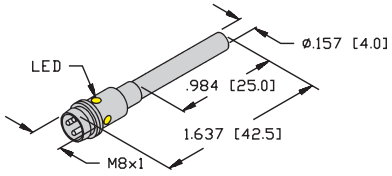
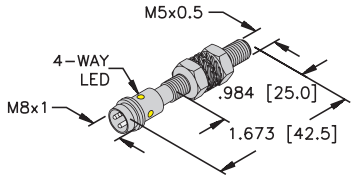
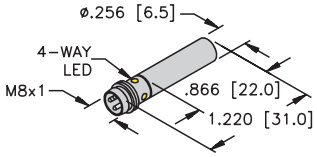
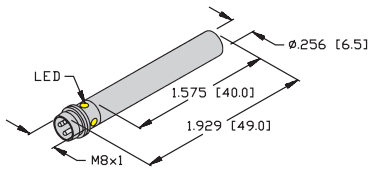
Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
4 mm - Embeddable, Miniature Smooth, *picofast*® Quick Disconnect 	Bi 1-EH04-AN6X-V1331	S4608540		1	3-Wire DC NPN
	Bi 1-EH04-AP6X-V1331	S4608440		1	3-Wire DC PNP
	Bi 1-EH04-Y1-V1330	S1003044		1	2-Wire DC NAMUR
5 mm - Embeddable, Miniature Threaded, *picofast* Quick Disconnect 	Bi 1-EG05-AN6X-V1331	S4608740		1	3-Wire DC NPN
	Bi 1-EG05-AP6X-V1331	S4608640		1	3-Wire DC PNP
	Bi 1-EG05-Y1-V1331	S1003241		1	2-Wire DC NAMUR
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5K-AN6X-V1131	S4610840	*Short Barrel*	1.5	3-Wire DC NPN
	Bi 2-EH6.5K-AN6X-V1131	S4610120	*Short Barrel*	2	
	Bi 1.5-EH6.5K-AP6X-V1131	S4610740	*Short Barrel*	1.5	3-Wire DC PNP
	Bi 1.5-EH6.5K-AP6X-V1131/S100	S4612003	*High Temp. 100°C*	1.5	
	Bi 2-EH6.5K-AP6X-V1131	S4610020	*Short Barrel*	2	
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5-AN6X-V1131	S4612120		1.5	3-Wire DC NPN
	Bi 1.5U-EH6.5-AN6X-V1131	S4600687	*Uprox*	1.5	
	Bi 2-EH6.5-AN6X-V1131	S4612320		2	
	Bi 2U-EH6.5-AN6X-V1131	S4281180	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131	S4612020		1.5	3-Wire DC PNP
	Bi 2-EH6.5-AP6X-V1131	S4612220		2	
	Bi 2U-EH6.5-AP6X-V1131	S4281160	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131/S100	S4612002	*High Temp. 100°C*	1.5	
	Bi 1.5-EH6.5-Y1-V1130	S1004621		1.5	2-Wire DC NAMUR

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	EPTR	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3

Wiring Diagrams

Diagram 1

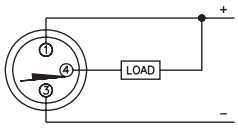


Diagram 2

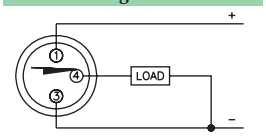
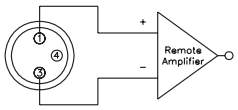


Diagram 3



* Length in meters.

3-Wire DC

Ripple	≤10%
Differential Travel (Hysteresis)	3-15% (5% typical)
Voltage Drop Across Conducting Sensor	≤1.8 V - Si...K08/K10(AP71, AN7) . ≤0.7 V - Bi/Ni../S34 . . . . . ≤1.8 V - Bi 2-Q8SE-AP/AN.. . . . . ≤2.5 V
Trigger Current for Overload Protection	≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current
Off-State (Leakage) Current	<100 µA
No-Load Current	<10 mA (***Uprox*** ≤15 mA)
Time Delay Before Availability	≤8 ms
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Incorporated
Transient Protection	Per EN 60947-5-2
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability	≤2% of Rated Operating Distance Bi 2-Q8SE-AP/AN.. ≤5% of Rated Operating Distance

4-Wire DC

Ripple	≤10%
Differential Travel (Hysteresis)	3-15% (5% typical)
Voltage Drop Across Conducting Sensor	≤1.8 V at 200 mA
Trigger Current for Overload Protection	≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current
Off-State (Leakage) Current	<100 µA
No-Load Current	<10 mA (Uprox ≤15 mA)
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Incorporated
Transient Protection	Per EN 60947-5-2
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability	≤2% of Rated Operating Distance