

PRODUCT DESCRIPTION

SPECTEC's Intrinsically Safe preamplifier for passive magnetic VRS sensors is designed for installation in hazardous locations. The 'ELBY' housing type will fit in ELBY50 and ELBY75 explosion proof junction boxes. The 'A' housing type will fit in a GAUL-16 or similar standard explosion proof junction box.

INSTALLATION

CAUTION: This sensor MUST be installed with an FM approved barrier and following the details specified in the Installation Instruction Document #85049.

SPECIFICATIONS

Supply Voltage & Current: 7.5-30Vdc @ ≤ 3mA for 0-5Vo
 11-30Vdc @ ≤ 12mA for 0-10Vo
 3.6Vdc min. @ ≤ 20mA for 0-Vs

Output Voltage: See below
 (R Load >20kW)

Frequency Range: ~5 Hz to 10 kHz
 Up to 40 kHz with increased signal

Input Sensitivity: See below

Construction: Plastic housing
 Solid Epoxy Encapsulation

TERMINAL CONNECTIONS

- | | |
|--------------------|--------------------------|
| 1 - Supply Voltage | 4 - Mag Sensor (IS only) |
| 2 - Common | 5 - Mag Sensor (IS only) |
| 3 - Output Signal | (see IS40 & IS41) |

FEATURE SELECTION

- IS4022 -** Mag Preamp (US & C cert.)
IS4022A - Mag Preamp (ATEX & IECEx cert.)

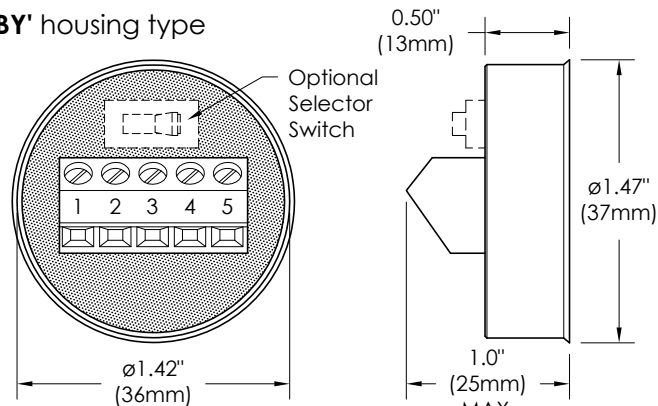
- Output Signal
- 1 - 0-5V, NPN
 - 2 - 0-10V, NPN
 - 3 - 0-Vs, NPN
 - 4 - 0-Vs, NPN, OC
 - 5 - Selectable: 0-5V, NPN
 - 0-10V, NPN
 - 0-Vs, NPN, OC
 - 6 - 0-Vs, PNP, OC

- Input Sensitivity
- 0 - 30 mVpp (Standard)
 - 1 - 12 mVpp (High)

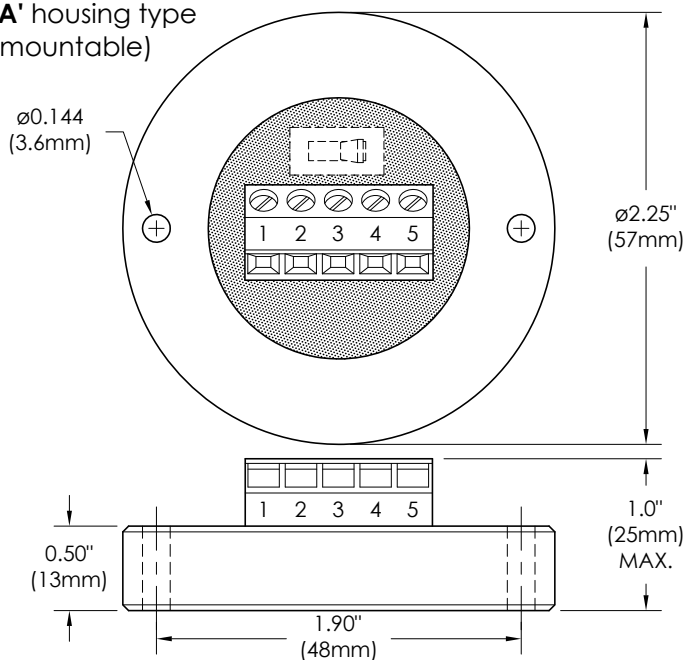
For 'A' housing type add 'A' as a prefix to the P/N suffix:
 (e.g. IS4022-Axx)
 Similarly for the ATEX & IECEx version:
 (e.g. IS4022A-Axx)

For explosion proof junction box refer to bulletin 4001.

'ELBY' housing type



'A' housing type (mountable)



CERTIFICATIONS for IS4022

- USA:** Intrinsically Safe
 Class I, II, III, Division 1
 GROUP ABCDEFG T6...T4
 Class I, Zone 0, AEx ia IIC T6...T4
- Canada:** Intrinsically Safe
 Class I, Division 1
 GROUP ABCD T6...T4
 Class I, Zone 0, Ex ia IIC T6...T4
- T4 @ -40°C ≤ T_{amb} ≤ +85°C
 T5 @ -40°C ≤ T_{amb} ≤ +80°C
 T6 @ -40°C ≤ T_{amb} ≤ +60°C

CERTIFICATIONS for IS4022A

- ATEX:** II 1 G Ex ia IIC T6...T4 Ga
 FM08ATEX0068X
- IECEx:** Ex ia IIC T6...T4 Ga
 IECEx FMG 16.0003X
- T4 @ -40°C ≤ T_{amb} ≤ +85°C
 T5 @ -40°C ≤ T_{amb} ≤ +80°C
 T6 @ -40°C ≤ T_{amb} ≤ +60°C
- CE:** Compliance with
 EN50081-1, EN50082-1