

## Engineering Specification

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Deringer™ 50 Reduced Pressure Detector Assembly

### 2" – 8"

The Deringer™ 50 Reduced Pressure Detector Assembly (RPDA-II) prevents non-health hazard pollutants and hazardous contaminants entering a potable water supply system when backpressure and/or backsiphonage conditions occur. Used primarily on fire sprinkler systems when monitoring of unauthorized water use is required.

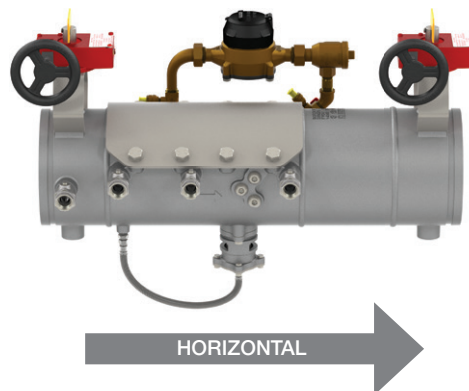
### Features

- Integral shutoff valves for indoor or outdoor application
- 100% stainless steel housing
- Tamper-resistant test cocks
- Stainless steel braided wire sensing line
- Patented Dual-action™ second check module
  - Poppet action at low flow
  - Swing action at high flow
- Balanced chamber relief valve with no sliding seals
- Poppet action first check for more reliable relief valve closure
- Lead free bronze bypass components
- CuFt or gallons bypass meter
- Single check bypass
- Prewired supervisory switches
- Flanged adapters available
- IPS grooved ends

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.



Approved for Fire Protection, Waterworks, Plumbing,  
and Irrigation Applications

### Specification

The Deringer 50 Reduce Pressure Detector assembly valve shall use two independent check modules and two integral resiliently seated shutoff valves, all of which shall be contained within a single rigid valve housing constructed entirely of 304 stainless steel. Both integral shutoff valves shall include prewired supervisory tamper switches contained within a weatherproof actuator housing approved for both indoor and outdoor use. The Dual-action second check module shall operate as a "poppet style" check under low flow conditions, operate as a "swing style" check under high flow conditions, and use replaceable silicone elastomer sealing discs. The assembly test cocks shall be handle-less and operate by a tamper resistant actuator. The assembly shall have a single full access service port and cover with an in-line replaceable elastomer seal. All bypass assembly components shall be lead free and include a meter registering either gallons or cubic feet, a single check valve, and required test cocks. The relief valve shall operate using only static seals (zero dynamic/sliding seals). All wetted surface relief valve components shall be constructed of stainless steel. The assembly shall be serviceable without special tools.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.



## Materials

Valve Housing:	304 Stainless Steel
Valve Cover:	304 Stainless Steel
SOV Disks:	EPDM/304SS
SOV Shafts:	304 Stainless Steel
Bypass Spring:	302 Stainless Steel
RV Spring:	302 Stainless Steel
SOV Bearings:	PTFE Fluoropolymer/Bronze
Non-wetted Bolts:	Grade 8 Zinc Plated
Check Disks:	Silicone (NSF)
Wetted Fasteners:	18-8 Stainless Steel
Bypass Components:	Lead Free Bronze
RV Housing:	304 Stainless Steel
Check Springs:	17-7 Stainless Steel
Check Pins:	17-7/18-8 Stainless Steel
Check Seats:	Noryl® Polymer (NSF)
O-rings:	Buna-N (NSF)
Bypass Internals:	ABS Polymer (NSF)
RV Hose:	Braided Stainless Steel Wire

## Pressure — Temperature

Temperature Range: 33°F – 140°F

Working Pressure: 10 – 175 psi

## Standards

AWWA C511-07 Compliant

ANSI/NSF/CAN 61 UL Certified Health Effects

UL Certified to ANSI/NSF/CAN 372 LEAD FREE

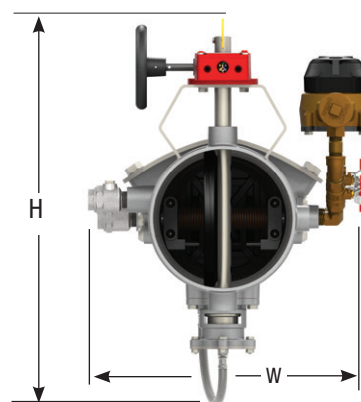
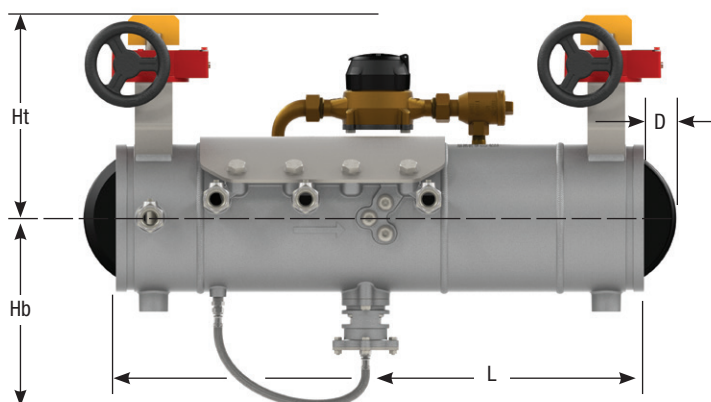
End Connections

- IPS Groove for Steel Pipe: AWWA C606

- Flange Adapters: ANSI B16.1 Class 125



## Dimensions — Weights



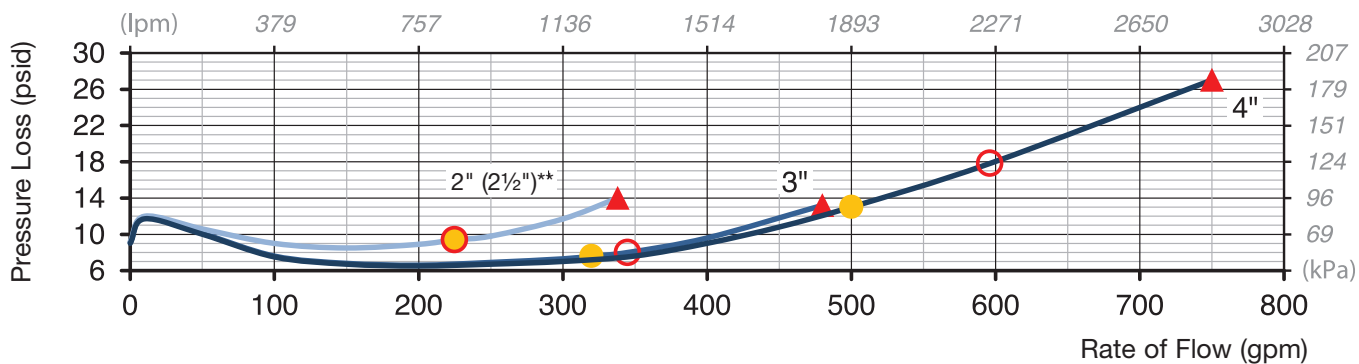
Size	Model	Ht		Hb		L		D		H		W		Weight	
in.		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
2 (2½")**	50	9.3	236	8.7	221	22.1	561	0.0	0	18.0	457	12.5	318	59	27
2½	50	7.1	180	8.7	74	18.7	475	0.0	0	15.8	401	11.0	279	47	21
3	50	7.4	188	8.7	74	18.7	475	0.0	0	16.1	409	11.0	279	49	22
4	50	7.9	201	8.7	79	18.7	475	0.2	5	16.6	422	11.0	279	51	23
6	50X***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	50	10.4	264	5.4	137	31.0	787	1.8	46	21.1	536	13.8	351	150	68

\*\*2" size uses a 2½" assembly with 2½" groove to 2" female NPT adapter and couplings. Adapter and couplings ship unassembled.

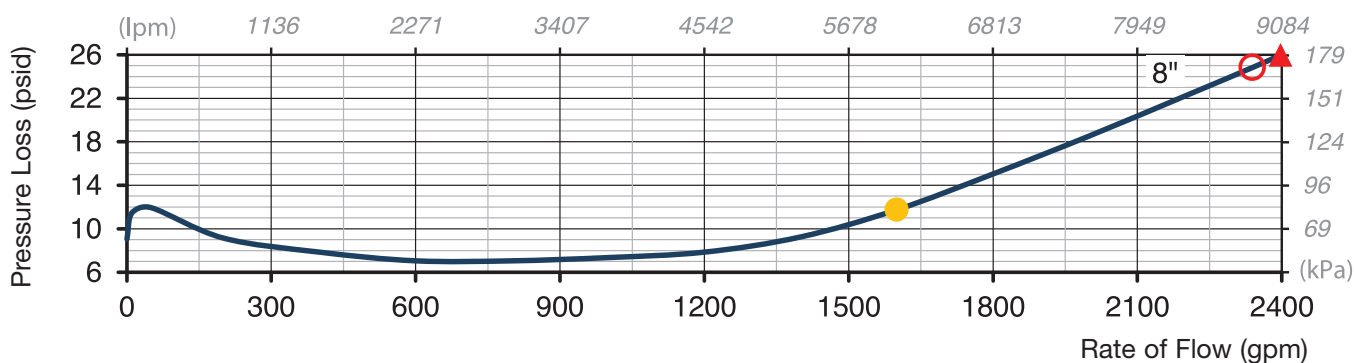
\*\*\*For 6" models, refer to Series Deringer 50X.

## Flow Performance

● = Rated Flow ▲ = UL Tested ○ = 15 fps



Specific orientation and agency flow characteristics available on website



Specific orientation and agency flow characteristics available on website



**A WATTS Brand**

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