

# SAPPD2D-06AP005

Safeguard Detector

SAFETY SYSTEMS FOR AUTOMATING MATERIAL FLOWS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	part no.
SAPPD2D-06AP005	1089445

**Included in delivery:** UE410-SD400 (1)

Other models and accessories → [www.sick.com/Safeguard\\_Detector](http://www.sick.com/Safeguard_Detector)



### Detailed technical data

#### Features

<b>Safety-related parameters</b>	
Category	Category 3 (EN ISO 13849-1)
Performance level	PL d (EN ISO 13849-1)
PFH <sub>D</sub> (mean probability of a dangerous failure per hour)	$1.5 * 10^{-7}$
DC <sub>avg</sub> (diagnostic coverage)	80 % (EN ISO 13849-1)
MTTF <sub>D</sub> (mean time to dangerous failure)	250 years (EN ISO 13849-1)
<b>Items supplied</b>	1 x UE410-SD400 safety evaluation module 1 x SAPPD2D-06A0001 MultiPulse sensor pair

#### UE410-SD safety evaluation module

<b>Note</b>	The UE410-SD safety evaluation module can be operated with one or two MultiPulse sensor pairs. The actuator can be connected directly to the UE410-SD safety evaluation module. The safety chain can also be expanded with additional logic elements (e.g., a higher-level safety controller).
<b>Configuration method</b>	Hard wired
<b>Number of connectable sensor pairs</b>	1 or 2
<b>Connection type</b>	Spring terminals
<b>Pulse rate of the sensors</b>	10 Hz
<b>Supply voltage V<sub>S</sub></b>	24 V DC (19.2 V ... 30 V)
<b>Protection class</b>	III (EN 50178)
<b>Enclosure rating</b>	IP20 (EN 60529)
<b>Ambient operating temperature</b>	-25 °C ... 55 °C
<b>Response time of the overall safety system (sensors and safety evaluation module)</b>	≤ 160 ms

#### MultiPulse photoelectric proximity sensor

<b>Number of sensors</b>	2 pieces
<b>Detection zone</b>	30 mm ... 100 mm <sup>1)</sup>
<b>Remission</b>	6 % ... 90 %

<sup>1)</sup> If no movable physical guard is identified in the detection zone, the safety controller prompts the machine to enter the safe state.

<b>Pulse frequency</b>	10 Hz
<b>Response time</b>	≤ 100 ms
<b>Type of light</b>	Visible red light
<b>Wave length</b>	650 nm
<b>Light spot size (distance)</b>	Ø 7 mm (50 mm)
<b>Connection type</b>	Connector M8, 3-pin
<b>Voltage supply</b>	Via UE410-SD
<b>Enclosure rating</b>	IP67 (EN 60529)
<b>Ambient operating temperature</b>	-40 °C ... +60 °C

<sup>1)</sup> If no movable physical guard is identified in the detection zone, the safety controller prompts the machine to enter the safe state.

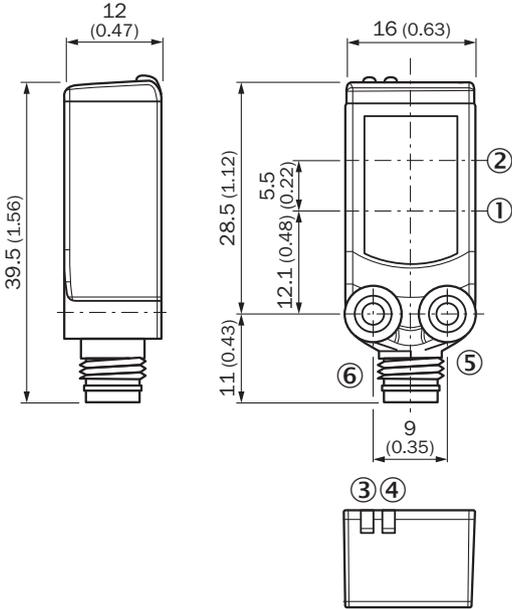
### Certificates

<b>EU declaration of conformity</b>	✓
<b>ACMA declaration of conformity</b>	✓
<b>EC-Type-Examination approval</b>	✓

### Classifications

<b>ECLASS 5.0</b>	27279090
<b>ECLASS 5.1.4</b>	27279090
<b>ECLASS 6.0</b>	27279090
<b>ECLASS 6.2</b>	27279090
<b>ECLASS 7.0</b>	27279090
<b>ECLASS 8.0</b>	27279090
<b>ECLASS 8.1</b>	27279090
<b>ECLASS 9.0</b>	27279090
<b>ECLASS 10.0</b>	27279090
<b>ECLASS 11.0</b>	27279090
<b>ECLASS 12.0</b>	27279090
<b>ETIM 5.0</b>	EC001449
<b>ETIM 6.0</b>	EC001449
<b>ETIM 7.0</b>	EC001449
<b>ETIM 8.0</b>	EC001449
<b>UNSPSC 16.0901</b>	32151705

Dimensional drawing



Dimensions in mm (inch)

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)