

Earth Bonding

Drill, Insert, Expand, Connect The easy to use, reliable earth bond system

The Earth bonding system is a fast, effective and reliable means of creating an attachment to metallic structures. It creates an equipotential bond between equipment for the passage of high intensity current in case of short circuit.

Suitable where lightning strike protection is required, for EMC where low resistance electrical connections must be maintained, and in hazardous areas where naked flame is not permitted. Industry sectors that have selected the Earth Bonding system as their chosen method of electrical grounding include railway rolling stock, automotive, communications and military vehicle manufacture.

In addition to repeatable electrical connections having low electrical resistance the system also ensures connections have high tensile and bending moment values. The system is ideal for applications where access behind the structure is not possible.

Features & Benefits

- Lightweight hydraulic setting tool.
- Requires no welding, cleaning or surface preparation.
- Quality repeatable termination even to uneven and curved surfaces
- Consistent connection for low electrical resistance.
- Bond is installed from one side only.
- Available for aluminium and steel plates.
- High strength joint.

Approvals

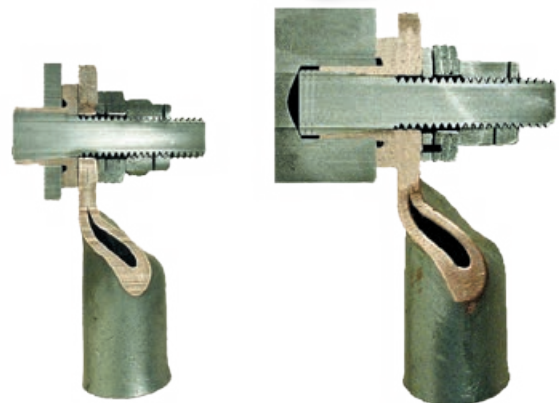
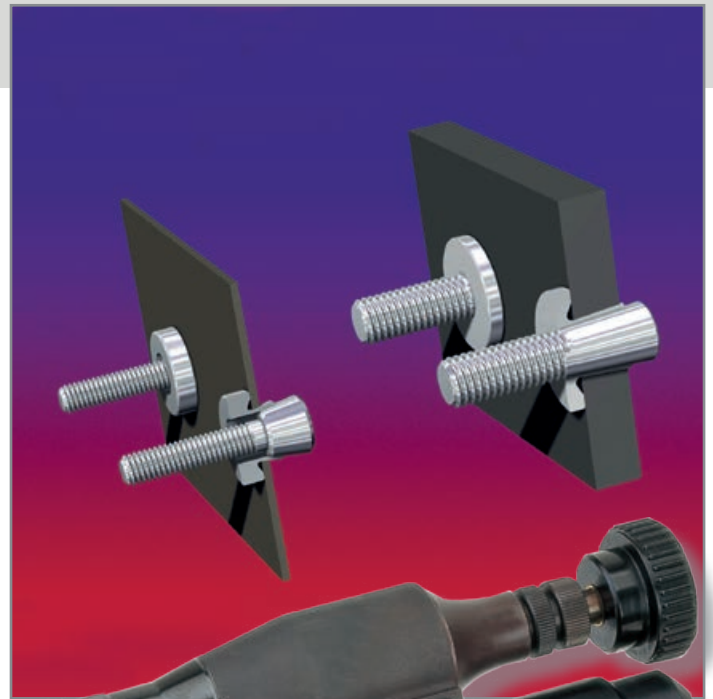
- Lloyds register (Ref: 02/00022 Issued 27/03/02).
- Ministry of Defence (Equipment Support (Sea)/Warship Support Agency).

Typical Performance Characteristics

- Electrical continuity 20 $\mu\Omega$ to 120 $\mu\Omega$
- M6 short circuit withstand 10kA
- M10 short circuit withstand 20kA
- Corrosion resistance 500 hrs (salt spray)
- Tensile strength 200daN to 800daN
- Pressure withstand 6 Bar
- Torsion 8Nm to 34Nm

Hydraulic Setting Tools

Part No.	Pulling Force	Length	Weight	Test Gauge
PMT6	10 KN	185 mm	1.28 Kg	80928
PMT8	18 KN	185 mm	1.28 Kg	80928
PMT10	25 KN	185 mm	1.28 Kg	80928



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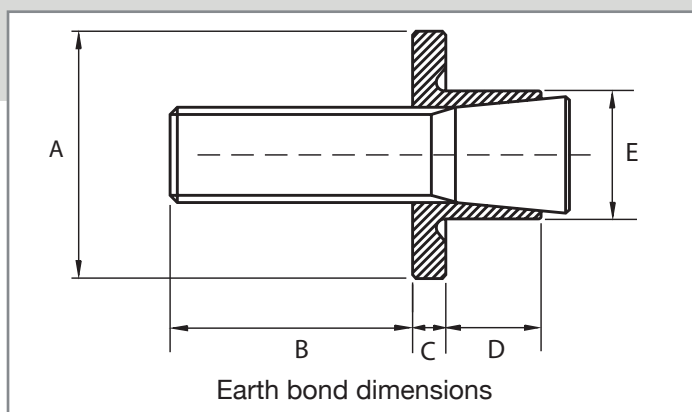
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For full installation guide and process please contact us for more information.



Earth Bonds for use with Steel & Stainless Plate

Earth Bond Part No.	Dimension					Thread Size	Hole Size Ø	Steel Plate Thickness	Setting Tool	Setting Torque	Weight
	A Ø	B	C	D	E Ø						
80923	16.0	21.0	4.5	4.5	11.5	M6	11.5	1.5 - 4.0	PMT6	8 Nm	16g
80925	16.0	24.0	3.5	11.0	8.5	M6	8.5	>4.0	PMT6	8 Nm	16g
80974	16.0	13.0	4.5	4.5	11.5	M6	11.5	1.5 - 4.0	PMT6	8 Nm	14g
80975	16.0	16.0	3.5	11.0	8.5	M6	8.5	>4.0	PMT6	8 Nm	14g
81929	20.0	15.0	4.5	4.5	15.0	M8	15.0	1.5 - 4.0	PMT8	15 Nm	29g
81928	20.0	19.0	3.5	11.0	11.5	M8	11.5	>4.0	PMT8	15 Nm	26g
80924	25.0	24.0	5.5	4.5	19.0	M10	19.0	2.0 - 4.0	PMT10	34 Nm	50g
80926	25.0	28.0	3.5	11.0	13.5	M10	13.5	>4.0	PMT10	34 Nm	42g

Earth Bonds for use with Aluminium Plate

Earth Bond Part No.	Dimension					Thread Size	Hole Size Ø	Steel Plate Thickness	Setting Tool	Setting Torque	Weight
	A Ø	B	C	D	E Ø						
80958	16.0	21.0	4.5	4.5	11.5	M6	11.5	1.5 - 4.0	PMT6	8 Nm	12g
80960	16.0	24.0	3.5	11.0	10.5	M6	10.5	>4.0	PMT6	8 Nm	15g
80976	16.0	13.0	4.5	4.5	11.5	M6	11.5	1.5 - 4.0	PMT6	8 Nm	12g
80977	16.0	16.0	3.5	11.0	10.5	M6	10.5	>4.0	PMT6	8 Nm	15g
81931	20.0	15.0	5.5	4.5	15.0	M8	15.0	1.5 - 4.0	PMT8	15 Nm	19g
81930	20.0	19.0	3.5	11.0	13.5	M8	13.5	>4.0	PMT8	15 Nm	26g
80959	25.0	24.0	5.5	4.5	19.0	M10	19.0	2.0 - 4.0	PMT10	34 Nm	34g
80961	25.0	28.0	3.5	11.0	15.0	M10	15.0	>4.0	PMT10	34 Nm	36g

NATO Stock and BAE Systems Part Number Cross Reference

Part Number	Size	NATO Stock No.	BAE Systems
80923	M6 <4.0mm	NSN-5307-99-386-7414	14825029
80925	M6 >4.0mm	NSN-5307-99-385-4153	14879997
80924	M10 <4.0mm	NSN-5307-99-189-1984	14880032
80926	M10 >4.0mm	NSN-5307-99-967-9875	14826038

All dimensions above are in millimetres unless otherwise stated.

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