



- *Background suppression adjustable from 2 to 10 cm*
- *Axial or radial optics*
- *Cable or M12 connection*
- *Impermeable and sturdy plastic housing*

SDS5 SERIES

The M18 tubular sensors of the **SDS5** series, thanks to the background suppression proximity optic system, precisely detect all objects inside the set operating distance, independently from rear fixed or moving objects.

The photoemitter is a red light LED that generates a visible circular spot; the receiver is a PSD (Position Sensitive Device) photoelement sensitive to the incident light's position. A good vibration immunity and a low detection difference between lighter or darker objects are obtained as there are no moving parts for the optic triangulation.

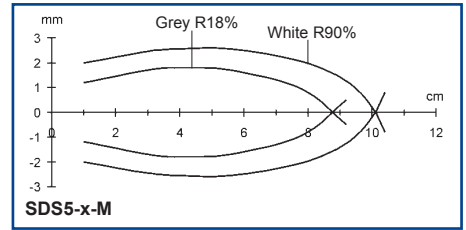
Two LED indicators are visible on the sensor's bottom, a yellow one indicating the output status and a green one signalling switching stability; the background suppression distance setting is precisely obtained by means of a 4-turn trimmer.

The normally open output and the normally closed output are both available on the different cable or M12 connector poles.

TECHNICAL DATA

Power supply:	10 ... 30 Vdc, reverse polarity protection
Consumption:	30 mA max.
Light emission:	red LED 660 nm
Spot dimension:	Ø 15 mm (at 100 mm) for radial vers. Ø 10 mm (at 100 mm) for axial vers.
Background suppression op. distance:	2 ... 10 cm
Setting:	multi-turn trimmer
Indicators:	yellow OUTPUT LED green STABILITY LED
Output type:	NO-NC PNP or NPN, open collector
Saturation voltage:	2 V max. (PNP vers.) 1 V max. (NPN vers.)
Output current:	100 mA max., short-circuit protection
Response time:	2.5 ms max.
Switching frequency:	200 Hz max.
Operating mode:	light (NO) dark (NC)
Connection:	M12 4-pole connector 2 m Ø 5 mm cable
Electrical protection:	class 2
Mechanical protection:	IP67
Housing material:	ABS housing, optic head in PVC
Lens material:	glass
Weight:	30 g max. (connector vers.) 100 g max. (cable vers.)
Operating temperature:	-25 ... +55°C
Storage temperature:	-25 ... +70°C
Reference normative:	EN 60947-5-2
Certifications:	CE

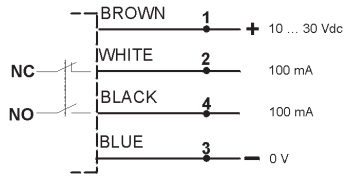
DETECTION DIAGRAMS



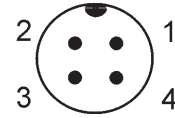
The operating distances indicate the detection distance with excess gain 2.

The detection diagrams indicate the typical operating distance with excess gain 1.

CONNECTIONS



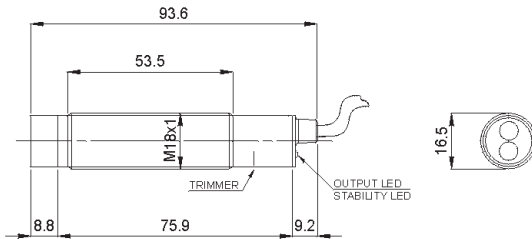
M12 CONNECTOR



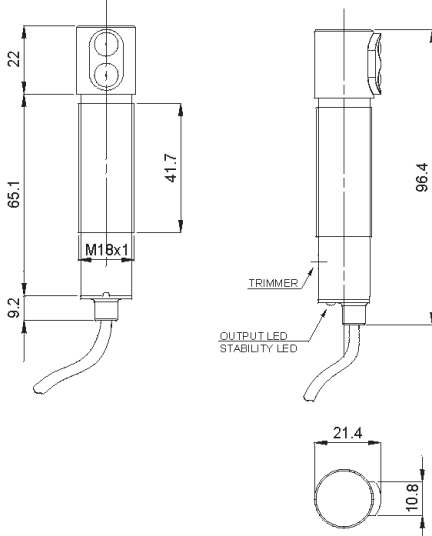
DIMENSIONS

CABLE VERSIONS

AXIAL VERSION

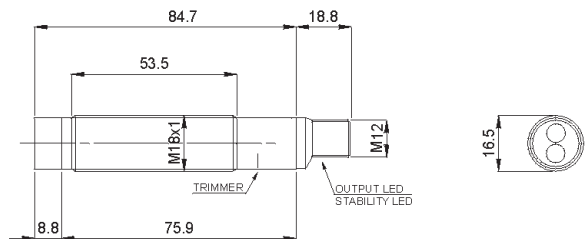


RADIAL VERSION

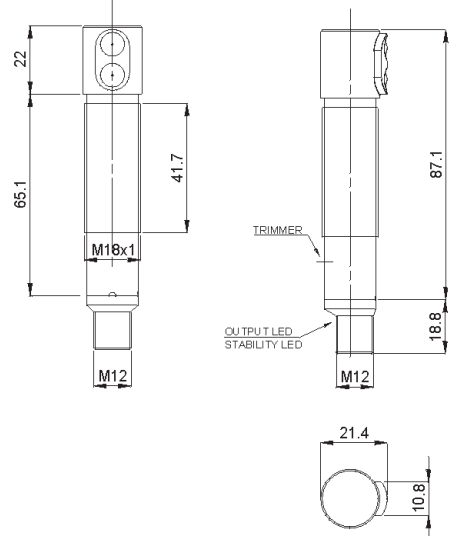


M12 CONNECTOR VERSIONS

AXIAL VERSION



RADIAL VERSION





MODELS

MODEL	OPTICS	CONNECTION	OUTPUT	CODE N°
SDS5-5-M10-75	radial	2 m cable	NPN	952201000
SDS5-5-M10-95	radial	2 m cable	PNP	952201010
SDS5-5-M10-77	radial	M12 connector	NPN	952201020
SDS5-5-M10-97	radial	M12 connector	PNP	952201030
SDS5-5-M10-70	axial	2 m cable	NPN	952201040
SDS5-5-M10-90	axial	2 m cable	PNP	952201050
SDS5-5-M10-72	axial	M12 connector	NPN	952201060
SDS5-5-M10-92	axial	M12 connector	PNP	952201070

ACCESSORIES

MODEL	DESCRIPTION	CODE N°
SP-40	fixed support for tubular M18 sensors	95ACC1370
SWING-18	adjustable support for tubular M18 sensors	895000006

Please refer also to **Sensor Accessories**

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HEADQUARTERS

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