

## LIGHT BEAM DEVICES



- *Emitter-receiver photocells with test input*
- *Effective aperture angle according to EN 61496*
- *Tubular plastic or metal photocells for up to 8 m*
- *Parallelepiped plastic photocells for up to 50 m*

**Sx-F/G-ST SERIES**

The **Sx-F/G-ST** series emitter-receiver photocells are homologated to be connected to the safety control units of the SB-BWS-T2 and BWS-T4 series and are easily identified by the yellow-coloured data label.

The special characteristics of these photocells mainly consist of the reduced beam's effective aperture angle and in the presence of a test input, complying with the EN 61496-2 standard.

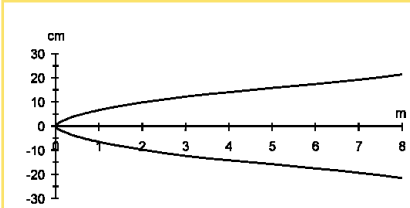
The photocells are available in a tubular M18 format either in the plastic S5 series version or metal S10 version, both with operating distances reaching 8 m, or in a glass-fibre reinforced plastic parallelepiped format of the S30 series with distances up to 50 m.

Different connections are available: M12 connector or 5 m shielded cable for S5, S10 models and terminal block for S30 models. A red LED, positioned on the housing, signals the power supply in the emitter and the alignment and reception of the beam in the receiver.

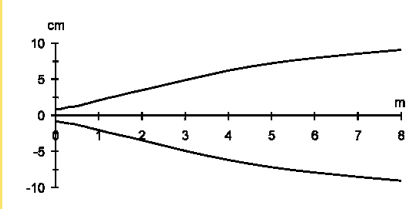
## TECHNICAL DATA

Power supply:	10 ... 30 Vdc, reverse polarity protection
Consumption:	30 mA max. (S5/S10) 40 mA max. (S30)
Light emission:	infrared LED 880 nm
Through beam operating distance:	0 ... 8 m (S5 / S10) 0 ... 50 m (S30)
Indicators:	red power LED (G vers.) red free/aligned beam LED (F vers.)
Output type:	PNP
Saturation voltage:	1 V max.
Output current:	200 mA max., short-circuit protection
Response time:	2 ms max.
Switching frequency:	250 Hz max.
Operating mode:	light
Auxiliary functions:	'test -' input for Sx-G-ST2 'test +' input for Sx-G-ST4
Connection:	5 m Ø 5 mm shielded cable (S5/S10) M12 connector (S5/S10/S30) terminal block (S30) for Ø 8 ... 12 mm cable
Safety category:	type 2 (ST2 vers.) type 4 (ST4 vers.)
Electrical protection:	class 2 (S5/S30) class 1 (S10)
Mechanical protection:	IP67
Housing material:	ABS (S5) nickel-plated brass (S10) glass-fibre reinforced polycarbonate (S30)
Lens material:	PMMA plastic
Weight:	150 g max. (S5/S10) 165 g max. (S30)
Operating temperature:	-25 ... +55 °C
Storage temperature:	-25 ... +70 °C
Reference standard:	EN 954-1, EN 61496-1, EN 61496-2
Certifications:	CE (S5/S10) ST2 Vers.) (TUV S30) ST4 Vers.)

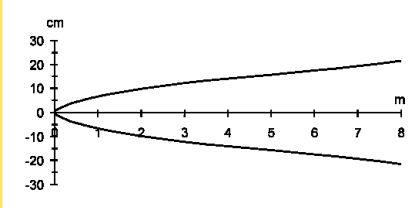
## DETECTION DIAGRAMS



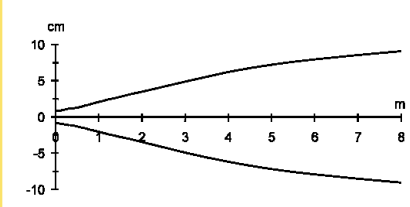
S5-F/G-ST2



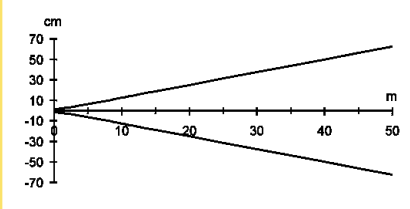
S5-F/G-ST4



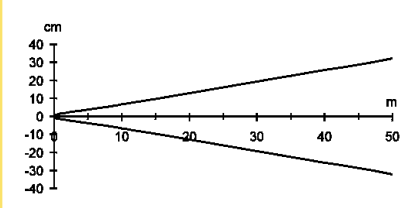
S10-F/G-ST2



S10-F/G-ST4



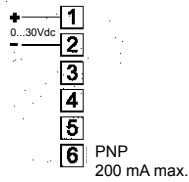
S30-F/G-ST2



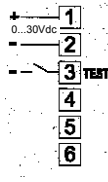
S30-F/G-ST4

Effective aperture angle (EAA)

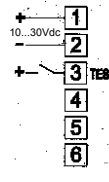
## CONNECTIONS



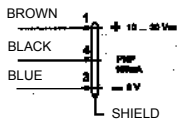
S30-F50-1-ST2/ST4



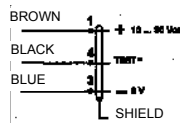
S30-G50-1-ST2



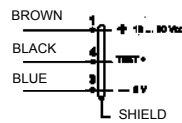
S30-G50-1-ST4



S5/S10-F8-ST2/ST4

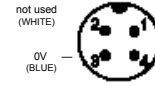


S5/S10-G8-ST2



S5/S10-G8-ST4

### M12 CONNECTOR



S30-F50-2-ST2/ST4



S30-G50-2-ST2



S30-G50-2-ST4

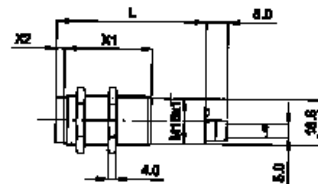
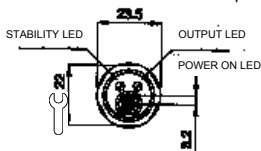


S5/S10-ST2/ST4

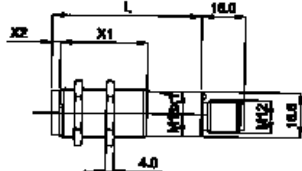
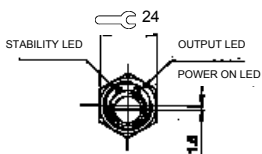
## DIMENSIONS

### S10 SERIES

#### CABLE VERSION

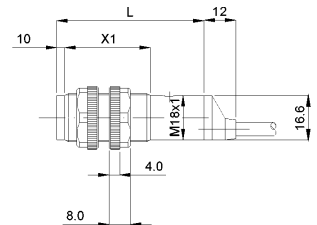
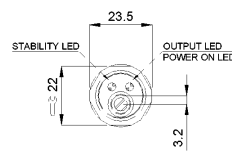


#### M12 CONNECTOR VERSION



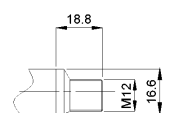
	MODELS			
	F8-ST2	F8-ST4	G8-ST2	G8-ST4
L	65	72	55	62
X1	42	42	32	32
X2	3	10	3	10

### S5 SERIES

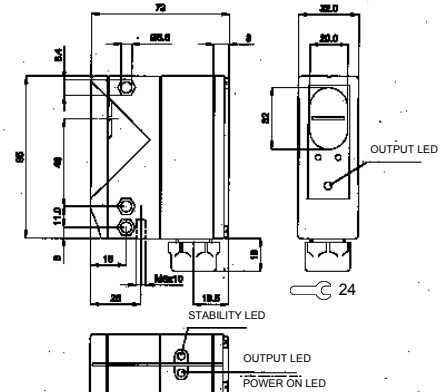


	MODELS	
	F8-ST4	G8-ST4
L	72	62
X1	42	32

#### M12 CONNECTOR



### S30 SERIES



## MODELS

### SAFETY PHOTOCELLS FOR SB-BWS-ST2 CONTROL UNITS (type 2)

MODEL	FUNCTION	CONNECTION	CODE N°
S5-5-G8-60-ST2	emitter	5 m cable	952051300
S5-5-G8-62-ST2	emitter	M12 connector	952051310
S5-5-F8-90-ST2	receiver	5 m cable	952051340
S5-5-F8-92-ST2	receiver	M12 connector	952051350
S10-5-G8-60-ST2	emitter	5 m cable	962151040
S10-5-G8-62-ST2	emitter	M12 connector	962151050
S10-5-F8-90-ST2	receiver	5 m cable	962151060
S10-5-F8-92-ST2	receiver	M12 connector	962151070
S30-5-G50-1-ST2	emitter	terminal block	960211350
S30-5-G50-2-ST2	emitter	M12 connector	960211360
S30-5-F50-1-ST2	receiver	terminal block	960211370
S30-5-F50-2P-ST2	receiver	M12 connector	960211380

### SAFETY PHOTOCELLS FOR SB-BWS-ST4 CONTROL UNITS (type 4)

MODEL	FUNCTION	CONNECTION	CODE N°
S5-5-G8-60-ST4	emitter	5 m cable	952051380
S5-5-G8-62-ST4	emitter	M12 connector	952051390
S5-5-F8-90-ST4	receiver	5 m cable	952051420
S5-5-F8-92-ST4	receiver	M12 connector	952051430
S10-5-G8-60-ST4	emitter	5 m cable	962151080
S10-5-G8-62-ST4	emitter	M12 connector	962151090
S10-5-F8-90-ST4	receiver	5 m cable	962151100
S10-5-F8-92-ST4	receiver	M12 connector	962151110
S30-5-G50-1-ST4	emitter	terminal block	960211390
S30-5-G50-2-ST4	emitter	M12 connector	960211400
S30-5-F50-1-ST4	receiver	terminal block	960211410
S30-5-F50-2P-ST4	receiver	terminal block	960211420

## ACCESSORIES

MODEL	DESCRIPTION	CODE N°
CV-A1-21-G-10	axial M12 3-pole shielded 10 m connector	95ACC2060

Please refer also to **Sensor Accessories**

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### HEADQUARTERS

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