

PRODUCT DESCRIPTION

SPECTEC's Non-Incendive / Increased Safety zero speed sensors are designed for installation in CL 1, Div 2 or Zone 2 hazardous locations and do not require a safety barrier. They are offered in a wide variety of configurations as outlined on page 2. These sensors are actuated by a magnet. Activation options include one pole (unipolar) or either pole (omnipolar). A latching bipolar option is also available (requires alternating poles). Variations with dual sensors or directional output are also available. Custom sensors can also be created to meet specific needs.

INSTALLATION

CAUTION: This sensor MUST be installed following the details specified in the Installation Instruction Document #85047N.

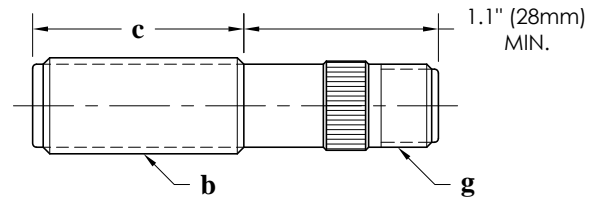
SPECIFICATIONS

- Supply Voltage:** 5 to 30 Vdc @ ≤15 mA
- Output Voltage:** See page 2
(25 mA maximum current sinking)
- Frequency Range:** Standard 0 Hz to ~20 kHz
for precision position applications
High Speed 0 to 100 kHz
for high speed only
- Rise/Fall Time:** .04 / .18 μs Nominal
- Air Gap:** 5DP: ≤ .160"
48DP: ≤ .025"
- Direction signal: (as applicable)** Forward Logic 1 (5V max)
(target rotating toward alignment mark)
Reverse Logic 0 (0.06V max)
(target rotating away from alignment mark)
- Connection:** Connector or lead wires, See page 2
- Construction:** 300 Series Stainless Steel
Solid Epoxy Encapsulation

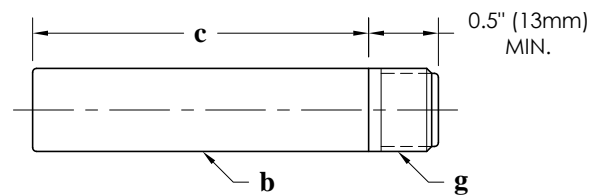
CERTIFICATIONS for N160 & N161

- ATEX:** II 3 G Ex ec IIC T6...T3 Gc
FM08ATEX0067X
- IECEX:** Ex ec IIC T6...T3 Gc
IECEX FMG 16.0003X
T3 @ -40°C ≤ T_{amb} ≤ +135°C
T4 @ -40°C ≤ T_{amb} ≤ +120°C
T5 @ -40°C ≤ T_{amb} ≤ +85°C
T6 @ -40°C ≤ T_{amb} ≤ +65°C
- USA:** N160: Class I, Division 2
GROUP ABCD T6...T5
Class I, Zone 2, AEx nC IIC T6...T5
N161: Class I, II, III, Division 2
GROUP ABCDEFG T6...T5
Class I, Zone 2, AEx nC IIC T6...T5
- Canada:** Class I, Division 2
GROUP ABCD T6...T5
Class I, Zone 2, Ex nL IIC T6...T5
T5 @ -40°C ≤ T_{amb} ≤ +85°C
T6 @ -40°C ≤ T_{amb} ≤ +65°C
- CE:** Compliance with
EN55011, EN50082-2

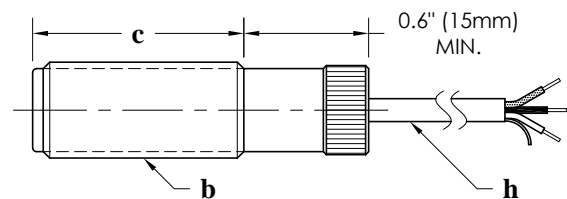
- N160** K shell type, knurled (shown below)
A shell type, all-thread (knurl removed)
H shell type, hex (knurl replaced by hex)



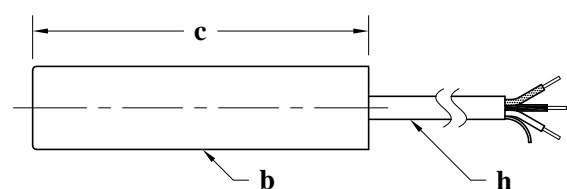
- N160** S shell type, smooth (custom units available)



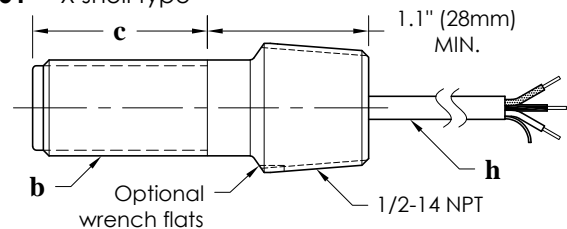
- N161** K shell type, knurled (shown below)
A shell type, all-thread (knurl removed)
H shell type, hex (knurl replaced by hex)



- N161** S shell type, smooth (custom units available)



- N161** X shell type



- N161** Y shell type

