

# INSTRUCTION - MANUAL

## ROTARY PADDLE SWITCH

### FEATURES

- # · Level switch for powders and free flowing solids
- # · Flexible coupling (optional as per application)
- # · Extension up to 3 m
- # · Robust, dust and watertight housing
- # · Extended life by motor shut off design
- # · Sealed bearings
- # · Interchangeable paddle assemblies,
- Magnetic Clutch mechanism

### ABOUT ROTARY PADDLE SWITCH

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

Rotary paddle switch 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.

#### Main application areas:

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 and 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,

#### Probe length

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

### TECHNICAL DETAILS

Housing

: POLYMER

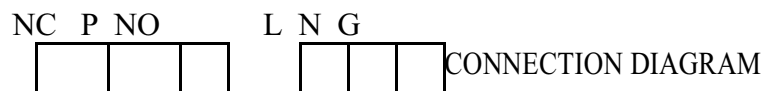
Protrusion length	: 150 mm standard, Extension upto 3 mtrs
Revolution per minute	: 1 / minute
Ambient temperature	: -40 °C...+65 °C
Material of wetted parts	: Galvanized mild steel, stainless steel, Plastic (glass reinforced)
Material and number of vanes	: galvanized mild steel, stainless steel, 1 - 4
Process connection	: 1-1/2" BSP (standard) others on request.
Medium specific gravity	: min. 0,08 kg / dm <sup>3</sup>
Medium temperature	: 40 °C...+90 °C
Electrical Cable gland	: PG -16, 2 nos. (Polymer)
Medium pressure max.	: 2 bar
Output	: SPDT 230 V AC, 10 A, (standard)
Power supply	: 230 V AC,

**Note :** The mounting opening in the hopper wall should be sufficiently large so that paddle can be inserted in the bin without dismantling the paddle. If opening size is smaller than the paddle size then paddle needs to be dismantled before inserting it into the bin.

For your information the rotation circle dia of the paddle is 127 mm and the flange PCD is 178 mm having 8 mm X 6 holes suitable for M8 bolt

Hence accordingly you have to cut a hole in the hopper and do self tapping on the counter PCD holes suitable for M8 bolt.

Or else the paddle need to be dismantled before inserting it into the bin and assembled from the inside in the hopper after the mounting of the probe.



Authorised Dealer

	<p><i>NK Instruments Pvt. Ltd.</i></p> <p>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@nkinstruments.com      Web: http://www.nkinstruments.com Skype: nitinkelkarskype      Gtalk: nkinstruments2006</p>	
---	--	---