

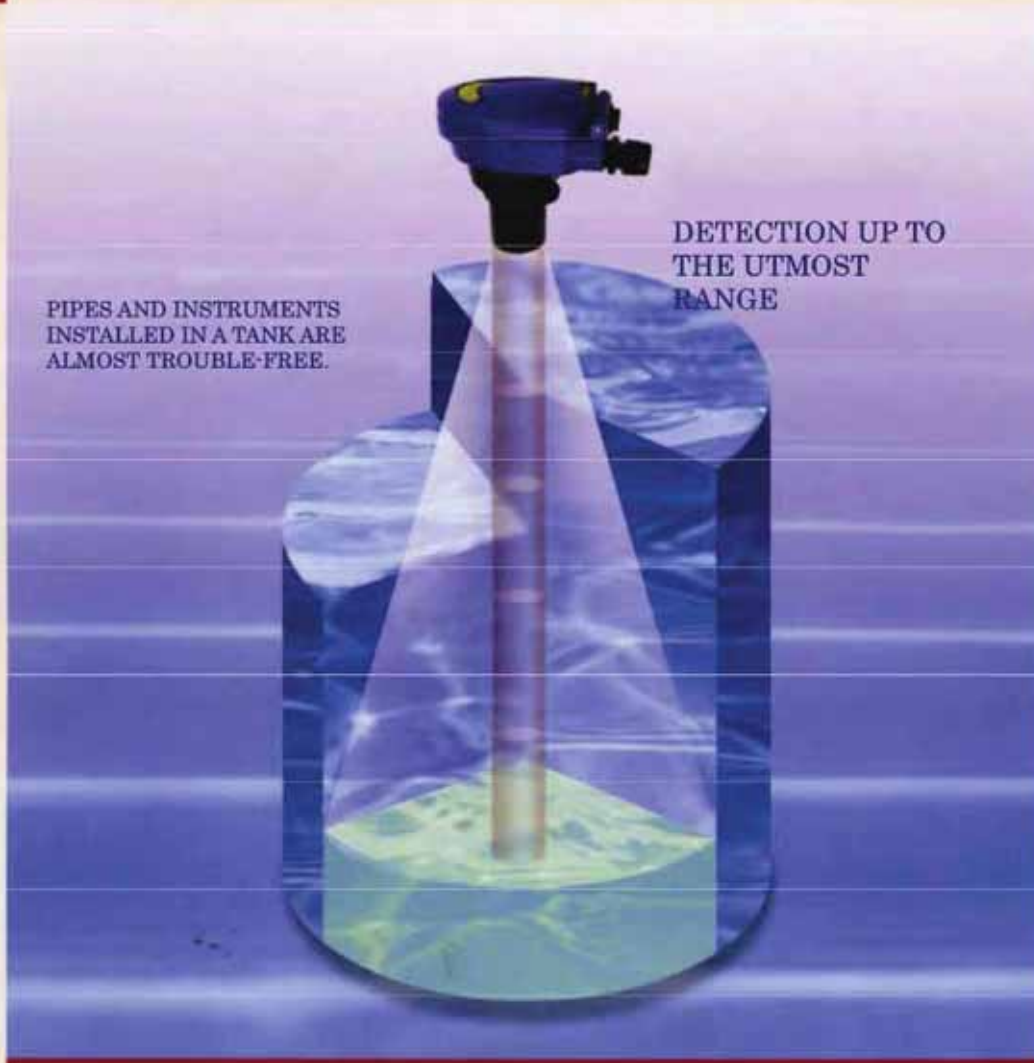
Two-Wire Ultrasonic Level Transmitter

ECHOSPAN TWO WIRE LU83-5161

ULTRASONIC TYPE LEVEL INDICATOR

PIPES AND INSTRUMENTS
INSTALLED IN A TANK ARE
ALMOST TROUBLE-FREE.

DETECTION UP TO
THE UTMOST
RANGE



Two-Wire Ultrasonic Level Transmitter **ECHOSPAN TWO WIRE LU83-5161**

《 ORIGINAL TECHNOLOGY OF DIGITAL INFINITY 》

Recognizing an obstacle in a tank as the digital image, it can cut unnecessary noise and ensure appropriate filtering of outputs, by which it has possibly come to measure within a narrow range.

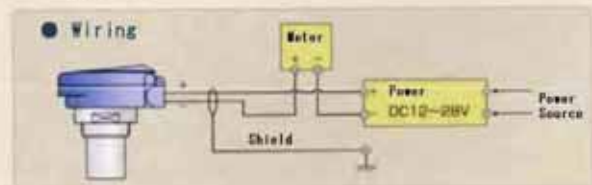
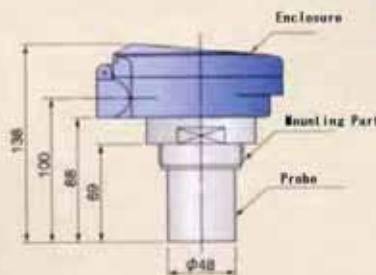
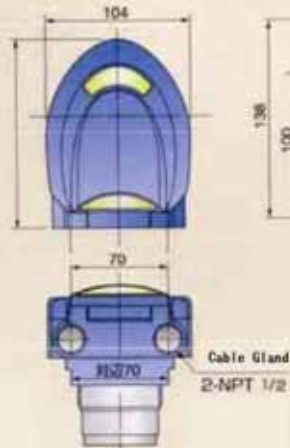
FEATURES

- Measuring in a narrow range, it can be applied in a small tank.
- Setup is easy with push button calibration and LCD display.
- LCD display can indicate in inch or centimeter values, or in percent.
- PVDF transducer excels in corrosion resistance and can be used in wide ranging applications.
- Fail-safe intelligence assures easy and safe operation.

PRINCIPLE OF OPERATION

It can convert the propagation time (time of flight) that the sonic wave transmitted from its transmitter took to reflect back from the measuring surface to its receiver to the distance up to the measuring surface and read out.

■ OUTLINE DRAWING



STANDARD SPECIFICATIONS

Range : 20cm - 8m
 Dead Band : 20cm
 Accuracy : $\pm 0.2\%$ of span in air
 Resolution : 1mm
 Memory : EEPROM
 Display : LCD, 6 digit
 Display Unit : Inch, cm, or percent
 Display Mode : Air Gap or Liquid height
 Supply voltage : 12 - 24VDC
 Signal output : 4-20mA, or 20-4mA two-wire
 Loop Resist : 500 Ω 24VDC
 Temp. Comp : Automatic

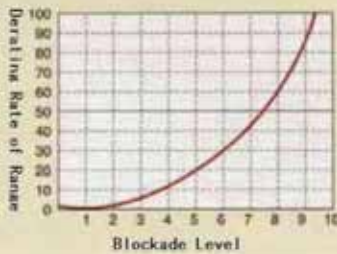
Calibration : Push button
 Fail safety : Selectable 4mA, 20mA, 21mA, 22mA or hold
 Process Temperature : -20 - +60°C.
 Ambient Temp. : -40 - +71°C.
 Pressure : 0.2MPa (25°C)
 Conduit entrance : 1/2 NPT x 2
 Enclosure rating : NEMA 4X (IP65)
 Process mount : G2
 Mount, gasket : Viton
 Trans. material : PVDF
 Encl. material : PC/ABS
 CE compliance : EN61326EMC

* Measuring range and dead band may be varied by measuring conditions.

Program flow sheet



MAXIMUM APPLIED RANGE

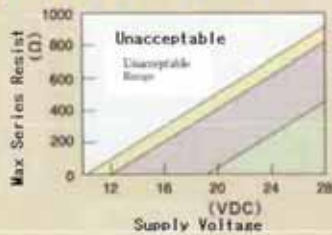


Blockade Level

Agitator : 1 - 3
 Vapor : 3 - 5
 Foam : 4 - 6

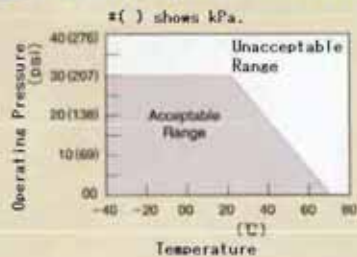
With reference to the blockade level for agitator, it is "1" when it is mild and "3" when heavy. Because "3" for agitator results to be the deration of 10% or less, it is not virtually affected. When there are multiple blockade factors, each total should be added.

MAX LOOP RESISTANCE



Enhanced Performance
 Specified Performance
 Limited Performance

TEMPERATURE/PRESSURE DERATING



APPLICATIONS

SUMP PIT DRAINAGE CHEMICALS TANK MEDICINES PURE WATER DRINKING WATER INDUSTRIAL WATER



Sump Pit



Chemicals Tank



Chemicals Tank



Purifying Facility



Water Treatment Plant



Wastewater Treatment Plant



Sewage Farm



Day Tank



INSTALLATION



Do not install at angle relative to the liquid.



Do not install with objects in the beam.



Do not install within 10 cm of tank side-wall.



Do not install in applications with vacuum.

*When you use a stand pipe, select 3" pipe in diameter with no umbo inside the pipe.

CONTROLLER STANDARD SPECIFICATION

TYPE	LC52-1001	MCS-B51D5
		
Supply Voltage	90 - 130VAC / 180 - 260VAC	85 - 265VAC / 95 - 370VDC (Shared power for AC/DC within any voltage as specified above)
Consumption	5W	5W
Sensor Supply	24VDC	24VDC
Analogue Output	DC4 - 20mA (External Power 12 - 36VDC) 450 Ω (Max Load with 24VDC)	DC4 - 20mA 500 Ω (Maximum Load)
Display	Bargraph: DC4 - 20mA with 10 set points Digital : LED, 4-digit	Bargraph: LED display with 51 segments Digital : LED display, 5-digit
Contact Type	2 SPDT relays(1 latching)	2SPDT 2SPST - 4-point output as option
Features	Relay type: Latched SPDT Time delay : 0-60 seconds	Linealizer with 128 points LED with brightness control function Contact up to 6 points at the maximum

Line of business

- 回転式レベルスイッチ
- 振動式レベルスイッチ
- 電子式レベルスイッチ
- 音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
- コンペア周辺機器
- ダストモニタ
- シ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・濁度計
- 超音波流量計

* The specifications herein may be subject to change without advance notice.
* Please be sure to read USER'S GUIDE, Installation & Operation Instructions when using the instrument.

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

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 106-0013, 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 81-93-511-4741 Fax 81-93-511-4580

代理店

SCIGATE
Your Automation Partner



SCIGATE AUTOMATION (S) PTE LTD

No.1 Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488

Fax: (65) 6562 0588

Email: sales@scigate.com.sg

Web: www.scigate.com.sg

Business Hours: Monday - Friday 8.30am - 6.15pm