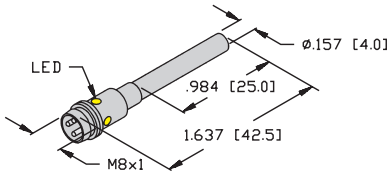
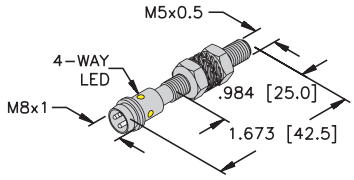
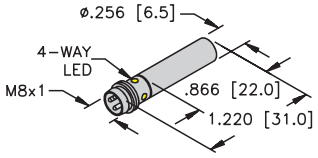
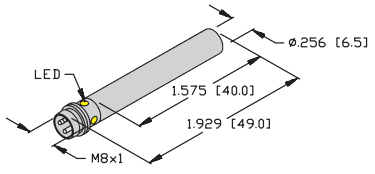
Inductive Sensors





Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
4 mm - Embeddable, Miniature Smooth, *picofast*® Quick Disconnect 	Bi 1-EH04-AN6X-V1331	S4608540		1	3-Wire DC NPN
	Bi 1-EH04-AP6X-V1331	S4608440		1	3-Wire DC PNP
	Bi 1-EH04-Y1-V1330	S1003044		1	2-Wire DC NAMUR
5 mm - Embeddable, Miniature Threaded, *picofast* Quick Disconnect 	Bi 1-EG05-AN6X-V1331	S4608740		1	3-Wire DC NPN
	Bi 1-EG05-AP6X-V1331	S4608640		1	3-Wire DC PNP
	Bi 1-EG05-Y1-V1331	S1003241		1	2-Wire DC NAMUR
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5K-AN6X-V1131	S4610840	*Short Barrel*	1.5	3-Wire DC NPN
	Bi 2-EH6.5K-AN6X-V1131	S4610120	*Short Barrel*	2	
	Bi 1.5-EH6.5K-AP6X-V1131	S4610740	*Short Barrel*	1.5	3-Wire DC PNP
	Bi 1.5-EH6.5K-AP6X-V1131/S100	S4612003	*High Temp. 100°C*	1.5	
	Bi 2-EH6.5K-AP6X-V1131	S4610020	*Short Barrel*	2	
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5-AN6X-V1131	S4612120		1.5	3-Wire DC NPN
	Bi 1.5U-EH6.5-AN6X-V1131	S4600687	*Uprox*	1.5	
	Bi 2-EH6.5-AN6X-V1131	S4612320		2	
	Bi 2U-EH6.5-AN6X-V1131	S4281180	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131	S4612020		1.5	3-Wire DC PNP
	Bi 2-EH6.5-AP6X-V1131	S4612220		2	
	Bi 2U-EH6.5-AP6X-V1131	S4281160	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131/S100	S4612002	*High Temp. 100°C*	1.5	
	Bi 1.5-EH6.5-Y1-V1130	S1004621		1.5	2-Wire DC NAMUR

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	EPTR	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3

Wiring Diagrams

Diagram 1

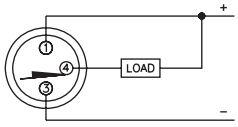


Diagram 2

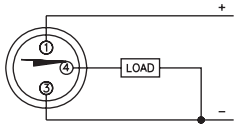
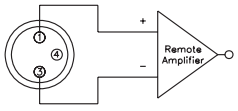
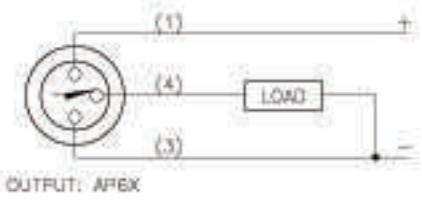


Diagram 3



* Length in meters.

WIRING DIAGRAM

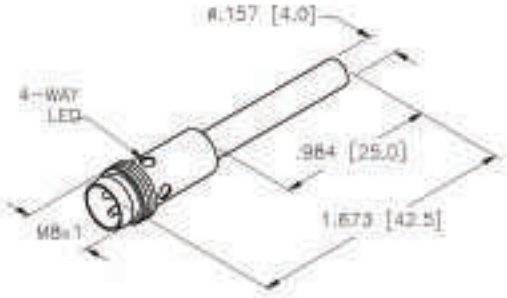


OUTPUT: AP6X

SHORT-CIRCUIT AND OVERLOAD PROTECTED

SPECIFICATIONS

RATED OPERATING DISTANCE	1mm = .039" (NOMINAL)
MOUNTING MODE	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	≤ 100 mA
NO-LOAD CURRENT	≤ 15 mA
MAX. OFF-STATE CURRENT	≤ 0.1 mA
RATED INSULATION VOLTAGE	≤ 0.5 kV
SHORT-CIRCUIT PROTECTION	INCORPORATED
MAX. VOLTAGE DROP	≤ 1.8 V
WIRE BREAKAGE PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
OUTPUT FUNCTION	3-WIRE, NORMALLY OPEN, PNP
MAX. SWITCHING FREQUENCY	≤ 3 kHz
HOUSING MATERIAL	METAL, A4 1.4404 (AISI 316L)
ACTIVE FACE	PLASTIC, PA12-GF30
CONNECTOR	M8x1
VIBRATION RESISTANCE	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
SHOCK RESISTANCE	30 g, 11 ms
DEGREE OF PROTECTION	IP67
SWITCHING STATUS INDICATION	LED, YELLOW



SOURCE DRAWING - FOR REFERENCE ONLY

B	UPDATE BARREL LENGTH	RDS	02/27/08	2D464
REV.	DESCRIPTION	BY	DATE	ECO NO.

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

FINISH

TOLERANCES UNLESS OTHERWISE SPECIFIED
.X ±0.03
.XX ±0.01
.XXX ±0.005
ANGLES ±1°
ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY

DRFT RDS | DATE 04/18/08
DSGN – | SCALE 1=1.0

UNIT OF MEASUREMENT
INCH [MILLIMETER]
DO NOT SCALE THIS DRAWING

DESCRIPTION
BI 1-EH04-AP6X-V1331

IDENTIFICATION NO.
S4608440

REV.
B

FILE: S4608440 | SHEET 1 OF 1