

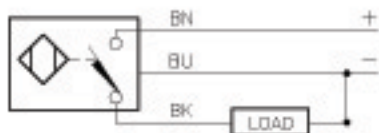
Inductive Sensors



Housing Style - Rectangular	Part Number	ID Number	Features	Embeddable	Sensing Range (mm)	Output
14 mm - Embeddable/Nonembeddable, Potted-In Cable 	Ni20-Q14-AD4X	M4414557			20	2-Wire DC
	Bi10U-Q14-AN6X2	M1608710	<i>Uprox</i>	•	10	3-Wire DC NPN
	Bi10-Q14-AN6X2	M1608320		•	10	
	Ni20-Q14-AN6X2	M4690220			20	
	Bi10U-Q14-AP6X2	M1608700	<i>Uprox</i>	•	10	3-Wire DC PNP
	Bi10-Q14-AP6X2	M1608720		•	10	
	Ni20-Q14-AP6X2	M4690205		•	20	
	Bi10-Q14-ADZ32X2	M4256220		•	10	2-Wire AC/DC Short-Circuit Protected
	Bi10-Q14-ADZ32X2/S34	M4256225	<i>Weld-field Immune</i>	•	10	
	Ni20-Q14-ADZ32X2	M4205410			20	
Bi10-Q14-Y0X	M1608730			•	10	2-Wire NAMUR
14 mm - Embeddable/Nonembeddable, picofast® Connector 	Bi10-Q14-AN6X2-V1131	M1608325		•	10	3-Wire DC NPN
	Bi10U-Q14-AN6X2-V1131	M1608510	<i>Uprox</i>	•	10	
	Ni20-Q14-AN6X2-V1131	M4690221			20	
	Bi10-Q14-AP6X2-V1131	M1608530		•	10	3-Wire DC PNP
	Bi10U-Q14-AP6X2-V1131	M1608500	<i>Uprox</i>	•	10	
	Ni20-Q14-AP6X2-V1131	M4690210			20	

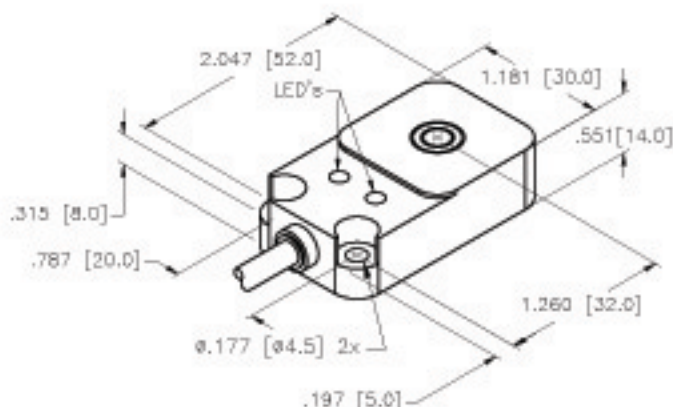
Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Front Cap/Face	Power LED	Output LED	Mating Cord, Cable Length/Jacket	Wiring Diagram #	Wiring Diagrams
10-65 VDC	150	≤100	-25 to +70	IP 67	PBT	PBT	N/A	YE	2M/PVC	1	<p>Diagram 1</p>
10-30 VDC	250	≤200	-30 to +85	IP 67	PBT	PBT	GN	YE	2M/PVC	2	<p>Diagram 2</p>
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	2	
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	2	
10-30 VDC	250	≤200	-30 to +85	IP 67	PBT	PBT	GN	YE	2M/PVC	3	<p>Diagram 3</p>
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	3	
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	3	
20-250 VAC 10-300 VDC	20	≤100	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	4	<p>Diagram 4</p>
	30	≤100	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	4	
	20	≤100	-25 to +70	IP 67	PBT	PBT	GN	YE	2M/PVC	4	
5-30 VDC	250	Remote	-25 to +70	IP 67	PBT	PBT	N/A	YE	2M/PVC	5	<p>Diagram 5</p>
10-30 VDC	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	PKG 3M-*	6	<p>Diagram 6</p>
	250	≤200	-30 to +85	IP 67	PBT	PBT	GN	YE	PKG 3M-*	6	
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	PKG 3M-*	6	
10-30 VDC	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	PKG 3M-*	7	<p>Diagram 7</p>
	250	≤200	-30 to +85	IP 67	PBT	PBT	GN	YE	PKG 3M-*	7	
	250	≤200	-25 to +70	IP 67	PBT	PBT	GN	YE	PKG 3M-*	7	

WIRING DIAGRAM



OUTPUT: AP6X

SHORT-CIRCUIT AND OVERLOAD PROTECTED



SPECIFICATIONS

RATED OPERATING DISTANCE	20mm = .787" (NOMINAL)
MOUNTING MODE	NON-FLUSH
MIN. REPEAT ACCURACY	≤ 2%
TEMPERATURE DRIFT	≤ ±10%
HYSTERESIS (SWITCHING DISTANCE)	3-15%
OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
RATED OPERATIONAL VOLTAGE	10-30 VDC
MAX. RIPPLE	≤ 10%
DC RATED OPERATIONAL CURRENT	≤ 200 mA
NO-LOAD CURRENT	≤ 15 mA
RESIDUAL CURRENT	≤ 0.1 mA
RATED INSULATION VOLTAGE	≤ 0.5 kV
SHORT-CIRCUIT PROTECTION	YES, CYCLIC
MAX. VOLTAGE DROP	≤ 1.8 V
WIRE BREAKAGE PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
OUTPUT FUNCTION	3-WIRE, NORMALLY OPEN, PNP
MAX. SWITCHING FREQUENCY	≤ 0.25 kHz
HOUSING MATERIAL	PLASTIC, PBT-GF30-V0
MATERIAL ACTIVE FACE	PLASTIC, PBT-GF30-V0
CABLE	#5.2, UYY-11Y, PUR, 2.0 METERS
VIBRATION RESISTANCE	55 Hz, 1 mm AMPITUDE (IN ALL 3 PLANES)
SHOCK RESISTANCE	30 g, 11 ms
DEGREE OF PROTECTION	IP67
OPERATING VOLTAGE DISPLAY	LED, GREEN
SWITCHING STATUS INDICATION	LED, YELLOW

CABLE LENGTH	TOLERANCE
ALL LENGTHS	+ .4% (OR 50mm) OF LENGTH - .0% (OR 0mm) OF LENGTH WHICHEVER IS GREATER
STRIP LENGTH	TOLERANCE
0-7mm	±1.5mm
8-20mm	±1.0mm
30-40mm	±1.0mm
50-60mm	±1.0mm
70-100mm	±1.0mm
OVER 100mm	±1.0mm

SOURCE DRAWING - FOR REFERENCE ONLY

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MATERIAL SEE SPECIFICATIONS	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1°	DRAWN RDS	DATE 11/29/06		
FINISH SEE SPECIFICATIONS	ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	UNIT OF MEASUREMENT INCH [MILLIMETER]	SCALE 1 = 1.0	IDENTIFICATION NO. M4690205	
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A	DRAWING RELEASE	RDS	11/29/06	
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