Subminiature Size Horizontal Type

SL (AZ3) Micro Limit Switch

* Refer to our website for details of product.

RoHS compliance

Related Information ■General terms and conditions..... F-3

Rubber cover type
(roller lever)

panasonic.net/id/pidsx/global

Features

- **Subminiature limit switch**
- **A light force commensurate to the microswitch.**
- **Achieves stroke tolerance (O.T./T.T.) of 0.67**
- **Long life (electrical life: 10^5, mechanical life: 10^7)**
- **Built-in safety features and excellent environment proofing**

Typical applications

- **Food processing**
- **Spinning**
- **Assembly lines, etc.**

Subminiature size horizontal Micro Limit Switches

PRODUCT TYPE

Switch body

Actuator	Operating Force (O.F.)	Exposed terminal type	Rubber cover type	Socket with cord type*
		Model No.	Model No.	Model No.
Hinge lever	1.18 N {120 gf}	**AZ3012**	**AZ3512**	**AZ3712**
	1.96 N {200 gf}	**AZ3022**	**AZ3522**	**AZ3722**
Roller lever	1.18 N {120 gf}	**AZ3013**	**AZ3513**	**AZ3713**
	1.96 N {200 gf}	**AZ3023**	**AZ3523**	**AZ3723**
One-way roller lever	1.96 N {200 gf}	**AZ3024**	**AZ3524**	**AZ3724**
Hinge short lever	2.94 N {300 gf}	**AZ3025**	**AZ3525**	**AZ3725**
Short roller lever	2.94 N {300 gf}	**AZ3026**	**AZ3526**	**AZ3726**
One-way short roller lever	2.94 N {300 gf}	**AZ3027**	**AZ3527**	**AZ3727**

*Socket with cord type is combination of;

Socket with cord type = Exposed terminal type + Socket with cord (cord length: 1 m 3.281 ft)

Sockets (Used in combination with the exposed terminal type)

Product name	Specifications	Model No.
L socket	The roller can be attached in any of four directions.	**AZ3806**
Socket with cord	Cord length 1 m 3.281 ft	**AZ3807**
	Cord length 2 m 6.562 ft	**AZ3827**
	Cord length 3 m 9.843 ft	**AZ3837**
	Cord length 5 m 16.405 ft	**AZ3857**

CONNECTION METHOD FOR RUBBER COVER

1) Remove the rubber cover from the limit switch.

2) After stripping the sheath from the appropriate cord (refer to the following table) and removing the covering of the lead wires, insert the cord into the rubber cover.

· Table of applicable code

Wire name	Applicable wire		
	Conductor	Wire strand	Finished outside diameter
Vinyl cabtire cord (VCTF)(JIS C3306)	0.75 mm^2 1.12 × 10^{-3} in^2	2-wire	ø6.6 mm ø0.260 in
		3-wire	ø7.0 mm ø0.276 in

3) Connect lead wire to the receptacle terminals (#110) with insulating sleeve provided and insert it into the terminal of limt switch. (The lead wire can directly be soldered to the terminals without using receptacle terminals)

4) Push the rubber cover securely over the terminals.

CAUTIONS FOR USE

Ambient conditions

- The use of these switches under the following conditions should be avoided.
  If the following conditions should become necessary, we recommend consulting us first.
  - Use where there will be direct contact with organic solvents, strong acids or alkalis, or direct exposure to their vapors.
  - Use where inflammable or corrosive gases exist.
  - Because these switches are not of water resistant or immersion-proof construction, their use in water or oil should be avoided. Also, locations where water or oil can normally impringe upon the switch or where there is an excessive accumulation of dust should be avoided.
- To improve reliability during actual use, it is recommended that the operation be checked under installation conditions.
- If O.T. is too big, the life of limit switch will be shortened switching friction.
  Use it with enough margin of O.T. 70 % of O.T. standard value will be good for use.
- Do not use the switch in a silicon atmosphere. Case should be taken where organic silicon rubber, adhesive, sealing material, oil, grease or lead wire generates silicon.
- Avoid use in excessively dusty environments where actuator operation would be hindered.
- This is designed to use inside. When used outdoors (in places where there is exposure to direct sunlight or rain such as in multistory car parks) or in environments where ozone is generated, the influence of these environments cause deterioration of the rubber material and damage for the products.
- Do not change the operating position by bending the actuator.

Mounting and wiring

- Although SL limit switches have large over-travel (O.T.), excessive O.T. will occur wear and change in its characteristics.
  Specifically, where there is a need for long life, it is recommended that the proper O.T. as given below should be used.
  - Within 1 to 3 mm 0.039 to 0.118 in
- When the operating object is in the free condition, force should not be applied directly to the actuator.
- Use their own accessories when mounting and wiring SL limit switches so as to maintain their own characteristics. When the SL rubber cover type is used, there should absolutely be no tension applied to the cord. If there is the fear that tension may be applied, the L socket or socket with cord attached should be used. The maximum permissible tension with the above socket use is 98 N {10 kgf}.
- The tightening torque when installing this limit switch should be 1.18 to 1.47 N·m (12 to 15 kgf·cm).