

SP. No.

Yamatake Corporation

製品仕様書
SPECIFICATIONS

CATALOG CODING

1 4 C E 6 - [1] J [2] [3] [4] G



APPROVED BY EN, GB STANDARDS

[1] CABLE LENGTH

CODE	CABLE LENGTH (L) REFER TO PAGE 6/6
1	1 m
3	3 m
5	5 m

[2] CONTACT MATERIAL

CODE	CONTACT MATERIAL
~	SILVER
K	GOLD ALLOY

[3] MATERIAL OF HEAD SEALING

CODE	MATERIAL
~	NITRILE BUTADIENE RUBBER
V	FLUOROCARBON RUBBER

[4] INDICATOR

CODE	TYPE OF INDICATOR	AC/DC	CURRENT	RESISTANCE
E 1	LED CONNECTED TO NO	100V	1.2 mA	100kΩ
E 2	LED CONNECTED TO NC	100V	1.2 mA	100kΩ
E 5	LED CONNECTED TO NO	24V	1.5 mA	18kΩ
E 8	LED CONNECTED TO NC	24V	1.5 mA	18kΩ
~	NO INDICATOR			

CATALOG LISTINGS AND ELECTRICAL RATINGS COVERED BY THIS DRAWING ARE AS IN THE BELOW TABLE.



CONTACT MATERIAL [2]		14CE6-*J [~] ***G		14CE6-*J [K] ***G	
[4] INDICATOR					
14CE6-*J** [E1] G	CATALOG LISTING	14CE6-1JE1G	14CE6-1JVE1G	14CE6-1JKE1G	14CE6-1JKVE1G
	ELECTRICAL RATING	EN60947-5-1 IP67 1.5A-125VAC AC-15 Y222		EN60947-5-1 IP67 0.1A-125VAC AC-12 Y96	
14CE6-*J** [E2] G	CATALOG LISTING	14CE6-1JE2G	14CE6-1JVE2G	14CE6-1JKE2G	14CE6-1JKVE2G
	ELECTRICAL RATING	EN60947-5-1 IP67 0.5A-30VDC DC-12 Y223		EN60947-5-1 IP67 0.1A-30VDC DC-12 Y70	
14CE6-*J** [E5] G	CATALOG LISTING	14CE6-1JE5G	14CE6-1JVE5G	14CE6-1JKE5G	14CE6-1JKVE5G
	ELECTRICAL RATING	EN60947-5-1 IP67 1.5A-240VAC AC-15 0.5A-30VDC DC-12 Y210		EN60947-5-1 IP67 0.1A-125VAC AC-12 0.1A-30VDC DC-12 Y93	
14CE6-*J** [E8] G	CATALOG LISTING	14CE6-1JE8G	14CE6-1JVE8G	14CE6-1JKE8G	14CE6-1JKVE8G
	ELECTRICAL RATING				
14CE6-*J** [~] G	CATALOG LISTING	14CE6-1JG	14CE6-1JVG	14CE6-1JKG	14CE6-1JKVG
	ELECTRICAL RATING				

6 05
5 03
4 03
3 05
2 05
頁改番
PAGE REV.

05	ECO06-0319	4,14,'06	SAKIYAMA	TOMITA
04	JEO05-1289	5,23,'05	KANAI	TOMITA
03	JEO04-1201	1, 7,'04	TATSUHARA	TOMITA
改番 REV.	来歴 RECORD	: 日付 DATE	担当 BY	検閲 APPD.

作成DR. TATSUHARA 1, 7, '04		尺度SCALE ~	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. TOMITA 3, 23, '04	形番 MODEL	14CE6-*J****G	
認可APPD ABE 4, 27, '04	名称 NAME	MINIATURE LIMIT SWITCH	
日付DATE 5, 7, '04	図番 NO.	AD53100E	改番REV. 05 / 1/6

SP. No.

Yamatake Corporation

製品仕様書 SPECIFICATIONS

1. STANDARDS

- ・Conform to: JIS C 8201-5-1 IEC 60947-5-1
- ・Approved by: EN60947-5-1 TÜV No. : R 9451283
GB14048.5:2001 CQC No. : 2005010305166971

2. STRUCTURE

- ・Type of Contact: C (SPDT)
- ・Shape of Contact: Silver Contacts; Rivet
Gold Alloy Contacts; Cross point
- ・Protective Structure: IP67 (IEC 60529), (JIS C 0920)
- ・Environment pollution degree: Degree 3 (EN 60947-5-1)
- ・Protection class: Class I (IEC 60536)

3. ELECTRICAL CHARACTERISTICS

- Rated operational voltage (Ue), Utilization category and Rated operational current (Ie)

Item	Silver contacts				Gold plated contacts			
	INDICATOR ~		INDICATOR E1·E2	INDICATOR E5·E8	INDICATOR ~		INDICATOR E1·E2	INDICATOR E5·E8
Rated operational voltage (Ue)	240VAC	30VDC	125VAC	30VDC	125VAC	30VDC	125VAC	30VDC
Utilization category	AC-15	DC-12	AC-15	DC-12	AC-12	DC-12	AC-12	DC-12
Rated operational current(Ie)	1.5	0.5	1.5	0.5	0.1	0.1	0.1	0.1

- ・The value of therated frequency: 45 to 65Hz and d.c.
- ・Rated insulation voltage (Ui): 250 VAC

- Note 1. Dielectric test voltage between each terminal and the enclosure: **2000VAC**
(50 to 60Hz, for 5 seconds, leak current 1mA)

- Dielectric test voltage between the open contacts: **600VAC** (50 to 60Hz, for 1 minute, leak current 1mA)

- Note2.Values Under Indication Lamp Removed.

- ・Rated impulse withstand voltage (Uimp)
TÜV: 2500V

- CQC: Between each terminal and earth: 2500V
Between terminals of different polarities: 1800V

- ・Conventional free air thermal current (Ith)

Silver Contacts: 5A

- Gold Alloy Contacts: TÜV: 1A
CQC: 0.1A

作成DR. TATSUHARA 1, 7, '04		尺度 SCALE ~	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. TOMITA 3, 23, '04	形番 MODEL	14CE6-*J****G	
認可APPD ABE 4, 27, '04	名称 NAME	MINIATURE LIMIT SWITCH	
日付DATE 5, 7, '04	図番 NO.	AD53100E	改番REV. 2/6

頁 PAGE	改番 REV.	改番 REV.	来歴 RECORD	: 日付 DATE	担当 BY	検閲 APPD.
		05	CHANGED	4,14,'06	SAKIYAMA	TOMITA
		04	ADDITION etc.	5,23,'05	KANAI	TOMITA
		03	ADDITION etc.	1, 7,'04	TATSUHARA	TOMITA

SP. No.

Yamatake Corporation

製品仕様書
SPECIFICATIONS

4. MECHANICAL CHARACTERISTICS

- Actuator Strength: Withstand **5** times O.F. in the operating direction for 1 minute.
- Shock: **300** m/s²
Misoperation of the contact shall be 1 ms max. in the free position and the total travel position.
- Vibration: Peak-to-peak amplitude 1.5 mm Vibration frequency 10 to 55 Hz for continuous 2 hours.
Misoperation of the contact shall be 1 ms max. in the free position and the total travel position.
- Allowable Operating Speed: **1.7** mm/s to **0.5** m/s
The lowest speed; Unstable condition of the contact shall be 0.1s max.
The highest speed; The actuator shall not damage.
- Mechanical Operating Frequency: **120** cycles/minute max.

5. LIFE

- Mechanical Life: **5000k** cycles min.
- Electrical Life: The conditions at operation frequency of 20 cycles a minute are satisfied.

Code of contact material	Condition	Operation cycle
~	Rated load and 1A-30VDC	200k cycles min.
K	Rated load	2000k cycles min.

6. ENVIRONMENTAL CHARACTERISTICS

- Operating Temperature: **-10 to +70** °C (at no freezing)
- Operating Humidity: **98** %RH max.

7. MOUNTING

- Recommended Tightening Torque
 For mounting the switch to panel: **5 to 6 N·m** (M5 cap screw)
 For mounting the lever to switch: **4 to 5.2 N·m** (M5 cap screw)
 For mounting the head to housing: **0.8 to 1.2 N·m** (M3.5)

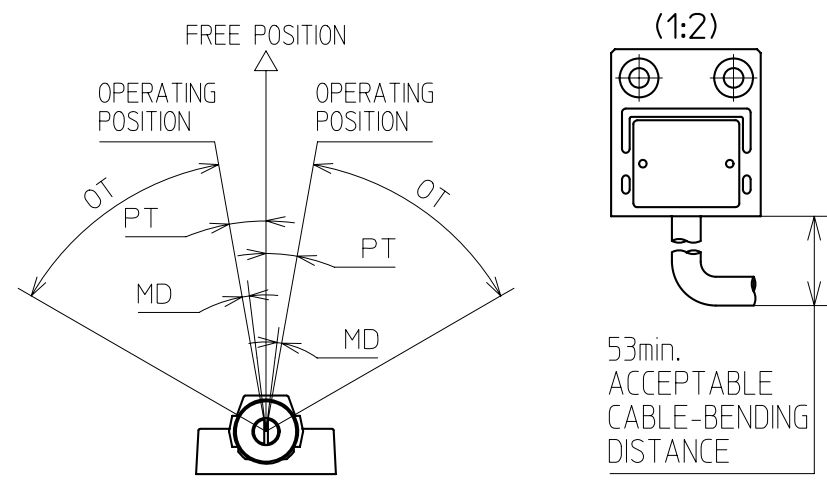
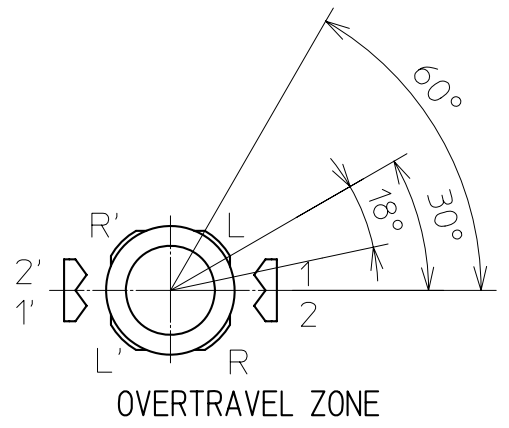
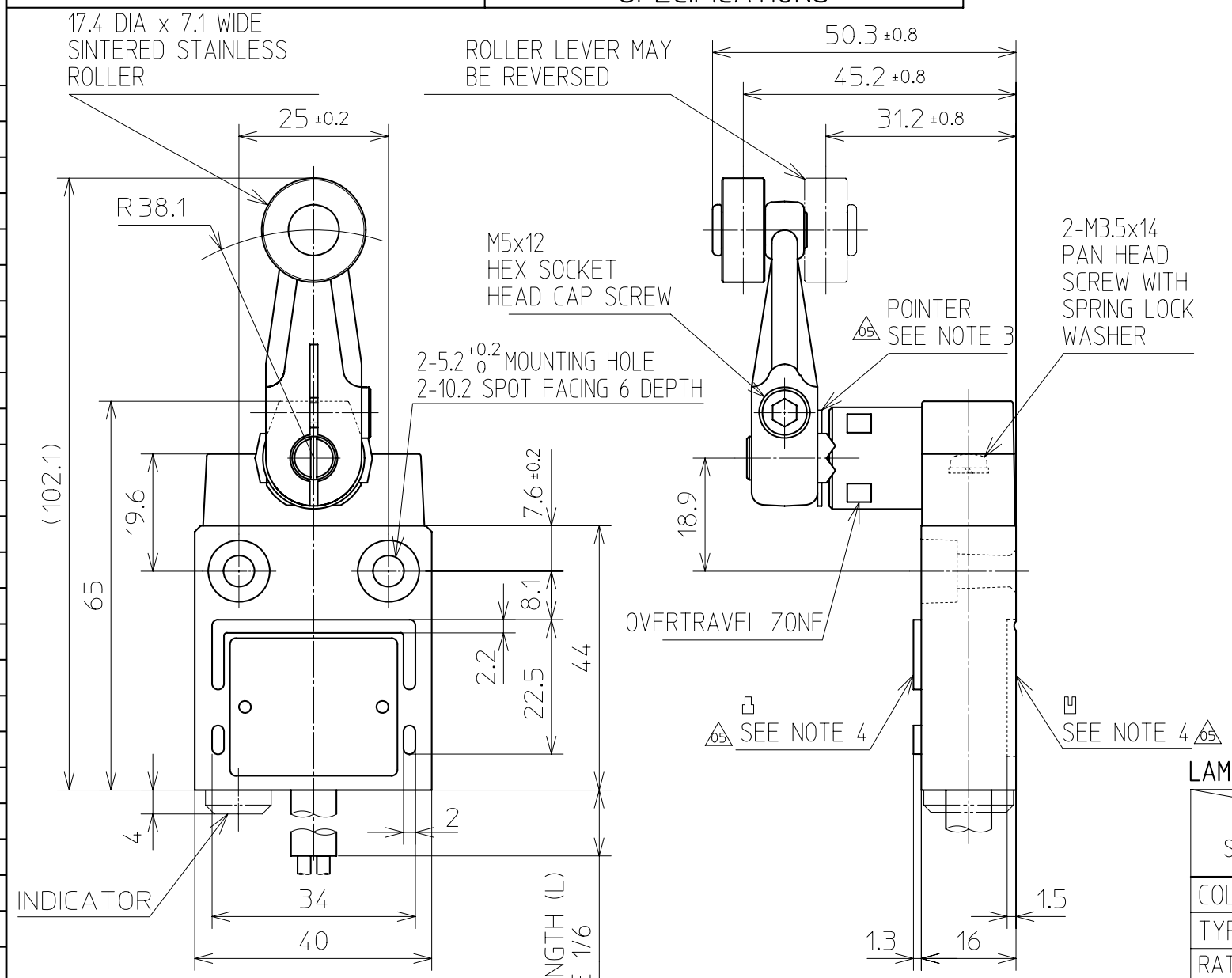
作成DR. TATSUHARA 1, 7, '04		尺度 SCALE ~	記入のない公差 TOL. UNLESS NOTED ~
検図CHK. TOMITA 3, 23, '04	形番 MODEL	14CE6-*J****G	
認可APPD ABE 4, 27, '04	名称 NAME	MINIATURE LIMIT SWITCH	
日付DATE 5, 7, '04	図番 NO.	AD53100E	改番REV. 4/6

03	ADDITION etc.	1, 7, '04	TATSUHARA	TOMITA	
頁 PAGE	改番 REV.	来歴 RECORD	: 日付 DATE	担当 BY	検閲 APPD.

SP. No.

Yamatake Corporation

製品仕様書
SPECIFICATIONS



CAT. LIST.	CIRCUIT DIAGRAM	INDICATOR
14CE6-*J** E1 G E5 G	OPERATION INDICATING LAMP LIGHTS WHILE ACTUATOR IS IN FREE POSITION 	 LED (RED) INDICATOR CAP IS MADE OF TRANSPARENT NYLON
14CE6-*J** E2 G E8 G	OPERATION INDICATING LAMP LIGHTS WHILE ACTUATOR IS IN PUSH POSITION 	
14CE6-*J** ~ G		

LAMP SPECIFICATIONS

SPECIFICATIONS	LAMP	14CE6-*J** E1 G	14CE6-*J** E5 G
			14CE6-*J** E2 G
COLOR OF THE LAMP		RED	RED
TYPE OF THE LAMP SOCKET		SOLDER THE LEAD OF LED	SOLDER THE LEAD OF LED
RATED POWER OF THE LAMP OR ITS TYPE DESIGNATION (W)	14CE6-*J~***G	0.16	0.04
	14CE6-*JK***G	0.16	0.04

- NOTES
- HOUSING IS MADE OF ALUMINUM ALLOY FINISHED WITH BLUE PAINT.
 - ROLLER LEVER MAY BE LOCKED IN ANY POSITION THROUGH 360 DEGREES.
 - SET ROLLER LEVER SO THAT, AT OVERTRAVEL ZONE, POINTER 2.2' CAN MEET SETTING MARK R,R' IN RIGHT TURN AND POINTER 1.1' CAN MEET L,L' IN LEFT TURN.
 - SINCE THERE ARE POSITIONING GROOVES AND CORRESPONDING EXTRUSIONS ON THE HOUSING, CORRECT GANG MOUNTING CAN BE EASILY MADE.
 - CABLE MATERIAL ; OIL RESISTANT VINYL INSULATED FLEXIBLE CORD, 0.75mm², 4-LEAD, APPROX. 7.6 O.D., BLACK.

CHARACTERISTICS

OPERATING FORCE	8.9N max.
RELEASE FORCE	1.4N min.
PRETRAVEL	10' ± 3'
MOVEMENT DIFFERENTIAL	3' max.
OVERTRAVEL	50' min.

作成DR. TATSUHARA 1, 7, '04	尺 度 SCALE 1:1	記入のない公差 TOL. UNLESS NOTED ±0.4 ANGLES ±3'
検図CHK. TOMITA 3, 23, '04	形 番 MODEL 14CE6-*J****G	
認可APPD ABE 4, 27, '04	名 称 NAME MINIATURE LIMIT SWITCH	
日付DATE 5, 7, '04	図 番 NO. AD53100E	改番REV. 05/6

頁 改番
PAGE REV.

SP.NO.

Terms and Conditions

We would like to express our appreciation for your purchase and use of Yamatake products.

You are required to acknowledge and agree upon the following terms and conditions for your purchase of Yamatake 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

Yamatake 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 Yamatake product has any failure attributable to Yamatake during the aforementioned warranty period, Yamatake 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 Yamatake product
(noncompliance with conditions, environment of use, precautions, etc. set forth in catalogs, specifications, instruction manuals, etc.);
- (2) Failure caused for other reasons than Yamatake product;
- (3) Failure caused by any modification or repair made by any person other than Yamatake or Yamatake's subcontractors;
- (4) Failure caused by your use of Yamatake 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 Yamatake's shipment did not allow Yamatake to predict; or
- (6) Failure that arose from any reason not attributable to Yamatake, 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 Yamatake shall not be liable for any damages, including direct, indirect, special, incidental or consequential damages in connection with or arising out of Yamatake products.

2 Ascertainment of suitability

You are required to ascertain the suitability of Yamatake 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 Yamatake 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 Yamatake is constantly making efforts to improve the quality and reliability of Yamatake 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

Yamatake products other than those explicitly specified as applicable (e.g. Yamatake Limit Switch For Nuclear Energy) shall not be used in a nuclear energy controlled area (radiation controlled area).

Any Yamatake 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 Yamatake 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 Yamatake 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

