

Capacitive - Principle

When material enters a magnetic field, it disrupts it - causing changes that are detected by capacitive proximity and level switches.

Advantages

- Usable on solids and liquids
- Usable at any orientation (top, bottom or side mounted)
- No moving parts
- Suitable for aggressive media
- Some units can deal with coating or material buildup

Disadvantages

- The solids or liquids must be conductive and have a dielectric constant significantly different to that of air.

Vibration - Principle

A vibrating fork extends into your vessel. When your media reaches the switch, the weight of the material changes the frequency and amplitude of the vibration. This is detected and the switch operates.

Advantages

- Usable on virtually all solids and liquids
- Usable at any orientation
- Available in a variety of lengths and sizes

Disadvantages

- Unable to detect particularly fine solid particles
- Includes a vibration motor, which slightly reduces sensor lifespan.



A Pepperl+Fuchs conductive point-level switch



A Pepperl+Fuchs miniature vibrating fork point level switch

