



# Part Number Key for Proximity Sensors

<b>B</b>	<b>i</b>	<b>10</b>	<b>U</b>	<b>-</b>	<b>G</b>	<b>T</b>	<b>30</b>	<b>-</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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### Mounting

- B = Embeddable
- N = Nonembeddable
- S = Slot Sensor
- RU(C) = Ultrasonic Sensor
- W = Position Measuring System

### Principle of Operation

- C = Capacitive
- CF = Capacitive (Noise immune)
- i = Inductive
- IM = Inductive Magnet Operated
- R = Reed

### Rated Operating Distance (mm)

### Sensing Characteristics

- F = Front Sensing on Q26 and Q34 Sensor
- NF = Nonferrous Only
- R = Ring Sensor
- S = Side Sensing on Q26 Sensor
- T = Side Sensing on Q34 Sensor
- U = **Uprox**<sup>®</sup> Sensor

### Housing Material Modifier

- E = Stainless Steel

### Housing Style

#### Barrel - Metal

- G = Full Threading, Generally Chrome Plated Brass
- H = Smooth, Chrome Plated Brass or Stainless Steel
- M = Partial Threading, Chrome Plated Brass

#### Barrel - Plastic

- K = Smooth
- KT = PVDF, Smooth
- P = Full Threading
- PT = PVDF, Full Threading
- S = Partial Threading
- T = Right Angle

#### Rectangular

- Q = Metal or Plastic, Various Rectangular Styles

#### Limit Switch

- CA = **stubby**<sup>®</sup>, Short Aluminum Housing, Connector
- CK = **stubby**<sup>®</sup>, Short Plastic Housing, Connector
- CP = **combiprox**<sup>®</sup>, Plastic Housing, Terminal Chamber Base with Removable Sensor

#### Slot

- K = Slot Sensor, Plastic Housing

#### Ring

- 32SR = Large Plastic Housing, Static or Dynamic Output
- Q = Small Rectangular Plastic Housing, Static Output
- W = Small Plastic Housing, Dynamic Output

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- A23 = Metal, Clamp-on; Active Face Centered
- AKT = Plastic, Clamp-on; Active Face Centered
- IKE = Metal, Clamp- or Strap-on; Active Face on End
- IKM = Metal, Clamp- or Strap-on; Active Face on End
- IKT = Metal, Clamp- or Strap-on; Active Face Centered
- INT = Plastic, Groove Mt. or Strap-On; Active Face on End
- INR = Plastic, Groove Mount; Active Face on End
- KST = Metal/Plastic, Strap-on; Active Face Centered
- NST = Plastic, Clamp-on; Active Face Centered
- PSM = Metal/Plastic, Strap-on; Active Face on End
- PST = Plastic, Strap-on; Active Face on End
- QST = Plastic, Clamp-on; Active Face on End

#### Cylinder Rotatable

- CRS = Cylinder Rotatable Sensor with Probe, Metal

### Number of LEDs

- Examples:
- Blank = No LEDs
- X2 = 2 LEDs

### Voltage Range

#### AC/DC: (No SCP\*\*)

- 3 = 20-250 VAC, 10-300 VDC
- 31 = 20-250 VAC, 10-300 VDC, Plastic Barrel
- 33 = 35-250 VAC, Grounded Metal Barrel

#### AC/DC: (Latched SCP)

- 30 = 20-250 VAC, 10-300 VDC
- 32 = 20-250 VAC, 10-300 VDC
- 40 = 20-140 VAC/DC, High Off-State Current

#### DC:

- 4 = 10-65 VDC, Polarity Protected, Pulsed SCP\*\*
- 6 = 10-30 VDC, Polarity Protected, Pulsed SCP
- 7 = 10-30 VDC, TTL Compatible
- 8 = 20-30 VDC, Polarity Protected, Pulsed SCP
- 41 = 10-65 VDC, Polarity Protected, Pulsed SCP
- 61 = 10-30 VDC, Polarity Protected, Pulsed SCP
- LI = 20-30 VDC
- LIU = 15-30 VDC
- LU = 18-30 VDC

\*\*SCP = Short-Circuit and Overload Protection

### Output

- D = 2-Wire DC (Transistor Output)
- DZ = 2-Wire AC/DC, (Power MOSFET Output)
- LF = Frequency Output
- G = 2-Wire DC, Low Voltage Drop
- LI(LU) = Linear Analog Output Current (LI) or Voltage (LU)
- LIU = Linear Analog Output (Current and Voltage)
- N = NPN Transistor (Current Sinking)
- P = PNP Transistor (Current Sourcing)
- R = Relay Output
- SIU = Analog Output (non-linear)
- Z = 2-Wire AC or 2-Wire AC/DC

### Output Function

- A = Normally Open (N.O.)
- DA = Dynamic Output (Ring Sensor), Normally Open
- F = Connection Programmable (N.O. or N.C.)
- R = Normally Closed (N.C.)
- U = Jumper Programmable (N.O. or N.C.)
- V = Complementary Outputs: One N.O., One N.C.
- Y0 = NAMUR Output, Requires Switching Amplifier
- Y1 = NAMUR Output, Requires Switching Amplifier

### Secondary Barrel Modifier

- E = Extended Barrel Length
- H = Weldguard<sup>®</sup>/Stoneface
- K = Short Barrel Length
- LD = Load Dump
- M = Medium Barrel Length
- SK = Right-Angle Terminal Chamber
- SR = Straight Terminal Chamber
- T = Barb Fitting at Cable Entry
- WD = Washdown IP 67/IP 68/IP 69K
- S = Side Sensing

**Housing Diameter or Height (mm) or CRS Probe Length (mm = Number/10)**

### Primary Barrel Modifier

- T = Teflon<sup>®</sup> Coated

\* See back for WIRING OPTIONS and SPECIAL OPTION CODES.

**Note: This key is to assist in IDENTIFICATION ONLY. Consult factory for items not identified.**

## Wiring Options

### A) Connectorized Sensor

**Bi 2-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, 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

Examples:

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

**Bi 2-G12-AN6X 7M**

#### Cable Length

Blank = 2 meter cable  
 7M = 7 meter cable

### C) Potted Cable with Molded Connector

**Bi 2-G12-Y0X - 0.2M - RS 4.21T**

#### Cable Length (m)

Examples:  
 0.2M = 0.2 meters (minimum)  
 2M = 2 meters

#### Standard Cordset Connector

**AC:** RSM 30 = *minifast*, 3-conductor  
 SB 3T = *microfast*, 3-conductor  
**DC:** RS 4T = *eurofast*, 3-conductor  
 RS 4.2T = *eurofast*, 2-conductor  
 RS 4.21T = *eurofast*, NAMUR, 2-conductor  
 RS 4.4T = *eurofast*, 4-conductor  
 RSM 40 = *minifast*, 4-conductor  
 PSG 3 = *picofast*, 3-conductor (snap-on)  
 PSG 3M = *picofast*, 3-conductor (M8x1)

## Special Option Codes

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

**Bi 2-S12-AN7X /S100 or Bi10R-W30-DAN6X-H1141 /F2**

Examples:

/S34 = Weld Field Immune  
 /S97 = -40°C (-40°F) Operating Temperature  
 /S100 = +100°C (+212°F) Operating Temperature  
 /S395 = Medium Barrel Length of 60 mm  
 /S250 = Without Potentiometer

Example:

/F2 = Alternate Oscillator Frequency

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