

Roto-Safe™ Rotary Paddle Level Indicator

APPLICATION

The Roto-Safe rotary paddle switch is designed to detect high and low levels of bulk granular solids in bins, tanks, silos, and as blockage detectors in spouts where fail-safe detection is required, or for dust hazard areas.

METHOD OF OPERATION

The detection of material is achieved by a rotating paddle. If material impedes the rotation of the paddle, the motor topples of its axis and triggers a contact. The power supply to the motor is cut and the contact signals that a critical level has been reached, which will cause the motor for any inlet or outlet to close down or start up. When the level of the material reaches normal levels again, the motor returns to its initial position and restarts.

In the case of a power failure, the Roto-Safe has a fail safe relay that will signal the control room or sound an audible alarm indicating that the unit is not working. Through the control circuit, this alarm can stop any motor filling or emptying the silo.

The Roto-Safe also has a built in rotation detection circuit. The output operates from 0 to 20 seconds after the motor has stalled. This feature can be tested by using the magnetic test feature on the outside of the case.



ATEX Approved
Versions Available

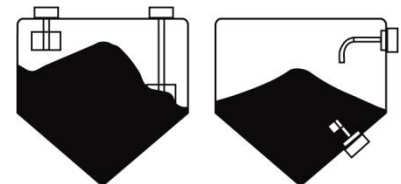
FEATURES

- ▶ Failsafe Paddle Rotation Detection
- ▶ Glass Fiber Reinforced Nylon Housing
- ▶ Vertical Extensions to 14 Feet are Available
- ▶ Internal Sensitivity Adjustment
- ▶ Adjustable Timer
- ▶ Power Fail Alarm
- ▶ Automatic Power Shut-Off
- ▶ 4 Paddle Versions Available
- ▶ Dust Hazard Approved (CSA)

PART NUMBERS/ACCESSORIES

- ▶ RTS1V0C Roto-Safe 110/240 VAC or 24 VDC (Universal Supply)
- ▶ RLISP1 Insertable Paddle
- ▶ RLISP2 Insertable Paddle
- ▶ RLISP3 Three Vane 5" Diameter Paddle
- ▶ RLISP4 Three Vane 7" Diameter Paddle
- ▶ SMP Side Mounting Plate
- ▶ SMPS Side Mounting Plate – Stainless Steel
- ▶ TMP Top Mounting Plate
- ▶ TMPS Top Mounting Plate – Stainless Steel

Mounting Options (Top & Side)

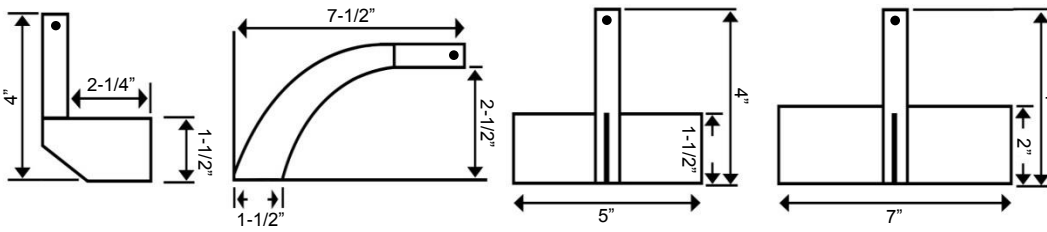


Please refer to instruction manual for correct installation.
Information subject to change or correction. Oct 2013

Roto-Safe™

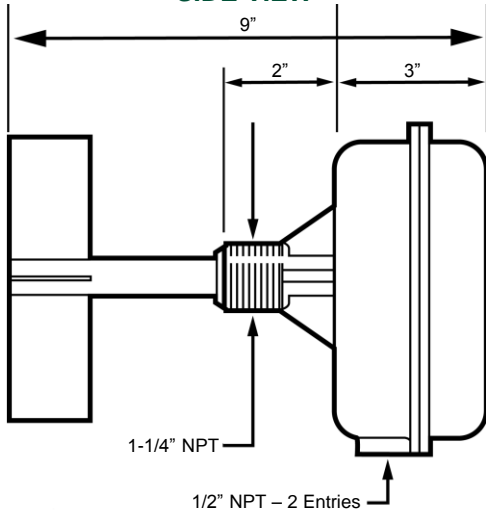
BETTER BY DESIGN

PADDLE VARIATIONS

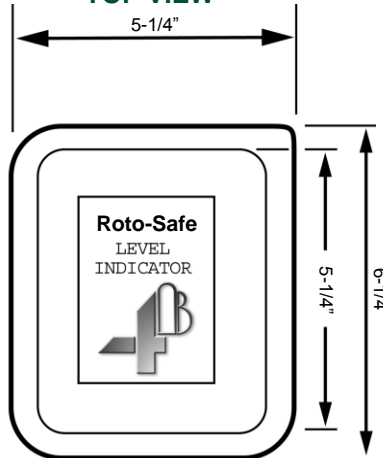


RLISP1	RLISP2	RLISP3	RLISP4
Single Vane - Insertable for Materials Over 70 PCF (Coal, Stones, Etc.)	Single Vane - Insertable for Materials 30 - 70 PCF (Powders, Light Grain & Seed)	Three Vane for Materials 30 - 70 PCF (Grain, Beans, Oil Seeds)	Three Vane for Materials Under 30 PCF (Flour & Light Materials)

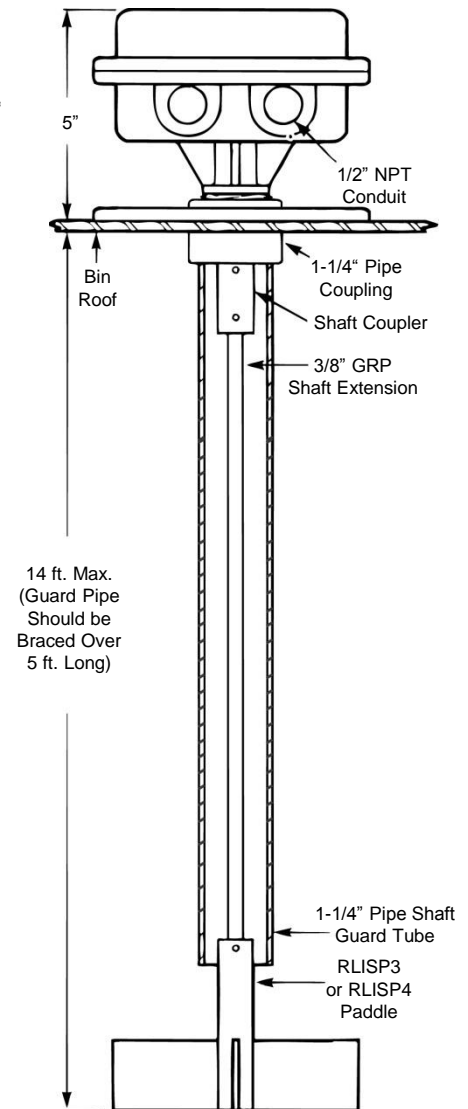
SIDE VIEW



TOP VIEW



WITH SHAFT EXTENSION



TECHNICAL SPECIFICATIONS

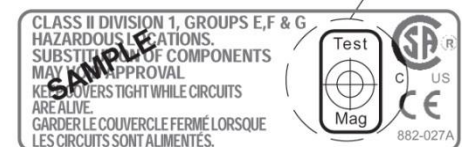
Roto-Safe Rotary Paddle Level Indicator

RTS1V0C	
Power Supply:	120/240 VAC or 24 VDC (Universal Supply)
Supply Tolerance:	± 10%
Power Consumption:	450 mA
Fuse:	5 Amp
Operating Temperature:	-4°F (-20°C) to + 140°F (60°C)
Output:	Voltage Free Relay
Contact Rating:	Rated at 3 Amps/250 Volts
Time Delay:	0 - 120 Seconds (Adjustable)
Output Mode:	Hi/Low Level (Selectable)
Sensitivity:	Normal and Low Ranges (Selectable)
Conduit Entry:	Two, 1/2" NPT
Mounting:	1-1/4" NPT
Connections:	Screw Terminal Block
LED Indicators (3):	Power On, Motion and Output On
Enclosure:	Flame Retardant Glass Reinforced Nylon
Protection:	IP65, NEMA 4
Approvals:	CSA Class II Div. 1 Groups E, F, G CE and ATEX (Available)



TEST FEATURE

Apply Magnet Here To Test Unit



(Label on Back of Unit)

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

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