

EC-Type Examination Certificate

No. M6A 020132 0193 Rev. 03

Holder of Certificate: **Pilz GmbH & Co. KG**

Felix-Wankel-Str. 2
73760 Ostfildern
GERMANY

Product: **Electro-Sensitive Protective Equipment**
Model(s): **Photoelectric safety sensors:**
PSEN op2S-1-1 (Safety sensor Type 2)
PSEN op4S-1-1 (Safety sensor Type 4)
PSEN op4S-1-2 (Safety sensor Type 4)

Parameters: Supply Voltage: 24VDC
Operating temperature: 0°C to +50°C

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 PO88238C 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.: PO106281C

Valid until: 2029-02-27

Date, 2026-02-17



(Peter Weiß)

Page 1 of 1

TÜV SÜD Product Service GmbH is Notified Body according to Council Directive 2006/42/EC relating to machinery, notified by publication in the Official Journal of the EC with identification No.0123.



Product Service

CERTIFICATE

No. Z10 020132 0192 Rev. 03

Holder of Certificate: **Pilz GmbH & Co. KG**

Felix-Wankel-Str. 2
73760 Ostfildern
GERMANY

Certification Mark:



Product:

Electro-Sensitive Protective Equipment

Model(s):

Photoelectric safety sensors:

PSEN op2S-1-1 (Safety sensor Type 2)

PSEN op4S-1-1 (Safety sensor Type 4)

PSEN op4S-1-2 (Safety sensor Type 4)

Parameters:

Supply Voltage: 24VDC

Operating temperature: 0°C to +50°C

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 PO88238C in the current valid revision.

Tested

according to:

EN IEC 61496-1:2020 (Type 2 / Type 4)

EN IEC 61496-2:2020 (Type 2 / Type 4)

EN ISO 13849-1:2023 (Cat 2, PL c / Cat 4, PL e)

EN 61508-1:2010 (SIL 1 / SIL 3)

EN 61508-2:2010 (SIL 1 / SIL 3)

EN 61508-3:2010 (SIL 1 / SIL 3)

EN IEC 62061:2021 (maximum SIL 3)

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.:

PO106281C

Valid until:

2029-02-27

Date,

2026-02-17

(Peter Weiß)



Add value.
Inspire trust.

Liste der Varianten der Sicherheits-Lichtschranken-Familie

PSEN opxS
(Type 2 und 4 / EN 61496)

**List of variants
of Safety Light Curtain family**
PSEN opxS
(Type 2 and 4 / EN 61496)

Hersteller / Manufacturer:

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

Bericht-Nr. / Report no: PO88238C

Revision 1.6
2026-03-24

Testing Laboratory for Safety Components:

TÜV SÜD RAIL GmbH
Generische Sicherheitssysteme
Westendstr. 199
D-80686 München

Zertifizierungsstelle / Certification body:

TÜV SÜD Product Service GmbH
Ridlerstraße 65
D-80339 München

Inhalt / content:

Seite / Page

1. PNOZelog mit Sicherheitssensor Typ 2 PNOZelog with Safety sensor Type 2	4
2. PNOZelog mit Sicherheitssensor Typ 4 PNOZelog with Safety sensor Type 4	4
3. myPNOZ mit Sicherheitssensor Typ 2 myPNOZ with Safety sensor Type 2	4
4. myPNOZ mit Sicherheitssensor Typ 4 myPNOZ with Safety sensor Type 4	4
5. PNOZmulti mit Sicherheitssensor Typ 2 PNOZmulti with Safety sensor Type 2	5
6. PNOZmulti mit Sicherheitssensor Typ 4 PNOZmulti with Safety sensor Type 4	5
7. PNOZmulti2 mit Sicherheitssensor Typ 2 PNOZmulti2 with Safety sensor Type 2	5
8. PNOZmulti2 mit Sicherheitssensor Typ 4 PNOZmulti2 with Safety sensor Type 4	5
9. Handbücher / Manuals	6
10. Anmerkung / Remark	7

Änderungshistorie / Change history:

Version	Name	Datum / Date	Änderungen / Changes
1.0	Thomas Kreten	2016-01-02	Erste Ausgabe / First release
1.1	Thomas Kreten	2021-08-04	Rezertifizierung / Recertification Handbuch / Manual
1.2	Thomas Kreten	2022-03-29	Hinzugefügt/added Sicherheitsmerkmale/Safety characteristics
1.3	Thomas Kreten	2024-02-04	Aktualisierung der zu Grunde liegenden Test-Berichte / Update of the underlying test reports
1.4	Thomas Kreten	2024-03-08	Korrektur / Correction
1.5	Thomas Kreten	2026-02-13	Hinzugefügt / added: myPNOZ
1.6	Thomas Kreten	2026-03-25	Korrektur / Correction

Änderungen zur Vorgängerversion / Changes to the previous version:

Kapitel Chapter	Type / Device	Bemerkung / Remarks
--	Manual	Review Report Manual PSEN opxS_1 EN 61496, Rev 1.0, dated 04.08.2021
5	PNOZmulti2 – Typ 2	Neu / New
6, 7	PNOZmulti2 – Typ 4 Safety characteristics	Neu / New Beschreibung hinzugefügt / Description added
all	Actual Testreports added	-

1, 2, 5, 6	PNOZ e7 PNOZ m B0 PNOZ m B0.1	Sicherheitskennzahlen ergänzt / Safety characteristics added
3 + 4	PNOZy	Neu hinzugefügt / New added
7 + 8	PNOZmulti2	Neu hinzugefügt / New added

1. PNOZelog mit Sicherheitssensor Typ 2

PNOZelog with Safety sensor Type 2

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾
Safety sensor	PSEN op2S-1-1	630380	PO102528T V1.0	Cat 2, PL c, SIL 1
Control Unit	PNOZ e7p	774197	PO89000C V1.2	PFD 5,31 E-5
		784197	PO89001T V1.2	PFH 3,43 E-9 [1/h]

2. PNOZelog mit Sicherheitssensor Typ 4

PNOZelog with Safety sensor Type 4

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾
Safety sensor	PSEN op4S-1-1	774197 784197	PO102528T V1.0	Cat 4, PL e, SIL 3
Safety sensor	PSEN op4S-1-2	774197 784197	PO102528T V1.0	Cat 4, PL e, SIL 3
Control Unit	PNOZ e7p	774197	PO89000C V1.2	PFD 5,31 E-5
		784197	PO89001T V1.2	PFH 3,43 E-9 [1/h]

3. myPNOZ mit Sicherheitssensor Typ 2

myPNOZ with Safety sensor Type 2

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾
Safety sensor	PSEN op2S-1-1	630380	PO102528T V1.0	Cat 2, PL c, SIL 1
Control Unit	PNOZ yh1	2A000002	PO96549C_V1.4	PFD 5,32E-04
	PNOZ yi8	2A000020	PO105556T_V1.0	PFH 6,07E-09 [1/h]
	PNOZ yo2	2A000014	PO96547T_V1.4	

4. myPNOZ mit Sicherheitssensor Typ 4

myPNOZ g with Safety sensor Type 4

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾
Safety sensor	PSEN op4S-1-1	774197 784197	PO102528T V1.0	Cat 2, PL d, SIL 2
Safety sensor	PSEN op4S-1-2	774197 784197	PO102528T V1.0	Cat 2, PL d, SIL 2
Control Unit	PNOZ yh1	2A000002	PO96549C_V1.4	PFD 5,32E-04
	PNOZ yi8	2A000020	PO105556T_V1.0	PFH 6,07E-09 [1/h]
	PNOZ yo2	2A000014	PO96547T_V1.4	

5. PNOZmulti mit Sicherheitssensor Typ 2

PNOZmulti with Safety sensor Type 2

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾	
Safety sensor	PSEN op2S-1-1	630380	PO102528T V1.0	Cat 2, PL c, SIL 1	
Control Unit	PNOZ m0p	773110	PO86829T V2.0 PO80773 V4.2	PFD PFH	2,21 E-5 2,50 E-10 [1/h]
	PNOZ m1p	773100			
	PNOZ m2p	773120			
	PNOZ mm0p	772000			
	PNOZ mm0.1p	772001			
	PNOZ mm0.2p	772002			

6. PNOZmulti mit Sicherheitssensor Typ 4

PNOZmulti with Safety sensor Type 4

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾	
Safety sensor	PSEN op4S-1-1	630381	PO102528T V1.0	Cat 4, PL e, SIL 3	
Safety sensor	PSEN op4S-1-2	630382	PO102528T V1.0	Cat 4, PL e, SIL 3	
Control Unit	PNOZ m0p	773110	PO86829T V2.0 PO91550T V1.19	PFD PFH	2,21 E-5 2,50 E-10 [1/h]
	PNOZ m1p	773100			
	PNOZ m2p	773120			
	PNOZ mm0p	772000			
	PNOZ mm0.1p	772001			
	PNOZ mm0.2p	772002			

7. PNOZmulti2 mit Sicherheitssensor Typ 2

PNOZmulti2 with Safety sensor Type 2

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾	
Safety sensor	PSEN op2S-1-1	630380	PO102528T V1.0	Cat 2, PL c, SIL 1	
Control Unit	PNOZ m B0	772100	PO91549C V2.0 PO80773 V4.2	PFD	2,21 E-5
	PNOZ m B0.1	772104		PFH	2,50 E-10 [1/h]
	PNOZ m c0	772105		PFD	6,85 E-5
				PFH	7,75 E-10 [1/h]
	PNOZ m b1	772101		PFD	With expansion module
	PNOZ m b1 Burner	772102		PFH	
Expansion module	PNOZ m EF 16DI	772140		PFD PFH	1,86 E-5 2,10 E-10 [1/h]
	PNOZ m EF 8DI4DO	772142			
	PNOZ m EF 8DI4DOT	772144			
	PNOZ m EF 4DI4DOR	772143			
	PNOZ m EF 4DI4DORD	772145			

8. PNOZmulti2 mit Sicherheitssensor Typ 4

PNOZmulti2 with Safety sensor Type 4

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾	
Safety sensor	PSEN op4S-1-1	630381	PO102528T V1.0	Cat 4, PL e, SIL 3	
Safety sensor	PSEN op4S-1-2	630382	PO102528T V1.0	Cat 4, PL e, SIL 3	
Control Unit	PNOZ m B0	772100	PO91549C V2.0	PFD	2,21 E-5
	PNOZ m B0.1	772104	PO80773 V4.2	PFH	2,50 E-10 [1/h]



8. PNOZmulti2 mit Sicherheitssensor Typ 4

PNOZmulti2 with Safety sensor Type 4

Beschreibung Description	Typ Type.	Sach-Nr. Order No.	Interner Prüfbericht Internal Test Report	Sicherheitsmerkmale ¹⁾ Safety characteristics ¹⁾	
Control Unit	PNOZ m c0	772105		PFD PFH	6,85 E-5 7,75 E-10 [¹ /h]
Control Unit	PNOZ m b1	772101		PFD	With expansion module
	PNOZ m b1 Burner	772102		PFH	
Expansion module	PNOZ m EF 16DI	772140		PFD PFH	1,86 E-5 2,10 E-10 [¹ /h]
	PNOZ m EF 8DI4DO	772142			
	PNOZ m EF 8DI4DOT	772144			
	PNOZ m EF 4DI4DOR	772143			
	PNOZ m EF 4DI4DORD	772145			

9. Handbücher / Manuals:

Name / Name	ID	Rev	Datum / Date
Operating Instructions: PSEN op2S-1-1 PSEN op4S-1-1 PSEN op4S-1-2	PSEN_op2_4S_Operat_Man_1001182_ 3FR_10	10	2025/11

10. Anmerkung / Remark

1) Sicherheitsmerkmal / Safety characteristics

TM:	Gebrauchsdauer für 20 Jahre nach EN ISO 13849-1. Der Wert gilt auch als Intervall der Wiederholungsprüfungen entsprechend EN 61508-6 und IEC 61511 und als Intervall für den Proof-Test und die Gebrauchsdauer nach EN IEC 62061. Mission Time for 20 years according to EN ISO 13849-1. The value is also valid as the interval of the proof test according to EN 61508-6 and IEC 61511 and as the interval for the proof test and the service life according to EN IEC 62061.
Cat.:	Maximal erreichbare Kategorie nach EN ISO 13849-1. Maximum achievable Category according to EN ISO 13849-1.
PL:	Maximal erreichbarer Leistungsgrad entsprechend EN ISO 13849-1. Maximum obtainable Performance Level according to EN ISO 13849-1.
Maximum. SIL:	Maximal erreichbarer Sicherheitsintegritätsstufen Anspruchsgrenze entsprechend (EN) IEC 62061. Maximum obtainable Safety Integrity Level Claim Limit according (EN) IEC 62061.
SIL:	Maximal erreichbarer Sicherheitsintegritätsstufe entsprechend EN 61508-6 und IEC 61511. Maximum obtainable Safety Integrity Level according to EN 61508-6 and IEC 61511.
PFD:	Wahrscheinlichkeit eines gefährlichen Versagens bei Anforderung der Sicherheitsfunktion. Probability of Failure on Demand.
PFH:	Wahrscheinlichkeit eines gefährbringenden Ausfalls pro Stunde. Probability of a Dangerous Failure per Hour.

	Release by Testing Laboratory :	Release by Certification Body:
Datum: Date:	Peter Weiß 2026.03.25	Thomas Kreten 2026.03.24
Unterschrift: Signature:	 09:38:25 +01'00'	 11:57:41 +01'00'