

Microwave Solid Flow Monitor

—CDS320



Working principle

Doppler flow switch is a material flow detector using the Doppler effect. According to the Doppler effects, the frequency of microwave changes when encountering a moving object. The detector is installed outside the pipeline or above the conveyor belt. The detector emits electromagnetic waves. When there is material flowing, the frequency of the reflected wave changes. When there is no material flowing or blocking, the frequency of the reflected wave won't change. The detector judges whether the material flows according to whether the frequency of the reflected wave changes and outputs a signal through a relay.

Benefits

- Microwave has good penetration and is not affected by flying dust, steam, stickiness
- Compact design, small footprint and flexible installation.
- No moving parts and maintenance free.

Specification

Power supply	24V DC
Output	4...20mA (passive)
Frequency	24~26GHz
Delay	1~15s
Transmitter power	5mW
Flow speed	≥0.1m/s
Detect range	0~2.5m
Process fitting	Thread G11/2/Flange
Housing material	Stainless steel
Ambient temperature	-40~70°C
Process temperature	-40~220°C (Up to 1000°C with adapter)
Process pressure	1bar (Up to 20bar with adapter)
Protection	IP67

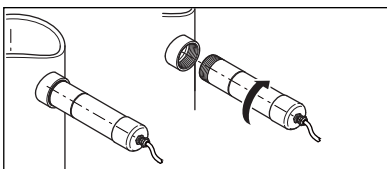
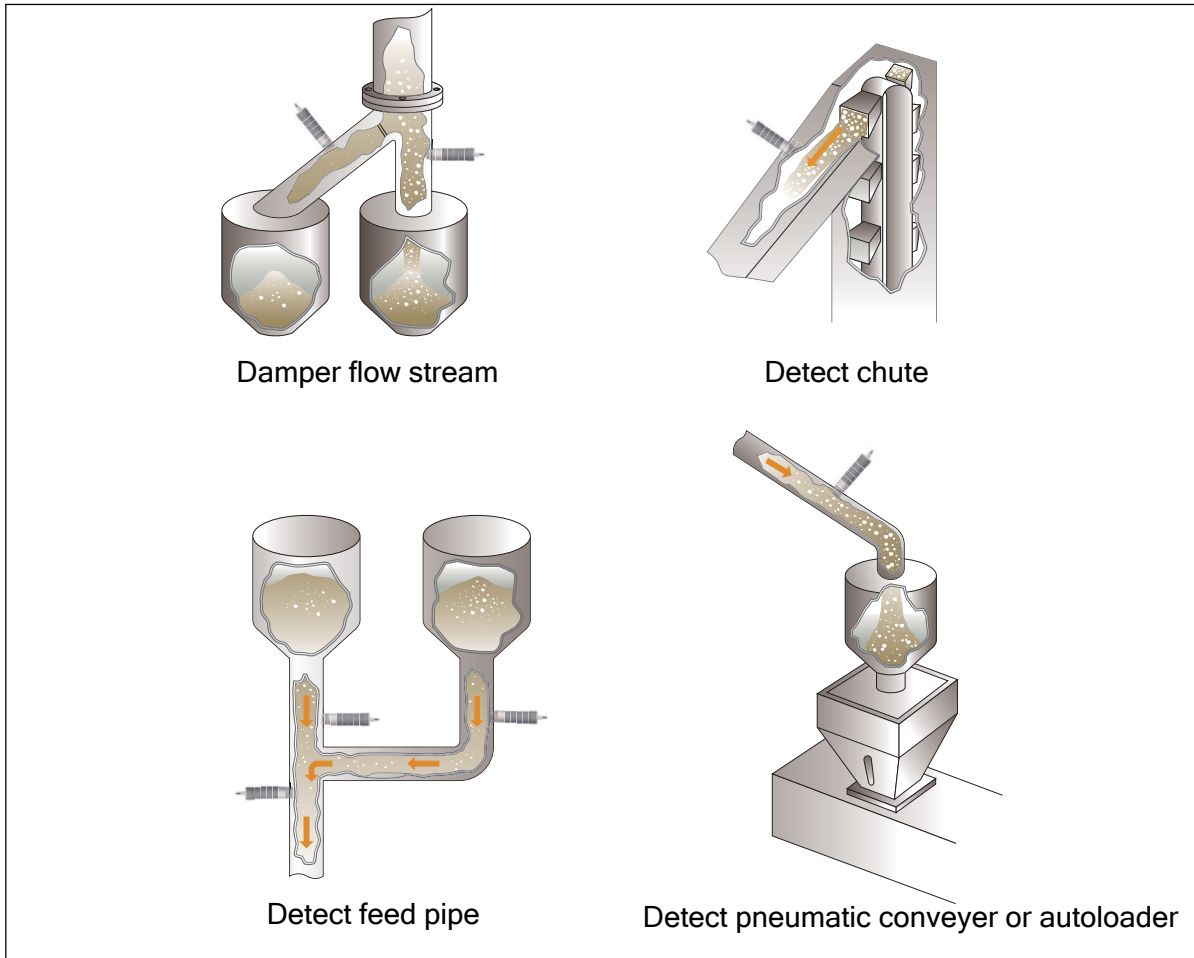
Application

- (1) Detect solid flow/non-flow in pipelines
- (2) Detect fault of conveying system

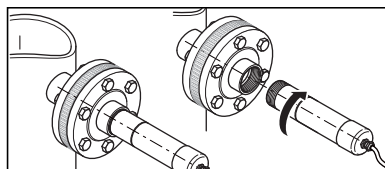
Industry

- Building material: cement,clinker,woodchips
- Chemical: plastic powder or granuls,fertilizer,silica
- Food: coffee,animal food,oats,tobacoo leaf tobacco leaf
- Power: coal,carbon dust,flyash

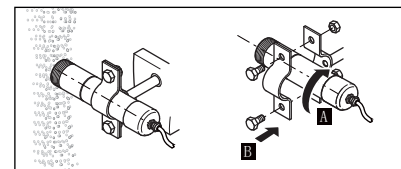
Installation



Thread mounting



Flange mounting



Pipe clamp mounting