



► 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.

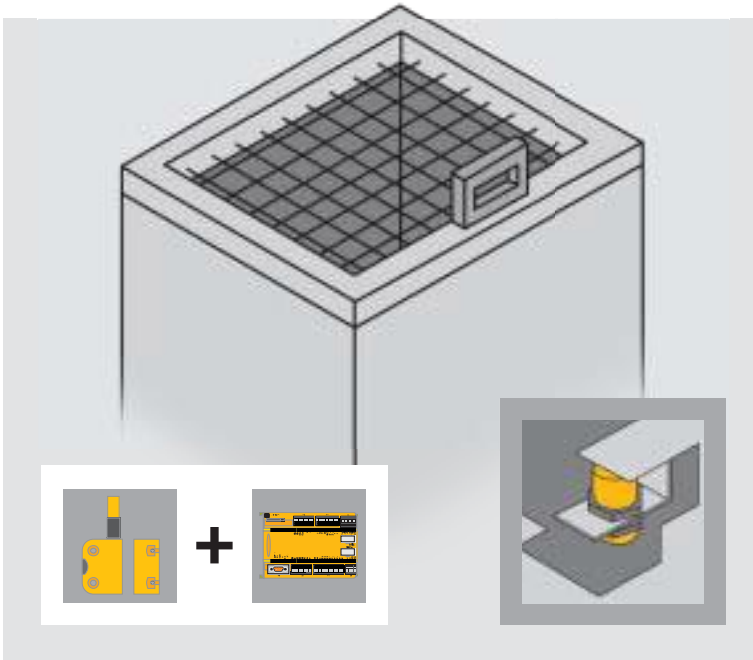
The low wear and tear of the rugged, fully encapsulated housing, in conjunction with the non-contact, magnetic operating principle, guarantees a long product service life.

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



Your benefits at a glance

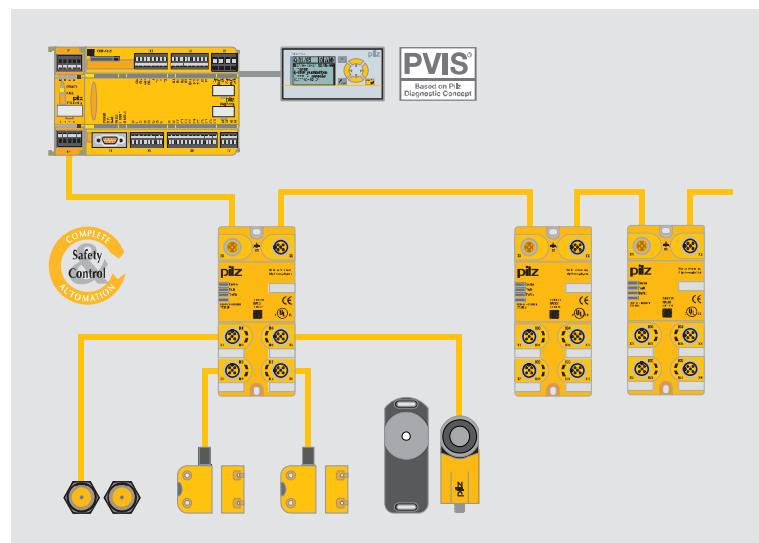
- ▶ Safe, complete solution with BG certification for the highest category applications
- ▶ Economical thanks to:
 - Space and time-saving installation
 - Series connection
 - Long product service life as it is mechanically non-wearing
 - User-friendly diagnostics via an additional signal contact and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

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

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



► Selection guide – PSENmag

Non-contact magnetic safety switches PSENmag – Square design

Common features

- Safety switches for monitoring the position of movable guards in accordance with EN 60947-5-3
- Approved for applications up to Performance Level e of EN ISO 13849-1 and SIL CL 3 of IEC 62061 or up to Category 4 of EN 954-1 in conjunction with:
 - Safety relays PNOZsigma: PNOZ s3, PNOZ s4, PNOZ s5
 - Configurable safety systems PNOZmulti: All evaluation devices
 - Programmable control systems PSS, with or without SafetyBUS p interface: All evaluation devices
- Connected directly, via PDP67 or via the interface PSEN ix1, see accessories, page 66
- Protection type:
 - Cable versions: IP69K
 - Connector versions: IP67



PSEN ma1.4a







































































PSEN ma1.4p



PSEN 1.1p

Type	Assured switching distance
★ PSEN ma1.4a-50/PSEN ma1.4-10	10 mm
PSEN ma1.4a-51/PSEN ma1.4-10	10 mm
PSEN ma1.4a-52/PSEN ma1.4-10	10 mm
PSEN ma1.4p-50/PSEN ma1.4-10	10 mm
★ PSEN ma1.4p-51/PSEN ma1.4-10	10 mm
PSEN ma1.4p-52/PSEN ma1.4-10	10 mm
PSEN ma1.4n-50/PSEN ma1.4-10	10 mm
PSEN ma1.4n-51/PSEN ma1.4-10	10 mm
PSEN 1.1a-20/PSEN 1.1-20	8 mm
PSEN 1.1a-22/PSEN 1.1-20	8 mm
PSEN 2.1a-20/PSEN 2.1-20	8 mm
PSEN 2.1b-20/PSEN 2.1-20	8 mm
PSEN 1.1p-20/PSEN 1.1-20	8 mm
★ PSEN 1.1p-22/PSEN 1.1-20	8 mm
PSEN 2.1p-20/PSEN 2.1-20	8 mm
PSEN 2.1p-21/PSEN 2.1-20	8 mm
PSEN 1.1b-23/PSEN 1.1-20	8 mm
PSEN 1.1p-23/PSEN 1.1-20	8 mm
PSEN 1.1p-25/PSEN 1.1-20	8 mm
★ PSEN ma1.4a-50/PSEN ma1.4-03	3 mm
PSEN ma1.4a-51/PSEN ma1.4-03	3 mm
PSEN ma1.4a-52/PSEN ma1.4-03	3 mm
PSEN ma1.4p-50/PSEN ma1.4-03	3 mm
PSEN ma1.4p-51/PSEN ma1.4-03	3 mm
PSEN ma1.4p-52/PSEN ma1.4-03	3 mm
PSEN ma1.4n-50/PSEN ma1.4-03	3 mm
PSEN ma1.4n-51/PSEN ma1.4-03	3 mm
PSEN 1.1p-10/PSEN 1.1-10	3 mm
PSEN 1.1p-12/PSEN 1.1-10	3 mm

Contacts	Single connection	Series via	LED	ATEX	Connection type Cable/connector	Order number ¹⁾
 	◆	-			5 m	506322
  	◆	-	◆		5 m	506326
 		PSEN ix1			5 m	506323
 	◆	-			M8, 4-pin, pigtail, 25 cm	506334
  	◆	-	◆		M8, 8-pin, pigtail, 25 cm	506338
 		PSEN ix1			M8, 4-pin, pigtail, 25 cm	506335
 	◆	PDP67			M12, 5-pin, pigtail, 25 cm	506342
  	◆	PDP67	◆		M12, 5-pin, pigtail, 25 cm	506343
 	◆	-			5 m	504226
 		PSEN ix1			5 m	504228
  	◆	-			5 m	502226
  	◆	-			10 m	502227
 	◆	-			M8, 4-pin	504220
 		PSEN ix1			M8, 4-pin	504222
  	◆	-			M8, 4-pin	502220
  	◆	-	◆		M8, 4-pin	502221
 	◆	-		◆	10 m	504250
 	◆	-		◆	M8, 4-pin	504223
 		PSEN ix1		◆	M8, 4-pin	504225
 	◆	-			5 m	506320
  	◆	-	◆		5 m	506324
 		PSEN ix1			5 m	506321
 	◆	-			M8, 4-pin, pigtail, 25 cm	506332
  	◆	-	◆		M8, 8-pin, pigtail, 25 cm	506336
 		PSEN ix1			M8, 4-pin, pigtail, 25 cm	506333
 	◆	PDP67			M12, 5-pin, pigtail, 25 cm	506340
  	◆	PDP67			M12, 5-pin, pigtail, 25 cm	506341
 	◆	-			M8, 4-pin	504210
 		PSEN ix1			M8, 4-pin	504212

¹⁾ Order number for safety switch and actuator (one unit)

★ Recommended type for the majority of applications



Technical documentation on non-contact, magnetic safety switches PSENmag:

 Webcode 0357

Accessories, supplementary products and services:

 From page 62

 Webcode 0326

Online information at www.pilz.com