✦DATALOGIC

S6R-5-M10/M25/M50
Background suppression proximity

S6R-5-N20
Foreground and background suppression proximity

INSTRUCTION MANUAL

CONTROLS

OUTPUT LED
The red LED indicates the output status.
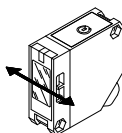
STABILITY LED (S6R-5-M25/M50/N20)
The green LED ON indicates that the received signal has a reserve greater than 30% compared to the output switching value.

ADJUSTMENT SCREW (S6R-5-M25/M50/N20)
This control can be used to adjust the foreground and/or background suppression distance.
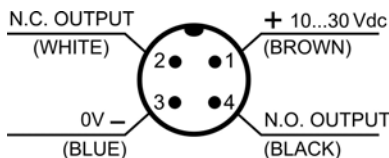
INSTALLATION

The target must move orthogonally respect to the short side of the lens, to get the correct reading.
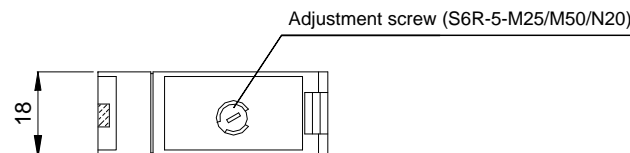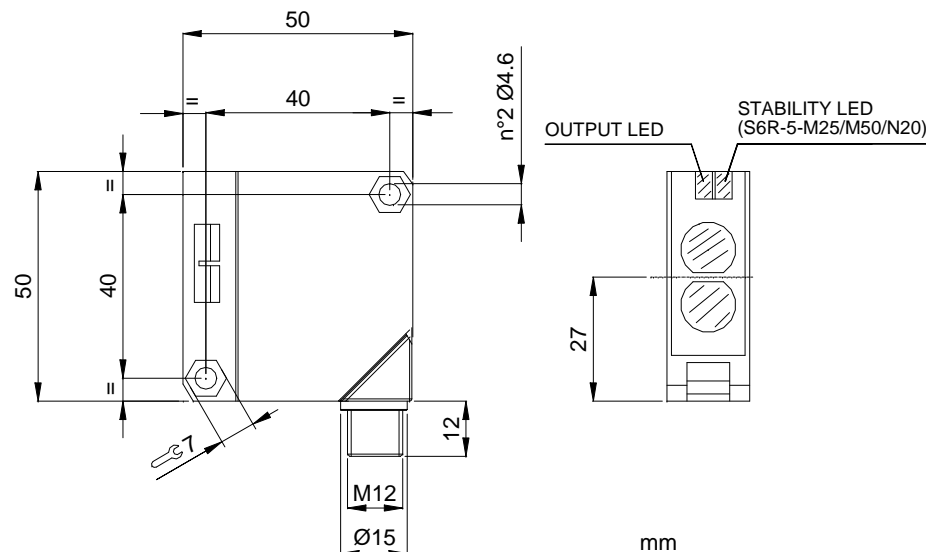
CONNECTIONS

The connections are configured in compliance with the standard EN 60947-5-2.

N.C. OUTPUT (WHITE) — 2
+ 10...30 Vdc (BROWN) — 1
0V (BLUE) — 3
N.O. OUTPUT (BLACK) — 4

DIMENSIONS

50
40
n°2 Ø4.6
OUTPUT LED
STABILITY LED (S6R-5-M25/M50/N20)
50
40
27
7
12
M12
Ø15
mm
18

Adjustment screw (S6R-5-M25/M50/N20)

TECHNICAL DATA

Power supply:	10 … 30 Vdc limit values
Ripple:	2 Vpp max.
Current consumption (output current excluded):	30 mA max.
Outputs:	PNP or NPN N.O./N.C.; 30 Vdc max.
Output current:	100 mA max. (short-circuit protection)
Output saturation voltage:	1.5 V max. (NPN/PNP output)
Response time:	1ms max.
Switching frequency:	500Hz max.
Indicators:	OUTPUT LED (RED) / STABILITY LED (GREEN)
Setting:	adjustment screw (S6R-5-M25/M50/N20)
Operating temperature:	-25 … 55 °C
Storage temperature:	-25 … 70 °C
Electric shock protection:	Class 2
Operating distance (minimum):	3…10cm (S6R-5-M10) / 3…25cm (S6R-5-M25) /10…50cm (S6R-5-M50) 5…20cm foreground suppression area (S6R-5-N20) 12…110cm background suppression (S6R-5-N20)
Emission type:	INFRARED LED 880nm (S6R-5-M20/M25/N20) RED LED (S6R-5-M10)
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 (30 G) 6 shock for every axis (EN60068-2-27)
LIGHT/DARK selection:	by N.O./N.C. output
Housing:	ABS UL 94V-O
Lenses:	PMMA plastic
Mechanical protection:	IP65
Connections:	M12 4-pole connector
Weight:	40 g. max.

SETTING

S6R-5-M10 setting
Position the sensor in front of the background.
Move the sensor on the background until the red output LED turns off (move away if the output LED is ON).
The sensor is now ready to detect any object inside the operating range (output LED turns on).

S6R-5-M25/M50 setting
Place the background opposite the sensor.
Turn the adjustment screw counterclockwise until the RED OUTPUT LED turns OFF and the STABILITY LED turns ON.
During this phase it is very important to not move the background and/or the sensor, to avoid any setting failure.
Place the object in the detection area and verify that the STABILITY LED turns ON and the switching has occured.

S6R-5-N20 setting
Place the target opposite the sensor.
Turn the adjustment screw counterclockwise, until the RED OUTPUT LED turns OFF and the STABILITY LED turns ON.
Turn the adjustment screw clockwise until the RED OUTPUT LED and the STABILITY LED turns ON.
The OUTPUT LED has to turn OFF when the target is moved closer to the sensor (foreground suppression area).

The sensors are NOT safety devices, and so MUST NOT be used in the safety control of the machines where installed.

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Helpful links at www.datalogic.com: **Contact Us, Terms and Conditions, Support**.

The warranty period for this product is 36 months. See General Terms and Conditions of Sales for further details.

826001074 Rev. D