

Your Global Automation Partner

TURCK

Uprox[®]3 Factor 1 Sensors



A Global Leader in Industrial Automation

Turck's sensors, connectivity, and fieldbus technology products are built to be the best. As one of the most **prominent** sensor manufacturers **in the world**, we even back our sensors with a **lifetime warranty**. Turck works by bringing **rugged engineering** solutions to your industrial automation applications.

85,000+
SOLUTIONS

50+
YEARS OF INNOVATION

2,000+
EXPERIENCED SALES REPRESENTATIVES

Pioneer in non-contact
sensing technology

Developed innovative **connectivity**
solutions in response to our customers' needs

Recognized the need for advanced **I/O solutions**
in harsh duty environments

**SUPPORT &
DEDICATED SERVICE**

EXTENSIVE WARRANTY



4,000+
APPLICATION EXPERTS

RESPOND
and SOLVE over **1,200** inquiries
per day



Strategically placed manufacturing facilities in the

USA with **28** GLOBAL
SUBSIDIARIES

GLOBAL BUT LOCAL...

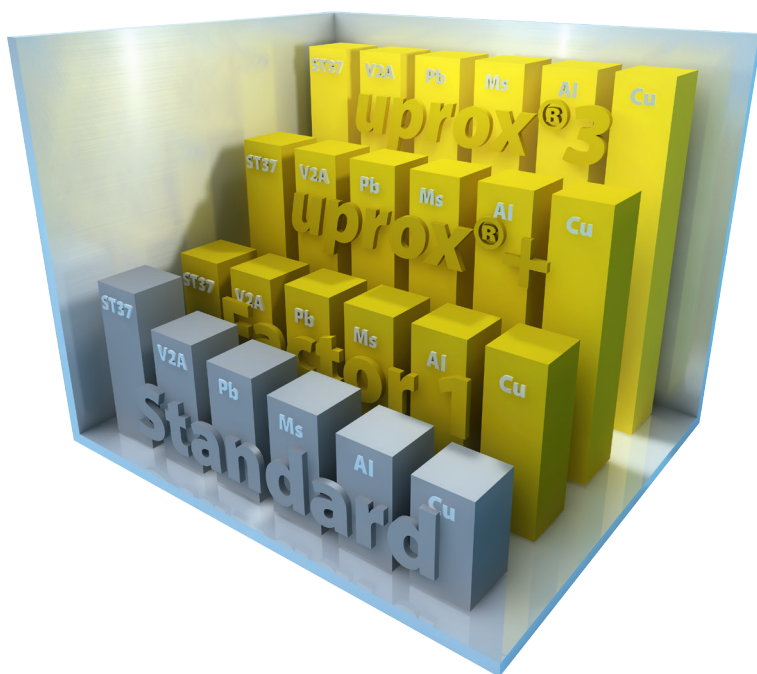
60 representations worldwide

New Uprox3 Series Features Longer Sensing Ranges in More Compact Design

Turck announces the **uprox®3** series of sensors, which offers the largest switching distances of all Factor 1 sensors on the market thanks to an electronic platform that uses the latest chip set and manufacturing technologies. These technologies are a world first, enabling the creation of the Uprox3 Factor 1 sensors in compact, 4 mm smooth barrel, and M5 designs with a 1 mm switching distance, even for flush mounting. Turck has also managed to shrink the previously most compact M8, M12 and M18 designs.

Uprox3 sensors are the third generation of Turck's Uprox Factor 1 sensors. Although the existing Uprox+ sensors offered large switching distances for all metals, these distances are increased by as much as 50 percent in the new sensors. It was previously unattainable to sense 3 mm in the M8 design, 6 mm in M12, 10 mm in M18, and 20 mm in M30. However, thanks to the consistent development of its Uprox technology, Turck has been able to achieve these larger switching distances without any compromises in performance. The Uprox3 sensors still offer outstanding application reliability for demanding sensing tasks, but also allow for the possibility of completely new installations.

Because of their inherent immunity to magnetic fields, the Uprox3 series sensors are suitable for use in many demanding industrial sectors, such as welding for the automotive and metal forming markets. The new Uprox3 series will be available with robust PTFE coated sensors in M8, M12, M18 and M30 designs (**weldguard®** will also be available). Like their predecessors, all Uprox3 sensors offer high EMC stability and flexible mounting, including full flush mounting, as well as precise switch points.



Target Markets

- Automotive
- Factory Automation
- Metal Forming
- Medical Applications
- Packaging
- Any application with multiple metals present

Selling Strengths

- Achieves larger switching distances without any compromises in performance
- Third generation of proven and trusted Uprox series
- Largest switching distances on the market in Factor 1 sensors
- More compact housing than previously available

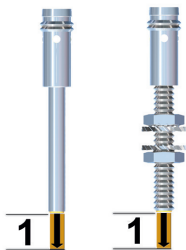
Product Specifications

- Available in 4 mm smooth barrel and M5 designs with a 1 mm switching distance
- Switching distances increased by as much as 50%
- Available in 4, 5, 8, 12, 18, and 30 mm barrels including PTFE coated sensors in M8, M12, M18, and M30 designs (Weldguard will also be available)
- High EMC stability
- Flexible mounting, including flush mounting options

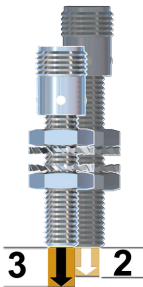
Housing Styles

Highest sensing ranges, completely flush mountable, and Factor 1

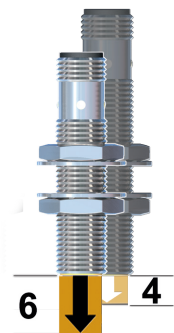
4 mm & M5 housing styles
1 mm sensing range



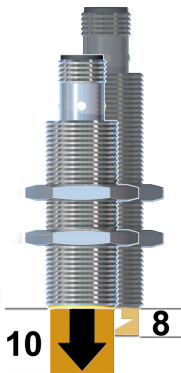
M8 housing style
3 mm sensing range
3 x standard range
50% over *uprox*®+



M12 housing style
6 mm sensing range
3 x standard range
50% over *uprox*®+

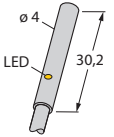
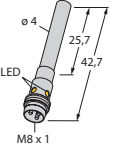
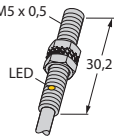
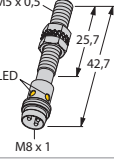
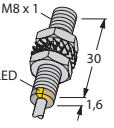
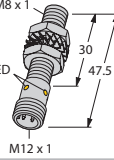
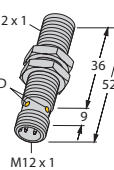
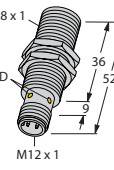
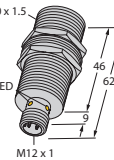


M18 housing style
10 mm sensing range
2 x standard range
25% over *uprox*®+



	BI 1U-EH04 & EG05	BI 3U-EM08	BI 6U-M12	BI10U-M18	BI20U-M30
Versions	EH04 EG05	EM08 EMT08 (PTFE)	M12 MT12 (PTFE)	M18 MT18 (PTFE)	M30 MT30
Sensing range	1 mm	3 mm	6 mm	10 mm	20 mm
Length	30 mm	30 mm	52 mm	52 mm	62 mm
Connection	V1331 Cable	H1341 V1131 Cable 2 m	H1141 Cable 2 m	H1141 Cable 2 m	H1141 Cable 2 m

Product Offering

Housing	Part Number	ID Number	Sensing Range (mm)	Output	Product Features
	BI 1U-EH04-AP6X	S4602112	1	DC 3-wire PNP	- Factor 1 for all metals - Protection class IP68 - Resistant to magnetic fields - Large switching distance - Short circuit protection 2 m potted cable versions also available on M12 and M18 models - PTFE and Weldguard models available upon request
	BI 1U-EH04-AN6X	S4602114	1	DC 3-wire NPN	
	BI 1U-EH04-AP6X-V1331	S4602113	1	DC 3-wire PNP	
	BI 1U-EH04-AN6X-V1331	S4602115	1	DC 3-wire NPN	
	BI 1U-EG05-AP6X	S4602116	1	DC 3-wire PNP	
	BI 1U-EG05-AN6X	S4602118	1	DC 3-wire NPN	
	BI 1U-EG05-AP6X-V1331	S4602117	1	DC 3-wire PNP	
	BI 1U-EG05-AN6X-V1331	S4602119	1	DC 3-wire NPN	
	BI 3U-EM08-AP6X	S4602411	3	DC 3-wire PNP	
	BI 3U-EM08-AN6X	S4602421	3	DC 3-wire NPN	
	BI 3U-EM08-AP6X-H1341	S4602412	3	DC 3-wire PNP	
	BI 3U-EM08-AN6X-H1341	S4602422	3	DC 3-wire NPN	
	BI 6U-M12-VP6X-H1141	M1644805	6	DC 4-wire PNP	
	BI 6U-M12-AN6X-H1141	M1644808	6	DC 3-wire NPN	
	BI 6U-M12-AP6X-H1141	M1644810	6	DC 3-wire PNP	
	BI10U-M18-VP6X-H1141	M1644844	10	DC 4-wire PNP	
	BI10U-M18-AP6X-H1141	M1644830	10	DC 3-wire PNP	
	BI10U-M18-AN6X-H1141	M1644847	10	DC 3-wire NPN	
	BI20U-M30-AP6X-H1141	M1644881	20	DC 3-wire PNP	
	BI20U-M30-AN6X-H1141	M1644888	20	DC 3-wire NPN	

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28 subsidiaries and over
60 representations worldwide!

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