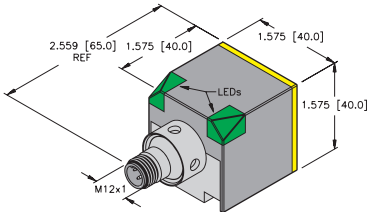
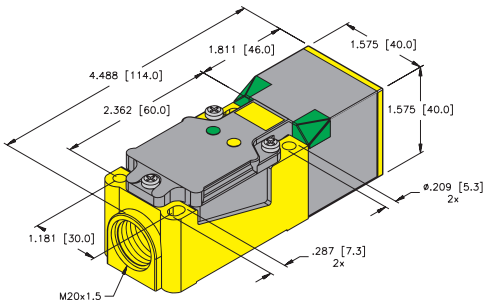
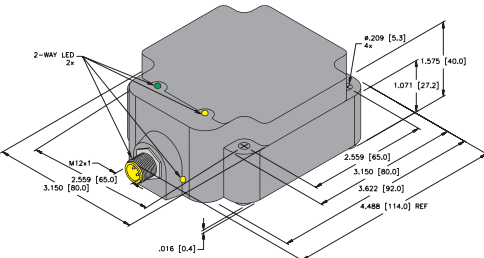


Inductive Sensors

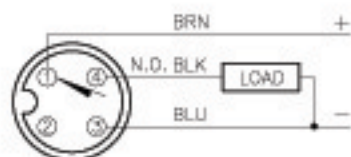


Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
CK40 - Embeddable/Nonembeddable, eurofast® Connection 	Bi20U-CK40-AN6X2-H1141 W/BS 2.1	M1627231	<i>Uprox+</i>	20	3-Wire DC NPN
	Bi30U-CK40-AN6X2-H1141 W/BS 4	M1625820	<i>Uprox+</i>	30	
	Ni50U-CK40-AN6X2-H1141 W/BS 4	M1625823	<i>Uprox+</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	
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	6	Diagram 4
10-30 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	N/A	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	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	N/A	5	
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	
10-65 VDC	250	≤200	-25 to +70	IP 68	PBT	PBT	GN	YE	RK 4.4T-*	4	

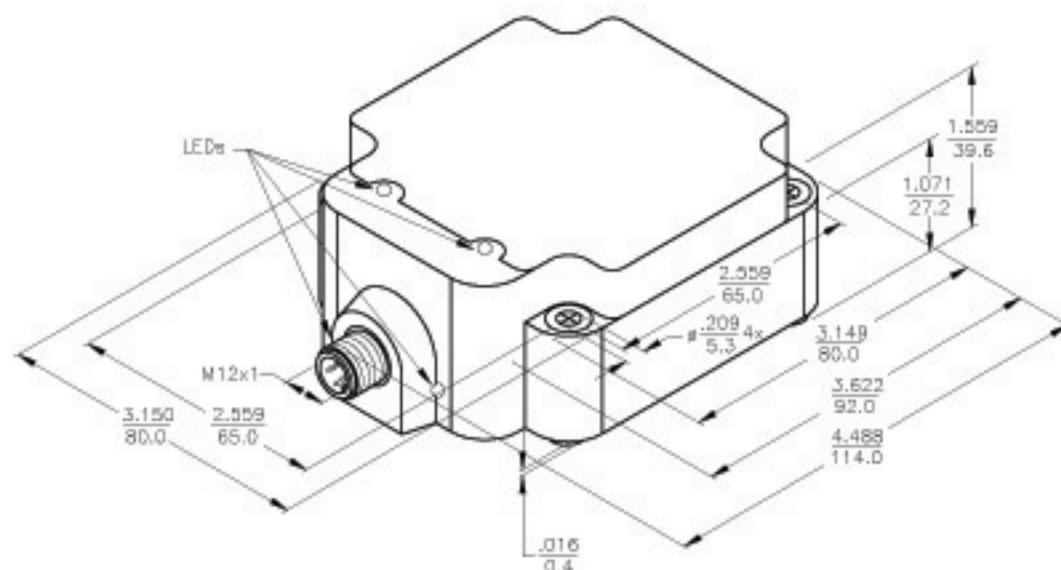
* Length in meters.

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
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	< 10 μ A
NO-LOAD CURRENT	4.0-9.5 mA
TIME DELAY BEFORE AVAILABILITY	≤ 80 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	EN 6047-5-2
OPERATING TEMPERATURE	-30°C to +85°C (-22°F to +185°F)
ENCLOSURE	MEETS NEMA 1, 3, 4, 6, 13 AND IEC IP67
SHOCK	30 g, 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (ALL 3 PLANES)
LED FUNCTION	YELLOW: OUTPUT ENERGIZED GREEN: POWER ON
SENSING RANGE	50 mm = 1.969" (NOMINAL)
SWITCHING FREQUENCY	250 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE

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 PBT-GF30-VO PLASTIC	TOLERANCES UNLESS OTHERWISE SPECIFIED	CRFT JBJ	DATE 04/04/00	DESCRIPTION Bi50U-Q80-AP6X2-H1141		
		FINISH	.X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	USCR	SCALE NONE	IDENTIFICATION NO. M1608940		REV B
				UNIT OF MEASUREMENT INCH [MILLIMETER]		FILE: M1608940		SHEET 1 OF
DO NOT SCALE THIS DRAWING								

B	UPDATE SWITCHING FREQUENCY	RDS	07/12/05	1341D
REV	DESCRIPTION	BY	DATE	EDD NO.