

PS116 Safety Rated Limit Switch



Overview

The PS116 is an extremely versatile yet compact and robust limit switch for determining the position of movable machine components or machine guards that can be moved laterally or rotated.

For ease of installation, these limit switches are prewired with either a M12 connector or a 2 meter cable lead, on the bottom or side of the housing. Since the housing is symmetrical, the switch can be mounted with the cable or connector to the left or right. The PS116 is available with 10 actuator elements - plungers, roller levers, and a rod lever - which are field adjustable, to be set in one of 8 positions (45° steps) to meet application requirements.

The PS116 offers 2 and 3 contact options, in several configurations. The contacts are either snap action (Z) with optional latching (manual reset), or slow action (T) with overlapping, simultaneous or staggered contacts. All normally closed contacts are positive break, according to IEC 60947-5-1.

The compact body design of the PS116 series measures only 1.25" x 2.25" x 0.65", perfect for use in confined spaces to monitor the position or presence of moving parts, work pieces or conveyed materials. The housings are die-cast zinc and heavy duty thermoplastic and are dust tight and sealed to withstand strong water jets (IP66) and submersion in water (IP67), suitable for use in all industrial environments.

In conjunction with an appropriate safety controller, a single position switch can be used up to PLd, while using two can achieve PLe, according to ISO 13849-1.

Elevator industry

The PS116 limit switch also fulfils the requirements for use in elevators according to EN 81-1, because all available switching elements have a contact opening of 2 x 2 mm.

Features



Four connection options:

- Prewired cable from bottom or side
- M12 connector from bottom or side

Actuator element options:

The PS116 offers a wide variety of actuator elements, which can be ordered separately.



Actuator Rotation and Replacement

The housing is symmetrical, so the switch can be mounted with the connector or cable on the left or right side. The actuator elements can be adjusted in the field: rotated to one of 8 positions - in 45° steps relative to the body; or replaced with other elements. (Adjustment tool required)



Applications

- Elevators
- Material handling systems
- Packaging machinery
- Chemical processing equipment
- Folding or brake presses
- Filter presses
- Punching machines
- Printing machines
- Injection molding
- Palletizers
- Conveyor equipment
- Position detection

Available Literature



PS116 Brochure
10 pages

Ordering Details

PS116-①-②-③

① Contact Action/Configuration

Snap Action	
Z02	2 NC
Z02R	2 NO, latching
Z11	1 NO & 1 NC
Z11R	1 NO & 1 NC, latching
Z12	1 NO & 2 NC
Z12R	1 NO & 2 NC, latching

Slow Action	
T02	2 NC
T02H	2 NC, staggered
T11	1 NO & 1 NC
T11UE	1 NO & 1 NC, overlapping
T20	2 NO **
T03	3 NC
T12	1 NO & 2 NC
T21	2 NO & 1 NC

② Wiring Connection

L200	2 m prewired cable, bottom
LR200	2 m prewired cable, side
ST	M12 connector, bottom
STR	M12 connector, side

③ Actuation Element *

S200	Plunger
R200	Roller Plunger
K200	Offset roller lever
K210	Offset roller lever
K230	Angle roller lever
K240	Angle roller lever
K250	Angle roller lever
H200	Roller lever
N200	Roller lever
J200	Rod lever **

* Actuation elements can be ordered separately
** not appropriate for use in safety applications

Accessories / Connector cables

ACC-PS116-1 Adjustment tool

M12 connector

103006760	5 m cable (4 pole)
101209964	5 m cable (8 pole)
101209960	10 m cable (8 pole)

Compatible Safety Controllers

SRB-E-201LC	SRB-E-322ST
SRB-E-201ST	SRB-E-402ST
SRB-E-301ST	SRB-301MC
SRB-E-212ST	

Bold part numbers are regularly stocked

Contact

Schmersal Nordiska AB
Västra Frölunda
Tel: +46 31 338 35 00
E-mail: info-se@schmersal.com

Schmersal Norge
Drammen
Tel: +47 22 06 00 70
E-Mail: info-no@schmersal.com

Schmersal Danmark AS
Hvidovre
Tel: +45 70 20 90 27
E-Mail: info-dk@schmersal.com