

## M18 SENSORS BASIC LINE



- *Most diffused models available*
- *NPN/PNP and dark/light configuration possibility*
- *Cable or M12 connection*
- *Impermeable plastic or metal housing*

## S18 SERIES

The new **S18** series basic line includes all the most diffused tubular photoelectric sensor models.

The retroreflex optic function is available in two versions, with or without the optic polarisation filter for the detection of shiny objects, and with operating distances up to 3 m according to the reflector used. Two different diffuse proximity versions with 10 or 30 cm operating distances are also available; while the through beam models offer a 12 m operating distance.

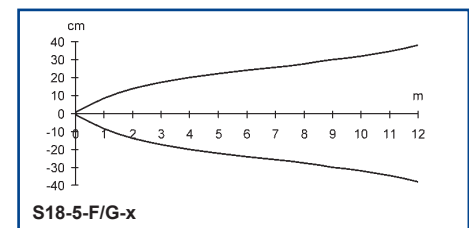
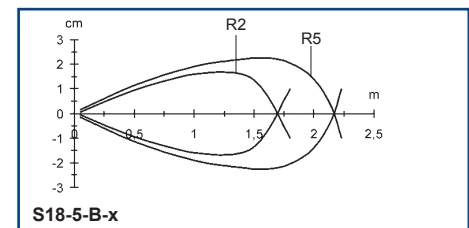
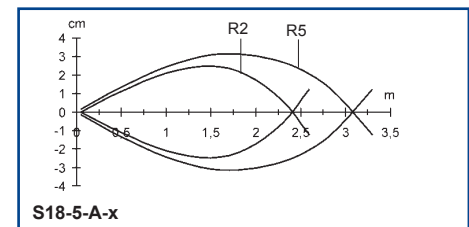
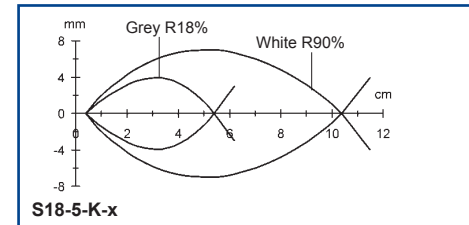
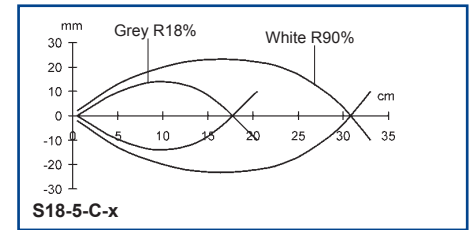
The connection can be either with a cable or M12 connector; in both cases the 4 wire connection allows the complete configuration of the NPN/PNP output and dark/light operating mode. The connector versions can also be pre-configured for the 3 wire connection with PNP output, conforming to the EN 60947-5-2 standard. The **S18** models offer ABS housing and fixing nuts, while the **S18M** models offer them in nickel-plated brass. The IP67 protection is guaranteed in all models.

## TECHNICAL DATA

<b>Power supply:</b>	10 ... 30 Vdc, reverse polarity protection
<b>Consumption:</b>	30 mA max.
<b>Light emission:</b>	infrared LED 880 nm red LED (B vers.)
<b>Diffuse proximity operating distance:</b>	1 ... 30 cm (C vers.) 1 ... 10 cm (K vers.)
<b>Retroreflex operating distance:</b>	0.1 ... 2 m (on R2)
<b>Polarised retroreflex operating distance:</b>	0.1 ... 1.5 m (on R2)
<b>Through beam operating distance:</b>	0 ... 12 m
<b>Setting:</b>	sensitivity trimmer (B, C vers.)
<b>Indicators:</b>	yellow OUTPUT LED green POWER LED (G vers.)
<b>Output type:</b>	NPN or PNP configurable (4 wire vers.) PNP (3 wire vers.)
<b>Saturation voltage:</b>	2.5 V max. (4 wire vers.) 1.8 V max. (3 wire vers.)
<b>Output current:</b>	150 mA max, short-circuit protection
<b>Response time:</b>	1 ms 2 ms (F vers.)
<b>Switching frequency:</b>	500 Hz max. 250 Hz max. (F vers.)
<b>Operating mode:</b>	dark/light configurable (4 wire vers.) light (3 wire K, C vers.) dark (3 wire A, B, F vers.)
<b>Connection:</b>	4-pole M12 connector 2 m Ø 5 mm cable
<b>Electrical protection:</b>	class 2 (S18) class 1 (S18M)
<b>Mechanical protection:</b>	IP67
<b>Housing material:</b>	ABS for S18, nickel-plated brass for S18M
<b>Lens material:</b>	PMMA plastic
<b>Weight:</b>	50 g max. (connector vers.) 100 g max. (cable vers.)
<b>Operating temperature:</b>	-25 ... +55°C
<b>Storage temperature:</b>	-25 ... +70°C
<b>Reference standard:</b>	EN 60947-5-2
<b>Certifications:</b>	CE cULus

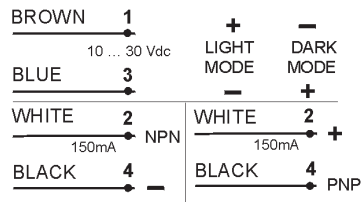
The operating distances indicate the detection distance with excess gain 2.

## DETECTION DIAGRAMS

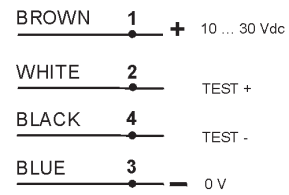


The detection diagrams indicate the typical operating distance with excess gain 1.

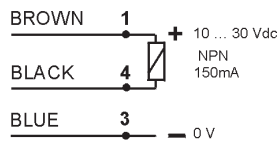
## CONNECTIONS



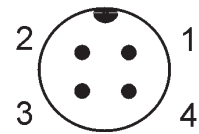
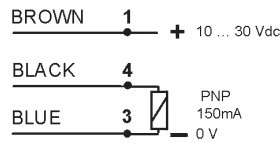
S18-5-x (4 wires)



S18-5-G (4 wires)



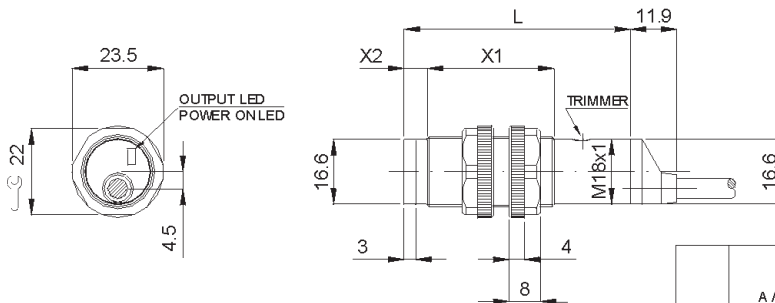
S18-5-x (3 wires)



M12 CONNECTOR

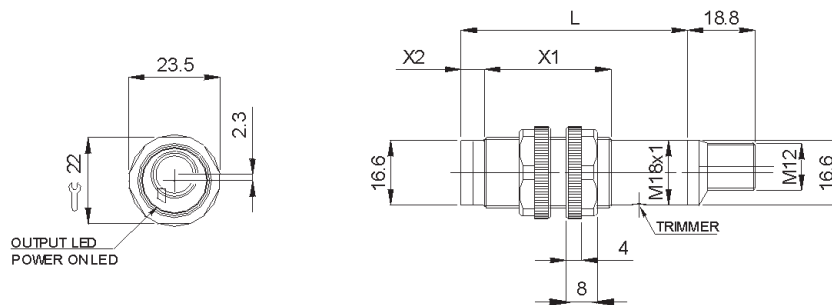
## DIMENSIONS

### CABLE VERSIONS



	MODELS		
	A / K / G	C / F	B
L	55	65	68
X1	32	42	42
X2	3	3	6

### M12 CONNECTOR VERSIONS



## MODELS

### VERSIONS WITH PLASTIC HOUSING

MODEL	OPTIC FUNCTION	CONNECTION*	CODE N°
S18-5-C-30	long distance proximity	2 m cable	952601040
S18-5-C-32	long distance proximity	M12 4 wire connector	952601050
S18-5-C-92	long distance proximity	M12 3 wire connector	952601260
S18-5-K-30	short distance proximity	2 m cable	952601020
S18-5-K-32	short distance proximity	M12 4 wire connector	952601030
S18-5-K-92	short distance proximity	M12 3 wire connector	952601250
S18-5-A-30	retroreflex	2 m cable	952601000
S18-5-A-32	retroreflex	M12 4 wire connector	952601010
S18-5-A-82	retroreflex	M12 4 wire connector	952601240
S18-5-B-30	polarised retroreflex	2 m cable	952601060
S18-5-B-32	polarised retroreflex	M12 4 wire connector	952601070
S18-5-B-82	polarised retroreflex	M12 3 wire connector	952601270
S18-5-F-30	through beam receiver	2 m cable	952601080
S18-5-F-32	through beam receiver	M12 4 wire connector	952601090
S18-5-F-82	through beam receiver	M12 3 wire connector	952601280
S18-5-G-00	through beam emitter	2 m cable	952601100
S18-5-G-02	through beam emitter	M12 4 wire connector	952601110

### VERSIONS WITH METAL HOUSING

MODEL	OPTIC FUNCTION	CONNECTION*	CODE N°
S18M-5-C-30	long distance proximity	2 m cable	952651040
S18M-5-C-32	long distance proximity	M12 4 wire connector	952651050
S18M-5-C-92	long distance proximity	M12 3 wire connector	952651260
S18M-5-K-30	short distance proximity	2 m cable	952651020
S18M-5-K-32	short distance proximity	M12 4 wire connector	952651030
S18M-5-K-92	short distance proximity	M12 3 wire connector	952651250
S18M-5-A-30	retroreflex	2 m cable	952651000
S18M-5-A-32	retroreflex	M12 4 wire connector	952651010
S18M-5-A-82	retroreflex	M12 3 wire connector	952651240
S18M-5-B-30	polarised retroreflex	2 m cable	952651060
S18M-5-B-32	polarised retroreflex	M12 4 wire connector	952651070
S18M-5-B-82	polarised retroreflex	M12 3 wire connector	952651270
S18M-5-F-30	through beam receiver	2 m cable	952651080
S18M-5-F-32	through beam receiver	M12 4 wire connector	952651090
S18M-5-F-82	through beam receiver	M12 3 wire connector	952651280
S18M-5-G-00	through beam emitter	2 m cable	952651100
S18M-5-G-02	through beam emitter	M12 4 wire connector	952651110

(\*) The cable and M12 4 wire connector versions offer NPN/PNP and dark/light configuration.

The M12 3 wire connector versions have PNP output: K, C versions with light mode and A, B, F versions with dark mode.

## ACCESSORIES

MODEL	DESCRIPTION	CODE N°
SP-40	fixed support for tubular M18 sensors	95ACC1370
SWING-18	adjustable support for plastic tubular M18 sensors	895000006

Please refer also to **Sensor Accessories**

**Distributed by:**

### HEADQUARTERS

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