

## Rotary Paddle Level Indicator

Approved for dust-explosive environments  
Zones 20, 21 & 22

### APPLICATION

The ROTOSAFE rotary paddle switch is designed to signal the presence or absence of bulk materials such as chemical products, wood chips, grain, granules and powders. It is ideal for bunkers, hoppers and silos as well as for blockage detectors in conveyor chutes.

### METHOD OF OPERATION

The detection of material is achieved by a rotating paddle. If material impedes the rotation of the paddle, the motor topples on its axle and triggers a contact. The power supply to the motor is cut and the contact signals that the critical level has been reached. When the level of the material goes down again, the motor returns to its initial position and restarts.

The ROTOSAFE has a « Failsafe » rotation detection circuit; it has a magnetic test allowing to shut the motor down.

### PADDLE SELECTION

Four alternative paddles are available to detect a wide range of product from heavy to light densities.

### OPTIONS

**KITRTS** – system allowing to have an adjustable level between 0,65 and 2,1 meters.

Detailed specification, wiring diagrams and installation/operating instructions available immediately upon request.



**RTS1V0A**

**ATEX-approved**



**Ex II 1D T100°C-IP 65-ZONE 20**

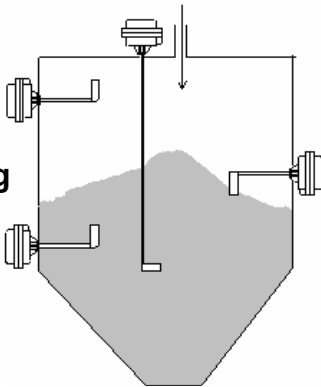
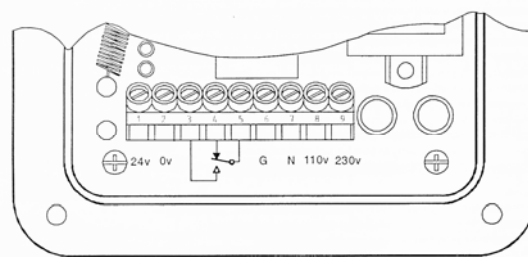
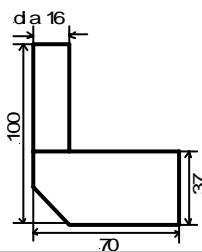


**CLASS 2 div. 1  
groups E,F,G**

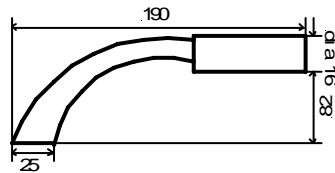
Please refer to instruction manual for correct installation .  
Information subject to change or correction. July 2007.

**SPECIFICATION**

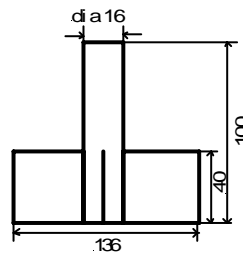
<b>Type</b>	<b>RTS1V0A</b>
<b>Supply</b>	24 V dc, 110/230 V ac 50/60 Hz
<b>Consumption</b>	1,8 VA
<b>Ambiant temperature</b>	-20° to + 50°C
<b>Protection</b>	IP 65
<b>Enclosure</b>	Flame retardant, glass fibre, reinforced nylon
<b>Mounting</b>	1¼ NPT
<b>Conduit entry</b>	2 conduit entries M20
<b>Motor</b>	1 RPM
<b>Fuse</b>	5 Amps
<b>Cable length</b>	min, 1 mm <sup>2</sup> - max, 4 mm <sup>2</sup>
<b>Sensitivity</b>	2 ranges selected via internal spring position
<b>Switch High/Low</b>	Desired security position (high or low level)
<b>Standard lengths</b>	up to 3,5 m
<b>Output</b>	S.P.C.O contacts, rated at 3A 250V non inductive
<b>Output delay time</b>	User selectable, 0-120 sec (to avoid wrong signals, e.g. in the case of dirt build-up)
<b>Approvals</b>	ATEX EX II 1D T100°C
<b>Indication</b>	1 LED for the supply - and 1 LED for the output state
<b>Weight</b>	0,95 Kg

**Mounting**

**Connections**

**KIT RTS**

**RLIP1**

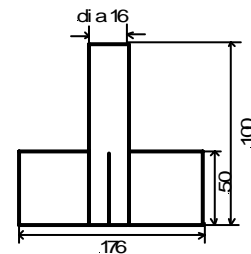
Single vane paddle  
Density higher than  
1120 kg/m<sup>2</sup>


**RLIP2**

Single vane insertable  
paddle for materials  
480 to 1120 kg/m<sup>2</sup>


**RLIP3**

3 vane paddle for  
materials  
480 to 1120 kg/m<sup>2</sup>


**RLIP4**

Large 3-vane paddle  
for materials less  
than 480 kg/m<sup>2</sup>

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