S12H-275VPA-RGCB2

Analog Ferrous Metal Position Sensor

- Analog Hall Proximity Sensor
- .4" detection gap
- 0-5V output
- Stainless 12x1mm x 52mm housing
- Integral 4 pin male 12mm micro connector

CUSTOMER FOCUSED ENGINEERING + MODULAR DESIGN

Part Description: S12H-275VPA-RGCB2

Housing	Sensor Type & Function	Electrical Option	Connection Type
S = Stainless Steel, Thread Pitch M12x1, 52mm Long	Analog Ferrous Metal Position Sensor	Regulated Input 0-5V Analog Output	CB2 = Integral 4 Pin Male 12mm Micro Connector

Modify, update, or enhance any sensor with our modular features and functionality.

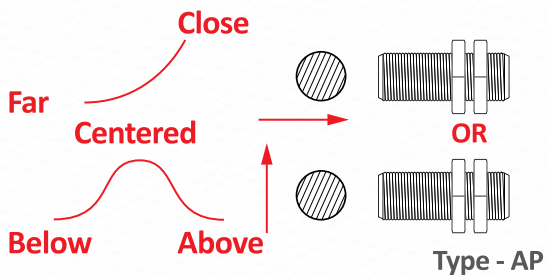
HOUSING *- Aluminum, stainless steel, plastic, threaded, flange mount, customer specific*

ELECTRICAL *- Every sensor function available in various electrical options (NPN, PNP, TTL, etc.)*

CONNECTION *- Deutsch, Amphenol, many other brands, free end wires, pigtails, any length*

Need a Custom Sensor Solution?... Send us your application specific requirements at *sensorso.com*

'Analog Output Proportional to Ferrous Metal Proximity



DESCRIPTION

- Analog output increases as ferrous metal approaches, decreases as target moves away
- Standard programming goes from 0.5V with no metal present to 4.5V when contacting steel plate.
- Target detection gap is dependent on shape/size/ferrous content.
- Custom programming available for precision repeatable detection of target positions, contact Sensor Solutions.
- Provided lock nuts used to set air gap from target.

FEATURES

- Lower Cost OEM Design
- Wide Temperature Range
- Detects Through Aluminum
- Shock and Vibration Resistant

Sensor Solutions
A STANDEX ELECTRONICS COMPANY

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Analog Ferrous Metal Position Sensor

Note: Check our website or contact us for details on all our ferrous metal detection options.

Electrical Specifications	Conditions	Min	Max	Unit
Temperature Range*	Operating	-40	+110*	Deg C
Supply Voltage, Vcc	Operating	+8	+30	Volts DC
Supply Current	Into Vcc	2.5	12	mA
Output Current	Recommended	-2	+2	mA
Load Capacitance	Cable and Load	n/a	+1.0	µF
Frequency Range **	Programmable	0	500**	Hz
Saturation Voltage Low	I sink < 1.0 mA	0	.35	Volts
Saturation Voltage High	I source < 1.0 mA	4.65	Vcc	Volts
Impulse Response Time	500 Hz Freq. Range	2 typ	4	mS

* T max = 150°C is available, contact factory.

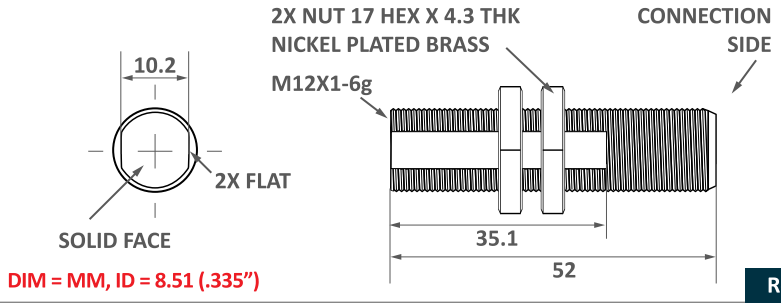
** Can be programmed for operation 2000 Hz, contact factory.

Rev A

Absolute Max Limits	Min	Max	Unit
Supply Voltage, Vcc	-16	30	Volts
Supply Voltage, <10 min	-5	+8.5	Volts
Continuous Output Current	-10	+10	mA
Vout Short Circuit Duration	-	3	Minutes
ESD	-7	+7	kVolts
Load Dump, 40 ms	-	40	Volts

Environmental Specifications	
Corrosion Resistance	500 hours salt spray ASTM B-117
Installation Torque	23 Foot-Pounds Maximum
Enclosure	Nema 1,3,4,6,13 & IEC IP67
Vibration	10 G's 2 to 2000 Hz Sinusodal
Mechanical Shock	100 G's, 11 mS Half-Sine

S12H Housing, 303 Stainless Steel, M12X1, 52mm Long

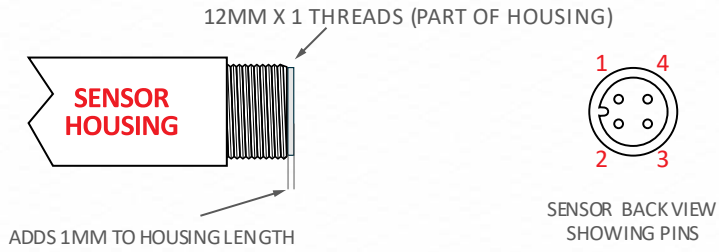


DIM = MM, ID = 8.51 (.335")

Rev B

Functional Characteristics 900-12-000 w/Large Steel Target	Min	Typ	Max
For Sensors with Custom Programming, these values may change			
Voltage at Infinity	0.40V	0.50V	0.60V
Voltage at 0"	4.25V	4.50V	4.75V
Conformity to Curve	-250V	-	+250V

CB2, Integral 4 Pin Male 12mm Micro Connector



Rev A

Connections Chart			
Pin 1	Vcc	Pin 3	Ground
Pin 2	Analog Vout	Pin 4	Program/LEAVE OPEN
CB2-275VPA			

Caution: *A short from the Pin 4 Program wire to either Pin 1 Vcc or Pin 3 Ground wire will cause component failure.*

OTHER MATING CONNECTORS AND CABLES AVAILABLE

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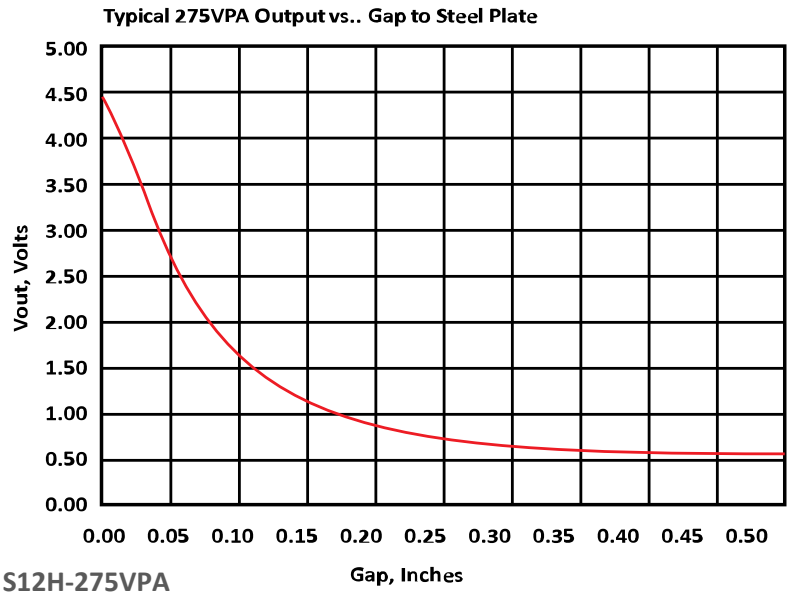
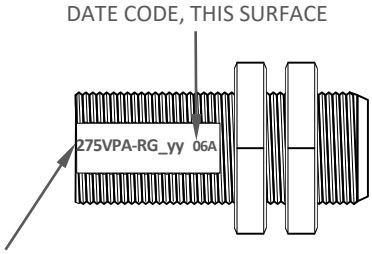
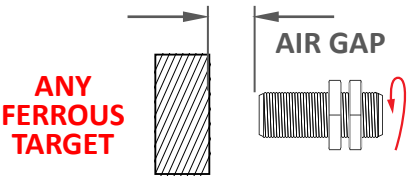
Sensor Function



Marking

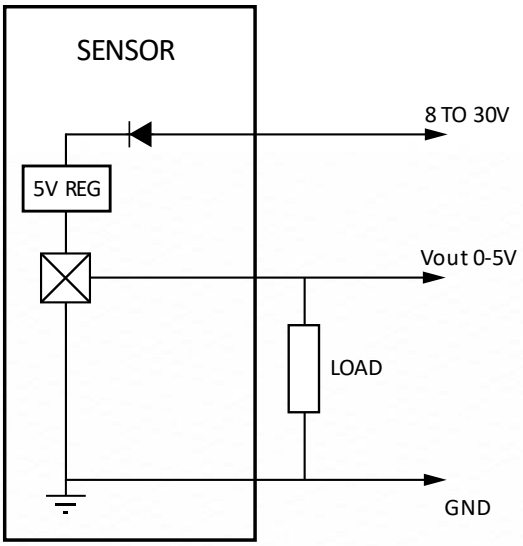


CHARACTERISTIC-OPTION_PROGRAMMING MARKED ON THIS SURFACE yy = PROGRAM #



NO ORIENTATION REQUIRED

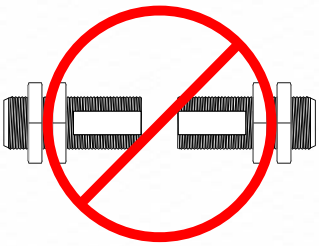
RG, Linear Regulator



Date Code 'YYM' YY = YEAR, M = MONTH			
A JAN	D APR	H JUL	L OCT
B FEB	E MAY	J AUG	M NOV
C MAR	G JUN	K SEP	N DEC

Handling Instructions

DO NOT CONTACT FACE TO FACE



CONTACT WITH OTHER MAGNETS *MAY* REDUCE THE MAXIMUM OPERATING GAP

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