



Cenelectrex[®]

System Accessories

A complete range of accessories for use with Cenelectrex Earthing Systems

These items are available both as spares or as part of a complete earthing system. They may also be used to customise a standard system or enhance its specification.

Full details are available by quotation.

Monitoring Clamps, Cables & Reels



1
VESX01
Dual Circuit Earthing Clamp

Stainless steel heavy duty Dual Circuit Earthing Clamp for use on a wide range of drums and containers or flat surfaces, such as a tanker chassis.

⊗ II 1 GD T6



2
VESX21
Tanker Clamp

Stainless steel heavy duty Dual Circuit Tanker Clamp for use on the UK and Ireland standard ½" (13mm) earthing pins or flat surfaces, such as a tanker chassis.

⊗ II 1 GD T6



3
VESX25
REB-IP Clamp

Medium duty hard anodised die-cast aluminium dual circuit REB-IP clamp for use on small containers and drums. Stainless Steel Medium Duty-IP clamp available, VESX23.

⊗ II 1 GD T6



4
VESX02F
FIBC Monitoring Clamp

Single pole monitoring clamp for use with Earth-Rite FIBC System. Suitable for monitoring Type 'C' FIBCs (Big Bags) and some static-dissipative liner applications.

⊗ II 1 GD T6



5
VESG Range
Dual Circuit Spiral Cables

2-core blue Hytrel-coated spiral cables with 1mm sq conductors. Available in 3m, 5m, 10m, 15m or 30m lengths. Also available by the metre in straight form and as blue single core spirals or straight cable for monitoring-only applications. (see Application 2 on third page)



6
VESM01
Cable Reel

Self-retracting cable reel with 15m of 2-core blue Hytrel-coated cable with 1mm sq conductors. Ultra-low resistance mercury contact arrangement between reel drum and mount.

⊗ II 2 GD T6

30m hand-rewind cable reel also available for off-shore/aviation applications.

System Accessories

Connectors

The dual circuit plug and socket arrangements shown in photographs 7 - 10 can be used as an alternative to conventional clamps in certain circumstances. *See Application examples, below.*



VESF30
2-pole Plug

Nickel-plated 2-pole plug. Available separately or with any 2-core blue Hytel-coated cables. Assessed by Notified Body as suitable for use with I.S. output:

Ⓢ II 1 GD



VESF31
2-pole Socket

Nickel-plated 2-pole Socket for use with 2-pole Plug. For mounting on a junction box or control panel. Assessed by Notified Body as suitable for use with I.S. output:

Ⓢ II 1 GD



VESF31A
2-pole Socket with mount

Nickel-plated 2-pole Socket for use with 2-pole Plug. For mounting on a vessel or plant item without the need for a junction box / support. Assessed by Notified Body as suitable for use with I.S. output:

Ⓢ II 1 GD



VESA31/F01
Tanker Earthing Socket

2-pole Socket and shroud for use with tanker-mounted 1/2" (13mm) brass earthing pin (VESA11).* Available separately or with any 2-core blue Hytel-coated cables. Assessed by Notified Body as suitable for use with I.S. output:

Ⓢ II 1 GD



VESF34
In-Line Quick Connect

Quick-release IP68 connector for use in line with 2-core core blue Hytel-coated cables. Available with 12cm length of cable for fitting to Dual Circuit clamps (add /LQ to clamp part number when ordering). Assessed by Notified Body as suitable for use with I.S. output:

Ⓢ II 1 GD



VESF38 & 39
Single core connectors

A range of connectors suitable for use with single core cables. Plugs for fitting to cable: Green (F38) for earthing, Blue (F38/B) for I.S. monitoring and Black (F38/BK) for use with orange / other cables. Sockets for panel or junction box mounting have corresponding colour coding (F39, F39/B & F39/BK).

Applications

1. The 2-pole plug and sockets shown photographs 7 - 9 are designed for use in applications where there are a limited number of vessels, containers or plant items intended for use with the earthing system. In these cases a socket is fitted to each of the items requiring earthing (either the version with or without the mount, as appropriate) to provide a dedicated earthing point. The system will be fitted with the plug, in place of a clamp, thus ensuring that it can only be connected to one of the designated items, rather than any extraneous metalwork.

These sockets have the added benefit of a 2-core connection onto the plant item, thus ensuring that the monitoring signal passes through the item, guaranteeing that the socket is correctly fitted as well as the plug.

2. The Tanker earthing sockets and pins shown in photograph 10 are sometimes used when a fleet of tankers is fitted with the UK and Ireland standard 1/2" (13mm) earthing pins.* This arrangement can also be used with dedicated vessels, containers or plant items as an alternative to the 2-pole plug and sockets described above.

If tankers are likely to have 1/2" (13mm) earthing pins, but this cannot be guaranteed, then the VESF21 Tanker Clamp (previous page) is the obvious solution.

VESF26 GAT-IP Cast Aluminium Dual Circuit Clamp is also available for use outside the European / ATEX zone (US ground ball compatible).

* 3/4" (19mm) Sockets and pins also available.

Junction & Marshalling Boxes

A range of enclosures is available in both carbon-loaded GRP or stainless steel, for use with I.S. cables.
See application examples, below.



VESV72
GRP Standard Junction Box

As supplied with Earth-Rite PLUS monitoring systems for ease of access to clamp cable. Includes clamp stowage pin for Tanker / Dual Circuit clamps and is available with alternatives to stow REB-IP Clamp, 2-pole Plug or Tanker Socket, etc. A compact version (VESM62) without stowage pin is available for certain applications.



VESV80
GRP Junction Box with Quick Connect

This can be added to an earth monitoring system as an alternative to the standard box (EMU system code / QC) to provide a quick connect for simplest possible changing of the clamp cable. Now incorporates clamp stowage pin.



VESV74
Stainless Steel Junction Box

Stainless steel version for use in some pharmaceutical applications. Includes clamp stowage pin for Tanker / Dual Circuit clamps and is available with alternatives to stow Stainless Steel Medium Duty-IP Clamp, 2-pole Plug or Tanker Socket, etc.



VESM60
GRP Marshalling Junction Box

As supplied with Earth-Rite MULTIPOINT monitoring systems for ease of cabling for up to 8 monitored points / plant items (single or 2-core cables). 10 entries.



VESM63
GRP Multi-Way Junction Box

For ease of cabling for up to 3 monitored points / plant items (single or 2-core cables). 5 entries. Also used for I.S. power cabling of up to 4 Bond-Rite REMOTE (EP)s.



VESM61
Stainless Steel Marshalling Box

Stainless steel version of Marshalling Junction Box for use in some pharmaceutical applications. 10 entries. Compact versions available on request.

VESB22 Separate Clamp Stowage Pin and mounting bracket for Tanker / Dual Circuit clamps. Also available with alternative pins to stow REB-IP Clamp, 2-pole Plug or Tanker Socket, etc.

Applications

1. Besides their use with the Earth-Rite PLUS, the junction boxes shown in photographs 13 - 15 are ideal additions to Earth-Rite MULTIPOINT Systems, where 2-core spiral cables are specified. They provide:

- Support for the cable via a strong gland.
- An interface between the spiral and installation cables.
- A convenient stowage point, appropriate to the clamp or connector used.

In the case of the Earth-Rite PLUS, the cable can be changed without the need to isolate the system (as the junction box is on the I.S. side) or replace an Ex gland.

2. The Marshalling Junction Boxes shown in photographs 16 - 18 allow multiple cables in the field to be easily organised. They allow both single core monitoring cables and 2-core monitoring / earthing cables to be used (or a combination of both).

When deciding which type of cable to select for a MULTIPOINT application, the following may be referred to as a guide:

- 2-core cables are generally used to connect to isolated items of plant (such as containers).
- Single core cables are often selected to monitor the earth status of removable plant items connected to the main earthed structure (such as chutes or ducting).

Other Items



VESI09
Earth Status Indicator

Auxiliary indicator station for use in flammable atmospheres.

ⓧ II 2G & ⓧ II 2D EEx edm IIC T6

Safe Area versions (eg for mounting in a control room) available on request.



MCSB02
Key Over-ride Switch

To switch Earth-Rite PLUS system temporarily from Dual to Single Mode (eg. when using a tanker filling arm to fill IBCs). Includes capacitor with parallel bleed resistor (to be fitted in system's EEx d enclosure).

ⓧ II 2G & ⓧ II 2D EEx edm IIC T6



VESF62
Capacitance Parameter Test Unit

For use with Earth-Rite PLUS Dual Mode System, the CPT allows the tanker verification check (capacitance) parameters to be tested without the need for an actual tanker to be present. For use during system installation or routine maintenance.

VESI96 Multi-Cluster LED - For use in Earth-Rite PLUS EEx d IIB indicators. Please advise if an alternative system specification is involved. Please confirm voltage requirement 230V or 110V. LEDs are normally supplied in white for use in either Red or Green indicators.

Tools & Services for Systems & Bond-Rites



TOOLS

VEST11 Hex Key (allen key)
For REB Clamp hex-head grub screws which hold the cable in place.

VEST12 Slotted Box Spanner
For cable gland on Bond-Rite, Tanker and Dual Circuit clamps.

VEST13 Torx Driver (TX10)
For lid screws on Bond-Rite, Tanker and Dual Circuit clamps.

VEST14 Torx Driver (T20)
For lid screws on Bond-Rite REMOTE and Bond-Rite REMOTE (EP).



UPGRADE/01

The original Bond-Rite design, shown in the background, may be upgraded to the ergonomic style, shown in the foreground. The upgrade includes new ergonomic stainless steel clamp body plus In-Line Quick Connect and cable section, new battery and full testing. Any additional remedial work that may be required: by quotation.



REFURB/01

If the tungsten tips of a Bond-Rite, Dual Circuit or Tanker clamp become worn or damaged, they can now be replaced by returning the complete clamp for refurbishment. It is not possible for replacement tips to be fitted by the user, owing to the specialist tools required and maintaining of the IP rating.

Further details of all items on this data sheet are available by quotation.

In line with our policy of continual product development, specifications / materials may be subject to change.

FEDSOR0130-ACCS-09/04



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