# SPECTEC

THUNDERBIRD INTERNATIONAL CORPORATION P.O. BOX 360, EMIGRANT, MT 59027, USA (406) 333-4967 FAX: (406) 333-4259 W W W . s p e c t e c s e n s o r s . c o m

## N4021 Bulletin

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

## PRODUCT DESCRIPTION

SPECTEC's Non-Incendive / Increased Safety preamplifier for passive magnetic VRS sensors is designed for installation in hazardous locations and to fit a Crouse-Hinds GUAL16 or similar standard explosion proof junction box. Standard and NC (with expanded noise filtering) models are offered.

#### **INSTALLATION**

CAUTION: This sensor MUST be installed following the details specified in the Installation Instruction Document #85051N.

#### **SPECIFICATIONS**

Supply Voltage & Current:

7.5-30Vdc @ ≤ 3mA for 0-5Vo 13-30Vdc @ ≤ 12mA for 0-12Vo 3.6-30Vdc @ ≤ 20mA for 0-Vs NC Model: 25Vdc Maximum

for USA and Canada

Output Voltage:

See below (R Load >  $20k\Omega$ )

Frequency Range:

~5 Hz to 10 kHz

Up to 40 kHz with increased signal

NC Model: ~5 Hz to 5 kHz

Input Sensitivity:

See below

Construction:

Plastic housing

Solid Epoxy Encapsulation

### **TERMINAL CONNECTIONS**

1 - Supply Voltage 5 - Mag Sensor 2 - Common 6 - Mag Sensor 3 - Output Signal (half freq.) (see N40 & N41)

4 - Output Signal

## **FEATURE SELECTION**

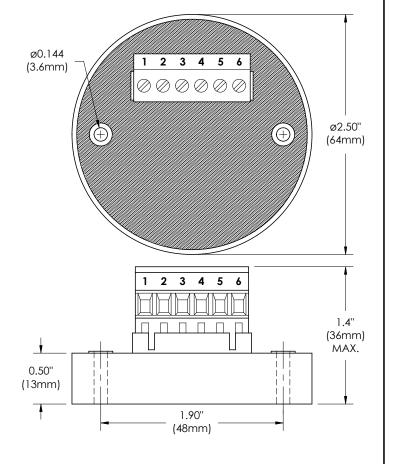
 Mag Preamplifier

Output | 1 - 0-5V, NPN/PNP (push-pull) | 2 - 0-12V, NPN/PNP (push-pull)

Input 0 - 60 mVpp Sensitivity 1 - 12 mVpp

# For NC model add 'NC' as a suffix: (e.g. N4021-xx<u>NC</u>)

For explosion proof junction box refer to bulletin 4001



### **CERTIFICATIONS for N4021**

USA:

Class I, II, III, Division 2 GROUP ABCDEFG T6...T4

APPROVED

FΜ

APPROVED

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  $\leq$  T<sub>amb</sub>  $\leq$  +85°C T5 @ -40°C  $\leq$  T<sub>amb</sub>  $\leq$  +80°C T6 @ -40°C  $\leq$  T<sub>amb</sub>  $\leq$  +60°C

ATEX & UKEX:

® CA

C€

IECEx:

CE:

IECEX

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

FM08ATEX0069X FM22UKEX0111X

Compliance with EN50081-1, EN50082-1 Ex ec IIC T6...T4 Gc

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

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