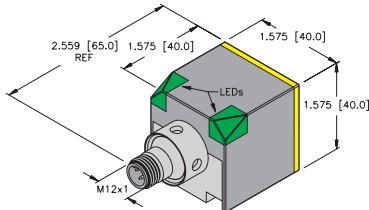
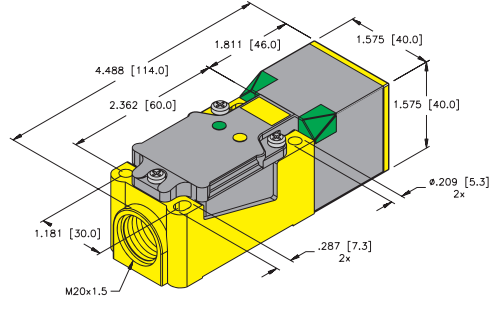
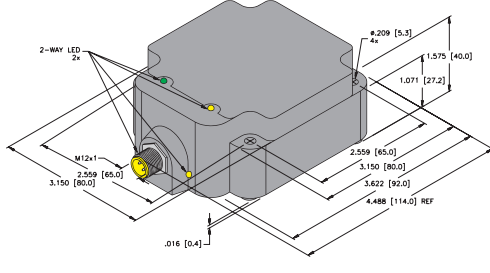


Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
CK40 - Embeddable/Nonembeddable, eurofast® Connection 	Bi20U-CK40-AN6X2-H1141 W/BS 2.1	M1627231	<i>Uprox+</i>	20	3-Wire DC NPN
	Bi30U-CK40-AN6X2-H1141 W/BS 4	M1625820	<i>Uprox+</i>	30	
	Ni50U-CK40-AN6X2-H1141 W/BS 4	M1625823	<i>Uprox+</i>	50	
	Bi20U-CK40-AP6X2-H1141 W/BS 2.1	M1627288	<i>Uprox+</i>	20	3-Wire DC PNP
	Bi30U-CK40-AP6X2-H1141 W/BS 4	M1625829	<i>Uprox+</i>	30	
	Ni50U-CK40-AP6X2-H1141 W/BS 4	M1625837	<i>Uprox+</i>	50	
	Ni50U-CK40-VN4X2-H1141 W/BS 4	M1625806	<i>Uprox+/Comp. Outputs</i>	50	4-Wire DC NPN
	Ni50U-CK40-VP4X2-H1141 W/BS 4	M1538302	<i>Uprox+/Comp. Outputs</i>	50	4-Wire DC PNP
CP40 - Embeddable/Nonembeddable, Terminal Chamber 	Bi20U-CP40-AN6X2	M1625828	<i>Uprox+</i>	20	3-Wire DC NPN
	Bi20U-CP40-AP6X2	M1625826	<i>Uprox+</i>	20	3-Wire DC PNP
	Bi30U-CP40-AN6X2	M1625827	<i>Uprox+</i>	30	3-Wire DC NPN
	Bi30U-CP40-AP6X2	M1625825	<i>Uprox+</i>	30	3-Wire DC PNP
	Ni50U-CP40-AN6X2	M1625824	<i>Uprox+</i>	50	3-Wire DC NPN
	Ni50U-CP40-AP6X2	M1625842	<i>Uprox+</i>	50	3-Wire DC PNP
Q80 - Embeddable/Nonembeddable, eurofast Connection 	Bi50U-Q80-AN6X2-H1141	M1608944	<i>Uprox+</i>	50	3-Wire DC NPN
	Ni70U-Q80-VN4X2-H1141	M1625821	<i>Uprox+/Comp. Outputs</i>	70	4-Wire DC NPN
	Bi50U-Q80-AP6X2-H1141	M1608940	<i>Uprox+</i>	50	3-Wire DC PNP
	Ni70U-Q80-VP4X2-H1141	M1625833	<i>Uprox+/Comp. Outputs</i>	70	4-Wire DC PNP

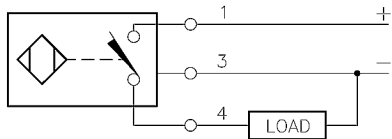


Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #	Wiring Diagrams
10-30 VDC	250	≤200	-20 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	1	Diagram 1
	250	≤200	-10 to +60	IP 68	PBT	PBT	GN	YE	RK 4T-*	1	
	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	1	
10-30 VDC	250	≤200	-20 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	2	Diagram 2
	250	≤200	-10 to +60	IP 68	PBT	PBT	GN	YE	RK 4T-*	2	
	250	≤200	-20 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	2	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4.4T-*	3	Diagram 3
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4.4T-*	4	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	5	Diagram 4
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	6	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	5	Diagram 5
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	6	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	1	Diagram 6
10-65 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4.4T-*	3	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4T-*	2	Diagram 6
10-65 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4.4T-*	4	

Uprox+

* Length in meters.

WIRING DIAGRAM

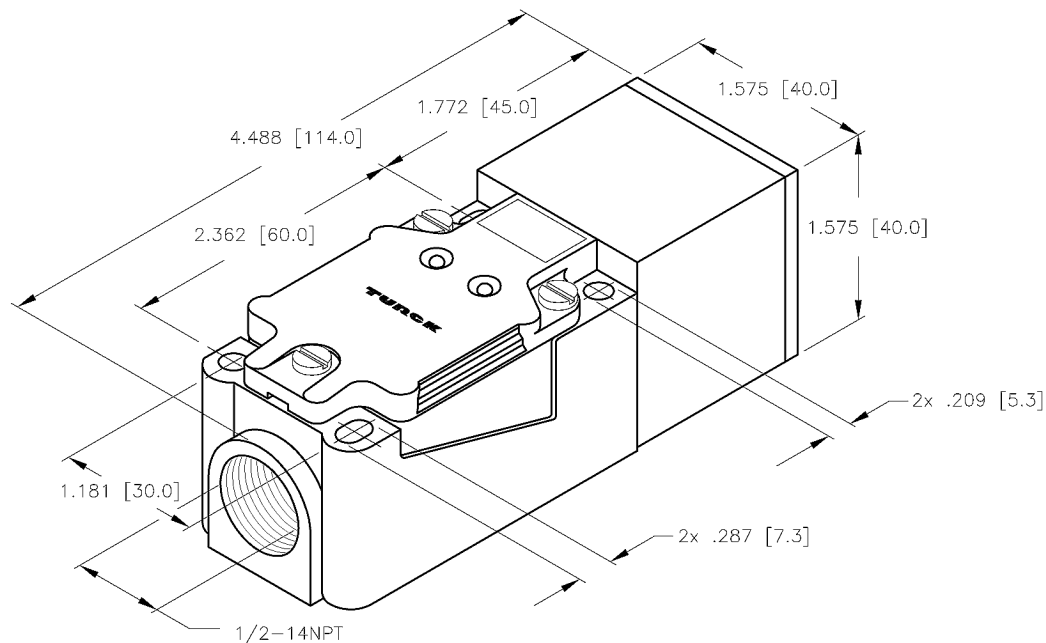


OUTPUT: AP6X2

SHORT-CIRCUIT AND OVERLOAD PROTECTED

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
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	< 10µA
NO-LOAD CURRENT	≤ 15 mA
TIME DELAY BEFORE AVAILABILITY	≤25 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	2 kV, 1ms, 1 kΩ
OPERATING TEMPERATURE	-25°C to +75°C (-13°F to +167°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	GREEN: POWER ON YELLOW: OUTPUT ENERGIZED
SENSING RANGE	30 mm = 1.181" (NOMINAL)
SWITCHING FREQUENCY	250 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES



SOURCE DRAWING - FOR REFERENCE ONLY

NOTES:

- SENSING HEAD TURNS TO ACCOMMODATE 9 DIFFERENT SENSING POSITIONS.

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.		TURCK INC High Technology Sensors and Automation Controls	
	MATERIAL PLASTIC HOUSING	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DRFT RDS DSGN RT	DATE 06/23/05 SCALE 1=1.3	DESCRIPTION BI30U-CP40-AP6X2
FINISH		UNIT OF MEASUREMENT INCH [MILLIMETER]		IDENTIFICATION NO. M1625825	REV A
A DRAWING RELEASE	RDS 06/23/05	DO NOT SCALE THIS DRAWING		FILE: M1625825	SHEET 1 OF 1
REV DESCRIPTION	BY DATE ECO NO.				