

► Selection guide – PSENcode

Coded safety switch PSENcode with 8-pin connector and integrated series connection, SDD-capable



- Common features**
- Safety switch for monitoring the position of movable guards
 - Certified for applications up to PL e of EN ISO 13849-1, up to SIL CL 3 of EN/IEC 62061
 - Integrated evaluation and standard interfaces (OSSD) for connection to evaluation devices from Pilz or other manufacturers
 - Series connection with PSENcode, PSENslock and PSENsgate approved up to PL e of EN ISO 13849-1, up to SIL CL 3 of EN/IEC 62061
 - Protection type:
 - Cable version: IP6K9K
 - Connector version: IP67
 - Diagnostic interface with 3 LEDs
 - Outputs: 2 safety outputs and 1 signal output
 - Drill hole spacing:
 - PSEN cs3/PSEN cs4: 22 mm
 - PSEN cs5/PSEN cs6: 22 mm
 - Typical operating distance:
 - PSEN cs1/PSEN cs2: 21 mm
 - PSEN cs3/PSEN cs4: 11 mm
 - PSEN cs5/PSEN cs6: 11 mm, 5 mm, 9 mm (M8 connector) or 6 mm (M12 connector)
 - Magnetic latching PSEN cs5.11/ PSEN cs6.11/PSEN cs6.21: 30 N



PSEN cs1.1p



PSEN cs4.2p



PSEN cs5.11

Type (switch)	Type of coding	Additional functions	Suitable actuator	Connection type	Certification	Order number	
						Switch	Unit ¹⁾
► Large design							
PSEN cs1.1p	Coded ²⁾	-	540 080	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	540 050	540 000
PSEN cs1.13p	Coded ²⁾	With ATEX	540 080	Connector, M12, 8-pin	ATEX ⁶⁾ , EAC, electrosuisse, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	-	540 005
PSEN cs2.1p	Fully coded ³⁾	-	540 180	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	540 150	540 100
PSEN cs2.13p	Fully coded ³⁾	With ATEX	540 180	Connector, M12, 8-pin	ATEX ⁶⁾ , EAC, electrosuisse, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	-	540 105
PSEN cs2.2p	Unique, fully coded ⁴⁾	-	540 180	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	-	540 200
► Compact design							
PSEN cs3.1 M12/8-0.15m	Coded ²⁾	-	541 080, 540 080	Connector, M12, 8-pin, pigtail, 16 cm	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 059	541 009
PSEN cs3.1 M12/8-1.5m	Coded ²⁾	-	541 080, 540 080	Connector, M12, 8-pin, pigtail, 1.5 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 064	541 014
PSEN cs3.1a	Coded ²⁾	-	541 080, 540 080	Cable, 5 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 061	541 011
PSEN cs3.1b	Coded ²⁾	-	541 080, 540 080	Cable, 10 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 062	541 012
PSEN cs3.1p	Coded ²⁾	-	541 080, 540 080	Connector, M8, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 060	541 010
PSEN cs4.1 M12/8-0.15m	Fully coded ³⁾	-	541 180, 540 180	Connector, M12, 8-pin, pigtail, 16 cm	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 159	541 109
PSEN cs4.1a	Fully coded ³⁾	-	541 180, 540 180	Cable, 5 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 161	541 111
PSEN cs4.1b	Fully coded ³⁾	-	541 180, 540 180	Cable, 10 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 162	541 112
PSEN cs4.1p	Fully coded ³⁾	-	541 180, 540 180	Connector, M8, 8-pin, pigtail, 14 cm	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 160	541 110
PSEN cs4.2 M12/8-0.15m	Unique, fully coded ⁴⁾	-	541 180, 540 180	Connector, M12, 8-pin, pigtail, 16 cm	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 259	541 209
PSEN cs4.2a	Unique, fully coded ⁴⁾	-	541 180, 540 180	Cable, 5 m	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 261	541 211
PSEN cs4.2p	Unique, fully coded ⁴⁾	-	541 180, 540 180	Connector, M8, 8-pin, pigtail, 14 cm	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	541 260	541 210
► Slimline design							
PSEN cs5.1 M12/8	Coded ²⁾	-	542 083	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 059	542 009
PSEN cs5.1p	Coded ²⁾	-	542 080	Connector, M8, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 050	542 000
PSEN cs5.11 M12/8	Coded ²⁾	Magnetic latching	542 081	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 051	542 011
PSEN cs5.13 M12/8	Coded ²⁾	With ATEX	542 085	Connector, M12, 8-pin	ATEX ⁶⁾ , EAC, electrosuisse, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 055	542 005
PSEN cs6.1 M12/8	Fully coded ³⁾	-	542 183	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 159	542 109
PSEN cs6.1p	Fully coded ³⁾	-	542 180	Connector, M8, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 150	542 100
PSEN cs6.11 M12/8	Fully coded ³⁾	Magnetic latching	542 181	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 151	542 111
PSEN cs6.2 M12/8	Unique, fully coded ⁴⁾	-	542 183	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 259	542 209
PSEN cs6.2p	Unique, fully coded ⁴⁾	-	542 180	Connector, M8, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 250	542 200
PSEN cs6.21 M12/8	Unique, fully coded ⁴⁾	Magnetic latching	542 181	Connector, M12, 8-pin	EAC, FCC ⁵⁾ , IC ⁵⁾ , TÜV, UL ⁵⁾	542 251	542 211

¹⁾ Unit comprising switch and actuator ²⁾ Coded = switch accepts any PSENcode actuator
³⁾ Fully coded = switch accepts only one PSENcode actuator, teach-in up to 8 times
⁴⁾ Unique, fully coded = switch accepts only one PSENcode actuator, no teach-in facility
⁵⁾ FCC, IC and UL certification applies only to individual components contained within the set
⁶⁾ ATEX certification applies only to individual components contained within the set



Cable selection:

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Keep up-to-date on coded safety switches PSENcode:

Webcode: web150412

Online information at www.pilz.com

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PSEN cs1.1



PSEN cs3.1



PSEN cs5.11



PSEN cs5.1 low profile
glue 1 actuator



PSEN cs5.1 low profile
screw 1 actuator

Actuator for coded safety switch PSENcode

Type (actuator)	Additional functions	Certification	Order number Actuator
► Large design			
PSEN cs1.1	-	TÜV, EAC, UL	540 080
PSEN cs2.1	-	TÜV, EAC, UL	540 180
► Compact design			
PSEN cs3.1	-	TÜV, EAC, UL	541 080
PSEN cs4.1	-	TÜV, EAC, UL	541 180
► Slimline design			
PSEN cs5.1	-	TÜV, EAC, UL	542 080
PSEN cs5.1 M12	-	TÜV, EAC, UL	542 083
PSEN cs5.11 M12	Magnetic latching	TÜV, EAC, UL	542 081
PSEN cs5.13	For ATEX applications	TÜV, EAC, UL	542 085
PSEN cs6.1	-	TÜV, EAC, UL	542 180
PSEN cs6.1 M12	-	TÜV, EAC, UL	542 183
PSEN cs6.11 M12	Magnetic latching	TÜV, EAC, UL	542 181

Type	Features	Order number
PSEN cs5.1 low profile glue 1 actuator	Stick-on actuator, coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode slimline design	542 087
PSEN cs5.1 low profile screw 1 actuator	Screw-on actuator, coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode slimline design	542 088
PSEN cs6.1 low profile glue 1 actuator	Stick-on actuator, fully coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode slimline design	542 187
PSEN cs6.1 low profile screw 1 actuator	Screw-on actuator, fully coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode slimline design	542 188
PSEN cs3.1 low profile glue 1 actuator	Stick-on actuator, coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode compact design	541 087
PSEN cs3.1 low profile screw 1 actuator	Screw-on actuator, coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode compact design	541 088
PSEN cs4.1 low profile glue 1 actuator	Stick-on actuator, fully coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode compact design	541 187
PSEN cs4.1 low profile screw 1 actuator	Screw-on actuator, fully coded, height: 3 mm, switching distance: 6 mm, for use with PSENcode compact design	541 188