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UNIVERSAL TUBULAR SENSORS

M18 SENSORS WITH BACKGROUND SUPPRESSION

- ***Adjustable background suppression reaching 12 cm***
- ***Axial or radial optics***
- ***Plastic or metal M18x1 housing***
- ***Double NO-NC standard output***

SDS SERIES

The M18 tubular sensors of the **SDS** series, thanks to the background suppression proximity optic system, precisely detect all objects inside the set operating distance, independently from colour and 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.
The background suppression distance setting is precisely obtained by means of a multi-turn trimmer.
Normally open and normally closed outputs are both present with standard configuration.

DATASENSOR
value through detection

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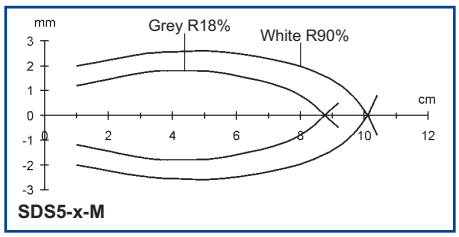
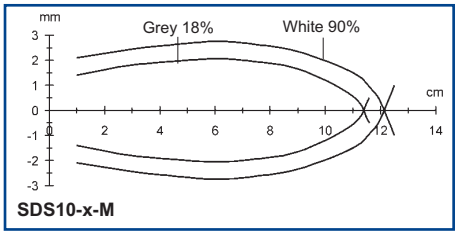
TECHNICAL DATA

Power supply: ..... 10 **...** 30 Vdc, reverse polarity protection
Consumption: ..... 30 mA max.
Light emission: ..... red LED 660 nm
Spot dimension: ..... Ø 10 mm at 100 mm
Ø 15 mm at 100 mm (SDS5 radial vers.)
Background suppression op. distance: ..... 2 **...** 10 cm (SDS5 vers.)
4 **...** 12 cm (SDS10 vers.)
Setting: ..... multi-turn trimmer
Indicators: ..... yellow OUTPUT LED
green STABILITY LED (SDS5 vers.)
Output type: ..... NO-NC PNP or NPN, open collector
Saturation voltage: ..... 2 V max. (SDS5 PNPvers.)
1 V max. (SDS5 NPN vers.)
2.4 V max. (SDS10 vers.)
Output current: ..... 100 mA max. (SDS5 vers.)
200 mA max. (SDS10 vers.)
short-circuit protection
Response time: ..... 2.5 ms max. (SDS5 vers.)
1 ms max. (SDS10 vers.)
Switching frequency: ..... 200 Hz max. (SDS5 vers.)
600 Hz max. (SDS10 vers.)
Operating mode: ..... light (NO)
dark (NC)
Connection: ..... M12 4-pole connector
3 m Ø 5 mm cable (SDS10 vers.)
Electrical protection: ..... class 2
Mechanical protection: IP67
Housing material: ..... ABS (SDS5 vers.)
nickel-plated brass (SDS10 vers.)
Lens material: ..... glass
Weight: ..... 30 g max. (SDS5 vers.)
100 g max. (SDS10 cable vers.)
30 g max. (SDS10 connector vers.)
Operating temperature: ..... -25 **...** +55°C
Storage temperature: ..... -25 **...** +70°C
Reference normative: ..... EN 60947-5-2
Certifications: ..... CE cULus LISTED

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

DETECTION DIAGRAMS





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

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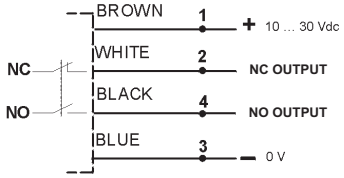
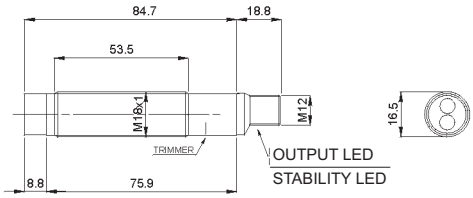
CONNECTIONS

M12 CONNECTOR

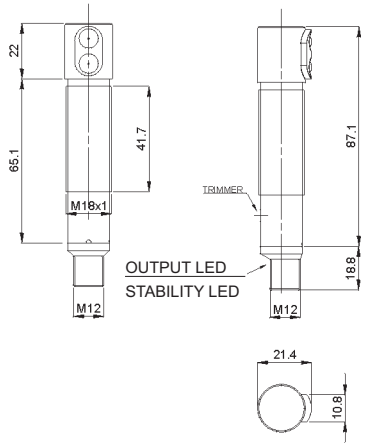


DIMENSIONS

SDS5 VERSIONS

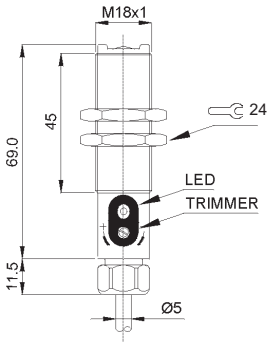


AXIAL

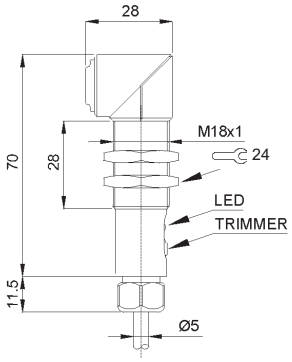


RADIAL

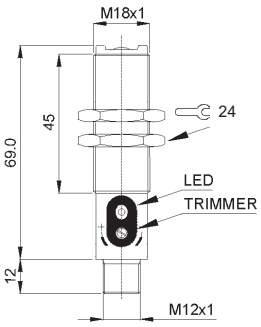
SDS10 VERSIONS



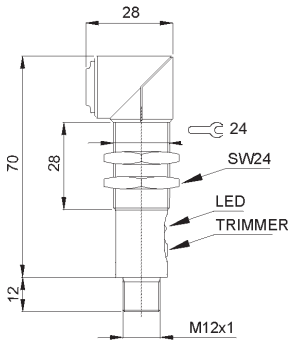
SDS10-5-M12-30



SDS10-5-M12-35



SDS10-5-M12-32



SDS10-5-M12-37

mm

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MODEL SELECTION AND ORDER INFORMATION

MODEL	HOUSING	OPTICS	CONNECTION	OUTPUT	ORDER N°
SDS5-5-M10-77	plastic	radial	M12 connector	NPN	952201020
SDS5-5-M10-97	plastic	radial	M12 connector	PNP	952201030
SDS5-5-M10-72	plastic	axial	M12 connector	NPN	952201060
SDS5-5-M10-92	plastic	axial	M12 connector	PNP	952201070
SDS10-5-M12-30	metal	axial	2 m cable	PNP	962411000
SDS10-5-M12-32	metal	axial	M12 connector	PNP	962411010
SDS10-5-M12-35	metal	radial	2 m cable	PNP	962411020
SDS10-5-M12-37	metal	radial	M12 connector	PNP	962411030

ACCESSORY SELECTION AND ORDER INFORMATION

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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Distributed by:

HEADQUARTERS

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