ifm electronic

Compact ultrasonic sensors

TOP PRODUCT

Object detection for long ranges and difficult surfaces

- **Robust high-grade stainless steel housing for demanding applications**
- **Sensing range up to 1.2 m in M18 cube design and 2.2 m in M18 design**
- **The vibrating sound transducer reduces the deposit of dirt**
- **Retro-reflective operation for orientation-independent object detection**
- **Easy setting via teach button or wire teach**

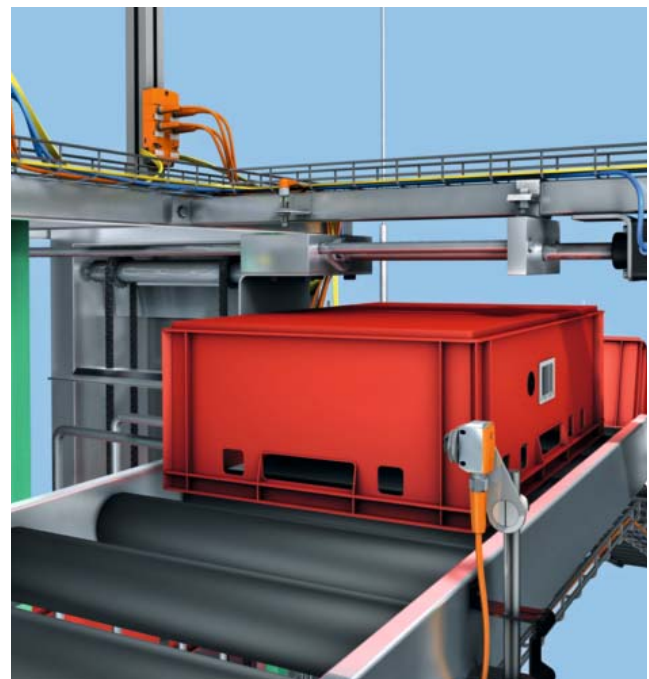Ultrasound | High-grade stainless steel | TEACH-IN

The alternative for difficult surfaces

Ultrasonic sensors transmit and receive sound waves in the ultrasonic range. The object to be detected reflects the sound waves and the distance information is determined via time of flight measurement. As opposed to photoelectric sensors colour, transparency or the object's surface shine do not play a role. Blister packages in packaging technology or transparent plastic bowls in the food industry, for example, can be reliably detected.

High performance

The ifm ultrasonic sensors in M18 design provide a particularly small blind zone and long sensing ranges which are usually only achieved by sensors of a considerably larger design.
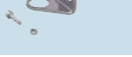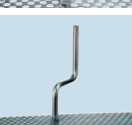
The sensors operate reliably with heavy soiling so that they can be used in applications in which photoelectric sensors meet their limits.

Position sensors
Ultrasonic sensors

ifm electronic

Type	Housing length/ dimensions [mm]	Setting	Output	Order no.	Order no.	Order no.	Order no.	Order no.
Diffuse-reflection sensor · 3-wire DC				**300 mm***	**800 mm***	**1200 mm***	**1600 mm***	**2200 mm***
M18	60	Wire	PNP	UGT500	UGT503	UGT506	–	–
M18	60	Wire	NPN	UGT521	UGT522	UGT523	–	–
M18	60	Wire	4…20 mA	UGT501	UGT504	UGT507	–	–
M18	60	Wire	0…10 V	UGT502	UGT505	UGT508	–	–
Diffuse-reflection sensor · 4-wire DC				**300 mm***	**800 mm***	**1200 mm***	**1600 mm***	**2200 mm***
M18 Cube	53 x 20 x 38	Pushbutton	PNP + 4…20 mA	UGT580	UGT582	UGT584	–	–
M18 Cube	53 x 20 x 38	Pushbutton	PNP + 0…10 V	UGT581	UGT583	UGT585	–	–
M18 Cube	53 x 20 x 38	Pushbutton	NPN + 4…20 mA	UGT586	UGT588	UGT590	–	–
M18 Cube	53 x 20 x 38	Pushbutton	NPN + 0…10 V	UGT587	UGT589	UGT591	–	–
Diffuse-reflection sensor · 5-wire DC, IO-Link				**300 mm***	**800 mm***	**1200 mm***	**1600 mm***	**2200 mm***
M18	98	Pushbutton	2 x PNP	–	–	–	UGT509	UGT512
M18	98	Pushbutton	PNP + 4…20 mA	–	–	–	UGT510	UGT513
M18	98	Pushbutton	PNP + 0…10 V	–	–	–	UGT511	UGT514
Diffuse-reflection sensor · 5-wire DC				**300 mm***	**800 mm***	**1200 mm***	**1600 mm***	**2200 mm***
M18	98	Pushbutton	2x NPN	–	–	–	UGT515	UGT518
M18	98	Pushbutton	NPN + 4…20 mA	–	–	–	UGT516	UGT519
M18	98	Pushbutton	NPN + 0…10 V	–	–	–	UGT517	UGT520
Retro-reflective sensor · 4-wire DC				**300 mm***	**800 mm***	**1200 mm***	**1600 mm***	**2200 mm***
M18	98	Pushbutton	PNP	–	–	–	UGR500	UGR501
M18	98	Pushbutton	NPN	–	–	–	UGR502	UGR503

* Max. range

Accessories

Type	Description	Order no.
	Mounting set for clamp mounting, diecast zinc, Ø 12 mm	E20720
	Mounting set for clamp mounting, stainless steel, Ø 12 mm	E21206
	Mounting set for clamp mounting, diecast zinc, Ø 12 mm	E20721
	Mounting set for clamp mounting, stainless steel, Ø 12 mm	E21207
	Rod, 100 mm, Ø 12 mm, M10 thread, stainless steel	E20938
	Rod, 200 mm, Ø 10 mm, M10 thread, stainless steel	E20940
	Cube for mounting on an aluminium profile, M10 thread, diecast zinc	E20951

Common technical data

Operating voltage	[V DC]	10...30
Current rating Switching output	[mA]	100
Operating temperature range	[°C]	-20...70
Temperature compensation		•
Protection		IP 67
Connection		M12 connector
Status indications	LED	yellow
Echo	LED	green

Connection technology

Type	Description	Order no.
	Socket, M12, 4-pole 2 m orange, PVC cable	EVT064
	Socket, M12, 4-pole 5 m orange, PVC cable	EVT001
	Socket, M12, 4-pole 2 m black, PUR cable	EVC001
	Socket, M12, 4-pole 5 m black, PUR cable	EVC002
	Socket, M12, 4-pole 2 m black, PUR cable	EVC004
	Socket, M12, 4-pole 5 m black, PUR cable	EVC005

ifm – close to you!

For further technical details please visit: www.ifm.com