

Inductive Barrel Sensor Part Number Key

B	I	10	U	-		G	T	30	-	A	DZ	30	X2	Wiring Option*	Special Option Code**
Mounting															
B = embeddable															
N = nonembeddable															
Principle of Operation															
I = inductive															
Rated Operating Distance (mm)															
Sensing Characteristics															
U = Uprox® sensor															
Housing Material Modifier															
E = stainless steel															
Housing Style															
Barrel - Metal															
G = full threading, generally chrome plated brass															
GS = threaded side sensor															
H = smooth, chrome plated brass or stainless steel															
HS = smooth side sensor															
M = partial threading, chrome plated brass															
Barrel - Plastic															
K = smooth															
P = full threading															
S = partial threading															
SK = side sensing/slot sensor, plastic housing															
Primary Barrel Modifier															
T = PTFE coated															
Housing Diameter or Height (mm)															
Secondary Barrel Modifier															
CA = conduit adaptor															
E = extended barrel length															
EE = extra long barrel length															
F = stainless steel face															
FE = stainless steel face, extended barrel length															
H = Stoneface®															
K = short barrel length															
M = medium barrel length															
S = side sensing															
SE = extended length															
SK = right-angle terminal chamber															
SR = straight terminal chamber															
T = barb fitting at cable entry															
TC = terminal chamber															
WD = washdown IP68/IP69K															

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A	DZ	30	X2	Wiring Option*	Special Option Code**
Number of LEDs					
(blank) = no LEDs					
X = 1 LED					
X2 = 2 LEDs					
Voltage Range					
AC/DC: (No SCP**)					
3 = 20-250 VAC, 10-300 VDC					
14 = 20-132 VAC, 10-140 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 = 10-55 VDC, polarity protected, pulsed SCP					
44 = 10-55 VDC					
45 = 8.4-64 Volts					
**SCP = short-circuit and overload protection					
Output					
D = 2-wire DC (transistor output)					
DZ = 2-wire AC/DC, (power MOSFET output)					
G = 2-wire DC, low voltage drop					
N = NPN transistor (current sinking)					
P = PNP transistor (current sourcing)					
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.)					
V = complementary outputs: one N.O., one N.C.					
Y0 = NAMUR output, requires switching amplifier					
Y1 = NAMUR output, requires switching amplifier, ATEX Approved					

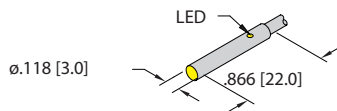
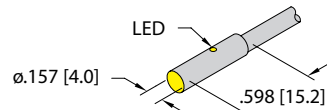
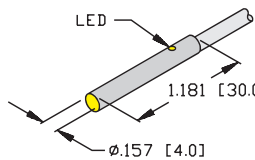
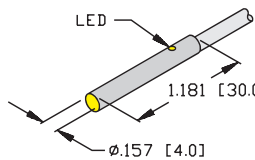
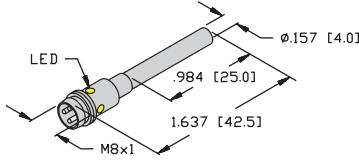
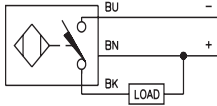
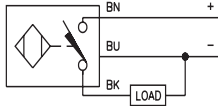
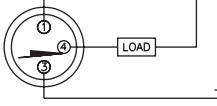
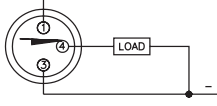
NOTE:

Part number keys are to assist in identification only.

Verify new part numbers with factory; some configurations are not possible.

Inductive Barrel Sensors | 3 mm, 4 mm

Embeddable Smooth Metal Barrels with DC Outputs

Housing Style		Dimension Drawings	
	A		B
			
	C		D
			
3 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable			
4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable			
4 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect			
Wiring Diagrams/Mating Cordsets			
1	2	3	4
			
		Mating Cordset: PKG 3M-*	Mating Cordset: PKG 3M-*
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
Ripple: ≤10%		Time Delay Before Availability: ≤8 ms	
Differential Travel (Hysteresis): 3-15% (5% typical)		Power-On Effect: Per IEC 947-5-2	
Voltage Drop Across Conducting Sensor: ≤1.8 V		Reverse Polarity Protection: Incorporated	
Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current		Wire-Break Protection: Incorporated	
≥170 mA on 150 mA Load Current		Transient Protection: Per EN 60947-5-2	
≥120 mA on 100 mA Load Current		Temperature Drift: ≤±10%	
Off-State (Leakage) Current: ≤0.1 mA		Shock: 30 g, 11 ms	
No-Load Current: ≤15 mA (Ferrite, Uprox)		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes	
≤20 mA (Uprox+, Uprox3)		Repeatability: ≤2% of Rated Operating Distance	

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Inductive Barrel Sensors | 3 mm, 4 mm

Embeddable Smooth Metal Barrels with DC Outputs

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1U-EH04-AN6X 4602114	Uprox3	1	3-wire DC NPN	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1U-EH04-AP6X 4602112	Uprox3	1	3-wire DC PNP	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4
Bi1-EH04-AN6X 4609640		1	3-wire DC NPN	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1-EH04-AP6X 4609540		1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4
Bi1-EH04K-AN6X 4609768	Short Barrel	1	3-wire DC NPN	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Bi1-EH04K-AP6X 4609767	Short Barrel	1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi1-EH03-AN6X 1619326		1	3-wire DC NPN	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi1-EH03-AP6X 1619325		1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi1U-EH04-AN6X-V1331 4602115	Uprox3	1	3-wire DC NPN	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	3	A4
Bi1U-EH04-AP6X-V1331 4602113	Uprox3	1	3-wire DC PNP	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4
Bi1-EH04-AN6X-V1331 4608540		1	3-wire DC NPN	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	3	A4
Bi1-EH04-AP6X-V1331 4608440		1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4

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