



## Industrial Safety Systems

WSU/WEU26-3  
Single-beam Photoelectric Safety Switch



**SICK**  
Sensor Intelligence.



- Universal in application
- Relay outputs
- Robust design
- Large scanning range
- Front screen heating



## Overview of technical specifications

Scanning range (depending on type)	0.5 m ... 20 m / 15 m ... 70 m
Light sender/type of light	Infrared light
Construction size	156 mm x 50 mm x 116 mm
Supply voltage	24 V DC
Enclosure rating	IP 67
Ambient operating temperature from ... to	-25 °C ... +55 °C
Type	Type 4 (IEC 61496)
Performance Level	PL e (EN ISO 13849)

## Product description

The photoelectric safety switch WSU/WEU26-3 is used for access protection of hazardous areas on machines or plants. The devices are permanently mounted in the access area with the necessary safety

distance from the nearest hazardous point and send a shutdown signal to the machine or system when the light beam is interrupted.

## In-system added value

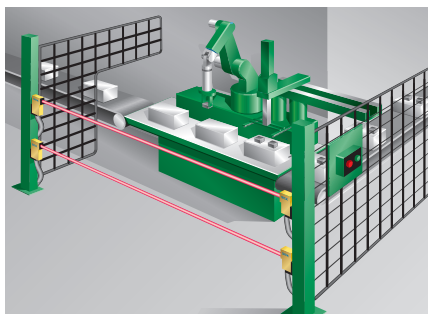
Combined with SICK safe control solutions

→ You can find more combinations using the product finder at [www.sick.com](http://www.sick.com)

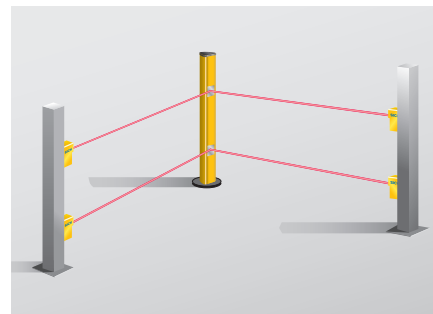
## Applications

→ You can find more applications using the application finder at [www.mysick.com](http://www.mysick.com)

- Robots
- Processing machines
- Machining centres
- Palletiser systems
- High-bay warehouses
- Transfer lines



Access protection on a machining centre



Access protection with mirror deflection

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## Ordering information

- Supply voltage: 24 V DC
- Connection type: PG gland
- Enclosure rating: IP 67

Scanning range	Sender		Receiver	
	Type	Part number	Type	Part number
0.5 m ... 20 m	WSU26/3-103A00	1047984	WEU26/3-103A00	1047985
15 m ... 70 m	WSU26/3-103A00	1047984	WEU26/3-203A00	1048379

## Technical specifications

→ You can find more detailed data in the operating instructions. Download at [www.mysick.com](http://www.mysick.com)

### General data

System part	Sender	Receiver
Scanning range (depending on type)	-	0.5 m ... 20 m / 15 m ... 70 m
Number of beams	1	
Synchronisation	Optical, without separate synchronization cable	
Detection capability	30 mm	
Wave length	950 nm	-
Protection class	I (EN 50178:1998) <sup>1)</sup>	
Enclosure rating	IP 67 (EN 60529)	
Safety related parameters	Type 4 (IEC 61496) SIL3 (IEC 61508), SILCL3 (IEC 62061) Category 4 (EN ISO 13849) PL e (EN ISO 13849) 1 x 10 <sup>6</sup> switching cycles (at AC-15, 230 V, 0.4 A) 2,6 x 10 <sup>5</sup> switching cycles (at AC-15, 230 V, 2.0 A) 1 x 10 <sup>6</sup> switching cycles (at DC-13, 24 V, 0.6 A) 2 x 10 <sup>5</sup> switching cycles (at DC-13, 24 V, 1.5 A) 4,0 x 10 <sup>-9</sup> 20 years	
PFHd (mean probability of a dangerous failure per hour)		
T <sub>M</sub> (Mission Time)		
Dimensions (W x H x D)	156 mm x 50 mm x 116 mm	
Housing material	Aluminum diecast	
Ambient operating temperature from ... to	-25 °C ... +55 °C	
Storage temperature from ... to	-25 °C ... +70 °C	
Air humidity from ... to	15 % ... 95 %, Non-condensing	
Vibration resistance	5 g, 10 Hz ... 55 Hz (IEC 60068-2-6)	
Shock resistance	10 g, 16 ms (IEC 60068-2-29)	
Weight	1 kg	
Front screen heating	✓	

<sup>1)</sup> Requires safe extra-low voltage SELV/PELV

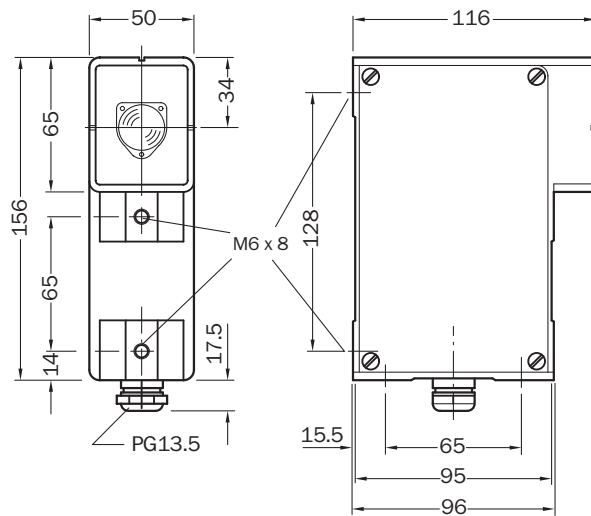
## Electrical data

Connection type	PG gland	
Supply voltage $V_s$	24 V DC (19.2 V DC ... 28.8 V DC) <sup>1)</sup>	
Maximum power consumption	6 W	8 W
Switch-on time	Max. 10 s <sup>2)</sup>	
Test input	Volt-free N/C contact	-
Switching outputs	-	Relay
Contact material	-	Ag alloy with Au coating
Maximum response time	-	Max. 22 ms
Switching current	-	0.02 A ... 2 A
Switching voltage	-	10 V DC ... 30 V DC
	-	10 V AC ... 230 V AC
Usage category in compliance with IEC/EN 60947-5-1	-	AC-15/DC-13
Mechanical life (relay contacts)	-	$\geq 1 \times 10^7$ switching cycles

<sup>1)</sup> The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK.

<sup>2)</sup> After applying the supply voltage to sender and receiver

## Dimensional drawings



Dimensions in mm

## Connection diagrams


→ You can find connection diagrams at [www.mysick.com](http://www.mysick.com)

## Accessories



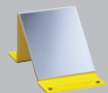
### Mounting systems

Property	Items supplied	Type	Part number
Spring fastening	For PSK 1	BEF-4AAAAHST3	2012473
Fixing bracket	For PSK1	BEF-4GHAHAL1	2009292
Mounting bracket	For WSU/WEU26/2, WSU/WEU26-3	BEF-4WNAEFAL1	2007900

### Power supply units


Figure	Input voltage	Output voltage	Output current	Part number
	100 V AC ... 240 V AC	24 V DC	2.1 A	7028789
			3.9 A	7028790

### Deflector mirrors <sup>1)</sup>



Figure	Mirror surface	Deflection angle	Items supplied	Type	Part number
	75 mm x 80 mm	-	Including mounting adapter (two pieces swivel mount)	PNS75-008	1026647
	96 mm x 124 mm	-	-	PSK1	1005229
	80 mm x 97 mm	90°	For 90° deflection, incl. mounting set, not suitable for column mounting	PSK45	5306053

<sup>1)</sup> Reduction of the scanning range

### Laser alignment aid

Figure	Type	Part number
	Laser alignment aid - AR60	1015741
	Adapter AR60 WSU/WEU26/2, WSU/WEU26-3	4031156

**Device protection**

Figure	Designation	Type	Part number
	Test rod holder	BEF-3WNAAAAAL1	2052249
 Presentation similar	30 mm diameter	Test rod	2022602
	-	Snow protection tube	1003619
	-	Dust protection tube	1003556

**PG expansion**

Construction size	Type	Part number
PG13/21	PG expansion	5307052
PG21	Two-way splitter	5305978

**Arc-suppressor**

Designation	Type	Part number
0.22 $\mu$ F/220 Ohm for 110 V AC ... 220 V AC	RC-A	6001224
2.2 $\mu$ F/100 Ohm for 24 V AC/DC ... 48 V AC/DC	RC-AD	6001225

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