

PRODUCT DESCRIPTION

SPECTEC's Intrinsically Safe zero speed sensors are designed for installation in hazardous locations. They are offered in a wide variety of configurations as outlined on page 2. These sensors are actuated by either one magnetic field (unipolar) or by both (omnipolar). A latching bipolar option is also available. Variations with dual sensors or directional output are also available. Versions with ATEX certification are available under part numbers IS160A & IS161A. Custom sensors can also be created to meet specific needs.

INSTALLATION

CAUTION: This sensor MUST be installed with an FM approved barrier and following the details specified in the Installation Instruction Document #85047.

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
Temperature Class & Range:	T5 Ta= -40° to 85°C T6 Ta= -40° to 65°C
Storage Temp.:	-55° to 85°C
Construction:	300 Series Stainless Steel Solid Epoxy Encapsulation

CERTIFICATIONS for IS160 & IS161

USA: Intrinsically Safe
 Class I, II, III, Division 1
 GROUP ABCDEFG
 Class I, Zone 0, AEx ia IIC

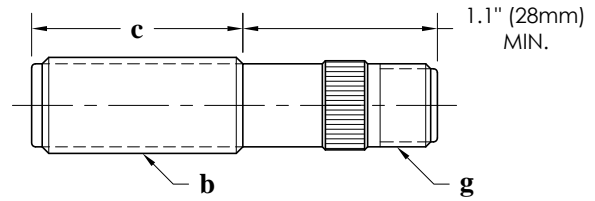
Canada: Intrinsically Safe
 Class I, Division 1
 GROUP ABCD
 Class I, Zone 0, Ex ia IIC

CERTIFICATIONS for IS160A & IS161A

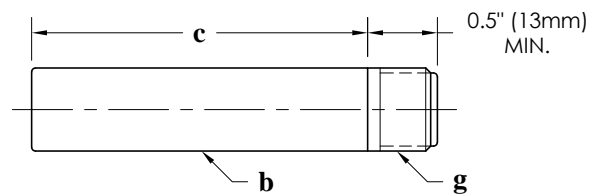
ATEX: II 1 G Ex ia IIC
 FM08ATEX0066X

CE: Compliance with
 EN55011, EN50022-2

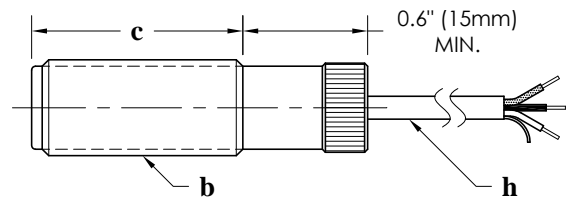
IS160 K shell type, knurled (shown below)
 A shell type, all-thread (knurl removed)
 H shell type, hex (knurl replaced by hex)



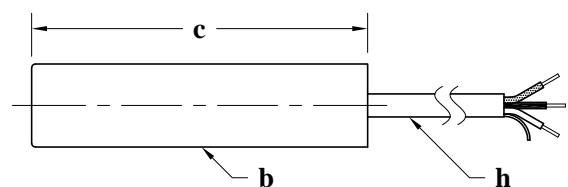
IS160 S shell type, smooth (custom units available)



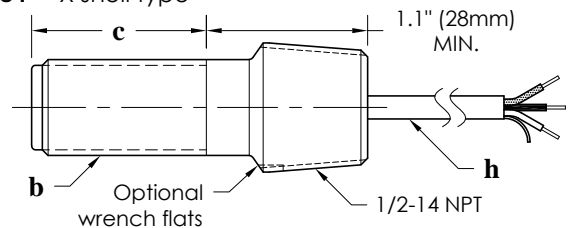
IS161 K shell type, knurled (shown below)
 A shell type, all-thread (knurl removed)
 H shell type, hex (knurl replaced by hex)



IS161 S shell type, smooth (custom units available)



IS161 X shell type



IS161 Y shell type

