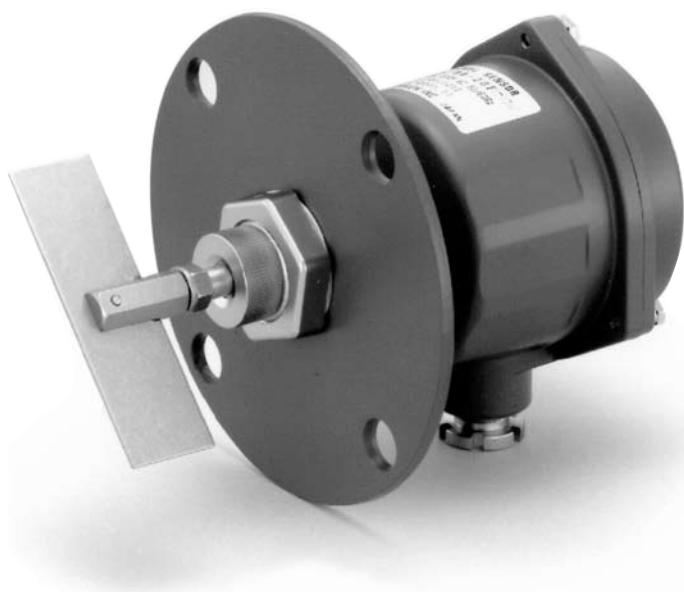


MODEL RB ROTATING PADDLE SENSOR



Features

- Simple torque adjustment
- Easy maintenance and repair

Application

- Powder: Cement, Coal dust, Glass powder, Gypsum, Lime powder, Carbon, Iron powder, Sand, Flour, Sugar, etc.
- Granular: Plastic pellet, Fertilizer, Cereal, etc.
- Block: Coal, Lime stone, Coke, Aggregate, Ore, etc.

Specifications

Model	RB20F		RB21FT	
Description	Standard		Heat Resistant	
Drawing				
Mounting	JIS5K65A (t=5)		JIS5K65A (t=6)	
Supply Power	100, 110, 120, 200, 220, 240V AC 50/60Hz			
Power Consumption	Approx. 4W Max.			
Contact Rating	1 SPDT, 250V 5A AC, 30V 5A DC (Resistive) C-H: Normally Open contact C-L: Normally Closed contact			
Operating Temperature	Housing	0°C to 45°C		
	Detection Part	0°C to 50°C	0°C to 250°C	
Maximum Pressure	20kPa / 0.2bar			
Material	Housing	ADC12		
	Flange	Steel	304SS	
	Shaft	304SS		
	Paddle	304SS		
Cable Entry	JIS F 15c (G1/2)			
Protection	Shaft	IP45		
	Housing	IP55		
Motor Rotation	1rpm (50Hz), 1.2rpm (60Hz)			
Life Expectancy	5 × 10 ⁵ Operations (Micro switch)			

General Description

The RB series of rotating paddle sensors are designed to use in the application such as coal, limestone, ore, and etc, where our R7 series can not be used. Moreover, RB can also be used in the application of powder and solid detection by changing the detection torque.

The RB20 series are standard type. The RB21 series are custom made for heat resistive, extension, and long shaft. The maximum operation temperature is up to 250°C. The extension type is up to 1000mm, and long shaft is up to 3000mm at vertical mounting.

Operational Description

When the power is applied to an RB sensor, a motor powers a revolving shaft to which a paddle is mounted. When the material level reaches the revolving paddle, the paddle rotation is halted then the motor itself starts rotating around the shaft and activates an isolated SPDT micro switch. This removes power from the motor so that it stops rotating and an alarm signal is provided. When the material level falls below the paddle, the motor resets and the micro switch restores the revolving action.

Technical Note

Detection torque can be easily adjusted on site by changing the spring position. The RB has four torque setting. The standard setting is "B". Adjust to "A", if there is a slight vibration on the hopper. Adjust to "C" or "D", if the load is small.

RB21FL Pipe Extension	RB21FBV Shaft Extension
JIS5K65A (t=6)	JIS5K65A (t=5)
100, 110, 120, 200, 220, 240V AC 50/60Hz	
Approx. 4W Max.	
1 SPDT, 250V 5A AC, 30V 5A DC (Resistive)	
C-H: Normally Open contact	
C-L: Normally Closed contact	
0°C to 45°C	
0°C to 50°C	
20kPa / 0.2bar	
ADC12	
304SS	Steel
304SS	
304SS	
JIS F 15c (G1/2)	
IP45	
IP55	
1rpm (50Hz), 1.2rpm (60Hz)	
5 × 10 ⁵ Operations (Micro switch)	