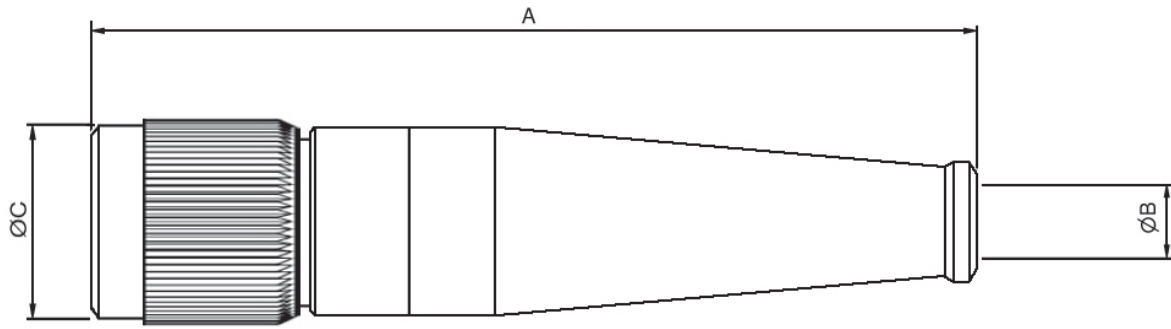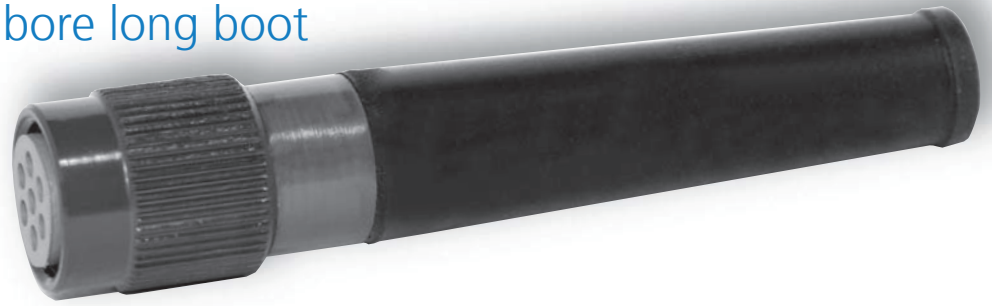
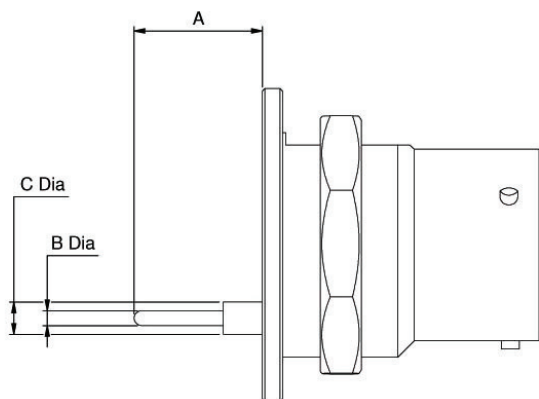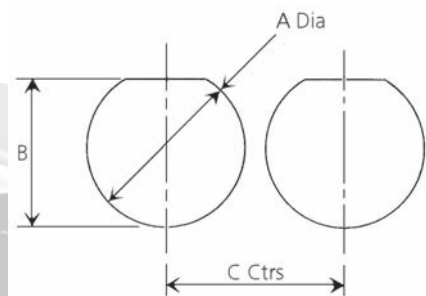| Shell Size	A	B Ø	C Ø
10	78.35	5.08	16.74

All measurements in mm.

AB06-Printed Circuit Tail Detail
receptacle, single hole mounting

Shell Size	P.C.B Contact			P.C.B. Contact (non-standard)		
	A	B Ø	C Ø	A	B Ø	C Ø
10	3.48	1.98	0.94	7.24	2.13	0.71
12	1.45	1.98	0.94	5.21	2.13	0.71

AB06-Panel Piercing Detail
receptacle, single hole mounting

Shell Size	A Ø	B	C
08	14.43	No flats	19.3
10	17.65	16.81	25.83
12	21.16	17.78	29.72

All measurements in mm.