

## Isolating Spark Gap (ISG) Surge Protective Devices SPDs



### EPZ 100

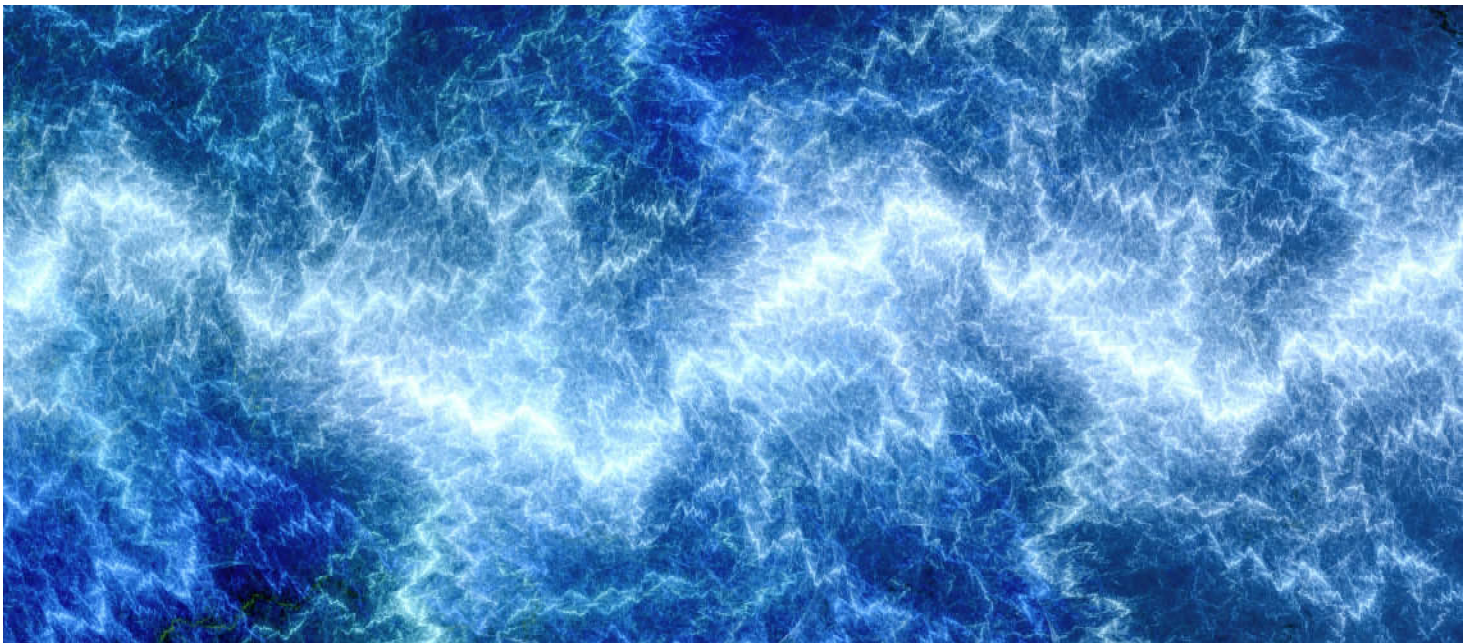
The EPZ series of isolating spark gaps has been developed to prevent unsafe potential gradients from establishing between adjacent metallic structures or surfaces during a lightning discharge event. This is achieved by an internal voltage switching component which establishes equipotential equalization when its predetermined spark-over voltage is reached, thereby preventing damage to equipment or eliminating unsafe conditions.

The EPZ is recommended for use in applications such as lightning protection grounding, where circumstances may dictate that a "clean" signal ground can not be directly connected to a "dirty" power system ground. It has wide application in the petrochemical industry for the protection of oil and gas pipeline insulating flanges from flash-overs during direct or nearby lightning discharges or when ground faults of nearby power transmission lines can cause large potential gradients across these flanges.

The EPZ is available in a hermetically sealed enclosure for direct burial applications.

The EPZ has been developed to comply with the EN 62561:1.0 Edition—Requirements for Lightning Protection Components (LPC), Part 3.

### EPZ 100



# Isolating Spark Gaps (ISG) SPD EPZ 100



Location of Use: Exposed Environments and Direct Burial  
 Surge Ratings:  $I_{imp} = 25 \text{ kA}$   
 $I_{max} = 100 \text{ kA (8/20}\mu\text{s)}$   
 Protective Elements: High Energy GDT  
 Safety: TOV Withstand  
 Housing: Equipotential Bonding  
 Compliance: IEC 62561-3:2012

Corrosion resistant enclosure with hermetic environmental seal and flying leads for ease of connection.

## Technical Data

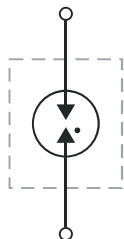
| EPZ 100/xxx                                 |                     | 350                                   |
|---|---------------------|---------------------------------------|
| <b>Electrical</b>                           |                     |                                       |
| Rated DC Withstand Voltage                  | $U_{WDC}$           | 350V                                  |
| Rated Impulse Sparkover Voltage             | $U_{r \text{ imp}}$ | 1000V                                 |
| Maximum Discharge Current (8/20 $\mu$ s)    | $I_{max}$           | 100 kA                                |
| Impulse Discharge Current                   | $I_{imp}$           | 25 kA                                 |
| Residual Voltage at 5 kA (8/20 $\mu$ s)     | $U_{res}$           | 1.6 kV                                |
| Class Lightning Current Carrying Capability |                     | 1 L                                   |
| Capacitance at 1 MHz                        | C                   | < 10 pf                               |
| <b>Mechanical &amp; Environmental</b>       |                     |                                       |
| Temperature Range                           | $T_a$               | -30 °C to +70 °C                      |
| Nominal Outer Diameter                      |                     | 28 mm                                 |
| Nominal Length                              |                     | 140 mm                                |
| Length With Cables (approx)                 |                     | 1 m                                   |
| Length (approx)                             |                     | 450 mm                                |
| Cross Sectional Area                        |                     | 16 mm <sup>2</sup>                    |
| Number of Conductors                        |                     | $\geq 465/0.21$                       |
| Insulation                                  |                     | Double Insulated                      |
| Environmental Protection                    |                     | UV Stabilized, Flame Retardant        |
| Resistant                                   |                     | Acids, Solvents and Oils              |
| Connection                                  |                     | Suitable for Screw or Lug Termination |
| Degree of Protection                        |                     | IP 67                                 |
| Housing Material                            |                     | Plastic Sheath                        |
| Location                                    |                     | Indoor/Outdoor                        |

| Specifications for Use |  |  |
|------------------------|--|--|
| Environmental          |  | Local heating by pipelines and other hot surfaces in vicinity of the installation of the product must be considered by the installer to ensure that specified maximum ambient temperature is not exceeded. |
| Wiring                 |  | Connection of the internal cables must be in accordance with the applicable requirement of IEC 60079-0 and IEC 60079-15 for field wiring connections.  |
| Safety                 |  | EPZ has an external non-metallic heat shrink sleeve which may provide a potential electrostatic charging hazard. See installation instructions for further information.                                    |

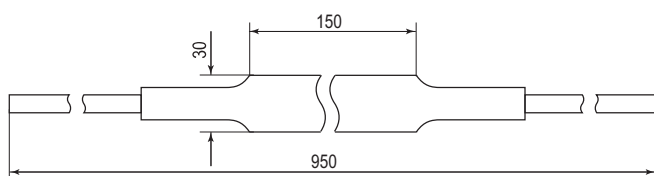
| Order Information |         |
|-------------------|---------|
| Order Code        | 350     |
| EPZ 100/xxx       | 509 520 |

## EPZ 100

### Internal Configuration



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

|                              |                  |
|------------------------------|------------------|
| <b>EPZ 100/xxx</b>           | <b>350</b>       |
| Single Unit Weight           | 500g             |
| Packaging Dimensions (H×W×L) | 350 × 125 × 55mm |
| Minimum Order Quantity       | 27 Units         |