

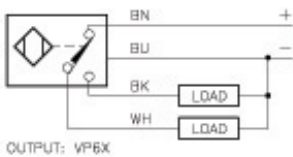
Inductive Sensors



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	Comp. Output	2	4-Wire DC NPN
	Bi 4-M12-VN6X	T1643300	Ext. Range, Comp. Output	4	
	Bi 2-M12-VP6X	T1630200	Comp. Output	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 6
20-250 VAC 10-300 VDC	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	
10-30 VDC	1000	≤200	-60 to +60	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3	
	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	

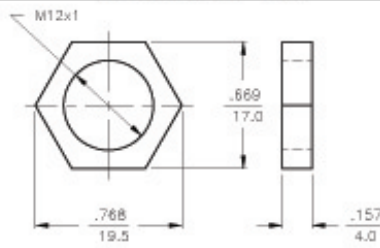
WIRING DIAGRAMS



OUTPUT: VP6X

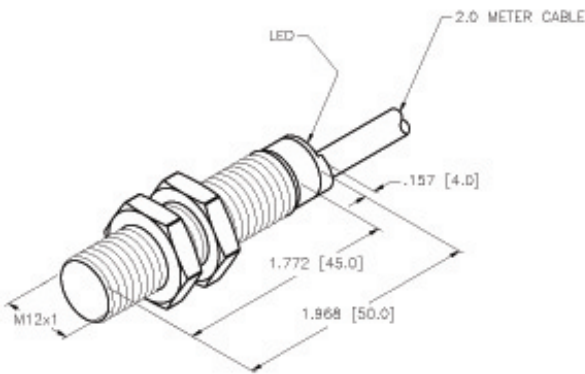
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-M12



SPECIFICATIONS

RATED OPERATING DISTANCE	4mm = .157"
MOUNTING MODE	FLUSH
TEMPERATURE DRIFT	±10%
HYSTERESIS	3-15%
MIN. REPEAT ACCURACY	±2%
OPERATING TEMPERATURE	-25C to +70C (+13°F to +158°F)
RATED OPERATIONAL VOLTAGE	10-30 VDC
RESIDUAL 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
MAX. VOLTAGE DROP	≤1.8 V
WIRE BREAKAGE PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
MAX. SWITCHING FREQUENCY	≤2.0 kHz
OUTPUT FUNCTION	4-WIRE, CHANGE-OVER, PNP
HOUSING MATERIAL	METAL, BRASS, CHROME-PLATED
ACTIVE FACE MATERIAL	PLASTIC, PA12-GF30
END CAP	PLASTIC, EPTR
CABLE	#5.2, UFYY, PVC
VIBRATION RESISTANCE	55 Hz (IN ALL 3 PLANES)
SHOCK RESISTANCE	30 g, 11 ms
DEGREE OF PROTECTION	IP67
SWITCHING STATUS INDICATION	LED, YELLOW



CABLE LENGTH	TOLERANCE
ALL LENGTHS	+ .45 (OR 30mm) OF LENGTH - .00 (OR 0mm) OF LENGTH WHICHEVER IS GREATER
STRIP LENGTH	TOLERANCE
0-7mm	±0.2mm
8-23mm	±1.0mm
24-39mm	±2.0mm
40-55mm	±3.0mm
56-71mm	±4.0mm
72-100mm	±5.0mm

SOURCE DRAWING - FOR REFERENCE ONLY

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	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCED ONLY	DWGT RDS USGN AF	DATE 12/03/07 SCALE 1=1.0	DESCRIPTION BI 4-M12-VP6X	
FINISH		UNIT OF MEASUREMENT INCH [MILLIMETER]		IDENTIFICATION NO. T1633300	REV A
A DRAWING RELEASE	RDS 12/03/07	DO NOT SCALE THIS DRAWING		FILE: T1633300	SHEET 1 OF 1
REV DESCRIPTION	BY DATE EDO NO.				