

► Safe automation of AGVs

NEW

We make your automated guided vehicle system safe! The safety laser scanner PSENscan delivers surface monitoring and the provision of data for the navigation of mobile platforms. Adjustment of the dynamic protected field is performed by directly analyzing the encoder inputs in the laser scanner. When combined with the modular safety relay myPNOZ and the control and signal devices PITestop and PITsign, you get a cost-optimized solution thanks to the mutually compatible components. The open interfaces also offer maximum flexibility when it comes to your individual mobile platform. The Security Bridge ensures that no one can access the internal IT network of the mobile platform without authorization during operation. As well as safe automation, we also have a comprehensive package of services enabling us to help you with the safe operation of automated guided vehicles.







Your benefits at a glance

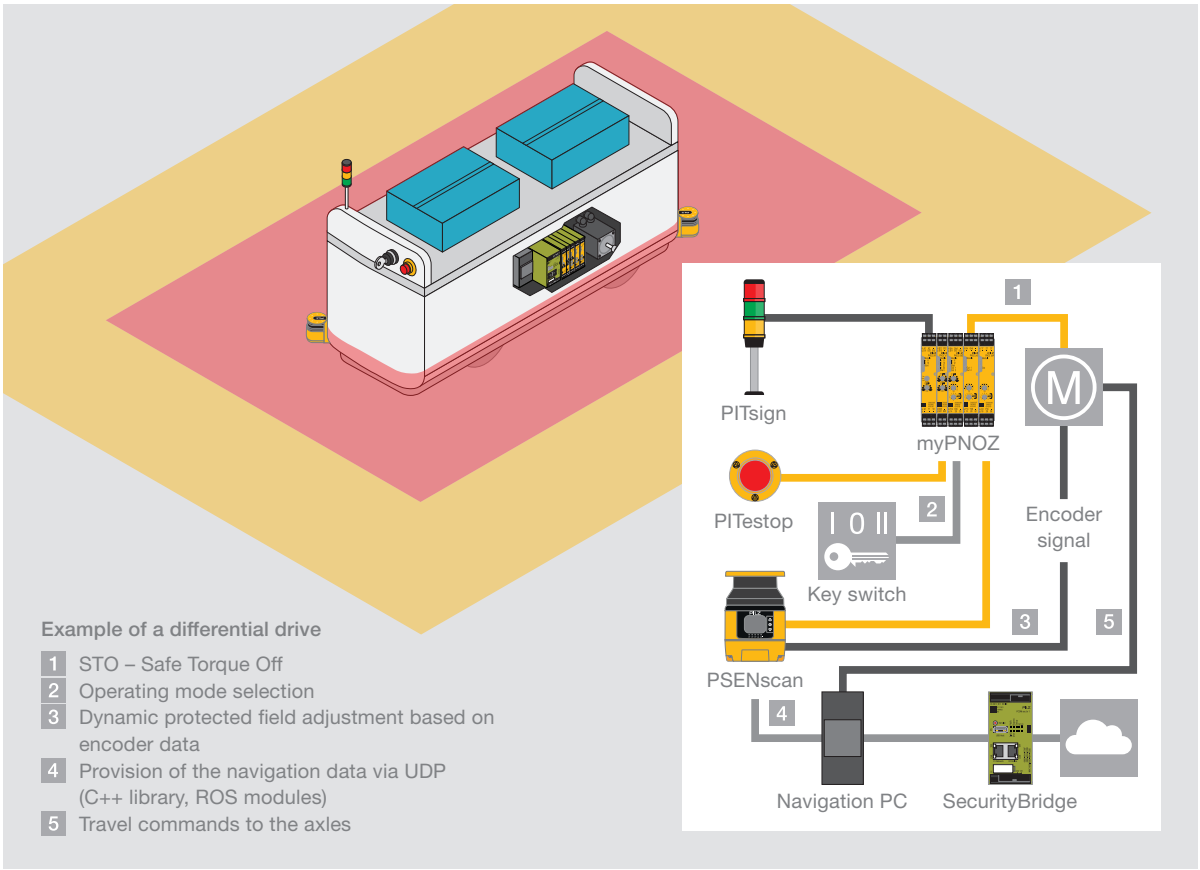
- Compliance of the AGV system application with the requirements of ISO 3691-4
- Complete one-stop safety solution saves time and money
- Rapid integration of the navigation data from the laser scanner PSENscan via UDP
- Time saving thanks to dynamic protected field adjustment, which is performed by directly evaluating the encoder inputs in the laser scanner
- International conformity assessment, e.g. CE marking for AGV systems and for the entire application where necessary, as well as training and consulting



Example of a safe and flexible solution for differential drives

Type	Features	Order number
 PSEnscan	PSEnsc ME 5.5 08-17 Master encoder model for surface monitoring and the provision of data for navigation via C++ library and ROS ¹⁾ interface: compliant and approved in accordance with EN IEC 61496-1, Type 3, EN ISO 13849-1, PL d/Cat. 3, IEC 61508: SIL 2, series connection master for up to 3 subscribers, up to 4 encoder inputs	6D000034
 myPNOZ	myPNOZ.73.CKA360EB640XA445AA058AC011 Plug-and-play with the preconfigured safety relay	
 Security Bridge	PCOM sec br1 PCOM, Security Bridge, VPN server for establishment of a VPN tunnel, supports X.509 certificates	311 501
 PITestop/PITsign	PITes1s PITestop E-STOP pushbutton IP65, with E-STOP symbol and logo, mounting hole: 22.3 mm PIT si3.1 indicator light unit PITsign indicator light unit red, yellow, green including LED, housing: IP65, for signalling various operating and plant statuses	400 131 581 190

¹⁾ Free download of the ROS modules: https://github.com/PilzDE/psen_scan_v2



- Example of a differential drive
- 1 STO – Safe Torque Off
 - 2 Operating mode selection
 - 3 Dynamic protected field adjustment based on encoder data
 - 4 Provision of the navigation data via UDP (C++ library, ROS modules)
 - 5 Travel commands to the axles



www.pilz.com/en-EN/services/safety-of-automated-guided-vehicles



Further information about intralogistics solutions: www.pilz.com/intralogistics