

Photoelectric sensors

OR18 light barriers and diffuse sensors

- Robust, cylindrical M18 sensor
- Ranges up to 55 m
- Laser class 1 sensors for detection of small objects
- Detection of semi-transparent and shiny objects with fixed focus types
- Short response time <0,34 ms
- *SmartReflect*[®] – light barrier without a reflector in M18 housing



OR18.GP



OR18.GR



OR18.GR.F



OR18.SP

function principle	Diffuse sensors with background suppression	Diffuse sensors with background suppression	Diffuse sensors with background suppression	<i>SmartReflect</i> [®] – light barrier without a reflector
specific features	■ Wear-free qTeach		■ Fixed Focus	■ Wear-free qTeach
dimensions	M18 × 65 mm	M18 × 71,9 mm	M18 × 48,3 mm	M18 × 65 mm
light sources / ranges				
Baumer PinPoint LED	45 ... 200 mm			55 ... 300 mm
standard LED		40 ... 120 mm	50 mm	
infrared LED				
laser				
response time	< 0,49 ms	< 1 ms	< 0,5 ms	< 0,49 ms
output	push-pull PNP NPN	PNP NPN	PNP NPN	push-pull PNP NPN
connection types	connector M12	connector M12	cable 2 m flylead connector M12	connector M12
setting	qTeach external teach-in	potentiometer		qTeach external teach-in
housing material	brass nickel plated	plastic (ABS)	plastic (ABS)	brass nickel plated
operating temperature	–25 ... +60 °C	–25 ... +55 °C	–25 ... +55 °C	–25 ... +60 °C
protection class	IP 67	IP 67	IP 67	IP 67



OR18.ZI



OR18.ZL

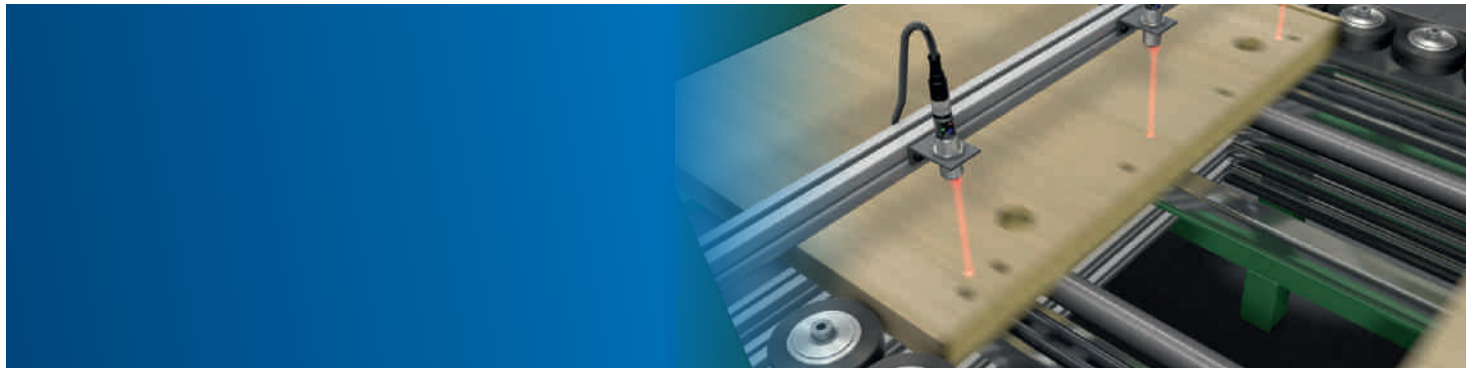


OR18.RR



OR18.RL

function principle	Diffuse sensors with intensity difference	Diffuse sensors with intensity difference	Retro-reflective sensors	Retro-reflective sensors
specific features		■ Laser class 1		■ Laser class 1
dimensions	M18 × 44,8 mm M18 × 67,2 mm	M18 × 77 mm M18 × 81,5 mm	M18 × 44,8 mm M18 × 67,2 mm	M18 × 77 mm M18 × 81,5 mm
light sources / ranges				
Baumer PinPoint LED				
standard LED			3,5 m	
infrared LED	0 ... 80 mm 0 ... 300 mm 0 ... 800 mm			
laser		10 ... 300 mm		15 m
response time	< 1 ms	< 0,34 ms	< 1 ms	< 0,34 ms
output	PNP NPN	PNP NPN	PNP NPN	PNP NPN
connection types	cable 2 m flylead connector M12 connector M12	cable 2 m connector M12	cable 2 m flylead connector M12 connector M12	cable 2 m connector M12
setting	potentiometer	potentiometer	potentiometer	potentiometer
housing material	plastic (ABS)	brass nickel plated	plastic (ABS)	brass nickel plated
operating temperature	-25 ... +55 °C	-10 ... +55 °C	-25 ... +55 °C	-10 ... +55 °C
protection class	IP 67	IP 67	IP 67	IP 67



OR18.RR.T



OR18.EI
OR18.TI



OR18.TL (emitter)
OR18.EL (receiver)

function principle	Retro-reflective sensors for transparent objects	Through beam sensors	Through beam sensors
specific features			■ Laser class 1
dimensions	M18 × 67,2 mm	M18 × 44,8 mm M18 × 67,2 mm	M18 × 77 mm M18 × 81,5 mm
light sources / ranges			
Baumer PinPoint LED			
standard LED	500 mm		
infrared LED	13 m		
laser	55 m		
response time	< 1 ms	< 2 ms	< 0,34 ms
output	PNP NPN	PNP NPN	PNP NPN
connection types	connector M12	cable 2 m flylead connector M12 connector M12	cable 2 m connector M12
setting	potentiometer	potentiometer	potentiometer
housing material	plastic (ABS)	plastic (ABS)	brass nickel plated
operating temperature	-25 ... +55 °C	-25 ... +55 °C	-10 ... +55 °C
protection class	IP 67	IP 67	IP 67

Photoelectric sensors

OR18 light barriers and diffuse sensors in stainless steel housing

- Robust, cylindrical M18 sensor in stainless steel
- IP 69K washdown design
- Ranges up to 13 m
- Short response time <1 ms



OR18W.GR



OR18W.ZI



OR18W.RR



OR18W.RR.T

function principle	Diffuse sensors with background suppression	Diffuse sensors with intensity difference	Retro-reflective sensors	Retro-reflective sensors for transparent objects
dimensions	M18 × 71,9 mm	M18 × 67,2 mm	M18 × 67,2 mm	M18 × 67,2 mm
light sources / ranges	Baumer PinPoint LED			
standard LED	40 ... 120 mm		3,5 m	500 mm
infrared LED		0 ... 300 mm 0 ... 800 mm		
laser				
response time	< 1 ms	< 1 ms	< 1 ms	< 1 ms
output	PNP NPN	PNP NPN	PNP NPN	PNP NPN
connection types	connector M12	connector M12	connector M12	connector M12
setting	potentiometer	potentiometer	potentiometer	potentiometer
housing material	stainless steel	stainless steel	stainless steel	stainless steel
operating temperature	−25 ... +55 °C	−25 ... +55 °C	−25 ... +55 °C	−25 ... +55 °C
protection class	IP 67/69K	IP 67/69K	IP 67/69K	IP 67/69K



OR18W.TI (emitter)
OR18W.EI (receiver)

function principle	Through beam sensors
dimensions	M18 × 67,2 mm
light sources / ranges	
	Baumer PinPoint LED
	standard LED
infrared LED	13 m
laser	
response time	< 2 ms
output	PNP NPN
connection types	connector M12
setting	potentiometer
housing material	stainless steel
operating temperature	-25 ... +55 °C
protection class	IP 67/69K

OR18 accessories

- Reflectors and reflective tapes
- Cable, adapter and other mounting accessories



cable sockets



cable sockets for washdown



connecting cables and adapters



Sensofix series 18

accessories

characteristics

- 3-, 4- and 5-pole versions
- Straight or angled
- Screened or unshielded
- Sheath materials PUR
- Various lengths available up to 25 m
- IP 67

- For food & beverage industry applications
- 4 pin unshielded female versions
- Cable coating PP
- Cap nut material in stainless steel V4A
- Ecolab certified and FDA conform
- Various lengths available up to 25 m
- Follows EHEDG design requirements
- IP 67/68/69K

- M8 and M12
- 3- or 4-pole versions
- Straight or angled
- Sheath materials PUR
- Various lengths available up to 10 m
- IP 67

- Sensofix Mounting sets
- Robust metal version
- Easy, flexible alignment



mounting brackets



mounting bracket for adjustment



reflectors



reflective tapes

accessories

characteristics

- Suitable mounting brackets available for various installation conditions
- High quality metal

- Versions in plastic and high quality metal
- Easy, precise alignment

- Self-adhesive or screw-mount reflectors
- Circular or rectangular
- All-metal reflectors
- Ecolab certified types, resistant to cleaning agents

- Self-adhesive tapes
- Various widths and lengths