

# Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output	
<b>18 mm - Embeddable, eurofast® Connection</b> 	Bi 8U-EM18-AN6X-H1141	M1644738	<i>Uprox+</i> , Stainless steel	8	3-Wire DC NPN	
	Bi 8U-EM18WD-AN6X-H1141	M1634839	<i>Uprox+</i> , Washdown	8		
	Bi 8U-M18-AN6X-H1141	M1644737	<i>Uprox+</i>	8		
	Bi 8U-MT18-AN6X-H1141	M1644739	<i>Uprox+</i> , Teflon	8		
		Bi 8U-EM18-AP6X-H1141	M1644734	<i>Uprox+</i> , Stainless steel	8	3-Wire DC PNP
		Bi 8U-EM18WD-AP6X-H1141	M1634816	<i>Uprox+</i> , Washdown	8	
		Bi 8U-M18-AP6X-H1141	M1644731	<i>Uprox+</i>	8	
		Bi 8U-MT18-AP6X-H1141	M1644730	<i>Uprox+</i> , Teflon	8	
		Bi 8U-MT18M-AP6X2-H1141*	M1644740	<i>Uprox+</i> , Dual LED's	8	
		Ni 15U-EM18-AN6X-H1141	M1635336	<i>Uprox+</i> , Stainless steel	15	
Ni 15U-EM18WD-AN6X-H1141	M1634835	<i>Uprox+</i> , Washdown	15			
Ni 15U-M18-AN6X-H1141	M1635335	<i>Uprox+</i>	15			
Ni 15U-MT18-AN6X-H1141	M1635337	<i>Uprox+</i> , Teflon	15			
	Ni 15U-EM18-AP6X-H1141	M1635332	<i>Uprox+</i> , Stainless steel	15	3-Wire DC PNP	
	Ni 15U-EM18WD-AP6X-H1141	M1634818	<i>Uprox+</i> , Washdown	15		
	Ni 15U-M18-AP6X-H1141	M1635331	<i>Uprox+</i>	15		
	Ni 15U-MT18-AP6X-H1141	M1635333	<i>Uprox+</i> , Teflon	15		
	Ni 15U-MT18M-AP6X2-H1141*	M1635338	<i>Uprox+</i> , Dual LED's	15		
	Bi 8U-EM18E-AP6X-H1141	M1634865	<i>Uprox+</i> , Stainless steel	8		3-Wire DC PNP
<b>18 mm - Embeddable, eurofast Connection</b> 	Bi 8U-M18M-VP44X-H1141	M1634877	<i>Uprox+</i>	8	4-Wire DC PNP	

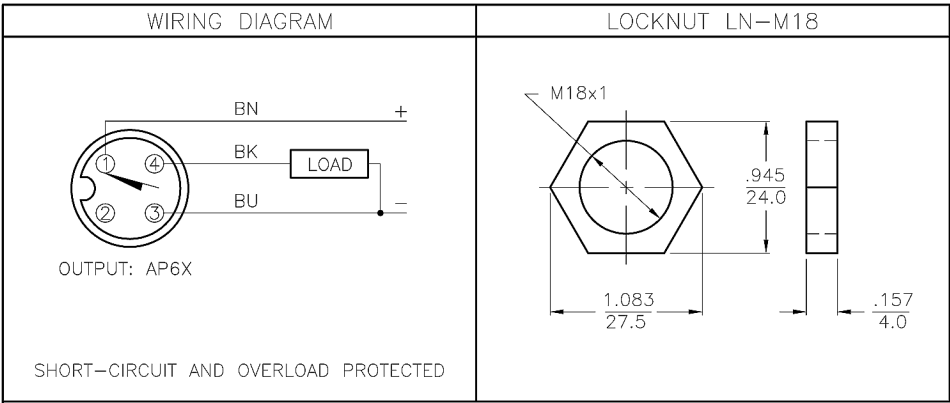
\* MT18M = Barrel length 62 mm.



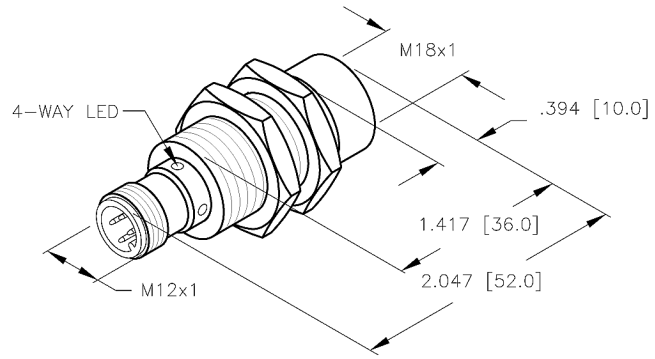
Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #	Wiring Diagrams
10-30 VDC	1500	≤200	-25 to +75	IP 68	SS	LCP	N/A	YE	RK 4T-*	1	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Diagram 1</b> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <b>Diagram 2</b> </div> <div style="border: 1px solid black; padding: 5px;"> <b>Diagram 3</b> </div>
	1500	≤200	0 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	1	
	1500	≤200	-25 to +75	IP 68	CPB	LCP	N/A	YE	RK 4T-*	1	
	1500	≤200	-25 to +75	IP 68	TC	LCP	N/A	YE	RK 4T-*	1	
10-30 VDC	1500	≤200	-25 to +75	IP 68	SS	LCP	N/A	YE	RK 4T-*	2	
	1500	≤200	0 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	2	
	1500	≤200	-25 to +75	IP 68	CPB	LCP	N/A	YE	RK 4T-*	2	
	1500	≤200	-25 to +75	IP 68	TC	LCP	N/A	YE	RK 4T-*	2	
	1500	≤200	-25 to +75	IP 68	TC	LCP	GN	YE	RK 4T-*	2	
10-30 VDC	1000	≤200	-25 to +75	IP 68	SS	LCP	N/A	YE	RK 4T-*	1	
	1000	≤200	0 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	1	
	1000	≤200	-25 to +75	IP 68	CPB	LCP	N/A	YE	RK 4T-*	1	
	1000	≤200	-25 to +75	IP 68	TC	LCP	N/A	YE	RK 4T-*	1	
10-30 VDC	1000	≤200	-25 to +75	IP 68	SS	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	0 to +85	IP 68, 69K	SS	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-25 to +75	IP 68	CPB	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-25 to +75	IP 68	TC	LCP	N/A	YE	RK 4T-*	2	
	1000	≤200	-25 to +75	IP 68	TC	LCP	GN	YE	RK 4T-*	2	
10-30 VDC	1000	≤200	-25 to +75	IP 68	SS	LCP	N/A	YE	RK 4T-*	2	
10-55 VDC	1500	≤200	-30 to +85	IP 68	CPB	LCP	N/A	YE	RK 4.4T-*	3	

Uprox+

\* Length in meters.



SPECIFICATIONS	
OPERATING VOLTAGE	10-30 VDC
RIPPLE	≤ 10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	3-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤ 1.8 V at 200 mA
OUTPUT FUNCTION	NORMALLY OPEN 3-WIRE DC SELF-CONTAINED
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	≤ 0.1 mA
NO-LOAD CURRENT	≤ 15 ms
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
POWER-ON EFFECT	PER IEC 947-5-2
REVERSE POLARITY PROTECTION	YES
WIRE-BREAK PROTECTION	YES
TRANSIENT PROTECTION	Per EN 60947-5-2
OPERATING TEMPERATURE (10% DRIFT)	-25°C to +70°C (-13°F to +158°F)
OPERATING TEMPERATURE (15% DRIFT)	-30°C to +85°C (-22°F to +185°F)
ENCLOSURE	MEETS NEMA 1, 3, 4, 6, 13 AND IEC IP68
SHOCK	30 g, 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	LED ON: OUTPUT ENERGIZED LED FLASHING: SHORT-CIRCUIT WARNING
SENSING RANGE	15 mm = .591" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	NO
MATING PLUGS/CABLES	4-PIN "EUROFAST" CONSTRUCTION



SOURCE DRAWING - FOR REFERENCE ONLY

NOTES:  
1. UPROX HAS WELD FIELD IMMUNITY, SENSOR IS SUITABLE FOR USE ON RESISTANCE MACHINES.

RELATED DOCUMENTS 1. 2. 3. 4.		3RD ANGLE PROJECTION 	THIS DRAWING IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED.		 <i>High Technology Sensors and Automation Controls</i>	
MATERIAL BRASS BARREL		TOLERANCES UNLESS OTHERWISE SPECIFIED 0.0394in [1.00mm]	DRFT RDS DSGN EH	DATE 07/21/05 SCALE NONE	DESCRIPTION NI15U-M18-AP6X-H1141	
FINISH COPPER/NICKEL CHROME PLATING		UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>		IDENTIFICATION NO. M1635331		REV A
A DRAWING RELEASE		RDS 07/21/05		DO NOT SCALE THIS DRAWING		FILE: M1635331
REV DESCRIPTION	BY DATE ECO NO.	SHEET 1 OF 1				