

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
12 mm - Nonembeddable, Extended Barrel Length, eurofast® Connection 	Ni 4-M12E-AD4X-H1144	T4406792		4	2-Wire DC
	Ni 8-M12E-AN6X-H1141	T4611325	Ext. Range	8	3-Wire DC NPN
	Ni 8-EM12HE-AN6X-H1141/S1589	T4611395	Ext. Range, weldguard	8	
	Ni 8U-EM12E-AN6X-H1141	M1644351	Uprox	8	
	Ni 8U-EM12E-AN6X2-H1141	M1644315	Uprox	8	
	Ni 8U-EM12HE-AN6X2-H1141/S1589	M1644391	Uprox, weldguard	8	
	Ni 8U-M12E-AN6X-H1141	M1644151	Uprox	8	
	Ni 8-M12E-AP6X-H1141	T4611398-1	Ext. Range	8	3-Wire DC PNP
	Ni 8-EM12HE-AP6X-H1141/S1589	T4611396	weldguard	8	
	Ni 8U-EM12E-AP6X-H1141	M1644342	Uprox	8	
	Ni 8U-EM12E-AP6X2-H1141	M1644314	Uprox	8	
	Ni 8U-EM12HE-AP6X2-H1141/S1589	M1644392	Uprox, weldguard	8	
	Ni 8U-M12E-AP6X-H1141	M1644144	Uprox	8	
	Ni 8U-M12E-VN4X-H1141	M1580552	Comp. Output	8	4-Wire DC NPN
	Ni 8U-EM12E-VP4X-H1141	M1580463	Uprox	8	4-Wire DC PNP
	Ni 8U-M12E-VP4X-H1141	M1580454	Uprox	8	
	Ni 4-M12E-VN6X-H1141	T1643190	Comp. Output	4	4-Wire DC NPN
	Ni 4-EM12E-VP6X-H1141	T1633191	Comp. Output	4	4-Wire DC PNP
	Ni 4-M12E-VP6X-H1141	T1633190	Comp. Output	4	
Ni 8-M12E-VP6X-H1141	T4611389	Ext. Range, Comp. Output	8		
12 mm - Nonembeddable, Extended Barrel Length, eurofast Connection, PTFE Coated 	Ni 5U-MT12E-AD4X-H1144	M4405065	Uprox		2-Wire DC
	Ni 8-MT12HE-AN6X-H1141/S1589	T4611397	Ext. Range, weldguard	8	3-Wire DC NPN
	Ni 8U-MT12E-AN6X2-H1141	M1644248	Uprox	8	
	Ni 8U-MT12HE-AN6X2-H1141/S1589	M1644290	Uprox, weldguard	8	
	Ni 8-MT12HE-AP6X-H1141/S1589	T4611398	Ext. Range, weldguard	8	3-Wire DC PNP
	Ni 8U-MT12E-AP6X2-H1141	M1644247	Uprox	8	
	Ni 8U-MT12HE-AP6X2-H1141/S1589	M1644291	Uprox, weldguard	8	
	Ni 10U-MT12E-AP6X2-H1141	M1634844	Uprox	10	
Ni 10U-MT12E-AP6X2-H1141/S1589	M1634994	Dual LED's Uprox PTFE, weldguard	10		

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

Specifications