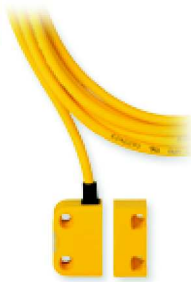


## ► Magnetic safety switch PSENmag

Magnetic safety switches are used both for monitoring the position of guards in accordance with EN 60947-5-3 and for position monitoring. Thanks to economical series connection, PSENmag offers maximum safety at a “low price” and is easily integrated into the existing system environment.



IP67



PSEN ma1.4a



PSEN ma1.4p



PSEN 1.2p



PSEN ma1.3a

### Manipulation protection

The concealed installation of the sensor – as defined in accordance with EN ISO 14119 – prevents manipulation. Other ways of manipulation are excluded if the actuator is secured using safety screws (one-way screws). If the highest manipulation protection is required, we recommend PSENcode due to the RFID technology and the key lock principle.

### High requirements – implemented economically

Use PSENmag wherever a high category is specified, heavy soiling occurs or strict cleaning requirements are to be met. The rugged, fully encapsulated housing in conjunction with the non-contact, magnetic operating principle guarantees a long product service life.

### Flexible application

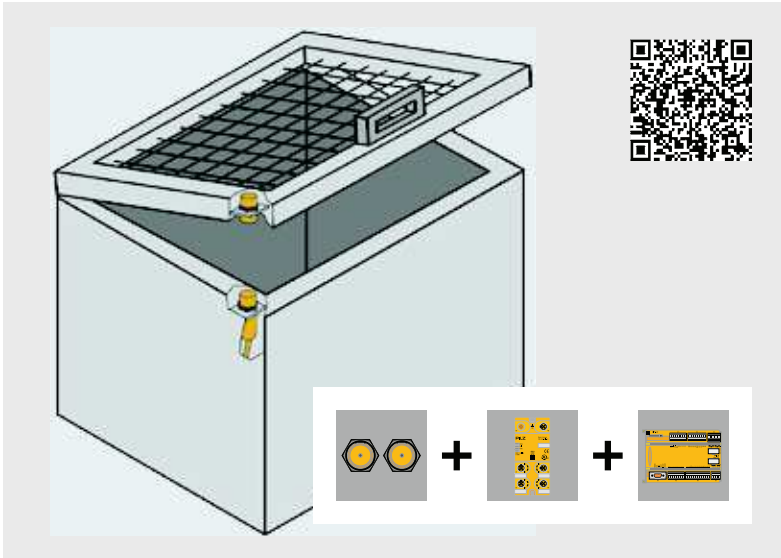
The compact design of the PSENmag saves installation space. A large selection of connectors and cables plus an assured operating distance of 3 to 12 mm enable flexible assembly and rapid, simple installation.

### Type code for PSENmag

#### PSEN ma1.4a-50

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

<sup>1)</sup> Depends on the actuator <sup>2)</sup> Ri = 0 Ω

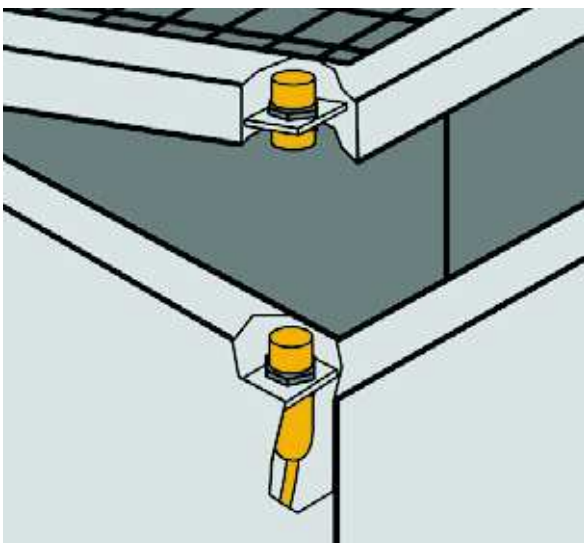


**Your benefits at a glance**


- ▶ Safe complete solution with TÜV certification for applications of the highest categories
- ▶ Economical thanks to:
  - Space and time-saving installation
  - Long product service life as it is mechanically non-wearing
  - User-friendly diagnostics via an additional signal contact and LED
- ▶ Can be used with heavy soiling and stringent cleaning requirements IP67/IP6K9K, ECOLAB tested
- ▶ High level of safety, even in potentially explosive areas

Components for your safe solution	Order number
Sensor: PSEN ma1.3n-20/PSEN ma1.3-12	506238
Connection: PSS67 cable, M12, straight, socket/M12, straight, plug, 5 m	380209
Decentralised periphery: PDP67 F 8DI ION	773600
Connection: PSEN cable, straight, M12, 5-pin	630311
Evaluation device: PNOZmulti	773100


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



Cable and other accessories:

 From page 108

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

 Webcode: web5179

Online information at [www.pilz.com](http://www.pilz.com)

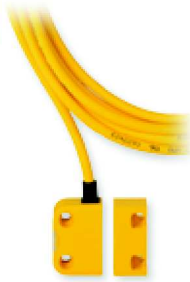
Possible to protect against manipulation through concealed installation.

## ► Selection guide – PSENmag

### Magnetic safety switch PSENmag – Square design

#### Common features

- ▶ Dual-channel safety switch 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 EN/IEC 62061 in conjunction with safety relays PNOZ s3, PNOZ s4, PNOZ s5, PNOZ e1p, PNOZ e1.1p, PNOZ e1vp, PNOZ e5.11p
- ▶ Optional signal contact
- ▶ Direct connection, via PDP67, PDP20 or via the interface PSEN ix1, see accessories from page 108
- ▶ Protection type:
  - Cable versions: IP6K9K
  - Connector versions: IP67
- ▶ Flexible installation due to the housing design and pigtail cable
- ▶ Protective caps included for better manipulation protection



PSEN ma1.4a



PSEN ma1.4p

Type (switch/actuator)	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 ma1.4a-57/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 ma1.4p-57/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 ma1.4-51M12/8-0.15m/PSEN ma1.4-10	10 mm
PSEN ma1.4a-57/PSEN ma1.4-03	3 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-57/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 ma1.4-51M12/8-0.15m/PSEN ma1.4-03	3 mm
PSEN 1.1p-23/PSEN 1.1-20	8 mm
PSEN 1.1p-25/PSEN 1.1-20	8 mm

Contacts	Single connection	Series connection via	LED	ATEX	Connection type Cable/connector	Certification	Order number (Unit) <sup>1)</sup>
	◆	-			5 m	TÜV, EAC, UL <sup>2)</sup> , ECOLAB	506 322
	◆	-	◆		5 m		506 326
		PSEN ix1			5 m		506 323
		PSEN ix1	◆		5 m		506 327
	◆	-			M8, 4-pin, pigtail, 20 cm		506 334
	◆	-	◆		M8, 8-pin, pigtail, 20 cm		506 338
		PSEN ix1			M8, 4-pin, pigtail, 20 cm		506 335
		PSEN ix1	◆		M8, 8-pin, pigtail, 20 cm		506 339
	◆	PDP67			M12, 5-pin, pigtail, 13 cm		506 342
	◆	PDP67	◆		M12, 5-pin, pigtail, 13 cm		506 343
	◆	-	◆		M12, 8-pin, pigtail, 13 cm		506 345
		PSEN ix1	◆		5 m		506 325
	◆	-			5 m		506 320
	◆	-	◆		5 m		506 324
		PSEN ix1			5 m		506 321
	◆	-			M8, 4-pin, pigtail, 20 cm		506 332
	◆	-	◆		M8, 8-pin, pigtail, 20 cm		506 336
		PSEN ix1	◆		M8, 8-pin, pigtail, 20 cm		506 337
		PSEN ix1			M8, 4-pin, pigtail, 20 cm		506 333
	◆	PDP67			M12, 5-pin, pigtail, 13 cm		506 340
	◆	PDP67	◆		M12, 5-pin, pigtail, 13 cm	506 341	
	◆	-	◆		M12, 8-pin, pigtail, 13 cm	506 344	
	◆	-		◆	M8, 4-pin	TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	504 223
		PSEN ix1		◆	M8, 4-pin	TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	504 225

<sup>1)</sup> Unit comprising switch and actuator

<sup>2)</sup> UL certification applies only to individual components contained within the set

<sup>3)</sup> ATEX certification applies only to individual components contained within the set



Cable and other accessories:

From page 108

Keep up-to-date on magnetic safety switches PSENmag:

Webcode: web5179

Online information at [www.pilz.com](http://www.pilz.com)

## ► Selection guide – PSENmag

### Magnetic safety switch PSENmag – Round design

#### Common features

- ▶ Dual-channel safety switch 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 EN/IEC 62061 in conjunction with safety relays PNOZ s3, PNOZ s4, PNOZ s5, PNOZ e1p, PNOZ e1.1p, PNOZ e1vp, PNOZ e5.11p
- ▶ With signal contact
- ▶ Direct connection, via PDP67, PDP20 or via the interface PSEN ix1, see accessories from page 108
- ▶ Protection type:
  - Cable versions: IP67
  - Connector versions: IP65



PSEN ma1.3p-20/  
PSEN ma1.3-12

Type (switch/actuator)	Assured switching distance
▶ M12 housing	
PSEN ma1.3a-20/PSEN ma1.3-08	8 mm
PSEN ma1.3a-22/PSEN ma1.3-08	8 mm
PSEN ma1.3b-20/PSEN ma1.3-08	8 mm
PSEN ma1.3b-22/PSEN ma1.3-08	8 mm
PSEN ma1.3p-20/PSEN ma1.3-08	8 mm
PSEN ma1.3n-20/PSEN ma1.3-08	8 mm
PSEN ma1.3-20M12/8-0.15m/ PSEN ma1.3-08	8 mm
PSEN ma1.3p-22/PSEN ma1.3-08	8 mm
PSEN ma1.3b-23/PSEN ma1.3-08	8 mm
PSEN ma1.3b-25/PSEN ma1.3-08	8 mm
PSEN ma1.3a-20/PSEN ma1.3-12	12 mm
PSEN ma1.3a-22/PSEN ma1.3-12	12 mm
PSEN ma1.3b-20/PSEN ma1.3-12	12 mm
PSEN ma1.3b-22/PSEN ma1.3-12	12 mm
PSEN ma1.3p-20/PSEN ma1.3-12	12 mm
PSEN ma1.3n-20/PSEN ma1.3-12	12 mm
PSEN ma1.3-20M12/8-0.15m/ PSEN ma1.3-12	12 mm
PSEN ma1.3p-22/PSEN ma1.3-12	12 mm
PSEN ma1.3b-23/PSEN ma1.3-12	12 mm
PSEN ma1.3b-25/PSEN ma1.3-12	12 mm

Contacts	Single connection	Series connection via	LED	ATEX	Connection type Cable/connector	Certification	Order number (Unit) <sup>1)</sup>	
	◆	-	◆		5 m	TÜV, EAC, UL <sup>2)</sup> , ECOLAB	506 220	
		PSEN ix1	◆		5 m		506 221	
	◆	-	◆		10 m		506 222	
		PSEN ix1	◆		10 m		506 223	
	◆	-	◆		M8, 8-pin, pigtail, 20 cm		506 226	
	◆	PDP67	◆		M12, 5-pin, pigtail, 13 cm		506 228	
	◆	-	◆		M12, 8-pin, pigtail, 13 cm		506 229	
		PSEN ix1	◆		M8, 8-pin, pigtail, 20 cm		506 227	
	◆	-	◆	◆	10 m		TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	506 224
		PSEN ix1	◆	◆	10 m		TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	506 225
	◆	-	◆		5 m		TÜV, EAC, UL <sup>2)</sup> , ECOLAB	506 230
		PSEN ix1	◆		5 m		506 231	
	◆	-	◆		10 m		506 232	
		PSEN ix1	◆		10 m		506 233	
	◆	-	◆		M8, 8-pin, pigtail, 20 cm	506 236		
	◆	PDP67	◆		M12, 5-pin, pigtail, 13 cm	506 238		
	◆	-	◆		M12, 8-pin, pigtail, 13 cm	506 239		
		PSEN ix1	◆		M8, 8-pin, pigtail, 20 cm	506 237		
	◆	-	◆	◆	10 m	TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	506 234	
		PSEN ix1	◆	◆	10 m	TÜV, EAC, UL <sup>2)</sup> , ATEX <sup>3)</sup> , ECOLAB	506 235	

<sup>1)</sup> Unit comprising switch and actuator

<sup>2)</sup> UL certification applies only to individual components contained within the set

<sup>3)</sup> ATEX certification applies only to individual components contained within the set



Cable and other accessories:

From page 108

Keep up-to-date on magnetic safety switches PSENmag:

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