Electrical Connectors

AB05/6 Mil-C-26482 Series 1 Style





A Subsidiary of TT electronics plc

and the

8E 3M 00

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 coordinated 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. Thisspecificationsupercedes 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 withan operating temperature range of between -55°C to 125°C. 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: Coupling: Contact Termination: Sealing:	8 to 24, measured in sixteenths of an inch Three pin bayonet Solder bucket, crimp (rubber retention), pin tails for P.C.B. applications and flexible printing wiring Barrier, or barrier and panel seal. Dynamic peripheral seal between mating shells.
Materials Shell: Insulator: Grommet: Contacts: Accessories Hardware:	Aluminium alloy Polychloroprene Brass Aluminium alloy
Plating Finishes Shell: Contacts: Accessory Hardware:	Conductive, olive drab over cadmium plate (alternatives available on re- quest) Gold over nickel Conductive, olive drab over cadmium plate (alternatives available on re- quest)
Technical Data Temperature Range: Voltage at Sea Level:	 -55°C to +125°C 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. a) Shack equation 021 m/c² (100a) for 6 milling conde
Environmental Ratings:	 a) Shock severity: 981 m/s² (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/s² (50g_n) d) Humidity severity: 44 millibars e) Bump severity: 390 m/s² (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).

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 1	0 00	10	**	Р	F	00
Shell Style:	 10 : Cable connecting receptacle 20 : Square flange receptacle with accessory thread 21 : Square flange receptacle without accessory thread 31 : Jam nut receptacle without accessory thread 32 : Jam nut receptacle with external accessory thread 60 : Plug with knurled coupling nut 61 : Plug with knurled coupling nut & spring grounding fingers 62 : Plug with coarse ribbed coupling nut 63 : Plug with coarse ribbed coupling nut & spring grounding fingers 						
Accessory Class:	 00 : No accessory 27 : Strain relief clamp 29 : Straight outlet internally screened 30 : Straight outlet externally screened 40 : Grommet nut 50 : General duty adaptor (No grommet necessary) 55 : Sealing gland (No grommet necessary) 62 : Sealing gland with integral cable clamp 75 : Screen and heat shrink adaptor 2* : Screening heat shrink adaptor, sealing type (* Indicates Entry Size, see page) 	ge 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 S : Socket						
Orientation:	N, B, C, E & F (Insert orientation available only for replacement of MIL-C-2648	82 types.	Please o	onsult f	actory)		
Modification:	 00 : Solder contacts 01 : Crimp contacts. (Size 20, small bore, Ø 0.84) (Bore Ø 1.75, Size 16 only) 02 : Crimp contacts. (Size 20, large bore, Ø 1.24) (No Size 16 contact) 03 : P.C.B. contact 0.73 ± 0.025/2 mm. 04 : P.C.B. contact 0.73 ± 0.025/5 mm. 15 : No contacts 19 : Silver cad plated shell, Gold flash on crimp contacts 20 : Silver cad plated shell, Gold flash on solder contacts 21 : Anodised black DEF 151 type 1 31 : Silver plated contacts, solder style 43 : Silver cad plated shell, Gold flash on P.C.B. contacts 60 : Ink marked insert rears. (For additional modifications and special requirements please consult factory.) 						
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AB05 arrangement specifications

Shell	Contact	No. of	Contact S	ize and Currer 85°C Am		PS) - at	Shell	Service	
Size	Arrangement	Contacts	20	16	12	C0-AX	Orientation	Rating	
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	СХ	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

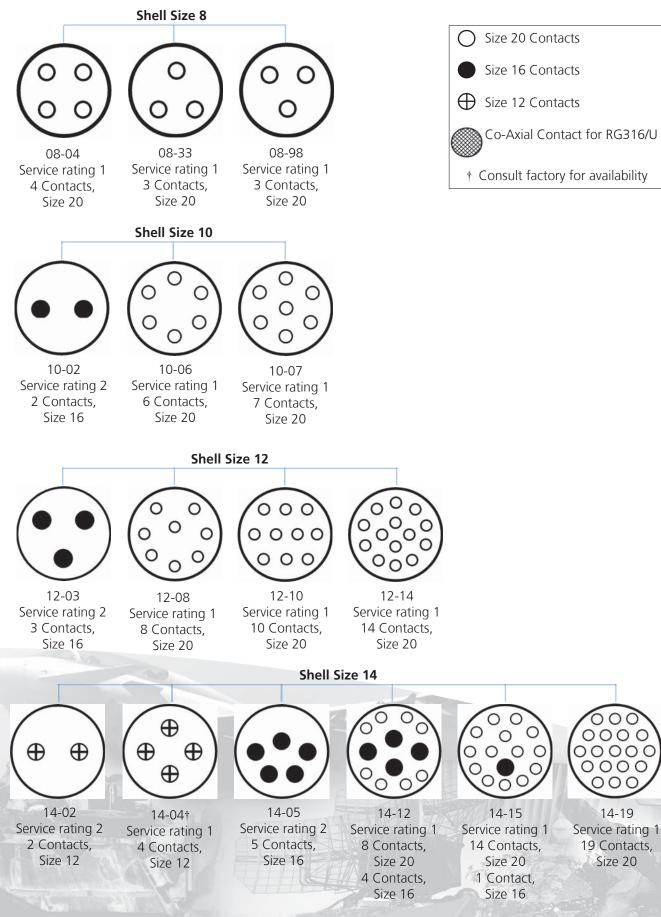
	Sea I 1013	Level mbar	8,50 (2780 300 i	00 ft.)	20,000 m (66,000 ft.) 44 mbar			
Service Rating	1	2	1	2	1	2		
Working Voltage (nominal) d.c. or a.c. peak	700	1200	550	650	330	380		
Voltage proof d.c. or a.c. peak	2100	3000	1100	1300	660	760		

Current Service Ratings	Contact Size	Max. Current	* Rated Current
	20 AWG	7.5A	5A
	16 AWG	13A	10A
Vise C	12 AWG	23A	20A
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*Maximum working current per contact when all contacts are working simultaneously at 85°C ambient temperature.

AB05

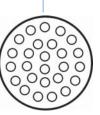




AB05 contact arrangements

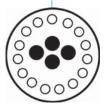


16-08 Service rating 2 8 Contacts, Size 16

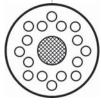


Shell Size 16

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

Shell Size 20



18-11 Service rating 2 11 Contacts, Size 16

0 0 0 0

0 0

20-41

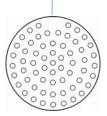
18-32 Service rating 1 32 Contacts, Size 20

00

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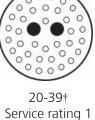






24-61 Service rating 1 61 Contact, Size 20

Service rating 1 41 Contacts, Size 20



37 Contact, Size 20 2 Contacts, Size 16

Shell Size 22



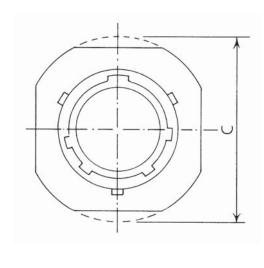
22-55 Service rating 1 55 Contacts, Size 20

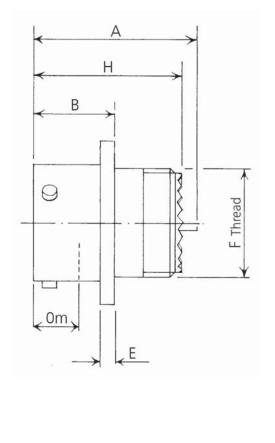


† Consult factory for availability

AB05-1000 cable connecting receptacle



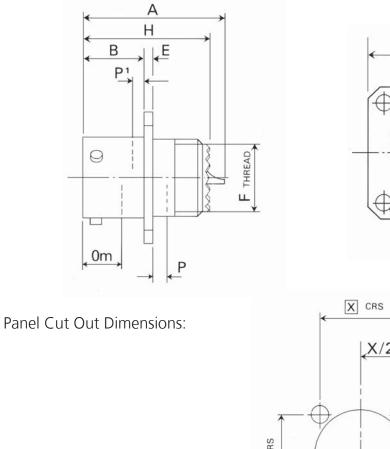


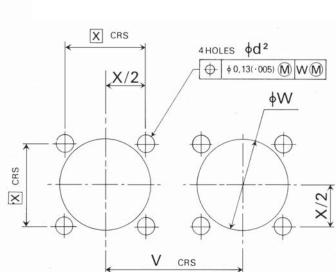


Shell Size	A max.	B max.	CØ max.	E max.	F thread UNEF 2A	H max.	Om min. overlap	MASS max. G
08	26.40	13.80	24.40	2.80	⁷ / ₁₆ -28	26.0	7.30	8
10	26.40	13.80	27.70	2.80	⁹ / ₁₆ -24	26.0	7.30	13
12	26.40	13.80	30.0	2.80	¹¹ / ₁₆ -24	26.0	7.30	17
14	26.40	13.80	32.30	2.80	¹³ / ₁₆ -20	26.0	7.30	24
16	26.40	13.80	34.80	2.80	15/16 -20	26.0	7.30	30
18	26.40	13.80	37.10	2.80	11/16 -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	17/16 -18	30.0	8.90	85

receptacle, square flange

with accessory thread





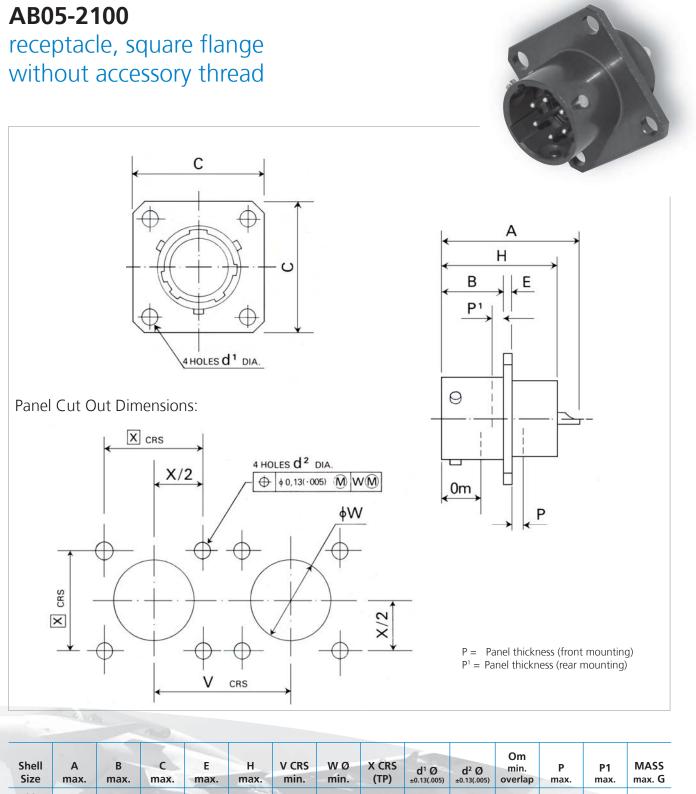
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*P	Max. Panel Thickness	
Р	Min. Clearance Distance For Mating Connector	
	Size 8 to 18-2,0 (0,08)	
	Size 20 to 24-5,3 (0,21)	
*P	May be increased if 'W' is enlarged to clear access	ory

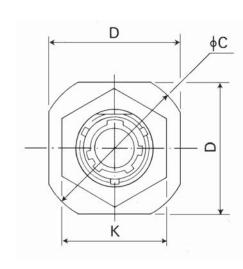
Shell Size	A max.	B max.	D sq. max.	E max.	F thread UNEF 2A	H max.	Om min. overlap	d¹Ø min.	d² Ø min.	V min.	₩Ø ±0.13 (.005)	Х (ТР)	MASS max. G
08	26.40	11.80	21.10	2.0	⁷ / ₁₆ -28	26.0	7.30	3.05	3.25	22.60	14.43	15.09	10
10	26.40	11.80	24.40	2.0	⁹ / ₁₆ -24	26.0	7.30	3.05	3.25	25.40	17.40	18.26	13
12	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	11/16 -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	15/16 -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	17/16 -18	30.0	8.90	3.73	3.86	50.0	41.02	34.93	77

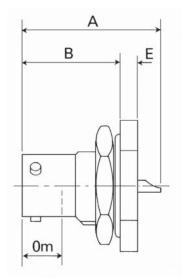


Shell Size	A max.	B max.	C max.	E max.	H max.	V CRS min.	WØ min.	X CRS (TP)	d ¹ Ø ±0.13(.005)	d ² Ø ±0.13(.005)	min. overlap	P max.	P1 max.	MASS max. G
08	26.40	11.70	21.10	2.0	21.60	22.06	14.43	15.09	3.05	3.12	7.30	8.50	2.21	10
10	26.40	11.70	24.30	2.0	21.60	25.04	17.40	18.26	3.05	3.12	7.30	8.50	2.21	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

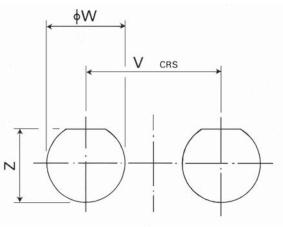
receptacle, jam nut without accessory thread







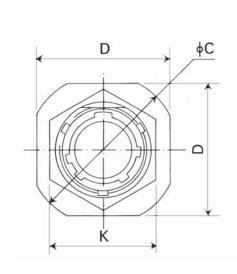
Panel Cut Out Dimensions

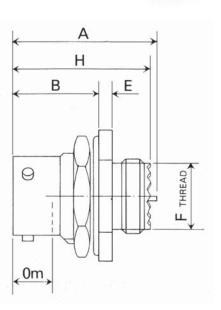


																			1	NIL .			
Shell	А	В	сø	D	E	к	v	wø	7	Om min.		nel mess	MASS										
Size	max.	max.	max.	max.	max.	max.	min.	±0.13(.005)	±0.13(.005)	overlap	max.	min.	max. G										
08	26.40	18.60	27.50	24.40	3.60	19.60	24.70	14.53	13.72	7.30	3.30	1.50	17										
10	26.40	18.60	30.80	27.50	3.60	22.90	28.0	17.70	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										

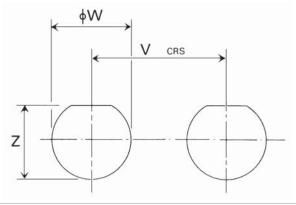
All measurements in mm.

AB05-3200 receptacle, jam nut with external accessory thread





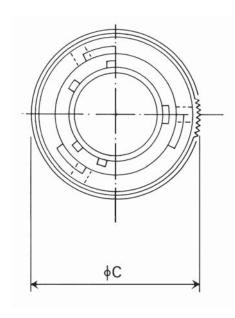
Panel Cut Out Dimensions:

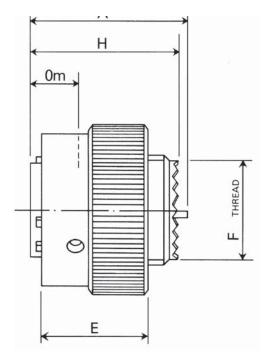


Shell	А	В	cø	D	E	F thread	н	к	Om min.		nel mess			_	MASS
Size	max.	max.	max.	max.	max.	UNEF 2A	max.	max.	overlap	max.	min.	V	WØ ±0.13(.005)	Z ±0.13(.005)	max. G
08	26.40	15.80	27.50	24.40	3.60	⁷ / ₁₆ -28	26.0	19.60	7.30	3.30	1.50	24.70	14.53	13.72	21
10	26.40	15.80	30.80	27.50	3.60	⁹ / ₁₆ -24	26.0	22.90	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	11/16 -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	15/16 -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	17/16 -18	30.0	46.50	8.90	6.40	1.50	54.20	41.53	40.03	116

plug, knurled coupling nut



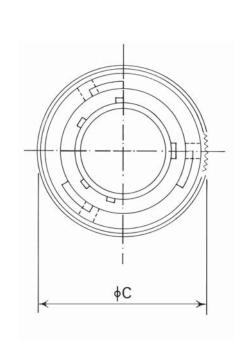


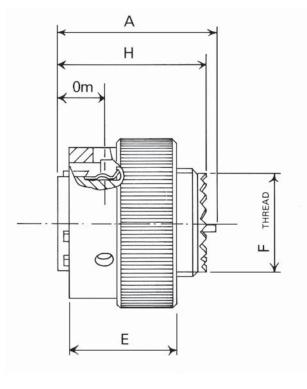


Shell Size	A max.	CØ max.	E max.	F thread UNEF 2A	H max.	Om min. overlap	MASS max. G		
08	25.40	19.10	19.30	⁷ / ₁₆ -28	24.40	7.30	12		
10	25.40	21.80	19.30	⁹ / ₁₆ -24	24.40	7.30	15		
12	25.40	26.40	19.30	¹¹ / ₁₆ -24	24.40	7.30	20		
14	25.40	30.0	19.30	¹³ / ₁₆ -20	24.40	7.30	27		
16	25.40 491	33.30	19.30	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	15/16 -18	26.20	8.90	65		
24	27.80	45.20	20.40	17/16 -18	28.0	8.90	80		

plug, knurled coupling nut with grounding fingers



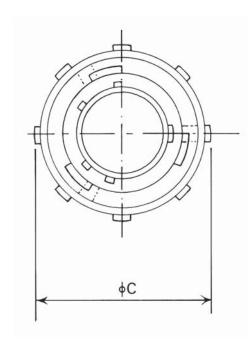


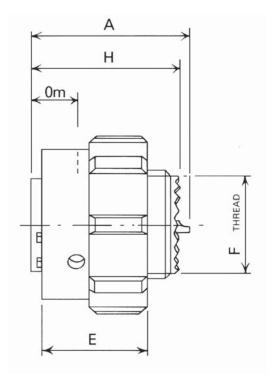


Shell Size	A max.	CØ max.	E max.	F thread UNEF 2A	H max.	Om min. overlap	MASS max. G
08	25.40	19.10	19.30	7/16 -28	24.40	7.30	12
10	25.40	21.80	19.30	⁹ / ₁₆ -24	24.40	7.30	15
12	25.40	26.40	19.30	¹¹ / ₁₆ -24	24.40	7.30	20
14	25.40	30.0	19.30	¹³ / ₁₆ -20	24.40	7.30	27
16	25.40	33.30	19.30	¹⁵ / ₁₆ -20	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	15/16 -18	26.20	8.90	65
24	27.80	45.20	20.40	17/16 -18	28.0	8.90	80

plug, course ribbed coupling nut



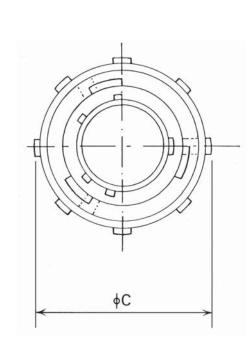


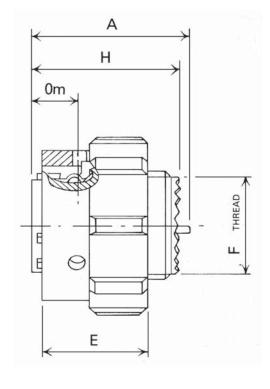


Shell Size	A max.	CØ max.	E max.	F thread UNEF 2A	H max.	Om min. overlap	MASS max. G
08	25.40	22.10	20.40	⁷ / ₁₆ -28	24.40	7.30	13
10	25.40	24.90	20.40	⁹ / ₁₆ -24	24.40	7.30	17
12	25.40	29.30	20.40	11/16 -24	24.40	7.30	22
14	25.40	32.60	20.40	¹³ / ₁₆ -20	24.40	7.30	28
16	25.40 49	37.60	20.40	¹⁵ / ₁₆ -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	15/16 -18	26.20	8.90	63
24	27.80	49.60	21.40	17/16 -18	28.0	8.90	83

plug, coarse ribbed coupling nut with grounding fingers







hell Size	A max.	CØ 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
8	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
2	27.80	46.30	20.40	15/16 -18	26.20	8.90	63
4	27.80	49.60	21.40	17/16 -18	28.0	8.90	83

AB05 accessories part number explanation

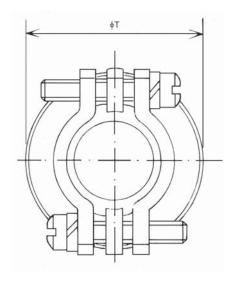
Accessories can also be ordered separately.

To illustrate the ordering procedure, part number AB05002710070021 is shown in the table below:

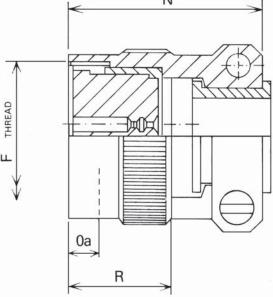
Product Range:		AB05	00	27	10	07	00	21
Shell Style:	00 No connector. Accessory only.							
	27 : Strain relief clamp							
	29 : Straight outlet internally screened							
	30 : Straight outlet externally screened							
	40 : Grommet nut							
	50 : General duty adaptor (no grommet necessary)			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







strain relief clamp



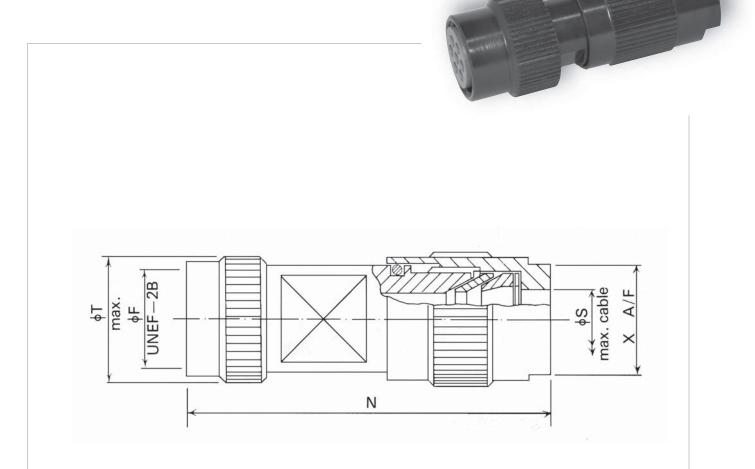
Shell Size	F thread UNEF 2B	N max.	Oa min.	R max.	TØ max.	MASS max. G
08	7/16 -28	31.40	4.80	16.50	15.20	18
10	⁹ / ₁₆ -24	31.40	4.80	16.50	18.50	19
12	¹¹ / ₁₆ -24	31.40	4.80	16.50	21.80	20
14	¹³ / ₁₆ -20	31.40	4.80	16.50	25.10	22
16	15/16 -20	33.50	4.80	16.50	28.20	25
18	1 ¹ / ₁₆ -18	34.30	4.80	16.50	31.50	29
20	1 ³ / ₁₆ -18	36.80	4.80	17.20	34.50	31
22	15/16 -18	36.80	4.80	17.20	37.60	38
24	17/16 -18	36.80	4.80	17.20	40.90	42

ш

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

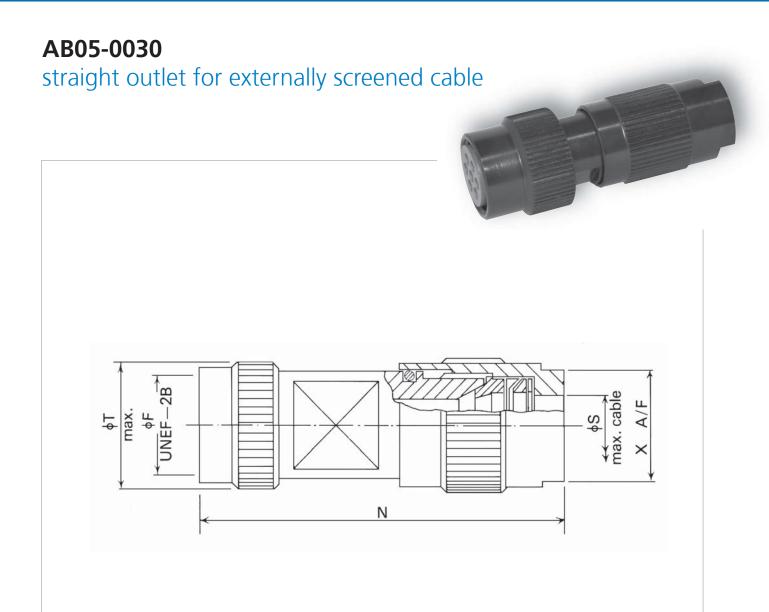


straight outlet for internally screened cable



Shell Size	T Ø max.	F thread Ø	N max.	SØ .	X A/F
08	17.53	⁷ / ₁₆ x 28	51.30	7.20	12.70
10	19.30	⁹ ∕₁ ₆ 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	/9 KL 59	*	*	*	*
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.

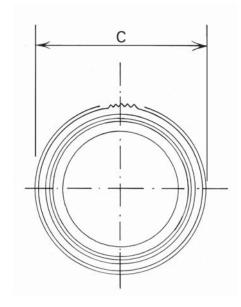


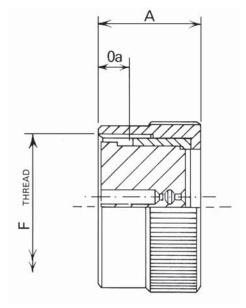
Shell Size	TØ max.	F thread Ø	N max.	s ø	X A/F
08	17.53	⁷ / ₁₆ x 28	51.30	7.20	12.70
10	19.30	⁹ / ₁₆ x 28	51.05	8.70	12.70
12	21.74	¹¹ / ₁₆ x 24	63.30	7.20; 11.80	15.87
14	26.52	¹³ / ₁₆ x 20	63.91	12.50	17.45
16	29.62	¹⁵ / ₁₆ x 20	67.06	14.60	19.05
18	*	*	*	*	* (
20	*	*	*	*	*
22	*	*	*	*	*
24	*	*	*	*****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

* Please consult factory For Accessory Part Number Explanation, see page 18.

grommet nut







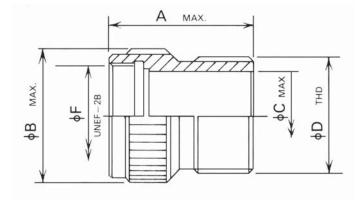
Shell Size	F thread Class 2B	A max.	Oa min. overlap	CØ max.	MASS max. G
08	7/16 -28 UNEF	16.50	4.80	15.20	7
10	9/16 -24 UNEF	16.50	4.80	18.50	9
12	¹¹ / ₁₆ -24 UNEF	16.50	4.80	21.80	12
14	¹³ / ₁₆ -20 UNEF	16.50	4.80	25.20	14
16	¹⁵ / ₁₆ -20 UNEF	16.50	4.80	28.20	17
18	1 ¹ / ₁₆ -18 UNEF	16.50	4.80	31.50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

22

AB05-0050 general duty adaptor (no grommet necessary)



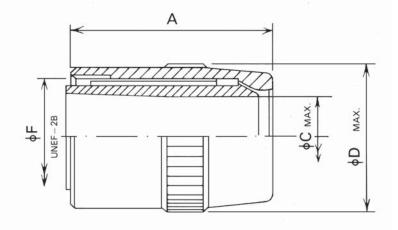


Shell Size	F thread Ø	А	CØ	ВØ	D thread Ø
08	⁷ / ₁₆ x 28	23.75	8.36	14.99	1/2 x 28 UNEF
10	⁹ ∕₁₅ x 24	23.75	11.35	18.29	5/8 x 24 UNEF
12	¹¹ / ₁₆ x 24	23.75	14.53	21.59	³ / ₄ x 20 UNEF
14	¹³ / ₁₆ x 20	23.75	17.42	24.89	⁷ / ₈ x 20 UNEF
16	¹⁵ / ₁₆ x 20	23.75	20.60	27.84	1 x 20 UNEF
18	1 ¹ / ₁₆ x 18	23.75	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.

AB05-0055 sealing gland (no grommet necessary)

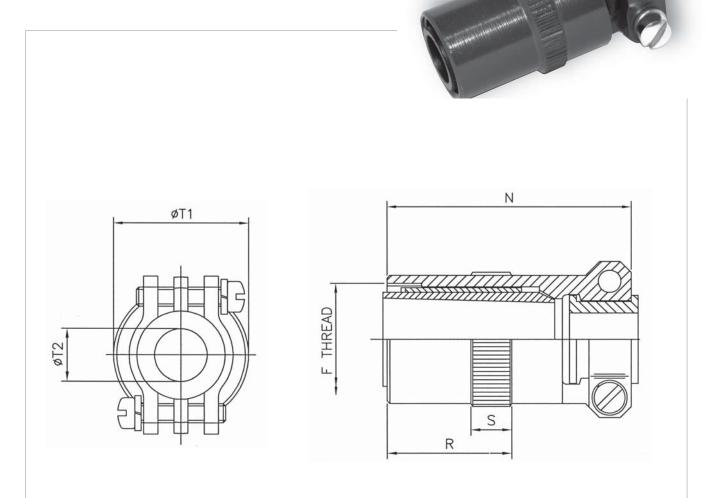




Shell Size	F thread Ø	A	C Ø max.	D Ø max.
08	⁷ / ₁₆ x 28	26.80	5.84	14.22
10	⁹ / ₁₆ x 24	26.80	7.92	17.37
12	¹¹ / ₁₆ x 24	29.33	11.23	20.57
14	¹³ / ₁₆ x 20	33.02	13.69	23.75
16	¹⁵ / ₁₆ x 20	38.71	15.60	26.92
18	/9KL11/16 x 18	43.79	17.07	30.10
20	1 ³ / ₁₆ x 18	48.90	18.90	33.27
22	1 ⁵ / ₁₆ x 18	54.23	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.

sealing gland with integral cable clar



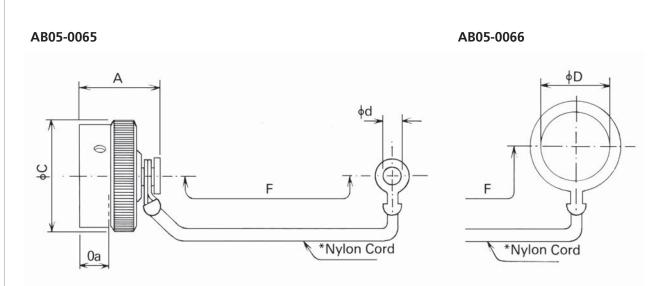
Shell Size	F thread UNEF 2B	N max.	R max.	S max.	T1 Ø max.	T2 Ø max.	Closing Ø of sealing gland
08	⁷ / ₁₆ x 28 UNEF	39.20	19.10	5.08	15.0	3.96	4.98
10	9/16 x 24 UNEF	39.20	19.10	5.08	18.30	4.93	5.06
12	¹¹ / ₁₆ x 24 UNEF	41.80	20.30	5.08	21.60	8.20	9.45
14	¹³ / ₁₆ x 20 UNEF	44.70	22.90	7.62	24.90	9.68	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	15/16 x 18 UNEF	71.90	27.40	8.48	37.60	19.20	15.24
24	17/16 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.

cover for square flange receptacle **AB05-0066**

cover for jam nut receptacle





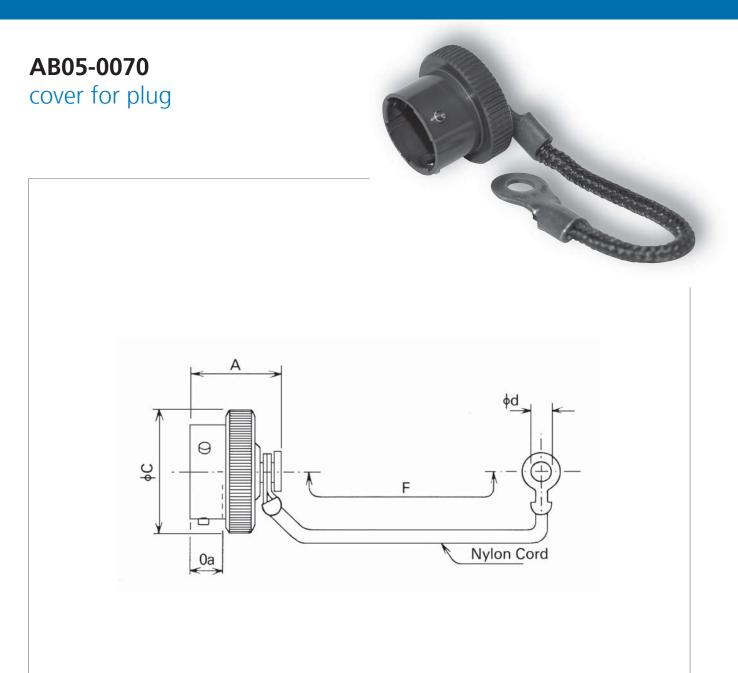
* Part number for cover with Ball Chain attachment is AB05 0067 or AB05 0068 respectively.

Shell Size	A max.	CØ 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	59 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.

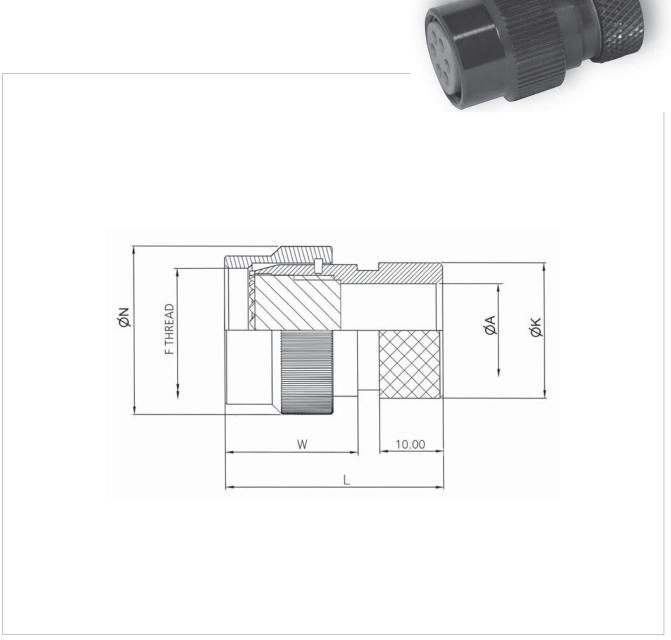


* Part number for cover with Ball Chain Attachment is AB05 0072.

Shell Size	A max.	CØ 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

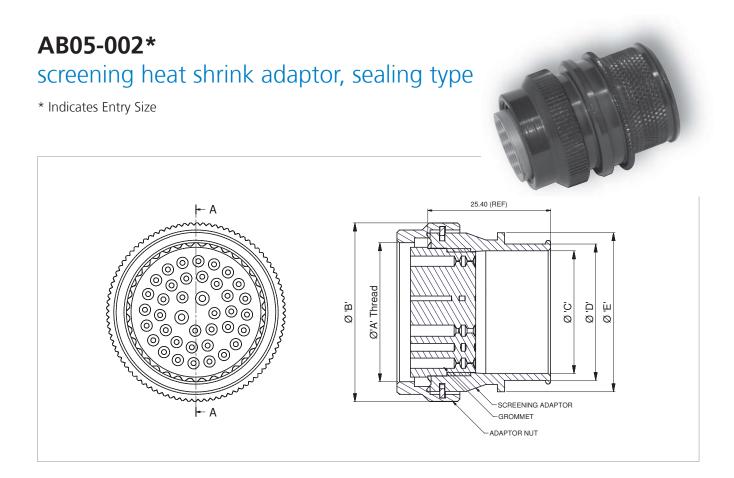
* Please consult factory For Accessory Part Number Explanation, see page 18. All measurements in mm.

screen and heat shrink adaptor



				State State				
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.



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

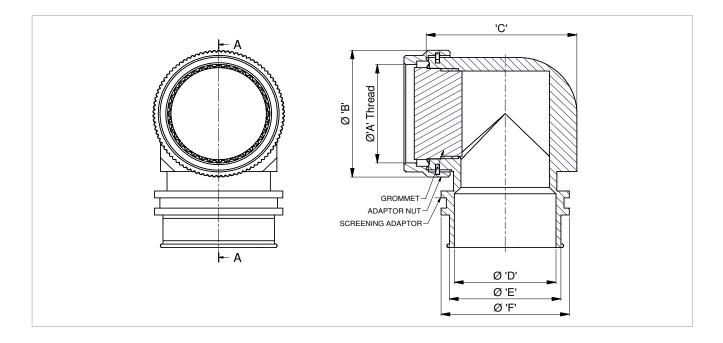
Entry Dimensions:

Entry Size	С	D Knurl	E max.	Entry Size	С	D Knurl	E max.
03	4.77	9.75	13.90	14	22.23	25.03	29.90
04	6.35	9.75	13.90	15	23.82	26.62	31.50
05	7.92	10.72	15.50	16	25.40	28.20	33.10
06	9.52	12.32	17.20	17	27.00	29.80	34.70
07	11.10	13.90	18.70	18	28.60	31.40	36.30
08	12.70	15.50	20.30	19	30.20	33.00	37.90
09	14.27	17.07	21.90	20	31.80	34.60	39.50
10	15.88	18.68	23.50	21	33.38	36.18	41.10
11	17.47	20.27	25.10	22	35.00	37.80	42.70
12	19.05	21.85	26.70	23	36.58	39.38	44.30
13	20.62	23.42	28.30	24	38.10	40.90	45.90

For Accessory Part Number Explanation, see page 18.

AB05-003* screening heat shrink adaptor 90° outlet, sealing type

* Indicates Entry Size



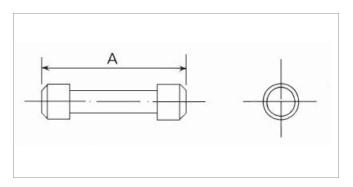
Shell Size	A thread UNEF 2B	B max.	Entry Range
08	7/16 - 28	22.0	03 - 07
10	⁹ / ₁₆ - 24	22.0	03 - 10
12	¹¹ / ₁₆ - 24	26.2	03 - 16
14	¹³ / ₁₆ - 20	29.20	03 - 18
16	¹⁵ / ₁₆ - 20	32.20	03 - 20
18	1 ¹ / ₁₆ - 18	35.20	03 - 22
20	1³/ ₁₆ - 18	39.20	03 - 24
22	15/16 - 18	42.20	03 - 24
24	17/16 - 18	48.20	03 - 24

Entry Dimensions:

Entry Size	С	D Knurl	E max.	Entry Size	С	D Knurl	E max.
03	4.77	9.75	13.90	14	22.23	25.03	29.90
04	6.35	9.75	13.90	15	23.82	26.62	31.50
05	7.92	10.72	15.50	16	25.40	28.20	33.10
06	9.52	12.32	17.20	17	27.00	29.80	34.70
07	11.10	13.90	18.70	18	28.60	31.40	36.30
08	12.70	15.50	20.30	19	30.20	33.00	37.90
09	14.27	59 17.07	21.90	20	31.80	34.60	39.50
10	15.88	18.68	23.50	21	33.38	36.18	41.10
11	17.47	20.27	25.10	22	35.00	37.80	42.70
12	19.05	21.85	26.70	23	36.58	39.38	44.30
13	20.62	23.42	28.30	24	38.10	40.90	45.90

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

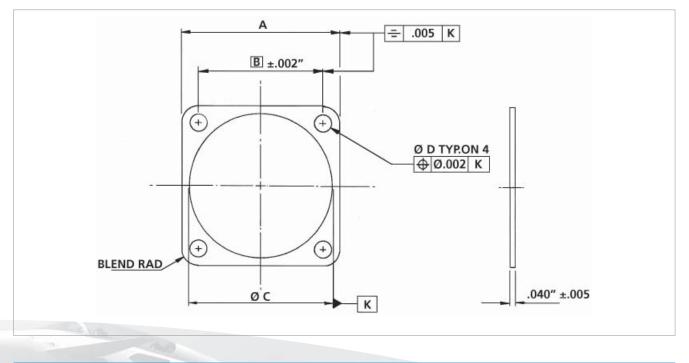
AB06-size-240-000-AC filler plug



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

AB05-size-382-000-AC

panel gasket

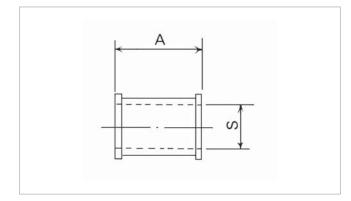


Shell Size	A	В	Ø C +0,15 - 0	DØ
08	20.98	15.08	11.12	3.42
10	25.40	18.26	14.30	3.42
12	27.78	20.62	17.47	3.42
14	30.17	23.01	20.65	3.42
16	32.53	24.61	23.82	3.42
18	34.92	26.97	27.00	3.42
20	38.10	29.36	30.17	3.42
22	41.27	31.75	33.35	3.42
24	44.45	34.92	36.52	4.14

All measurements in mm.

AB05-size-430-000-AC

cable grommet

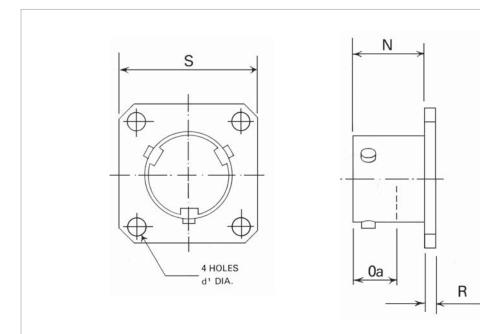


Shell Size	A max.	S Ø max.	MASS max. G
08	12.70	4.10	0.70
10	12.70	5.10	0.90
12	12.70	8.40	1.30
14	12.70	9.90	2.20
16	12.70	13.0	1.90
18	14.50	16.30	2.70
20	14.50	16.30	2.70
22	14.50	19.30	4.60
24	14.50	20.60	4.60

A VILL

AB05-2300

square flange stowage receptacle



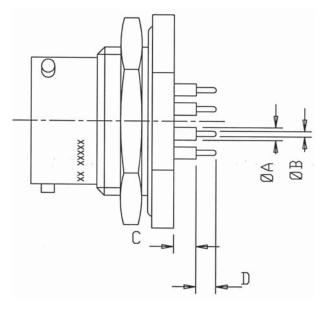
-	
0	-

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

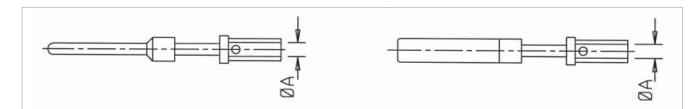




Modification Code	Shell Size	ØA		Ø B		с	D ±0.10
03	08 - 18	1.50	±0.05	0.74	±0.03	3.05/1.52	2.00
03	20 - 22	1.50	±0.05	0.74	±0.03	2.84/1.32	2.00
03	24	1.50	±0.05	0.74	±0.03	1.93/0.48	2.00
04	08 - 18	1.50	±0.05	0.74	±0.03	3.05/1.52	5.00
04	20 - 22	1.50	±0.05	0.74	±0.03	2.84/1.32	5.00
04	24	1.50	±0.05	0.74	±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

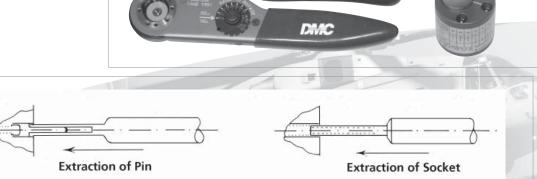


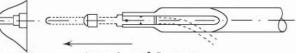
Contact Size AWG AB Part Number		Pin / Socket	ΑØ	Conductor Sizes AWG	Shell Sizes
20	05-20-110-0-00-GM	Pin	0.84	28, 26, 24, 22	08 - 18
20	05-20-111-0-00-GM	Pin	0.84	28, 26, 24, 22	20 - 24
16	05-16-112-0-00-GM	Pin	1.75	16	08 - 18
20	05-20-112-0-00-GM	Pin	1.24	20	08 - 18
20	05-20-113-0-00-GM	Pin	1.24	20	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		

Crimp Tool & Positioner







Insertion of Contact

Assembly

AB05 - 0029

assembly procedure for straight outlets

AB05-0029 Internally Screened Cable

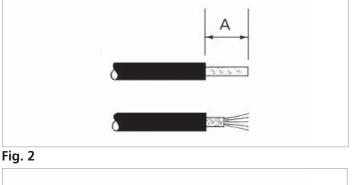
Туре С

 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).
- 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).





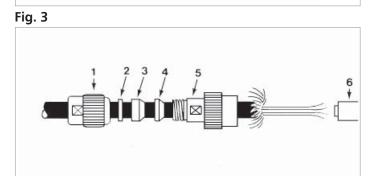
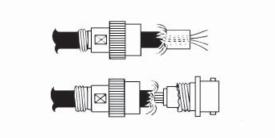
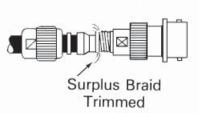


Fig. 4

Fig. 1



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. 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)

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

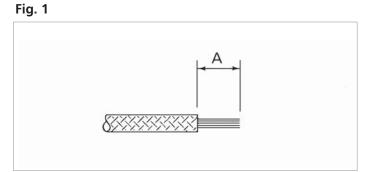


Fig. 2

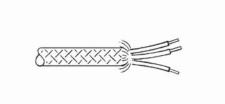
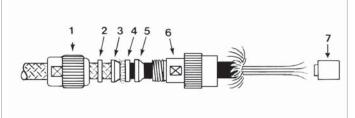
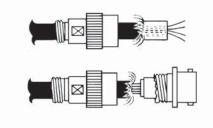


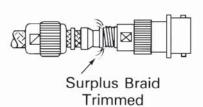
Fig. 3







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. 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 -55°C to 125° C.

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 Technical Information Part No. Explanation	36-41 37 37
Receptacles;	16
AB06 3100 10 76 SF 152: receptacle, panel mounting with PC printed circuit terminals AB06 3100 10 76 SF 221: receptacle, panel cut out with solder contacts	38 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	10, measured in sixteenths of an inch
Shell size:	Three pin bayonet
Coupling:	Solder bucket, pin tails for P.C.B. applications.
Contact Termination:	Barrier, or barrier and panel seal
Sealing:	Dynamic peripheral seal between mating shells
Materials Shell: Insulator: Contacts:	Aluminium Alloy Thermoplastic Brass
Plating Finishes Shell: Contacts:	Zinc cobalt olive drab Gold over nickel
Technical Data	 -55°C to +125°C a) Shock severity: 981 m/s² (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/s² (50g_n) d) Humidity severity: 44 millibars e) Bump severity: 390 m/s² (40g_n), 4000 ± 10 bumps f) Mechanical endurance: 500 matings g) High temperature:
Temperature Range:	Long term: 1000 hours at 85°C
Environmental Ratings:	Short term: 250 hours at 125°C

Orientation:

KL 59

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.

10



AB05 10-76 part number explanation

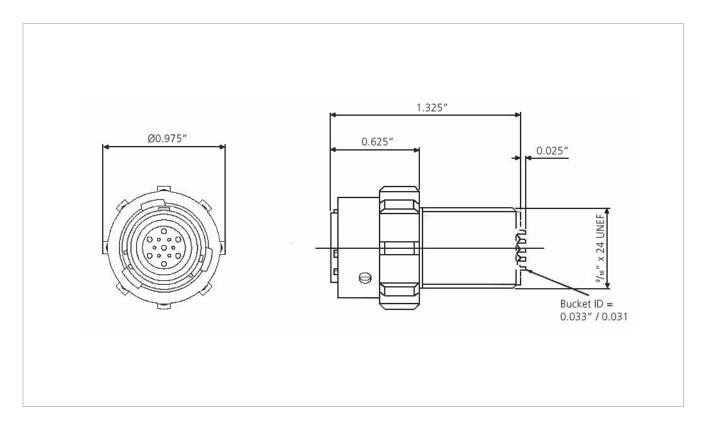
To illustrate the ordering procedure, part number AB0557001076PF217 is shown in the table below:

Product Range:	AB**	57	00	10	76	Р	F	217
Shell Style:	AB05 57 : Plug with coarse ribbed coupling nut and extended accessory the	nread						
Shell Style.	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 turner	P : Pin							
Contact type:	S : Socket							
Orientation:	N, B, C, E & F (Insert orientation available only for replacement of MIL-C-20	6482 t <u>y</u>	ypes. F	lease co	onsult f	actory)		
	152 : Round flange shell. Rounded jam nut.							
Modification:	217 : Contact bucket. Heights all the same.							
Mouncation.	220 : Contact bucket. At different heights.							
	221 : Round flange shell hex.							



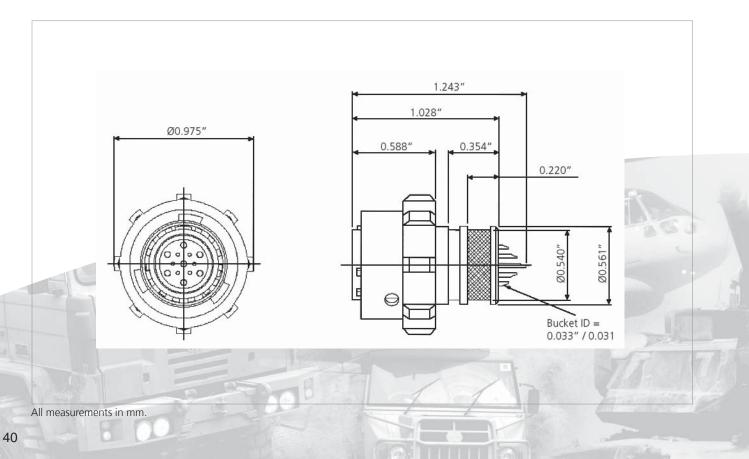
AB05-5700-10-76-PF-217

plug, extended rear shell with solder contacts



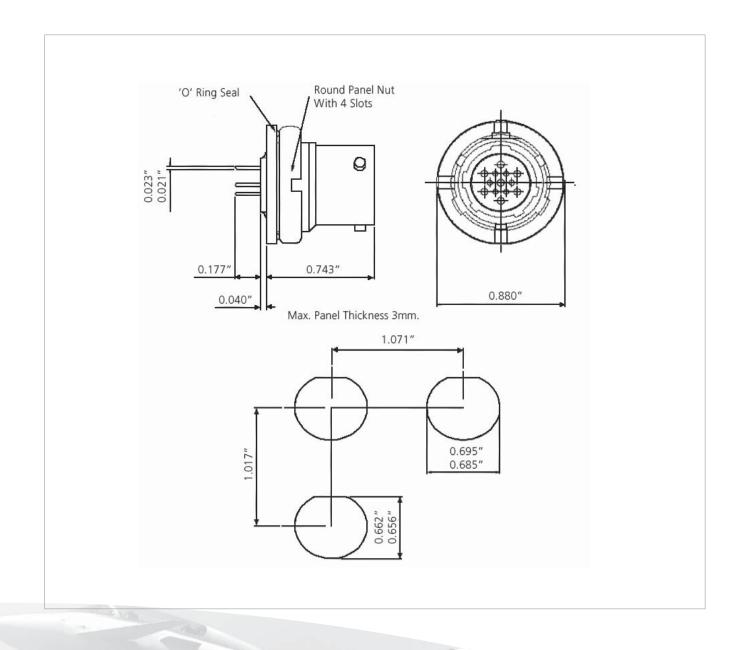
AB05-8500-10-76-PC-220

plug, with over moulding back shell and solder contacts



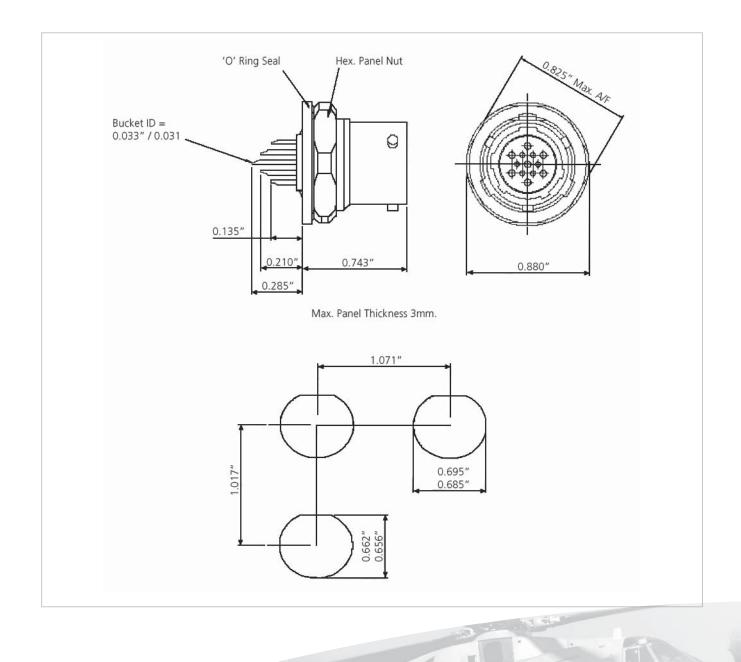
AB06-3100-10-76-SF-152

receptacle, panel mounting with PC printed circuit terminals



AB06-3100-10-76-SF-221

receptacle, panel cut out detail with solder contacts



9 KL 55

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: Coupling: Contact Types:

Sealing:

Polarization: Contact Arrangements:

Materials

Shell: Insulator: Contacts: Accessories Hardware:

Plating Finishes

Shell: Contacts: Accessory Hardware:

Technical Data

Temperature Range: Voltage Rating:

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

Aluminium alloy Polychloroprene Copper alloy Aluminium alloy

Cadmium/cadmium free plated, choice of passivation colour Gold plated Cadmium/cadmium free plated, choice of passivation colour

-55°C to +125°C

 a) Working Voltage - d.c. or a.c. peak: Size 20 Contacts: 700V (Voltage rating 1) Size 16 Contacts: 1200V (Voltage rating 2)
 b) Proof Voltage - d.c. or a.c. peak:

Size 20 Contacts: 700V (Voltage rating 1) Size 16 Contacts: 3000V (Voltage rating 2) The establishment of electrical safety factors when the connector is used at

other than the working voltage is the responsibility of the user. Max. current between 7.5 and 13 amps per contact

Electrical Data:



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

Contact Arrangement Service Ratings

	Sea Level 1013 mbar		8,500 m (27800 ft.) 300 mbar		(66,0	00 m 00 ft) nbar
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

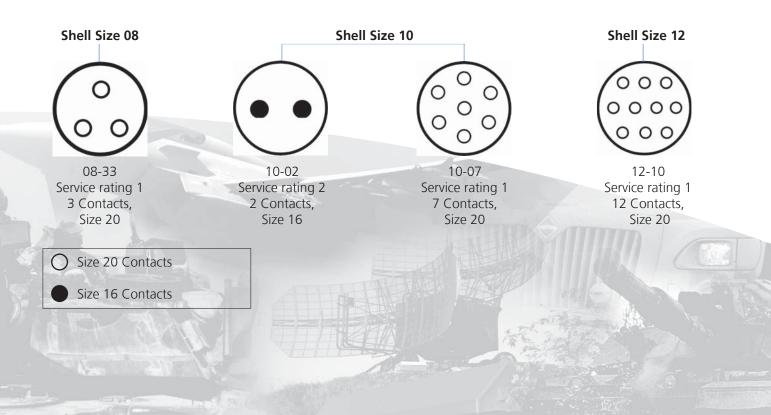
Current Service Ratings	Contact Size	Max. Current	* Rated Current	*Ma per c
	20 AWG	7.5A	5A	tacts
	16 AWG	13A	10A	neou temp
				temp

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

Contact Arrangement Alternative Orientations	Contact Arrangement	Available Orientations
Alternative 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

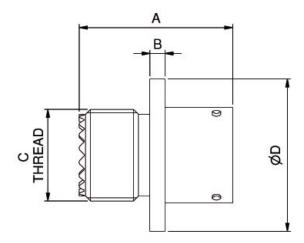
contact arrangements





coupler connector with accessory thread



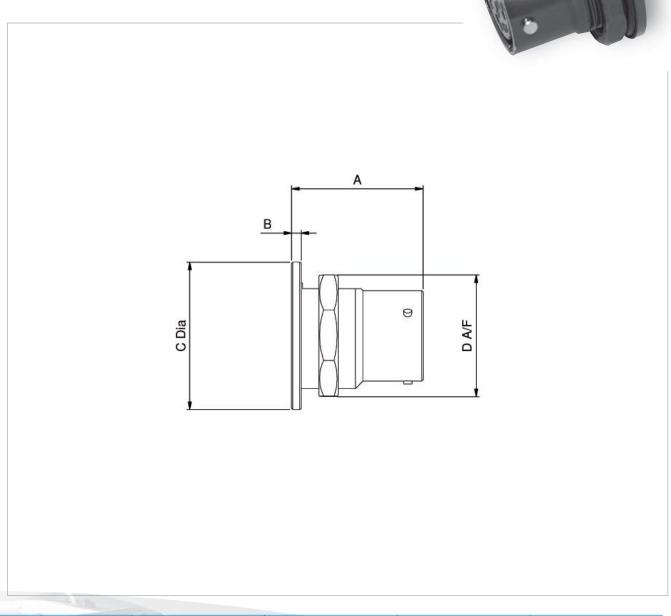


The second s					
Shell Size	А	В	C thread UNEF 2A	DØ	
10	22.96	2.49	⁹ / ₁₆ - 24	24.00	
12	22.96	2.49	11/16 - 24	26.42	

Thread measurement is imperial, all other measurements in mm.

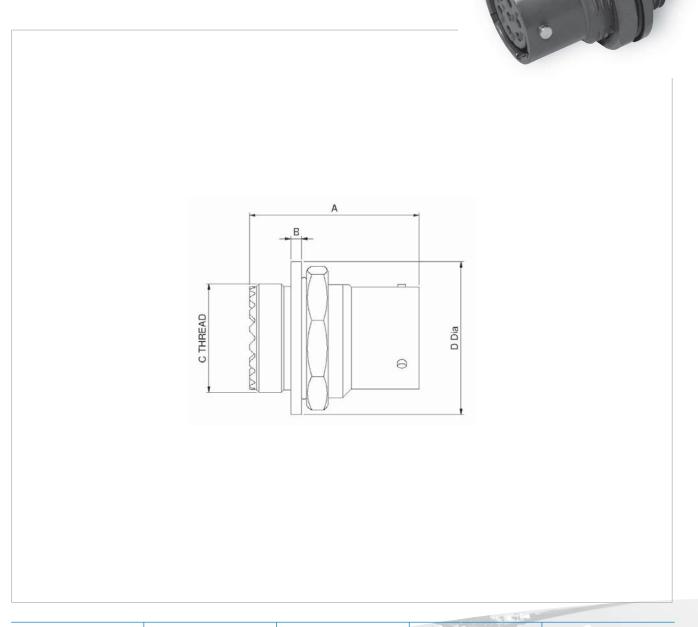
KL 55

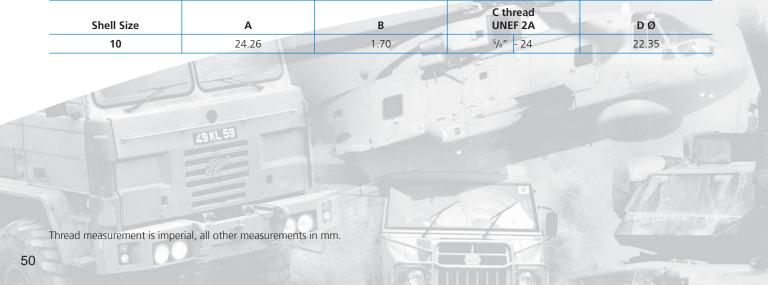
fixed connector single hole mounting



Shell Size	A	В	CØ	D A/F
10	19.00	1.70	22.35	20.96
12	21.11	2.97	28.70	27.10

fixed connector single hole mounting with accessory thread



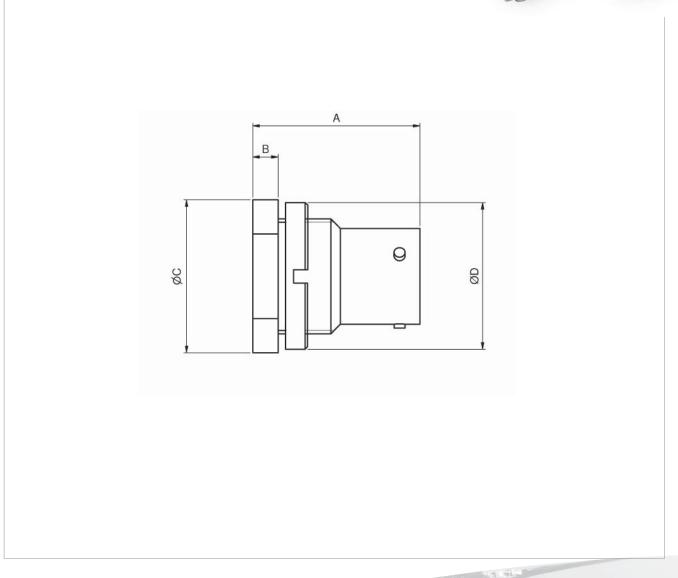


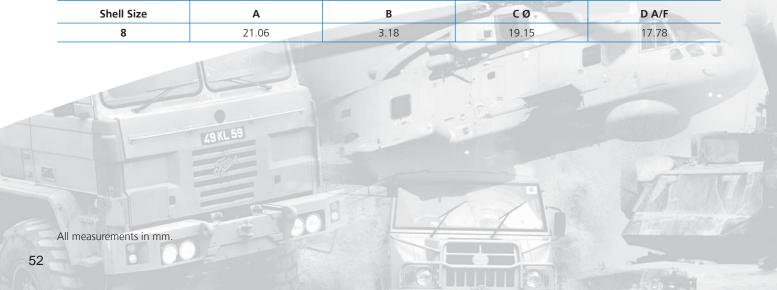


Shell Size	A	В	CØ	D A/F
10	18.92	0.66	22.35	20.96
	198- 25			
			and the	
			ANE AND	
measurements in mm.			- Parter	

fixed connector single hole mounting (modified flange)

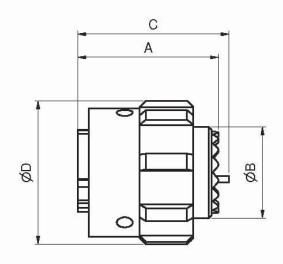






free connector with coarse ribbed coupling nut





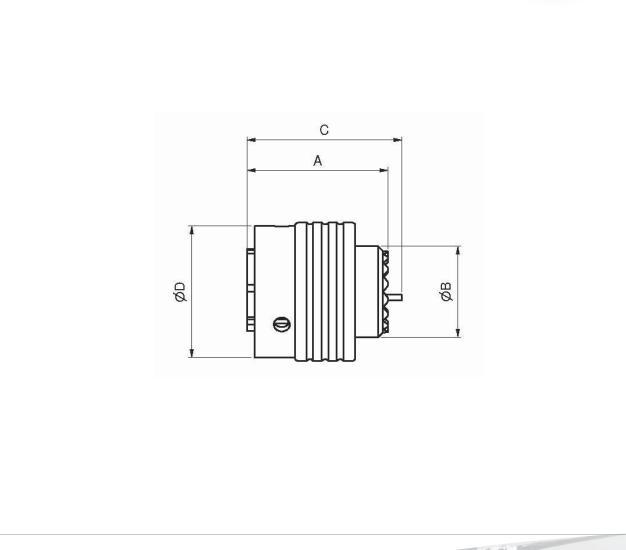
Shell Size		B thread Ø	C	DØ
Shell Size	A	B thread Ø	L L	00
8	21.92	⁷ / ₁₆ x 28 UNEF	23.27	21.94
10	21.92	9/16 x 24 UNEF	23.27	22.35
12	21.92	¹¹ / ₁₆ x 24 UNEF	23.27	28.58

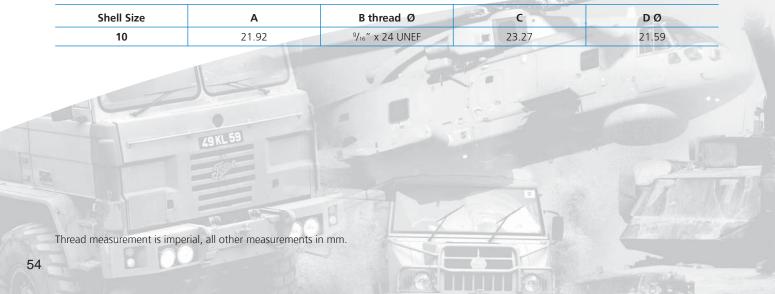
Thread measurement is imperial, all other measurements in mm.



free connector 'snatch' release coupling nut







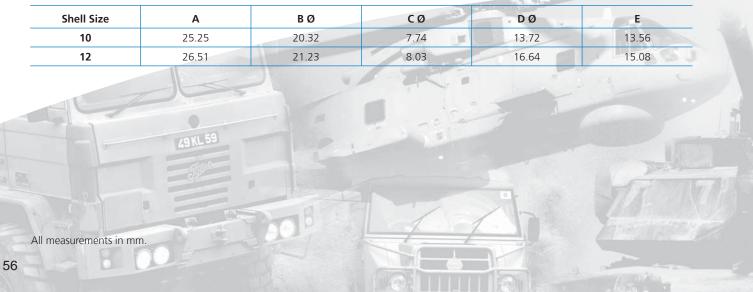
Accessories can also be ordered separately.

To illustrate the ordering procedure, part number AB06002010070021 is shown in the table below:

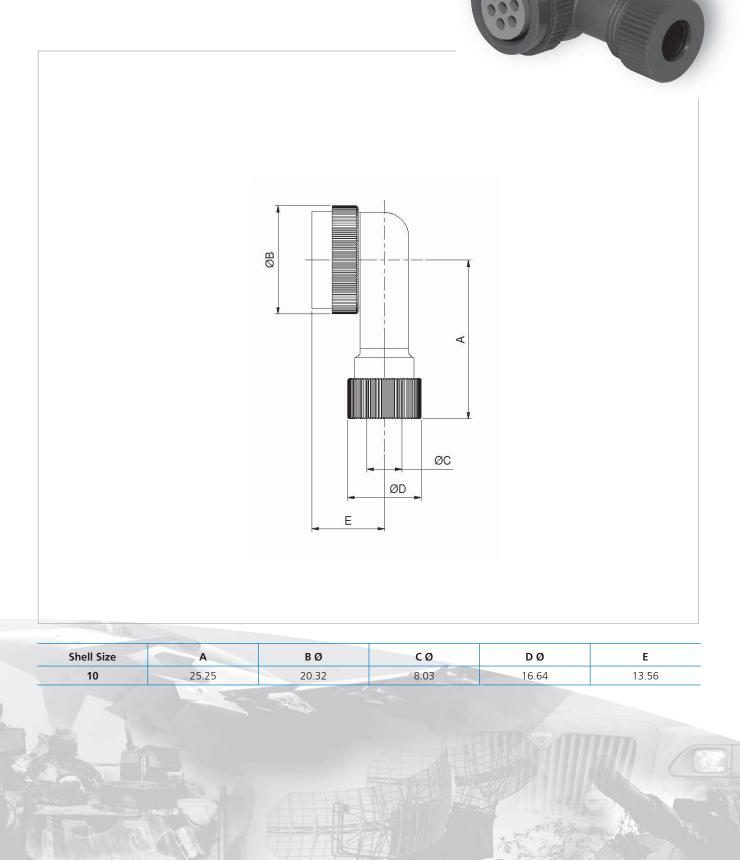
Product Range:		AB06	00	20	10	07	00	21
Shell Style:	00 No connector. Accessory only.							
Accessory Class	 10 : 90° angled outlet 11 : 90° angled outlet (non standard, #10 accepts #12 cable) 20 : Straight outlet, large bore short boot 21 : Straight outlet, small bore short boot 22 : Straight outlet,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







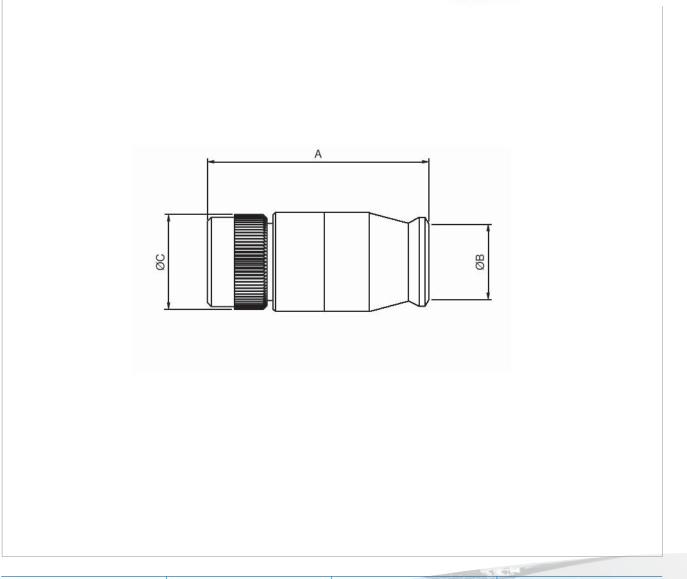
AB06-0011 90° angled outlet (non-standard, #10 acccepts #12 cable)





straight outlet, large bore short boot

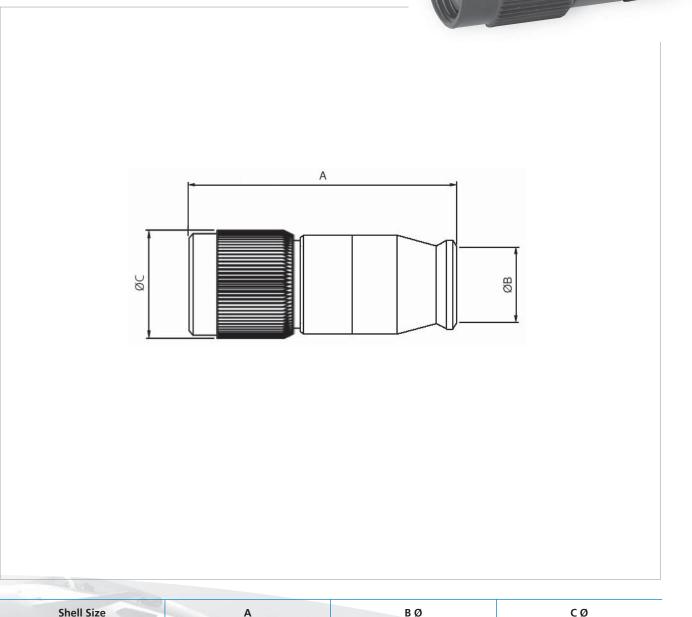




Shell Size	A	ΒØ	CØ
8	34.13	7.26	15.88
10	42.25	7.26	17.70
12	42.44	7.26	21.46
	22.		
	KL 59		
	A REAL		STA STA
	Con Black		
All measurements in mm.	Charles and the state		
58			
30		Celumia	The Providence

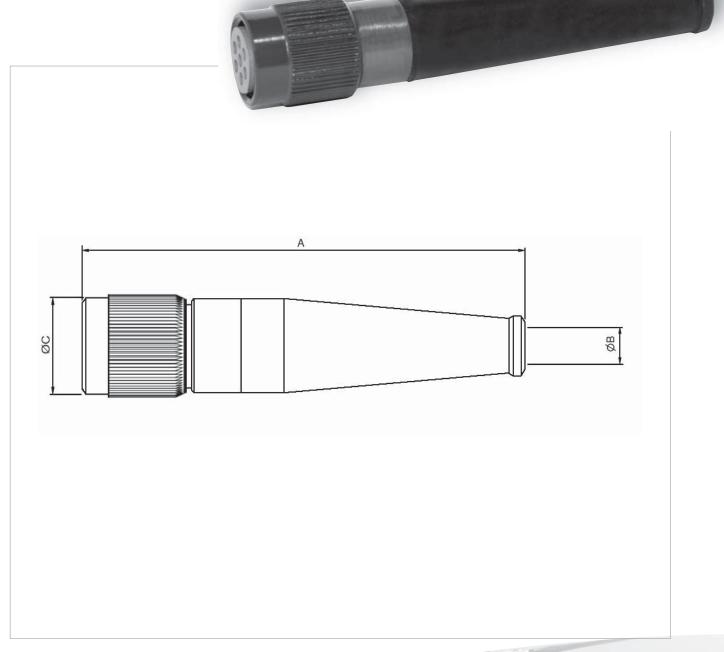
X302 HTF

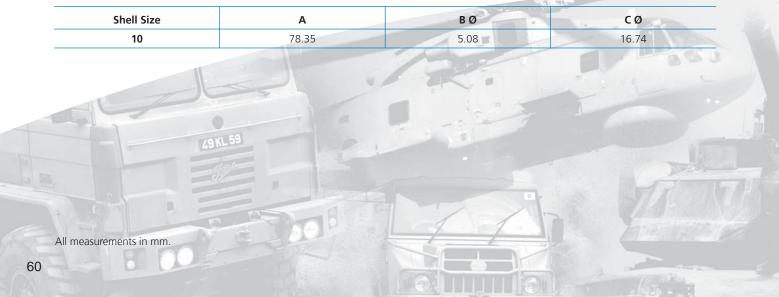
straight outlet, small bore short boot



Shell Size	А	BØ	CØ
8	34.13	5.08	15.88
10	42.25	5.08	17.70
12	42.44	5.08	21.46

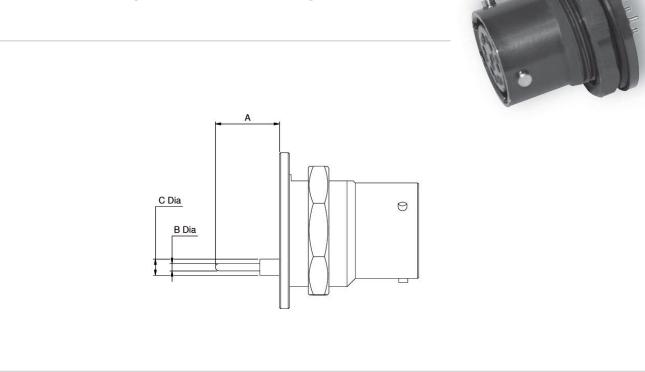
straight outlet, small bore long boot





AB06-Printed Circuit Tail Detail

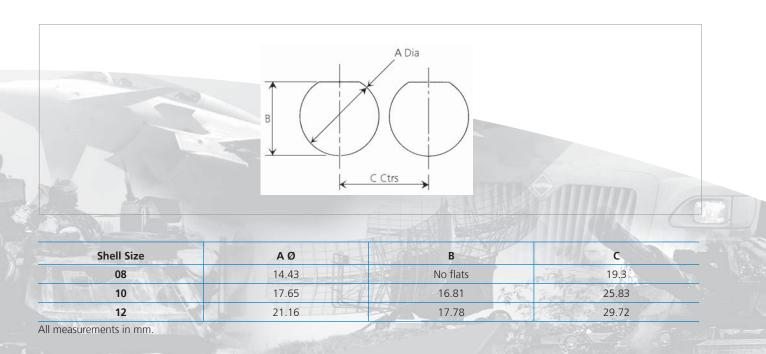
receptacle, single hole mounting



	P.C.B Contact			P.C.B. Contact (non-standard)		
Shell Size	А	ВØ	СØ	А	ВØ	СØ
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



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.

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