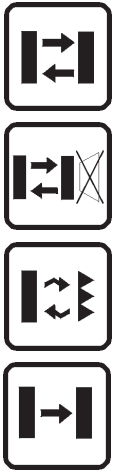


MULTI-FUNCTION SENSORS



- *Direct or alternate current power supply*
- *NPN/PNP or relay output with timing possibility*
- *Models for AS-Interface fieldbus connection*
- *Versions with active defogging system*

S30 SERIES

Thanks to a polarised retroreflex model that exceeds 10 m, a 2 m diffuse proximity, a background suppression over 1 m, and a 70 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 integrated interface for direct connection to the AS-Interface fieldbus is available in specific polarised retroreflex and background suppression models.

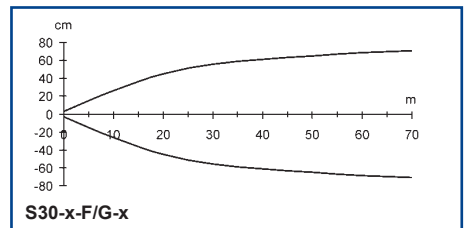
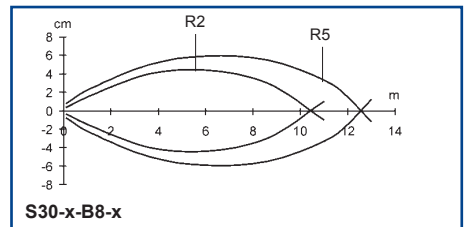
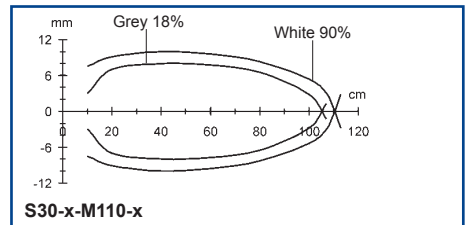
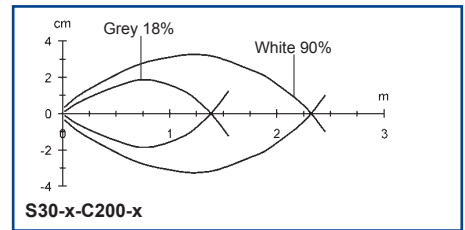
The glass-fibre reinforced polycarbonate housing guarantees maximum resistance; moreover versions with glass-front protection with active defogging system are available.

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 ... 70 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.) AS-Interface S-1.1 profile (AS-I 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.) class 3 (AS-I 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 (AS-I vers.)

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.

MODELS

VERSIONS WITH 17 ... 264 Vdc POWER SUPPLY

MODEL	OPTIC FUNCTION	CONNECTION	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-M110-1	background suppression	terminal block	relay	960211100
S30-1-M110T-1	background suppression	terminal block	relay with timer	960211130
S30-1-B8-1	polarised retroreflex	terminal block	relay	G3110700
S30-1-B8T-1	polarised retroreflex	terminal block	relay with timer	G3110710
S30-1-F50-1	receiver	terminal block	relay	G3110100
S30-1-F50T-1	receiver	terminal block	relay with timer	G3110110
S30-1-G50-1	emitter	terminal block	relay	G3110000

VERSIONS WITH 10 ... 30 Vdc POWER SUPPLY

MODEL	OPTIC FUNCTION	CONNECTION	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-M110-2P-ASI	background suppression	M12 connector	AS-Interface	960211340
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-B8-2P-ASI	polarised retroreflex	M12 connector	AS-Interface	960201200
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 are available (add -M suffix, AS-Interface excluded)

ACCESSORIES

MODEL	DESCRIPTION	CODE N°
ST-130	1 pc fixing bracket	95ACC1350
ST-138	1 pc fixing bracket (RT7 compatible)	95ACC1360
S30-SLIT	adhesive slit for emitter-receiver	G3040215

Please refer also to **Sensor Accessories**

Distributed by:

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

Datasensor SpA endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use Datasensor SpA can guarantee only the data indicated in the instruction manual supplied with the products.