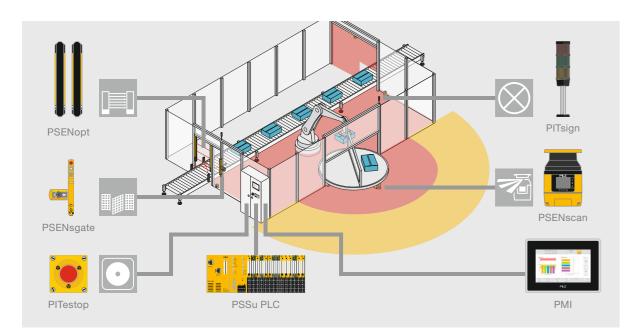
## ► Safe, complete solution

With its many years of experience in optoelectronic sensors, Pilz is your competent contact partner for safety laser scanners. From sensor and control technology through to drive technology and visualization - with our comprehensive product range, we can provide you with complete, one-stop solutions.



### Safety laser scanner PSENscan



### Technical

- ▶ Compliant and approved in accordance with:
- EN/IEC 61496-1: Type 3 - EN ISO 13849-1: PL d
- IEC 61508: SIL 2
- ▶ Opening angle: 275 degrees
- ▶ Operating range: 3 m and 5.5 m safety zone, 20 m warning zone
- ▶ Reaction time: 60 ms (+12 ms for all connected slaves)
- ▶ Protection type: IP65
- ▶ Dimensions (H x W x D): 152 x 102 x 112.5 mm







PILZ | 5

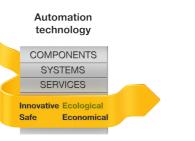
### **Support**

Technical support is available from Pilz round the clock.

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+55 11 97569-2804	
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Mexico	+43 1 7986263-0
+52 55 5572 1300	Belgium, Luxembourg
USA (toll-free)	+32 9 3217575
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	+33 3 88104000
Asia	Germany
China	+49 711 3409-444

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Pilz develops environmentally-friendly products using ecological materials and energy-saving technologies. Offices and production facilities are ecologically designed, environmentally-aware and energy-saving. So Pilz offers sustainability, plus the security of using energy-efficient products and environmentally-friendly solutions.



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Safety laser scanner PSENscan



## Safety laser scanner PSENscan: Productive area monitoring - Series connection also possible

### **PSENscan**

The safety laser scanner PSENscan provides two-dimensional area monitoring with an opening angle of 275 degrees and a protected field range of up to 5.5 meters. Thanks to the free configuration of warning fields and protected fields as well as adaptation to structural conditions, the scanner can be optimally integrated into the widest range of applications. To increase productivity, up to three separate zones can be monitored simultaneously and up to 70 selectable configurations can be set up. The series connection of up to four scanners according to the master-slave principle means that you can significantly reduce your cabling and setup costs and requirements. An integrated operator display provides information immediately. The exchangeable storage medium allows you to transfer your configuration at any time.

Combining with configurable small controllers PNOZmulti or controllers PSSuniversal gives you a cost-effective, complete, one-stop solution.



#### Your benefits at a glance

- Large opening angle of 275 degrees
- Always the right operating range: variants with protected field ranges of 3 meters and 5.5 meters
- Easy to integrate into the application: compact housing as well as free configuration of the protected fields and warning fields including adaptation to structural conditions
- High productivity: up to three separate zones can be monitored simultaneously with just one scanner and up to 70 switchable configurations can be set up
- Reduction of cabling and setup costs and requirements: series connection of up to four scanners according to the master-slave principle
- Integrated operator display provides information immediately
- Exchangeable storage medium for transferring the configuration
- High availability thanks to resistance to dust
- Simple mounting and alignment of the scanner using the appropriate accessories











Safety laser scanner PSENscan



## Optimum safeguarding of danger zones

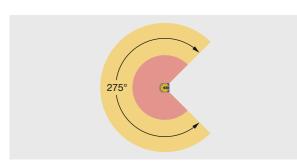
Stationary or mobile safeguarding of danger zones as well as access monitoring - the safety laser scanner PSENscan offers the optimum solution for your application.

#### Two-dimensional area monitoring

The safety laser scanners PSENscan provide two-dimensional area monitoring with an opening angle of 275 degrees. Protected fields and warning fields can be freely defined and adapted to structural conditions. This allows the safety laser scanners PSENscan to be integrated easily into a wide variety of different applications.

#### Stationary safeguarding of danger zones

Applications that involve interaction between man and machine place high demands on the safety solution. The safety laser scanners PSENscan detect when a person approaches a hazardous movement. Entry into a warning field causes controlled braking of the hazardous movement; entry into the protected field causes the hazardous movement to be stopped.



Easy to integrate into the application: free configuration of the protected fields and warning fields, including adaptation to structural conditions

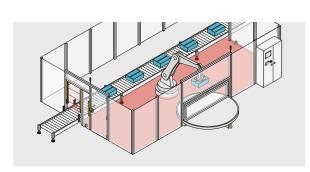
Reliable detection of persons in the danger zone triggers controlled braking of the hazardous movement.

#### **Encroachment from behind**

A reliable safety concept is indispensable particularly in danger zones where visibility is poor, e.g. in the case of robot applications. The safety laser scanners PSENscan detect the presence of a person in the danger zone and prevent hazardous movements from being restarted.

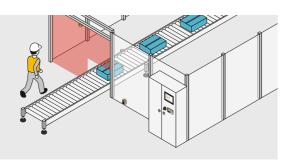
#### Access protection

A flexible solution is needed to safeguard access to danger zones in the widest range of applications. The safety laser scanners PSENscan are not only ideal for safeguarding access points against entry by persons thanks to their integrated muting inputs, they are also suitable for applications where material is fed in and out simultaneously.



PSENscan fulfils two requirements at the same time: danger zone safeguarding and restart monitoring.

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Distinction made between humans and material, ensuring the safe infeed and outfeed of material.



Safety laser scanner PSENscan

# ► Safeguarding of Automated Guided Vehicles

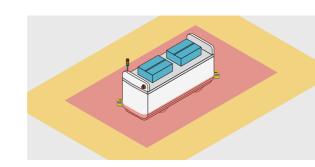
Reliable safeguarding of Automated Guided Vehicles (AGVs) is required in order to protect people and objects from harm. The safety laser scanners PSENscan detect objects in the path of the vehicle and ensure maximum safety even at high speeds without any reduction in productivity.

#### Safe all around

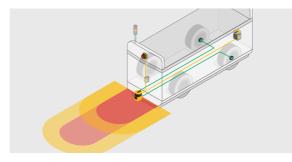
Just two safety laser scanners are necessary to provide AGVs with all-around safeguarding. The safety laser scanners detect objects in the path of the vehicle and ensure that the AGV stops in good time.

#### Always the right protected field

If the speed of the vehicle changes, the danger zone also changes. Integrated encoder inputs enable adaptation of the protected and warning fields to the current speed, thereby preventing unnecessary stops.



All-around safeguarding of AGVs with just two safety laser scanners.



Adaptation of protected and warning fields to the vehicle speed.

#### Safe cornering

Various protected fields and warning fields can be configured in order to ensure that AGVs also move safely around corners. The appropriate protected field and warning field is then activated depending on the current path of the vehicle.

### Keeping an eye on the surrounding area

The safety laser scanners PSENscan measure the distance to surrounding objects. This information can be used for the direct navigation of Automated Guided Vehicles.



Direct navigation of AGVs by monitoring the surrounding area



Safety laser scanner PSENscan

### ► Flexible solution for your application

PSENscan safety laser scanners - used as stand-alone devices, in series or in combination with other products provide a customized solution for your application.

#### Easy to configure thanks to series connection

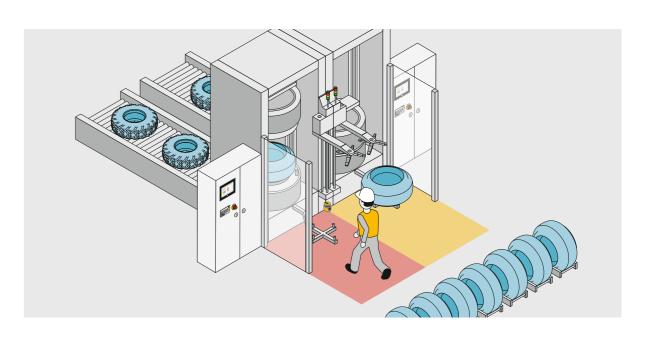
Up to four safety laser scanners PSENscan can be connected together according to the master-slave principle. The configuration is set centrally at the master scanner and passed on to the slaves. The master

also supplies the slaves with power.



#### Simultaneous monitoring of up to three safety zones

With PSENscan, up to three safety zones can be monitored simultaneously and independently of each other. Only the plant section which a person has entered is stopped. This allows the safety distances of your plant to be optimized. The result is increased plant productivity and improved plant ergonomics while ensuring optimum safety.



Switching of the protected field and warning field to the current path.

PILZ | 3 PILZ | 4