

## SDS5-5 SERIES INSTRUCTION MANUAL

### CONTROLS

#### OUTPUT LED

The yellow LED indicates the output status.

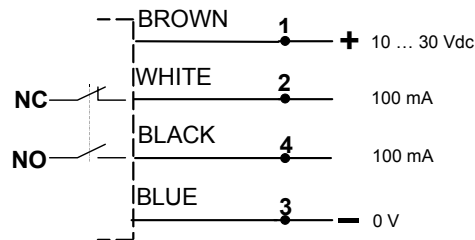
#### STABILITY LED

The green LED ON indicates that the received signal has a reserve greater than 30% compared to the output switching value.

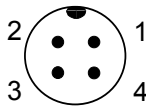
#### TRIMMER

The 4-turn trimmer can be used to adjust the operating distance; the distance increases turning the trimmer clockwise.

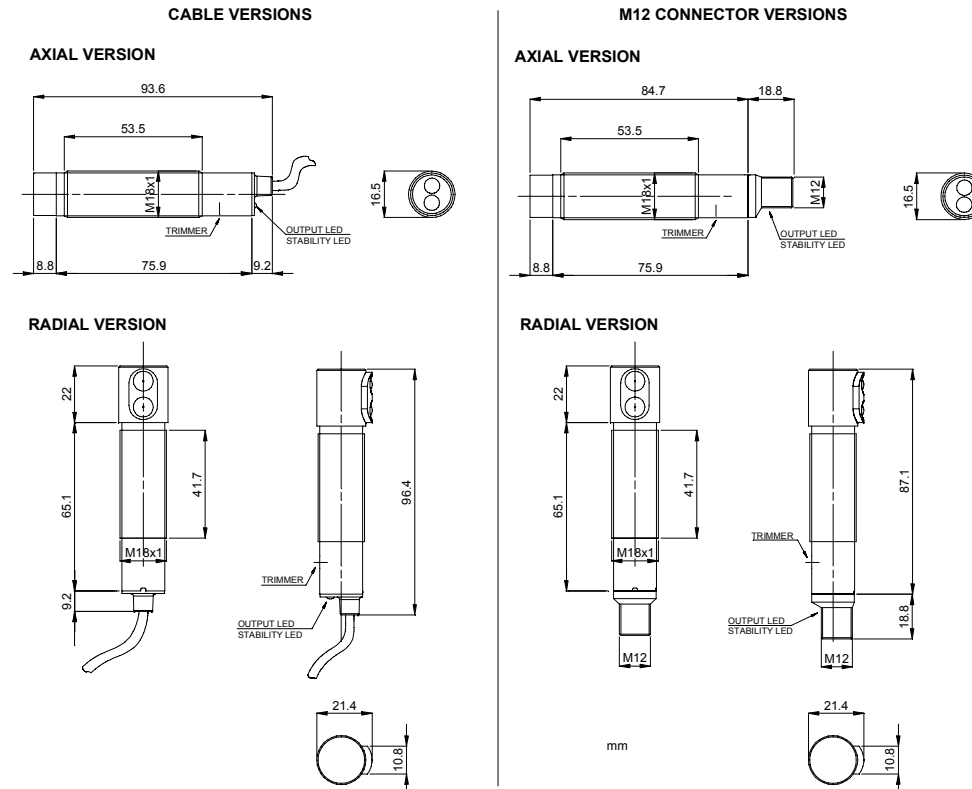
### CONNECTIONS



### M12 CONNECTOR



### DIMENSIONS



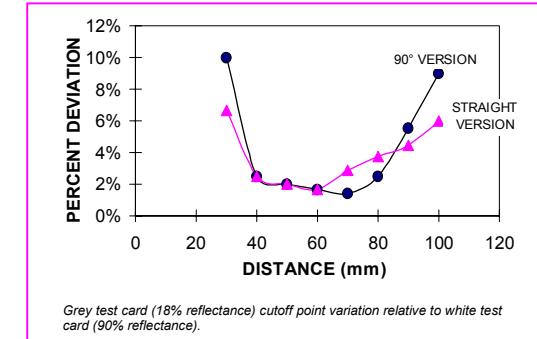
### TECHNICAL DATA

Power supply:	10 ... 30 Vdc; reverse polarity protection
Ripple:	2 Vpp max.
Current consumption (output current excluded):	30 mA max.
Output:	NC and NO, NPN or PNP; 30 Vdc max. (short-circuit protection)
Output current:	100 mA max.
Output saturation voltage:	1 V max NPN versions / 2 V max PNP versions
Response time:	2.5 ms max.
Switching frequency:	200 Hz max.
Indicators:	OUTPUT LED (YELLOW) / STABILITY LED (GREEN)
Setting:	operating distance 4-turn trimmer wiper idles
Operating temperature:	-25 ... 55 °C
Storage temperature:	-25 ... 70 °C
Electric shock protection:	Class 2
Cutoff distance adjustment range:	50 ... 100 mm
Operating distance:	from 20 ... 50 mm to 0 ... 100 mm depending from cutoff adjustment
Emission type:	RED (660 nm)
Ambient light rejection:	according to EN 60947-5-2
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
Shock resistance:	11 ms (approx. 30 G) 6 shock for every axis (EN60068-2-27)
LIGHT/DARK selection:	LIGHT mode on NO output
Housing:	ABS UL 94V-O
Optics head:	PVC
Lenses:	Glass
Protection class:	IP67 (TYPE 1 ENCLOSURE)
Connections:	2 m cable Ø 5 mm / M12 4-pole connector
Weight:	100 g. max. cable versions / 30 g. max. connector versions

### SETTING

Position the sensor and turn the operating distance trimmer to maximum. Place the target opposite the sensor at a slightly greater distance than desired. Turn the trimmer counterclockwise until the sensor switches. Verify the adjustment moving the target closer and further the sensor; tune the adjustment if necessary. It is recommended to operate with the stability LED turned ON.

The white/grey remission diagram is shown below:



### DECLARATION OF CONFORMITY

We DATASENSOR S.p.A. declare under our sole responsibility that these products are conform to the 89/336 CEE, 73/23 CEE Directives and successive amendments.

### WARRANTY

DATASENSOR S.p.A. warrants its products to be free from defects. DATASENSOR S.p.A. will repair or replace, free of charge, any product found to be defective during the warranty period of 36 months from the manufacturing date. This warranty does not cover damage or liability deriving from the improper application of DATASENSOR products.

DATASENSOR S.p.A. Via Lavino 265  
40050 Monte S. Pietro - Bologna - Italy  
Tel: +39 051 6765611 Fax: +39 051 6759324  
http://www.datasensor.com e-mail: info@datasensor.com



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# SDS10-5 SERIES INSTRUCTION MANUAL

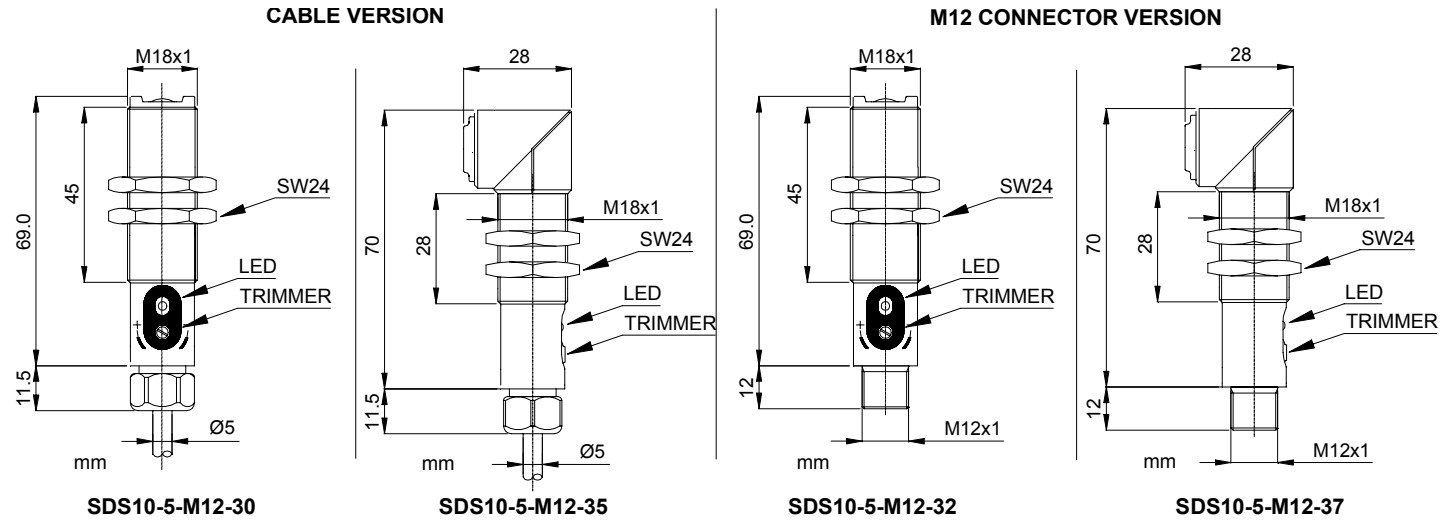
Photoelectric sensor  
with background suppression 120mm adj.

	OPTIC	OUTPUT	CONNECTION
SDS10-5-M12-30	straight	PNP	standard cable
SDS10-5-M12-32	straight	PNP	M12 connector
SDS10-5-M12-35	90°	PNP	standard cable
SDS10-5-M12-37	90°	PNP	M12 connector

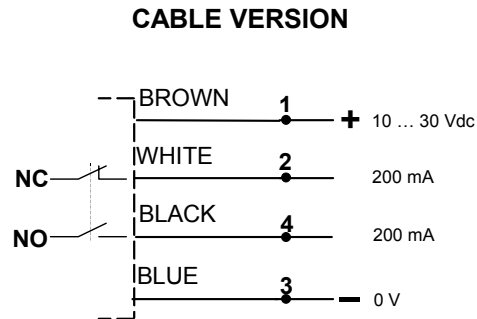
## TECHNICAL DATA

Power supply:	10 ... 30 Vdc reverse polarity protected
Ripple:	3 Vpp max.
Current consumption (output current excluded):	30 mA max.
Output:	NC and NO, PNP (short circuit protection)
Output current:	200 mA max.
Output saturation voltage:	2.4 V max.
Response time:	1 ms max.
Switching frequency:	600 Hz max.
Indicators:	OUTPUT LED (YELLOW)
Setting:	trimmer, 18 turn
Operating temperature:	-20 ... 60°C
Storage temperature:	-20 ... 80°C
Electrical shock protection:	Class 2
Operating distance:	40 ... 120 mm
Emission type:	RED (660 nm)
Hysteresis:	8% max.
Humidity:	35 ... 85% rH non condensing
Ambient light rejection:	according to EN 60947-5-2
Vibration:	0.5 mm amplitude, 10 ... 55 Hz frequency, for every axis (EN60068-2-6)
Shock resistance:	11 ms (approx. 30 G) 6 shock for every axis (EN60068-2-27)
LIGHT/DARK selection:	LIGHT mode
Housing:	Brass, nickel plated
Protection class:	IP67
Connections:	4 wires 3 m cable Ø 5 mm / M12 4 pole connector
Weight:	100 g. max.

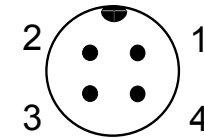
## DIMENSIONS



## CONNECTIONS



## M12 CONNECTOR VERSION



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