

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
18 mm - Embeddable, Full Threading, Potted-In Cable 	Bi 5-G18K-AN6X	T4671400	<i>Short Barrel</i>	5	3-Wire DC NPN
	Bi 5-G18K-AN7X	T4740593	<i>TTL Compatible</i>	5	
	Bi 5-G18K-AP6X	T4670400		5	3-Wire DC PNP
	Bi 5-EG18-Y0	T1006001		5	2-Wire NAMUR
	Bi 5-G18-Y0	T1006000		5	
	Bi 5-G18-Y0X	T4015000		5	
18 mm - Embeddable, Full Threading, Potted-In Cable 	Bi 5-EG18-AN6X	T4611101		5	3-Wire DC NPN
	Bi 5-G18-AN6X	T4641500		5	
	Bi 5-G18-AN7X	T4740500	<i>TTL Compatible</i>	5	
	Bi 8-G18-AN6X	T4616101	<i>Ext. Range</i>	8	
	Bi 5-EG18-AP6X	T4611001		5	3-Wire DC PNP
	Bi 5-G18-AP6X	T4641400		5	
Bi 8-G18-AP6X	T4615088		8		
18 mm - Embeddable, Full Threading, Potted-In Cable 	Bi 5-G18-ADZ30X2	T4212000		5	2-Wire AC/DC Short-Circuit Protected
	Bi 8-G18-ADZ30X2	T4209320	<i>Extended Range</i>	8	
	Bi 5-EG18-AZ3X	T4611190		5	2-Wire AC/DC
	Bi 5-G18-AZ3X	T4330400		5	
	Bi 5-G18-AZ3X2	T1374195		5	

Output	Switching Freq. (Hz)	Operating Current (mA) VAC/VDC	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable /Mat.	Wiring Diagram #	Wiring Diagrams
10-30 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	Diagram 1
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
10-30 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	Diagram 2
5-30 VDC	1000	Remote	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	N/A	2M/PVC	3	
	1000	Remote	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	N/A	2M/PVC	3	
	1000	Remote	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
10-30 VDC	1000	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	1	Diagram 3
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
	1000	≤150	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	1	
10-30 VDC	1000	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	2	Diagram 4
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	2	
20-250 VAC 10-300 VDC	20	≤400/300	-25 to +70	IP 67	CPB	PA 12	EPTR	GN	RD	2M/PVC	4	
	20	≤400/300	-25 to +70	IP 67	SS	PA 12	EPTR	GN	RD	2M/PVC	4	
20-250 VAC 10-300 VDC	20	≤400/300	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	RD	2M/PVC	4	
	20	≤400/300	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	RD	2M/PVC	4	
	20	≤400/300	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	RD	2M/PVC	4	

WIRING DIAGRAMS		LOCKNUT LN-M18		SPECIFICATIONS																																																			
<p>OUTPUT: AP6X</p>				<table border="1"> <tr><td>OPERATING VOLTAGE</td><td>10-30 VDC</td></tr> <tr><td>RIPPLE</td><td>≤10%</td></tr> <tr><td>DIFFERENTIAL TRAVEL (HYSTERESIS)</td><td>3-15% (5% TYPICAL)</td></tr> <tr><td>VOLTAGE IRDP ACROSS CONDUCTING SENSOR</td><td>≤1.8 V at 200 mA</td></tr> <tr><td>OUTPUT FUNCTION</td><td>NORMALLY OPEN 3-WIRE DC SELF-CONTAINED</td></tr> <tr><td>TTL COMPATIBLE</td><td>NO</td></tr> <tr><td>SHORT-CIRCUIT PROTECTED</td><td>YES</td></tr> <tr><td>TRIGGER CURRENT FOR OVERLOAD PROTECTION</td><td>≥220 mA</td></tr> <tr><td>CONTINUOUS LOAD CURRENT</td><td>≤200 mA</td></tr> <tr><td>OFF-STATE (LEAKAGE) CURRENT</td><td><10 μA</td></tr> <tr><td>NO-LOAD CURRENT</td><td>5.5-9.5 mA</td></tr> <tr><td>TIME DELAY BEFORE AVAILABILITY</td><td>≤8 ms</td></tr> <tr><td>POWER-ON EFFECT PROTECTION</td><td>INCORPORATED</td></tr> <tr><td>REVERSE POLARITY PROTECTION</td><td>INCORPORATED</td></tr> <tr><td>WIRE-BREAK PROTECTION</td><td>INCORPORATED</td></tr> <tr><td>PROTECTION AGAINST TRANSIENTS</td><td>≥ 4kV, 1 ns, 1 kΩ</td></tr> <tr><td>OPERATING TEMPERATURE</td><td>-25°C to +70°C (-13°F to +158°F)</td></tr> <tr><td>ENCLOSURE</td><td>MEETS NEMA L 3, 4, 6, 13 AND IEC IP67</td></tr> <tr><td>SHOCK</td><td>30 g, 11 ms</td></tr> <tr><td>VIBRATION</td><td>55 Hz, 1 mm AMPLITUDE (ON ALL 3 PLANES)</td></tr> <tr><td>LED FUNCTION</td><td>RED OUTPUT ENERGIZED</td></tr> <tr><td>RATED OPERATING DISTANCE(Sn)</td><td>5 mm = .197" (NOMINAL)</td></tr> <tr><td>SWITCHING FREQUENCY</td><td>1000 Hz</td></tr> <tr><td>REPEATABILITY</td><td>≤2% of RATED OPERATING DISTANCE</td></tr> <tr><td>EMBEDDABLE (SHIELDED)</td><td>YES</td></tr> </table>		OPERATING VOLTAGE	10-30 VDC	RIPPLE	≤10%	DIFFERENTIAL TRAVEL (HYSTERESIS)	3-15% (5% TYPICAL)	VOLTAGE IRDP 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	<10 μA	NO-LOAD CURRENT	5.5-9.5 mA	TIME DELAY BEFORE AVAILABILITY	≤8 ms	POWER-ON EFFECT PROTECTION	INCORPORATED	REVERSE POLARITY PROTECTION	INCORPORATED	WIRE-BREAK PROTECTION	INCORPORATED	PROTECTION AGAINST TRANSIENTS	≥ 4kV, 1 ns, 1 kΩ	OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)	ENCLOSURE	MEETS NEMA L 3, 4, 6, 13 AND IEC IP67	SHOCK	30 g, 11 ms	VIBRATION	55 Hz, 1 mm AMPLITUDE (ON ALL 3 PLANES)	LED FUNCTION	RED OUTPUT ENERGIZED	RATED OPERATING DISTANCE(Sn)	5 mm = .197" (NOMINAL)	SWITCHING FREQUENCY	1000 Hz	REPEATABILITY	≤2% of RATED OPERATING DISTANCE	EMBEDDABLE (SHIELDED)	YES
OPERATING VOLTAGE	10-30 VDC																																																						
RIPPLE	≤10%																																																						
DIFFERENTIAL TRAVEL (HYSTERESIS)	3-15% (5% TYPICAL)																																																						
VOLTAGE IRDP 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	<10 μA																																																						
NO-LOAD CURRENT	5.5-9.5 mA																																																						
TIME DELAY BEFORE AVAILABILITY	≤8 ms																																																						
POWER-ON EFFECT PROTECTION	INCORPORATED																																																						
REVERSE POLARITY PROTECTION	INCORPORATED																																																						
WIRE-BREAK PROTECTION	INCORPORATED																																																						
PROTECTION AGAINST TRANSIENTS	≥ 4kV, 1 ns, 1 kΩ																																																						
OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)																																																						
ENCLOSURE	MEETS NEMA L 3, 4, 6, 13 AND IEC IP67																																																						
SHOCK	30 g, 11 ms																																																						
VIBRATION	55 Hz, 1 mm AMPLITUDE (ON ALL 3 PLANES)																																																						
LED FUNCTION	RED OUTPUT ENERGIZED																																																						
RATED OPERATING DISTANCE(Sn)	5 mm = .197" (NOMINAL)																																																						
SWITCHING FREQUENCY	1000 Hz																																																						
REPEATABILITY	≤2% of RATED OPERATING DISTANCE																																																						
EMBEDDABLE (SHIELDED)	YES																																																						
<p>SHORT-CIRCUIT AND OVERLOAD PROTECTED</p>				<table border="1"> <tr> <td>MATERIAL</td> <td>BRASS BARREL</td> <td>3RD ANGLE PROJECTION</td> <td rowspan="2"> </td> <td rowspan="2"> TUBOK INC </td> </tr> <tr> <td>FINISH</td> <td>COPPER/NICKEL/ CHROME PLATING</td> <td></td> </tr> <tr> <td>DRWN</td> <td>GMB</td> <td>DATE</td> <td>9/14/88</td> <td>PART NO.</td> <td>BI5-G18-AP6X 50mm</td> </tr> <tr> <td>DWG</td> <td></td> <td>DATE</td> <td></td> <td>SIZE</td> <td>B</td> </tr> <tr> <td>TNI</td> <td></td> <td>DATE</td> <td></td> <td>ID NO.</td> <td>4641400</td> </tr> <tr> <td colspan="4">DIMENSIONS ARE IN INCHES</td> <td>SCALE</td> <td>NONE</td> </tr> <tr> <td colspan="4"></td> <td></td> <td>BMPC-IV\4641400</td> </tr> <tr> <td colspan="4"></td> <td>SHEET</td> <td>OF</td> </tr> </table>		MATERIAL	BRASS BARREL	3RD ANGLE PROJECTION		TUBOK INC	FINISH	COPPER/NICKEL/ CHROME PLATING		DRWN	GMB	DATE	9/14/88	PART NO.	BI5-G18-AP6X 50mm	DWG		DATE		SIZE	B	TNI		DATE		ID NO.	4641400	DIMENSIONS ARE IN INCHES				SCALE	NONE						BMPC-IV\4641400					SHEET	OF						
MATERIAL	BRASS BARREL	3RD ANGLE PROJECTION		TUBOK INC																																																			
FINISH	COPPER/NICKEL/ CHROME PLATING																																																						
DRWN	GMB	DATE	9/14/88	PART NO.	BI5-G18-AP6X 50mm																																																		
DWG		DATE		SIZE	B																																																		
TNI		DATE		ID NO.	4641400																																																		
DIMENSIONS ARE IN INCHES				SCALE	NONE																																																		
					BMPC-IV\4641400																																																		
				SHEET	OF																																																		
<table border="1"> <tr> <td>B</td> <td>SEE REVISION DOCUMENT 4641400</td> <td>SWC</td> <td>5/17/94</td> <td></td> </tr> <tr> <td>REV</td> <td>DESCRIPTION</td> <td>DRFT</td> <td>DATE</td> <td>CHKD</td> </tr> <tr> <td colspan="5" style="text-align: center;">REVISIONS</td> </tr> </table>		B	SEE REVISION DOCUMENT 4641400	SWC	5/17/94		REV	DESCRIPTION	DRFT	DATE	CHKD	REVISIONS																																											
B	SEE REVISION DOCUMENT 4641400	SWC	5/17/94																																																				
REV	DESCRIPTION	DRFT	DATE	CHKD																																																			
REVISIONS																																																							