


**Description**

- Operation mode and max sensing range:  
Diffuse proximity: 0-35 cm
- Cable or plug connection
- Visible red light source
- Sensitivity adjustment via potentiometer
- Switch selectable light or dark function
- Power and output indicators
- High tolerance to hostile environments
- 10-30 V dc supply voltage
- 4 wire, NPN/PNP transistor output
- Available with optional  ATEX approval



The visible red light SMP 7000R series consists of a self-contained diffuse proximity sensor with a sensing range of up to 35 cm. The series is offered with sensitivity adjustment via integral potentiometer available with either cable or plug connection.

The series is available with a 4 wire, NPN/PNP transistor output with

a 10-30 V dc supply voltage. Both include a switch selectable light or dark function.

The series is protected against reverse polarity of power supplies, control input and output signals. The output is protected against short circuit and inductive loads.

**Technical Data**

		SMP
Supply voltage		10-30 V dc
Voltage ripple		Max. 15 %
Reverse polarity protected		Yes
Short circuit protected		Yes
Current consumption		20 mA
Maximum output load		120 mA @ 30 V dc
Maximum residual voltage		2 V
Max. operation frequency		250 Hz
Response time $t_{ON} / t_{OFF}$		2 ms / 2 ms
Power on indicator		Green LED
Output indicator		Yellow LED
Hysteresis		Approx. 3-10 %
Light source		Visible red light (620 nm)
Spot size		4x4 cm @ 35 cm range
Housing material	Sensor housing	Stainless Steel (AISI 316 / 1.4401) or Polycarbonate
	Front lens	
Cable, PVC		Ø 4,0 mm, 4 x 0,14 mm <sup>2</sup>

**Environmental Data**

Vibration		10-55 Hz, 0,5 mm
Shock		30 g
Light immunity	@ 15° incidence	20 000 lux
Temperature, operation		-20 to +60 °C
Temperature, storage		-40 to +80 °C
Sealing class		IP 67
Approvals		CE UK EA

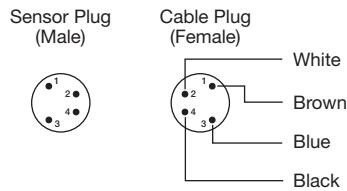
Available Types

Diffuse Proximity	Type	Power Supply	Control Feature	Output	Connection		5 m cable	4 pin, M8 plug	4 pin, M12 plug	Range
					Housing Material	Housing Type				
	Order Reference									
7600R	10-30 V dc	Sensitivity pot. and light/dark switch	NPN/PNP	Polycarbonate	M18 x 1	SMP 7600R TP 5	SMP 7600R TP T4	SMP 7600R TP J	0-35 cm	
				Stainless Steel		SMP 7600R TS 5	SMP 7600R TS T4	SMP 7600R TS J		

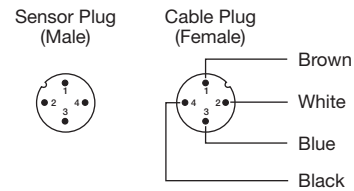
Connections

	Cable	M8 Plug / Cable	M12 Plug / Cable
Supply +	Brown	Pin 1 / Brown	Pin 1 / Brown
Supply -	Blue	Pin 3 / Blue	Pin 3 / Blue
Output	Black	Pin 4 / Black	Pin 4 / Black
Output	White	Pin 2 / White	Pin 2 / White

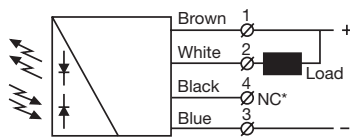
4 pin, M8



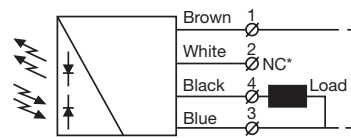
4 pin, M12



Wiring Diagrams

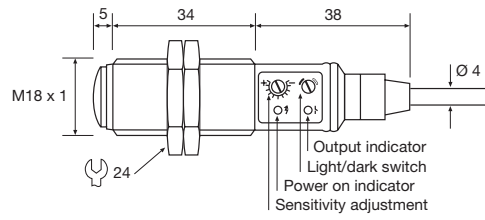


SMP 7600R  
Load as NPN

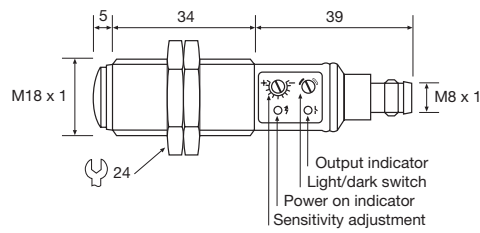


SMP 7600R  
Load as PNP

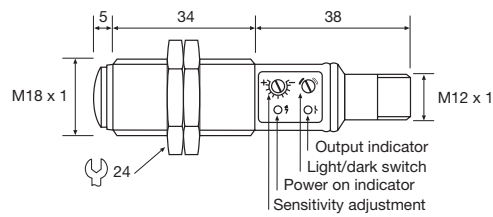
Dimensions and Descriptions



SMP TP/TS 5



SMP TP/TS T4



SMP TP/TS J

(Units in mm)

Telco reserves the right to change specifications without notice.