


SERIE
RX

**Universal photoelectric sensors
with static output - DC
or with relay output - AC/DC**

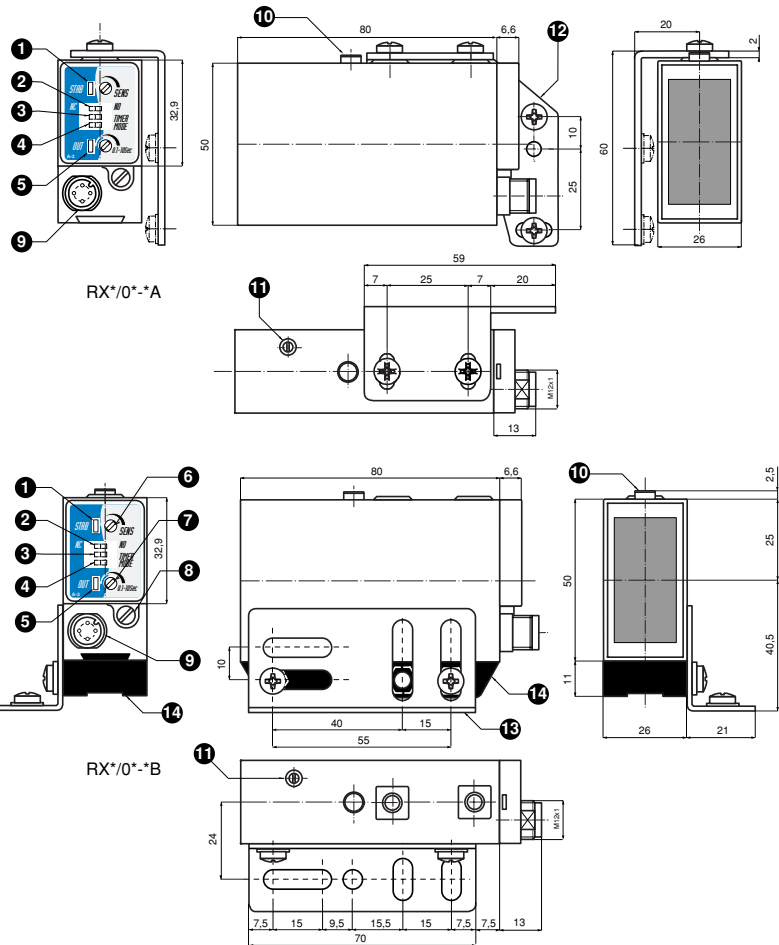
- ◆ Wide range of models: diffuse reflection, retro-reflective, polarized, through-beam and background suppression
- ◆ Series with high performances and large possibilities of installation
- ◆ High sensing distance
- ◆ Very small dimensions (the most compact)
- ◆ Relay output or multifunctional DECOU[®]
- ◆ Timer function delay on, delay off, one shot
- ◆ Trimmer for sensitivity adjustment
- ◆ Switch reducing the emission for fine detection in through-beam types
- ◆ LED alignment indicator with 360° visibility
- ◆ 2 LED indicators (stable signal, output)
- ◆ M12 standard plug cable exit
- ◆ Axial and right angle brackets
- ◆ IP65 protection degree
- ◆ Complete protection against electrical damage
- ◆ Wide range of connectors, accessories and reflectors available



High performances in universal housing

The new RX series offers high performances and maximum installation flexibility thanks to the axial and right angle brackets, to the housing with or without slide, to the plug in exit for safe cable connection accordingly with regulations and for easy maintenance. All these advantages allow universal applications.

DIMENSIONAL DRAWING



Key

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Green LED (stable signal RX6-8-C-P-S-L-R)
Green LED (check off RXX or supply voltage RXE) 2 Switch of NO/NC selection (RX6-8-C-P-S-L-R)
Switch select.dist. x1 - dist. x2 (RXX-E) 3 Switch selecting timer function delay ON 4 Switch selecting timer function delay ON 5 Red LED (output state RX6-8-C-P-S-L-R)
Red LED (distance x2 RXX-RXE) 6 Trimmer for sensitivity adjustment
(not available for RXX and RXE) 7 Trimmer for timer function adjustment
(0,1-10s) | <ul style="list-style-type: none"> 8 Fixing screw for plastic protection of adjustments 9 M12 standard plug-in exit 10 LED for alignment (not available on RXX and RXE) 11 Screw for optic adjustment (available only for background suppression models RXS RXL) 12 Fixing bracket (ST80) for sensor option A 13 Fixing bracket (ST81) for sensor option B 14 Plastic slide for sensor option B fixing |
|--|--|

 Connectors **CD** serie

 Accessories **ST** serie

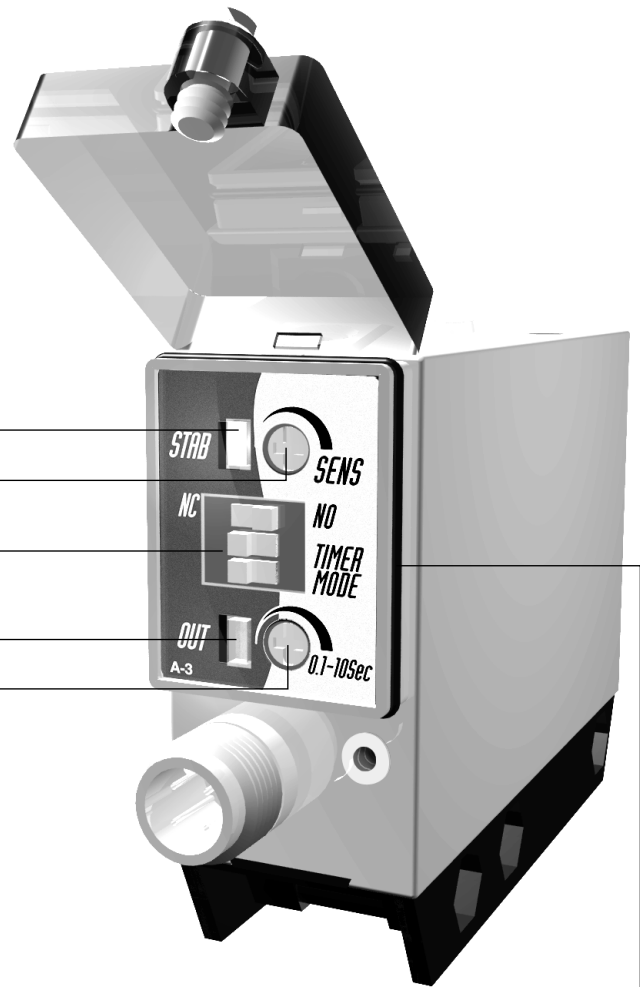

Multifunctional models

Both relay version (AC/DC) and static one (DC) have the commutation NO/NC granted by a switch placed on the panel. Moreover the static output is able to perform both NPN and PNP connection.

Functional panel

All controls of RX series are placed on the back panel easy to reach for the quickest adjustment.

- stable signal led
- adjustment sensitivity trimmer
- switch for **NO-NC output selection and for timer function (delay-on, delay-off, one shot)**
- output led
- timer-function adjustment **trimmer (0.1-10s)**



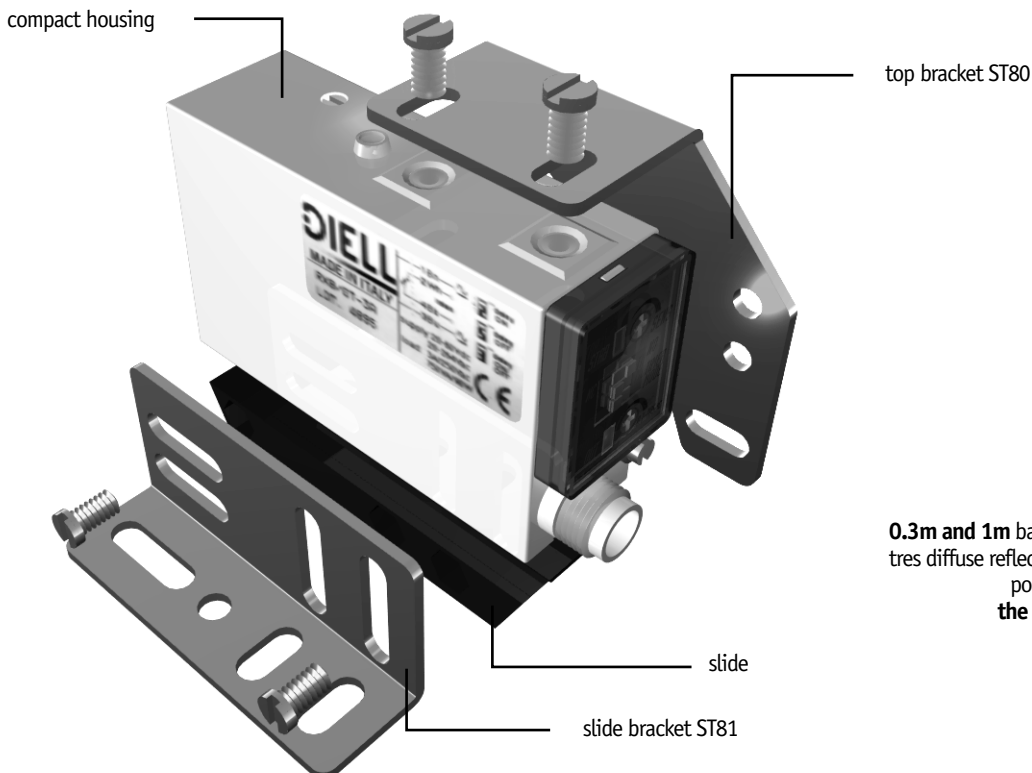
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Maximum versatility of installation

Two types of installation: with **top bracket ST 80** (and compact housing without slide) for overall dimensions reduction or with **side bracket ST 81** (and reflector with slide) for the availability of standard housing. The exit with axial or right angle connector completes the wide installation versatility of the new RX series.

IP 65 protection degree

The locking with screw stud and O-Ring grant an high protection degree (IP 65).



High distances

0.3m and 1m background suppression, 1 and 2 metres diffuse reflection, **12 m** with reflector (6 m with polarizing filter), **32m** through beam; **the highest distances in its category.**


ORDERING SYSTEM

		R X 6 / 0 0 - 1 A		diffuse - retro-reflective - background suppression	
serie	universal photoelectric sensor	RX		A	fixing without fixing slide
model	diffuse reflection 1000mm	6		B	with fixing slide
	diffuse reflection 2000mm	8		1	output type / supply
	retro-reflective 12m	C		3	DECOUT® output / 10-30Vdc
	polarized retro-reflective 6m	P		0	relay output / 20-60Vdc - 20-253Vac
	background suppression 0,05 - 0,3m	S		T	timer function without timer
	background suppression 0,25 - 1m	L			with timer function

SPECIFICATIONS

	DC						AC/DC							
Model	RX6/0*-1*	RX8/0*-1*	RXC/0*-1*	RXP/0*-1*	RXS/0*-1*	RXL/0*-1*	RX6/0*-3*	RX8/0*-3*	RXC/0*-3*	RXP/0*-3*	RXS/0*-3*	RXL/0*-3*		
Type	diffuse reflection		retro-reflective		diffuse reflection		diffuse reflection		retro-reflective		diffuse reflection			
	-		standard		polarized		-		standard		polarized			
Nominal sensing distance (Sn)	1m ⁽¹⁾	2m ⁽¹⁾	12m ⁽²⁾	6m ⁽²⁾	0,05-0,3m ⁽¹⁾	0,25-1m ⁽¹⁾	1m ⁽¹⁾	2m ⁽¹⁾	12m ⁽²⁾	6m ⁽²⁾	0,05-0,3m ⁽¹⁾	0,25-1m ⁽¹⁾		
Emission	infrared (880nm)			red _(660nm)		infrared (880nm)			red _(660nm)		infrared (880nm)			
Tolerance	-10/ +30%		EG≥2 at Sr		0/ +10%		-10/ +30%		EG≥2 at Sr		0/ +10%			
Differential travel	2/10% of the nominal sensing distance Sn													
Repeat accuracy	5%													
Operating voltage	10 - 30Vdc						20 - 253Vac / 20 - 60Vdc							
Ripple	≤10 %						-							
No-load supply current	25mA			40mA			25mA _{ARMS}			30mA _{ARMS}				
Load current	≤100 mA						3A - 250Vac / 3A - 30Vdc (750VA/90W)							
Leakage current	≤10µA						-							
Voltage drop	1,2V max.						-							
Output type	static type (DECOUT®)						relay type							
Switching frequency	500Hz						25Hz							
Time delay before availability	100 ms													
Timing functions	from 0,1s to 10s, delay ON, delay OFF, one shot													
Supply electrical protections	polarity reversal, transient						transient (AC), over voltages (DC)							
Output electrical protections	short circuit (with hold)						-							
Temperature range	-25°....+70°C (without freeze)		-25°....+60°C		-25°....+70°C (without freeze)			-25°....+60°C		-25°....+70°C				
Temperature drift	±10% Sr													
Interference to external light	≥5000 lux (incandescent lamp)		≥10000 lux (incandescent lamp)		≥5000 lux (incandescent lamp)			≥10000 lux (incandescent lamp)		≥5000 lux (incandescent lamp)				
Protection degree (DIN 40)	IEC IP65													
LED indicators	rear red (output state), superior red (alignment), green (stable signal)													
Housing material	polycarbonate (glass fiber reinforced)													
Lenses material	PMMA 7N				glass		PMMA 7N				glass			
Weight (approx.)	75g (without slide) - 90g (with slide)													

(1) with 100x100mm white matt paper and excess gain EG=1,5 ; (2) with standard reflector Ø80mm (RL110 supplied separately).

WIRING DIAGRAMS

relay output AC - DC	RX*/0*-3*	emitter	RXE/0*-**	emitter with check	RXX/0*-**
DECOUT® output NPN	RX*/0*-**	DECOUT® output PNP	RX*/0*-**		


CHARACTERISTIC CURVES
