

# VESX45/PGS

## Personnel Grounding Strap



Stainless steel VESX45/PGS Personnel Grounding Strap



Adjustable wrist strap with quick release connector

The VESX45/PGS is a medium duty stainless steel grounding clamp and wrist strap assembly that provides operators working in hazardous areas with an additional layer of protection against fires or explosions caused by static electricity.

Through their own movement people can generate large amounts of static charge if they are not grounded. In some cases, as much as 30,000 volts can be carried by people who are completely unaware that they themselves are the potential source for an electrostatic spark discharge that could ignite a flammable atmosphere.

If the operating requirements of certain processes cause the loss of direct contact between the operator's static dissipative safety shoes and the static dissipative flooring of the plant, the VESX45/PGS provides an added layer of protection to ensure the operator is grounded via the plant or bonded to the equipment they are interacting with.

For example, an operator may need to stand on a ladder to tip powder into a large mixer and in the process of moving to the ladder loses contact with the static dissipative flooring.

To ensure static cannot accumulate on the operator, by fastening the grounding strap to their wrist, any charge generated by their movement can be dissipated to ground by direct contact to a verified ground connection.

*\*refer to page 2 of this datasheet to see what IEC TS 60079-32-1 and NFPA 77 recommend with respect to the use of personnel grounding straps.*

### Product Features

**ATEX / FM / IECEx approved medium duty stainless steel grounding clamp** with tungsten carbide teeth mounted in a side-by-side configuration to provide a high degree of clamp stability and to bite through rust, coatings and deposits of process material.

**3.7 m (12 ft) spiral cable** fitted with a quick release connector enables operators to detach themselves in the event that they need to vacate the process area immediately.

**1 Meg-Ohm safety resistor** mounted in the cable to limit stray electrical currents passing through the operator.

**Adjustable anti-allergy wrist strap** to fit a wide range of wrist sizes.

## VESX45/PGS

### Technical Specification

#### VESX45/PGS

<b>Clamp Details:</b>	ATEX / FM / IECEx approved medium duty static grounding clamp
<b>Clamp Material:</b>	Stainless handles (SS grade: 304) and spring (SS grade: 302) Tungsten carbide teeth for maximum penetration
<b>Clamp Dimensions:</b>	120 mm x 25 mm (4.7" x 1.0") Length x Width
<b>Clamp Jaw Opening:</b>	0.6" (15mm) maximum
<b>Wrist Strap:</b>	Anti-allergy adjustable strap
<b>Electrical Safety Resistor:</b>	1 Meg-Ohm resistor mounted in the conductor
<b>Cable Details:</b>	3.7 m (12 ft) single pole spiral conductor fitted to a quick release connector

Personnel Grounding Strap test kit is available on request.

### Hazardous Area Certification

#### Grounding Clamp

Europe / International:	North America Version Available:
<b>ATEX</b> Ex II 1 GD T6 (Assessed to EN 13463-1 : 2009) ATEX certificate number: Sira 02ATEX9381 FM Certificate of Compliance number: 3046346 IECEx Ex h IIC T6 Ga Ex h IIIC T85°C Da Ta = -40°C to +60°C IECEx EXV 20.0033	<b>FM approved</b> FM Certificate of Compliance number: 3046346

\* Both section 11.4 of IEC TS 60079-32-1 and section 8.2.3.3 of NFPA 77 state the following:

"The simplest type of commercial device is an earthing bracelet with a built-in resistor typically giving a resistance to ground of about 100 kΩ for shock protection. Wrist straps of this type have the greatest utility at ventilation hoods and at other locations where limitation on the operator's mobility can be tolerated. Breakaway wrist tether systems could be necessary where emergency egress is needed. A hood can be equipped with two external coiled earthing cords with cuff attachments that can be removed and kept by individual users."

**IEC TS 60097-32-1: Explosive atmospheres, Electrostatic Hazards, Guidance.**

**NFPA 77 "Recommended Practice on Static Electricity".**

\* Always check for and read the latest version of the International Standards, Guidance and/or Recommended Practices.

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**Leading the way in hazardous area static control**



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