

Description

- Operation mode and max sensing range:
Thru-beam: 0-20 m
Diffuse proximity: 0-1 m
Retro reflective: 0,1-3 m
Fibre: Dependent on fibre optic
- IO-Link communication interface
- PC software for parameter configuration and diagnostics with optional USB-IO-Link Master 02
- M8 or M12 plug connection
- Sensitivity adjustment via potentiometer
- Switch selectable light or dark function
- Power and output indicators
- High tolerance to hostile environments
- 10-30 V dc supply voltage
- 4 pin, IO-Link / push-pull and NPN or PNP output
- Test input



The 7000-IO series consists of a self-contained transmitter SMT, and a receiver SMR, which are to be used in thru-beam mode, an SMP for diffuse proximity, SMRR for retro reflective and an SMPF for use with fibre optic cables.

The complete series is available with a 10-30 V dc supply voltage. All sensors offer a combined IO-link and push-pull output, together with a supplementary NPN or PNP output.

The SM 7000-IO is equipped with an IO-link communication interface which allows a variety of process parameters and settings to be configured and monitored, which includes: sensitivity adjustment, teach-in function, automatic gain adjustment, output mode, on/off time

delay, one-shot timer, hysteresis. Sensitivity adjustment and light or dark function may also be manually configured via integral potentiometers.

The SMR is available with either a 0.5 ms response time and a 7 metre range or with a 2 ms response time and a 20 metre range. The test input in the SMT is intended to be used for disabling or enabling the transmitting power temporarily for test purpose or for multiplexing applications.

The complete series is protected against reverse polarity of power supplies, control input and output signals. The output is protected against short circuit and inductive loads.

Technical Data						
	SMT	SMR		SMP	SMPF	SMRR
		7x07	7x20			
Supply voltage	10-30 V dc					
Voltage ripple	Max. 15 %					
Reverse polarity protected	Yes					
Short circuit protected	-	Yes				
Current consumption	25 mA	30 mA				
Maximum output load	-	200 mA / 30 V dc				
Maximum residual voltage	-	2 V				
IO-Link communication	Yes					
Maximum operation frequency	-	1000 Hz	250 Hz			
Response time t_{ON} / t_{OFF}	-	0,5 ms / 0,5 ms	2 ms / 2 ms			
Power on indicator	Green LED					
Output indicator	-	Yellow LED				
Hysteresis	-	Approx. 15-20 %		Approx. 3-10 %		
Light source	Infrared (880 nm)	-		Infrared (880 nm)		
Opening angle	-	+/- 6°		+/- 4°		
Emission angle	+/- 2°	-				
Housing material	Sensor housing	Stainless Steel (AISI 316 / 1.4401) or Polycarbonate				
	Front lens	Polycarbonate				

