



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
12 mm - Embeddable, <i>picofast</i>® Connection 	Bi 4U-M12-AP6X-V1131	M1634780	<i>Uprox+</i>	4	3-Wire DC PNP
12 mm - Embeddable, <i>eurofast</i>® Connection 	Bi 4U-EM12-AN6X-H1141	M1634827	<i>Uprox+</i> , Stainless Steel	4	3-Wire DC NPN
	Bi 4U-EM12WD-AN6X-H1141	M1634841	<i>Uprox+</i> , Washdown	4	
	Bi 4U-M12-AN6X-H1141	M1634824	<i>Uprox+</i>	4	
	Bi 4U-MT12-AN6X-H1141	M1634829	<i>Uprox+</i> , Teflon	4	
	Bi 4U-EM12-AP6X-H1141	M1634807	<i>Uprox+</i> , Stainless Steel	4	3-Wire DC PNP
	Bi 4U-EM12WD-AP6X-H1141	M1634812	<i>Uprox+</i> , Washdown	4	
	Bi 4U-M12-AP6X-H1141	M1634804	<i>Uprox+</i>	4	
	Bi 4U-MT12-AP6X-H1141	M1634809	<i>Uprox+</i> , Teflon	4	
	Bi 4U-MT12E-AP6X2-H1141*	M1644742	<i>Uprox+</i> , Dual LED's	4	
12 mm - Nonembeddable, <i>eurofast</i> Connection 	Ni10U-EM12-AN6X-H1141	M1634828	<i>Uprox+</i> , Stainless Steel	10	3-Wire DC NPN
	Ni10U-EM12WD-AN6X-H1141	M1634837	<i>Uprox+</i> , Washdown	10	
	Ni10U-M12-AN6X-H1141	M1634826	<i>Uprox+</i>	10	
	Ni10U-MT12-AN6X-H1141	M1634830	<i>Uprox+</i> , Teflon	10	
	Ni10U-EM12-AP6X-H1141	M1634808	<i>Uprox+</i> , Stainless Steel	10	3-Wire DC PNP
	Ni10U-EM12WD-AP6X-H1141	M1634814	<i>Uprox+</i> , Washdown	10	
	Ni10U-M12-AP6X-H1141	M1634806	<i>Uprox+</i>	10	
	Ni10U-MT12-AP6X-H1141	M1634810	<i>Uprox+</i> , Teflon	10	
	Ni10U-MT12E-AP6X2-H1141*	M1634844	<i>Uprox+</i> , Dual LED's	10	
12 mm - Embeddable, Potted-in Cable 	Bi 4U-EM12WD-AN6X	M1634842	<i>Uprox+</i> , Washdown	4	3-Wire DC NPN
	Bi 4U-M12-AN6X	M1634823	<i>Uprox+</i>	4	
	Bi 4U-EM12WD-AP6X	M1634811	<i>Uprox+</i> , Washdown	4	3-Wire DC PNP
	Bi 4U-M12-AP6X	M1634803	<i>Uprox+</i>	4	
12 mm - Nonembeddable, Potted-in Cable 	Ni10U-EM12WD-AN6X	M1634838	<i>Uprox+</i> , Washdown	10	3-Wire DC NPN
	Ni10U-M12-AN6X	M1634825	<i>Uprox+</i>	10	
	Ni10U-EM12WD-AP6X	M1634813	<i>Uprox+</i> , Washdown	10	3-Wire DC PNP
	Ni10U-M12-AP6X	M1634805	<i>Uprox+</i>	10	

* MT12E = extended barrel length 62mm.



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	-30 to +85	IP 68	CPB	LCP	N/A	YE	PKG 3Z-*	5	Diagram 1
10-30 VDC	2000	≤200	-30 to +85	IP 68	SS	LCP	N/A	YE	RK 4T-*	1	Diagram 2
	2000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	1	
	2000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	RK 4T-*	1	
	2000	≤200	-30 to +85	IP 68	TC	LCP	N/A	YE	RK 4T-*	1	
10-30 VDC	2000	≤200	-30 to +85	IP 68	SS	LCP	N/A	YE	RK 4T-*	2	Diagram 3
	2000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	2	
	2000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	RK 4T-*	2	
	2000	≤200	-30 to +85	IP 68	TC	LCP	N/A	YE	RK 4T-*	2	
	2000	≤200	-30 to +85	IP 68	TC	LCP	GN	YE	RK 4, 4T-*	2	
10-30 VDC	1000	≤200	-30 to +85	IP 68	SS	LCP	N/A	YE	RK 4T-*	1	Diagram 4
	1000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	1	
	1000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	RK 4T-*	1	
	1000	≤200	-30 to +85	IP 68	TC	LCP	N/A	YE	RK 4T-*	1	
10-30 VDC	1000	≤200	-30 to +85	IP 68	SS	LCP	N/A	YE	RK 4T-*	2	Diagram 5
	1000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-30 to +85	IP 68	TC	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-30 to +85	IP 68	TC	LCP	GN	YE	RK 4T-*	2	
10-30 VDC	2000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	2M/PUR	3	Diagram 5
	2000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	2M/PVC	3	
10-30 VDC	2000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	2M/PUR	4	Diagram 5
	2000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	2M/PVC	4	
10-30 VDC	1000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	2M/PUR	3	Diagram 5
	1000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	2M/PVC	3	
10-30 VDC	1000	≤200	-30 to +85	IP 68, 69K	SS	LCP	N/A	YE	2M/PUR	4	Diagram 5
	1000	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	2M/PVC	4	

Uprox+

* 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