



Turning the tube into a counter

Inductive ring sensors monitor material flow in feeding technology

- Reliable detection of even the smallest metallic objects
- Very short response time
- Dynamic or static operating principle
- Sensitivity, pulse stretching and output function can be adjusted
- Internal piece counter can be queried via IO-Link



IP67



ifm – close to you!

Diameter [mm]	Electrical design (default setting)	Order no.	
		Static measuring principle (default setting)	Dynamic measuring principle (default setting)
10	PNP	I7R201	I7R203
10	NPN	I7R202	I7R204
15	PNP	I7R205	I7R207
15	NPN	I7R206	I7R208
20	PNP	I7R209	I7R211
20	NPN	I7R210	I7R212
25	PNP	I7R213	I7R215
25	NPN	I7R214	I7R216
50	PNP	I7R217	–

360° monitoring of small parts

Inductive ring sensors are used in feeding technology to detect metallic parts such as screws or nuts as they are transported through tubes. Objects are identified at speeds of up to 35 m/s, regardless of their size. This enables precise counting and efficient flow control. Blockages, standstills or incorrect conveyance (no part or several parts at once) can be reliably detected.

Static and dynamic applications

Ring sensors operate either statically or dynamically: Static sensors detect permanently present metal parts, e.g. for level monitoring. Dynamic sensors only react to passing parts and are suitable for counting tasks or flow control. Both versions ensure a trouble-free production process in assembly systems.

IO-Link functions

The sensitivity can be conveniently adjusted using a potentiometer. Extended parameters such as pulse stretching, electrical design (PNP/NPN) and output function (NO/NC) can be configured via IO-Link. The sensor also offers IO-Link-specific features such as piece counting and diagnostic functions.

Technical data		
Operating voltage	[V DC]	10...30
Output function		NO (default setting) / NC
Pulse stretching	[ms]	10...150
Ambient temperature	[°C]	-25...70
Protection rating		IP67

BEST FRIENDS



IO-Link masters
Field-compatible masters
with PROFINET interface



SD compressed air meter
Detects flow, consumption,
pressure and temperature



**OGD photoelectric
distance sensor**
Precise object detection using
time-of-flight measurement



For further technical
details, please visit:
ifm.com/fs/I7R201