





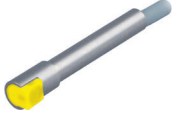




Inductive Barrel Sensor Selection Guide





Embeddable/Nonembeddable Barrels					
					
Housing	3 mm	4 mm	4 mm	4 mm	5 mm
Sensing Range	1 mm	1 mm	1 mm	1 mm	1 mm
Pages	B9	B9	B9	B11	B11
Features					
2-wire					
3/4-wire	•	•	•	•	•
2-wire AC/DC					





Embeddable/Nonembeddable Barrels				
				
Housing	5 mm	6.5 mm	6.5 mm	8 mm
Sensing Range	1 mm	1.5 - 6 mm	1.5 - 6 mm	1.5 - 2 mm
Pages	B11	B13 - 16	B13 - 16	B17
Features		Uprox	Uprox	
2-wire				
3/4-wire	•	•	•	•
2-wire AC/DC				





Embeddable/Nonembeddable Barrels				
				
Housing	8 mm	Side Sensing	Side Sensing	8 mm
Sensing Range	1.5 - 2 mm	1 - 1.5 mm	1.5 mm	1.5 - 6 mm
Pages	B17	B19	B19	B23 - 34
Features	Uprox			Uprox
2-wire				•
3/4-wire	•	•	•	•
2-wire AC/DC				

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

Inductive Barrel Sensor Selection Guide

Embeddable/Nonembeddable Barrels				
				
Housing	8 mm	12 mm	12 mm	12 mm
Sensing Range	1.5 - 6 mm	2 - 10 mm	2 - 8 mm	2 - 10 mm
Pages	B35 - 42	B43 - 64	B59	B65 - 72
Features		Uprox	Uprox	
2-wire	•	•		•
3/4-wire	•	•	•	•
2-wire AC/DC		•		•





Embeddable/Nonembeddable Barrels				
				
Housing	12 mm	12 mm	18 mm	18 mm
Sensing Range	2 - 8 mm	2 - 8 mm	5 - 15 mm	2 - 10 mm
Pages	B73	B75	B77 - 104	B95; B103
Features	Uprox	Uprox	Uprox	Uprox
2-wire		•	•	
3/4-wire	•	•	•	•
2-wire AC/DC	•		•	





Embeddable/Nonembeddable Barrels				
				
Housing	18 mm	18 mm	18 mm	18 mm
Sensing Range	5 - 15 mm	5 - 12 mm	5 - 10 mm	5 - 12 mm
Pages	B105 - 110	B99 - 112	B113	B115
Features	Uprox	Uprox	Uprox	Uprox
2-wire	•	•		
3/4-wire	•	•	•	•
2-wire AC/DC	•	•	•	•





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

Inductive Barrel Sensors

Inductive Barrel Sensor Selection Guide

Embeddable/Nonembeddable Barrels				
				
Housing	30 mm	30 mm	30 mm	30 mm
Sensing Range	10 - 30 mm	10 - 20 mm	10 - 30 mm	10 - 20 mm
Pages	B117 - 132	B127, B143	B133 - 140	B141
Features	Uprox	Uprox	Uprox	Uprox
2-wire	•	•	•	•
3/4-wire	•	•	•	•
2-wire AC/DC	•	•	•	•

Embeddable/Nonembeddable Barrels				
				
Housing	30 mm	30 mm	40 mm	47 mm
Sensing Range	10 - 20 mm	10 - 20 mm	30 mm	20 - 25 mm
Pages	B145	B145	B147	B147
Features	Uprox			
2-wire				
3/4-wire	•	•	•	•
2-wire AC/DC	•	•	•	•

Embeddable/Nonembeddable Barrels				
				
Housing	47 mm	40 mm	47 mm	Variable
Sensing Range	20 - 25 mm	15 - 30 mm	25 - 40 mm	1 - 15 mm
Pages	B147	B149	B149	B151 - 162
Features				
2-wire				•
3/4-wire	•	•	•	
2-wire AC/DC	•	•	•	

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

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

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.

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

Inductive Barrel Sensors

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, 3-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

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

Inductive Barrel Sensors

Mounting

Turck inductive proximity sensors are manufactured with a shielded coil, designated by “Bi” in the part number, and a nonshielded coil, designated by “Ni” in the part number. Embeddable (shielded) units may be safely flush-mounted in metal. Nonembeddable (nonshielded) units require a metal free area around the sensing face. Because of possible interference of the electromagnetic fields generated by the oscillators, minimum spacing is required between adjacent or opposing sensors.

It is good engineering practice to mount sensors horizontally or with the sensing face looking down. Avoid sensors that look up wherever considered, especially if metal filings and chips are present.

Maximum Locknut Torque Specifications

The locknut torque should be considered for all threaded sensors to prevent the housing from being over stressed. The values below pertain to the locknut provided with each sensor. Liquid thread sealants of an anaerobic base, such as Loctite, are recommended if strong vibrations are likely.

Caution: Sensor barrels are typically brass. Consider break torque when selecting grade of thread sealant.

Barrel Size	Metal Barrel	Plastic Barrel
5 mm	5 Nm (3.7 ft-lb)	----
8 mm	5 Nm (3.7 ft-lb)	----
8 mm (M08 Ferrite)	7 Nm (5.2 ft-lb)	----
12 mm	10 Nm (7.4 ft-lb)	1 Nm (0.7 ft-lb)
18 mm	25 Nm (18 ft-lb)	2 Nm (1.4 ft-lb)
30 mm	75 Nm (55 ft-lb)	5 Nm (3.7 ft-lb)
47 mm	90 Nm (66 ft-lb)	----

Drill Hole Sizes for Metric Threads

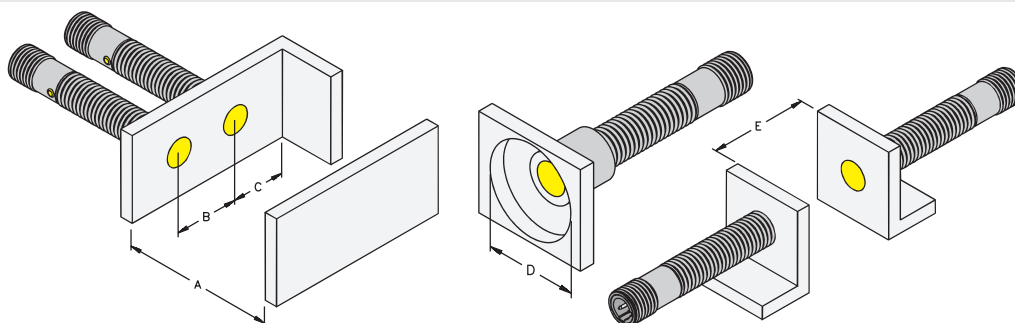
Thread Size	Pitch	Thru Hole (mm)	Tap Hole Dia. (mm)	Thru Hole (in)	Tap Hole Dia. (in)
M5 x 0.5	0.5	5.0	4.5	13/64	5/32
M8 x 1	1.0	8.0	7	21/64	1/4
M12 x 1	1.0	12.0	11	31/64	13/32
M18 x 1	1.0	18.0	17	23/32	41/64
M30 x 1.5	1.5	30.0	28	1-3/16	1-5/64
PG 9	1.41	15.2	14	5/8	1/2
PG 13.5	1.41	20.4	19	13/16	23/32
PG 36	1.59	47.0	45.5	1-7/8	1-47/64

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

Inductive Barrel Sensors

Inductive Barrel Sensors

Embeddable Mounting Considerations



Flush Mountable

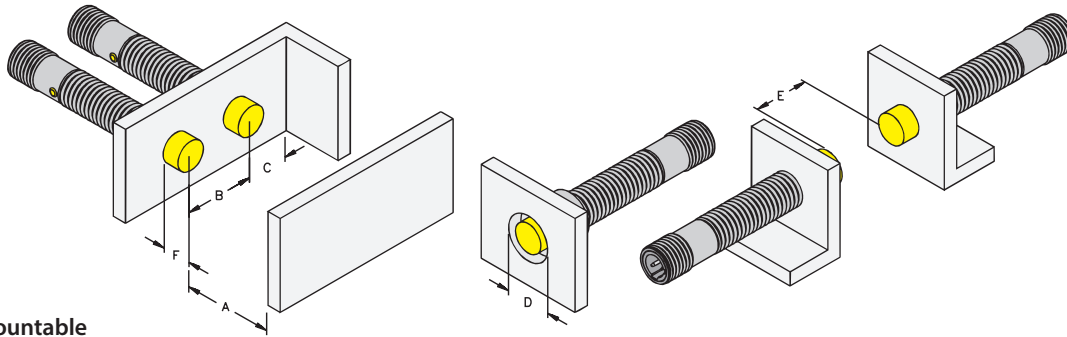
Sensor Type	Barrel Diameter	A	B	C	D	E
Bi1	3.00	3.00	6.00	4.50	9.00	9.00
Bi1U	4.00	3.00	8.00	6.00	12.00	6.00
Bi1	4.00	3.00	8.00	6.00	12.00	6.00
Bi1	5.00	3.00	10.00	8.00	15.00	6.00
Bi1U	5.00	3.00	10.00	7.50	15.00	6.00
Bi1.5U	6.50	5.00	13.00	10.00	20.00	9.00
Bi1.5	6.50	5.00	13.00	10.00	20.00	9.00
Bi2	6.50	6.00	13.00	10.00	20.00	12.00
Bi1.5U	8.00	5.00	16.00	12.00	24.00	9.00
Bi1.5	8.00	5.00	16.00	12.00	24.00	9.00
Bi2	8.00	6.00	16.00	12.00	24.00	12.00
Bi2U	8.00	6.00	16.00	12.00	24.00	12.00
Bi3U	8.00	9.00	16.00	12.00	24.00	18.00
Bi2	11.00	6.00	22.00	17.00	33.00	12.00
Bi2	12.00	6.00	24.00	18.00	36.00	12.00
Bi3U	12.00	9.00	24.00	18.00	36.00	18.00
Bi3	12.00	9.00	24.00	18.00	36.00	18.00
Bi4	12.00	12.00	24.00	18.00	36.00	24.00
Bi4U	12.00	12.00	24.00	18.00	36.00	24.00
Bi6U	12.00	18.00	24.00	18.00	36.00	36.00
Bi5U	18.00	15.00	36.00	27.00	54.00	30.00
Bi5	18.00	15.00	36.00	27.00	54.00	30.00
Bi7	18.00	21.00	36.00	27.00	54.00	42.00
Bi8U	18.00	24.00	36.00	27.00	54.00	48.00
Bi8	18.00	24.00	36.00	27.00	54.00	48.00
Bi10U	18.00	30.00	36.00	27.00	54.00	60.00
Bi10U	30.00	27.00	60.00	45.00	90.00	54.00
Bi10	30.00	30.00	60.00	45.00	90.00	60.00
Bi12	30.00	36.00	60.00	45.00	90.00	72.00
Bi15	30.00	45.00	60.00	45.00	90.00	90.00
Bi15U	30.00	45.00	60.00	45.00	90.00	90.00
Bi 20U	30.00	60.00	60.00	45.00	90.00	120.00
Bi 20	47.00	60.00	94.00	71.00	141.00	120.00
Bi 25	47.00	75.00	94.00	71.00	141.00	150.00

Dimensions are in mm.

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

Inductive Barrel Sensors

Nonembeddable Mounting Characteristics

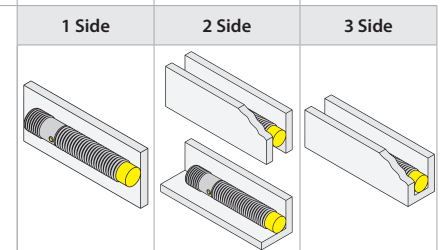


Non-Flush Mountable

Sensor Type	Barrel Diameter	A	B	C	D	E	F	1 Side	2 Side	3 Side
Ni3	6.50	9.00	20.00	10.00	20.00	18.00	6.00			
Ni3	8.00	9.00	24.00	12.00	24.00	18.00	6.00			
Ni4U	8.00	12.00	32.00	12.00	32.00	24.00	8.00			
Ni4	8.00	12.00	24.00	12.00	24.00	24.00	8.00			
Ni6U	8.00	18.00	32.00	12.00	36.00	36.00	12.00			
Ni5	11.00	15.00	33.00	17.00	33.00	30.00	10.00			
Ni4	12.00	12.00	36.00	18.00	36.00	24.00	8.00			
Ni5	12.00	15.00	36.00	18.00	36.00	30.00	10.00			
Ni8U	12.00	24.00	48.00	18.00	45.00	48.00	16.00	Sr=6 mm*		
Ni8	12.00	24.00	36.00	18.00	36.00	48.00	16.00			
Ni10U	12.00	30.00	48.00	18.00	36.00	60.00	20.00			
Ni8	18.00	24.00	54.00	27.00	54.00	48.00	16.00			
Ni10	18.00	30.00	54.00	27.00	54.00	60.00	20.00			
Ni12U	18.00	36.00	70.00	27.00	54.00	72.00	24.00			
Ni14	18.00	42.00	54.00	27.00	54.00	84.00	20.00			
Ni15U	18.00	45.00	70.00	27.00	54.00	90.00	30.00			
Ni10	20.00	30.00	60.00	30.00	60.00	60.00	20.00			
Ni15	30.00	45.00	90.00	45.00	90.00	90.00	20.00			
Ni20U	30.00	60.00	90.00	45.00	90.00	120.00	40.00	Sr=15 mm*	Sr=12 mm*	Sr=11 mm*
Ni20	30.00	60.00	90.00	45.00	90.00	120.00	20.00			
Ni30U	30.00	135.00	90.00	45.00	90.00	180.00	60.00			
Ni20	40.00	60.00	120.00	60.00	120.00	120.00	40.00			
Ni30	40.00	90.00	120.00	60.00	120.00	180.00	40.00			
Ni25	47.00	75.00	141.00	71.00	141.00	150.00	40.00			
Ni40	47.00	120.00	141.00	71.00	141.00	240.00	40.00			

Dimensions are in mm.

* The above Uprox Ni sensors with DC outputs and Stainless barrels can be flush mounted because the sensor automatically compensates for metal alongside its sensing face by decreasing the sensing range, preventing the output from locking on.


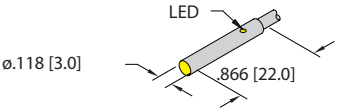
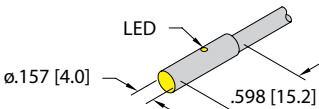
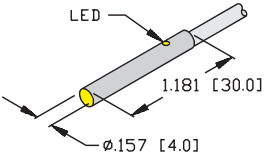
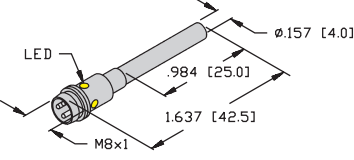


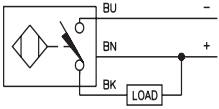
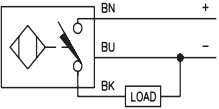
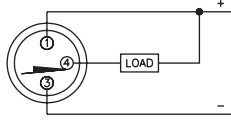
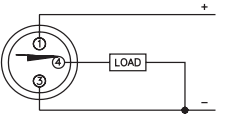
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 3 mm, 4 mm

Embeddable Smooth Metal Barrels with DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>3 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>B</p>  <p>4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>
<p>C</p>  <p>4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>D</p>  <p>4 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	

Wiring Diagrams/Mating Cordsets			
<p>1</p> 	<p>2</p> 	<p>3</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>4</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ±±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 3 mm, 4 mm

Embeddable Smooth Metal Barrels with DC Outputs


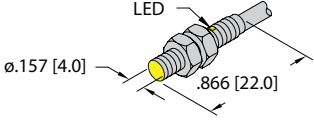
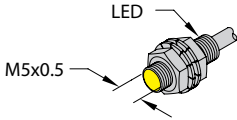
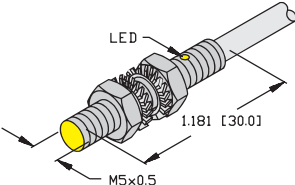
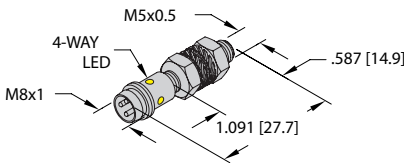
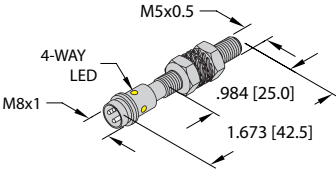
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1U-EH04-AN6X 4602114	Uprox3	1	3-wire DC NPN	10-30 VDC	2000	≤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

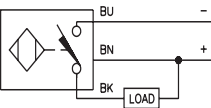
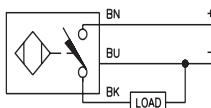
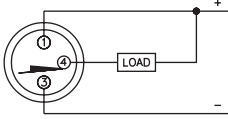
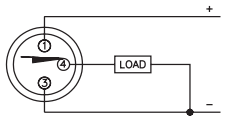
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 4 mm, 5 mm

Embeddable Threaded Metal Barrels with DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>4 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>B</p>  <p>5 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>C</p>  <p>5 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>D</p>  <p>5 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>E</p>  <p>5 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>

Wiring Diagrams/Mating Cordsets			
<p>1</p> 	<p>2</p> 	<p>3</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>4</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection:</p> <ul style="list-style-type: none"> ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current <p>Off-State (Leakage) Current:</p> <ul style="list-style-type: none"> No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3) 	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ±±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>		

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

Inductive Barrel Sensors | 4 mm, 5 mm

Embeddable Threaded Metal Barrels with DC Outputs


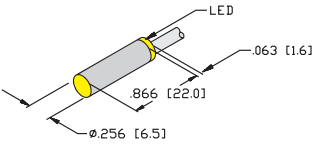
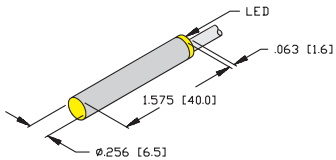
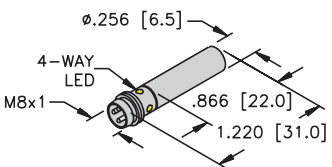
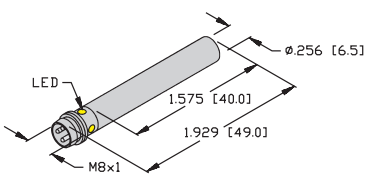
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1U-EG05-AN6X 4602118	Uprox3	1	3-wire DC NPN	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1U-EG05-AP6X 4602116	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-EG05-AN6X 4609840		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-EG05-AP6X 4609740		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-EG05K-AN6X 4609764	Short Barrel	1	3-wire DC NPN	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Bi1-EG05K-AP6X 4609765	Short Barrel	1	3-wire DC PNP	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi1-EG04-AN6X 1619328		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-EG04-AP6X 1619327		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-EG05-AN6X-V1331 4602119	Uprox3	1	3-wire DC NPN	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	3	A4
Bi1U-EG05-AP6X-V1331 4602117	Uprox3	1	3-wire DC PNP	10-30 VDC	2000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	4	A4
Bi1-EG05-AN6X-V1331 4608740		1	3-wire DC NPN	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	3	A4
Bi1-EG05-AP6X-V1331 4608640		1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	4	A4
Bi1-EG05K-AP6X-V1331 4609766	Short Barrel	1	3-wire DC PNP	10-30 VDC	3000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4

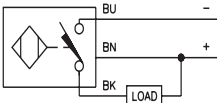
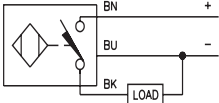
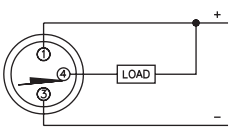
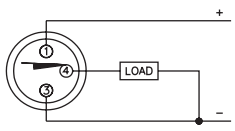
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 6.5 mm

Embeddable Smooth Metal Barrels with DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>6.5 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>B</p>  <p>6.5 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>
<p>C</p>  <p>6.5 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	<p>D</p>  <p>6.5 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	

Wiring Diagrams/Mating Cordsets			
<p>1</p> 	<p>2</p> 	<p>3</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>4</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 6.5 mm

Embeddable Smooth Metal Barrels with DC Outputs


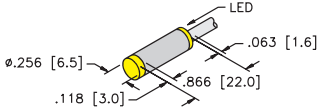
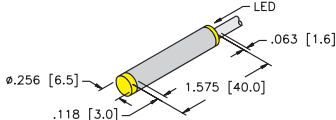
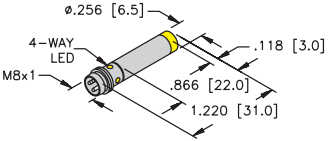
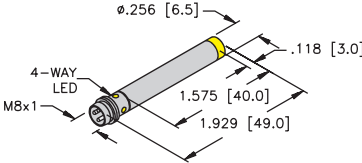
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi2U-EH6.5-AN6X 4281170	Uprox	2	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/ TPU	B	1	A4
Bi2U-EH6.5-AP6X 4281150	Uprox	2	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/ TPU	B	2	A4
Bi2-EH6.5-AN6X 4612300		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	B	1	A4
Bi2-EH6.5-AP6X 4612200		2	3-wire DC PNP	10-30 VDC	1000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	B	2	A4
Bi2-EH6.5K-AN6X 4610100	Short Barrel	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	A	1	A4
Bi2-EH6.5K-AP6X 4610000	Short Barrel	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	A	2	A4
Bi1.5-EH6.5-AN6X 4612100		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	B	1	A4
Bi1.5-EH6.5-AP6X 4612000		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	B	2	A4
Bi1.5-EH6.5-AP6X/S100 4612001	High Temp. 100 °C	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	SS	PA 12	N/A	YE	2M/ TPU	B	2	A4
Bi1.5-EH6.5K-AN6X 4610640	Short Barrel	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	A	1	A4
Bi1.5-EH6.5K-AP6X 4610540	Short Barrel	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/ TPU	A	2	A4
Bi2U-EH6.5-AN6X-V1131 4281180	Uprox	2	3-wire DC NPN	10-30 VDC	1000	≤150	-25 to +70	IP68	SS	PA 12	N/A	YE	--	D	3	A4
Bi2U-EH6.5-AP6X-V1131 4281160	Uprox	2	3-wire DC PNP	10-30 VDC	1000	≤150	-25 to +70	IP68	SS	PA 12	N/A	YE	--	D	4	A4
Bi2-EH6.5-AN6X-V1131 4612320		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	3	A4
Bi2-EH6.5-AP6X-V1131 4612220		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4
Bi2-EH6.5K-AN6X-V1131 4610120	Short Barrel	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	3	A4
Bi2-EH6.5K-AP6X-V1131 4610020	Short Barrel	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	4	A4
Bi1.5-EH6.5-AN6X-V1131 4612120		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	3	A4
Bi1.5-EH6.5-AP6X-V1131 4612020		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4
Bi1.5-EH6.5K-AN6X-V1131 4610840	Short Barrel	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	3	A4
Bi1.5-EH6.5K-AP6X-V1131 4610740	Short Barrel	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	4	A4

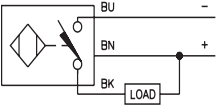
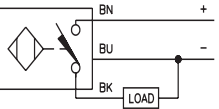
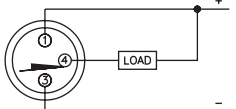
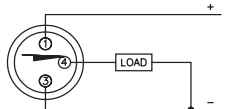
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 6.5 mm

Nonembeddable Smooth Metal Barrels with DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>6.5 mm - Nonembeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>B</p>  <p>6.5 mm - Nonembeddable, Miniature Smooth Barrel, Potted-In Cable</p>
<p>C</p>  <p>6.5 mm - Nonembeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	<p>D</p>  <p>6.5 mm - Nonembeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	

Wiring Diagrams/Mating Cordsets			
<p>1</p> 	<p>2</p> 	<p>3</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>4</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection:</p> <ul style="list-style-type: none"> $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 6.5 mm

Nonembeddable Smooth Metal Barrels with DC Outputs


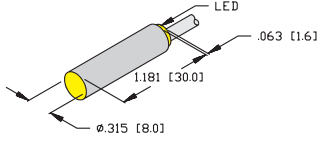
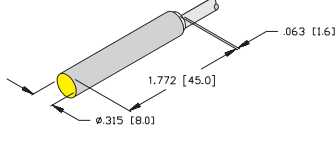
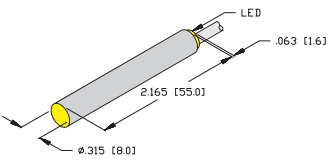
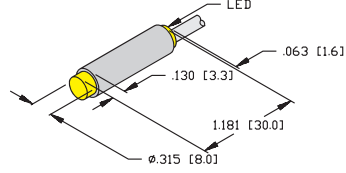
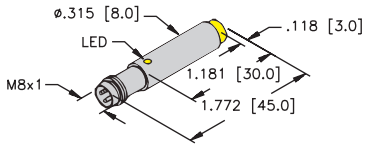
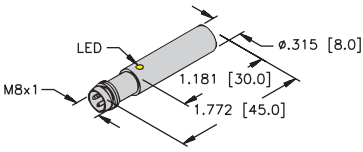
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni4U-EH6.5-AP6X 4600680	Uprox	4	3-wire DC PNP	10-30 VDC	3000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Ni3-EH6.5-AN6X 4612500		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Ni3-EH6.5-AP6X 4612400		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Ni3-EH6.5K-AN6X 4610300	Short Barrel	3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Ni3-EH6.5K-AP6X 4610200	Short Barrel	3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Ni6U-EH6.5-AP6X-V1131 4631510	Uprox+	6	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +70	IP68	SS	PA 12	N/A	YE	--	D	4	A4
Ni4U-EH6.5-AN6X-V1131 4600683	Uprox	4	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	--	D	3	A4
Ni4U-EH6.5-AP6X-V1131 4600681	Uprox	4	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	--	D	4	A4
Ni3-EH6.5-AN6X-V1131 4612520		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	3	A4
Ni3-EH6.5-AP6X-V1131 4612420		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	D	4	A4
Ni3-EH6.5K-AN6X-V1131 4610320	Short Barrel	3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	3	A4
Ni3-EH6.5K-AP6X-V1131 4610220	Short Barrel	3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	C	4	A4

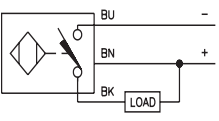
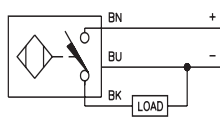
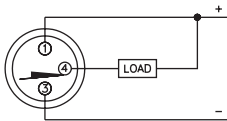
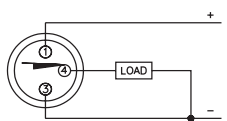
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable and Nonembeddable Smooth Metal Barrels with DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>B</p>  <p>8 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>
<p>C</p>  <p>8 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>D</p>  <p>8 mm - Nonembeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>E</p>  <p>8 mm - Nonembeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>
<p>F</p>  <p>8 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>		

Wiring Diagrams/Mating Cordsets			
<p>1</p> 	<p>2</p> 	<p>3</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>4</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Embeddable and Nonembeddable Smooth Metal Barrels with DC Outputs

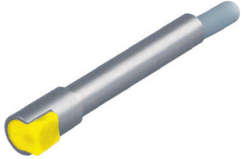
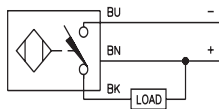
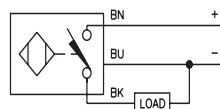
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1.5-H08K-AN6X 1604341	Short Barrel	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi1.5-H08K-AP6X 1604331	Short Barrel	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi1.5-H08M-AP6X 1604301		1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi1.5-H08-AN6X 16143		1.5	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1.5-H08-AP6X 16043		1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4
Ni2-H08K-AN6X 16147	Short Barrel	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	D	1	A4
Ni2-H08K-AP6X 16047	Short Barrel	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	D	2	A4
Bi1.5-H08K-AN6X-V1131 1604340	Short Barrel	1.5	3-wire DC NPN	10-30 VDC	5000	≤150	-25 to +70	IP67	SS	PBT	N/A	YE	--	F	3	A4
Bi1.5-H08K-AP6X-V1131 1604330	Short Barrel	1.5	3-wire DC PNP	10-30 VDC	5000	≤150	-25 to +70	IP67	SS	PBT	N/A	YE	--	F	4	A4
Ni2-H08K-AN6X-V1131 16148	Short Barrel	2	3-wire DC NPN	10-30 VDC	5000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	3	A4
Ni2-H08K-AP6X-V1131 16048	Short Barrel	2	3-wire DC PNP	10-30 VDC	5000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	--	E	4	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 5 mm, 8 mm

Embeddable Side Sensing Metal Barrels with Cable and DC Outputs

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

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

Inductive Barrel Sensors | 5 mm, 8 mm

Embeddable Side Sensing Metal Barrels with Cable and DC Outputs


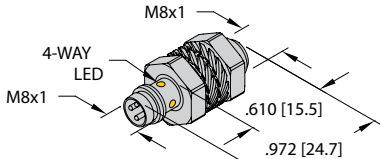
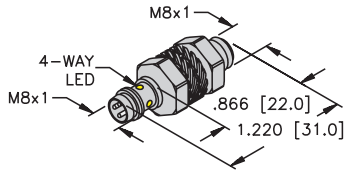
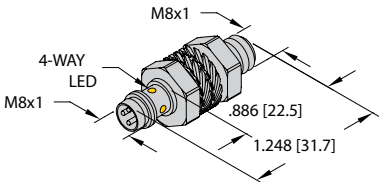
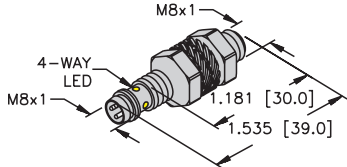
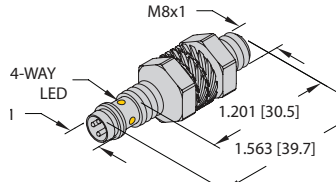
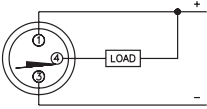
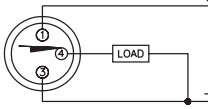
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1.5-HS865-AN6X 4604301	Side Sensing	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Bi1.5-HS865-AP6X 4604201	Side Sensing	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi1.5-GS880-AN6X 4604501	Side Sensing	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1.5-GS880-AP6X 4604401	Side Sensing	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4
Bi1-HS540-AN6X 4604101	Side Sensing	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-HS540-AP6X 4604001	Side Sensing	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

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

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

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Bi3U-EM08-AN6X-V1131 4602423	Uprox3	3	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	D	1	A4
Bi3U-EMT08-AN6X-V1131 4602157	Uprox3, PTFE	3	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +60	IP68	SS	TC	N/A	YE	D	1	A4
Bi3U-EM08-AP6X-V1131 4602413	Uprox3	3	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	D	2	A4
Bi3U-EMT08-AP6X-V1131 4602156	Uprox3, PTFE	3	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +60	IP68	SS	TC	N/A	YE	D	2	A4
Bi3-M08-AN6X-V1131 4602914		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	E	1	A4
Bi3-M08-AP6X-V1131 4602911		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	E	2	A4
Bi3-M08KK-AN6X-V1131 4602942	Short Barrel	3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	A	1	A4
Bi3-M08KK-AP6X-V1131 4602939	Short Barrel	3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	A	2	A4
Bi2-EG08K-AN6X-V1131 4669550		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	D	1	A4
Bi2-EG08K-AP6X-V1131 4669450		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	D	2	A4
Bi2-G08K-AP6X-V1131 4672803		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PBT	N/A	YE	D	2	A4
Bi2-M08K-AN6X-V1131 4602965		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	C	1	A4
Bi2-M08K-AP6X-V1131 4602968		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	C	2	A4
Bi1.5-EG08K-AN6X-V1131 4672540		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	1	A4
Bi1.5-EG08K-AP6X-V1131 4672440		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	2	A4


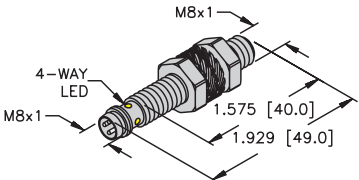
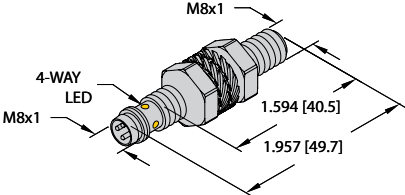
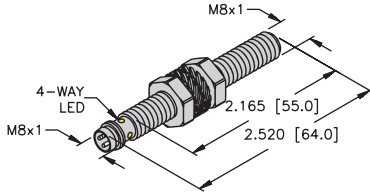
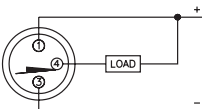
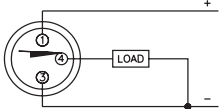
Note: Reference sensor data sheet for considerations if mounting a Bi3-M08 sensor flush in steel.

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>
<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>2</p>  <p>Mating Cordset: PKG 3M-*, PKG 3M-*/S1587</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection:</p> <ul style="list-style-type: none"> $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


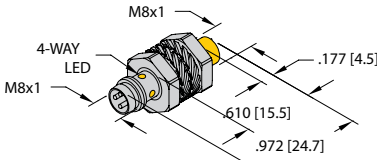
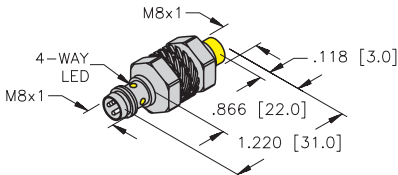
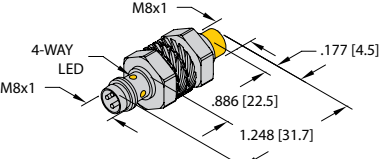
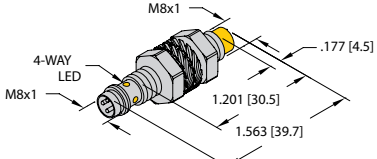
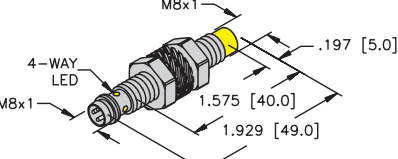
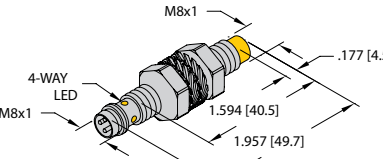
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi2U-EG08-AN6X-V1131 4602036	Uprox	2	3-wire DC NPN	10-30 VDC	1000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	C	1	A4
Bi2U-EG08-AP6X-V1131 4602033	Uprox	2	3-wire DC PNP	10-30 VDC	1000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	C	2	A4
Bi2-EG08-AN6X-V1131 4602150		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	1	A4
Bi2-EG08-AP6X-V1131 4602050		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	2	A4
Bi2-EG08-AP6X-V1131/S1589 46020501	Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	C	2	A4
Bi2-EGT08-AP6X-V1131/S100 4602263	PTFE, High Temp. 100 °C	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	SS	TC	N/A	YE	C	2	A4
Bi2-EGT08-AP6X-V1131/S100/S1589 4602072	PTFE, High Temp. 100 °C, Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	SS	WG	N/A	YE	C	2	A4
Bi2-G08-AP6X-V1131 4602002		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	2	A4
Bi2-M08E-AN6X-V1131 4602953		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	B	1	A4
Bi2-M08E-AP6X-V1131 4602956		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	B	2	A4
Bi1.5U-EG08-AN6X-V1131 4600530	Uprox	1.5	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	A	1	A4
Bi1.5U-EG08-AP6X-V1131 4600520	Uprox	1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	A	2	A4
Bi1.5-EG08-AN6X-V1131 4602350		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	1	A4
Bi1.5-EG08-AP6X-V1131 4602220		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4

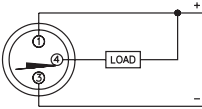
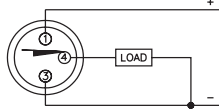
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>B</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>
<p>C</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>D</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>E</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>
<p>F</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>		

Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>2</p>  <p>Mating Cordset: PKG 3M-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ≤±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


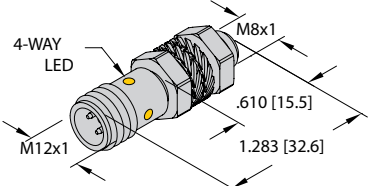
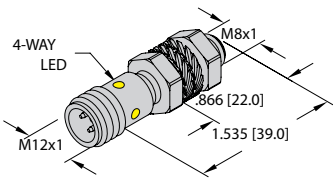
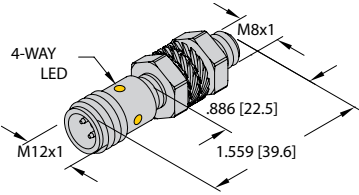
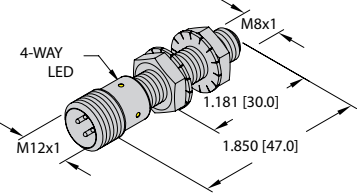
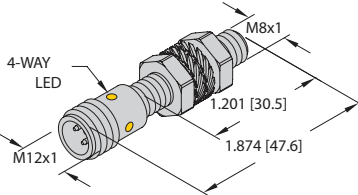
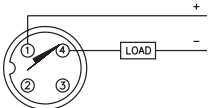
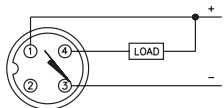
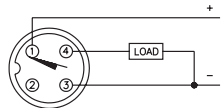
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni6U-EG08-AN6X-V1131 4635804	Uprox+	6	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	E	1	A4
Ni6U-EG08-AP6X-V1131 4635801	Uprox+	6	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	E	2	A4
Ni5-M08-AN6X-V1131 4602924		5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	D	1	A4
Ni5-M08-AP6X-V1131 4602921		5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	D	2	A4
Ni5-M08KK-AN6X-V1131 4602949	Short Barrel	5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	A	1	A4
Ni5-M08KK-AP6X-V1131 4602946	Short Barrel	5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	A	2	A4
Ni4U-EG08-AN6X-V1131 4600630	Uprox	4	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	E	1	A4
Ni4U-EG08-AP6X-V1131 4600620	Uprox	4	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	E	2	A4
Ni3-M08E-AN6X-V1131 4602833		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	F	1	A4
Ni3-M08E-AP6X-V1131 4602836		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	F	2	A4
Ni3-M08K-AN6X-V1131 4602849		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	C	1	A4
Ni3-M08K-AP6X-V1131 4602853		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	C	2	A4
Ni3-EG08-AN6X-V1131 4602850		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	E	1	A4
Ni3-EG08-AP6X-V1131 4602750		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	E	2	A4
Ni3-EG08K-AN6X-V1131 4669750		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	1	A4
Ni3-EG08K-AP6X-V1131 4669650		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	2	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings		
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>		<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>D</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>		<p>E</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
Wiring Diagrams/Mating Cordsets			
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RK 4T-*/S1587</p>	
A2	2-wire DC - (AD, RD, AG)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) < 5.0 V Polarized (AG) ≤ 4.2 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 120 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Off-State (Leakage) Current: ≤ 0.8 mA</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>		
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 220 mA on 200 mA Load Current ≥ 170 mA on 150 mA Load Current ≥ 120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤ 0.1 mA</p> <p>No-Load Current: ≤ 15 mA (Ferrite, Uprox) ≤ 20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤ 8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>		

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Bi3U-EM08-AN6X-H1341 4602422	Uprox3	3	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	D	2	A4
Bi3U-EMT08-AN6X-H1341 4602158	Uprox3, PTFE	3	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +60	IP68	SS	TC	N/A	YE	D	2	A4
Bi3U-EM08-AP6X-H1341 4602412	Uprox3	3	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	D	3	A4
Bi3U-EMT08-AP6X-H1341 4602156	Uprox3, PTFE	3	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +60	IP68	SS	TC	N/A	YE	D	3	A4
Bi3-M08-AN6X-H1341 4602915		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	E	2	A4
Bi3-M08-AP6X-H1341 4602912		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	E	3	A4
Bi3-M08KK-AN6X-H1341 4602943	Short Barrel	3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	A	2	A4
Bi3-M08KK-AP6X-H1341 4602940	Short Barrel	3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	A	3	A4
Bi2-EG08K-AG41X-H1341 4562011		2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	B	1	A2
Bi2-EG08K-AG41X-H1341/S1589 4562090	Weldguard	2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	B	1	A2
Bi2-EGT08K-AG41X-H1341/S1589 4602599	PTFE, Short barrel, Weldguard	2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	B	1	A2
Bi2-EG08K-AN6X-H1341 4669560		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	2	A4
Bi2-EG08K-AP6X-H1341 4669460		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	3	A4
Bi2-EG08K-AP6X-H1341/S1589 4669486	Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	B	3	A4
Bi2-M08K-AN6X-H1341 4602964		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	C	2	A4
Bi2-M08K-AP6X-H1341 4602967		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP- GF20	N/A	YE	C	3	A4
Bi1.5-EG08K-AN6X-H1341 4669150		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	2	A4
Bi1.5-EG08K-AP6X-H1341 4669050		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	3	A4


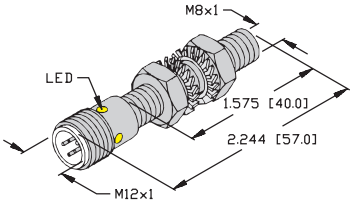
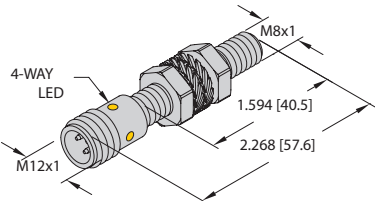
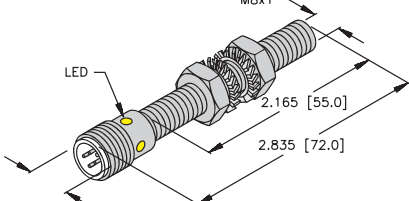
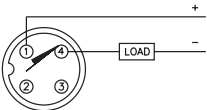
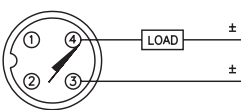
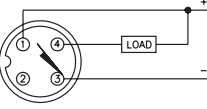
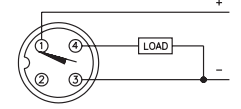
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Note: Reference sensor data sheet for considerations if mounting a Bi3-M08 sensor flush in steel.

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4T-*, RK 4T-*/S1587</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*, RK 4T-*/S1587</p>
A2	2-wire DC - (AD, RD, AG)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


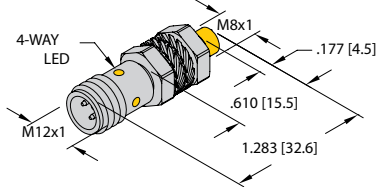
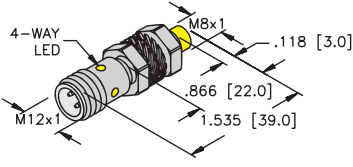
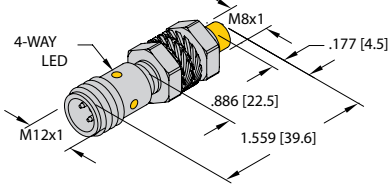
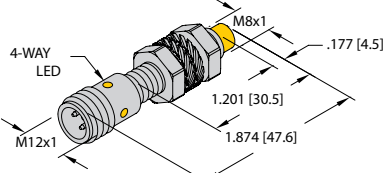
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi2U-EG08-AN6X-H1341 4602037	Uprox	2	3-wire DC NPN	10-30 VDC	1000	≤150	-35 to +85	IP68	SS	PA 12	N/A	YE	A	3	A4
Bi2U-EG08-AP6X-H1341 4602034	Uprox	2	3-wire DC PNP	10-30 VDC	1000	≤150	-35 to +85	IP68	SS	PA 12	N/A	YE	A	4	A4
Bi2-EG08-AG41X-H1341 4562001		2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	A	1	A2
Bi2-EG08-AG41X-H1341/S1589 4562095	Weldguard	2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	A	1	A2
Bi2-EG08-AN6X-H1341 4602160		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi2-EG08-AN6X-H1341/S1589 4602182	Weldguard	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	A	3	A4
Bi2-EG08-AP6X-H1341 4602060		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	4	A4
Bi2-EG08-AP6X-H1341/S1589 4602086	Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	A	4	A4
Bi2-EGT08-AP6X-H1341/S100 4602257	PTFE, High Temp. 100 °C	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	TC	TC	N/A	YE	A	4	A4
Bi2-EG08-VN6X-H1341 4602521	Comp. Outputs	2	4-wire DC NPN	10-30 VDC	3000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	5	A4
Bi2-EG08-VP6X-H1341 54602522	Comp. Outputs	2	4-wire DC PNP	10-30 VDC	3000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	6	A4
Bi2-G08-AN6X-H1341 46026		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	3	A4
Bi2-G08-AP6X-H1341 46025		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	4	A4
Bi2-M08E-AN6X-H1341 4602952		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP- GF20	N/A	YE	B	3	A4
Bi2-M08E-AP6X-H1341 4602955		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP- GF20	N/A	YE	B	4	A4
Bi1.5U-EG08-AN6X-H1341 4600550	Uprox	1.5	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi1.5U-EG08-AP6X-H1341 4600540	Uprox	1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	A	4	A4
Bi1.5U-EG08-AP6X-H1341/S1589 46005401	Uprox, Weldguard	1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP67	SS	WG	N/A	YE	A	4	A4
Bi1.5U-EGT08-AP6X-H1341 4600555	Uprox, PTFE	1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP67	TC	TC	N/A	YE	A	4	A4
Bi1.5-EG08-AD6X-H1341 4600203		1.5	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A2
Bi1.5-EG08-AN6X-H1341 4602360		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi1.5-EG08-AP6X-H1341 4602260		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	4	A4
Bi1.5-G08-AN6X-H1341 4603700		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	3	A4
Bi1.5-G08-AN7X-H1341 4701126	TTL Compatible	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	3	A4
Bi1.5-G08-AP6X-H1341 4603600		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	4	A4

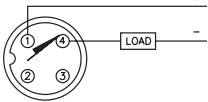
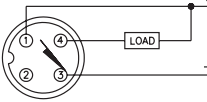
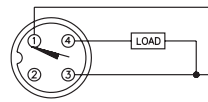
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
<p>B</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>C</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
<p>D</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


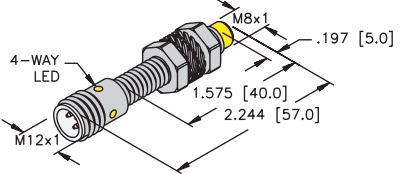
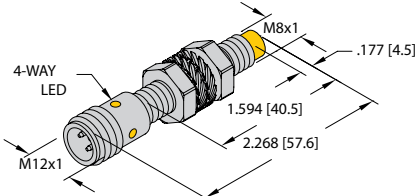
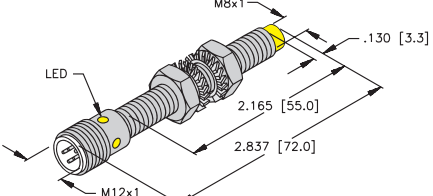
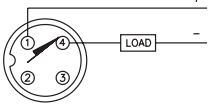
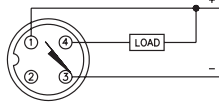
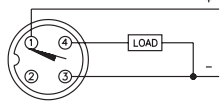
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni5-M08-AN6X-H1341 4602925		5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	D	2	A4
Ni5-M08-AP6X-H1341 4602922		5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	D	3	A4
Ni5-M08KK-AN6X-H1341 4602950	Short Barrel	5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	A	2	A4
Ni5-M08KK-AP6X-H1341 4602947	Short Barrel	5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	A	3	A4
Ni4-EG08K-AG41X-H1341 4561011		4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	B	1	A2
Ni4-EG08K-AG41X-H1341/S1589 4561090	Weldguard	4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	B	1	A2
Ni3-EG08K-AN6X-H1341 4669760		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	2	A4
Ni3-EG08K-AP6X-H1341 4669660		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	B	3	A4
Ni3-M08K-AN6X-H1341 4602848		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	C	2	A4
Ni3-M08K-AP6X-H1341 4602852		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	C	3	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	
<p>B</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>C</p>  <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.23T-*; RK 4.23T-*/S1587</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*;</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*; RK 4T-*/S1587</p>
A2 2-wire DC - (AD, RD, AG)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


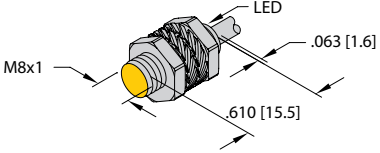
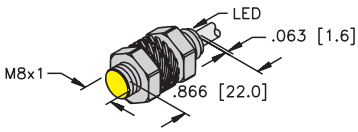
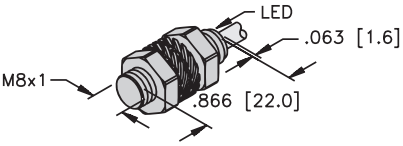
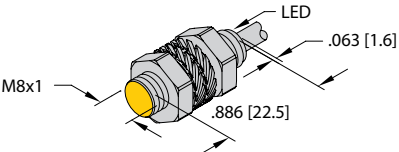
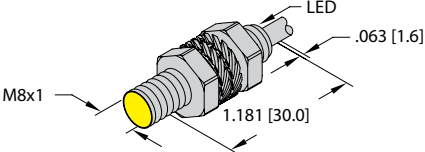
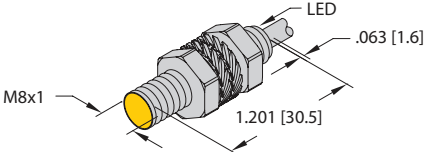
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni6U-EG08-AN6X-H1341 4635805	Uprox+	6	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	A	2	A4
Ni6U-EG08-AP6X-H1341 4635802	Uprox+	6	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	A	3	A4
Ni4U-EG08-AN6X-H1341 4600650	Uprox	4	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	A	2	A4
Ni4U-EG08-AP6X-H1341 4600640	Uprox	4	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	A	3	A4
Ni4U-EG08-AP6X-H1341/S1589 4600641	Uprox, Weldguard	4	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP67	SS	WG	N/A	YE	A	3	A4
Ni4-EG08-AG41X-H1341 4561001		4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	A	1	A2
Ni4-EG08-AG41X-H1341/S1589 4561091	Weldguard	4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	A	1	A2
Ni3-EG08-AN6X-H1341 4602860		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4
Ni3-EG08-AN7X-H1341 4669761	TTL Compatible	3	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4
Ni3-EG08-AP6X-H1341 4602760		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Ni3-EG08-AP6X-H1341/S1589 4602799	Weldguard	3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	A	3	A4
Ni3-M08E-AN6X-H1341 4602832		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	B	2	A4
Ni3-M08E-AP6X-H1341 4602835		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	B	3	A4
Ni3-G08-AN6X-H1341 4602704		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	2	A4
Ni3-G08-AP6X-H1341 4602705		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	3	A4
Ni2-G08-AN6X-H1341 46033		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	2	A4
Ni2-G08-AP6X-H1341 46032		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	C	3	A4

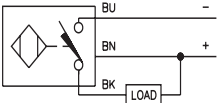
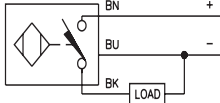
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable, PTFE Coated</p>	<p>D</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>E</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>F</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>		

Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ±±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and 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
Bi3U-EM08-AN6X 4602421	Uprox3	3	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	2M/TPU	E	1	A4
Bi3U-EM08-AP6X 4602411	Uprox3	3	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +60	IP68	SS	PA 12	N/A	YE	2M/TPU	E	2	A4
Bi3-M08-AN6X 4602913		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	F	1	A4
Bi3-M08-AP6X 4602910		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	F	2	A4
Bi3-M08KK-AN6X 4602941	Short Barrel	3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	A	1	A4
Bi3-M08KK-AP6X 4602938	Short Barrel	3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	A	2	A4
Bi2-EG08K-AN6X 4669500		2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Bi2-EG08K-AN6X/S1589 4669587	Weldguard	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	B	1	A4
Bi2-EG08K-AP6X 4669400		2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi2-EG08K-AP6X/S97 4669413	Low Temp. -40 °C	2	3-wire DC PNP	10-30 VDC	3000	≤150	-40 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi2-EGT08K-AP6X 4602541	PTFE	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	TC	TC	N/A	YE	2M/TPU	C	2	A4
Bi2-EGT08K-AP6X/S100 4602544	PTFE, High Temp. 100 °C	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	TC	TC	N/A	YE	2M/TPU	C	2	A4
Bi2-EGT08K-AP6X/S1589 46025413	PTFE, Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	TC	WG	N/A	YE	2M/TPU	C	2	A4
Bi2-M08K-AN6X 4602963		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	D	1	A4
Bi2-M08K-AP6X 4602966		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP-GF20	N/A	YE	2M/TPU	D	2	A4
Bi1.5-EG08K-AN6X 4669140		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Bi1.5-EG08K-AP6X 4669040		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Bi1.5-EG08K-AP6/S100 4669016	High Temp. 100 °C	1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4


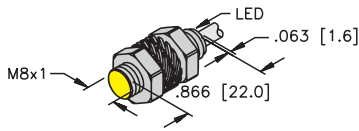
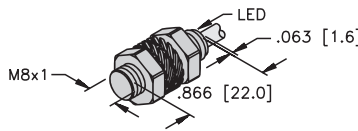
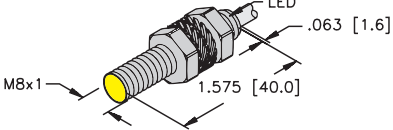
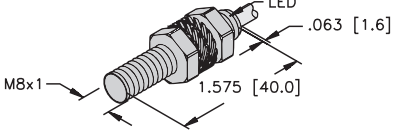
Note: Reference sensor data sheet for considerations if mounting a Bi3-M08 sensor flush in steel.

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and 2-Wire Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable, PTFE Coated</p>
<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>D</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable, PTFE Coated</p>	

Wiring Diagrams/Mating Cordsets

<p>1</p> 	<p>2</p> 
--	--

A2 2-wire DC - (AD, RD, AG)

<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
---	---

A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)

<p>Line Frequency: $\geq 50\text{ Hz}$... $\leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms max. 5 Hz}$) $\leq 1\text{ A}$ ($\leq 10\text{ ms max. 5 Hz}$) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms max. 0.2 Hz}$) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
---	--

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and 2-Wire Outputs


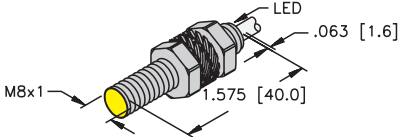
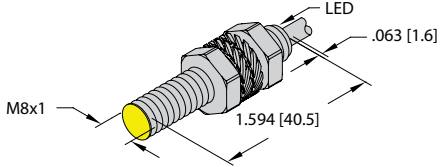
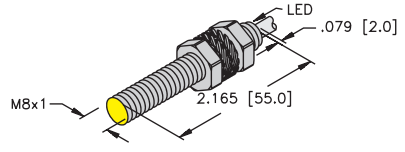
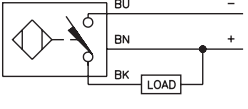
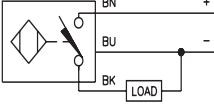
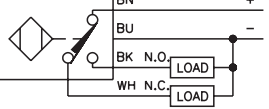
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi2-EG08-AG41X 4562000		2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A2
Bi2-EG08-AG41X/S1589 4562088	Weldguard	2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	C	1	A2
Bi2-EG08-AZ14X 4100001		2	2-wire AC/DC	20-132 VAC/10-140 VDC	20	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A6
Bi2-EGT08-AG41X 4602540	PTFE	2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	TC	PA 12	N/A	YE	2M/TPU	D	1	A2
Bi2-EGT08-AG41X/S1589 4602003	PTFE, Weldguard	2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	2M/TPU	D	1	A2
Bi2-EG08K-AG41X 4562010		2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A2
Bi2-EG08K-AG41X/S1589 4562091	Weldguard	2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	A	1	A2
Bi2-EGT08K-AG41X 4602545	PTFE	2	2-wire DC	10-55 VDC	1000	≤100	-25 to +70	IP67	TC	PA 12	N/A	YE	2M/TPU	B	1	A2

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	
<p>B</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>C</p>  <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection:</p> <ul style="list-style-type: none"> $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 8 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs


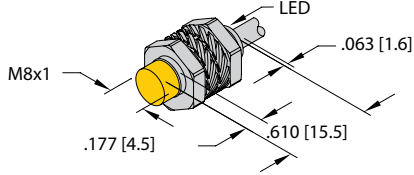
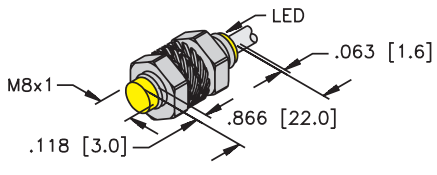
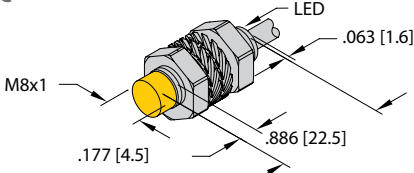
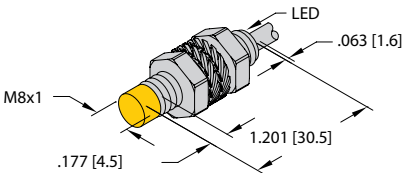
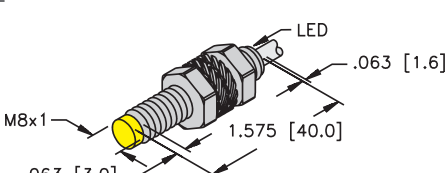
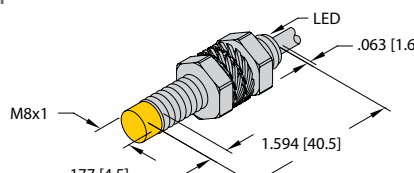
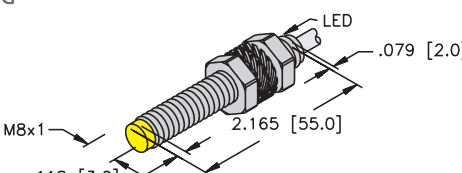
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi2U-EG08-AN6X 4602035	Uprox	2	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi2U-EG08-AP6X 4602032	Uprox	2	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi2-EG08-AN6X 4602140	Extended Range	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi2-EG08-AP6X 4602040	Extended Range	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi2-EG08-AP6X/S100 4602047	High Temp. 100 °C	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +100	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi2-EG08-AP6X/S1589 4602085	Weldguard	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	A	2	A4
Bi2-EG08-VP6X 1604610	Comp. Outputs	2	4-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	3	A4
Bi2-G08-AN6X 46021	Extended Range	2	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi2-G08-AP6X 46020	Extended Range	2	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4
Bi2-M08E-AN6X 4602951		2	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP- GF20	N/A	YE	2M/TPU	B	1	A4
Bi2-M08E-AP6X 4602954		2	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CBP	PP- GF20	N/A	YE	2M/TPU	B	2	A4
Bi1.5U-EG08-AN6X 4600510	Uprox	1.5	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi1.5U-EG08-AP6X 4600500	Uprox	1.5	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi1.5-EG08-AN6X 4602340		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi1.5-EG08-AN7X 1766110	TTL Compatible	1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	1	A4
Bi1.5-EG08-AP6X 4602240		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	A	2	A4
Bi1.5-G08-AN6X 46023		1.5	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	1	A4
Bi1.5-G08-AP6X 46022		1.5	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	C	2	A4

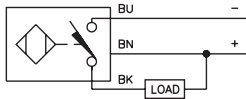
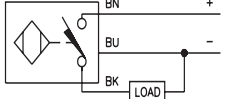
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>B</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>C</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>D</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>E</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>F</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>G</p>  <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>	

Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 8 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs


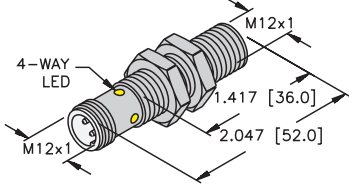
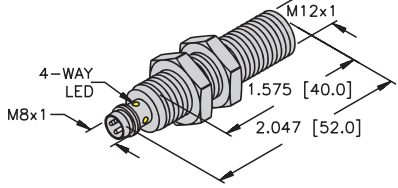
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni6U-EG08-AN6X 4635803	Uprox+	6	3-wire DC NPN	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	2M/TPU	E	1	A4
Ni6U-EG08-AP6X 4635800	Uprox+	6	3-wire DC PNP	10-30 VDC	1000	≤150	0 to +70	IP68	SS	LCP	N/A	YE	2M/TPU	E	2	A4
Ni5-M08-AN6X 4602923		5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	D	1	A4
Ni5-M08-AP6X 4602920		5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	D	2	A4
Ni5-M08KK-AN6X 4602948	Short Barrel	5	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	A	1	A4
Ni5-M08KK-AP6X 4602944	Short Barrel	5	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	A	2	A4
Ni4U-EG08-AN6X 4600610	Uprox	4	3-wire DC NPN	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	E	1	A4
Ni4U-EG08-AP6X 4600600	Uprox	4	3-wire DC PNP	10-30 VDC	2000	≤150	-30 to +85	IP68	SS	PA 12	N/A	YE	2M/TPU	E	2	A4
Ni3-EG08-AN6X 4602840		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	E	1	A4
Ni3-EG08-AN6X/S1589 4602888	Weldguard	3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	E	1	A4
Ni3-EG08-AN7X 4669759	TTL Compatible	3	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	E	1	A4
Ni3-EG08-AP6X 4602740		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	E	2	A4
Ni3-EG08-AP6X/S1589 4602789	Weldguard	3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	WG	N/A	YE	2M/TPU	E	2	A4
Ni3-EG08K-AN6X 4669700		3	3-wire DC NPN	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	1	A4
Ni3-EG08K-AP6X 4669600		3	3-wire DC PNP	10-30 VDC	3000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	B	2	A4
Ni3-G08-AN6X 46028		3	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	G	1	A4
Ni3-G08-AP6X 46027		3	3-wire DC PNP	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	G	2	A4
Ni3-M08E-AN6X 4602831		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	F	1	A4
Ni3-M08E-AP6X 4602834		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	F	2	A4
Ni3-M08K-AN6X 4602847		3	3-wire DC NPN	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	C	1	A4
Ni3-M08K-AP6X 4602851		3	3-wire DC PNP	10-30 VDC	2800	≤150	-25 to +70	IP67	CPB	PP-GF20	N/A	YE	2M/TPU	C	2	A4
Ni2-G08-AN6X 4601300		2	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	G	1	A4
Ni2-G08-AP6X 46012		2	3-wire DC PNP	10-30 VDC	2000	≤150	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/TPU	G	2	A4

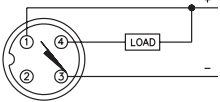
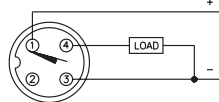
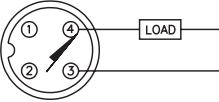
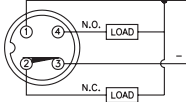
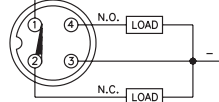
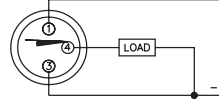
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>12 mm - Embeddable, M12 Eurofast Connection</p>	<p>B</p>  <p>12 mm - Embeddable, M8 Picofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4T-*; RKV 4T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*; RKV 4T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4.2T-*</p>
<p>4</p>  <p>Mating Cordset: RK 4.4T-*</p>	<p>5</p>  <p>Mating Cordset: RK 4.4T-*; RKV 4.4T-*</p>	<p>6</p>  <p>Mating Cordset: PKG 3M-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


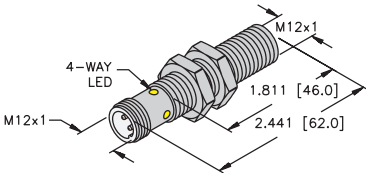
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi6U-M12-AN6X-H1141 1644808	Uprox3	6	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	1	A4
Bi6U-M12-AP6X-H1141 1644810	Uprox3	6	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	2	A4
Bi6U-M12-VP6X-H1141 1644805	Uprox3, Comp. Outputs	6	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	5	A4
Bi4U-EM12-AN6X-H1141 1634827	Uprox+	4	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	1	A4
Bi4U-M12-AN6X-H1141 1634824	Uprox+	4	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	1	A4
Bi4U-EM12-AP6X-H1141 1634807	Uprox+	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	2	A4
Bi4U-M12-AP6X-H1141 1634804	Uprox+	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	2	A4
Bi4U-M12-AP6X-V1131 1634780	Uprox+	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	B	6	A4
Bi4-M12-AN6X-H1141 4607100	Extended Range	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi4-M12-AP6X-H1141 46070	Extended Range	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi4-M12-VN6X-H1141 1643200	Ext. Range, Comp. Outputs	4	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi4-M12-VP6X-H1141 1633200	Ext. Range, Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Bi4-EM12-VP6X-H1141 1633201	Ext. Range, Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	5	A4
Bi3U-EM12-AN6X-H1141 1634350	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	1	A4
Bi3U-M12-AN6X-H1141 1634150	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi3U-EM12-AP6X-H1141 1634340	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	2	A4
Bi3U-M12-AP6X-H1141 1634140	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi3-M12-AD4X-H1141 4405041		3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A2
Bi2-M12-AD4X-H1141 44065		2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A2
Bi2-EM12-AN6X-H1141 4606601		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	1	A4
Bi2-M12-AN6X-H1141 46066		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi2-EM12-AP6X-H1141 4606501		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4
Bi2-M12-AP6X-H1141 46065		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi2-M12-VN6X-H1141 16430	Comp. Outputs	2	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi2-M12-VP6X-H1141 16330	Comp. Outputs	2	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4

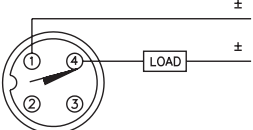
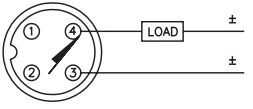
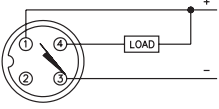
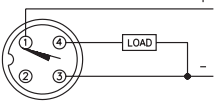
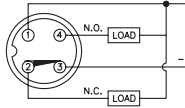
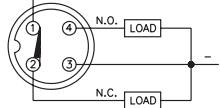
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, M12 Eurofast Connection, Extended Barrel Length</p>

Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.2T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>
<p>5</p>  <p>Mating Cordset: RK 4.4T-*</p>	<p>6</p>  <p>Mating Cordset: RK 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current</p> <p>$\geq 170\text{ mA}$ on 150 mA Load Current</p> <p>$\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


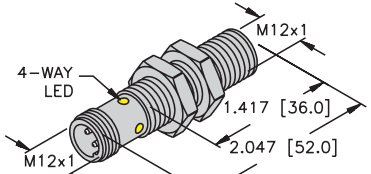
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi4-M12E-AN6X-H1141 4607193	Extended Range	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Bi4-EM12E-AN6X-H1141/S1589 4607185	Ext. Range, Weldguard	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	3	A4
Bi4-M12E-AP6X-H1141 4608030	Extended Range	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi4-EM12E-AP6X-H1141/S1589 4607184	Ext. Range, Weldguard	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	4	A4
Bi4-M12E-VN6X-H1141 1643201	Extended Range	4	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Bi4-M12E-VP6X-H1141 4608092	Extended Range	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Bi3U-EM12E-AN6X-H1141 1634351	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	3	A4
Bi3U-EM12HE-AN6X2-H1141 1634311	Uprox, Stoneface	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PA 12	GN	YE	A	3	A4
Bi3U-EM12E-AN6X2-H1141/S1589 1634397	Uprox, Weldguard	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	3	A4
Bi3U-M12E-AP6X-H1141 1634148	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi3U-EM12HE-AP6X2-H1141 1634310	Uprox, Stoneface	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	SF	GN	YE	A	4	A4
Bi3U-EM12E-AP6X2-H1141/S1589 1634398	Uprox, Weldguard	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	4	A4
Bi3U-M12E-AN6X-H1141 1634151	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	3	A4
Bi3U-EM12E-AP6X-H1141 1634343	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	4	A4
Bi3U-M12E-VN4X-H1141 1580354	Uprox	3	4-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	5	A4
Bi3U-M12E-VP4X-H1141 1580252	Uprox	3	4-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	6	A4
Bi3-M12E-AD4X-H1141 4405080		3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A2
Bi2U-M12E-AD4X-H1144 4405060	Uprox	2	2-wire DC	10-65 VDC	1000	≤100	-30 to +85	IP68	CPB	LCP	N/A	YE	A	1	A2
Bi2-M12E-AN6X-H1141 4606602		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4

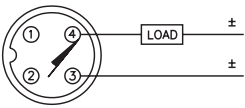
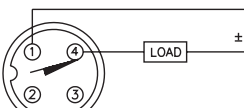
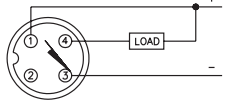
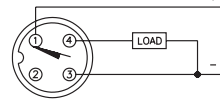
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, M12 Eurofast Connection, PTFE Coated Sensors</p>

Wiring Diagrams s/Mating Cordset	
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>

A2 2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0 V$ Polarized (AG) $\leq 4.2 V$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120 mA$</p> <p>Minimum Load Current: $\geq 3.0 mA$</p>	<p>Off-State (Leakage) Current: $\leq 0.8 mA$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8 V$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220 mA$ on 200 mA Load Current $\geq 170 mA$ on 150 mA Load Current $\geq 120 mA$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1 mA$</p> <p>No-Load Current: $\leq 15 mA$ (Ferrite, Uprox) $\leq 20 mA$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8 ms$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs


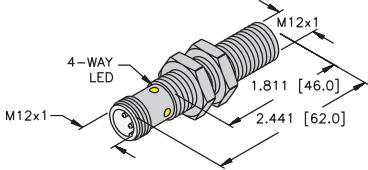
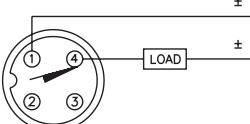
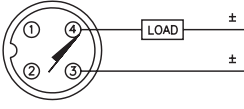
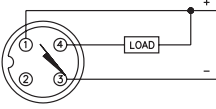
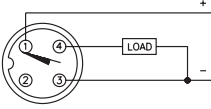
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi6U-MT12-AN6X-H1141 1644858	Uprox3, PTFE	6	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	3	A4
Bi6U-MT12-AP6X-H1141 1644831	Uprox3, PTFE	6	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	4	A4
Bi6U-MT12-AP6X2-H1141 1644904	Uprox3, PTFE	6	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	TC	TC	GN	YE	A	4	A4
Bi4U-MT12-AN6X-H1141 1634829	Uprox+, PTFE	4	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	3	A4
Bi4U-MT12-AN6X-H1141/S1589 16348290	Uprox+, PTFE, Weldguard	4	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	3	A4
Bi4U-MT12-AP6X-H1141 1634809	Uprox+, PTFE	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	4	A4
Bi4-MT12H-AN6X-H1141 4607194	Ext. Range, PTFE, Stoneface	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	SF	N/A	YE	A	3	A4
Bi4-MT12-AN6X-H1141/S1589 4607188	Ext. Range, PTFE, Weldguard	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	WG	N/A	YE	A	3	A4
Bi4-MT12H-AP6X-H1141 4607093	Ext. Range, PTFE, Stoneface	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	SF	N/A	YE	A	4	A4
Bi4-MT12-AP6X-H1141/S1589 4607099	Ext. Range, PTFE, Weldguard	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	WG	N/A	YE	A	4	A4
Bi3U-MT12-AN6X-H1141 1634250	Uprox, PTFE	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	3	A4
Bi3U-MT12-AP6X-H1141 1634240	Uprox, PTFE	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	4	A4
Bi3U-MT12-AP6X2-H1141 1634245	Uprox, PTFE	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	4	A4
Bi3U-MT12H-AP6X-H1141 1634212	Uprox, PTFE, Stoneface	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	4	A4
Bi3U-MT12-AP6X2-H1141/S1589 1634293	Uprox, PTFE, Weldguard	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	4	A4
Bi3-MT12-AD4X-H1141/S1589 4405082	PTFE, Weldguard	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	A	1	A2
Bi3-MT12-AD4X-H1144/S1589 4405084	PTFE, Weldguard	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	A	2	A2

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, M12 Eurofast Connection, Extended Barrel Length, PTFE Coated Sensors</p>
Wiring Diagrams/Mating Cordset	
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.2T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>
A2 2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs


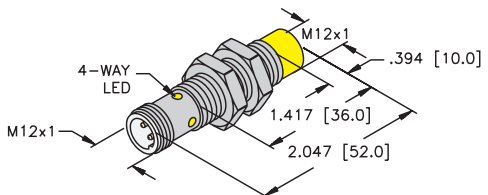
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi4U-MT12E-AP6X2-H1141 1644742	Uprox+	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	TC	TC	GN	YE	A	4	A4
Bi4U-MT12E-AP6X2-H1141/S1589 1644797	Uprox+, PTFE, Weldguard	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	4	A4
Bi4-MT12E-AP6X-H1141 46080932	Ext. Range, PTFE	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	TC	N/A	YE	A	4	A4
Bi4-MT12HE-AN6X-H1141 4607197	Ext. Range, PTFE	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	TC	N/A	YE	A	3	A4
Bi4-MT12HE-AP6X-H1141 4608093	Ext. Range, Stoneface	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	TC	N/A	YE	A	4	A4
Bi4-MT12E-AN6X-H1141/S1589 4607187	Ext. Range, Weldguard	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	WG	N/A	YE	A	3	A4
Bi4-MT12E-AP6X-H1141/S1589 4608094	Ext. Range, Weldguard	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	TC	WG	N/A	YE	A	4	A4
Bi3U-MT12HE-AN6X2-H1141 1634230	Uprox, PTFE, Stoneface	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	3	A4
Bi3U-MT12E-AN6X2-H1141/S1589 1634290	Uprox, Weldguard	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	3	A4
Bi3U-MT12HE-AP6X2-H1141 1634220	Uprox, PTFE, Stoneface	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	4	A4
Bi3U-MT12E-AP6X2-H1141/S1589 1634291	Uprox, Weldguard	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	4	A4
Bi3-MT12E-AD4X-H1141 44050882	PTFE	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	TC	N/A	YE	A	2	A2
Bi3-MT12HE-AD4X-H1141 4405088	Stoneface	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	TC	N/A	YE	A	2	A2
Bi3-MT12E-AD4X-H1141/S1589 4405086	PTFE, Weldguard	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	A	2	A2
Bi3-MT12E-AD4X-H1144/S1589 4405087	PTFE, Weldguard	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	A	2	A2
Bi2U-MT12E-AD4X-H1144 4405061	Uprox+, PTFE	2	2-wire DC	10-65 VDC	1000	≤100	-30 to +85	IP68	TC	TC	N/A	YE	A	1	A2

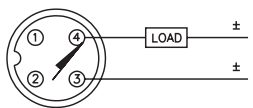
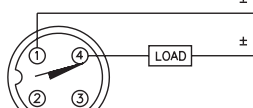
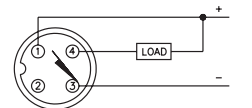
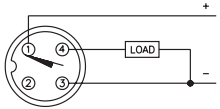
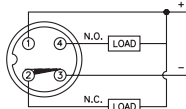
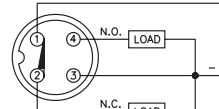
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p data-bbox="836 334 853 355">A</p>  <p data-bbox="974 571 1386 592">12 mm - Nonembeddable, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p data-bbox="131 668 147 689">1</p>  <p data-bbox="243 808 462 830">Mating Cordset: RK 4.2T-*</p>	<p data-bbox="596 668 613 689">2</p>  <p data-bbox="714 808 932 830">Mating Cordset: RK 4.23T-*</p>	<p data-bbox="1071 668 1088 689">3</p>  <p data-bbox="1167 808 1419 830">Mating Cordset: RK 4T-*, RKV 4T-*</p>
<p data-bbox="131 849 147 871">4</p>  <p data-bbox="226 980 478 1002">Mating Cordset: RK 4T-*, RKV 4T-*</p>	<p data-bbox="596 849 613 871">5</p>  <p data-bbox="722 980 924 1002">Mating Cordset: RK 4.4T-*</p>	<p data-bbox="1071 849 1088 871">6</p>  <p data-bbox="1159 980 1436 1002">Mating Cordset: RK 4.4T-*, RKV 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p data-bbox="428 1088 562 1110">Ripple: ≤10%</p> <p data-bbox="243 1116 663 1138">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="159 1144 730 1166">Voltage Drop Across Conducting Sensor: Non-polarized (AD) <5.0 V</p> <p data-bbox="294 1172 688 1194">Polarized (AG) ≤4.2 V</p> <p data-bbox="134 1200 588 1222">Trigger Current for Short Circuit Protection: ≥120 mA</p> <p data-bbox="294 1228 579 1250">Minimum Load Current: ≥3.0 mA</p>	<p data-bbox="940 1088 1268 1110">Off-State (Leakage) Current: ≤0.8 mA</p> <p data-bbox="1033 1116 1318 1138">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="999 1144 1335 1166">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1117 1172 1285 1194">Shock: 30 g, 11 ms</p> <p data-bbox="1083 1200 1503 1222">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1050 1228 1470 1250">Repeatability: ≤2% of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p data-bbox="428 1306 562 1328">Ripple: ≤10%</p> <p data-bbox="243 1334 663 1356">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="159 1362 562 1384">Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p data-bbox="134 1390 798 1476">Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p data-bbox="260 1483 579 1504">Off-State (Leakage) Current: ≤0.1 mA</p> <p data-bbox="344 1511 714 1532">No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p data-bbox="915 1306 1251 1328">Time Delay Before Availability: ≤8 ms</p> <p data-bbox="1033 1334 1318 1356">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="940 1362 1302 1384">Reverse Polarity Protection: Incorporated</p> <p data-bbox="982 1390 1302 1412">Wire-Break Protection: Incorporated</p> <p data-bbox="999 1418 1335 1440">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1016 1446 1251 1468">Temperature Drift: ≤±10%</p> <p data-bbox="1117 1474 1285 1496">Shock: 30 g, 11 ms</p> <p data-bbox="1083 1502 1486 1524">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1050 1530 1470 1552">Repeatability: ≤2% of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Ni10U-M12-AN6X-H1141 1634826	Uprox+	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	3	A4
Ni10U-M12-AP6X-H1141 1634806	Uprox+	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	4	A4
Ni10U-EM12-AN6X-H1141 1634828	Uprox+	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Ni10U-EM12-AP6X-H1141 1634808	Uprox+	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	4	A4
Ni8U-M12-AN6X-H1141 1644150	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	A	3	A4
Ni8U-M12-AN6X2-H1141 1644155	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	GN	YE	A	3	A4
Ni8U-M12-AP6X-H1141 1644140	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	A	4	A4
Ni8U-M12-AP6X2-H1141 1644145	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	GN	YE	A	4	A4
Ni8U-EM12-AN6X-H1141 1644350	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Ni8U-EM12-AP6X-H1141 1644340	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	4	A4
Ni8-M12-AD4X-H1141 4411241	Extended Range	8	2-wire DC	10-65 VDC	2000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni8-M12-AD4X-H1144 4411289	Extended Range	8	2-wire DC	10-65 VDC	2000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A2
Ni8-M12-AN6X-H1141 4611315	Extended Range	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni8-M12-AP6X-H1141 4611310	Extended Range	8	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni8-M12-VN6X-H1141 4611323	Ext. Range, Comp. Outputs	8	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni8-M12-VP6X-H1141 4611324	Ext. Range, Comp. Outputs	8	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Ni5-M12-AN6X-H1141 4671390		5	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni5-M12-AP6X-H1141 4653400		5	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni4-M12-AD4X-H1141 44067		4	2-wire DC	10-65 VDC	2000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni4-M12-AN6X-H1141 46068		4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni4-M12-AP6X-H1141 46067		4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni4-EM12-AN7X-H1141 4606893	TTL Compatible	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni4-M12-VN6X-H1141 16431	Comp. Outputs	4	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni4-M12-VP6X-H1141 16331	Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Ni4-EM12-VP6X-H1141 1633101	Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	6	A4

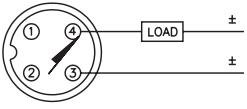
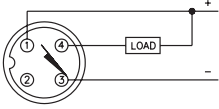
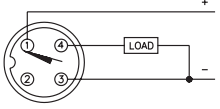
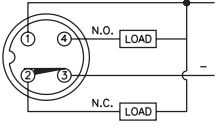
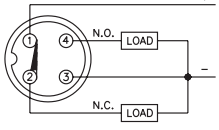
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p> <p>12 mm - Nonembeddable, Extended Barrel Length, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>
<p>4</p>  <p>Mating Cordset: RK 4.4T-*</p>	<p>5</p>  <p>Mating Cordset: RK 4.4T-*, RKV 4.4T-*</p>	

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) <5.0 V Polarized (AG) ≤4.2 V</p> <p>Trigger Current for Short Circuit Protection: ≥120 mA</p> <p>Minimum Load Current: ≥3.0 mA</p>	<p>Off-State (Leakage) Current: ≤0.8 mA</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


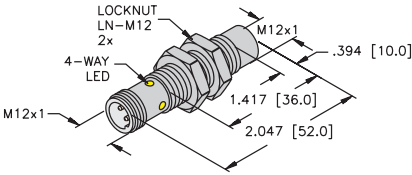
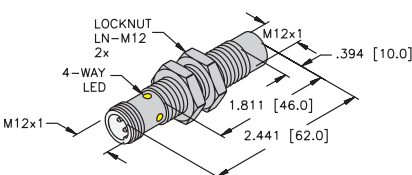
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni8U-M12E-AN6X-H1141 1644151	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	2	A4
Ni8U-EM12E-AN6X2-H1141 1644315	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PA 12	GN	YE	A	2	A4
Ni8U-EM12E-AN6X2-H1141/S1589 1644391	Uprox, Weldguard	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	WG	WG	GN	YE	A	2	A4
Ni8U-M12E-AP6X-H1141 1644144	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni8U-EM12E-AP6X-H1141 1644342	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	3	A4
Ni8U-EM12E-AP6X2-H1141 1644314	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	GN	YE	A	3	A4
Ni8U-EM12E-AP6X2-H1141/S1589 1644392	Uprox, Weldguard	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	WG	WG	GN	YE	A	3	A4
Ni8U-M12E-VN4X-H1141 1580552	Uprox, Comp. Outputs	8	4-wire DC NPN	10-65 VDC	2000	≤200	-30 to +85	IP67	SS	PA 12	N/A	YE	A	4	A4
Ni8U-M12E-VP4X-H1141 1580454	Uprox	8	4-wire DC PNP	10-65 VDC	2000	≤200	-30 to +85	IP67	SS	PA 12	N/A	YE	A	5	A4
Ni8U-EM12E-VP4X-H1141 1580463	Uprox	8	4-wire DC PNP	10-65 VDC	2000	≤200	-30 to +85	IP67	SS	PA 12	N/A	YE	A	5	A4
Ni8-M12E-AN6X-H1141 4611325	Extended Range	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Ni8-EM12E-AN6X-H1141/S1589 4611395	Ext. Range, Weldguard	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	WG	WG	N/A	YE	A	2	A4
Ni8-M12E-AP6X-H1141 46113981	Extended Range	8	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni8-EM12E-AP6X-H1141/S1589 4611396	Weldguard	8	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	WG	WG	N/A	YE	A	3	A4
Ni8-M12E-VP6X-H1141 4611389	Ext. Range, Comp. Outputs	8	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni4-M12E-AD4X-H1144 4406792		4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni4-EM12E-VP6X-H1141 1633191	Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	5	A4

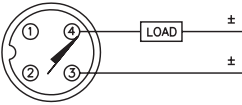
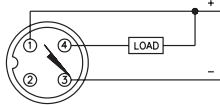
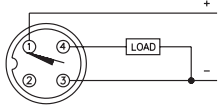
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>12 mm - Nonembeddable, M12 Eurofast Connection, PTFE Coated</p>	<p>B</p>  <p>12 mm - Nonembeddable, Extended Barrel Length, M12 Eurofast Connection, PTFE Coated</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RKC 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs


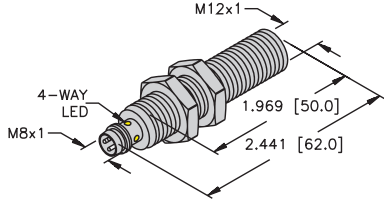
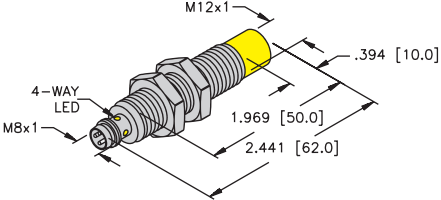
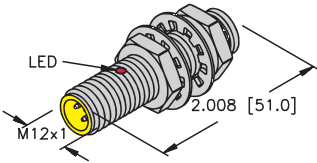
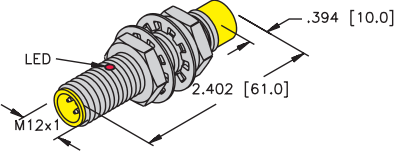
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni10U-MT12-AN6X-H1141 1634830	Uprox+, PTFE	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	LCP	N/A	YE	A	2	A4
Ni10U-MT12-AP6X-H1141 1634810	Uprox+, PTFE	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	LCP	N/A	YE	A	3	A4
Ni10U-MT12-AP6X-H1141/S1589 16348101	Uprox+, PTFE, Weldguard	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	3	A4
Ni10U-MT12E-AP6X2-H1141 1634844	Uprox+, PTFE	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	LCP	GN	YE	B	3	A4
Ni10U-MT12E-AP6X2-H1141/S1589 1634994	Uprox+, PTFE, Weldguard	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	WG	N/A	YE	B	3	A4
Ni8U-MT12-AP6X-H1141 1644240	Uprox, PTFE	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	3	A4
Ni8U-MT12-AP6X2-H1141 1644245	Uprox, PTFE	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	3	A4
Ni8U-MT12-AP6X2-H1141/S1589 1644292	Uprox, PTFE, Weldguard	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	3	A4
Ni8U-MT12E-AN6X2-H1141 1644248	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	B	2	A4
Ni8U-MT12E-AP6X2-H1141 1644247	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	B	3	A4
Ni8-MT12-AD4X-H1141/S1589 4411291	PTFE, Weldguard	8	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	A	1	A2
Ni8-MT12E-AN6X-H1141/S1589 4611397	Ext. Range, Weldguard	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	WG	WG	N/A	YE	B	2	A4
Ni8-MT12E-AP6X-H1141/S1589 4611398	Ext. Range, Weldguard	8	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	WG	WG	N/A	YE	B	3	A4

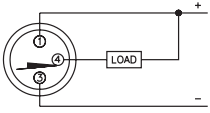
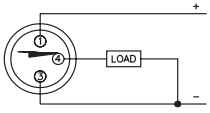
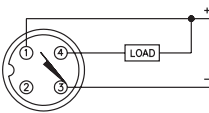
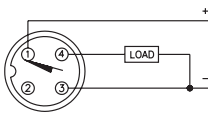
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, M8 Picofast Connection</p>
<p>B</p>  <p>12 mm - Embeddable, M8 Picofast Connection</p>	<p>C</p>  <p>12 mm - Embeddable, M12 Eurofast Connection</p>
<p>D</p>  <p>12 mm - Nonembeddable, M12 Eurofast Connection</p>	

Wiring Diagrams/Mating Cordsets			
<p>1</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>2</p>  <p>Mating Cordset: PKG 3M-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*, RKV 4T-*</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Connector and DC Outputs


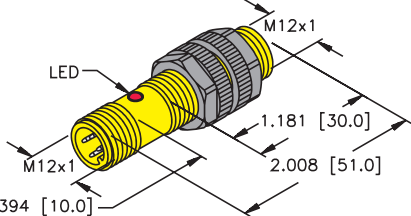
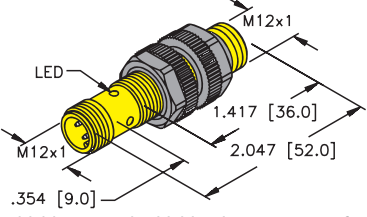
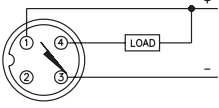
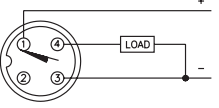
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi4-G12-AN6X-V1131 1690707	Extended Range	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi4-G12-AP6X-V1131 1690703	Extended Range	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi4-EG12-AP6X-H1141 4607091	Extended Range	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	RD	C	4	A4
Bi2-G12-AN6X-V1131 4635583		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi2-G12-AN6X-H1141 4606693		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	C	3	A4
Bi2-G12-AP6X-H1141 4606595		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	C	4	A4
Bi2-G12-AP6X-V1131 4606597		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni8-G12-AN6X-H1141 4611383	Extended Range	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	D	3	A4
Ni5-G12-AN6X-V1131 4635721		5	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	1	A4
Ni5-G12-AN6X-H1141 4635793		5	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	D	3	A4
Ni5-G12-AN7X-H1141 1714593	TTL Compatible	5	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	D	3	A4
Ni5-G12-AP6X-V1131 4635690		5	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni5-G12-AP6X-H1141 4635692		5	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	RD	D	4	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Threaded Plastic Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable/Nonembeddable, Plastic, M12 Eurofast Connection</p>
<p>B</p>  <p>12 mm - Embeddable/Nonembeddable, Plastic, M12 Eurofast Connection</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RKK 4T-*</p>	<p>2</p>  <p>Mating Cordset: RKK 4T-*</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ≤±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Threaded Plastic Barrels with Connector and DC Outputs


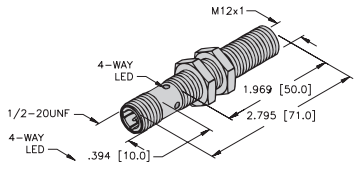
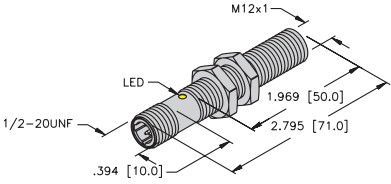
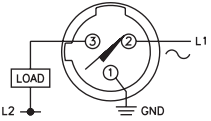
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi3U-S12-AN6X-H1141 1634620	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	B	1	A4
Bi3U-S12-AP6X-H1141 16346	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	B	2	A4
Bi2-S12-AN6X-H1141 46521		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	RD	A	1	A4
Bi2-S12-AP6X-H1141 46520		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	RD	A	2	A4
Ni8U-S12-AN6X-H1141 1644620	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	B	1	A4
Ni8U-S12-AP6X-H1141 1644600	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	B	2	A4
Ni4-S12-AN6X-H1141 46523		4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	RD	A	1	A4
Ni4-S12-AP6X-H1141 46522		4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	RD	A	2	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, 1/2" Microfast Connection</p>
<p>B</p>  <p>12 mm - Embeddable, 1/2" Microfast Connection, PTFE Coated</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: KB 3T-*</p>	
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Connector and AC/DC Outputs


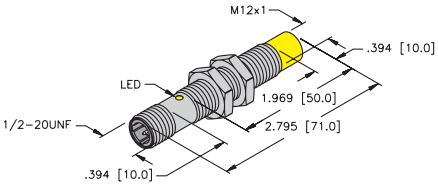
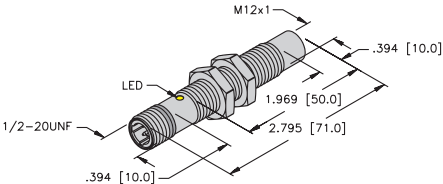
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi4-G12-ADZ32X-B3131 4205031	Extended Range	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A5
Bi4-GT12H-ADZ32X-B3131 4205097	Stoneface	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	B	1	A5
Bi4-GT12-ADZ32X-B3131/S1589 4205087	PTFE, Weldguard	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	WG	N/A	YE	B	1	A5
Bi2U-G12-ADZ32X-B3131 4281005	Uprox	2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤100	-30 to +85	IP67	CPB	PBT	N/A	YE	A	1	A5
Bi2U-GT12-ADZ32X-B3131 4281015	Uprox	2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤100	-30 to +85	IP67	TC	TC	N/A	YE	B	1	A5
Bi2-G12-AZ33X-B3131 1304032		2	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A6
Bi2-G12-ADZ32X-B3131 4205001		2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A5
Bi2-GT12H-ADZ32X-B3131/S34 4205093	PTFE, WFI, Stoneface	2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	B	1	A5
Bi2-GT12-ADZ32X-B3131/S34 4205005	PTFE, WFI	2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	B	1	A5
Bi2-GT12-AZ33X-B3131/S34 1304082	PTFE, WFI	2	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	B	1	A6

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

Inductive Barrel Sensors

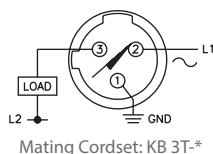
Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>10 mm - Nonembeddable, 1/2" Microfast Connection</p>
<p>B</p>  <p>12 mm - Nonembeddable, 1/2" Microfast Connection, PTFE Coated</p>	

Wiring Diagrams/Mating Cordsets

1



A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)		A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>		
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>		

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

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Connector and AC/DC Outputs


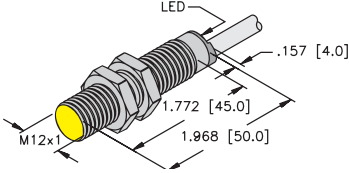
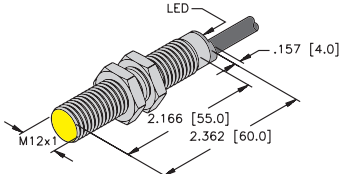
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni8U-G12-ADZ32X-B3131 4281105	Uprox	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10- 300 VDC	10	≤100	-30 to +85	IP67	CPB	PBT	N/A	YE	A	1	A5
Ni8U-GT12-ADZ32X-B3131 4281115	Uprox	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10- 300 VDC	10	≤100	-30 to +85	IP67	TC	PA 12	N/A	YE	B	1	A5
Ni4-G12-ADZ32X-B3131 4205201		4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A5
Ni4-G12-AZ33X-B3131 1304232		4	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A6
Ni4-GT12-ADZ32X-B3131/S34 4205205	PTFE, WFI	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	TC	PA 12	N/A	YE	B	1	A5
Ni4-GT12-AZ33X-B3131/S34 1304292	PTFE, WFI	4	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	TC	PA 12	N/A	YE	B	1	A6
Ni4-GT12-ADZ32X-B3131/S34/S1589 4205293	PTFE, Weldguard	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	TC	WG	N/A	YE	B	1	A5

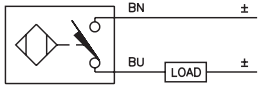
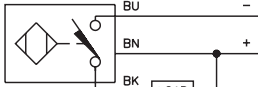
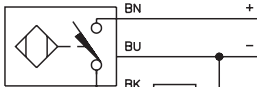
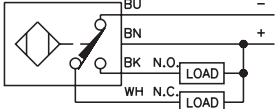
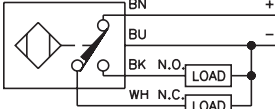
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, Potted-in Cable</p>
<p>B</p>  <p>12 mm - Embeddable, Extended Length Barrel, Potted-in Cable</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 	

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$</p> <p>Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current</p> <p>$\geq 170\text{ mA}$ on 150 mA Load Current</p> <p>$\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs


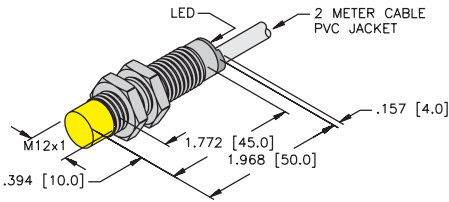
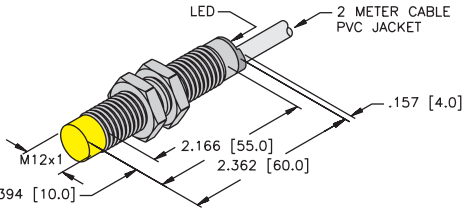
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi6U-M12-AN6X 1644806	Uprox3	6	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi6U-M12-AP6X 1644801	Uprox3	6	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Bi6U-M12-VP6X 1644803	Uprox3, Comp. Outputs	6	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	5	A4
Bi4U-M12-AN6X 1634823	Uprox+	4	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi4U-M12-AP6X 1634803	Uprox+	4	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Bi4-M12-AN6X 4607130	Extended Range	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi4-M12-AP6X 4607006	Extended Range	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi4-M12-VN6X 1643300	Ext. Range, Comp. Outputs	4	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Bi4-M12-VP6X 1633300	Ext. Range, Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4
Bi4-M12E-VN6X 1643290	Ext. Range, Comp. Outputs	4	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	4	A4
Bi4-M12E-VP6X 1633391	Ext. Range, Comp. Outputs	4	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	5	A4
Bi3U-M12-AN6X 1634120	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	2	A4
Bi3U-M12-AP6X 1634100	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	3	A4
Bi3U-M12E-AP6X 1634108	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	B	3	A4
Bi3U-EM12-AN6X 1634320	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	2M/PVC	A	2	A4
Bi3U-EM12-AP6X 1634300	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	2M/PVC	A	3	A4
Bi3-M12-AD4X 4405035	Extended Range	3	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi2U-M12E-AD4X 4405062	Uprox	2	2-wire DC	10-65 VDC	1000	≤100	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	B	1	A2
Bi2-M12-AD4X 44050		2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi2-M12-AP6X 46050		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi2-M12-VN6X 16402	Comp. Outputs	2	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Bi2-M12-VP6X 16302	Comp. Outputs	2	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4

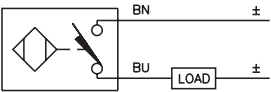
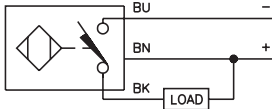
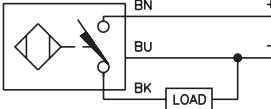
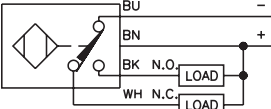
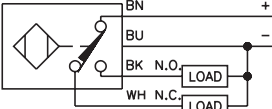
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Nonembeddable, Potted-in Cable</p>
<p>B</p>  <p>12 mm - Nonembeddable, Potted-In Cable, Extended Barrel Length</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 	

A2 2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 12 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs


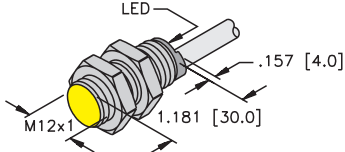
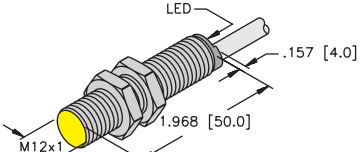
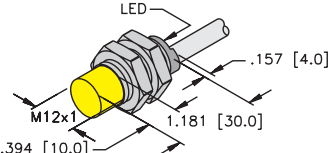
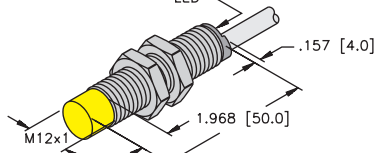
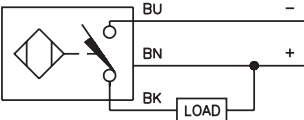
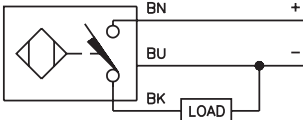
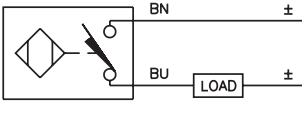
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni10U-M12-AN6X 1634825	Uprox	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Ni10U-M12-AP6X 1634805	Uprox	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Ni8U-M12-AN6X 1644120	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Ni8U-M12-AP6X 1644100	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Ni8U-M12E-AP6X 1644102	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	2M/PVC	B	3	A4
Ni8U-EM12-AP6X 1644300	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	2M/PVC	A	3	A4
Ni8-M12-AD4X 4411235	Extended Range	8	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Ni8-M12-AN6X 4611318	Extended Range	8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni8-M12E-AN6X 4611326		8	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	2	A4
Ni8-M12-AP6X 4611319	Extended Range	8	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Ni8-M12-VN6X 4611321	Ext. Range, Comp. Outputs	8	4-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Ni8-M12-VP6X 4611322	Ext. Range, Comp. Outputs	8	4-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4
Ni4-M12-AD4X 44052		4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Ni4-M12E-AD4X 4405298		4	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	1	A2
Ni4-M12-AP6X 46052		4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>12 mm - Embeddable, Potted-In Cable</p>	<p>B</p>  <p>12 mm - Embeddable, Potted-In Cable</p>
<p>C</p>  <p>12 mm - Nonembeddable, Potted-In Cable</p>	<p>D</p>  <p>12 mm - Nonembeddable, Potted-In Cable</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Cable and DC Outputs


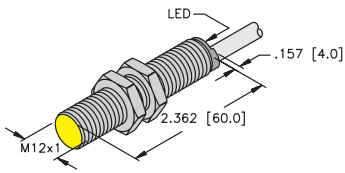
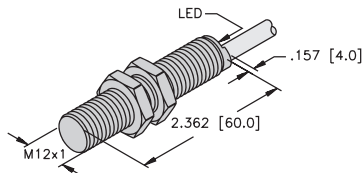
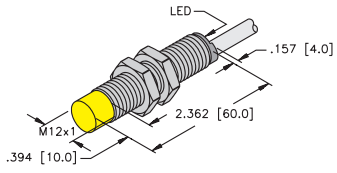
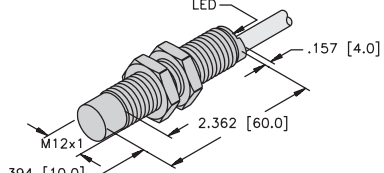
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi4-G12-AN6X 1690706	Extended Range	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	1	A4
Bi4-G12K-AN6X 4670251	Ext. Range, Short Barrel	4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A4
Bi4-G12K-AP6X 4670250	Ext. Range, Short Barrel	4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi2-G12-AN6X 4635500		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	1	A4
Bi2-G12-AN7X 4730500	TTL Compatible	2	3-wire DC NPN	10-30 VDC	2000	≤150	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	1	A4
Bi2-EG12-AP6X 4605001		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi2-G12-AP6X 4635400		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi2-G12K-AN6X 46712	Short Barrel	2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A4
Bi2-G12K-AP6X 46702	Short Barrel	2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni8-G12-AN6X 4611327	Extended Range	8	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	1	A4
Ni8-G12K-AD4X 4411230	Short Barrel	8	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	3	A2
Ni5-G12K-AN6X 46713	Short Barrel	5	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	2	A4
Ni5-G12K-AP6X 46703	Short Barrel	5	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	2	A4
Ni5-G12-AN6X 4635700		5	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	1	A4
Ni5-G12-AN7X 1714500	TTL Compatible	5	3-wire DC NPN	10-30 VDC	1500	≤150	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	1	A4
Ni5-G12-AP6X 46356		5	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	2	A4

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

Inductive Barrel Sensors

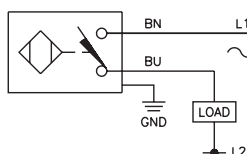
Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Cable and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>12 mm - Embeddable, Potted-In Cable</p>	<p>B</p>  <p>12 mm - Embeddable, Potted-In Cable, PTFE Coated</p>
<p>C</p>  <p>12 mm - Nonembeddable, Potted-In Cable</p>	<p>D</p>  <p>12 mm - Nonembeddable, Potted-In Cable, PTFE Coated</p>	

Wiring Diagrams/Mating Cordsets

1



A5	2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
Line Frequency:	≥50... ≤60 Hz	Minimum Load Current: ≥3.0 mA
Differential Travel (Hysteresis):	3-15% (5% typical)	Inrush Current: ≤3 A (≤20 ms, max 5 Hz)
Voltage Drop Across Conducting Sensor:	≤6.0 V	Power-On Effect: Per IEC 947-5-2
Trigger Current for Short Circuit Protection:	AC: ≥440 mA; DC: ≥330 mA	Transient Protection: Per EN 60947-5-2
	AC: ≥120 mA; DC: ≥120 mA	Shock: 30 g, 11 ms
Continuous Load Current:	AC: ≤400 mA; DC: ≤300 mA	Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes
	AC: ≤100 mA; DC: ≤100 mA	Repeatability: ≤2% of Rated Operating Distance
Off-State (Leakage) Current:	≤1.7 mA (AC)	
	≤1.5 mA (DC)	
A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
Line Frequency:	≥50... ≤60 Hz	Inrush Current: ≤8 A (≤10ms max. 5 Hz)
Differential Travel (Hysteresis):	3-15% (5% typical)	≤1 A (≤10 ms max. 5 Hz) 12 mm
Voltage Drop Across Conducting Sensor:	≤6.0 V	≤0.2 A (≤10 ms max. 0.2 Hz) 8 mm
Continuous Load Current:	AC: ≤400 mA; DC: ≤300 mA	Power-On Effect: Per IEC 947-5-2
	AC: ≤100 mA; DC: ≤100 mA	Transient Protection: Per EN 60947-5-2
Off-State (Leakage) Current:	≤1.7 mA	Shock: 30 g, 11 ms
Minimum Load Current:	≥3.0 mA	Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes
		Repeatability: ≤2% of Rated Operating Distance

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

Inductive Barrel Sensors | 12 mm

Fully Threaded Metal Barrels with Cable and AC/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
Bi4-G12-ADZ32X 4205030	Extended Range	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A5
Bi2-G12-ADZ32X 4205000		2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A5
Bi2-G12-AZ33X 1304002		2	2-wire AC/DC	35-250 VAC	20	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A6
Bi2-GT12-ADZ32X/S34 4205210	PTFE, WFI	2	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	2M/PVC	B	1	A5
Bi2-GT12-AZ33X/S34 1304052	PTFE, WFI	2	2-wire AC/DC	35-250 VAC	20	≤200	-25 to +70	IP67	TC	TC	N/A	YE	2M/PVC	B	1	A6
Ni8-G12-ADZ32X 4205400	Extended Range	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A5
Ni4-G12-AZ33X 1304202		4	2-wire AC/DC	35-250 VAC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A6
Ni4-G12-ADZ32X 4205200		4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A5
Ni4-GT12-ADZ32X/S34 4205210	PTFE, WFI	4	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	2M/PVC	D	1	A5
Ni4-GT12-AZ33X/S34 1304294	PTFE, WFI	4	2-wire AC/DC	35-250 VAC	20	≤100	-25 to +70	IP67	TC	TC	N/A	YE	2M/PVC	D	1	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Threaded Plastic Barrels with Cable and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p> <p>12 mm - Embeddable/Nonembeddable, Plastic, Potted-In Cable</p>	<p>B</p> <p>12 mm - Embeddable/Nonembeddable, Plastic, Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>	<p>2</p>	<p>3</p>

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50\text{ Hz}$... $\leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Threaded Plastic Barrels with Cable and AC/DC Outputs


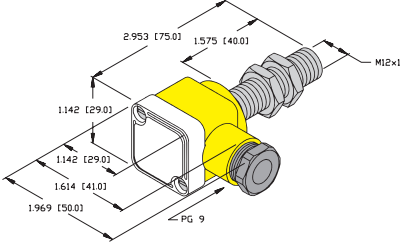
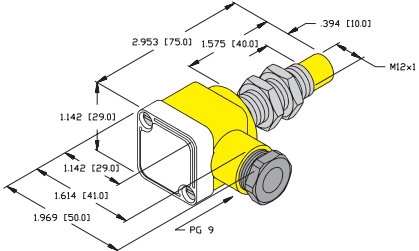
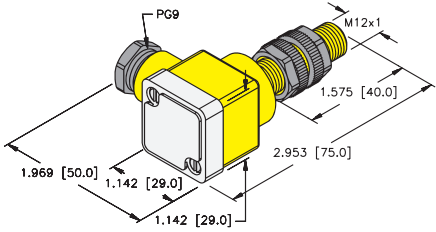
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi3U-S12-AN6X 1634520	Uprox	3	3-wire DC NPN	10-30 VDC	3000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	2M/PVC	A	1	A4
Bi3U-S12-AP6X 1634500	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	2M/PVC	A	2	A4
Bi2-S12-AN6X 46531		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	1	A4
Bi2-S12-AN7X 1713800	TTL Compatible	2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	1	A4
Bi2-S12-AP6X 46530		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi2-S12-AP7X/S100 17555	TTL Compatible, High Temp. 100 °C	2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +100	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi2-S12-AZ31X 13020		2	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	3	A6
Bi2-S12-AZ31X/S100 1302001	High Temp. 100 °C	2	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +100	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	3	A6
Ni8U-S12-AN6X 1644520	Uprox	8	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	2M/PVC	A	1	A4
Ni8U-S12-AP6X 1644500	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PBT	PBT	N/A	YE	2M/PVC	A	2	A4
Ni4-S12-AN6X 46533		4	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	1	A4
Ni4-S12-AN7X 1713900	TTL Compatible	4	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	1	A4
Ni4-S12-AP6X 46532		4	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	B	2	A4
Ni4-S12-AZ31X 13022		4	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	3	A6
Ni4-S12-AZ31X/S100 1302201	High Temp. 100 °C	4	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤100	-25 to +100	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	3	A6

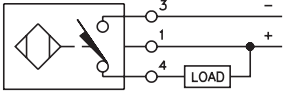
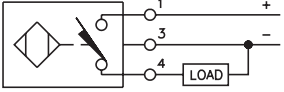
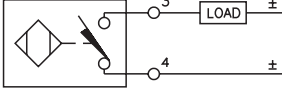
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm

Threaded Barrels with Terminal Chamber and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>12 mm - Embeddable, Terminal Chamber</p>
<p>B</p>  <p>12 mm - Nonembeddable, Terminal Chamber</p>	<p>C</p>  <p>12 mm - Embeddable/Nonembeddable, Plastic, Terminal Chamber</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 12 mm

Threaded Barrels with Terminal Chamber and DC Outputs


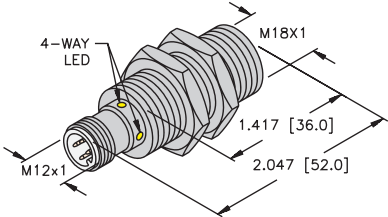
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi3U-EG12SK-AP6X 1634400	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	2	A4
Bi3U-P12SK-AP6X 1634700	Uprox	3	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	2	A4
Bi2-G12SK-AN6X2 4636500		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	1	A4
Bi2-G12SK-AP6X2 4636400		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	2	A4
Bi2-P12SK-AD4X 4453050		2	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	C	3	A2
Bi2-P12SK-AN6X2 4654000		2	3-wire DC NPN	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	1	A4
Bi2-P12SK-AP6X2 4653900		2	3-wire DC PNP	10-30 VDC	2000	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	2	A4
Ni8U-EG12SK-AP6X 1644400	Uprox	8	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	B	2	A4
Ni5-G12SK-AP6X2 46366		5	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	B	2	A4
Ni5-P12SK-AP6X2 4654100		5	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	2	A4

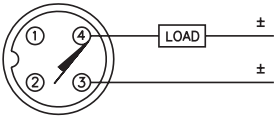
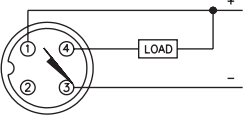
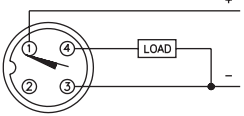
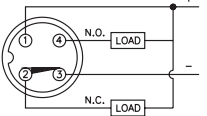
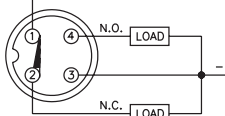
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKV 4T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RKV 4T-*</p>
<p>4</p>  <p>Mating Cordset: RK 4.4T-*, RKV 4.4T-*</p>	<p>5</p>  <p>Mating Cordset: RK 4.4T-*</p>	

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


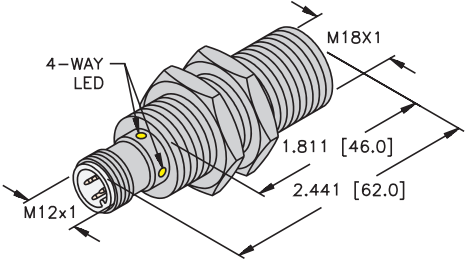
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-M18-AN6X-H1141 1644847	Uprox3	10	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	2	A4
Bi10U-M18-AP6X-H1141 1644830	Uprox3	10	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	3	A4
Bi10U-M18-VP6X-H1141 1644844	Uprox3, Comp. Outputs	10	4-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	5	A4
Bi8U-M18-AN6X-H1141 1644737	Uprox+	8	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	2	A4
Bi8U-EM18-AN6X-H1141 1644738	Uprox+	8	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	2	A4
Bi8U-M18-AP6X-H1141 1644731	Uprox+	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	3	A4
Bi8U-EM18-AP6X-H1141 1644734	Uprox+	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Bi8-M18-AN6X-H1141 4615100	Extended Range	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4
Bi8-M18-AP6X-H1141 461510	Extended Range	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi8-EM18H-AP6X-H1141 4615094	Ext. Range, Stoneface	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	SF	N/A	YE	A	3	A4
Bi8-EM18-AP6X-H1141/S1589 4615099	Weldguard	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	3	A4
Bi8-M18-VN4X-H1141 4590702	Ext. Range, Comp. Outputs	8	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	4	A4
Bi8-M18-VP4X-H1141 4590701	Ext. Range, Comp. Outputs	8	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	5	A4
Bi7-M18-AD4X-H1141 4414541	Extended Range	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi5U-M18-AN6X-H1141 1635150	Uprox	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	2	A4
Bi5U-EM18-AN6X-H1141 1635350	Uprox	5	3-wire DC NPN	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	2	A4
Bi5U-M18-AP6X-H1141 1635140	Uprox	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	3	A4
Bi5U-EM18-AP6X-H1141 1635340	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	3	A4
Bi5-M18-AD4X-H1141 44145		5	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi5-M18-AN6X-H1141 46146		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi5-M18-AP6X-H1141 46145		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Bi5-EM18-AP6X-H1141 4614501		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi5-M18-VN4X-H1141 15718	Comp. Outputs	5	4-wire DC NPN	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi5-EM18-VN4X-H1141 4614699	Comp. Outputs	5	4-wire DC NPN	10-65 VDC	1000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	4	A4
Bi5-M18-VP4X-H1141 15618	Comp. Outputs	5	4-wire DC PNP	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4

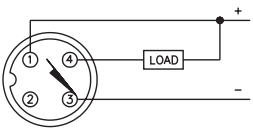
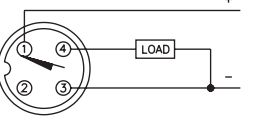
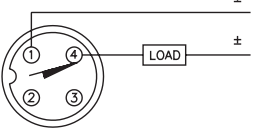
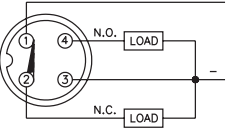
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets			
<p>1</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>3</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>4</p>  <p>Mating Cordset: RK 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$</p> <p>Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current</p> <p>$\geq 170\text{ mA}$ on 150 mA Load Current</p> <p>$\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Bi8U-EM18M-AP6X2-H1141/S1589 1644771	Uprox+, Weldguard	8	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	2	A4
Bi8U-M18M-VP44X-H1141 1634877	Uprox+, Comp. Outputs	8	4-wire DC PNP	10-55 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	4	A4
Bi8-M18M-AP6X-H1141 4615083	Extended Range	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +75	IP67	CPB	PBT	N/A	YE	A	2	A4
Bi5U-M18M-AD4X-H1144 4405066	Uprox+	5	2-wire DC	10-65 VDC	10	≤100	-30 to +85	IP68	TC	LCP	N/A	YE	A	3	A2
Bi5U-M18-AN6X-H1141/S395 1635154	Uprox	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi5U-M18-AP6X-H1141/S395 1635141	Uprox	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	2	A4
Bi5U-EM18-AP6X-H1141/S395 1635342	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	2	A4
Bi5U-EM18H-AN6X2-H1141/S395 1635146	Uprox, Stoneface	5	3-wire DC NPN	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	SF	GN	YE	A	1	A4
Bi5U-EM18H-AN6X2-H1141/S395/S1589 1635196	Uprox, Weldguard	5	3-wire DC NPN	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	1	A4
Bi5U-EM18H-AP6X2-H1141/S395 1635158	Uprox, Stoneface	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	SF	GN	YE	A	2	A4
Bi5U-EM18-AP6X2-H1141/S395/S1589 1635197	Uprox, Weldguard	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	2	A4
Bi5U-EM18M-AP6X2-H1141 1635349	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PBT	GN	YE	A	2	A4

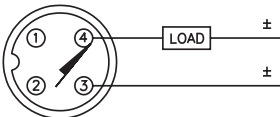
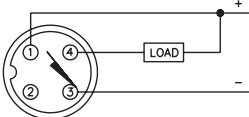
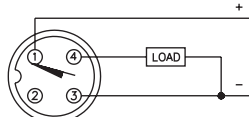
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p> <p>18 mm - Embeddable, Ext. Barrel Length, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*; RKV 4T-*; RKC 4T-*/S1587</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

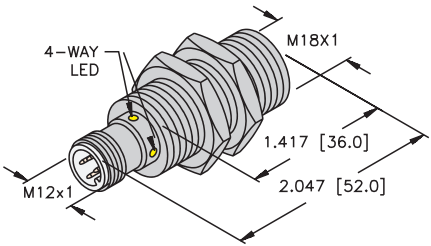
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi8U-EM18E-AP6X-H1141 1634865	Uprox+	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Bi8-M18E-AN6X-H1141 4615190	Extended Range	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	2	A4
Bi8-EM18HE-AN6X-H1141 4615194	Ext. Range, Stoneface	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	SF	N/A	YE	A	2	A4
Bi8-EM18E-AN6X-H1141/S1589 4615193	Ext. Range, Weldguard	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	2	A4
Bi8-EM18E-AP6X-H1141 46150952	Extended Range	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	A	3	A4
Bi8-EM18HE-AP6X-H1141 4615095	Ext. Range, Stoneface	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	SF	N/A	YE	A	3	A4
Bi8-EM18E-AP6X-H1141/S1589 4615096	Ext. Range, Weldguard	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	3	A4
Bi7-M18E-AD4X-H1141 4414580	Extended Range	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi5U-M18E-AN6X-H1141 1635122	Uprox	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	2	A4
Bi5U-M18E-AP6X-H1141 1635103	Uprox	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	3	A4
Bi5-M18E-AD4X-H1141 4414591		5	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi5-M18E-AN6X-H1141 4614697		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4

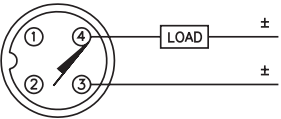
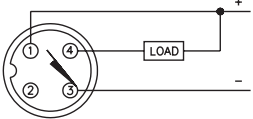
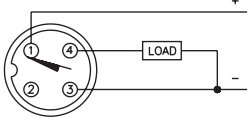
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p data-bbox="836 332 853 353">A</p>  <p data-bbox="942 599 1421 618">18 mm - Embeddable, M12 Eurofast Connection, PTFE Coated</p>

Wiring Diagrams/Mating Cordsets		
<p data-bbox="131 685 147 707">1</p>  <p data-bbox="253 879 455 901">Mating Cordset: RK 4.2T-*</p>	<p data-bbox="596 685 613 707">2</p>  <p data-bbox="673 879 984 901">Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p data-bbox="1076 685 1093 707">3</p>  <p data-bbox="1211 879 1404 901">Mating Cordset: RK 4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p data-bbox="433 972 572 993">Ripple: $\leq 10\%$</p> <p data-bbox="248 1000 673 1021">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="164 1028 735 1084">Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p data-bbox="139 1090 598 1112">Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p data-bbox="299 1118 589 1140">Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p data-bbox="942 972 1266 993">Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p data-bbox="1031 1000 1320 1021">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="997 1028 1337 1049">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1110 1056 1286 1078">Shock: 30 g, 11 ms</p> <p data-bbox="1085 1084 1505 1106">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1051 1112 1471 1134">Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p data-bbox="433 1194 572 1215">Ripple: $\leq 10\%$</p> <p data-bbox="248 1222 673 1244">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="164 1250 572 1272">Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p data-bbox="139 1278 799 1364">Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p data-bbox="265 1371 589 1392">Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p data-bbox="349 1399 715 1420">No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p data-bbox="920 1194 1244 1215">Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p data-bbox="1031 1222 1320 1244">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="942 1250 1303 1272">Reverse Polarity Protection: Incorporated</p> <p data-bbox="984 1278 1303 1300">Wire-Break Protection: Incorporated</p> <p data-bbox="997 1306 1337 1328">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1018 1334 1253 1356">Temperature Drift: $\leq \pm 10\%$</p> <p data-bbox="1110 1362 1286 1384">Shock: 30 g, 11 ms</p> <p data-bbox="1085 1390 1488 1412">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1051 1418 1471 1440">Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs


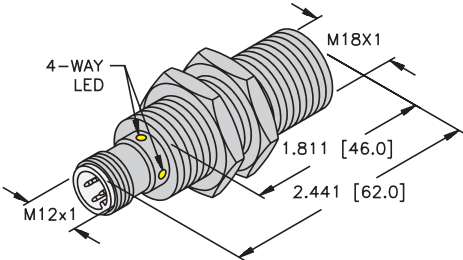
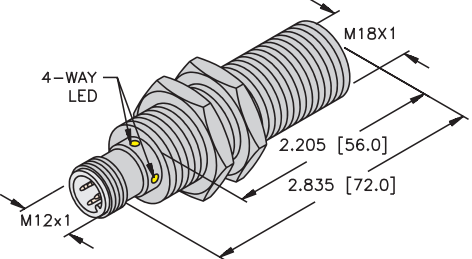
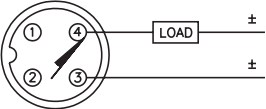
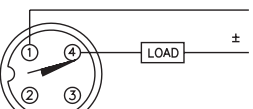
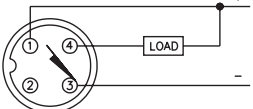
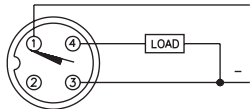
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-MT18-AN6X-H1141 1644858	Uprox3, PTFE	10	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	2	A4
Bi10U-MT18-AP6X-H1141 1644831	Uprox3, PTFE	10	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	3	A4
Bi10U-MT18-AP6X2-H1141 1644905	Uprox3, PTFE	10	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	TC	TC	GN	YE	A	3	A4
Bi8U-MT18-AN6X-H1141 1644739	Uprox+, PTFE	8	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	2	A4
Bi8U-MT18-AP6X-H1141 1644730	Uprox+, PTFE	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	3	A4
Bi8U-MT18-AN6X-H1141/S1589 1644791	Uprox+, PTFE, Weldguard	8	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	2	A4
Bi7-MT18H-AD4X-H1141 44145801	Ext. Range, PTFE	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	SF	N/A	YE	A	1	A2
Bi5U-MT18-AN6X-H1141 1635250	Uprox, PTFE	5	3-wire DC NPN	10-30 VDC	2500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	2	A4
Bi5U-MT18-AP6X-H1141 1635240	Uprox, PTFE	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	3	A4
Bi5U-MT18-AP6X2-H1141 1635245	Uprox, PTFE	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	3	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, M12 Eurofast Connection, PTFE Coated</p>
<p>B</p>  <p>18 mm - Embeddable, Ext. Barrel Length, M12 Eurofast Connection, PTFE Coated</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>4</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>
A2	2-wire DC - (AD, RD, AG)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded PTFE Coated Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Bi8U-MT18M-AP6X2-H1141 1644740	Uprox+, PTFE	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	LCP	GN	YE	A	4	A4
Bi8U-MT18M-AP6X2-H1141/S1589 16447411	Uprox+, PTFE, Weldguard	8	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	WG	GN	YE	A	4	A4
Bi7-MT18HE-AD4X-H1141 4414597	PTFE, Stoneface	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	SF	N/A	YE	B	1	A2
Bi7-MT18HE-AD4X-H1144 4414598	PTFE, Stoneface	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	SF	N/A	YE	B	2	A2
Bi7-MT18HE-AD4X-H1141/S1589 4414588	PTFE, Weldguard	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	B	1	A2
Bi7-MT18HE-AD4X-H1144/S1589 4414599	PTFE, Weldguard	7	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	TC	WG	N/A	YE	B	2	A2
Bi5U-MT18E-AP6X2-H1141 1635247	Uprox, PTFE	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	TC	TC	GN	YE	B	4	A4
Bi5U-MT18M-AP6X2-H1141 1635252	Uprox, PTFE	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	4	A4
Bi5U-MT18H-AN6X2-H1141/S395 1635225	Uprox, PTFE, Stoneface	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	SF	GN	YE	A	3	A4
Bi5U-MT18-AN6X2-H1141/S395/S1589 1635290	Uprox, PTFE, Weldguard	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	3	A4
Bi5U-MT18-AP6X-H1141/S395 1635231	Uprox, PTFE	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	4	A4
Bi5U-MT18H-AP6X2-H1141/S395 1635220	Uprox, PTFE, Stoneface	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	SF	GN	YE	A	4	A4
Bi5U-MT18-AP6X2-H1141/S395/S1589 1635291	Uprox, PTFE, Weldguard	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	4	A4

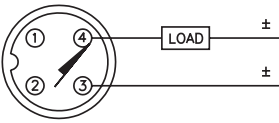
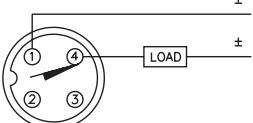
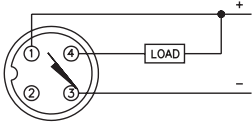
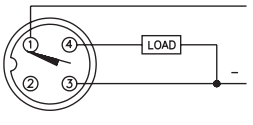
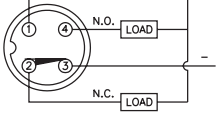
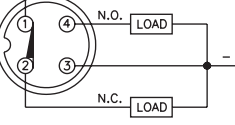
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p> <p>18 mm - Nonembeddable, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*; RKV 4T-*</p>
<p>4</p>  <p>Mating Cordset: RK 4T-*; RKV 4T-*</p>	<p>5</p>  <p>Mating Cordset: RK 4.4T-*</p>	<p>6</p>  <p>Mating Cordset: RK 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) < 5.0 V Polarized (AG) ≤ 4.2 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 120 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Off-State (Leakage) Current: ≤ 0.8 mA</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 220 mA on 200 mA Load Current ≥ 170 mA on 150 mA Load Current ≥ 120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤ 0.1 mA</p> <p>No-Load Current: ≤ 15 mA (Ferrite, Uprox) ≤ 20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤ 8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


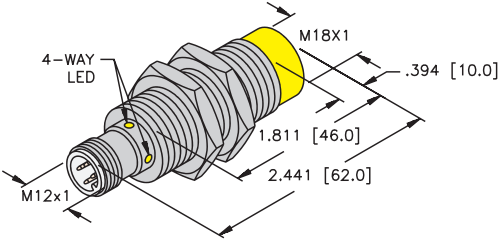
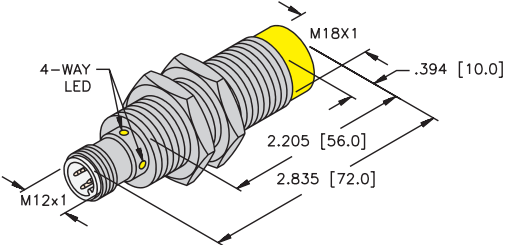
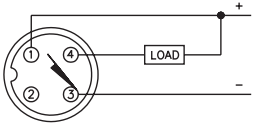
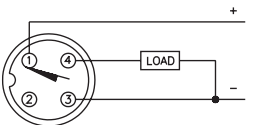
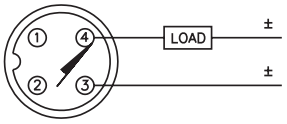
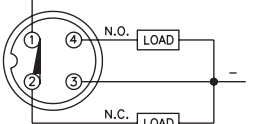
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni15U-M18-AN6X-H1141 1635335	Uprox+	15	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	3	A4
Ni15U-EM18-AN6X-H1141 1635336	Uprox+	15	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Ni15U-M18-AP6X-H1141 1635331	Uprox+	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	4	A4
Ni15U-EM18-AP6X-H1141 1635332	Uprox+	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	4	A4
Ni14-M18-AD4X-H1141 4417241	Extended Range	14	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni14-M18-AD4X-H1144 4417290	Extended Range	14	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A2
Ni14-M18-AN6X-H1141 4611410	Extended Range	14	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni14-M18-AP6X-H1141 4611400	Extended Range	14	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni14-M18-VN4X-H1141 4590603	Ext. Range, Comp. Outputs	14	4-wire DC NPN	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni14-M18-VP4X-H1141 4590602	Ext. Range, Comp. Outputs	14	4-wire DC PNP	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Ni12U-M18-AN6X-H1141 1645150	Uprox	12	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	A	3	A4
Ni12U-EM18-AN6X-H1141 1645350	Uprox	12	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	3	A4
Ni12U-M18-AP6X-H1141 1645140	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	A	4	A4
Ni12U-M18-AP6X2-H1141 1645145	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	LCP	GN	YE	A	4	A4
Ni12U-EM18-AP6X-H1141 1645340	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	4	A4
Ni12U-EM18-AP6X2-H1141 1645345	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	GN	YE	A	4	A4
Ni10-M18-AN6X-H1141 4614892		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni10-M18-AP6X-H1141 4641291		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni8-M18-AD4X-H1141 44147		8	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni8-M18-AD4X-H1144 4411288		8	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A2
Ni8-M18-AN6X-H1141 46148		8	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni8-M18-AP6X-H1141 46147		8	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni8-M18-VN4X-H1141 15719	Comp. Outputs	8	4-wire DC NPN	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni8-M18-VP4X-H1141 15619	Comp. Outputs	8	4-wire DC PNP	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Nonembeddable, M12 Eurofast Connection</p>
<p>B</p>  <p>18 mm - Nonembeddable, Ext. Barrel Length M12 Eurofast Connection</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*; RKC 4T-*/S1587</p>
<p>3</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>4</p>  <p>Mating Cordset: RK 4.4T-*</p>
A2 2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


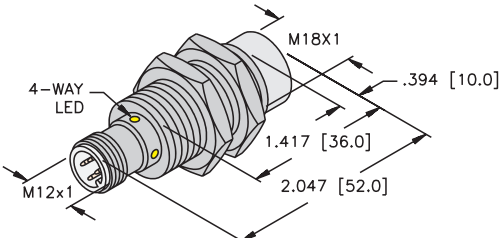
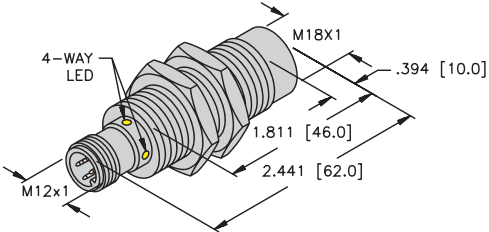
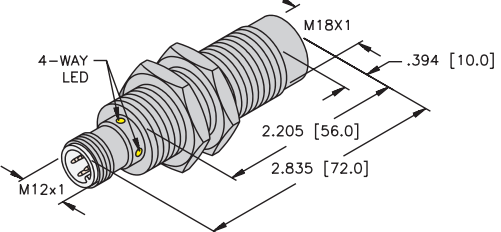
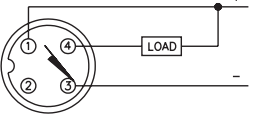
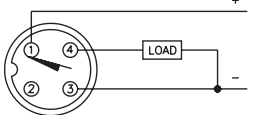
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni14-M18E-AD4X-H1141 4417292	Extended Range	14	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	3	A2
Ni14-M18E-AN6X-H1141 4611483	Extended Range	14	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	1	A4
Ni14-EM18E-AN6X-H1141/S1589 4611494	Ext. Range, Weldguard	14	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	SS	WG	N/A	YE	B	1	A4
Ni14-M18E-AP6X-H1141 4611489	Extended Range	14	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni14-EM18E-AP6X-H1141/S1589 4611495	Ext. Range, Weldguard	14	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	SS	WG	N/A	YE	B	2	A4
Ni12U-M18-AN6X-H1141/S395 1645151	Uprox	12	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	1	A4
Ni12U-EM18-AP6X2-H1141/S395 1645304	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	GN	YE	A	2	A4
Ni12U-EM18-AN6X2-H1141/S395/S1589 1645490	Uprox, Weldguard	12	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	1	A4
Ni12U-EM18-AP6X2-H1141/S395/S1589 1645491	Uprox, Weldguard	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	2	A4
Ni12U-M18E-AP6X-H1141 1645143	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	LCP	N/A	YE	B	2	A4
Ni12U-M18-AP6X-H1141/S395 1645142	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	2	A4
Ni12U-M18M-VP4X-H1141 1581458	Uprox, Comp. Outputs	12	4-wire DC PNP	10-65 VDC	1500	≤200	-30 to +85	IP68	CPB	PBT	N/A	YE	A	4	A4
Ni10-M18E-AN6X-H1141 4614894		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	1	A4
Ni10-M18E-AP6X-H1141 4641294		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni8-M18E-AD4X-H1141 4411210		8	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	3	A2
Ni8-M18E-VP4X-H1141 1561990	Comp. Outputs	8	4-wire DC PNP	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	4	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>18 mm - Nonembeddable, M12 Eurofast Connection, PTFE Coated</p>	
<p>B</p>  <p>18 mm - Nonembeddable, M12 Eurofast Connection, PTFE Coated</p>	<p>C</p>  <p>18 mm - Nonembeddable, Ext. Barrel Length M12 Eurofast Connection, PTFE Coated</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded PTFE Coated Metal Barrels with Connector and DC Outputs


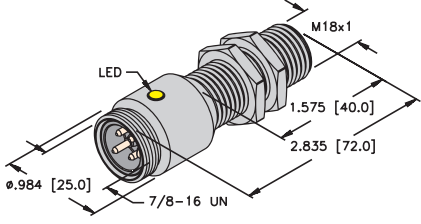
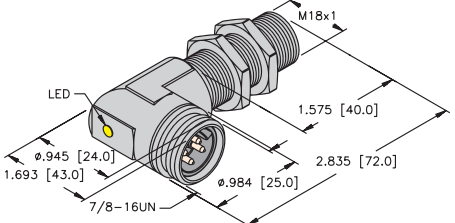
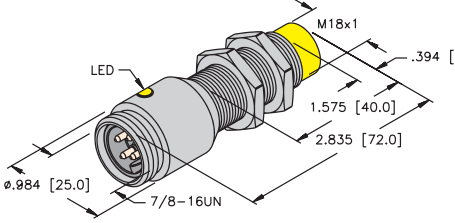
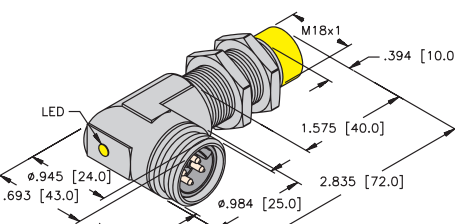
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni15U-MT18-AN6X-H1141 1635337	Uprox+, PTFE	15	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	1	A4
Ni15U-MT18-AN6X-H1141/S1589 16353370	Uprox+, PTFE, Weldguard	15	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	1	A4
Ni15U-MT18-AP6X-H1141 1635333	Uprox+, PTFE	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	2	A4
Ni15U-MT18-AP6X-H1141/S1589 1635333-1	Uprox+, PTFE, Weldguard	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	WG	N/A	YE	A	2	A4
Ni15U-MT18M-AP6X2-H1141 1635338	Uprox+, PTFE	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	TC	GN	YE	B	2	A4
Ni15U-MT18M-AP6X2-H1141/S1589 16352920	Uprox+, PTFE, Weldguard	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	TC	WG	GN	YE	B	2	A4
Ni14-MT18E-AP6X-H1141/S1589 4611497	Ext. Range, PTFE, Weldguard	14	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	TC	WG	N/A	YE	C	2	A4
Ni12U-MT18-AN6X-H1141 1645250	Uprox, PTFE	12	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	1	A4
Ni12U-MT18-AP6X-H1141 1645240	Uprox, PTFE	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	2	A4
Ni12U-MT18-AP6X-H1141/S1589 1645292	Uprox, Weldguard	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	WG	N/A	YE	A	2	A4
Ni12U-MT18-AP6X2-H1141 1645245	Uprox, PTFE	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	2	A4
Ni12U-MT18-AP6X2-H1141/S1589 1645293	Uprox, Weldguard	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	2	A4
Ni12U-MT18-AP6X-H1141/S395 1645242	Uprox, PTFE	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	N/A	YE	B	2	A4
Ni12U-MT18-AP6X2-H1141/S395 1645246	Uprox, PTFE	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	TC	GN	YE	B	2	A4
Ni12U-MT18-AP6X2-H1141/S395/ S1589 1645291	Uprox, PTFE, Weldguard	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	TC	WG	GN	YE	B	2	A4

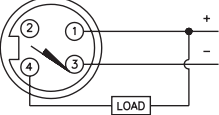
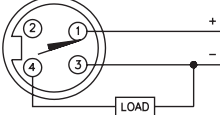
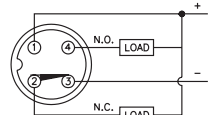
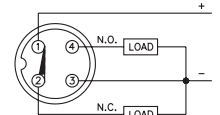
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Fully Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, 7/8" Minifast Connection</p>
<p>B</p>  <p>18 mm - Embeddable, Right Angle, 7/8" Minifast Connection</p>	<p>C</p>  <p>18 mm - Nonembeddable, 7/8" Minifast Connection</p>
<p>D</p>  <p>18 mm - Nonembeddable, 7/8" Minifast Right Angle Connection</p>	

Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RKM 40-*M</p>	<p>2</p>  <p>Mating Cordset: RKM 40-*M</p>
<p>3</p>  <p>Mating Cordset: RKM 40-*M</p>	<p>4</p>  <p>Mating Cordset: RKM 40-*M</p>

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ≤±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Fully Threaded Metal Barrels with Connector and AC/DC Outputs


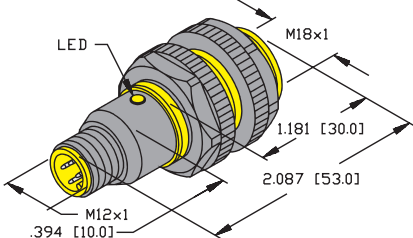
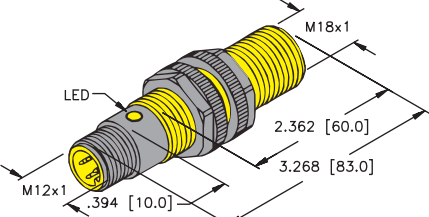
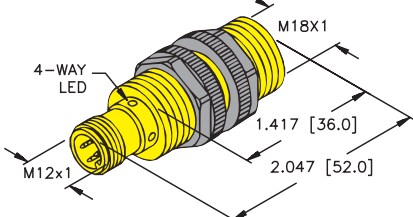
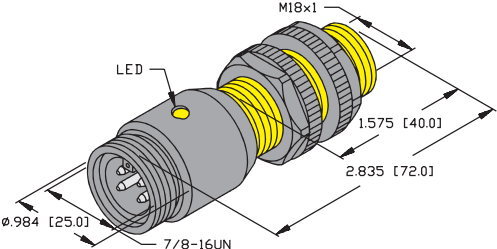
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5-G18-AN6X-B1341 46952		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi5-G18-AP6X-B1341 46963		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi5-G18-AN6X-B1441 46956		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	1	A4
Bi5-G18-AP6X-B1441 46967		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni10-G18-AN6X-B1341 46953		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	C	1	A4
Ni10-G18-AP6X-B1341 46964		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	C	2	A4
Ni10-G18-AN6X-B1441 46957		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	1	A4
Ni10-G18-AP6X-B1441 46968		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	2	A4
Ni10-G18-VN6X-B1441 46991	Comp. Outputs	10	4-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	3	A4
Ni10-G18-VP6X-B1441 4699190	Comp. Outputs	10	4-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	4	A4

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

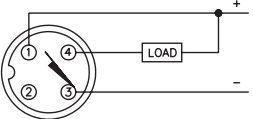
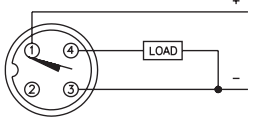
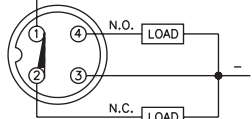
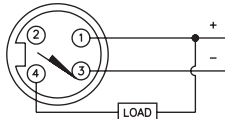
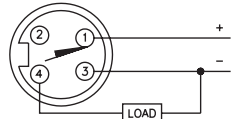
Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Threaded Plastic Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable and Nonembeddable, Partial Threading, M12 Eurofast Connection</p>
<p>B</p>  <p>18 mm - Embeddable and Nonembeddable, Partial Threading, M12 Eurofast Connection</p>	<p>C</p>  <p>18 mm - Embeddable and Nonembeddable, Partial Threading, M12 Eurofast Connection</p>
<p>D</p>  <p>18 mm - Embeddable and Nonembeddable, Full Threading, 7/8" Minifast Connection</p>	

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

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RKK 4T-*</p>	<p>2</p>  <p>Mating Cordset: RKK 4T-*</p>	<p>3</p>  <p>Mating Cordset: RKK 4.4T-*</p>
<p>4</p>  <p>Mating Cordset: RK 40-*M</p>	<p>5</p>  <p>Mating Cordset: RK 40-*M</p>	

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ±±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>	

Inductive Barrel Sensors | 18 mm

Threaded Plastic Barrels with Connector and DC Outputs


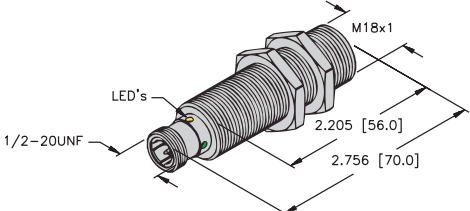
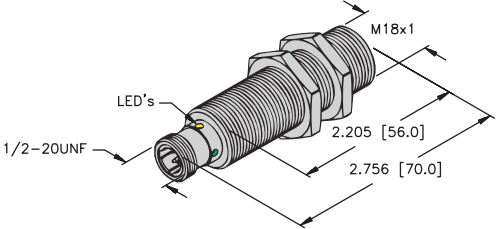
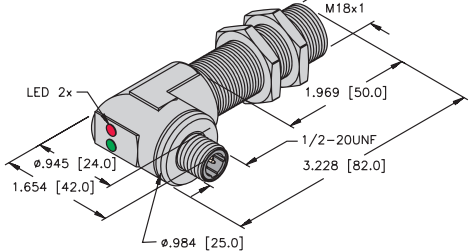
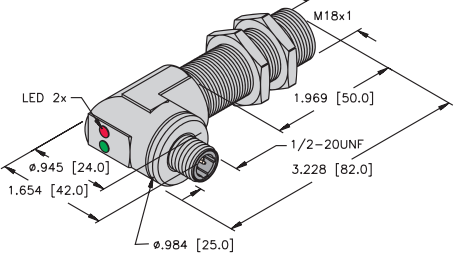
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-S18-AN6X-H1141 1635620	Uprox	5	3-wire DC NPN	10-30 VDC	2500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	1	A4
Bi5U-S18-AP6X-H1141 1635600	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	2	A4
Bi5-S18-AN6X-H1141 46525		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Bi5-S18-AP6X-H1141 46524		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4
Bi5-S18-VP4X-H1141 1513401	Comp. Outputs	5	4-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	B	3	A4
Bi5-P18-AN6X-B2341 46972		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	D	4	A4
Bi5-P18-AP6X-B2341 46973		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	D	5	A4
Ni12U-S18-AN6X-H1141 1645620	Uprox	12	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	1	A4
Ni12U-S18-AP6X-H1141 1645600	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	2	A4
Ni10-P18-AN6X-B2341 4697800		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	D	4	A4
Ni10-P18-AP6X-B2341 4697900		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	D	5	A4
Ni8-S18-AN6X-H1141 46527		8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Ni8-S18-AP6X-H1141 46526		8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Fully Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, 1/2" Microfast Connection</p>
<p>B</p>  <p>18 mm - Embeddable, 1/2" Microfast Connection, PTFE Coated</p>	<p>C</p>  <p>18 mm - Embeddable, 1/2" Microfast Connection</p>
<p>D</p>  <p>18 mm - Embeddable, 1/2" Microfast Right Angle Connection, PTFE Coated</p>	

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

Wiring Diagrams/Mating Cordsets



A5	2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

Inductive Barrel Sensors | 18 mm

Embeddable Fully Threaded Metal Barrels with Connector and AC/DC Outputs


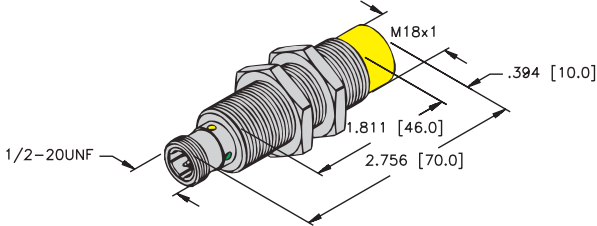
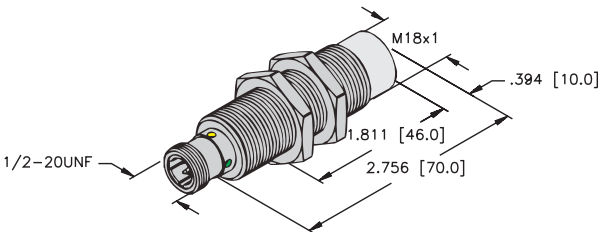
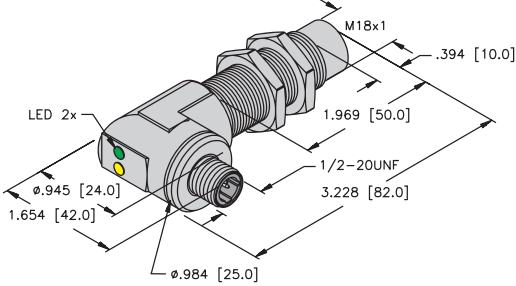
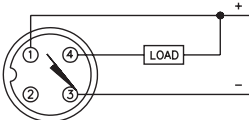
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi8-G18-ADZ30X2-B3331 4209301	Extended Range	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	PA 12	GN	RD	A	1	A5
Bi5U-G18-ADZ30X2-B3331 4281213	Uprox	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Bi5U-GT18-ADZ30X2-B3331 4281223	Uprox, PTFE	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	B	1	A5
Bi5-G18-ADZ30X2-B3331 4208092		5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi5-GT18-ADZ30X2-B3331 4255491	PTFE	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Bi5-GT18-ADZ30X2-B3331/S34 4255400	PTFE, WFI	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Bi5-GT18H-ADZ30X2-B3331/S34 4255289	PTFE, WFI, Stoneface	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	SF	GN	RD	B	1	A5
Bi5-GT18H-ADZ30X2-B3331/S34/S1589 4255283	PTFE, Weldguard	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	B	1	A5
Bi5-GT18-ADZ30X2-B3431/S34 4255605	PTFE, WFI	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	D	1	A5
Bi5-G18-AZ3X-B3331 4372098		5	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Bi5-G18-AZ3X-B3431 4372090		5	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	C	1	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Fully Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>18 mm - Nonembeddable, 1/2" Microfast connection</p>	
<p>B</p>  <p>18 mm - Nonembeddable, 1/2" Microfast connection, PTFE Coated</p>	<p>C</p>  <p>18 mm - Nonembeddable, PTFE Coated, 1/2" Microfast Right Angle Connection</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: KB 3T.*</p>		
A5	2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Fully Threaded Metal Barrels with Connector and AC/DC Outputs


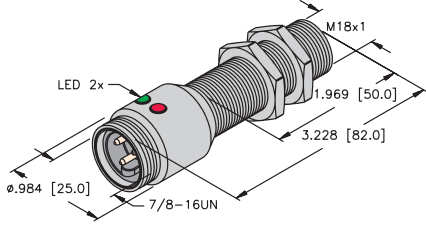
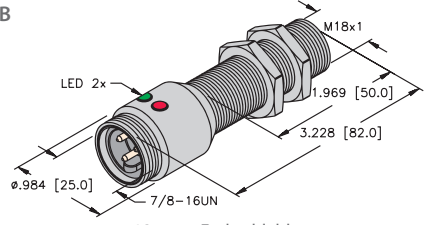
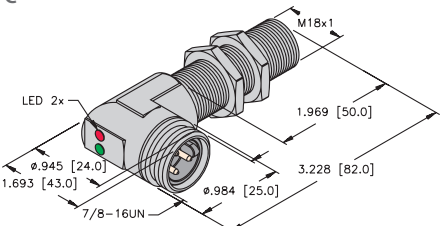
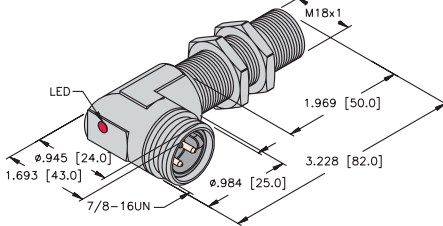
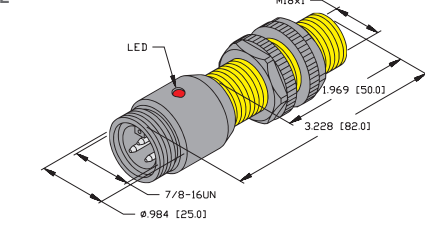
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni14-G18-ADZ30X2-B3331 4205403	Extended Range	14	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Ni12U-G18-ADZ30X2-B3331 4281413	Uprox	12	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Ni12U-GT18-ADZ30X2-B3331 4281423	Uprox, PTFE	12	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	B	1	A5
Ni10-G18-AZ3X-B3331 4372192		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Ni8-G18-ADZ30X2-B3331/S34 4209100	WFI	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Ni8-GT18-ADZ30X2-B3331/S34 4209101	PTFE, WFI	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Ni8-GT18-ADZ30X2-B3431/S34 4209201	PTFE, WFI	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	C	1	A5
Ni8-G18-AZ3X-B3331 4350588		8	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6

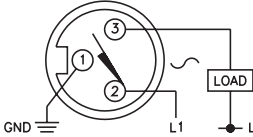
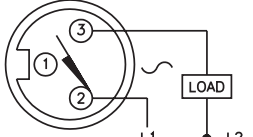
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Fully Threaded Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>18 mm - Embeddable, 7/8" Minifast Connection</p>	<p>B</p>  <p>18 mm - Embeddable, 7/8" Minifast Connection, PTFE Coated</p>
<p>C</p>  <p>18 mm - Embeddable, 7/8" Minifast Right Angle Connection</p>	<p>D</p>  <p>18 mm - Embeddable, 7/8" Minifast Right Angle Connection, PTFE Coated</p>	<p>E</p>  <p>18 mm - Embeddable and Nonembeddable, Full Threading, 7/8" Minifast Connection</p>

Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RKM 30-*M; RKM 311-*M/S600</p>	<p>2</p>  <p>Mating Cordset: RK 30-*M</p>

A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Embeddable Fully Threaded Barrels with Connector and AC/DC Outputs


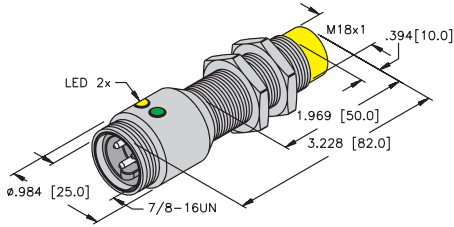
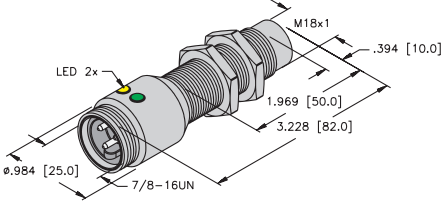
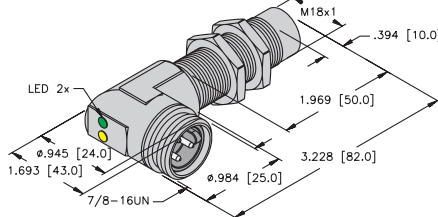
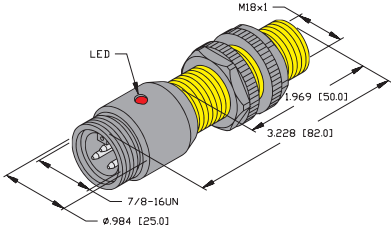
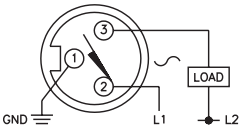
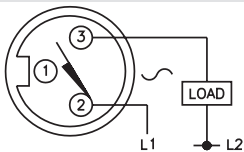
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-G18-ADZ30X2-B1331 4281212	Uprox	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Bi5U-GT18-ADZ30X2-B1331 4281222	Uprox, PTFE	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	B	1	A5
Bi5-G18-ADZ30X2-B1331 42080		5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi5-GT18-ADZ30X2-B1331 4255290	PTFE	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Bi5-GT18-ADZ30X2-B1331/S34 4255200	PTFE, WFI	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Bi5-GT18H-ADZ30X2-B1331/S34/S1589 4255284	PTFE, WFI, Weldguard	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	B	1	A5
Bi5-GT18-ADZ30X2-B1431 4255690	PTFE	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	D	1	A5
Bi5-GT18-ADZ30X2-B1431/S34 4255600	PTFE, WFI	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	D	1	A5
Bi5-GT18H-ADZ30X2-B1431/S34/S1589 4255285	PTFE, Weldguard	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	D	1	A5
Bi5-G18-AZ3X-B1331 43720		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Bi5-G18-AZ3X-B1431 43724		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	C	1	A6
Bi5-P18-AZ3X-B2331 43748		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	E	2	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Fully Threaded Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Nonembeddable 7/8" Minifast Connection</p>
<p>B</p>  <p>18 mm - Nonembeddable 7/8" Minifast Connection, PTFE Coated</p>	<p>C</p>  <p>18 mm - Nonembeddable, PTFE Coated 7/8" Minifast Right Angle Connection</p>
<p>D</p>  <p>18 mm - Embeddable and Nonembeddable, Full Threading, 7/8" Minifast Connection</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RKM 30-*M; RKM 311-*M/S600</p>	<p>2</p>  <p>Mating Cordset: RK 30-*M</p>
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50... \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Fully Threaded Barrels with Connector and AC/DC Outputs


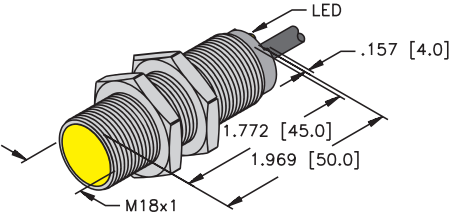
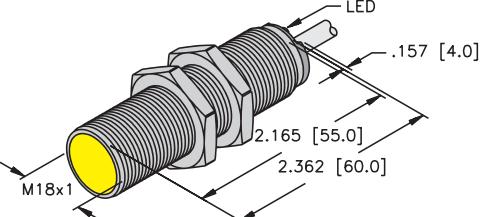
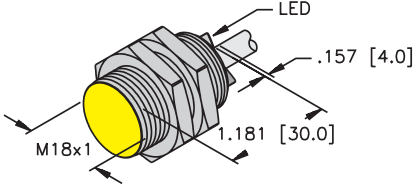
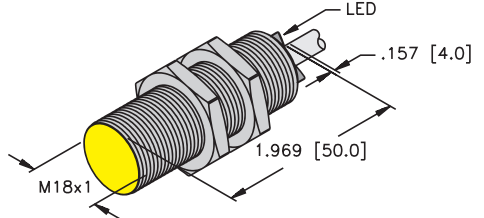
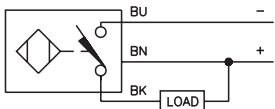
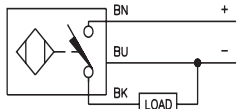
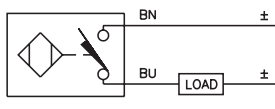
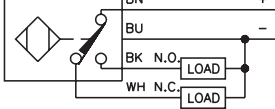
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni14-G18-ADZ30X2-B1331 4205407	Extended Range	14	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Ni14-GT18H-ADZ30X2-B1331/S1589 4205484	PTFE, Weldguard	14	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	B	1	A5
Ni12U-G18-ADZ30X2-B1331 4281412	Uprox	12	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Ni12U-GT18-ADZ30X2-B1331 4281422	Uprox	12	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	B	1	A5
Ni10-G18-AZ3X-B1331 43721		10	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Ni10-P18-AZ3X-B2331 43752		10	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	D	2	A6
Ni8-GT18-ADZ30X2-B1331/S34 4208801	PTFE, WFI	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Ni8-GT18H-ADZ30X2-B1331/S34/S1589 4208890	PTFE, Weldguard	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	B	1	A5
Ni8-GT18-ADZ30X2-B1431/S34 4208901	PTFE, WFI	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	C	1	A5
Ni8-GT18H-ADZ30X2-B1431/S34/S1589 4208990	Weldguard	8	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	C	1	A5

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, Potted-in Cable</p>
<p>B</p>  <p>18 mm - Embeddable, Potted-In Cable, Extended Length Barrel, Partial Threading</p>	<p>C</p>  <p>18 mm - Embeddable, Full Threading, Potted-In Cable</p>
<p>D</p>  <p>18 mm - Embeddable, Full Threading, Potted-In Cable</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 
<p>3</p> 	<p>4</p> 
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs


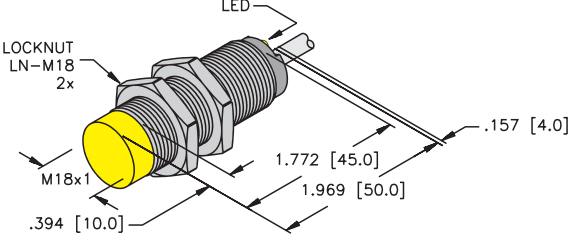
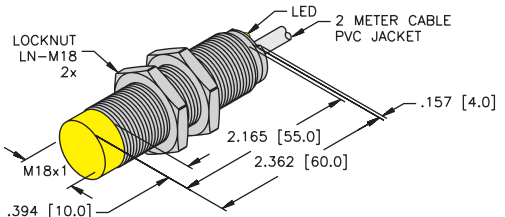
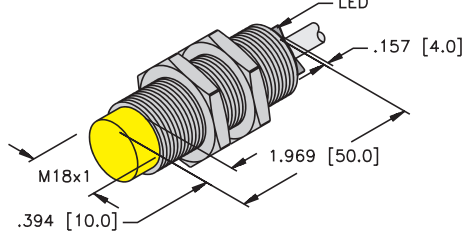
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-M18-AN6X 1644845	Uprox3	10	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	1	A4
Bi10U-M18-AP6X 1644840	Uprox3	10	3-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi10U-M18-VP6X 1644842	Uprox3, Comp. Outputs	10	4-wire DC PNP	10-30 VDC	1500	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	4	A4
Bi8U-M18-AN6X 1644736	Uprox+	8	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	1	A4
Bi8U-M18-AP6X 1644733	Uprox+	8	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi8-M18-AN6X 4615130	Extended Range	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	A	1	A4
Bi8-M18-AP6X 4615030	Extended Range	8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi8-M18-VN4X 4590703	Comp. Outputs	8	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi8-M18-VP4X 4590704	Comp. Outputs	8	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	A	4	A4
Bi8-G18-AN6X 4616101	Extended Range	8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	D	1	A4
Bi8-G18-AP6X 4615088		8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	D	2	A4
Bi5U-M18-AN6X 1635120	Uprox	5	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	1	A4
Bi5U-EM18-AP6X 1635300	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	2M/PVC	A	2	A4
Bi5U-M18-AP6X 1635100	Uprox	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	2	A4
Bi5U-M18E-AP6X 1635101	Uprox	5	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	B	1	A4
Bi5-G18-AN6X 4641500		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	1	A4
Bi5-G18-AN7X 4740500	TTL Compatible	5	3-wire DC NPN	10-30 VDC	1000	≤150	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	1	A4
Bi5-G18-AP6X 4641400		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	2	A4
Bi5-EG18-AN6X 4611101		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	D	1	A4
Bi5-EG18-AP6X 4611001		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	SS	PA 12	N/A	YE	2M/PVC	D	2	A4
Bi5-M18E-VP4X 1561190	Comp. Outputs	5	4-wire DC PNP	10-65 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	4	A4
Bi5-G18K-AN6X 46714	Short Barrel	5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A4
Bi5-G18K-AP6X 46704	Short Barrel	5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	2	A4

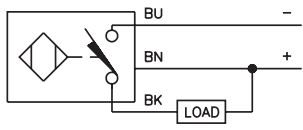
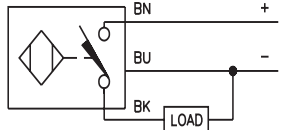
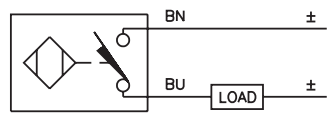
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Nonembeddable, Potted-in Cable</p>
<p>B</p>  <p>18 mm - Nonembeddable, Extended Barrel Length, Partial Threading, Potted-In Cable</p>	<p>C</p>  <p>18 mm - Nonembeddable, Full Threading, Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p> <p>Polarized (AG) $\leq 4.2\text{ V}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current</p> <p>$\geq 170\text{ mA}$ on 150 mA Load Current</p> <p>$\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs


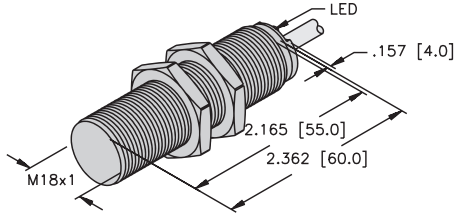
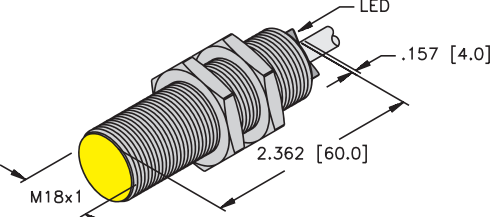
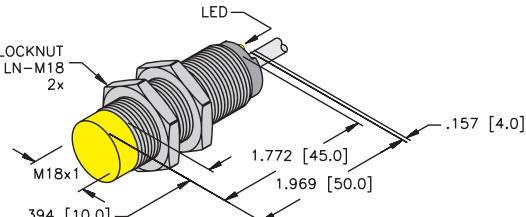
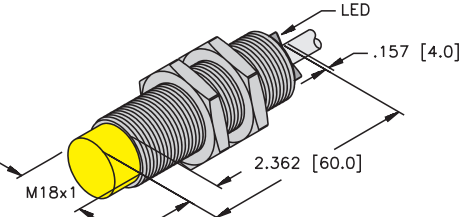
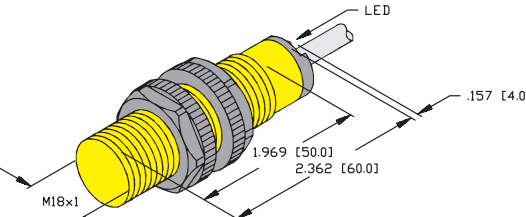
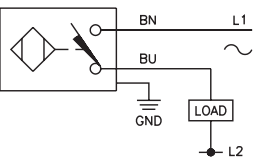
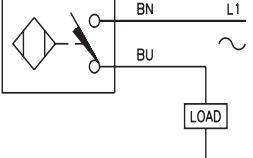
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni15U-M18-AN6X 1635334	Uprox+	15	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	1	A4
Ni15U-M18-AP6X 1635330	Uprox+	15	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Ni14-M18-AD4X 4417235	Extended Range	14	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A2
Ni14-M18-AN6X 4611411	Extended Range	14	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A4
Ni14-M18-AP6X 4611401	Extended Range	14	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni12U-M18-AN6X 1645120	Uprox	12	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	1	A4
Ni12U-M18-AP6X 1645100	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	2	A4
Ni12U-M18E-AN6X 1645110	Uprox	12	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	B	1	A4
Ni12U-M18E-AP6X 1645106	Uprox	12	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	B	2	A4
Ni12U-EM18-AN6X 1645320	Uprox	12	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP67	SS	PBT	N/A	YE	2M/PVC	A	1	A4
Ni12U-EM18-AP6X 1645300	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP67	SS	PBT	N/A	YE	2M/PVC	A	2	A4
Ni10-G18-AN6X 4641700		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A4
Ni10-G18-AN7X 4740700	TTL Compatible	10	3-wire DC NPN	10-30 VDC	1000	≤150	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	1	A4
Ni10-G18-AP6X 4641600		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	2	A4
Ni8-M18-AD4X 44112		8	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A2

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Threaded Barrels with Cable and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable, Potted-In Cable, Partial Threading, PTFE Coated</p>
<p>B</p>  <p>18 mm - Embeddable, Full Threading, Potted-In Cable</p>	<p>C</p>  <p>18 mm - Nonembeddable, Partial Threading, Potted-In Cable</p>
<p>D</p>  <p>18 mm - Nonembeddable, Full Threading, Potted-In Cable</p>	<p>E</p>  <p>18 mm - Embeddable and Nonembeddable, Partial Threading, Potted-In Cable</p>
Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC)</p> <p>≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10ms max. 5 Hz)</p> <p>≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm</p> <p>≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Threaded Barrels with Cable and AC/DC Outputs


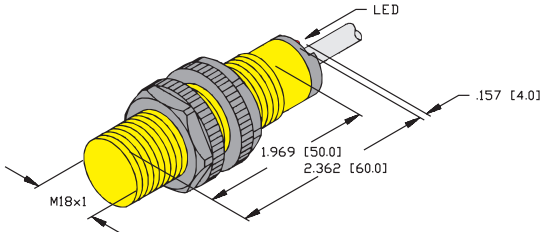
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-MT18-ADZ30X2 4209410	Uprox	5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	2M/PVC	A	1	A5
Bi5-G18-ADZ30X2 4212000		5	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	2M/PVC	B	1	A5
Bi5-G18-AZ3X 4330400		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	B	1	A6
Bi5-G18-AZ3X2 1374195		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	YE	2M/PVC	B	1	A6
Bi5-EG18-AZ3X 4611190		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	PA 12	N/A	RD	2M/PVC	B	1	A6
Bi5-S18-AZ3X 4350400		5	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	E	2	A6
Ni14-G18-ADZ30X2 4205402	Extended Range	14	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	2M/PVC	D	1	A5
Ni12U-M18-ADZ30X2 4282410	Uprox	12	2-wire AC/DC Short-Circuit Protected	20-250 VAC/ 10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	2M/PVC	C	1	A5
Ni8-S18-AZ3X 4350500		8	2-wire AC/DC	20-250 VAC/ 10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	E	2	A6

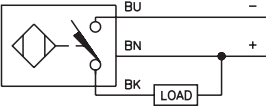
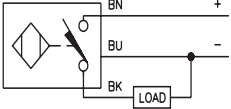
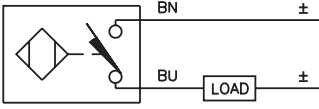
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Threaded Plastic Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable and Nonembeddable, Partial Threading, Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Threaded Plastic Barrels with Cable and DC Outputs


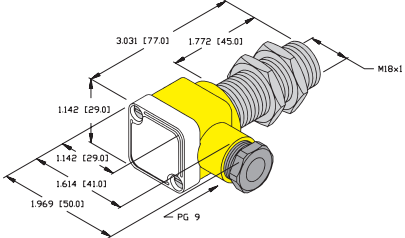
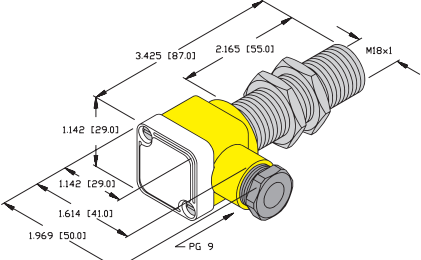
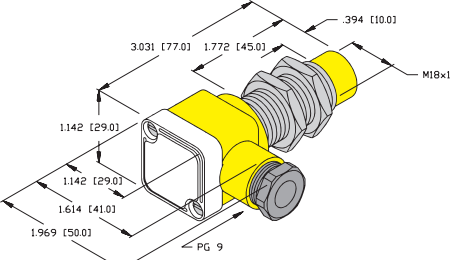
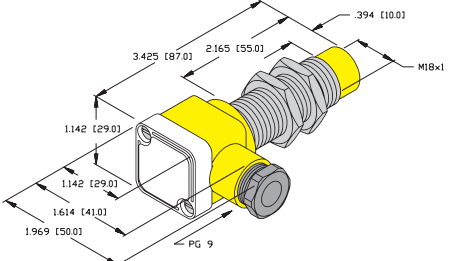
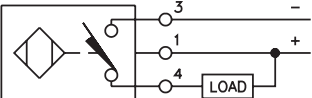
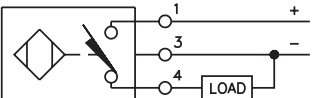
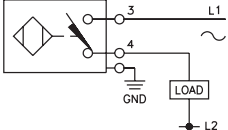
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-S18-AP6X 1635500	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Bi5-S18-AD4X 44560		5	2-wire DC	10-65 VDC	1000	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	3	A2
Bi5-S18-AN6X 46561		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Bi5-S18-AN7X 1714000	TTL Compatible	5	3-wire DC NPN	10-30 VDC	1000	≤150	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Bi5-S18-AN7X/S100 17734	High Temp. 100 °C	5	3-wire DC NPN	10-30 VDC	1000	≤150	-25 to +100	IP67	PA 12	IRPA	N/A	YE	A	1	A4
Bi5-S18-AP6X 46560		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4
Bi5-S18-AP7X/S100 1754200	TTL Compatible, High Temp. 100 °C	5	3-wire DC PNP	10-30 VDC	1000	≤150	-25 to +100	IP67	PA 12	IRPA	N/A	YE	A	2	A4
Ni12U-S18-AN6X 1645520	Uprox	12	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	1	A4
Ni12U-S18-AP6X 1645500	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Ni8-S18-AD4X 44562		8	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	3	A2
Ni8-S18-AN6X 46563		8	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Ni8-S18-AN7X 1714100	TTL Compatible	8	3-wire DC NPN	10-30 VDC	500	≤150	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A4
Ni8-S18-AP6X 46562		8	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4
Ni8-S18-AN7X/S100 1773250	TTL Compatible, High Temp. 100 °C	8	3-wire DC NPN	10-30 VDC	500	≤150	-25 to +100	IP67	PA 12	IRPA	N/A	YE	A	1	A4
Ni8-S18-AP7X/S100 1749850	TTL Compatible, High Temp. 100 °C	8	3-wire DC PNP	10-30 VDC	500	≤150	-25 to +100	IP67	PA 12	IRPA	N/A	YE	A	2	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Threaded Metal Barrels with Terminal Chamber and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>18 mm - Embeddable, Terminal Chamber</p>	
<p>B</p>  <p>18 mm - Embeddable, Terminal Chamber</p>	<p>C</p>  <p>18 mm - Nonembeddable, Terminal Chamber</p>	
<p>D</p>  <p>18 mm - Nonembeddable, Terminal Chamber</p>		
Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)		
<p>Line Frequency: $\geq 50\text{...} \leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 18 mm

Threaded Metal Barrels with Terminal Chamber and AC/DC Outputs


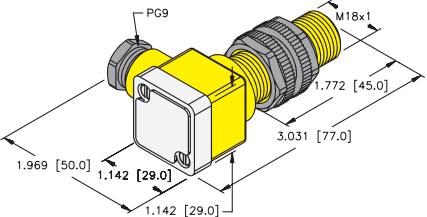
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-EG18SK-AP6X 1635400	Uprox	5	3-wire DC PNP	10-30 VDC	2500	≤200	-30 to +85	IP68	SS	PA 12	N/A	YE	A	2	A4
Bi5-G18SK-AN6X2 4642500		5	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	1	A4
Bi5-G18SK-AP6X2 4642400		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	2	A4
Bi5-G18SK-AZ3X2 4331400		5	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤500	-25 to +70	IP67	CPB	PA 12	GN	RD	B	3	A6
Ni10-G18SK-AN6X2 4642700		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	C	1	A4
Ni10-G18SK-AP6X2 4642600		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	C	2	A4
Ni10-G18SK-AZ3X2 4331500		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	D	3	A6

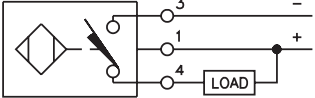
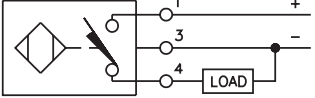
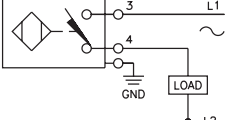
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 18 mm

Threaded Metal Barrels with Terminal Chamber and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>18 mm - Embeddable and Nonembeddable, Full Threading, Terminal Chamber</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>		<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50\text{...} \leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>		<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 18 mm

Threaded Metal Barrels with Terminal Chamber and AC/DC Outputs


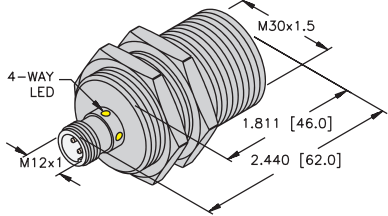
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi5U-P18SK-AP6X 1635700	Uprox	5	3-wire DC PNP	10-30 VDC	3000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Bi5-P18SK-AP6X2 4656900		5	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	A	2	A4
Bi5-P18SK-AZ3X2 4351400		5	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	GN	RD	A	3	A6
Ni12U-P18SK-AP6X 1645700	Uprox	12	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Ni10-P18SK-AZ3X2 4351500		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	GN	RD	A	3	A6
Ni10-P18SK-AN6X2 4657200		10	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	A	1	A4
Ni10-P18SK-AP6X2 4657100		10	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	A	2	A4

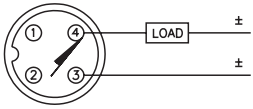
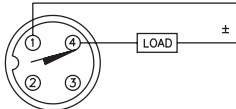
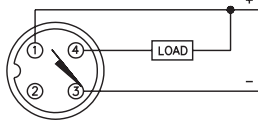
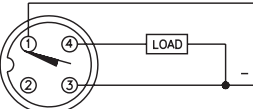
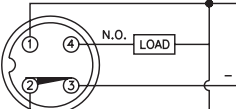
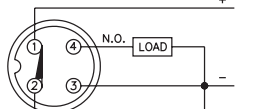
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>
<p>4</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>5</p>  <p>Mating Cordset: RK 4.4T-*</p>	<p>6</p>  <p>Mating Cordset: RK 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Embeddable Threaded Metal Barrels with Connector and DC Outputs


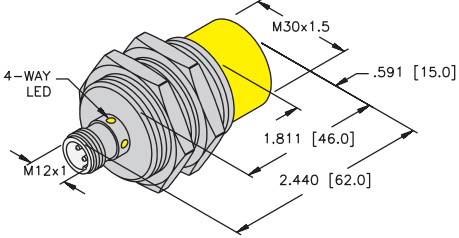
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi20U-M30-AN6X-H1141 1644888	Uprox3	20	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	3	A4
Bi20U-M30-AP6X-H1141 1644880	Uprox3	20	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	A	4	A4
Bi15U-M30-AN6X-H1141 1636736	Uprox+	15	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	3	A4
Bi15U-M30-AP6X-H1141 1636732	Uprox+	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	4	A4
Bi15U-EM30-AP6X-H1141 1636733	Uprox+	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	4	A4
Bi15-M30-AN6X-H1141 4618600	Extended Range	15	3-wire DC NPN	10-30 VDC	300	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Bi15-EM30H-AN6X-H1141 4618692	Ext. Range, Stoneface	15	3-wire DC NPN	10-30 VDC	300	≤200	-25 to +70	IP67	SS	SF	N/A	YE	A	3	A4
Bi15-M30-AP6X-H1141 46185	Extended Range	15	3-wire DC PNP	10-30 VDC	300	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi15-EM30H-AP6X-H1141 4618592	Ext. Range, Stoneface	15	3-wire DC PNP	10-30 VDC	300	≤200	-25 to +70	IP67	SS	SF	N/A	YE	A	4	A4
Bi15-EM30-AP6X-H1141/S1589 4618593	Weldguard	15	3-wire DC PNP	10-30 VDC	300	≤200	-25 to +70	IP67	SS	WG	N/A	YE	A	4	A4
Bi15-M30-VN4X-H1141 4570711	Ext. Range, Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Bi15-M30-VP4X-H1141 4570710	Ext. Range, Comp. Outputs	15	4-wire DC PNP	10-65 VDC	300	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Bi12-M30-AD4X-H1141 4417041	Extended Range	12	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi10U-M30-AD4X-H1144 4405072	Uprox	10	2-wire DC	10-65 VDC	10	≤100	-25 to +70	IP68	CPB	LCP	N/A	YE	A	2	A2
Bi10U-M30-AN6X-H1141 1636150	Uprox	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	3	A4
Bi10U-EM30-AN6X-H1141 1636350	Uprox	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	3	A4
Bi10U-M30-AP6X-H1141 1636140	Uprox	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	4	A4
Bi10U-M30-AP6X2-H1141 1636145	Uprox	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	GN	YE	A	4	A4
Bi10U-EM30-AP6X-H1141 1636340	Uprox	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	4	A4
Bi10U-M30-VP4X-H1141 1582253	Uprox, Comp. Outputs	10	4-wire DC PNP	10-65 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	6	A4
Bi10-M30-AD4X-H1141 44175		10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Bi10-M30-AN6X-H1141 46176		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Bi10-M30-AP6X-H1141 46175		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Bi10-M30-VN4X-H1141 15716	Comp. Outputs	10	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Bi10-M30-VP4X-H1141 15616	Comp. Outputs	10	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4

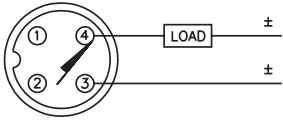
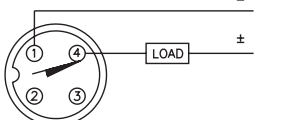
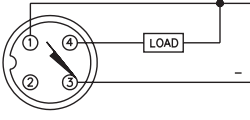
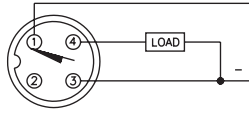
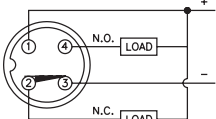
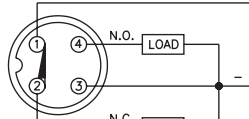
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p data-bbox="836 336 853 357">A</p>  <p data-bbox="976 577 1384 599">30 mm - Nonembeddable, M12 Eurofast Connection</p>

Wiring Diagrams/Mating Cordsets	
<p data-bbox="131 664 147 685">1</p>  <p data-bbox="371 810 576 832">Mating Cordset: RK 4.2T-*</p>	<p data-bbox="836 664 853 685">2</p>  <p data-bbox="1076 810 1281 832">Mating Cordset: RK 4.23T-*</p>
<p data-bbox="131 847 147 868">3</p>  <p data-bbox="315 993 626 1015">Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p data-bbox="836 847 853 868">4</p>  <p data-bbox="1021 993 1332 1015">Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>
<p data-bbox="131 1030 147 1052">5</p>  <p data-bbox="371 1198 576 1220">Mating Cordset: RK 4.4T-*</p>	<p data-bbox="836 1030 853 1052">6</p>  <p data-bbox="1076 1198 1281 1220">Mating Cordset: RK 4.4T-*</p>

A2	2-wire DC - (AD, RD, AG)	
<p data-bbox="430 1295 567 1317">Ripple: ≤10%</p> <p data-bbox="245 1323 668 1345">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="161 1351 729 1405">Voltage Drop Across Conducting Sensor: Non-polarized (AD) <5.0 V Polarized (AG) ≤4.2 V</p> <p data-bbox="136 1412 593 1433">Trigger Current for Short Circuit Protection: ≥120 mA</p> <p data-bbox="295 1440 586 1461">Minimum Load Current: ≥3.0 mA</p>	<p data-bbox="937 1295 1265 1317">Off-State (Leakage) Current: ≤0.8 mA</p> <p data-bbox="1029 1323 1323 1345">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="996 1351 1337 1373">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1105 1379 1290 1401">Shock: 30 g, 11 ms</p> <p data-bbox="1080 1407 1505 1429">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1055 1435 1466 1457">Repeatability: ≤2% of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p data-bbox="430 1511 567 1532">Ripple: ≤10%</p> <p data-bbox="245 1539 668 1560">Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p data-bbox="161 1567 567 1588">Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p data-bbox="136 1595 794 1683">Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p data-bbox="262 1690 586 1711">Off-State (Leakage) Current: ≤0.1 mA</p> <p data-bbox="346 1718 707 1739">No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p data-bbox="920 1511 1248 1532">Time Delay Before Availability: ≤8 ms</p> <p data-bbox="1029 1539 1323 1560">Power-On Effect: Per IEC 947-5-2</p> <p data-bbox="945 1567 1298 1588">Reverse Polarity Protection: Incorporated</p> <p data-bbox="979 1595 1298 1617">Wire-Break Protection: Incorporated</p> <p data-bbox="996 1623 1337 1645">Transient Protection: Per EN 60947-5-2</p> <p data-bbox="1013 1651 1256 1673">Temperature Drift: ≤±10%</p> <p data-bbox="1105 1679 1290 1701">Shock: 30 g, 11 ms</p> <p data-bbox="1080 1707 1505 1729">Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p data-bbox="1055 1735 1466 1757">Repeatability: ≤2% of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Nonembeddable Threaded Metal Barrels with Connector and DC Outputs


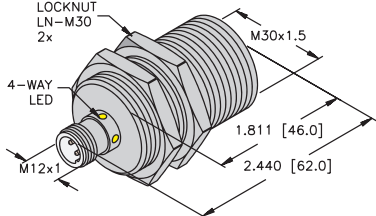
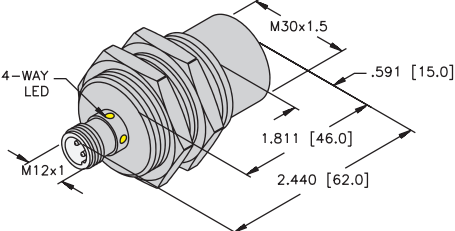
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Ni30U-M30-AN6X-H1141 1644635	Uprox+	30	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	3	A4
Ni30U-EM30-AN6X-H1141 1644636	Uprox+	30	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	3	A4
Ni30U-M30-AP6X-H1141 1646631	Uprox+	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	A	4	A4
Ni30U-EM30-AP6X-H1141 1646632	Uprox+	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	4	A4
Ni20U-M30-AN6X-H1141 1646150	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	3	A4
Ni20U-M30-AN6X2-H1141 1646155	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	GN	YE	A	3	A4
Ni20U-EM30-AN6X-H1141 1646350	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	3	A4
Ni20U-EM30-AN6X2-H1141/S1589 1646191	Uprox, Weldguard	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	3	A4
Ni20U-M30-AP6X-H1141 1646140	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	4	A4
Ni20U-EM30-AP6X-H1141 1646340	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	4	A4
Ni20U-EM30-AP6X2-H1141 1646345	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	PBT	GN	YE	A	4	A4
Ni20U-EM30-AP6X2-H1141/S1589 1646490	Uprox, Weldguard	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	WG	GN	YE	A	4	A4
Ni20U-M30-VP4X-H1141 1582457	Uprox	20	4-wire DC PNP	10-65 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	A	6	A4
Ni20-M30-AD4X-H1141 4466141	Extended Range	20	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni20-M30-AD4X-H1144 4466192	Extended Range	20	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A2
Ni20-M30-AN6X-H1141 4670515	Extended Range	20	3-wire DC NPN	10-30 VDC	1500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni20-M30-AP6X-H1141 4670510	Extended Range	20	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni20-M30-VN4X-H1141 4590606	Ext. Range, Comp. Outputs	20	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni20-M30-VP4X-H1141 4590607	Ext. Range, Comp. Outputs	20	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4
Ni15-M30-AD4X-H1141 44177		15	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A2
Ni15-M30-AN6X-H1141 46178		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A4
Ni15-M30-AP6X-H1141 46177		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	4	A4
Ni15-M30-VN4X-H1141 1571510	Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	5	A4
Ni15-M30-VP4X-H1141 15617	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	6	A4

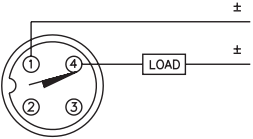
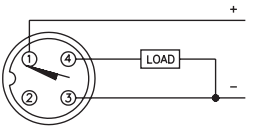
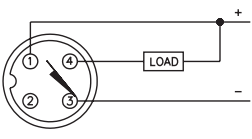
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded PTFE Coated Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, M12 Eurofast Connection, PTFE Coated</p>
<p>B</p>  <p>30 mm - Nonembeddable, M12 Eurofast Connection, PTFE Coated</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RK 4.23T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>	<p>3</p>  <p>Mating Cordset: RK 4T-*, RKC 4T-*/S1587</p>

A2 2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) <5.0 V Polarized (AG) ≤ 4.2 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 120 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Off-State (Leakage) Current: ≤ 0.8 mA</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥ 220 mA on 200 mA Load Current ≥ 170 mA on 150 mA Load Current ≥ 120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤ 0.1 mA</p> <p>No-Load Current: ≤ 15 mA (Ferrite, Uprox) ≤ 20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤ 8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded PTFE Coated Metal Barrels with Connector and 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	Dimension Drawings	Wiring Diagrams	Spec List
Bi20U-MT30-AN6X-H1141 1644889	Uprox3, PTFE	20	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	3	A4
Bi20U-MT30-AP6X-H1141 1644881	Uprox3, PTFE	20	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP68	TC	TC	N/A	YE	A	2	A4
Bi15U-MT30-AP6X-H1141 1636734	Uprox+, PTFE	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	TC	N/A	YE	A	2	A4
Bi15U-MT30-AP6X2-H1141 1644741	Uprox+	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	TC	GN	YE	A	2	A4
Bi12-MT30H-AD4X-H1144 4417095	PTFE, Stoneface	12	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	TC	SF	N/A	YE	A	1	A2
Bi10U-MT30-AN6X-H1141 1636250	Uprox	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	3	A4
Bi10U-MT30-AP6X-H1141 1636240	Uprox, PTFE	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	A	2	A4
Bi10U-MT30-AP6X2-H1141 1636245	Uprox, PTFE	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	TC	GN	YE	A	2	A4
Bi10U-MT30H-AP6X2-H1141 1636220	Uprox, PTFE, Stoneface	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	SF	GN	YE	A	2	A4
Bi10U-MT30-AP6X2-H1141/S1589 1636291	Uprox, PTFE, Weldguard	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	WG	GN	YE	A	2	A4
Ni30U-MT30-AN6X-H1141 1644637	Uprox+, PTFE	30	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	TC	N/A	YE	B	3	A4
Ni30U-MT30-AP6X-H1141 1646633	Uprox+, PTFE	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	TC	N/A	YE	B	2	A4
Ni30U-MT30-AP6X2-H1141 1646635	Uprox+, PTFE	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	TC	GN	YE	B	2	A4
Ni30U-MT30-AP6X-H1141/S1589 16466331	Uprox+, PTFE, Weldguard	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	WG	N/A	YE	B	2	A4
Ni30U-MT30-AP6X2-H1141/S1589 16466351	Uprox+, PTFE, Weldguard	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	TC	WG	GN	YE	B	2	A4
Ni20U-MT30-AP6X-H1141 1646240	Uprox, PTFE	20	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	TC	N/A	YE	B	2	A4
Ni20U-MT30-AP6X2-H1141 1646245	Uprox, PTFE	20	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	TC	GN	YE	B	2	A4
Ni20U-MT30-AP6X2-H1141/S1589 1646291	Uprox, Weldguard	20	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	TC	WG	GN	YE	B	2	A4
Ni20-MT30-AN6X-H1141/S1589 4670589	PTFE, Weldguard	20	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	TC	WG	N/A	YE	B	3	A4
Ni15U-MT30-AD4X-H1144 4405077	Uprox, PTFE	15	2-wire DC	10-65 VDC	10	≤100	-25 to +70	IP68	TC	TC	GN	YE	B	1	A2

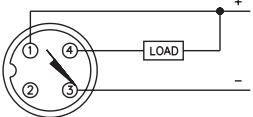
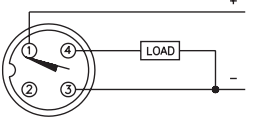
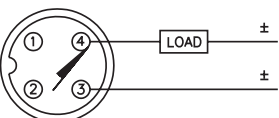
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p> <p>30 mm - Embeddable, M12 Eurofast Connection, Extended Barrel Length</p>
<p>B</p> <p>30 mm - Nonembeddable, M12 Eurofast Connection, Extended Barrel Length</p>	

Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 4T-*</p>	<p>2</p>  <p>Mating Cordset: RK 4.23T-*</p>
<p>3</p>  <p>Mating Cordset: RK 4.2T-*</p>	<p>4</p> <p>Mating Cordset: RK 4.4T-*</p>
<p>5</p> <p>Mating Cordset: RK 4.4T-*</p>	

A2	2-wire DC - (AD, RD, AG)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and DC Outputs


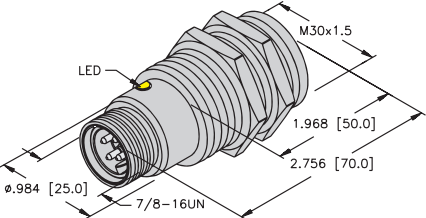
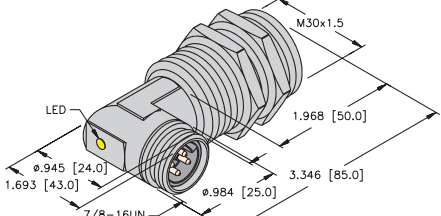
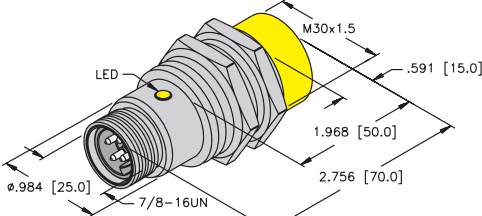
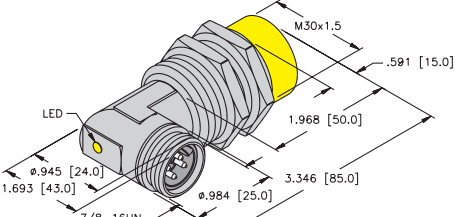
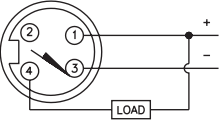
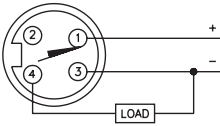
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi15-M30E-AN6X-H1141 4618690	Extended Range	15	3-wire DC NPN	10-30 VDC	300	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi15-M30E-AP6X-H1141 4618590	Extended Range	15	3-wire DC PNP	10-30 VDC	300	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi10U-EM30E-AP6X-H1141 1636322	Uprox	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	A	2	A4
Bi10U-EM30HE-AP6X2-H1141 1636415	Uprox, Stoneface	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	SF	GN	YE	A	2	A4
Bi10-M30E-AD4X-H1141 4417501		10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	3	A2
Ni15-M30E-AD4X-H1141 4417790		15	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	3	A2
Ni15-M30E-VN4X-H1141 1571590	Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	4	A4
Ni15-M30E-VP4X-H1141 1561790	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	5	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, 7/8" Minifast Connection</p>
<p>B</p>  <p>30 mm - Embeddable, 7/8" Minifast Right Angle Connection</p>	<p>C</p>  <p>30 mm - Nonembeddable, 7/8" Minifast Connection</p>
<p>D</p>  <p>30 mm - Nonembeddable, Right Angle 7/8" Minifast Connection</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RKM 40-*M</p>	<p>2</p>  <p>Mating Cordset: RKM 40-*M</p>
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: ≤10%</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤1.8 V</p> <p>Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current</p> <p>Off-State (Leakage) Current: ≤0.1 mA</p> <p>No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: ≤8 ms</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: ≤±10%</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and DC Outputs


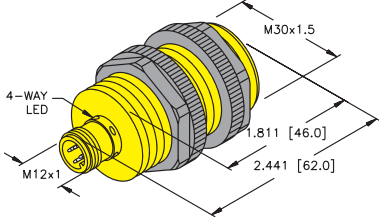
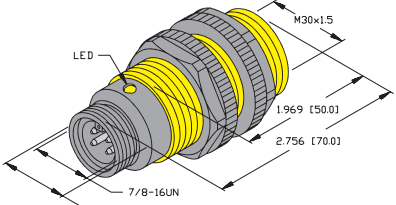
Part Number/ ID Number	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi10-G30-AN6X-B1141 46954	10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	1	A4
Bi10-G30-AP6X-B1141 46965	10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	A	2	A4
Bi10-G30-AN6X-B1441 46958	10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	1	A4
Bi10-G30-AP6X-B1441 46969	10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	B	2	A4
Ni15-G30-AN6X-B1141 46955	15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	C	1	A4
Ni15-G30-AP6X-B1141 46966	15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	C	2	A4
Ni15-G30-AN6X-B1441 4695590	15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	1	A4
Ni15-G30-AP6X-B1441 46970	15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	D	2	A4

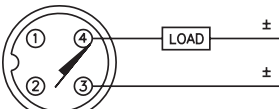
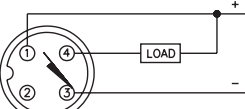
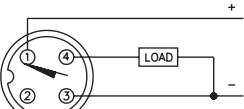
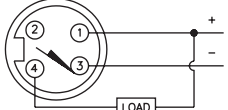
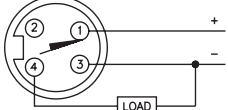
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with Connector and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable/Nonembeddable, Partial Threading, M12 Eurofast Connection</p>
<p>B</p>  <p>30 mm - Embeddable/Nonembeddable, Full Threading, 7/8" Minifast Connection</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RKK 4.2T-*</p>	<p>2</p>  <p>Mating Cordset: RKK 4T-*</p>	<p>3</p>  <p>Mating Cordset: RKK 4T-*</p>
<p>4</p>  <p>Mating Cordset: RK 40-*M</p>	<p>5</p>  <p>Mating Cordset: RK 40-*M</p>	

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>		<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>		<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with Connector and DC Outputs


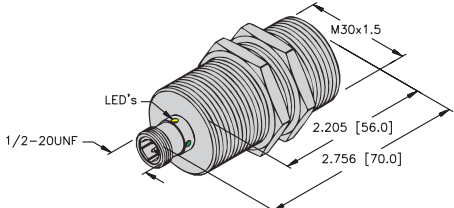
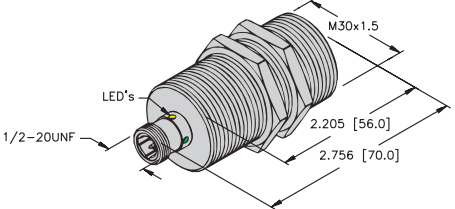
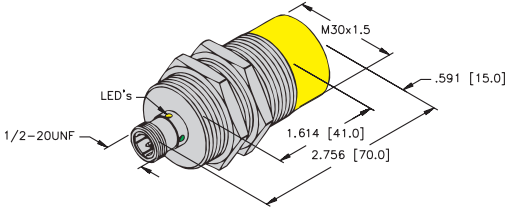
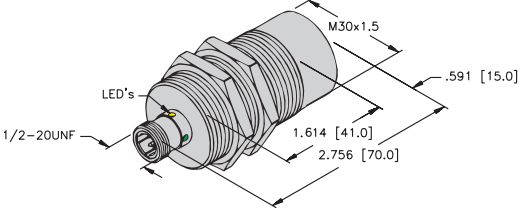
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-S30-AN6X-H1141 1636620	Uprox	10	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Bi10U-S30-AP6X-H1141 1636600	Uprox	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	3	A4
Bi10-S30-AD4X-H1141 4458000		10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A2
Bi10-S30-AN6X-H1141 46581		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4
Bi10-S30-AP6X-H1141 46580		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	3	A4
Bi10-P30-AN6X-B2141 46974		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	B	4	A4
Bi10-P30-AP6X-B2141 46975		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	B	5	A4
Ni20U-S30-AN6X-H1141 1646620	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	2	A4
Ni20U-S30-AP6X-H1141 1646600	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	A	3	A4
Ni15-S30-AD4X-H1141 44582		15	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	1	A2
Ni15-S30-AN6X-H1141 46583		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	2	A4
Ni15-P30-AN6X-B2141 46976		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	B	4	A4
Ni15-S30-AP6X-H1141 46582		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	A	3	A4
Ni15-P30-AP6X-B2141 46977		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	B	5	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, 1/2" Microfast Connection</p>
<p>B</p>  <p>30 mm - Embeddable, 1/2" Microfast Connection, PTFE Coated</p>	<p>C</p>  <p>30 mm - Nonembeddable, 1/2" Microfast Connection</p>
<p>D</p>  <p>30 mm - Nonembeddable, 1/2" Microfast Connection, PTFE Coated</p>	

Wiring Diagrams/Mating Cordsets



A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA</p> <p>Continuous Load Current: AC: ≥ 400 mA; DC: ≥ 120 mA</p> <p>Off-State (Leakage) Current: AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC)</p> <p>Off-State (Leakage) Current: ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≥ 400 mA; DC: ≥ 300 mA</p> <p>Off-State (Leakage) Current: AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz)</p> <p>Inrush Current: ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm</p> <p>Inrush Current: ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and AC/DC Outputs


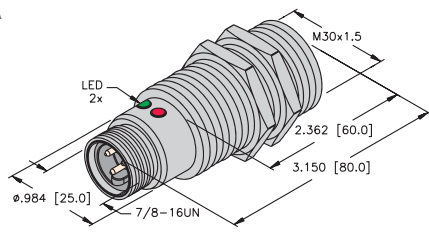
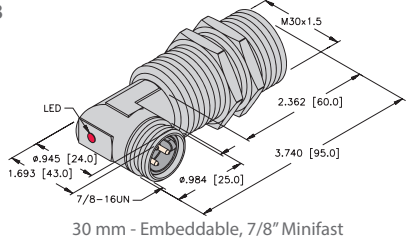
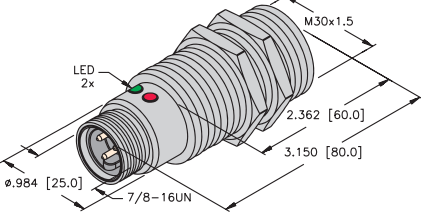
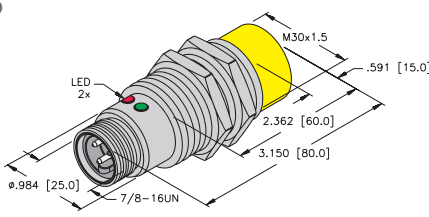
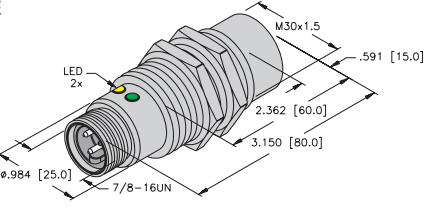
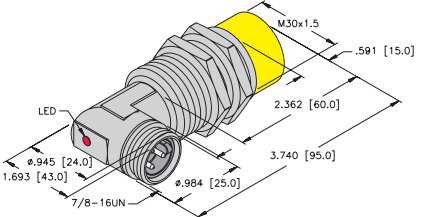
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi15-G30-ADZ30X2-B3131 4207201	Extended Range	15	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi15-EG30H-ADZ30X2-B3131 4207284	Ext. Range, Stoneface	15	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	SF	GN	RD	A	1	A5
Bi10U-G30-ADZ30X2-B3131 4281613	Uprox	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Bi10U-GT30-ADZ30X2-B3131 4281623	Uprox, PTFE	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	B	1	A5
Bi10-G30-ADZ30X2-B3131 T207591		10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi10-GT30-ADZ30X2-B3131/S34 4256203	PTFE, WFI	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	B	1	A5
Bi10-GT30H-ADZ30X2-B3131/S34 4256094	WFI, Stoneface	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	SF	GN	RD	B	1	A5
Bi10-G30-AZ3X-B3131 4372298		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Ni20U-G30-ADZ30X2-B3131 4281813	Uprox	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	C	1	A5
Ni20U-GT30-ADZ30X2-B3131 4281823	Uprox, PTFE	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	D	1	A5
Ni20-G30-ADZ30X2-B3131 4205406	Extended Range	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	C	1	A5
Ni15-G30-AZ3X-B3131 1306090		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	C	1	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

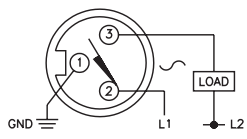
Threaded Metal Barrels with Connector and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>30 mm - Embeddable, 7/8" Minifast Connection</p>	<p>B</p>  <p>30 mm - Embeddable, 7/8" Minifast Right Angle Connection</p>
<p>C</p>  <p>30 mm - Embeddable, 7/8" Minifast Connection, PTFE Coated</p>	<p>D</p>  <p>30 mm - Nonembeddable, 7/8" Minifast Connection</p>	<p>E</p>  <p>30 mm - Nonembeddable, 7/8" Minifast Connection, PTFE Coated</p>
<p>F</p>  <p>30 mm - Nonembeddable, 7/8" Minifast Right Angle Connection</p>		

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

Wiring Diagrams/Mating Cordsets

1



Mating Cordset: RKM 30-*M; RKM 311-*M/S600

A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)		
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)		
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Connector and AC/DC Outputs


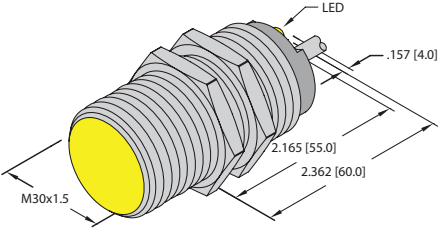
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi15-G30-ADZ30X2-B1131 4207202	Extended Range	15	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi15-EG30H-ADZ30X2-B1131 4207292	Ext. Range, Stoneface	15	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	SF	GN	RD	A	1	A5
Bi10U-G30-ADZ30X2-B1131 4281612	Uprox	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	A	1	A5
Bi10-GT30-ADZ30X2-B1131/S34/S1589 4255280	PTFE, WFI, Weldguard	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	WG	GN	RD	C	1	A5
Bi10-G30-ADZ30X2-B1131 42075		10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	1	A5
Bi10-GT30-ADZ30X2-B1131/S34 4256200	PTFE, WFI	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	C	1	A5
Bi10-GT30-ADZ30X2-B1131 4256290	PTFE	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	C	1	A5
Bi10-G30-AZ3X-B1131 43722		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	A	1	A6
Bi10-G30-AZ3X-B1431 43726		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	B	1	A6
Bi10U-GT30-ADZ30X2-B1131 4281622	Uprox, PTFE	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	C	1	A5
Ni20U-G30-ADZ30X2-B1131 4281812	Uprox	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	CPB	PBT	GN	YE	D	1	A5
Ni20U-GT30-ADZ30X2-B1131 4281822	Uprox	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	10	≤400/300	-30 to +85	IP67	TC	TC	GN	YE	E	1	A5
Ni20-G30-ADZ30X2-B1131 4205405	Extended Range	20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	D	1	A5
Ni15-G30-AZ3X-B1131 43723		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	D	1	A6
Ni15-G30-AZ3X-B1431 4372700		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	F	1	A6

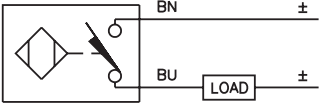
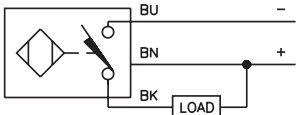
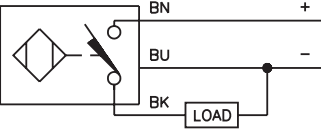
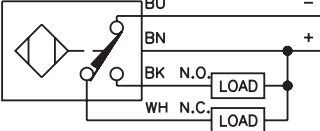
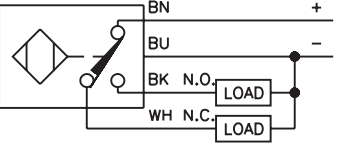
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, Potted-in Cable</p>

Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 
<p>3</p> 	<p>4</p> 
<p>5</p> 	

<p>A2</p> <p>2-wire DC - (AD, RD, AG)</p> <p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>
<p>A4</p> <p>3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)</p> <p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current</p> <p>$\geq 170\text{ mA}$ on 150 mA Load Current</p> <p>$\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox)</p> <p>$\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Embeddable Threaded Metal Barrels with Cable and DC Outputs


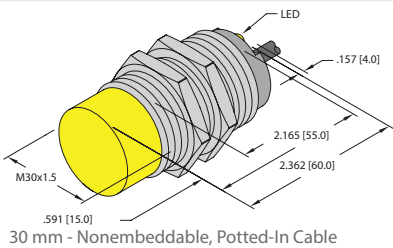
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi20U-M30-AN6X 1644890	Uprox3	20	3-wire DC NPN	10-30 VDC	1000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi20U-M30-AP6X 1644886	Uprox3	20	3-wire DC PNP	10-30 VDC	1000	≤200	-25 to +70	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Bi15U-M30-AN6X 1636735	Uprox+	15	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Bi15U-M30-AP6X 1636731	Uprox+	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Bi15U-EM30-AP6X 1636741	Uprox+	15	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	2M/PVC	A	3	A4
Bi15-M30-AN6X 4618620	Extended Range	15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi15-M30-AP6X 4618530	Extended Range	15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi15-M30-VN4X 4570712	Ext. Range, Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Bi15-M30-VP4X 4570713	Ext. Range, Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4
Bi12-M30-AD4X 4417035	Extended Range	12	2-wire DC	10-65 VDC	400	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi10U-M30-AD4X 4405073	Uprox	10	2-wire DC	10-65 VDC	10	≤100	-30 to +85	IP68	TC	LCP	N/A	YE	2M/PVC	A	1	A2
Bi10U-M30-AN6X 1636120	Uprox	10	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	2	A4
Bi10U-EM30-AN6X 1636320	Uprox	10	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	2M/PVC	A	2	A4
Bi10U-M30-AP6X 1636100	Uprox	10	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	3	A4
Bi10U-EM30-AP6X 1636300	Uprox	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	2M/PVC	A	3	A4
Bi10-M30-AD4X 44170		10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi10-M30-VN4X 15714	Comp. Outputs	10	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Bi10-M30-VP4X 15614	Comp. Outputs	10	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4

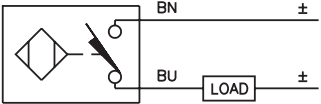
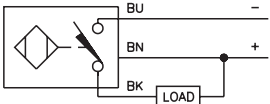
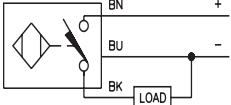
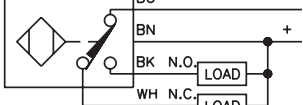
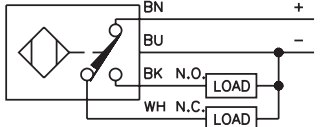
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p> 

Wiring Diagrams/Mating Cordsets	
<p>1</p> 	<p>2</p> 
<p>3</p> 	<p>4</p> 
<p>5</p> 	

A2	2-wire DC - (AD, RD, AG)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Nonembeddable Threaded Metal Barrels with Cable and DC Outputs


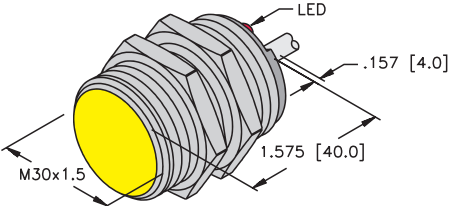
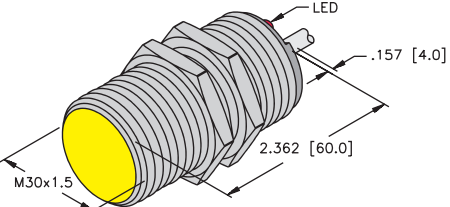
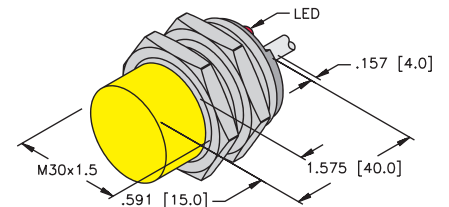
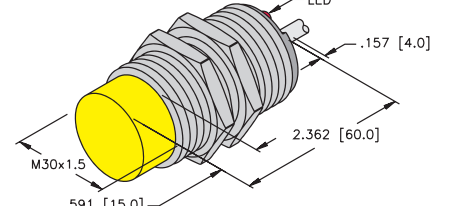
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni30U-M30-AN6X 1644634	Uprox+	30	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	2	A4
Ni30U-M30-AP6X 1646630	Uprox+	30	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP68	CPB	LCP	N/A	YE	2M/PVC	A	3	A4
Ni20U-M30-AN6X 1646120	Uprox	20	3-wire DC NPN	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	2	A4
Ni20U-EM30-AN6X 1646320	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	2M/PVC	A	2	A4
Ni20U-M30-AP6X 1646100	Uprox	20	3-wire DC PNP	10-30 VDC	1000	≤200	-30 to +85	IP67	CPB	PBT	N/A	YE	2M/PVC	A	3	A4
Ni20U-EM30-AP6X 1646300	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	SS	PBT	N/A	YE	2M/PVC	A	3	A4
Ni20-M30-AD4X 4466135	Extended Range	20	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Ni20-M30-AN6X 4670516	Extended Range	20	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni20-M30-AP6X 4670511	Extended Range	20	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Ni20-M30-VN4X 4590604	Extended Range	20	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Ni20-M30-VP4X 4590605	Extended Range	20	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4
Ni15-M30-AD4X 44172		15	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Ni15-M30-VN4X 15715	Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	4	A4
Ni15-M30-VP4X 15615	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	5	A4

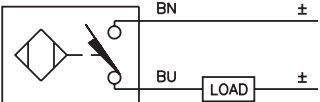
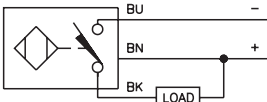
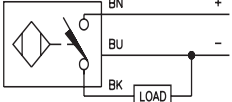
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, Potted-In Cable</p>
<p>B</p>  <p>30 mm - Embeddable, Potted-In Cable</p>	<p>C</p>  <p>30 mm - Nonembeddable, Potted-In Cable</p>
<p>D</p>  <p>30 mm - Nonembeddable, Potted-In Cable</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$ Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$ Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$ Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$ Power-On Effect: Per IEC 947-5-2 Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$ Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$ Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current Off-State (Leakage) Current: $\leq 0.1\text{ mA}$ No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$ Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: $\pm 10\%$ Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Cable and DC Outputs


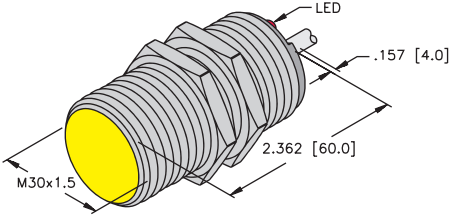
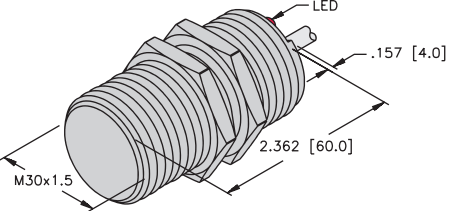
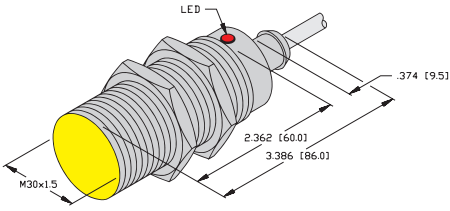
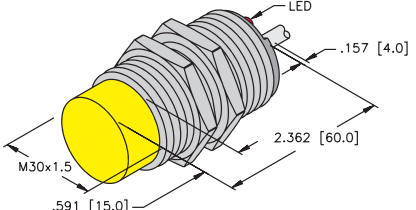
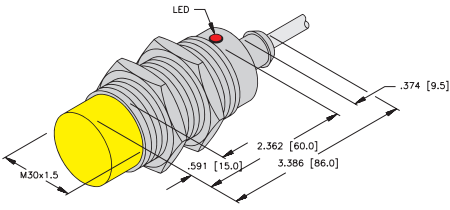
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi10-G30K-AD4X 4670695	Short Barrel	10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi10-G30K-AN6X 46716	Short Barrel	10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi10-G30K-AP6X 46706	Short Barrel	10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi15-G30K-AP6X 4207300	Short Barrel	15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi10-G30-AN6X 4647500		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi10-G30-AN7X 1714800	TTL Compatible	10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	2	A4
Bi10-G30-AP6X 4647400		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	B	3	A4
Ni30-G30K-AP6X 4670711	Short Barrel	30	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	3	A4
Ni15-G30-AN6X 46477		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	2	A4
Ni15-G30-AN7X 1714900		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	2	A4
Ni15-G30-AP6X 4647600		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	3	A4
Ni15-G30K-AN6X 46717	Short Barrel	15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	2	A4
Ni15-G30K-AP6X 46707	Short Barrel	15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	3	A4

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

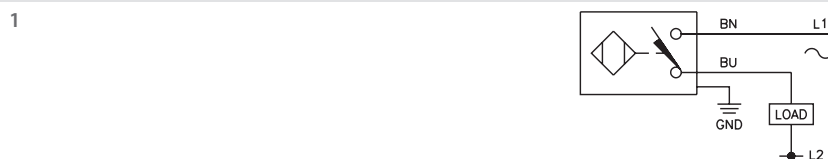
Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Cable and AC/DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable, Potted-In Cable</p>
<p>B</p>  <p>30 mm - Embeddable, Potted-In Cable, PTFE Coated</p>	<p>C</p>  <p>30 mm - Embeddable, Potted-In Cable</p>
<p>D</p>  <p>30 mm - Nonembeddable, Potted-In Cable</p>	<p>E</p>  <p>30 mm - Nonembeddable, Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets



A5	2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Trigger Current for Short Circuit Protection: AC: ≥ 440 mA; DC: ≥ 330 mA AC: ≥ 120 mA; DC: ≥ 120 mA</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA (AC) ≤ 1.5 mA (DC)</p>	<p>Minimum Load Current: ≥ 3.0 mA</p> <p>Inrush Current: ≤ 3 A (≤ 20 ms, max 5 Hz)</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

A6	2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10 ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Threaded Metal Barrels with Cable and AC/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
Bi10-EG30-ADZ30X2 4256095		10	2-wire AC/DC Short-circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	PA 12	GN	RD	2M/PVC	A	1	A5
Bi10-G30-ADZ30X2 42070		10	2-wire AC/DC Short-circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	2M/PVC	A	1	A5
Bi15-G30-ADZ30X2 4207200		15	2-wire AC/DC Short-circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	2M/PVC	A	1	A5
Bi10-EG30-AZ3X 4345699		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	SS	PA 12	N/A	RD	2M/PVC	A	1	A6
Bi10-G30-AZ3X 4345400		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	A	1	A6
Bi10-GT30-ADZ30X2/S34 4256000	PTFE, WFI	10	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	TC	TC	GN	RD	2M/PVC	B	1	A5
Bi10-M30T-AZ3X 43170		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	C	1	A6
Ni20-G30-ADZ30X2 4205404		20	2-wire AC/DC Short-Circuit Protected	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	2M/PVC	D	1	A5
Ni15-M30T-AZ3X 43171		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	E	1	A6

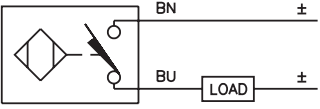
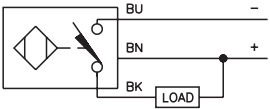
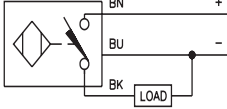
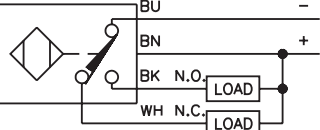
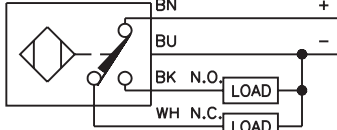
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with Cable and DC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable/Nonembeddable, Partial Threading, Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 	

A2	2-wire DC - (AD, RD, AG)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: Non-polarized (AD) $< 5.0\text{ V}$ Polarized (AG) $\leq 4.2\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 120\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Off-State (Leakage) Current: $\leq 0.8\text{ mA}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A4	3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)	
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with Cable and DC Outputs


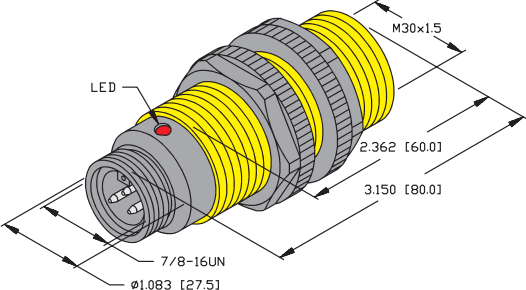
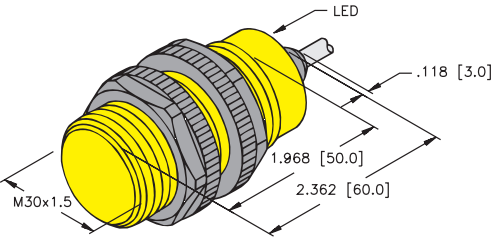
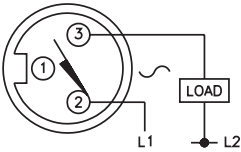
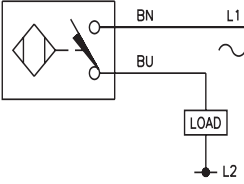
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-S30-AN6X 1636520	Uprox	10	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi10U-S30-AP6X 1636500	Uprox	10	3-wire DC PNP	10-30 VDC	2000	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi10-S30-AD4X 44590		10	2-wire DC	10-65 VDC	500	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	1	A2
Bi10-S30-AN6X 46591		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	2	A4
Bi10-S30-AN7X/S100 17777	TTL Compatible, High Temp. 100 °C	10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +100	IP67	PA 12	IRPA	N/A	YE	2M/PVC	A	2	A4
Bi10-S30-AP6X 46590		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	3	A4
Bi10-S30-VP4X 15122	Comp. Outputs	10	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	5	A4
Ni20U-S30-AN6X 1646520	Uprox	20	3-wire DC NPN	10-30 VDC	1500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni20U-S30-AP6X 1646500	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	2M/PVC	A	3	A4
Ni15-S30-AD4X 44592		15	2-wire DC	10-65 VDC	200	≤100	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	1	A2
Ni15-S30-AN6X 46593		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	2	A4
Ni15-S30-AP6X 46592		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	3	A4
Ni15-S30-VN4X 15224	Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	4	A4
Ni15-S30-VP4X 15630	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	N/A	YE	2M/PVC	A	5	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with AC Outputs

Housing Style	Dimension Drawings
	<p>A</p>  <p>30 mm - Embeddable/Nonembeddable, Full Threading, 7/8" Minifast Connection</p>
<p>B</p>  <p>30 mm - Embeddable/Nonembeddable, Partial Threading, Potted-In Cable</p>	
Wiring Diagrams/Mating Cordsets	
<p>1</p>  <p>Mating Cordset: RK 30-*M</p>	<p>2</p> 
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)	
<p>Line Frequency: $\geq 50 \dots \leq 60$ Hz</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: ≤ 6.0 V</p> <p>Continuous Load Current: AC: ≤ 400 mA; DC: ≤ 300 mA AC: ≤ 100 mA; DC: ≤ 100 mA</p> <p>Off-State (Leakage) Current: ≤ 1.7 mA</p> <p>Minimum Load Current: ≥ 3.0 mA</p>	<p>Inrush Current: ≤ 8 A (≤ 10ms max. 5 Hz) ≤ 1 A (≤ 10 ms max. 5 Hz) 12 mm ≤ 0.2 A (≤ 10 ms max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>

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

Inductive Barrel Sensors | 30 mm

Threaded Plastic Barrels with AC Outputs


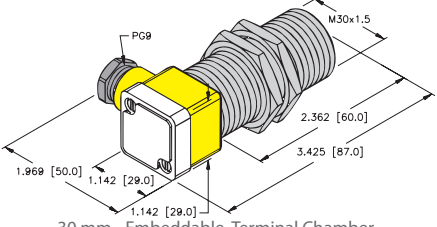
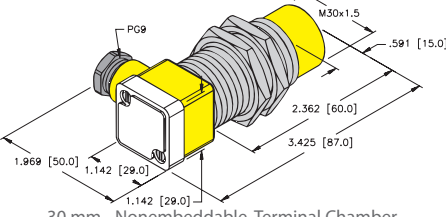
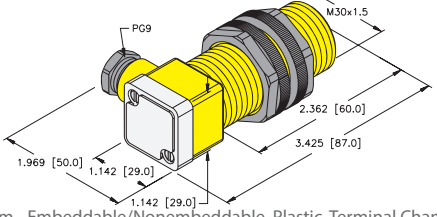
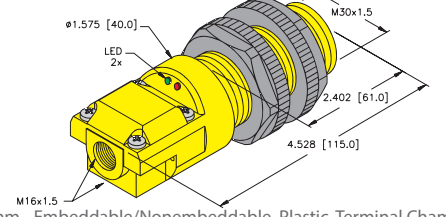
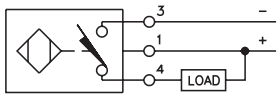
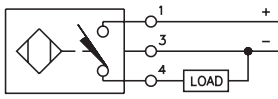
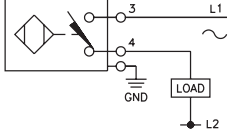
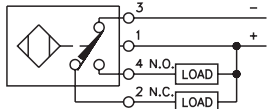
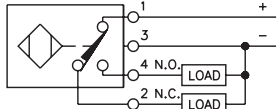
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi10-S30-AZ3X 43554		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	2	A6
Ni15-S30-AZ3X 43555		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	2	A6
Bi10-P30-AZ3X-B2131 43749		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	--	A	1	A6
Ni15-S30-AZ3X/S100 13758	High Temp. 100 °C	15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +100	IP67	PA 12	PA 12	N/A	RD	2M/PVC	B	2	A6
Ni15-P30-AZ3X-B2131 43754		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	N/A	RD	--	A	1	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 30 mm

Threaded Barrels with Terminal Chamber and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>30 mm - Embeddable, Terminal Chamber</p>	
<p>B</p>  <p>30 mm - Nonembeddable, Terminal Chamber</p>	<p>C</p>  <p>30 mm - Embeddable/Nonembeddable, Plastic, Terminal Chamber</p>	
<p>D</p>  <p>30 mm - Embeddable/Nonembeddable, Plastic, Terminal Chamber</p>		
Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
<p>4</p> 	<p>5</p> 	
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)		
<p>Line Frequency: $\geq 50\text{...} \leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 30 mm

Threaded Barrels with Terminal Chamber and AC/DC Outputs


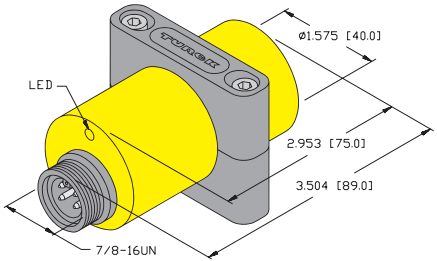
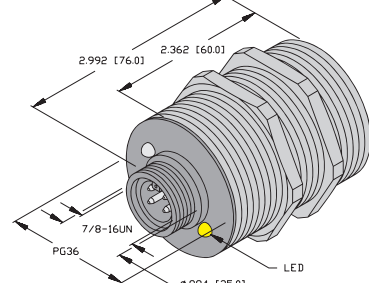
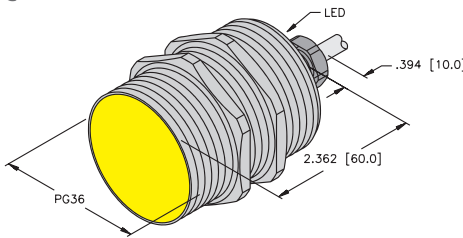
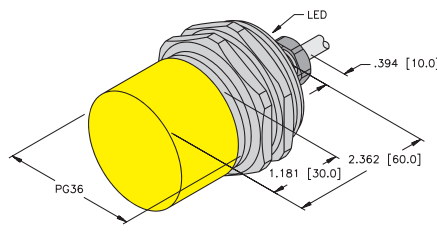
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi10U-EG30SK-AN6X 1636420	Uprox	10	3-wire DC NPN	10-30 VDC	2000	≤200	-30 to +85	IP68	SS	LCP	N/A	YE	A	1	A4
Bi10-G30SK-AN6X2 4648500		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	1	A4
Bi10-P30SK-AN6X2 4660000		10	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	1	A4
Bi10-G30SK-AP6X2 4648400		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	A	2	A4
Bi10-P30SK-AP6X2 4659900		10	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	2	A4
Bi10-P30SR-VN4X2 15752	Comp. Outputs	10	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	D	4	A4
Bi10-P30SR-VP4X2 15652	Comp. Outputs	10	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	D	5	A4
Bi10-G30SK-AZ3X2 4346400		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	A	3	A6
Bi10-P30SK-AZ3X2 4356400		10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	GN	RD	C	3	A6
Bi10-P30SR-FZ3X2 13420	Programmable Outputs	10	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤500	-25 to +70	IP67	PA 12	PA 12	GN	RD	D	3	A6
Ni20U-P30SK-AP6X 1646700	Uprox	20	3-wire DC PNP	10-30 VDC	1500	≤200	-30 to +85	IP68	PA 12	PA 12	N/A	YE	C	2	A4
Ni15-P30SK-AN6X2 4660200		15	3-wire DC NPN	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	1	A4
Ni15-G30SK-AP6X2 4648600		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	B	2	A4
Ni15-P30SK-AP6X2 4660100		15	3-wire DC PNP	10-30 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	C	2	A4
Ni15-P30SR-VN4X2 15753	Comp. Outputs	15	4-wire DC NPN	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	D	4	A4
Ni15-P30SR-VP4X2 15653	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	500	≤200	-25 to +70	IP67	PA 12	PA 12	GN	YE	D	5	A4
Ni15-G30SK-AZ3X2 4346500		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	B	3	A6
Ni15-P30SK-AZ3X2 4356500		15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	PA 12	PA 12	GN	RD	C	3	A6
Ni15-P30SR-FZ3X2 13421	Programmable Outputs	15	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤500	-25 to +70	IP67	PA 12	PA 12	GN	RD	D	3	A6

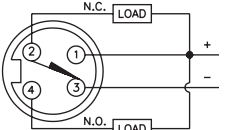
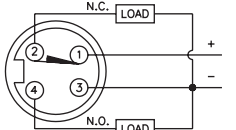
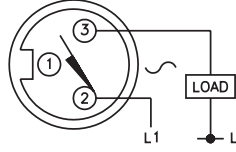
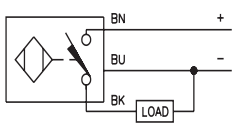
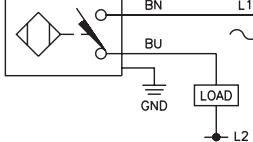
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

Inductive Barrel Sensors | 40 mm, 47 mm

Large Diameter Barrels with AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>40 mm - Nonembeddable, Smooth Plastic Barrel, 7/8" Minifast Connection</p>	<p>B</p>  <p>47 mm - Embeddable, 7/8" Minifast Connection</p>
<p>C</p>  <p>47 mm - Embeddable, Potted-In Cable</p>	<p>D</p>  <p>47 mm - Nonembeddable, Potted-In Cable</p>	

Wiring Diagrams/Mating Cordsets		
<p>1</p>  <p>Mating Cordset: RKM 40-*M</p>	<p>2</p>  <p>Mating Cordset: RKM 40-*M</p>	<p>3</p>  <p>Mating Cordset: RKM 30-*M</p>
<p>4</p> 	<p>5</p> 	

A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)		
<p>Line Frequency: $\geq 50\text{...} \leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 40 mm, 47 mm

Large Diameter Barrels with AC/DC Outputs


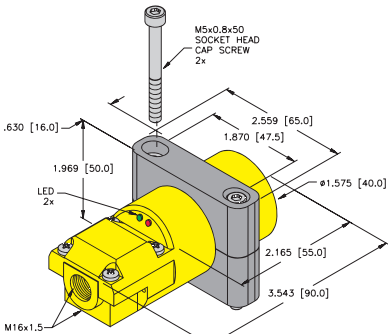
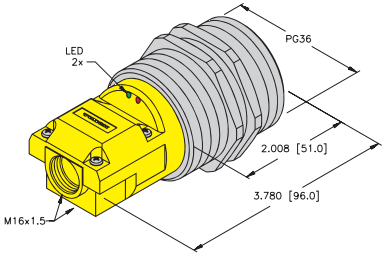
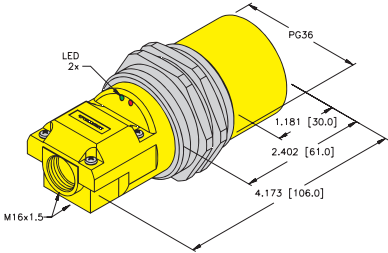
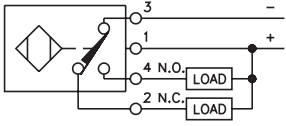
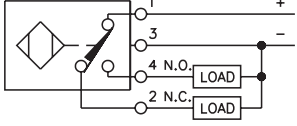
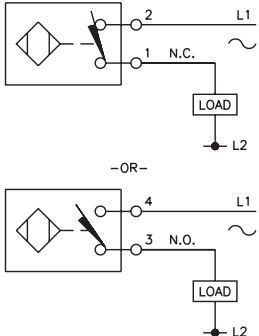
Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi20-G47-AP4X 15645		20	3-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	C	4	A4
Bi20-G47-AZ3X 13088		20	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	C	5	A6
Ni25-G47-AP4X 15646		25	3-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	2M/PVC	D	4	A4
Ni25-G47-AZ3X 13089		25	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	2M/PVC	D	5	A6
Bi25-G47-VN4X-B2141 45903	Comp. Outputs	25	4-wire DC NPN	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	--	B	1	A4
Bi25-G47-VP4X-B2141 45902	Comp. Outputs	25	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	N/A	YE	--	B	2	A4
Bi20-G47-AZ3X-B2131 43759		20	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	N/A	RD	--	B	3	A6
Ni30-K40-VN4X-B2141 45904	Comp. Outputs	30	4-wire DC NPN	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	N/A	YE	--	A	1	A4
Ni30-K40-VP4X-B2141 45905	Comp. Outputs	30	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	N/A	YE	--	A	2	A4
Ni30-K40-AZ3X-B2131 43758		30	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤400/300	-25 to +70	IP67	ABS	ABS	N/A	RD	--	A	3	A6

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 40 mm, 47 mm

Large Diameter Barrels with Terminal Chambers and AC/DC Outputs

Housing Style	Dimension Drawings	
	<p>A</p>  <p>40 mm - Smooth Plastic, Terminal Chamber</p>	
<p>B</p>  <p>47 mm - Embeddable, Terminal Chamber</p>	<p>C</p>  <p>47 mm - Nonembeddable, Terminal Chamber</p>	
Wiring Diagrams/Mating Cordsets		
<p>1</p> 	<p>2</p> 	<p>3</p> 
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)		
<p>Ripple: $\leq 10\%$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 1.8\text{ V}$</p> <p>Trigger Current for Short Circuit Protection: $\geq 220\text{ mA}$ on 200 mA Load Current $\geq 170\text{ mA}$ on 150 mA Load Current $\geq 120\text{ mA}$ on 100 mA Load Current</p> <p>Off-State (Leakage) Current: $\leq 0.1\text{ mA}$</p> <p>No-Load Current: $\leq 15\text{ mA}$ (Ferrite, Uprox) $\leq 20\text{ mA}$ (Uprox+, Uprox3)</p>	<p>Time Delay Before Availability: $\leq 8\text{ ms}$</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Incorporated</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Temperature Drift: $\leq \pm 10\%$</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	
A6 2-wire AC/DC w/o Short-Circuit Protection - (AZ, RZ, FZ)		
<p>Line Frequency: $\geq 50\text{...} \leq 60\text{ Hz}$</p> <p>Differential Travel (Hysteresis): 3-15% (5% typical)</p> <p>Voltage Drop Across Conducting Sensor: $\leq 6.0\text{ V}$</p> <p>Continuous Load Current: AC: $\leq 400\text{ mA}$; DC: $\leq 300\text{ mA}$ AC: $\leq 100\text{ mA}$; DC: $\leq 100\text{ mA}$</p> <p>Off-State (Leakage) Current: $\leq 1.7\text{ mA}$</p> <p>Minimum Load Current: $\geq 3.0\text{ mA}$</p>	<p>Inrush Current: $\leq 8\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) $\leq 1\text{ A}$ ($\leq 10\text{ ms}$ max. 5 Hz) 12 mm $\leq 0.2\text{ A}$ ($\leq 10\text{ ms}$ max. 0.2 Hz) 8 mm</p> <p>Power-On Effect: Per IEC 947-5-2</p> <p>Transient Protection: Per EN 60947-5-2</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes</p> <p>Repeatability: $\leq 2\%$ of Rated Operating Distance</p>	

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

Inductive Barrel Sensors | 40 mm, 47 mm

Large Diameter Barrels with Terminal Chambers and AC/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	Dimension Drawings	Wiring Diagrams	Spec List
Bi25-G47SR-FZ3X2 13427	Programmable Outputs	25	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	B	3	A6
Bi25-G47SR-VN4X2 15748	Comp. Outputs	25	4-wire DC NPN	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	B	1	A4
Bi25-G47SR-VP4X2 15648	Comp. Outputs	25	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	B	2	A4
Bi15-K40SR-FZ3X2 13423	Programmable Outputs	15	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤400/300	-25 to +70	IP67	ABS	ABS	GN	RD	A	3	A6
Bi15-K40SR-VP4X2 15655	Comp. Outputs	15	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	GN	YE	A	2	A4
Ni40-G47SR-FZ3X2 13428	Programmable Outputs	40	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤400/300	-25 to +70	IP67	CPB	PA 12	GN	RD	C	3	A6
Ni40-G47SR-VP4X2 15650	Comp. Outputs	40	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	CPB	PA 12	GN	YE	C	2	A4
Ni30-K40SR-FZ3X2 13425	Programmable Outputs	30	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤400/300	-25 to +70	IP67	ABS	ABS	GN	RD	A	3	A6
Ni30-K40SR-VN4X2 15758	Comp. Outputs	30	4-wire DC NPN	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	GN	YE	A	1	A4
Ni30-K40SR-VP4X2 15658	Comp. Outputs	30	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	GN	YE	A	2	A4
Ni20-K40SR-FZ3X2 13424	Programmable Outputs	20	2-wire AC/DC	20-250 VAC/10- 300 VDC	20	≤400/300	-25 to +70	IP67	ABS	ABS	GN	RD	A	3	A6
Ni20-K40SR-VN4X2 15756	Comp. Outputs	20	4-wire DC NPN	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	GN	YE	A	1	A4
Ni20-K40SR-VP4X2 15656	Comp. Outputs	20	4-wire DC PNP	10-65 VDC	100	≤200	-25 to +70	IP67	ABS	ABS	GN	YE	A	2	A4

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 4 mm, 5 mm, & 6.5 mm Namur



Dimension Drawings		
<p>A</p> <p>4 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>	<p>B</p> <p>5 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>C</p> <p>6.5 mm - Embeddable, Miniature Smooth, M8 Picofast Quick Disconnect</p>
<p>D</p> <p>4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>E</p> <p>5 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>F</p> <p>6.5 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>
<p>G</p> <p>6.5 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>H</p> <p>6.5 mm - Nonembeddable, Miniature Smooth Barrel, Potted-In Cable</p>	

Wiring Diagrams/Mating Cordsets	
<p>1</p> <p>Mating Cordset: PKG 3M-*</p>	<p>2</p>

A1 2-wire DC NAMUR - (Y0 and Y1)	
<p>Differential Travel (Hysteresis): 1-10% (5% typical)</p> <p>Nominal Voltage: 8.2 VDC (EN60947-5-6)</p> <p>Load Resistance: 1000 Ω</p> <p>Non-Activated Current Consumption: ≥2.1 mA</p> <p>Activated Current Consumption: ≤1.2 mA</p> <p>Recommended Switching Point for Remote Amplifier: >1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF</p>	<p>Power-On Effect: Realized in Amplifier</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Realized in Amplifier</p> <p>Transient Protection: Realized in Amplifier</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 4 mm, 5 mm, & 6.5 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Cable Length/Jacket	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi1-EH04-Y1-V1330 1003044		1	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	--	N/A	A	1	A1
Bi1-EG05-Y1-V1331 1003241		1	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	--	N/A	B	1	A1
Bi1.5-EH6.5-Y1-V1130 1004621		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	--	N/A	C	1	A1
Bi1-EH04-Y1 1003040		1	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	2M/PVC	N/A	D	2	A1
Bi1-EG05-Y1 1003240		1	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	2M/PVC	N/A	E	2	A1
Bi1.5-EH6.5K-Y1 1004600	Short Barrel	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	2M/PVC	N/A	F	2	A1
Bi1.5-H6.5-Y1X 4004810		1.5	2-wire DC NAMUR	5-30 VDC	3000	Remote	-25 to +70	IP67	SS	PA 12	2M/PVC	YE	G	2	A1
Ni3-EH6.5K-Y1 1004700	Short Barrel	3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	2M/PVC	N/A	H	2	A1

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm Namur

Intrinsically Safe 

Dimension Drawings

<p>A</p> <p>8 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>B</p> <p>8 mm - Embeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>C</p> <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>
<p>D</p> <p>8 mm - Nonembeddable, Miniature Threaded, M8 Picofast Quick Disconnect</p>	<p>E</p> <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>F</p> <p>8 mm - Embeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>
<p>G</p> <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	<p>H</p> <p>8 mm - Nonembeddable, Miniature Threaded, M12 Eurofast Quick Disconnect</p>	

Wiring Diagrams/Mating Cordsets

<p>1</p> <p>Mating Cordset: PKG 3M-*</p>	<p>2</p> <p>Mating Cordset: RK 4.21T-*</p>
---	---

A1 2-wire DC NAMUR - (Y0 and Y1)	
<p>Differential Travel (Hysteresis): 1-10% (5% typical) Nominal Voltage: 8.2 VDC (EN60947-5-6) Load Resistance: 1000 Ω Non-Activated Current Consumption: ≥2.1 mA Activated Current Consumption: ≤1.2 mA Recommended Switching Point for Remote Amplifier: >1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF</p>	<p>Power-On Effect: Realized in Amplifier Reverse Polarity Protection: Incorporated Wire-Break Protection: Realized in Amplifier Transient Protection: Realized in Amplifier Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≤2% of Rated Operating Distance</p>

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 8 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Output LED	Dimension Drawings	Wiring Diagrams	Spec List
Bi1.5-EG08K-Y1-V1131 1003630	Short Barrel	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	A	1	A1
Bi1.5-EG08-Y1-V1131 1003530		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	B	1	A1
Ni3-EG08K-Y1-V1130 1003721	Short Barrel	3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	C	1	A1
Ni3-EG08-Y1-V1130 1003732		3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	D	1	A1
Bi1.5-EG08K-Y1-H1341 1003620	Short Barrel	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	E	2	A1
Bi1.5-EG08K-Y1X-H1341 1003640	Short Barrel	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	YE	E	2	A1
Bi1.5-EG08-Y1-H1341 1003502		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	F	2	A1
Ni3-EG08K-Y1-H1341 1003720	Short Barrel	3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	G	2	A1
Ni3-EG08K-Y1X-H1341 1003704	Short Barrel	3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	G	2	A1
Ni3-EG08-Y1-H1341 1003730		3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	H	2	A1

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 8 mm Namur

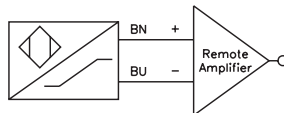


Dimension Drawings

<p>A</p> <p>8 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</p>	<p>B</p> <p>8 mm - Embeddable, Miniature Threaded Barrel, Side Sensing, Potted-In Cable</p>	<p>C</p> <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>D</p> <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>E</p> <p>8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</p>	<p>F</p> <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>
<p>G</p> <p>8 mm - Nonembeddable, Miniature Threaded Barrel, Potted-In Cable</p>		

Wiring Diagrams/Mating Cordsets

1



A1

2-wire DC NAMUR - (Y0 and Y1)

<p>Differential Travel (Hysteresis): 1-10% (5% typical)</p> <p>Nominal Voltage: 8.2 VDC (EN60947-5-6)</p> <p>Load Resistance: 1000 Ω</p> <p>Non-Activated Current Consumption: ≥2.1 mA</p> <p>Activated Current Consumption: ≤1.2 mA</p> <p>Recommended Switching Point for Remote Amplifier:</p> <p>Amplifier: >1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF</p>	<p>Power-On Effect: Realized in Amplifier</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Realized in Amplifier</p> <p>Transient Protection: Realized in Amplifier</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>
--	---

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 8 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi1.5-H08-Y1 1021800		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	A	1	A1
Bi1.5-GS880-Y0 1004401	Side Sensing	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	B	1	A1
Bi1.5-EG08K-Y1 1003600	Short Barrel	1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	C	1	A1
Bi1.5-EG08-Y1 1003500		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	D	1	A1
Bi1.5-G08-Y1 1005224		1.5	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	E	1	A1
Ni3-EG08K-Y1 1003700	Short Barrel	3	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	F	1	A1
Ni2-G08-Y1 10053		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	G	1	A1

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

Inductive Barrel Sensors

Inductive Barrel Sensors | 12 mm Namur



Dimension Drawings

<p>A</p> <p>12 mm - Embeddable, M12 Eurofast Connection</p>	<p>B</p> <p>12 mm - Embeddable, M12 Eurofast Connection, PTFE Coated Sensors</p>	<p>C</p> <p>12 mm - Embeddable, M12 Eurofast Connection, Extended Barrel Length</p>
<p>D</p> <p>12 mm - Nonembeddable, M12 Eurofast Connection</p>	<p>E</p> <p>12 mm - Nonembeddable, M12 Eurofast Connection</p>	<p>F</p> <p>12 mm - Embeddable, Potted-In Cable</p>
<p>G</p> <p>12 mm - Nonembeddable, Potted-In Cable</p>	<p>H</p> <p>12 mm - Embeddable/Nonembeddable, Plastic, M12 Eurofast Quick Disconnect</p>	<p>I</p> <p>12 mm - Embeddable/Nonembeddable, Plastic Potted-In Cable</p>

Wiring Diagrams/Mating Cordsets

<p>1</p> <p>Mating Cordset: RK 4.21T-*, RKK 4.21T-*</p>	<p>2</p>
--	-----------------

A1 2-wire DC NAMUR - (Y0 and Y1)			
<p>Differential Travel (Hysteresis): 1-10% (5% typical)</p> <p>Nominal Voltage: 8.2 VDC (EN60947-5-6)</p> <p>Load Resistance: 1000 Ω</p> <p>Non-Activated Current Consumption: ≥2.1 mA</p> <p>Activated Current Consumption: ≤1.2 mA</p> <p>Recommended Switching Point for Remote Amplifier:</p> <p>Amplifier: >1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF</p>	<p>Power-On Effect: Realized in Amplifier</p> <p>Reverse Polarity Protection: Incorporated</p> <p>Wire-Break Protection: Realized in Amplifier</p> <p>Transient Protection: Realized in Amplifier</p> <p>Shock: 30 g, 11 ms</p> <p>Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes</p> <p>Repeatability: ≤2% of Rated Operating Distance</p>		

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 12 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi2-M12-Y1X-H1141 40102		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	A	1	A1
Bi2-MT12-Y0X-H1141 4010093	PTFE	2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	TC	TC	YE	--	B	1	A1
Bi2-M12E-Y0X-H1141 4606490		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	C	1	A1
Bi2-S12-Y0X-H1141 4030090		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	PA	PA	RD	--	H	1	A1
Ni5-M12-Y1X-H1141 40103		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	D	1	A1
Ni5-G12-Y0-H1141 1005594		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	CPB	PA 12	N/A	--	E	1	A1
Ni5-S12-Y0X-H1141 4030300		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	PA	PA	RD	--	H	1	A1
Bi2-EG12-Y0X 4012097		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	SS	PA 12	YE	2M/PVC	F	2	A1
Bi2-G12-Y0 1005450		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	F	2	A1
Bi2-G12-Y0X 4010000		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	F	2	A1
Bi2-P12-Y0 1005456		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	I	2	A1
Bi2-P12-Y0X 403000		2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	I	2	A1
Bi2-P12-Y1X/S97 4030021	Low Temp. -40 °C	2	2-wire DC NAMUR	5-30 VDC	5000	Remote	-40 to +70	IP67	PA 12	PA 12	YE	2M/Silicon	I	2	A1
Ni5-G12-Y0 1005451		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	G	2	A1
Ni5-G12-Y0X 1005458		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	G	2	A1
Ni5-P12-Y0X 1005460		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	I	2	A1
Ni5-P12-Y1 10094		5	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	I	2	A1

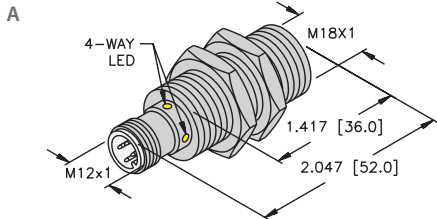
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

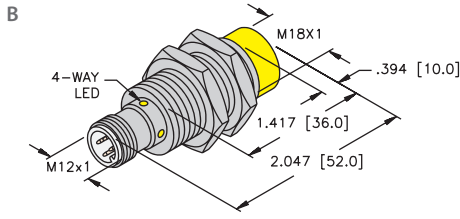
Inductive Barrel Sensors | 18 mm Namur



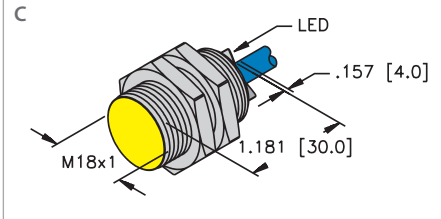
Dimension Drawings



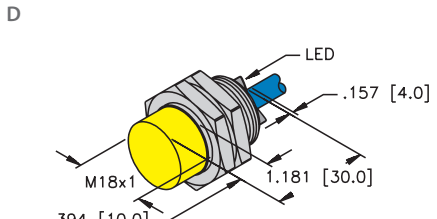
18 mm - Embeddable, M12 Eurofast Connection



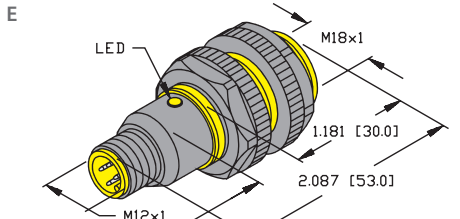
18 mm - Nonembeddable, M12 Eurofast Connection



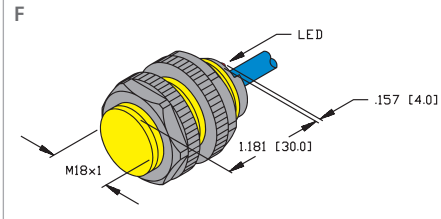
18 mm - Embeddable, Full Threading, Potted-In Cable



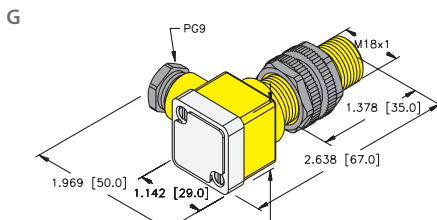
18 mm - Nonembeddable, Full Threading, Potted-In Cable



18 mm - Embeddable and Nonembeddable, Partial Threading, M12 Eurofast Connection

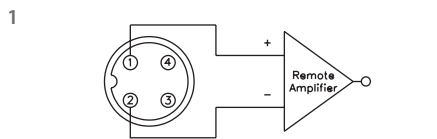


18 mm - Embeddable and Nonembeddable, Full Threading, Potted-In Cable

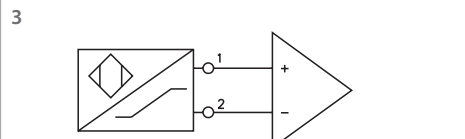
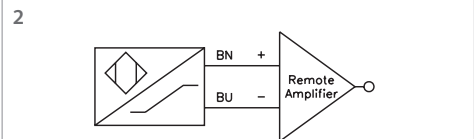


18 mm - Embeddable and Nonembeddable, Full Threading, Terminal Chamber

Wiring Diagrams/Mating Cordsets



Mating Cordset: RK 4.21T-*, RKK 4.21T-*



A1 2-wire DC NAMUR - (Y0 and Y1)

Differential Travel (Hysteresis):	1-10% (5% typical)
Nominal Voltage:	8.2 VDC (EN60947-5-6)
Load Resistance:	1000 Ω
Non-Activated Current Consumption:	≥2.1 mA
Activated Current Consumption:	≤1.2 mA
Recommended Switching Point for Remote Amplifier:	>1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF

Power-On Effect:	Realized in Amplifier
Reverse Polarity Protection:	Incorporated
Wire-Break Protection:	Realized in Amplifier
Transient Protection:	Realized in Amplifier
Shock:	30 g, 11 ms
Vibration:	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability:	≤2% of Rated Operating Distance

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 18 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi5-M18-Y1X-H1141 40152		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	A	1	A1
Ni10-M18-Y1X-H1141 40153		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	B	1	A1
Bi5-EG18-Y0 100600		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	SS	PA 12	N/A	2M/PVC	C	2	A1
Bi5-G18-Y0 1005452		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	C	2	A1
Bi5-G18-Y0X 4015000		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	C	2	A1
Ni10-G18-Y0 1006100		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	D	2	A1
Ni10-G18-Y0X 4015100		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	D	2	A1
Bi5-S18-Y0X-H1141 4036095		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	PA 12	PA 12	YE	--	E	1	A1
Bi5-P18-Y0 1005457		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	F	2	A1
Bi5-P18-Y0X 1005462		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	F	2	A1
Bi5-P18-Y0/S100 1024500	High Temp. 100 °C	5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +100	IP67	PA 12	IRPA	N/A	2M/PVC	F	2	A1
Ni10-P18-Y0X 1005463		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	F	2	A1
Ni10-P18-Y1 10096		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	F	2	A1
Ni10-P18-Y0/S100 103170	High Temp. 100 °C	10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +100	IP67	PA 12	IRPA	N/A	2M/PVC	F	2	A1
Bi5-P18SK-Y1X 40360		5	2-wire DC NAMUR	5-30 VDC	1000	Remote	-25 to +70	IP67	PA 12	PA 12	YE	--	G	3	A1
Ni10-P18SK-Y1X 40361		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	PA 12	PA 12	YE	--	G	3	A1

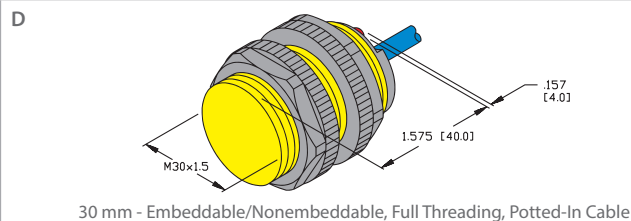
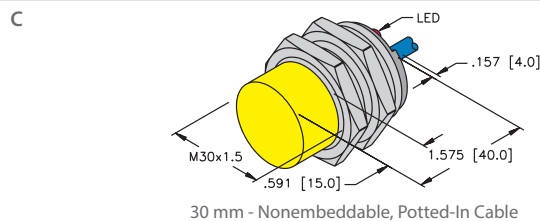
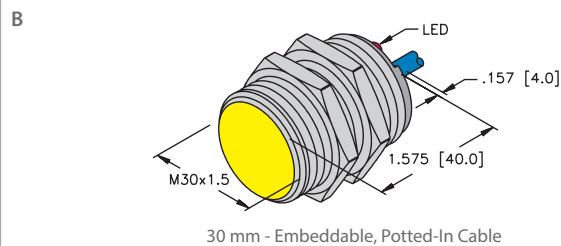
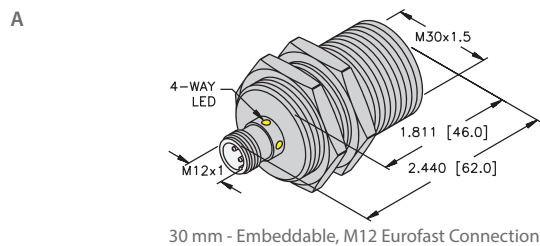
We reserve the right to make technical alterations without prior notice.

Inductive Barrel Sensors

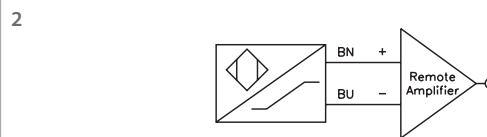
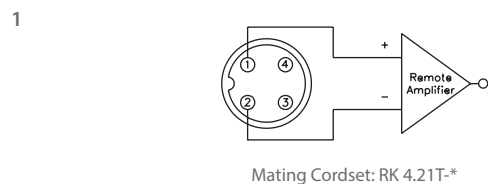
Inductive Barrel Sensors | 30 mm Namur



Dimension Drawings



Wiring Diagrams/Mating Cordsets



A1 2-wire DC NAMUR - (Y0 and Y1)

Differential Travel (Hysteresis):	1-10% (5% typical)
Nominal Voltage:	8.2 VDC (EN60947-5-6)
Load Resistance:	1000 Ω
Non-Activated Current Consumption:	≥2.1 mA
Activated Current Consumption:	≤1.2 mA
Recommended Switching Point for Remote Amplifier:	>1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF

Power-On Effect:	Realized in Amplifier
Reverse Polarity Protection:	Incorporated
Wire-Break Protection:	Realized in Amplifier
Transient Protection:	Realized in Amplifier
Shock:	30 g, 11 ms
Vibration:	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability:	≤2% of Rated Operating Distance

Amplifier Note:

Inductive sensors with Namur outputs are typically used in hazardous locations and the approval agencies require the use of an amplifier to regulate the signals in the hazardous area. Due to the wide variety of approvals, output options, and amplifier designs, it is not possible to incorporate all of the choices in this catalog. For the most up to date information, please either search for these products under our interface technology product category (www.turck.us) or contact us by phone.

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

Inductive Barrel Sensors | 30 mm Namur

Intrinsically Safe

Part Number/ ID Number	Features	Sensing Range (mm)	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Bi10-M30-Y1X-H1141 40202		10	2-wire DC NAMUR	5-30 VDC	2000	Remote	-25 to +70	IP67	CPB	PA 12	YE	--	A	1	A1
Bi10-G30-Y0 1005453	Short Barrel	10	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	B	2	A1
Bi10-G30-Y0X 1005459	Short Barrel	10	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	B	2	A1
Ni15-G30-Y0 1005454		15	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	CPB	PA 12	N/A	2M/PVC	C	2	A1
Ni15-G30-Y0X 4020100		15	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	CPB	PA 12	YE	2M/PVC	C	2	A1
Bi10-P30-Y0X 404000		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	D	2	A1
Bi10-P30-Y1 10097		10	2-wire DC NAMUR	5-30 VDC	500	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	D	2	A1
Ni15-P30-Y0X 1005465		15	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	PA 12	PA 12	YE	2M/PVC	D	2	A1
Ni15-P30-Y1 10098		15	2-wire DC NAMUR	5-30 VDC	200	Remote	-25 to +70	IP67	PA 12	PA 12	N/A	2M/PVC	D	2	A1

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

Inductive Barrel Sensors

Notes



Notes

