

When oil is all over – the new O6 coolant



Photoelectric sensor for use with coolants / oils

- Long life due to resistant materials
- Diffuse reflection sensor with reliable background suppression
- Range is independent of the object colour
- Design with 4-pole M8 connector
- Stainless steel housing with protection rating IP 68 / IP 69K

High-grade stainless steel

Visible red light

IP 67
IP 68
IP 69 K



The optimum choice in metalworking

The new high-performance O6 coolant sensors are especially suited for applications in metal working. Other applications are conveyor technology and the automotive industry.

The potentiometers are fitted with a double seal. The front pane is embedded flush. Viton which is proven in demanding applications was chosen as the sealing material. The transparent black housing cover ensures that, even in bright lighting conditions, the LEDs are highly visible.

Best optical performance

The diffuse reflection sensors provide reliable background suppression, even in cases of highly reflective backgrounds and objects like the oily and greasy metal surfaces of the parts to be worked. The sensing range is independent of the type and colour of the object to be detected.

The new O6 coolant reliably performs its duty in applications with coolants / oils.



Range [mm]	Spot diameter [mm]	Connection M8 connector	Type of light, wave length [nm]	Current consumption [mA]	Order no.	Order no.
Diffuse reflection sensor with background suppression · 3-wire DC					NPN	PNP
2...200	8*	4-pole	Red light, 633	22	O6H401	O6H400
Diffuse reflection sensor · 3-wire DC					NPN	PNP
5...500	15*	4-pole	Red light, 633	16	O6T401	O6T400
Retro-reflective sensor with polarisation filter · 3-wire DC					NPN	PNP
50...5000	150**	4-pole	Red light, 645	12	O6P401	O6P400
Through-beam sensor – transmitter · 2-wire DC						
0...10000	300*	4-pole	Red light, 645	11	O6S400	
Through-beam sensor – receiver · 3-wire DC					NPN	PNP
0...10000	–	4-pole	Red light, 645	7	O6E401	O6E400

* at maximum range, ** referred to prismatic reflector Ø 80 mm





Accessories

Type	Description	Order no.
Mounting accessories		
	Mounting set for clamp mounting, stainless steel, Ø 10 mm	E21272
	Mounting set for clamp mounting, stainless steel, Ø 12 mm	E21275
	Angle bracket for free-standing mounting, stainless steel	E21271
	Protective bracket, stainless steel	E21273
	Rod, 120 mm, Ø 10 mm, M8 thread, stainless steel	E21081
	Rod, 100 mm, Ø 12 mm, M10 thread, stainless steel	E20938
Prismatic reflectors		
	Ø 50 mm, plastic	E20956
	Ø 80 mm, plastic	E20005
	48 x 48 mm, PMMA, ABS	E20744
	95 x 95 mm, plastic	E20454
Power supplies		
	Plastic housing, 24 V DC, 2.5 A	DN1031
	Metal housing, 24 V DC, 3.3 A	DN4011

Common technical data

Operating voltage	[V DC]	10...30
Protection rating, protection class		IP 65, IP 67, IP 68, IP 69 K, III
Switching frequency	[Hz]	1000
Switching status indication	LED	Yellow
Operation	LED	Green
Current rating	[mA]	100
Voltage drop	[V]	< 2.5
Short-circuit protection, pulsed		•
Reverse polarity protection / overload protection		• / •
Ambient temperature	[°C]	-25...60
Materials	Housing Lens Seal	High-grade stainless steel (316L/1.4404), PPSU PMMA FKM

Connection technology

Type	Description	Order no.
	Socket, M8, 4-pole 2 m black, PUR cable	EVC153
	Socket, M8, 4-pole 5 m black, PUR cable	EVC154
	Socket, M8, 4-pole 2 m black, PUR cable	EVC150
	Socket, M8, 4-pole 5 m black, PUR cable	EVC151