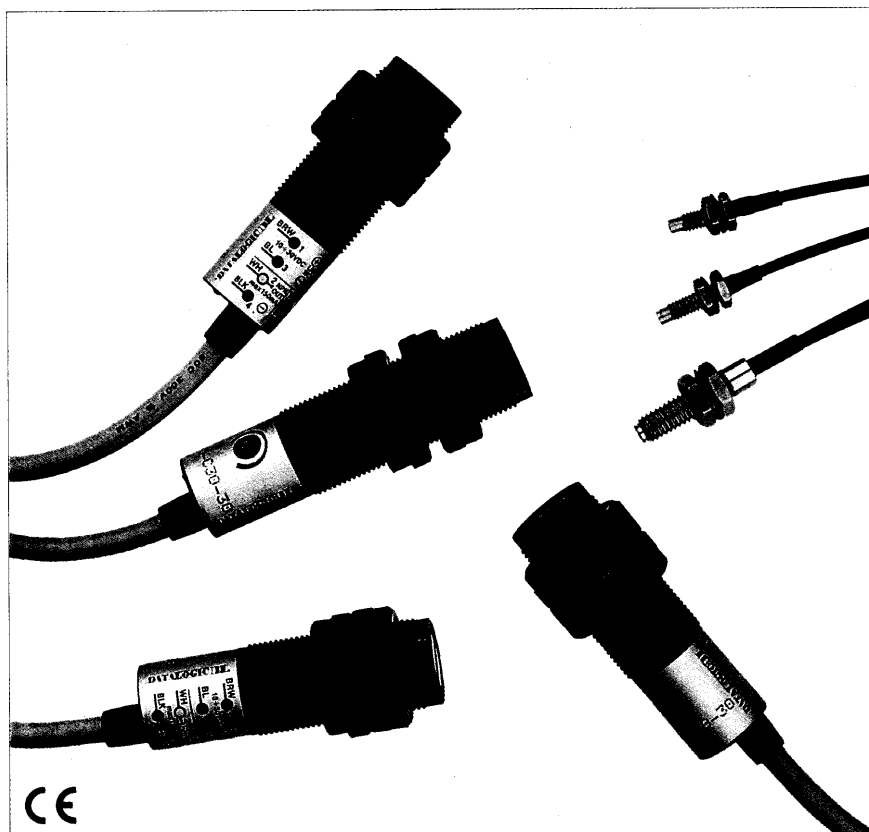




S5 series

- Multivoltage from 15 to 264 Vac
- DC versions (10 to 30 Vdc)
- Green stability LED
- Light/dark selection
- Sensitivity control
- Straight or 90° optics
- Connection via cable or M12 connector
- Test input models
- Fibre optics versions
- Plastic casing - IP67

TECHNICAL DESCRIPTION

The **S5** 18 mm tubular photoelectric sensor series is available in the following versions:

- | | |
|--|------------------------------------|
| ■ <i>Retroreflex</i> | ■ <i>Limited proximity scanner</i> |
| ■ <i>Polarised retroreflex</i> | ■ <i>Fibre optics</i> |
| ■ <i>Proximity scanner</i> | ■ <i>Emitter/receiver</i> |
| ■ <i>Fixed focus proximity scanner</i> | |

The **S5** versions operating from 10 to 30 Vdc have dual NPN/PNP output and light/dark operation selection. These units are also short-circuit and reverse polarity protected. The multivoltage versions accept any voltage from 15 to 264 Vac and are supplied with SCR + bridge output.

A red output LED indicator is standard in all models. The DC versions of the series are provided with a green stability LED to control alignment and display the level of the received signal, a sensitivity control trimmer and test input function.

S5 sensors are enclosed in plastic casing, protection class IP67, straight or 90° optics. Electrical connection may be with a cable or using the M12 connector. Two or more sensors may be connected to activate simple logic configurations: AND, NOR, OR and NAND.

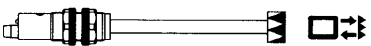
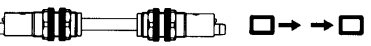
The wide range of models available suits these sensors to a variety of industrial applications requiring solutions to critical space and difficult access situations.

A MEK 18 mm glass filter is available to protect the lens when used in the presence of corrosive substances.

APPLICATIONS

- Automatic packaging machines
- Presence detection, counting
- Transport and conveyor lines
- Robotics and FMS applications
- Small object detection
- Space critical situations

FUNCTIONS

		
		1 Retroreflex 2 Polarised retroreflex 3 Proximity scanner 4 Fixed focus proximity scanner 5 Limited proximity scanner 6 Emitter/receiver 7 Fibre optics
		

SPECIFICATIONS

Emission:	Infrared LED 880 nm Red LED 660nm for fixed focus, proximity scanner and fibre optics versions	AC versions	
Lenses:	PMMA Methacrylate	Power supply:	15 to 264 Vac, 48 to 62 Hz
Indicators:	red output LED green stability LED (DC versions with sensitivity control only)	Current consumption:	10 mA max.
Housing:	plastic	Output:	SCR + bridge rectifier - 264 Vac
Protection class:	IP67	Output current:	100 mA max.
Weight:	approx. 100 g. (3.53 oz)	Output leakage current:	1 mA max. at 264 Vac
Connections:	2 m cable or M12 connector	Response time:	20 ms max.
Operating temperature:	-15 to +55°C (+5 to 131°F)	Switching frequency:	25 Hz max.
Storage temperature:	-20 to +70°C (-4 to 158°F)	DC versions	
Humidity:	35 to 85% (non-condensing)	Power supply:	10 to 30 Vdc
Ambient light rejection:	3,000 lux max., incandescent lamp 10,000 lux max., sunlight	ripple:	2 Vpp max.
Vibration:	10 to 55 Hz, amplitude 1.5 mm (0.06 in) in each axes X, Y, Z for 2 hours	Current consumption:	30 mA max.
Shock resistance:	500 m/s (approx. 50 G) 3 shocks in each 3 axes	Output:	NPN/PNP selectable 30Vdc max (excluding limited proximity version)
Hysteresis:	10% max. (proximity versions only)	Output current:	150 mA max.
Light/dark selection:	standard in all DC models, excluding limited proximity version (selectable by inverting the power supply wires)	Short circuit protection:	active at 200 mA
		Saturation voltage:	2.5 V max. - NPN or PNP output 1.2 V max. - limited proximity
		Output leakage:	50 µA at 30 Vdc
		Response time:	1 ms max. - standard 2 ms - emitter/receiver 6 ms - limited proximity
		Switching frequency:	500 Hz max. - standard 250 Hz - emitter/receiver 175 Hz - limited proximity

AC VERSIONS: MODELS SELECTION TABLE

TYPE	FUNCTION OPERATING DISTANCE	DARK LIGHT PULSE	SENSITIVITY TRIMMER	Straight optic with standard cable	Straight optic with 90° cable	Straight optic with M12 connector	90° optic with standard cable	90° optic with M12 connector
S5-1-A2-10		dark		G5110210				
S5-1-A2-11		dark			G5110211			
S5-1-A2-12		dark				G5110212		
S5-1-A2-15	retroreflex	dark					G5110215	
S5-1-A2-17		dark						G5110217
S5-1-A2-20		light		G5110220				
S5-1-A2-21	0.1 to 2 m	light			G5110221			
S5-1-A2-22	(0.33 to 6.6 ft)	light				G5110222		
S5-1-A2-25		light					G5110225	
S5-1-A2-27		light						G5110227

