LEVEL SENSORS

Best Products



General Catalogue

EDITION
14A

- Powder Level Switch
- Powder & Liquid Level Switch
- Non-Contact Level Meter
- Flow Sensor
- Contact Level Meter
- Liquid Level Meter & Switch
- Conveyor Peripherals
- Environment Measurement Instrument
- Special Measurement Instrument










CAT. No. ALL-233-1803E

KANSAI Automation Co.,Ltd.

Corporate Philosophy

Aiming for A RAISON D'ETRE indispensable to the betterment for life of mankind with OUR ZEAL AND OUR ORIGINAL TECHNOLOGY

Management Creed

「Zeal and Originality」

PASSION above all can be a foundation for strength.
Exerting our knowledge and making the impossible come true in the firm brief that our possibilities may be expanded infinitely

ORIGINALITY can page a new path.
Exerting our technical capabilities and turning adversity to leap in the hope that our dream may come true.

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Powder Level Switch

Swing Type Level Switch

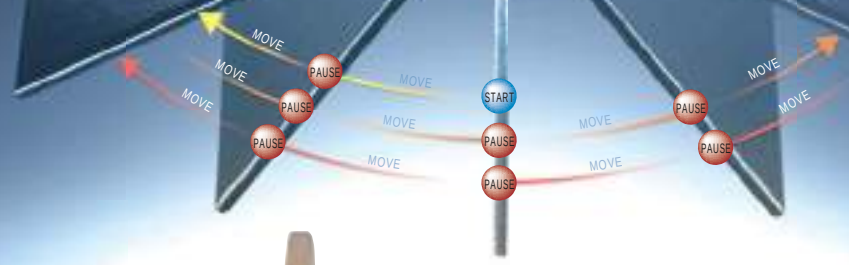
conform to RoHS

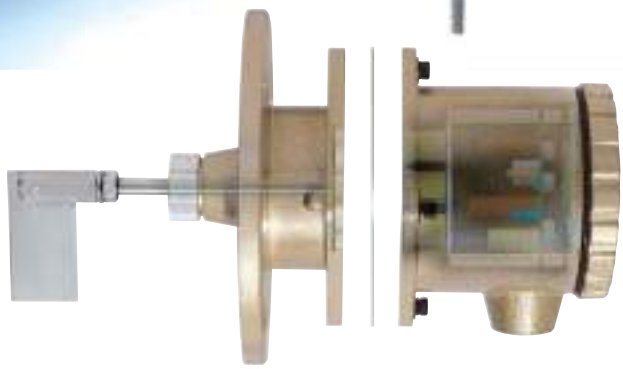
SWING MASTER

Epoch-making product of Powder level detection.

Newly developed "SWING MASTER"
Future standard level switch for powder.

Swing!!

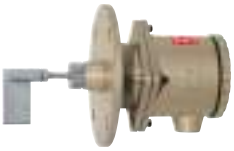




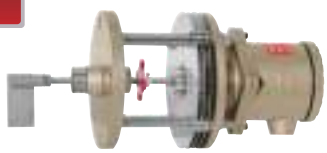
One and only development for Powder Level Switch, based on our extensive experiences.

SWM Series SWINGMASTER®

Highly functional as well as cost effective.
Versatile enough to be used for any applications.

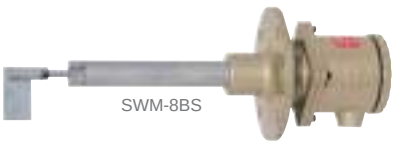


SWM-8B



SWM-8BH

SWM-8BSC



SWM-8BS

Class leading power supply (100 – 240VAC), Universally applicable.

Powder Granules

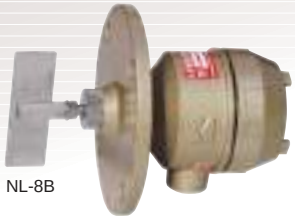
Powder Level Switch

Rotary Paddle Type Level Switch

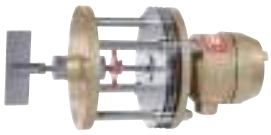
NL/NM Series **Standard type for detecting powder, versatile usages.**

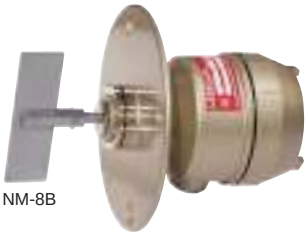
STANDARD

24VDC Power Adaptive


NL-8B


NL-8BS


NL-8BH


NM-8B

FL-GM Series

Flame-proof d2G4

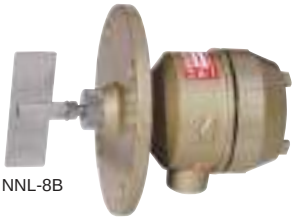

FL-GM

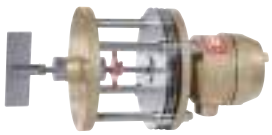
Powder Granules

NNL/NNM Series **Expendable parts in a motor removed and developing the original switching structure developped. Motor unit operates reliably for a long period of time.**

LONGSPAN

Reversible Paddle Type


NNL-8B


NNL-8BH


NNM-8BA

Powder Granules

LEMICON Series **Compact, light weight, and lowest price on top of high efficiency and quality.**

COMPACT

Extremely Compact Type


LS


LS-H

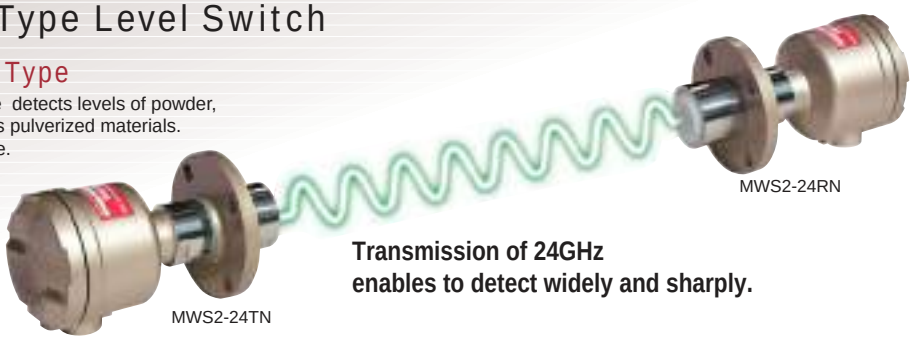

LS-S

Powder Granules

Microwave Type Level Switch

MWS2-24TN/24RN Type

The attenuation of microwave detects levels of powder, granules and blocks as well as pulverized materials.
Heat-resistant type is available.


MWS2-24RN

MWS2-24TN

Transmission of 24GHz enables to detect widely and sharply.

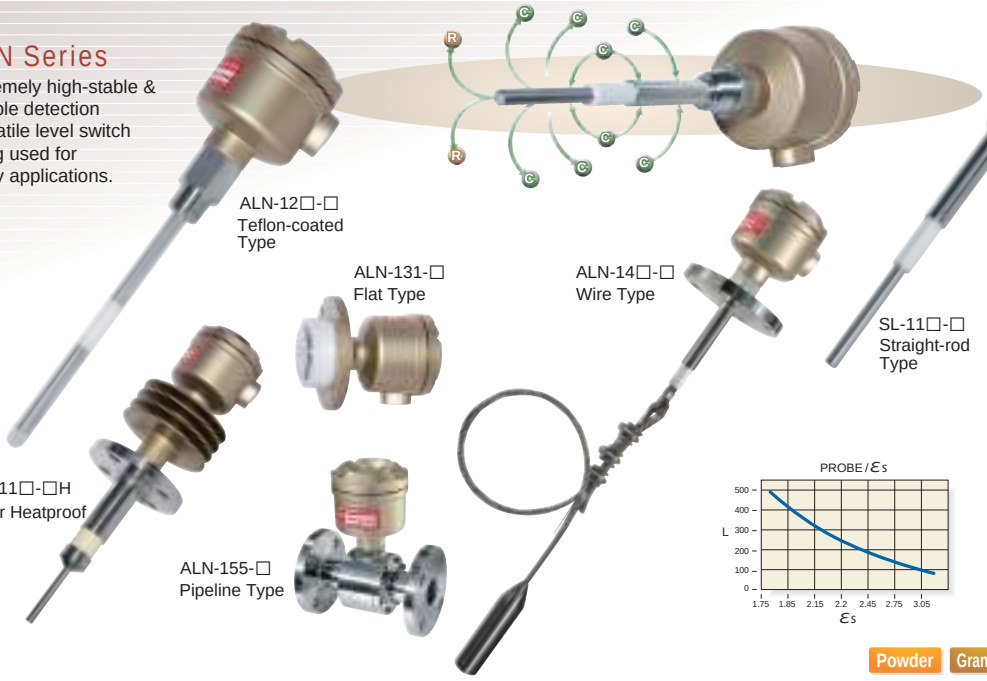
Powder Granules Lump

Powder & Liquid Level Switch

Capacitance Type Level Switch

ALN Series

Extremely high-stable & reliable detection
Versatile level switch being used for many applications.



SL Series

Certified as the Intrinsically Safe Explosion-proof can be accommodated to any shape of electrode.

Intrinsically safe (i) 3nG5

Relay
Power Unit

● Remote model
Amplifier

Powder Granules Liquid Surface Interface

Vibration Type Level Switch

● Remote model
Amplifier

KVK Series

A single vibrating probe realizes as delicate vibration as tuning fork.
High reliable detection and various product line.

High Sensitivity Type

KVA/KVF Series

Our own technology has made it possible to line up series of withstand-load probe that can still come with delicate vibration.

Withstand Load Type

Powder Granules

KVS Series

Intrinsically safe i2G4

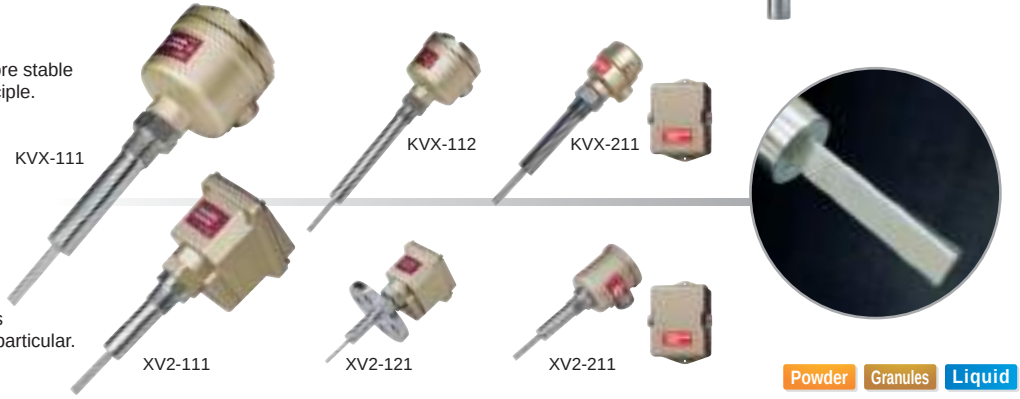
Barrier/
Power Unit

Liquid Underwater Solid

KVX Series

Pursuing simple operation.
Our own technology realizes more stable vibration with new physical principle.

Compact



XV2 Series

Extremely compact and light suitable for such a place as the compact size is required in particular.

Extremely Compact Type

Powder Granules Liquid

Non-Contact Level Meter

Ultrasonic Type Level Indicator

KHD 1200

Realize a further stable measurement with a DSP installed

KHD 353/323

Low cost level meter with DSP (KHD353)
Low cost model of Two-wire system (KHD323)

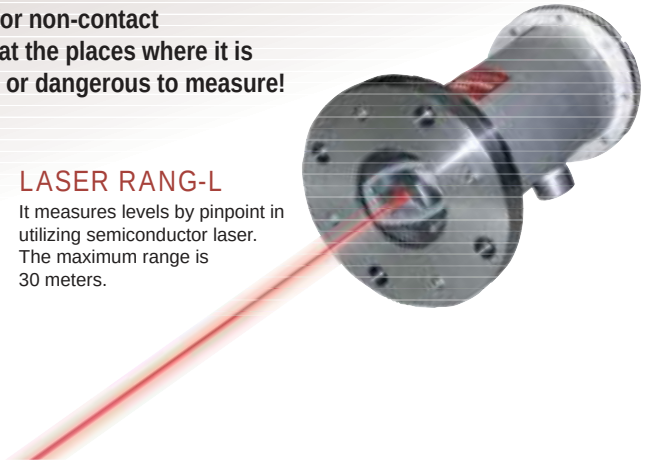
Powder Granules Liquid

Laser Type Level Indicator

Best suitable for non-contact measurement at the places where it is highly difficult or dangerous to measure!

LASER RANG-L

It measures levels by pinpoint in utilizing semiconductor laser. The maximum range is 30 meters.



LASER RANG-S

Extremely compact Laser Type Level Meter that can measure up to 10 meters by pinpoint.

Powder Granules Liquid

Flow Sensor

Microwave Type Flow Sensor

KFD-1/KFD-2

24GHz helps this sensor be highly sensitive and reliable. It does not overlook even a grain.

Powder Granules

Particle Flow Sensor

KDS-1

Concentration Monitoring of exhausted dust and minute particles and detecting flow/no flow.

Powder Granules

Contact Level Meter

Sounding Type Level Indicator



Various product lines.
They can be applied to all processes, and they are the best selling lines for their reliability.

KSL-T2
SPAN:MAX40m

Standard

Powder
Granules
Lump
Underwater Solid

KSL-W3T
SPAN:MAX20m

Standard

Powder
Granules
Underwater Solid

KSL-W2B
SPAN:MAX20m

Standard

Powder
Granules
Underwater Solid


●Optional Units

KSLAU Control Unit

PSC P/I Converter

CPU built-in models. Upgraded models are all weathertight constructions with aluminum casting body.

KSL-T8
SPAN:MAX40m

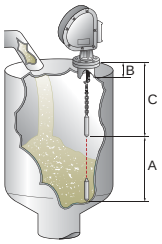
Build-in CPU

Powder
Granules
Lump
Underwater Solid

KSL-MT
SPAN:MAX20m

Build-in CPU

Powder
Granules
Underwater Solid



A. Measuring Range
B. Height of Nozzle
C. Roll-up Position

It can be applied to hazardous areas

KSL-GT
SPAN:MAX30m

Flame-proof
Exd ⅡBT4

Powder
Granules
Lump
Underwater Solid

●Optional Units

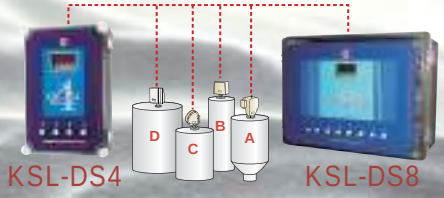
KSLAU Control Unit

PSC P/I Converter

Sounding Type Level Indicator Controls

A controller controls many units (4 for DS4 and 8 for DS8). Selecting a tank with one-touch operation. Memory function is equipped.

Microprocessor Control System



KSL-DS4 KSL-DS8

Contact Level Meter

Capacitance Type Level Indicator

No moving part. It can be applied to any processes.
Best selling line in continuous measurement

Electrode · Amplifier
Remote Type

KLI Series

KLI-4☐☐
Cable with
TEFLON-coating

KLI-2☐☐
TEFLON-tubing
probe

Amplifier

Electrode · Amplifier
Built-in Type

KLT Series

KLT-2☐☐
TEFLON-tubing
probe

KLT-1☐☐
Bare probe

Various kinds of electrode that can be provided for hazardous places.

Intrinsically safe
explosion-proof model

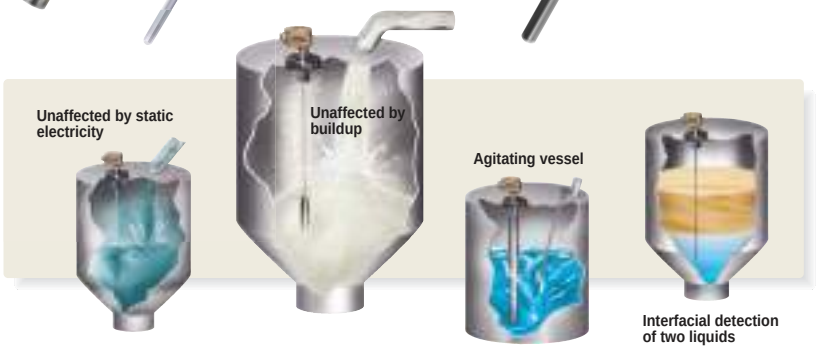
KLG Series

Intrinsically safe
(i)2G4

KLG-2☐3
TEFLON-tubing
probe

Safety barrier

Amplifier



Option

Meter Relay
LV1000-AI-A2

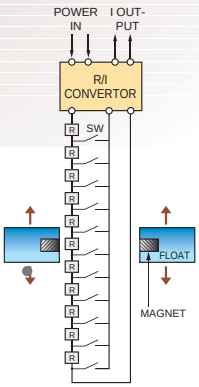
Powder Granules Liquid Surface Interface

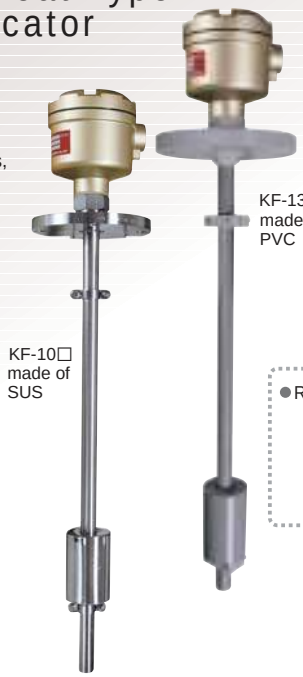
Vertical Float Type Level Indicator

KF-100 Series

It is not at all affected by environmental conditions such as material changes, gas and so on. Pioneer of Liquid Level Indicator

INSIDE CIRCUIT





KF-13☐
made of
PVC

KF-10☐
made of
SUS

● Remote model

Amplifier

FLC-d

Ex explosion proof on technical standard (IEC resistration)

A lot kinds of material variation enables various liquids measurement in hazardous area.

Intrinsic safety
Exia ⅡCT5

［Explosion proof type］

Liquid Surface Interface

Liquid Level Meter & Switch

Horizontal Float Type Level Switch

Many products upgraded depending on application and installation.Best selling line for its reliability.

KF200 Series

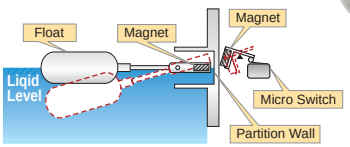
KF-207

KF-213

KFG200 Series

Flame-proof d2G4

KFG-207



Liquid

Compact Float Switch

RFS-2 RFS-4 RFS-11A

One-point-measurement Type

Palm-sized Switch

Multi-point-measurement Type

Most ideal for an ultra-small tank

KS30 KP3

Liquid

Vertical Float Type Level Switch

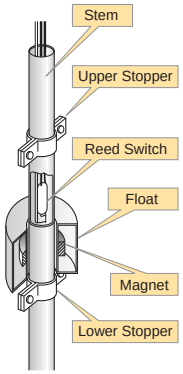
These can be applied to all processes with various sizes and materials.

KF-300 Series

KF-322 KF-332N KF-352

KFE-3000 Series

Flame-proof Exd II BT4



Liquid Surface Interface

Diaphragm Type Level Switch

KF500 Series

Can be used for viscous liquids as well as high temperature liquids.Diaphragm can reliably detect level.

Electrode Type Level Switch

KF-600 Series

Various materials of electrode can satisfy any applications .

Multi-point Ball Float Switch/ KARI Float Switch

It perfectly detects levels of wastewater and viscous liquids with its incomparable buoyancy.

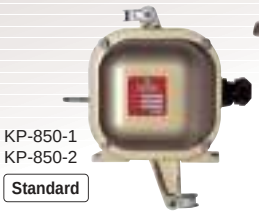
Liquid

Conveyor Peripherals

Conveyor Peripherals Switch

KP-800 Series

Ensuring safety operation of Conveyor Lines

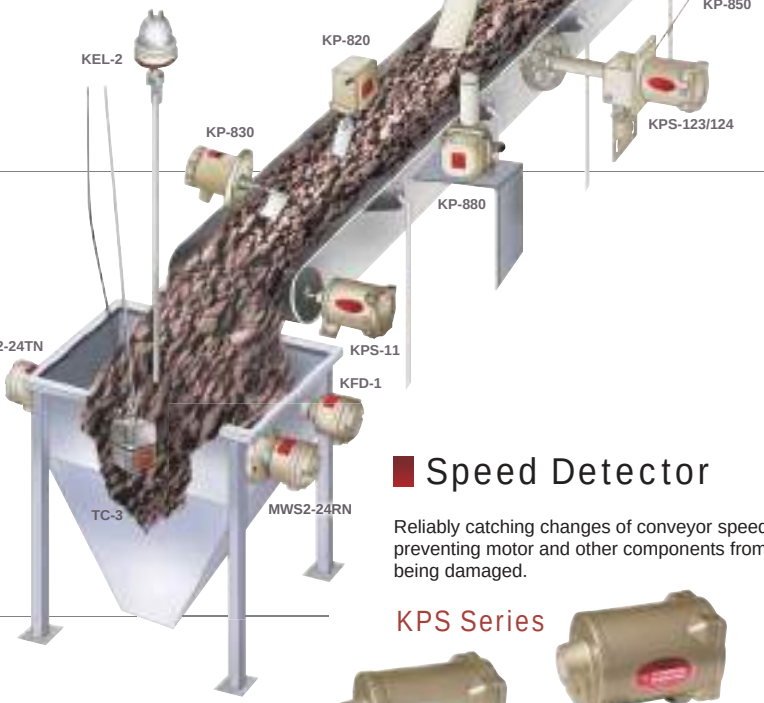


KP-850-1
KP-850-2
Standard

KP-860
Indication Lamp

KP-870
Indication Plate

Detecting operational exceptions such as belt moving off to one side.
KP-880



Powder **Granules** **Lump**

Leak Type Level Switch

KEL-2 Series

No moving part.
Suitable for measuring sand.
Applicable to aggregate, limestone and so on.

AMP

Insulator

Powder **Granules** **Lump**

Tilt Switch

Simple mechanical construction tough enclosure.
Level measurement with simple and reliable operation

TC-1

TC-3

TC Series

Powder **Granules** **Lump**

PL-910

PL-920

PL Series

Speed Detector

Reliably catching changes of conveyor speed, preventing motor and other components from being damaged.

KPS Series

KPS-11
Directly Connected to Shaft

KPS-21
Non-contact Type

KPS-123/124
Touch-roll Type

Powder **Granules** **Lump**

Flow Switch

KP-800 Series

Flow detection of powder and granules on a conveyer.

KP-4

KP-810

KP-820

KP-830

Powder **Granules** **Lump**

Special Measurement Instrument

Ultrasonic Sludge Blanket Level Meter

KWS100 Series

Continuous measurement of sludge blanket level in sedimentation tank, thickener etc.

KWS100-S

Reliable detection unclear sludge with unique algorithm.

KWS100-P

Portable Type

sensor

controller

Ultrasonic Sludge Density Meter

KWS200

Sludge density measurement in every application with 3 kinds of probes.

Probes

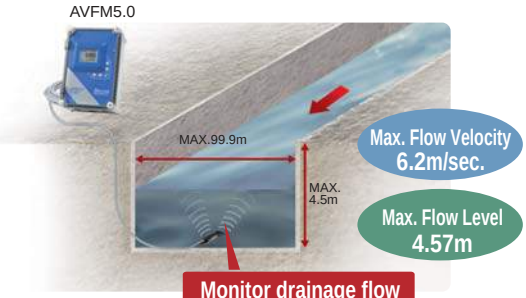
S2-S
(spool piece)

S2-C
(clamp on)

S2-T
(tank mount)

Ultrasonic Area-velocity Flow Meter

Velocity and level measurement in the channel with one sensor.
Continuous monitoring for open channels and pipes.



AVFM5.0

Can calculate flow at channels only if you place the sensor.
Flow calculation available by placing the sensor in the channel.

Stingray 2.0

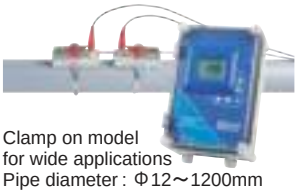
Portable Type

Ultrasonic Liquid Flow Meter

[**Transit time type**] **For clear water**

Transit Time Flow Meter TTFM1.0

Stationaly Type



Clamp on model
for wide applications
Pipe diameter : Φ12～1200mm

Transit Time Flow Meter PTFM1.0

Portable Type

Ultraflow U1000-U

Sensor built-in Type

Sensor integrated model
Pipe diameter : Φ20～110mm

[**Doppler**] **For turbid water**

Doppler Flow Meter DFM5.1

Applicable pipe size:
Φ12.5 to Φ4500mm

Stationaly Type

Doppler Flow Meter PDFM5.1

Applicable pipe size: Φ12.5 to Φ4500mm

Portable Type

Doppler Flow Switch DFS5.1

Applicable pipe size:
Φ12.5 to Φ4500mm

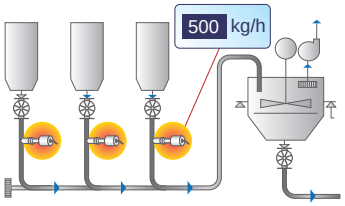
Special Measurement Instrument

Solid Mass Flow Measurement

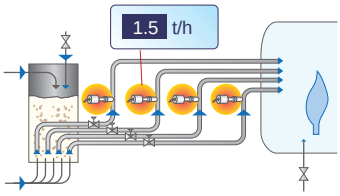
Solid Flow 2.0

Available for powder or granules of particle size from 1nm to 10mm. Online measurement up to a maximum flow rate of 20 t/h.

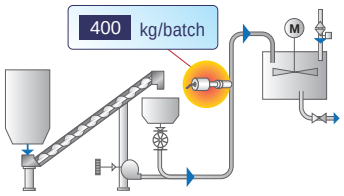
Blending process



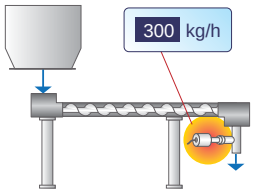
Fuel suppy process



Speed control of a screw conveyor



Optimization of dosing process

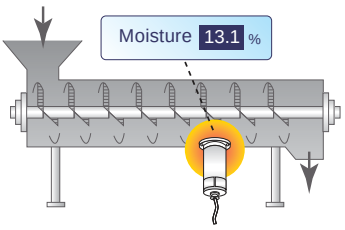


Online Residual Moisture Measurement

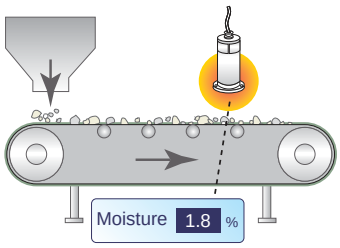
M-Sens 2

Measure moisture of all kinds of solids in real time. Optimum management of process and product quality.

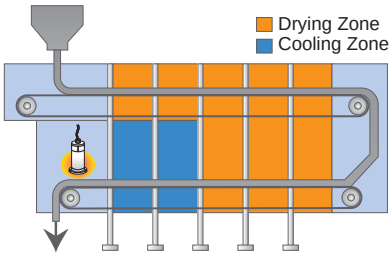
Screw Conveyor



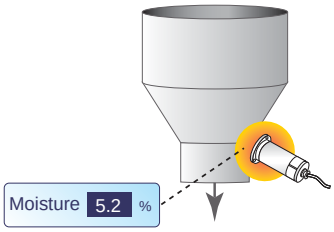
Belt conveyor



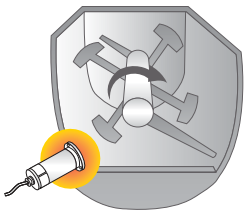
Drying conveyor control



Tank bottom



Mixing process



Certified Explosion-proof Instruments: Usable Range of Explosive Gas

National Standard

d 2 G4

- d — EXP-proof construction
  - d : Withstand pressure Exp-proof
  - e : Safety-increased EXP-proof
  - i : Intrinsic Safety EXP-proof
  - f : Pressurized construction
  - o: Oil filled EXP-proof
  - s: Special EXP-proof
- 2 — EXP-proof grade : 1-3
- G4 — Ignition level : G1-G5

International Standard

Ex d IIB T4

- Ex — Explosion-proof equipment (IEC)
- d — Flameproof enclosure type
  - g : Withstand pressure Exp-proof
  - e : Safety-increased EXP-proof
  - ia, ib : Intrinsic Safety EXP-proof
  - p : Pressurized construction
  - o : Oil filled EXP-proof
- IIB — Surface industries: IIA, IIB, IIC
- T4 — Surface Temp. Class: T1-T6

Ignition Temp. of ExplosiveGas	Over 450°C	Over 300°C Below 450°C	Over 200°C Below 300°C	Over 135°C Below 200°C	Over 100°C Below 135°C	Over 80°C Below 100°C
Temperature Grade	T1	T2	T3	T4	T5	T6
Ignition Level	G1	G2	G3	G4	G5	G6

Chemical Resistance Table

Chemicals	Material					
	PVC	PA	PP	FEP	PFA	SUS
Acetone	×	×	×	A	A	A
Aniline	×	B	B	A	A	A
Amyl alcohol	B	B	B	A	A	–
Ammonia water (10%)	B	A	A	A	A	A
Ammonia water (28%)	B	A	A	A	A	A
Isopropyl alcohol	B	B	B	A	A	A
Ethyl alcohol (50%)	B	A	B	A	A	A
Ethyl alcohol (95%)	B	B	B	A	A	A
Ethyl glycol	B	A	A	A	A	B
Zinc chloride	A	A	A	A	A	×
Aluminum chloride	A	A	A	A	A	×
Ammonium chloride	A	A	A	A	A	–
Kalium chloride	A	A	A	A	A	×
Calcium chloride	A	A	A	A	A	B
Ferric chloride	A	A	A	A	A	×
Magnesium chloride	A	A	A	A	A	B
Methylene chloride	×	×	×	A	A	B
Hydrochloric acid (10%)	A	A	A	A	A	×
Hydrochloric acid (35%)	A	A	A	A	A	×
Perchloric acid	B	B	B	A	A	×
Hydrogen peroxide (10%)	A	A	A	A	A	B
Hydrogen peroxide (3%)	A	A	A	A	A	A
Potassium permagnate	A	A	A	A	A	B
Formic acid	A	A	A	A	A	×
Xylene	×	×	×	A	A	A
Citric acid	A	A	A	A	A	A
Cresol	A	×	×	A	A	A
Chromic acid (10%)	B	B	B	A	A	×
Chromic acid (50%)		×	×	A	A	×
Chloroform	×	×	×	A	A	A
Acetic acid (50%)	A	A	A	A	A	A
Acetic acid (80%)	A	B	B	A	A	×
Acetic ether	×	×	×	A	A	B
Sodium hypochlorite	A	B	B	A	A	A
Carbon tetrachloride	×	×	×	A	A	B
Dimethylformamode	×	A	A	A	A	A
Oxalic acid	A	A	A	A	A	×

Chemicals	Material					
	PVC	PA	PP	FEP	PFA	SUS
Nitric acid (10%)	A	A	A	A	A	×
Nitric acid (50%)	B	A	A	A	A	×
Caustic silver	A	A	A	A	A	B
Sodium nitrate (10%)	A	A	A	A	A	A
Vegetable oil	B	A	A	A	A	A
Sugared water	A	A	A	A	A	A
Sugared water (alkali)	A	A	A	A	A	B
Potassium hydroxide (45%)	A	A	A	A	A	B
Potassium hydroxide (5%)	A	A	A	A	A	B
Sodium hydroxide (1%)	A	A	A	A	A	B
Sodium hydroxide (10%)	A	A	A	A	A	B
Sodium hydroxide (50%)	A	B	B	A	A	B
Stearic acid	A	B	B	A	A	A
Oil	B	×	×	A	A	A
Ammonium carbonate	A	A	A	A	A	A
Sodium carbonate	–	A	A	A	A	A
Kerosene	A	×	×	A	A	A
Toluene	×	×	×	A	A	A
Lactic acid	A	A	A	A	A	A
Picric acid	B	B	B	A	A	×
Phenol (50%)	–	A	A	A	A	A
n-butyl alcohol	A	A	A	A	A	–
Hydrofluoric acid (10%)	A	A	A	A	A	×
Hydrofluoric acid (50%)	A	A	A	A	A	×
Benzene	×	×	×	A	A	A
Boric acid	A	A	A	A	A	A
Formaldehyde (gas)	B	A	A	A	A	B
Methyl alcohol	B	A	A	A	A	A
Methyl ethyl ketone	×	×	×	A	A	A
Sulfuric acid (10%)	A	A	A	A	A	×
Sulfuric acid (50%)	B	A	A	A	A	×
Sulfuric acid (98%)	B	A	A	A	A	×
Ammonium sulfate	A	A	A	A	A	B
Phosphoric acid (10%)	A	A	A	A	A	B
Phosphoric acid (50-80%)	B	A	A	A	A	B
Ammonium phosphate	A	A	A	A	A	B
Sodium phosphate	A	A	A	A	A	–

A = Good B = dependent on conditions × = Unusable

Characteristic Table of Fluorocarbon Resin

Abbreviation	PTFE (4F)	FEP (6F)	PFA	PVDF (2F)
Name	Polytetra Fluoro Etylene	Perfluoroethylene· Propylene Copolymer	Tetrafluoroethylene· Perfluoroalkoxy Vinyl Ether Copolymer	Polyvinylidene Fluoride
Continuous Temp. Limit (℃)	260	200	260	150
Pull Strength (Mpa)	13.7 – 34.3	16.6 – 21.6	27.5 – 29.4	24.5 – 50.0
Affected by weak acid	No	No	No	No
Affected by strong acid	No	No	No	Corroded by fuming sulfuric acid
Affected by weak alkali	No	No	No	No
Affected by strong alkali	No	No	No	No
Affected by organic solvent	No	No	No	Almost resistant
Affected by direct sunlight	No	No	No	No
Application·Features	Anti-corrosion materials for chemical-plant fixtures, non-adhesive applications, non-greased bearings and electric insulation of jet aircrafts.		Machinery parts requiring anti-corrosion, intensity and transparency.	Anti-corrosion and electric insulating materials requiring flammability
Models applied	●Insulator for Capacitance model ●Insulator for Dust Monitor	●Teflon-tube for Capacitance model (Standard: Max 120°C)	●Teflon-tube for Capacitance model (Special : Max 150°C) ●Wire-tube for Capacitance model	●Transmitting device for Ultrasonic Transmitter

*The above characteristic table shows the features of fluorocarbon resin alone. When it is incorporated into a product, its heat resistant temperature and strength may be varied so that the performance level. may be maintained

Table of Recommended Sensitivity and Specific Indcutive Capacity for Capacitance Type Level Switch

	Name of Object	SIC	S
A	Acrylic Rubber	4	1
	Acetate	3.2~7.0	1
	Acetic acid	6.1~6.7	1
	Acetic anhydride	22	2
	Acetum,	38	2
	Acrylic Resin	2.7~4.5	1
	Alcohol	16~31	2
	Aluminum fluoride	2.2	1
	Amber	2.8~2.9	1
	Aminoalkyl Resin	3.9~4.2	1
	Ammonia	15~25	2
	Amyl ether	3.1	1
	Aniline	6.9	1
	Arboreous cotton	1.3~1.4	1
	Asbestos	3.0~3.6	1
	Asbestos	3.0~3.5	1
	Asphalt	2.5~3.2	1
B	Bakelite	3.5~4.5	1
	Balm grounds	3.1	1
	Barley bran	1.8	1
	Barley flour	3.0~4.0	1
	Barley grain	3.0~4.0	1
	Barley hull	1.5	1
	Beeswax	2.5~2.9	1
	Benzene	2.3	1
	Benzine	2.3	1
	Benzyl alcohol	13	2
	Bone dust	5.0~6.0	1
	Borosilicic acid glass	4.5~6.2	1
	Bran	1.4~2.0	1
	Butanol	16~17	2
	Butyl alcohol	11	2
	Butyl chloride	7.4	1
	Butylaldehyde	13	2
	Butylnitryl	20	2
C	Calcite	8.3	1
	Calcium	3	1
	Calcium Carbonate	2.0~3.5	1
	Calcium hydroxide	2.0~3.5	1
	Calcium oxide	12	2
	Calcium phosphate	1.6~1.9	1
	Calcium sulfate	2.5~6.0	1
	Carbon bisulfide	2.6	1
	Carbon dioxide	1.6	1
	Casein resin	6.0~7.0	1
	Casting sand	3.4~3.5	1
	Cellophane	3.2~6.4	1
	Cellulose	3.2~7.5	1
	Cellulose acetate	3.2~7.0	1
	Cement powder	5.0~10	1
	Ceramic	4.0~7.0	1
	Cereal	3.0~8.0	1
	Charcoal	1.2~1.8	1
	CHCH3	12	2
	Chloride of lime	1.8~2.0	1
	Chlorobenzene	5.5~6.3	1
	Chloroform	4.8	1
	Chlorotoluene	4.0~4.5	1
	Chocolate	3.0~4.0	1
	Chrome	12	2
	Chromite	4.0~4.2	1
	Clay	1.8~2.8	1
	Coal	4	1
	Cocoa grounds	2.5~3.5	1
	Coffee grounds	2.4~2.6	1
	Compound	3.6	1
	Copper oxide	18	2
	Corn	5.0~10	1
	Corn husk	2.3~2.6	1

	Name of Object	SIC	S
	Cotton-seed oil	3.1	1
	Cresol	9.0~11	2
	Crude oil	2.48	1
	Crystal	3.5~4.7	1
	Curry powder	2.6	1
	Cyclohexane	19	2
D	Decanol	8.1	1
	DEP dimethy	4.5~5.6	1
	Diallyl phthalein resin	3.3~6.0	1
	Diamond	2.2	1
	Dichloroethylene	4.6	1
	Diesel oil	1.8	1
	Diethyl ether	4.3	1
	Dolomite	8	1
E	Epoxy resin	2.5~6.0	1
	Ethanol	24	2
	Ethyl acetate	6.0~6.4	1
	Ethyl ether	3.9~4.3	1
	Ethyl iodide	7.8	1
	Ethyl toluene	2.2	1
	Ethylene dichloride	11~17	2
	Ethylene glycol	37	2
	Ethylene iodide	3.4	1
	Ethylene oxide	4.0~5.0	1
	Ethylene resin	2.2~2.3	1
	Ethylene terafluoride	1.9~2.0	1
F	Feeding stuff	38	2
	Feldspar porcelain	5.0~7.0	1
	Ferric oxide	14	2
	Ferromanganese	5.0~5.2	1
	Fiber	2.5~7.5	1
	Flour	2.5~3.0	1
	Fluid margarine	2.8~3.2	1
	Fluorine rubber	6.8~8.0	1
	Fluorite	6.8	1
	Fly ash	1.5~1.7	1
	Formaline	23	2
	Formamido	109	2
	Formic acid	58	2
	Freon	2.2	1
G	Gasoline	2.0~2.2	1
	Glass	3.7	1
	Glass (granulated	6.0~7.0	1
	Glass-silicon board	3.5~4.2	1
	Glycerin	47~68	2
	Glycol	35~40	2
	Granulated gelatine	2.6~2.7	1
	Granulated sugar	1.5~2.2	1
	Graphite	12~15	2
	Gravel	5.4~5.6	1
	Grout	3.0~5.0	1
	Gum	2.7~2.9	1
H	Heavy oil	3	1
	Helium	1.1	1
	Heptanal	13	2
	Heptane	1.9~2.0	1
	Hexane	5.8~6.3	1
	Hexanol	13	2
	Hydrochloric acid 100%	4.0-12	1
	Hydrofluoric acid	11~17	2
I	Ink	2.5	1
	Iodine	11	2
	Isobutyl alcohol	18~40	2
	Isobutyl amine	4.5	1
	Ivory	6.9	1
K	Kerosene	1.8	1
L	Lactonitrile	38	2
	Lead carbonate	18	2
	Lead glass	7.0~10	1

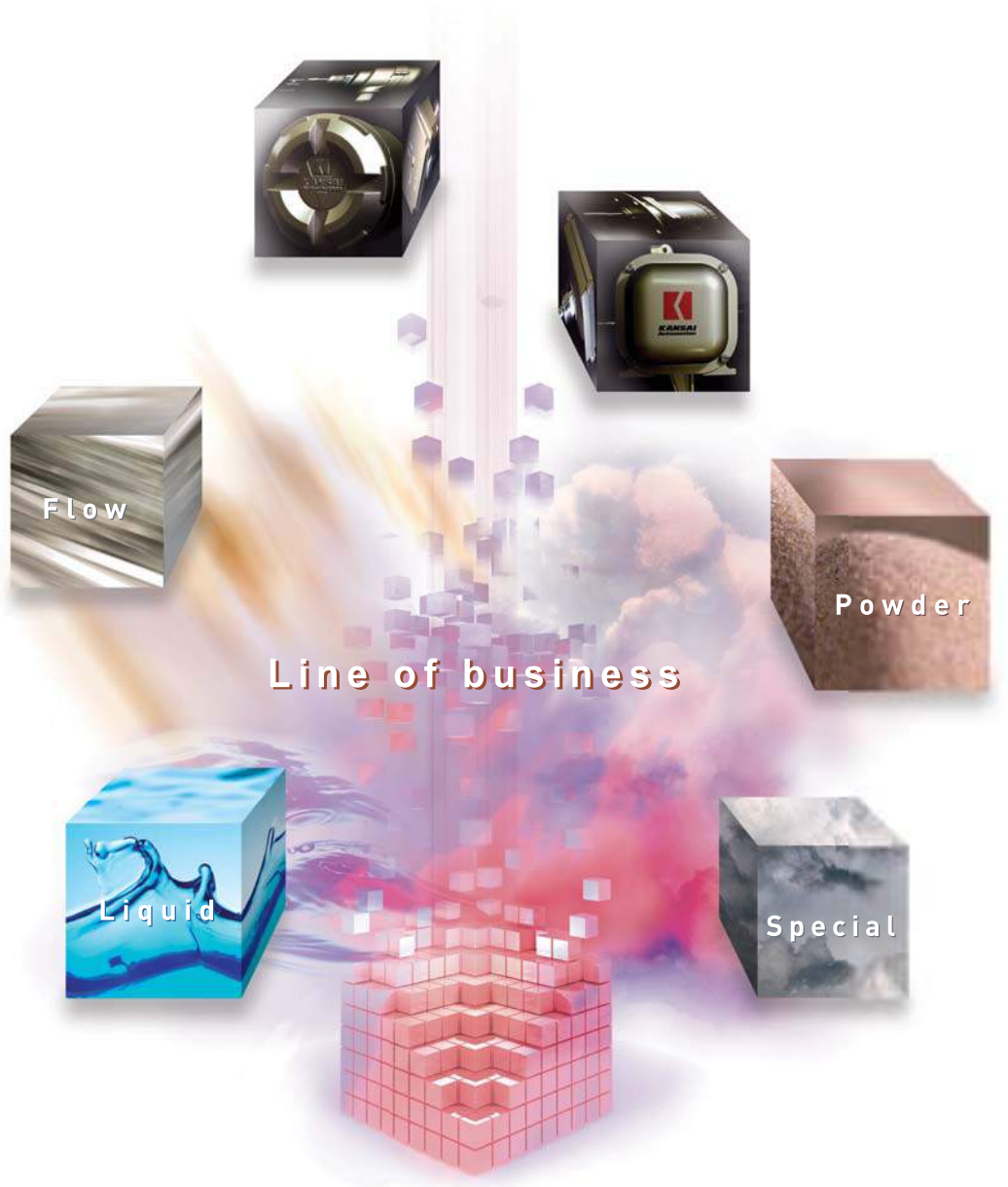
SIC - Specific Inductive Capacity **S** - Sensitivity

*Please be advised that recommended SENSITIVITY depends on the conditions of the object to be measured, environments/temperature, and the shape of the electrode or its mounted conditions.

Table of Recommended Sensitivity and Specific Indcutive Capacity for Capacitance Type Level Switch

	Name of Object	SIC	S
	Lead nitrate	38	2
	Linoleic acid	2.6～2.7	1
	Lumber, dried	2.0～6.0	1
	Lumber, wet	11～30	2
M	Magnesium oxide	9.6	1
	Magnesium sulfate	8.2	1
	Manganese dioxide	5.0～5.2	1
	Marble	3.5～9.3	1
	Melamine resin	4.7～11	1
	Menthol	3.9	1
	Metane	1.7	1
	Methacrylic resin	2.2～3.2	1
	Methanol	33	2
	Methyl aniline	5.9	1
	Methyl ether	5	1
	Methyl iodide	7	1
	Methyl nitrate	24	2
	Methylamine	9.4	1
	Mica	5.0～9.0	1
	Mica	2.6～3.2	1
	Micanite	1.8～2.6	1
	Mineral oil	2.0～2.5	1
	Molasses	50～80	2
	Morpholine	7.3	1
N	Na2CO3	8.7	1
	Naphthalene	2.5	1
	Natural rubber	2.7～4.0	1
	Neoprene	6.0～9.0	1
	Nitrobenzene	36	2
	Nitrocellulose	6.2～7.5	1
	Nylon	4.0～5.0	1
O	Oil	2.0～2.2	1
P	Paint or the like	5.0～8.0	1
	Palmitic acid	70	2
	Paper	2.0～2.5	1
	Paraffin	1.6～1.9	1
	Paraffin	2.4～6.5	1
	Paste	1.7～1.8	1
	Pentanol	14	2
	Pentanone	15	2
	Petrolatum	2.2～2.9	1
	Phenol	9.8	1
	Phosphor	4	1
	Phthalic acid	5.0～6.3	1
	Picoline	9.8	1
	Pine oil	2.5～2.6	1
	Pine resin	1.5～1.8	1
	Piperidine	5.8	1
	Plywood	2.0～2.6	1
	Poly-ether chloride	2.9	1
	Polyacetal	2.6～3.7	1
	Polyamide	2.5～2.6	1
	Polybutylene	2.2～2.3	1
	Polycarbonate	2.9～3.0	1
	Polyester resin	2.8～8.1	1
	Polyethylene	2.2～2.4	1
	Polyethylene, pellet	1.5	1
	Polypropylene	1.5～1.8	1
	Polystyrol	2.0～2.6	1
	Polyvinyl acetate resin	2.7～6.1	1
	Polyvinyl alcohol	1.9～2.0	1
	Polyvinylidene chloride	4.5～6.0	1
	Polyvinylidene fluoride	8.4	1
	Powdered coal	2.0～4.0	1
	Propane	1.6	1
	Propionaldehyde	19	2
	Propyl alcohol	32	2
	Propyl butyrate	4.3	1
	Pyrex	4.8	1

	Name of Object	SIC	S
Q	Quartz sand	2.5～3.5	1
R	Resin	1.8～2.6	1
	Rice	3.0～8.0	1
	Rice flour	3.5～3.7	1
	Ricinus	4.4～4.8	1
	Rosin	2.6～3.5	1
	Rubber	2.1～2.7	1
S	Salt	5.9	1
	Sand	3.0～5.0	1
	Seasoned lumber	2.0～6.0	1
	Sesame	1.8～2.0	1
	Silicon dioxide	4.5	1
	Silicone	2.1～2.4	1
	Silicone resin	3.5～5.0	1
	Silk	1.3～2.0	1
	Sinter	12	2
	Soda ash	2.7	1
	Soda-lime glass	5.5～8.5	1
	Sodium carbonate	2.7	1
	Sodium cyanide	7.6	1
	Sodium nitrate	5.2	1
	Soluble quartz	3.5～4.5	1
	Soy bean	1.8～2.0	1
	Soy bean waste	2.7～2.8	1
	Styrene	2.3～3.4	1
	Styrol resin	2.1～2.8	1
	Sugar	3	1
	Sulfur	3.6～4.4	1
T	Tar	2.0～3.0	1
	Teflon	2	1
	Tetrachloroethylene	2.3	1
	Tetrafluoroethylene	2.1	1
	Thinner	3.7	1
	Thiokol	7.5	1
	Tobacco	1.5～1.8	1
	Toluene	2.0～2.4	1
	Transformer oil	2.2～2.4	1
	Trichloroethylene	3.4	1
	Trichlorotoluene	6.9	1
	Trifluoroacetic acid	40	2
	Trinitriles	19	2
U	Urea	5.0～8.0	1
	Urea resin	3.4	1
	Urethane	6.5～7.1	1
	Urethane (hardener)	6.3	1
	Urethane rubber	6.7～7.5	1
V	Vanadium sulfide	3.1	1
	Vinyl alcohol	1.8～2.0	1
	Vinyl alcohol resin	2.6～3.5	1
	Vinyl chloride powder	1.4	1
	Vinyl chloride resin	2.8～6.4	1
W	Water	80	2
	Water-soluble chemicals	50～80	2
	Wheat	3.0～5.0	1
	White mica	4.5～9.6	1
X	Xylene	2.2～2.6	1
Z	Zinc oxide	1.7～2.5	1



- 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 Type Switch
- Sounding Bob Type Level Indicator
- Flow Switch
- Conductance Type Level Switch
- Float Switch
- Float Type Level Indicator
- Ultrasonic Type Level Indicator
- Equipments For Conveyor Lines
- Dust Monitor System
- Zirconia Oxygen Analyzer
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KANSAI Automation Co.,Ltd.

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

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

e-mail: infoe@kansai-automation.co.jp

official site

Headquarters: 2-14, Togano-cho, Kita-ku, Osaka530-0056, Japan Tel 81-6-6312-2071 Fax 81-6-6314-0848
Tokyo Branch: 1-29-6, Hamamatsu-cho, Minato-ku. Tokyo105-0013, Japan Tel 81-3-5777-6931 Fax 81-3-5777-6933
Nagoya Office: 3-10-17, Uchiyama, Chigusa-ku, Nagoya464-0075, Japan Tel 81-52-741-2432 Fax 81-52-741-1588
Kyushu Office: 1-1-21, Komemachi, Kokura Kita-ku,Kitakyushu802-0001, Japan Tel 81-93-511-4741 Fax 81-93-511-4580

Agent

SCIGATE AUTOMATION (S) PTE LTD
No 1 Bukit Batok Street 22 #01-01 Singapore 659592
Tel: (65) 6561 0488 Fax: (65) 6561 0588
Email: sales@scigate.com.sg Web: https://scigate.com.sg/
Business Hours: Monday - Friday 8:30AM - 6:15PM

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