

FORK TYPE

For grain



FEATURES

- Measurement is stable and unaffected by temperature, pressure, specific gravity, induction rate, or conductivity.
- Material with excellent corrosion resistance and strength: SUS316Ti used (RRH-300 series).
- Highly visible operation easy to confirm even from outside: LED display installed.
- Fail-safe functions are standard.
- AC/DC-free power supply.
- Simple setting by dip switch alone.
- Ideal for controlling fine grains with apparent specific gravity of 0.01 or more.
- Ideal for compact hoppers and tanks.
- Switches have no mechanical moving or shielded parts, providing excellent pressure resistance and durability.
- CE-authorized product (CE marking).

PRINCIPLE

Fork level switch vibration enables piezoelectric elements to vibrate by an electronic circuit converting movement to mechanical vibration. An internal electronic circuit determines current state and outputs it to a relay when the measured object contacts the vibrating fork detector, regulating vibration.

APPLICATIONS

Almost all types of grain (fine grains not measured by other methods, including carbon, perlite, diatomaceous earth, toner, silica, and foam beads). Compact size makes this ideal for small hoppers or tanks.

Model	RFM-300 series		RRH-300 series
Probe material	SUS316 equivalent (DIN1.4404)		SUS316Ti (DIN1.4571)
Installation method	G1"		G1 1/2"
	Screw-in flange optional		
Housing material	Aluminum alloy powder-particle coating		
Temperature	Detector temperature range	-40°C – +130°C	
	Peripheral temperature	-30°C – +70°C	
Acceptable pressure	Maximum 2.5 MPa (130°C) 4 MPa (100°C)		
Probe length	125 – 3000mm	137 – 3000mm	
Minimum detection sensitivity	Specific gravity ≥ 0.01		
Response time	When detecting	≤ 0.5 sec	
	When recovering	≤ 1 sec when setting to higher specific gravity (≥ 0.5), ≤ 2 sec when setting to lower specific gravity (< 0.5)	
Operation display	2 colors LED (RED/GREEN)		
Operation mode change	Maximum and minimum alarms are changed using a dip switch		
Sensitivity change	High and low sensitivity are changed using a dip switch		
Output	SPDT relay		
Output rating	AC250V 8A		
Power supply cable inlet port	2 for $\phi 6 - 12$ mm cable \times M20 (0.75 – 2.5 mm ² wire sectional area)		
Supply voltage	AC20 – 255V DC20 – 60V		
Power consumption	AC1.2 – 17VA DC<3W		
Electrical protection	Class I		
Protection configuration	IP67 (NEMA6)		