

# Level Switch Capacitance type Model **BLX**



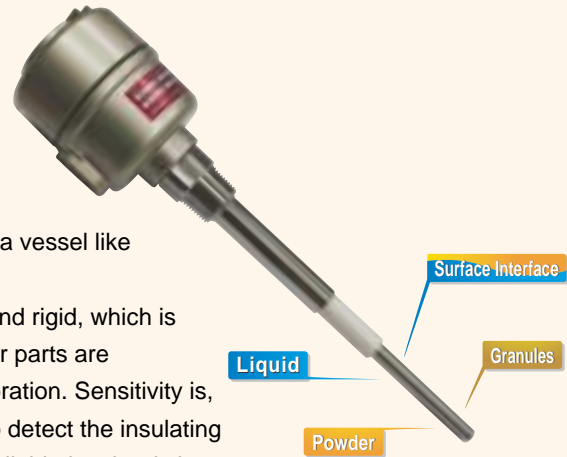
**Sophisticated, Rigid And Reliable  
For Solids, Liquids And Interface  
From Insulating Powder To Conductive Fluid  
No Influence by contamination on a probe**

# 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

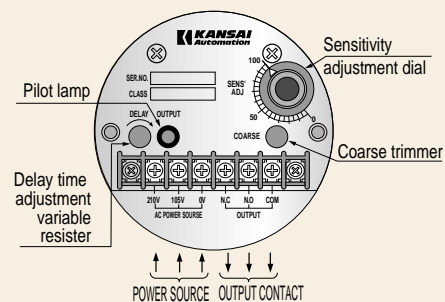
**INSTALLATION** : R1 ( Other size or flange mounting available )

## SENSITIVITY AND OBJECTS

Sensitivity		Objects
Class	Meaning	
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 cake, etc.

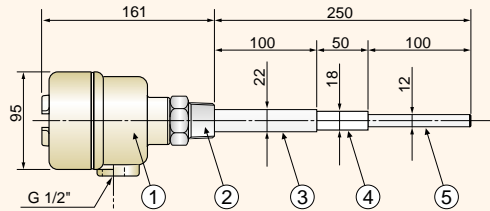


## BUILT-IN AMPLIFIER



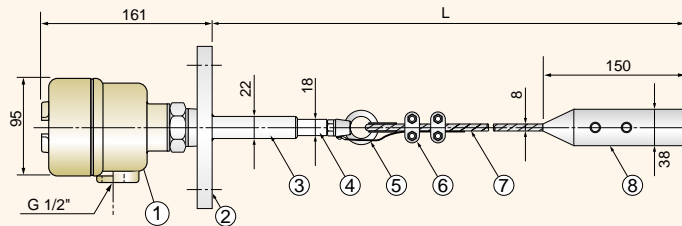
## GENERAL DRAWINGS

### Straight Rod model



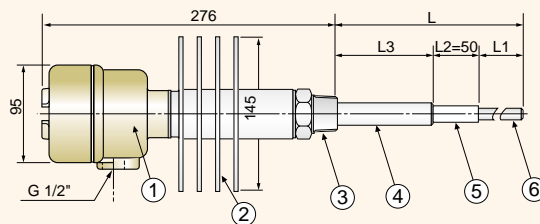
5	Detection Rod	304SS
4	Insulator	PA
3	Earth Electrode	304SS
2	Screw	304SS
1	Housing	ADC

### Wire Rod model



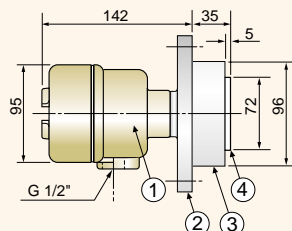
8	Weight	304SS
7	Wire Rod	304SS
6	Wire Clip	304SS
5	Nut	304SS
4	Insulator	PA
3	Earth Electrode	304SS
2	Flange	SS400
1	Housing	ADC

### 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

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All-round Manufacturer of Level Controllers for Powder, Granules and Liquid

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### Line of business

Rotary Paddle Type Level Switch	Conductance Type Level Switch
Vibration Type Level Switch	Float Switch
Swing Type Level Switch	Float Type Level Indicator
Acoustic Level Switch	Ultrasonic Type Level Indicator
Capacitance Type Level Switch	Equipments For Conveyor Lines
Capacitive Proximity Sensor	Dust Monitor System
Capacitance Type Level Indicator	Zirconia Oxygen Analyzer
Diaphragm Type Level Switch	Laser Type Level Indicator
Tilt Switch	RADAR Type Level Indicator
Leak Type Level Switch	On-line Sensors for Accurate
Microwave Switch	Liquid Analysis
Sounding Bob Type Level Indicator	Ultrasonic Flow meter
Flow Switch	

Agent

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.