# Configurable safe small controllersPNOZmulti 2 – the success story continues!

# **PNOZmulti 2**





The configurable safe small controllers PNOZmulti have been on the market since 2002 and are now in use in hundreds of thousands of applications. Users worldwide trust the market leader in configurable safety controllers! 2nd generation PNOZmulti offers the right solution for your automation task and is as easy to use as a safety relay, but as flexible as a programmable controller! You create your safety circuit with the software tool PNOZmulti Configurator, which is free of licence costs, and thus have access to an entire range of software blocks. Whether emergency stop, safety gate monitoring, light curtain, two-hand operation see for yourself how software tool PNOZmulti Configurator realises your safety requirements simply, flexibly and intuitively. The safety configuration only takes a few clicks. The modular hardware structure is as flexible as your application. You can use PNOZmulti regardless of the machine type, plant type, country or industry sector. Even after 20 years on the market, you can still say "Many functions - One solution!" for state-of-the-art safety applications.



### Your benefits at a glance

- ▶ Cost-effective and sustainable: worldwide safety standard for many automation environments and communication systems
- ▶ Flexible: configuration with certified software modules; inputs and outputs are freely configurable
- ▶ Just one software application from planning to maintenance
- Easy modifications and adjustments of the user program
- Customised costs: exact adaptation to your application using certified expansion modules
- Minimal machine downtimes and high plant availability through simple, comprehensive diagnostics and user-friendly, web-based visualisation
- ▶ Maximum safety up to PL e and SIL CL 3, depending on the application
- Fast commissioning thanks to simple wiring with plug-in terminals
- Potential for rationalisation because safety components cover automation tasks



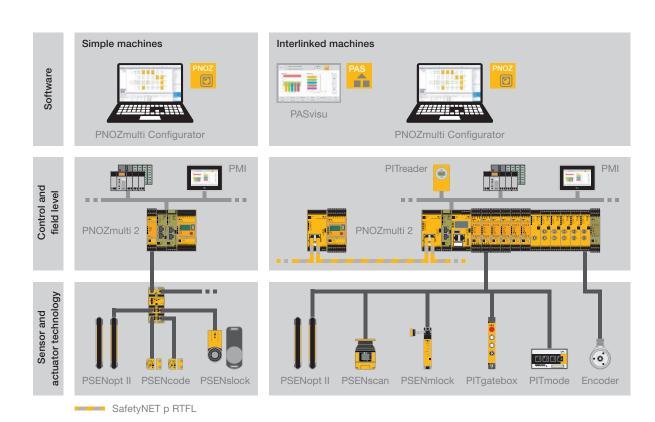






# Configurable safe small controllers PNOZmulti 2 – worldwide safety standard

Count on the bestseller and the worldwide safety standard for all machine types. The simple graphics configuration tool saves engineering costs because you can create your user program simply and intuitively on the PC. User-friendly, web-based visualisation and simple diagnostics options reduce downtimes. While others are still wiring, you are already producing – safely!



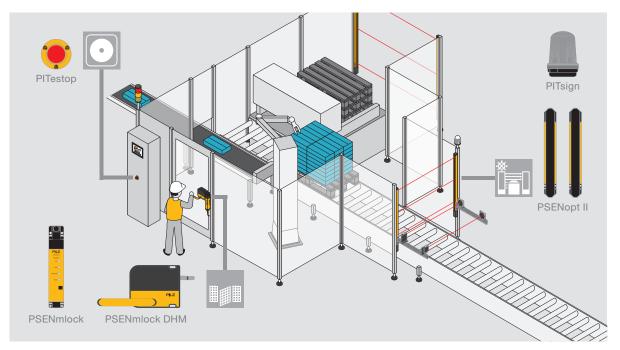
### Modular and flexible

The configurable safe small controllers are suitable for both simple machines and large automation projects. In combination with the web-based visualisation software PASvisu, the diagnostics and visualisation panels PMIvisu, the safe sensor technology PSEN, the operator devices PIT and the decentralised periphery PDP67, you get a totally compatible, complete solution for your automation tasks. A wide range of expansion modules such as analogue input modules, dual-pole output modules, motion monitoring modules, input and output modules as well as link modules offer you maximum flexibility in your application.

### Safe and simple

The software tool PNOZmulti Configurator will impress you with its simple operation: install, open, work intuitively. Once user programs have been created, they can be flexibly adapted and reused again and again. A wide range of diagnostic options ensures short downtimes for your plant and machinery. All you need is just one software application from planning to maintenance. As a worldwide safety standard for numerous automation environments and communication systems, PNOZmulti 2 also protects your plant and machinery safely and in compliance with standards up to PL e/SIL CL 3.

Online information at www.pilz.com/pnozmulti



Automation solutions from safe sensor and actuator technology and control and signal devices in combination with small controllers PNOZmulti 2.

### Safe small controllers PNOZmulti 2 - overview of base units



## PNOZ m C0 – the compact option

- ▶ 8 safe inputs
- ▶ 4 safe semiconductor outputs
- USB connection, chip card
- Not modular and expandable
- ▶ Width: 22.5 mm
- Certifications: CE, UKCA, TÜV



### PNOZ m B0 – the universal option

- ▶ 20 safe inputs, up to 8 can be configured as standard outputs
- 4 safe semiconductor outputs
- USB connection, chip card
- Right side: up to 6 safe modules can be connected
- Certifications:CE, UKCA cULus Listed,KOSHA, TÜV, EAC



### PNOZ m B0.1 – for small to mediumsized applications

- As for PNOZ m B0
- ▶ Right side: can be expanded with max. 1 I/O module
- ▶ Certifications: CE, UKCA, KOSHA, TÜV. EAC



# PNOZ m B1 – for large projects

- ► Fine granularity due to the number/type of I/O modules used
- Modbus TCP on-board;2 ETH interfaces;USB memory
- Right side: up to 12 safe modules and 6 standard output modules can be connected
- ➤ Certifications: CE, UKCA cULus Listed, KOSHA, TÜV, EAC



## PNOZ m B1 burner – for industrial burner management

- As for PNOZ m B1
- Additional special burner management function block, can be configured in the software tool PNOZmulti Configurator
- Certifications:
  CE, UKCA cULus Listed,
  KOSHA, TÜV, EAC

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Can be expanded on the left with safe link modules, communication and fieldbus modules. For further technical details please refer to the PNOZmulti technical catalogue or our website at www.pilz.com/pnozmulti

### Configurable safe small controllers PNOZmulti 2

| ****                        | Туре                                   | Technical features   | Order<br>number <sup>1)</sup>    |
|-----------------------------|--|--|----------------------------------|
| PNOZ m EF 4AI               | PNOZ m EF 4AI                          | Analogue input module  4 safe analogue inputs  | 772 160                          |
|                             | PNOZ m EF 16DI                         | Safe input module  16 safe inputs  | 772 140                          |
|                             | PNOZ m EF 8DI4DO                       | Safe input/semiconductor output module  8 safe inputs  4 safe semiconductor outputs  | 772142                           |
|                             | PNOZ m EF 4DI4DOR                      | Safe input/relay output module  4 safe inputs  4 safe relay outputs  | 772143                           |
| PNOZ m EF 4DI4DORD          | PNOZ m EF 4DI4DORD                     | Diverse input and output module  4 safe inputs  4 safe positive-guided relay outputs, diverse  Suitable for control of a burner's safety valves  | 772145                           |
| 50 C                        | PNOZ m EF 8DI2DOT                      | 2-pole, semiconductor output module  8 digital inputs  2 2-pole semiconductor outputs  | 772 144                          |
| PNOZ m EF 8DI2DOT           | PNOZ m EF 2DOR                         | Safe relay output module  > 2 safe relay outputs   | 772 146                          |
| PNOZ m ES 14DO              | PNOZ m ES 14DO                         | Output module for standard applications  14 semiconductor outputs for non-safety-related applications  Can be connected to PNOZ m B1   | 772 181                          |
|                             | PNOZ m EF 1MM2DO                       | Safe motion monitoring module  Monitors 1 axis  2 safe semiconductor outputs  1 cascading input and output, can also be used as a standard output  1 output for standard applications                              | 772 172                          |
|                             | PNOZ m EF 1MM                          | Safe motion monitoring module  Monitors 1 axis   | 772170                           |
| PNOZ m EF 1MM2DO            | PNOZ m EF 2MM                          | Safe motion monitoring module  Monitors 2 axes   | 772 171                          |
| PNOZ m EF<br>SafetyNET      | PNOZ m EF SafetyNET                    | Link module for safe communication via the real-time Ethernet SafetyNET p  Up to 16 PNOZmulti 2 systems in linear topology  Exchange of 32-bit data via RTFL   | 772 122                          |
|                             | PNOZ m EF Multi Link                   | Link module for safe point-to-point connection between 2 base units  | 772 120                          |
|                             | PNOZ m EF PDP Link                     | Link module for safe connection of 1 base unit to up to 4 decentralised modules PDP67  | 772 121                          |
| PNOZ PNOZmulti Configurator | PDP67 F 8DI ION/<br>PDP67 F 8DI ION HP | Digital input modules  | Webcode<br>web150450             |
|                             | Fieldbus and communication modules     | <ul> <li>Fieldbus modules for connection to<br/>PROFINET, PROFIBUS, EtherCAT, EtherNet/IP,<br/>POWERLINK, CANopen, CC-Link</li> <li>Communication modules with ETH or<br/>RS232 interface for PNOZ m B0</li> </ul> | Webcode<br>web225353             |
| Webcode: web225352          | PNOZmulti Configurator                 | <ul> <li>▶ Software tool for project planning</li> <li>▶ Configuration, documentation and commissioning</li> </ul>   | www.pilz.com/<br>pnozmulti-tools |

Online information at www.pilz.com

We are represented internationally. Please refer to our homepage www.pilz.com for further details or contact our headquarters.

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<sup>&</sup>lt;sup>1)</sup> Please note that there are mandatory accessories such as terminals, chip cards or cables. You can find them in our e-shop at www.pilz.com