

Instructions for Category 1 X45 Static Grounding / Earthing Clamp

Certified to EN 13463-1:2009

Certificate number: Sira 02ATEX9381 Issue 4



Approval:  II 1 GD T6

Ambient Temperature Range: Ta = -40°C to +60°C



The safety of any system incorporating the equipment referred to in this manual is the responsibility of the installer of the system.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Any warranty is made void if the equipment is not installed, or used, in accordance with the manufacturers instructions.

Please contact Newson Gale if you require an EC Declaration or a translation of this instruction manual.

Instructions for VESX45, VESX45FE and VESX45S

Single Pole Category 1 Static Grounding / Earthing Clamp

With regard to the relevant Essential Health & Safety Requirements (EHSRs) of the ATEX Directive 94/9/EC, the following declarations are made with respect to the Newson Gale X45 series Static Earthing Clamps: VESX45, VESX45FE and VESX45S.

1.0.6

1. The constructional materials of the equipment are deemed to be suitable for the intended use.
2. **Intended Use:** The clamp is designed to dissipate undesirable static electricity away from conductive objects during a process.
3. **Identified Hazards in accordance with EN 13463-1:2009:** A) Mechanical sparks resulting from a fracture of the torsion spring or as a result of mechanical damage. B) Static Electricity hazards resulting from a high resistance static dissipation path due to corrosion, bad connections or mechanical damage.

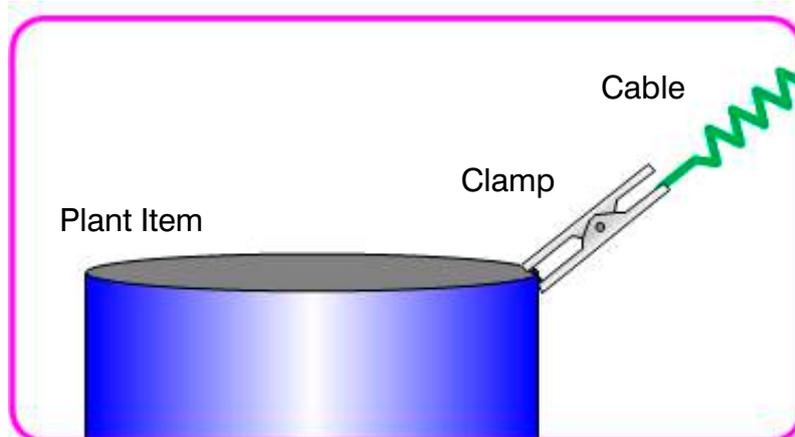
Instructions for Safe Use

4. The clamp should be connected to a flexible, multi-strand cable suitable for the area of operation and the site conditions. Ideally, the clamp should be fitted with a single steel-cored cable. A suitable steel-cored cable can be supplied by Newson Gale.

The cable should be terminated at the clamp using a crimp connector suitable for the cable type. The crimp connector shall have a clearance hole to suit the 4mm diameter fixing stud.

The crimp connector shall be fitted to the clamp's threaded fixing stud and secured using the washer, and self-sealing nut, supplied with the clamp.

5. The cable should be checked regularly to ensure that the strands have not broken. If more than 10% of the strands are found to be broken the cable must be re-terminated with reference to point 4 above.
6. The clamp cable must have a connection to a verifiable Earth Point in order to dissipate static. 
7. Before use always check that the cable is connected securely to the clamp and that there are no signs of corrosion at the cable termination.
8. The clamp should be attached to the object to be earthed at a secure position which is clean and free from any insulating coating (see diagram 1). If in doubt, check the resistance between the object to be earthed and the Earth Point, using a suitable ohmmeter. The resistance should not exceed 10 ohm.
9. The clamp should be attached, and removed, carefully, slowly and smoothly.



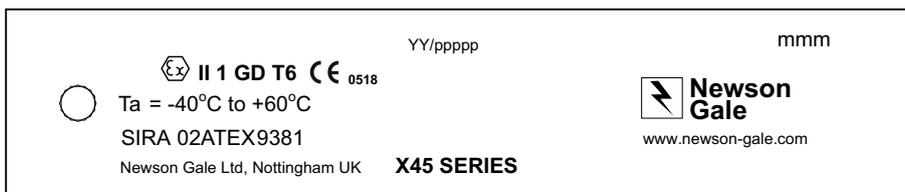
10. The clamp should be taken out of service if the clamp shows signs of corrosion or the clamp becomes damaged.
11. Regularly (more often than once a month) check the resistance between the clamp contacts and the Earth Point, using a suitable ohmmeter. The resistance should not exceed 10 ohm.
12. The clamp should be used by trained, competent persons only.

13. At the end of it's life the clamp should be disposed of in a safe, considerate manner.
14. If the cable connection or the contact tips become loose, re-tighten the fixings using appropriate tools.

Approval:  II 1 GD T6

Ambient Temperature Range: Ta = -40°C to +60°C

VESX45, VESX45FE & VESX45S Clamp Marking



KEY

YY = Year of Manufacture
 pppp = Newson Gale Batch Number
 mmm = Model Number



VESX45 Single Pole Category 1
 Static Grounding / Earthing Clamp



Contact arrangement of the
 VESX45FE Single Pole Category 1
 Static Grounding / Earthing Clamp

Instructions for VESX45-IP and VESX45RT

Two Pole Category 1 Static Grounding / Earthing Clamp

With regard to the relevant Essential Health & Safety Requirements (EHSRs) of the ATEX Directive 94/9/EC, the following declarations are made with respect to the Newson Gale X45 series Static Earthing Clamps: VESX45-IP and VESX45RT.

1.0.6

1. The constructional materials of the equipment are deemed to be suitable for the intended use.

2. Intended Use:

VESX45-IP - This 2-pole clamp is designed to dissipate undesirable static electricity away from conductive objects, during a process, whilst monitoring the connection. It has pointed contacts and is intended that the clamp is used with Newson Gale Static Earthing Systems.

VESX45RT - This 2-pole clamp is the same as the VESX45-IP but with rounded contacts.

3. **Identified Hazards in accordance with EN 13463-1:2009:** A) Mechanical sparks resulting from a fracture of the torsion spring or as a result of mechanical damage. B) Static Electricity hazards resulting from a high resistance static dissipation path due to corrosion, bad connections or mechanical damage. Electrostatic hazards due to the insulating material used in the clamp.

Instructions for Safe Use

4. The clamp is ready connected to an anti-static 2-core flexible cable fitted with an in-line quick connector.
5. The cable should be checked regularly to ensure that no strands have broken. If more than 10% of the strands are found to be broken the cable must be re-terminated or replaced.
6. The VESX45-IP and VESX45RT clamp cable must have a connection to a verifiable Earth Point in order to dissipate static charges. 
7. Before use always check that the cable is connected securely to the clamp and that there are no signs of corrosion at the cable termination.
8. The clamp should be attached to the object to be earthed at a secure position which is clean and free from any insulating coating (see diagram 1).
9. The clamp should be attached, and removed, carefully, slowly and smoothly.

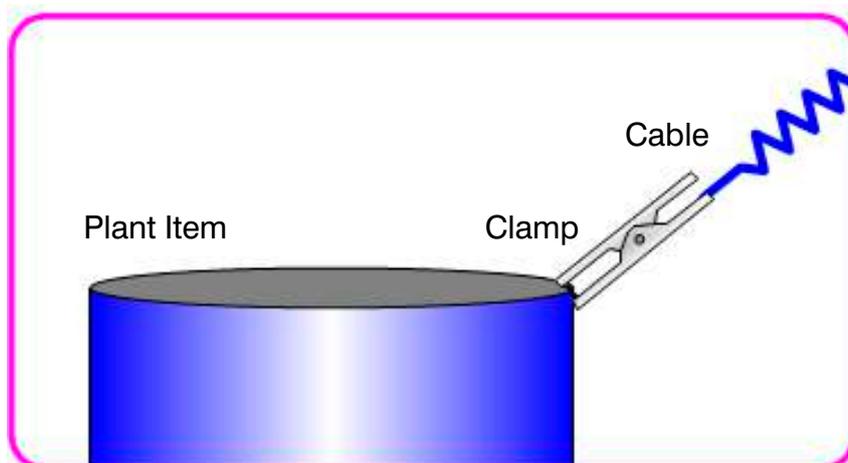


Diagram 1

10. The clamp should be taken out of service if the clamp shows signs of corrosion or the clamp becomes damaged.
11. The clamp should be used by trained, competent persons only.
12. At the end of it's life the clamp should be disposed of in a safe, considerate manner.
13. If the cable connection or the contact tips become loose, re-tighten the fixings using appropriate tools.

Approval:  II 1 GD T6

Ambient Temperature Range: Ta = -40°C to +60°C

VESX45-IP & VESX45RT Clamp Marking



KEY

YY = Year of Manufacture

pppp = Newson Gale Batch Number

mmm = Model Number



VESX45-IP Two Pole Category 1
Static Grounding / Earthing Clamp



Contact arrangement of the
VESX45RT Two Pole Category 1
Static Grounding / Earthing Clamp

Instructions for VESX45F

Category 1 Static Grounding / Earthing Clamp

With regard to the relevant Essential Health & Safety Requirements (EHSRs) of the ATEX Directive 94/9/EC, the following declarations are made with respect to the Newson Gale X45 series Static Earthing Clamp: VESX45F.

1.0.6

1. The constructional materials of the equipment are deemed to be suitable for the intended use.

2. **Intended Use:**

VESX45F - This clamp is designed to monitor that a Type "C" Flexible Intermediate Bulk Container (big bag) is correctly connected to a static Earth Point in order to dissipate undesirable static electricity away from the FIBC, during a transfer operation. It is intended that the clamp is used primarily with the Newson Gale FIBC system.

3. **Identified Hazards in accordance with EN 13463-1:2009:** A) Mechanical sparks resulting from a fracture of the torsion spring or as a result of mechanical damage. B) Static Electricity hazards resulting from a high resistance static dissipation path due to corrosion, bad connections or mechanical damage, C) Electrostatic hazards due to the insulating material used in the clamp.



Instructions for Safe Use

4. The clamp is ready connected to an anti-static 2-core flexible cable fitted with an in-line quick connector.
5. The cable should be checked regularly to ensure that no strands have broken. If more than 10% of the strands are found to be broken the cable must be re-terminated or replaced.
6. The VESX45F acts as a monitoring clamp intended to be attached to a Type "C" Flexible Intermediate Bulk Container (big bag), or liner, and connected to the monitoring terminal of a Newson Gale Static Earthing System, primarily the FIBC system.
7. Before use always check that the cable is connected securely to the clamp and that there are no signs of corrosion at the cable termination.
8. The VESX45F monitoring clamp should be attached to the Earthing Point of the Type "C" Flexible Intermediate Bulk Container (big bag). The Type "C" Flexible Intermediate Bulk Container (big bag) is connected to Earth via the bag lifting gear or by a supplementary clamp (Code number VESX45FE).
9. The clamp should be attached, and removed, carefully, slowly and smoothly.

10. The clamp should be taken out of service if the clamp shows signs of corrosion or the clamp becomes damaged.
11. The clamp should be used by trained, competent persons only.
12. At the end of its life the clamp should be disposed of in a safe, considerate manner.
13. If the cable connection or the contact tips become loose, re-tighten the fixings using appropriate tools.

Approval:  II 1 GD T6

Ambient Temperature Range: Ta = -40°C to +60°C

VESX45F Clamp Marking



KEY

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pppp = Newson Gale Batch Number

mmm = Model Number



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VESX45F Category 1
Static Grounding / Earthing Clamp

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