# AB05/6

Mil-C-26482 Series 1 Style

ab Connectors

A Subsidiary of TT electronics plc

TT electronics

AB Connectors Limited

# AB Connectors

## Company Profile

Operating from the principal site in South Wales, U.K., AB Connectors Limited, a subsidiary of TT electronics plc., is one of the recognised market leaders in design, test and manufacture of harsh environment interconnection systems, bespoke harness assemblies and equipment sub-units.

With a satellite assembly facility in North Carolina, USA, and a co-ordinated global sales and distribution network, AB Connectors Ltd. offers an unrivalled service to both engineers and buyers alike.

Through a commitment to a structured new product introduction process, AB Connectors is continuing investment in research and development of new materials and processes, surface treatments and the very latest manufacturing technology and techniques to ensure the products meet the most exacting standards encountered in the modern Military, Mass Transportation and Industrial market places.

Quality system approvals include BS/EN/ISO 9001 along with product approvals to BS9000, IECQ and CECC. As a result of these qualifications, AB Connectors have been awarded several major customer approvals and accreditations.

AB Connectors total commitment to providing customers with high levels of service, cost effectiveness, quality and innovation solutions in interconnection products, make it the ideal first choice supply partner.

# AB05
## Miniature Bayonet Coupling Connectors

Pages 2 - 36

# AB05 10-76
## Miniature Bayonet Coupling Connectors

Pages 37 - 42

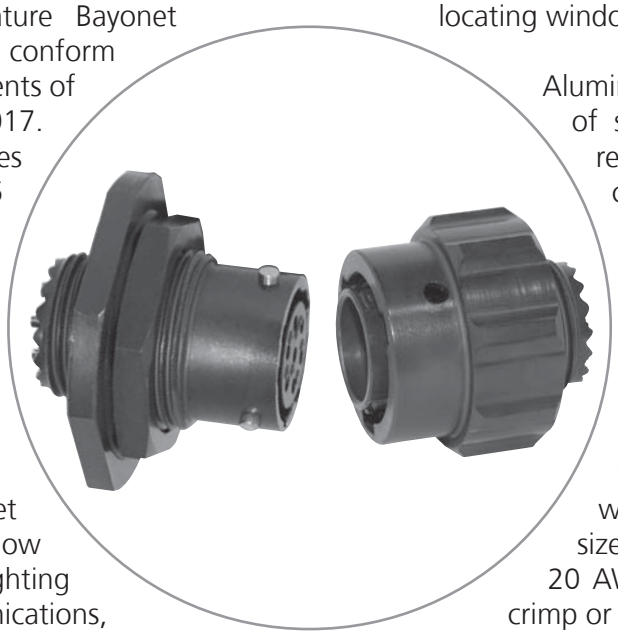
&

# AB06
## Audio Miniature Bayonet Lock Connectors

Pages 43 - 61

Web: www.ttabconnectors.com
Email: sales@ttabconnectors.com

# AB05
## Miniature Bayonet Coupling Connectors



The AB05 Series Miniature Bayonet Coupling connectors fully conform to the stringent requirements of British Standard 9522 F0017. This specification supercedes Defence Standard 59-35 (Part 1), which was itself based on the American Military Specification Mil-C-26482 Series 1 (solder).

Initially developed for aircraft applications, miniature bayonet coupling connectors are now extensively used in fighting vehicles, military communications, professional audio and general industrial markets where high reliability, miniaturisation and cost effectiveness are of prime importance.

AB05 series connectors are interchangeable and intermateable with similar connectors of British, European or American origin.

Positive coupling is indicated by an audible click and by visual alignment of the three bayonet pins with locating windows in the coupling nut.

Aluminium alloy shells and a choice of surface finishes, offer a high resistance to corrosion. A choice of colour is available for occasions where the connector has to match the finish of the equipment.

Insulators are polychloroprene with an operating temperature range of between -55ºC to 125ºC. Contact arrangements with from 2 to 61 ways feature size 16 AWG (13 amps) or size 20 AWG (7.5 amps) solder bucket, crimp or P.C.B contacts.

Sealing against water and dust ingress is achieved between mating connectors by using a square section gasket between shells, by a peripheral seal on the insulators and by individual wire seal grommets.

In response to modern environmental considerations, AB05 connectors can be specified with alternative cadmium free surface finishes.

# AB05
## Miniature Bayonet Coupling Connectors

**Contents:** **Page:**


**AB05 Miniature Bayonet Coupling Connectors** **2-36**
Technical Information 4
Part No. Explanation 5
Arrangement Specifications 6
Contact Arrangements 7-8
**Receptacles;**
AB05 1000: cable connecting receptacle 9
AB05 2000: receptacle, square flange with accessory thread 10
AB05 2100: receptacle, square flange w/o accessory thread 11
AB05 3100: receptacle, jam nut w/o accessory thread 12
AB05 3200: receptacle, jam nut with accessory thread 13
**Plugs;**
AB05 6000: plug, knurled coupling nut 14
AB05 6100: plug, knurled coupling nut with grounding fingers 15
AB05 6200: plug, coarse ribbed coupling nut 16
AB05 6300: plug, coarse ribbed coupling nut with grounding fingers 17
**Accessories;**
Accessories Part No. Explanation 18
AB05 0027: strain relief clamp 19
AB05 0029: straight outlet for internally screened cables 20
AB05 0030: straight outlet for externally screened cables 21
AB05 0040: grommet nut 22
AB05 0050: general duty adaptor 23
AB05 0055: sealing gland 24
AB05 0062: sealing gland with integral cable clamp 25
AB05 0065 / AB05 0066: cover for square flange receptacle 26
AB05 0070: cover for plug 27
AB05 0075: screen and heat shrink adaptor 28
AB05 002*: screening heat shrink adaptor, sealing type 29
AB05 003*: screening heat shrink adaptor 90° outlet, sealing type 30
AB05 size240-0-00-AC: filler plug 31
AB05 size382-0-00-AC: panel gasket 31
AB05 size430-0-00-AC: cable grommet 32
AB05 2300: stowage receptacles 32
AB05 Printed Circuit Board Contacts 33
AB05 Crimp Contacts and Assembly Tools 34
Assembly Procedures for Cables used on AB05 0029 and 0030 Straight Outlets 35-36

**AB05 10-76 Miniature Bayonet Coupling Connectors** **37-42**

**AB06 Audio Miniature Bayonet Lock Connectors Range** **43-61**

**Safety Information** **62**

# AB05
## technical information

**Mechanical Features**

| | |
|---|---|
| Shell size: | 8 to 24, measured in sixteenths of an inch |
| Coupling: | Three pin bayonet |
| Contact Termination: | Solder bucket, crimp (rubber retention), pin tails for P.C.B. applications and flexible printing wiring |
| Sealing: | Barrier, or barrier and panel seal.<br>Dynamic peripheral seal between mating shells. |

**Materials**

| | |
|---|---|
| Shell: | Aluminium alloy |
| Insulator: | Polychloroprene |
| Grommet: | Polychloroprene |
| Contacts: | Brass |
| Accessories Hardware: | Aluminium alloy |

**Plating Finishes**

| | |
|---|---|
| Shell: | Conductive, olive drab over cadmium plate (alternatives available on request) |
| Contacts: | Gold over nickel |
| Accessory Hardware: | Conductive, olive drab over cadmium plate (alternatives available on request) |

**Technical Data**

Temperature Range: -55°C to +125°C

Voltage at Sea Level:

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: 2100V (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.

Environmental Ratings:

a) Shock severity: 981 m/s$^2$ (100g$_n$) for 6 milliseconds.
b) Vibration: 10Hz-5000 Hz, 0.75 mm/10g$_n$ duration; 30 hours (including 1 hour at -55°C and 3 hours at 125°C).
c) Acceleration: 490 m/s$^2$ (50g$_n$)
d) Humidity severity: 44 millibars
e) Bump severity: 390 m/s$^2$ (40g$_n$), 4000 ± 10 bumps
f) Mechanical endurance: 500 matings
g) High temperature:
   Long term: 1000 hours at 85°C
   Short term: 250 hours at 125°C

**Orientation:** To prevent mismating or cross-plugging, shell to shell, key to keyway orientations are offered in normal (N) or any of four alternatives (B,C,E or F). Insert orientation, permissible in Pattern 105 connectors to enable replacement of existing MIL-C-26482 types, is available by special request.

# AB05
## part number explanation

**To illustrate the ordering procedure, part number AB05100010**PF00 is shown in the table below:**

| **Product Range:** | **AB05** | **10** | **00** | **10** | ****** | **P** | **F** | **00** |
|---|---|---|---|---|---|---|---|---|
| **Shell Style:** | 10 : Cable connecting receptacle<br>20 : Square flange receptacle with accessory thread<br>21 : Square flange receptacle without accessory thread<br>31 : Jam nut receptacle without accessory thread<br>32 : Jam nut receptacle with external accessory thread<br>60 : Plug with knurled coupling nut<br>61 : Plug with knurled coupling nut & spring grounding fingers<br>62 : Plug with coarse ribbed coupling nut<br>63 : Plug with coarse ribbed coupling nut & spring grounding fingers | | | | | | | |
| **Accessory Class:** | 00 : No accessory<br>27 : Strain relief clamp<br>29 : Straight outlet internally screened<br>30 : Straight outlet externally screened<br>40 : Grommet nut<br>50 : General duty adaptor (No grommet necessary)<br>55 : Sealing gland (No grommet necessary)<br>62 : Sealing gland with integral cable clamp<br>75 : Screen and heat shrink adaptor<br>2* : Screening heat shrink adaptor, sealing type (* Indicates Entry Size, see page 29) | | | | | | | |
| **Shell size:** | 08, 10, 12, 14, 16, 18, 20, 22, 24 (Increase in sixteenths of an inch) | | | | | | | |
| **Contact layout:** | ** See pages 7-8 | | | | | | | |
| **Contact type:** | P : Pin<br>S : Socket | | | | | | | |
| **Orientation:** | N, B, C, E & F (Insert orientation available only for replacement of MIL-C-26482 types. Please consult factory) | | | | | | | |
| **Modification:** | 00 : Solder contacts<br>01 : Crimp contacts. (Size 20, small bore, Ø 0.84) (Bore Ø 1.75, Size 16 only)<br>02 : Crimp contacts. (Size 20, large bore, Ø 1.24) (No Size 16 contact)<br>03 : P.C.B. contact 0.73 ± 0.025/2 mm.<br>04 : P.C.B. contact 0.73 ± 0.025/5 mm.<br>15 : No contacts<br>19 : Silver cad plated shell, Gold flash on crimp contacts<br>20 : Silver cad plated shell, Gold flash on solder contacts<br>21 : Anodised black DEF 151 type 1<br>31 : Silver plated contacts, solder style<br>43 : Silver cad plated shell, Gold flash on P.C.B. contacts<br>60 : Ink marked insert rears.<br>(For additional modifications and special requirements please consult factory.) | | | | | | | |

# AB05
## arrangement specifications

| Shell Size | Contact Arrangement | No. of Contacts | Contact Size and Current Rating (AMPS) - at 85°C Ambient | | | | Shell Orientation | Service Rating |
|---|---|---|---|---|---|---|---|---|
| | | | 20 | 16 | 12 | C0-AX | | |
| **08** | 33 | 3 | 3 x 5 amps | --- | --- | --- | N, E, F | 1 |
| **08** | 04 | 4 | 4 x 5 amps | --- | --- | --- | N, E, F | 1 |
| **08** | 98 | 3 | 3 x 5 amps | --- | --- | --- | N, E, F | 1 |
| **10** | 02 | 2 | --- | 2 x 10 amps | --- | --- | N, B, C, E, F | 2 |
| **10** | 06 | 6 | 6 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **10** | 07 | 7 | 7 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **12** | 03 | 3 | --- | 3 x 10 amps | --- | --- | N, B, C, E, F | 2 |
| **12** | 08 | 8 | 8 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **12** | 10 | 10 | 10 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **12** | 14 | 14 | 14 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **14** | 02 | 2 | --- | --- | 2 x 20 amps | --- | N, B, C, E, F | 2 |
| **14** | 04 | 4 | --- | --- | 4 x 20 amps | --- | N, B, C, E, F | 2 |
| **14** | 05 | 5 | --- | 5 x 10 amps | --- | --- | N, B, C, E, F | 2 |
| **14** | 12 | 12 | 8 x 5 amps | 4 x 10 amps | --- | --- | N, B, C, E, F | 1 |
| **14** | 15 | 15 | 14 x 5 amps | 1 x 10 amps | --- | --- | N, B, C, E, F | 1 |
| **14** | 19 | 19 | 19 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **16** | 08 | 8 | --- | 8 x 10 amps | --- | --- | N, B, C, E, F | 2 |
| **16** | 26 | 26 | 26 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **16** | 19† | 19 | 15 x 5 amps | 4 x 10 amps | --- | --- | N, B, C, E, F | 1 |
| **16** | CX | 17 | 16 x 5 amps | --- | --- | 1 x cable | N, B, C, E, F | 1 |
| **18** | 11 | 11 | --- | 11 x 10 amps | --- | --- | N, B, C, E, F | 2 |
| **18** | 32 | 32 | 32 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **20** | 41 | 41 | 41 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **20** | 39† | 39 | 37 x 5 amps | 2 x 10 amps | --- | --- | N, B, C, E, F | 1 |
| **22** | 55 | 55 | 55 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |
| **24** | 61 | 61 | 61 x 5 amps | --- | --- | --- | N, B, C, E, F | 1 |

† Consult factory for availability

| | 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 |

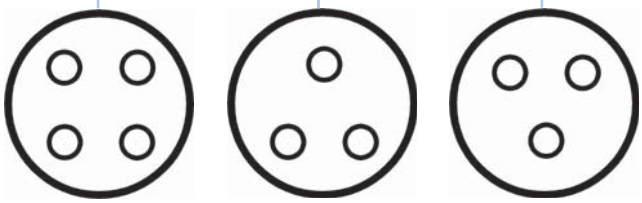
**Current Service Ratings**

| Contact Size | Max. Current | * Rated Current |
|---|---|---|
| 20 AWG | 7.5A | 5A |
| 16 AWG | 13A | 10A |
| 12 AWG | 23A | 20A |

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

# AB05
## contact arrangements

### Shell Size 8



08-04
Service rating 1
4 Contacts,
Size 20

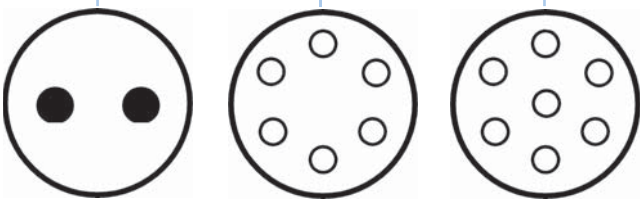
08-33
Service rating 1
3 Contacts,
Size 20

08-98
Service rating 1
3 Contacts,
Size 20

- Size 20 Contacts
- Size 16 Contacts
- Size 12 Contacts
- Co-Axial Contact for RG316/U

† Consult factory for availability

### Shell Size 10

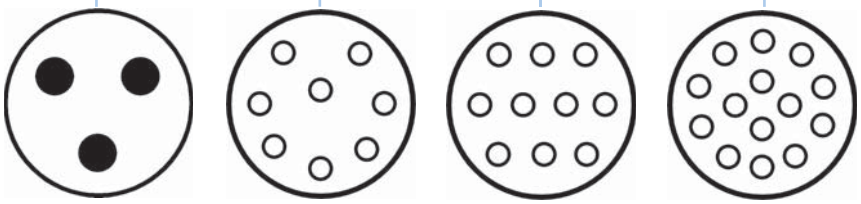


10-02
Service rating 2
2 Contacts,
Size 16

10-06
Service rating 1
6 Contacts,
Size 20

10-07
Service rating 1
7 Contacts,
Size 20

### Shell Size 12



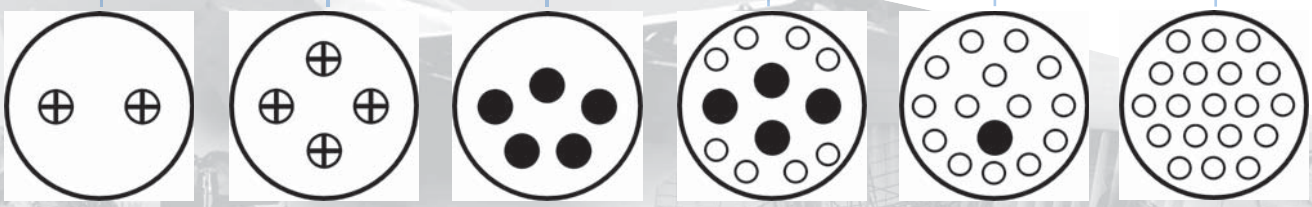
12-03
Service rating 2
3 Contacts,
Size 16

12-08
Service rating 1
8 Contacts,
Size 20

12-10
Service rating 1
10 Contacts,
Size 20

12-14
Service rating 1
14 Contacts,
Size 20

### Shell Size 14



14-02
Service rating 2
2 Contacts,
Size 12

14-04†
Service rating 1
4 Contacts,
Size 12

14-05
Service rating 2
5 Contacts,
Size 16

14-12
Service rating 1
8 Contacts,
Size 20
4 Contacts,
Size 16

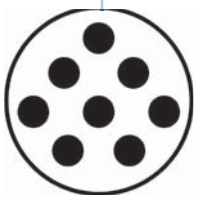
14-15
Service rating 1
14 Contacts,
Size 20
1 Contact,
Size 16

14-19
Service rating 1
19 Contacts,
Size 20

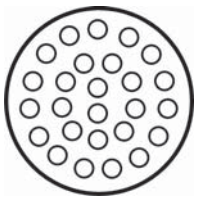
† Consult factory for availability

# AB05
## contact arrangements

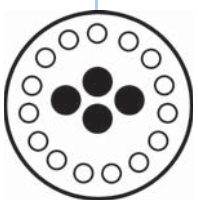
### Shell Size 16



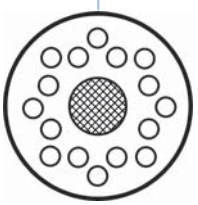
16-08
Service rating 2
8 Contacts,
Size 16



16-26
Service rating 1
26 Contacts,
Size 20

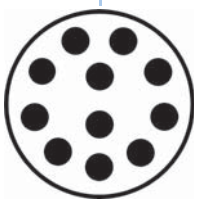


16-19†
Service rating 1
15 Contacts,
Size 20
4 Contacts,
Size 16

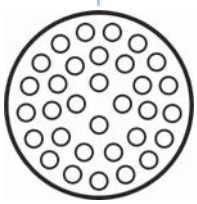


16-CX
Service rating 1
17 Contacts,
Size 20
1 Co-Axial Contact,
for RG316/U

### Shell Size 18

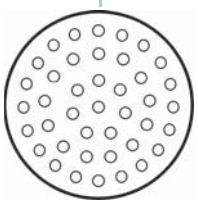


18-11
Service rating 2
11 Contacts,
Size 16

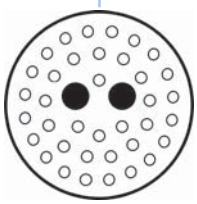


18-32
Service rating 1
32 Contacts,
Size 20

### Shell Size 20

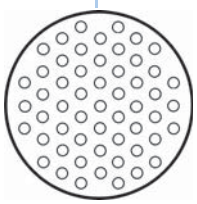


20-41
Service rating 1
41 Contacts,
Size 20



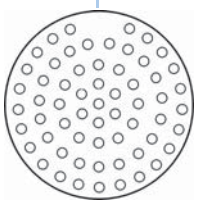
20-39†
Service rating 1
37 Contact,
Size 20
2 Contacts,
Size 16

### Shell Size 22

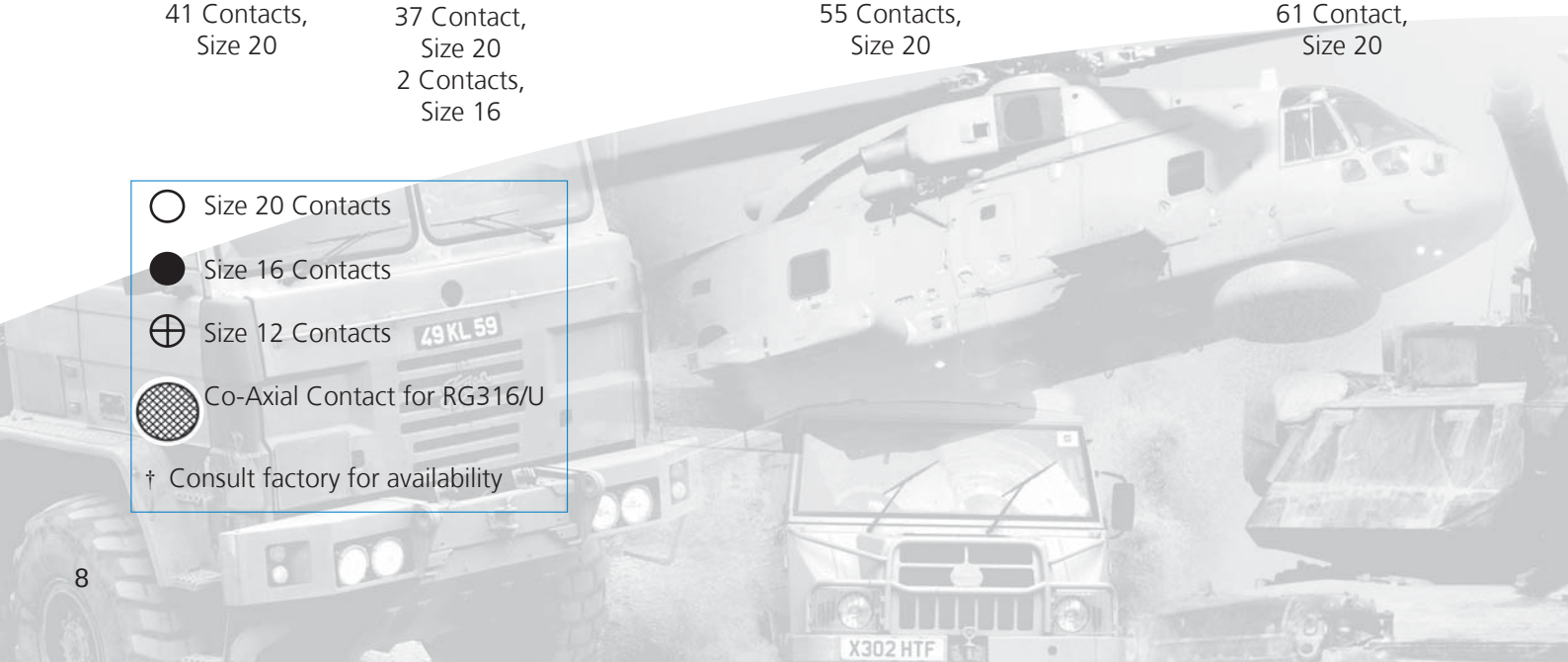


22-55
Service rating 1
55 Contacts,
Size 20

### Shell Size 24



24-61
Service rating 1
61 Contact,
Size 20



Size 20 Contacts

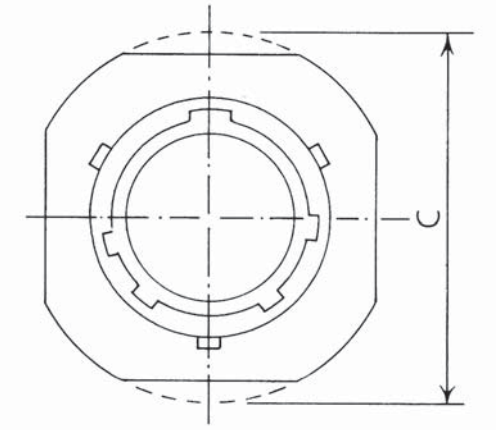
Size 16 Contacts

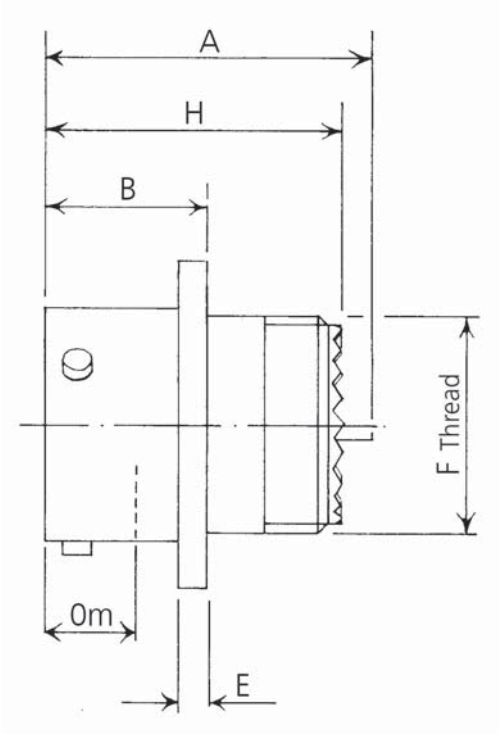
Size 12 Contacts

Co-Axial Contact for RG316/U

† Consult factory for availability

# AB05-1000
## cable connecting receptacle



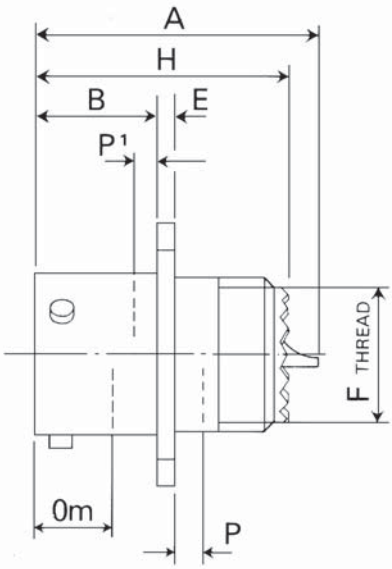



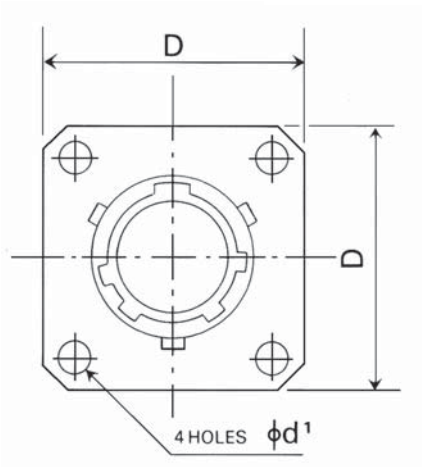

| Shell Size | A max. | B max. | C Ø max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | MASS max. G |
|---|---|---|---|---|---|---|---|---|
| **08** | 26.40 | 13.80 | 24.40 | 2.80 | 7/16 -28 | 26.0 | 7.30 | 8 |
| **10** | 26.40 | 13.80 | 27.70 | 2.80 | 9/16 -24 | 26.0 | 7.30 | 13 |
| **12** | 26.40 | 13.80 | 30.0 | 2.80 | 11/16 -24 | 26.0 | 7.30 | 17 |
| **14** | 26.40 | 13.80 | 32.30 | 2.80 | 13/16 -20 | 26.0 | 7.30 | 24 |
| **16** | 26.40 | 13.80 | 34.80 | 2.80 | 15/16 -20 | 26.0 | 7.30 | 30 |
| **18** | 26.40 | 13.80 | 37.10 | 2.80 | 1 1/16 -18 | 26.0 | 7.30 | 37 |
| **20** | 30.40 | 17.80 | 40.40 | 3.30 | 1 3/16 -18 | 28.50 | 8.90 | 59 |
| **22** | 30.40 | 17.80 | 43.40 | 3.30 | 1 5/16 -18 | 28.50 | 8.90 | 72 |
| **24** | 30.40 | 18.60 | 46.70 | 3.30 | 1 7/16 -18 | 30.0 | 8.90 | 85 |

Thread measurement is imperial, all other measurements in mm.

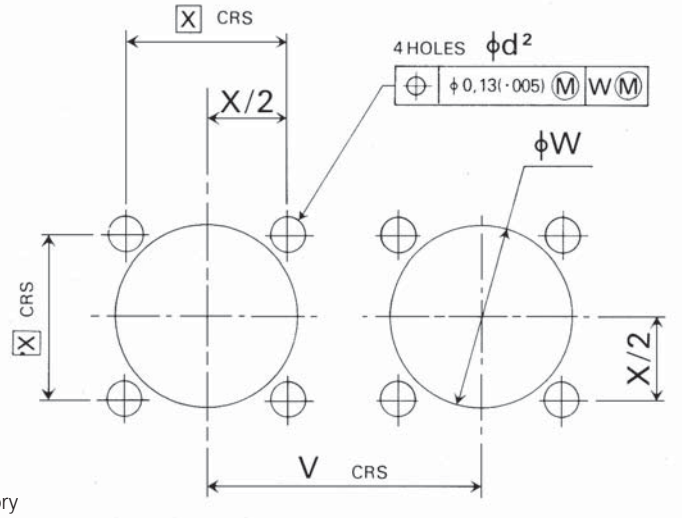
# AB05-2000

## receptacle, square flange with accessory thread




Panel Cut Out Dimensions:



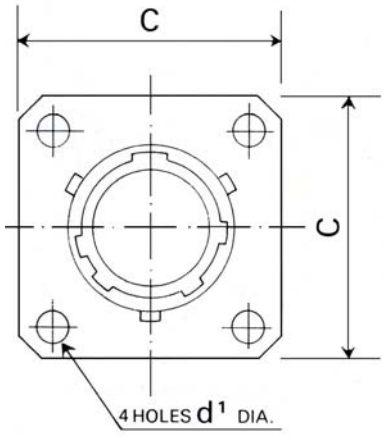

*P Max. Panel Thickness
P Min. Clearance Distance For Mating Connector
Size 8 to 18-2,0 (0,08)
Size 20 to 24-5,3 (0,21)
*P May be increased if 'W' is enlarged to clear accessory

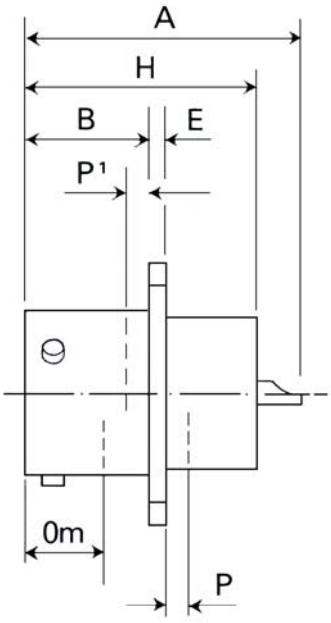
| Shell Size | A max. | B max. | D sq. max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | d1 Ø min. | d2 Ø min. | V min. | W Ø ±0.13 (.005) | X (TP) | MASS max. G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **08** | 26.40 | 11.80 | 21.10 | 2.0 | 7/16 -28 | 26.0 | 7.30 | 3.05 | 3.25 | 22.60 | 14.43 | 15.09 | 10 |
| **10** | 26.40 | 11.80 | 24.40 | 2.0 | 9/16 -24 | 26.0 | 7.30 | 3.05 | 3.25 | 25.40 | 17.40 | 18.26 | 13 |
| **12** | 26.40 | 11.80 | 26.70 | 2.0 | 11/16 -24 | 26.0 | 7.30 | 3.05 | 3.25 | 29.70 | 21.95 | 20.62 | 16 |
| **14** | 26.40 | 11.80 | 29.30 | 2.0 | 13/16 -20 | 26.0 | 7.30 | 3.05 | 3.25 | 33.0 | 25.12 | 23.01 | 22 |
| **16** | 26.40 | 11.80 | 31.50 | 2.0 | 15/16 -20 | 26.0 | 7.30 | 3.05 | 3.25 | 38.1 | 28.27 | 24.61 | 27 |
| **18** | 26.40 | 11.80 | 33.80 | 2.0 | 1 1/16 -18 | 26.0 | 7.30 | 3.05 | 3.25 | 40.90 | 31.45 | 26.97 | 38 |
| **20** | 30.40 | 15.0 | 37.10 | 2.8 | 1 3/16 -18 | 28.5 | 8.90 | 3.05 | 3.25 | 43.90 | 34.62 | 29.36 | 52 |
| **22** | 30.40 | 15.0 | 40.20 | 2.8 | 1 5/16 -18 | 28.5 | 8.90 | 3.05 | 3.25 | 46.70 | 37.80 | 31.75 | 65 |
| **24** | 30.40 | 15.80 | 43.50 | 2.8 | 1 7/16 -18 | 30.0 | 8.90 | 3.73 | 3.86 | 50.0 | 41.02 | 34.93 | 77 |

Thread measurement is imperial, all other measurements in mm.

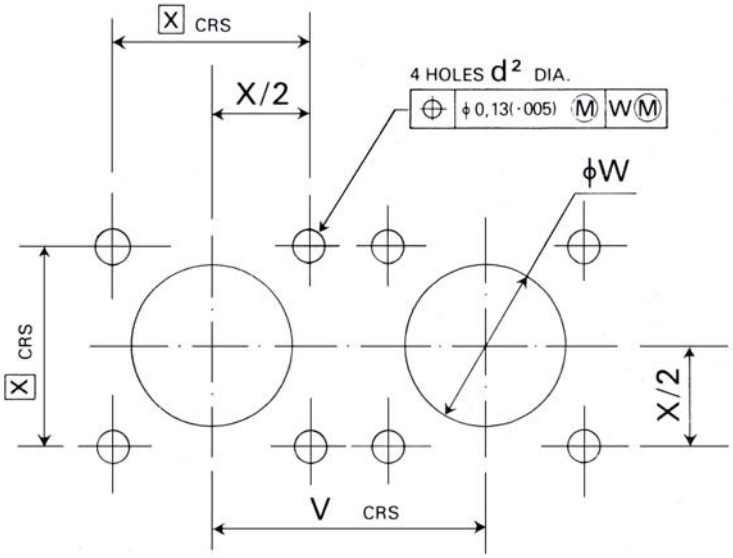
# AB05-2100

## receptacle, square flange without accessory thread




Panel Cut Out Dimensions:



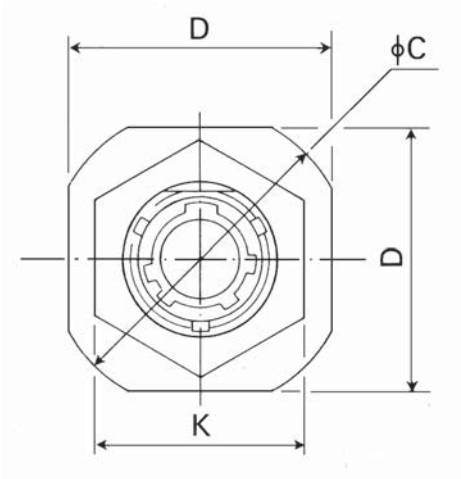

P = Panel thickness (front mounting)
P1 = Panel thickness (rear mounting)

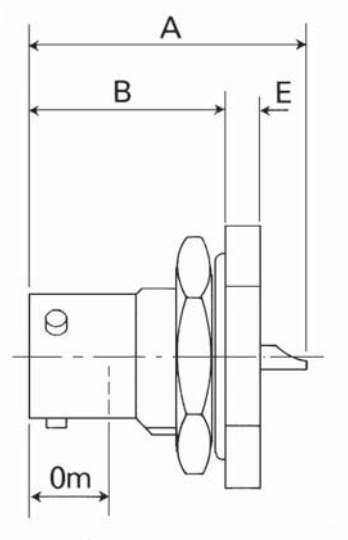
| Shell Size | A max. | B max. | C max. | E max. | H max. | V CRS min. | W Ø min. | X CRS (TP) | d1 Ø ±0.13(.005) | d2 Ø ±0.13(.005) | Om min. overlap | P max. | P1 max. | MASS max. G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 08 | 26.40 | 11.70 | 21.10 | 2.0 | 21.60 | 22.06 | 14.43 | 15.09 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 10 |
| 10 | 26.40 | 11.70 | 24.30 | 2.0 | 21.60 | 25.04 | 17.40 | 18.26 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 13 |
| 12 | 26.40 | 11.70 | 26.60 | 2.0 | 21.60 | 29.07 | 21.95 | 20.62 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 18 |
| 14 | 26.40 | 11.70 | 29.0 | 2.0 | 21.60 | 33.0 | 25.12 | 23.01 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 24 |
| 16 | 26.40 | 11.70 | 31.50 | 2.0 | 21.60 | 38.10 | 28.27 | 24.61 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 30 |
| 18 | 26.40 | 11.70 | 33.80 | 2.0 | 21.60 | 40.09 | 31.45 | 26.97 | 3.05 | 3.12 | 7.30 | 8.50 | 2.21 | 39 |
| 20 | 30.40 | 14.80 | 37.10 | 2.80 | 27.20 | 43.90 | 34.62 | 29.36 | 3.05 | 3.12 | 8.90 | 8.50 | 5.38 | 55 |
| 22 | 30.40 | 14.80 | 40.20 | 2.80 | 27.20 | 46.70 | 37.80 | 31.75 | 3.05 | 3.12 | 8.90 | 8.50 | 5.38 | 65 |
| 24 | 30.40 | 15.70 | 43.50 | 2.80 | 28.60 | 50.0 | 41.02 | 34.93 | 3.73 | 3.81 | 8.90 | 8.50 | 5.38 | 77 |

All measurements in mm.

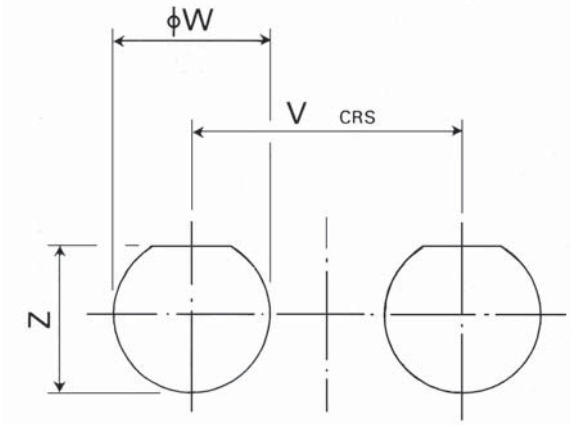
# AB05-3100

## receptacle, jam nut without accessory thread




Panel Cut Out Dimensions

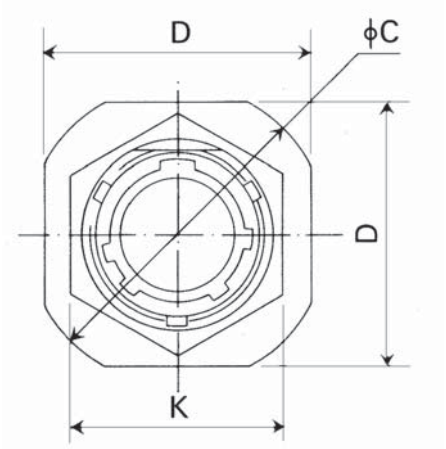


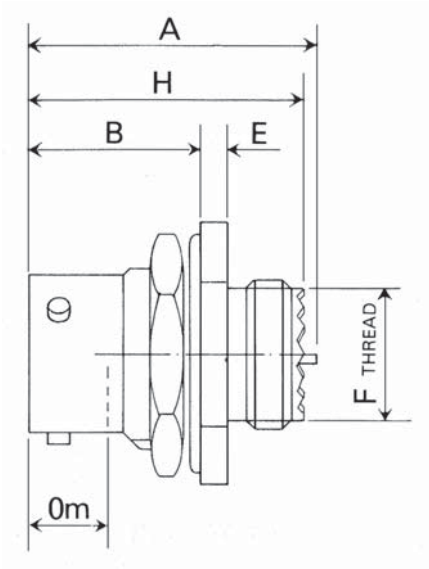

| Shell Size | A max. | B max. | C Ø max. | D max. | E max. | K max. | V min. | W Ø ±0.13(.005) | Z ±0.13(.005) | Om min. overlap | Panel Thickness max. | Panel Thickness min. | MASS max. G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **08** | 26.40 | 18.60 | 27.50 | 24.40 | 3.60 | 19.60 | 24.70 | 14.53 | 13.72 | 7.30 | 3.30 | 1.50 | 17 |
| **10** | 26.40 | 18.60 | 30.80 | 27.50 | 3.60 | 22.90 | 28.0 | 17.70 | 16.69 | 7.30 | 3.30 | 1.50 | 20 |
| **12** | 26.40 | 18.60 | 35.60 | 32.30 | 3.60 | 27.50 | 32.80 | 22.48 | 21.03 | 7.30 | 3.30 | 1.50 | 24 |
| **14** | 26.40 | 18.60 | 38.70 | 35.60 | 3.60 | 30.80 | 35.90 | 25.65 | 24.18 | 7.30 | 3.30 | 1.50 | 34 |
| **16** | 26.40 | 18.60 | 42.0 | 38.70 | 3.60 | 33.80 | 39.20 | 28.83 | 27.33 | 7.30 | 3.30 | 1.50 | 43 |
| **18** | 26.40 | 18.60 | 45.0 | 42.0 | 3.60 | 37.10 | 43.0 | 32.00 | 30.61 | 7.30 | 3.30 | 1.50 | 47 |
| **20** | 30.40 | 23.10 | 49.80 | 46.50 | 4.40 | 40.20 | 47.80 | 35.18 | 33.73 | 8.90 | 6.40 | 1.50 | 63 |
| **22** | 30.40 | 23.10 | 52.90 | 49.80 | 4.40 | 49.50 | 50.80 | 38.35 | 36.81 | 8.90 | 6.40 | 1.50 | 74 |
| **24** | 30.40 | 24.10 | 56.20 | 52.90 | 4.40 | 46.50 | 54.20 | 41.53 | 40.03 | 8.90 | 6.40 | 1.50 | 87 |

All measurements in mm.

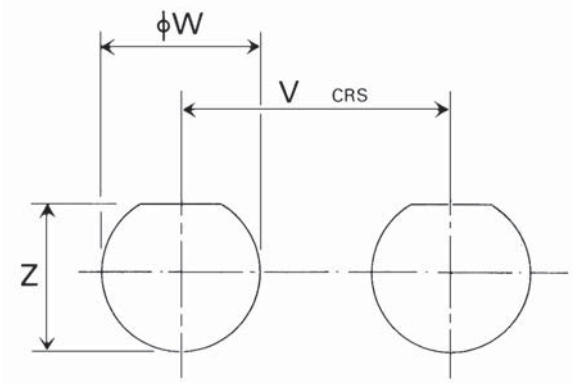
# AB05-3200

## receptacle, jam nut
## with external accessory thread



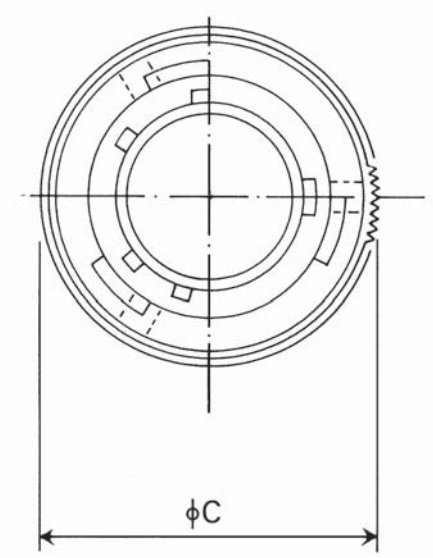

Panel Cut Out Dimensions:

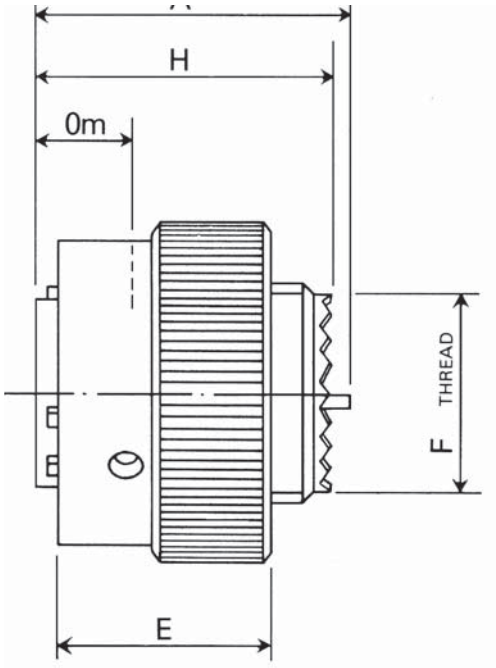



| Shell Size | A max. | B max. | C Ø max. | D max. | E max. | F thread UNEF 2A | H max. | K max. | Om min. overlap | Panel Thickness max. | Panel Thickness min. | V | W Ø ±0.13(.005) | Z ±0.13(.005) | MASS max. G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **08** | 26.40 | 15.80 | 27.50 | 24.40 | 3.60 | 7/16 -28 | 26.0 | 19.60 | 7.30 | 3.30 | 1.50 | 24.70 | 14.53 | 13.72 | 21 |
| **10** | 26.40 | 15.80 | 30.80 | 27.50 | 3.60 | 9/16 -24 | 26.0 | 22.90 | 7.30 | 3.30 | 1.50 | 28.0 | 17.70 | 16.89 | 27 |
| **12** | 28.40 | 15.80 | 35.60 | 32.30 | 3.60 | 11/16 -24 | 26.0 | 27.50 | 7.30 | 3.30 | 1.50 | 32.80 | 22.48 | 21.03 | 32 |
| **14** | 26.40 | 15.80 | 38.70 | 35.60 | 3.60 | 13/16 -20 | 26.0 | 30.80 | 7.30 | 3.30 | 1.50 | 35.90 | 25.65 | 24.18 | 47 |
| **16** | 26.40 | 15.80 | 42.0 | 38.70 | 3.60 | 15/16 -20 | 26.0 | 33.80 | 7.30 | 3.30 | 1.50 | 39.20 | 28.03 | 27.33 | 58 |
| **18** | 26.40 | 15.80 | 45.0 | 42.0 | 3.60 | 1 1/16 -18 | 26.0 | 37.10 | 7.30 | 3.30 | 1.50 | 43.0 | 32.0 | 30.61 | 62 |
| **20** | 30.40 | 19.60 | 49.60 | 46.50 | 3.60 | 1 3/16 -18 | 28.50 | 40.20 | 8.90 | 6.40 | 1.50 | 47.80 | 35.18 | 33.73 | 84 |
| **22** | 30.40 | 19.60 | 52.90 | 49.80 | 4.40 | 1 5/16 -18 | 28.50 | 43.50 | 8.90 | 6.40 | 1.50 | 50.80 | 38.35 | 36.81 | 98 |
| **24** | 30.40 | 20.90 | 56.70 | 52.90 | 4.40 | 1 7/16 -18 | 30.0 | 46.50 | 8.90 | 6.40 | 1.50 | 54.20 | 41.53 | 40.03 | 116 |

Thread measurement is imperial, all other measurements in mm.

# AB05-6000
## plug, knurled coupling nut



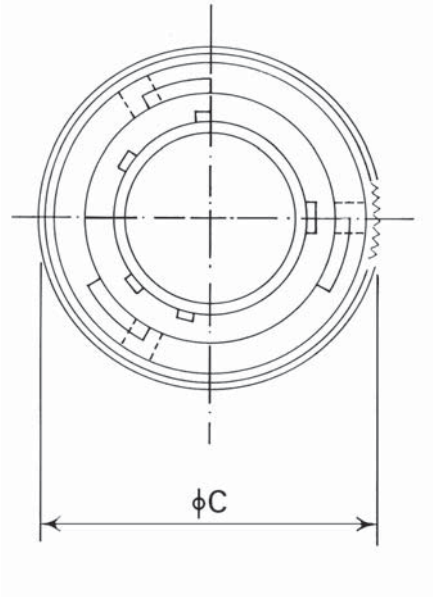



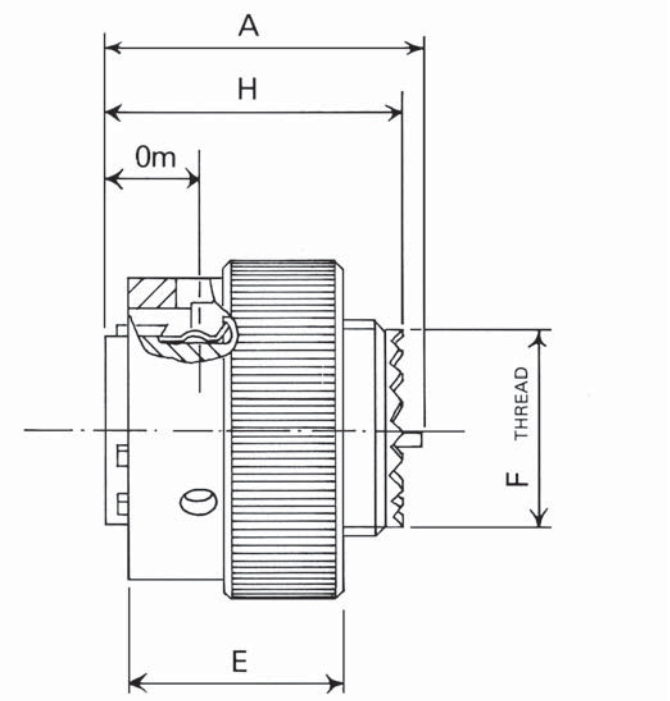

| Shell Size | A max. | C Ø max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | MASS max. G |
|---|---|---|---|---|---|---|---|
| **08** | 25.40 | 19.10 | 19.30 | 7/16 -28 | 24.40 | 7.30 | 12 |
| **10** | 25.40 | 21.80 | 19.30 | 9/16 -24 | 24.40 | 7.30 | 15 |
| **12** | 25.40 | 26.40 | 19.30 | 11/16 -24 | 24.40 | 7.30 | 20 |
| **14** | 25.40 | 30.0 | 19.30 | 13/16 -20 | 24.40 | 7.30 | 27 |
| **16** | 25.40 | 33.30 | 19.30 | 15/16 -20 | 24.70 | 7.30 | 35 |
| **18** | 25.40 | 35.60 | 19.30 | 1 1/16 -18 | 24.90 | 7.30 | 45 |
| **20** | 27.80 | 39.10 | 19.30 | 1 3/16 -18 | 26.20 | 8.90 | 56 |
| **22** | 27.80 | 42.20 | 19.30 | 1 5/16 -18 | 26.20 | 8.90 | 65 |
| **24** | 27.80 | 45.20 | 20.40 | 1 7/16 -18 | 28.0 | 8.90 | 80 |

Thread measurement is imperial, all other measurements in mm.

# AB05-6100

## plug, knurled coupling nut with grounding fingers



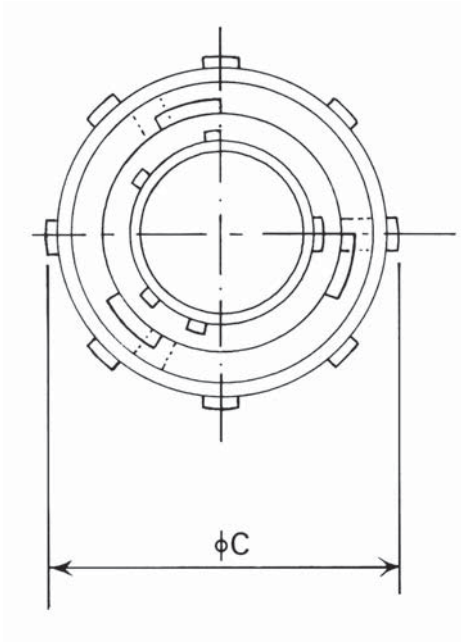



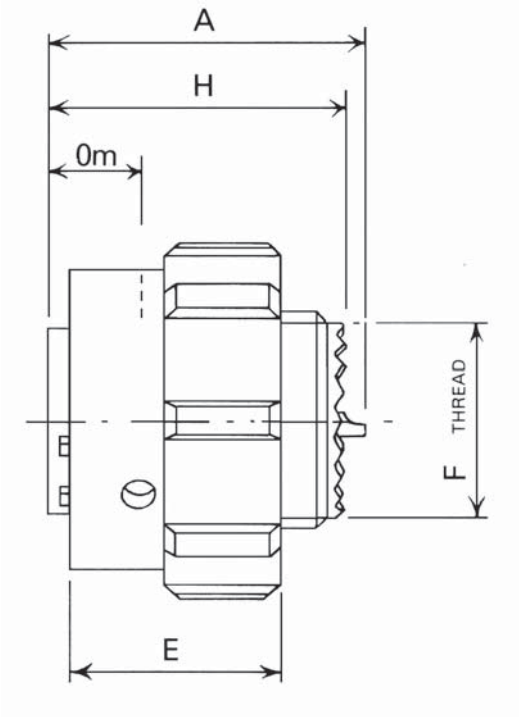

| Shell Size | A max. | C Ø max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | MASS max. G |
|---|---|---|---|---|---|---|---|
| **08** | 25.40 | 19.10 | 19.30 | 7/16 -28 | 24.40 | 7.30 | 12 |
| **10** | 25.40 | 21.80 | 19.30 | 9/16 -24 | 24.40 | 7.30 | 15 |
| **12** | 25.40 | 26.40 | 19.30 | 11/16 -24 | 24.40 | 7.30 | 20 |
| **14** | 25.40 | 30.0 | 19.30 | 13/16 -20 | 24.40 | 7.30 | 27 |
| **16** | 25.40 | 33.30 | 19.30 | 15/16 -20 | 24.70 | 7.30 | 35 |
| **18** | 25.40 | 35.60 | 19.30 | 1 1/16 -18 | 24.90 | 7.30 | 45 |
| **20** | 27.80 | 39.10 | 19.30 | 1 3/16 -18 | 26.20 | 8.90 | 56 |
| **22** | 27.80 | 42.20 | 19.30 | 1 5/16 -18 | 26.20 | 8.90 | 65 |
| **24** | 27.80 | 45.20 | 20.40 | 1 7/16 -18 | 28.0 | 8.90 | 80 |

Thread measurement is imperial, all other measurements in mm.

# AB05-6200

## plug, course ribbed coupling nut



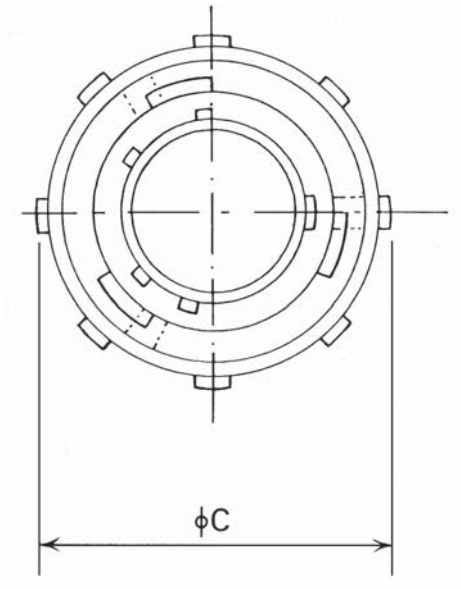



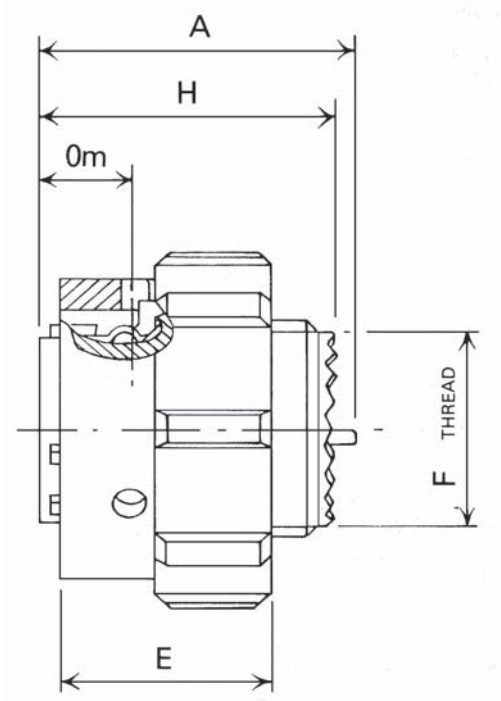

| Shell Size | A max. | C Ø max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | MASS max. G |
|---|---|---|---|---|---|---|---|
| **08** | 25.40 | 22.10 | 20.40 | 7/16 -28 | 24.40 | 7.30 | 13 |
| **10** | 25.40 | 24.90 | 20.40 | 9/16 -24 | 24.40 | 7.30 | 17 |
| **12** | 25.40 | 29.30 | 20.40 | 11/16 -24 | 24.40 | 7.30 | 22 |
| **14** | 25.40 | 32.60 | 20.40 | 13/16 -20 | 24.40 | 7.30 | 28 |
| **16** | 25.40 | 37.60 | 20.40 | 15/16 -20 | 24.70 | 7.30 | 38 |
| **18** | 25.40 | 40.40 | 20.40 | 1 1/16 -18 | 24.90 | 7.30 | 46 |
| **20** | 27.80 | 43.50 | 20.40 | 1 3/16 -18 | 26.20 | 8.90 | 59 |
| **22** | 27.80 | 46.30 | 20.40 | 1 5/16 -18 | 26.20 | 8.90 | 63 |
| **24** | 27.80 | 49.60 | 21.40 | 1 7/16 -18 | 28.0 | 8.90 | 83 |

Thread measurement is imperial, all other measurements in mm.

# AB05-6300

## plug, coarse ribbed coupling nut with grounding fingers




| Shell Size | A max. | C Ø max. | E max. | F thread UNEF 2A | H max. | Om min. overlap | MASS max. G |
|---|---|---|---|---|---|---|---|
| **08** | 25.40 | 22.10 | 20.40 | 7/16 -28 | 24.40 | 7.30 | 13 |
| **10** | 25.40 | 24.90 | 20.40 | 9/16 -24 | 24.40 | 7.30 | 17 |
| **12** | 25.40 | 29.30 | 20.40 | 11/16 -24 | 24.40 | 7.30 | 22 |
| **14** | 25.40 | 32.60 | 20.40 | 13/16 -20 | 24.40 | 7.30 | 28 |
| **16** | 25.40 | 37.60 | 20.40 | 15/16 -20 | 24.70 | 7.30 | 38 |
| **18** | 25.40 | 40.40 | 20.40 | 1 1/16 -18 | 24.90 | 7.30 | 46 |
| **20** | 27.80 | 43.50 | 20.40 | 1 3/16 -18 | 26.20 | 8.90 | 59 |
| **22** | 27.80 | 46.30 | 20.40 | 1 5/16 -18 | 26.20 | 8.90 | 63 |
| **24** | 27.80 | 49.60 | 21.40 | 1 7/16 -18 | 28.0 | 8.90 | 83 |

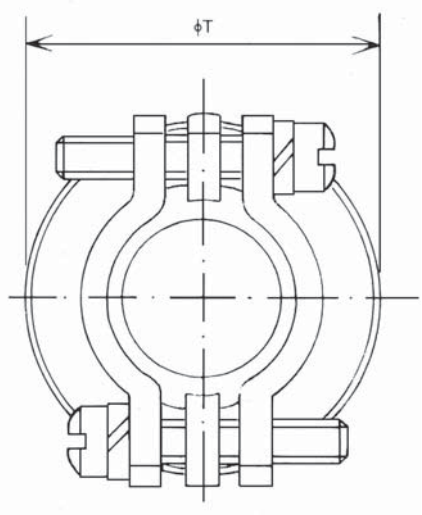
Thread measurement is imperial, all other measurements in mm.

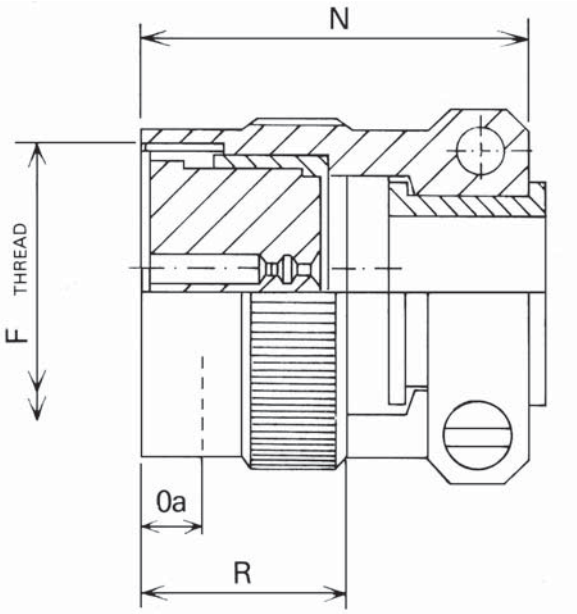
# AB05
## accessories part number explanation

**Accessories can also be ordered separately.**
**To illustrate the ordering procedure, part number AB05002710070021 is shown in the table below:**

| **Product Range:** | | **AB05** | **00** | **27** | **10** | **07** | **00** | **21** |
|---|---|---|---|---|---|---|---|---|
| **Shell Style:** | 00 No connector. Accessory only. | | | | | | | |
| **Accessory Class** | 27 : Strain relief clamp<br>29 : Straight outlet internally screened<br>30 : Straight outlet externally screened<br>40 : Grommet nut<br>50 : General duty adaptor (no grommet necessary)<br>55 : Sealing gland (no grommet necessary)<br>62 : Sealing gland with integral cable clamp<br>65 : Cover for square flange receptacle<br>66 : Cover for jam nut receptacle<br>70 : Cover for plug<br>75 : Screen and heat shrink adaptor<br>2* : Screening heat shrink adaptor, sealing type (* Indicates Entry Size, see page 29) | | | | | | | |
| **Accessory Size:** | 08, 10, 12, 14, 16, 18, 20, 22, 24 (Increase in sixteenths of an inch) | | | | | | | |
| **Contact Layout:** | Refers to grommet where fitted.<br>00 No grommet supplied. | | | | | | | |
| **Orientation:** | 00 No orientation. | | | | | | | |
| **Modification:** | 21 Anodised black def 151 type 1. | | | | | | | |

# AB05-0027
## strain relief clamp



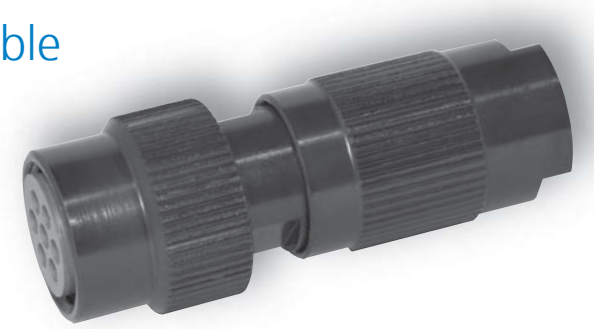



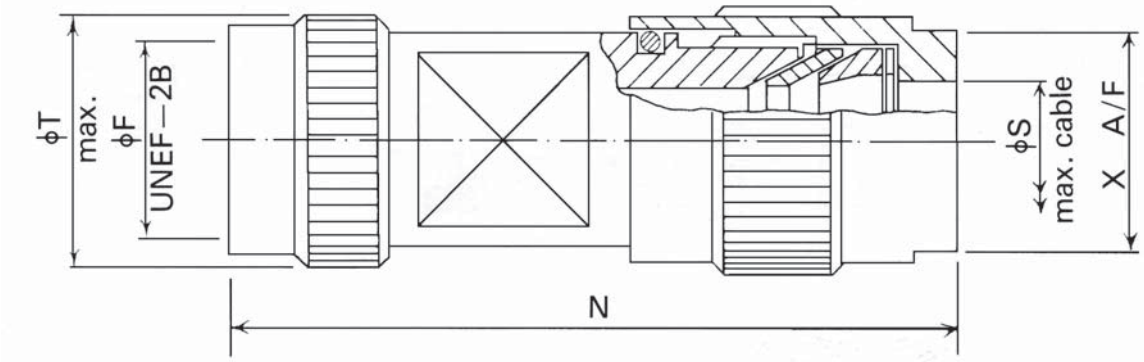

| Shell Size | F thread UNEF 2B | N max. | Oa min. | R max. | T Ø max. | MASS max. G |
|---|---|---|---|---|---|---|
| **08** | 7/16 -28 | 31.40 | 4.80 | 16.50 | 15.20 | 18 |
| **10** | 9/16 -24 | 31.40 | 4.80 | 16.50 | 18.50 | 19 |
| **12** | 11/16 -24 | 31.40 | 4.80 | 16.50 | 21.80 | 20 |
| **14** | 13/16 -20 | 31.40 | 4.80 | 16.50 | 25.10 | 22 |
| **16** | 15/16 -20 | 33.50 | 4.80 | 16.50 | 28.20 | 25 |
| **18** | 1 1/16 -18 | 34.30 | 4.80 | 16.50 | 31.50 | 29 |
| **20** | 1 3/16 -18 | 36.80 | 4.80 | 17.20 | 34.50 | 31 |
| **22** | 1 5/16 -18 | 36.80 | 4.80 | 17.20 | 37.60 | 38 |
| **24** | 1 7/16 -18 | 36.80 | 4.80 | 17.20 | 40.90 | 42 |

For Accessory Part Number Explanation, see page 18.
Thread measurement is imperial, all other measurements in mm.

# AB05-0029

## straight outlet for internally screened cable






| Shell Size | T Ø max. | F thread Ø | N max. | S Ø | X A/F |
|---|---|---|---|---|---|
| **08** | 17.53 | 7/16 x 28 .... | 51.30 | 7.20 | 12.70 |
| **10** | 19.30 | 9/16 x 24 .... | 51.05 | 8.70 | 12.70 |
| **12** | 21.74 | 11/16 x 24 .... | 63.30 | 7.20; 11.80 | 15.87 |
| **14** | 26.52 | 13/16 x 20 .... | 63.91 | 12.50 | 17.45 |
| **16** | 29.82 | 15/16 x 20 .... | 67.06 | 14.60 | 19.05 |
| **18** | * | * | * | * | * |
| **20** | 35.66 | 1 3/16 x 18 .... | 67.06 | 16.70 | 25.40 |
| **22** | * | * | * | * | * |
| **24** | 42.00 | 1 7/16 x 18 .... | 76.58 | 20.30 | 26.97 |

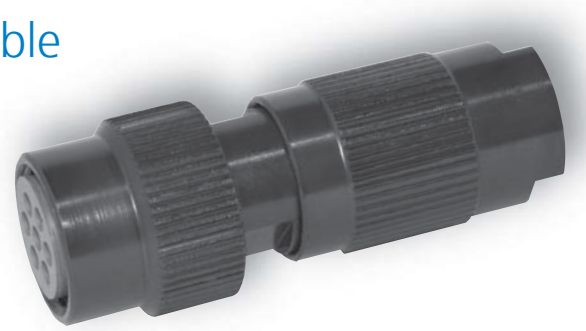
* Please consult factory

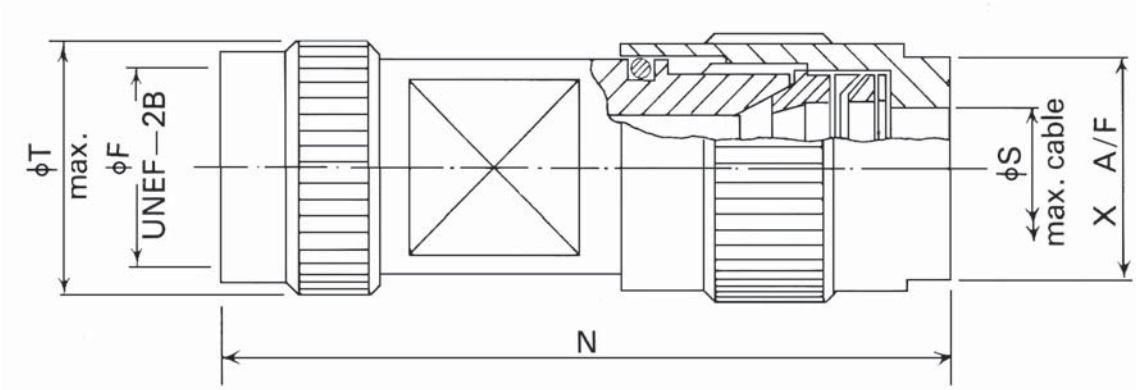
For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-0030

## straight outlet for externally screened cable





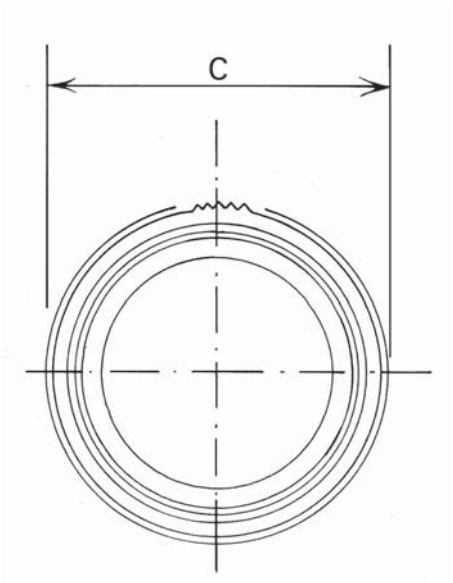

| Shell Size | T Ø max. | F thread Ø | N max. | S Ø | X A/F |
|---|---|---|---|---|---|
| **08** | 17.53 | 7/16 x 28 .... | 51.30 | 7.20 | 12.70 |
| **10** | 19.30 | 9/16 x 28 .... | 51.05 | 8.70 | 12.70 |
| **12** | 21.74 | 11/16 x 24 .... | 63.30 | 7.20; 11.80 | 15.87 |
| **14** | 26.52 | 13/16 x 20 .... | 63.91 | 12.50 | 17.45 |
| **16** | 29.62 | 15/16 x 20 .... | 67.06 | 14.60 | 19.05 |
| **18** | * | * | * | * | * |
| **20** | * | * | * | * | * |
| **22** | * | * | * | * | * |
| **24** | * | * | * | * | * |

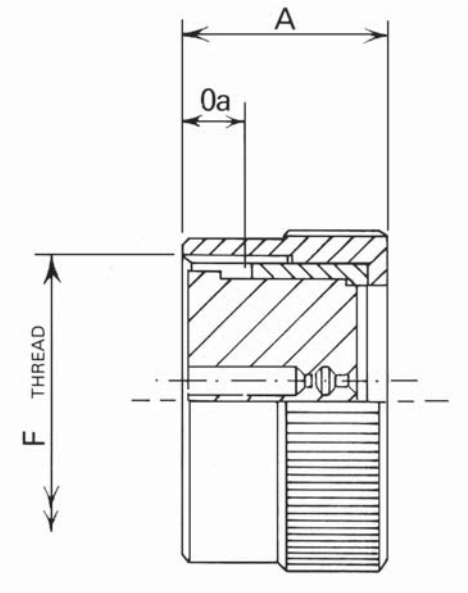
* Please consult factory

For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-0040
## grommet nut




| Shell Size | F thread Class 2B | A max. | Oa min. overlap | C Ø max. | MASS max. G |
|---|---|---|---|---|---|
| **08** | 7/16 -28 UNEF | 16.50 | 4.80 | 15.20 | 7 |
| **10** | 9/16 -24 UNEF | 16.50 | 4.80 | 18.50 | 9 |
| **12** | 11/16 -24 UNEF | 16.50 | 4.80 | 21.80 | 12 |
| **14** | 13/16 -20 UNEF | 16.50 | 4.80 | 25.20 | 14 |
| **16** | 15/16 -20 UNEF | 16.50 | 4.80 | 28.20 | 17 |
| **18** | 1 1/16 -18 UNEF | 16.50 | 4.80 | 31.50 | 21 |
| **20** | 1 3/16 -18 UNEF | 17.20 | 4.80 | 34.50 | 22 |
| **22** | 1 5/16 -18 UNEF | 17.20 | 4.80 | 37.50 | 26 |
| **24** | 1 7/16 -18 UNEF | 17.20 | 4.80 | 40.90 | 28 |

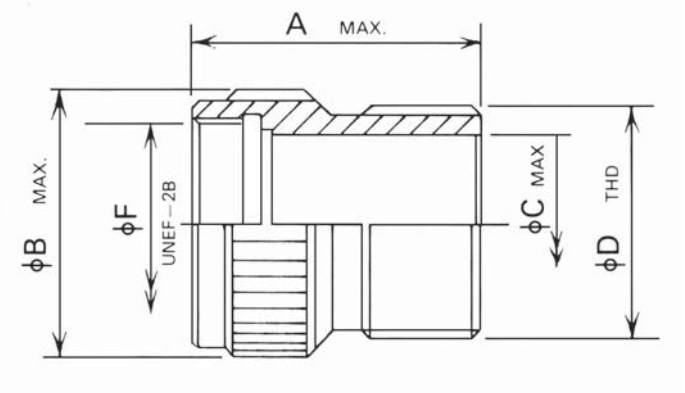
* Please consult factory

For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-0050

## general duty adaptor (no grommet necessary)



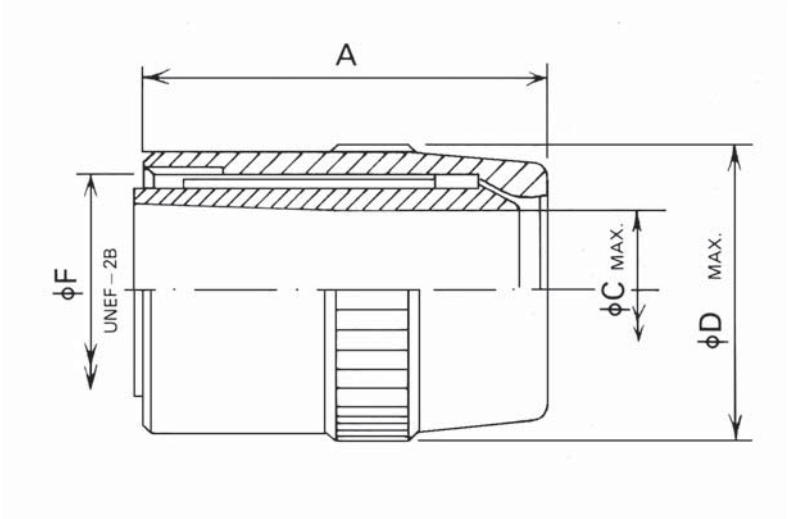

| Shell Size | F thread Ø | A | C Ø | B Ø | D thread Ø |
|---|---|---|---|---|---|
| **08** | 7/16 x 28 .... | 23.75 | 8.36 | 14.99 | 1/2 x 28 UNEF |
| **10** | 9/16 x 24 .... | 23.75 | 11.35 | 18.29 | 5/8 x 24 UNEF |
| **12** | 11/16 x 24 .... | 23.75 | 14.53 | 21.59 | 3/4 x 20 UNEF |
| **14** | 13/16 x 20 .... | 23.75 | 17.42 | 24.89 | 7/8 x 20 UNEF |
| **16** | 15/16 x 20 .... | 23.75 | 20.60 | 27.84 | 1 x 20 UNEF |
| **18** | 1 1/16 x 18 .... | 23.75 | 23.34 | 30.73 | 1 3/16 x 18 NEF |
| **20** | 1 3/16 x 18 .... | 23.75 | 24.89 | 34.29 | 1 3/16 x 18 NEF |
| **22** | 1 5/16 x 18 .... | 23.75 | 29.69 | 37.59 | 1 7/16 x 18 NEF |
| **24** | 1 7/16 x 18 .... | 23.75 | 31.24 | 40.64 | 1 7/16 x 18 NEF |

* Please consult factory

For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-0055
## sealing gland
## (no grommet necessary)




| Shell Size | F thread Ø | A | C Ø max. | D Ø max. |
|---|---|---|---|---|
| **08** | 7/16 x 28 .... | 26.80 | 5.84 | 14.22 |
| **10** | 9/16 x 24 .... | 26.80 | 7.92 | 17.37 |
| **12** | 11/16 x 24 .... | 29.33 | 11.23 | 20.57 |
| **14** | 13/16 x 20 .... | 33.02 | 13.69 | 23.75 |
| **16** | 15/16 x 20 .... | 38.71 | 15.60 | 26.92 |
| **18** | 1 1/16 x 18 .... | 43.79 | 17.07 | 30.10 |
| **20** | 1 3/16 x 18 .... | 48.90 | 18.90 | 33.27 |
| **22** | 1 5/16 x 18 .... | 54.23 | 21.44 | 36.45 |
| **24** | 1 7/16 x 18 .... | 55.25 | 22.61 | 39.62 |

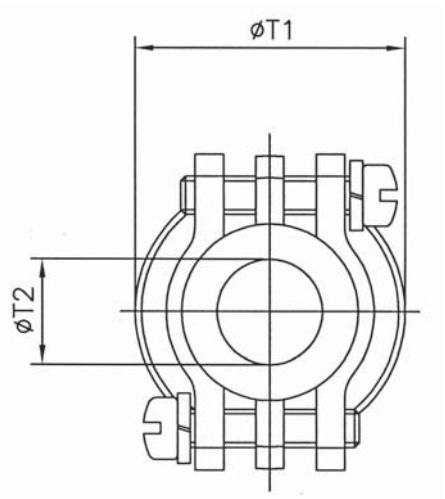
* Please consult factory

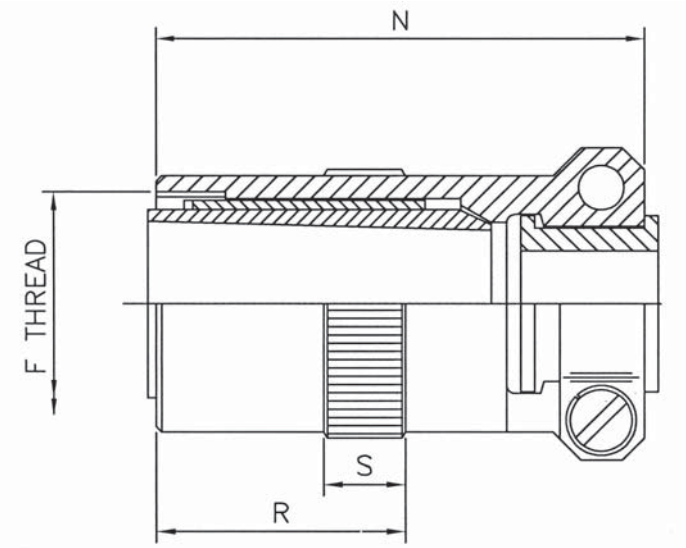
For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-0062

## sealing gland with integral cable clar




| Shell Size | F thread UNEF 2B | N max. | R max. | S max. | T1 Ø max. | T2 Ø max. | Closing Ø of sealing gland |
|---|---|---|---|---|---|---|---|
| **08** | 7/16 x 28 UNEF | 39.20 | 19.10 | 5.08 | 15.0 | 3.96 | 4.98 |
| **10** | 9/16 x 24 UNEF | 39.20 | 19.10 | 5.08 | 18.30 | 4.93 | 5.06 |
| **12** | 11/16 x 24 UNEF | 41.80 | 20.30 | 5.08 | 21.60 | 8.20 | 9.45 |
| **14** | 13/16 x 20 UNEF | 44.70 | 22.90 | 7.62 | 24.90 | 9.68 | 11.30 |
| **16** | 15/16 x 20 UNEF | 50.80 | 28.70 | 8.48 | 27.90 | 12.85 | 14.35 |
| **18** | 1 1/16 x 18 UNEF | 55.10 | 27.40 | 8.48 | 30.70 | 16.03 | 15.44 |
| **20** | 1 3/16 x 18 UNEF | 66.50 | 27.40 | 8.48 | 34.30 | 16.03 | 14.96 |
| **22** | 1 5/16 x 18 UNEF | 71.90 | 27.40 | 8.48 | 37.60 | 19.20 | 15.24 |
| **24** | 1 7/16 x 18 UNEF | 72.90 | 27.40 | 9.25 | 40.60 | 20.47 | 19.71 |

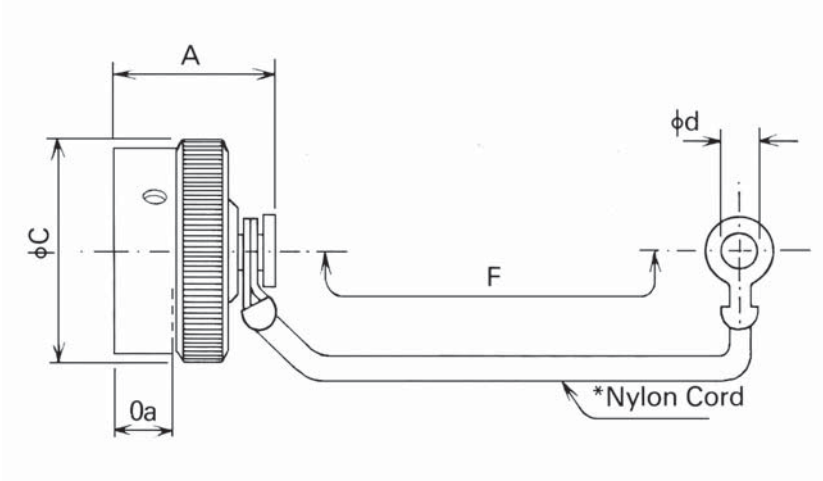
* Please consult factory

For Accessory Part Number Explanation, see page 18.

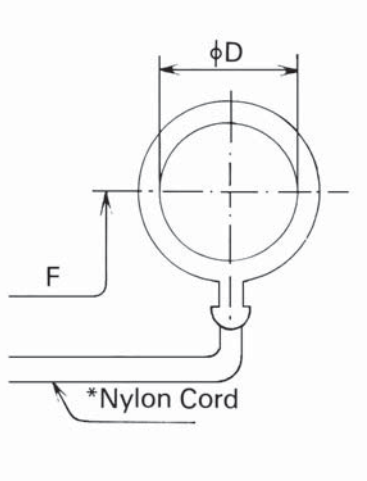
Thread measurement is imperial, all other measurements in mm.

# AB05-0065
## cover for square flange receptacle
# AB05-0066
## cover for jam nut receptacle

**AB05-0065**




**AB05-0066**




* Part number for cover with Ball Chain attachment is AB05 0067 or AB05 0068 respectively.

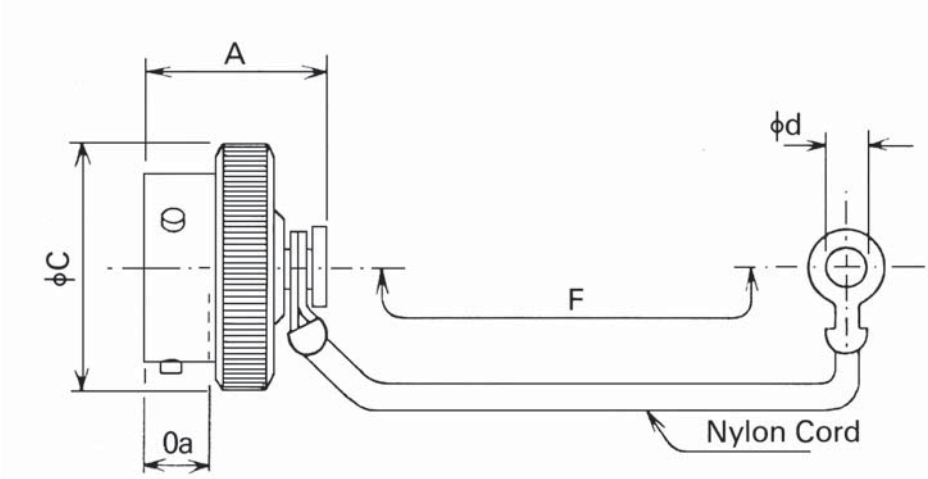
| Shell Size | A max. | C Ø max. | d Ø min. | D Ø min. | F approx. | Oa min. | MASS max. G |
|---|---|---|---|---|---|---|---|
| **08** | 20.10 | 19.10 | 3.05 | 14.50 | 76.0 | 7.30 | 10 |
| **10** | 20.10 | 21.80 | 3.05 | 17.80 | 76.0 | 7.30 | 11 |
| **12** | 20.10 | 26.40 | 3.05 | 22.40 | 89.0 | 7.30 | 14 |
| **14** | 20.10 | 30.0 | 3.05 | 25.70 | 89.0 | 7.30 | 16 |
| **16** | 20.10 | 33.30 | 3.05 | 28.70 | 89.0 | 7.30 | 18 |
| **18** | 20.10 | 35.60 | 3.05 | 32.0 | 89.0 | 7.30 | 20 |
| **20** | 21.60 | 39.10 | 3.05 | 35.10 | 102.0 | 7.30 | 24 |
| **22** | 21.60 | 42.20 | 3.05 | 38.40 | 102.0 | 7.30 | 25 |
| **24** | 22.40 | 45.20 | 3.73 | 41.40 | 102.0 | 8.90 | 29 |

* Please consult factory

For Accessory Part Number Explanation, see page 18.

All measurements in mm.

# AB05-0070
## cover for plug




* Part number for cover with Ball Chain Attachment is AB05 0072.

| Shell Size | A max. | C Ø max. | d Ø min. | F approx. | Oa min. overlap | MASS max. G |
|---|---|---|---|---|---|---|
| **08** | 20.10 | 19.10 | 3.05 | 76.0 | 7.30 | 8 |
| **10** | 20.10 | 21.80 | 3.05 | 76.0 | 7.30 | 9 |
| **12** | 20.10 | 26.40 | 3.05 | 89.0 | 7.30 | 11 |
| **14** | 20.10 | 30.0 | 3.05 | 89.0 | 7.30 | 13 |
| **16** | 20.10 | 33.30 | 3.05 | 89.0 | 7.30 | 15 |
| **18** | 20.10 | 35.60 | 3.05 | 89.0 | 7.30 | 17 |
| **20** | 21.80 | 39.10 | 3.05 | 102.0 | 7.30 | 24 |
| **22** | 21.80 | 42.20 | 3.05 | 102.0 | 7.30 | 27 |
| **24** | 22.40 | 45.20 | 3.73 | 102.0 | 8.90 | 30 |

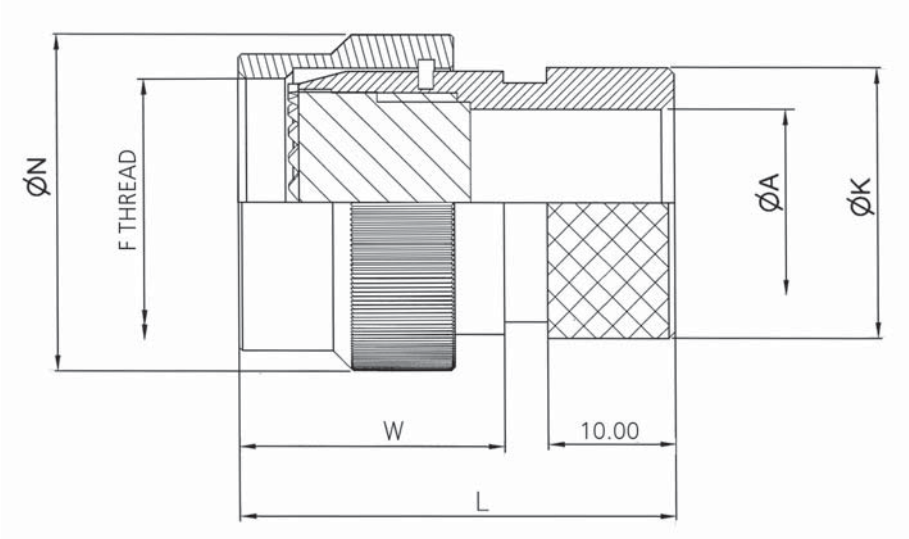
* Please consult factory

For Accessory Part Number Explanation, see page 18.

All measurements in mm.

# AB05-0075

## screen and heat shrink adaptor



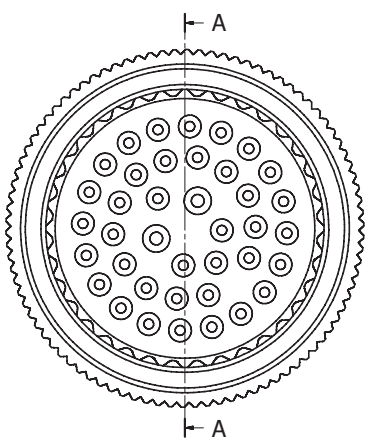

| Shell Size | F thread UNEF 2B | A Ø max. | K Ø max. | N Ø max. | W max. | L max. |
|---|---|---|---|---|---|---|
| **08** | 7/16 x 28 | 5.59 | 13.46 | 15.20 | 16.50 | 35.51 |
| **10** | 9/16 x 24 | 8.56 | 15.24 | 18.50 | 16.50 | 35.51 |
| **12** | 11/16 x 24 | 11.76 | 19.56 | 21.80 | 16.50 | 35.51 |
| **14** | 13/16 x 20 | 14.66 | 21.29 | 25.20 | 16.50 | 35.51 |
| **16** | 15/16 x 20 | 17.73 | 24.36 | 28.20 | 16.50 | 35.51 |
| **18** | 1 1/16 x 18 | 20.32 | 26.42 | 31.50 | 16.50 | 35.51 |
| **20** | 1 3/16 x 18 | 22.91 | 29.54 | 34.50 | 17.20 | 35.51 |
| **22** | 1 5/16 x 18 | 26.57 | 32.66 | 37.50 | 17.20 | 35.51 |
| **24** | 1 7/16 x 18 | 28.35 | 35.22 | 40.90 | 17.20 | 35.51 |

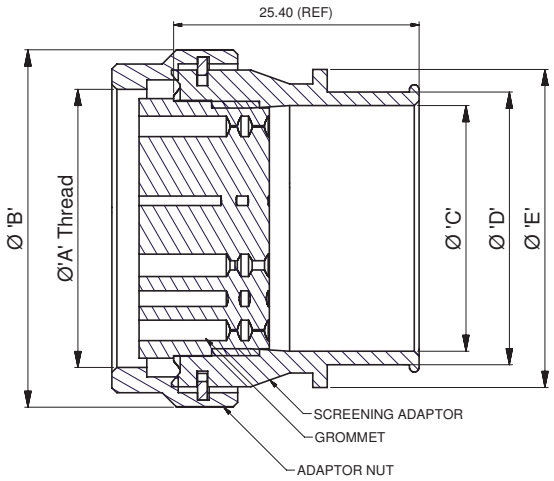
For Accessory Part Number Explanation, see page 18.
Thread measurement is imperial, all other measurements in mm.

# AB05-002*

## screening heat shrink adaptor, sealing type

* Indicates Entry Size




| Shell Size | A thread UNEF 2B | B max. | Entry Range |
|---|---|---|---|
| **08** | 7/16 - 28 | 22.0 | 03 - 07 |
| **10** | 9/16 - 24 | 22.0 | 03 - 10 |
| **12** | 11/16 - 24 | 26.2 | 03 - 16 |
| **14** | 13/16 - 20 | 29.20 | 03 - 18 |
| **16** | 15/16 - 20 | 32.20 | 03 - 20 |
| **18** | 1 1/16 - 18 | 35.20 | 03 - 22 |
| **20** | 1 3/16 - 18 | 39.20 | 03 - 24 |
| **22** | 1 5/16 - 18 | 42.20 | 03 - 24 |
| **24** | 1 7/16 - 18 | 48.20 | 03 - 24 |

### Entry Dimensions:

| Entry Size | C | D Knurl | E max. |
|---|---|---|---|
| **03** | 4.77 | 9.75 | 13.90 |
| **04** | 6.35 | 9.75 | 13.90 |
| **05** | 7.92 | 10.72 | 15.50 |
| **06** | 9.52 | 12.32 | 17.20 |
| **07** | 11.10 | 13.90 | 18.70 |
| **08** | 12.70 | 15.50 | 20.30 |
| **09** | 14.27 | 17.07 | 21.90 |
| **10** | 15.88 | 18.68 | 23.50 |
| **11** | 17.47 | 20.27 | 25.10 |
| **12** | 19.05 | 21.85 | 26.70 |
| **13** | 20.62 | 23.42 | 28.30 |

| Entry Size | C | D Knurl | E max. |
|---|---|---|---|
| **14** | 22.23 | 25.03 | 29.90 |
| **15** | 23.82 | 26.62 | 31.50 |
| **16** | 25.40 | 28.20 | 33.10 |
| **17** | 27.00 | 29.80 | 34.70 |
| **18** | 28.60 | 31.40 | 36.30 |
| **19** | 30.20 | 33.00 | 37.90 |
| **20** | 31.80 | 34.60 | 39.50 |
| **21** | 33.38 | 36.18 | 41.10 |
| **22** | 35.00 | 37.80 | 42.70 |
| **23** | 36.58 | 39.38 | 44.30 |
| **24** | 38.10 | 40.90 | 45.90 |

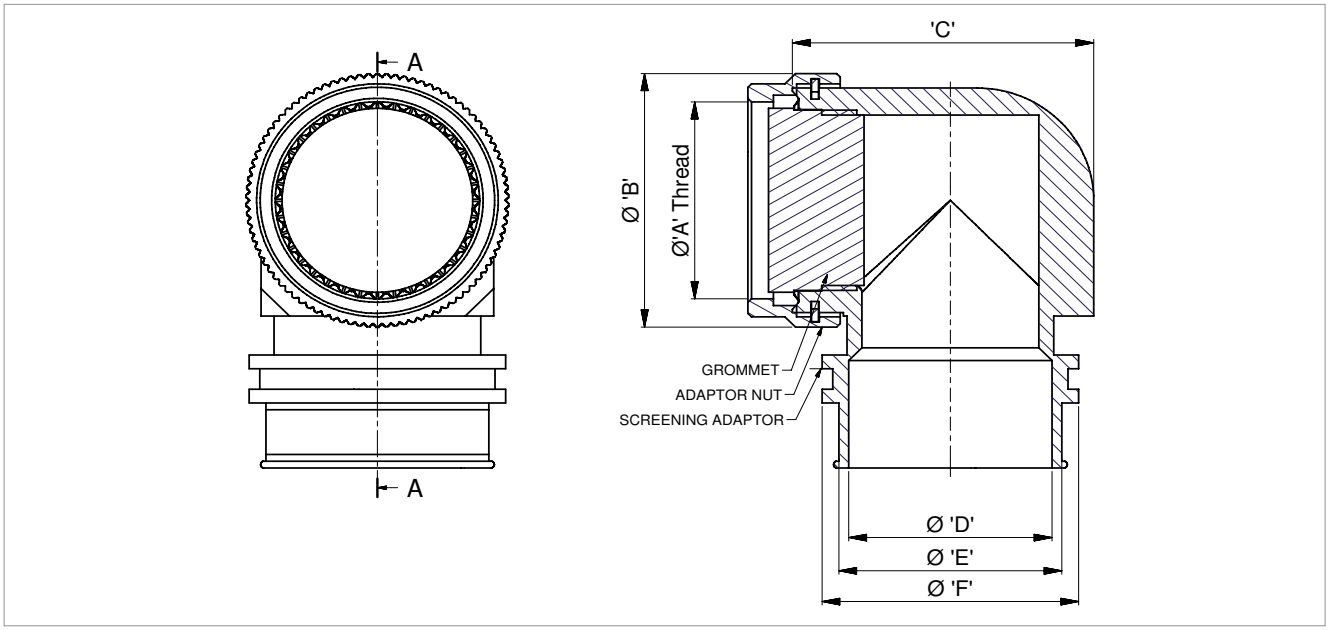
For Accessory Part Number Explanation, see page 18.

Thread measurement is imperial, all other measurements in mm.

# AB05-003*

## screening heat shrink adaptor 90° outlet, sealing type

* Indicates Entry Size




| Shell Size | A thread UNEF 2B | B max. | Entry Range |
|---|---|---|---|
| **08** | 7/16 - 28 | 22.0 | 03 - 07 |
| **10** | 9/16 - 24 | 22.0 | 03 - 10 |
| **12** | 11/16 - 24 | 26.2 | 03 - 16 |
| **14** | 13/16 - 20 | 29.20 | 03 - 18 |
| **16** | 15/16 - 20 | 32.20 | 03 - 20 |
| **18** | 1 1/16 - 18 | 35.20 | 03 - 22 |
| **20** | 1 3/16 - 18 | 39.20 | 03 - 24 |
| **22** | 1 5/16 - 18 | 42.20 | 03 - 24 |
| **24** | 1 7/16 - 18 | 48.20 | 03 - 24 |

### Entry Dimensions:

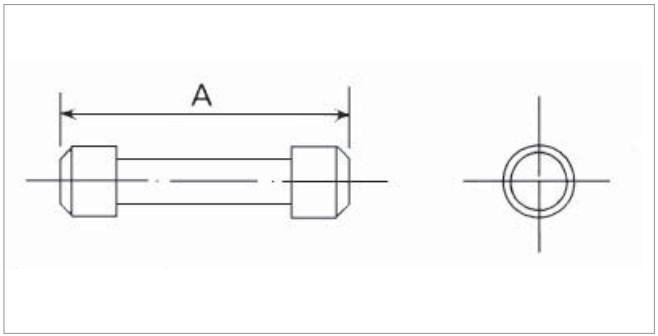
| Entry Size | C | D Knurl | E max. |
|---|---|---|---|
| **03** | 4.77 | 9.75 | 13.90 |
| **04** | 6.35 | 9.75 | 13.90 |
| **05** | 7.92 | 10.72 | 15.50 |
| **06** | 9.52 | 12.32 | 17.20 |
| **07** | 11.10 | 13.90 | 18.70 |
| **08** | 12.70 | 15.50 | 20.30 |
| **09** | 14.27 | 17.07 | 21.90 |
| **10** | 15.88 | 18.68 | 23.50 |
| **11** | 17.47 | 20.27 | 25.10 |
| **12** | 19.05 | 21.85 | 26.70 |
| **13** | 20.62 | 23.42 | 28.30 |

| Entry Size | C | D Knurl | E max. |
|---|---|---|---|
| **14** | 22.23 | 25.03 | 29.90 |
| **15** | 23.82 | 26.62 | 31.50 |
| **16** | 25.40 | 28.20 | 33.10 |
| **17** | 27.00 | 29.80 | 34.70 |
| **18** | 28.60 | 31.40 | 36.30 |
| **19** | 30.20 | 33.00 | 37.90 |
| **20** | 31.80 | 34.60 | 39.50 |
| **21** | 33.38 | 36.18 | 41.10 |
| **22** | 35.00 | 37.80 | 42.70 |
| **23** | 36.58 | 39.38 | 44.30 |
| **24** | 38.10 | 40.90 | 45.90 |

For Accessory Part Number Explanation, see page 18.

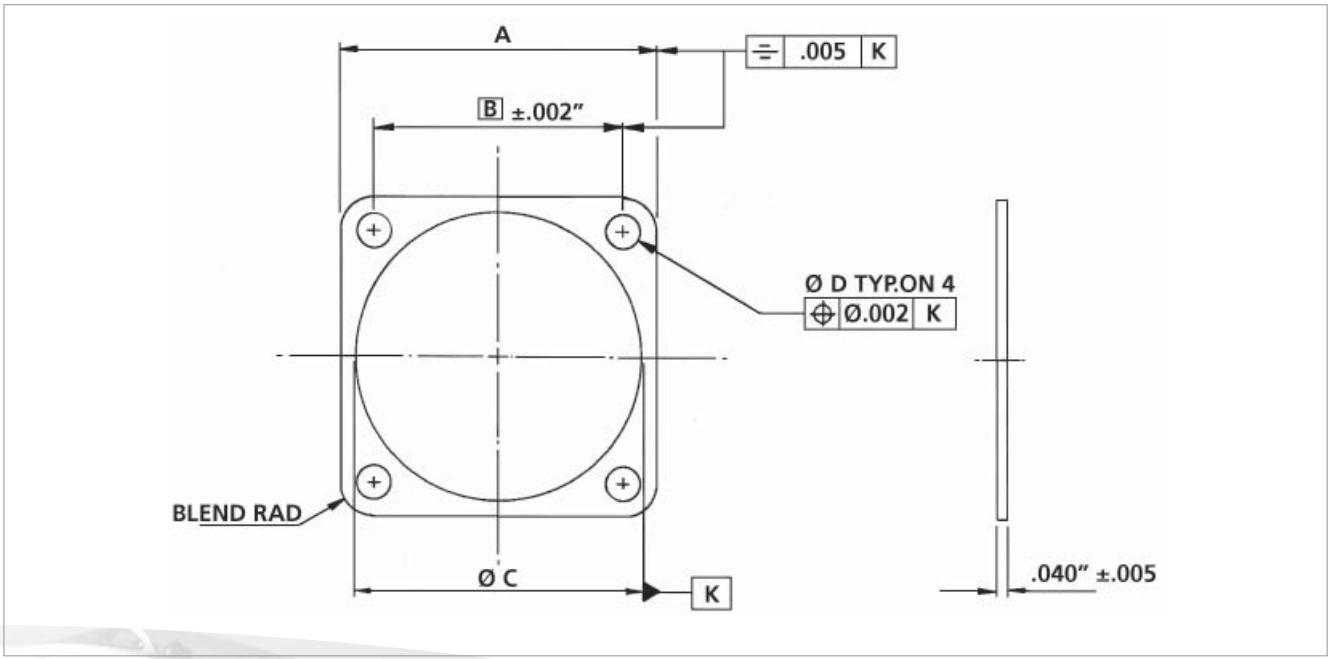
Thread measurement is imperial, all other measurements in mm.

# AB06-size-240-000-AC
## filler plug




| Shell Size | Colour code | A max. | MASS g x 10 |
|---|---|---|---|
| **20** | Red | 9.90 | 0.40 |
| **ABB16KFP** | Blue | 12.20 | 1.0 |
| **12** | Please consult factory | | |

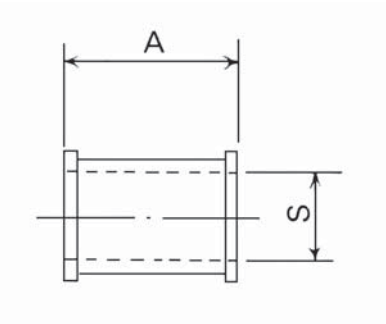
# AB05-size-382-000-AC
## panel gasket




| Shell Size | A | B | Ø C +0,15 -0 | D Ø |
|---|---|---|---|---|
| **08** | 20.98 | 15.08 | 11.12 | 3.42 |
| **10** | 25.40 | 18.26 | 14.30 | 3.42 |
| **12** | 27.78 | 20.62 | 17.47 | 3.42 |
| **14** | 30.17 | 23.01 | 20.65 | 3.42 |
| **16** | 32.53 | 24.61 | 23.82 | 3.42 |
| **18** | 34.92 | 26.97 | 27.00 | 3.42 |
| **20** | 38.10 | 29.36 | 30.17 | 3.42 |
| **22** | 41.27 | 31.75 | 33.35 | 3.42 |
| **24** | 44.45 | 34.92 | 36.52 | 4.14 |

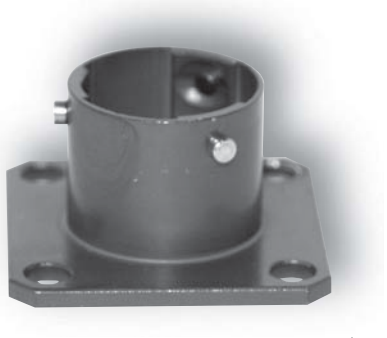
All measurements in mm.

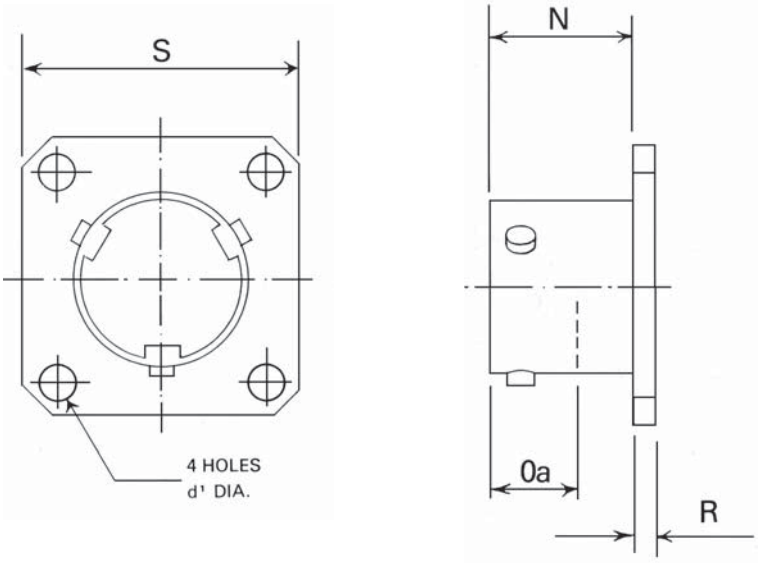
# AB05-size-430-000-AC
## cable grommet




| Shell Size | A max. | S Ø max. | MASS max. G |
|---|---|---|---|
| **08** | 12.70 | 4.10 | 0.70 |
| **10** | 12.70 | 5.10 | 0.90 |
| **12** | 12.70 | 8.40 | 1.30 |
| **14** | 12.70 | 9.90 | 2.20 |
| **16** | 12.70 | 13.0 | 1.90 |
| **18** | 14.50 | 16.30 | 2.70 |
| **20** | 14.50 | 16.30 | 2.70 |
| **22** | 14.50 | 19.30 | 4.60 |
| **24** | 14.50 | 20.60 | 4.60 |

# AB05-2300
## square flange stowage receptacle

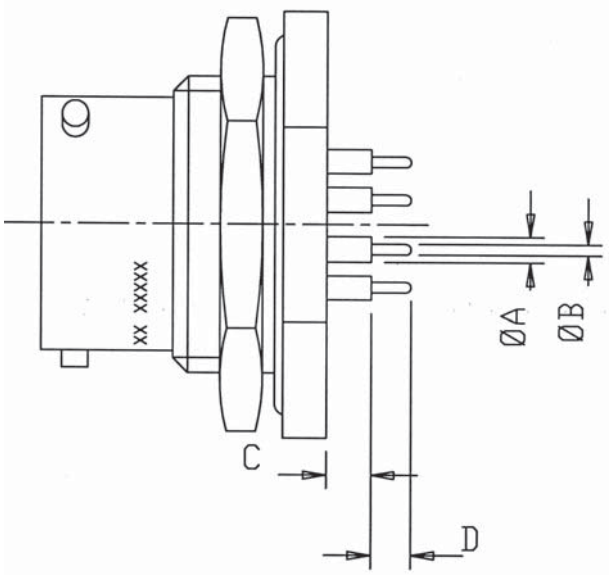





| Shell Size | N max. | Oa min. | R max. | V CRS (TP) | X CRS (TP) | S max. | d¹ Ø | d² Ø |
|---|---|---|---|---|---|---|---|---|
| **08** | 12.50 | 7.50 | 2.0 | 22.60 | 15.09 | 21.10 | 3.05 | 3.12 |
| **10** | 12.50 | 7.50 | 2.0 | 25.40 | 18.26 | 24.40 | 3.05 | 3.12 |
| **12** | 12.50 | 7.50 | 2.0 | 29.70 | 20.62 | 26.70 | 3.05 | 3.12 |
| **14** | 12.50 | 7.50 | 2.0 | 33.0 | 23.01 | 29.20 | 3.05 | 3.12 |
| **16** | 12.50 | 7.50 | 2.0 | 38.10 | 24.61 | 31.50 | 3.05 | 3.12 |
| **18** | 12.50 | 7.50 | 2.0 | 40.90 | 26.97 | 33.80 | 3.05 | 3.12 |
| **20** | 14.90 | 9.10 | 2.80 | 43.90 | 29.36 | 37.0 | 3.05 | 3.12 |
| **22** | 14.90 | 9.10 | 2.80 | 46.70 | 31.75 | 40.10 | 3.05 | 3.12 |
| **24** | 15.70 | 9.10 | 2.80 | 50.0 | 34.93 | 43.40 | 3.73 | 3.81 |

All measurements in mm.

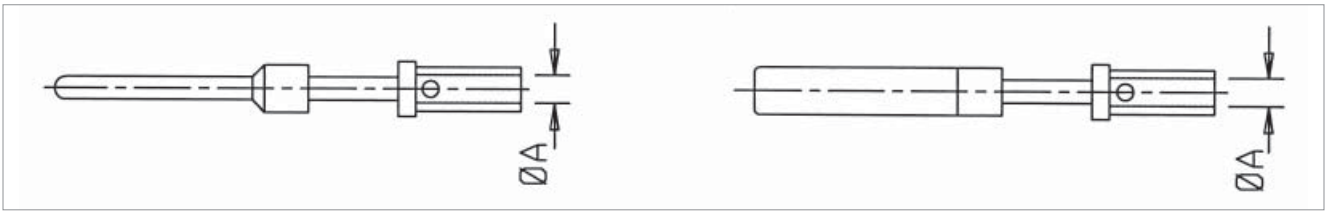
# AB05
## printed circuit board contacts




| Modification Code | Shell Size | Ø A | | Ø B | | C | D ±0.10 |
|---|---|---|---|---|---|---|---|
| 03 | 08 - 18 | 1.50 | ±0.05 | 0.74 | ±0.03 | 3.05/1.52 | 2.00 |
| 03 | 20 - 22 | 1.50 | ±0.05 | 0.74 | ±0.03 | 2.84/1.32 | 2.00 |
| 03 | 24 | 1.50 | ±0.05 | 0.74 | ±0.03 | 1.93/0.48 | 2.00 |
| 04 | 08 - 18 | 1.50 | ±0.05 | 0.74 | ±0.03 | 3.05/1.52 | 5.00 |
| 04 | 20 - 22 | 1.50 | ±0.05 | 0.74 | ±0.03 | 2.84/1.32 | 5.00 |
| 04 | 24 | 1.50 | ±0.05 | 0.74 | ±0.03 | 1.93/0.48 | 5.00 |
| 05* | 08 - 18 | 2.03 | ±0.10 | 1.02 | ±0.10 | 3.81/2.28 | 2.29 |
| 06* | 08 - 18 | 2.03 | ±0.10 | 0.69 | ±0.03 | 3.81/2.28 | 2.29 |
| 46* | 08 - 18 | 1.90 | ±0.20 | 0.77 | ±0.17 | 1.03/-0.50 | 2.50 |
| 62* | 08 - 18 | 1.90 | ±0.20 | 0.80 | ±0.10 | 4.45/2.93 | 3.00 |
| 89* | 08 - 18 | 1.50 | ±0.05 | 0.74 | ±0.03 | 3.05/1.52 | 3.00 |
| 91* | 08 - 18 | 1.50 | ±0.05 | 0.74 | ±0.03 | 2.92/1.39 | 6.35 |
| 96* | 08 - 18 | 2.03 | ±0.10 | 0.69 | ±0.03 | 2.55/1.02 | 5.00 |

* Please consult factory
N.B. Dimensions shown above are for AB05 3100 Style connectors only. For other styles please consult factory.
All measurements in mm.

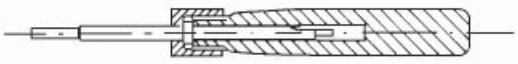
# AB05
## crimp contacts and assembly tools




| Contact Size AWG | AB Part Number | Pin / Socket | A Ø | Conductor Sizes AWG | Shell Sizes |
|---|---|---|---|---|---|
| **20** | 05-20-110-0-00-GM | Pin | 0.84 | 28, 26, 24, 22 | 08 - 18 |
| **20** | 05-20-111-0-00-GM | Pin | 0.84 | 28, 26, 24, 22 | 20 - 24 |
| **16** | 05-16-112-0-00-GM | Pin | 1.75 | 16 | 08 - 18 |
| **20** | 05-20-112-0-00-GM | Pin | 1.24 | 20 | 08 - 18 |
| **20** | 05-20-113-0-00-GM | Pin | 1.24 | 20 | 20 - 24 |
| **20** | 05-20-114-0-00-GM | Pin | 1.35 | 18 | 08 - 18 |
| **20** | 05-20-115-0-00-GM | Pin | 1.35 | 18 | 20 - 24 |
| **20** | 05-151-20-00-00-0 | Socket | 1.83 | 14 | 08 - 18 |
| **20** | 05-103-20-00-00-0 | Socket | 0.84 | 28, 26, 24, 22 | 08 - 18 |
| **20** | 05-152-20-00-00-0 | Socket | 0.84 | 28, 26, 24, 22 | 20 - 24 |
| **16** | 05-103-16-00-00-0 | Socket | 1.75 | 16 | 08 - 18 |
| **20** | 05-104-20-00-00-0 | Socket | 1.24 | 20 | 08 - 18 |
| **20** | 05-153-20-00-00-0 | Socket | 1.24 | 20 | 20 - 24 |
| **20** | 05-154-20-00-00-0 | Socket | 1.35 | 18 | 20 - 24 |
| **20** | 05-156-20-00-00-0 | Socket | 1.35 | 18 | 08 - 18 |

| Description | Part No. |
|---|---|
| Crimp Tool | ABBAF8 (M22520/01-01) |
| Positioner size 20 Pin and Socket | ABBTH1A |
| Positioner size 16 Pin and Socket | ABBTP1251 |

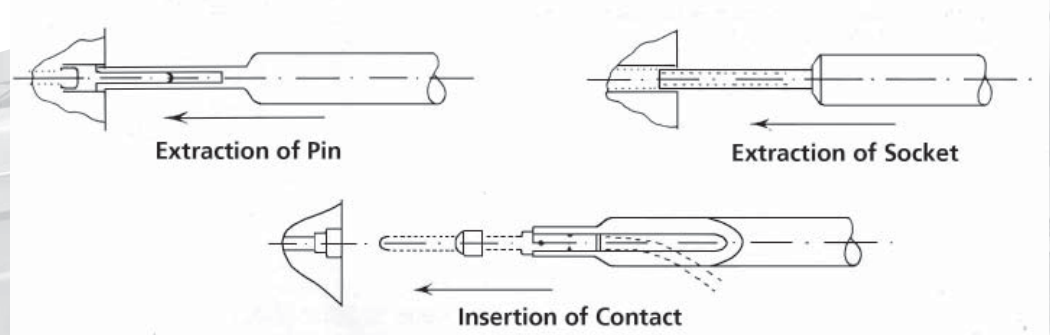
Insertion and Extraction Tool



Part Number AB06-0042-00-0000-15

### Crimp Tool & Positioner

### Assembly




All measurements in mm.

# AB05 - 0029
## assembly procedure for straight outlets

### AB05-0029 Internally Screened Cable

### Type C

1. Strip PVC sheath back to Dim A, this will expose the Braid which is to be trimmed to within 19.8 mm (0.75") of PVC Sheath and the remainder folded back. (Fig. 1).

| Size | Dimension A |
|---|---|
| 08 | 34.93 (1.375) |
| 10 | 36.51 (1.437) |
| 12-14 | 41.27 (1.625) |
| 16-20 | 44-45 (1.750) |
| 22-24 | 49.21 (1.937) |

2. Strip 5.3 mm (0.210") to 6.1 mm (0.240") of insulation from each wire and Tin Ends. (Fig. 2).

3. Slide onto the cable (1) Nut; (2) Washer; (3) Gasket; (4) Braid Clamp; (5) Clamp Body; (6) Grommet. (Fig. 3).

4. Insert individual wires into Grommet. Slide Grommet back as far as possible. Insert Tinned Ends into Contacts and solder. Slide Grommet over Contacts pushing firmly against rear of connector insert. (Fig. 4).

5. Screw clamp body onto Connector. Fold Braid at right angles to cable and slide forward Braid Clamp. Smooth down and trim surplus Braid. Slide up Gasket Washer and Screw on Nut. (Fig. 5).

**Fig. 1**

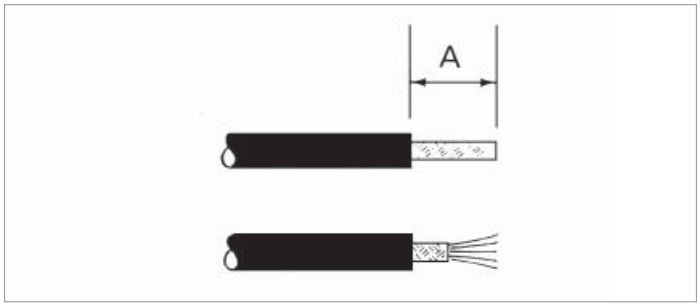



**Fig. 2**

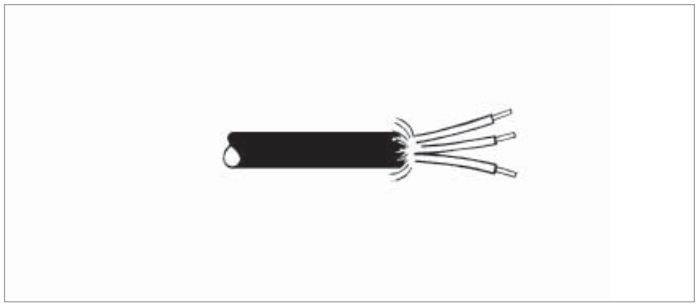


**Fig. 3**

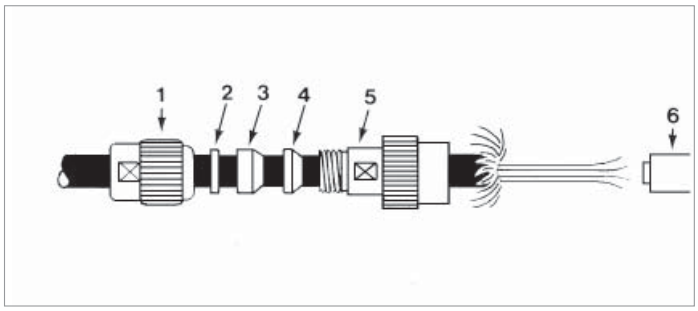



**Fig. 4**

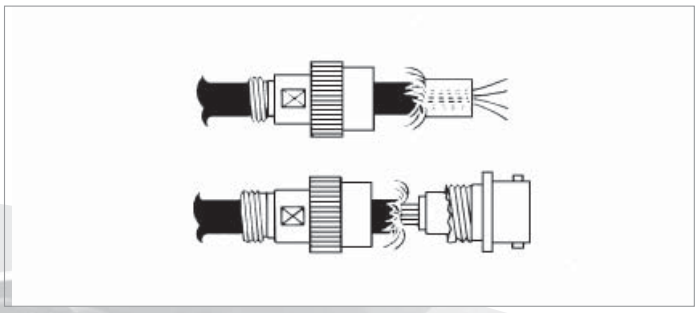
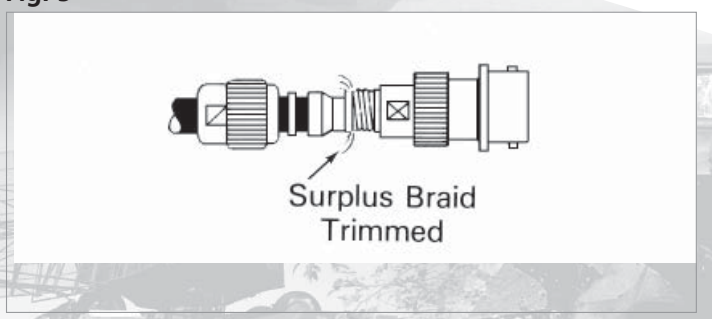


**Fig. 5**



# AB05 - 0030
## assembly procedure for straight outlets

### AB05-0030 Externally Screened Cable
### Type B and Q

1. Strip outer Braid and Internal PVC Sheath of Cable back to Dim A (Fig 1).

| Size | Dimension A |
|---|---|
| 08 | 33.32 (1.312) |
| 10 | 34.93 (1.375) |
| 12-14 | 39.70 (1.563) |
| 16-20 | 42.85 (1.687) |
| 22-24 | 49.21 (1.875) |

2. Strip 5.3 mm (0.210) to 6.1 mm (0.240) of insulation from each wire and Tin Ends. (Fig. 2).

3. Slide onto the cable (1) Nut; (2) Washer; (3) Male Briad Clamp. Pull back Braid as far as possible. Slide on item (4) Female Braid Clamp; (5) Gasket; (6) Clamp Body (7) Grommet. (Fig. 3).

4. Insert individual wires into Grommet. Slide Grommet back as far as possible. Insert Tinned Ends into Contacts and solder. Slide Grommet over Contacts pushing firmly against rear of connector insert. (Fig. 4).

5. Screw clamp body onto Connector. Slide up Gasket and Female Braid Clamp. Push Braid up to Female Braid Clamp. Fold end of Braid at right angles. Push up Male Braid Clamp and smooth down and trim surplus Braid. Slide up Washer and Screw on Nut. (Fig. 5).

**Fig. 1**

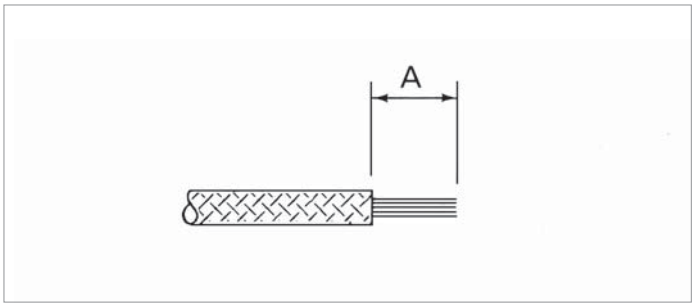



**Fig. 2**

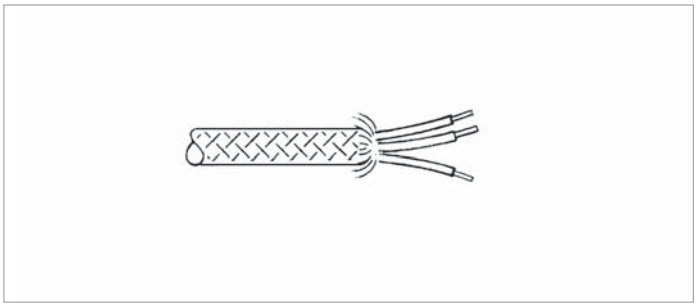


**Fig. 3**

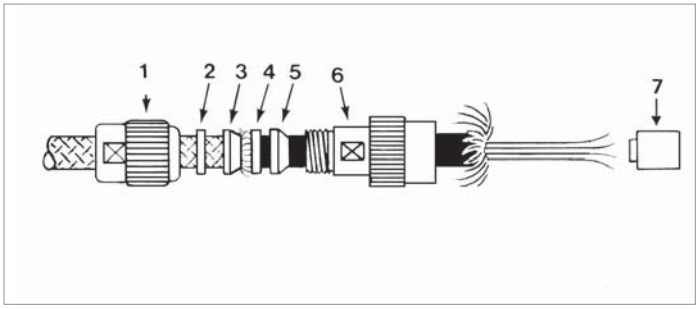



**Fig. 4**

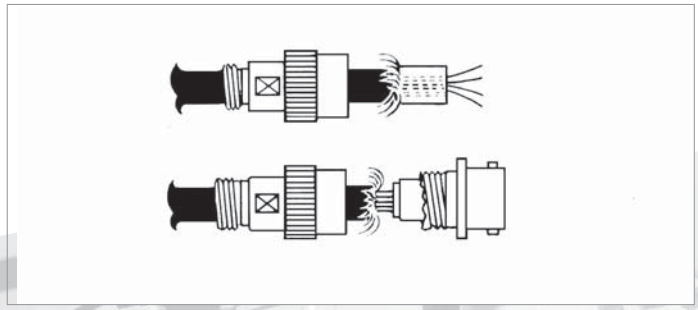
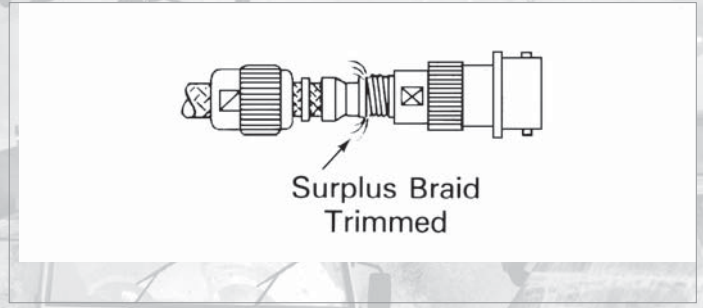


**Fig. 5**



# AB05 10-76
## Miniature Bayonet Coupling Connectors

The AB05 10-76 Miniature Bayonet Coupling Connectors have been specifically designed to be backward compatible with the Clansman 10-07.

AB05 10-76 has a plating finish of zinc cobalt olive drab a benefit of this is a high resistance to corrosion which has been dictated on Bowman in the UK.

Shell size 10 is used throughout the connector range and contact arrangements consist only of 7 size 20 contacts and 6 size 22 contacts. Insulators are thermoplastic with an operating temperature range of -55ºC to 125ºC.

Shells are keyed to prevent miss mating between shells of different orientations. Designation F is for Radio Audio, N for Data and E for Ethernet. Other orientations available are B and C.

**Contents:** **Page:**


**AB05 10-76 Miniature Bayonet Coupling Connectors** **36-41**
Technical Information 37
Part No. Explanation 37
**Receptacles;**
AB06 3100 10 76 SF 152: receptacle, panel mounting with PC printed circuit terminals 38
AB06 3100 10 76 SF 221: receptacle, panel cut out with solder contacts 39
**Plugs;**
AB05 5700 10 76 PF 217: plug, knurled coupling nut 40
AB05 8500 10 76 PC 220: plug, with over moulding back shell and solder contacts 41

**AB06 Audio Miniature Bayonet Lock Connectors Range** **42-60**

**Safety Information** **61**

# AB05 10-76
## technical information

**Mechanical Features**

| | |
|---|---|
| Shell size: | 10, measured in sixteenths of an inch |
| Coupling: | Three pin bayonet |
| Contact Termination: | Solder bucket, pin tails for P.C.B. applications. |
| Sealing: | Barrier, or barrier and panel seal<br>Dynamic peripheral seal between mating shells |

**Materials**

| | |
|---|---|
| Shell: | Aluminium Alloy |
| Insulator: | Thermoplastic |
| Contacts: | Brass |

**Plating Finishes**

| | |
|---|---|
| Shell: | Zinc cobalt olive drab |
| Contacts: | Gold over nickel |

**Technical Data**

Temperature Range: -55°C to +125°C

Environmental Ratings:

a) Shock severity: 981 m/s$^2$ (100g$_n$) for 6 milliseconds.
b) Vibration: 10Hz-5000 Hz, 0.75 mm/10g$_n$ duration; 30 hours (including 1 hour at -55°C and 3 hours at 125°C).
c) Acceleration: 490 m/s$^2$ (50g$_n$)
d) Humidity severity: 44 millibars
e) Bump severity: 390 m/s$^2$ (40g$_n$), 4000 ± 10 bumps
f) Mechanical endurance: 500 matings
g) High temperature:
   Long term: 1000 hours at 85°C
   Short term: 250 hours at 125°C

**Orientation:**

To prevent mismating or cross-plugging, shell to shell, key to keyway orientations are offered in normal (N) or any of four alternatives (B,C,E or F). Insert orientation, permissible in Pattern 105 connectors to enable replacement of existing MIL-C-26482 types, is available by special request.

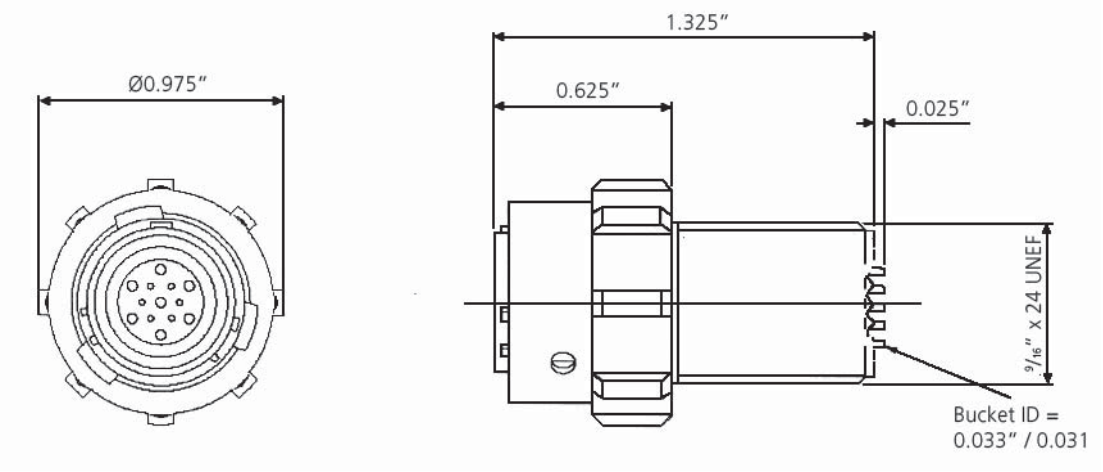
# AB05 10-76
## part number explanation

**To illustrate the ordering procedure, part number AB0557001076PF217 is shown in the table below:**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Product Range:** | **AB**** | **57** | **00** | **10** | **76** | **P** | **F** | **217** |
| **Shell Style:** | AB06 31 : Jam Receptacle (no accessory thread)<br>AB05 57 : Plug with coarse ribbed coupling nut and extended accessory thread<br>AB05 85 : Plug with coarse ribbed coupling nut spring grounding fingers extended for over moulding | | | | | | | |
| **Accessory Class:** | 00 : No accessory | | | | | | | |
| **Shell size:** | 10 (Increase in sixteenths of an inch) | | | | | | | |
| **Contact layout:** | 76 | | | | | | | |
| **Contact type:** | P : Pin<br>S : Socket | | | | | | | |
| **Orientation:** | N, B, C, E & F (Insert orientation available only for replacement of MIL-C-26482 types. Please consult factory) | | | | | | | |
| **Modification:** | 152 : Round flange shell. Rounded jam nut.<br>217 : Contact bucket. Heights all the same.<br>220 : Contact bucket. At different heights.<br>221 : Round flange shell hex. | | | | | | | |

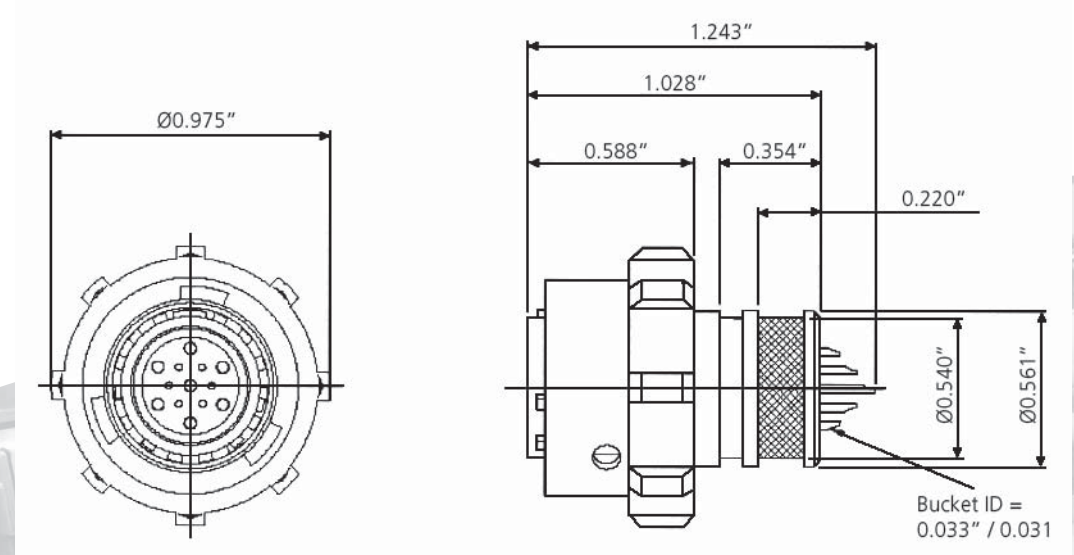
## AB05-5700-10-76-PF-217

plug, extended rear shell with solder contacts




## AB05-8500-10-76-PC-220

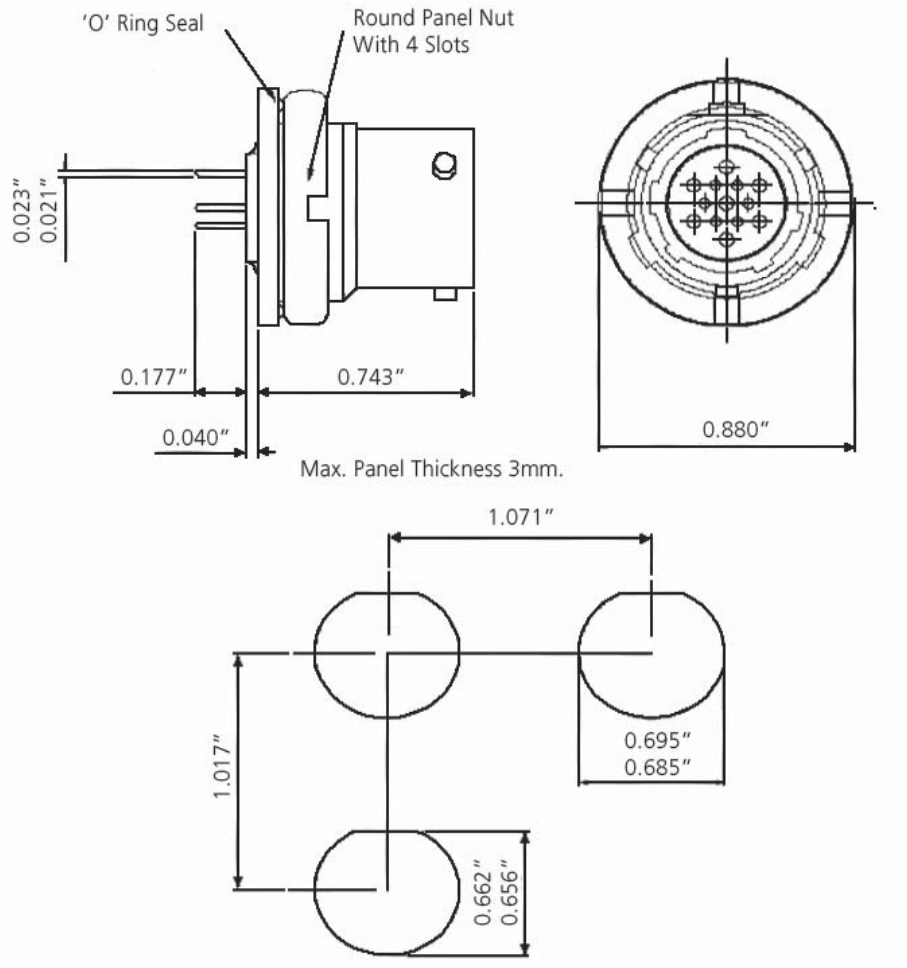
plug, with over moulding back shell and solder contacts




All measurements in mm.

# AB06-3100-10-76-SF-152

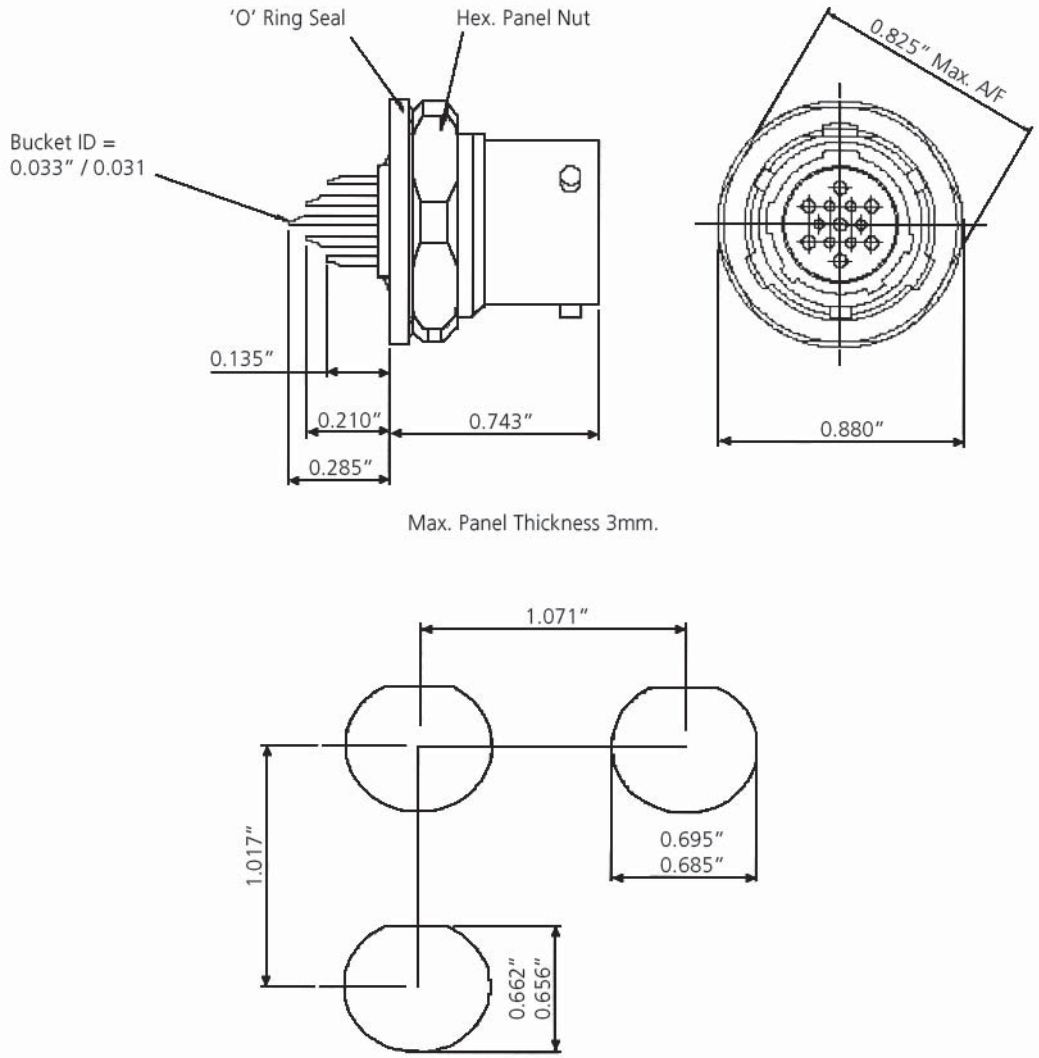
## receptacle, panel mounting with PC printed circuit terminals




All measurements in mm.

# AB06-3100-10-76-SF-221

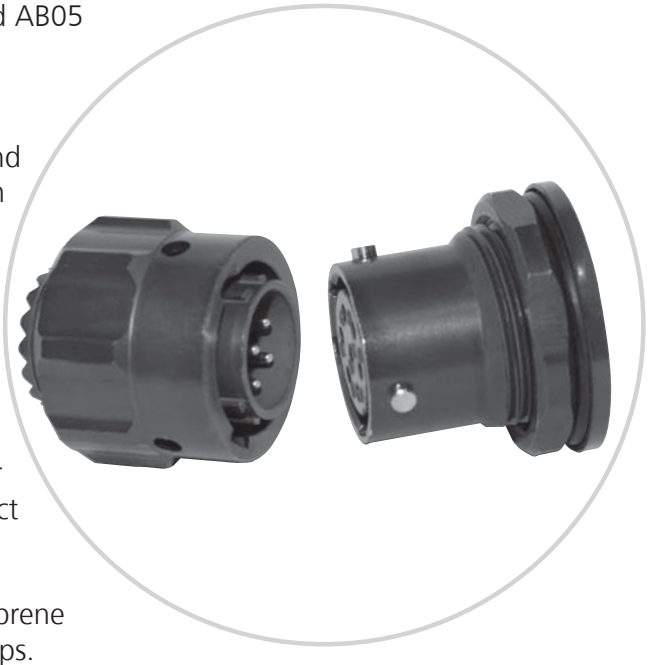
## receptacle, panel cut out detail with solder contacts




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, 90° outlets and protective caps.

# AB06
## Audio Miniature Bayonet Lock Connectors

**Contents:** **Page:**


**AB06 Audio Miniature Bayonet Lock Connectors** **42-59**
Technical Information 44
Part No. Explanation 45
Arrangement Specifications 46
Contact Arrangements 46
**Connectors;**
AB06 1000: coupler connector with accessory thread 47
AB06 3100: fixed connector single hole mounting 48
AB06 3200: fixed connector single hole mounting with accessory thread 49
AB06 3300: fixed audio connector (thinner mounting flange) 50
AB06 3400: fixed connector single hole mounting (modified flange) 51
AB06 6200: free connector with coarse ribbed coupling nut 52
AB06 6400: free connector 'snatch' release coupling nut 53
**Accessories;**
Accessories Part. No. Explanation 54
AB06 0010: 90° angled outlet 55
AB06 0011: 90° angled outlet (non-standard, #10 accepts #12 cable) 56
AB06 0020: straight outlet, large bore short boot 57
AB06 0021: straight outlet, small bore short boot 58
AB05 0022: straight outlet, small bore long boot 59
Printed Circuit Tail Detail 60
Panel Piercing Detail 60

**Safety Information** **61**

# 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.<br>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:<br>Size 20 Contacts: 700V (Voltage rating 1)<br>Size 16 Contacts: 1200V (Voltage rating 2)<br>b) Proof Voltage - d.c. or a.c. peak:<br>Size 20 Contacts: 700V (Voltage rating 1)<br>Size 16 Contacts: 3000V (Voltage rating 2)<br>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<br>31 : Fixed connector single hole mounting<br>32 : Fixed connector single hole mounting with accessory thread.<br>33 : Fixed audio connector (thinner mounting flange)<br>34 : Fixed connector single hole mounting (modified flange)<br>62 : Free connector with coarse ribbed coupling nut<br>64 : Free connector 'snatch' release coupling nut | | | | | | | | |
| **Accessory Class:** | 10 : 90° angled outlet<br>11 : 90° angled outlet (non-standard, #10 accepts #12 cable)<br>20 : Straight outlet, large bore short boot<br>21 : Straight outlet, small bore short boot<br>22 : Straight outlet, small bore long boot | | | | | | | | |
| **Shell size:** | 08, 10, 12 | | | | | | | | |
| **Contact layout:** | See page 40 | | | | | | | | |
| **Contact type:** | P : Pin<br>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 |

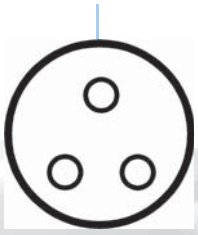
*Maximum working current per contact when all contacts are working simultaneously at 85°C ambient temperature.

### 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** |

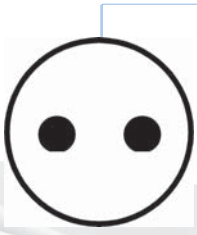
# AB06
## contact arrangements

**Shell Size 08**

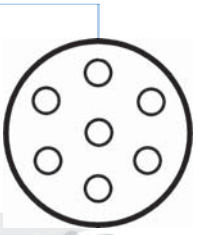


08-33
Service rating 1
3 Contacts,
Size 20

**Shell Size 10**

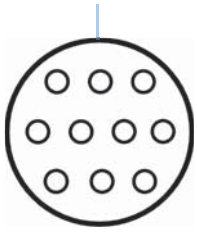


10-02
Service rating 2
2 Contacts,
Size 16



10-07
Service rating 1
7 Contacts,
Size 20

**Shell Size 12**



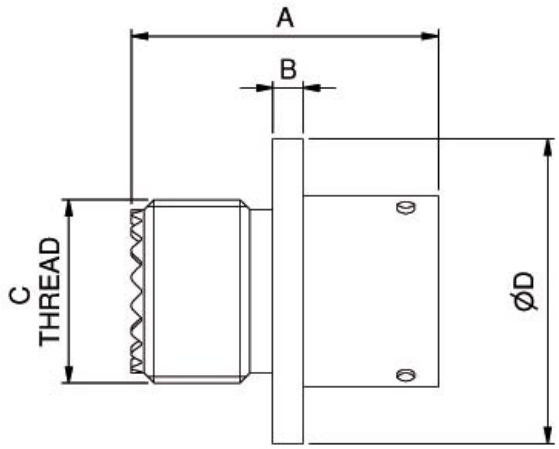
12-10
Service rating 1
12 Contacts,
Size 20

○ Size 20 Contacts

● Size 16 Contacts

# AB06-1000

## coupler connector with accessory thread

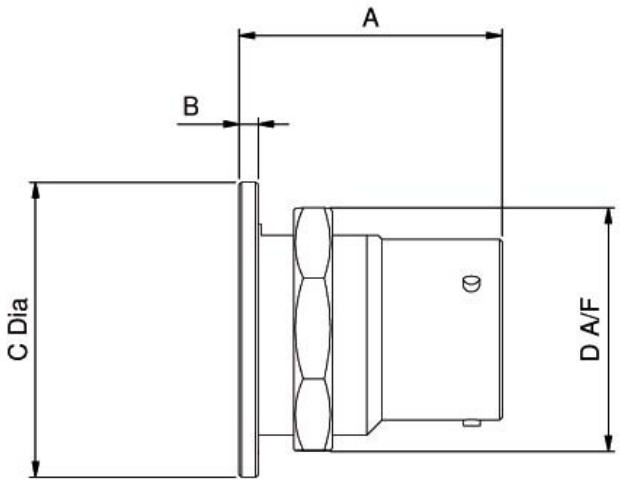



| Shell Size | A | B | C thread UNEF 2A | D Ø |
|---|---|---|---|---|
| **10** | 22.96 | 2.49 | 9/16 - 24 | 24.00 |
| **12** | 22.96 | 2.49 | 11/16 - 24 | 26.42 |

Thread measurement is imperial, all other measurements in mm.

# AB06-3100

## fixed connector single hole mounting

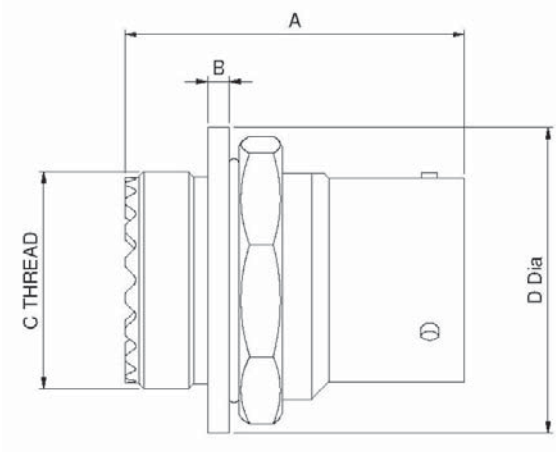



| Shell Size | A | B | C Ø | D A/F |
|---|---|---|---|---|
| **10** | 19.00 | 1.70 | 22.35 | 20.96 |
| **12** | 21.11 | 2.97 | 28.70 | 27.10 |

All measurements in mm.

# AB06-3200

## fixed connector single hole mounting with accessory thread

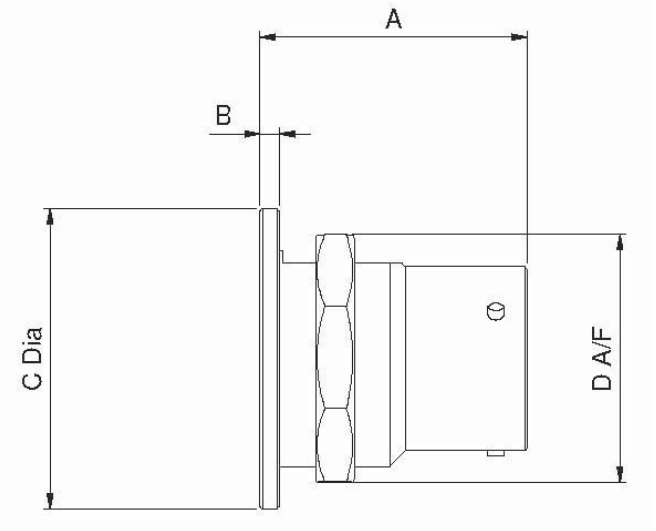



| Shell Size | A | B | C thread UNEF 2A | D Ø |
|---|---|---|---|---|
| **10** | 24.26 | 1.70 | 5/8" - 24 | 22.35 |

Thread measurement is imperial, all other measurements in mm.

# AB06-3300

## fixed audio connector (thinner mounting flange)

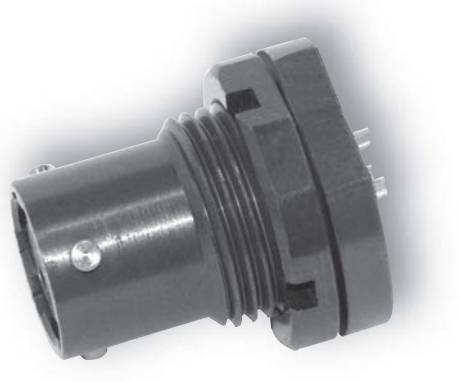


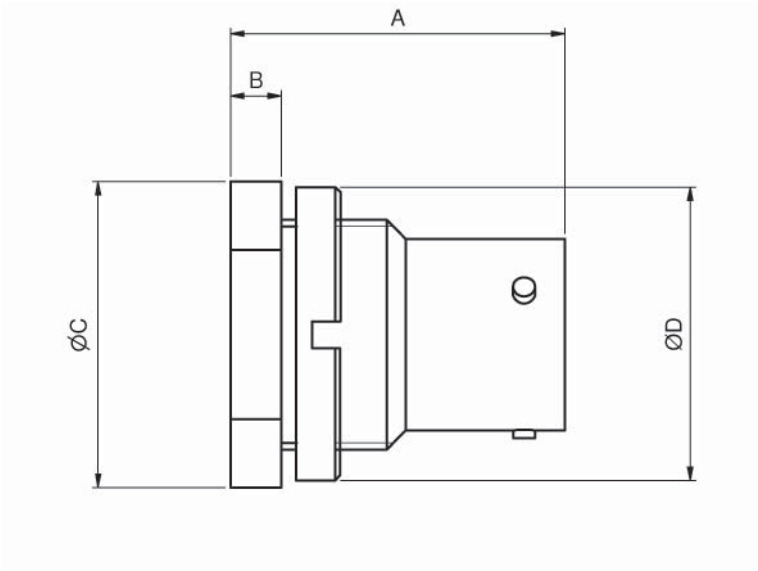

| Shell Size | A | B | C Ø | D A/F |
|---|---|---|---|---|
| **10** | 18.92 | 0.66 | 22.35 | 20.96 |

All measurements in mm.

# AB06-3400

## fixed connector single hole mounting (modified flange)



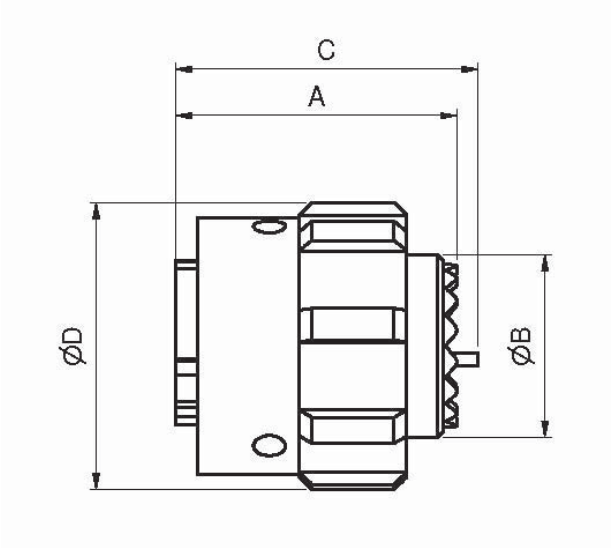



| Shell Size | A | B | C Ø | D A/F |
|---|---|---|---|---|
| **8** | 21.06 | 3.18 | 19.15 | 17.78 |

All measurements in mm.

# AB06-6200

## free connector with coarse ribbed coupling nut

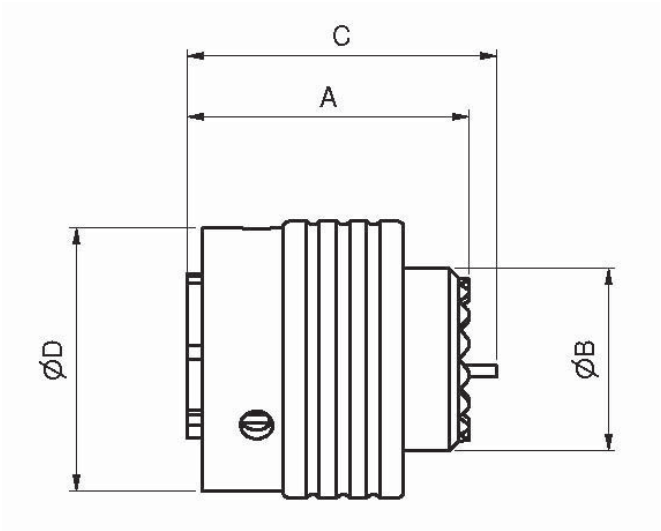



| Shell Size | A | B thread Ø | C | D Ø |
|---|---|---|---|---|
| **8** | 21.92 | 7/16 x 28 UNEF | 23.27 | 21.94 |
| **10** | 21.92 | 9/16 x 24 UNEF | 23.27 | 22.35 |
| **12** | 21.92 | 11/16 x 24 UNEF | 23.27 | 28.58 |

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.

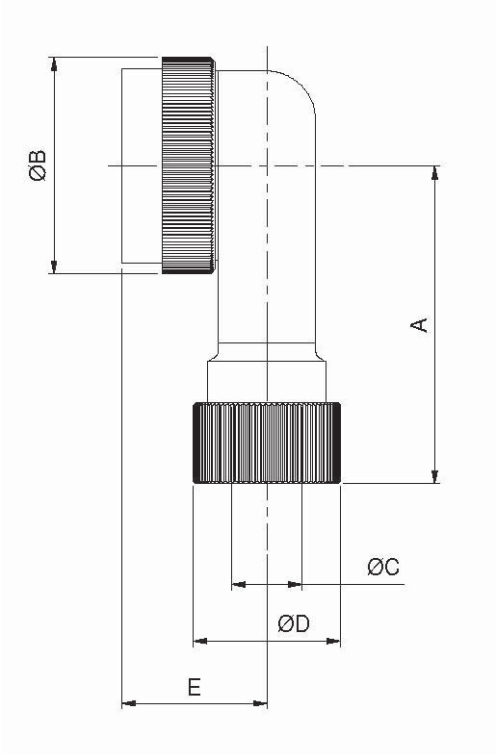
# AB06
## accessories part number explanation

**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<br>11 : 90° angled outlet (non standard, #10 accepts #12 cable)<br>20 : Straight outlet, large bore short boot<br>21 : Straight outlet, small bore short boot<br>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.<br>00 No grommet supplied. | | | | | | |
| **Orientation:** | 00 No orientation. | | | | | | |
| **Modification:** | 21 Anodised black def 151 type 1. | | | | | | |

# AB06-0010

## 90° angled outlet

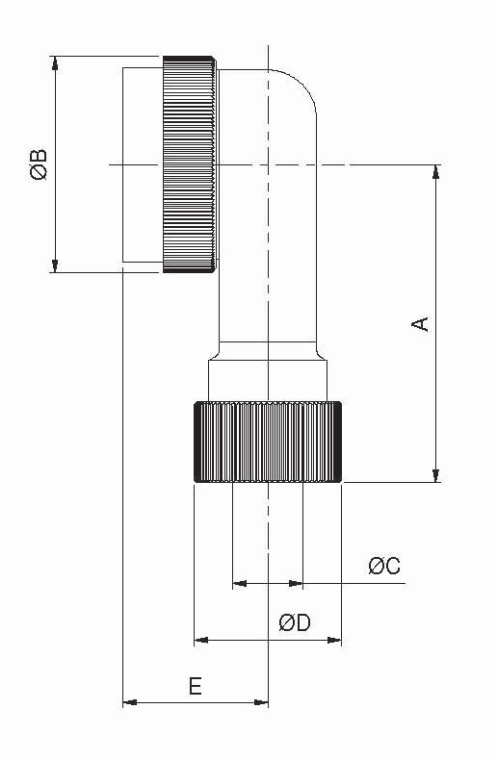



| Shell Size | A | B Ø | C Ø | D Ø | E |
|---|---|---|---|---|---|
| **10** | 25.25 | 20.32 | 7.74 | 13.72 | 13.56 |
| **12** | 26.51 | 21.23 | 8.03 | 16.64 | 15.08 |

All measurements in mm.

# AB06-0011

## 90° angled outlet
## (non-standard, #10 acccepts #12 cable)

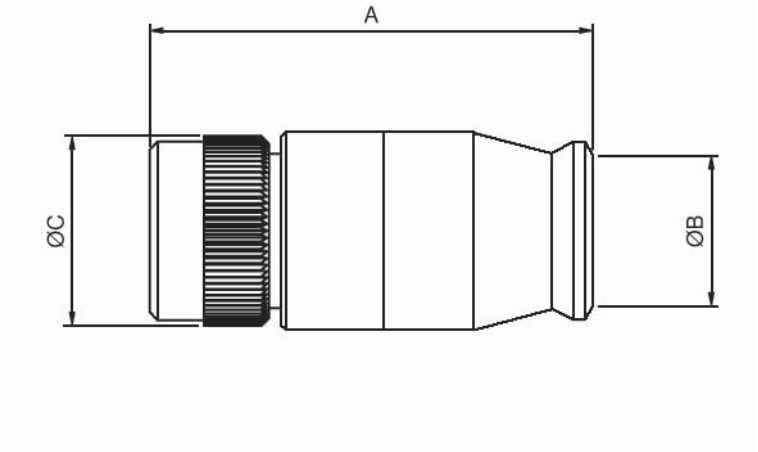



| Shell Size | A | B Ø | C Ø | D Ø | E |
|---|---|---|---|---|---|
| **10** | 25.25 | 20.32 | 8.03 | 16.64 | 13.56 |

All measurements in mm.

# AB06-0020

## straight outlet, large bore short boot

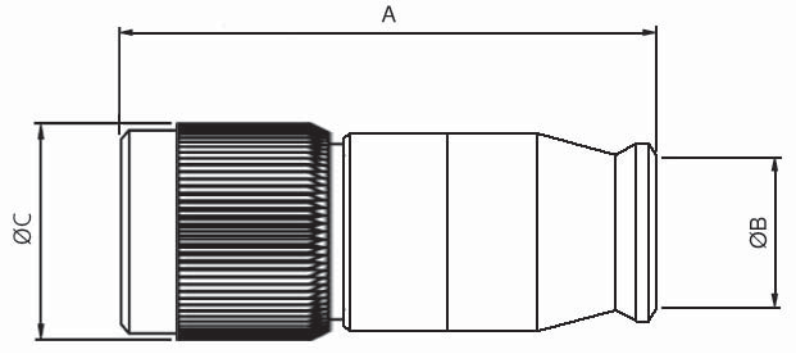



| Shell Size | A | B Ø | C Ø |
|---|---|---|---|
| **8** | 34.13 | 7.26 | 15.88 |
| **10** | 42.25 | 7.26 | 17.70 |
| **12** | 42.44 | 7.26 | 21.46 |

All measurements in mm.

# AB06-0021

## straight outlet, small bore short boot

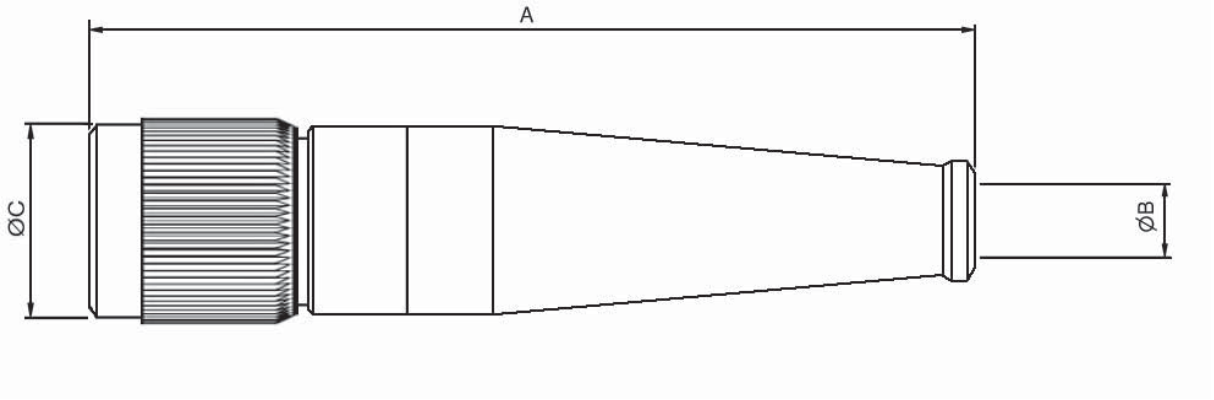



| Shell Size | A | B Ø | C Ø |
|---|---|---|---|
| **8** | 34.13 | 5.08 | 15.88 |
| **10** | 42.25 | 5.08 | 17.70 |
| **12** | 42.44 | 5.08 | 21.46 |

All measurements in mm.

# AB06-0022

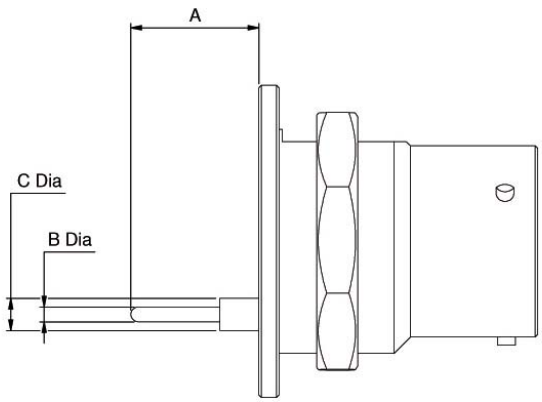
## straight outlet, small bore long boot




| Shell Size | A | B Ø | C Ø |
|---|---|---|---|
| **10** | 78.35 | 5.08 | 16.74 |

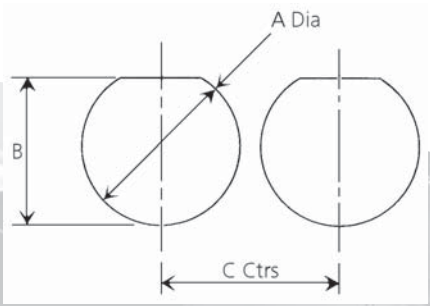
All measurements in mm.

# 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.

## Safety Information

This information is to be used in conjunction with the Product Catalogue and Product Specification. Products may be safely used in the applications for which they have been designed and within the specified ratings and environments. If products are exposed to conditions outside the performance ratings or specified environments they may constitute a hazard. In particular it should be noted that:

### 1) Material Content of Products

Circular connectors generally use metalwork parts made of copper, copper alloy, aluminium alloy, aluminium - bronze or steel, which, dependant on the particular application, may be passivated and protected with cadmium or zinc plate - in conjunction with chromated or anodised surface finishes. The insulating materials can be either natural or synthetic rubber, together with plastic or glass moulded parts. Contact materials vary with product type but are usually made of copper, copper alloy, nickel, phosphor - bronze, alumel chromel or steel.

### 2) Electric Shock, Burns and Fire

Hazard can occur if the product is used outside the specified parameters or if the product is damaged, wrongly wired or poorly assembled, or poorly integrated into larger equipments, or contaminated with conductive fluids. Live circuit terminations must be protected and live circuits never broken by demating products. Hotspots may be created when resistance is increased due to damage or incorrect integration particularly soldering, crimping or loose terminations. Overheating can cause breakdown of insulation, electric shot, burns or, ultimately, fire. In the event of fire noxious and/or toxic fumes may be released and, in these circumstances, any fire involving the product should be dealt with by personnel properly equipped.

Connector products with exposed terminations or contacts should not be used on the current supply side of a circuit with exposed contacts on an unmated product. Before making a circuit live, the product and wiring should be checked to ensure that there is no damage and no electrically conducting debris present. Circuit resistance checks should also be conducted before making the circuit live. Always ensure that the correct tools, (specified by AB Connectors Ltd.) are employed for crimping and assembled and wired by properly trained personnel.

### 3) Disposal or Products

Products should not be burnt.

### 4) Use, Transport and Storage of Products

Care must be taken to avoid damage to any part of the products during transportation, storage or use. The products as manufactured, are free of sharp edges. Abnormal transit or storage conditions and abuse during installation can give rise to damage. Products should not be used in a damaged condition.
Improper storage (particularly of damaged products) can give rise to additional hazards particularly corrosion. Your attention is specifically drawn to the need of proper storage of products containing cadmium and you are advised to see the Guidance Note from the Health and Safety Executive on Cadmium - Health and Safety Precautions.

## Safety Rules

1. Ensure all conductor wires are capable of withstanding the electrical and environmental conditions of the application.
2. Always use the correct assembly tools for cables, contacts and connectors.
3. Make circuit resistance checks before making a circuit live.
4. Always protect live circuits and never demate a live connector.
5. Never use a damaged connector.
6. Never burn discarded connectors or cable.
7. IF IN DOUBT, ASK.

N. B. Additional information on the products and the materials used in them may be obtained from the Sales Department of AB Connectors Ltd.

## Shelf Life for Rubber Components

AB Connectors incorporate a number of rubber components within their connectors. Most rubbers change in physical properties during storage e.g. excessive hardening, softening, cracking or other surface degradation. These changes may be the result of particular factors or a combination of factors such as light, heat, humidity, oils or solvents.

With a few simple precautions the shelf life may be considerably lenghtened.

The storage temperature should be between +5° and +25°C. Direct contact with sources of heat such as boilers, radiators and direct sunlight should be avoided. It is advisable to cover any windows of storage rooms with a red or orange coating or screen. The relative humidity in the storeroom should be below 70%. Very moist or very dry conditions should be avoided. Condensation should not occur.

If the above recommendations are adhered to, then AB Connectors would warrant a shelf life of four years for its products.

**N. B.** The company reserves the right and may change or vary specification without prior written notice.

# Global Presence

The world's demand for electronics is increasing as new technologies, with a higher dependence on complex components, are being adopted by a broader customer base. This growth provides TT electronics an assured future as we focus on efforts to deliver excellence in customer service and quality products to these markets. From our strong UK base, the company has achieved truly global reach. We have established technical and manufacturing facilities in strategic countries maintaining the successful formula of close liaison with our customers in all major overseas markets.

In addition, through strategic relationships with Original Equipment Manufacturers around the world, we are now in the enviable position where we gain double benefit - from growth in their markets and from the increase in the electronic content of end products.

Information on TT electronics companies can be found by contacting:-

**Head Office:**

TT electronics plc
Clive House
12 - 18 Queens Road
Weybridge
Surrey
KT13 9XB
UK

**Tel:** +44 (0) 1932 841310
**Fax:** +44 (0) 1932 836450

**Email:** info@ttelectronics.com
**Web:** www.ttelectronics.com

AB Connectors Limited

Abercynon, Mountain Ash,
Rhondda Cynon Taff, CF45 4SF, UK.

Telephone: + 44(0) 1443 740331
Facsimile: + 44(0) 1443 741676
Email: sales@ttabconnectors.com
Website: www.ttabconnectors.com

AB Interconnect Inc.

PO Box 2240, 2500 Business Highway 70 East,
Smithfield, NC 27577, USA.

Telephone: + (1)919 934 5181
Facsimile: + (1)919 934 0652
Email: sales@abinterconnect.com
Website: www.abinterconnect.com

AB Connectors (Suzhou) Limited

158-29 Huashan Road, Feng Qiao Ind. Park,
Suzhou, Jiang Su Province, China 215129

Telephone: + 86 512 6661 1004
Facsimile: + 86 512 6661 3261 880
Email: sales@ttabconnectors.com
Website: www.ttabconnectors.com


TT electronics

**AB Connectors Limited**

A Subsidiary of TT electronics plc

© 06.10 AB Connectors Ltd AB05/06