

# Rectangular Inductive Sensor Part Number Key

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |           |   |          |           |   |          |          |          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|---|----------|-----------|---|----------|----------|----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <b>B</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>i</b> | <b>15</b> | - | <b>Q</b> | <b>20</b> | - | <b>A</b> | <b>P</b> | <b>6</b> | <b>X2</b> | <b>Wiring Option*</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Special Option Code**</b> |
| <b>Mounting</b><br>B = embeddable<br>N = nonembeddable<br><b>Principle of Operation</b><br>i = inductive<br><b>Rated Operating Distance (mm)</b><br><br><b>Sensing Characteristics</b><br>S = side sensing on Q10S sensor<br>U = Uprox® Sensor<br><b>Housing Style</b><br><b>Rectangular</b><br>K = smooth<br>Q = metal or plastic, various rectangular styles<br><b>Limit Switch</b><br>CA = Stubby®, short aluminum housing, connector<br>CK = Stubby, short plastic housing, connector<br>CP = Combiprox®, plastic housing, terminal chamber base with removable sensor<br><b>Housing Height (mm)</b> |          |           |   |          |           |   |          |          |          |           | <b>Number of LEDs</b><br>(blank) = no LEDs<br>X = 1 LED<br>X2 = 2 LEDs<br><b>Voltage Range</b><br><b>AC/DC: (No SCP**)</b><br>3 = 20-250 VAC, 10-300 VDC<br>31 = 20-250 VAC, 10-300 VDC, plastic barrel<br><b>AC/DC: (Latched SCP)</b><br>30 = 20-250 VAC, 10-300 VDC 400 mA<br>32 = 20-250 VAC, 10-300 VDC 400 mA<br><b>DC:</b><br>4 = 10-65 VDC, polarity protected, pulsed SCP**<br>6 = 10-30 VDC, polarity protected, pulsed SCP<br>**SCP = short-circuit and overload protection                                                                            |                              |
| <b>NOTE:</b><br>Part number keys are to assist in identification only.<br>Verify new part numbers with factory; some configurations are not possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |          |           |   |          |           |   |          |          |          |           | <b>Output</b><br>D = 2-wire DC (transistor output)<br>DZ = 2-wire AC/DC, (power MOSFET output)<br>N = NPN transistor (current sinking)<br>P = PNP transistor (current sourcing)<br>Z = 2-wire AC or 2-wire AC/DC<br><b>Output Function</b><br>A = normally open (N.O.)<br>F = connection programmable (N.O. or 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<br><b>Secondary Housing Modifier</b><br>SR = straight terminal chamber |                              |

Rectangular Inductive Sensors

## Wiring Options\*

### A. Connectorized Sensor

Bi15 - Q20 - AN6X2 - H1 1 4 1

#### Connector Family

- B1 = Minifast®, Metal, Male
- B2 = Minifast, Plastic, Male
- B3 = Microfast®, Metal, Male
- H1 = Eurofast®, Metal or Plastic, Male
- V1 = Picofast®, Metal, Male
- V2 = Picofast, Snap and M8x1, Male (Q08 Only)

#### Connector/Sensor Transition

- 1 = straight

#### Wiring Configuration

##### Example:

- 1 = Standard
- 3 = N.C. DC Output on Pin 4 (for US)

#### Number of Pins

### B. Potted Cable

Bi15 - Q20 - AN6X2 - 7M

#### Cable Length

- Blank = 2 meter cable
- 7M = 7 meter cable

## Special Option Codes\*\*

Bi - 5 - Q08 - AN6XS /S34

#### Option Code

##### Example:

- /S34 = Weld Field Immune
- /S97 = -40 °C (-40 °F) Operating Temperature
- /S100 = +100 °C (+212 °F) Operating Temperature

- /S1590 = CK/CA40 sensors with Weldguard laminate
- /S1591 = CA40 sensors with Weldguard and Armorguard

# Rectangular Inductive Sensors | Q4.7, Q5.5, & Q06

## Top Sensing Subminiature Qpak Housing

| Part Number/<br>ID Number    | Features | Embeddable | Sensing Range (mm) | Output        | Voltage   | Switching Freq. (Hz) | Operating Current (mA) | Operating Temp. (°C) | Protection | Housing | Front Cap/Face | Power LED | Output LED | Cable Length/Jacket | Dimension Drawings | Wiring Diagrams | Spec List |
|------------------------------|----------|------------|--------------------|---------------|-----------|----------------------|------------------------|----------------------|------------|---------|----------------|-----------|------------|---------------------|--------------------|-----------------|-----------|
| Bi2-Q4.7-AN6X<br>1614001     |          | •          | 2                  | 3-wire DC NPN | 10-30 VDC | 1000                 | ≤100                   | 0 to +85             | IP67       | Zinc    | PA             | N/A       | YE         | 2M/TPU              | A                  | 2               | A4        |
| Bi2-Q4.7-AP6X<br>1614000     |          | •          | 2                  | 3-wire DC NPN | 10-30 VDC | 1000                 | ≤100                   | 0 to +85             | IP67       | Zinc    | PA             | N/A       | YE         | 2M/TPU              | A                  | 3               | A4        |
| Bi2-Q5.5-AG6X<br>1613108     |          | •          | 2                  | 2-wire DC     | 10-30 VDC | 1000                 | ≤50                    | -25 to +70           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 1               | A2        |
| Bi2-Q5.5-AN6X<br>1613100     |          | •          | 2                  | 3-wire DC NPN | 10-30 VDC | 2000                 | ≤150                   | -25 to +85           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 2               | A4        |
| Bi2-Q5.5-AN6X/S34<br>1613101 | WFI      | •          | 2                  | 3-wire DC NPN | 10-30 VDC | 2000                 | ≤150                   | -25 to +70           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 2               | A4        |
| Ni3.5-Q5.5-AN6X<br>4613610   |          |            | 3.5                | 3-wire DC NPN | 10-30 VDC | 2000                 | ≤150                   | -25 to +70           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 2               | A4        |
| Bi2-Q5.5-AP6X<br>1613000     |          | •          | 2                  | 3-wire DC PNP | 10-30 VDC | 2000                 | ≤150                   | -25 to +85           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 3               | A4        |
| Bi2-Q5.5-AP6X/S34<br>1613001 | WFI      | •          | 2                  | 3-wire DC PNP | 10-30 VDC | 2000                 | ≤150                   | -25 to +70           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 3               | A4        |
| Ni3.5-Q5.5-AP6X<br>4613601   |          |            | 3.5                | 3-wire DC PNP | 10-30 VDC | 2000                 | ≤150                   | -25 to +70           | IP67       | PP      | PP             | N/A       | YE         | 2M/TPU              | B                  | 3               | A4        |
| Bi3-Q06-AN6X2<br>1620150     |          | •          | 3                  | 3-wire DC NPN | 10-30 VDC | 1000                 | ≤200                   | -25 to +70           | IP67       | PBT     | PA             | GN        | YE         | 2M/TPU              | C                  | 2               | A4        |
| Bi3-Q06-AP6X2<br>1620100     |          | •          | 3                  | 3-wire DC PNP | 10-30 VDC | 1000                 | ≤200                   | -25 to +70           | IP67       | PBT     | PA             | GN        | YE         | 2M/TPU              | C                  | 3               | A4        |

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

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