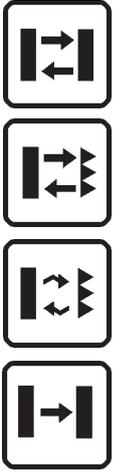


## MULTI-FUNCTION SENSORS



- *Sensitivity adjustment and Stability LED*
- *Free voltage power supply and relay output*
- *10-30 Vdc power supply with NPN and PNP outputs*
- *Versions with 5 timing functions*

## S2 SERIES

The photoelectric sensors of the **S2** series are enclosed in sturdy plastic housings, developed to guarantee the complete protection of the control panel and connection terminals.

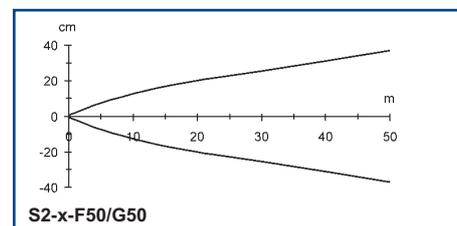
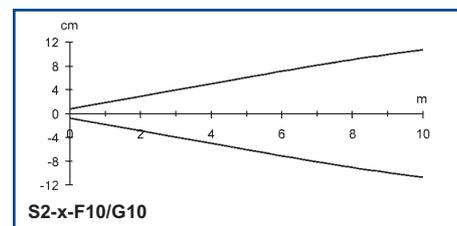
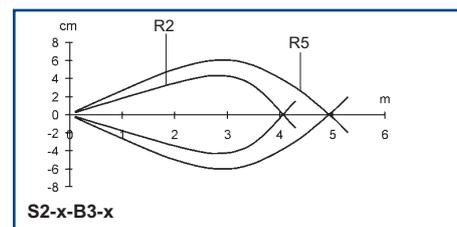
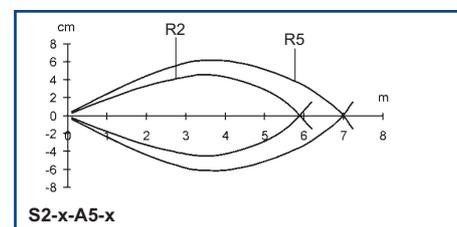
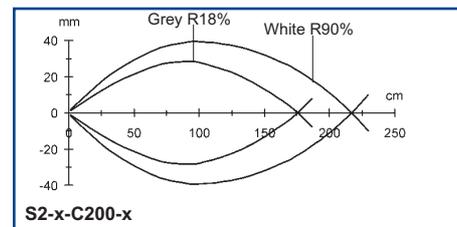
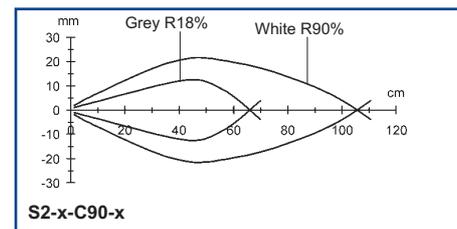
The free voltage versions present a relay output, while the 10-30 Vdc versions have a double NPN and PNP output, both available with 1 or 2 m proximity, 5 m polarised retroreflex, 3 m polarised retroreflex and 10 or 50 m through beam optic functions.

The red output LED and the green stability LED are visible through the IP66 hermetically-sealed cover, that also protects the terminal block and commands, such as the sensitivity adjustment trimmer and dark/light operating mode selector. The versions with output timing present a trimmer to regulate the time up to 16 s. and a selector to set 5 different functions.

## TECHNICAL DATA

<b>Power supply:</b> .....	10 ... 30 Vdc, reverse polarity protection 15 ... 264 Vac/Vdc
<b>Consumption:</b> .....	30 mA max. (d.c. vers.) 3 VA max. (a.c. vers.)
<b>Light emission:</b> .....	infrared LED 880 nm red LED 660 nm (B vers.)
<b>Diffuse proximity operating distance:</b> .....	1 ... 90 cm (C90 vers.) 1 ... 200 cm (C200 vers.)
<b>Retroreflex operating distance:</b> .....	0.1 ... 5 m (on R2)
<b>Polarised retroreflex operating distance:</b> ..	0.15 ... 3 m (on R2)
<b>Through beam operating distance:</b> .....	0 ... 10 m (G10/F10 vers.) 0 ... 50 m (G50/F50 vers.)
<b>Setting:</b> .....	sensitivity trimmer
<b>Indicators:</b> .....	red OUTPUT LED green STABILITY LED
<b>Output type:</b> .....	NPN and PNP, open collector (d.c. vers.) or relay 1 NO contact (a.c. vers.)
<b>Saturation voltage:</b> .....	1 V max. (NPN vers.) 2 V max. (PNP vers.)
<b>Output current:</b> .....	100 mA max., short-circuit protection relay 1 A (250 Vac), resistive load
<b>Response time:</b> .....	1 ms max. (d.c. vers.) 20 ms max. (a.c. vers.)
<b>Switching frequency:</b> .....	500 Hz max. (d.c. vers.) 25 Hz max. (a.c. vers.)
<b>Timing function:</b> .....	normal, ON-delay, OFF-delay, ON/OFF- delay, one-shot all adjustable from 0.6 to 16 sec.
<b>Operating mode:</b> .....	dark/light selectable
<b>Connection:</b> .....	terminal block with 4 screw terminals gland for cables with 8 to 10 mm diameter
<b>Electrical protection:</b> .....	class 1 (a.c. vers.) class 2 (d.c. vers.)
<b>Mechanical protection:</b> .....	IP66
<b>Housing material:</b> .....	PBT plastic
<b>Lens material:</b> .....	PMMA plastic
<b>Weight:</b> .....	100 g max.
<b>Operating temperature:</b> .....	-25 ... +55°C
<b>Storage temperature:</b> .....	-25 ... +70°C
<b>Reference standard:</b> .....	EN 60947-5-2
<b>Certifications:</b> .....	<b>CE</b>

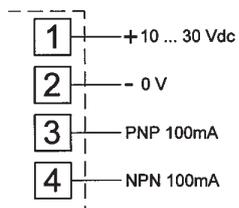
## DETECTION DIAGRAMS



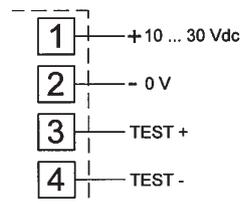
The operating distances indicate the detection distance with excess gain 2.

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

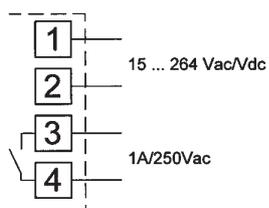
## CONNECTIONS



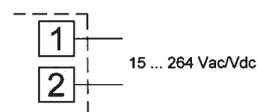
S2-5-A/B/C/F



S2-5-G

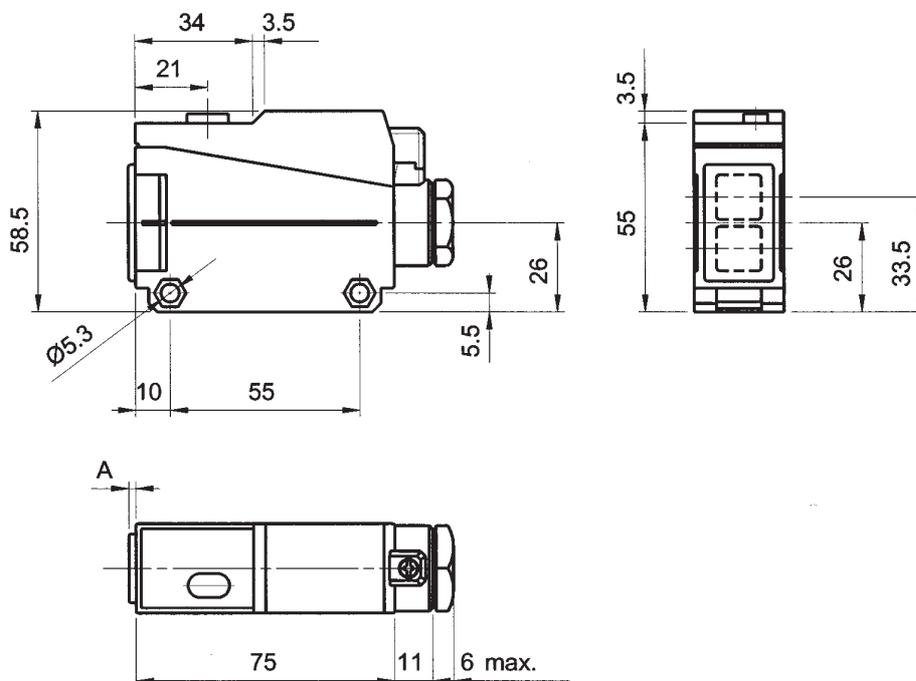


S2-1-A/B/C/F



S2-1-G

## DIMENSIONS



## MODEL SELECTION AND ORDER INFORMATION

### VERSIONS WITH 15 ... 264 Vac/Vdc POWER SUPPLY

MODEL	FUNCTION	OUTPUT	CODE N°
S2-1-C90	proximity	relay	J950530390
S2-1-C90T	proximity	relay with timer	J950535390
S2-1-C200	proximity	relay	J950530393
S2-1-C200T	proximity	relay with timer	J950535393
S2-1-A5	retroreflex	relay	J950330390
S2-1-A5T	retroreflex	relay with timer	J950335390
S2-1-B3	polarised retroreflex	relay	J950320390
S2-1-B3T	polarised retroreflex	relay with timer	J950325390
S2-1-F10	receiver	relay	J950200390
S2-1-F10T	receiver	relay with timer	J950205390
S2-1-F50	receiver	relay	J950200394
S2-1-F50T	receiver	relay with timer	J950205394
S2-1-G10	emitter	-	J950139990
S2-1-G50	emitter	-	J950139995

### VERSIONS WITH 10 ... 30 Vdc POWER SUPPLY

MODEL	FUNCTION	OUTPUT	CODE N°
S2-5-C90	proximity	NPN/PNP	J950530000
S2-5-C90T	proximity	NPN/PNP with timer	J950535000
S2-5-C200	proximity	NPN/PNP	J950530003
S2-5-C200T	proximity	NPN/PNP with timer	J950535003
S2-5-A5	retroreflex	NPN/PNP	J950330000
S2-5-A5T	retroreflex	NPN/PNP with timer	J950335000
S2-5-B3	polarised retroreflex	NPN/PNP	J950320000
S2-5-B3T	polarised retroreflex	NPN/PNP with timer	J950325000
S2-5-F10	receiver	NPN/PNP	J950200000
S2-5-F10T	receiver	NPN/PNP with timer	J950205000
S2-5-F50	receiver	NPN/PNP	J950200004
S2-5-F50T	receiver	NPN/PNP with timer	J950205004
S2-5-G10	emitter	-	J950139900
S2-5-G50	emitter	-	J950139905

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