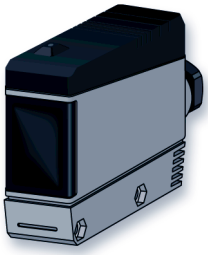


Diffuse Ref. Photoelectric Sensors

PHOTOELECTRIC SENSORS IN RECTANGULAR HOUSING 12 ÷ 30 V DC WITH TIMER NPN OR PNP OUTPUT

- ***Rectangle compact size***
- ***Multi-function timer***
- ***ON/OFF delay***
- ***One shot-four functions***
- ***NPN or PNP outputs***
- ***Conduit wiring terminal block***

FW Series

Identification code

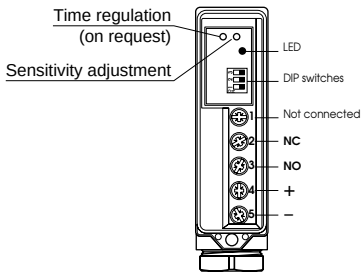
FW — **01** — **D2** — **T**

- **FW** — SERIES FW
- **01** — NPN NO or NC output
- **02** — PNP NO or NC output
- **D2** — SWITCHING DISTANCE = 20 ÷ 80 CM
- **T** — TIME DELAY 1 ÷ 7 SEC.

AVAILABLE	D2
SWITCHING DISTANCE	**20 - 80 cm**(1)
HYSTERESIS	10%
EMISSION	Infrared (875 ηm)
NOMINAL VOLTAGE	12 ÷ 30VDC (-15 /+10%)
RESIDUAL RIPPLE	≤ 10%
OUTPUT	NPN or PNP
MAX OUTPUT CURRENT	200 mA
ABSORPTION	≤ 40 mA
VOLTAGE DECREASE	≤ 2.5 VDC
YELLOW LED	Present
SENSITIVITY ADJUSTEMENT	Timmer 1 turn
TIME REGULATION	0.1 ÷ 7 s ± 2 s (only models with timer)
SWITCHING FREQUENCY	100 Hz
RESPONSE TIME	10 mS
START UP DELAY	≤ 300 ms
PROTECTION AGAINTS SHORT-CIRCUIT	Present (self-resetting)
TEMPERATURE LIMITS	-25° ÷ +55°C
LIGHT IMMUNITY	5.000 Lux (2)
PROTECTION DEGREE	IP 67
CONNECTIONS	Screw
CABLE GUIDE	PG 13.5
HOUSING MATERIAL	Polycarbonate
WEIGHT (Approximately)	110 g

(1) Determined with a white mat paper cm 20 x 20.
(2) Determined with halogen tungsten lamp 3000° K.
Note: for a proper use see norms at pages 6, 7 and 8.

Wiring diagrams



Timing diagrams

MODELS WITHOUT TIMER

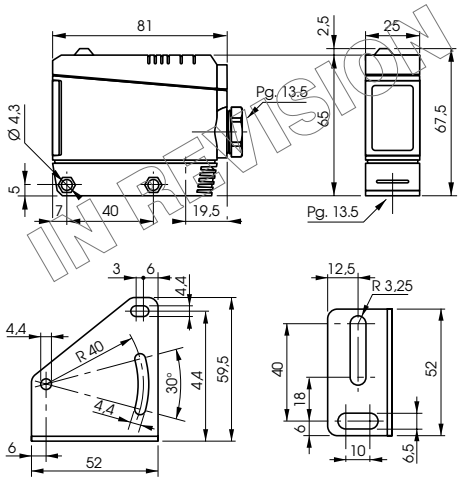
N.	DIP. SWITCHES POSITION	OBJECT	OUTPUT DIAGRAM
		Light impulse	
1	Output ON (2=NO; 3=NC)	Outoput status	
2	Output OFF (2=NC; 3=NO)	Outoput status	

MODELS WITH TIMER

N.	DIP. SWITCHES POSITION	OBJECT	OUTPUT DIAGRAM
		Light impulse	
1	On operate output ON	Outoput status	
2	On operate output OFF	Outoput status	
3	On release output ON	Outoput status	
4	On release output OFF	Outoput status	
5	One shot trailing edge output ON	Outoput status	
6	One shot trailing edge output OFF	Outoput status	
7	One shot leading edge output ON	Outoput status	
8	One shot leading edge output OFF	Outoput status	

T = Fixed delay

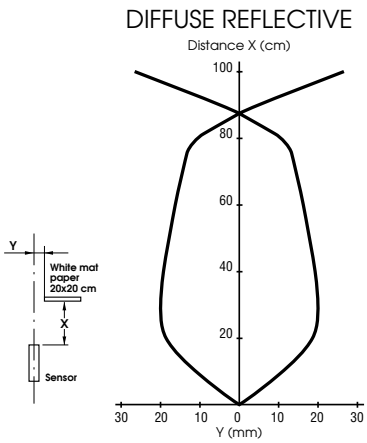
Dimensions (mm)

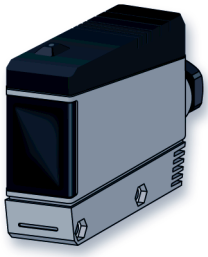


PHOTOELECTRIC SENSOR

MOUNTING BRACKET (SUPPLIED ACCESSORY)

Characteristic curves





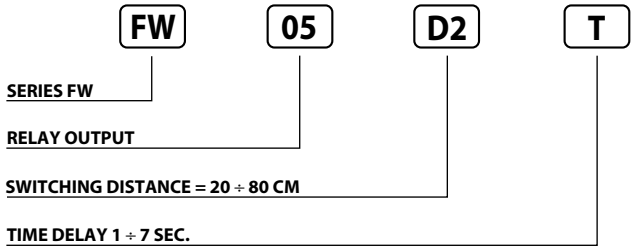
Diffuse Ref. Photoelectric Sensors

PH. SENSORS IN RECTANGULAR HOUSING 12 ÷ 240 V DC 24 ÷ 240 V AC WITH TIMER RELAY OUTPUT

- ***Wide range World Wide Power Supply***
- ***Rectangular compact size***
- ***Multi-function timer:***
  - ***ON/OFF delay***
  - ***3A relay SPDT***
  - ***One shot-four functions***
  - ***Terminal block wiring***

FW Series

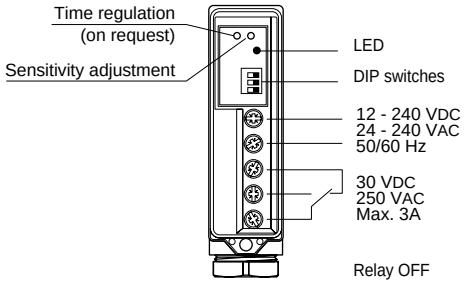
Identification code



AVAILABLE	D2
SWITCHING DISTANCE	**20 -80 cm** (1)
HYSTERESIS	10%
EMISSION	Infrared (875 ηm)
NOMINAL VOLTAGE	12 ÷ 240VDC / 24 ÷ 240 VAC (-15 /+10%)
NET FREQUENCY	45 ÷ 60 Hz
OUTPUT	Relay (40 x 10^6 mec. op. -5 x 10^6 elect. op.)
MAX OUTPUT CURRENT	3A 250VAC - 3A 30VDC
ABSORPTION	≤ 2W (2.5 VA)
YELLOW LED	Present
GREEN LED	-
SENSITIVITY ADJUSTEMENT	Present
TIME REGULATION	0.1 ÷ 7 s ± 2 s (only models with timer)
SWITCHING FREQUENCY	20 Hz
RESPONSE TIME	50 ms
START UP DELAY	≤ 300 ms
TEMPERATURE LIMITS	-25° ÷ +55°C
LIGHT IMMUNITY	5.000 Lux (2)
PROTECTION DEGREE	IP 67
CONNECTIONS	Screw
CABLE GUIDE	PG 13.5
HOUSING MATERIAL	Polycarbonate
WEIGHT (Approximately)	110 g

(1) Determined with a white mat paper cm 20 x 20.
(2) Determined with halogen tungsten lamp 3000° K.
Note: for a proper use see norms at pages ? and ?.

Wiring diagrams



Timing diagrams

MODELS WITHOUT TIMER

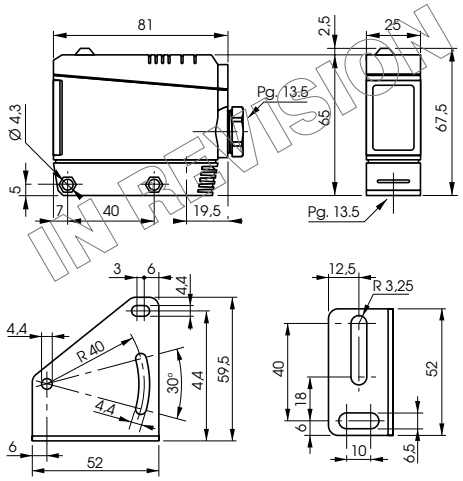
N.	DIP. SWITCHES POSITION	OBJECT	OUTPUT DIAGRAM
		Light impulse	
1	Output ON (2=NO; 3=NC)	Outoput status	
2	Output OFF (2=NC; 3=NO)	Outoput status	

MODELS WITH TIMER

N.	DIP. SWITCHES POSITION	OBJECT	OUTPUT DIAGRAM
		Light impulse	
1	On operate output ON	Outoput status	
2	On operate output OFF	Outoput status	
3	On release output ON	Outoput status	
4	On release output OFF	Outoput status	
5	One shot trailing edge output ON	Outoput status	
6	One shot trailing edge output OFF	Outoput status	
7	One shot leading edge output ON	Outoput status	
8	One shot leading edge output OFF	Outoput status	

T = Fixed delay

Dimensions (mm)



PHOTOELECTRIC SENSOR

MOUNTING BRACKET (SUPPLIED ACCESSORY)

Characteristic curves