Twice as good: inductive sensors with analogue output and IO-Link.

Inductive sensors

High-precision distance measurement for early diagnosis of mechanical changes.

Distance measurement and switch using only one unit.

- **Flexible use due to adaptable output range.**
- **Measured value transmission without any loss via IO-Link.**
- **More functionality with full compatibility using standard input devices.**

Prepared for plant retrofit

The new inductive analogue sensors are fully compatible for use in existing plants. A wide range of functions and information are provided additionally via IO-Link.

Increased measurement accuracy with IO-Link

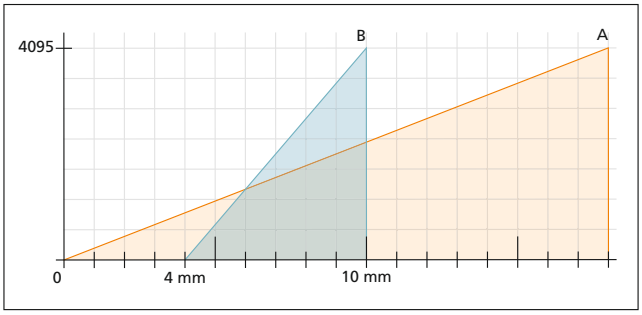
On the one hand, conversion losses or electromagnetic interference are avoided thanks to digital communication. On the other hand, the detection range of the sensor is freely scalable via IO-Link – allowing also adjustment of the switch-on curve. Thus, the resolution can be specifically maximised whenever tiny changes in distance, for example caused by first stages of wear, need to be detected quickly. When connected to an ERP, the digital data can be used to implement automated, demand-based maintenance.

Type	Total length [mm]	Measuring range [mm]	Installation	Output signal	Protection rating	Order no.
M12 connector · analogue output programmable/ IO-Link						
M12	70	0.2...2	flush	4...20 mA	IP 65...IP 69K	**IF6028**
M12	70	0.2...2	flush	0...10 V	IP 65...IP 69K	**IF6029**
M12	70	0.4...4	non flush	4...20 mA	IP 65...IP 69K	**IF6030**
M12	70	0.4...4	non flush	0...10 V	IP 65...IP 69K	**IF6031**
M18	60	0.8...8	non flush	4...20 mA	IP 65...IP 69K	**IG6083**
M18	60	0.8...8	non flush	0...10 V	IP 65...IP 69K	**IG6084**
M18	60	0.5...5	flush	4...20 mA	IP 65...IP 69K	**IG6086**
M18	60	0.5...5	flush	0...10 V	IP 65...IP 69K	**IG6087**
M30	65	1...15	non flush	4...20 mA	IP 65...IP 69K	**II6913**
M30	65	1...15	non flush	0...10 V	IP 65...IP 69K	**II5914**
M30	65	1...10	flush	0...10 V	IP 65...IP 69K	**II5917**
rectangular	40 x 40 x 54	1...15	flush	4...20 mA	IP 67	**IM5139**
rectangular	40 x 40 x 54	1...15	flush	0...10 V	IP 67	**IM5140**
rectangular	40 x 40 x 54	1...26	non flush	4...20 mA	IP 67	**IM5141**
rectangular	40 x 40 x 54	1...26	non flush	0...10 V	IP 67	**IM5142**
rectangular	40 x 40 x 54	3...35	non flush	0...10 V	IP 67	**IM5143**
rectangular	40 x 40 x 54	3...35	non flush	0...10 V	IP 67	**IM5175**

Accessories

Type	Description	Order no.
Installation		
	Angle bracket for M12 design, stainless steel	**E10735**
	Angle bracket for M18 design, stainless steel	**E10736**
	Angle bracket for M30 design, stainless steel	**E10737**
IO-Link		
	1-port IO-Link master (connects IO-Link sensors to the PC via USB)	**AL1060**
	Memory plug, parameter memory for IO-Link sensors	**E30398**
	IO-Link master EtherNet/IP, 4-port	**AL1320**
	**moneo|configure SA** (Stand-alone) licence, software for online and offline parameter setting of IO-Link devices including maintenance and support until the end of the following year	**QMP010**

Focus area with highest resolution



A = detection zone, B = focus zone

In the case of measuring sensors, the 4096 measuring points (i.e. the resolution) extend over the entire detection zone (A).

With the new analogue sensors, however, this resolution can be (e.g.) specifically maximised in any focus zone where minimal changes in distance need to be detected quickly.
For this purpose, all available 4096 measuring points are "placed" in the particular zone to be considered.

In present example, this results in the highest possible resolution of 628 measuring points per mm. This precise measurement accuracy not only increases process reliability, but can also prevent rejects, thus allowing substantial savings.