



- *Background suppression adjustable from 4 to 12 cm*
- *Axial or radial optics*
- *Cable or M12 connection*
- *Metal housing with double insulation*

SDS10 SERIES

The **SDS10** series is exclusively composed of background suppression proximity sensors, characterised by a PSD (Position Sensitive Device) receiving system that allows the maximum detection distance setting with extreme precision, independent of the object's colour or dimensions. For example, at a 100 mm operating distance, the detection difference between a very-reflective white object and a poor-reflective grey object is inferior to 5 mm.

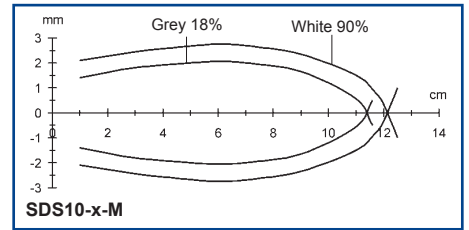
The emission LED generates a visible and well-defined red spot, with a diameter less than 10 mm at a distance of 100 mm. The response time, inferior to 1 ms, offers the possibility of working at 600 Hz switching frequency.

The yellow output LED and the 18-turn trimmer for the background suppression distance adjustment are both positioned on the sensor's housing. The metal housing with double insulation guarantees a high mechanical and electric protection degree.

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)
Background suppression op. distance:	4 ... 12 cm
Setting:	multi-turn trimmer
Indicators:	yellow OUTPUT LED
Output type:	NO-NC PNP, open collector
Saturation voltage:	2.4 V max.
Output current:	200 mA max., short-circuit protection
Response time:	1 ms max.
Switching frequency:	600 Hz max.
Connection:	4-pole M12 connector 3 m Ø 5 mm cable
Electrical protection:	class 2
Mechanical protection:	IP67
Housing material:	nickel-plated brass
Lens material:	glass
Weight:	100 g max.
Operating temperature:	-20 ... +60°C
Storage temperature:	-20 ... +80°C
Reference standard:	EN 60947-5-2
Certifications:	CE

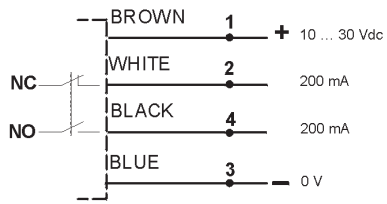
DETECTION DIAGRAMS



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

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

CONNECTIONS

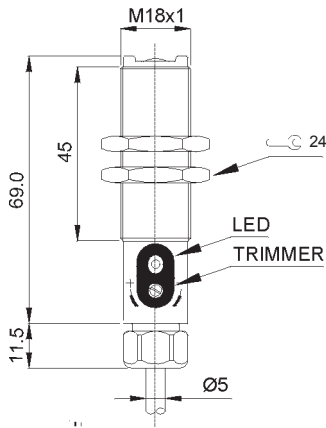


M12 CONNECTOR

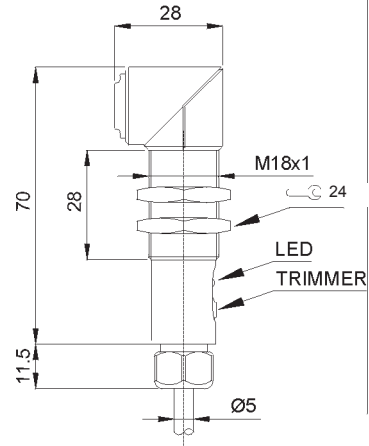


DIMENSIONS

CABLE VERSIONS

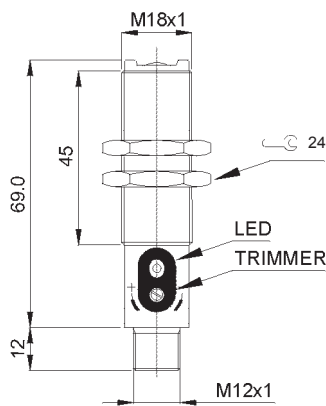


SDS10-5-M12-30

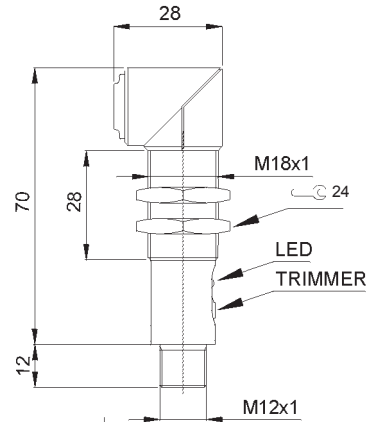


SDS10-5-M12-35

M12 CONNECTOR VERSIONS



SDS10-5-M12-32



SDS10-5-M12-37

mm



MODELS

MODEL	OPTICS	CONNECTION	OUTPUT	CODE N°
SDS10-5-M12-30	axial	2 m cable	PNP	962411000
SDS10-5-M12-32	axial	M12 connector	PNP	962411010
SDS10-5-M12-35	radial	2 m cable	PNP	962411020
SDS10-5-M12-37	radial	M12 connector	PNP	962411030

ACCESSORIES

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

Please refer also to **Sensor Accessories**

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HEADQUARTERS

DATASENSOR SpA

via Lavino, 265 - 40050 Monte San Pietro, BO - Italy

Tel. +39 051/6765611 • Fax +39 051/6759324

www.datasensor.com • e-mail info@datasensor.com

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