PRODUCT DESCRIPTION
SPECTEC's Intrinsically Safe directional preamplifier for passive magnetic VRS sensors is designed for installation in hazardous locations. It is available in gated and non-gated versions. It is designed to fit 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 #85053.

SPECIFICATIONS
Supply Voltage & Current:
7.5-25Vdc @ ≤ 3mA for 0-5Vo
13-25Vdc @ ≤ 12mA for 0-12Vo
3.6Vdc min. @ ≤ 20mA for 0-Vs

Output Voltage: See below
(@ < 20mA sink)

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

Input Sensitivity: See below

Gating:
Gated: Channel A only in Forward
Channel B only in Reverse
Non-Gated: Channel A & B always on

Direction:
Forward (A before B): 0 Vdc
Reverse (B before A): 5 Vdc

Rise/Fall Time: .03 μs nominal

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

FEATURE SELECTION
IS4033 - x x Mag Preamp (US & C cert.)
IS4033A - x x Mag Preamp (with ATEX cert.)

Output Signal
1 - 0-5V, NPN - Gated
2 - 0-12V, NPN - Gated
3 - 0-Vs, NPN OC - Gated
5 - 0-5V, NPN - Non-Gated
6 - 0-12V, NPN - Non-Gated
7 - 0-Vs, NPN OC - Non-Gated

Input Sensitivity
0 - 40 mVpp (Standard)
1 - 12 mVpp (High)

For explosion proof junction box refer to bulletin 4001.

TERMINAL CONNECTIONS
1 - Supply Voltage
2 - Common
3 - Direction
4 - Output Signal A
5 - Output Signal B
6 - Output Signal x2 (IS only see IS40 & IS41)

CERTIFICATIONS for IS4033
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 IS4033A
ATEX: II 1 G Ex ia IIC
FM08ATEX0068X

CE: Compliance with
EN55011, EN50022-2