



# Disc Rupture Sensor

Manual.





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#### INTRODUCTION

The **Disc Rupture Sensor** is composed of a continuous track circuit. If the disc ruptures, the track will be broken and there will be no flow of electric current through it. When the application is installed in series with the Auxiliary Quick Relay (RARE) coil, it de-energizes when the track is broken and the contacts (NAF) return to the rest position and trigger the alarm, buzzer, remote event announcers, or interfaced with process control systems providing indication of disc rupture and consequent flow passage.

Its connector is IP67 protection class that protects electrical connections against dust and submersion in water, these characteristics are defined by the international standard IEC-60529 that classifies and evaluates the degree of protection of electronic products against dust, intrusion and contact with water.

#### **KEY FEATURES**

- Maximum Current of 500mA and Maximum Voltage of 26Vdc;
- Operating Temperature: -40°C to +260°C;
- Serves liquid and gas applications;
- Cable connector with IP67 degree of protection;

#### **DIMENSIONS**

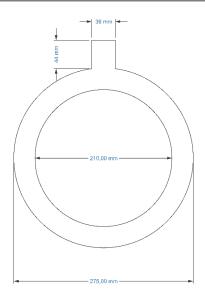


Image 1- Sensor Dimensions 8"

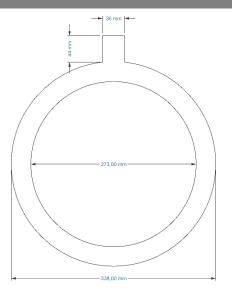
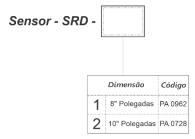


Image 2 -Sensor Dimensions 10"

#### ORDER REQUEST





#### **ASSEMBLY INSTRUCTION**

1. With the flange still disassembled, position the rupture sensor on the straight flange of the pipe, with the circular connector facing downwards;

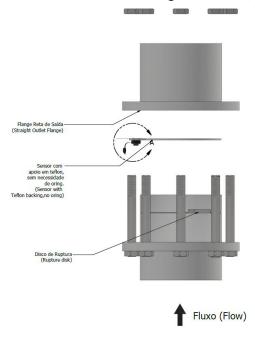


Image 3 – step 1 assembly

## NOTE: DO NOT ADD EXTRA SEALING OF ANY KIND BETWEEN THE BURST SENSOR AND THE FLANGE.

2. Position the flange straight and adjust the bolts following the torque determined by the flange manufacturer;

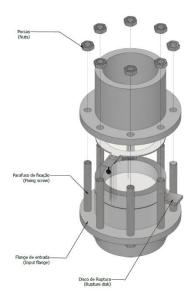


Image 4 – step 2 assembly



3. Connect the PA/P4A connector to the 2-way cable (18AWG-Shielded) supplied by the customer;



Image 5 – step 3 assembly

4. After preparing the signal cable, connect the PA/P4A connector to the JAB/P4 2-way circular connector;

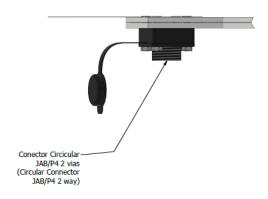


Image 6 – step 4 assembly

5. Connect the signal cable to the customer's Supervisory/Relay.

**WARRANTY TERM** 



The **Electron Disc Rupture Sensor** has a warranty period of two years from the date of sale stated on the invoice, with coverage for any manufacturing defects that make it unsuitable or unsuitable for the applications it is intended for.

#### **Disclaimer of Warranty**

The warranty does not cover transportation expenses for technical assistance, freight and insurance for shipment of a product with evidence of defect or malfunction. The following events are also not covered: Natural wear and tear of parts due to continuous and frequent use, damage to the outside caused by falls or improper packaging; attempt to repair/break a seal with damage caused by persons not authorized by Electron and in disagreement with the instructions that are part of the technical description.

#### Loss of Warranty

The product will automatically lose its warranty when:

- The instructions for use and assembly contained in this manual and the installation procedures contained in the NBR 5410 Standard are not observed;
- Subjected to conditions outside the limits specified in the respective technical descriptions;
- Violated or repaired by a person other than Electron's technical team;
- The damage is caused by a fall or impact;
- Overload occurs that causes degradation of the components and parts of the product.

#### Warranty Utilization

To enjoy this warranty, the customer must send the product to Electron along with a copy of the purchase invoice properly packaged so that there is no damage in transport. For an emergency service, it is recommended to send as much information as possible, regarding the defect detected. This will be analyzed and subjected to full functional tests.

The analysis of the product and its eventual maintenance will only be carried out by the technical team at the headquarters of Electron do Brasil.