

**BANTAM BIN-DICATOR®**

- 5 3/4" diameter
- 2 diaphragm material options
- Light duty

**AUTO-BIN-DICATOR®**

- 8" diameter
- Cast aluminum housing
- Neoprene or SS diaphragm material
- Medium duty

**MODEL 'A'**

- 10 1/4" diameter
- Explosion proof model avail.
- 7 diaphragm material options
- Heavy duty

DESCRIPTION The original electromechanical point level switch, Bin-Dicator® diaphragm-type level controls were the first to enjoy general usage in the industry. Bin-Dicator® controls eliminate bin overflow, empty bins, clogged conveyors, choked elevators and resulting damage and waste.

HOW IT WORKS The Bin-Dicator® control is a pressure actuated switch for use with free flowing bulk materials at atmospheric pressures. Actuation of the switch is the result of pressure exerted by the bulk material against the diaphragm assembly. De-actuation or switch release is a result of the bulk material clearing away from the diaphragm.

FEATURES AND BENEFITS**Simple and Rugged Construction**

- Can be mounted outside the bin for lower installation costs.

Simple Operating Mechanism

- Makes entire unit readily accessible for inspection, resulting in lower maintenance costs.

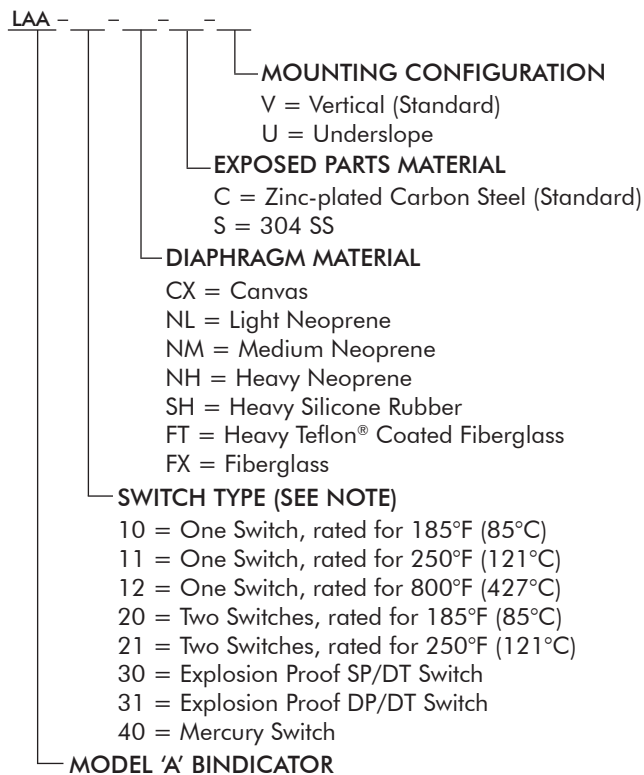
Many Variations Available

- For use in a wide range of dry materials and conditions of temperature, corrosion and moisture.

SPDT Switch

- No need to power electronics.

HOW TO ORDER Model 'A'



Note: High-temperature switches not available with neoprene diaphragms.

HOW TO ORDER Bantam Bin-Dicator®

Diaphragm Material	One Switch	Two Switches
Neoprene (light)	B-1-N, LAB101800	B-2-N, LAB101936
Teflon® Neoprene	B-1-LT, LAB101808	B-2-LT, LAB101944

Note: Specify if all metal parts exposed within the bin need to be stainless steel.

HOW TO ORDER Auto-Bin-Dicator®

Diaphragm Material	General Purpose	Explosion-proof
Neoprene	AB-R, LAD101701	NA
T-302 SS	AB-S, LAD101700	ABX-S, LAD101716

Note: Specify if all metal parts exposed within the bin need to be stainless steel.

SPECIFICATIONS

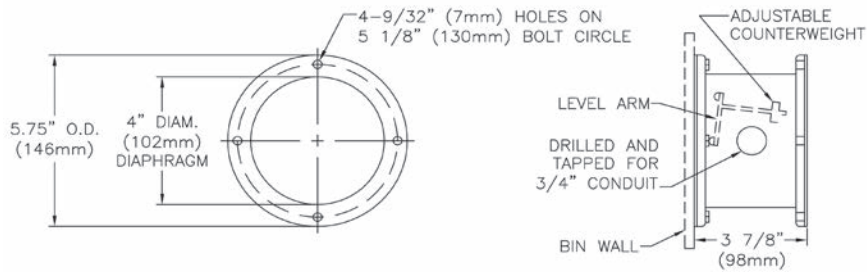
FUNCTIONAL SPECS	
Switch	General Purpose SPDT; may be wired for normally open (NO) or normally closed (NC) operation
	AC Rating 15 amp @ 125, 250 or 480 VAC
	DC Rating 1/2 amp @ 125 VDC; 1/4 amp @ 250 VDC
	HP Rating 1/8 HP @ 125 VAC
Temperature	Explosion-Proof; single-pole double-throw or double-pole double-throw
	1.0 of calibrated span (combined linearity, hysteresis, stability) between 0° and 150° F
Optional	185° F (85° C) standard, Auto and Bantam
	250° F (121° C), 800° F (427° C); Auto and Model "A"
PERFORMANCE SPECIFICATIONS	
Frame	Polyester-coated aluminum casting
Cover	Polyester-coated aluminum casting (Auto and Bantam)
	Standard durable ABS white plastic (Model "A")
Construction	Weather-proof or explosion-proof (Auto)
Diaphragms	Neoprene, Stainless Steel (Auto), Aluminum (Bantam), Steel galvanized back plate; Steel polyester washer (Model "A")
Gasket	Rubber (Bantam), Fiber (Model "A")
Mounting	Can be mounted on underslopes up to 45 degree (Bantam & Model "A")
Shipping Weight	Aluminum 8 lbs (Auto & Bantam), Aluminum 10 lbs (Model "A")
APPROVALS	
	General Purpose: UL, CSA Hazardous Location: UL; Class 1, Groups C & D, Class II, Groups E, F, G CSA: Class 1, Groups C & D, Class II, Groups E, F, G

DIAPHRAGM SELECTION

Diaphragm Material	Max. Temp	Product Wt. Cu./Ft.	Application Remarks
Neoprene Rubber (light)	170° F (77° C)	10-40	Highest sensitivity, abrasion resistant
Neoprene Rubber (medium)	170° F (77° C)	30-100	Strong, resists abrasion, low temperatures
Neoprene Rubber (heavy)	170° F (77° C)	100-350	Strong, resists abrasion, low temperatures
Canvas	200° F (93° C)	10-60	Powders only
Fiberglass	1000° F (538° C)	25-100	Very high temp-see switch temperatures
T-302 SS	800° F (427° C)	30 Min.	Auto-Bin-Dicator® only
Silicone Rubber (heavy)	450° F (232° C)	50-150	Extreme low to medium-high temperature
Teflon® Coated Fiberglass (heavy)	400° F (204° C)	50-150	Corrosion resistant, medium-high temperatures

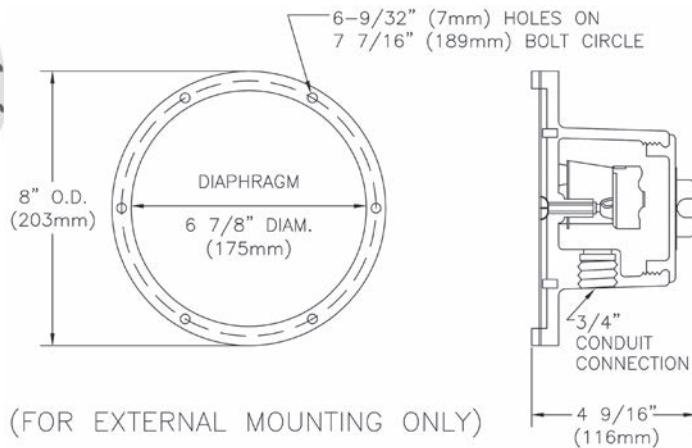
Note: For high temperature applications, special switches may be required in addition to proper diaphragm selection. Please consult factory.

Bantam Bin-Dicator® Dimensions



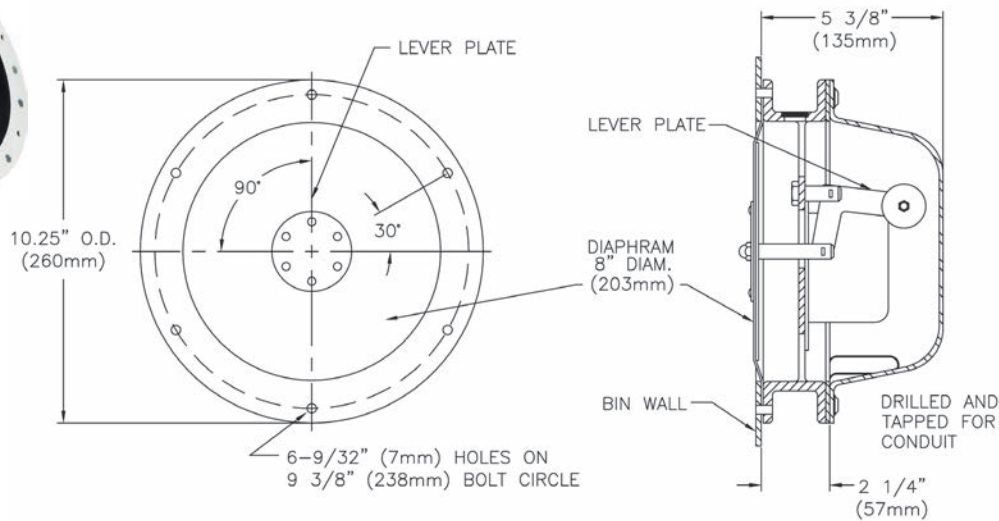
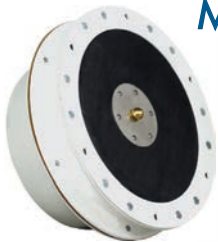
(FOR EXTERNAL MOUNTING ONLY)

Auto-Bin-Dicator® Dimensions



(FOR EXTERNAL MOUNTING ONLY)

Model 'A' Dimensions



(FOR EXTERNAL MOUNTING ONLY)



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622 Mary Street; Suite 101; Warminster, PA 18974
Phone: 267-673-8117 - Fax: 267-673-8118
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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 unequaled 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. Pilot Duty: 345 VA, 115 VAC; 690 VA, 230 VAC
Process Temperature	-20° to 302° F (-29° to 150° C) Standard 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 ²) @ 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) 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

COMPLETE CONFIGURATION

POWER PACK OPTIONS

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

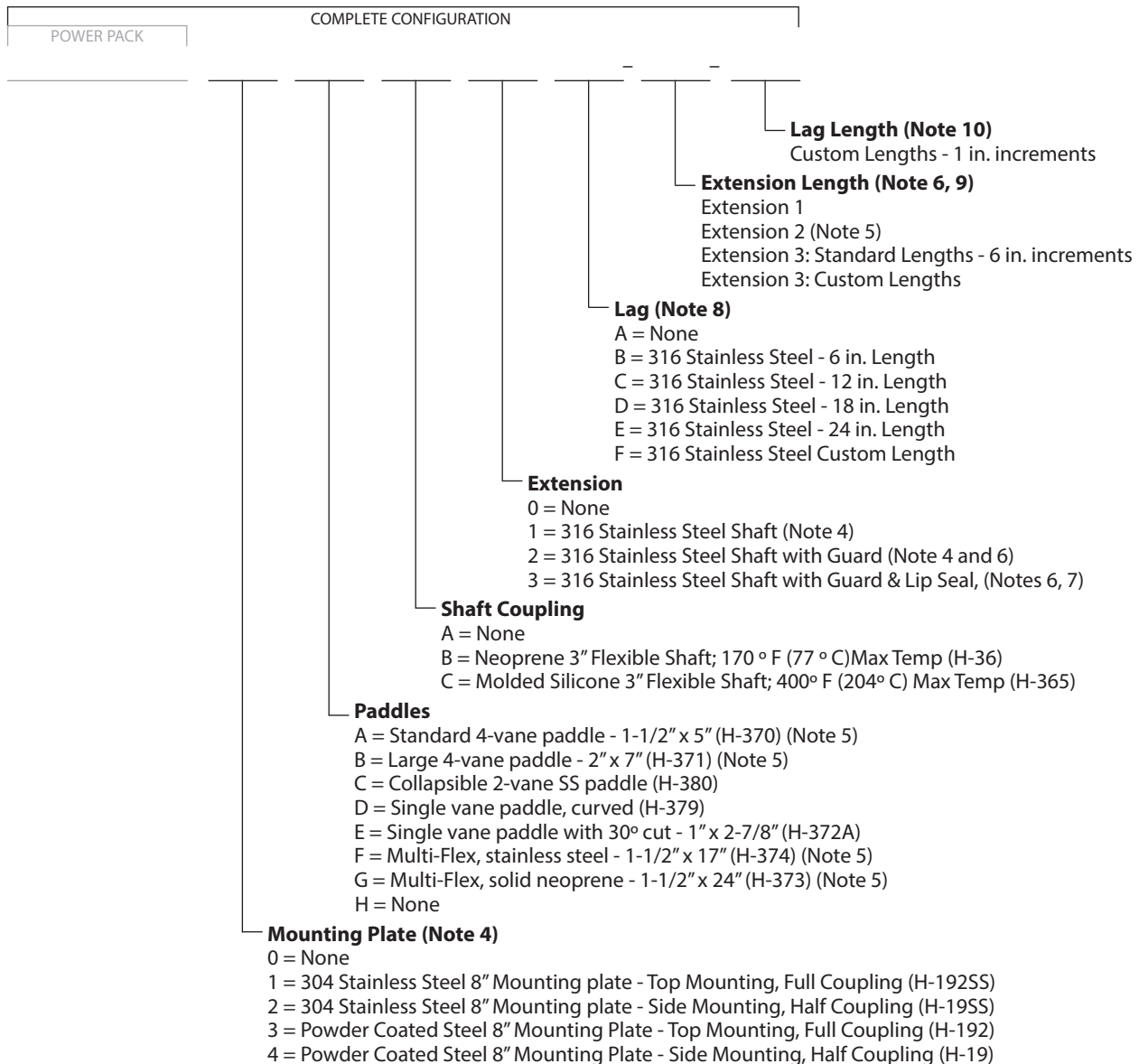
Note 1. For PowerPack ordering: for powder coated aluminum and 1-1/4 in. NPT order by model number only.

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

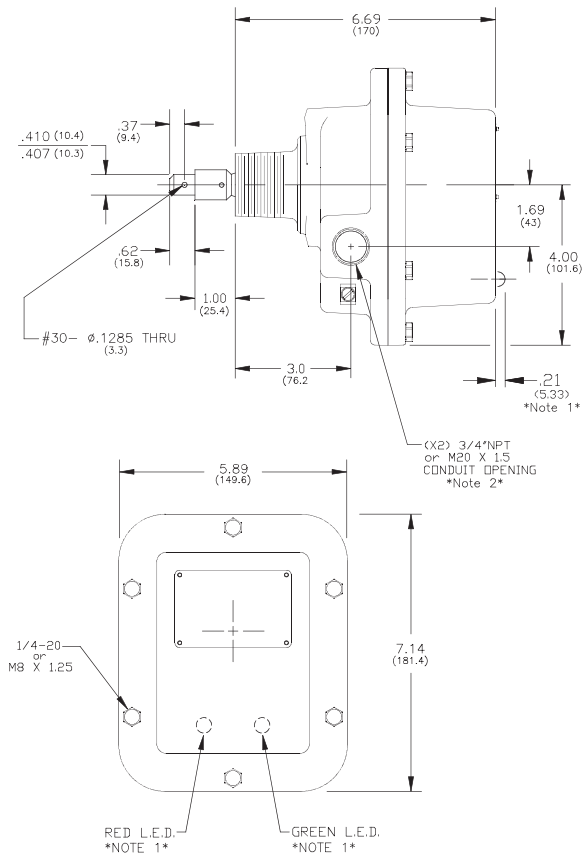
ROTO-BIN-DICATOR - ORIGINAL - PART TWO



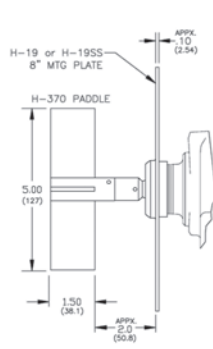
Notes:

- 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.

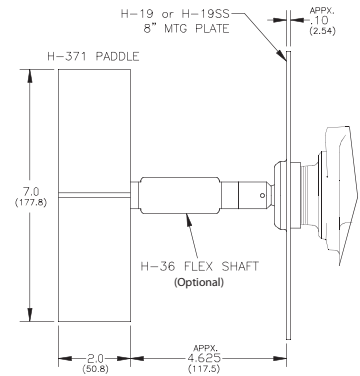
Housing Dimensions



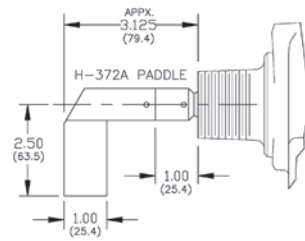
Standard 4-Vane Paddle



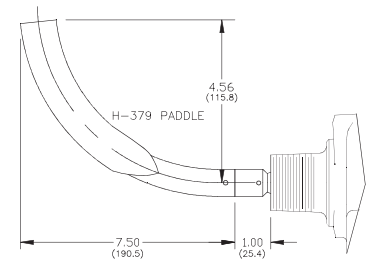
Large 4-Vane Paddle



Single Vane Paddle 30° Cut



Single Vane Paddle Curved



AGENCY APPROVALS

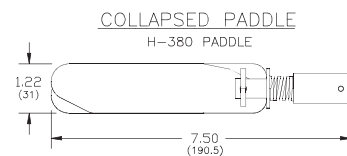
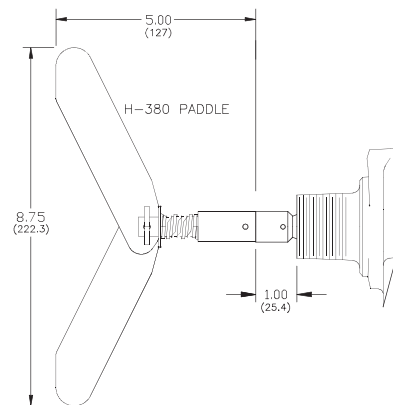
UL (US and Canada)

- 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



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ACTIVELY PROTECTING VALUABLE INVENTORY

The Roto-Bin-Dicator® PRO is a paddlewheel type level device that outperforms others in its class. This simple device monitors the level of dry bulk material and indicates when there has been a change. The fail-safe PRO model is unique in that it comes standard with functional diagnostics that detect a unit fault even when the paddle is buried in material; unlike other paddlewheel devices.

The PRO provides added reliability by employing redundant methods of detection. These methods monitor shaft rotation as well as motor behavior, making it more reliable with regards to not missing a reading or creating a false positive.

FEATURES AND BENEFITS

- **Diagnostics** – While the paddle is in or out of material self-checks are performed to detect unit faults which are differentiated and alerted through LED flash codes
- **High/Low Level Failsafe** – user selectable
- **Motor Pause** – optional setting, motor function will pause after a prolonged period of time where no change in material state is detected, saving power and extending the life of the unit
- **Time Delay** – delay the activation and deactivation of the alarm relay
- **Sensitivity Adjustments** - motor torque can be adjusted +/- 30% to match materials of varying bulk densities
- **Test FOB** – check the functionality of the unit without removing the cover and while the paddle is in or out of material
- **Universal Input Power** provides flexibility to match power availability
- **Fault Option** - optional setting, critical faults trigger an alarm, eliminates need to jumper relays to obtain genuine fail-safe operation
- **Unique Frame Design** to enable connection flexibility
 - Imperial or Metric conduit thread options
 - Process Fitting can be made to fit any connection
 - Extension and lag configurations available for added shaft length or high temperature applications

DETECT & DIFFERENTIATE FAULTS

FUNCTIONAL DIAGNOSTICS

Supply Voltage Fault	The power supply voltage is too low.
Motor Not Connected	The motor has become disconnected from the power supply.
Electronics Temperature Range	The electronic boards have gone outside the accepted temperature range.
Motor Failure	The motor has stopped functioning normally.
Gear Train Failure	Internal rotation mechanics are bound.
Electronics Fault	Communication error between the LED (top) and power supply (bottom) electronic boards.

Roto-Bin-Dicator® PRO

ROTO-BIN-DICATOR PRO - PART ONE

COMPLETE CONFIGURATION

POWER PACK OPTIONS

PRO-A - - -

Shaft Coupling

- A = None
- B = Neoprene 3" Flexible Shaft; 170° F (77 ° C) Max Temp (H-36)
- C = Molded Silicone 3" Flexible Shaft; 400° F (204° C) Max Temp (H-365)

Paddles

- A = Standard 4-vane paddle - 1-1/2" x 5" (H-370) (Note 5)
- B = Large 4-vane paddle - 2" x 7" (H-371) (Note 5)
- C = Collapsible 2-vane SS paddle (H-380)
- D = Single vane paddle, curved (H-379)
- E = Single vane paddle with 30° cut - 1" x 2-7/8" (H-372A)
- F = Multi-Flex, stainless steel - 1-1/2" x 17" (H-374) (Note 5)
- G = Multi-Flex, solid neoprene - 1-1/2" x 24" (H-373) (Note 5)
- H = None

Mounting Plate (Note 4)

- 0 = None
- 1 = 304 Stainless Steel 8" Mounting plate - Top Mounting, Full Coupling (H-192SS)
- 2 = 304 Stainless Steel 8" Mounting plate - Side Mounting, Half Coupling (H-195S)
- 3 = Powder Coated Steel 8" Mounting Plate - Top Mounting, Full Coupling (H-192)
- 4 = Powder Coated Steel 8" Mounting Plate - Side Mounting, Half Coupling (H-19)

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)

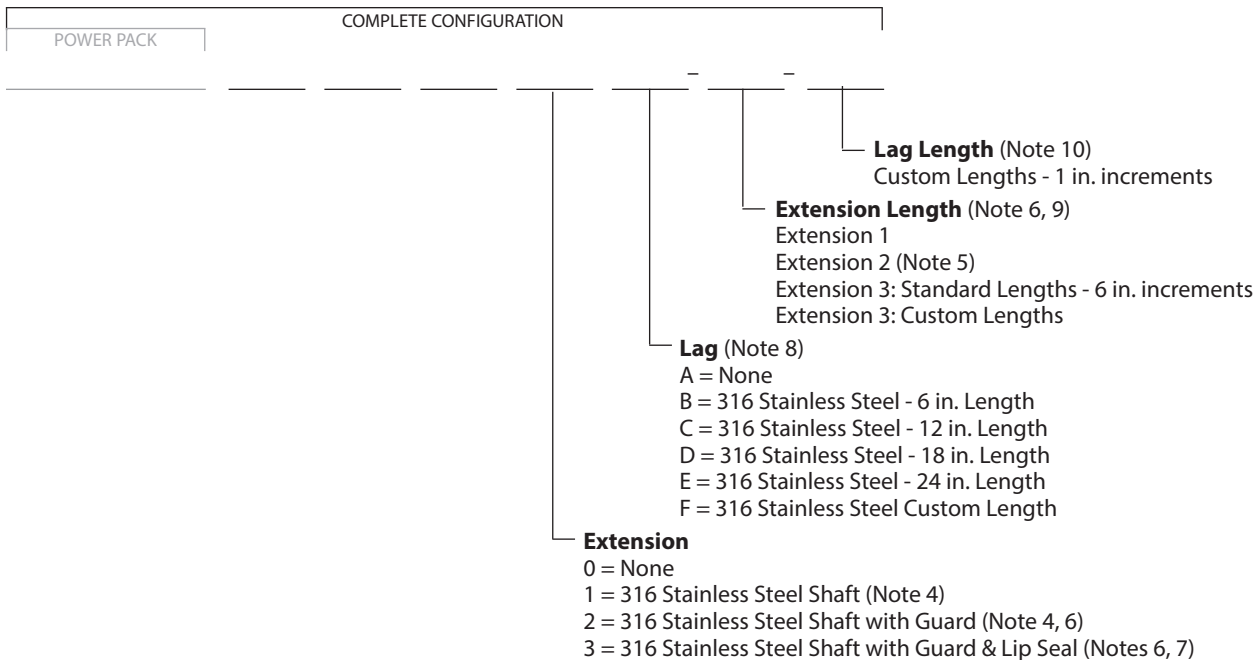
Base Unit

- G = 3/4" NPT Conduit Entry with Ordinary Location Approval
- GM = M20 x 1.5" Conduit Entry with Ordinary Location Approval
- X = 3/4" NPT Conduit Entry with Hazardous Location Approval (Note 2)
- XM = M20 x 1.5" Conduit Entry with Hazardous Location Approval (Note 2)
- XT = 3/4" NPT Conduit Entry with Hazardous Location Approval - Extended Temperature Range (Note 2, 14)
- XMT = M20 x 1.5" Conduit Entry with Hazardous Location Approval - Extended Temperature Range (Note 2, 14)

Model (Note 1)

Roto-Bin-Dicator PRO

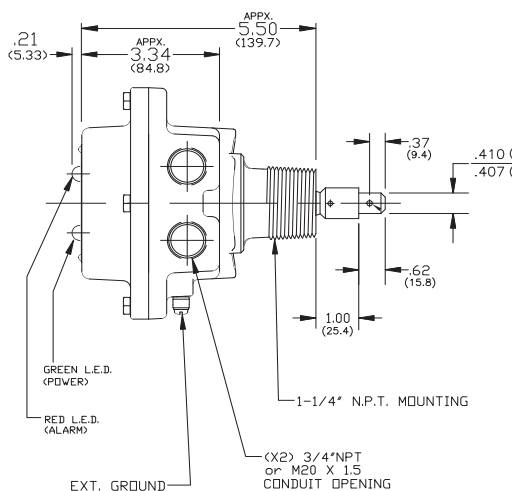
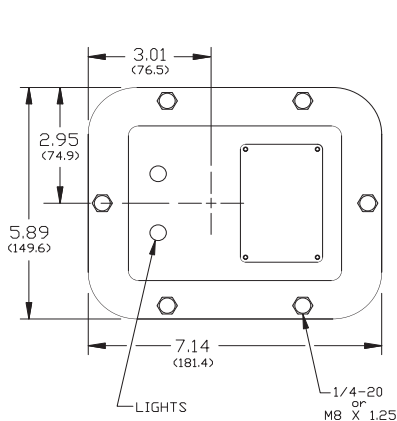
ROTO-BIN-DICATOR PRO - PART TWO



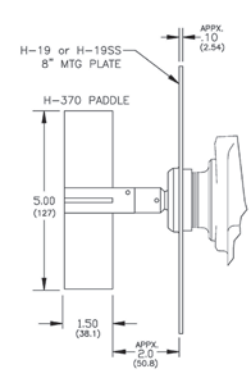
Notes:

1. For PowerPack ordering, stop the part number after the Process Fitting selection.
2. Hazardous location approval not available with stainless steel Housing Finish or electroless nickel plated aluminum Housing Finish
3. Function Test FOB not available with stainless steel Housing Finish
4. For Mounting Plates Process Fitting must be X1, X2, or C2. Extensions 1 and 2 must use Mounting Plate 1 or 3 (Top Mounted)
5. Mounting plate is required.
6. Shaft guard length will be 2 in. (5 cm) shorter than extension length unless otherwise noted
7. 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)
8. Lag not available with process fitting X1 or X2, and if used with Extension, the maximum total length is 48 in. (122 cm)
9. Maximum extension length is 180 in. (4.6 m), minimum length is 3 in. (7.6 cm); leave blank if not used.
10. Maximum lag length is 24 inches, minimum length 1 in. (2.5 cm); leave blank if not used
11. EPDM Flat gasket is included for Process Fittings with straight threads.
12. X2 Process Fitting and Stainless Steel Housing Finish can only be ordered together.
13. M2 and N2 Process Fitting only available with C, D, E, F and G Paddles.
14. Extended ambient temperature range is -40° to 140 °F (-40° to 60° C).

Housing Dimensions



Standard 4-Vane Paddle



SPECIFICATIONS

FUNCTIONAL	
Operating Power	Universal, 120-240 VAC, 50/60 Hz or 24-48 VDC
Power Consumption	3 watts (1.8 watts in Pause Mode)
Ambient Temperature	Ordinary Location: -40° to 158° F (-40° to 70° C) Hazardous Location: -4° to 140° F (-20° to 60° C) Hazardous Location, Extended: -40° to 140° F (-40° to 60° C)
Process Temperature	-20° to 302° F (-29° to 150° C) Standard Up to 500° F (Up to 260° C) with Extension 3 and Lag
Outputs	Main Relay: 8A DPDT @ 240 VAC or 30 VDC (resistive) Auxiliary Relay: 0.46A SPDT @ 150 VAC or 30 VDC
PERFORMANCE	
Time Delay	Field Selectable; up to 25 seconds
Fail Safe	Field Selectable; high/low level
Sensitivity	Minimum 3.4 lbs/ft ³ (54 kg/m ³); Field Adjustable; Paddle Dependent
Diagnostics	LED Indicators with blink codes; see IOM for code interpretation
PHYSICAL	
Enclosure Material	Aluminum, Epoxy Coated Aluminum, Stainless Steel or Electroless Nickel Plated Aluminum
Dual Conduit Entry	3/4" NPT or M20 x 1.5
Mounting Plate Material	Mild Steel or 304 Stainless Steel
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) Stainless steel housing 16 lbs (7.3 kg)

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

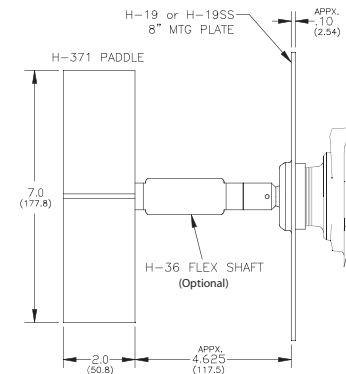


CE

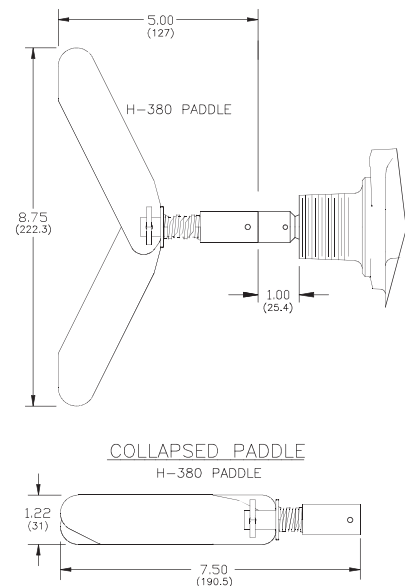
- Electromagnetic Compatibility Directive
- Low Voltage Directive



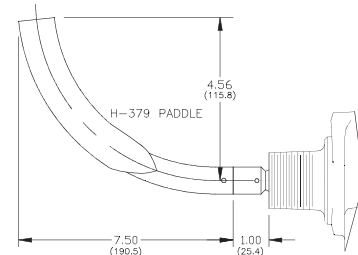
Large 4-Vane Paddle



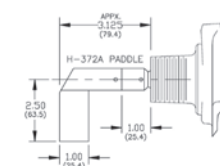
Collapsible Paddle



Single Vane Paddle Curved



Single Vane Paddle 30° Cut



Order from: **C A Briggs Company**
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Single Rod shown with X1 Process Fitting, including 3/4 in. 316 NPT

SIMPLICITY AT ITS BEST WITH CONSISTENT RESULTS

Pulse Point™ II Series models sense when a material reaches or leaves a particular point. These point level switches use electronic vibratory technology to sense the material. This mechanical operation is not affected by the dielectric constant of the material being measured.

The vibrating rod is designed so that the sensing mechanism is located in the tip of the rod. This design allows for the 3/4" NPT process fitting connection - one of the smallest in the industry. This device is also able to be used in hazardous locations, widening its range of applications. The rod is often used for materials larger in size like gravel or pellets.

FEATURES AND BENEFITS

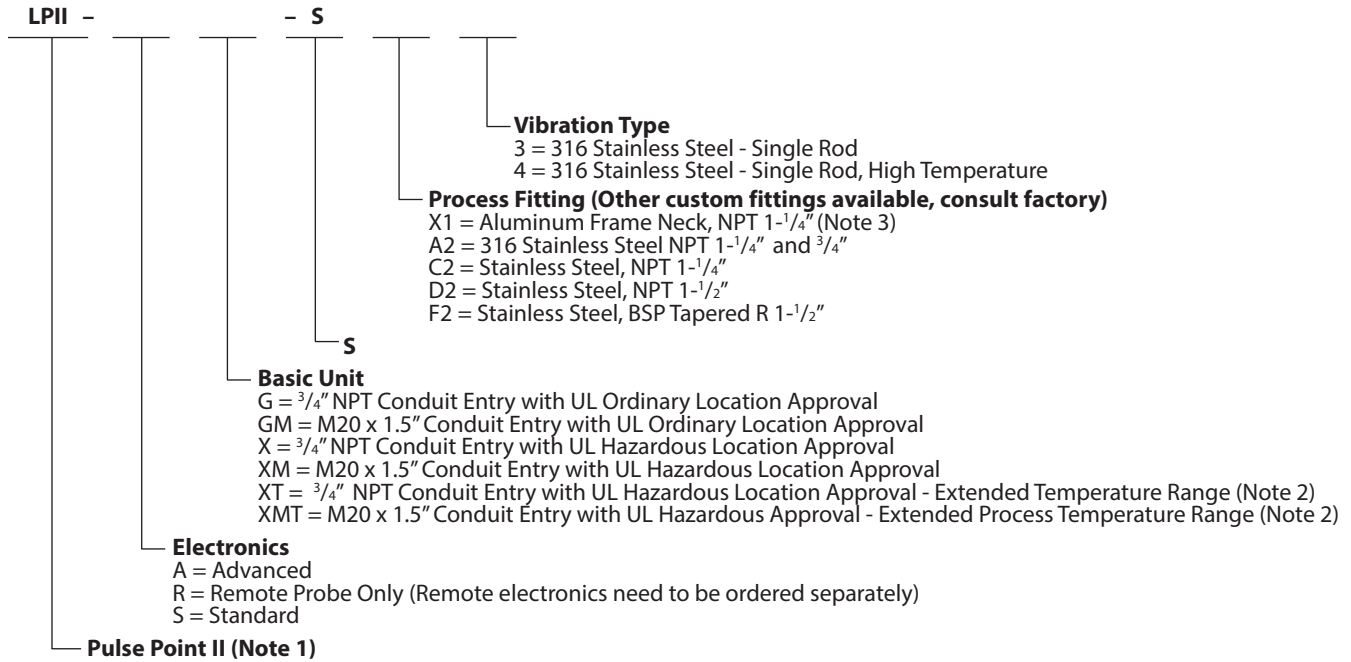
- Universal Input Power provides flexibility.
- Adjustable Time Delay allows the user to determine time between sensing material and the alarm state. Advanced units can permit delays when it detects the presence and absence of material or a combination.
- Sensitivity Settings can be selected to fit specific applications and material requirements down to 1.5 lbs/ft³ (24 kg/m³).
- Move electronics up to 50 ft (15 m) away with the Remote Option.
- Standard and Advanced offering enables the user to choose the option that best suits the application.
- Design allows for resistance to side wall build-up.
- Frame designed to enable connection flexibility: Imperial or Metric conduit entry options. Process Fitting can be made to fit any connection.

STANDARD VS. ADVANCED UNITS

STANDARD	ADVANCED
2 Sensitivity Settings	3 Sensitivity Settings
Time Delay up to 6 seconds	Time Delay up to 150 seconds
Universal Power	Universal Power
	Test FOB
Push Button Test	Push Button Test
	Indicator Lights

Pulse Point™ II ROD

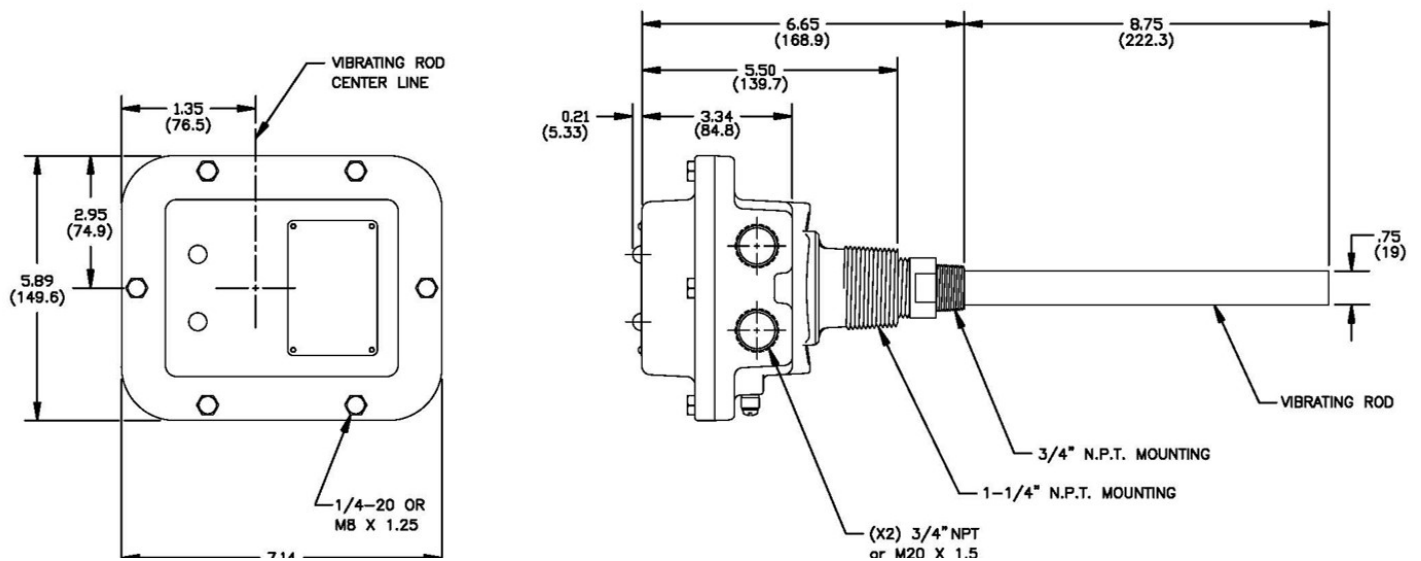
PULSE POINT II - STANDARD



- NOTES: 1. Units have Powder Coated Aluminum Housing Finish.
 2. Extended ambient temperature range is -40° to 158°F (-40° to 70°C).
 3. For Vibration Types 3 and 4, X1 Process Fittings will include a 3/4" NPT 316 stainless steel bin connector.

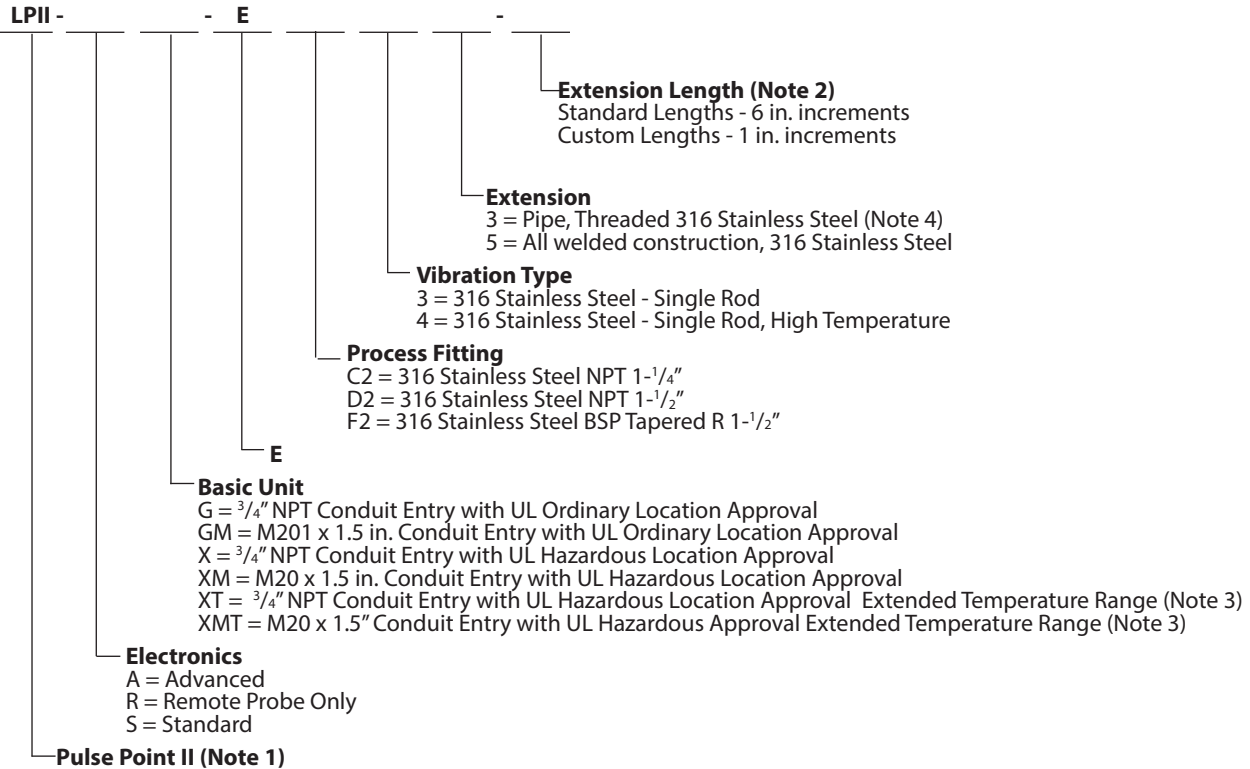
STANDARD ROD DIMENSIONS

ADVANCED MODEL SHOWN



* Additional drawings available at www.bindicator.com

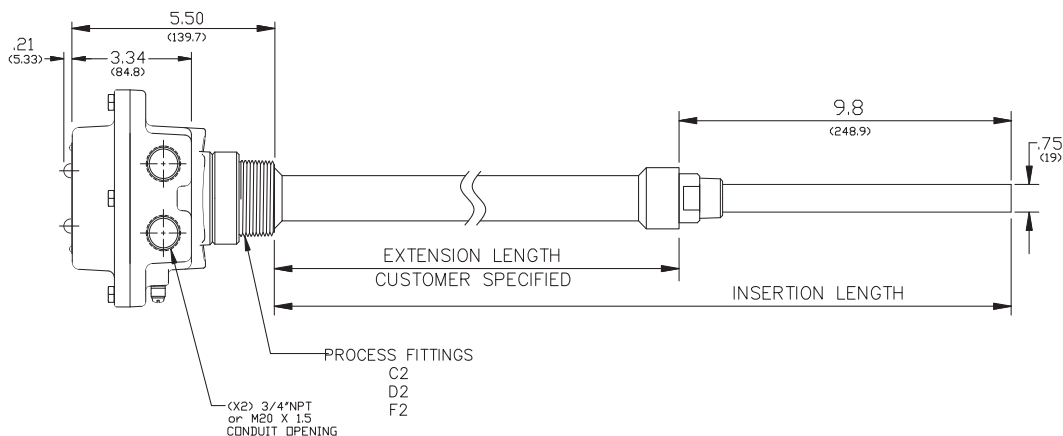
PULSE POINT II - EXTENSIONS



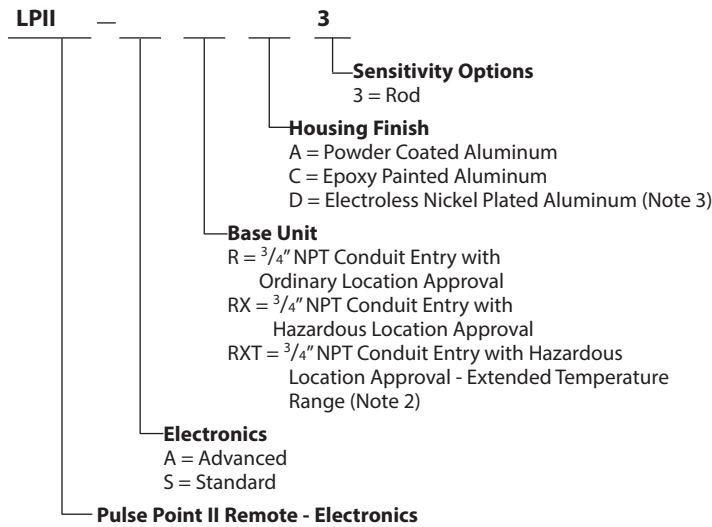
- NOTES: 1. Units have Powder Coated Aluminum Housing Finish.
 2. Maximum extension length is 180 in. (4.6 m), minimum length 3 in. (7.6 cm)
 3. Extended ambient temperature range is -40° to 158°F (-40° to 70°C)
 4. Type 3 Extension not available for Hazardous Location units.

EXTENSION DIMENSIONS

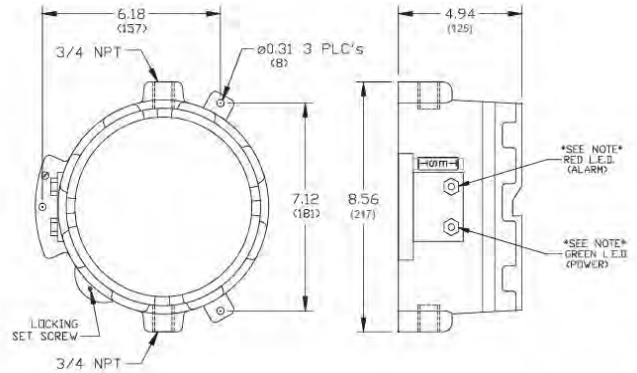
ADVANCED MODEL SHOWN



REMOTE ELECTRONICS



REMOTE DIMENSIONS



- NOTES:
1. Maximum cable length is 50 ft (15 m).
 2. Extended ambient temperature range is -40° to 158°F (-40° to 70°C).
 3. Hazardous location approval not available with electroless nickel plated aluminum Housing Finish.

SPECIFICATIONS

FUNCTIONAL

Power Requirements Universal	(± 10%), 120-240 VAC 50/60 Hz or 24-48 VDC
Power Consumption	4 W AC; 4 W DC
Fuse	Slow Blow, 0.5 A 300 V (Not User Serviceable)
Operating Temperature	
Electronics: Ordinary Location	-40° to 158°F (-40° to 70°C)
Electronics: Hazardous Location	-4° to 158°F (-20° to 70°C)
Electronics: Hazardous Location - Extended	-40° to 158°F (-40° to 70°C)
Rod (Process): Standard Temperature	-22° to 203°F (-30° to 95°C)
Rod (Process): High Temperature	-22° to 320°F (-30° to 160°C)
Outputs	
Main Relay	8 A DPDT @ 240 VAC or 30 VDC (resistive)
Auxiliary Relay - ADVANCED Only	0.46 A SPDT @ 150 VAC or 1 A @ 30 VDC

PERFORMANCE

Pressure Rating	400 psi (28.1 kg/cm ²) with process fitting; 5 psi (0.35 kg/cm ²) with mounting plate
Time Delay - STANDARD	Field Adjustable; Up to 6 seconds
Time Delay - ADVANCED	Field Adjustable; Up to 150 seconds
Fail Safe	Field Selectable; high/low level
Sensitivity - STANDARD	Minimum 3.5 lbs/ft ³ (56 kg/m ³); Field Adjustable
Sensitivity - ADVANCED	Minimum 1.5 lbs/ft ³ (24 kg/m ³); Field Adjustable
Remote Distance	50 ft. (15m) Max

PHYSICAL

Enclosure Material	Powder or Epoxy Coated Aluminum, or 304 SS
Process Fitting	NPT 3/4", 1-1/4", 1-1/2" BSP R 1-1/4", 1-1/2" BSP G 1-1/4", 1-1/2"
Rod Material	316 Stainless Steel
Dual Conduit Entry	3/4" NPT or M20 x 1.5
Mounting Plate Material	Mild Steel, 304 Stainless Steel
Extended Pipe Material	316 Stainless Steel
Shipping Weight	Integral, non-extended 9 lb (4 kg)

AGENCY APPROVALS

UL (US and Canada)

- Ordinary Location, Type 4X; IP66
 - Hazardous Location, 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



Order from: **C A Briggs Company**
622 Mary Street; Suite 101; Warminster, PA 18974
Phone: 267-673-8117 - Fax: 267-673-8118
Sales@cabriggs.com - www.cabriggs.com



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Shown with C2 Process Fitting
Imperial Conduit Entry

SIMPLICITY AT ITS BEST WITH CONSISTENT RESULTS

Pulse Point™ II Series models sense when a material reaches or leaves a particular point. These point level switches use electronic vibratory technology to sense the material. This mechanical operation is not affected by the dielectric constant of the material being measured.

FEATURES AND BENEFITS

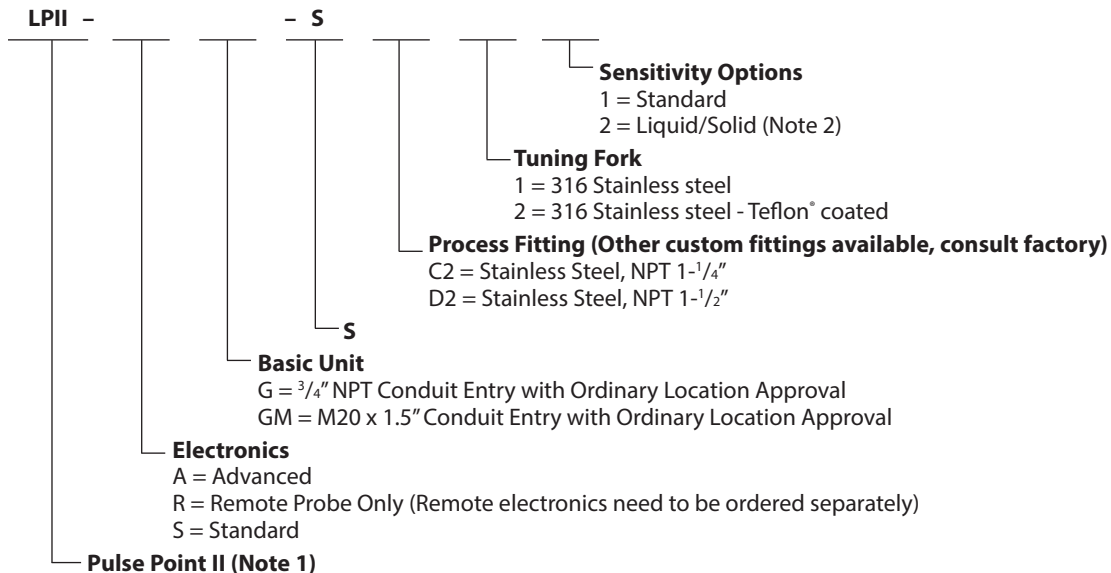
- Universal Input Power provides flexibility.
- Adjustable Time Delay allows the user to determine time between sensing material and the alarm state. Advanced units can permit delays when it detects the presence and absence of material or a combination.
- Sensitivity Settings can be selected to fit specific applications and material requirements.
- To avoid false readings, the Pulse Point II features Build-Up Detection to detect when material is beginning to build up on the forks.
- Move electronics up to 100 ft (30 m) away with the Remote Option.
- Available on Advanced units only, Liquid/Solid Interface feature can detect solids under a liquid surface.
- Standard and Advanced offering enables the user to choose the option that best suits the application.
- Frame designed to enable connection flexibility:
Imperial or Metric conduit entry options.
Process Fitting can be made to fit any connection.

STANDARD VS. ADVANCED UNITS

STANDARD	ADVANCED
3 Sensitivity Settings	6 Sensitivity Settings
Time Delay up to 6 seconds	Time Delay up to 150 seconds
Universal Power	Universal Power
	Test FOB
	Push Button Test
	Indicator Lights
	Auxiliary Relay
	Liquid/Solid Interface (Optional)
	Build-up Detection

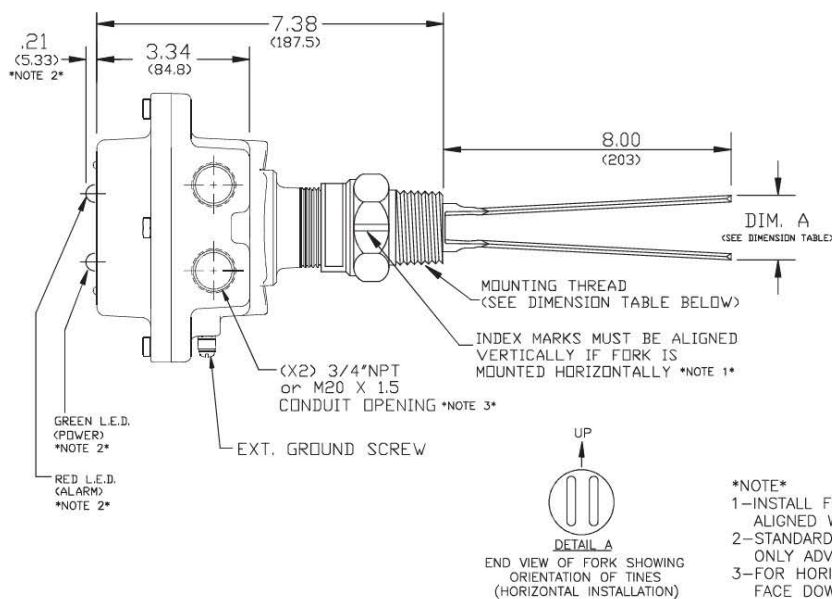
Pulse Point™ II Fork

PULSE POINT II - STANDARD



- Notes: 1. Units have Powder Coated Aluminum Housing Finish.
 2. Available on Advanced Units only.

DIMENSIONAL DRAWING - STANDARD



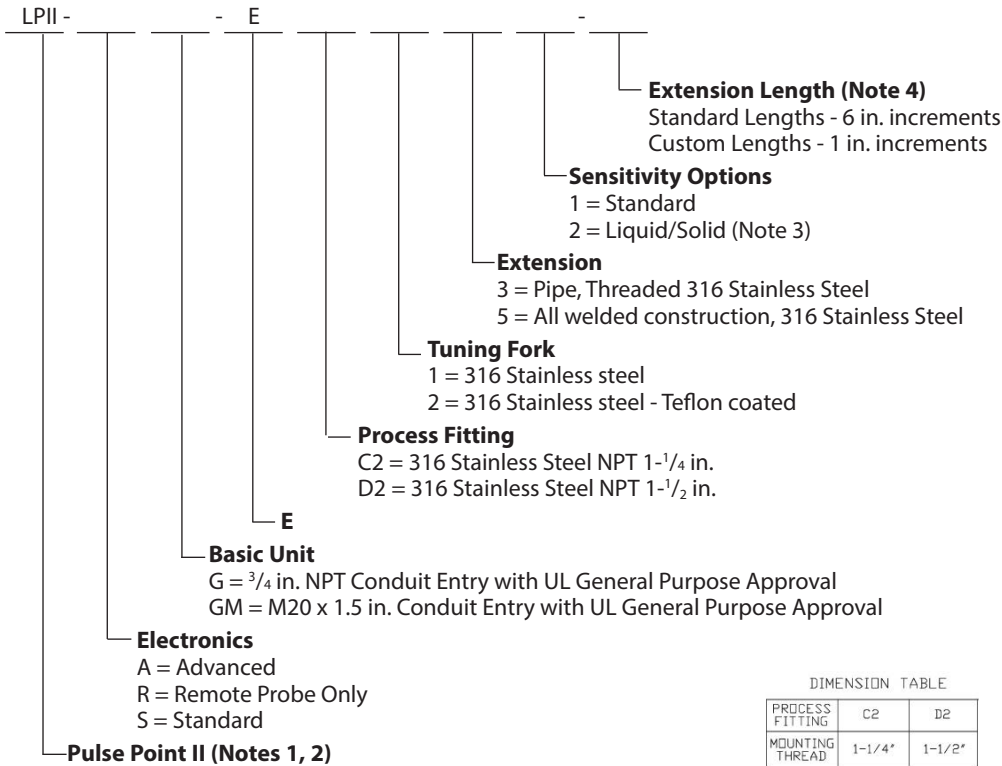
DIMENSION TABLE

PROCESS FITTING	C2	D2
MOUNTING THREAD	1-1/4"	1-1/2"
DIM A	1.4" NOM (35.56mm)	1.7" NOM (43.18mm)

OUTLINE DWG FOR LPII STANDARD UNIT
 with C2, D2
 PROCESS FITTINGS

- *NOTE***
 1-INSTALL FORKS WITH OPENING BETWEEN TINES ALIGNED WITH CONDUIT HOLES IN FRAME AS SHOWN.
 2-STANDARD AND REMOTE FORKS WILL NOT HAVE LIGHTS. ONLY ADVANCED UNITS WILL HAVE LIGHTS.
 3-FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLOOP.

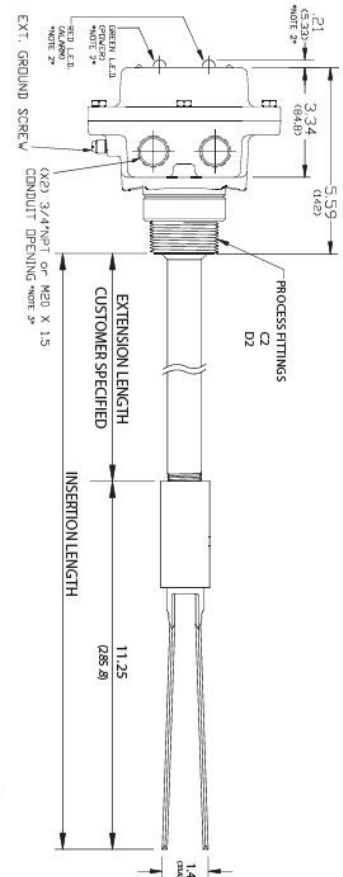
PULSE POINT II - EXTENSIONS



DIMENSION TABLE

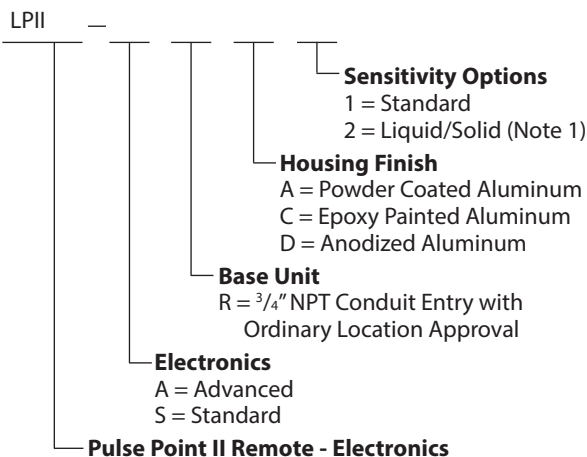
PROCESS FITTING	C2	D2
MOUNTING THREAD	1-1/4"	1-1/2"

OUTLINE DWG FOR LPII PIPE EXTENDED WELDED UNIT with C2, D2 PROCESS FITTINGS



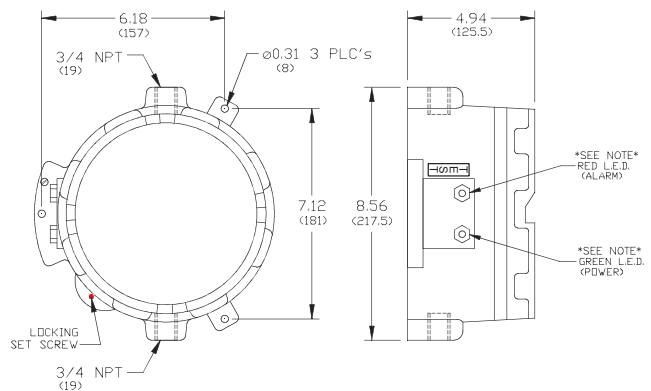
- Notes:
- Units have powder coated aluminum Housing Finish.
 - Extension units will only use 1-1/4" fork size.
 - Available on Advanced units only.
 - Maximum extension length is 180 in. (4.6 m), minimum length is 3 in. (7.6 cm). Length cannot be zero.

ELECTRONICS REMOTE



Note 1: Liquid/Solid Interface is available with Advanced Electronics only.

REMOTE DIMENSIONS



SPECIFICATIONS

FUNCTIONAL

Power Requirements Universal	(± 10%), 120-240 VAC 50/60 Hz or 24-48 VDC
Power Consumption - STANDARD	10 W AC; 3 W DC
Power Consumption - ADVANCED	11 W AC; 4 W DC
Fuse	Fast Blow, 1 A 300 V (Not User Serviceable)
Operating Temperature	
Electronics	-40° to 158° F (-40° to 70° C)
Fork	-55° to 302° F (-48° to 150° C) depending on fork
Outputs	
Main Relay	8 A DPDT @ 240 VAC or 30 VDC (resistive)
Auxiliary Relay - ADVANCED Only	0.46 A SPDT @ 150 VAC or 1 A @ 30 VDC

PERFORMANCE

Pressure Rating	150 psi (10.5 kg/cm ²) with 1-1/2" NPT; 5 psi (0.35 kg/cm ²) with mounting plate
Time Delay - STANDARD	Field Adjustable; 1 - 6 seconds
Time Delay - ADVANCED	Field Adjustable; 0 - 150 seconds
Fail Safe	Field Selectable; high/low level
Sensitivity - STANDARD	Minimum 2.0 lbs/ft ³ (32 kg/m ³); Field Adjustable
Sensitivity - ADVANCED	Minimum 0.5 lbs/ft ³ (8 kg/m ³); Field Adjustable
Maximum Particle Size	3/8" (9.5 mm)

PHYSICAL

Enclosure Material	Polyester, Epoxy Coated Aluminum, or 304 SS
Fork Material	316 SS (standard); 316 SS with Teflon® coating
Dual Conduit Entry	3/4" NPT or M20 x 1.5
Mounting Plate Material	Mild Steel, 304 SS
Extended Pipe Material	Galvanized or 316 SS
Shipping Weight	Integral, non-extended 10 lb (4.5 kg)

AGENCY APPROVALS

UL (US and Canada)

- Ordinary Location, Type 4X; IP66

CE

- Electromagnetic Compatibility Directive
- Low Voltage Directive



Order from: **C A Briggs Company**
 622 Mary Street; Suite 101; Warminster, PA 18974
 Phone: 267-673-8117 - Fax: 267-673-8118
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venture
 MEASUREMENT

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Shown with X1 Process Fitting
Imperial Conduit Entry

SURPASSING SENSITIVITY FOR THE TOUGHEST APPLICATIONS

The VRF® II Series uses radio frequency to detect the presence or absence of material in a vessel. It compensates for the load of the probe and vessel environment to automatically determine the optimal operating frequency for the greatest sensitivity and stability.

FEATURES AND BENEFITS

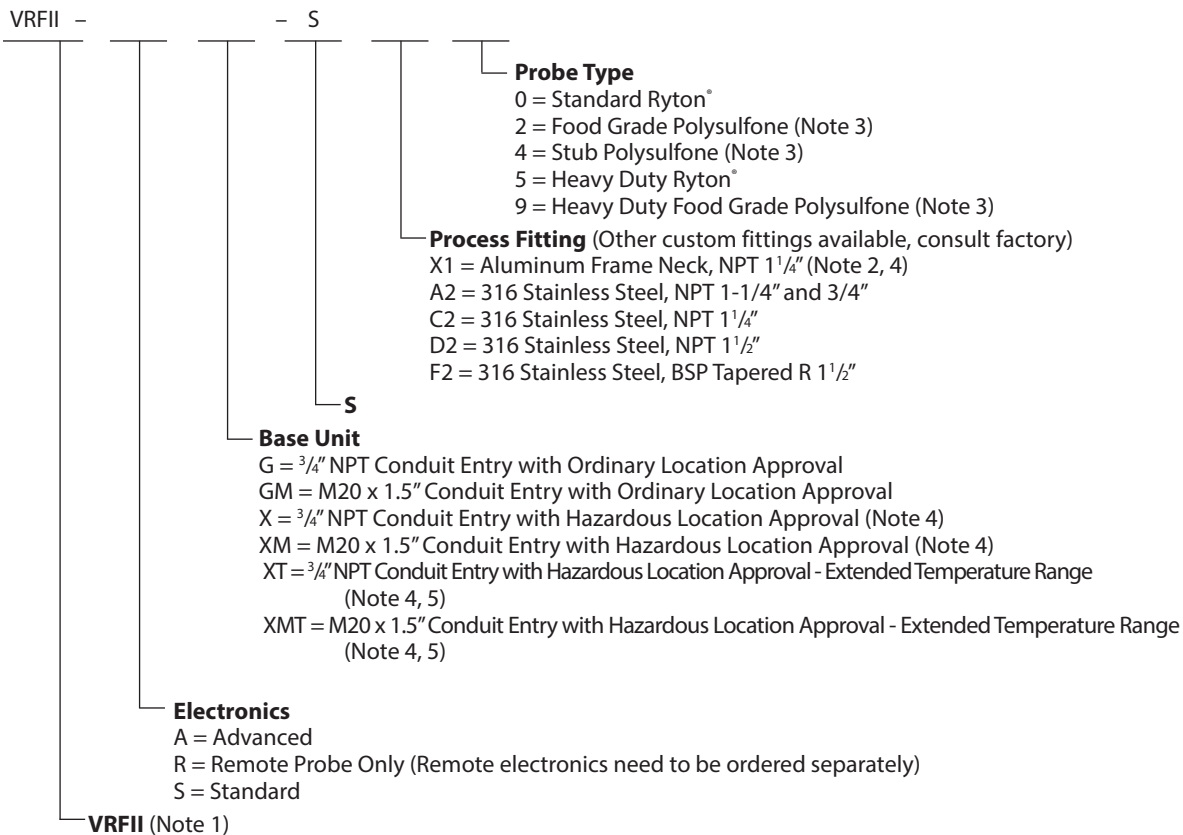
- **Universal Input Power** provides flexibility in location of the unit
- The VRF II can automatically calibrate itself when the probe senses a large decrease in the impedance with **EZ-CAL® II**
- **Adjustable Time Delay** allows the user to determine time between sensing material and the alarm state. Advanced units can permit delays when it detects the presence and absence of material or a combination.
- **Sensitivity Settings** can be selected to fit specific applications and material requirements.
- Probes have been designed with **Pro-Guard®** that has the ability to ignore the effects of coatings that can adhere to the probe
- Move electronics up to 100 ft (30 m) away with the **Remote Option**
- **Standard** and **Advanced** offering enables the user to choose the option that best suits the application
- Frame designed to enable connection flexibility
 - Imperial or Metric **conduit entry options**
 - **Process Fitting** can be made to fit any connection

STANDARD VS. ADVANCED UNITS

STANDARD	ADVANCED
4 Sensitivity Settings (min 1.5 pF)	7 Sensitivity Settings (min 0.5 pF)
Time Delay up to 6 seconds	Time Delay up to 150 seconds
Manual, Push Button for Test and Calibration	Test and Calibration with FOB
Universal Power	Universal Power
	Indicator Lights
	Auxiliary Relay

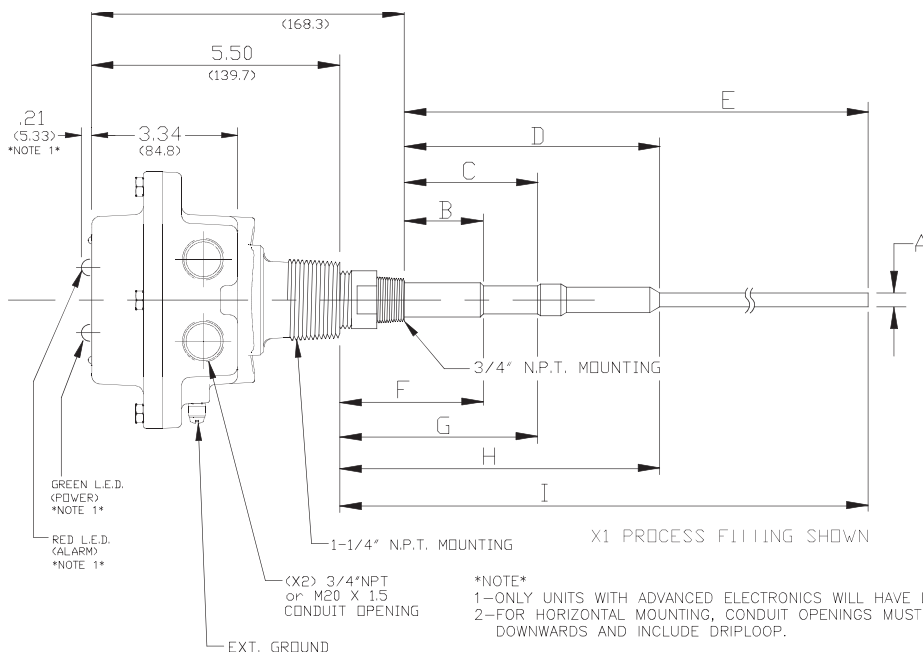
VRF® II Standard Unit

VRF II - STANDARD UNIT



- Notes:
- Units have powder coated aluminum Housing Finish.
 - X1 Process Fitting includes a 3/4" NPT 316 stainless steel bin connector.
 - EPDM food grade gasket is standard.
 - Process Fitting X1 cannot be used with Hazardous Location Approval.
 - Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

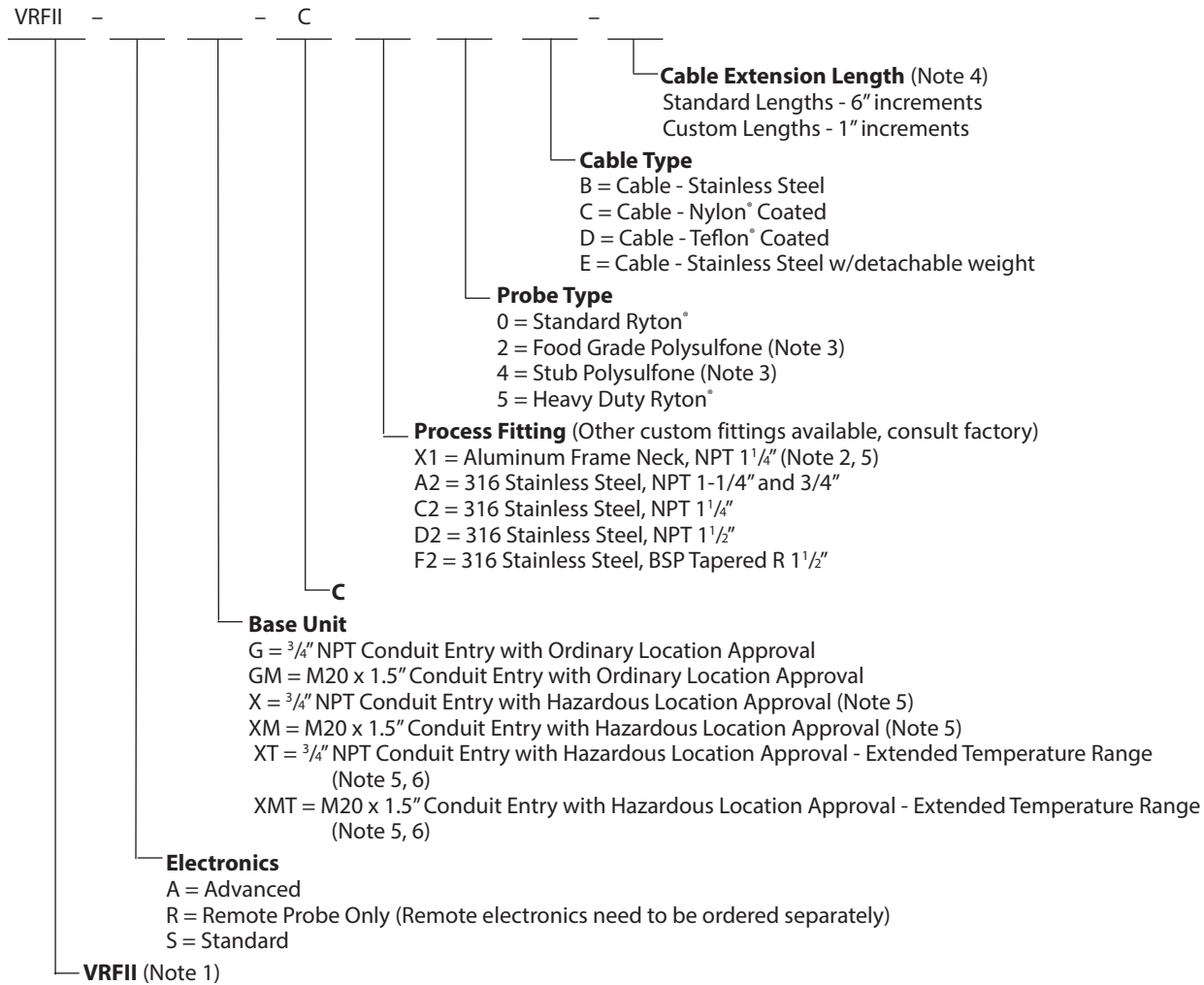
STANDARD UNIT DIMENSIONS



I	15.25 (387.5)	19.25 (489)	15.25 (387.35)
H	7.00 (178)	11.75 (298.5)	3.63 (92.2)
G	4.50 (114.3)	10.00 (254)	3.25 (82.55)
F	3.38 (86)	8.5 (216)	2.75 (69.85)
E	14.25 (362)	18.25 (463.5)	14.25 (362)
D	6.00 (152.5)	10.75 (273)	2.63 (66.8)
C	3.50 (89)	9.00 (228.5)	2.25 (57.2)
B	2.38 (60.5)	7.50 (190.5)	1.75 (44.5)
A	.31 DIA. (8)	.38 DIA. (9.5)	.31 DIA. (8)
APPROX DIM'S	STD. & FOODGRADE	H.D.	STUB
PROBE TYPE	0 & 2	5 & 9	4

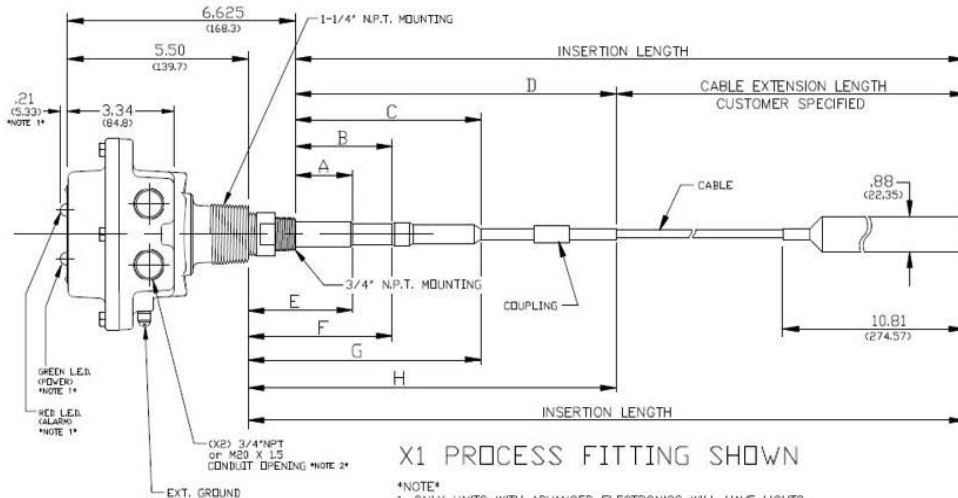
- *NOTE*
- ONLY UNITS WITH ADVANCED ELECTRONICS WILL HAVE LIGHTS.
 - FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLOOP.

VRF II - STANDARD CABLE UNIT



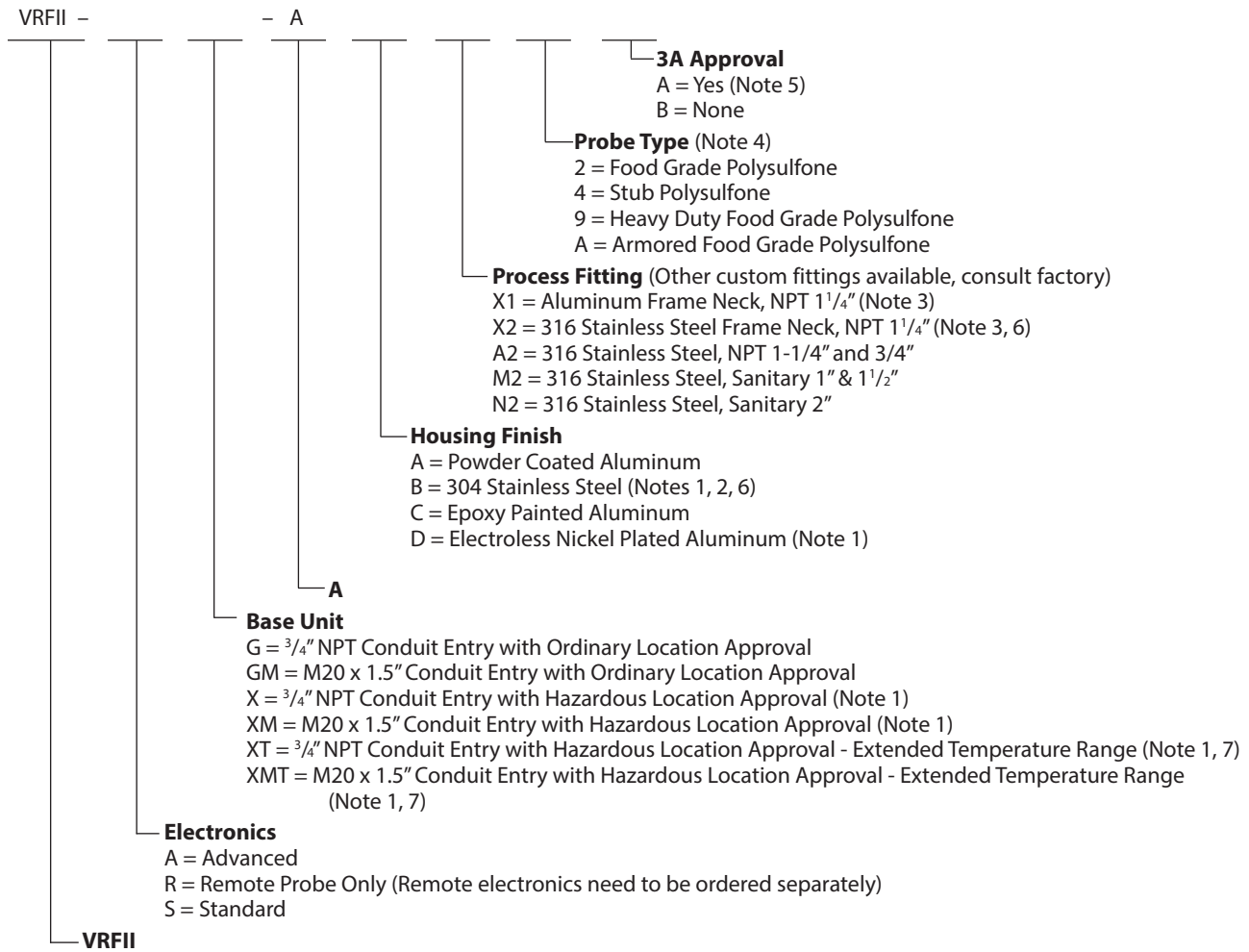
- Notes:
- Units have powder coated aluminum Housing Finish.
 - X1 Process Fitting includes a 3/4" NPT 316 stainless steel bin connector.
 - EPDM food grade gasket is standard.
 - Maximum length is 540" (13.7 m), minimum length is 12" (30.5 cm). Length cannot be zero.
 - Process Fitting X1 cannot be used with Hazardous Location Approval.
 - Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

STANDARD CABLE UNIT DIMENSIONS



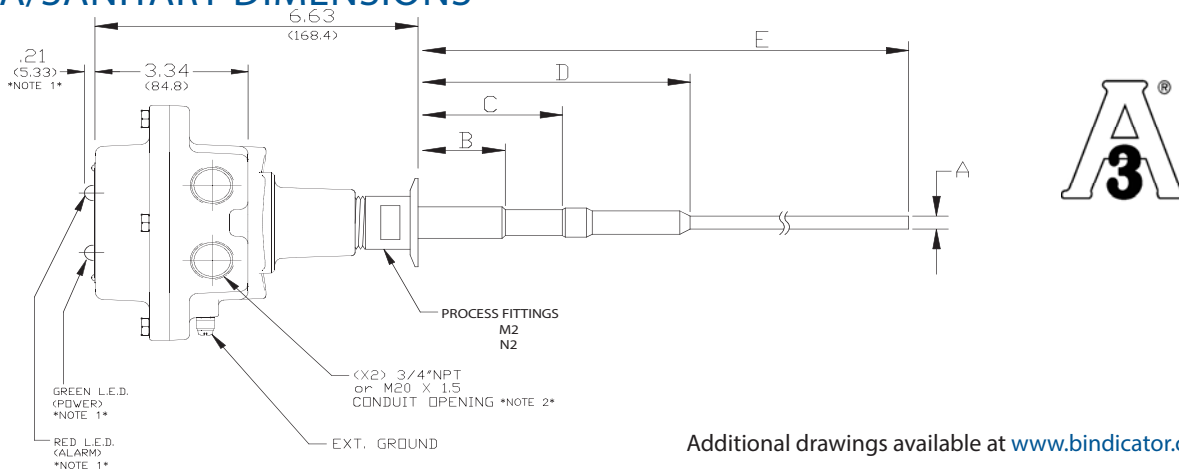
H	11.50 (292.1)	16.25 (412.8)	8.12 (206.2)
G	7.00 (178)	11.75 (298.5)	3.63 (92.2)
F	4.50 (114.5)	10.00 (254)	3.25 (82.6)
E	3.38 (86)	8.50 (216)	2.75 (69.9)
D	10.50 (266.7)	15.25 (387.4)	7.12 (180.8)
C	6.00 (152.5)	10.75 (273)	2.63 (66.8)
B	3.50 (89)	9.00 (228.5)	2.25 (57.2)
A	2.38 (60.5)	7.50 (190.5)	1.75 (44.5)
APPROX DIM'S	STD. & FOODGRADE	H.D.	STUB
PROBE TYPE	0 & 2	5	4

VRF II - FOOD GRADE/3A



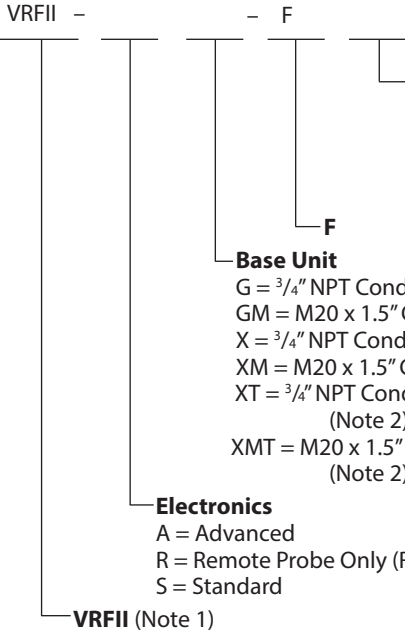
- Notes:
1. Hazardous location approval not available with electroless nickel plated aluminum Housing Finish, stainless steel Housing Finish or the X1 Process Fitting; frame dimensions for stainless steel are not standard contact factory for drawings.
 2. Function Test FOB not available with stainless steel Housing Finish.
 3. X1 and X2 Process Fittings include a 3/4" NPT 316 stainless steel bin connector.
 4. EPDM food grade gasket is standard.
 5. 3A Approval only available with Process Fittings M2 or N2 and Probe Types 2, 4 or 9.
 6. Process Fitting X2 and Stainless Steel Housing Finish can only be ordered together.
 7. Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

3A/SANITARY DIMENSIONS



Additional drawings available at www.bindicator.com.

VRF II - FLUSH MOUNT



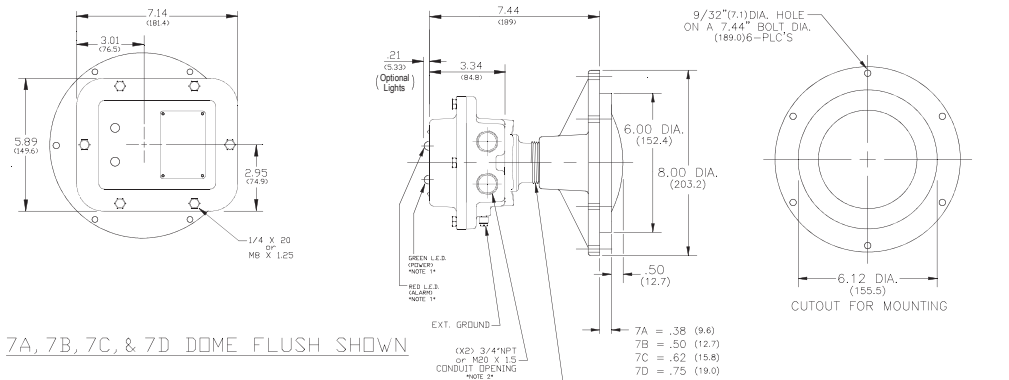
Probe Type
 7A = Dome Flush - 3/8" Thickness
 7B = Dome Flush - 1/2" Thickness
 7C = Dome Flush - 5/8" Thickness
 7D = Dome Flush - 3/4" Thickness
 8 = Flush Probe - 7/16" Thickness

Base Unit
 G = 3/4" NPT Conduit Entry with Ordinary Location Approval
 GM = M20 x 1.5" Conduit Entry with Ordinary Location Approval
 X = 3/4" NPT Conduit Entry with Hazardous Location Approval
 XM = M20 x 1.5" Conduit Entry with Hazardous Location Approval
 XT = 3/4" NPT Conduit Entry with Hazardous Location Approval - Extended Temperature Range (Note 2)
 XMT = M20 x 1.5" Conduit Entry with Hazardous Location Approval - Extended Temperature Range (Note 2)

Electronics
 A = Advanced
 R = Remote Probe Only (Remote electronics need to be ordered separately)
 S = Standard

- Notes:**
1. Units have powder coated aluminum Housing Finish.
 2. Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

DOMe FLUSH DIMENSIONS



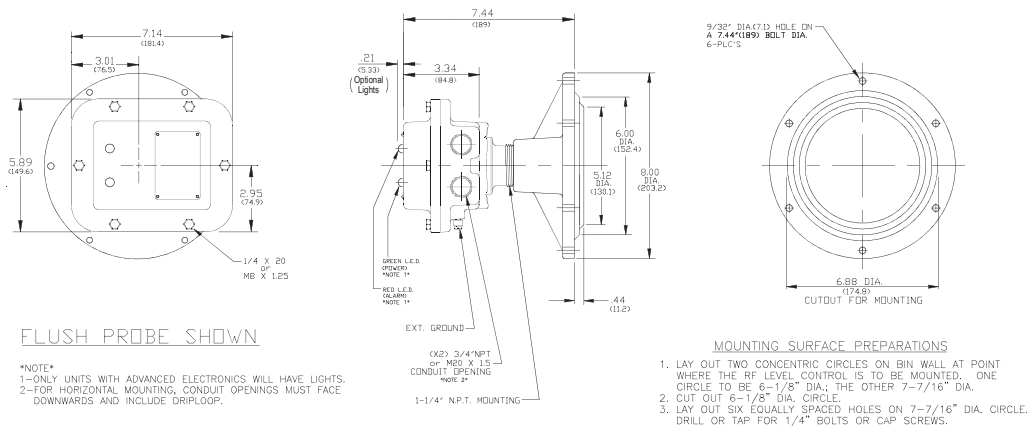
7A, 7B, 7C, & 7D DOME FLUSH SHOWN

NOTE
 1—ONLY UNITS WITH ADVANCED ELECTRONICS WILL HAVE LIGHTS.
 2—FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLOOP.

MOUNTING SURFACE PREPARATIONS

1. LAY OUT TWO CONCENTRIC CIRCLES ON BIN WALL AT POINT WHERE THE RF LEVEL CONTROL IS TO BE MOUNTED. ONE CIRCLE TO BE 6-1/8" DIA.; THE OTHER 7-7/16" DIA.
2. CUT OUT 6-1/8" DIA. CIRCLE.
3. LAY OUT SIX EQUALLY SPACED HOLES ON 7-7/16" DIA. CIRCLE. DRILL OR TAP FOR 1/4" BOLTS OR CAP SCREWS.

FLUSH PROBE DIMENSIONS



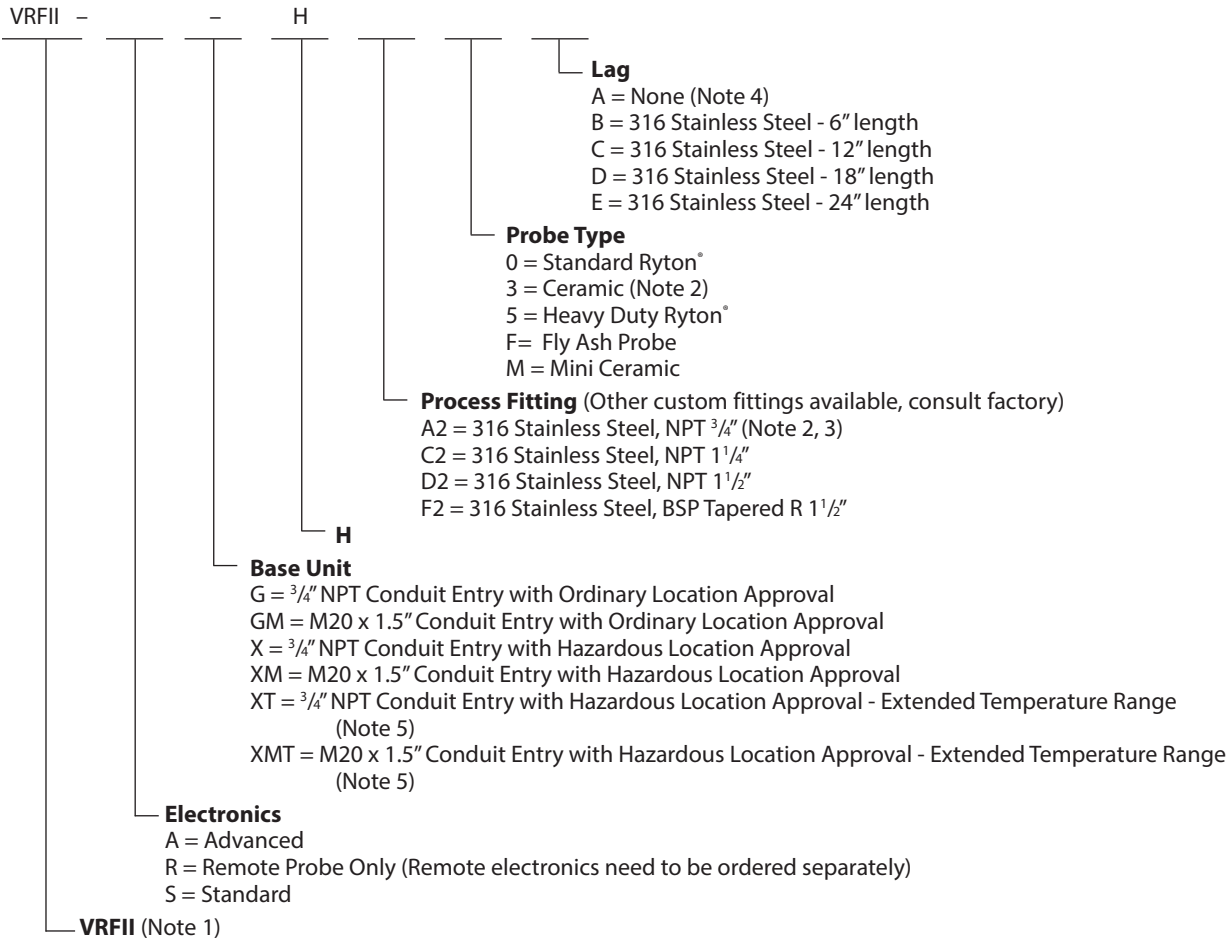
FLUSH PROBE SHOWN

NOTE
 1—ONLY UNITS WITH ADVANCED ELECTRONICS WILL HAVE LIGHTS.
 2—FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLOOP.

MOUNTING SURFACE PREPARATIONS

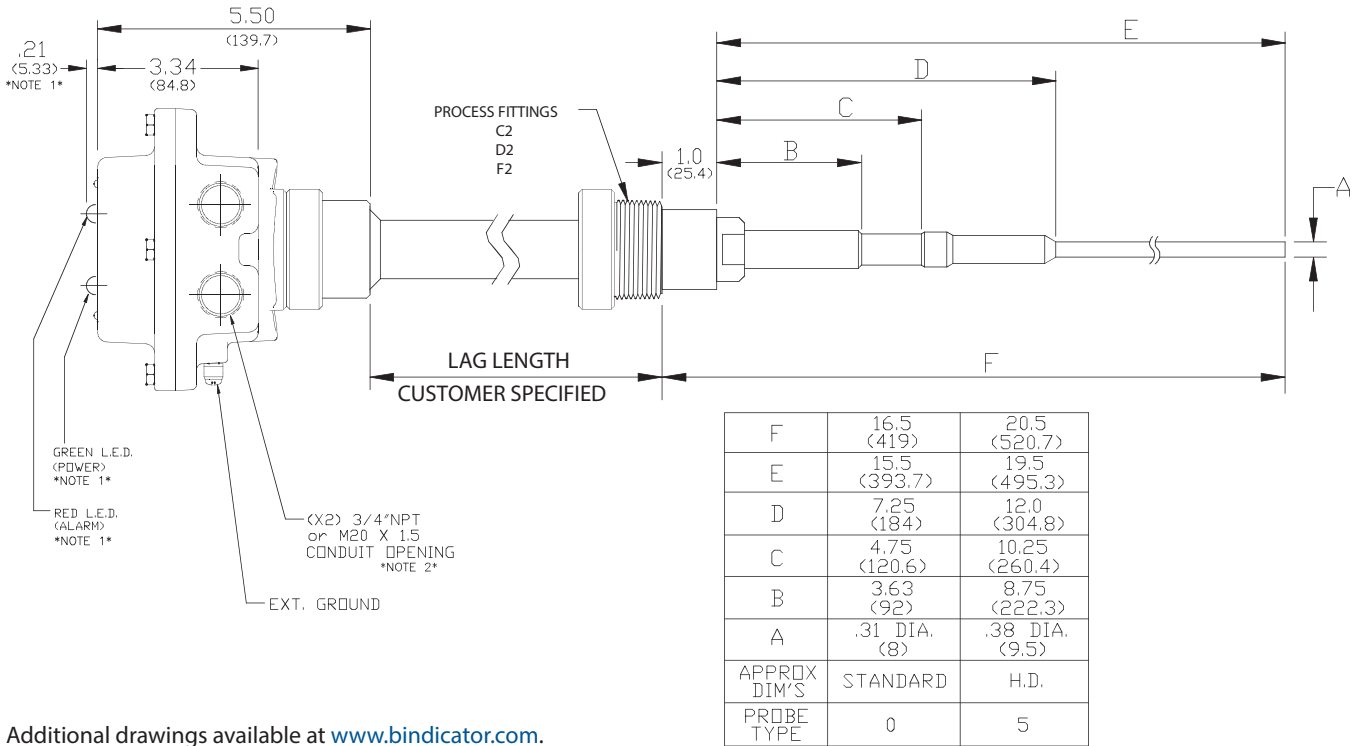
1. LAY OUT TWO CONCENTRIC CIRCLES ON BIN WALL AT POINT WHERE THE RF LEVEL CONTROL IS TO BE MOUNTED. ONE CIRCLE TO BE 6-1/8" DIA.; THE OTHER 7-7/16" DIA.
2. CUT OUT 6-1/8" DIA. CIRCLE.
3. LAY OUT SIX EQUALLY SPACED HOLES ON 7-7/16" DIA. CIRCLE. DRILL OR TAP FOR 1/4" BOLTS OR CAP SCREWS.

VRF II - HIGH TEMPERATURE

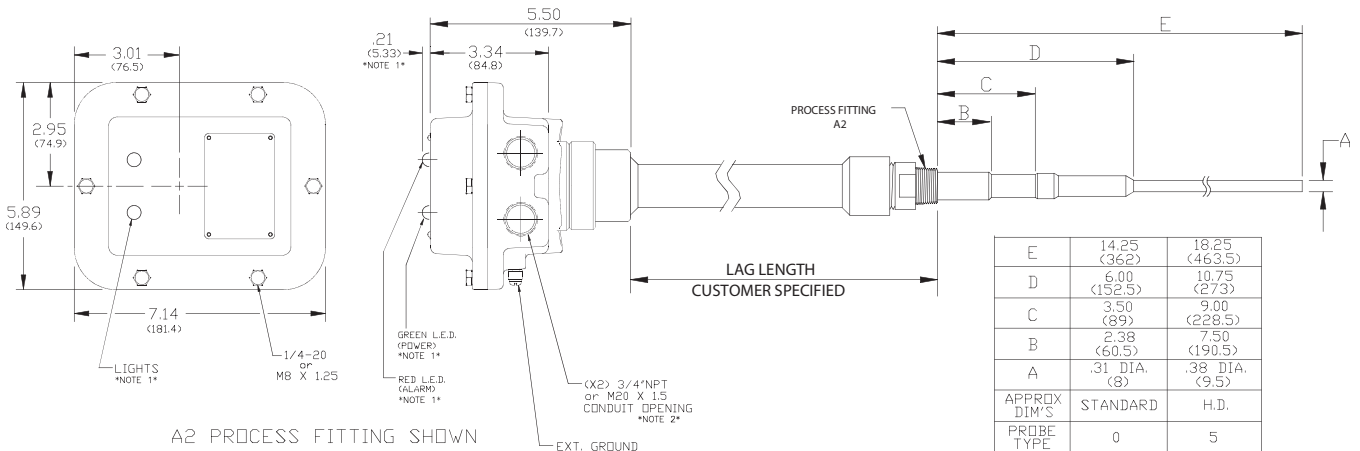


- Notes:
- Units have powder coated aluminum Housing Finish.
 - Ceramic probe is remote only, includes built-in lag of 9 in. (22.9 cm), Lag must be 'None', and it can only be used with Process Fittings C2 through F2, J2 or K2. All material is comprised of 304 stainless steel.
 - Mini Ceramic Probe includes A2 Process Fitting.
 - Can only be used with the ceramic Probe Type
 - Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

HIGH TEMPERATURE DIMENSIONS



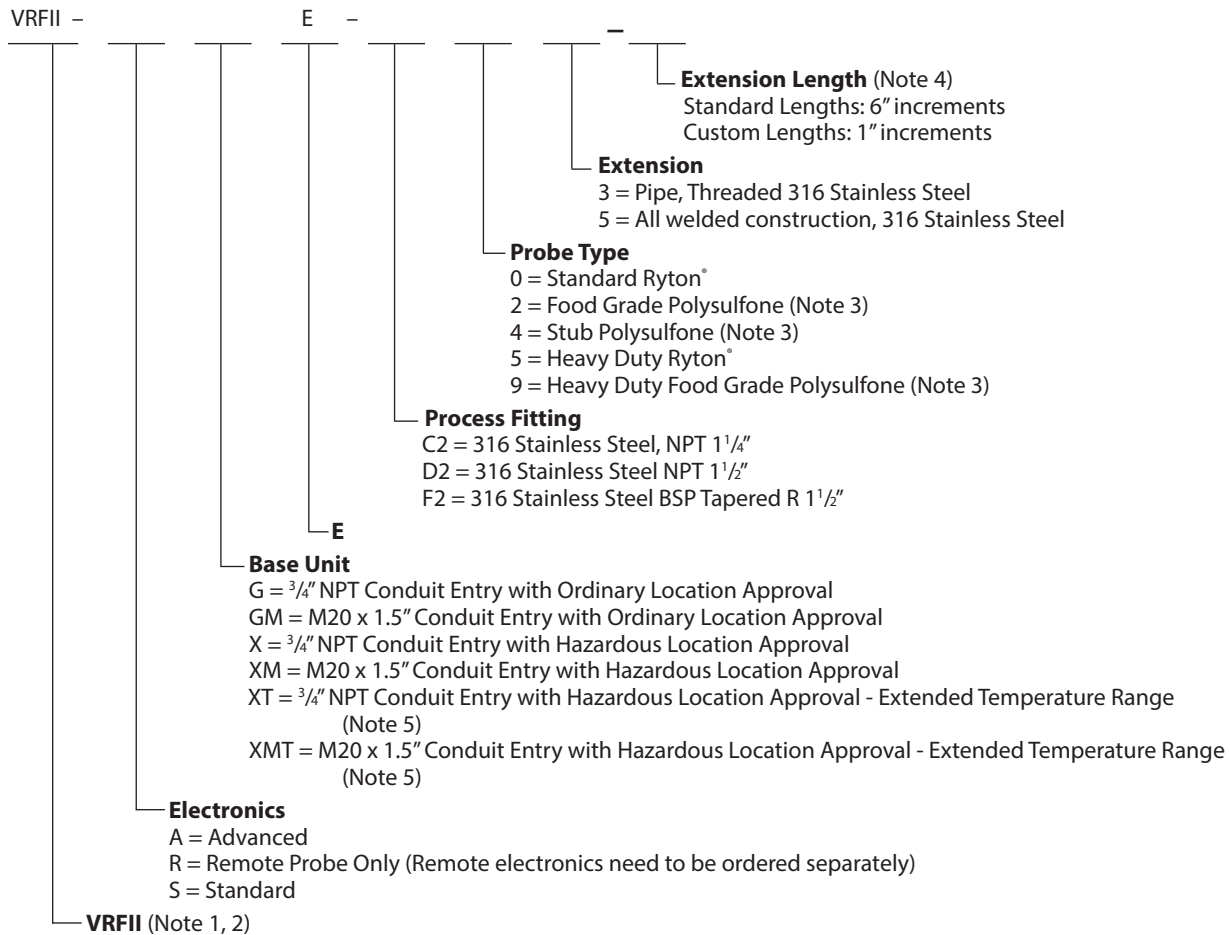
Additional drawings available at www.bindicator.com.



A2 PROCESS FITTING SHOWN

NOTE
 1—ONLY UNITS WITH ADVANCED ELECTRONICS WILL HAVE LIGHTS.
 2—FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLOOP.

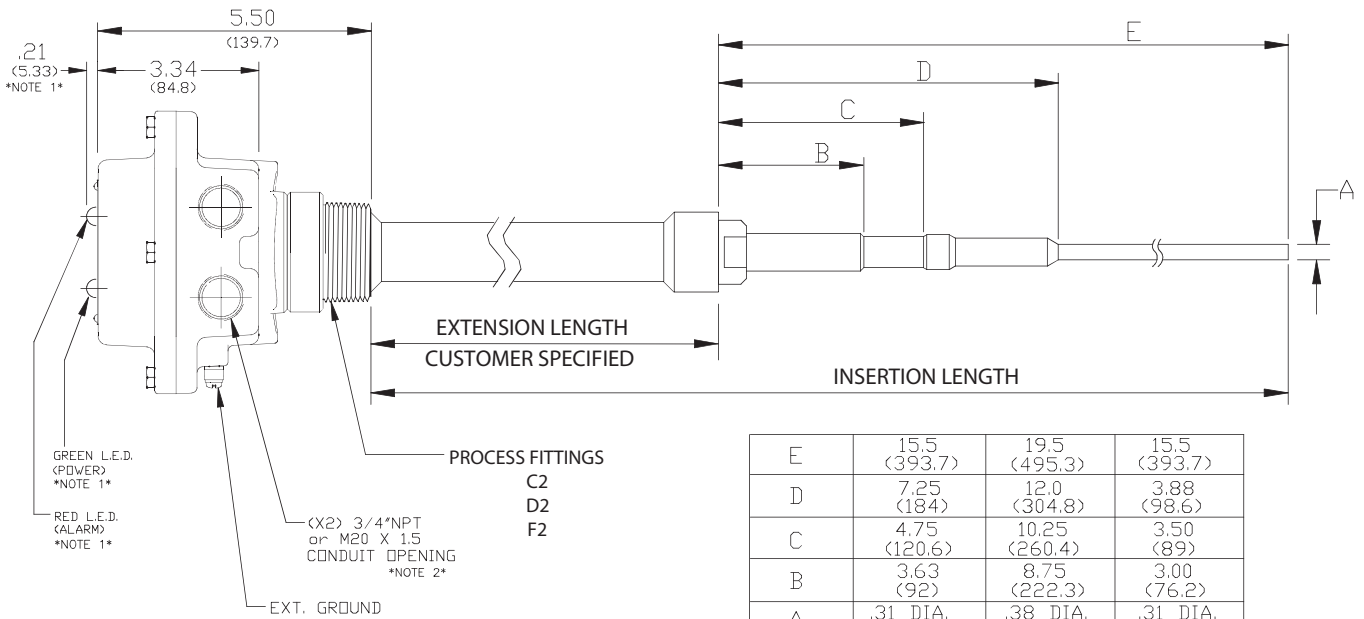
VRF II - EXTENSIONS



Notes:

1. Units have powder coated aluminum Housing Finish.
2. Extension units do not include 3/4" NPT 316 stainless steel bin connector.
3. EPDM food grade gasket is standard.
4. Maximum extension is 180 in (4.6 m), minimum length is 3 in. (7.6 cm). Length cannot be zero.
5. Extended ambient temperature range is -40° to 158° F (-40° to 70° C).

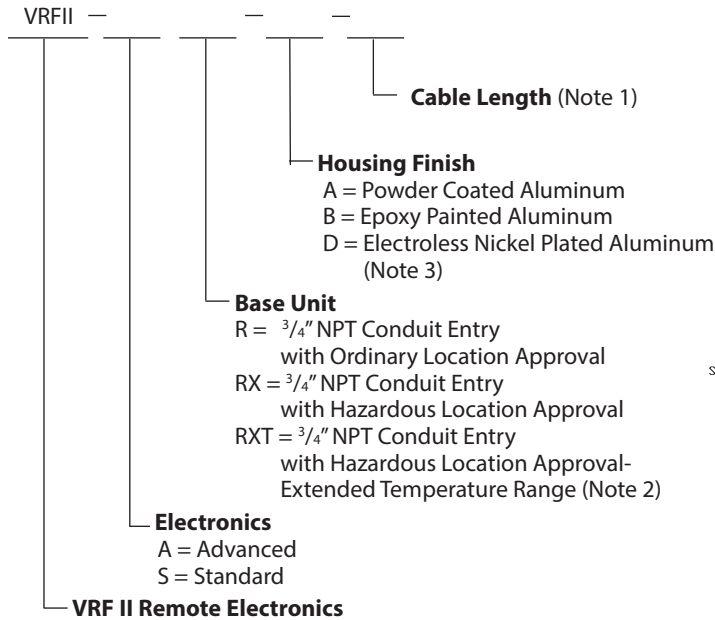
EXTENSION DIMENSIONS



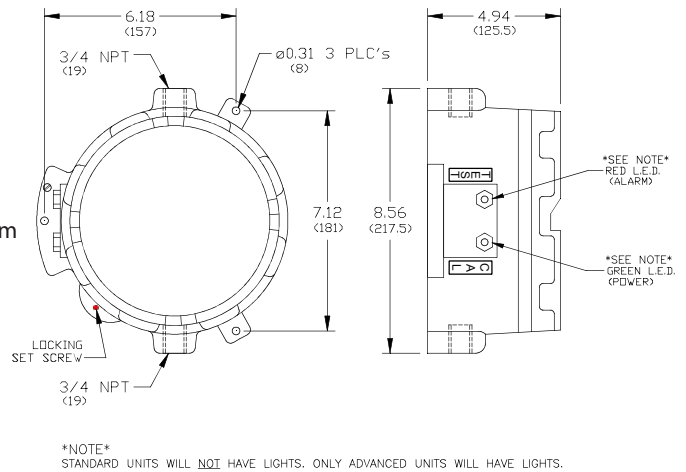
E	15.5 (393.7)	19.5 (495.3)	15.5 (393.7)
D	7.25 (184)	12.0 (304.8)	3.88 (98.6)
C	4.75 (120.6)	10.25 (260.4)	3.50 (89)
B	3.63 (92)	8.75 (222.3)	3.00 (76.2)
A	.31 DIA. (8)	.38 DIA. (9.5)	.31 DIA. (8)
APPROX DIM'S	STD. & FOODGRADE	H.D.	STUB
PROBE TYPE	0 & 2	5 & 9	4

Additional drawings available at www.bindicator.com.

VRFII - ELECTRONICS REMOTE



REMOTE DIMENSIONS



Notes:

- Maximum cable length is 100 ft (30.5 m) and is high temperature cable; leave blank if not used. Standard lengths are 1 ft increments.
- Extended ambient temperature range is -40° to 158° F (-40° to 70° C).
- Hazardous location approval not available with electroless nickel plated aluminum Housing Finish.

PROBE SPECS

		MAX TEMP °F (°C)	PROBE MATERIAL	PROBE LENGTH* IN (MM)
0	Standard Ryton®	450 (232)	316 SS/Ryton®	15.25 (387.5)
1	Standard Kynar® Coated	250 (121)	316 SS/Kynar®	15.25 (387.6)
2	Food Grade Polysulfone	300 (149)	316 SS/Polysulfone	15.25 (387.7)
3	Ceramic	1,000 (537)	316 SS/Ceramic	18.62 (472.9)
4	Stub Polysulfone	300 (149)	316 SS/Polysulfone	15.25 (387.7)
5	Heavy Duty Ryton®	450 (232)	316 SS/Ryton®	19.25 (489.0)
6	Heavy Duty Kynar® Coated	250 (121)	316 SS/Kynar®	19.25 (489.0)
7A-D	Dome Flush	200 (93)	316 SS/Epoxy	Flush Mounted
8	Flush Probe	200 (93)	316 SS/Epoxy	Flush Mounted
9	Heavy Duty Food Grade Polysulfone	300 (149)	316 SS/Polysulfone	19.25 (489.0)
A	Armored Food Grade	230 (110)	Polysulfone covered by 316 SS sleeve and food grade epoxy	15.25 (387.4)
F	Fly Ash Probe	450 (232)	316 SS/Ryton®	19.25 (489.0)
J	Jumbo	200 (93)	316 SS/Thermoset Epoxy	2.33 (5.9)
M	Mini Ceramic	700 (371)	316 SS/Ceramic	18.25 (463.6)**
T	Teflon® Jacketed Standard	250 (121)	316 SS/Teflon® and Hastelloy® C process connection	15.25 (387.7)
U	Teflon® Jacketed Heavy Duty	250 (121)	316 SS/Teflon® and Hastelloy® C process connection	19.25 (489.0)

* From bottom of 1 1/4" fitting to tip of probe; process connections may alter length of probe. See drawings for additional details.

** From 3/4" NPT

PROBE MODIFICATIONS AND OPTIONS

Probe Attachments for Heavy Duty Probes Only		When to Use
LHF110030	Rigid Tip Extension - 12" (300 mm)	To extend active length for vertical mounting
LHF110031	Rigid Tip Extension - 24" (600 mm)	
LHF110032	Rigid Tip Extension - 36" (900 mm)	
LHF110033	Rigid Tip Extension - 48" (1200 mm)	
LHF110034	Rigid Tip Extension - 60" (1500 mm)	
LHF110035	Flexible Tip Extension - 12" (300 mm)	To extend active length, vertical mount with excessive side loading
LHF110036	Flexible Tip Extension - 24" (600 mm)	
LHF110037	Flexible Tip Extension - 36" (900 mm)	
LHF110038	Flexible Tip Extension - 48" (1200 mm)	
LHF110039	Flexible Tip Extension - 60" (1500 mm)	
LRF110851	Cable/Weight Tip Extension (84" maximum) Specify length in inches	

Probe Attachments		
LRF110085	Sensitivity Sleeve - 3/4", Standard Probe	Adds mechanical sensitivity by providing more surface contact between material and probe
LRF110086	Sensitivity Sleeve - 1 1/4", Standard Probe	
LRF110199	Sensitivity Sleeve - 3/4", Heavy Duty Probe	
LRF110766	Sensitivity Sleeve - 1 1/4", Heavy Duty Probe	Provides additional mechanical sensitivity to tip of probe
LRF120058	Tear Drop Sensitivity Attachment, Standard Probe - 1 1/4"	
LRF120081	Tear Drop Sensitivity Attachment, Heavy Duty Probe - 1 1/4"	
LRF120089	Tear Drop Sensitivity Attachment, Standard Probe - 3/4"	
LRF120090	Tear Drop Sensitivity Attachment, Heavy Duty Probe - 3/4"	
LRF120145	Tear Drop Sensitivity Attachment, Ceramic Probe - 1 1/4"	

Remote Cable Options	
VRFK35208	Bulk Cable, Low Temperature
VRFK35209	Bulk Cable, High Temperature
LRF110039	Termination Kit
LRF110028	Preterminated Remote Cable, Low Temperature (in feet)
LRF110029	Preterminated Remote Cable, High Temperature (in feet)

Probe Modifications	
	Welded Tip Extension
	Bent Probe (Exact location and degree of bend required)
	Shortened Probe (Exact length required)
	Kynar® Coated Tip Extension
	Teflon Welded Tip Extension

SPECIFICATIONS

FUNCTIONAL

Power Requirements	Universal, 120 - 240 VAC 50/60 Hz or 24 - 48 VDC
Power Consumption - STANDARD	3 W AC; 3 W DC
Power Consumption - ADVANCED	4 W AC; 4 W DC
Fuse	Fast Blow, 1A 300 V (Not User Serviceable)
Ambient Temperature	Ordinary Location: -40° to 158° F (-40° to 70° C) Hazardous Location: -4° to 158° F (-20° to 70° C) Hazardous Location, Extended: -40° to 158° F (-40° to 70° C)
Process Temperature	-20° to 302° F (-29° to 150° C) Standard Up to 500° F (Up to 260° C) with Extension 3 and Lag
Probe Temperature Range	-40° to 993° F (-40° to 534° C) depending on probe
Outputs	
Main Relay	8 A DPDT @ 240 VAC or 30 VDC (resistive)
Auxiliary Relay - ADVANCED Only	0.46 A SPDT @ 150 VAC or 1 A @ 30 VDC

PERFORMANCE

Pressure Rating	150 psi (10.5 kg/cm ²) with 3/4" NPT; 50 psi (3.5 kg/cm ²) with 1 1/4" NPT
Time Delay - STANDARD	Field Adjustable; 0.2 - 6 seconds
Time Delay - ADVANCED	Field Adjustable; 0 - 150 seconds
Fail Safe	Field Selectable; high/low level
Sensitivity - STANDARD	Field Adjustable; minimum 1.5 pf
Sensitivity - ADVANCED	Field Adjustable; minimum 0.5 pf
Maximum Particle Size	9/16" (14.3 mm)

PHYSICAL

Enclosure Material	Polyester or epoxy coated aluminum or 304 SS
Dual Conduit Entry	3/4" NPT or M20 x 1.5
Mounting Plate Material	Mild Steel, 304 SS
Extended Pipe Material	Galvanized or 316 SS
Shipping Weight	Integral, non-extended 10 lb (4.5 kg)

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
 - Intrinsically Safe



CE

- Electromagnetic Compatibility Directive
- Low Voltage Directive



3A SANITARY



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 MEASUREMENT

VRF180713 Rev. J

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