

Ultrasonic Level	Sounding Bob	Capacitance	Vibration	Rotary Paddle	Microwave Level	Swing	Open Channel Flow	Microwave Flow	Sludge Level	Sludge Density	ETC
4p	6p	9p	13p	21p	28p	29p	31p	33p	34p	38p	42p

Capacitance Level Switches

WKC Series

The WKC series capacitance level switches are all-purpose and primary products, having more than 1000 different electrodes. It can detect not only liquid but powder, granule, lump, paste, and foam. It is one of the most efficient products which WESS has developed for 30 years.

Features

- Operate reliably under fouling and build-up
- Can be used for measuring highly conductive materials.
- Can apply to highly corrosive substance.
- This excels in mechanical intensity and durability.

Principle Of Operation

It measures the impedance variation between a main electrode and a tank-wall or between the main electrode and an earth electrode.

Delay Time Set

The output relay motion can be delayed up to ten seconds from the time of detection(the pilot lamp lights). Adjust the delay time with the setting volume as required. If the wetted time is shorter than the set delay time, the relay will not be operated.

Standard Specification

Power	105/210VAC ±10% 50/60Hz
Power Consumption	4.5VA
Output Contact	SPDT, 250VAC 10A, 30VDC 10A Resistive load
Ambient Temperature Allowance	-25 ~ +60°C
Stable Detection Range	1. high sensitivity 0.5~20 pF 2. standard sensitivity 2~50 pF 3. low sensitivity 20~1,000pF 4. ultra low sensitivity 5~35 Ω
Delay Time Set	Max. 10seconds
Vibration	2mm 600~3,600/min In all direction for three hours
Enclosure	IP66

Specification-Probe

Withstand load at electrode	Top end load($\ell=250$) 1kN(100kg)
Withstand Pressure at Electrode	980kPa
Ambient Temperature Allowance	-25 ~ +80°C
Impact	9.8kGa(10G) at electrode

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WKC-E Series

Is one of the safest explosion-proof instruments applying in hazardous areas where water gas, hydrogen, carbon disulfide and others exist.

Standard Specification

Power	105/210 VAC $\pm 10\%$ 50/60Hz
Power Consumption	4 VA
Output Contact	SPDT, 100VA(200VAC Max, 2A Max)
Detection Range	1. High sensitivity 0.5~20 pF 2. Standard sensitivity 2~50 pF 3. Low sensitivity 20~1,000pF
Vibration	2mm 600~3,600/min In all direction for three hours
Enclosure	IP66

Specification-Probe

Withstand load at Electrode	Top End Load($\ell=250$) 1kN(100kg)
Withstand Pressure at Electrode	980kPa
Ambient Temperature	-25 ~ +80°C
Impact	9.8kGa(10G) at electrode

Sensor

A1(Standard Type, Straight Electrode)

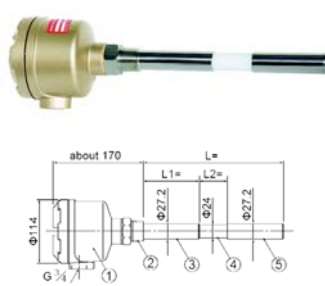
The length of electrode can be adjusted upon request.



No.	Parts Name	Material
1	Housing	ADC
2	Screw	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode	SUS304

A2(High-sensitivity Type, Straight Electrode)

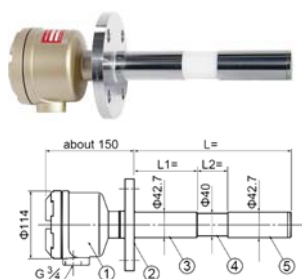
The shape can be selectable depending on the loading condition.



No.	Parts Name	Material
1	Housing	ADC
2	Screw	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode	SUS304

A3(Ultimate-sensitivity Type, Straight Electrode)

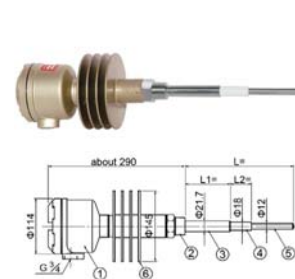
It is effective in detecting low-dielectric-constant medium.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode	SUS304

H1(Heat-resistant Type, Straight Electrode)

Materials of insulator and gasket can be changed subject to temperature and type of medium.

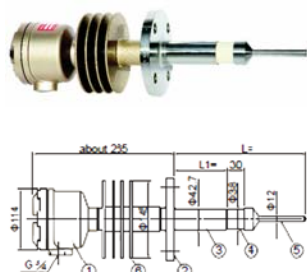


No.	Parts Name	Material
1	Housing	ADC
2	Screw	SUS304
3	Earth electrode	SUS304
4	Insulator	Teflon
5	Electrode	SUS304
6	Fin	AC

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H2(Ultimate Heat-resistant Type, Straight Electrode)

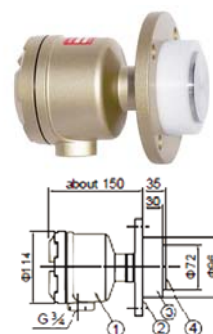
It works well against metal elasticity caused by temperature change.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Ceramic
5	Electrode	SUS304
6	Fin	AC

F1(Standard Type, Flat Electrode)

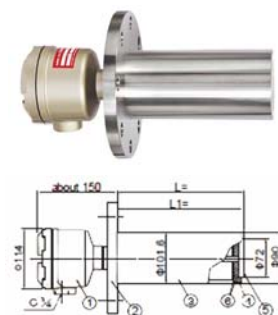
Suitable for a tank where agitator exists.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Insulator	Polyacetal
4	Electrode	SUS304

F2(Flat Electrode with Earth Electrode)

Suitable for big load and higher sensitivity.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode	SUS304
6	O-ring	Silicon

P1(Standard Type, Pipeline Electrode)

Suitable for Teflon-coated and high sensitive application



No.	Parts Name	Material
1	Housing	ADC
2	Earth electrode with flange	SUS304
3	Insulator	Polyacetal
4	Electrode	SUS304
5	O-ring	Silicon
6	Hexagon nut	SUS304

T1(Teflon-coated Type, Straight Electrode)

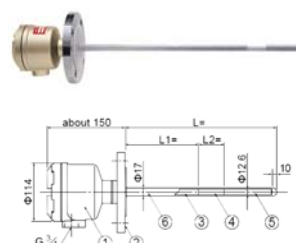
Suitable for viscous materials. It's less affected by fouling



No.	Parts Name	Material
1	Housing	ADC
2	Earth electrode	SUS304
3	Insulator	Polyacetal
4	Electrode	SUS304
5	Tube	Teflon

T2(Teflon-coated Type, Flared Straight Electrode)

Fixing by the ferrule. Teflon-coated one can also be manufactured.

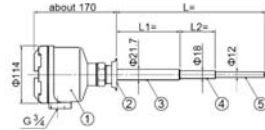


No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode	SUS304
6	Tube	Teflon

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→ A4(Ferrule-mounting Type, Straight Electrode)

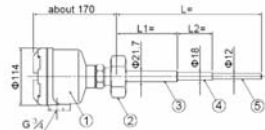
Fixing by the ferrule. Teflon-coated one can also be manufactured.



No.	Parts Name	Material
1	Housing	ADC
2	Ferrule	SUS304
3	Earth electrode	SUS304
4	Insulator	Teflon
5	Electrode	SUS304

→ A5(IDF Mounting Type, Straight Electrode)

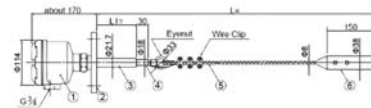
Fixing by the IDF nut. Various shapes of electrodes are available.



No.	Parts Name	Material
1	Housing	ADC
2	Union nut	SUS304
3	Earth electrode	SUS304
4	Insulator	Teflon
5	Electrode	SUS304

→ W1(Standard Type, Wire Electrode)

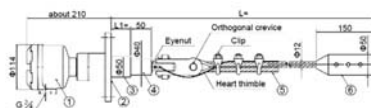
Typical wire-type. The wire length is adjustable in the field.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode wire	SUS304
6	Weight	SUS304

→ W2(Withstand load Type, Wire Electrode)

Well designed to stand for a heavy load at the bottom of a big silo.



No.	Parts Name	Material
1	Housing	ADC
2	Flange	SUS304
3	Earth electrode	SUS304
4	Insulator	Polyacetal
5	Electrode wire	SUS304
6	Weight	SUS304