





SP. No.

# Azbil Corporation

## 製品仕様書 SPECIFICATIONS

### PRECAUTIONS

#### 1 LIMIT SWITCH

##### 1.1 MOUNTING

- (1) Tighten each portion of limit switch at reasonable torque specified in this specification.  
Over-tightening may damage the screw or other parts. Loose-tightening may cause poor sealing of switch and decrease in various performance.
- (2) Do not loosen cover screws.
- (3) Assemble lever to shaft avoiding the hitting of dog and lever body.  
If not, actuator may be deformed and result in return failure.
- (4) Do not use silicone adhesives or silicone-contained grease.  
It may cause electrical contact conduction failure.

##### 1.2 ADJUSTMENT

- (1) Do not apply excessive force (more than 5 times of operating force) to the actuator beyond the limit of its travel. It may break the switch.
- (2) Small overtravel may cause chattering of contact or contact failure by vibration or shock.

##### 1.3 ENVIRONMENT

- (1) Do not use in environment where cover is exposed to volatile solvent.

### 2. CABLE PLUG

#### 2.1 FASTENING OF FIXING CUPRING LOCKRING.


- (1) For fastening, tighten fully with fingers (0.4~0.6N·m), using tools like priers will result in damage.
- (2) Insufficient tightening may result in nonfulfilment of IP67 protection or loosening.

#### 2.2 INSERTION/REMOVAL OF CABLE PLUG

- (1) Disconnect power supply before beginning insertion or removal of cable plug.  
Don't pull cable when removing cable plug.

#### 2.3 CONNECTOR

- (1) This product is molded into one unit with plastics.  
after fitting connectors, use with external force applied continuously.  
Don't put foot or heavy thing on product, don't hang heavy thing from it.
- (2) IP67 is not water-seal type. Don't use in water continuously.
- (3) Do not loosen connector.
- (4) Do not bend or move the cable at the entry of connector. It may cause sealing failure or broken wire and result in malfunction of switch.

作成DR. SAKIYAMA 10, 31, '05		尺度 SCALE ~	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. TOMITA 10, 31, '05	形番 MODEL	1LS75-JWC-PD03	
認可APPD SUDO 10, 31, '05	名称 NAME	LIMIT SWITCH	
日付 DATE 10, 31, '05	図番 NO.	AD14227E	改番REV. 3/4

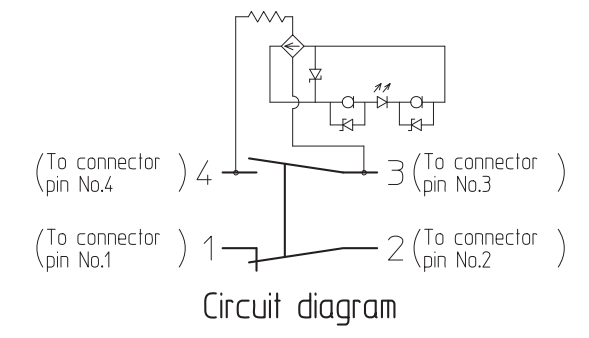
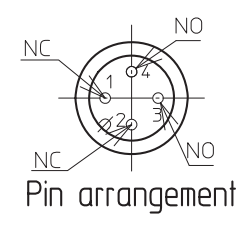
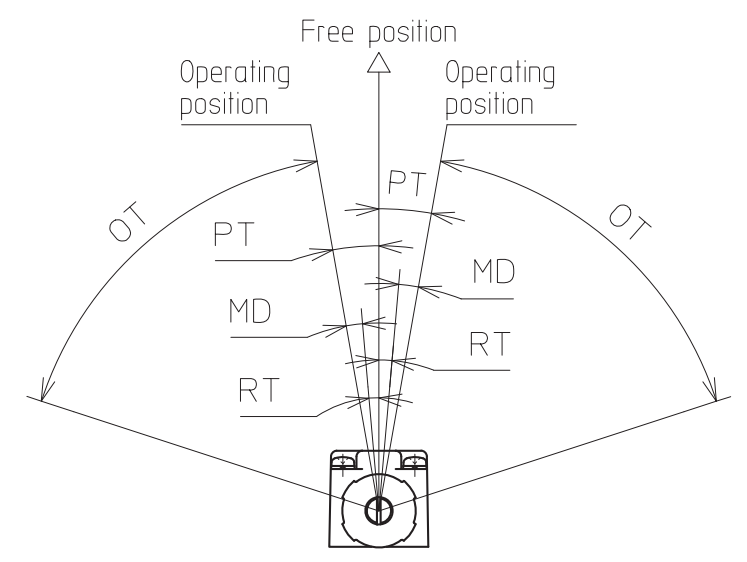
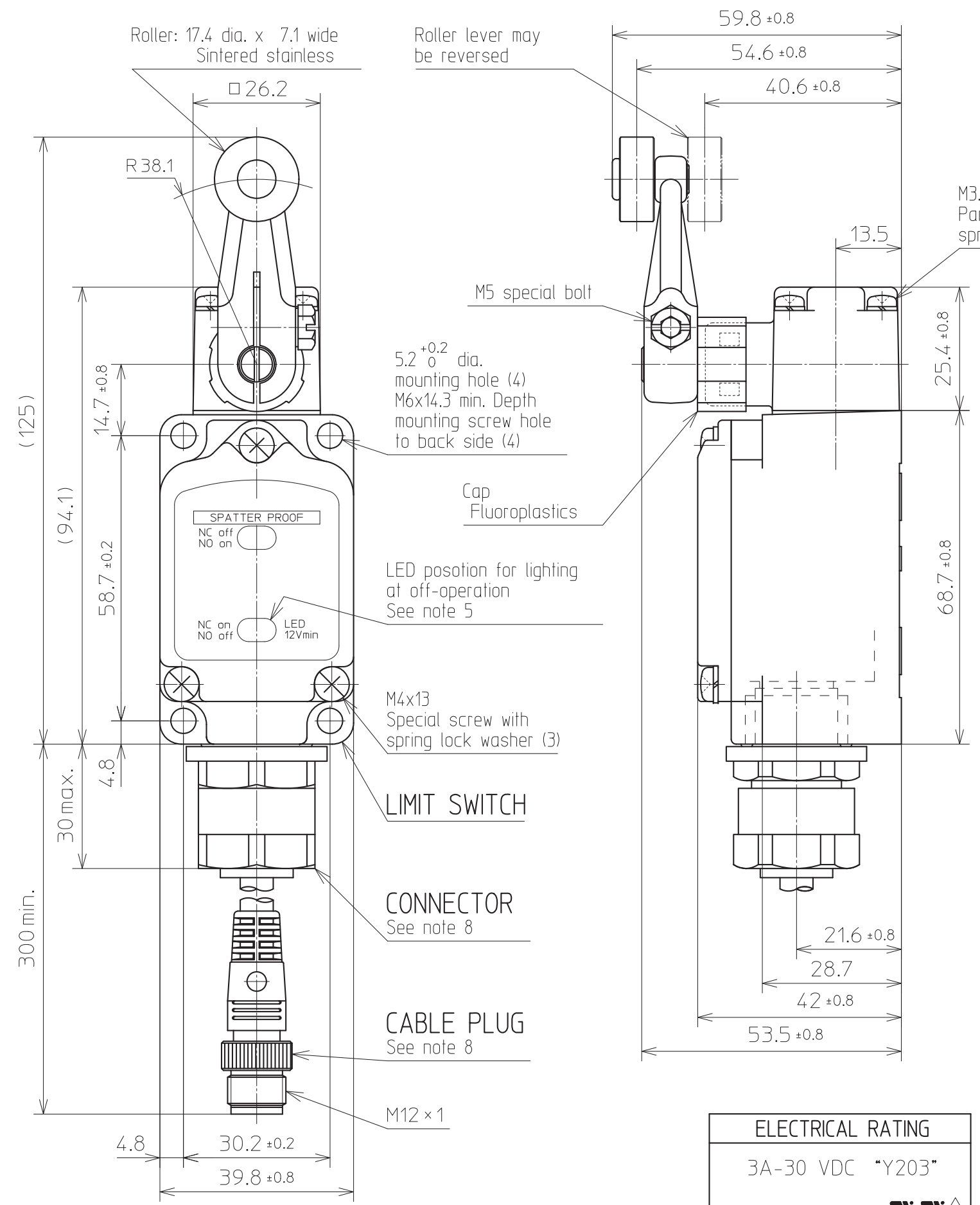
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		00	~	10,31,'05	SAKIYAMA	TOMITA

SR. No.

# Azbil Corporation

## 製品仕様書 SPECIFICATIONS

Characteristics		
Operating force	8.9 N	max.
Release force	0.98N	min.
Pretravel	10 <sup>+</sup> 2 <sup>-</sup>	
Movement differential	5 <sup>+</sup>	max.
Overtravel	62 <sup>+</sup>	min.
Release travel	3 <sup>+</sup>	min.



- NOTES
1. This switch actuates in either direction.
  2. Housing, cover and head made of aluminum alloy and resin indication cover are finished with glossy acrylic baking paint (light beige: munsell 4Y7.18/1.27).
  3. Actuator head mounts in any of four positions.
  4. Roller lever may be locked in any position through 360 degrees.
  5. Operation indicating lamp lights while actuator is off-operating position.
  6. Power source voltage of operating indicating lamp is 12 to 30V DC.
  7. External screws are made of stainless steel.
  8. 4-pin cable plug is wired and tightened to fix with connector.

ELECTRICAL RATING	
3A-30 VDC	"Y203"

01	~	3,15,'06	KANAI	TOMITA
00	~	10,31,'05	SAKIYAMA	TOMITA
改番 REV.	来歴 RECORD	日付 DATE	担当 BY	検閲 APPD.

作成DR. SAKIYAMA 10, 31, '05	検図CHK. TOMITA 10, 31, '05	認可APPD SUDO 10, 31, '05	日付DATE 10, 31, '05	尺 度 SCALE 1:1	記入のない公差 TOL. UNLESS NOTED ±0.4 ANGLES ±3°
形 番 MODEL	1LS75-JWC-PD03				
名 称 NAME	LIMIT SWITCH				
図 番 NO.	AD14227E	改番REV. 01	4/4		

SP. NO.	Azbil Corporation		製品仕様書 SPECIFICATIONS			
	<b>Terms and Conditions</b>					
	<p>We would like to express our appreciation for your purchase and use of azbil products.          You are required to acknowledge and agree upon the following terms and conditions for your purchase of azbil products (field instruments, control valves, and control products), unless otherwise stated in any separate document, including, without limitation, estimation sheets, written agreements, catalogs, specifications and instruction manuals.</p>					
	<p><b>1 Warranty period and warranty scope</b></p>					
	<p><b>1.1 Warranty period</b>          Azbil products shall be warranted for one (1) year from the date of your purchase of the said products or the delivery of the said products to a place designated by you.</p>					
	<p><b>1.2 Warranty scope</b>          In the event that azbil product has any failure attributable to azbil during the aforementioned warranty period, azbil shall, without charge, deliver a replacement for the said product to the place where you purchased, or repair the said product and deliver it to the aforementioned place.          Notwithstanding the foregoing, any failure falling under one of the following shall not be covered under this warranty:</p>					
	<p>(1) Failure caused by your improper use of azbil product          (noncompliance with conditions, environment of use, precautions, etc. set forth in catalogs, specifications, instruction manuals, etc.);</p>					
	<p>(2) Failure caused for other reasons than azbil product;</p>					
	<p>(3) Failure caused by any modification or repair made by any person other than azbil or azbil's subcontractors;</p>					
	<p>(4) Failure caused by your use of azbil product in a manner not conforming to the intended usage of that product;</p>					
	<p>(5) Failure that the state-of-the-art at the time of azbil's shipment did not allow azbil to predict; or</p>					
	<p>(6) Failure that arose from any reason not attributable to azbil, including, without limitation, acts of God, disasters, and actions taken by a third party.</p>					
	<p>Please note that the term "warranty" as used herein refers to equipment-only-warranty, and azbil shall not be liable for any damages, including direct, indirect, special, incidental or consequential damages in connection with or arising out of azbil products.</p>					
	<p><b>2 Ascertainment of suitability</b></p>					
	<p>You are required to ascertain the suitability of azbil product in case of your use of the same with your machinery, equipment, etc. (hereinafter referred to as "Equipment") on your own responsibility, taking the following matters into consideration:</p>					
	<p>(1) Regulations and standards or laws that your Equipment is to comply with.</p>					
	<p>(2) Examples of application described in any documents provided by azbil are for your reference purpose only, and you are required to check the functions and safety of your Equipment prior to your use.</p>					
	<p>(3) Measures to be taken to secure the required level of the reliability and safety of your Equipment in your use          Although azbil is constantly making efforts to improve the quality and reliability of azbil products, there exists a possibility that parts and machinery may break down.          You are required to provide your Equipment with fool-proof design, fail-safe design, anti-flame propagation design, safety design, or the like so that the said Equipment may satisfy the level of the reliability and safety required in your use, whereby preventing any occurrence of physical injuries, fires, significant damage, and so forth.</p>					
	<p><b>3 Precautions and restrictions on application</b></p>					
	<p>Azbil products other than those explicitly specified as applicable (e.g. azbil Limit Switch For Nuclear Energy) shall not be used in a nuclear energy controlled area (radiation controlled area).          Any azbil products shall not be used for/with medical equipment.          In addition,          you are required to conduct a consultation with our sales representative and understand detail specifications, cautions for operation, and so forth by reference to catalogs, specifications, instruction manual, etc. in case that you intend to use azbil product for any purposes specified in (1) through (6) below.          Moreover, you are required to provide your Equipment with fool-proof design, fail-safe design, anti-flame propagation design and other designs of protection/safety circuit on your own responsibility to ensure the reliability and safety, whereby preventing problems caused by failure or nonconformity.</p>					
	<p>(1) For use under such conditions or in such environments as not stated in technical documents, including catalogs, specification, and instruction manuals</p>					
	<p>(2) For use of specific purposes, such as:</p>					
	<p>* Nuclear energy/radiation related facilities          [For use outside nuclear energy controlled areas]          [For use of azbil Limit Switch For Nuclear Energy]</p>					
	<p>* Machinery or equipment for space/sea bottom</p>					
	<p>* Transportation equipment          [Railway, aircraft, vessels, vehicle equipment, etc.]</p>					
	<p>* Antidisaster/crime-prevention equipment</p>					
	<p>* Burning appliances</p>					
	<p>* Electrothermal equipment</p>					
	<p>* Amusement facilities</p>					
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				<p>(3) Supply systems such as electricity/gas/water supply systems, large-scale communication systems, and traffic/air traffic control systems requiring high reliability</p> <p>(4) Facilities that are to comply with regulations of governmental/public agencies or specific industries</p> <p>(5) Machinery or equipment that may affect human lives, human bodies or properties</p> <p>(6) Other machinery or equipment equivalent to those set forth in items (1) to (5) above which require high reliability and safety</p>		
		<p><b>4 Precautions against long-term use</b></p> <p>Use of azbil products, including switches, which contain electronic components, over a prolonged period may degrade insulation or increase contact-resistance and may result in heat generation or any other similar problem causing such product or switch to develop safety hazards such as smoking, ignition, and electrification.</p> <p>Although acceleration of the above situation varies depending on the conditions or environment of use of the products, you are required not to use any azbil products for a period exceeding ten (10) years unless otherwise stated in specifications or instruction manuals.</p>				
		<p><b>5 Recommendation for renewal</b></p> <p>Mechanical components, such as relays and switches, used for azbil products will reach the end of their life due to wear by repetitious open/close operations.</p> <p>In addition, electronic components such as electrolytic capacitors will reach the end of their life due to aged deterioration based on the conditions or environment in which such electronic components are used.</p> <p>Although acceleration of the above situation varies depending on the conditions or environment of use, the number of open/close operations of relays, etc. as prescribed in specifications or instruction manuals, or depending on the design margin of your machine or equipment, you are required to renew any azbil products every 5 to 10 years unless otherwise specified in specifications or instruction manuals.</p> <p>Field instruments (sensors such as pressure/flow/level sensors, regulating valves, etc.) will reach the end of their life due to aged deterioration of parts.</p> <p>For those parts that will reach the end of their life due to aged deterioration, recommended replacement cycles are prescribed. You are required to replace parts based on such recommended replacement cycles.</p>				
		<p><b>6 Other precautions</b></p> <p>Prior to your use of azbil products, you are required to understand and comply with specifications (e.g., conditions and environment of use), precautions, warnings/cautions/notices as set forth in the technical documents prepared for individual azbil products, such as catalogs, specifications, and instruction manuals to ensure the quality, reliability, and safety of those products.</p>				
		<p><b>7 Changes to specifications</b></p> <p>Please note that the descriptions contained in any documents provided by azbil are subject to change without notice for improvement or for any other reason.</p> <p>For inquiries or information on specifications as you may need to check, please contact our branch offices or sales offices, or your local sales agents.</p>				
		<p><b>8 Discontinuance of the supply of products/parts</b></p> <p>Please note that the production of any azbil product may be discontinued without notice.</p> <p>For repairable products, we will, in principle, undertake repairs for five (5) years after the discontinuance of those products. In some cases, however, we cannot undertake such repairs for reasons, such as the absence of repair parts.</p> <p>For field instruments, we may not be able to undertake parts replacement for similar reasons.</p>				
		<p><b>9 Scope of services</b></p> <p>Prices of azbil products do not include any charges for services such as engineer dispatch service. Accordingly, a separate fee will be charged in any of the following cases:</p> <p>(1) Installation, adjustment, guidance, and attendance at a test run</p> <p>(2) Maintenance, inspection, adjustment, and repair</p> <p>(3) Technical guidance and technical education</p> <p>(4) Special test or special inspection of a product under the conditions specified by you</p> <p>Please note that we cannot provide any services as set forth above in a nuclear energy controlled area (radiation controlled area) or at a place where the level of exposure to radiation is equivalent to that in a nuclear energy controlled area.</p>				
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