

S.R. No.

CATALOG LISTING

1 L S - J [1] [2] [3] [4]

1 ACTUATOR TYPE

Code	Actuator Type
5 5 0	Standard roller lever
5 5 1	Without lever
5 5 3	Adjustable. roller lever
5 5 5	Short adjustable. roller lever

2 INTERNAL SWITCH

Code	Switch
~	General use silver contact
S	General use silver contact Seal type
K	Gold plated contact for low current load
K S	Gold plated contact for low current load Seal type

3 TYPE OF INDICATION LIGHT

Code	Voltage	Type of lamp
E	100/200V (AC only)	Neon lamp
E C	12 to 125V (AC/DC)	LED

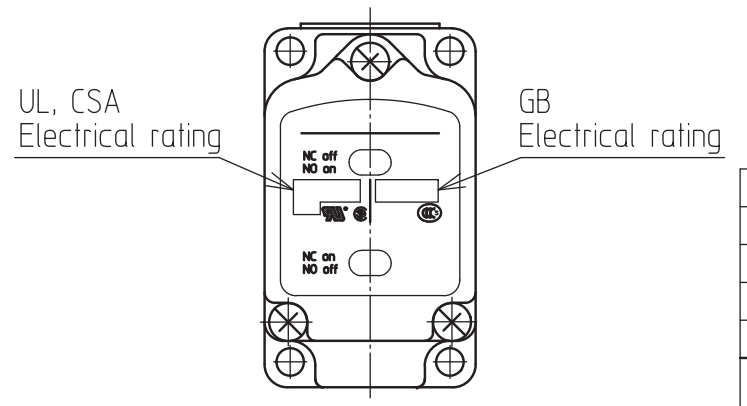
4 CONDUIT

Code	Conduit
~	Parallel pipe thread G1/2, 3.5 threads min.
B	Pipe threads (INCH) 1/2-14 NPT
D	Screw threads for rigid metal conduits and fittings Pg13.5, 5 threads min. (DIN40430)

Catalog listings and electrical ratings covered by this drawing are as in the below table.

Indication light	Catalog listing	Electrical rating								
		UL, CSA	GB							
1LS-J***** [E]*	1LS-J550E 1LS-J550EB 1LS-J550ED 1LS-J551E 1LS-J551EB 1LS-J551ED 1LS-J553E 1LS-J553EB 1LS-J553ED 1LS-J555E 1LS-J555EB 1LS-J555ED	5A-125 OR 250 VAC "Y19"	3A-240VAC AC-15							
	1LS-J550SE 1LS-J550SEB 1LS-J550SED 1LS-J551SE 1LS-J551SEB 1LS-J551SED 1LS-J553SE 1LS-J553SEB 1LS-J553SED 1LS-J555SE 1LS-J555SEB 1LS-J555SED									
	1LS-J550KE 1LS-J550KEB 1LS-J550KED 1LS-J551KE 1LS-J551KEB 1LS-J551KED 1LS-J553KE 1LS-J553KEB 1LS-J553KED 1LS-J555KE 1LS-J555KEB 1LS-J555KED			0.1A-125VAC "Y96"	0.1A-125VAC AC-12					
	1LS-J550KSE 1LS-J550KSEB 1LS-J550KSED 1LS-J551KSE 1LS-J551KSEB 1LS-J551KSED 1LS-J553KSE 1LS-J553KSEB 1LS-J553KSED 1LS-J555KSE 1LS-J555KSEB 1LS-J555KSED									
	1LS-J***** [EC]*					1LS-J550EC 1LS-J550ECB 1LS-J550ECD 1LS-J551EC 1LS-J551ECB 1LS-J551ECD 1LS-J553EC 1LS-J553ECB 1LS-J553ECD 1LS-J555EC 1LS-J555ECB 1LS-J555ECD	5A-125 VAC "Y173"	3A-125VAC AC-15 0.4A-30VDC DC-12		
						1LS-J550SEC 1LS-J550SECB 1LS-J550SECD 1LS-J551SEC 1LS-J551SECB 1LS-J551SECD 1LS-J553SEC 1LS-J553SECB 1LS-J553SECD 1LS-J555SEC 1LS-J555SECB 1LS-J555SECD				
						1LS-J550KEC 1LS-J550KECB 1LS-J550KECD 1LS-J551KEC 1LS-J551KECB 1LS-J551KECD 1LS-J553KEC 1LS-J553KECB 1LS-J553KECD 1LS-J555KEC 1LS-J555KECB 1LS-J555KECD			0.1A-125VAC 0.1A-30VDC "Y93"	0.1A-125VAC AC-12 0.1A-30VDC DC-12
						1LS-J550KSEC 1LS-J550KSECB 1LS-J550KSECD 1LS-J551KSEC 1LS-J551KSECB 1LS-J551KSECD 1LS-J553KSEC 1LS-J553KSECB 1LS-J553KSECD 1LS-J555KSEC 1LS-J555KSECB 1LS-J555KSECD				

ELECTRICAL RATING LOCATION



6 05
5 05
4 05
3 05
2 05
頁改番
PAGE REV.

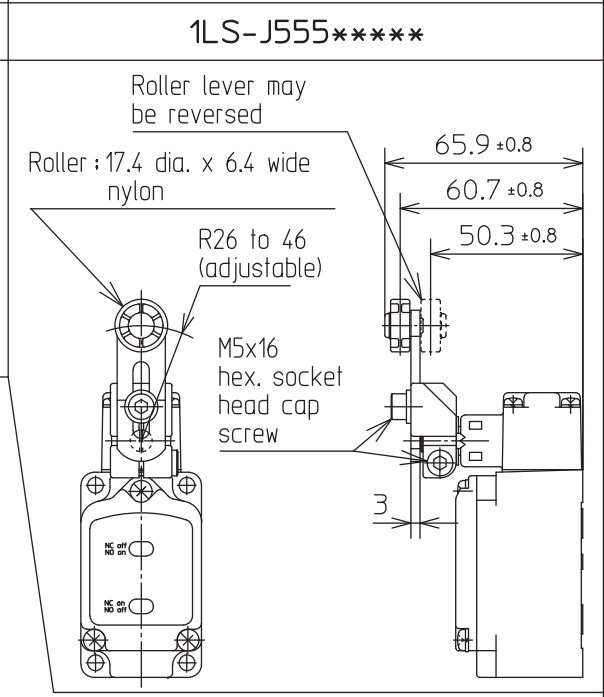
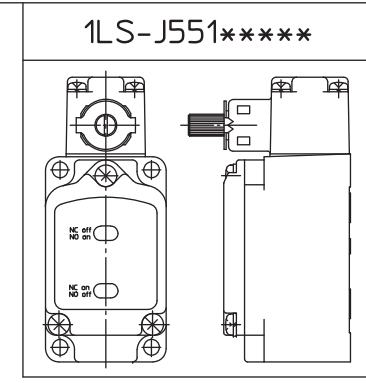
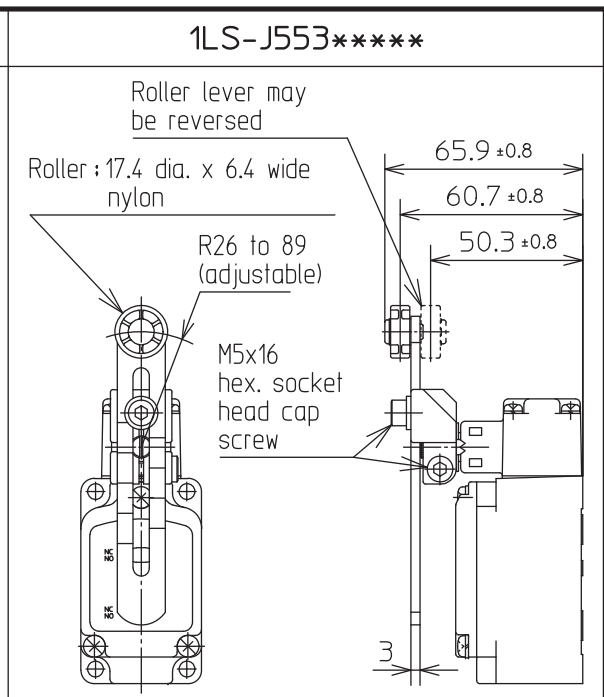
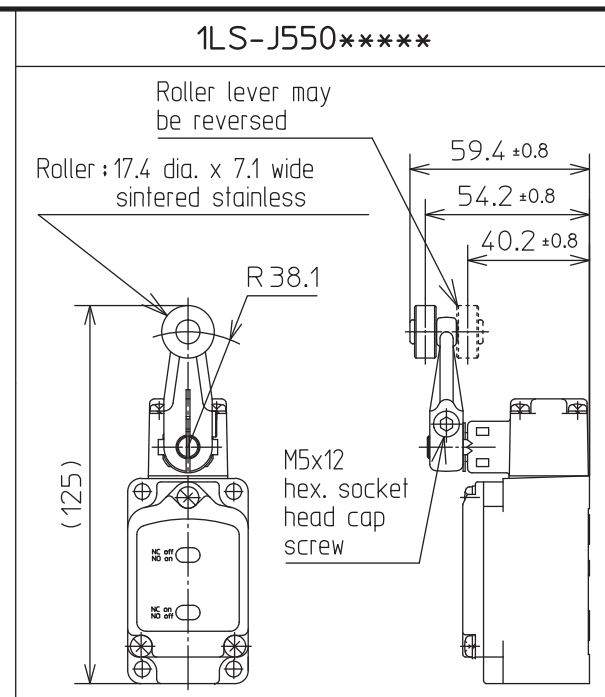
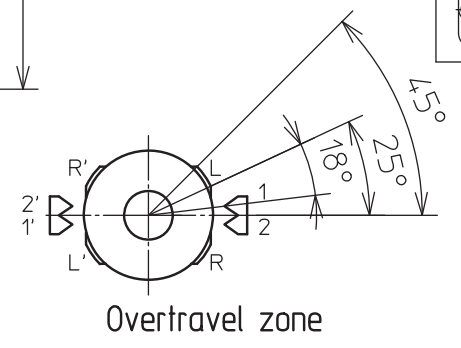
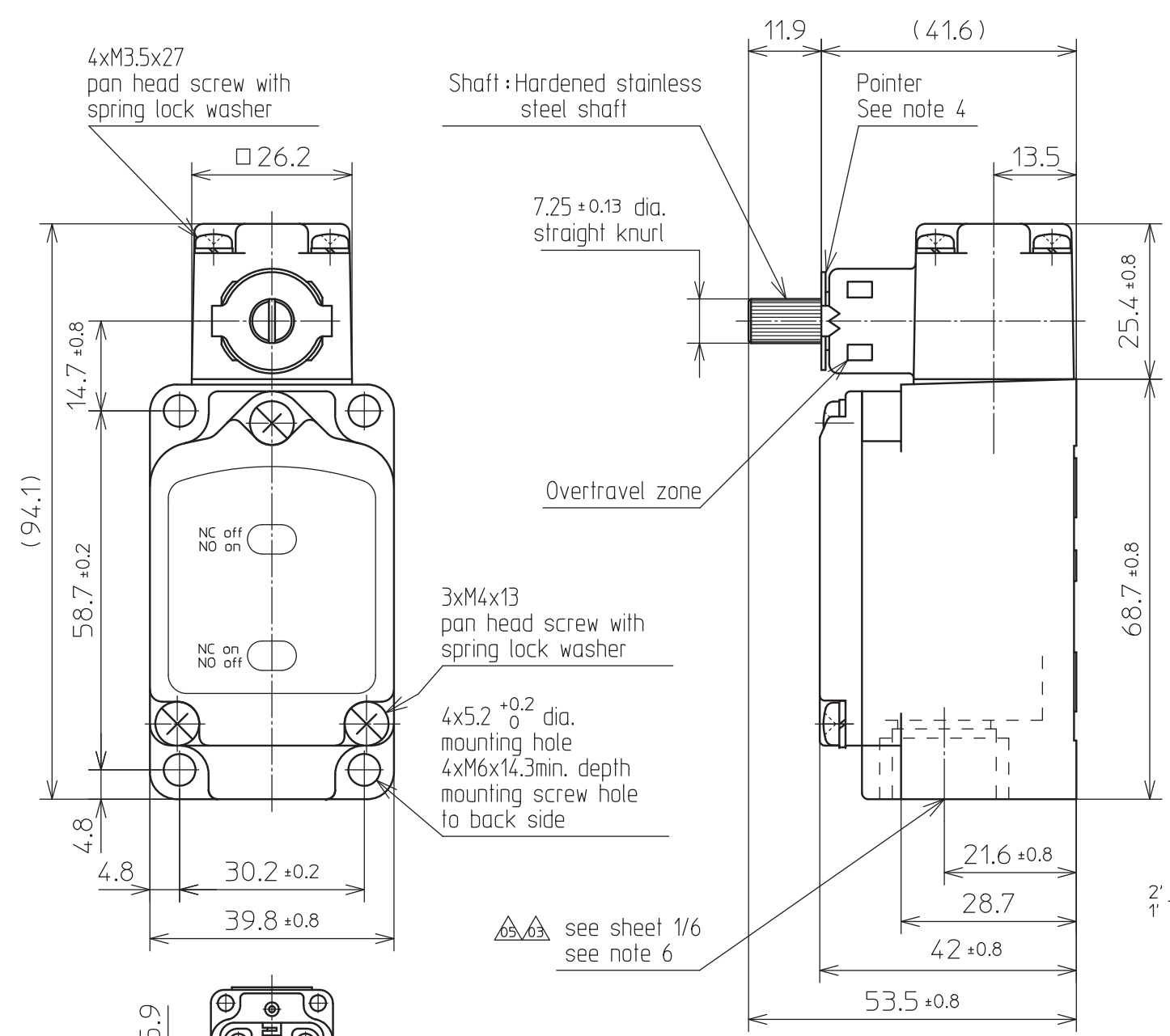
05	ECO06-2442	10, 3,'06	SAKIYAMA	TOMITA
04	JE003-1391	10, 2,'03	TATSUHARA	MATSUNO
03	JE099-1436	12, 24,'99	SHIMIZU	TOMITA
02	JE099-1214	4,28,'99	TATSUHARA	TOMITA
01	JE098-1368	8,24,'98	TATSUHARA	TOMITA
改番 REV.	来歴 RECORD	: 日付 DATE	担当 BY	検閲 APPD.

作成DR. TATSUHARA 2. 19, '98		尺度 SCALE UN	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. ARAI 2. 23, '98	形番 MODEL	1LS-J*****	
認可APPD ANDO 2. 24, '98	名称 NAME	LIMIT SWITCH	
日付 DATE 2. 24, '98	図番 NO.	AD52978E	改番REV. 05 1/6

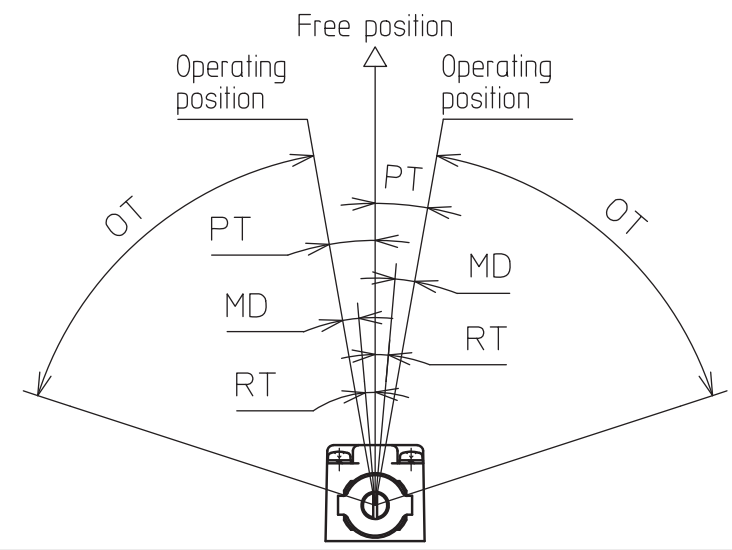
SR. No.

Azbil Corporation

製品仕様書
SPECIFICATIONS



- Notes
1. This switch actuates in either direction.
 2. Aluminum alloy housing, cover and head, and resin indicator cover are finished with glossy acylic resin baking paint (Light beige, Munsell 4Y7.18/1.27).
 3. Actuator head mounts in any of four positions.
 4. Set lever shaft so that at overtravel zone pointer 2.2' can meet setting mark R.R' in left turn and pointer 1.1' can meet L.L' in right turn.
 5. Roller lever may be locked in any position through 360°.
 6. Before using this switch, be sure the conduit is sealed.
 7. Values given for O.F. or R.F. (among the mechanical characteristics) are for a lever length of 38.1.

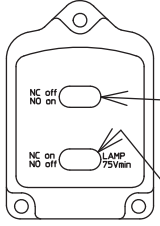
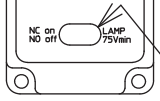
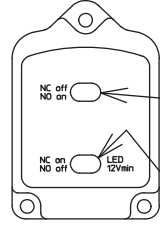
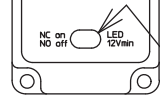
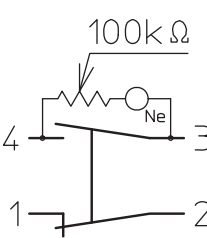
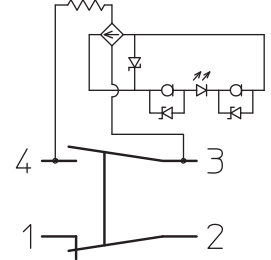


Characteristics		
Operating force	8.9 N	max. △0.2
Release force	0.98N	min. △0.2
Pretravel	10 ⁺² ₋₁	
Movement differential	5'	max.
Overtravel	62'	min.
Release travel	3'	min.

05	~	10, 3, '06	SAKIYAMA	TOMITA
03	ADDED CONDUIT	12, 24, '99	SHIMIZU	TOMITA
02	SI (MKS) → SI	4, 28, '99	TATSUHARA	TOMITA
01	~	8, 24, '98	TATSUHARA	TOMITA
改番 REV.	来歴 RECORD	日付 DATE	担当 BY	検閲 APPD.

作成DR. TATSUHARA 2. 19, '98	検図CHK. ARAI 2. 23, '98	認可APPD ANDO 2. 24, '98	日付DATE 2. 24, '98	尺度SCALE 1:1	記入のない公差 TOL. UNLESS NOTED ±0.4 ANGLES ±3°
形番 MODEL	1LS-J*****				
名称 NAME	LIMIT SWITCH				
図番 NO.	AD52978E	改番REV. 05	5/6		


COVER SHAPE AND CIRCUIT DIAGRAM △△△

Cover	 <p>Lamp position for lighting at on-operation</p>  <p>Lamp position for lighting at off-operation See note 1</p>	 <p>LED position for lighting at on-operation</p>  <p>LED position for lighting at off-operation See note 1</p>
Circuit diagram		
Note	<ul style="list-style-type: none"> Apply more than 75Vac voltage to secure lighting of neon lamp. 	<ul style="list-style-type: none"> Power source voltage of operating indicating lamp is 12 to 125V AC or DC. Maximum current of operating indicating lamp is 0.6mA. △△
	1LS-J***** E *	1LS-J***** EC *

Note 1. Indication lamp is mounted for the lighting at off-operation.
Rotate the lamp holder 180° when using the lamp for the lighting at on-operation.

LAMP DESCRIPTION △△

Description	Lamp	1LS-J***** E *	1LS-J***** EC *
Color of the lamp		Red	Red
Type of the lamp socket		Soldered leads	Mounted on PCB
Max. power consumption or lamp circuit (W)	1LS-J*** ~ ***	0.06	0.18
	1LS-J*** S ***		
	1LS-J*** K ***	0.06	0.18
	1LS-J*** KS ***		

作成DR. SAKIYAMA 10, 3,'06		尺度 SCALE 1:2	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. TOMITA 10, 3,'06	形番 MODEL	1LS-J*****	
認可APPD SUDO 10, 3,'06	名称 NAME	LIMIT SWITCH	
日付DATE 10, 3,'06	図番 NO.	AD52978E	改番REV. 05 / 6

05	~	10, 3,'06	SAKIYAMA	TOMITA
頁 PAGE	改番 REV.	来歴 RECORD	担当 BY	検閲 APPD.

SP.NO.

Azbil Corporation

製品仕様書 SPECIFICATIONS

Terms and Conditions

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.

1 Warranty period and warranty scope

1.1 Warranty period

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.

1.2 Warranty scope

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:

- (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.);
- (2) Failure caused for other reasons than azbil product;
- (3) Failure caused by any modification or repair made by any person other than azbil or azbil's subcontractors;
- (4) Failure caused by your use of azbil product in a manner not conforming to the intended usage of that product;
- (5) Failure that the state-of-the-art at the time of azbil's shipment did not allow azbil to predict; or
- (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.

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.

2 Ascertainment of suitability

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:

- (1) Regulations and standards or laws that your Equipment is to comply with.
- (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.
- (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.

3 Precautions and restrictions on application

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.

- (1) For use under such conditions or in such environments as not stated in technical documents, including catalogs, specification, and instruction manuals
- (2) For use of specific purposes, such as:
 - * Nuclear energy/radiation related facilities
[For use outside nuclear energy controlled areas]
[For use of azbil Limit Switch For Nuclear Energy]
 - * Machinery or equipment for space/sea bottom
 - * Transportation equipment
[Railway, aircraft, vessels, vehicle equipment, etc.]
 - * Antidisaster/crime-prevention equipment
 - * Burning appliances
 - * Electrothermal equipment
 - * Amusement facilities

頁 改番

改番
REV.

来歴
RECORD

・ 日 付
・ DATE

担当
BY

検閲
APPD.

SP.NO.		Azbil Corporation		製品仕様書 SPECIFICATIONS		
		<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>4 Precautions against long-term use</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>5 Recommendation for renewal</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>6 Other precautions</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>7 Changes to specifications</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>8 Discontinuance of the supply of products/parts</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>9 Scope of services</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>				
頁	改番	改番 REV.	来歴 RECORD	日付 DATE	担当 BY	検閲 APPD.