

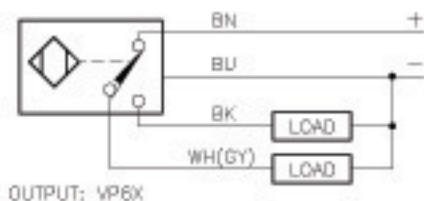
Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
12 mm - Embeddable, Potted-In Cable 	Bi 2-M12-AD4X	T4405000		2	2-Wire DC
	Bi 3-M12-AD4X	T4405035	Ext. Range	3	
	Bi 2-M12-AN6X	T4606695		2	3-Wire DC NPN
	Bi 3U-EM12-AN6X	M1634320	Uprox	3	
	Bi 3U-M12-AN6X	M1634120	Uprox	3	
	Bi 4-M12-AN6X	T4607130	Ext. Range	4	
	Bi 2-M12-AP6X	T4605000		2	3-Wire DC PNP
	Bi 2-M12-AP6X/S100	M4605003	High Temp. 100°C	2	
	Bi 3U-EM12-AP6X	M1634300	Uprox	3	
	Bi 3U-M12-AP6X	M1634100	Uprox	3	
	Bi 4-M12-AP6X	T4607006	Ext. Range	4	
	Bi 2-M12-VN6X	T1640200		2	4-Wire DC NPN
	Bi 4-M12-VN6X	T1643300	Ext. Range, Comp. Output	4	
	Bi 2-M12-VP6X	T1630200		2	4-Wire DC PNP
Bi 4-M12-VP6X	T1633300	Ext. Range, Comp. Output	4		
	Bi 2-EM12-ADZ32X	T4205092		2	2-Wire AC/DC Short-circuit Protected
12 mm - Embeddable, Potted-In Cable, Teflon Coated 	Bi 2U-MT12-ADZ32X	M4205100	Uprox	2	2-Wire AC/DC Short-circuit Protected
12 mm - Embeddable, Potted-In Cable 	Bi 3-EM12WD-AN6X	M1634333	Washdown	3	3-Wire DC NPN
	Bi 2-EM12WD-AP6/S929	M4614515	Low Temp. -60°C	2	3-Wire DC PNP
	Bi 3-EM12WD-AP6X	M1634330	Washdown	3	
	Bi 3-EM12WD-AP6X/S97	M1634336	Low Temp. -40°C	3	

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #	Wiring Diagrams
10-65 VDC	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	Diagram 1
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	Diagram 2
	3000	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	2	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	Diagram 3
	2000	≤200	-25 to +100	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
	3000	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	3	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	Diagram 4
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	Diagram 5
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	
20-250 VAC 10-300 VDC	20	≤100	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	6	Diagram 5
20-250 VAC 10-300 VDC	20	≤100	-25 to +70	IP 67	TC	TC	EPTR	N/A	YE	2M/PVC	6	Diagram 6
	20	≤100	-25 to +70	IP 67	TC	TC	EPTR	N/A	YE	2M/PVC	6	
10-30 VDC	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	2	Diagram 6
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	2	
10-30 VDC	1000	≤200	-60 to +60	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	Diagram 6
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	
	2000	≤200	-40 to +70	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	

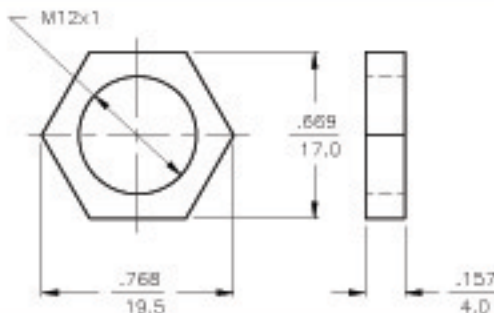
WIRING DIAGRAM



OUTPUT: VP6X

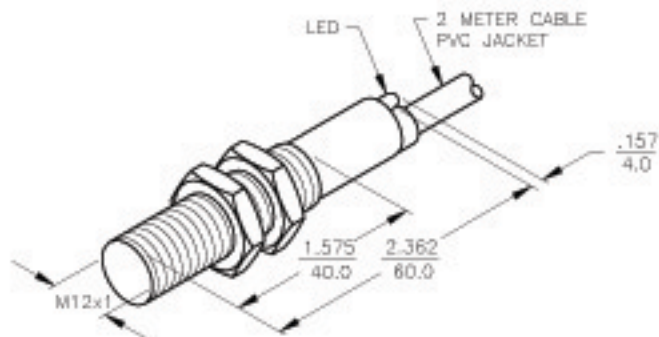
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-M12



SPECIFICATIONS

OPERATING VOLTAGE	10-30 V DC (SHORT-CIRCUIT PROTECTED)
RIPPLE	≤ 10%
HYSTERESIS (DIFFERENTIAL TRAVEL)	3-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤ 1.8 V at 200 mA
OUTPUT FUNCTION	COMPLEMENTARY OUTPUT ONE N.O., ONE N.C. (SPST)
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
LEAKAGE (OFF-STATE) CURRENT	< 10 μ A
NO-LOAD CURRENT	5.5-9.5 mA
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
POLARITY INVERSION PROTECTION	INCORPORATED
WIRE BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	2 kV, 1 ms, 1 μ s
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	95 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(S _{ri})	2 mm = .079" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
SHIELDED	YES



RELATED DOCUMENTS

- 1.
- 2.
- 3.
- 4.

3RD ANGLE PROJECTION



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TURCK INC
High Technology Sensors and Automation Controls

MATERIAL
BRASS BARREL

TOLERANCES UNLESS OTHERWISE SPECIFIED

DWGT IK

DATE 01/26/99

DESCRIPTION

Bi 2-M12-VP6X

FINISH
COPPER/NICKEL/
CHROME PLATING

.X ±0.02
.XX ±0.01
.XXX ±0.005
ANGLES ±1°

UNIT OF MEASUREMENT

INCH [MILLIMETER]

IDENTIFICATION NO.

T1630200

REV
A

A DRAWING RELEASE

IK 01/26/99 B2689

REV DESCRIPTION

BY DATE EDD NO.

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SHEET 1 OF 1