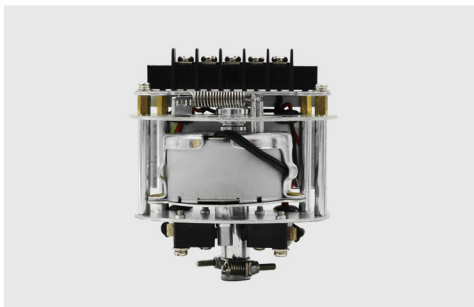


The anti rotation material level switch uses a micro motor as the driving device, and the transmission shaft is connected with the clutch. When the blade contacts the material, the motor stops rotating, and the detection device outputs a contact signal. At the same time, the power supply is cut off to stop rotating.



Working Principle

A low-speed gear motor with a sliding clutch drives a rotating measuring blade. When the measured material impedes the rotation of the blade, the motor will self-rotate, causing the internal micro switch to actuate and output a detection signal. At the same time, the power to the motor will be cut off, stopping the power supply (detection state). Once there is no measured material, the obstruction of the blade will be relieved. The blade will be reset by the internal spring tension, and the detection signal will be switched on again while the motor is powered on, and the blade will start to rotate again.




Application

The RP series Rotary Paddle Level Switch is usually used for the monitoring of full, intermediate, and empty levels of solid material bins. It is suitable for various solid materials, such as powders, granules, gels, or blocks. It can automatically monitor and control the material level. Different models of rotary resistance level switches can meet the requirements of different working conditions and have a wide range of applications in the material conveying and control processes of various industries, such as metallurgy, grain, flour, building materials, cement, power, coal, chemical industry, casting, rubber, environmental protection and dust removal. It is also used in the monitoring of chemical plastics, pharmaceuticals, feed, cement and chemical fertilizers, and the food powder manufacturing and processing industry.

Features

- Suitable for almost all solid materials
- Not affected by dust, dielectric constant, adhesives, temperature, and pressure changes
- Simple and reliable operating principle, modular design, maintenance-free
- Highly integrated mechanical seal to prevent dust infiltration along the shaft
- Unique friction clutch mechanism to protect the motor from damage
- Can use multiple process connectors for easy installation
- Provides high-temperature resistant and optional elongated parts to adapt to various working conditions




Rotary Paddle Level Switch

Model	RP-10	RP-11	RP-20
Image			
Power Supply	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M	1R.P.M
Body Material	SUS304	SUS304	SUS304
Measurement Range	100~2000mm	100~2000mm	100~1500mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~80°C	-20~80°C	-20~80°C
Connection Specifications	Thread: G1"/G1-1/2" (Customizable)	Flange: 2-1/2*5kg/cm ³ (Customizable)	Thread: G1"/G1-1/2" (Customizable)
Applicable Material Specific Gravity	≥0.5g/cm ³	≥0.5g/cm ³	≥0.5g/cm ³
Blade	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)	B-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint/PEK /Stainless Steel	Aluminum Alloy Paint/PEK /Stainless Steel	Aluminum Alloy Paint/PEK /Stainless Steel
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67	IP65 / IP66 / IP67




Rotary Paddle Level Switch

Model	RP-21	RP-30	RP-31
Image			
Power Supply	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M	1R.P.M
Body Material	SUS304	SUS304	SUS304
Measurement Range	300~3000mm	100~2000mm	100~2000mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~80°C	-20~350°C	-20~350°C
Connection Specifications	Flange: 2-1/2*5kg/cm ³ (Customizable)	Thread: G"1/G"1-1/2 (Customizable)	Flange: 2-1/2*5kg/cm ³ (Customizable)
Applicable Material Specific Gravity	≥0.5g/cm ³	≥0.5g/cm ³	≥0.5g/cm ³
Blade	B-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint/PEK /Stainless Steel	Aluminum Alloy Paint/Stainless Steel	Aluminum Alloy Paint/Stainless Steel
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67	IP65 / IP66 / IP67


Rotary Paddle Level Switch

Model	RP-32	RP-33	RP-40
Image			
Power Supply	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M	1R.P.M
Body Material	SUS304	SUS304	SUS304
Measurement Range	100~2000mm	100~2000mm	450~6000mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~350°C	-20~1300°C	-20~80°C
Connection Specifications	Thread: G1"/G1-½" Flange: 2-½*5kg/cm³ (Customizable)	Flange: 2-½*5kg/cm³ (Customizable)	Thread: G1"/G1-½" Flange: 2-½*5kg/cm³ (Customizable)
Applicable Material Specific Gravity	≥0.5g/cm³	≥0.5g/cm³	≥0.5g/cm³
Blade	B-type, refer to blade specification table (can be customized)	B-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint/Stainless Steel	Aluminum Alloy Paint/Stainless Steel	Aluminum Alloy Paint/PEK /Stainless Steel
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67	IP65 / IP66 / IP67

Rotary Paddle Level Switch

Model	RP-41	RP-42	RPF-980D
Image			
Power Supply	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M	1R.P.M
Body Material	SUS304	SUS304	SUS304
Measurement Range	450~6000mm	300~3000mm	100~6000mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~350°C	-20~350°C	-20~350°C (Customizable)
Connection Specifications	Thread: G1"/G1-½" Flange: 2-½*5kg/cm³ (Customizable)	Thread: G1"/G1-½" Flange: 2-½*5kg/cm³ (Customizable)	Thread: G1"/G1-½" Flange: 2-½*5kg/cm³ (Customizable)
Applicable Material Specific Gravity	≥0.5g/cm³	≥0.5g/cm³	≥0.5g/cm³
Blade	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)	B-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint/Stainless Steel	Aluminum Alloy Paint/Stainless Steel	Aluminum Alloy Paint/Stainless Steel
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67	IP65 / IP66 / IP67

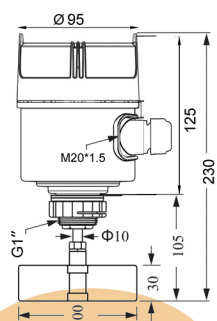
Rotary Paddle Level Switch

Model	RP-50	RP-60
Image		
Power Supply	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ	110VAC / 220VAC / 24VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M
Body Material	SUS304	SUS304
Measurement Range	100~1500mm	450~1500mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~80°C	-40~350°C
Connection Specifications	Thread: G1"/G1-½" Flange: 2-½*5kg/cm ³ (Customizable)	Thread: G1"/G1-½"
Applicable Material Specific Gravity	≥0.5g/cm ³	≥0.5g/cm ³
Blade	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint/PEK /Stainless Steel	Aluminum Alloy Paint/PEK /Stainless Steel
Certification	CE / ATEX / ISO9001	CE / ATEX / ISO9001
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67

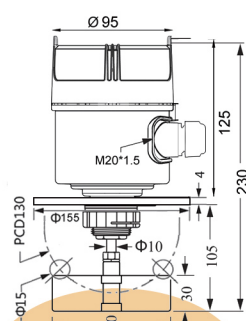
Rotary Paddle Level Switch

Model	RP-80	RP-80A	RP-80C
Image			
Power Supply	220VAC / 24VDC 50/60HZ	220VAC / 24VDC 50/60HZ	220VAC / 24VDC 50/60HZ
Signal Output	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT	Microswitch5A/250VAC SPDT
Blade Speed	1R.P.M	1R.P.M	1R.P.M
Body Material	SUS304	SUS304	SUS304
Measurement Range	80~1000mm	80~1000mm	80~1000mm
Working Pressure	Atmospheric Pressure	Atmospheric Pressure	Atmospheric Pressure
Working Temperature	-20~80°C	-20~250°C	-20~80°C
Connection Specifications	Thread: G $\frac{3}{4}$ " Flange: 2- $\frac{1}{2}$ *5kg/cm 3 (Customizable)	Thread: G $\frac{3}{4}$ " Flange: 2- $\frac{1}{2}$ *5kg/cm 3 (Customizable)	Thread: G $\frac{3}{4}$ " Flange: 2- $\frac{1}{2}$ *5kg/cm 3 (Customizable)
Applicable Material Specific Gravity	$\geq 0.3\text{g/cm}^3$	$\geq 0.3\text{g/cm}^3$	$\geq 0.3\text{g/cm}^3$
Blade	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)	A-type, refer to blade specification table (can be customized)
Junction Box Material	Aluminum Alloy Paint	Aluminum Alloy Paint	Aluminum Alloy Paint
Length of Cable	300mm (Customizable)	300mm (Customizable)	300mm (Customizable)
Protection Level	IP65 / IP66 / IP67	IP65 / IP66 / IP67	IP65 / IP66 / IP67

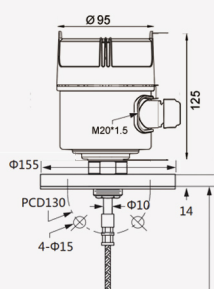
Product Dimension Diagram



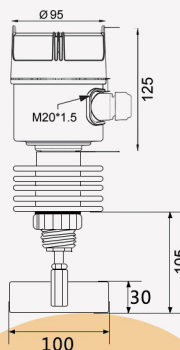
RP-10
Standard Thread Type



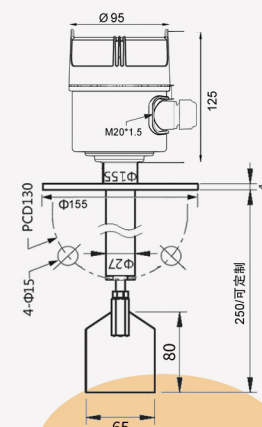
RP-11
Standard Flange Type



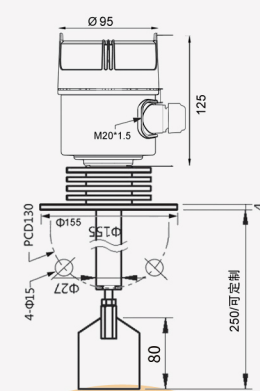
RP-31
High-temperature
Flange Type



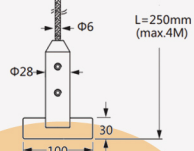
RP-30
High-temperature
Thread Type



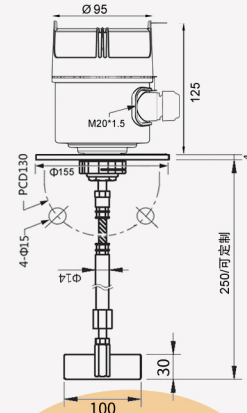
RP-21
Flange Shaft Protective
Tube Type



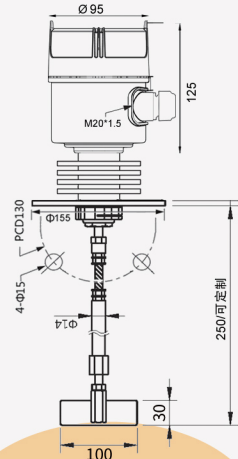
RP-32
High-temperature
Flange Shaft
Protective Tube Type



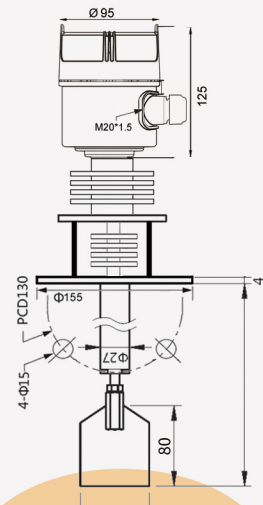
RP-40
Cable Type



RP-41
Adjustable Flange
Shaft Type



RP-42
High-temperature
Adjustable
Flange Shaft Type



RP-33
Ultra-high-temperature
Adjustable Flange
Shaft Type

Product Dimension Diagram

