

RLI "SHAKER"

Rotary Paddle Level Indicator

APPLICATION

The RLI "SHAKER" rotary paddle switch is used to detect high and low levels of bulk granular solids in bins, tanks and silos. It can also be used to detect plug conditions in spouts, where long life and fail-safe detection is required.

METHOD OF OPERATION

Utilizing a unique stepper motor drive, the RLI "SHAKER" rotates clockwise, then counter-clockwise and then shakes to shed any excess material build up. If the paddle rotation is impeded at any time by the bulk material then the electronic circuit provides a signal for level indication or control.

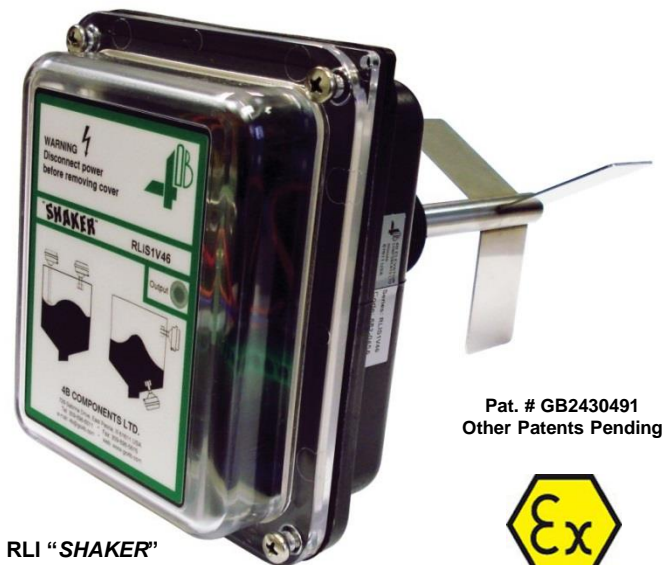
The RLI "SHAKER" uses fewer mechanical parts compared with standard rotary level indicators. No gearbox or clutch is required as the stepper motor drive is directly coupled to the output shaft and is practically indestructible and cannot be damaged by forced or backwards rotation. Also, an adjustable torque control allows one unit to cover many different densities of material, and provides easy on site calibration without having to change paddles.

FEATURES

- ▶ Shaking Action for Shedding Material Build Up
- ▶ User Adjustable Torque Control
- ▶ Direct Stepper Motor Drive
- ▶ No Clutch and No Gearbox
- ▶ Fail-Safe Rotation Detection
- ▶ Glass Fiber Reinforced Nylon Housing
- ▶ Vertical Extensions to 14 feet
- ▶ Adjustable Timer

PART NUMBERS/ACCESSORIES

- ▶ RLIS1V46 RLI "SHAKER" 24 - 240 VAC/VDC (Universal Supply)
- ▶ RLISP1 One Vane Insertable Paddle
- ▶ RLISP2 One Vane Insertable Paddle (Extended)
- ▶ RLISP3 Three Vane 5 in. Diameter Paddle
- ▶ RLISP4 Three Vane 7 in. Diameter Paddle
- ▶ SMP Side Mounting Plate
- ▶ SMPS Side Mounting Plate (Stainless Steel)
- ▶ TMP Top Mounting Plate
- ▶ TMPS Top Mounting Plate (Stainless Steel)



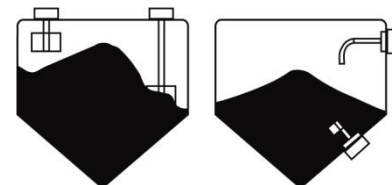
RLI "SHAKER"
& RLISP3 Paddle

Pat. # GB2430491
Other Patents Pending



ATEX Approved
Versions Available

Mounting Options (Top & Side)



RLISP1 Paddle

RLISP2 Paddle

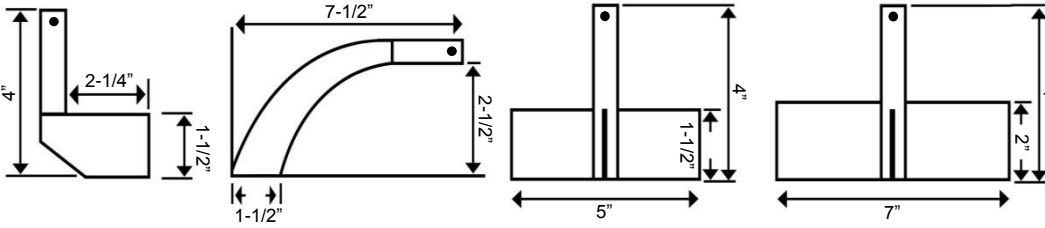


4B
Components
Limited

RLI "SHAKER"

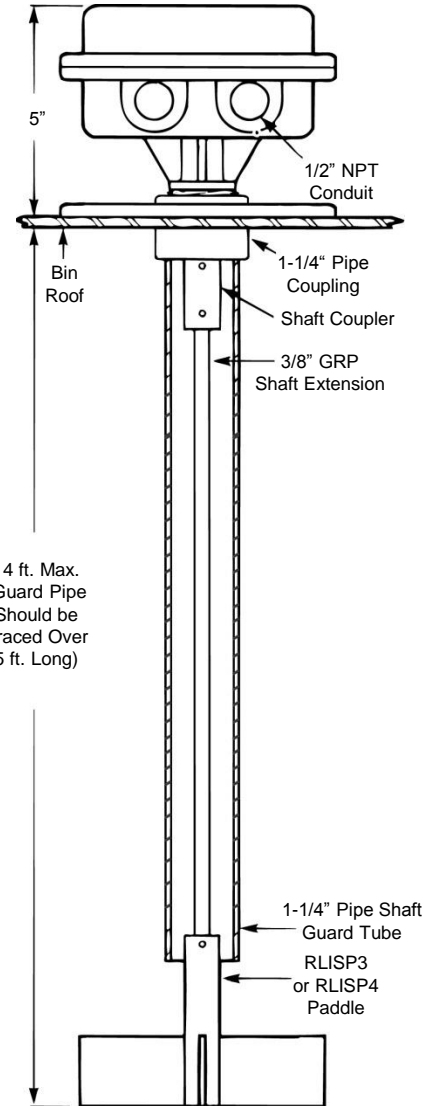
BETTER BY DESIGN

PADDLE VARIATIONS

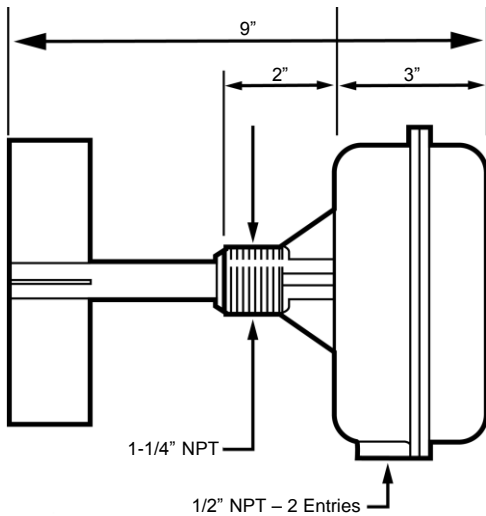


RLISP1	RLISP2	RLISP3	RLISP4
Single Vane - Insertable for Materials Over 70 PCF (Coal, Stones, Etc.)	Single Vane - Insertable for Materials 30 - 70 PCF (Powders, Light Grain & Seed)	Three Vane for Materials 30 - 70 PCF (Grain, Beans, Oil Seeds)	Three Vane for Materials Under 30 PCF (Flour & Light Materials)

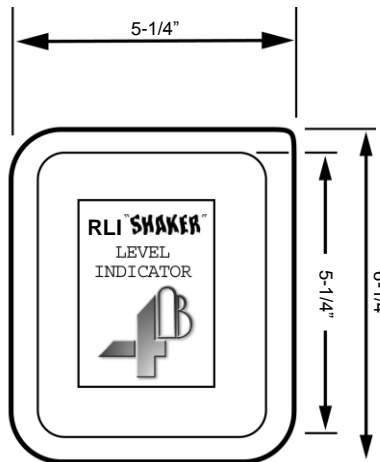
WITH SHAFT EXTENSION



SIDE VIEW



TOP VIEW



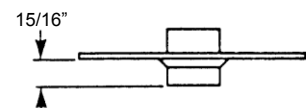
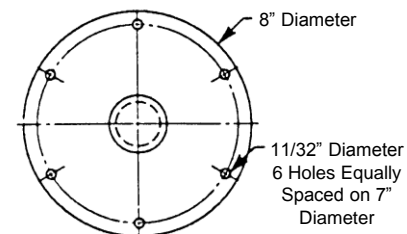
TECHNICAL SPECIFICATIONS

RLI "SHAKER" Rotary Paddle Level Indicator

RLI "SHAKER"	
Power Supply:	120/240 VAC or 24 VDC (Universal Supply)
Supply Tolerance:	± 10%
Power Consumption:	6 VA Max AC - 50 mA Max DC
Fuse:	5 Amp
Operating Temperature:	-4°F (-20°C) to + 130°F (54°C)
Output:	Voltage Free Relay
Contact Rating:	Rated at 2.5 Amps/240 Volts
Time Delay:	0 - 30 Seconds (Adjustable)
Output Mode:	Hi/Low Level (Selectable)
Calibration:	Electronic Torque Control (Adjustable)
Conduit Entry:	Two, 1/2" NPT
Mounting:	1-1/4" NPT
Connections:	Screw Terminal Block
LED Indicators:	Output
Enclosure:	Flame Retardant Glass Reinforced Nylon
Approval:	ATEX Approved Versions Available
Weight:	4.4 lb. (Power Pack Only)



MOUNTING PLATE



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

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