



### Individual solution for every industry

1/3











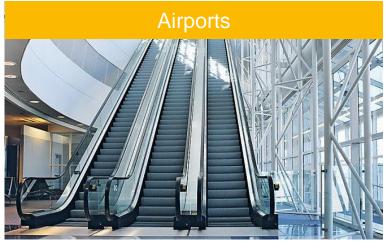


### Individual solution for every industry

2/3













### Individual solution for every industry

3/3





1/2











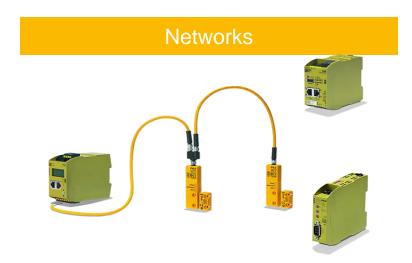




Robotics

PILZ

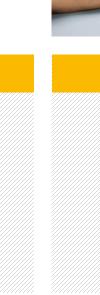
2/2











#### **Sensor technology**







#### Controllers











#### Robotics



PILZ 27.11.2022 Product overview





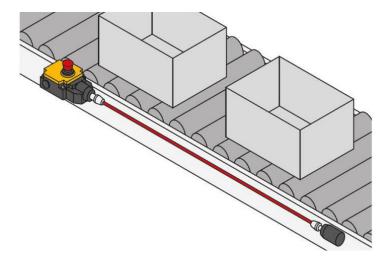
Devices for position monitoring



### Devices for position monitoring

Safe rope pull switch PSENrope



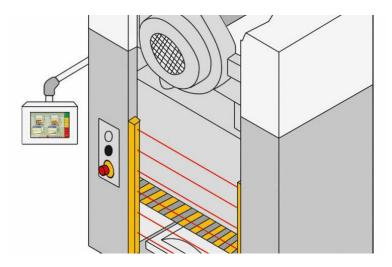




### Devices for position monitoring

#### **Rotary encoder PSENenco**











#### **Mechanical safety switch PSENmech**





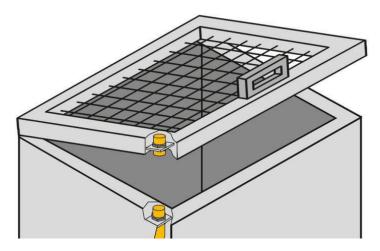


Non-contact, magnetic safety switch PSENmag





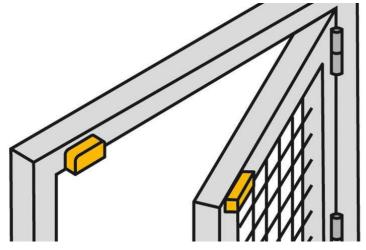






#### **Coded safety switches PSENcode**

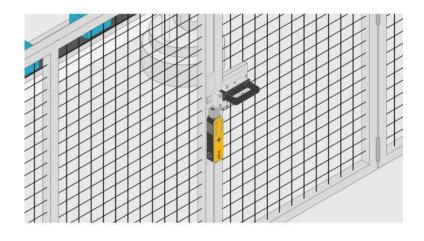






#### Safety bolt PSENbolt



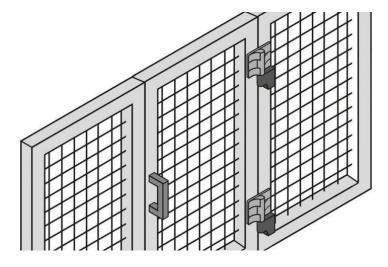




#### Safe hinge switches PSENhinge









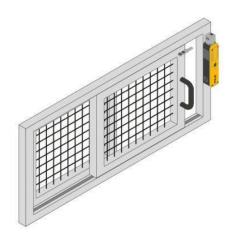




**▶** Safety gate systems

Mechanical safety gate system PSENmech with guard locking





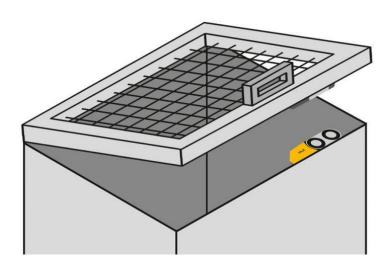


#### Safety gate system PSENslock





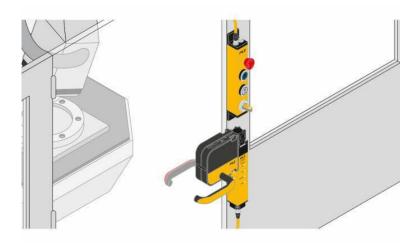






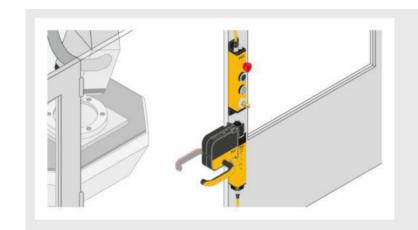
#### Safety gate system PSENmlock 1/2



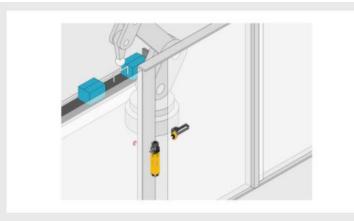




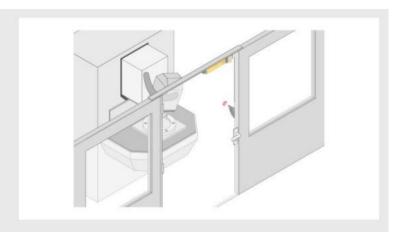
#### Safety gate system PSENmlock 2/2



PSENmlock door handle module with an integrated escape release



Separate door handles

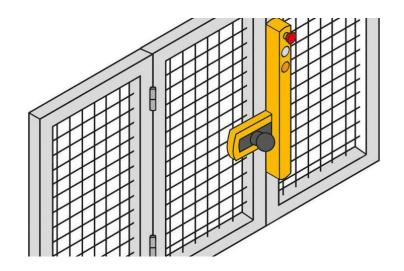


Escape releases

27.11.2022 Product overview PILZ | 21

#### Safety gate system PSENsgate







27.11.2022 Product overview PILZ | 22





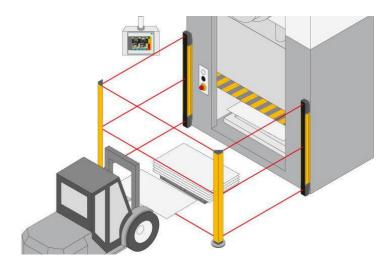




Optoelectronic sensors

#### **Light curtain PSENopt**

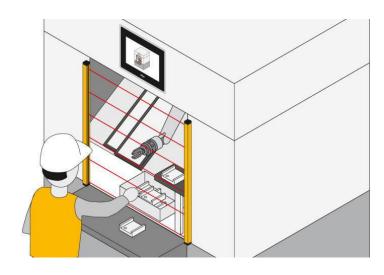






**Light curtain PSENopt – Second generation 1/2** 







**Light curtain PSENopt – Second generation 2/2** 

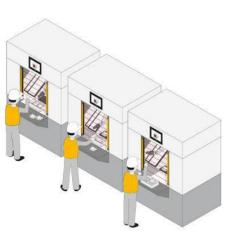
Protect your light curtains PSENopt II from damage - with the PSENopt II post protectors

Accessory for the light curtain PSENopt II to prevent restart

Integrated coding on all PSENopt II safety light curtains



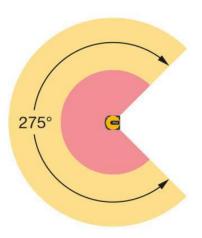




27.11.2022 Product overview PILZ | 26

#### **Safety laser scanner PSENscan 1/5**





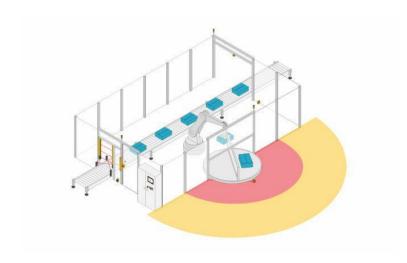


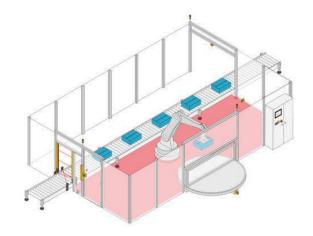
**Safety laser scanner PSENscan 2/5** 

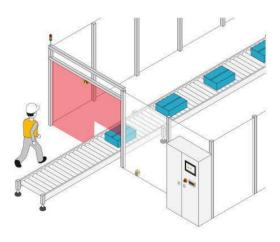
Stationary safeguarding of danger zones

Protection against encroachment from behind

**Access guarding** 







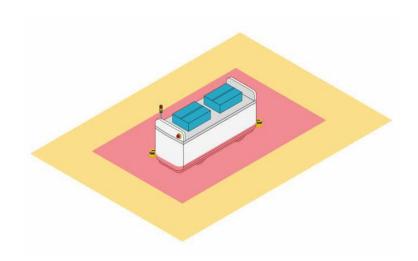
27.11.2022 Product overview PLZ | 28

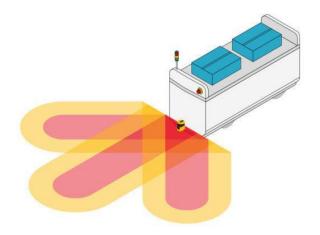
**Safety laser scanner PSENscan 3/5** 

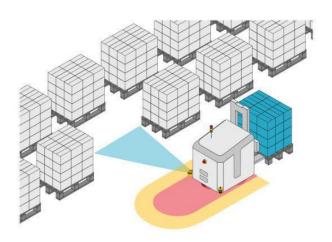
**All-round protection** 

Safe cornering

**Have the complete picture** 







27.11.2022 Product overview PILZ | 29

#### Safety laser scanner PSENscan 4/5



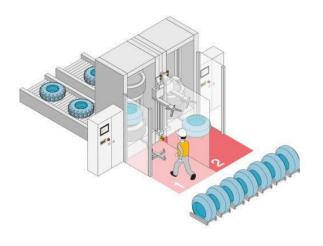
ROS packages for AGV navigation

**Safety laser scanner PSENscan 5/5** 

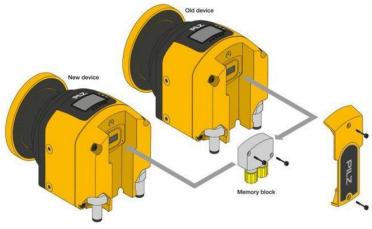
Simultaneous monitoring of up to 3 safety zones

Simple configuration thanks to series connection

High availability thanks to fast replacement







PILZ | 31 27.11.2022 Product overview

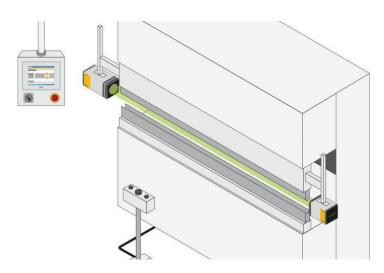




**▶** Safe camera systems

#### **Camera-based protection system PSENvip**









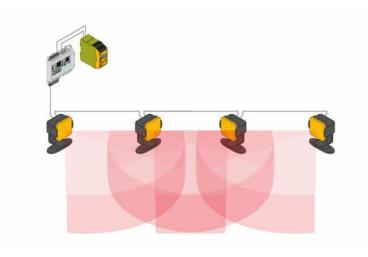


**▶** Safe radar sensor PSENradar

#### Safe radar sensor PSENradar 1/2









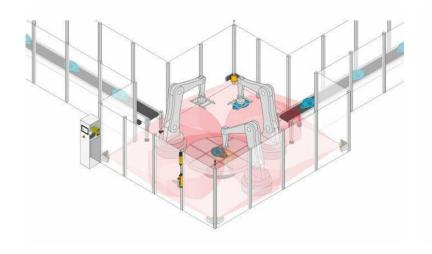
27.11.2022 Product overview PILZ | 35

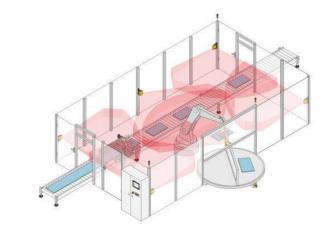
#### Safe radar sensor PSENradar 1/2

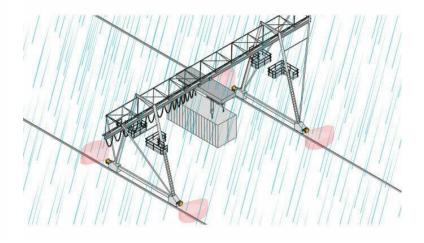
Rear access protection in metalworking

Safe woodworking thanks to protection zone monitoring

Using radar sensors to safeguard outdoor applications



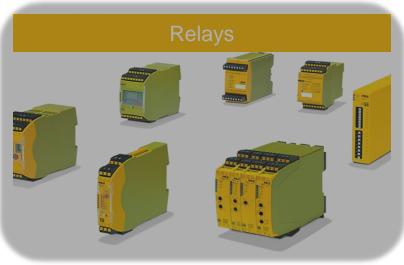




### Product overview

1/2







# Controlle









Robotics

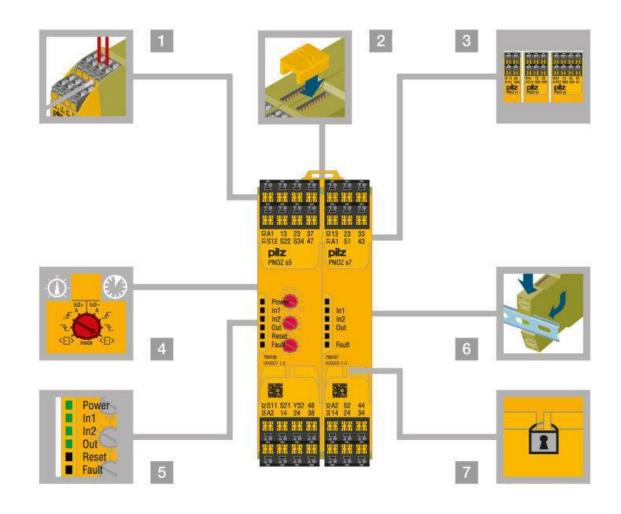


27.11.2022 Product overview PILZ | 37





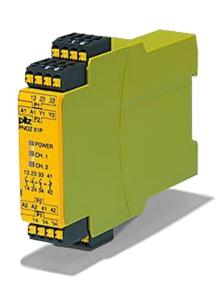
PNOZsigma safety relay



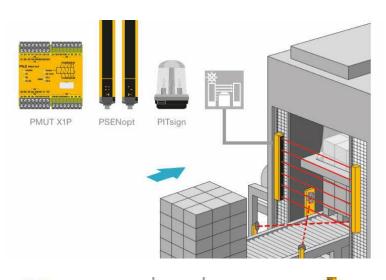


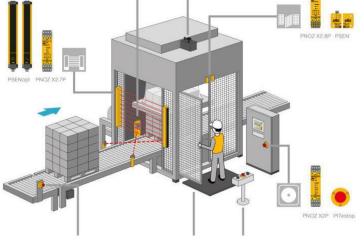


### **PNOZ X safety relays**

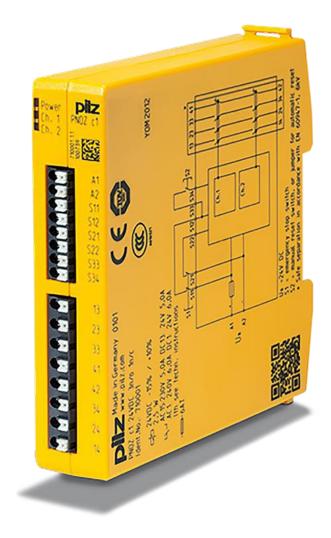


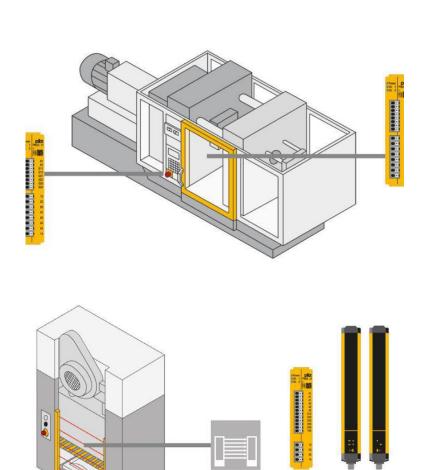






### **PNOZcompact** safety relay

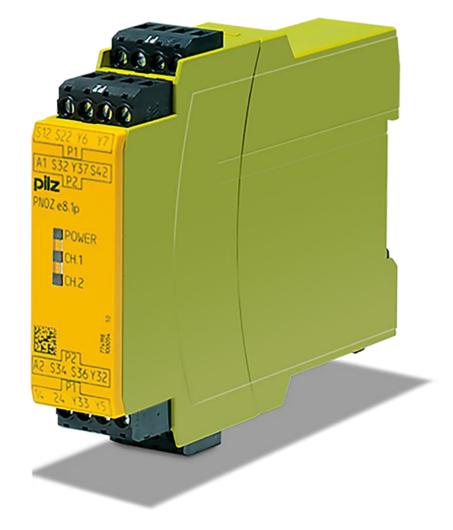


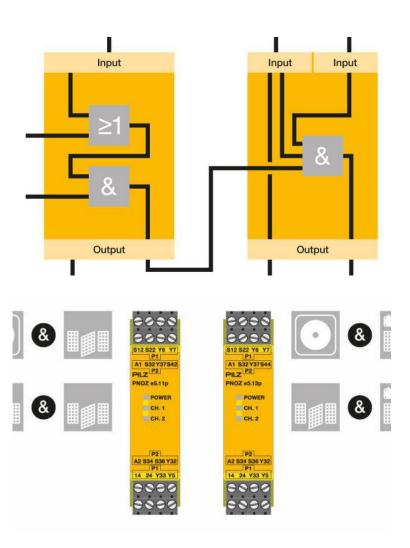


PNOZ c2

**PSENopt** 

**PNOZelog safety relay** 





### **PNOZpower safety relays**







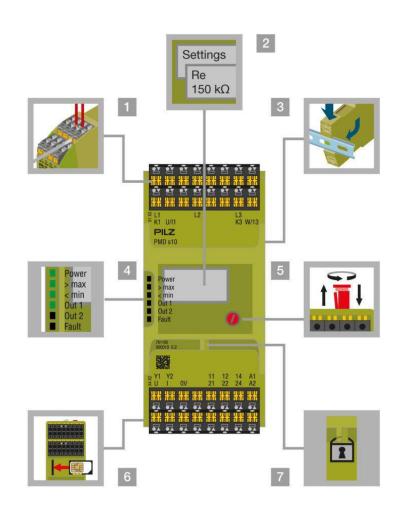
27.11.2022 Product overview PILZ | 43





**Electronic monitoring relays PMDsigma 1/2** 





### **Electronic monitoring relays PMDsigma 2/2**

True power monitor PMD s10

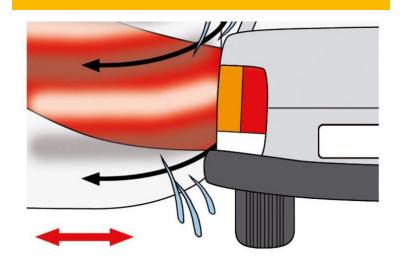
To control the brush pressure on car washes.

Insulation monitor PMD s20

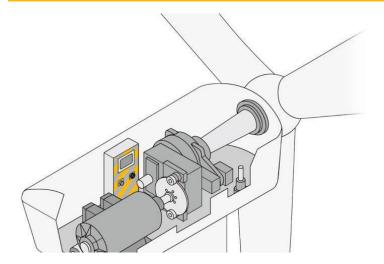
Clinical operation zones with insulation monitoring

Insulation monitor PMD s20

Offshore installations such as wind turbines, clarification plants and shiplifts.





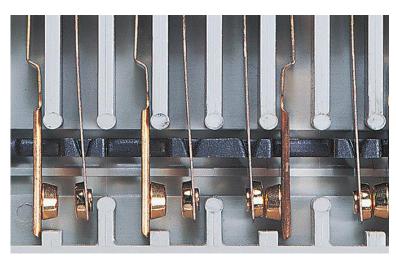


### **Electronic monitoring relays PMDsrange 1/2**











**Electronic monitoring relays PMDsrange 2/2** 

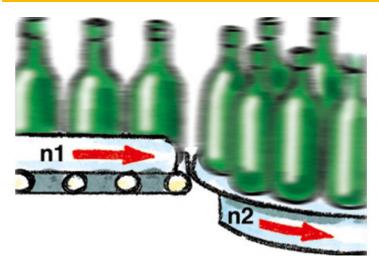
"Bottling plant" with voltage monitoring

monitoring relay ensures that the plant is shut down in a controlled manner

"Hospital" with insulation monitoring

Use insulation monitoring in hospitals

"Monitoring fault voltage and insulation on welding transformers"







27.11.2022 Product overview PILZ | 48





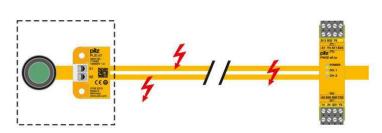
**Line inspection devices** 



# **Line inspection devices**

Maximum safety for long cable routes – With PLIDdys!









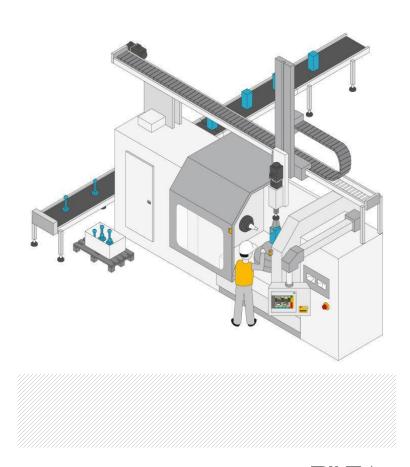


Brake control devices

### Brake control devices

Safety relay PNOZ s50 for safe brake control 1/2





27.11.2022 Product overview PILZ | 52

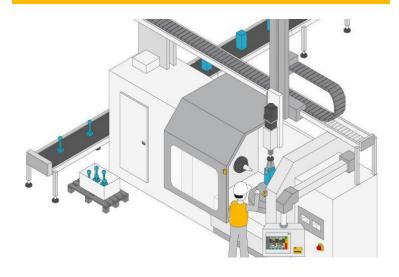
### Brake control devices

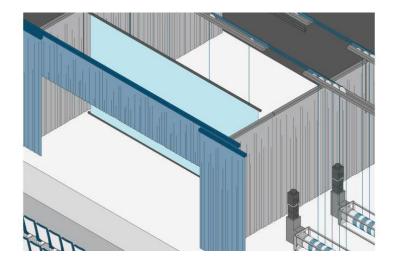
Safety relay PNOZ s50 for safe brake control 2/2

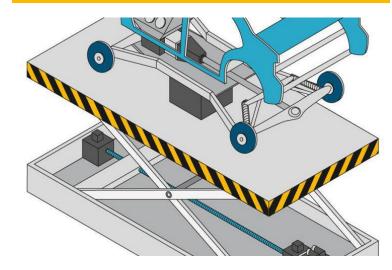
Application on gravity-loaded axes

Application in stage technology on winches

Application on scissor tables











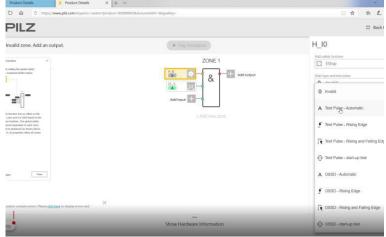
Modular Relay myPNOZ

# Modular Relay myPNOZ

myPNOZ – the new, modular safety relay







### Product overview

1/2















Robotics







**▶** Small controllers PNOZmulti 2

### **▶** Small controllers PNOZmulti 2

It's multi-talented and fits into any system!











Configurable compact controllers PNOZmulti Mini

# **▶** Configurable compact controllers PNOZmulti Mini

As simple as a safety relay, as flexible as a controller









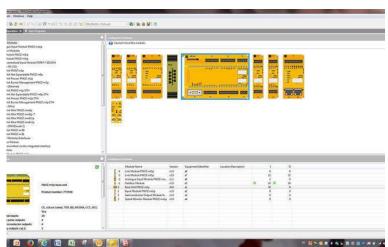


Configurable safety systems PNOZmulti

# **▶** Configurable safety systems PNOZmulti

The original configurable safety system!







### Product overview

1/2







**PLC** controllers

# **PLC** controllers

**PSSuniversal – Controllers in the automation system PSS 4000** 









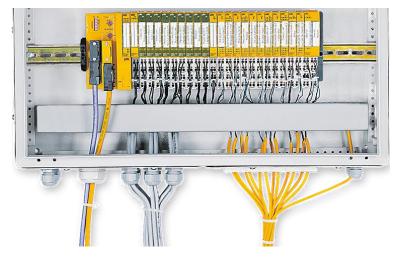


▶ I/O modules

### ▶ I/O modules

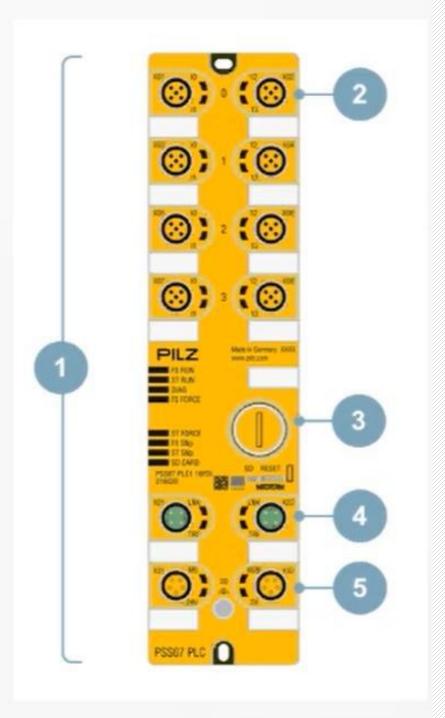
### PSSuniversal – I/O modules for controllers and I/O systems







27.11.2022 Product overview PILZ | 67

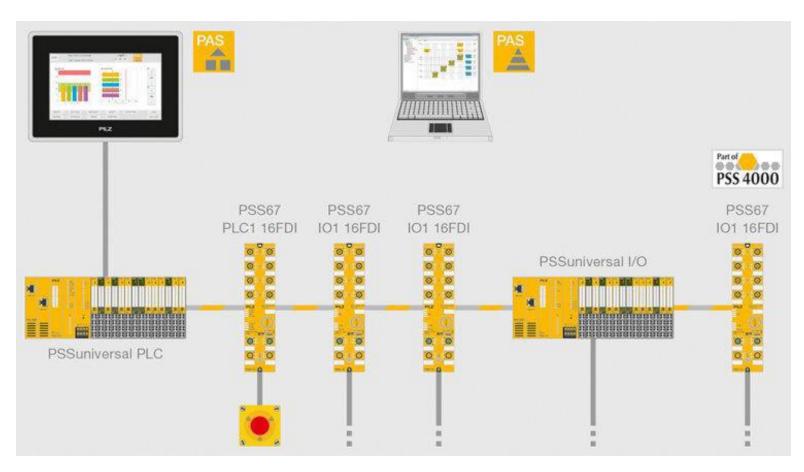




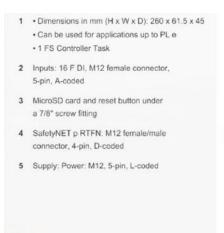
PSS67 PLC: First safe control system with protection type IP67

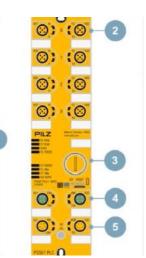
## PSS67 PLC: First safe control system with protection type IP67

### Safe automation without control cabinet









27.11.2022 Product overview PILZ | 69

### Product overview

1/2

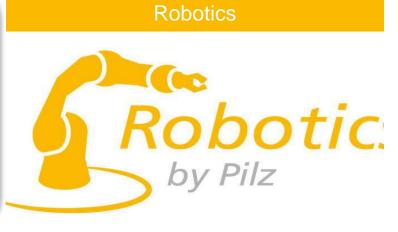












27.11.2022 Product overview PILZ | 70







Motion control – Understanding what moves you

# ▶ Motion control – Understanding what moves you

Control systems which will drive your application forward















**Servo motors** 

# **Servo motors PMCtendo**

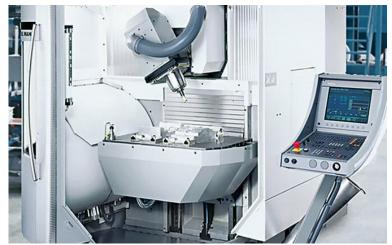
Servo motors for dynamic and precision movements











27.11.2022 Product overview PILZ | 74







**▶** Servo amplifiers

# Servo amplifiers

Servo amplifiers – the converters that control everything for you









27.11.2022 Product overview PILZ | 76



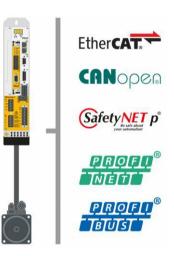


**▶** Safe motion – First across the line

### **▶** Safe motion – First across the line

Achieve up to performance level PL e with any feedback system







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#### Product overview

1/2







**▶** ROS: Robot Operating System

# **▶** ROS: Robot Operating System

Design robotics to be open!

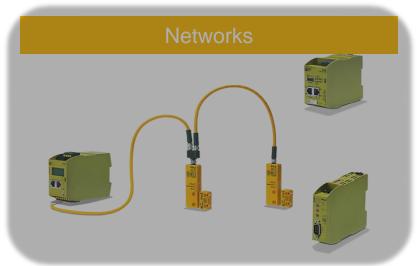






# Product overview

2/2











**PILZ** | 82 27.11.2022 Product overview





**▶** Fieldbus and Ethernet systems

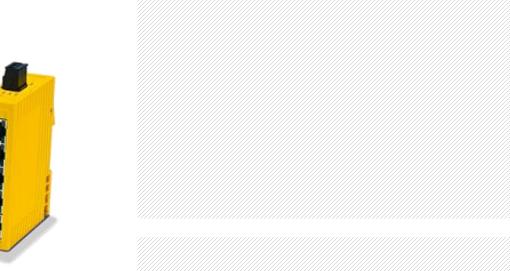
# Fieldbus and Ethernet systems

# For powerful networks!









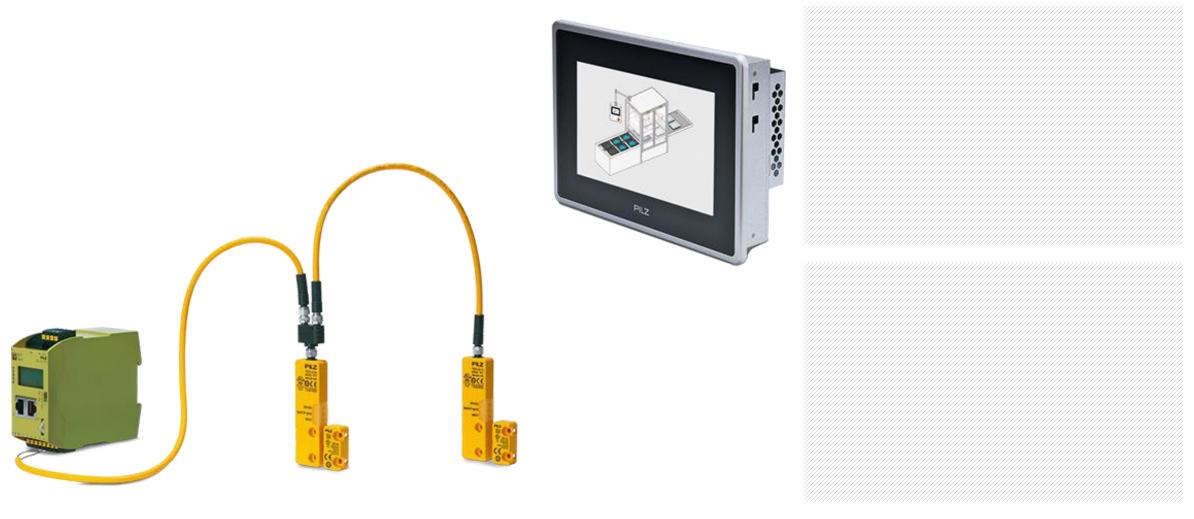




Device Diagnostic System

# Device Diagnostics System

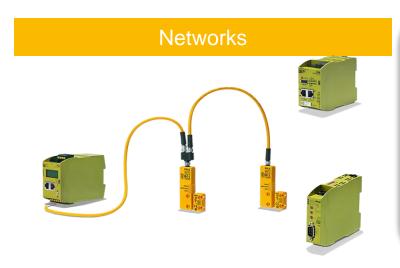
Higher machine availability due to comprehensive diagnostics



27.11.2022 Product overview PILZ | 86

# Product overview

2/2









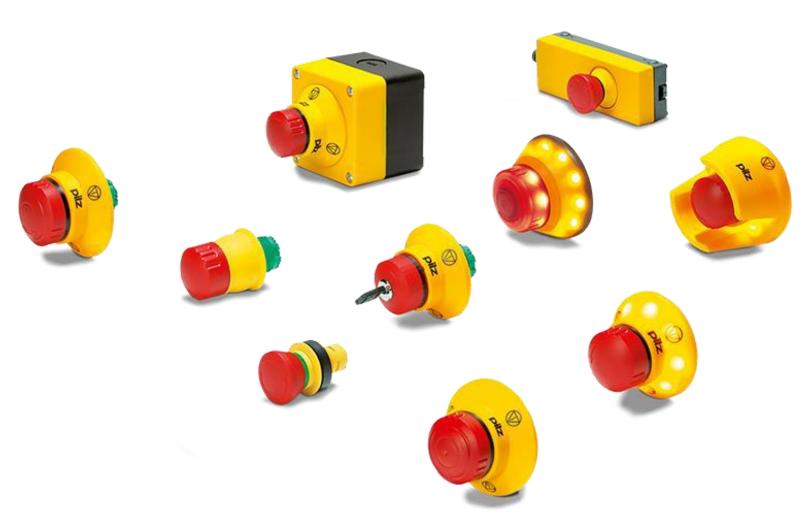




► Control and signal devices

# **E-STOP** pushbutton PITestop

Safety in hazardous situations using emergency stop







# Pushbutton unit PITgatebox

Simple operation of your safety gate system

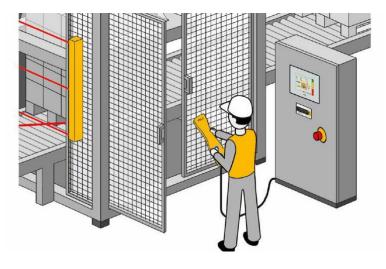




# Manually operated control devices PITjog

All risks under control with control devices







# ▶ Operating mode selection and access permission system PITmode

Safety and security functions in one system









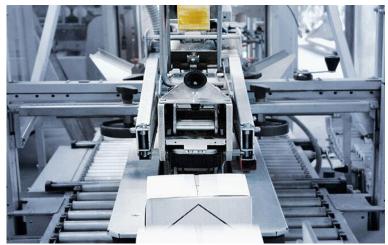
27.11.2022 Product overview PILZ | 92

# **Enabling switch PITenable**

Safe adjustment and maintenance with one hand







# Muting lamps PITsign

# Safe display of muting states









### **Control elements PIToe**

Compact pushbuttons for a variety of uses







PMI operator devices / operator terminals

# ▶ PMIvisu – the visualisation terminal with pre-installed visualisation software

Operator terminals in the PMI v8 and PMI v7e series



27.11.2022 Product overview PILZ | 97

# **▶** PMIcontrol and PMIprimo

### **Operator terminals in the 6 Series**

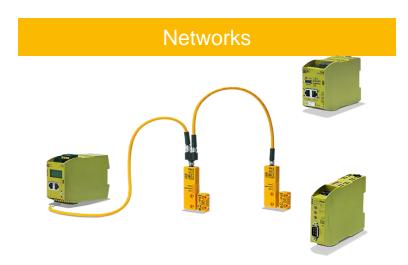






# Product overview

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Visualisation software

# Visualisation software

Visualisation software for all phases of the machine lifecycle















**Service software** 

#### Service software

#### User-friendly and clear: our service software tools



#### PASIoto - Lock Out Tag Out

This is how to document your Lockout Tagout procedures and processes quickly and simply: with the clear documentation software PASIoto.





# PAScal Safety Calculator for EN ISO 13849-1 calculation

Determine safety levels with ease! With the Safety Calculator PAScal, you have a handy tool to verify functional safety in accordance with EN ISO 13849-1 and EN/IEC 62061. It's a cool software!

→ PAScal Safety Calculator for EN ISO 13849-1 calculation



# PASupdate: all software updates at a glance

PASupdate shows you all available updates for our software products at a glance. Start the download process for them directly from PASupdate!

PASupdate: all software updates at a glance



# PASconnect: easily link multiple projects

With PASconnect you can link multiple projects from the automation system PSS 4000 via SafetyNET p. This way to the download.

PASconnect: easily link multiple projects





**▶** Software - sensor technology

# Software - sensor technology

#### **User-friendly software tools for Pilz sensor technology**



#### **PSENopt Configurator**

The PSENopt Configurator makes it easier to commission and operate the Advanced light beam devices. Functions such as muting, blanking and/or cascading can be configured quickly and easily.



#### PSENscan Configurator

Use PSENscan Configurator to configure all the required parameters for the operation of your laser scanner PSENscan quickly and easily.



**PSENopt Configurator** 

→ PSENscan Configurator

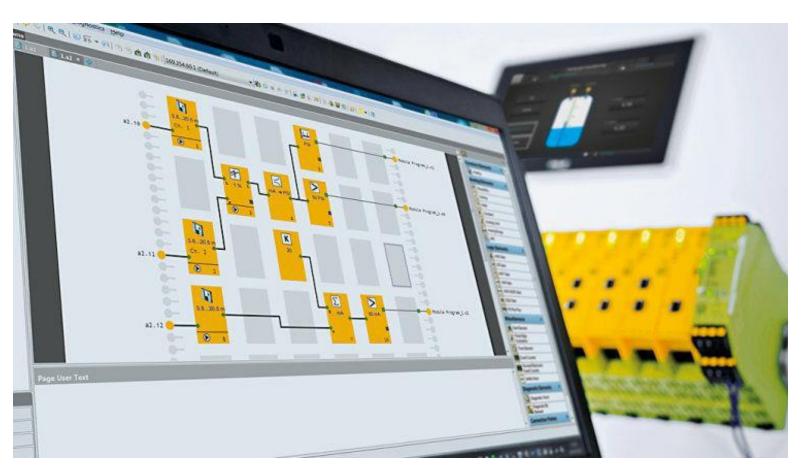




Software, small controllers PNOZmulti

# **▶** Software, small controllers PNOZmulti

Features of the software for the small controllers PNOZmulti











Software for PLC control systems and I/O systems

# Software for PLC control systems and I/O systems

#### Programming and configuration of your plant and machinery



### PAS4000 for controllers in the automation system PSS 4000

The software platform PAS 4000 of the PSS 4000 automation system offers easy handling for complex functions. With PAS 4000, you configure and program your safety and automation application in one tool.

→ PAS4000 for control systems in the automation system PSS 4000



#### PSSu Tools for decentralised I/O systems PSSuniversal

Use PSSu Tools for configuring the decentralised I/O system PSSuniversal. For example, benefit from quick commissioning by the PSSuniversal Startup Tool.

PSSu Tools for decentralised I/O systems PSSuniversal



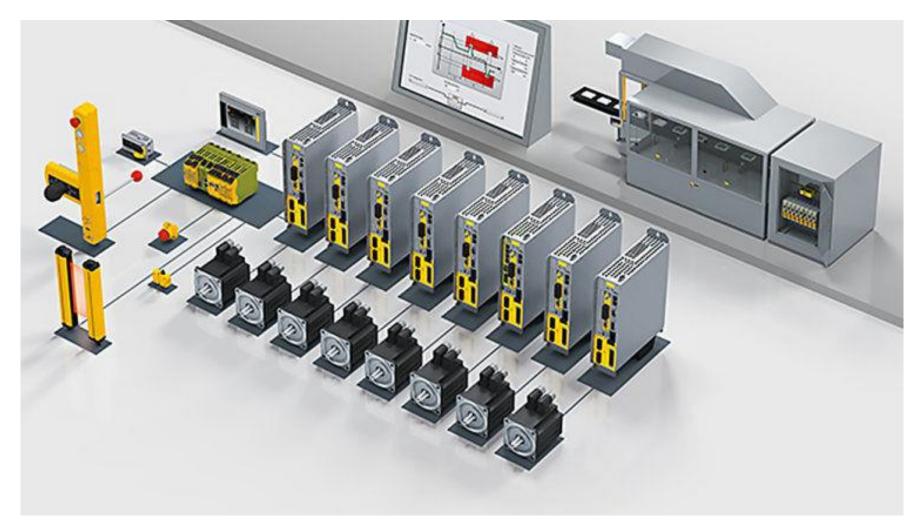






Software drive technology

# Software drive technology



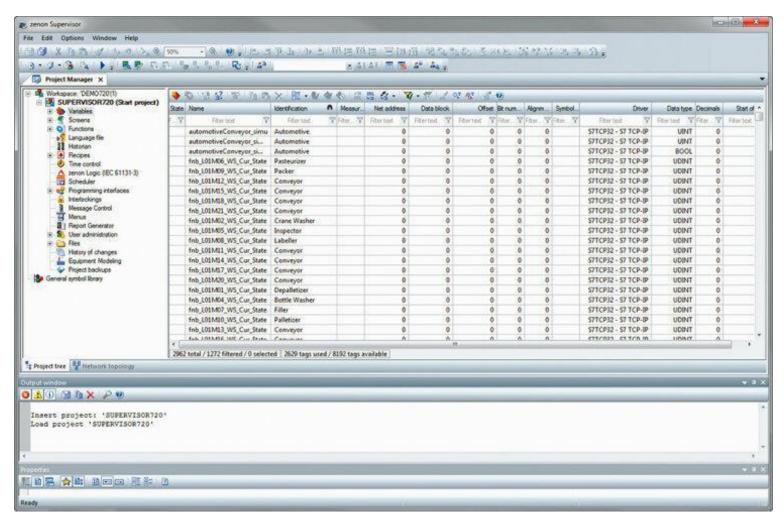




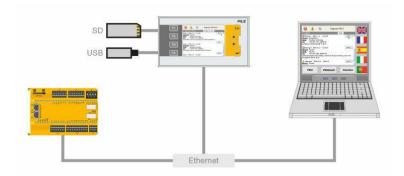
**SCADA Visualisation** 

#### Software

#### Visualisation of your plants and machinery

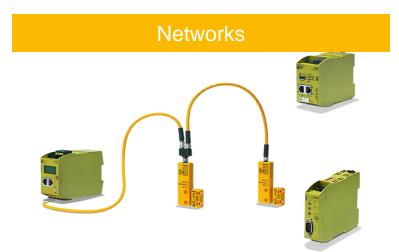






# Product overview

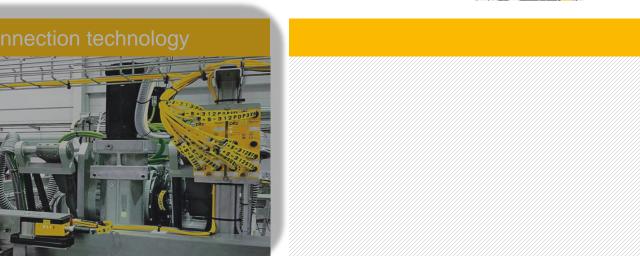
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**PILZ** | 114 27.11.2022 Product overview





► Cables and plug-in connectors

# **Cables and plug-in connectors**

Our product range







