



EC-Type Examination Certificate

No. M6A 020132 0230 Rev. 03

Holder of Certificate:

Pilz GmbH & Co. KG

Felix-Wankel-Str. 2
73760 Ostfildern
GERMANY

Product:

**Electro-Sensitive Protective Equipment
Safety Light Curtain (Type 4)**

Model(s):

PSEN opII4

Parameters:

Power supply: 24 V DC-25% / +20%
Protection class: IP65

The report and the user documentation in the current valid revision are mandatory part of this certificate. The product complies with the following safety requirements only if the specifications documented in the currently valid revision of this report are met. The certified components are listed in report PO89805T in the current valid revision.

This EC Type Examination Certificate is issued according to Article 12(3) b or 12(4) a of Council Directive 2006/42/EC relating to machinery. It confirms that the listed Annex-IV equipment complies with the principal protection requirements of the directive. It refers only to the sample submitted to TÜV SÜD Product Service GmbH for testing and certification. For details see: www.tuvsud.com/ps-cert

Test report no.:

PO106924C

Valid until: 2031-07-19

Date, 2026-07-21

(Matthias Ramold)



CERTIFICATE

No. Z10 020132 0224 Rev. 03

Holder of Certificate: Pilz GmbH & Co. KG
Felix-Wankel-Str. 2
73760 Ostfildern
GERMANY

Certification Mark:



Product: Electro-Sensitive Protective Equipment
Safety Light Curtain (Type 4)

Model(s): PSEN opII4

Parameters: Power supply: 24 V DC-25% / +20%
Protection class: IP65

The report and the user documentation in the current valid revision are mandatory part of this certificate. The product complies with the following safety requirements only if the specifications documented in the currently valid revision of this report are met. The certified components are listed in report PO89805T in the current valid revision.

Tested according to: EN IEC 61496-1:2020
EN IEC 61496-2:2020
EN ISO 13849-1:2023 (Cat. 4, PL e)
EN 61508-1:2010 (SIL3)
EN 61508-2:2010 (SIL3)
EN 61508-3:2010 (SIL3)
EN 61508-4:2010 (SIL3)

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: PO106924C

Valid until: 2031-07-20

Date, 2026-07-22

(Matthias Ramold)



**Liste der Varianten
der berührungslos wirkenden Schutzeinrichtung (BWS)
PSEN opII4**

**List of variants
of electro-sensitive protective equipment
PSEN opII4**

Hersteller / Manufacturer:

PILZ GmbH & Co. KG
Felix-Wankel-Straße 2
D-73760 Ostfildern
Germany

Bericht-Nr. / Report no:

PO89805T

Revision 1.13
2026-07-29

Prüfstelle / Test body:

TÜV SÜD RAIL GmbH
Rail Automation

Zertifizierungsstelle / Certification body:

TÜV SÜD Product Service GmbH
Ridlerstraße 65
D-80339 München

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Änderungshistorie / Change history:

Version	Name	Datum / Date	Änderungen / Changes
1.13	Wolfgang Mayer	2026-07-29	PSENopt Advanced

Änderungen zur Vorgängerversion / Changes to the previous version:

Kapitel Chapter	Baugruppe Device	Version Alt / Old	Version Neu / New
2	PSEN opII4-A	-	PO106951T V1.1
		-	PO106924C V1.1



1 Sicherheitslichtgitter Basic / Safety light grid Basic

1.1 14mm Auflösung / 14mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
PSEN opII4F-s-14-015 (632080)	PSEN opII4F-s-14-015 emitter (632280)	PSEN opII4F-s-14-015 receiver (632380)	150mm	5,9	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-030 (632081)	PSEN opII4F-s-14-030 emitter (632281)	PSEN opII4F-s-14-030 receiver (632381)	300mm	7,2	15,2	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-045 (632082)	PSEN opII4F-s-14-045 emitter (632282)	PSEN opII4F-s-14-045 receiver (632382)	450mm	8,4	15,2	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-060 (632083)	PSEN opII4F-s-14-060 emitter (632283)	PSEN opII4F-s-14-060 receiver (632383)	600mm	9,7	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-075 (632084)	PSEN opII4F-s-14-075 emitter (632284)	PSEN opII4F-s-14-075 receiver (632384)	750mm	11	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-090 (632085)	PSEN opII4F-s-14-090 emitter (632285)	PSEN opII4F-s-14-090 receiver (632385)	900mm	12,3	22,3	717505856, V1.10 PO106924C V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-105 (632086)	PSEN opII4F-s-14-105 emitter (632286)	PSEN opII4F-s-14-105 receiver (632386)	1050mm	13,6	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-120 (632087)	PSEN opII4F-s-14-120 emitter (632287)	PSEN opII4F-s-14-120 receiver (632387)	1200mm	14,8	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
PSEN opII4F-s-14-135 (632088)	PSEN opII4F-s-14-135 emitter (632288)	PSEN opII4F-s-14-135 receiver (632388)	1350mm	16,1	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-150 (632089)	PSEN opII4F-s-14-150 emitter (632289)	PSEN opII4F-s-14-150 receiver (632389)	1500mm	17,4	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-165 (632090)	PSEN opII4F-s-14-165 emitter (632290)	PSEN opII4F-s-14-165 receiver (632390)	1650mm	18,7	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO106963T, V1.0 PO106951T V1.0
PSEN opII4F-s-14-180 (632091)	PSEN opII4F-s-14-180 emitter (632291)	PSEN opII4F-s-14-180 receiver (632391)	1800mm	20	36,4	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0

1.2 30mm Auflösung / 30mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
PSEN opII4H-s-30-015 (632060)	PSEN opII4H-s-30-015 emitter (632260)	PSEN opII4H-s-30-015 receiver (632360)	150mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-030 (632061)	PSEN opII4H-s-30-030 emitter (632261)	PSEN opII4H-s-30-030 receiver (632361)	300mm	5,9	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-045 (632062)	PSEN opII4H-s-30-045 emitter (632262)	PSEN opII4H-s-30-045 receiver (632362)	450mm	6,5	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-060 (632063)	PSEN opII4H-s-30-060 emitter (632263)	PSEN opII4H-s-30-060 receiver (632363)	600mm	7,2	15,2	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-075 (632064)	PSEN opII4H-s-30-075 emitter (632264)	PSEN opII4H-s-30-075 receiver (632364)	750mm	7,8	15,2	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-090 (632065)	PSEN opII4H-s-30-090 emitter (632265)	PSEN opII4H-s-30-090 receiver (632365)	900mm	8,4	15,2	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-105 (632066)	PSEN opII4H-s-30-105 emitter (632266)	PSEN opII4H-s-30-105 receiver (632366)	1050mm	9,1	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-120 (632067)	PSEN opII4H-s-30-120 emitter (632267)	PSEN opII4H-s-30-120 receiver (632367)	1200mm	9,7	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-135	PSEN opII4H-s-30-135 emitter	PSEN opII4H-s-30-135 receiver	1350mm	10,4	22,3	717505856, V1.10



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
(632068)	(632268)	(632368)				PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-150 (632069)	PSEN opII4H-s-30-150 emitter (632269)	PSEN opII4H-s-30-150 receiver (632369)	1500mm	11	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-165 (632070)	PSEN opII4H-s-30-165 emitter (632270)	PSEN opII4H-s-30-165 receiver (632370)	1650mm	11,6	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO106963T, V1.0 PO106951T V1.0
PSEN opII4H-s-30-180 (632071)	PSEN opII4H-s-30-180 emitter (632271)	PSEN opII4H-s-30-180 receiver (632371)	1800mm	12,3	22,3	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0



1.3 170mm Auflösung / 170mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
PSEN opII4B-s-170-045 (632120)	PSEN opII4B-s-170-045 emitter (632420)	PSEN opII4B-s-170-045 receiver (632460)	450mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-170-060 (632121)	PSEN opII4B-s-170-060 emitter (632421)	PSEN opII4B-s-170-060 receiver (632461)	600mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-170-075 (632122)	PSEN opII4B-s-170-075 emitter (632422)	PSEN opII4B-s-170-075 receiver (632462)	750mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-170-090 (632123)	PSEN opII4B-s-170-090 emitter (632423)	PSEN opII4B-s-170-090 receiver (632463)	900mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-170-120 (632124)	PSEN opII4B-s-170-120 emitter (632424)	PSEN opII4B-s-170-120 receiver (632464)	1200mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-170-150 (632125)	PSEN opII4B-s-170-150 emitter (632425)	PSEN opII4B-s-170-150 receiver (632465)	1500mm	5,4	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0

1.4 300mm Auflösung / 300mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
PSEN opII4B-s-300-045 (632130)	PSEN opII4B-s-300-045 emitter (632430)	PSEN opII4B-s-300-045 receiver (632470)	450mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-300-060 (632131)	PSEN opII4B-s-300-060 emitter (632431)	PSEN opII4B-s-300-060 receiver (632471)	600mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-300-075 (632132)	PSEN opII4B-s-300-075 emitter (632432)	PSEN opII4B-s-300-075 receiver (632472)	750mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-300-090 (632133)	PSEN opII4B-s-300-090 emitter (632433)	PSEN opII4B-s-300-090 receiver (632473)	900mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-300-120 (632134)	PSEN opII4B-s-300-120 emitter (632434)	PSEN opII4B-s-300-120 receiver (632474)	1200mm	5,2	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0 PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0
PSEN opII4B-s-300-150 (632135)	PSEN opII4B-s-300-150 emitter (632435)	PSEN opII4B-s-300-150 receiver (632475)	1500mm	5,4	11,7	717505856, V1.10 PO106924C V1.0 PO89804T, V1.0 PO92444T, V1.0



System Unit	Sender Emitter	Empfänger Receiver	Schutzfeldhöhe protection hight	Reaktionszeit (ms) response time (ms)		Intern. Prüfbericht Internal test report
				Uncodiert uncoded	codiert coded	
						PO93602T, V1.0 PO96930T, V1.0 PO97040T, V1.0 PO97159T, V1.0 PO100741T, V1.1 PO106963T, V1.0 PO106951T V1.0



1.5 Anmerkung Basic / Comment Basic

1.5.1 Version Basic / Version Basic

Versionen alt ohne Codierung für 14 mm und 30 mm Auflösung /
Versions old without coding for 14 mm and 30 mm resolution

System	Software			
1.0	Gesamt	SignalProcessor	AppControl	SafetyOS
	2.0	5.3	2.0	1.0.0

Versionen neu mit Codierung für 14 mm, 30 mm, 170 mm, 300 mm Auflösung /
Versions new with coding for 14 mm, 30 mm, 170 mm, 300 mm resolution

System	Software			
4.0	Gesamt	SignalProcessor	AppControl	SafetyOS
	4.2	6.9(Tx), 8.7(Rx)	3.4.2	1.0.1

2 Sicherheitslichtgitter Advanced / Safety light grid Advanced

2.1 14mm Auflösung / 14mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeld- höhe protection hight	Reaktionszeit (ms) response time (ms)				Intern. Prüfbericht Internal test report
				Uncodiert uncoded		Codiert coded		
				OSSDe	IOLS	OSSDe	IOLS	
PSEN oplI4F-A-14-030-IOLS (6C000012)	PSEN oplI4F-A-14-030-IOLS emitter (6C000136)	PSEN oplI4F-A-14-030-IOLS receiver (6C000080)	300mm	8,9	38,9	15,2	45,2	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-045-IOLS (6C000013)	PSEN oplI4F-A-14-045-IOLS emitter (6C000137)	PSEN oplI4F-A-14-045-IOLS receiver (6C000081)	450mm	10,5	40,5	15,2	45,2	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-060-IOLS (6C000014)	PSEN oplI4F-A-14-060-IOLS emitter (6C000138)	PSEN oplI4F-A-14-060-IOLS receiver (6C000082)	600mm	12,1	42,1	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-075-IOLS (6C000015)	PSEN oplI4F-A-14-075-IOLS emitter (6C000139)	PSEN oplI4F-A-14-075-IOLS receiver (6C000083)	750mm	13,7	43,7	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-090-IOLS (6C000016)	PSEN oplI4F-A-14-090-IOLS emitter (6C000140)	PSEN oplI4F-A-14-090-IOLS receiver (6C000084)	900mm	15,3	45,3	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-105-IOLS (6C000017)	PSEN oplI4F-A-14-105-IOLS emitter (6C000141)	PSEN oplI4F-A-14-105-IOLS receiver (6C000085)	1050mm	16,9	46,9	36,4	66,4	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-120-IOLS (6C000018)	PSEN oplI4F-A-14-120-IOLS emitter (6C000142)	PSEN oplI4F-A-14-120-IOLS receiver (6C000086)	1200mm	18,5	48,5	36,4	66,4	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-135-IOLS (6C000019)	PSEN oplI4F-A-14-135-IOLS emitter (6C000143)	PSEN oplI4F-A-14-135-IOLS receiver (6C000087)	1350mm	20,1	50,1	36,4	66,4	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-150-IOLS (6C000020)	PSEN oplI4F-A-14-150-IOLS emitter (6C000144)	PSEN oplI4F-A-14-150-IOLS receiver (6C000088)	1500mm	21,7	51,7	36,4	66,4	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-165-IOLS (6C000021)	PSEN oplI4F-A-14-165-IOLS emitter (6C000145)	PSEN oplI4F-A-14-165-IOLS receiver (6C000089)	1650mm	23,3	53,3	36,4	66,4	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4F-A-14-180-IOLS (6C000022)	PSEN oplI4F-A-14-180-IOLS emitter (6C000146)	PSEN oplI4F-A-14-180-IOLS receiver (6C000090)	1800mm	24,9	54,9	36,4	66,4	PO106924C V1.1 PO106951T_v1.1

2.2 30mm Auflösung / 30mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeld- höhe protection hight	Reaktionszeit (ms) response time (ms)				Intern. Prüfbericht Internal test report
				Uncodiert uncoded		Codiert coded		
				OSSDe	IOLS	OSSDe	IOLS	
PSEN opl4H-A-30-030-IOLS (6C000034)	PSEN opl4H-A-30-030-IOLS emitter (6C000158)	PSEN opl4H-A-30-030-IOLS receiver (6C000102)	300mm	7,3	37,3	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-045-IOLS (6C000035)	PSEN opl4H-A-30-045-IOLS emitter (6C000159)	PSEN opl4H-A-30-045-IOLS receiver (6C000103)	450mm	8,1	38,1	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-060-IOLS (6C000036)	PSEN opl4H-A-30-060-IOLS emitter (6C000160)	PSEN opl4H-A-30-060-IOLS receiver (6C000104)	600mm	8,9	38,9	15,2	45,2	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-075-IOLS (6C000037)	PSEN opl4H-A-30-075-IOLS emitter (6C000161)	PSEN opl4H-A-30-075-IOLS receiver (6C000105)	750mm	9,7	39,7	15,2	45,2	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-090-IOLS (6C000038)	PSEN opl4H-A-30-090-IOLS emitter (6C000162)	PSEN opl4H-A-30-090-IOLS receiver (6C000106)	900mm	10,5	40,5	15,2	45,2	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-105-IOLS (6C000039)	PSEN opl4H-A-30-105-IOLS emitter (6C000163)	PSEN opl4H-A-30-105-IOLS receiver (6C000107)	1050mm	11,3	41,3	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-120-IOLS (6C000040)	PSEN opl4H-A-30-120-IOLS emitter (6C000164)	PSEN opl4H-A-30-120-IOLS receiver (6C000108)	1200mm	12,1	42,1	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-135-IOLS (6C000041)	PSEN opl4H-A-30-135-IOLS emitter (6C000165)	PSEN opl4H-A-30-135-IOLS receiver (6C000109)	1350mm	12,9	42,9	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-150-IOLS (6C000042)	PSEN opl4H-A-30-150-IOLS emitter (6C000166)	PSEN opl4H-A-30-150-IOLS receiver (6C000110)	1500mm	13,7	43,7	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-165-IOLS (6C000043)	PSEN opl4H-A-30-165-IOLS emitter (6C000167)	PSEN opl4H-A-30-165-IOLS receiver (6C000111)	1650mm	14,5	44,5	22,3	52,3	PO106924C V1.1 PO106951T_v1.1
PSEN opl4H-A-30-180-IOLS (6C000044)	PSEN opl4H-A-30-180-IOLS emitter (6C000168)	PSEN opl4H-A-30-180-IOLS receiver (6C000112)	1800mm	15,3	45,3	22,3	52,3	PO106924C V1.1 PO106951T_v1.1

2.3 170mm Auflösung / 170mm Resolution

System Unit	Sender Emitter	Empfänger Receiver	Schutzfeld- höhe protection hight	Reaktionszeit (ms) response time (ms)				Intern. Prüfbericht Internal test report
				Uncodiert uncoded		Codiert coded		
				OSSDe	IOLS	OSSDe	IOLS	
PSEN oplI4B-A-170-045-IOLS (6C000051)	PSEN oplI4B-A-170-045-IOLS emitter (6C000175)	PSEN oplI4B-A-170-045- IOLS receiver (6C000119)	450mm	6.5	36,5	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4B-A-170-060-IOLS (6C000052)	PSEN oplI4B-A-170-060-IOLS emitter (6C000176)	PSEN oplI4B-A-170-060- IOLS receiver (6C000120)	600mm	6.5	36,5	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4B-A-170-075-IOLS (6C000053)	PSEN oplI4B-A-170-075-IOLS emitter (6C000177)	PSEN oplI4B-A-170-075- IOLS receiver (6C000121)	750mm	6.5	36,5	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4B-A-170-090-IOLS (6C000054)	PSEN oplI4B-A-170-090-IOLS emitter (6C000178)	PSEN oplI4B-A-170-090- IOLS receiver (6C000122)	900mm	6.5	36,5	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4B-A-170-120-IOLS (6C000055)	PSEN oplI4B-A-170-120-IOLS emitter (6C000179)	PSEN oplI4B-A-170-120- IOLS receiver (6C000123)	1200mm	6.5	36,5	11,7	41,7	PO106924C V1.1 PO106951T_v1.1
PSEN oplI4B-A-170-150-IOLS (6C000056)	PSEN oplI4B-A-170-150-IOLS emitter (6C000180)	PSEN oplI4B-A-170-150- IOLS receiver (6C000124)	1500mm	6.7	36,7	11,7	41,7	PO106924C V1.1 PO106951T_v1.1

2.4 Anmerkung Advanced / Comment Advanced

2.4.1 Version Advanced / Version Advanced

Tx Sender

System	Software			
1.0	Gesamt	SignalProcessor	AppControl	SafetyOS
	4.2	6.9	3.4.2	1.0.1

Rx Empfänger

System	Software			
1.0	Gesamt	SignalProcessor	AppControl	SafetyOS
	01.00.04	01.00.01	01.00.04	4.0.0

3 Zubehör / Accessory

Typ Type	Bemerkung Remark	Intern. Prüfbericht Internal test report
PSEN opII Testpiece 14mm (632018)	Prüfstab für Sicherheitslichtgitter mit Fingerschutz, Ø 14mm Test piece for safety light grid for finger protection, Ø 14mm	-
PSEN opII Testpiece 24mm (632038)	Prüfstab für Sicherheitslichtgitter mit Fingerschutz, reduzierte Auflösung Ø 24mm Test piece for safety light grid for finger protection, reduced resolution, Ø 24mm	-
PSEN opII Testpiece 30mm (632019)	Prüfstab für Sicherheitslichtgitter mit Handschutz, Ø 30mm Test piece for safety light grid for hand protection, Ø 30mm	-
PSEN opII Testpiece 34mm (632039)	Prüfstab für Sicherheitslichtgitter mit Handschutz, Ø 34mm Test piece for safety light grid for hand protection, Ø 34mm	-
PSEN opII lockout (632510)	Mechanische Schutteinrichtung zum gesicherten Unterbrechen des Schutzfeldes, abschließbar Mechanical protective device for a secure interruption of the protective field, lockable	717505856, V1.5 PO96268T, V1.0
PSEN opII muting box (6C000181)	Verdrahtungshilfe für PSEN opII Sicherheitslichtgitter Wiring assistance for PSEN op safety light curtain	717505856 V1.9 PO99039T, V1.0
PSEN opII muting arm (6C000185)	2 Muting-Arme für die Montage von Muting-Sensoren an Sender und Empfänger der PSEN opIIxx-Serien 2 muting arms for assembling of muting sensors on sender and receiver of the PSEN opIIxx series	717505856 V1.9 PO99039T, V1.0
PSEN opII muting arm bracket kit (6C000186)	4 Halterungen für die Montage von Muting-Sensoren an Muting-Arme 4 brackets for mounting muting sensors on muting arms	717505856 V1.9 PO99039T, V1.0

4 Sicherheitskennzahlen / Safety-related characteristics

Sicherheitstechnische Kenndaten der Sicherheitsausgänge Safety-related characteristics of the safety outputs				
Sicherheitsfunktion Safety function	Kategorie	PL	PFH _D	SIL CL
Control of safety outputs Basic PSEN opII4F-s, PSEN opII4H-s	4	e	1,1E-08	3
Control of safety outputs Basic PSEN opII4B-s	4	e	1,5E-08	3
Control of safety outputs Advanced PSEN opII4F-A, PSEN opII4H-A, PSEN opII4B-A	4	e	2,0E-08	3

	Freigabe Prüfstelle: Release by Test Body:	Freigabe Zertifizierstelle: Release by Certification Body:
Datum: Date:	2026-07-29	2026-07-29
Unterschrift: Signature:	 Wolfgang Mayer 2026.07.29 17:51:18 +02'00'	 Matthias Ramold 2026.07.30 17:20:16 +02'00'