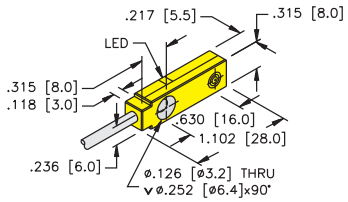
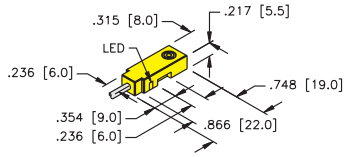
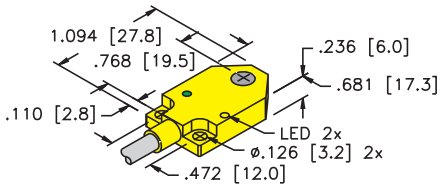
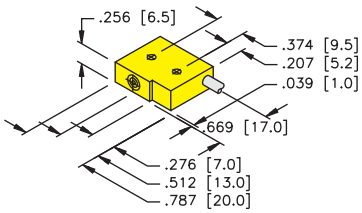
Inductive Rectangular Sensors

Housing Style - Rectangular	Part Number	ID Number	Features	Embeddable	Sensing Range (mm)	Output
5.5 mm - Embeddable/Nonembeddable, Potted-In Cable 	Bi 2-Q5.5-AG6X	S1613108		•	2	2-Wire DC
	Bi 2-Q5.5-AN6X	S1613100		•	2	3-Wire DC NPN
	Bi 2-Q5.5-AN6X/S34	S1613101	***Weld-field Immune***	•	2	
	Ni 3.5-Q5.5-AN6X	S4613610			3.5	
	Bi 2-Q5.5-AP6X	S1613000		•	2	3-Wire DC PNP
	Bi 2-Q5.5-AP6X/S34	S1613001	***Weld-field Immune***	•	2	
	Ni 3.5-Q5.5-AP6X	S4613601			3.5	
	Bi 2-Q5.5K-AP6X	S1613015		•	2	
5.5 mm - Embeddable/Nonembeddable, Potted-In Cable 	Bi 2-Q5.5K-Y1X	S4055300		•	2	2-Wire DC NAMUR
	Bi 2-Q5.5K-AN6X	S1613016		•	2	3-Wire DC NPN
	Bi 2-Q5.5K-AP6X	S1613015		•	2	3-Wire DC PNP
6.0 mm - Embeddable, Potted-In Cable 	Bi 3-Q06-AN6X2	S1620150		•	3	3-Wire DC NPN
	Bi 3-Q06-AP6X2	S1620100		•	3	3-Wire DC PNP
6.5 mm - Embeddable/Nonembeddable, Potted-In Cable 	Bi 1-Q6.5-AN6	S4613420		•	1	3-Wire DC NPN
	Ni 2-Q6.5-AN6	S4613520			2	
	Bi 1-Q6.5-AP6/S34	S4613401	***Weld-field Immune***	•	1	3-Wire DC PNP
	Ni 2-Q6.5-AP6/S34	S1650023	***Weld-field Immune***		2	

For detailed sensor specifications see Section M.
Normally Closed versions available upon request, consult factory.

3-Wire DC - (AN, RN, AP, RP)

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 (VN, VP)

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

Solid State Relay (AM6 and VM6)

Ripple	≤10%
Rated Operational Current	10-30 VDC
Differential	3-15% (5% typical)
Voltage Drop (Across Conducting Sensor) at I_e	400 m V
Continuous Load Current	≤6 Amp
Off-State (leakage) Current	≤0.1 mA
Inrush Current	≤8.0 A (10.0 ms max)
No-Load Current	≤25 mA
Time Delay before availability	≤50 ms
Reverse Polarity Protection	Incorporated
Wire-Break Protection	Incorporated
Short Circuit Protected	No
Transient Protection.	Per EN 60947-5-2
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude, in all 3 planes
Repeatability	≤2%