MODEL RB ROTATING PADDLE SENSOR

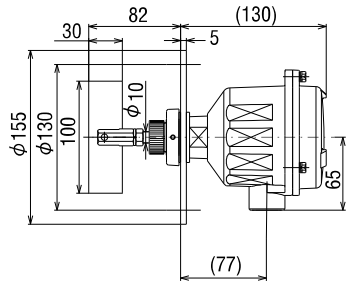
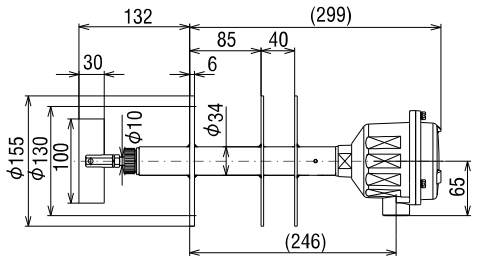
Features
- Simple torque adjustment
- Easy maintenance and repair

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.

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.

Specifications

Model		RB20F	RB21FT
Description		Standard	Heat Resistive
Drawing			
Measuring Object		Powder, Granular material, Pellet	
Mounting		JIS5K65A (t=5)	JIS5K65A (t=6)
Supply Power		100, 110, 200, 200V 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 to 45˚C	
	Detection Part	0 to 50˚C	0 to 180˚C
Maximum Pressure		20 kPa	
Material	Housing	ADC12	
	Flange	Steel	304SS
	Shaft	304SS	
	Paddle	304SS	
	Seal Part	NBR, PTFE	
Cable Entry		G1/2	
Protection	Housing	IP55	
	Detection Part	IP45	
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

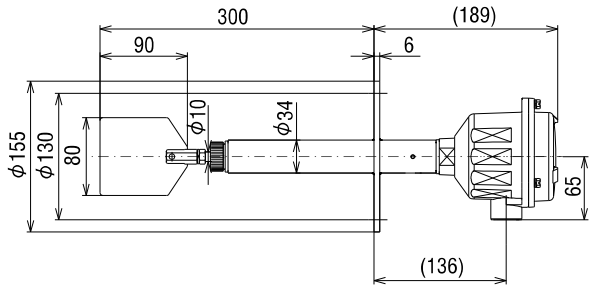
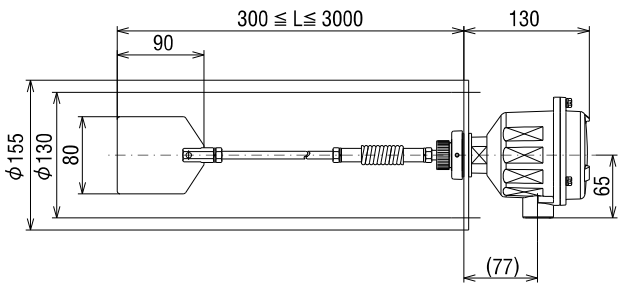
When the power is applied to an RB sensor, a motor powers a revolving shaft to which a paddle is mounted. When the material level reaches the revolving paddle, the paddle rotation is halted then the motor itself starts rotating around the shaft and activates an isolated SPDT micro switch. This removes 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.

Ordering Information

RB20N	Standard plug mounting, G1", L=90mm
RB20F	Standard flange mounting, JIS5K5A (t=5mm), L=82mm
RB21FBV	Shaft extension, JIS5K65A (t=5mm), L=300mm
RB21FL	Pipe extension, JIS5K65A (t=6mm), L=300mm
RB21FT	Heat proof, JIS5K65A (t=6mm), L=300mm
RB21FLT	Pipe extension with heat proof, JIS5K65A (t=6mm), L=300mm

1	100V AC ± 5%, 50/60Hz
2	110V AC ± 5%, 50/60Hz
3	120V AC ± 5%, 50/60Hz
4	200V AC ± 5%, 50/60Hz
5	220V AC ± 5%, 50/60Hz
6	240V AC ± 5%, 50/60Hz

RB20N 1 = RB20N-1

RB21FL/FLV	RB21FBV
Pipe Extension	Shaft Extension
	
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20 kPa	
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304SS	Steel
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