

Compact ø18mmx65mm barrel type photoelectric switches for DC operation

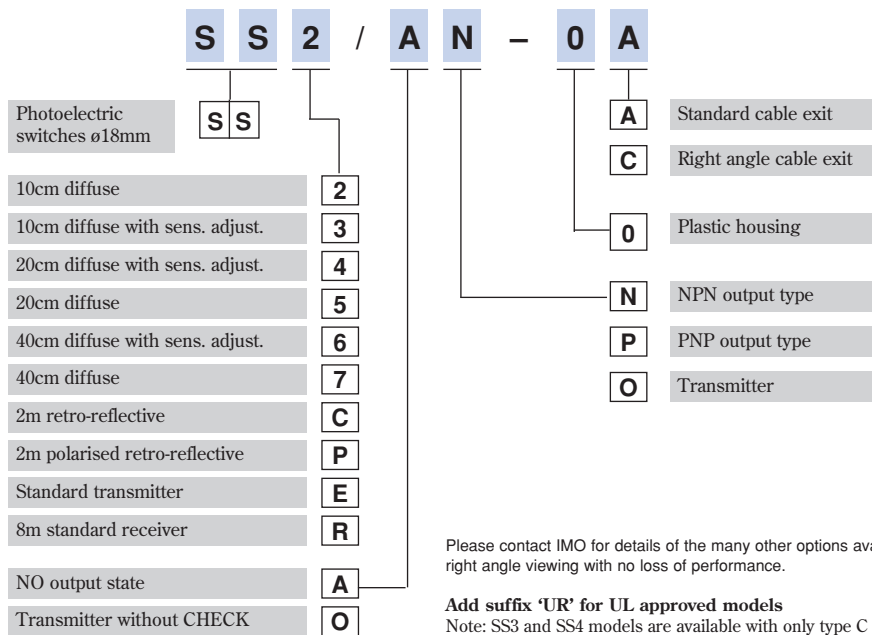
- Diffuse, retro-reflective, polarised, through-beam models
- Small object detection through-beam models
- Diagnostic CHECK function available on through-beam models
- IP67 nickel-plated or output-type colour-coded plastic housing
- Optional sensitivity adjustment - diffuse type (IP65)
- Rear mounted LED operation indicator
- Short-circuit protection
- UL approved option



SS3+SS4 models, feature flush lenses as standard

Options and ordering codes

Cable Exit Types



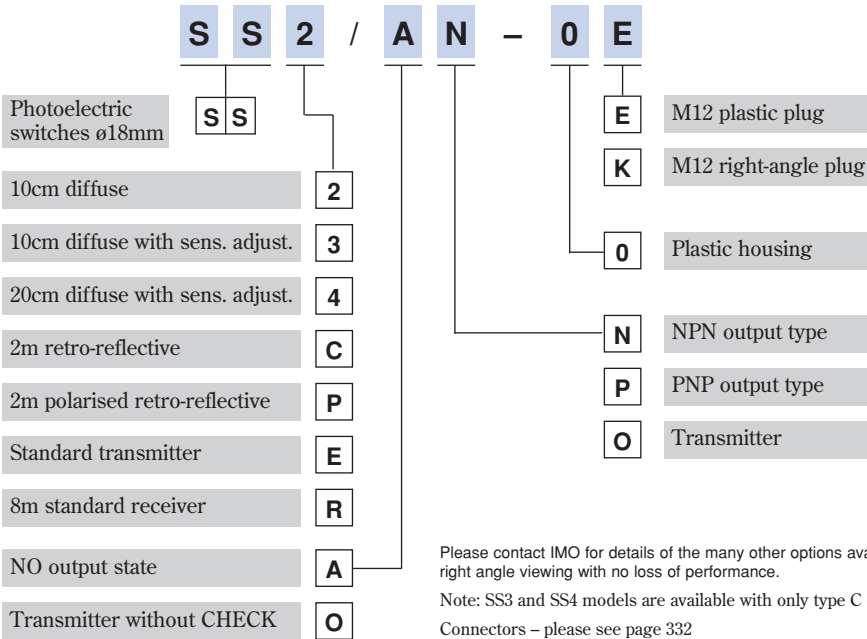
Specifications

Type	diffuse				retro-reflective	polarised	through-beam		
	SS2	SS3	SS4/5	SS6/SS7	SSC	SSP	SSE-SSR	SSU-SSG	SSU-SSV
Sensing range Sn	10cm ⁽¹⁾	10cm ⁽¹⁾	20cm ⁽²⁾	40cm ⁽²⁾	2m ⁽³⁾	2m ⁽³⁾	8m ⁽⁴⁾	8m ⁽⁵⁾	3m ⁽⁶⁾
Emission	infra-red					red	infrared	red	
Hysteresis					10%				
Repeatability					5%				
Tolerance	-5+15%	-0+20%Sn			-5+15% of sensing range Sn				
Supply voltage					10 - 30 VDC ripple 10% max.				
Max consumption	30mA	25mA			30mA		trans 15mA (with CHECK 35mA) receiver 20mA		
Response time	5ms				5ms		20ms	2ms	
Output type	NPN or PNP - NO or NC								
Load current	100 mA								
Residual output voltage	1.2V max. IL = 100 mA								
Leakage current	10µA max. to 30VDC								
Output current limit	~200 mA at 25°C								
Electrical protections	against short circuit (autoreset) - polarity reversal - inductive loads								
Time before switch operation	200 ms								
LED status indicator	yes (at the rear)								
Insulation resistance	>1000M Ohm to 1000VDC								
Dielectric strength	2000VAC 50Hz for 1 Minute								
Noise immunity	1000V (IEC 801-4, II) plastic housing, 500V (IEC801-4, I) metal housing								
Protection degree	IP67	IEC IP65			IEC IP67				
Materials	housing: plastic body - polyamide (nylon), metal body - nickel-plated brass, lenses: acrylic, cable exit: polycarbonate								
Operating temperature	-25° + 70°C (without freeze)								
Interference by external light	3000 lux (artificial light), 10000 lux (sunlight)								
Tightening torque	1Nm (10 kgcm), (plastic housing) 40Nm (408 kgcm) (metal housing)								
Ambient humidity	35-85% r.h.								
Weight (approx.)	100g (plastic) 120g (metal)							200g (plastic) 240g (metal)	

⁽¹⁾ referred to 100x100mm white matt paper; ⁽²⁾ referred to 200x200mm white matt paper; ⁽³⁾ with ø80mm reflector (RL110 supplied separately); ⁽⁴⁾ minimum detectable target ø7.5mm; ⁽⁵⁾ minimum detectable target ø4mm; ⁽⁶⁾ minimum detectable target ø1mm

Options and ordering codes

Plug In Types

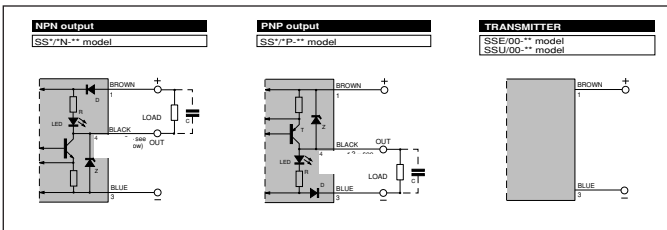


Please contact IMO for details of the many other options available, including small object detection and the SP range which gives right angle viewing with no loss of performance.

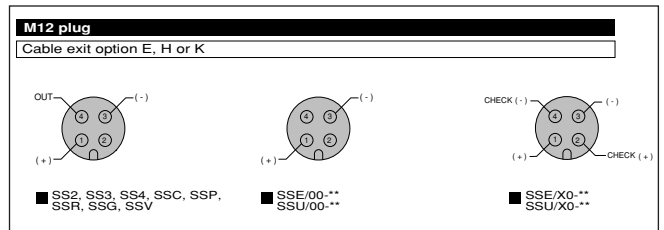
Note: SS3 and SS4 models are available with only type C or K cable exits (right angle cable and M12 right angle plug).

Connectors – please see page 332

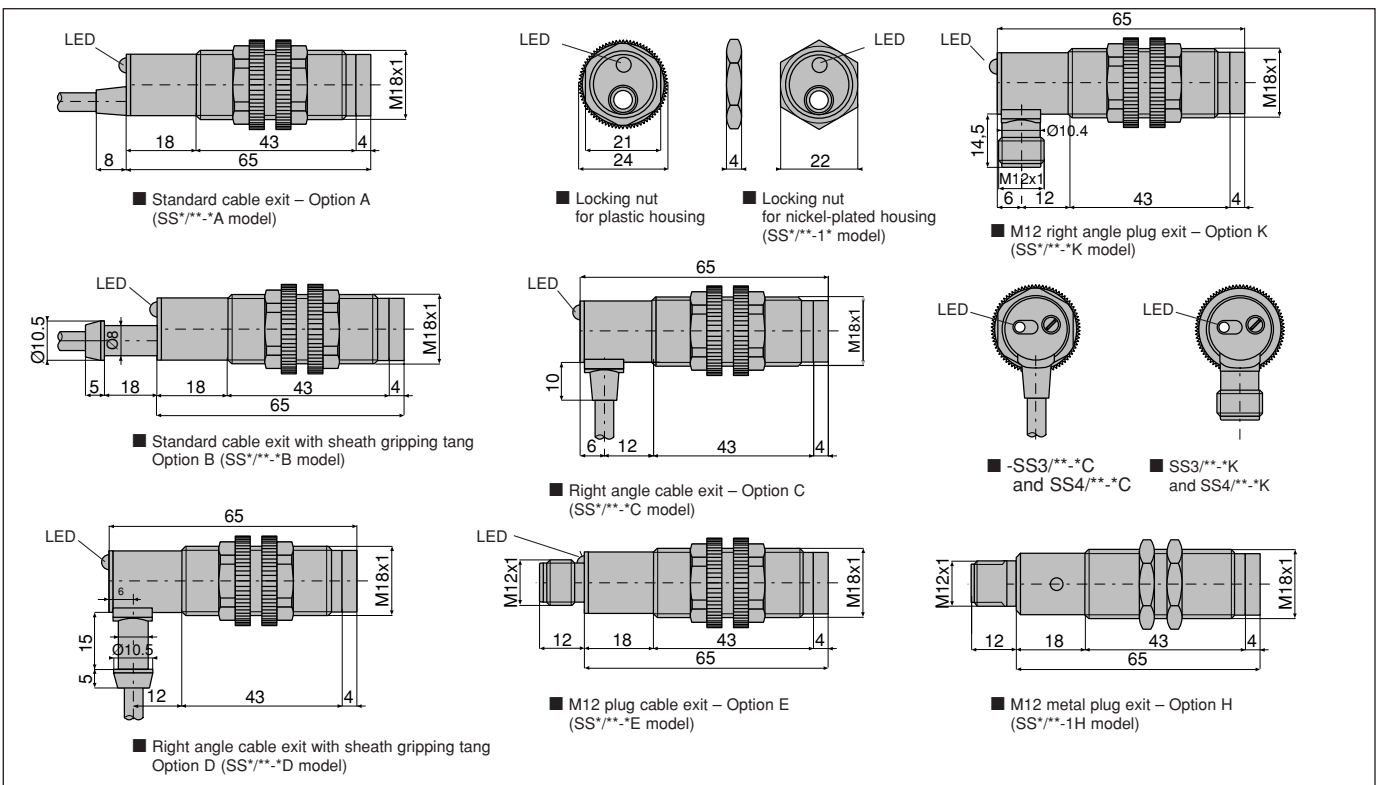
Output circuit



Plug-pin connections



Dimensions (mm)



Red LED showing the output state; SSE and SSU models equipped with LED showing the presence of power supply. Cable: ø4.7mm, 2m length, 0.34mm² conductor section, PVC material.

Characteristic curves

