

SPECTEC

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N4033 Bulletin

Directional Preamplifier for Passive
 Magnetic Sensor
 Non-Incendive/Increased Safety 2.5" Diameter

PRODUCT DESCRIPTION

SPECTEC's Non-Incendive / Increased Safety 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 following the details specified in the Installation Instruction Document #85053N.

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
- Construction:** Plastic housing
 Solid Epoxy Encapsulation

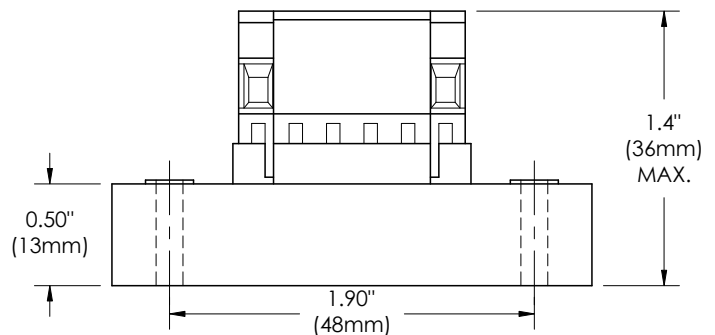
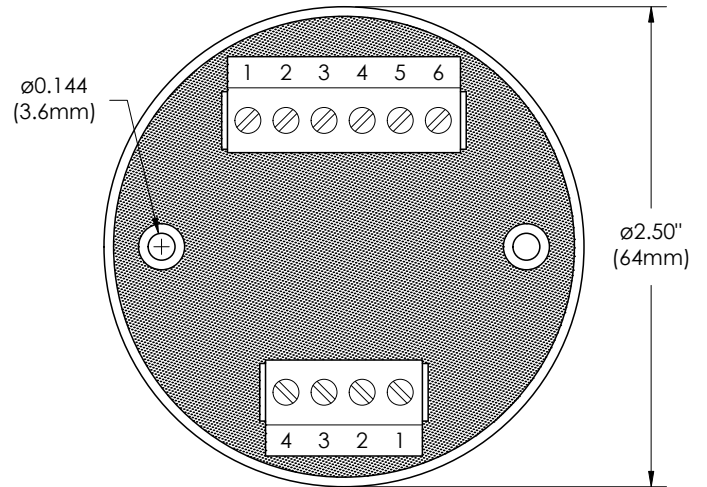
TERMINAL CONNECTIONS

- | | |
|----------------------|----------------------|
| 1 - Supply Voltage | 1 - Coil A + (white) |
| 2 - Common | 2 - Coil A - (black) |
| 3 - Direction | 3 - Coil B + (white) |
| 4 - Output Signal A | 4 - Coil B - (black) |
| 5 - Output Signal B | (see N40 & N41) |
| 6 - Output Signal x2 | |

FEATURE SELECTION

- N4033 -** Mag Preamp Directional
- 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.



CERTIFICATIONS for N4033

USA:

Class I, II, III, Division 2
 GROUP ABCDEFG T6...T4
 Class I, Zone 2, AEx nC IIC T6...T4



Canada:

Class I, Division 2
 GROUP ABCD T6...T4
 Class I, Zone 2, Ex nL IIC T6...T4

T4 @ -40°C ≤ T_{amb} ≤ +85°C
 T5 @ -40°C ≤ T_{amb} ≤ +80°C
 T6 @ -40°C ≤ T_{amb} ≤ +60°C

ATEX & UKEX:



II 3 G Ex ec IIC T6...T4 Gc
 FM08ATEX0069X
 FM22UKEX0111X

CE:



Compliance with
 EN50081-1, EN50082-1

IECEX:



Ex ec IIC T6...T4 Gc
 IECEx FMG 16.0003X

T4 @ -40°C ≤ T_{amb} ≤ +85°C
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