

## Thermo Scientific Ramsey™ RT Series

Point Level Monitoring of Solids in Bins, Vessels and Chutes

Thermo Scientific Ramsey RT Series rotary level controls can eliminate spills, material waste and downtime by preventing bin overflows, plugged chutes and empty bins. They work equally well as high or low-level indicators in plastic, food, chemical, raw ore, aggregate and many other solid material applications. This gives you the flexibility and control you need to maximize the performance of your process and improve your bottom line.



### Features & Benefits

- Simple, rugged construction using fewer parts for more reliable operation
- De-energizing motor for extended motor life
- Three bearings for greater shaft support and dependability
- Dust-tight, die-cast aluminum housing
- Model RTX is UL Listed and CSA Certified for NEC Class 1 & 2, Div. 1 & 2, Groups C, D, E, F & G

Thermo Scientific Ramsey RT rotary level controls are designed for point level monitoring of solids in bins, vessels and chutes. They can eliminate spills, material waste and downtime by preventing bin overflows, and by detecting plugged chutes and empty bins. These controls work equally well with plastics, food, chemicals, raw ores, aggregate and other solid materials.

The design of the Ramsey RT eliminates the most common causes of rotary control failure. The control's de-energizing motor will shut off when material is present, rather than entering a stalled condition. This reduces wear and operating temperature, thereby extending motor life. Three drive shaft bearings and a sealed, lubricated gear assembly make these the most reliable rotary level controls on the market.

The controls can be installed vertically on the top of a bin or chute, or horizontally on the side. Simple installation is achieved using the optional top or side mounting plates. As an alternative, they can be mounted using a standard 32 mm (1.25 in) pipe coupling for top mounting or a half-coupling for side mounting.

All Ramsey RT Series rotary level controls are ISO-9001 certified.

### Options

- Side Mounting Plates: Carbon or Stainless Steel
- Top Mounting Plates: Carbon or Stainless Steel
- Shaft Extensions: Galvanized or Stainless Steel
- Pipe Guards: Galvanized or Stainless Steel

### Thermo Scientific Ramsey RT-Plus Rotary Level Controls

Ramsey RT-Plus rotary level controls offer all the aforementioned advantages, such as the de-energizing motor, bi-directional slip clutch, three sealed bearings and PTFE seals, but they also incorporate supervisory circuitry with optical encoders and timing wheels to monitor shaft rotation. This means that the controls have true failsafe features.

Most rotaries cannot differentiate between a covered state and a failed motor. The optical encoder in these controls is separate from their micro-switch assembly, which is responsible for signaling a covered or uncovered condition. Because its optical encoder and micro-switch assembly function independently, the Ramsey RT-Plus can distinguish an alarm condition from a unit failure.

The Ramsey RT-Plus also features a highly visible LED light system for visual monitoring of paddle rotation, covered conditions and fault conditions. With just a quick glance, the operator can determine the fill status or whether there is a system shutdown. All of this can be done with one light. During normal operation, the LED flashes; during a covered condition, the LED stays on; and if the motor or drive fails, the LED stays off.

For top mounted units, a complete line of shaft extensions and support pipes are available.

### Mounting Plates

Mounting plates are necessary when a completely assembled unit will be mounted on a curved or flat bin wall—from the outside! This can be done by cutting a 140 mm (5.5 in) hole into the bin and creating six bolt holes to match the mounting plate. The plate, with the unit attached, is then bolted in place. All mounting plates are available in carbon or stainless steel.



#### Ramsey RP-1 Rotary Paddle

- Stainless steel for light material
- Up to 480 kg/m<sup>3</sup> (30 lb/ft<sup>3</sup>)
- Triple vane paddle, 178 mm (7 in) diameter



#### Ramsey RP-2 Rotary Paddle

- Stainless steel for medium material
- 480 kg/m<sup>3</sup> to 1120 kg/m<sup>3</sup> (30 lb/ft<sup>3</sup> to 70 lb/ft<sup>3</sup>)
- Triple vane paddle, 127 mm (5 in) diameter



#### Ramsey RP-3 Rotary Paddle

- Insertable stainless steel for heavy material
- More than 1120 kg/m<sup>3</sup> (70 lb/ft<sup>3</sup>)
- Single vane paddle, 127 mm (5 in) diameter



#### Ramsey RP-22 Rotary Paddle

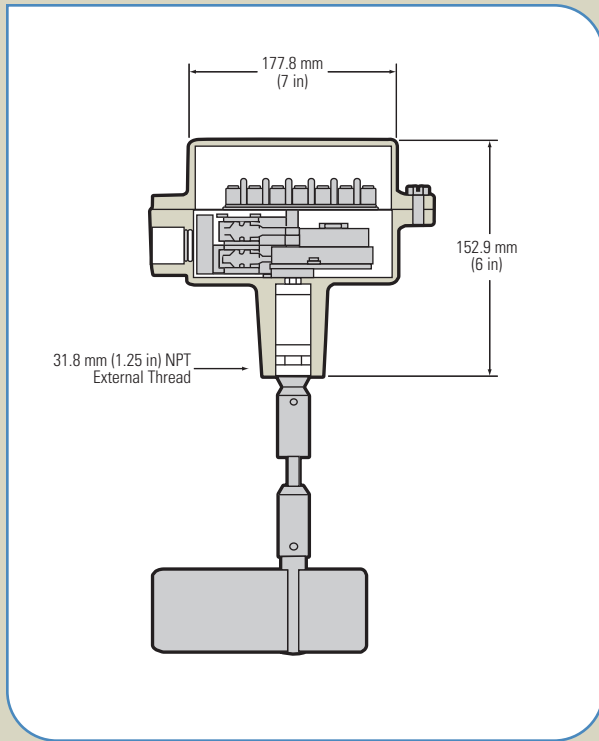
- Stainless steel for medium material
- More than 1120 kg/m<sup>3</sup> (70 lb/ft<sup>3</sup>)
- Triple vane paddle, 127 mm (5 in) diameter



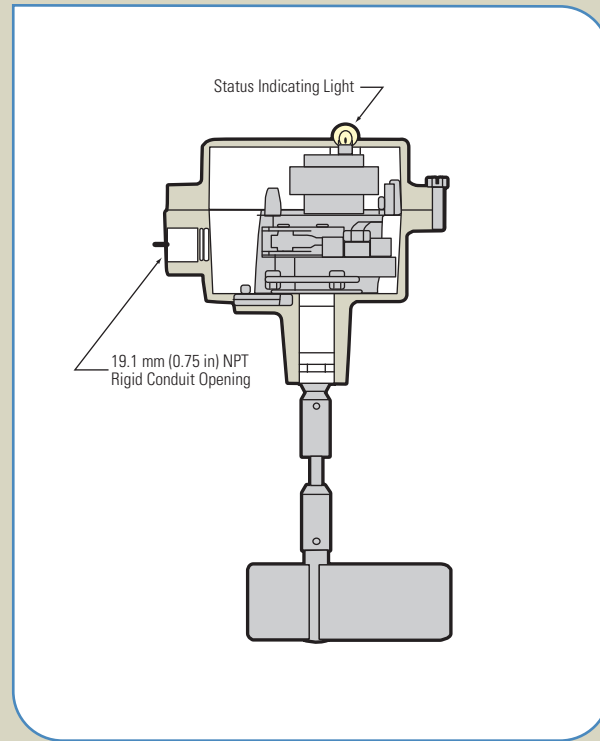
#### Ramsey RP-23 Rotary Paddle

- Insertable stainless steel for medium to heavy material
- Single bayonet vane paddle

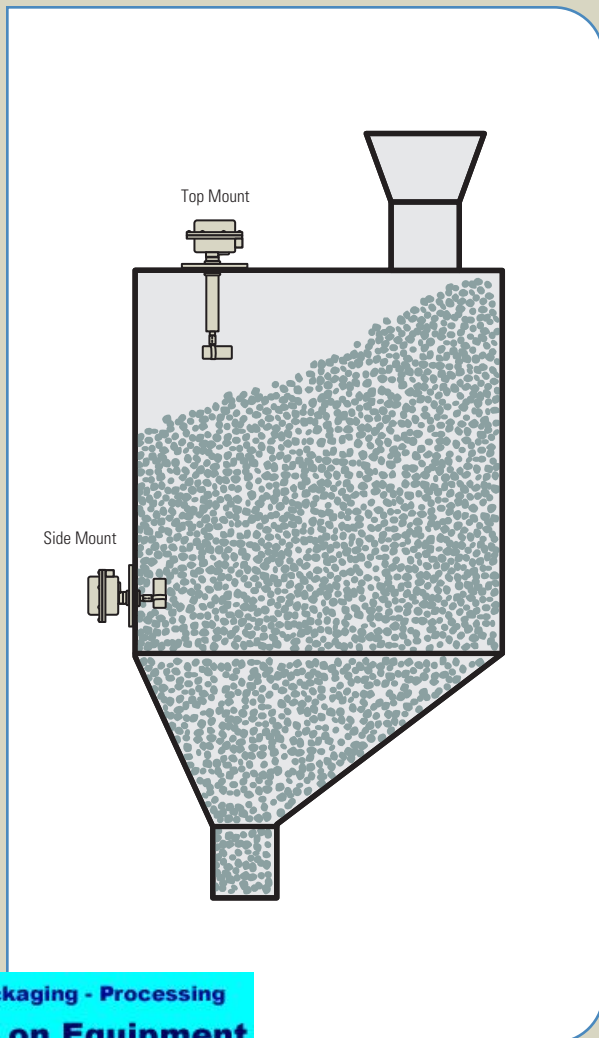
**Ramsey RT Rotary Level Control**



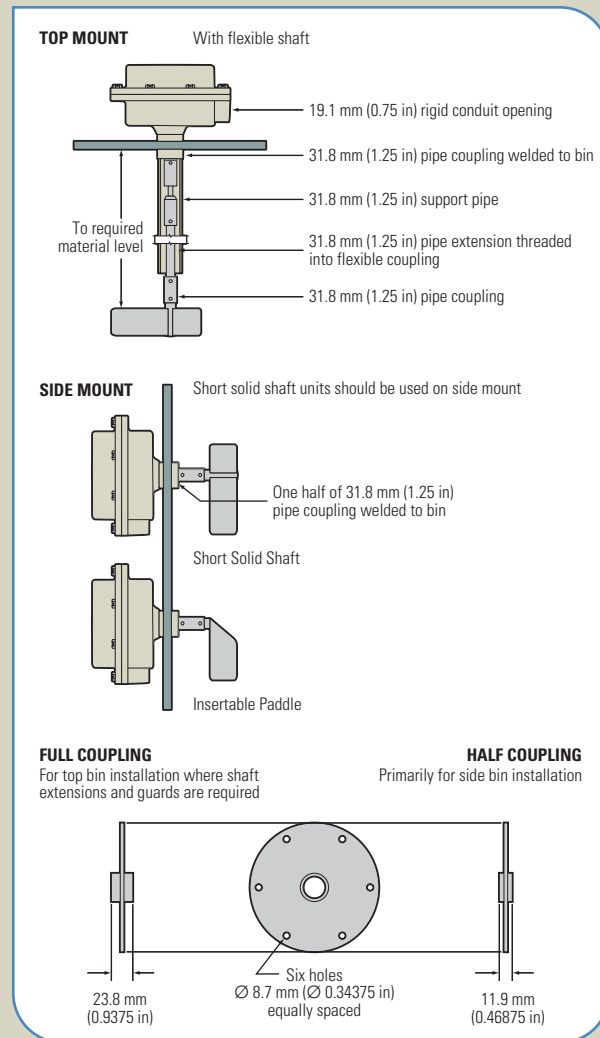
**Ramsey RT-Plus Rotary Level Control**



**Mounting Positions for Ramsey RT Series Rotary Level Controls**



**Mounting Accessories for Ramsey RT Series Rotary Level Controls**



## Thermo Scientific Ramsey RT Series

### Ramsey RT Control

Contact Rating	SPDT 15 A 110 VAC
Input Voltage	110 VAC
Enclosure Rating	NEMA-3, 4 and 12
Enclosure Material	Die-cast aluminum
Shaft Material	316 stainless steel
Paddle	316 stainless steel or polyethylene

### Ramsey RTE Control

Contact Rating	SPDT 15 A 110 VAC
Input Voltage	Specify 12, 24 or 240 VAC; 12 or 24 VDC
Enclosure Rating	NEMA-3, 4 and 12
Enclosure Material	Die-cast aluminum
Shaft Material	316 stainless steel
Paddle	316 stainless steel or polyethylene

### Ramsey RTX Control

Contact Rating	SPDT 15 A 110 VAC
Input Voltage	Specify 24, 110 or 240 VAC; 12 or 24 VDC
Enclosure Rating	Explosion-proof; UL and CSA approved for Class II, Groups E, F & G; Hazardous locations, NEMA-9
Enclosure Material	Die-cast aluminum
Shaft Material	316 stainless steel
Paddle	316 stainless steel or polyethylene

### Ramsey RT-Plus Control

Contact Rating	DPDT 10 A 250 VAC; SPDT supervisory 10 A 250 VAC/normal/fault
Input Voltage	Multiple 24, 120, 240 VAC
Enclosure Rating	NEMA-9; CSA approved for Class II, Groups E, F & G; Hazardous locations
Enclosure Material	Die-cast aluminum; USDA approved powder coat finish
Shaft Material	316 stainless steel
Paddle	316 stainless steel or polyethylene

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