



## VERSATILE ENOUGH TO BECOME YOUR GLOBAL STANDARD

The Roto-Bin-Dicator is the most universal of all level sensing technologies and is the most popular level switch used in dry bulk materials. The Roto-Bin-Dicator is a rotating paddle type, bulk material level sensor offered with a wide variety of paddle options for unequalled application versatility. It is easy to install and requires no special tools or calibration.

## FEATURES AND BENEFITS

- A simple, mechanical mechanism means no calibration is required for quick installation
- Long-lasting, sealed motor keeps maintenance and replacement costs low
- Extensive Paddle Options to adapt to a variety of applications
- Frame designed to enable connection flexibility  
Imperial or Metric conduit entry options  
Process Fitting can be made to fit any connection

## SPECIFICATIONS

### FUNCTIONAL

|                     |  |
|---------------------|--|
| Power Requirements  | 24/120/240 VAC; 50/60 Hz, 24 VDC   |
| Power Consumption   | 5 watts  |
| Motor               | 1 rpm  |
| Fail-Safe Circuitry | Low level fail safe  |
| Switch Rating       | General Purpose: SPDT 20A @ 125/250/480 VAC.   |
| Process Temperature | -20° to 302° F (-29° to 150° C) Standard<br>Up to 500° F (Up to 260° C) with Extension 3 and Lag |

### PHYSICAL

|                        |   |
|------------------------|---|
| Drive Shaft Assembly   | Precision machined shaft with two shielded ball bearings  |
| Shaft Seal             | Teflon®/Viton® Lipseal rated 1/2 micron @ 30 psi (2.1 kg/cm <sup>2</sup> ) @ 400° F (204° C)  |
| Housing and Cover      | Type 4X/IP66 polyester coated aluminum casting  |
| Mounting Plate         | 8" outside diameter with 1 1/4" NPT pipe threaded coupling; standard polyester coated mild steel; optional 304 stainless steel; H-19 Half Coupling; H-192 Full Coupling |
| Conduit Entry          | 3/4" NPT or M20 x 1.5   |
| Rigid Shaft and Paddle | Metal parts of all designs are 316 stainless steel  |
| Flex Shaft             | Available in neoprene, 155° F (68° C) or silicone, 400° F (204° C) coatings   |
| Shipping Weight        | Aluminum housing 10 lbs (4.5 kg)<br>Stainless steel housing 16 lbs (7.3 kg)   |

NOTE. Consult Factory where the housing temperature will be above 200° F (93° C). Shaft extensions and guards are available in galvanized or 316 SS. The Roto-Bin-Dicator® is also available with the Super-Safe-Plus option.

## ROTO-BIN-DICATOR - ORIGINAL - PART ONE

|                           |                               |
|---------------------------|-------------------------------|
| <b>POWER PACK OPTIONS</b> | <b>COMPLETE CONFIGURATION</b> |
|---------------------------|-------------------------------|

### Process Fitting

- X1 = Aluminum Frame Neck, NPT 1-1/4"
- X2 = 304 Stainless Steel Frame Neck, NPT 1-1/4" (Note 12)
- C2 = 316 Stainless Steel NPT 1-1/4"
- D2 = 316 Stainless Steel NPT 1-1/2"
- E2 = 316 Stainless Steel BSP Tapered R 1-1/4"
- F2 = 316 Stainless Steel BSP Tapered R 1-1/2"
- J2 = 316 Stainless Steel BSP Straight G 1-1/4" (Note 11)
- K2 = 316 Stainless Steel BSP Straight G 1-1/2" (Note 11)
- M2 = 316 Stainless Steel Tri-Clamp 1-1/2" (Note 13)
- N2 = 316 Stainless Steel Tri-Clamp 2" (Note 13)

### Housing Finish

- A = Powder Coated Aluminum
- B = 304 stainless steel (Notes 2, 3, 12)
- C = Epoxy Painted Aluminum
- D = Electroless Nickel Plated Aluminum (Note 2)

### Model (Note 1)

#### Ordinary Location

- Standard Roto-Bin-Dicator
- R-H = 120 VAC, 1SPDT
- RA-H = 120 VAC, 2SPDT
- RB-H = 240 VAC, 1SPDT
- RC-H = 240 VAC, 2SPDT
- RD-H = 24 VDC, 1SPDT
- RE-H = 24 VDC, 2SPDT
- RF-H = 24 VAC, 1SPDT
- RG-H = 24 VAC, 2SPDT
- R-HM = 120 VAC, 1SPDT, Metric
- RA-HM = 120 VAC, 2SPDT, Metric
- RB-HM = 240 VAC, 1SPDT, Metric
- RC-HM = 240 VAC, 2SPDT, Metric
- RD-HM = 24 VDC, 1SPDT, Metric
- RE-HM = 24 VDC, 2SPDT, Metric
- RF-HM = 24 VAC, 1SPDT, Metric
- RG-HM = 24 VAC, 2SPDT, Metric

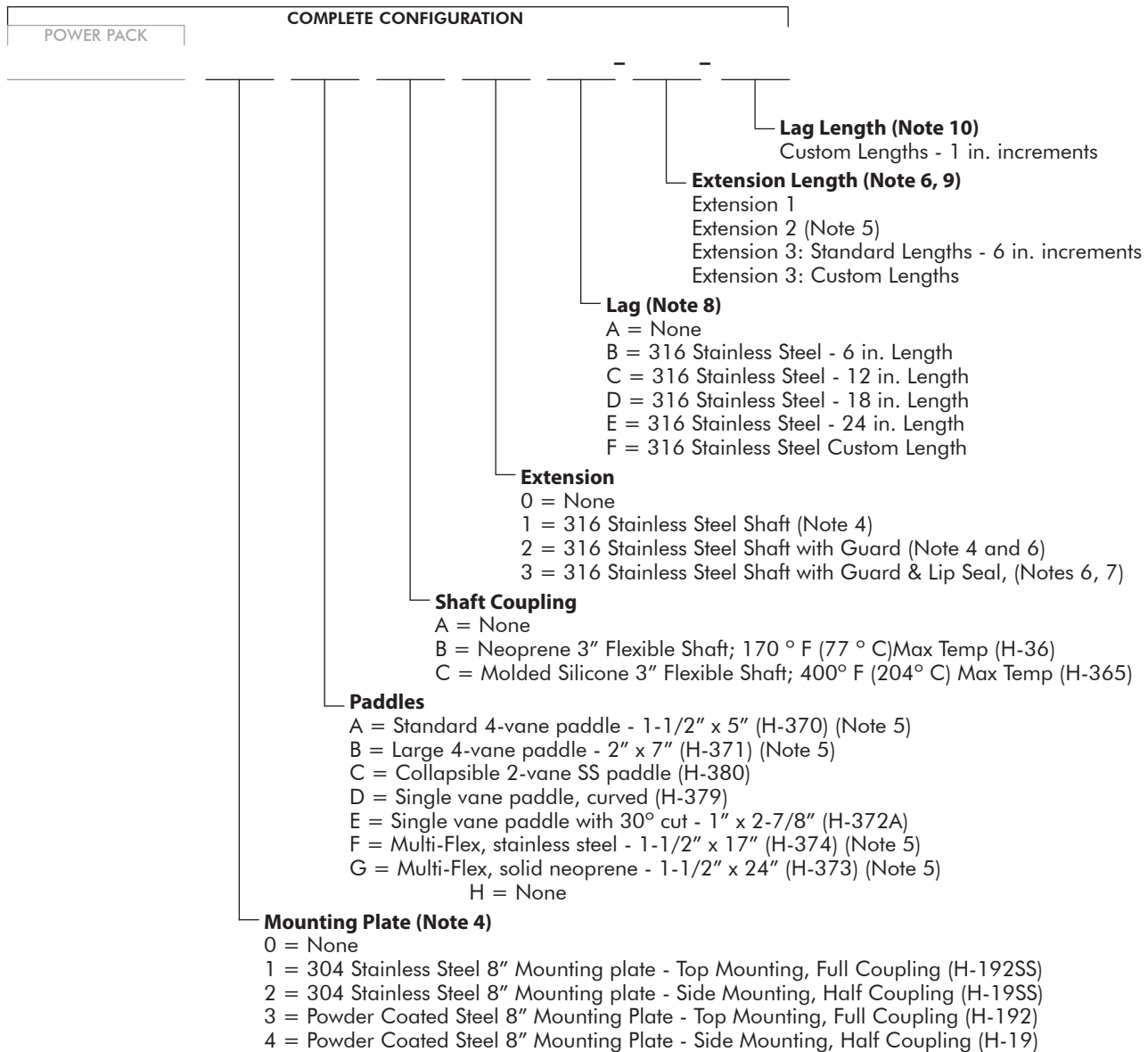
Note 1. For PowerPack ordering: for powder coated aluminum and 1-1/4 in. NPT order by model number only.

#### Hazardous Location

- Standard Roto-Bin-Dicator
- RX-H = 120 VAC, 1SPDT
- RXA-H = 120 VAC, 2SPDT
- RXB-H = 240 VAC, 1SPDT
- RXC-H = 240 VAC, 2SPDT
- RXD-H = 24 VDC, 1SPDT
- RXE-H = 24 VDC, 2SPDT
- RXF-H = 24 VAC, 1SPDT
- RXG-H = 24 VAC, 2SPDT
- RX-HM = 120 VAC, 1SPDT, Metric with ATEX and IEC approvals
- RXA-H M= 120 VAC, 2SPDT, Metric with ATEX and IEC approvals
- RXB-HM = 240 VAC, 1SPDT, Metric with ATEX and IEC approvals
- RXC-HM = 240 VAC, 2SPDT, Metric with ATEX and IEC approvals
- RXD-HM = 24 VDC, 1SPDT, Metric with ATEX and IEC approvals
- RXE-HM = 24 VDC, 2SPDT, Metric with ATEX and IEC approvals
- RXF-HM = 24 VAC, 1SPDT, Metric with ATEX and IEC approvals
- RXG-HM = 24 VAC, 2SPDT, Metric with ATEX and IEC approvals

Note 14: For Hazardous Location models that require extended ambient temperature -40° to 113°F (-40° to 45°C), add suffix 'T' to model number.  
Example: RX-HT

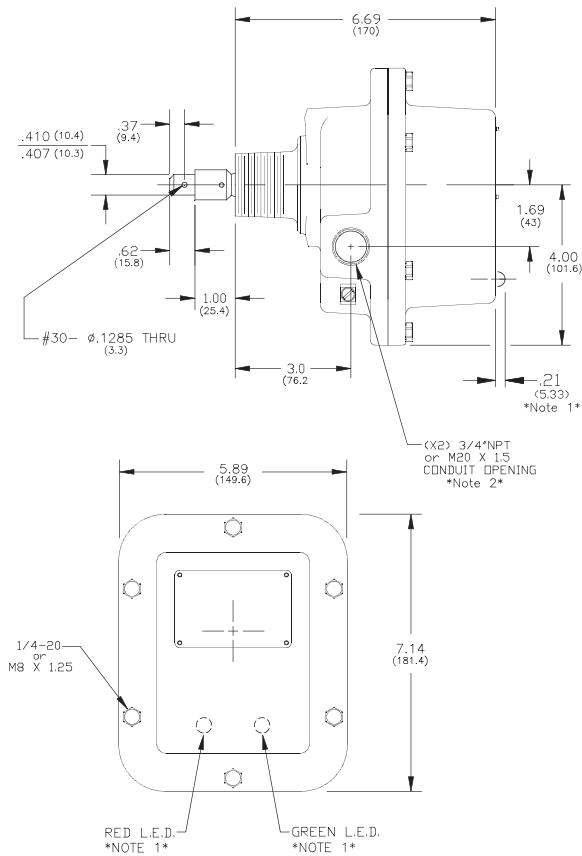
## ROTO-BIN-DICATOR - ORIGINAL - PART TWO



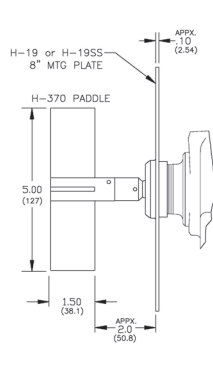
### Notes:

- Hazardous location approval not available with stainless steel Housing Finish or electroless nickel plated aluminum Housing Finish.
- Function Test FOB not available with stainless steel Housing Finish
- For Mounting Plates Process Fitting must be X1, X2, or C2. Extensions 1 and 2 must use Mounting Plate 1 or 3 (Top Mounted)
- Mounting plate is required.
- Shaft guard length will be 2 in. (5 cm) shorter than extension length unless otherwise noted
- Process Fitting cannot be X1 or X2 and maximum length is 36 in. (91 cm) and if used with Extension, the maximum total length is 48 in. (122 cm)
- Lag not available with process fitting X1 or X2, and if used with Extension, the maximum total length is 48 in. (122 cm)
- Maximum extension length is 180 in. (4.6 m), minimum length is 3 in. (7.6 cm); leave blank if not used.
- Maximum lag length is 24 inches, minimum length 1 in. (2.5 cm); leave blank if not used
- EPDM Flat gasket is included for Process Fittings with straight threads.
- X2 Process Fitting and Stainless Steel Housing Finish can only be ordered together.
- M2 and N2 Process Fitting only available with C, D, E, F and G Paddles.

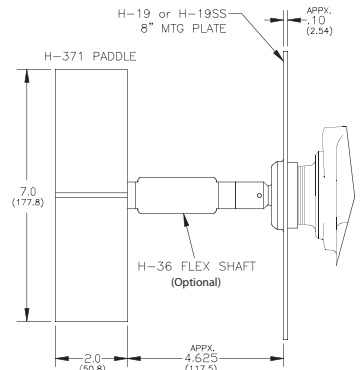
## Housing Dimensions



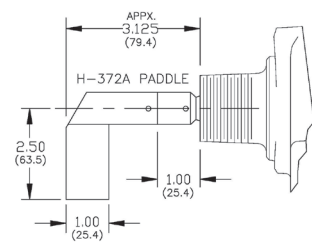
## Standard 4-Vane Paddle



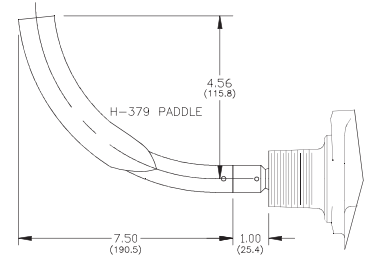
## Large 4-Vane Paddle



## Single Vane Paddle 30° Cut



## Single Vane Paddle Curved



## AGENCY APPROVALS

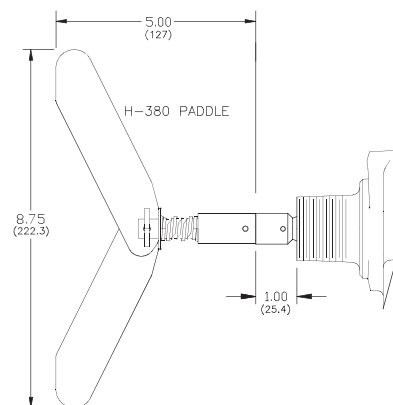
### UL (US and Canada)

- Ordinary Location, Type 4X; IP66
- Hazardous Locations, Type 4X  
Explosion Proof, Class I, Div 1, Groups C, D  
Dust Ignition Proof, Class II, Div 1, Groups E, F, G

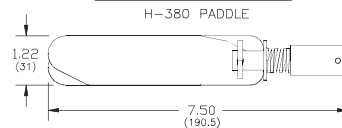
### CE

- Electromagnetic Compatibility Directive
- Low Voltage Directive

## Collapsible Paddle



### COLLAPSED PADDLE



Order from: **C A Briggs Company**

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**venture**  
MEASUREMENT

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