

# Inductive Barrel Sensor Part Number Key

We reserve the right to make technical alterations without prior notice.

|          |          |           |          |   |          |          |           |   |          |           |           |           |                       |                              |
|----------|----------|-----------|----------|---|----------|----------|-----------|---|----------|-----------|-----------|-----------|-----------------------|------------------------------|
| <b>B</b> | <b>I</b> | <b>10</b> | <b>U</b> | - | <b>G</b> | <b>T</b> | <b>30</b> | - | <b>A</b> | <b>DZ</b> | <b>30</b> | <b>X2</b> | <b>Wiring Option*</b> | <b>Special Option Code**</b> |
|----------|----------|-----------|----------|---|----------|----------|-----------|---|----------|-----------|-----------|-----------|-----------------------|------------------------------|

  

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| <p><b>Mounting</b></p> <p>B = embeddable<br/>N = nonembeddable</p> <p><b>Principle of Operation</b></p> <p>I = inductive</p> <p><b>Rated Operating Distance (mm)</b></p> <p><b>Sensing Characteristics</b></p> <p>U = Uprox® sensor</p> <p><b>Housing Material Modifier</b></p> <p>E = stainless steel</p> <p><b>Housing Style</b></p> <p><b>Barrel - Metal</b></p> <p>G = full threading, generally chrome plated brass<br/>GS = threaded side sensor<br/>H = smooth, chrome plated brass or stainless steel<br/>HS = smooth side sensor<br/>M = partial threading, chrome plated brass</p> <p><b>Barrel - Plastic</b></p> <p>K = smooth<br/>P = full threading<br/>S = partial threading<br/>SK = side sensing/slot sensor, plastic housing</p> <p><b>Primary Barrel Modifier</b></p> <p>T = PTFE coated</p> <p><b>Housing Diameter or Height (mm)</b></p> <p><b>Secondary Barrel Modifier</b></p> <p>CA = conduit adaptor<br/>E = extended barrel length<br/>EE = extra long barrel length<br/>F = stainless steel face<br/>FE = stainless steel face, extended barrel length<br/>H = Stoneface®<br/>K = short barrel length<br/>M = medium barrel length<br/>S = side sensing<br/>SE = extended length<br/>SK = right-angle terminal chamber<br/>SR = straight terminal chamber<br/>T = barb fitting at cable entry<br/>TC = terminal chamber<br/>WD = washdown IP68/IP69K</p> | <p><b>Number of LEDs</b></p> <p>(blank) = no LEDs<br/>X = 1 LED<br/>X2 = 2 LEDs</p> <p><b>Voltage Range</b></p> <p><b>AC/DC: (No SCP**)</b></p> <p>3 = 20-250 VAC, 10-300 VDC<br/>14 = 20-132 VAC, 10-140 VDC<br/>31 = 20-250 VAC, 10-300 VDC, plastic barrel<br/>33 = 35-250 VAC, grounded metal barrel</p> <p><b>AC/DC: (Latched SCP)</b></p> <p>30 = 20-250 VAC, 10-300 VDC<br/>32 = 20-250 VAC, 10-300 VDC<br/>40 = 20-140 VAC/DC, high off-state current</p> <p><b>DC:</b></p> <p>4 = 10-65 VDC, polarity protected, pulsed SCP**<br/>6 = 10-30 VDC, polarity protected, pulsed SCP<br/>7 = 10-30 VDC, TTL compatible<br/>8 = 20-30 VDC, polarity protected, pulsed SCP<br/>41 = 10-55 VDC, polarity protected, pulsed SCP<br/>44 = 10-55 VDC<br/>45 = 8.4-64 Volts</p> <p>**SCP = short-circuit and overload protection</p> <p><b>Output</b></p> <p>D = 2-wire DC (transistor output)<br/>DZ = 2-wire AC/DC, (power MOSFET output)<br/>G = 2-wire DC, low voltage drop<br/>N = NPN transistor (current sinking)<br/>P = PNP transistor (current sourcing)<br/>Z = 2-wire AC or 2-wire AC/DC</p> <p><b>Output Function</b></p> <p>A = normally open (N.O.)<br/>DA = dynamic output (ring sensor), normally open<br/>F = connection programmable (N.O or N.C.)<br/>R = normally closed (N.C.)<br/>V = complementary outputs: one N.O., one N.C.<br/>Y0 = NAMUR output, requires switching amplifier<br/>Y1 = NAMUR output, requires switching amplifier, ATEX Approved</p> |
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**NOTE:**  
Part number keys are to assist in identification only.  
Verify new part numbers with factory; some configurations are not possible.

# Inductive Barrel Sensor Part Number Key

## Wiring Options\*

### A. Connectorized Sensor

Bi2-M12-AN6X - H1 1 4 1

#### Connector Family

- B1 = Minifast®, 7/8"-16UN, metal, male
- B2 = Minifast®, 7/8"-16UN, plastic, male
- B3 = Microfast®, 1/2"-20UNF, metal, male
- H1 = Eurofast®, M12x1, metal or plastic, male
- V1 = Picofast®, snap and M8x1, metal, male (Q08 snap only)
- V2 = Picofast®, snap and M8x1, male (Q08 only)

#### Connector/Sensor Transition

- 1 = straight
- 3 = straight with adapter
- 4 = right-angle with adapter

#### Factory Code

##### Example:

- 0 = non-standard wiring
- 1 = standard wiring
- 3 = N.C. DC output on pin 4
- 4 = N.O. 2-wire DC output on pin 4

#### Number of Pins

### B. Potted Cable

Bi2-G12-AN6X 7M

#### Cable Length

- (blank) = 2 meter cable
- 7M = 7 meter cable
- \*M = custom cable lengths available

### C. Potted Cable with Molded Connector

Bi2-G12-Y0X - 0.2M - RS 4.21T

#### Cable Length

##### examples:

- 0.2M = 0.2 meters (minimum)
- 2M = 2 meter cable
- 7M = 7 meter cable

#### Standard Cordset Connector

- AC: RSM 30 = Minifast, 7/8"-16UN, metal, male, 3-conductor
- SB 3T = Microfast, 1/2"-20UNF, metal, male, 30 conductor
- DC: RS 4T = Eurofast, M12x1, metal or plastic, male, 3-conductor
- RS 4.2T = Eurofast, M12x1, metal or plastic, male, 2-conductor
- RS 4.21T = Eurofast, M12x1, metal or plastic, male, NAMUR, 2-conductor
- RS 4.4T = Eurofast, M12x1, metal or plastic, male, 4-conductor
- RSM 40 = Minifast, 7/8"-16UN, metal, male, 4-conductor
- PSG 3 = Picofast, snap, plastic, male, 3-conductor
- PSG 3M = Picofast, M8x1, male, 3-conductor

## Option Codes for Special or Custom-Built Sensors\*\*

Bi 2-S12-AN7X /S100 or Bi10-M30-AN6X-H1141 /F2

#### examples:

- /S34 = weld field immune
- /S90 = TPU cable
- /S97 = -40 °C (-40 °F) operating temperature
- /S100 = +100 °C (+212 °F) operating temperature
- /S1589 = barrel sensors with Weldguard® laminate
- /S1610 = barrel sensors with tool steel sleeve and Weldguard® laminate

#### example:

- /F2 = alternate oscillator frequency

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