



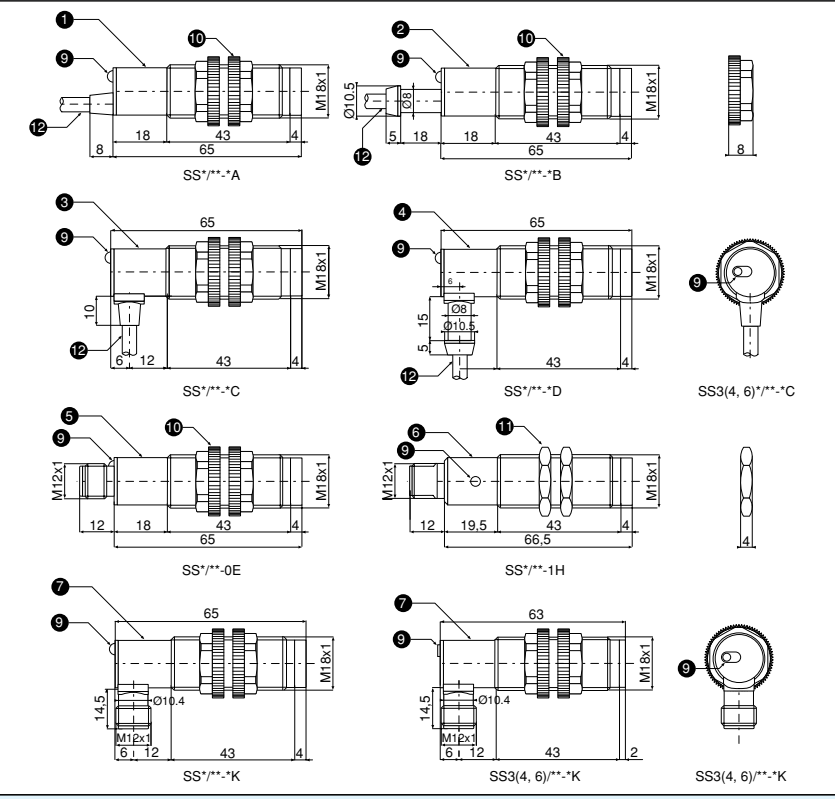
2.1

SERIE SS-SP



- Compact M18 photoelectric sensors axial and with right angle optics - DC**
- ◆ Through-beam, for small (Ø3mm) and ultra-small object (Ø1mm) with visible beam
 - ◆ Models with right angle optic (SP)
 - ◆ 7 cable exit options to suit any installation
 - ◆ M12 plug cable exit in axial or right angle shape (also available in all metal construction - SS)
 - ◆ Check available for all through-beam models
 - ◆ IP67 protection degree
 - ◆ Complete protection against electrical damage
 - ◆ Wide range of connectors, accessories and reflectors available

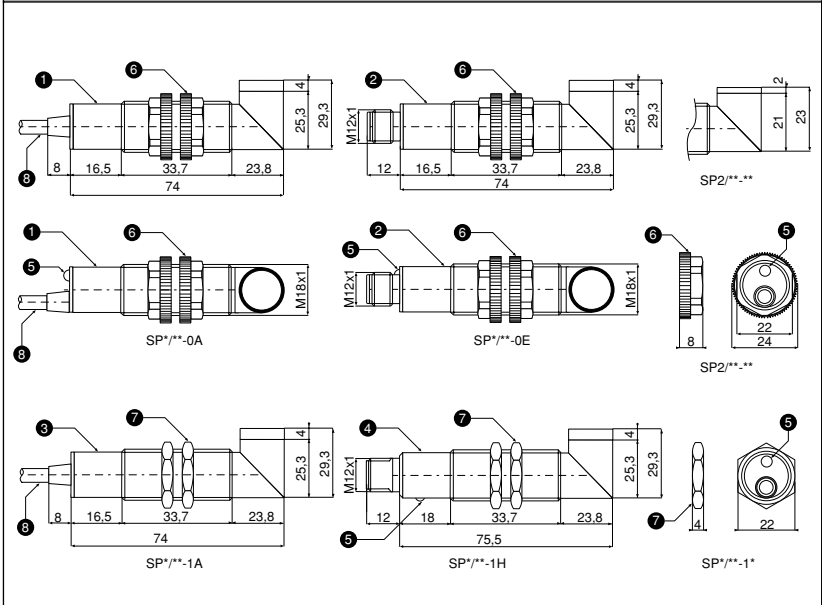
DIMENSIONAL DRAWING



- Key**
- | | |
|---|--|
| 1 Axial cable exit | 9 LED |
| 2 Axial cable exit with tang ⁽¹⁾ | 10 Tightening nut plastic housing |
| 3 Right angle cable exit | 11 Tightening nut metal housing (SW24) |
| 4 Right angle cable exit with tang ⁽¹⁾ | 12 Cable 3(2-4)x0,34 mm ² , Ø4,7mm, PVC, 2m |
| 5 M12 plastic plug cable exit | |
| 6 M12 metal plug cable exit | |
| 7 M12 right angle plug cable exit | |
- Connectors **CD** serie
Accessories **ST** serie



DIMENSIONAL DRAWING



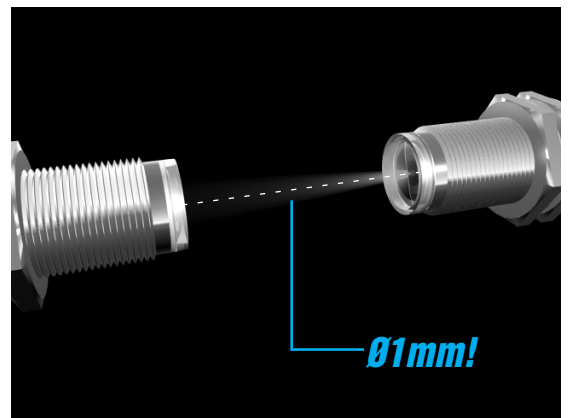
- Key**
- | |
|---|
| 1 Axial cable exit |
| 2 M12 plug cable exit (plastic housing) |
| 3 Axial cable exit (metal housing) |
| 4 M12 plug cable exit (metal housing) |
| 5 LED |
| 6 Tightening nut plastic housing |
| 7 Tightening nut metal housing (SW24) |
| 8 Cable 3(2)x0,34 mm ² , Ø4,7mm, PVC, 2m |
- Connectors **CD** serie
Accessories **ST** serie

7 different cable exit

To adapt the sensor to even the narrowest space.
 Patented right angle cable exit to avoid cable for accidental wrap.
 Plug-in connector available both plastic and all-metal for the maximum resistance.

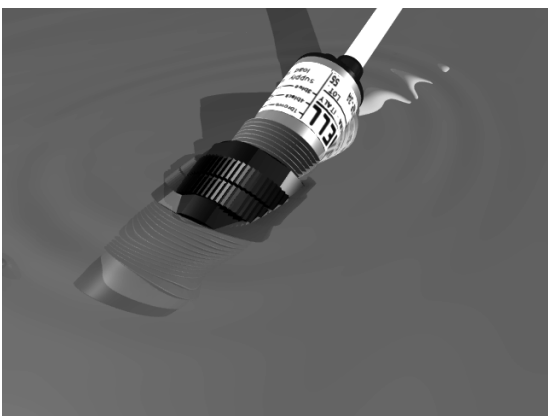


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New through-beams

A complete range of through-beam to suit the most exclusive needs, from visible reduced beam to detect very small objects (down to 1mm) with no accessories together with the advantage of the red light for the quickest installation and alignment.
 All available also with check function.



IP 67 protection degree

For the use in the hashest environment


ORDERING SYSTEM

		S S U / 0 0 - 0 A			
serie					through-beam
M18 compact photoelectric sensor	SS			A	cable exit
M18 photoelectric sensor with right angle optic	SP			B	axial cable exit
model				C	⁽¹⁾ axial cable exit with tang
emitter with reduced visible beam	U			D	⁽²⁾ right angle cable exit
8m receiver for small object	G			E	⁽¹⁾⁽²⁾ right angle cable exit with tang
3m receiver for ultra-small object	V			H	M12 plug cable exit (plastic housing)
output state				K	M12 plug cable exit (metal housing)
NO output	A			O	⁽²⁾ M12 right angle plug cable exit
NC output	C			1	housing
emitter with check	X			O	plastic housing
				1	metal housing
				O	logic emitter
				N	NPN output
				P	PNP output

(1) Available only on request.
(2) Not available on SP serie

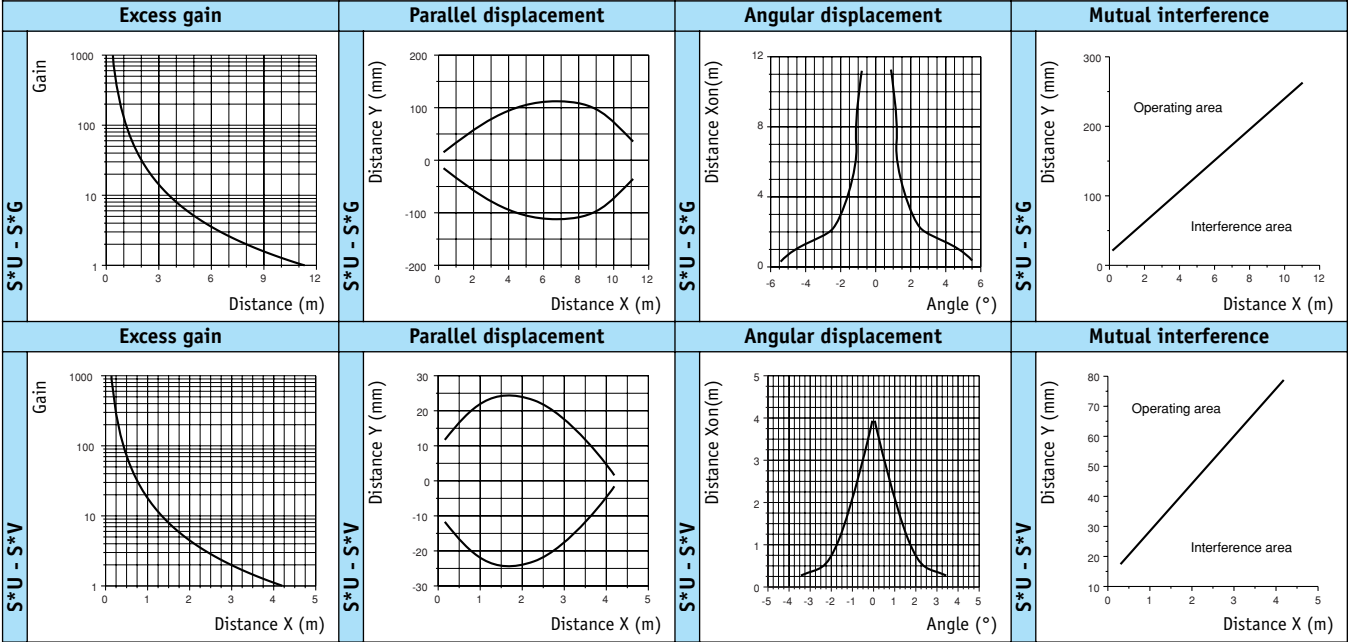
SPECIFICATIONS

Model	S*U/**-*** and S*G/**-***	S*U/**-*** and S*V/**-***
Type	through-beam	
	for small object	for ultra small object
Nominal sensing distance (Sn)	8m	3m
Minimum detectable object	∅4mm	∅1mm
Emission	red (660nm)	
Tolerance	See Sr (glossary)	
Differential travel	≤10%	
Repeat accuracy	5%	
Operating voltage	10 - 30 Vdc	
Ripple	≤10 %	
No-load supply current	15mA (S*E), 25mA (S*U), 20mA (S*R, S*G, S*V)	
Load current	≤100 mA	
Leakage current	≤ 10µA	
Voltage drop	1,2V max. I _L =100mA	
Output type	NPN or PNP - NO or NC	
Switching frequency	250Hz	
Time delay before availability	200 ms	
Supply electrical protections	polarity reversal, transient	
Output electrical protections	short circuit (autoreset)	
Temperature range	-25°...+70°C (without freeze)	
Temperature drift	≤10% Sr	
Interference to external light	3000 lux (incandescent lamp), 10000 lux (sunlight)	
Protection degree (DIN 40 050)	IEC IP67	
LED indicators	red (output energized)	
Housing material	PBT (plastic housing), nickel-plated brass (metal housing), polycarbonate (cable exit)	
Lenses material	PMMA	
Tightening torque	40Nm (metal housing)	
Weight (approx.)	200g (plastic housing) - 240g (metal housing)	

WIRING DIAGRAMS

emitter	S*U/00	NPN output receiver	S**/*N-**	PNP output receiver	S**/*P-**	emitter with	S*U/X0
In case of combined load the maximum admissible capacity C = 100nF, for max. output voltage and current.						See Description on technical terms.	

CHARACTERISTIC CURVES



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