

SCIGATE AUTOMATION (S) PTE LTD

No.1 Bukit Batok Street 22 #01-01 Singapore 659592 Tel: (65) 6561 0488 Email: sales@scigate.com.sg Fax: (65) 6562 0588 Web: www.scigate.com.sg

Business Hours: Monday - Friday 8.30am - 6.15pm

# **Level Switch Capacitance type** Model BLX





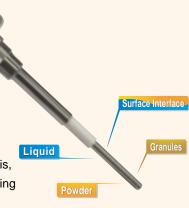


## Model BLX

#### INTRODUCTION

BLX detects an existence or no existence of object in a vessel like silos or tanks, depending on a capacitance principle.

The composition of the sensor probe is quite simple and rigid, which is made by stainless steel and some insulators. Amplifier parts are surface-mounted on a PCB to increase strength to vibration. Sensitivity is, as same as the advanced model ALN, high enough to detect the insulating powder, grain and even foam. BLX is the integrated reliable level switch with thorough functionality.



#### **FEATURES**

#### No moving parts are contained

BLX works correctly based on the capacitance principle which does not require mechanical moving parts. This instrument thus assures the user very long life-expectancy.

#### Not affected by contamination on the probe

The electric circuit contains a sensitivity self-compensation function to automatically eliminate the influence caused by contamination. The instrument readjusts sensitivity by itself, depending on contamination.

#### High and stable sensitivity

The high sensitivity can stably detect even plastic powder or oil which has very low dielectric constant, ignoring the influence by contamination.

#### Foam can be detected (Optional)

Foam, like beer or soap foam, can be detected by the optional foam detection circuitry...

#### Improves strength to vibration

The surface-mounted PCB can stand for vibration better than ever.

#### Rigid probe stands for high pressure

The probe is well designed to stand for high pressure of 1MPa as standard.

#### APPLICATION (Industries) EXAMPLES

Food: animal food, flour, rice, grain, sugar Cement: raw materials, product, clinker, dust, Waste water: effluent, chemicals, sludge, scum Brewery: grain, sweet wort, beer, foam, Plastic: PVC, polyethylene, nylon, PET Steel: Iron ore, lime, coke, slag, ash Chemical: fertilizer, chemicals, petroleum Ship: bilge, fuel oil, sea water, products

Power station: coal, ash, calcium carbonate, gypsum













#### **STANDARD SPECIFICATION**

POWER SOURCE: 105VAC/210VAC ±10% 50/60Hz

POWER CONSUMPTION: 3.5VA
OUTPUT CONTACT: SPDT×1

CONTACT CAPACITY: 250VAC 5A 30VDC 5A(Resistance load)

Minimum current load 10mA(24VDC)

**STABLE DETECTION RANGE**: 1. High sensitivity : 0.5 ~ 20pF

2. Standard sensitivity: 2~50pF

**TEMPERATURE**(AMPLIFIER): -25 ~+60 (NO CONDENSATION or FREEZING required)

**TEMPERATURE**(ELECTRODE): -25 ~ +80 (Optional heatproof available)

PRESSURE (ELECTRODE): 980kPa( 10kgf/cm<sup>2</sup> )

LOPSIDED LOAD(ELECTRODE): Load at tip( L=250 )1kN( 100kg )

VIBRATION: 2.0mm 600 ~ 3,600/min, in all directions for 3 hours

**IMPACT SHOCK**: Electrode: 98m/s<sup>2</sup>(10G)

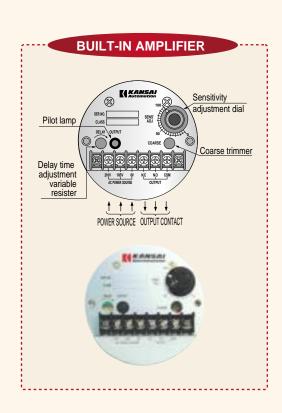
**ENCLOSURE RATING:** Drip-proof

INSTALLATION: R1"(Other size or flange mounting available)

#### **SENSITIVITY AND OBJECTS**

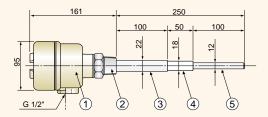
Sensitivity		Ohioata
Class	Meaning	Objects
1	High	PVC powder, Polyethylene pellet, Instant coffee, Flake, Flour, Grain, Oil, Vegetable oil, Petroleum, Cement, Lime, Rice, Animal food, etc.
2	Standard Water, Sludge, Water solution, Interface, Dehydrated cak	





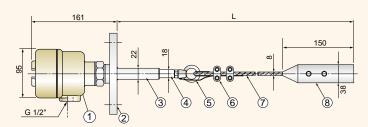
#### **GENERAL DRAWINGS**

#### Straight Rod model



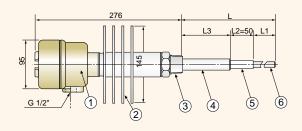
5	Detection Rod	304SS
4	Insulator	PA
3	Earth Electrode	304SS
2	Screw	304SS
1	Housing	ADC

#### Wire Rod model



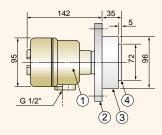
8	Weight	304SS
7	Wire Rod	304SS
6	Wire Clip	304SS
5	Nut	304SS
4	Insulator	PA
3	Earth Electrode	304SS
2	Flange	SS400
1	Housing	ADC

#### **Heat-Resistant model**



6	Detection Rod	304SS
5	Insulator	4F
4	Earth Electrode	304SS
3	Screw	304SS
2	Radiating Fin	AC
1	Housing	ADC

#### Flat Rod model



4	Detection Rod	304SS
3	Insulator	PA
2	Flange	304SS
1	Housing	ADC

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 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 81-93-511-4741 Fax 81-93-511-4580

Please be sure to read USER'S GUIDE, Installation & Operation Instructions before using the instrument.

The specifications herein may be subject to change without advance notice.

#### Line of business

Rotary Paddle Type Level Switch Vibration Type Level Switch Swing Type Level Switch Acoustic Level Switch Capacitance Type Level Switch Capacitive Proximity Sensor Capacitance Type Level Indicator Diaphragm Type Level Switch Tilt Switch Leak Type Level Switch

Microwave Switch

Sounding Bob Type Level Indicator Flow Switch

Float Switch Float Type Level Indicator Ultrasonic Type Level Indicator Equipments For Conveyor Lines Dust Monitor System Zirconia Oxygen Analyzer Laser Type Level Indicator RADAR Type Level Indicator On-line Sensors for Accurate Liquid Analysis

Conductance Type Level Switch

Ultrasonic Flow meter

Agent