

# VIBRATION TYPE LEVEL SWITCH

## Model **KVX/XV2**

**Highly sensitive & compact vibration level switch  
meeting demanding processes as well as  
hard requirements.**

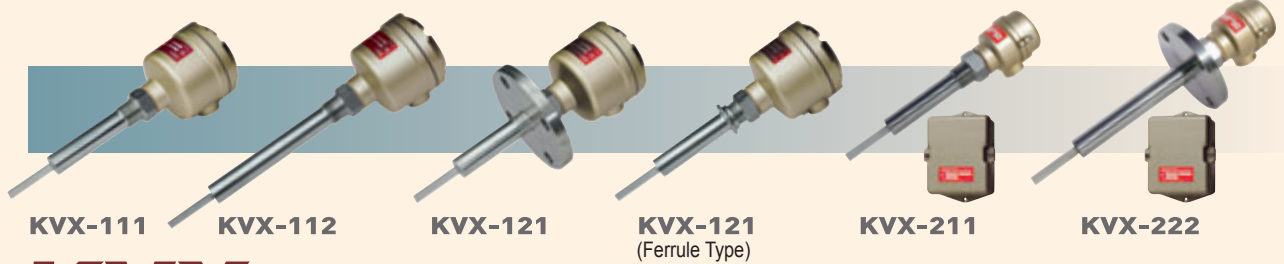
**Detecting hypobaric powder;**

Standard type can detect an object of apparent specific gravity from 0.1 or over while optional type can do one from 0.03 or over.



**Reliably detect any materials whose specific conductivity or electrical properties may be varied. Because the sensitivity is at the tip of the sensing plate, it may not be affected by fouling or build-up at the plate-root. With the development of new mechanism and new circuitry, it has greatly been upgraded in terms of sensitivity and reliability.**

Applicable to powder whose detection is difficult due to the small apparent specific gravity, and yet it is user-friendly.



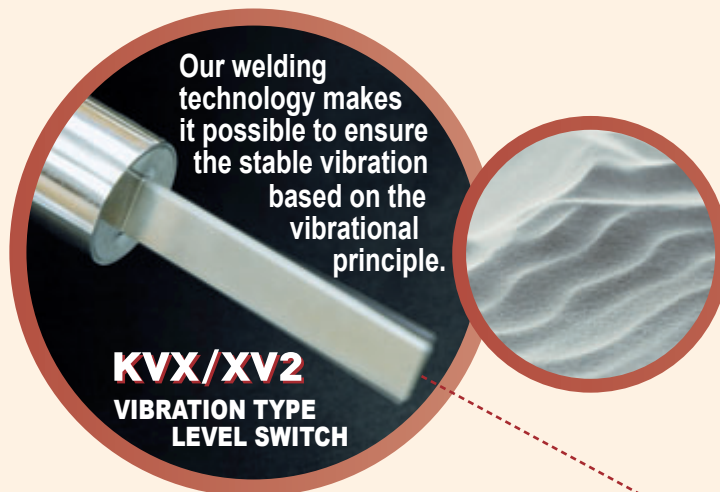
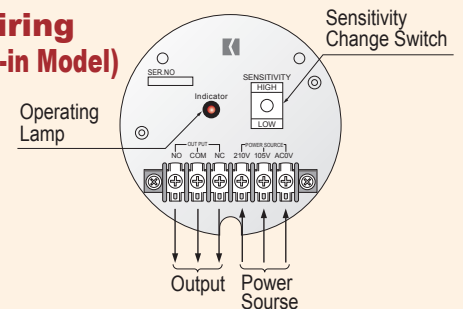
## KVX Series

### ■ Features

- Well suited to detection of such small-gravity powders that other instruments can not measure.
- Applicable to an object whose conductivity or specific gravity varies.
- Simple operation without complex sensitivity adjustment.
- Easy maintenance with few driving parts.
- Pressure resistant with no sealing part.
- Highly sensitive to detect fine and light powders. (Specific gravity : more than 0.1) (Specific gravity : 0.03, available as option)

- Applicable to liquids.
- A remote box is prepared as a vibration countermeasure.
- An operating lamp is fixed.
- 2 types of L dimension = 180mm, 250mm

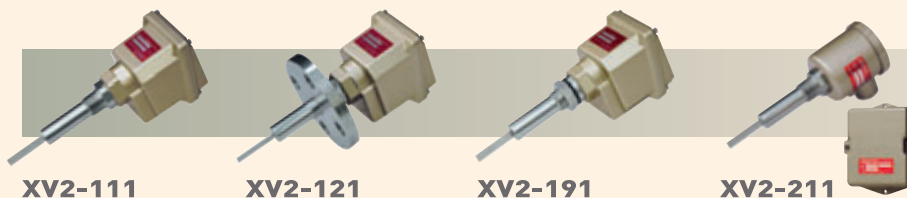
### ■ Wiring (Built-in Model)



### ■ Principle of Operation

When an object gets in touch with a rod oscillated by piezoelectricity, vibration damping takes place. This damping is transferred to a relay output.

## Lightweight/Compact/Quality Level Switch!!

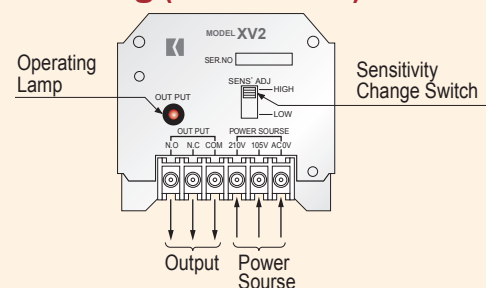


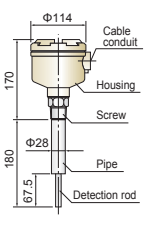
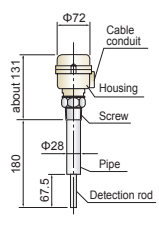
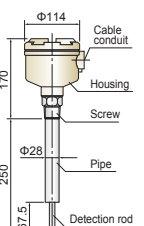
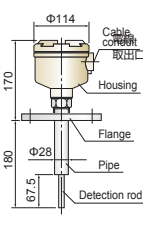
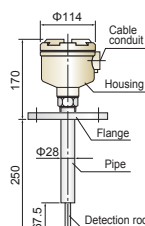
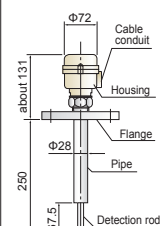
## XV2 Series

### ■ Features

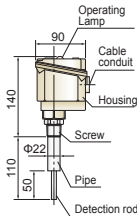
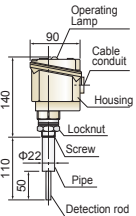
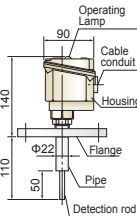
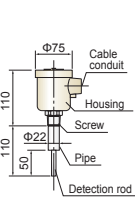
Besides the same performance as that of KVX series, it is compact and lightweight. It is the level switch developed to meet the downsizing requirements in particular.

### ■ Wiring (Built-in Model)



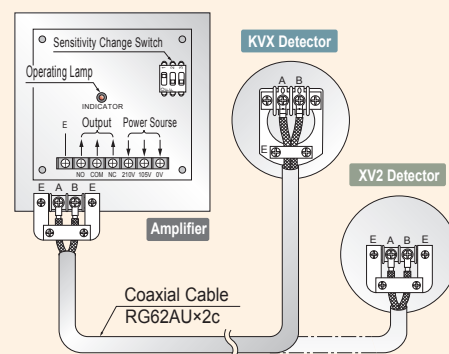
KVX Standard Model & Specification							
	Model	KVX-111	KVX-211	KVX-112	KVX-121	KVX-122	KVX-222
	Installation	R1	R1	R1	JIS10K50A	JIS10K50A	JIS10K50A
	Conduit	G 3/4	G 1/2	G 3/4		G 1/2	
	Sensitivity	Specific Gravity over 0.1 ( over 0.03 as option )					
	Sens. Adjustment	2 sensitivity Levels ( Switchable H & L *L level at factory setting)					
	Contact Capacity	250VAC 10A (30VDC 10A)					
	Power Source	105 / 210VAC ±10% ( 24VDC as option )					
	Consumption	4VA					
	Pressure (Probe)	980kPa					
Temperature (Probe)	-20°C to +80°C ( No condensation )						
Temperature (Amplifier)	-20°C to +60°C ( No condensation )						
Rod Material	304SS ( 316L SS as option )						
Housing Material	ADC						
Cable Length	—	4m (10m:option)*Inquiry	—	—	—	4m (10m:option)*Inquiry	
Enclosure Rating	IP-66	IP-55 equivalent	IP-66		IP-55 equivalent		
Angle Rod	Can be available ( KVK-□□□-3 )						
Sensitivity Volume	Can be available ( Optional )						
Fouling Protection	Can be available ( Optional )						
Detect sediments in water	Can be available ( depending on condition )						
Weight	1.4Kg	1.0Kg	1.5Kg	3.6Kg	3.7Kg	3.2Kg	

\*Note: Flange and Ferrule are not weldable.

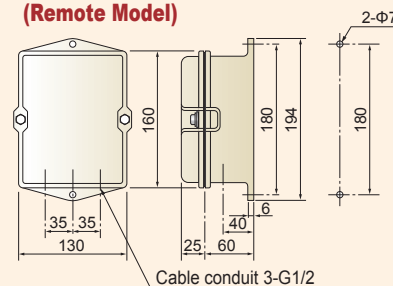
XV2 Standard Model & Specification					
	Model	XV2-111	XV2-191	XV2-121	XV2-211
	Installation	R 3/4	G 3/4B	JIS10K50A	R 3/4
	Conduit	G 1/2			
	Sensitivity	Specific Gravity over 0.1 ( over 0.03 as option )			
Sens. Adjustment	2 sensitivity Levels ( Switchable H & L *L level at factory setting )				
Contact Capacity	250V AC 5A (30V DC 5A)			250VAC 10A (DC30V10A)	
Power Source	105V/210V AC ±10% (24V DC as option)			105V/210V AC ±10%	
Consumption	4VA				
Pressure (Probe)	980kPa				
Temperature (Probe)	-20°C to +80°C ( No condensation)				
Temperature (Amplifier)	-20°C to +50°C ( No condensation)				
Rod Material	304SS ( 316LSS as option)				
Housing Material	ADC			AC	
Cable Length	—	—	—	4m	
Enclosure Rating	IP-55 equivalent				
Angle Rod	Can be available ( XV2-□□□-3 )				
Sensitivity Volume	Can be available (option)				
Fouling Protection	Not available				
Detect sediments in water	Not available				
Weight	1.0Kg		3.3Kg	0.8Kg	

\*Note: Flange and Ferrule are not weldable.

## KVX/XV2 Wiring (Remote Model)

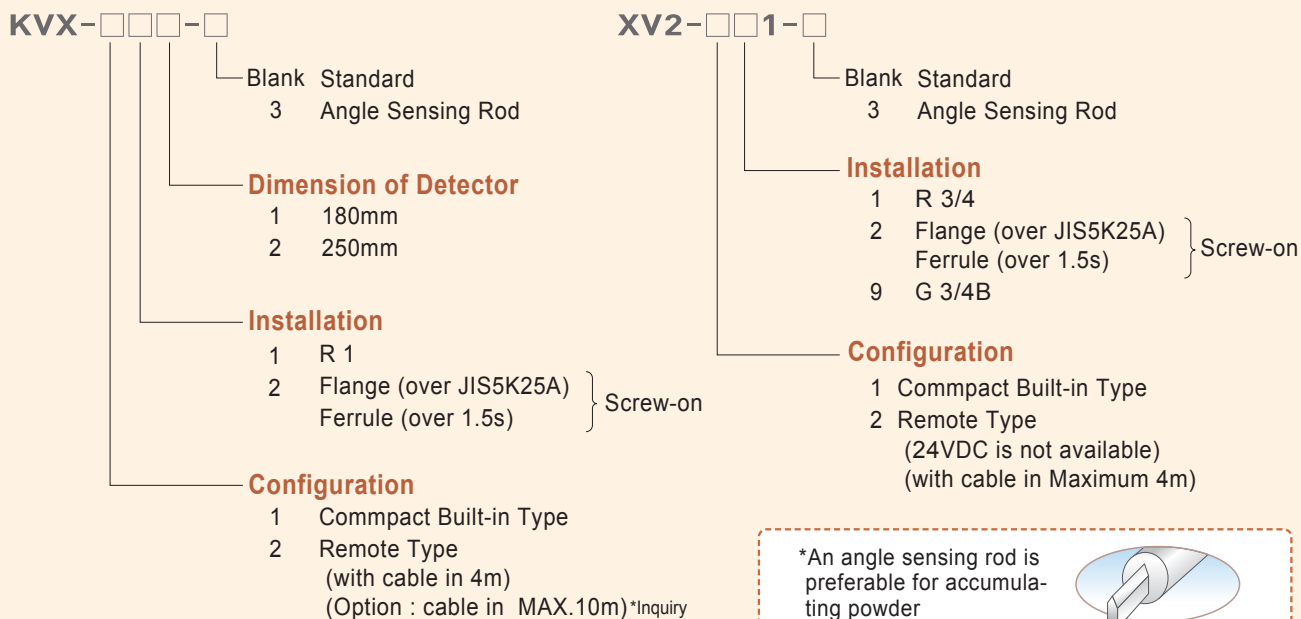


## KVX/XV2 Outdoor Wall Mounting (Remote Model)



Color : Hammer-net gold  
Weight : 1.7kg

## Type Designation



## ●Notes for Installation

In case of horizontal mounting, make the cable conduit directly downward in both Flange and Screw mounting Types. An arrow on a hexagonal nut between the housing and the screw shows the mounting direction (KVX only). Make this arrow up on the hexagonal nut, while the conduit should face directly underneath. When screwing, so as to the correct direction, adjust the finishing angle with increasing or decreasing a thickness of sealant tape. When screwing, you should make the last angle adjustment within a 360 degree roll in rolling the seal tape up or down.

Apply an effective sealing material on the screw when you fix it. The detection rod must be completely protruded inside the tank.

Do not rotate the level switch with housing but with the hexagonal nut by spanner or wrench when you screw in the instrument.

## 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 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
- Laser Type Level Indicator
- RADAR Type Level Indicator
- On-line Sensors for Accurate Liquid Analysis
- Ultrasonic Flow meter

\*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.

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

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