

CIRCULAR CONNECTORS



UK-AN

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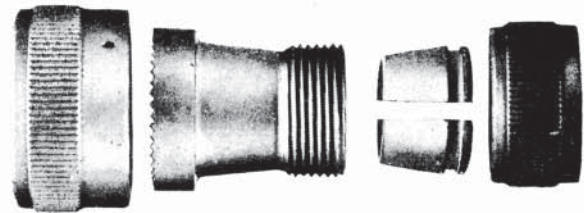
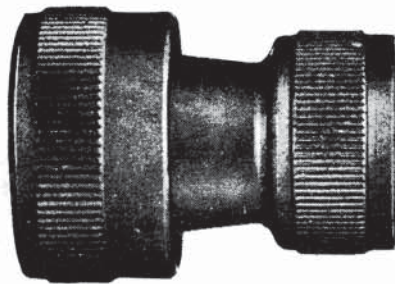
STEEL AND FIREPROOF RANGE

For Outlet Accessory Sets

Split Cone Sizes

Bell Clamps and Elbow Clamps may be ordered together with any fixed or free, steel or fireproof connector as shown on pages 38 to 44. They may be alternatively ordered as separate items as indicated on pages 49 and 50. These types of outlet fittings require no associated accessories. Straight and Right-Angle Outlet accessory sets which may be ordered together with the basic connectors (pages 38 to

44), or as separate items (pages 47 and 48) each include a pair of split cones (three on those marked for use with 3 way tersil 16) obtainable in various bore sizes to suit the ranges of cables in common use. Minimum and maximum sizes of cables that each pair of split cones will accept are shown in the following table. A stage-by-stage procedure for wiring is given on pages 30 to 33.



Shell Size	MINIMUM/MAXIMUM CABLE SIZE (IN INCHES)																
	*/001	-/002	-/003	-/004	-/005	-/006	-/007	-/008	-/009	-/010	-/011	-/012	-/013	-/014	-/015	-/016	-/017
10s	0.110/ 0.150	0.215/ 0.255	0.240/ 0.280	2 way † Tersil 16	3 way † Tersil 16												
12s	0.110/ 0.150	0.215/ 0.255	0.240/ 0.280	2 way † Tersil 16	3 way † Tersil 16						† Or any cable of similar dimensions.						
14s	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355												
16	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400											
18	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520								
20	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620						
22	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620	0.630/ 0.670	0.700/ 0.740				
24	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620	0.630/ 0.670	0.700/ 0.740	0.830/ 0.870			
28	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620	0.630/ 0.670	0.720/ 0.760	0.830/ 0.870	0.880/ 0.920	0.980/ 1.020	
32	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620	0.630/ 0.670	0.720/ 0.760	0.830/ 0.870	0.880/ 0.920	0.980/ 1.020	1.105/ 1.145
36	0.110/ 0.150	0.215/ 0.255	0.250/ 0.290	0.280/ 0.320	0.315/ 0.355	0.360/ 0.400	0.410/ 0.450	0.440/ 0.480	0.480/ 0.520	0.530/ 0.570	0.580/ 0.620	0.630/ 0.670	0.720/ 0.760	0.830/ 0.870	0.880/ 0.920	0.980/ 1.020	1.105/ 1.145

* Dimension and part numbers of the component parts are shown on pages 47 and 48.

The use of an outlet accessory set is desirable when a near 90° bend in the cable is made close to the rear of a connector. All dimensions shown are in inches. A machined recess is provided in the mouth of each outlet

to accept the fireproof baffle washer which is an essential part of all fireproof assemblies. Wire-locking holes are provided on all nuts.

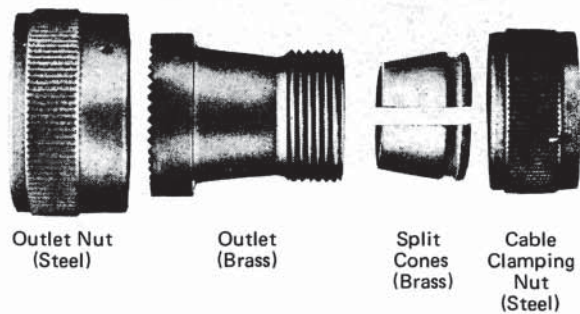
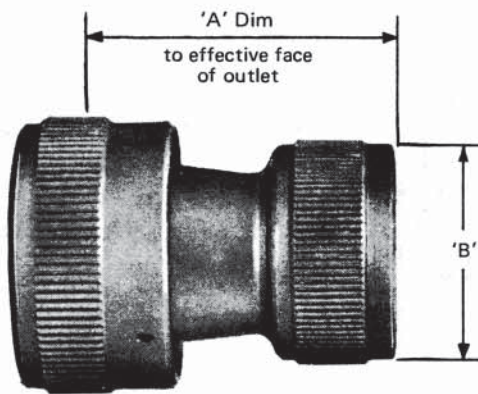
STEEL AND FIREPROOF RANGE

Accessory Set

Straight Outlet

Each outlet accessory set consists of the items illustrated below. The pair of split cones is obtainable in various bore sizes to suit ranges of cables in common use and the required size should be specified by adding the

relevant number from page 46 to complete the accessory set part number. Example: 508/1/00054/008 suits shell sizes 18. Cable size 0.440"/0.480" dia.



Accessory Set Part Number	Shell Size	Cable Clamping Nut 'B'	Outlet Length 'A'	COMPONENT PARTS OF OUTLET ACCESSORY SET				Approx. Weight (oz.)
				Outlet Nut	Straight Outlet	Split Cones 2 per outlet	Cable Clamping Nut	
508/1/00050/*	10s	0.49"	0.85"	508/2/00037/021	508/2/00063/021	508/2/15651/*	508/2/00076/021	1.5
508/1/00051/*	12s	0.56"	1.00"	508/2/00038/021	508/2/00064/021	508/2/15652/*	508/2/00077/021	2.0
508/1/00052/*	14s	0.66"	1.00"	508/2/00039/021	508/2/00065/021	508/2/15653/*	508/2/00078/021	2.4
508/1/00053/*	16	0.78"	1.12"	508/2/00040/021	508/2/00066/021	508/2/15654/*	508/2/00079/021	2.6
508/1/00054/*	18	0.91"	1.30"	508/2/00041/021	508/2/00067/021	508/2/15655/*	508/2/00080/021	4.3
508/1/00055/*	20	1.03"	1.50"	508/2/00042/021	508/2/00068/021	508/2/15656/*	508/2/00081/021	5.2
508/1/00056/*	22	1.16"	1.50"	508/2/00043/021	508/2/00069/021	508/2/15657/*	508/2/00082/021	6.3
508/1/00057/*	24	1.28"	1.50"	508/2/00044/021	508/2/00070/021	508/2/15658/*	508/2/00083/021	7.2
508/1/00059/*	28	1.53"	1.50"	508/2/00046/021	508/2/00072/021	508/2/15659/*	508/2/00084/021	7.4
508/1/00060/*	32	1.66"	1.50"	508/2/00047/021	508/2/00073/021	508/2/15660/*	508/2/00085/021	9.5
508/1/00061/*	36	1.50"	1.50"	508/2/00048/021	508/2/00074/021	508/2/15661/*	508/2/00086/021	10.9

* Add relevant cable size ex page 46 as a suffix. Wire-locking holes are provided on all nuts.

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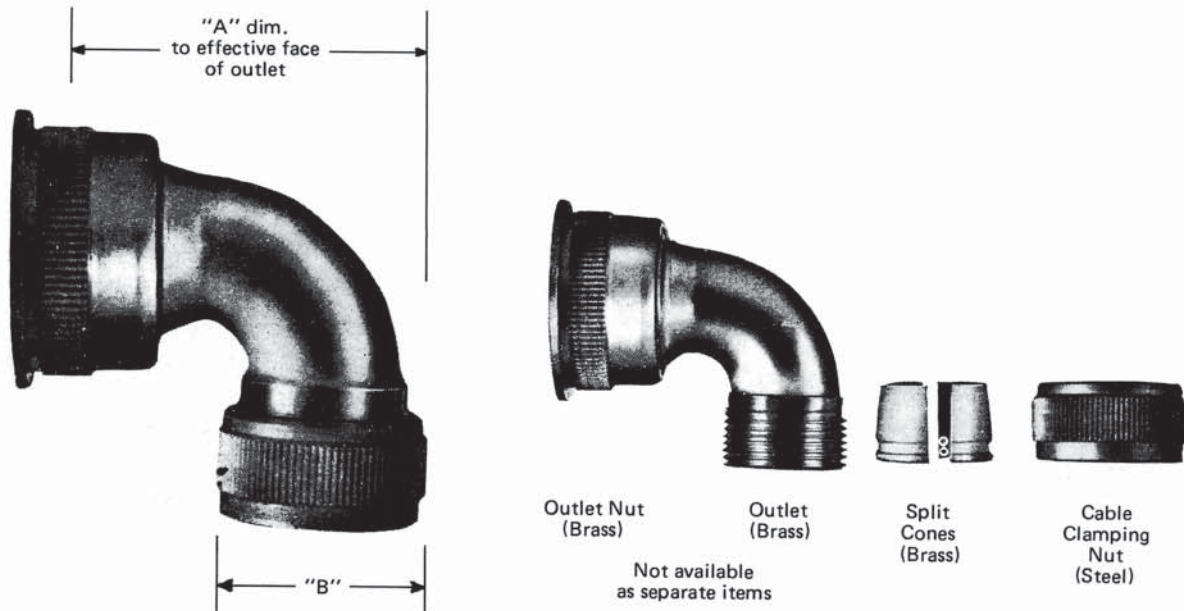
STEEL AND FIREPROOF RANGE

Accessory Set

Right-Angle Outlet

Each outlet accessory set consists of the items illustrated below. The pair of split cones are obtainable in various bore sizes to suit ranges of cables in common use and the required size should be specified by adding the relevant

number from page 46 to complete the accessory set part number. Example: 508/1/00785/015 suits shell size 32. Cable size 0.880"/0.920" dia.



Accessory Set Part Number	Shell Size	Cable Clamping Nut 'B'	Outlet Length 'A'	COMPONENT PARTS OF OUTLET ACCESSORY SET			Approx. Weight (oz.)
				Right-Angle Outlet and Nut Assembly	Split Cones 2 per outlet	Cable-Clamping Nut	
508/1/00776/*	10s	0.49"	0.86"	508/1/00765/021	508/2/15651/*	508/2/00076/021	3.3
508/1/00777/*	12s	0.56"	0.96"	508/1/00766/021	508/2/15652/*	508/2/00077/021	4.2
508/1/00778/*	14s	0.66"	1.08"	508/1/00767/021	508/2/15653/*	508/2/00078/021	5.1
508/1/00779/*	16	0.78"	1.21"	508/1/00768/021	508/2/15654/*	508/2/00079/021	5.6
508/1/00780/*	18	0.91"	1.41"	508/1/00769/021	508/2/15655/*	508/2/00080/021	7.5
508/1/00781/*	20	1.03"	1.60"	508/1/00770/021	508/2/15656/*	508/2/00081/021	8.9
508/1/00782/*	22	1.16"	1.80"	508/1/00771/021	508/2/15657/*	508/2/00082/021	10.5
508/1/00783/*	24	1.28"	2.12"	508/1/00772/021	508/2/15658/*	508/2/00083/021	12.3
508/1/00784/*	28	1.53"	2.41"	508/1/00773/021	508/2/15659/*	508/2/00084/021	15.5
508/1/00785/*	32	1.66"	2.54"	508/1/00774/021	508/2/15660/*	508/2/00085/021	18.0
508/1/00786/*	36	1.91"	2.92"	508/1/00775/021	508/2/15661/*	508/2/00086/021	20.8

* Add relevant cable size ex page 46 as a suffix. Wire-locking holes are provided on all nuts.

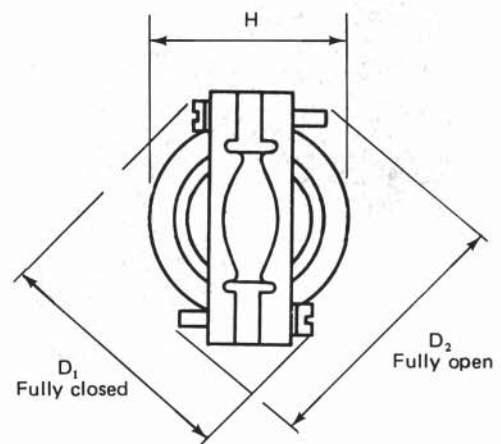
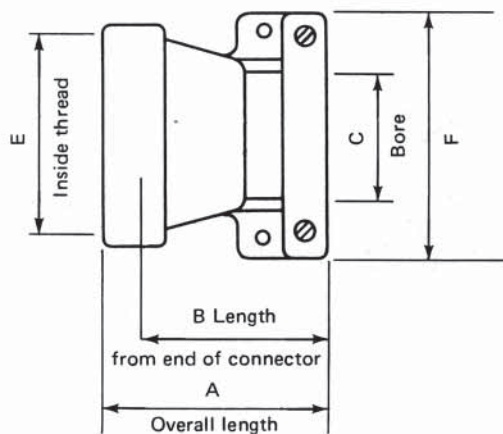
STEEL AND FIREPROOF RANGE

Bell Clamps

Brass cable fitting type 600 has a cadmium plate olive drab passivate finish. The short lightweight design will fit at the rear of any basic steel UK-AN connector.

Fluorinated silicone rubber sleeves are supplied with each bell clamp to assist in the clamping of single-core or multi-core cables.

Type 700 is of identical manufacture and is intended for fireproof types. It includes a cup washer to retain the fireproof baffle washer contained in fireproof connector assemblies.



Bell Clamp Part Number	Shell Size	A	B*	C Max.	C Min.	D ₁	D ₂	E Unified Class 1B Dia. x T.P.I.	F	H Dia.	Approx. Weight (oz.)
508/1/05277/021	10s	1.32	0.82	0.290	0.126	1.00	1.20	0.500 x 24	0.77	0.63	1.2
508/1/05278/021	12s	1.38	0.88	0.310	0.126	1.06	1.22	0.625 x 24	0.87	0.75	1.4
508/1/05279/021	14s	1.38	0.88	0.382	0.126	1.20	1.40	0.750 x 20	1.00	0.88	1.6
508/1/05280/021	16	1.51	1.01	0.445	0.126	1.30	1.50	0.875 x 20	1.12	1.00	1.8
508/1/05281/021	18	1.65	1.15	0.555	0.222	1.45	1.75	1.000 x 20	1.25	1.13	2.5
508/1/05282/021	20	1.65	1.15	0.685	0.222	1.63	1.90	1.125 x 18	1.37	1.25	2.8
508/1/05283/021	22	1.70	1.20	0.805	0.222	1.82	2.05	1.250 x 18	1.50	1.38	3.1
508/1/05284/021	24	1.70	1.20	0.925	0.322	1.82	2.12	1.375 x 18	1.62	1.50	3.5
508/1/05285/021	28	1.70	1.20	1.175	0.422	2.36	2.54	1.625 x 18	1.87	1.75	4.3
508/1/05286/021	32	1.70	1.20	1.305	0.422	2.30	2.62	1.750 x 18	2.00	1.88	4.7
508/1/05287/021	36	1.70	1.20	1.555	0.510	2.55	2.85	2.000 x 18	2.25	2.13	5.0

* Dimension 'B' increases by 0.20" when used with fireproof types.

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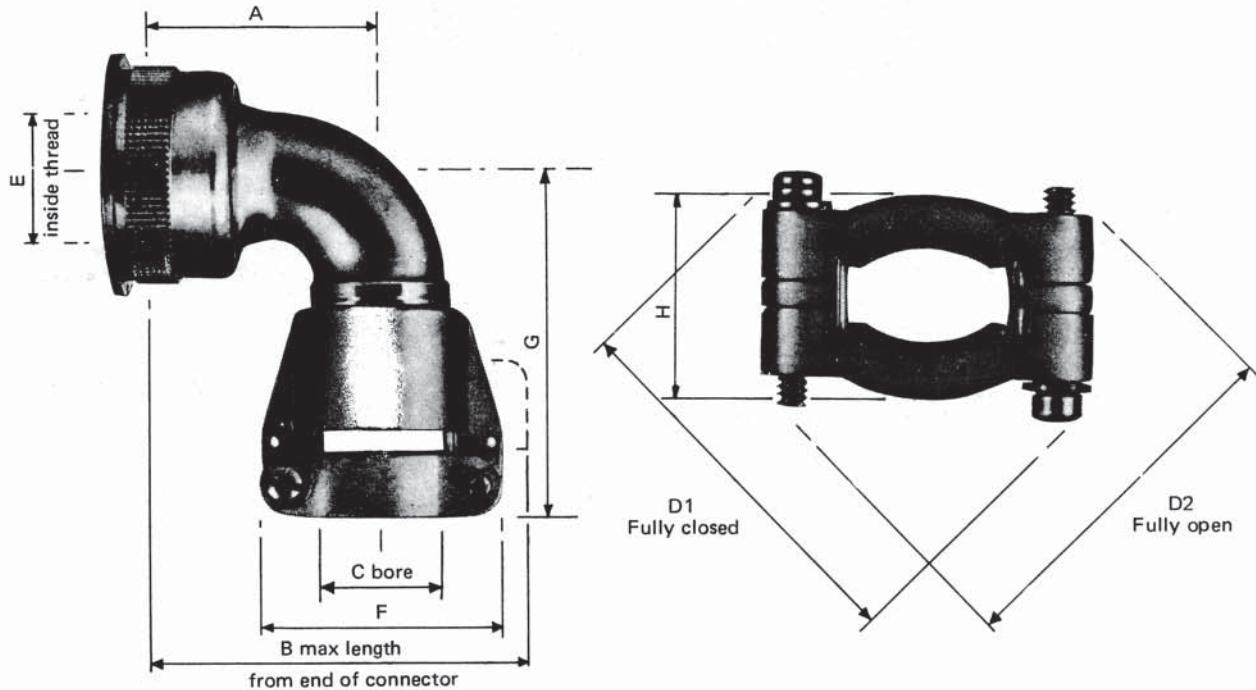
STEEL AND FIREPROOF RANGE

Elbow Clamps

Brass cable fitting type 600 has a cadmium plate olive drab passivate finish. The short lightweight design will fit at the rear of any basic steel UK-AN connector.

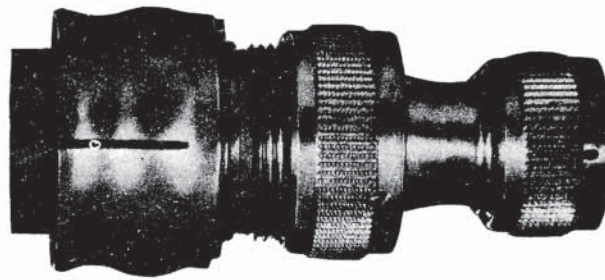
Fluorinated silicone rubber sleeves are supplied with each elbow clamp to assist in the clamping of single-core or multi-core cables.

Type 900 is of identical manufacture and is intended for fireproof types. It includes a cup washer to retain the fireproof baffle washer contained in fireproof connector assemblies.



Elbow Clamp Part Number	Shell	A	B	C Max.	C Min.	D ₁	D ₂	E Unified Class 1B Dia. x T.P.I.	F	G	H Dia.	Approx. Weight (oz.)
508/1/05288/021	10s	0.56	0.95	0.290	0.126	1.00	1.20	0.500 x 24	0.77	1.29	0.50	1.3
508/1/05289/021	12s	0.65	1.09	0.310	0.126	1.06	1.22	0.625 x 24	0.87	1.29	0.56	1.6
508/1/05290/021	14s	0.76	1.26	0.382	0.126	1.20	1.40	0.750 x 20	1.00	1.32	0.63	2.2
508/1/05291/021	16	0.83	1.39	0.445	0.126	1.30	1.50	0.875 x 20	1.12	1.39	0.75	2.4
508/1/05292/021	18	0.96	1.51	0.555	0.222	1.45	1.75	1.000 x 20	1.25	1.78	0.88	3.5
508/1/05293/021	20	1.09	1.78	0.685	0.222	1.63	1.90	1.125 x 18	1.37	1.88	1.00	3.7
508/1/05294/021	22	1.23	1.98	0.805	0.222	1.82	2.05	1.250 x 18	1.50	2.00	1.13	4.2
508/1/05295/021	24	1.49	2.30	0.925	0.322	1.82	2.12	1.375 x 18	1.62	2.23	1.25	4.9
508/1/05296/021	28	1.66	2.47	0.925	0.322	2.36	2.54	1.625 x 18	1.62	2.35	1.50	6.7
508/1/05297/021	32	1.72	2.72	1.305	0.422	2.30	2.62	1.750 x 18	2.00	2.41	1.63	6.8
508/1/05298/021	36	1.98	2.98	1.305	0.422	2.55	2.85	2.000 x 18	2.00	2.67	1.88	8.2

All dimensions in inches

**Quick-Release
UK-AN Connectors**

Aluminium or steel free units may now be obtained with an alternative tulip-shaped coupling nut. Basically similar to that of the MS3107 American connector, it allows the nut to expand and ride over the mating thread of the fixed unit. It is retained in position by its own flexure and can be demated in an instant by a sharp pull. If firmly anchored to the cable by the correct form of outlet, it may be allowed to demate itself when the stress on the cable becomes too great.

The following sizes are immediately available; other sizes can be supplied but protracted delivery may be unavoidable. Aluminium shell sizes: 16, 18, 22, 24, 32. Steel shell sizes: 14s, 18, 22, 28.

HOW TO ORDER

Use the normal UK-AN code number plus the suffix QR, e.g. UK-AN-9112-22-19P QR.

Information on Product Safety

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, brass, aluminium, aluminium-bronze, phosphor-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 filled plastic moulded parts. Contact materials vary with product type but are usually made of copper, brass, nickel, phosphor-bronze, alumel, chromel or steel.

Rectangular connectors are generally made using plastic or glass filled plastic moulded insulators and contact materials of plated phosphor-bronze, brass or copper.

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 shock, 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 Controls and Connectors Ltd.) are employed for crimping and that connectors are assembled and wired by properly trained personnel.

3. Disposal of Products. Products should not be burnt.

4. Use Transport and Storage of Products. Care must be exercised to avoid damage to any part of the products during transporting, 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 for 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. FOLLOW THESE GUIDELINES.
2. ALWAYS PROTECT LIVE CIRCUITS AND NEVER DEMATE A LIVE CONNECTOR.
3. NEVER USE A DAMAGED CONNECTOR.
4. NEVER BURN DISCARDED CONNECTORS.

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