

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing	Output
12 mm - Embeddable, <i>picofast</i>® Connection 	Bi 4U-M12-AP6X-V1131	M1634780		4	3-Wire DC PNP
12 mm - Embeddable, <i>eurofast</i>® Connection 	Bi 4-M12K-AN6X-H1141	T4607101	Short Barrel	4	3-Wire DC NPN
	Bi 4-M12K-AP6X-H1141	T4607082	Short Barrel	4	3-Wire DC PNP
12 mm - Embeddable, <i>eurofast</i> Connection 	Bi 2-M12-AD4X-H1141	T4406500		2	
	Bi 3-M12-AD4X-H1141	T4405041	Ext. Range	3	2-Wire DC
	Bi 2-EM12-AN6X-H1141	T4606601		2	
	Bi 2-M12-AN6X-H1141	T4606600		2	
	Bi 3U-EM12-AN6X-H1141	M1634350	Uprox	3	
	Bi 3U-M12-AN6X-H1141	M1634150	Uprox	3	
	Bi 3U-M12-AN6X2-H1141	M1634155	Uprox	3	
	Bi 4-M12-AN6X-H1141	T4607100	Extended Range	4	
	Bi 4U-EM12-AN6X-H1141	M1634827		4	
	Bi 4U-M12-AN6X-H1141	M1634824		4	
	Bi 2-EM12-AP6X-H1141	T4606501		2	
	Bi 2-M12-AP6X-H1141	T4606500		2	
	Bi 3U-EM12-AP6X-H1141	M1634340	Uprox	3	
	Bi 3U-EM12H-AP6X-H1141	M1634312	Uprox, Stoneface	3	
	Bi 3U-M12-AP6X-H1141	M1634140	Uprox	3	
	Bi 3U-M12-AP6X2-H1141	M1634145	Uprox	3	
	Bi 4-M12-AP6X-H1141	T4607000	Extended Range	4	
	Bi 4U-EM12-AP6X-H1141	M1634807		4	
	Bi 4U-EM12-AP6X-H1141/S1589	M1634897-1	weldguard	4	
	Bi 4U-M12-AP6X-H1141	M1634804		4	
	Bi 2-M12-VN6X-H1141	T1643000	Comp. Outputs	2	
	Bi 4-M12-VN6X-H1141	T1643200	Ext. Range, Comp.Outputs	4	
	Bi 2-M12-VP6X-H1141	T1633000	Comp. Outputs	2	
	Bi 4-M12-VP6X-H1141	T1633200	Ext. Range, Comp.Outputs	4	
	Bi 4-EM12-VP6X-H1141	T1633201	Ext. Range, Comp.Outputs	4	
	Bi 2-EM12-Y0X-H1141	T4010098		2	
	Bi 2-M12-Y1X-H1141	M4010200		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%	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%