

## Spin -11P Guard Rotary Paddle Switch



# Rotary Paddle Switch

In Spin-11 Rotary Paddle Switch series of products, micro motor, through a clutch, drives the rotation of a transmission shaft on which a paddle is assembled. When the spinning paddle is not contacted with measured material, the motor is in normal rotation; when the paddle is covered by the measured material, the motor stops rotating and its power is switched off automatically. At the same time, a switching signal is generated by a detection device to control the process of material transport /delivery. Rotary paddle switch is widely used in modern industrial process and storage.

Spin -11 Rotary Paddle Switch series is manufactured with high quality well-known brand motor, micro switch and bearing, etc. We also developed detailed technology, introduced strict production flow and quality inspection throughout. Spin-11 has high reliability and quality consistency. In comparison with other similar products in the market, Jiwei Spin-11 Rotary Paddle Switch has the following advantages:

- Purchased high quality well-known brand motors and micro switches as its key parts.
- Dual bearing design, with stable operation and long life time in service.
- Integrated design and anti-loose mechanical control mechanism, easy for parts replacement and maintenance.
- Made of 304/316L stainless steel.
- IP65 Ingress protection rating.



For different operation conditions, Spin -11 Rotary Paddle Switch series has two models to cope with:

**Spin -11A Standard:** For most of granular/powdery bulk solids level measurement.

**Spin-11P Guard:** Enhanced with a protection sleeve, suitable for bulk solid granules with higher density.

## Spin -11P Guard Rotary Paddle Switch

### Overview

In Spin-11P Guard Rotary Paddle Switch, the spindle is enhanced with a stainless steel protection sleeve to effectively avoid material impact damage. It is an ideal choice for measuring high density granular/powery bulk solids. Furthermore, we have introduced full production process and quality inspection to ensure our products have high reliability .

### Features

- Strong impact resistance thanks to the strengthened spindle with a stainless steel protection sleeve.
- Purchased high quality key parts such as motor, micro switch from international market.
- Dual bearing design, stable operation and long life time in service.
- Integrated design of motor and anti-loose mechanical mechanism, easy for maintenance and parts replacement.
- Made of 304/316L stainless steel.
- With gas and dust explosion proof certificates, applicable in a wide range.
- IP65 ingress protection rating.



### Typical applications

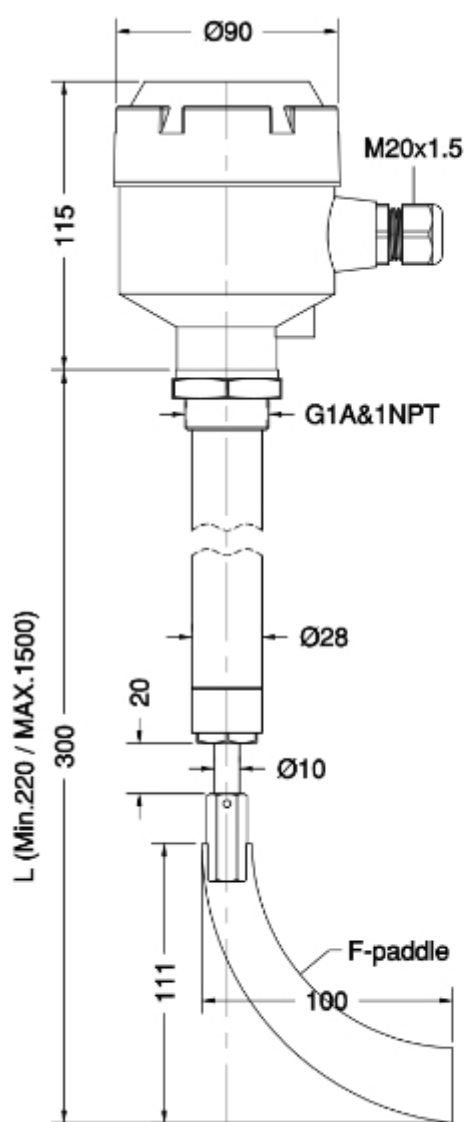
- Level measurement for high density granule and powder such as clay, metal, limestone and cement, etc.
- Level measurement for metal shavings, gravels, etc.

### Technical data

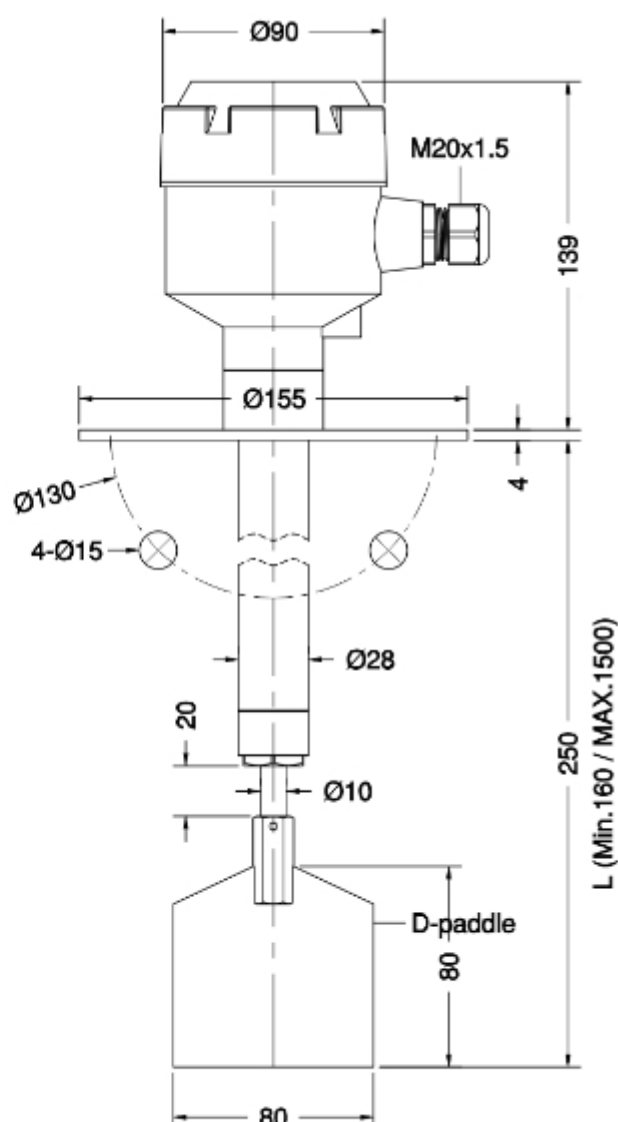
|                                 |                               |
|---------------------------------|-------------------------------|
| Measured medium                 | Bulk solid granule and powder |
| Medium Density                  | ≥0.3g/cm <sup>3</sup>         |
| Process temperature             | Normal: -20~70℃               |
|                                 | High temperature: -20~400℃    |
| Ambient temperature             | -40~85℃                       |
| Process fitting                 | Flange (thin/standard)        |
|                                 | Thread                        |
| Material for spindle and paddle | 304/316L                      |
| Paddle speed                    | 1 R.P.M                       |

|                           |   |
|---------------------------|---|
| External housing          | Aluminum alloy  |
| Ingress protection rating | IP65  |
| Cable entry               | M20 x1.5  |
| Contact rating            | SPDT 5A/250V AC   |
| Power supply              | 24V DC  |
|                           | 220V AC 50/60Hz   |
| Approvals                 | Gas Flameproof Enclosure: Ex d IIC T6;<br>Dust Explosion Protection Enclosure: Ex td A21 IP65 T80°C |

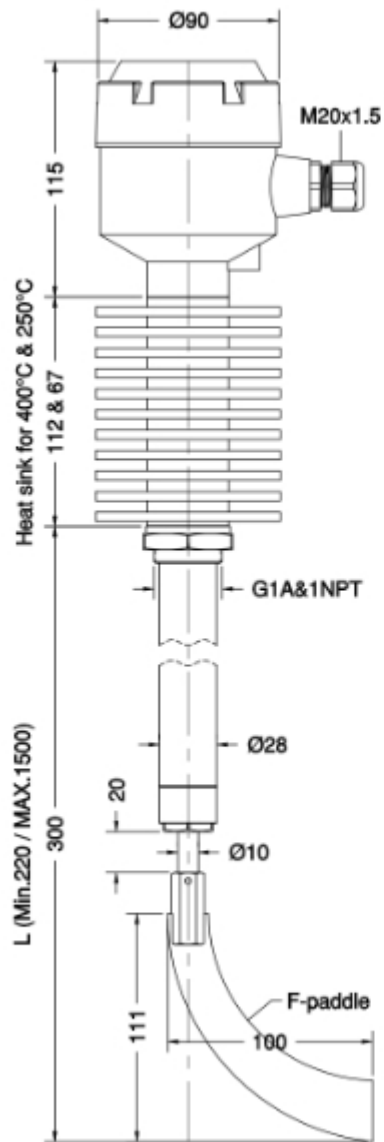
### Dimensional drawings



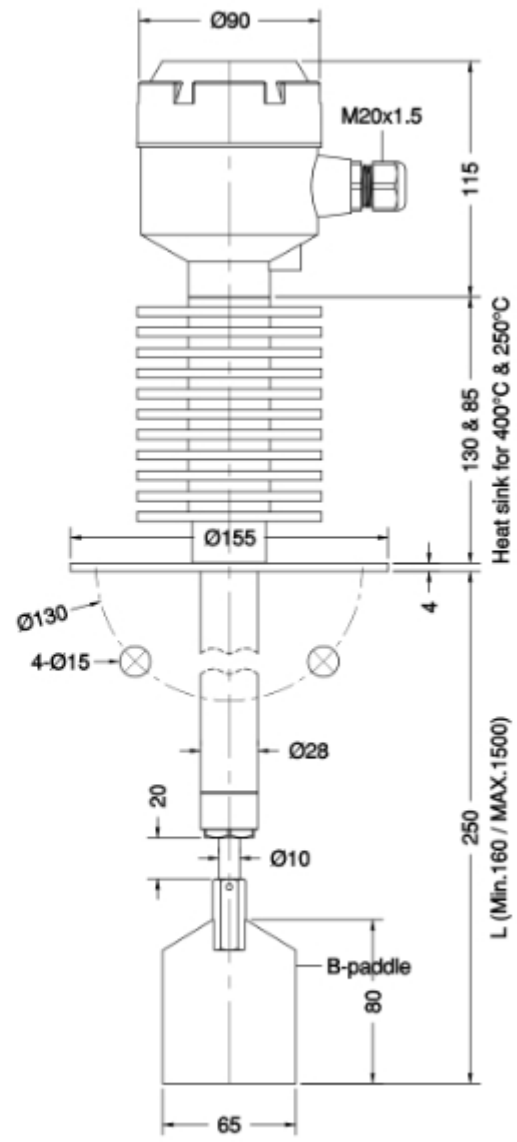
Guard type - Thread



Guard type - Flange

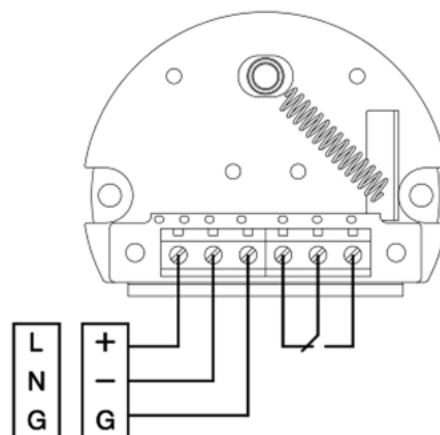


Guard - High temperature - Thread



Guard - High temperature - Flange

### Wiring plan



## Order information

|                            |   |   |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|--|--|--|--|--|--|--|--|--|
| Spin-11                    |   | P   |  |  |  |  |  |  |  |  |  |
| <b>Approvals</b>           | N   | None explosion hazards                                    |  |  |  |  |  |  |  |  |  |
|                            | D   | Gas Flameproof Enclosure: Ex D IIC T6                     |  |  |  |  |  |  |  |  |  |
|                            | E   | Dust Explosion protection Enclosure: Ex tD A21 IP65 T80°C |  |  |  |  |  |  |  |  |  |
| <b>Power supply</b>        | A   | 220V AC   |  |  |  |  |  |  |  |  |  |
|                            | D   | 24V DC  |  |  |  |  |  |  |  |  |  |
| <b>Process temperature</b> | C   | -20~70°C  |  |  |  |  |  |  |  |  |  |
|                            | H   | -20~400°C   |  |  |  |  |  |  |  |  |  |
| <b>Process fitting</b>     | TH  | Thread G 1"A  |  |  |  |  |  |  |  |  |  |
|                            | TM  | Thread 1"NPT  |  |  |  |  |  |  |  |  |  |
|                            | FA  | Flange DN50 PN16  |  |  |  |  |  |  |  |  |  |
|                            | FB  | Flange DN80 PN16  |  |  |  |  |  |  |  |  |  |
|                            | XX  | Customized design   |  |  |  |  |  |  |  |  |  |
| <b>Paddle</b>              | LA  | 100×30 (W×H)  |  |  |  |  |  |  |  |  |  |
|                            | LB  | 65×80 (W×H)   |  |  |  |  |  |  |  |  |  |
|                            | LC  | 65×120 (W×H)  |  |  |  |  |  |  |  |  |  |
|                            | LD  | 80×80 (W×H)   |  |  |  |  |  |  |  |  |  |
|                            | LE  | 50×30 (W×H)   |  |  |  |  |  |  |  |  |  |
|                            | LF  | Sickle-shaped   |  |  |  |  |  |  |  |  |  |
| <b>Length</b>              | LG  | Foldable  |  |  |  |  |  |  |  |  |  |
|                            | Selectable from 160~1500mm as specified.<br>( If selected length is longer than 1000mm, top-mounting is recommended.) |   |  |  |  |  |  |  |  |  |  |

### Note:

1. Length is defined by four digits in mm. For example, 500mm is expressed as 0500.
2. Default process fitting is made of 304 stainless steel, 316L and carbon steel are also available upon request.
3. Default flange is thin flange, standard flange is available upon request.
4. Default motor is standard motor, higher reliability motor is available upon selection.