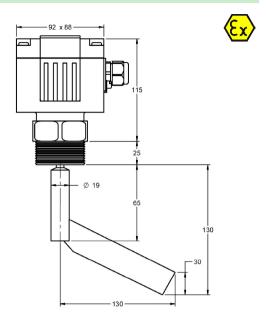


CNPR-D - CNPR-D Ex





LEVEL SWITCH BY ROTARY PADDLE



Function

Level control in powdery products, granulates and materials in bulk with a maximum grain of 15 mm.

Operating principle

It is based in a sinchronus moto reducer of slow speed which makes the paddle turning continously. When the product reaches the paddle a spin resistance is produced and two microswitches operate: the first one stops the motor and the other one switches the output contacts. When the paddle gets free of product, the moto reducer by means of a spring, recover the spin speed and releases the micro-switch.

Body and cover

Attachment

According DIN/ISO 228: Standar 1"1/4G Aluminium. Optional, 1" G, 1"1/2 (Aluminium or SS).

Flanges

A-110, AC, H-200, DN32, DN100. In aluminium or SS.

Paddles

Large number of types. In stainless steel or plastic, according to the model.

Hermetic sealed to the humidity and dust by means of a special retainer made in NBR (pressure, 1 bar). On request, made in Teflon, Viton or SS (pressure, 5 bar).

Axis close
Hermetic sealed to the humidity and dust by means of a special retainer made in NBR (pressur 1 bar). On request, made in Teflon, Viton or SS (pressure, 5 bar).

Two threaded holes, M20.

Protection
Protection
Temperature
Adjustable head
Once the unit is assembled, the head can turn 360° on its own axis.

Sensibility
Supply voltage

Available of types. In stainless steel of plastic, according to the midde.

Pressure 1 bar).

Two threaded holes, M20.

IP66. Optional ATEX

-20..+350°C, according model.

Once the unit is assembled, the head can turn 360° on its own axis.

Adjustable in three positions according to the density of the product to be controlled.

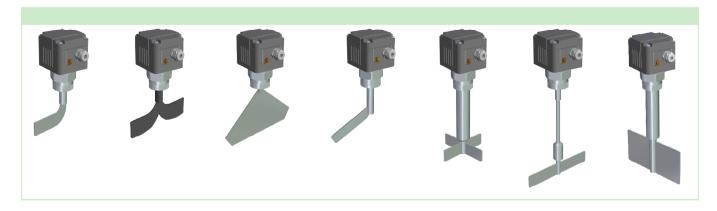
Supply voltage

220~240 VAC 50/60Hz
48 VAC 50/60Hz

 $\begin{array}{c} 24 \text{ VAC 50/60Hz} \\ 24 \text{ VDC} \\ \\ \text{Consumption} \quad \text{AC 3 VA / DC } 3\Omega \end{array}$

Speed 1 or 5 RPM, depending on model.

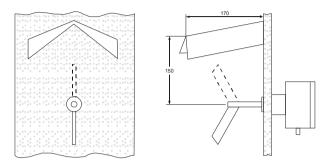
Output contact SPDT micro-switch from 1mA/4VAC up to 2A/250VAC



Placement The rotary paddle must be placed in such a position that the product entering to the tank can reach the paddle when the tank is becoming fill and get the paddle free when the tank

It must be avoid the direct falling of the product over the paddle.

When the flow of the entering material could hit on the paddle, is suggested to protect it with a cover. It is also advisable to protect the paddle in low and medium levels, when materials with desities up to 600 Kg/m³ could reach 5 meters high over the paddle. This height must be reduced proportionally if the density of the product becomes higher.



Connection

The electrical connections must be done as shown in the schema.

The terminals at left belongs to the output micro-switch when the paddle is turning. Check that the supply voltage is the same than the one specified in the pc board circuit. The motor must be powered permanently while the equipment is in operation. The motor releases automatically when the paddles got stopped.

