Azbil Corporation

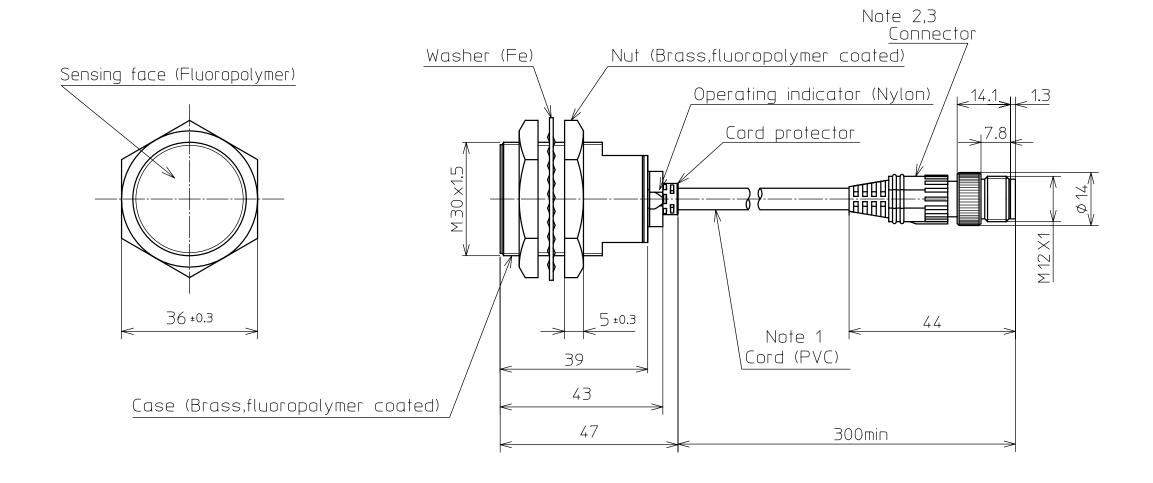
320-4-041-2

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S.R.

製品仕様書 SPECIFICATIONS

1. Mounting dimensions



Note 1. Cord: UL cord (oil resistance & vibration resistance. dia.: ϕ 5.7, 0.5mm 2)

2. Material of connector.

Housing:Polyester elastomer / light gray

Contact : Au plated brass

Rock ring: Ni plated brass

- 3. Please use the "PA5" series (DC type) of our VA connector.
- 4. UL listed product. (File No. E252012, class 2 circuit)

									±0.2 ±	0.3 ±0.5 ±0.8
[-				_ 	作成DR. T.Honma 9-4 '08	\Pi	尺度SCALE 1:1	REFER	公差 TOL. UNLESS NOTED ABOVE LIST FOR NLESS NOTED.
	-				-	検図CHK. S.Kawai 9-4 '08	形 番 MODEL	FL7M	1-10K	6WE-910
	- 01	ECOP10-1790	9–1 '10	TO	- S I/	認可APPD T.Nakao 9-4 '08	名 称 NAME	Prox	kimity	switch
	改番 REV.	来歴 RECORD	9-1 10 : 日付 : DATE	担当 BY	う.K. 検閲 APPD.	日付 DATE	図 番 NO.	AD15	499E	_ 改番REV. 1 / - 01 / 3

≤3 ≤6 ≤30 ≤120

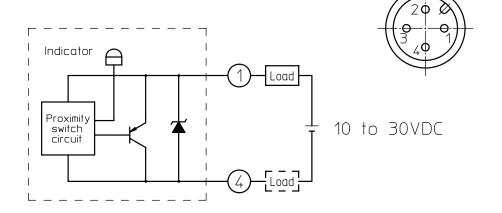
2. Specifications

SR. No.

	FL7M-10K6WE-910					
Туре	Eddy current killed oscillator					
Rated supply voltage	12V/24VDC					
Supply voltage	10 to 30VDC					
Leakage current	0.55mA max.					
Sensing distance	10 ± 1 mm					
Standard target	30×30mm t1mm (SPCC)					
Hysteresis	15% max. of sensing distance					
Operating mode	Normally close (break)					
Output type	2-wire DC of transistor output					
Output	Load current ; 3 to 100mA Voltage drop ; 3.0V max. Output withstand voltage ; 30VDC					
Repetition	500Hz min.					
Temperature drift	±10% of sensing distance (at +25°) between -25 to +70°					
Supply voltage drift	±1% of sensing distance (at rated voltage) between rated voltage ±15%					
Operating indicator	Orange 'ON' with output on					
Operating temperature	-25 to +70°					
Insulation resistance	50MΩ min. (at 500VDC)					
Dielectric strength	2500VAC 50/60Hz 1 minute					
Vibration	10 to 55Hz 1.5mm double amplitude 2 hours in each direction of X,Y,Z					
Shock	980m/s² 10 times in each direction of X,Y,Z					
Sealing	IP67 (IEC standard), IP67G (JEM standard)					
Insertion & pulling force of connector	0.4 to 4N (per pin)					
Cycle of insertion and pull of connector	50 times min.					
Mass	Approx.170g (only sensor with cord 0.3m)					
Circuit protection	Short current protection and wrong wiring protection					
EMC:Applied harmonized standard EN	N60947-5-2:2007					
Electro discharge	Level 3 6kV (contact discharge)	IEC61000-4-2:1995+A1:1998+A2:2000				
Radiated RF electromagnetic field	Level 3 10V/m	IEC61000-4-3:2006				
Electrical fast transients	Level 4 2kV (using the capacitive coupling clamp)	IEC61000-4-4:2004				
Conducted disturbaces induced by RF fields		IEC61000-4-6:2003+A1:2004+A2:2006				
Power frequency magnetic field	Level 4 30A/m	IEC61000-4-8:1993+A1:2000				

3. Connection diagram

Contact layout



Load can be connected to either of the lead wires.

作成DR. T.Honma 9-4 '08 R度SCALE 記入のない公語	差 TOL. UNLESS NOTED
	WE-910
	switch
$\langle 0 \rangle 0 \rangle \sim 0 \rangle $	7t 37 pcv 0 /
文番 来歴 : 日付 担当 検閲 日付DATE 図 番 AD15499E REV. RECORD : DATE BY APPD.	改番REV. 2 01

製品仕様書 **Azbil Corporation** Z **SPECIFICATIONS** ż S 4. Product revision change record Catalogue listing Product Rev. No. Content of change Date 2008/9/4 All 01 New issue Dimension and structure 2008/9/4 2 02 All change 5. Product revision The 2-digit product revision number is shown after the catalogue listing on the cord. ex.: FL7M-10K6WE-910 (1) Catalogue listing 2 Product revision number Product Catalogue listing Rev. No. FL7M-10K6WE-910 02 尺度 SCALE 記入のない公差 TOL. UNLESS NOTED 作成DR. $\oplus \Box$ T.Honma 9-4'08 検図CHK. 形 FL7M-10K6WE-910 Proximity switch T.Nakao NAME 改番REV. 3 [™]AD15499E 日付DATE 図 担当 BY 検閲 日付 DATE 来歴 RECORD APPD.

			A-bil Corporation			製品仕樣書					
			Azbil Corporation	SPECIFICATIONS							
SP.NO		Terms and Conditions									
We would like to express our appreciation for your purchase and use of Azbil Corporation's products. You are required to acknowledge and agree upon the following terms and conditions for your purchase of Az (system products, field instruments, control valves, and control products), unless otherwise stated in any sepa without limitation, estimation sheets, written agreements, catalogs, specifications and instruction manuals.							erms and conditions for your purchase of Azbil Corporation's products products), unless otherwise stated in any separate document, including,				
		1 Warranty period and warranty scope 1.1 Warranty period									
			Azbil Corporation's 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 Corporation's product has any failure attributable to azbil during the aforementioned warranty period, Azbil Corporation 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 Corporation's product; (3) Failure caused by any modification or repair made by any person other than Azbil Corporation or Azbil Corporation's									
			 (3) Failure caused by any modification or repair made by any person other than Azbil Corporation or Azbil Corporation's subcontractors; (4) Failure caused by your use of Azbil Corporation's 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 Corporation's shipment did not allow Azbil Corporation to predict; or (6) Failure that arose from any reason not attributable to Azbil Corporation, 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 Corporation shall not be liable for any damages, including direct, indirect, special, incidental or consequential damages in connection with or arising out of Azbil Corporation's products.									
	2 Ascertainment of suitability You are required to ascertain the suitability of Azbil Corporation's product in case of your use of the same with your material 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 Corporation are for your reference purpose of your 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 Corporation's products, the a possibility that parts and machinery may break down. You are required to provide your Equipment with safety design such as fool-proof design, *1 and fail-safe destroy (anti-flame propagation design, etc.), whereby preventing any occurrence of physical injuries, fires, significant dames so forth. Furthermore, fault avoidance, *3 fault tolerance, *4 or the like should be incorporated so that the said Equipment in the safe even if the user makes an error. *2. A design that is safe even if the device fails. *3. Avoidance of device failure by using highly reliable components, etc. *4. The use of redundancy.										
		Azbil Corporation's 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 Corporation's products shall not be used for/with medical equipment. The products are for industrial use. Do not allow general consumers to install or use any Azbil Corporation's product. However, azbil products can be incorporated into products used by general consumers. If you intend to use a product for that purpose, please contact one of our sales representatives. 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, fault avoidance, fault tolerance, and other kinds of protection/safety circuit design on your own responsibility to ensure reliability and safety, whereby preventing problems caused by failure or nonconformity.									
頁	改番	一 改番 REV.	来歴 RECORD	● 日付 • DATE	担当 BY	照査 CHK.					

Azbil Corporation NO. **SPECIFICATIONS** For use under such conditions or in such environments as not stated in technical documents, including catalogs, specification and instruction manuals For use of specific purposes, such as: * Nuclear energy/radiation related facilities [For use outside nuclear energy controlled areas] [For use of Azbil Corporation's 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 * Facilities/applications associated directly with billing Supply systems such as electricity/gas/water supply systems, large-scale communication systems, and traffic/air traffic control systems requiring high reliability Facilities that are to comply with regulations of governmental/public agencies or specific industries Machinery or equipment that may affect human lives, human bodies or properties Other machinery or equipment equivalent to those set forth in items (1) to (5) above which require high reliability and safety Precautions against long-term use Use of Azbil Corporation's 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. 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 Corporation's products for a period exceeding ten (10) years unless otherwise stated in specifications or instruction manuals. **Recommendation for renewal** Mechanical components, such as relays and switches, used for Azbil Corporation's products will reach the end of their life due to wear by repetitious 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. 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 Corporation's products every 5 to 10 years unless otherwise specified in specifications or instruction manuals. System products, 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. 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. Other precautions Prior to your use of Azbil Corporation's 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 Corporation's products, such as catalogs, specifications, and instruction manuals to ensure the quality, reliability, and safety of those products. Changes to specifications 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. For inquires or information on specifications as you may need to check, please contact our branch offices or sales offices, or your local sales agents. Discontinuance of the supply of products/parts Please note that the production of any Azbil Corporation's product may be discontinued without notice. 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. For system products, field instruments, we may not be able to undertake parts replacement for similar reasons. Scope of services Prices of Azbil Corporation's 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: (1) Installation, adjustment, guidance, and attendance at a test run Maintenance, inspection, adjustment, and repair (3) Technical guidance and technical education (4) Special test or special inspection of a product under the conditions specified by you 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. AAS-511A-014-04 改 番 来歴 日 付 担当 照査 改番 百 REV RECORD DATE BY CHK.