

#### 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 > 20kΩ)

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

**Input Sensitivity:** See below

**Temperature Range:** T4 Ta = -40° to 85°C  
 T5 Ta = -40° to 80°C  
 T6 Ta = -40° to 60°C

**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)        |

#### ORDERING INFORMATION

IS4022 - x x Mag Preamp (US & C cert.)  
 IS4022A - x x Mag Preamp (with ATEX cert.)

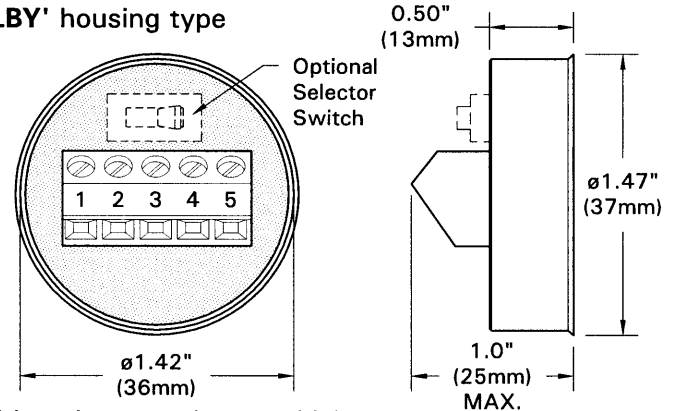
Output Signal	1 - 0-5V, NPN
	2 - 0-10V, NPN
	3 - 0-Vs, NPN
	4 - 0-Vs, NPN, OC
	5 - Selectable: 0-5V, NPN 0-10V, NPN 0-Vs, NPN, OC
	6 - 0-Vs, PNP, OC

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

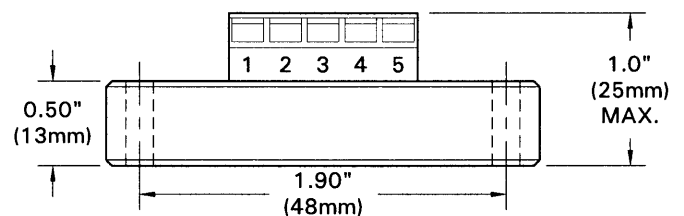
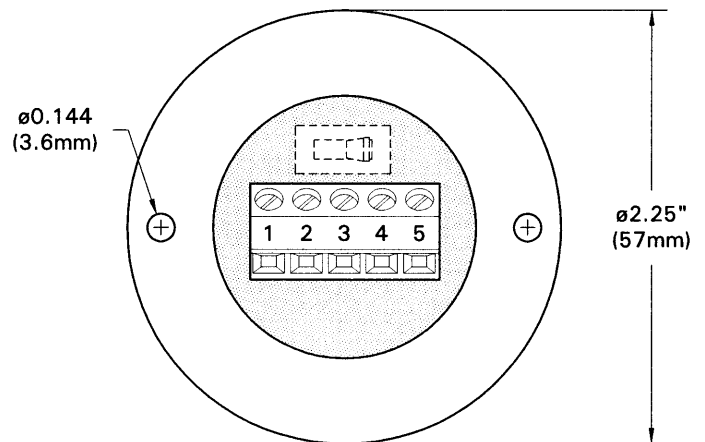
For 'A' housing type, P/N is IS4022-Axx  
 or for ATEX version P/N is IS4022A-Axx

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  
 Class I, Zone 0, AEx ia IIC

**Canada:** Intrinsically Safe  
 Class I, II, III, Division 1  
 GROUP ABCD  
 Class I, Zone 0, Ex ia IIC

#### CERTIFICATIONS for IS4022A

**ATEX:** II 1 G Ex ia IIC  
 FM08ATEX0068X

**CE:** Compliance with  
 EN55011, EN50022-2