

PRODUCT DESCRIPTION

SPECTEC's Non-Incendive digital output RF 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 gear teeth and other ferrous targets but do not cause magnetic drag. 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.

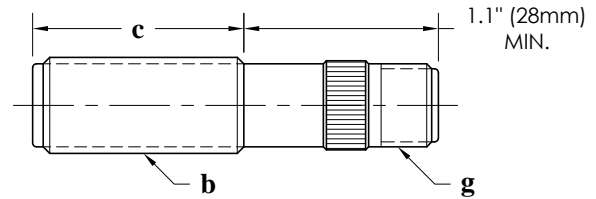
SPECIFICATIONS

Supply Voltage:	8 to 30 Vdc @ ≤15 mA
Output Voltage:	See page 2 (25 mA maximum current sinking)
Frequency Range:	~0.5 Hz to 5000 Hz
Rise/Fall Time:	.04 / .18 μs Nominal
Air Gap:	≤ .20" (5mm) Depending on target mass
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

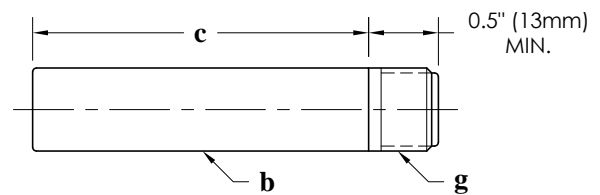
CERTIFICATIONS for N100 & N101

ATEX:	II 3 G Ex nL IIC FM08ATEX0067X
CE:	Compliance with EN55011, EN50022-2
USA:	Class I, Division 2 (N100 only) GROUP ABCD (N100 only) Class I, II, III, Division 2 (N101 only) GROUP ABCDEFG (N101 only) Class I, Zone 2, AEx nC IIC
Canada:	Class I, Division 2 GROUP ABCD Class I, Zone 2, Ex nL IIC

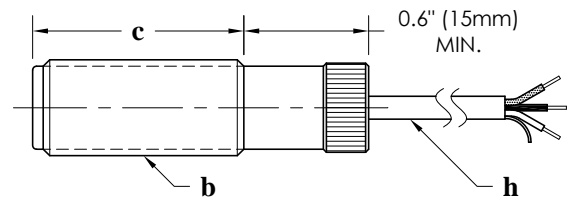
N100 K shell type, knurled (shown below)
 A shell type, all-thread (knurl removed)
 H shell type, hex (knurl replaced by hex)



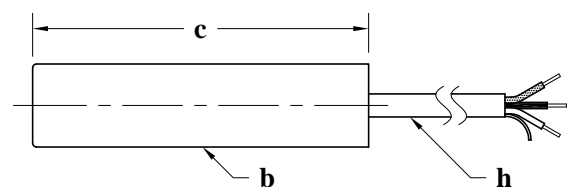
N100 S shell type, smooth (custom units available)



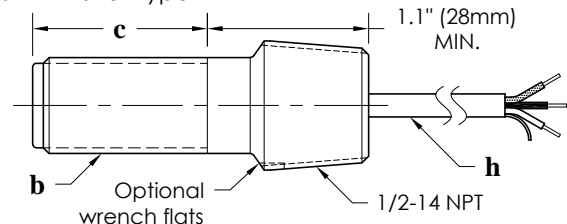
N101 K shell type, knurled (shown below)
 A shell type, all-thread (knurl removed)
 H shell type, hex (knurl replaced by hex)



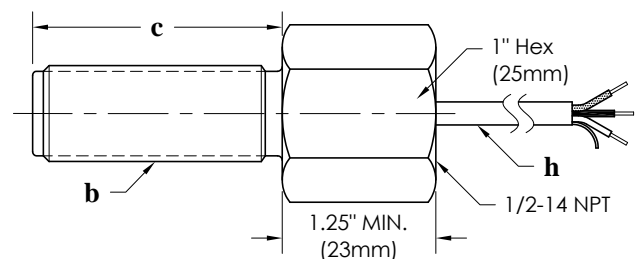
N101 S shell type, smooth (custom units available)



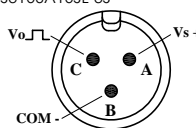
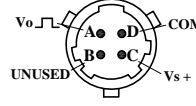
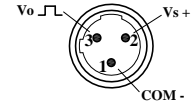
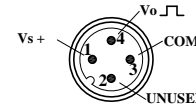
N101 X shell type



N101 Y shell type



FEATURE SELECTION for N100-abcgj and N101-abchj

SPECTEC P/N	a Shell Type	b Thread / Diameter	c Thread Length	Connection Type		j Output Signal
				g Connector (N100 Only)	h Lead Wires (N101 Only)	
N100- (Connector Version) or N101- (Lead Wire Version)	K A H	1 - 1/2-20 UNF 2 - 5/8-18 UNF 3 - 11/16-24 UNEF 4 - 3/4-16 UNF 5 - 3/4-20 UNEF 6 - M12x1 7 - M16x1.5 8 - M18x1 9 - M18x1.5	0 - 0.75" (19mm) 1 - 1.0" to 1.3" (25-33mm) 2 - 1.5" to 1.8" (38-45mm) 3 - 2.0" (51mm) 4 - 2.5" (64mm) 5 - 3.0" to 3.5" (76-89mm) 6 - 4.0" (101mm) 7 - 6.0" (152mm) 8 - 8.0" (203mm) 9 - 10.0" (254mm)	1 - MO3 Mate: Amphenol MS3106A10SL-3S  2 - B4 Mate: Amphenol MS3116F8-4S  3 - MC3 Mate: Turck KB 3T  4 - MD4 Mate: Turck RK 4.4T 	1 - 12" (.3m) 2 - 36" (1m) 3 - 120" (3m) 4 - 198" (5m) Lengths of 36" (1m) and longer use shielded cable 18 to 24 AWG (depending on shell size) PVC or TFE insulation Red - Supply Black - Common White - Output Shield - Floating (Not connected to shell, please ground to instrumentation) NOTE: Other lead wire lengths are available.	1 - 0-5V, NPN(TTL) 2 - 0-10V, NPN 3 - 0-Vs, NPN 4 - 0-Vs, NPN OC
	S	2 - $\phi 5/8"$ (15.9mm)	Same as above			
	X (Lead Wire only)	2 - 5/8-18 UNF 3 - 11/16-24 UNEF 4 - 3/4-16 UNF 5 - 3/4-20 UNEF	0 - 0.7" (18mm) 1 - 1.3" (33mm) 4 - 2.5" (64mm) 7 - 6.0" (152mm) 8 - 8.0" (203mm)			
	Y (Lead Wire only)	2 - 5/8-18 UNF 5 - 3/4-20 UNEF 7 - M16x1.5 8 - M18x1 9 - M18x1.5	1 - 1.1" (28mm) 3 - 2.0" (51mm) 5 - 3.0" (76mm) 6 - 4.0" (101mm) 7 - 6.0" (152mm) 8 - 8.0" (203mm) 9 - 10.0" (254mm)			

P/N Examples:

N100-K3412 K shell type, 11/16-24 x 2.5" thread, MO3 connector, 0-10V output

N101-Y2321 Y shell type, 5/8-18 x 2.0" thread, 36" leads, 0-5V output

Please Note: Some combinations of options are not possible, please contact sales with any questions.
Some output options are only available with thread lengths of 1.5" or longer (2.0" or longer for 'S' shell type)

Old P/N to New P/N correlations:

N100-01 → N100-K2214	N100-05 → N100-K2232	N100-42 → N100-K3211	N101-16 → N101-Y2323
N100-02 → N100-K2211	N100-07 → N100-K2221	N100-43 → N100-K3212	
N100-03 → N100-K2212	N100-41 → N100-K3234	N100-45 → N100-K3221	

SPECIALTY MODELS:

N100-17	X	5/8-18 UNF	1.3" (33mm)	MO3 Connector	0-10V, NPN
----------------	----------	------------	-------------	---------------	------------