

Level Switch Model selection guide



Introduction

There is no perfect level switch that can measure anything.

It is necessary to consider main conditions such as physical characteristics, measurement environment, installation conditions, and disturbances when making a selection from multiple level switches.

However, if these conditions are further subdivided, they will cover more than a dozen items, and combination will be astronomical numbers.

How to use

Therefore, in this guide, we tried to narrow down the main factors to select the model.

First, select one of the objects to be measured: bulk, particle, powder, liquid, slurry, and deposit in liquid.

Then, select required number of physical characteristics and environmental factors from the remaining selection items.

Judgment of ○ △ × is shown between the selected condition and each level switch.

The strictest judgment among them is the total judgment of the level switch.

Please select the best level switch from the total judgment.

If multiple candidates appear, we propose to select them in consideration of installation conditions, price, maintainability, etc.

<Judgement>

○ : applicable

△ : With any special specifications or option only, may be applicable

× : not applicable

Material/Application	Type Definition	Paddle type	Capacitance type	Admittance type (Capacitance type strong against adhesion)	Vibrating type (Probe)	Vibrating type (Fork type)	Conductive type	Full detection type	Transmission type	Float type	Electrode type
Bulk	dia.10mm - 50mm	○	○	○	△	×	○	○	△	×	×
Particle	less than dia. 10mm	○	○	○	○	△	○	○	○	×	×
Powder	less than dia. 1mm	○	○	○	○	○	○	×	○	×	×
Liquid	Water, Chemical solution etc	×	○	○	×	○	×	×	×	○	○
Slurry	Viscous material	×	△	○	×	△	×	×	×	×	×
Deposit in liquid	Deposit material in liquid	△	×	×	△	×	×	×	×	×	×
Low density	less than 0.5	△	○	○	○	○	○	△	△	×	×
Low dielectric constant	less than 2.0	○	×	×	○	○	×	○	△	○	△
Low conductivity	Conductive	○	△	△	○	○	○	○	○	○	○
Electrical properties	Dielectric constant and conductivity	○	×	×	○	○	△	○	△	○	△
Foam	Foam interrupts liquid surface	×	△	△	×	○	×	×	×	○	×
High temperature	80 deg.C or higher	△	△	△	△	△	×	△	△	△	△
High pressure	Higher than atmospheric pressure	×	△	△	△	△	×	×	△	×	△
Corrosive	Corrosive material	△	△	△	△	△	△	×	△	△	△
Adhesive	Can be wiped off with waste	△	×	△	×	×	△	○	△	×	×

* In case of judgment △, judgment will change depending on conditions, so please contact us whether it is applicable.