



PSENmag safety switches – The highest level of safety at the lowest price

pilz

Due to their non-contact operating mode, the safety switches PSEN ma1.4 are suitable for use anywhere there is heavy soiling. They can be used in combination with safe control technology.

Approved up to PL e of EN ISO 13849-1, SIL 3 of EN/IEC 62061 and Category 4 of EN 954-1, they meet the very highest safety requirements and offer a complete solution that's safe, approved and economical.

As well as the space-saving installation, the new safety switches PSENmag provide an operating distance of 3 or 10 mm and an additional signal contact with LED.

Your benefits at a glance

- ▶ Connected via a plug connection or with cable
- ▶ Flexible cable outlet, including connector, so there's no need for an angled connector
- ▶ Flexible mounting, both the sensor and the actuator support every conceivable mounting configuration
- ▶ Cost effective thanks to series connection
- ▶ Operating distance of 3 or 10 mm
- ▶ Additional signal contact and LED

PSENmag cable version available from May 2009
PSENmag connector version available from July 2009

the spirit of safety



► Non-contact magnetic safety switches PSEN



PSEN ma1.4a



PSEN ma1.4p



PSEN 1.2p



PSEN ma1.3a

... highest level of safety at a low price

Non-contact, magnetic safety switches are used to monitor the position of guards in accordance with EN 60947-5-3 and also for general position monitoring.

PSENmag gives you a cost-optimized system comprising Pilz sensor and control system, including approval.

Maximum freedom for installation

The compact design of the PSENmag saves installation space. Connector and cable for all mounting and approach directions, plus an assured operating distance of 3 or 8/10 mm, enable flexible assembly and rapid, simple installation.

High requirements – implemented economically

PSENmag switches can be used where a high category is specified, where there is heavy soiling or where strict hygiene regulations need to be met.

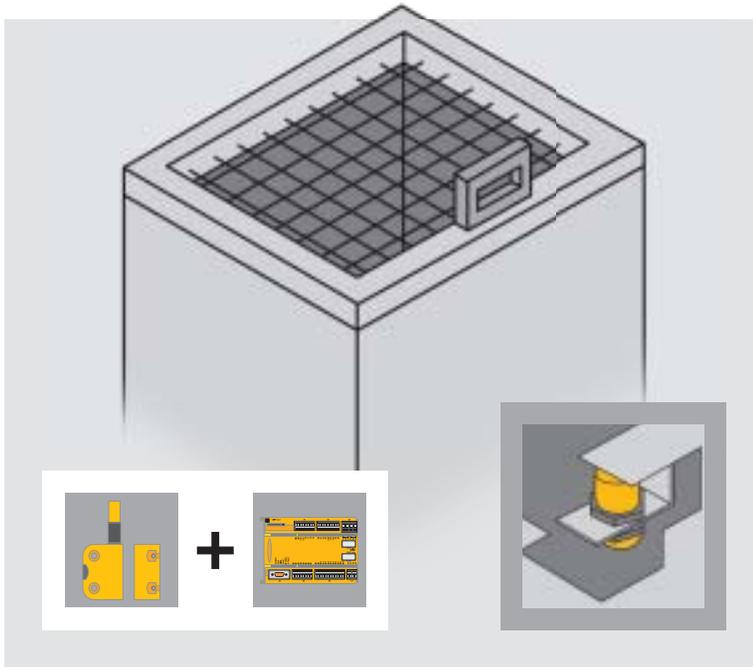
The low wear and tear of the rugged, fully encapsulated housing, in conjunction with the non-contact, magnetic operating principle, guarantees a long product service life.

Type code for PSENmag

PSEN ma1.4a-50

Product area Pilz SENSors	Contacts	Design	Connection type	Operating distance	LED/ATEX/Series connection
Product range ma – PSENmag Operation Non-contact, magnetic	1 NO/NO 2 NC/NO	1 Square, dimensions: 36 x 26 x 13 mm 2 Round, M30 3 Round, M12 with signal contact 4 Square, dimensions: 37 x 26.4 x 18 mm	a Cable, 5 m b Cable, 10 m n Connector, M12, 5-pin p Connector, M8: - 4-pin - 8-pin	1 3 mm 2 8 mm/12 mm ¹⁾ 3 6 mm 4 4 mm 5 3 mm/10 mm ¹⁾	0 Without LED 1 With LED 2 Only with PSEN ix1 ²⁾ 3 ATEX, without LED 4 ATEX, with LED 5 ATEX, without LED, only with PSEN ix1 ²⁾ 6 ATEX, without LED 7 Only with PSEN ix1 ²⁾ 8 ATEX, with LED, only with PSEN ix1 ²⁾ 9 Special types

mag



The optimum solution: Monitoring a cover using PSEnmag safety switches and the control system PNOZmulti.

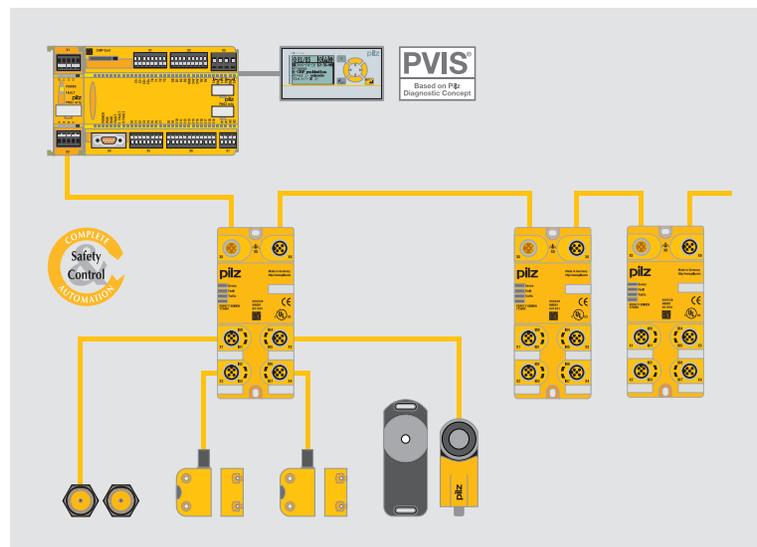
Your benefits at a glance

- ▶ Safe, complete solution with BG certification for the highest category applications
- ▶ Economical thanks to:
 - Space and time-saving installation
 - Series connection
 - Long product service life as it is mechanically non-wearing
 - User-friendly diagnostics via an additional signal contact and LED
- ▶ Insensitive to shock and vibration
- ▶ High level of safety, even in potentially explosive areas

Highest level of safety in series

Save time and costs! The decentralized periphery device PDP67 can be used to connect PSEnmag and other sensors to the configurable control system PNOZmulti. Short, standard plug-in sensor cables provide fast, economical installation.

The IP67 housing also saves you space in the control cabinet. The high diagnostic capability of the PDP67 in conjunction with the configurable control system PNOZmulti provides efficient operation in an emergency.



Keep up-to-date on non-contact, magnetic safety switches PSEnmag:

Webcode 0357

Online information at www.pilz.com

Non-contact magnetic safety switches PSEnmag



PSEN ma1.4

Technical features

- | | |
|------------------------------|--|
| ▶ Mode of operation | Magnetic |
| ▶ Assured operating distance | 3 mm/10 mm |
| ▶ Directions of actuation | 1 |
| ▶ Diagnostic interface | Without or with LED |
| ▶ Series connection | With PSEN ix1 |
| ▶ Connection type | Male M8 connector, 4-pin or 8-pin, 5 m cable |
| ▶ Contacts | 2 N/O contacts or 3 N/O contacts, of which 1 auxiliary contact |

Safety switch dimensions in mm (H x W x D)

- ▶ 37 x 26.4 x 18

Actuator dimensions in mm (H x W x D)

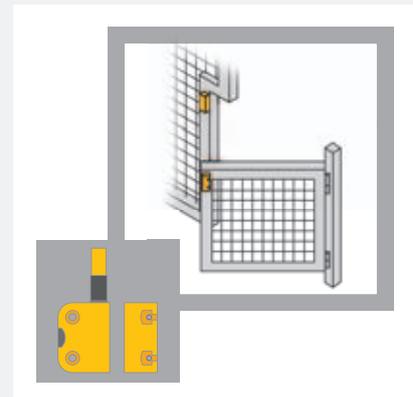
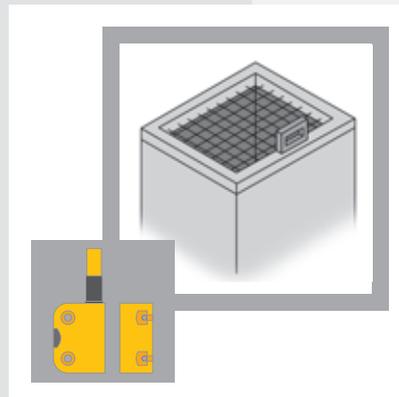
- ▶ 37 x 18 x 18

Order numbers

(Safety switch/
actuator)

	Single connection	Series connection*
▶ S_{ao} = 3 mm, 5 m cable		
PSEN ma1.4a-50/PSEN ma1.4-03	506 320	
PSEN ma1.4a-52/PSEN ma1.4-03		506 321
▶ S_{ao} = 3 mm, 5 m cable, 1 signal contact and LED		
PSEN ma1.4a-51/PSEN ma1.4-03	506 324	
PSEN ma1.4a-57/PSEN ma1.4-03		506 325
▶ S_{ao} = 3 mm, M8 connector, 4-pin		
PSEN ma1.4p-50/PSEN ma1.4-03	506 332	
PSEN ma1.4p-52/PSEN ma1.4-03		506 333
▶ S_{ao} = 3 mm, M8 connector, 8-pin, 1 signal contact and LED		
PSEN ma1.4p-51/PSEN ma1.4-03	506 336	
PSEN ma1.4p-57/PSEN ma1.4-03		506 337
▶ S_{ao} = 10 mm, 5 m cable		
PSEN ma1.4a-50/PSEN ma1.4-10	506 322	
PSEN ma1.4a-52/PSEN ma1.4-10		506 323
▶ S_{ao} = 10 mm, 5 m cable, 1 signal contact and LED		
PSEN ma1.4a-51/PSEN ma1.4-10	506 326	
PSEN ma1.4a-57/PSEN ma1.4-10		506 327
▶ S_{ao} = 10 mm, M8 connector, 4-pin		
PSEN ma1.4p-50/PSEN ma1.4-10	506 334	
PSEN ma1.4p-52/PSEN ma1.4-10		506 335
▶ S_{ao} = 10 mm, M8 connector, 8-pin, 1 signal contact and LED		
PSEN ma1.4p-51/PSEN ma1.4-10	506 338	
PSEN ma1.4p-57/PSEN ma1.4-10		506 339

*) with PSEN ix1



PSEnmag safety switch for safety gate monitoring.



Webcode

0357

Online information at www.pilz.com

Pilz GmbH & Co. KG, Felix-Wankel-Straße 2, 73760 Ostfildern, Germany
Telephone: +49 711 3409-0, Telefax: +49 711 3409-133, E-Mail: pilz.gmbh@pilz.de