

► Selection guide – PSENopt Advanced

Hand protection, muting: Type 2 – light curtain PSEN op2H-A

Common features

- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 2
- For use in applications up to:
 - PL c of EN ISO 13849-1
 - SIL CL 1 of EN/IEC 62061
- Function selection:
 - Manual/automatic restart
 - Muting (total/partial) via soft keys
 - Feedback loop monitoring (EDM)
 - Override function
 - Operating range reduction
- Semiconductor outputs: 2 pieces
- No dead zones
- Supply voltage: 24 VDC
- Connection:
 - Receiver Rx:
 - 1 x connector, M12, 12-pin;
 - 1 x connector, M12, 5-pin
 - Transmitter Tx:
 - 1 x connector, M12, 5-pin
- Dimensions: 35 x 40.8 mm
- For response times see data sheet



PSEN op2H-A-30-...

Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
► Hand protection, muting					
PSEN op2H-A-30-030/1	30 mm	300 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 040
PSEN op2H-A-30-045/1	30 mm	450 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 041
PSEN op2H-A-30-060/1	30 mm	600 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 042
PSEN op2H-A-30-075/1	30 mm	750 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 043
PSEN op2H-A-30-090/1	30 mm	900 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 044
PSEN op2H-A-30-105/1	30 mm	1 050 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 045
PSEN op2H-A-30-120/1	30 mm	1 200 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 046
PSEN op2H-A-30-135/1	30 mm	1 350 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 047
PSEN op2H-A-30-150/1	30 mm	1 500 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 048
PSEN op2H-A-30-165/1	30 mm	1 650 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 049
PSEN op2H-A-30-180/1	30 mm	1 800 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 050

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit)
²⁾ UL certification applies only to individual components contained within the set



Hand protection, muting, blanking, cascading: Type 4 – light curtain PSEN op4H-A

Common features

- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 4
- For use in applications up to:
 - PL e of EN ISO 13849-1
 - SIL CL 3 of EN/IEC 62061
- Function selection:
 - Manual/automatic restart
 - Muting (total/partial) via soft keys/software
 - Fixed/floating blanking via soft keys/software
 - Cascading
 - Feedback loop monitoring (EDM)
 - Beam coding
 - Override function
 - Operating range reduction
 - Programming software (online/offline) and monitoring
- Semiconductor outputs: 2 pieces
- No dead zones
- Supply voltage: 24 VDC
- Connection:
 - Receiver Rx: 1 x connector, M12, 12-pin;
 - 1 x connector, M12, 5-pin (for muting only)
 - Transmitter Tx: 1 x connector, M12, 5-pin
- Dimensions: 35 x 40.8 mm
- For response times see data sheet



PSEN op4H-A-30-...

Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
► Hand protection, muting, blanking, cascading					
PSEN op4H-A-30-030/1	30 mm	300 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 020
PSEN op4H-A-30-045/1	30 mm	450 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 021
PSEN op4H-A-30-060/1	30 mm	600 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 022
PSEN op4H-A-30-075/1	30 mm	750 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 023
PSEN op4H-A-30-090/1	30 mm	900 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 024
PSEN op4H-A-30-105/1	30 mm	1 050 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 025
PSEN op4H-A-30-120/1	30 mm	1 200 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 026
PSEN op4H-A-30-135/1	30 mm	1 350 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 027
PSEN op4H-A-30-150/1	30 mm	1 500 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 028
PSEN op4H-A-30-165/1	30 mm	1 650 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 029
PSEN op4H-A-30-180/1	30 mm	1 800 mm	0.2 ... 20 m	EAC, TÜV, UL ²⁾	631 030

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit); pigtail cables are not supplied with the device.
²⁾ UL certification applies only to individual components contained within the set

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Cable selection:

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Keep up-to-date on light curtains PSENopt Advanced:

 Webcode: web150423

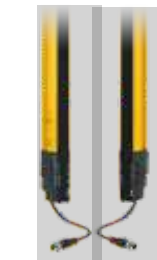
Online information at www.pilz.com

► Selection guide – PSENopt Advanced

Finger protection, muting, blanking, cascading: Type 4 – light curtain PSEN op4F-A

Common features

- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 4
- For use in applications up to:
 - PL e of EN ISO 13849-1
 - SIL CL 3 of EN/IEC 62061
- Function selection:
 - Manual/automatic restart
 - Muting (total/partial) via soft keys/software
 - Fixed/floating blanking via soft keys/software
 - Cascading
 - Feedback loop monitoring (EDM)
 - Beam coding
 - Override function
 - Operating range reduction
 - Programming software (online/offline) and monitoring
- Semiconductor outputs: 2 pieces
- No dead zones
- Supply voltage: 24 VDC
- Connection:
 - Receiver Rx:
 - 1 x connector, M12, 12-pin;
 - 1 x connector, M12, 5-pin (for muting only)
 - Transmitter Tx:
 - 1 x connector, M12, 5-pin
- Dimensions: 35 x 40.8 mm
- For response times see data sheet



PSEN op4F-A-14-...

Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
► Finger protection, muting, blanking, cascading					
PSEN op4F-A-14-030/1	14 mm	300 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 000
PSEN op4F-A-14-045/1	14 mm	450 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 001
PSEN op4F-A-14-060/1	14 mm	600 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 002
PSEN op4F-A-14-075/1	14 mm	750 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 003
PSEN op4F-A-14-090/1	14 mm	900 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 004
PSEN op4F-A-14-105/1	14 mm	1 050 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 005
PSEN op4F-A-14-120/1	14 mm	1 200 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 006
PSEN op4F-A-14-135/1	14 mm	1 350 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 007
PSEN op4F-A-14-150/1	14 mm	1 500 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 008
PSEN op4F-A-14-165/1	14 mm	1 650 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 009
PSEN op4F-A-14-180/1	14 mm	1 800 mm	0.2 ... 7 m	EAC, TÜV, UL ²⁾	631 010

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit); pigtail cables are not supplied with the device.
²⁾ UL certification applies only to individual components contained within the set



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Cable selection:

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Online information at www.pilz.com

► Selection guide – PSENopt slim

Hand protection: Type 2 – light curtain PSEN op2H-SL

Common features

- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 2
- For use in applications up to:
 - PL c of EN ISO 13849-1
 - SIL CL 1 of EN/IEC 62061
- Function selection:
 - Manual/automatic restart
 - Feedback loop monitoring (EDM)
 - Cascading
- No dead zones
- Supply voltage: 24 VDC
- Connection:
 - Receiver: 1 x pigtail, M12, 5-pin
 - Transmitter: 1 x pigtail, M12, 5-pin
- Dimensions: 15.4 x 32.6 mm
- For response times see data sheet



PSEN op2H-SL-24-...

Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
PSEN op2H-SL-24-015/1	24 mm	150 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 100
PSEN op2H-SL-24-030/1	24 mm	300 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 101
PSEN op2H-SL-24-045/1	24 mm	450 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 102
PSEN op2H-SL-24-060/1	24 mm	600 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 103
PSEN op2H-SL-24-075/1	24 mm	750 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 104
PSEN op2H-SL-24-090/1	24 mm	900 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 105
PSEN op2H-SL-24-105/1	24 mm	1 050 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 106
PSEN op2H-SL-24-120/1	24 mm	1 200 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 107

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit)

²⁾ UL certification applies only to individual components contained within the set



Hand protection: Type 4 – light curtain PSEN op4H-SL

Common features

- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 4
- For use in applications up to:
 - PL e of EN ISO 13849-1
 - SIL CL 3 of EN/IEC 62061
- Function selection:
 - Manual/automatic restart
 - Feedback loop monitoring (EDM)
 - Cascading
- No dead zones
- Supply voltage: 24 VDC
- Connection:
 - Receiver: 1 x pigtail, M12, 5-pin
 - Transmitter: 1 x pigtail, M12, 5-pin
- Dimensions: 15.4 x 32.6 mm
- For response times see data sheet



PSEN op4H-SL-24-...

Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
PSEN op4H-SL-24-015/1	24 mm	150 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 120
PSEN op4H-SL-24-030/1	24 mm	300 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 121
PSEN op4H-SL-24-045/1	24 mm	450 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 122
PSEN op4H-SL-24-060/1	24 mm	600 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 123
PSEN op4H-SL-24-075/1	24 mm	750 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 124
PSEN op4H-SL-24-090/1	24 mm	900 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 125
PSEN op4H-SL-24-105/1	24 mm	1 050 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 126
PSEN op4H-SL-24-120/1	24 mm	1 200 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 127

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit)

²⁾ UL certification applies only to individual components contained within the set

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Keep up-to-date
on light curtains
PSENopt slim:

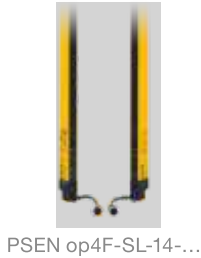
 Webcode:
web150423

Online information
at www.pilz.com

► Selection guide – PSENopt slim, PSENopt single-beam safety light barriers

Finger protection: Type 4 – light curtain PSEN op4F-SL

- Common features**
- Compliant and approved in accordance with:
 - EN/IEC 61508
 - EN/IEC 61496-1/-2: Type 4
 - For use in applications up to:
 - PL e of EN ISO 13849-1
 - SIL CL 3 of EN/IEC 62061
 - Function selection:
 - Manual/automatic restart
 - Feedback loop monitoring (EDM)
 - Cascading
 - No dead zones
 - Supply voltage: 24 VDC
 - Connection:
 - Receiver: 1 x pigtail, M12, 5-pin
 - Transmitter: 1 x pigtail, M12, 5-pin
 - Dimensions: 15.4 x 32.6 mm
 - For response times see data sheet



Type	Resolution	Height of protected field	Range	Certification	Order number ¹⁾
PSEN op4F-SL-14-015/1	14 mm	150 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 140
PSEN op4F-SL-14-021/1	14 mm	210 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 141
PSEN op4F-SL-14-030/1	14 mm	300 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 142
PSEN op4F-SL-14-036/1	14 mm	360 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 143
PSEN op4F-SL-14-042/1	14 mm	420 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 144
PSEN op4F-SL-14-045/1	14 mm	450 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 145
PSEN op4F-SL-14-048/1	14 mm	480 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 146
PSEN op4F-SL-14-054/1	14 mm	540 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 147
PSEN op4F-SL-14-060/1	14 mm	600 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 148
PSEN op4F-SL-14-066/1	14 mm	660 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 149
PSEN op4F-SL-14-072/1	14 mm	720 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 150
PSEN op4F-SL-14-075/1	14 mm	750 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 151
PSEN op4F-SL-14-078/1	14 mm	780 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 152
PSEN op4F-SL-14-084/1	14 mm	840 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 153
PSEN op4F-SL-14-090/1	14 mm	900 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 154
PSEN op4F-SL-14-096/1	14 mm	960 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 155
PSEN op4F-SL-14-102/1	14 mm	1 020 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 156
PSEN op4F-SL-14-105/1	14 mm	1 050 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 157
PSEN op4F-SL-14-108/1	14 mm	1 080 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 158
PSEN op4F-SL-14-114/1	14 mm	1 140 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 159
PSEN op4F-SL-14-120/1	14 mm	1 200 mm	0.2 ... 6 m	TÜV, UL ²⁾	631 160

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit)
²⁾ UL certification applies only to individual components contained within the set



Single-beam safety light barriers PSEN op2S/4S

- Common features**
- PL e/SIL CL 3 in conjunction with:
 - Safety relay PNOZ e7p
 - Configurable safe small controllers PNOZmulti 2: PNOZ m0p, PNOZ m1p, PNOZ m2p
 - Programmable control system PSS: PSS D120 T
 - Supply voltage: 20 ... 30 VDC
 - Design: M18
 - Connection: connector, M12, 4-pin
 - For response times see data sheet



Type	Resolution/ No. of beams	Approved in accordance with EN/IEC 61496-1/-2	Features	Range	Certification	Order number ¹⁾
PSEN op2S-1-1	Access guarding (1 beam)	Type 2	Infrared	0 ... 8 m	EAC, TÜV, UL ²⁾	630 380
PSEN op4S-1-1	Access guarding (1 beam)	Type 4	Infrared	0 ... 8 m	EAC, TÜV, UL ²⁾	630 381
PSEN op4S-1-2	Access guarding (1 beam)	Type 4	Laser	0 ... 40 m	EAC, TÜV, UL ²⁾	630 382

¹⁾ Order number for transmitter, receiver and mounting bracket respectively (one unit)
²⁾ UL certification applies only to individual components contained within the set

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Accessories PSENopt Advanced – hand and finger protection



PSEN op Advanced
Programming Adapter

Description Type	Features	Quantity	Order number
Mounting bracket PSEN op cascading bracket	► Corner fixture for 2 light curtains	1	631 061
Adapter PSEN op Advanced Programming Adapter	► Programming adapter for PSENopt Configurator ¹⁾ , use with PSEN op Ethernet cable (see page 160)	1	631 070

¹⁾ To use the software, the adapter must be ordered.

Accessories PSENopt slim – hand and finger protection



PSEN op SL Bracket O

Type	Features	Quantity	Order number
PSEN op SL Bracket C	Fastening kit PSENopt slim C-shape	1	631 180
PSEN op SL Bracket L	Fastening kit PSENopt slim L-shape	1	631 181
PSEN op SL Bracket O	Fastening kit PSENopt slim O-shape	1	631 182
PSEN op SL Testpiece F 24 mm	Test rod, diameter 24 mm	1	631 186

Light curtains

Accessories PSENopt (1st generation) – single-beam safety light device

Description Type	Features	Quantity	Order number
Deviating mirror PSEN 2S/4S mirror	Suitable for light barriers PSEN op2S/4S	1	630 711
Mounting bracket PSEN 2S/4S bracket	Suitable for light barriers PSEN op2S/4S	2	630 712