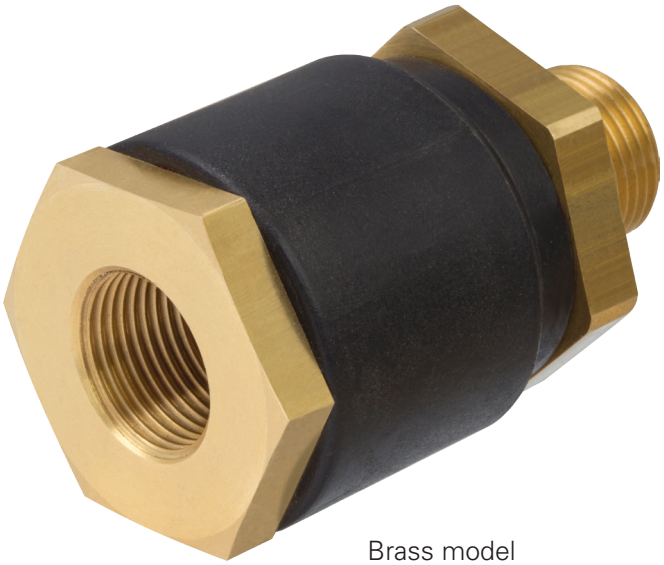
Improved Redapt Ex d / Ex e insulated adaptors



Brass model

Aluminium/brass model

316L stainless steel / mild steel / aluminium models also available

Redapt offers improved model of insulated adaptor for Ex d/ Ex e applications

Redapt are pleased to present the improved insulated adaptors now available.

The insulated adaptor offers:

- **ATEX and IECEx certification for International compliance**
- **Ex d and Ex e protection**
- **Eliminates electrical noise, providing a 'clean' earth for sensitive instruments**
- **Combination of entry metals to avoid galvanic corrosion**

Benefits of insulated adaptors

Insulated adaptors are an ideal method of providing a grounding for cable armour, particularly where the instruments or equipment are highly sensitive to electrical noise. They can also reduce the circulating currents that can cause heating of high capacity cables, and segregate high and low voltage earth fault paths.

With ATEX and IECEx certification for both Ex d and Ex e environments, these insulated adaptors are suitable for a wide range of applications in a global market.

Insulated adaptors have a glass filled nylon insulating body and are available with a combination of metallic materials for entries if required. This eliminates the risk of galvanic corrosion in seawater and similar environments where dissimilar metals are in constant contact.

As with all Redapt adaptors and reducers, insulated adaptors may be used as a thread conversion accessory whilst maintaining Exd/ Exe certification.

For more information about the new insulated adaptors, please see the Redapt thread conversion accessories catalogue or contact our Customer Service team:

Tel: +44 (0) 1922 450400

Email: csaldridge@eaton.com

Web: www.redapt.co.uk

Learn more about Redapt insulated adaptors

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Application

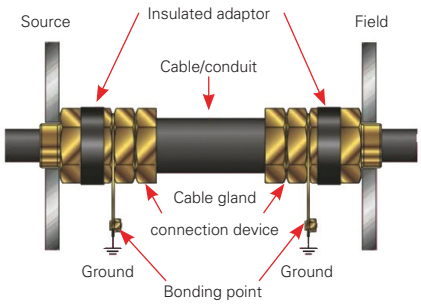
To avoid relying on the contact between cable termination and equipment enclosure for grounding the cable armour, an insulated adaptor can be fitted to both ends of the cable with a grounding device (i.e. earth tag/lug) fitted between the adaptor and the termination. The armour current can then be taken from the grounding device to ground in a controlled, positive manner that can be ***inspected*** easily.

Single point grounding

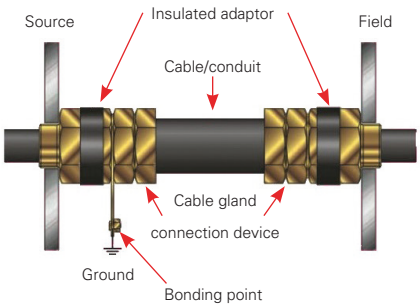
In many applications it is sufficient to ground the cable armour at one end. For single point grounding, the insulated adaptors would again be used at both ends of the cable but with the earth tag fitted only to the end where grounding is required. Single point grounding can:

- Reduce the circulating currents that can cause heating of high capacity cables.
- Reduce the risk of damage to electronic equipment within the enclosure in the event of a short circuit to ground through the enclosure.
- Reduce the problems of electrical noise on the armour affecting the clean earth required for some sensitive instruments.

Standard application



Single point grounding



Note: graphical representation only; actual appearance may differ.

Technical specification

Certifications (Ex d/Ex e)	Certificate numbers	Compliance standards	Codes of protection
ATEX	• ITS16ATEX101088X	EN 60079-0, EN 60079-1, EN 60079-7, EN60079-31	II 2 GD, Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC Db
IECEx	• IECEx ITS 16.0049X	IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31	Ex db IIC Gb, Ex eb IIC Gb, Ex tb IIIC Db

Materials*	Plating	Threadforms	Other
• Brass	• Nickel	• Metric	• IP6X (IP66 / IP68 with additional washer)
• Stainless steel 316L	• Zinc	• NPT	• -20°C to +130°C operating temperature
• Aluminium	• others on application	• PG	
• Mild steel		• BSP (ISO pipe)	
**Glass filled nylon insulating body*		• others on application	

Product codes

Example - a M25 to M32 stainless steel insulated adaptor: **DBU300506**

DIGIT 1, 2 & 3 DESCRIPTION	CODE	DIGIT 4 MATERIAL	CODE	DIGIT 5 PLATING	CODE	DIGIT 6 & 7 MALE THREAD REFERENCE*		DIGIT 8 & 9 FEMALE THREAD REFERENCE*	
Insulated adaptor	DBU	Brass	1	None	0	M16	03	½" NPT	29
		Mild steel	2	Nickel	1	M20	04	¾" NPT	30
		Stainless steel	3	Zinc	2	M25	05	1" NPT	31
		Aluminium	5			M32	06	1¼" NPT	32
						M40	07	1½" NPT	33
						M50	08	2" NPT	34
						M63	09	2½" NPT	35
						M75	10	3" NPT	36

* Use same code for male and female threads. For other materials and threadforms/sizes, please contact Customer Services on +44 (0) 1922 450400

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