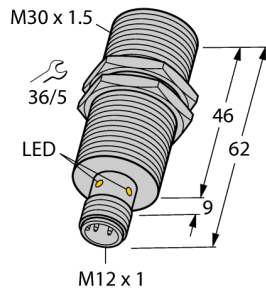


# Inductive Sensor With Extended Switching Distance BI15U-M30-VP44X-H1141



Type	BI15U-M30-VP44X-H1141
ID	1634885

Remark to product	Product discontinued. Please use the alternative product 1634944 with an operating voltage of 10...30 VDC.
-------------------	---------------------------------------------------------------------------------------------------------------

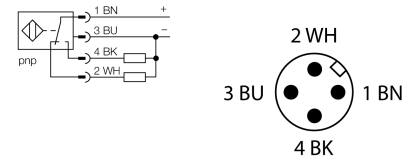
General data	
Rated switching distance $S_n$	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2\%$ of full scale
Temperature drift	$\leq \pm 10\%$
Hysteresis	$\leq \pm 15\%$ , $\leq -25\text{ °C}$ v $\geq +70\text{ °C}$

Electrical data	
Operating voltage	10...55 VDC
Residual ripple	$\leq 10\% U_{s\text{}}$
DC rated operational current	$\leq 200\text{ mA}$
Residual current	$\leq 0.1\text{ mA}$
Isolation test voltage	$\leq 0.5\text{ kV}$
Short-circuit protection	yes/ Cyclic
Voltage drop at $I_n$	$\leq 1.8\text{ V}$
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	4-wire, Complementary contact, PNP
DC field stability	300 mT
AC field stability	300 mT <sub>SS</sub>
Insulation class	□
Switching frequency	1 kHz

Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, LCP
Max. tightening torque of housing nut	75 Nm
Electrical connection	Connector, M12 x 1

- M30 × 1.5 threaded tube
- Chrome-plated brass
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Large switching distance
- Recessed mountable
- DC 4-wire, 10...55 VDC
- Changeover contact, PNP output
- M12 x 1 male connector

### Wiring Diagram



### Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox+ sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	
	LED, Yellow

## Accessories

Type code	Ident no.		Dimension drawing
PN-M30	6905308	Protective nut for M30 x 1 threaded barrel devices; material: Stainless steel A2 1.4305 (AISI 303)	
BST-30B	6947216	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	
QM-30	6945103	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 x 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	
MW-30	6945005	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-30	6901319	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	