

Small proximity switches with long sensing ranges.

6 different designs:
 \varnothing 3, \varnothing 4, M5, \varnothing 6.5, M8, 5 x 5.



- Total length from 19 to 41 mm, where space is limited.
- Two different connection technologies: M8 connector and cable.
- M8 connector for fast mounting.
- Long sensing range for more plant uptime.
- Wide temperature range and high switching frequencies.

Position sensors

Increased sensing range

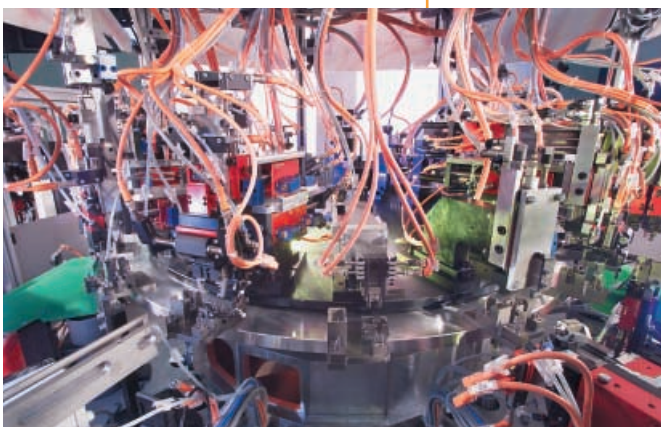

 Robust M8 connector

IP 67


 Vibration and shock resistant

High switching frequency

Stainless steel



Short total length

The total length of the IT cable version is only 19 mm. Thus the sensor is also suitable for applications where space is extremely limited.

M8 connector

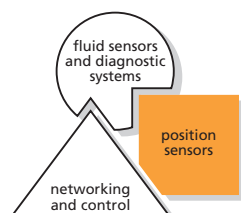
The connection is made via a robust M8 connector with integrated, clearly visible 4-port LED for indication of the output status.

High switching frequency and wide temperature range

The small sensors reach switching frequencies of 5000 Hz – and this over the whole temperature range.

Increased tightening torque

The stainless steel housing allows a tightening torque during the mounting which is up to two times higher than in the case of standard sensors.



Inductive, capacitive and magnetic proximity switches

Applications:
Application in handling and automatic assembly machines

Position sensors

Electrical design	DC PNP								
Connection	3-wire								
Type	Ø 3	Ø 4	M5	Ø 6.5	5 x 5	M8			
Nominal sensing range s_n [mm]	1 nf	1.5 nf	1.5 nf	2 f	0.8 f	1.5 f			
Output	— / —								
Order no.	IZ5048	IZ5047	IZ5046	IY5048	IY5049	IT5039	IL5022	IE5347	IE5348
Operating voltage [V]	10...30 DC								
Current rating [mA]	100	100	100	100	100	200	100	200	200
Short-circ./ rev. pol. protection	•								
Overload protection	—	•	•	•	—	—	—	—	—
Voltage drop [V]	< 1.5	< 3	< 3	< 3	< 3	< 2.5	< 1	< 1.5	< 1.5
Current cons. at 24 V [mA]	< 12	< 10	< 10	< 10	< 10	< 20	< 10	< 10	< 10
Output status indication LED	red	red	red	red	red	—	red	red	red
Switching frequency [Hz]	5000	1800	1800	1800	1800	1000	1000	1000	1000
Operating temperature [°C]	0...70	-25...70	-25...70	-25...70	-25...70	-25...70	-25...70	-25...70	-25...70
Protection	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67	IP 65	IP 67	IP 67
Housing material	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel	stainless steel	aluminium anodized	stainless steel	stainless steel
Sensing face	POM	POM	POM	POM	POM	PBTP	POM	PBTP	PBTP
Total length [mm]	27	27	41	41	27	19	25	32.5	20
Connection	PVC cable	PVC cable	M8 connector	M8 connector	PVC cable	PVC cable	PVC cable	M8 connector	PVC cable
Wiring diagram									

Sockets

Socket type	Design	Order no.
ifm	2 m (PUR), M8 angled, with LED	E11492
ifm	5 m (PUR), M8 angled, with LED	E11493
ifm	2 m (PUR), M8 straight, without LED	E11486
ifm	5 m (PUR), M8 straight, without LED	E11487

Accessories

Description	Order no.
Mounting clamp for type Ø 4, TPE	E10204
Mounting clamp for type Ø 6.5, PPE	E10014
Mounting clamp for type M8, aluminium, black anodized	E10221
Angle bracket for type M8, stainless steel	E10734

Dimensions

