

# EC-Type Examination Certificate

No. M6A 020132 0216 Rev. 02

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

Felix-Wankel-Str. 2  
73760 Ostfildern  
GERMANY

**Product:** **Electro-Sensitive Protective Equipment  
Safety Light Curtain (Type 2)**

**Model(s):** **PSEN op2B /1-Series**

**Parameters:**

|                        |                     |
|------------------------|---------------------|
| Supply Voltage:        | 24 Vdc $\pm 20\%$   |
| Output current:        | 500 mA/ each output |
| Operating temperature: | -10°C to +55°C      |
| IP Code:               | 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 PO87754C 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](http://www.tuvsud.com/ps-cert)

**Test report no.:** PO87754C

**Valid until:** 2028-08-15

**Date,** 2023-12-19



( Guido Neumann )



Product Service

# CERTIFICATE

No. Z10 020132 0207 Rev. 02

**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 2)

**Model(s):** PSEN op2B /1-Series

**Parameters:** Supply voltage: 24VDC  $\pm 20\%$   
Output current: 500mA/ each output  
Operating temperature:  $-10^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$   
IP code: IP65

The product fulfills the requirements according to the below standards. The report listed below is a mandatory part of the certificate.

**Tested according to:** 2006/42/EC  
EN IEC 61496-1:2020 (Type 2)  
EN IEC 61496-2:2020 (Type 2)  
EN ISO 13849-1:2015 (Cat.2, PL c)  
EN 61508-1:2010 (SIL 1)  
EN 61508-2:2010 (SIL 1)  
EN 61508-3:2010 (SIL 1)  
EN IEC 62061:2021 (maximum SIL 1)

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 and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** PO87754C  
**Valid until:** 2028-08-15

**Date,** 2023-12-15

  
( Thomas Kreten )



**Liste der Varianten  
der berührungslos wirkenden Schutzeinrichtung (BWS)  
PSEN op2  
(Type 2 / EN 61496)**

**List of variants  
of electro-sensitive protective equipment  
PSEN op2  
(Type 2 / EN 61496)**

**Hersteller / Manufacturer:**

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

**Bericht-Nr. / Report no:**

**PO87754C**

Revision 1.2

2023-12-14

**Prüfstelle für Sicherheitskomponenten /  
Testing Laboratory for Safety Components:**

TÜV SÜD Rail GmbH  
Rail Automation  
Barthstraße 16  
D-80339 München

**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                                  |
|---------|---------------|--------------|-------------------------------------------------------|
| 1.0     | Thomas Kreten | 2015-11-16   | Initial / initial release                             |
| 1.1     | Thomas Kreten | 2021-08-03   | Handbuch / Manual                                     |
| 1.2     | Franz Seika   | 2023-12-14   | Update of certificate to latest revision of standards |

**Änderungen zur Vorgängerversion / Changes to the previous version:**

| Kapitel<br>Chapter | Baugruppe<br>Device | Version<br>Alt / Old | Version<br>Neu / New |
|--------------------|---------------------|----------------------|----------------------|
| -                  | -                   | -                    | -                    |

## 1 PSEN op2H -S- /1 - Series

| Typ<br>Type          |             | Sach-Nr.<br>Order No. | Länge<br>Lenth | Schutz<br>Protection | Auflösung<br>Resolution | Beam *      | Feature * | Prüfbericht<br>Test- Report |
|----------------------|-------------|-----------------------|----------------|----------------------|-------------------------|-------------|-----------|-----------------------------|
| PSEN OP2H-S-30-015/1 |             | 630720                | 15 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-030/1 |             | 630721                | 30 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-045/1 |             | 630722                | 45 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-060/1 |             | 630723                | 60 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-075/1 |             | 630724                | 75 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-090/1 |             | 630725                | 90 cm          | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-105/1 |             | 630726                | 105 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-120/1 |             | 630727                | 120 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-135/1 |             | 630728                | 135 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-150/1 |             | 630729                | 150 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-165/1 |             | 630730                | 165 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
| PSEN OP2H-S-30-180/1 |             | 630731                | 180 cm         | Hand                 | 30 mm                   | L           | --        | PO101350T                   |
|                      |             |                       |                |                      |                         |             |           |                             |
| * Beam               | Description |                       |                |                      | * Feature               | Description |           |                             |
| L                    | Linear      |                       |                |                      | --                      | --          |           |                             |

## 2 PSEN op2H -A- /1 - Series

| Typ<br>Type          |             | Sach-Nr.<br>Order No. | Länge<br>Lenth | Schutz<br>Protection | Auflösung<br>Resolution | Beam *      | Feature * | Prüfbericht<br>Test- Report |
|----------------------|-------------|-----------------------|----------------|----------------------|-------------------------|-------------|-----------|-----------------------------|
| PSEN op2H-A-30-030/1 |             | 631040                | 30 cm          | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-045/1 |             | 631041                | 45 cm          | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-060/1 |             | 631042                | 60 cm          | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-075/1 |             | 631043                | 75 cm          | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-090/1 |             | 631044                | 90 cm          | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-105/1 |             | 631045                | 105 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-120/1 |             | 631046                | 120 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-135/1 |             | 631047                | 135 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-150/1 |             | 631048                | 150 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-165/1 |             | 631049                | 165 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
| PSEN op2H-A-30-180/1 |             | 631050                | 180 cm         | Hand                 | 30 mm                   | L           | A         | PO101350T                   |
|                      |             |                       |                |                      |                         |             |           |                             |
| * Beam               | Description |                       |                |                      | * Feature               | Description |           |                             |
| L                    | Linear      |                       |                |                      | A                       | Advanced    |           |                             |

### 3 PSEN op2B -2- /1 – Series

| Typ<br>Type       | Sach-Nr.<br>Order No.   | Länge<br>Lenth | Schutz<br>Protection | Auflösung<br>Resolution | Beam *      | Feature * | Prüfbericht<br>Test- Report |
|-------------------|-------------------------|----------------|----------------------|-------------------------|-------------|-----------|-----------------------------|
| PSEN op2B-2-050/1 | 630804                  | 615 mm         | 515 mm               | Body                    | 2           | --        | PO101350T                   |
| PSEN op2B-3-080/1 | 630805                  | 915 mm         | 815 mm               | Body                    | 3           | --        | PO101350T                   |
| PSEN op2B-4-090/1 | 630806                  | 1016 mm        | 915 mm               | Body                    | 4           | --        | PO101350T                   |
| PSEN op2B-4-120/1 | 630807                  | 1316 mm        | 1215 mm              | Body                    | 4           | --        | PO101350T                   |
| PSEN op2B-L-050/1 | 630812                  | 615 mm         | 515 mm               | Body                    | L           | --        | PO101350T                   |
| PSEN op2B-L-080/1 | 630813                  | 915 mm         | 815 mm               | Body                    | L           | --        | PO101350T                   |
| PSEN op2B-T-050/1 | 630814                  | 615 mm         | 515 mm               | Body                    | T           | --        | PO101350T                   |
| PSEN op2B-T-080/1 | 630815                  | 915 mm         | 815 mm               | Body                    | T           | --        | PO101350T                   |
|                   |                         |                |                      |                         |             |           |                             |
| * Beam            | Description             |                |                      | * Feature               | Description |           |                             |
| 2                 | 2, linear (no sensor)   |                |                      | --                      | --          |           |                             |
| 3                 | 3, linear (no sensor)   |                |                      | --                      | --          |           |                             |
| 4                 | 4, linear (no sensor)   |                |                      | --                      | --          |           |                             |
| L                 | 2, linear (one way)     |                |                      | --                      | --          |           |                             |
| T                 | 4, linear (bidirektion) |                |                      | --                      | --          |           |                             |

### 4 Sicherheitskennzahlen / Safety-related characteristics

| Sicherheitstechnische Kenndaten der Sicherheitsausgänge<br>Safety-related characteristics of the safety outputs |                       |    |                          |        |                                     |
|-----------------------------------------------------------------------------------------------------------------|-----------------------|----|--------------------------|--------|-------------------------------------|
| Sicherheitsfunktion<br>Safety function                                                                          | Kategorie<br>Category | PL | PFH <sub>D</sub>         | SIL CL | T <sub>mission</sub><br>Jahre/years |
| Control of safety outputs                                                                                       | 2                     | c  | 1,04 x 10 <sup>-08</sup> | 1      | 20                                  |



## 5 Handbücher / Manuals

| Name / Name                              | ID            | Rev | Datum / Date |
|------------------------------------------|---------------|-----|--------------|
| Bedienungsanleitung<br>PSEN op2H-A-Serie | 1003069-DE-05 | 05  | 12/2023      |

|                             | Freigabe Prüfstelle:<br>Release by Testing Laboratory :                                                                                                                    | Freigabe Zertifizierstelle:<br>Release by Certification Body:                                                                       |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Datum:<br>Date:             |                                                                                                                                                                            | Thomas                                                                                                                              |
| Unterschrift:<br>Signature: | <br>Digital<br>unterschrieben von<br>Franz Seika<br>Datum: 2023.12.14<br>11:23:48 +01'00' | <br>Kreten<br>2023.12.1<br>8 09:24:42<br>+01'00' |