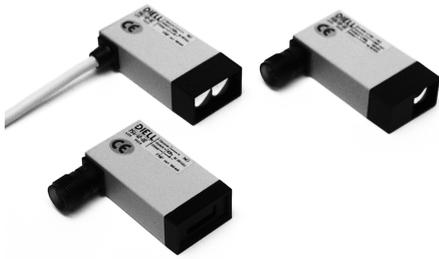
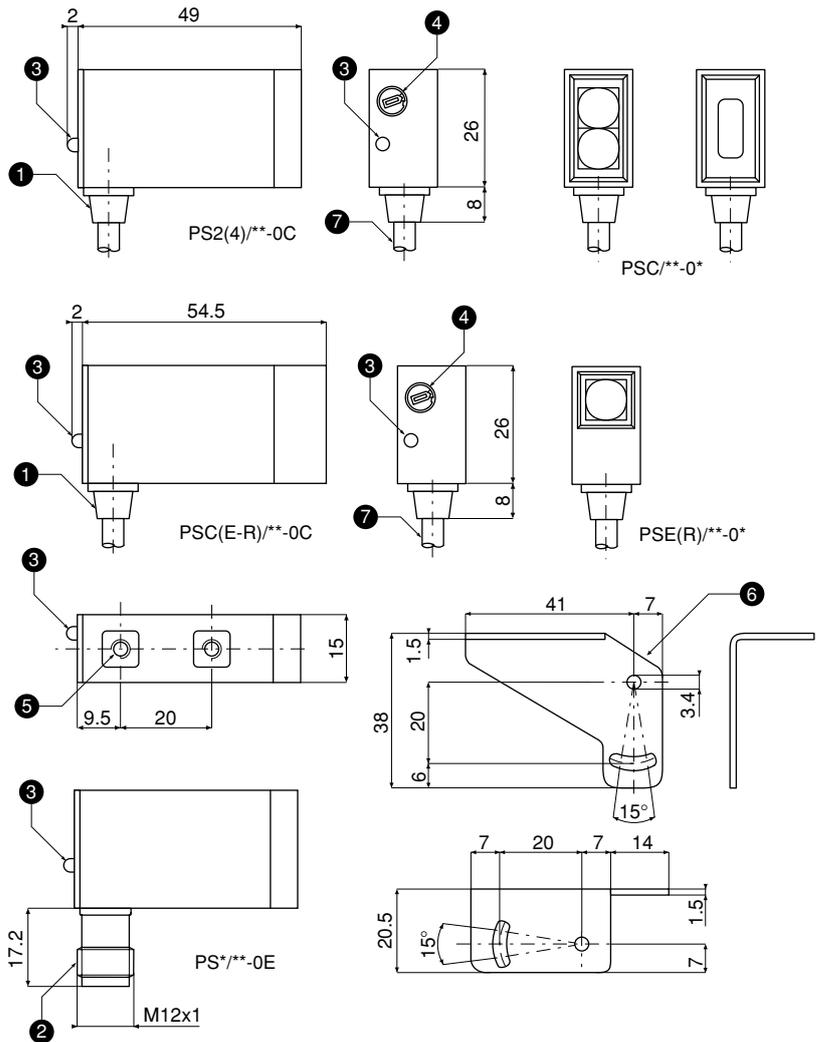


SERIE
PS

Miniature rectangular photoelectric sensors - DC

- ◆ Wide range of models: diffuse, retro-reflective, through-beam
- ◆ Extremely reduced dimensions
- ◆ High sensing distance
- ◆ Sensitivity adjustment
- ◆ Standard cable exit or M12 plug exit
- ◆ LED status indicator
- ◆ IP65 protection degree
- ◆ Complete protection against electrical damage


DIMENSIONAL DRAWING

Key

- 1 Standard right angle cable exit
 - 2 M12 plastic plug cable exit
 - 3 Red LED (output state)
 - 4 Sensitivity adjustment trimmer (1 turn)
 - 5 Holes for M4 mounting screws
 - 6 ST07 mounting bracket (supplied)
 - 7 Cable 4(2, 3)x0,34mm², Ø4,7mm, PVC, 2m
- Connectors **CD** serie
Accessories **ST** serie


ORDERING SYSTEM

		P S 2 / A N - O C			diffuse - retro-reflective - through-beam	
serie						
miniature rectangular photoelectric sensor	PS					cable exit
model						right angle cable exit
100mm diffuse reflection	2					M12 plastic plug cable exit
200mm diffuse reflection	4					housing
2m retro-reflective	C					plastic housing
emitter	E					output type
receiver	R					emitter
output state						NPN output
emitter / NO/NC selectable output (PSR only)	O					PNP output
NO output state	A					
NC output state	C					

2.1
SPECIFICATIONS

Model	PS2/**- 0*	PS4/**- 0*	PSC/**- 0*	PSE/00 - 0* and PSR/**- 0*
Type	diffuse reflection		retro-reflective	through-beam
Nominal sensing distance (Sn)	100mm ⁽¹⁾	200mm ⁽¹⁾	2m ⁽²⁾	4m
Emission	infrared (880nm)			
Tolerance	+15/ -5% Sn			see Sr (glossary)
Differential travel	≤5%		≤10%	
Repeat accuracy	5%			
Operating voltage	10 - 30 Vdc			
Ripple	≤10 %			
No-load supply current	30mA			25mA (emitter) - 30mA (receiver)
Load current	≤100 mA			
Leakage current	≤ 10µA			
Voltage drop	1,2V max.			
Output type	NPN or PNP, NO or NC (NO/NC selectable for PSR models)			
Switching frequency	100Hz			25Hz
Time delay before availability	200 ms			
Supply electrical protections	polarity reversal, transient			
Output electrical protections	short circuit (autoreset)			
Sensitivity adjustment	1 turn trimmer			
Temperature range	-25°....+70°C (without freeze)			
Temperature drift	≤10% Sr			
Interference to external light	3000 lux (incandescent lamp), 10000 lux (sunlight)			
Protection degree (DIN 40 050)	IEC IP65			
LED indicators	red (output energized)			
Housing material	ABS			
Lenses material	plexiglas			
Weight (approx.)	90g (20g mounting bracket ST07)			

(1) with 100x100mm white matt paper; (2) with standard reflector Ø80mm (RL110 supplied separately).

WIRING DIAGRAMS

emitters	PSE/00-0*	NPN output	PS*/*N-0*	PNP output	PS*/*P-0*
NPN output	PS*/*N-0*	PNP output	PS*/*P-0*		
<p>Note: In case of combined load, resistive and capacitive, the maximum admissible capacity $C = 0,1 \mu F$, for maximum output voltage and current.</p> <p>Wh (white wire): the cable present on the receiver PSR/0*-0* allows the output state selection. NPN output: NO state (white and brown on +), NC state (white and blue on -). PNP output: NO state (white and blue on -), NC state (white and brown on +).</p>					

2.1

CONNECTORS

PSE	M12	PSR	M12	PS2-PS4-PSC	M12

CHARACTERISTIC CURVES

<p>PS2</p> <p>Excess gain</p>	<p>PS2</p> <p>Parallel displacement</p>	<p>PS2</p> <p>Distance / target size</p>	<p>PS4</p> <p>Excess gain</p>
<p>PS4</p> <p>Parallel displacement</p>	<p>PS4</p> <p>Distance / target size</p>	<p>PSC</p> <p>Excess gain</p>	<p>PSC</p> <p>Parallel displacement</p>
<p>PSE - PSR</p> <p>Excess gain</p>	<p>PSE - PSR</p> <p>Parallel displacement</p>	<p>PSE - PSR</p> <p>Angular displacement</p>	<p>PSE - PSR</p> <p>Mutual interference</p>

2.1