

Sensing by pin spot whether the laser is broken or not. An object as distant as 20m can be measured to the millimeter accuracy.

It is a level switch utilizing laser as a light source, consisting of a pair of transmitter and receiver.

The use of the strong laser power by 3A makes it possible to reliably detect in transmitting into such an environment as vapor and dust, whose detection was impossible by conventional photoelectric switches.



**TK-LASER-TN/RN**

Class 3A

**FEATURES**

- A pair of facing units can be isolated by 20m at the maximum.
- Built-in interlock.
- Built-in delay circuit preventing any glitch.
- Built-in alarm lamp while laser is emitting.

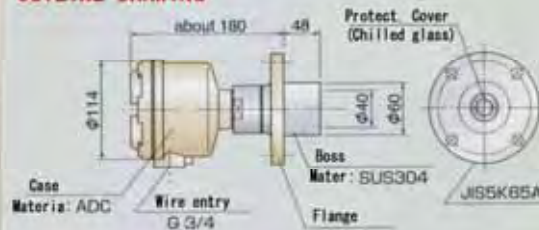
**APPLICATIONS**

- Control the filter cloth position of sludge processor.
- Detecting falling objects from a conveyor-belt.
- Control level of crushed papers.

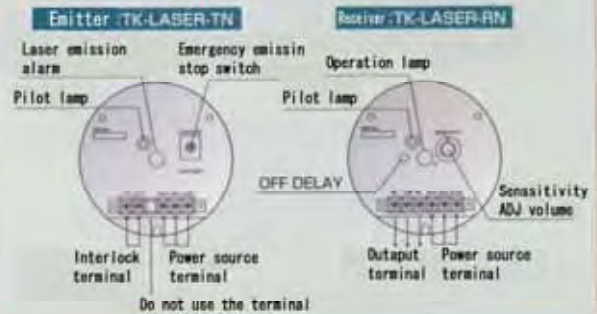
**STANDARD SPECIFICATION**

TYPE	TK-Laser-TN/RN
MEASURING RANGE	Distance of two facing units within 20m
OUTPUT	1SPDT 250VAC 10A ON Delay 0.1 - 10sec variable
TEMPERATURE	-10 - +50 (No freezing, no condensation)
HOUSING RATING	IP54 equivalent
HOUSING MATERIAL	Case : ADC Flange : AC Boss, Lightproof pipe: SUS304
LASER SPECIFICATION	Class 3A Semiconductor laser radiation, below 635nm5m
POWER VOLTAGE	105 - 210VAC ± 10%
POWER CONSUMPTION	TN: 20VA RN: 10VA

**OUTLINE DRAWING**



**CONFIGURATION DIAGRAM**



Make sure of the note on the right in order to safely use LASER RANG -L, LASER RANG -S & TK - LASER TN/RN.



●The power density of laser beam is strong and may pose a danger to public health. Take adequate safety measures.  
●Never peer into the lens. Taking a long look at laser beam may seriously harm your eyesight.

**CLASSIFICATION OF VISIBLE-LIGHT LASER(400-700nm)**

	Class 1	Class 2	Class3A	Class3B
Optical Power	below 6.8 μW	below 1mW	below 5mW	below 0.5W
Danger	Intrinsically safe in design	Low output laser		
Class label				

**Line of business**

- 回転式レベルスイッチ
- 振動式レベルスイッチ
- 磁子式レベルスイッチ
- 高波式レベルスイッチ
- 静電容量式レベルスイッチ
- 静電容量式近接センサ
- 静電容量式レベルメータ
- ダイヤフラム式レベルスイッチ
- チルトスイッチ
- リーク式レベルスイッチ
- マイクロウェーブスイッチ
- サウンディング式レベルメータ
- フロースイッチ
- 電極式レベルスイッチ
- フロートスイッチ
- フロート式レベルメータ
- 超音波式レベルメータ
- コンベア周回検出
- ガスモニター
- ジリコニア酸素濃度計
- レーザー式レベルメータ
- 電波式レベルメータ
- 液体濃度・濃度計
- 超音波流量計

Nuclear Power Generation to Rice Milling  
All-round Manufacturer of Level Controllers for Powder, Granules and Liquid

**KANSAI Automation Co., Ltd.**

Headquarters : TEL. 81-6-6312-2071 FAX. 81-6-6314-0848

URL : <http://www.kansai-automation.co.jp>

e-mail : [info@kansai-automation.co.jp](mailto:info@kansai-automation.co.jp)

Headquarters: 2-14, Togano-cho, Kita-ku, Osaka 530-0056 Japan  
Tel 81-6-6312-2071 Fax 81-6-6314-0848

Tokyo Branch: 1-29-6, Hamamatsu-cho, Minato-ku, Tokyo 105-0013 Japan  
Tel 81-3-5777-6931 Fax 81-3-5777-6933

Nagoya Office: 3-31-27, Uchiyama, Chigusa-ku, Nagoya 464-0075 Japan  
Tel 81-52-741-2432 Fax 81-52-741-1588

Kyushu Office: 1-2-39, Asano, Kokura Kita-ku, Kitakyushu 802-0001 Japan  
Tel 81-93-511-4241 Fax 81-93-511-4580

代理店 / Agent