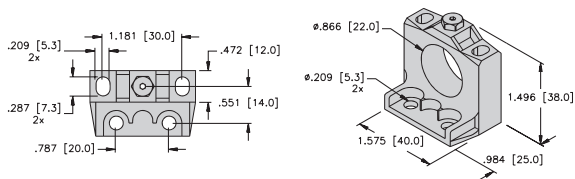


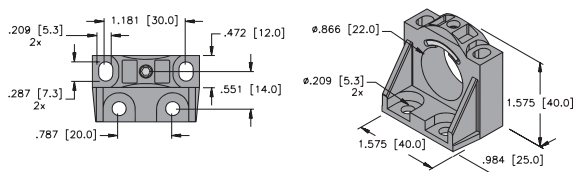
# Inductive Sensors



Housing Style - Rectangular	Part Number	ID Number	Features	Embeddable	Sensing Range (mm)	Output	
<b>CK40 - Embeddable/Nonembeddable, minifast® Connector</b> 	Bi15U-CK40-ADZ30X2-B1131 W/BS 2.1	M4280090	<i>Uprox</i>	•	15	2-Wire AC/DC Short-Circuit Protected	
	Ni25U-CK40-ADZ30X2-B1131 W/BS 2.1	M4280290	<i>Uprox</i>		25		
	Ni35U-CK40-ADZ30X2-B1131 W/BS 4	M4280410	<i>Uprox</i>		35		
	Bi15-CK40-ADZ30X2-B1131/S34 W/BS 2.1	M4244090		<b>WFI</b>	•	15	2-Wire AC/DC Short-Circuit Protected
	Bi15-CK40-AZ3X2-B1131 W/BS 2.1	M1335091			•	15	2-Wire AC/DC
	Ni20-CK40-AZ3X2-B1131 W/BS 2.1	M1335291				20	
<b>CK40 - Embeddable/Nonembeddable, microfast® Connector</b> 	Bi15U-CK40-ADZ30X2-B3131 W/BS 2.1	M4280091	<i>Uprox</i>	•	15	2-Wire AC/DC Short-Circuit Protected	
	Ni25U-CK40-ADZ30X2-B3131 W/BS 2.1	M4280291	<i>Uprox</i>		25		
	Ni35U-CK40-ADZ30X2-B3131 W/BS 4	M4280430	<i>Uprox</i>		35		
	Bi15-CK40-ADZ30X2-B3131/S34 W/BS 2.1	M4244290		<b>WFI</b>	•	15	2-Wire AC/DC Short-Circuit Protected
	Bi15-CK40-AZ3X2-B3131 W/BS 2.1	M1335095			•	15	2-Wire AC/DC
	Ni20-CK40-AZ3X2-B3131 W/BS 2.1	M1335290				20	



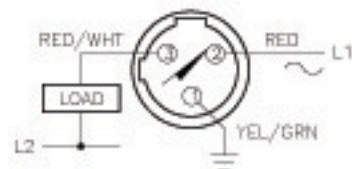
BS 2.1 Mounting Bracket



BS 4 Mounting Bracket

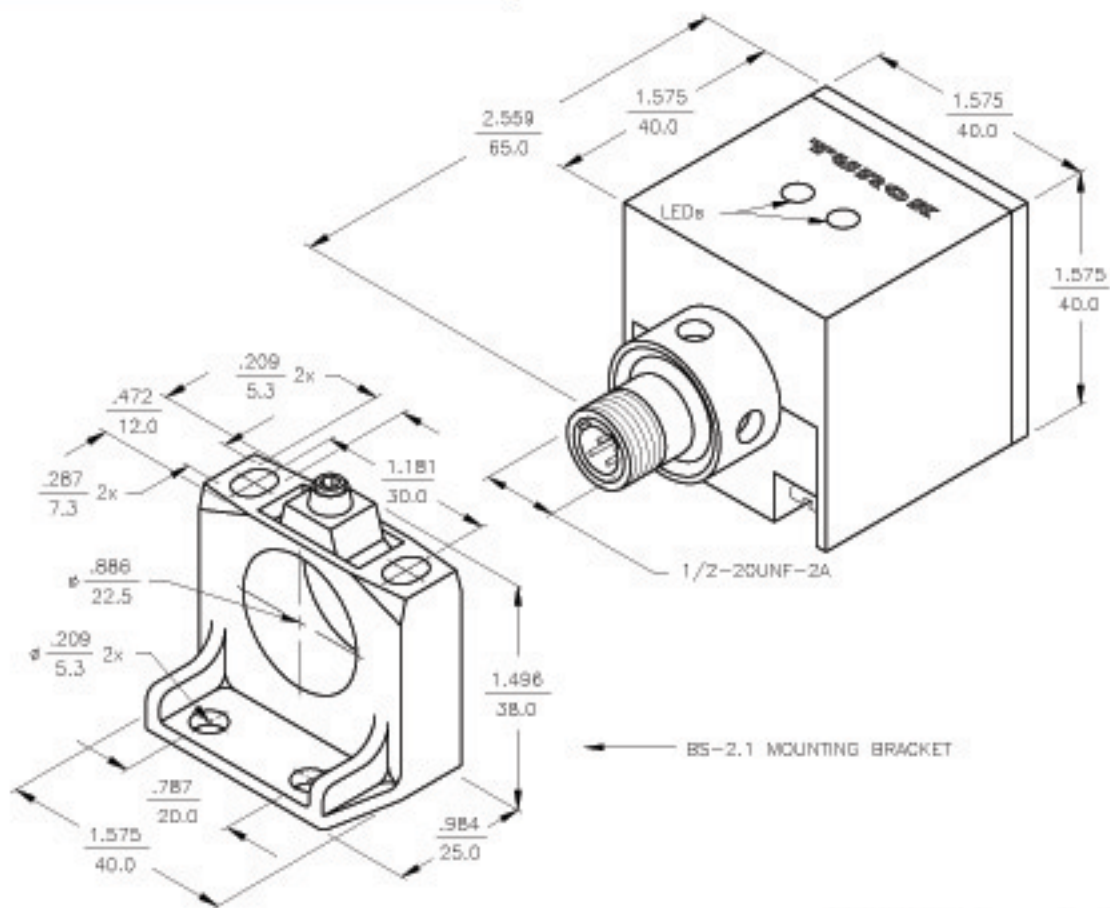
Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Front Cap/Face	Power LED	Output LED	Mating Cord, Cable Length/Jacket	Wiring Diagram #	Wiring Diagrams
10-300 VDC 20-250 VAC	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	<p><b>Diagram 1</b></p> <p><b>Diagram 2</b></p>
	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
10-300 VDC 20-250 VAC	30	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
10-300 VDC 20-250 VAC	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	RKM 30-*M	1	
	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
10-300 VDC 20-250 VAC	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
	60	≤400/300	-30 to +85	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
10-300 VDC 20-250 VAC	30	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
10-300 VDC 20-250 VAC	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	
	20	≤400/300	-25 to +70	IP 67	PBT	PBT	GN	YE	KB 3T-*	2	

### WIRING DIAGRAM



OUTPUT: AZ3X2

**WARNING: NO SHORT-CIRCUIT PROTECTION**  
ALWAYS WIRE A LOAD IN SERIES WITH THE SENSOR.



### SPECIFICATIONS

OPERATING VOLTAGE	20-250 VAC/DC
LINE FREQUENCY	40-60 Hz
DIFFERENTIAL TRAVEL (HYSTERESIS)	3-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤7.0 V at 500 mA
OUTPUT FUNCTION -AZ	NORMALLY OPEN 2-WIRE AC/DC SELF-CONTAINED
SHORT-CIRCUIT PROTECTED	NO
CONTINUOUS LOAD CURRENT	≤500 mA
OFF-STATE (LEAKAGE) CURRENT	≤1.7 mA
MINIMUM LOAD CURRENT	≥5.0 mA
INRUSH CURRENT	≤8 A (≤10 mA/5 Hz)
TIME DELAY BEFORE AVAILABILITY	≤80 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	5 kV, 10 ms, 10 kΩ
OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
ENCLOSURE	MEETS NEMA 1, 3, 4, 6, 13 AND IEC IP67
SHOCK	30 g, 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	GREEN: POWER ON GREEN FLASHING: SHORT-CIRCUIT WARNING YELLOW: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(S <sub>n</sub> )	15 mm = .591" (NOMINAL)
SWITCHING FREQUENCY	20 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES
MATING PLUGS/CABLES	3-PIN "MICROFAST" CONSTRUCTION

#### NOTES:

1. "/S34" DESIGNATES WELD FIELD IMMUNITY. SENSOR IS SUITABLE FOR USE ON RESISTANCE WELDING 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.		 High Technology Sensors and Automation Controls	
	MATERIAL PBT-GF30-VO PLASTIC HOUSING	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DRFT SWC		
FINISH		USDR	SCALE NONE	UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>	IDENTIFICATION NO. M1335095
C UPDATE TO CURRENT TITLEBLOCK	RDS 07/16/03	5004		DO NOT SCALE THIS DRAWING	REV C
REV DESCRIPTION	BY	DATE	EDD NO.	FILE: M1335095	SHEET 1 OF 1