

MULTI-FUNCTION SENSORS



- *50 m through beam, 12 m polarised retroreflex*
- *2 m diffuse proximity, 1 m background suppression*
- *Direct or alternate current power supply*
- *NPN/PNP or relay output with timing possibility*

S30 SERIES

Thanks to a 12 m polarised retroreflex model, a 2 m diffuse proximity, a background suppression over 1 m, and a 50 m through beam couple, the **S30** series is the reference for the most demanding applications.

Versions with 10-30 Vdc power supply and transistor output, or free voltage versions with relay output are foreseen; both offer also versions with the output timing function. Terminal block or M12 connector versions are available.

The housing, created in glass-fibre reinforced polycarbonate, guarantees maximum resistance.

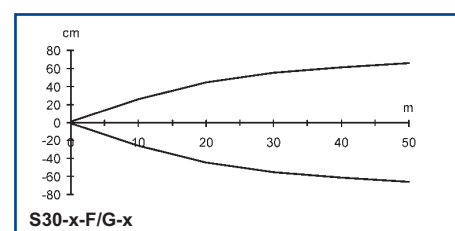
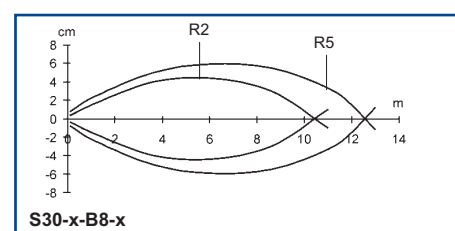
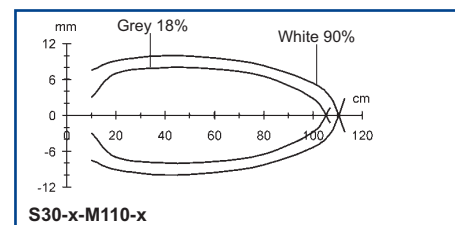
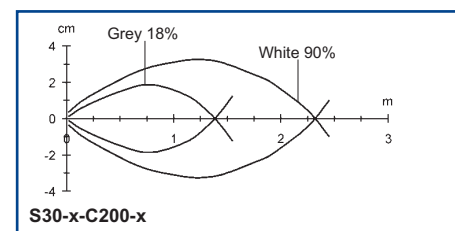
Moreover versions with glass-front protection with active defogging system are available.

TECHNICAL DATA

Power supply:	10 ... 30 Vdc, reverse polarity protection 17 ... 264 Vac/Vdc (free voltage vers.)
Consumption:	40 mA max. (B, C, F, G vers. in d.c.) 70 mA max. (M in d.c. vers.) 60 mA max. (B, C, F, G free voltage vers.) 90mA max. (M free voltage vers.)
Light emission:	infrared LED 880 nm red LED 660 nm (B vers.)
Diffuse proximity operating distance:	0.05 ... 2 m
Background suppression op. distance:	0.2 ... 1.1 m
Polarised retroreflex operating distance:	0.1 ... 8 m (on R2)
Through beam operating distance:	0 ... 50 m
Setting:	sensitivity trimmer distance adjustment screw (M vers.)
Indicators:	two red OUTPUT LEDs (one for M vers.) green STABILITY LED
Output type:	NPN and PNP, open collector (d.c. vers.) relay SPDT (free voltage vers.)
Saturation voltage:	1.5 V max. (d.c. vers.)
Output current:	200 mA max. (d.c. vers.), short-circuit prot. 3 A max. resistive load (free voltage vers.)
Response time:	1 ms max. (d.c. vers.) 20 ms max. (free voltage vers.)
Switching frequency:	500 Hz max. (d.c. vers.) 10 Hz max. (free voltage vers.)
Timing function:	normal, ON-delay, OFF-delay, ON/OFF-delay, one-shot all adjustable with trimmer from 0.02 to 12 sec.
Operating mode:	dark/light selectable with deviator
Auxiliary functions:	alarm output PNP 200 mA (d.c. vers.) test input (d.c. vers.)
Connection:	4-pole M12 connector terminal block gland for cables with 8 to 12 mm diameter
Electrical protection:	class 1 (free voltage vers.) class 2 (d.c. vers.)
Mechanical protection:	IP67
Housing material:	glass-fibre reinforced polycarbonate
Lens material:	PMMA plastic
Weight:	165 g max.
Operating temperature:	-25 ... +55°C
Storage temperature:	-25 ... +70°C
Reference standard:	EN 60947-5-2
Certifications:	CE

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

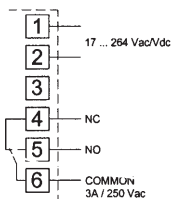
DETECTION DIAGRAMS



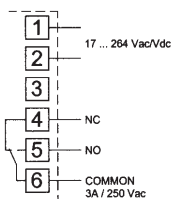
The detection diagrams indicate the typical operating distance with excess gain 1.

CONNECTIONS

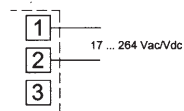
TERMINAL BLOCK VERSIONS



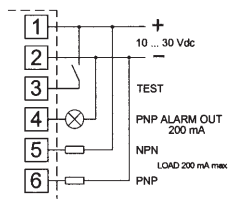
S30-1-B8/C200/M110



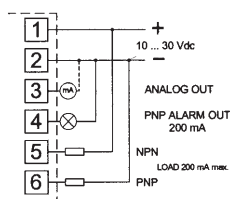
S30-1-F50



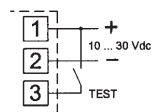
S30-1-G50



S30-5-B8/C200/M110

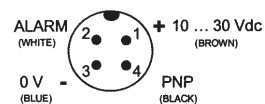


S30-5-F50

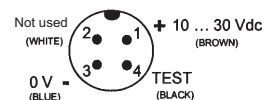


S30-5-G50

M12 CONN. VERSIONS

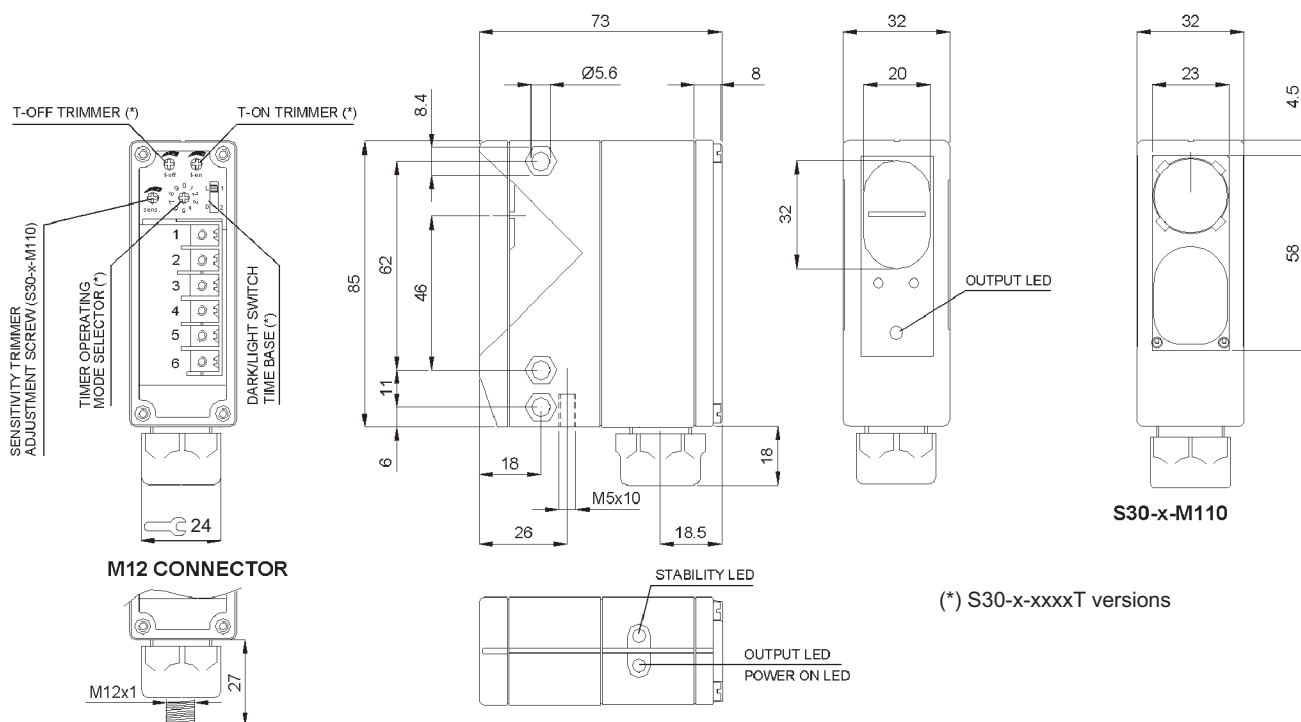


S30-5-B8/C200/M110/F50



S30-5-G50

DIMENSIONS



mm

MODEL SELECTION AND ORDER INFORMATION

VERSIONS WITH 17 ... 264 Vdc POWER SUPPLY

MODEL	OPTIC FUNCTION	CONNECTION	TIMER	OUTPUT	CODE N°
S30-1-C200-1	diffuse proximity	terminal block		relay	G3110500
S30-1-C200T-1	diffuse proximity	terminal block	•	relay with timer	G3110510
S30-1-C200T-1-M	diffuse proximity *	terminal block	•	relay with timer	960201130
S30-1-M110-1	background suppression	terminal block		relay	960211100
S30-1-M110T-1	background suppression	terminal block	•	relay with timer	960211130
S30-1-M110T-1-M	background suppression *	terminal block	•	relay with timer	960211290
S30-1-B8-1	polarised retroreflex	terminal block		relay	G3110700
S30-1-B8T-1	polarised retroreflex	terminal block	•	relay with timer	G3110710
S30-1-B8T-1-M	polarised retroreflex *	terminal block	•	relay with timer	960201170
S30-1-F50-1	receiver	terminal block		relay	G3110100
S30-1-F50T-1	receiver	terminal block	•	relay with timer	G3110110
S30-1-F50T-1-M	receiver *	terminal block	•	relay with timer	960201090
S30-1-G50-1	emitter	terminal block		relay	G3110000
S30-1-G50-1-M	emitter *	terminal block		relay	G311000001

VERSIONS WITH 10 ... 30 Vdc POWER SUPPLY

MODEL	OPTIC FUNCTION	CONNECTION	TIMER	OUTPUT	CODE N°
S30-5-C200-1	diffuse proximity	terminal block		NPN/PNP	G3210500
S30-5-C200-2P	diffuse proximity	M12 connector		PNP	G3210503
S30-5-C200T-1	diffuse proximity	terminal block	•	NPN/PNP with timer	G3210510
S30-5-C200T-2P	diffuse proximity	M12 connector	•	PNP with timer	G3210513
S30-5-M110-1	background suppression	terminal block		NPN/PNP	960211000
S30-5-M110-2P	background suppression	M12 connector		PNP	960211010
S30-5-M110T-1	background suppression	terminal block	•	NPN/PNP with timer	960211050
S30-5-M110T-2P	background suppression	M12 connector	•	PNP with timer	960211060
S30-5-B8-1	polarised retroreflex	terminal block		NPN/PNP	G3210700
S30-5-B8-2P	polarised retroreflex	M12 connector		PNP	G3210703
S30-5-B8T-1	polarised retroreflex	terminal block	•	NPN/PNP with timer	G3210710
S30-5-B8T-2P	polarised retroreflex	M12 connector	•	PNP with timer	G3210713
S30-5-F50-1	receiver	terminal block		NPN/PNP	G3210100
S30-5-F50-2P	receiver	M12 connector		PNP	G3210103
S30-5-F50T-1	receiver	terminal block	•	NPN/PNP with timer	G3210110
S30-5-F50T-2P	receiver	M12 connector	•	PNP with timer	G3210113
S30-5-G50-1	emitter	terminal block		NPN/PNP	G3210000
S30-5-G50-2	emitter	M12 connector		PNP	G3210002

* Versions with glass front and defogging system

ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	CODE N°
ST-130	1 pc fixing bracket	95ACC1350
ST-138	1 pc fixing bracket (RT7 compatible)	95ACC1360

Please refer also to **Sensor Accessories**

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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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