

Product Data

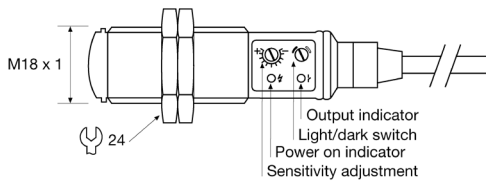
Electrical Data	
Supply Voltage	10-30 V dc
Voltage ripple	+/- 15%
Reverse polarity protected	Yes
Short circuit protected	Yes
Current consumption	20 mA
Max. output load	120 mA / 30 V dc

Environmental Data	
Temperature, operation	-20 to +60 °C
Sealing class	IP 67
Approvals	UK CA CE

Available Models					
	Model	Supply Voltage	Output	Output Mode	Sensing Range
Retro reflective	SMRR 7600	10-30 V dc	NPN / PNP	Light/dark	0-3 m*

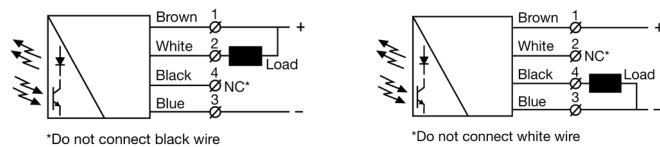
* Note: Measured against Ø85 mm retro-reflector.

Illustration



Connection

Wiring Diagrams

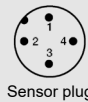
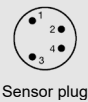


SMRR 7600
Load as NPN

SMRR 7600
Load as PNP

Connection Wires/Pins

Cable	4 pin, M8 plug	4 pin, M12 plug
Supply + / Brown	Pin 1	Pin 1
Supply - / Blue	Pin 3	Pin 3
Output / White	Pin 2	Pin 2
Output / Black	Pin 4	Pin 4



Mounting & Alignment

Mounting & Alignment	
1	Position the sensor pointing at a retro-reflector.
2	Align by moving sensor horizontally and vertically until the output status changes when aiming at retro-reflector and when no object is present (refer to Output Logic table).
3	Fasten the sensor securely using the enclosed locking nuts and/or a mounting bracket. Avoid acute angles on cable close to sensor.

Adjustments

Output Mode Selection

The output mode can be selected via an integral light/dark switch. Refer to Output Logic table for output mode reference.

Light Operated (N.C.)	Enables the output to be inactive when there is an object present.	Turn switch to full clockwise position
Dark Operated (N.O.)	Enables the output to be active when there is an object present.	Turn switch to full counter clockwise position

Output Logic

Detection	Output mode	Output status	Yellow LED
Object present	Dark operated (N.O.)	Closed	On
	Light operated (N.C.)	Open	Off
Object absent	Light operated (N.C.)	Closed	On
	Dark operated (N.O.)	Open	Off

Sensitivity Adjustment

Maximum sensitivity can be used for most applications and is advised for applications with contaminated environments. Increase the sensitivity to maximum by turning the potentiometer to full clockwise position.

Sensitivity adjustment may be required in applications where objects to be detected are small or translucent. Proceed with the following steps:

1	Start with the sensitivity at maximum by turning the potentiometer to full clockwise position.
2	Select target object with smallest dimensions and most translucent surface.
3	Place target object between the sensor and retro-reflector. If the output status changes, adjustment is not required. If the output has not changed proceed to step 4
4	Decrease the sensitivity by turning the potentiometer counter clockwise until the output changes. If the output has not changed, attempt to move the sensor and retro-reflector further apart or angle the sensor/retro-reflector. Then repeat procedure from step 1.
5	Remove target object. Check the output status has changed.



Warning

This device is not to be used for Personnel Protection in Machine Guarding Safety applications. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel machine guarding stand-alone safety applications.