

## S18 Series

- Basic line of tubular photoelectric sensors
- 3,5 m retroreflex, 2,2 m polarised
- 10 cm short proximity, 30 cm long proximity
- 12 m emitter-receiver barrier
- Cable or M12 connection
- 4 wire configuration for NPN/PNP and Dark/Light
- Plastic or metal housing with IP67 protection

### TECHNICAL DESCRIPTION

The new basic line presents the most diffused tubular photoelectric sensor models; **S18** series with plastic housing and **S18M** series with metal housing.

The retroreflex optic function is available in two models, with or without the optic polarisation filter for the detection of shiny objects; the operating distances vary according to the reflector used and reach 3,5 m.

The diffused proximity function is also present in two models; 10 cm short distance and 30 cm long distance models. The 12 m barrier function is obtained with the emitter - receiver couple.

Each sensor presents both cable or M12 connector versions, where the different 4 wire connection consents the configuration of the NPN/PNP output and of the Dark/Light pulse.

A yellow LED signals the output activation; a sensitivity adjustment trimmer is present in the retroreflex polarised and long proximity models.

The **S18** offers ABS housing and fixing nuts, while the **S18M** offers them in nickel plated brass; all models have PMMA lenses, polycarbonate cable/connector output block, and IP67 protection degree.

### APPLICATIONS

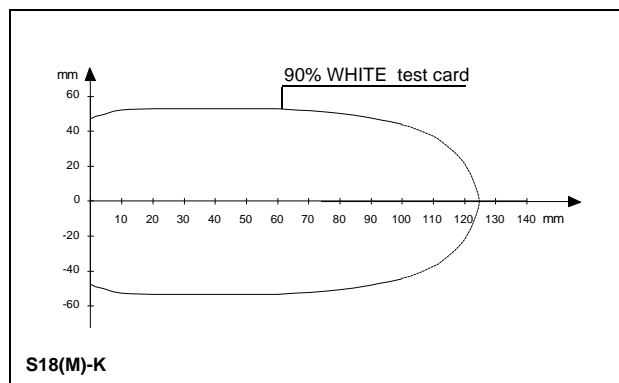
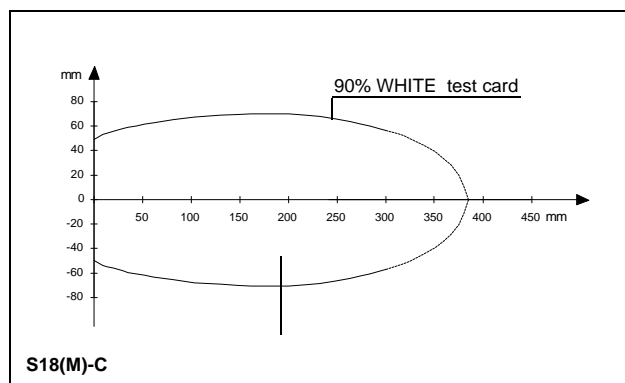
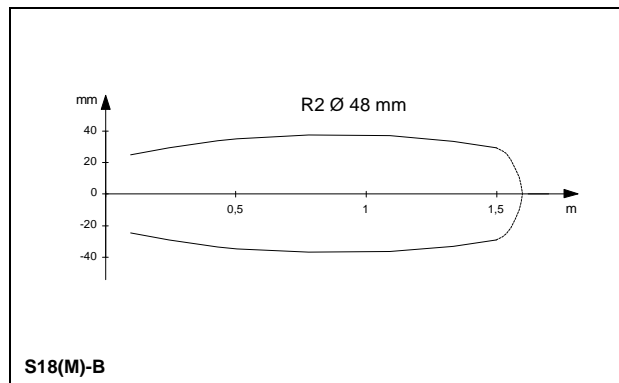
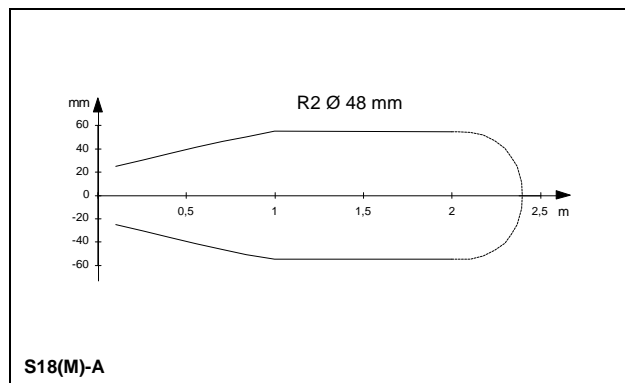
- Universal use in industrial automation
- Automatic material handling
- Automatic packing and packaging machines
- Presence detection for synchronisation and counting
- Civil electronics, domotics, elevators, gate openers, escalators



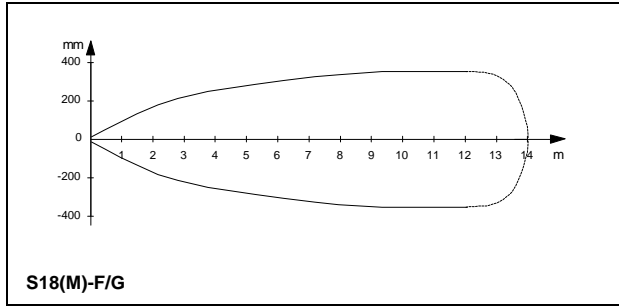
**TECHNICAL DATA**

	S18(M)-5-A	S18(M)-5-B	S18(M)-5-C/K	S18(M)-5-F/G
Power supply:	10 ÷ 30 Vdc			
Ripple:	2 Vpp max.			
Consumption (output current excluded):	30 mA max.			
Output:	NPN/PNP selectable by inverting the 4 power supply wires (- 'G' version excluded)			
Output current:	150 mA (short-circuit protection active at 200 mA )			
Saturation voltage:	2V for NPN or PNP outputs			
Leakage current:	50µA at 30 Vdc			
Response time:	1 ms			2 ms
Switching frequency:	500 Hz max.			250 Hz max.
Indicators:	OUT LED (YELLOW) / POWER ON LED (GREEN) - only for -G- version			
Sensitivity adjustment:		sensitivity trimmer	trimmer for - 'C' vers.	
Operating temperature:	-15°C ÷ 55°C			
Storage temperature:	-20°C ÷ 70°C			
Operating distance:	see tab.1	see tab. 1	-C = 30cm;-K = 10cm	12 m
Emission type:	I.R. (880 nm)	rossa (660 nm)	I.R. (880 nm)	
Ambient light rejection:	EN 60947-5-2			
Vibration:	1,5 mm amplitude at 10 ÷ 55 Hz in each axe X,Y,Z for 2 hours			
Shock resistance:	500 m/s (approx. 50G) 3 shocks in each axe			
Dark/Light selection:	selectable by inverting the 4 power supply wires (- 'G' version excluded)			
Housing and fixing nuts:	S18 = ABS; S18M = nickel plated brass			
Connector block:	Polycarbonate			
Lenses:	PMMA Metacrilato			
Protection degree:	IP67			
Connections:	2 m cable Ø 5 m or M12 4 pole connector			
Weight:	100g max.			

**EMISSION BEAMS**

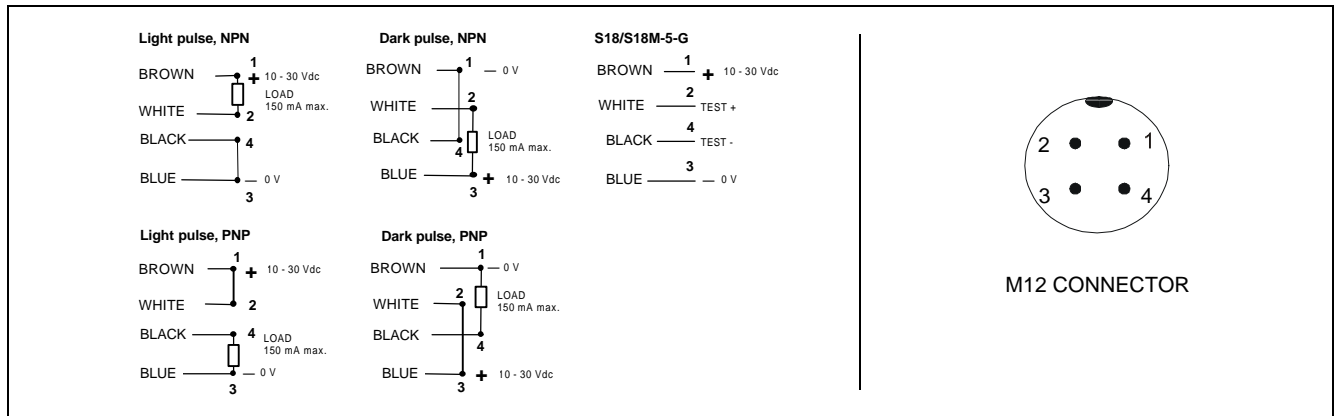


**TAB. 1: REFLECTOR / OPERATING DISTANCES**

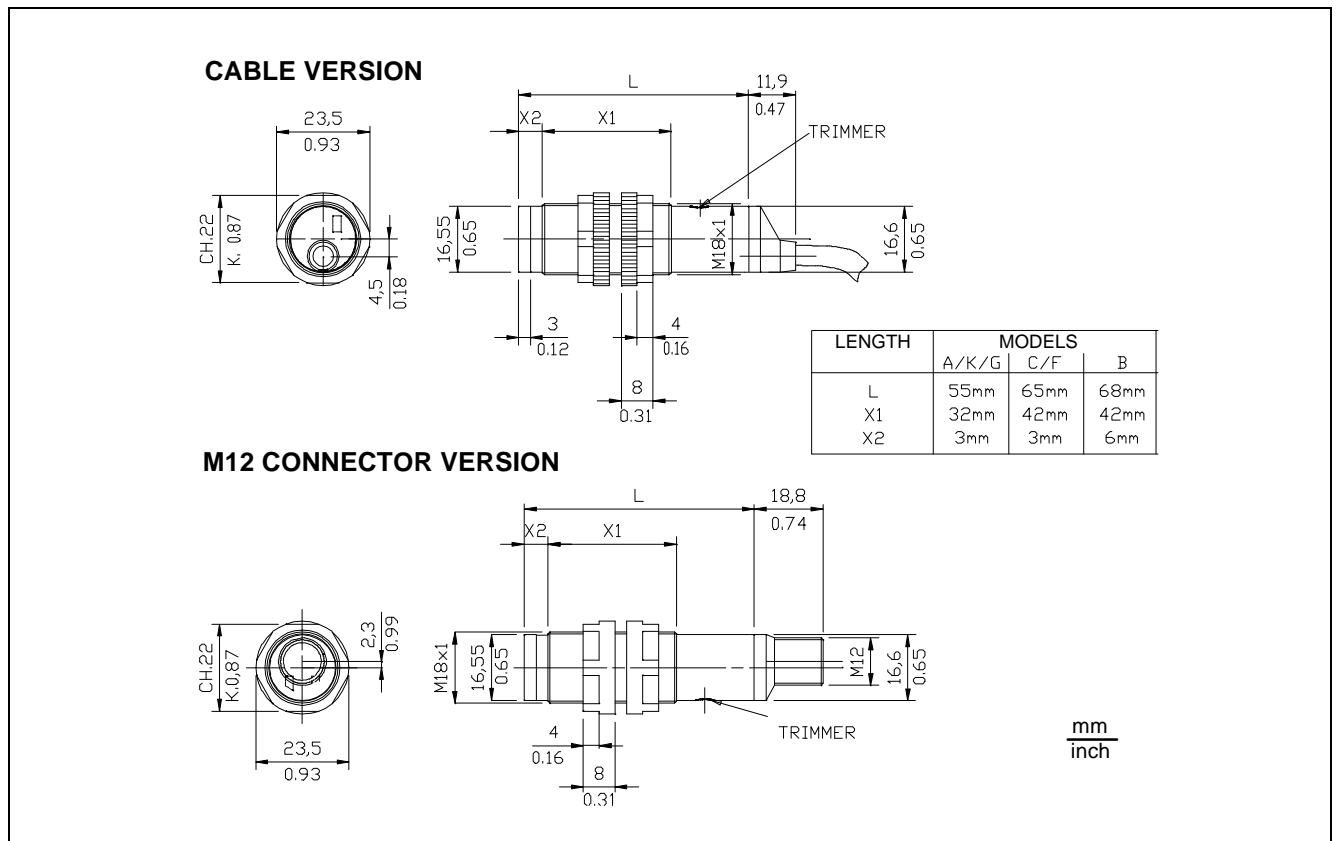


Reflector	S18(M)-A	S18(M)-B
R0	0,7 ± 0,1 m	not used
R1	1,5 ± 0,2 m	0,8 ± 0,1 m
R2	2 ± 0,2 m	1,5 ± 0,2 m
R3	2 ± 0,2 m	1,5 ± 0,2 m
R4	3 ± 0,3 m	2 ± 0,2 m
R5	3 ± 0,3 m	2 ± 0,2 m
R6	3,5 ± 0,3 m	2,2 ± 0,2 m

**CONNECTIONS**



**DIMENSIONS**



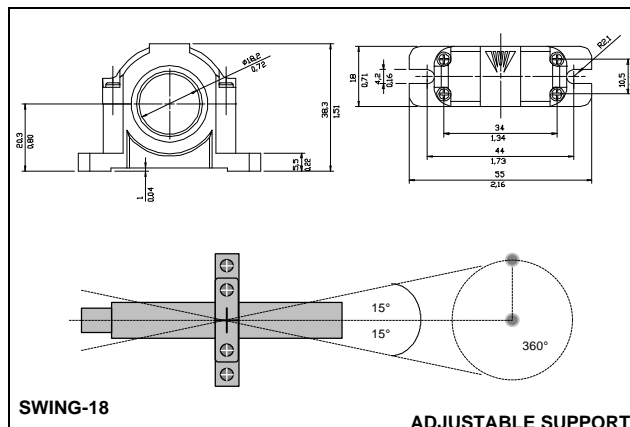
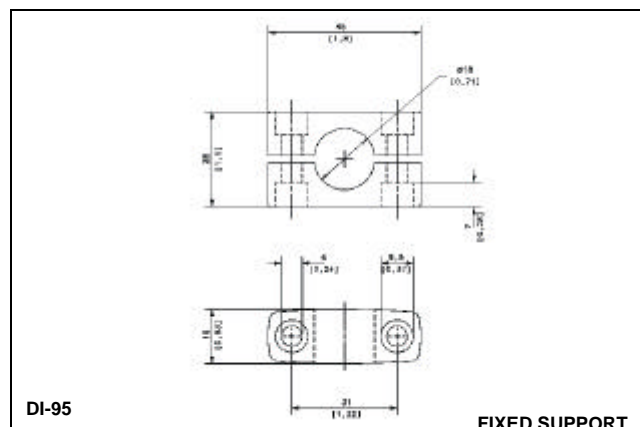
**MODELS**

MODEL	DESCRIPTION	CODE N°
S18-5-A-30	(10pcs) retroreflex 10-30Vdc cable plastic housing	952250000
S18-5-A-32	(10pcs) retroreflex 10-30Vdc M12 plastic housing	952250010
S18-5-K-30	(10pcs) short proximity 10-30Vdc cable plastic housing	952250020
S18-5-K-32	(10pcs) short proximity 10-30Vdc M12 plastic housing	952250030
S18-5-C-30	(10pcs) long proximity 10-30Vdc cable plastic housing	952250040
S18-5-C-32	(10pcs) long proximity 10-30Vdc M12 plastic housing	952250050
S18-5-B-30	(10pcs) pol. retroreflex 10-30Vdc cable plastic housing	952250060
S18-5-B-32	(10pcs) pol. retroreflex 10-30Vdc M12 plastic housing	952250070
S18-5-F-30	(10pcs) receiver 10-30Vdc cable plastic housing	952250080
S18-5-F-32	(10pcs) receiver 10-30Vdc M12 plastic housing	952250090
S18-5-G-00	(10pcs) emitter 10-30Vdc cable plastic housing	952250100
S18-5-G-02	(10pcs) emitter 10-30Vdc M12 plastic housing	952250110
S18M-5-A-30	(10pcs) retroreflex 10-30Vdc cable metal housing	952300000
S18M-5-A-32	(10pcs) retroreflex 10-30Vdc M12 metal housing	952300010
S18M-5-K-30	(10pcs) short proximity 10-30Vdc cable metal housing	952300020
S18M-5-K-32	(10pcs) short proximity 10-30Vdc M12 metal housing	952300030
S18M-5-C-30	(10pcs) long proximity 10-30Vdc cable metal housing	952300040
S18M-5-C-32	(10pcs) long proximity 10-30Vdc M12 metal housing	952300050
S18M-5-B-30	(10pcs) pol. retroreflex 10-30Vdc cable metal housing	952300060
S18M-5-B-32	(10pcs) pol. retroreflex 10-30Vdc M12 metal housing	952300070
S18M-5-F-30	(10pcs) receiver 10-30Vdc cable metal housing	952300080
S18M-5-F-32	(10pcs) receiver 10-30Vdc M12 metal housing	952300090
S18M-5-G-00	(10pcs) emitter 10-30Vdc cable metal housing	952300100
S18M-5-G-02	(10pcs) emitter 10-30Vdc M12 metal housing	952300110

**ACCESSORIES**

MODEL	DESCRIPTION	CODE N°
R0	Ø 20 mm scotch reflector	S940200020
R1	Ø 23 mm plastic reflector	S940700023
R2	Ø 48 mm plastic reflector	S940700048
R3	18 x 54 mm plastic reflector	S940700972
R4	51 x 51 mm plastic reflector	95A151010
R5	Ø 75 mm plastic reflector	S940700075
R6	60 x 40,5 mm plastic reflector	95A151020
DI-95	fixed support for tubular sensors	G71550095
SWING-18	adjustable support for tubular sensors	895000006

**FIXING SUPPORTS**



We reserve the right to make modifications and improvements