TEKSENS

RP Series
Rotating Paddle Level Switch

PRODUCT DATA

Principle

A low-speed gear motor with a slip clutch drives a rotating measuring paddle. When the measured medium hinders the rotation of the paddle, the motor will rotate, causing the internal micro switch to act and output a detection signal. At the same time, the motor power will be cut off and the power supply will be stopped. (Detection state) Once there is no medium to be measured, after the obstruction of the paddle is removed, it will be reset by the tension of the internal spring, and then the detection signal will be switched, and the power will be supplied to the motor, and the paddle will start to rotate again.

Features

- Suitable for almost all solid materials;
- Not affected by dust, dielectric constant, sticky material, temperature and pressure changes, simple and reliable working principle, modular design, maintenance-free;
- Highly integrated mechanical seal prevents dust penetration along the shaft;
- Unique friction clutch mechanism to protect the motor from damage;
- Available with a variety of process connections;
- Provide high temperature type and optional extension to adapt to various working conditions.

Application

The Rotating Paddle Level Switch is usually used as the full level, intermediate level and empty level monitoring of the solid silo. It is suitable for all kinds of solid materials, such as powder, granule, glue or block. Automatic monitoring and control of material level can be carried out. Different types of Rotating Paddle Level Switch can meet the requirements of different working conditions, in metallurgy, grain, flour, building materials, cement, electric power, coal, chemical industry, foundry, rubber, environmental protection and dust removal and other industries process has a wide range of applications. It is also used to monitor chemical plastics, pharmaceuticals, feed, cement and chemical fertilizers, and food powder manufacturing and processing industries.

Specification

Power supply:
110VAC, 220VAC, 24VAC, 24VDC 50/60HZ

Power consumption: 4W

Contact rating: 5A/250VAC SPDT

Paddle rotating speed:
counterclockwise 1 R.P.M

Rotational moment: 10 N.M

Medium density: ≥0.5g/cm3

Working temperature:
Normal: -20~85℃
High: -20~300℃
Customized: -20~1200℃

Ambient temperature: -20~80℃

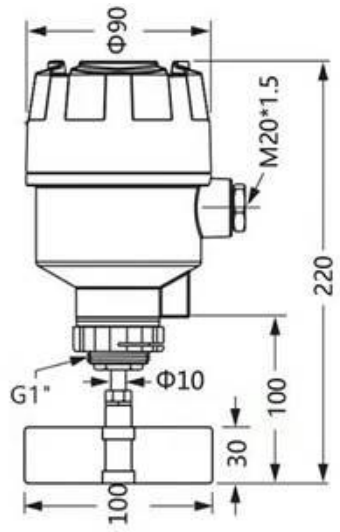
Insulation resistance: ≥100MΩ(500VDC)

Protection: IP65

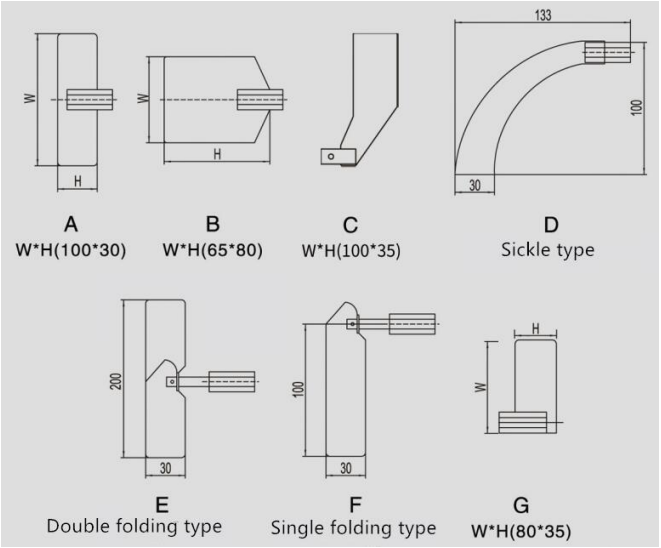
Connection type: 1”PF, G1”, Flange, ect

Housing material: cast aluminum

Dimension

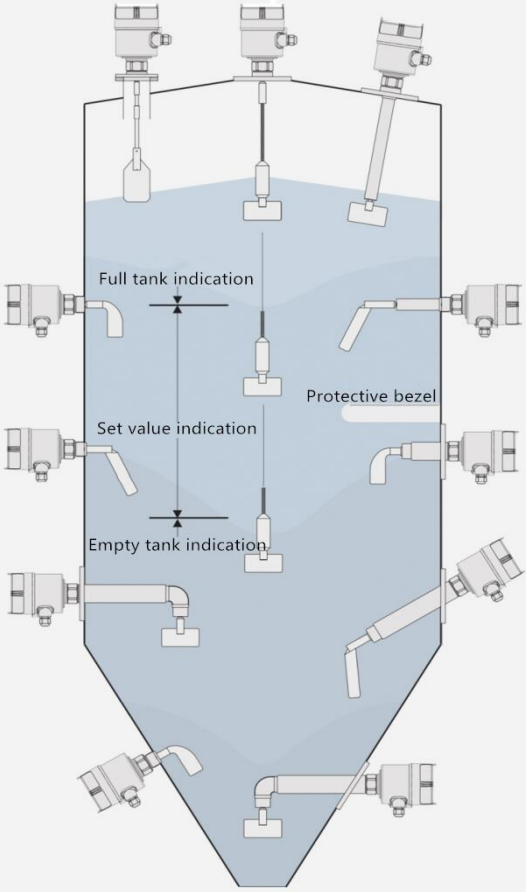


Paddle dimension



Wiring type

Installation



Selection

RP series			
RP-10	Standard thread connection		Type
RP-20	Shaft protection tube type		
RP-30	High temperature flange type		
RP-40	Cable type		
RP-50	Ex-proof thread type		
RP-53	Ex-proof adjustable type		
RP-56	Ex-proof high temperature adjustable type		
RP-11	Stand flange type		
RP-21	Shaft length adjustable type		
RP-31	High temperature shaft protection tube type		
RP-32	High temperature shaft length adjustable type		
RP-51	Ex-proof flange type		
RP-52	Ex-proof shaft protection tube type		
RP-54	Ex-proof high temperature type		
RP-55	Ex-proof high temperature shaft protection tube type		
	A	110VAC	Power supply
	B	220VAC	
	C	240VAC	
	D	24VDC, 50/60HZ	
		T1	1” PT thread	Process connection
		T2	1-1/2” PT thread	
		T3	2” PT thread	
		T4	2-1/2” PT thread	
		T5	1” NPT thread	
		T6	1/2” NPT thread	
		F7	Flange	
		Z	Others	