

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
12 mm - Embeddable, eurofast® Connection 	Bi 4-M12K-AN6X-H1141	T4607101	Short Barrel	4	3-Wire DC PNP
	Bi 4-M12K-AP6X-H1141	T4607082	Short Barrel	4	3-Wire DC PNP
	Bi 2-M12K-VP6X-H1141	M1633005	Short Barrel	2	4-Wire DC PNP
12 mm - Embeddable, eurofast Connection 	Bi 2-M12-AD4X-H1141	T4406500		2	2-Wire DC
	Bi 3-M12-AD4X-H1141	T4405041	Ext. Range	3	
	Bi 2-EM12-AN6X-H1141	T4606601		2	3-Wire DC NPN
	Bi 2-M12-AN6X-H1141	T4606600		2	
	Bi 3-EM12WD-AN6X-H1141	M1634334	Washdown	3	
	Bi 3-M12WD-AN6X-H1141	M4607120	Washdown	3	
	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 2-EM12-AP6X-H1141	T4606501		2	3-Wire DC PNP
	Bi 2-M12-AP6X-H1141	T4606500		2	
	Bi 3-EM12WD-AP6X-H1141	M1634331	Washdown	3	
	Bi 3-M12WD-AP6X-H1141	M4607121	Washdown	3	
	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 2-M12-VN6X-H1141	T1643000	Comp. Outputs	2	4-Wire DC NPN
	Bi 4-M12-VN6X-H1141	T1643200	Ext. Range, Comp. Outputs	4	
	Bi 2-M12-VP6X-H1141	T1633000	Comp. Outputs	2	4-Wire DC PNP
	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	2-Wire DC NAMUR	
Bi 2-M12-Y1X-H1141	M4010200		2		

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #	Wiring Diagrams
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	Diagram 1
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	Diagram 2
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
10-65 VDC	1000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	Diagram 3
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	
10-30 VDC	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4T-*	2	Diagram 4
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2	
	3000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2	
	3000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	2	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	2	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
10-30 VDC	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4T-*	3	Diagram 5
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	3000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	3000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	3	
	3000	≤200	-30 to +85	IP 68	SS	SF	N/A	YE	RKG 4T-*/S600	3	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	Diagram 6
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4.4T-*	5	
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4.21T-*	6	
	5000	Remote	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.21T-*	6	

* 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