

## Rotating Paddle Point Level Switch

### SILENT FEATURES

- Flexible coupling (optional as per application)
- Robust, dust and watertight housing
- Extended Probe possible.
- Extended life by motor shut off design
- Sealed Bearings
- Interchangeable paddle assemblies,
- Magnetic Clutch mechanism



### FUNCTION

A small electric motor drives the paddle, which rotates freely in the absence of material. Impeded by material the motor will be turned within the housing while loading a spring and triggering two switches. One of them is a dry electric contact for control and alarm functions while the other cuts the power to the motor. When the material level drops, the loaded stretched tension spring returns the motor to its original position and the unit is reactivated

### APPLICATION

Our heavy duty, rotary paddle switches are the most suitable for level detection of dust granules and other free flowing solids up to the particle size of Ø10 mm. Mounted in bins, silos and hoppers it can be applied for control of level, filling and emptying as well as for protection against overfilling

### PRIMARY AREA OF APPLICATION

- Building industry materials, cement, sand, lime, etc.
- Foodstuff industry, milk powder, flour, salt, food grains, etc.
- Plastic industry, powder, granular etc.
- Timber industry, chemical and mining etc.

## MAIN AREA OF APPLICATION

|                   |  |
|-------------------|--|
| Agriculture       | : Beet slice, hard crop,   |
| Chemical industry | : Plastic powders, granules, pellets                                   |
| Food industry     | : Sun flower, sun flower cod,  |
| Building industry | : Sand, calcium powder, gypsum, coffee and cacao powder, flour, sugar, |
| etc. Energetics   | : Active soot, coal powder, fly ash                                    |

## NUMBER & MATERIAL OF VANES

Specific gravity and particle size of the material provides orientation for the number of vanes. Most commonly used is the stainless steel, single vane blade. The lowest specific gravity for this paddle is 0,4 kg/dm<sup>3</sup>. For lighter materials the use of 3- or 4-vane paddle is recommended.

NOTE: for side mounting applications, we suggest to use single vane paddle only.

## PROBE LENGTH

Standard protrusion length of the unit is 150 mm. Longer protrusion is provided by the (up to 3 m)

## TECHNICAL SPECIFICATIONS (STADARD)

### SWITCHING UNIT:

|                        |  |
|------------------------|--|
| Housing                | : Aluminum, weather proof, powder coated. Integral with the probe.                         |
| Cable entry            | : 2 nos.   |
| Ambient temperature    | : 0° C to +60° C   |
| Power consumption      | : 1.9 VA   |
| Mains Voltage          | : 230/110 V AC (+/-15%),50 Hz  |
| Output                 | : 1 sets of potential free c/o contacts rated at 5 amps, 230 V AC for non-inductive loads. |
| Switching delay        | : Green LED shows Normal, Red LED shows alarm condition                                    |
| Mounting               | : Screwed – 1 ½” BSP (standard) Or Flanged (optional)                                      |
| Sense Rod              | : Stainless steel, 12 MM DIA   |
| Paddle                 | : 1 up to 4 Paddles depending up on application.   |
| Operating process Temp | : 80° C for the standard unit (Special case up to 200°C)                                   |

Continuous efforts for product development may necessitate changes in these details without notice

Authorised Dealer



*NK Instruments Pvt. Ltd.*

B-501/504, 5th floor, Raunak Arcade, Near THC Hospital, Gokhale Road, Naupada,  
Thane(W) 400602. Maharashtra INDIA      Telefax Nos.: 91-22-25301330 / 31 / 32  
E-Mail: sales@nkstruments.com      Web: <http://www.nkstruments.com>  
Skype: nitinkelkarskype      Gtalk: nkstruments2006

