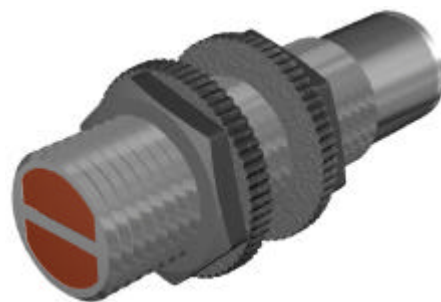


## Photoelectric Sensors with Fixed Output SPLF

- ◆ Low cost
- ◆ Standard M18 housing
- ◆ Proximity, Retro-reflective or Through-beam models
- ◆ Sensitivity adjustment option
- ◆ Polarized light models

The SPLF photoelectric sensors, distributed by COMECO, are manufactured by INFRA. These sensors use infrared (or red polarized) light to sense objects on the way of light beam. The SPLF sensors provide NPN or PNP digital output signal with NO or NC logic. Four groups of sensors are available:

- Proximity sensors, which use the reflected light from the object.
- Retro-reflective sensors, which sense the interruption of the light beam between sensor and reflector, caused by the object. The models, using polarized light, can sense shining or reflecting objects.
- Through-beam sensors, which consist from light emitter and light receiver as different parts on the same axis. The object interrupts the beam causing a receiver output change. Variety of options and accessories are available with SPLF sensors.



	Proximity or Retro-reflective Models	Trough-beam Emitter	Accessories
			1. Mirror cap for reading at 90 ° 2. Shutter for emitter-receiver through-beam models. Diameters: 2, 4 or 8mm. Distance attenuation: 97, 84 or 54 %. 3. Reflex foils: Ø20, Ø30, Ø40 or Ø80

SP

### Technical specifications

#### Power supply

Supply voltage	10 to 30 VDC (+10% -15%)
Residual ripple	maximum 10%

#### Output

Output type <sup>(1)</sup>	NPN or PNP (NO or NC)
Switching possibilities <sup>(1)</sup>	200 mA
Voltage drop (sensor ON)	1.5 V at 200 mA
Hysteresis	maximum 10%
Switching frequency	200 Hz
Response time	5 ms
Start-up delay	200 ms
Short circuit protection	Yes (self-reset)
Electric protection	Against polarity reverse

<sup>(1)</sup> Not available for emitter models

#### Indication and adjusting

Operating LED	Yellow
Sensitivity adjusting (option)	By multi-turn trimmer

#### Operating conditions

Operating temperature	-10 to 60 °C
Storage temperature	-20 to 80 °C

#### Design and materials

Casing material	Nylon with fiberglass
Metal housing (option) <sup>(1)</sup>	Not available for receivers
Wiring cable	L = 2m, 3-wire (2-wire for emitter)
Output connector (option)	4-pin connector M12
Protection class	IP67 (65 for sensitivity adjusting)
Weight	110 g (55 g with connector)

Model	Proximity switch			Retro-reflective sensor		Through-beam sensor set	
	short	middle	long	polarized		emitter	receiver
Parameter							
Switching distance	10 cm	20 cm	40 cm	1 m	2 m	15 m	
Light (light immunity)	Infrared (2000 Lx)			Red (2000 Lx)	Infrared (2000 Lx)	Infrared (2000 Lx)	
Background *	Paper white			Ø80 reflex foil		-	
Absorption at 30 VDC	30 mA			30 mA		15 mA	

\* To ensure the switching distance

### Ordering code



SPLF★ - G0.G3 - #12345

Code	Feature or option	Code values
★	Variant (model)	Proximity: 11 - short distance, 12 - middle distance, 14 - long distance Retro-reflective: 20 - not polarized, 21 - polarized Through-beam: 30 - emitter, 31 - receiver
G0	Housing type	N - normal (plastic), M - metal housing. Not available for receiver models!
G3	Output type	ON - NO NPN, CN - NC NPN, OP - NO PNP, CP - NC PNP
#1...5	Options & accessories (more than one can be ordered)	Options: C - connector M12 <sup>(2)</sup> , T - sensitivity adjusting trimmer <sup>(2)</sup> Accessories: M - 90° cap, S - shutter for through-beam (specify Ø), F - reflex foil (specify Ø)

<sup>(2)</sup> Not available simultaneously!