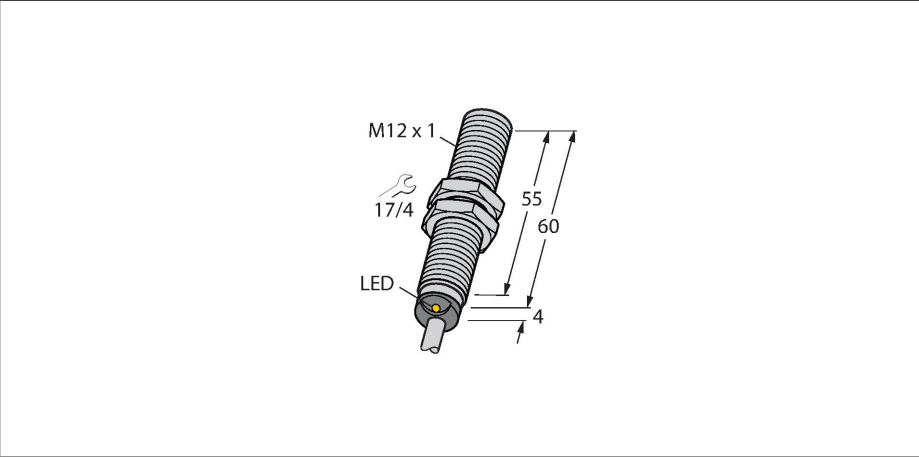


BI4U-M12E-VN6X

电感式传感器 – 开关距离扩展



技术数据

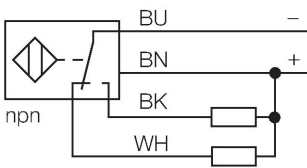
型号	BI4U-M12E-VN6X
货号	100003650
常用数据	
额定开关距离	4 mm
安装条件	齐平
安全工作距离	≤ (0.81 × Sn) mm
重复精度	≤ 2 %满量程
温度漂移	≤ ±10 %
	≤ ± 15 %, ≤ -25 °C v ≥ +70 °C
磁滞	3...15 %
电气数据	
工作电压U _B	10...30 VDC
纹波电压U _{ss}	≤ 10 % U _{Bmax}
额定直流工作电流I ₀	≤ 200 mA
空载电流	≤ 15 mA
漏电流	≤ 0.1 mA
隔离测试电压	0.5 kV
短路保护	是/循环
I ₀ 时的压降	≤ 1.8 V
断线/反极性保护	是/是
输出性能	4线, 互补触点, NPN
直流磁场稳定性	300 mT
交流电磁场稳定性	300 mT _{ss}
防护等级	☐
开关频率	3 kHz
机械数据	
设计	螺纹, M12 x 1



特点

- M12 × 1 螺纹
- 加长型
- 铜镀铬
- 全金属检测衰减系数恒为1
- 防护等级IP68
- 抗磁场干扰
- 最大开关距离
- 嵌入式安装
- 4线直流, 10...30 VDC
- 互补型, NPN输出
- 线缆连接

接线图



功能原理

电感式传感器采用无磨损和非接触的设计方式来检测金属物体。由于它特殊的多线圈的设计，使得uprox+传感器拥有相当多的优势。它们拥有最佳的开关距离、最高的灵活性和操作可靠性以及高效的标准化，尽显卓越不凡。

技术数据

尺寸	64 mm
外壳材料	金属, CuZn, 镀铬
感应面材料	塑料, LCP
底帽	塑料, EPTR
外壳螺母的最大拧紧扭矩	10 Nm
电气连接	线缆
线缆材质	Ø 5.2 mm, 灰, LifYY, PVC, 2 m
导体横截面	4 x 0.34 mm ²
环境条件	
工作温度	-30...+85 °C
防震动性	55 Hz (1 mm)
防冲击性	30 g (11 ms)
防护等级	IP68
MTTF	874 年 符合SN 29500 (Ed.99) 40 °C认证
开关状态指示	LED指示灯, 黄色

安装说明

安装说明/描述

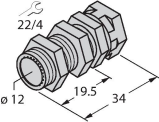
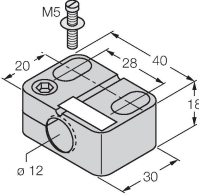
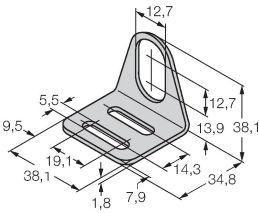
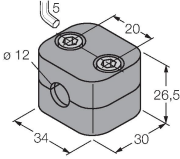
The image contains four technical diagrams illustrating different installation methods for a sensor. The top-left diagram shows a side view of a sensor with a circular opening and a threaded rod, with dimension 'T' indicating the distance from the bottom of the opening to the base of the rod. The top-right diagram shows a cross-section of a sensor with a threaded rod passing through a panel, with dimension 'D' indicating the distance from the top of the panel to the top of the rod. The middle diagram shows two views of a sensor being inserted into a panel, with dimension 'G' indicating the distance from the top of the panel to the top of the rod. The bottom diagram shows a detailed view of a sensor with two threaded rods passing through a panel, with dimensions 'W', 'D', and 'S' indicating the width of the panel, the distance from the top of the panel to the top of the rods, and the distance between the two rods, respectively.

This diagram shows a cross-section of a sensor with a threaded rod passing through a panel. The dimension 'D' is indicated as the distance from the top of the panel to the top of the rod.

距离D	24 mm
距离W	3 x Sn
距离T	3 x B
距离S	1.5 x B
距离G	6 x Sn
B有效面积直径	Ø 12 mm

所有齐平式可安装型uprox+螺纹圆柱形均允许
沉入式安装。此类传感器允许沉入半个螺纹安
装，以保证使用安全。

附件

QM-12	6945101	快速安装支架单端封闭；材料：铜镀铬外螺纹 M16 × 1。注意: 使用快速安装支架时，接近开关的开关距离可能更改。	BST-12B	6947212	用于圆柱螺纹传感器的带塞子的安装夹具；材料：PA6
					
MW12	6945003	用于圆柱螺纹传感器的安装托架；材料：不锈钢 A2 1.4301 (AISI 304)	BSS-12	6901321	用于平滑圆柱型和圆柱螺纹传感器的安装夹具；材料：PP
					
PN-M12	6905309	M12圆柱产品冲撞保护螺母，材质：不锈钢 A2 1.4305 (AISI 303)			
