

## Engineering Specification

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

Contractor \_\_\_\_\_

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

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

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

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

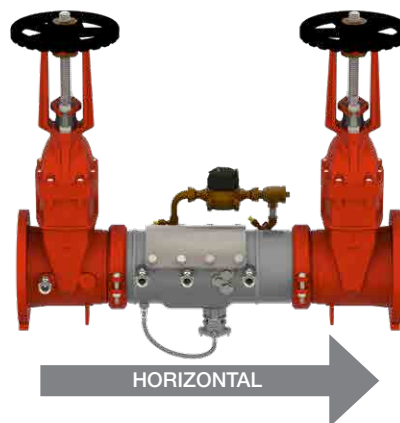
## Deringer™ 50G Reduced Pressure Detector Assembly

2½" – 8"

The Deringer™ 50G Reduced Pressure Detector assembly 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

- Poppet action first check for more reliable relief valve closure
- Stem includes tamper switch groove
- Inline serviceable gate valves
- Tamper-resistant test cocks
- Stainless steel housing
- Patented Dual-action™ second check module
  - Poppet action at low flow
  - Swing action at high flow
- CuFt or gallons bypass meter
- Lead Free\* bronze bypass components
- Stainless steel braided wire sensing line
- Silicone elastomer
- Balanced chamber relief valve requiring no sliding seals
- AWWA C509/UL/FM resilient seated gate valves (OS&Y)
- DCDA-II single check bypass
- Silicone elastomer check discs
- Flexible groove coupling UL Classified/FM Approved (between body and gate valves)
- Flanged ends ANSI B16.1 Class 125



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

### Specification

The Deringer 50G Reduce Pressure Detector assembly (RPDA-II) shall use two independent check modules contained within a single valve housing constructed entirely of stainless steel. 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. Valve assembly shall include two resiliently seated and inline serviceable AWWA C509 gate valves of type outside yoke and stem (OS&Y). Gate valves shall use a stainless steel stem with a pre-machined groove for installation of supervisory tamper switches. Assembly test cocks shall be handle-less and operate by a tamper-resistant actuator. Assembly shall use a single full access service port and a cover with an in-line replaceable elastomer seal. The relief valve shall operate without the use of sliding seals and shall be constructed entirely of stainless steel. The bypass assembly shall include a meter registering gallons or cubic feet, a single check valve and test cocks. The assembly shall be serviceable without the use of special tools.

### 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.

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

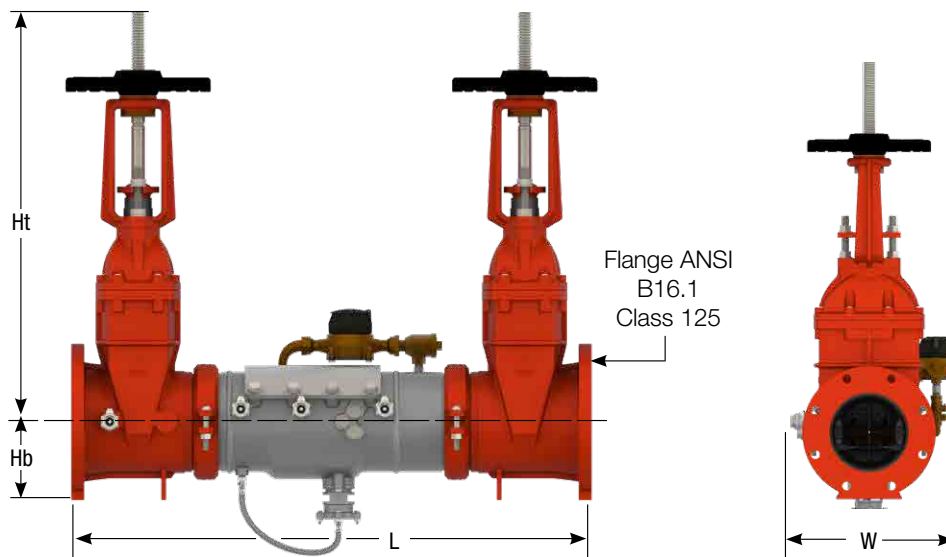
Valve Housing:	304 Stainless Steel
Valve Cover:	304 Stainless Steel
SOV Disks:	EPDM/304SS
SOV Shafts:	304 Stainless Steel
Bypass Spring:	302 Stainless Steel
RV Spring:	302 Stainless Steel
SOV Bearings:	PTFE Fluoropolymer/Bronze
Non-wetted Bolts:	Grade 8 Zinc Plated
Check Disks:	Silicone (NSF)
Wetted 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 House:	Braided Stainless Steel Wire

## Pressure – Temperature

Temperature Range: 33°F – 140°F

Working Pressure: 10 – 175 psi

## Dimensions – Weights



Size	Model	Ht		Hb		L		Ht+Hb		W		Weight	
in.		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
2½	50G	19.0	483	9.3	236	31.9	810	28.3	719	12.6	320	132	60
3	50G	19.5	495	9.3	236	31.9	810	28.8	732	12.6	320	136	62
4	50G	22.5	572	9.3	236	33.9	861	31.8	808	12.6	320	170	77
6	50G	30.9	785	10.5	267	39.9	1013	41.4	1052	15.2	386	202	92
8	50G	39.4	1001	11.5	292	45.0	1143	51.0	1295	17.7	450	462	210

## Standards

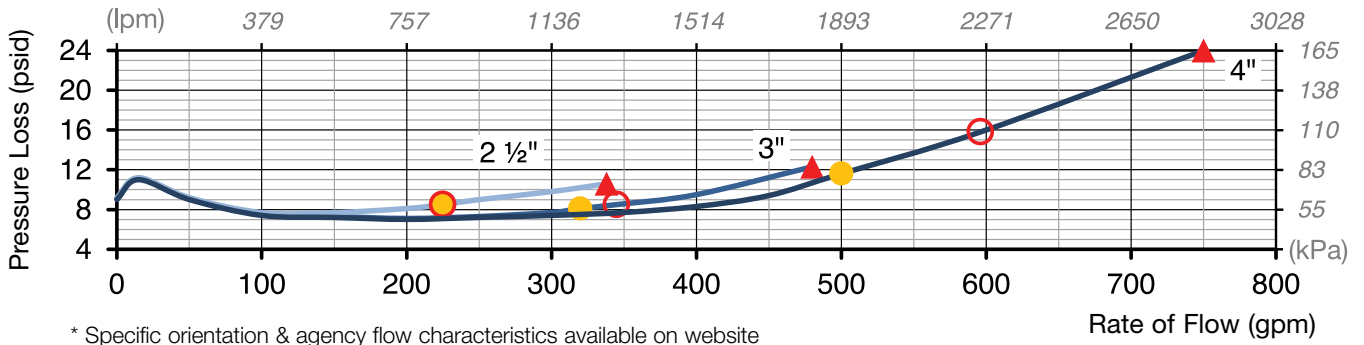
AWWA C511-07 Compliant  
NSF/ANSI 372, UL CERTIFIED  
LEAD FREE

End Connections: Flange – ANSI B16.1 Class 125

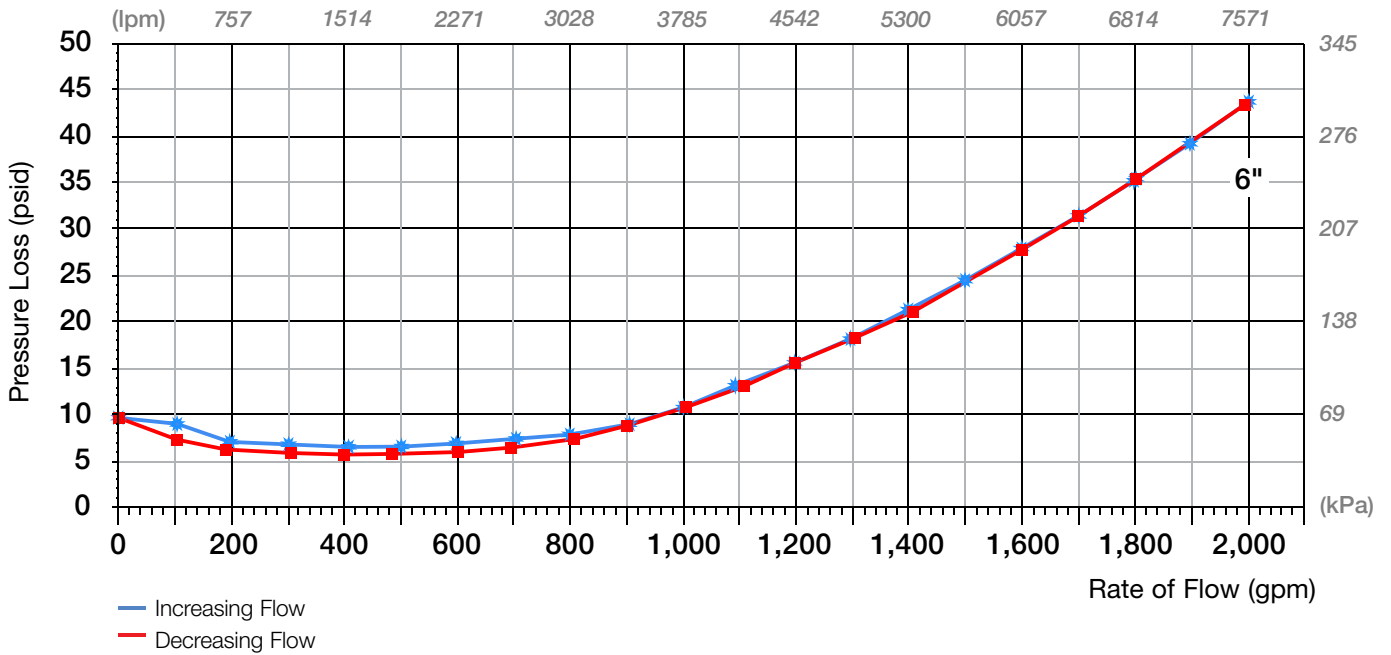


# Flow Performance

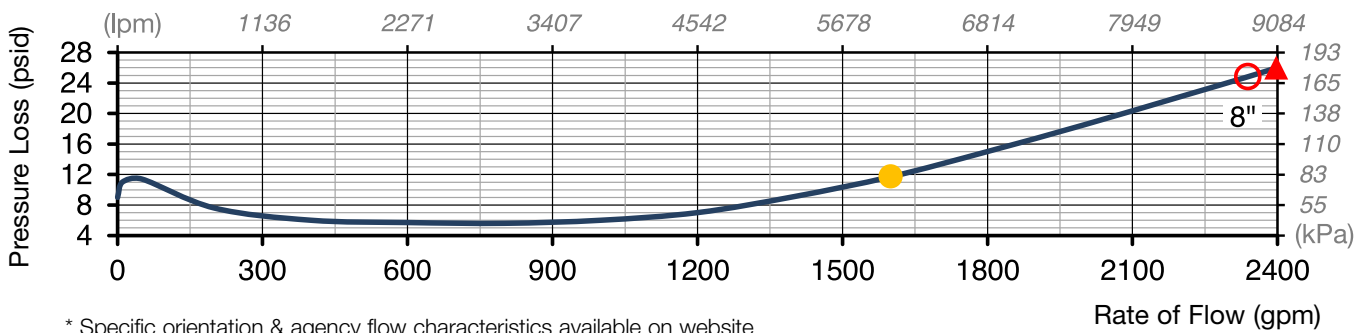
● = Rated Flow ▲ = UL Tested ○ = 15 fps



\* Specific orientation & agency flow characteristics available on website



\* Specific orientation & agency flow characteristics available on website



A WATTS Brand

USA: Backflow T: (978) 689-6066 • F: (978) 975-8350 • AmesFireWater.com  
 USA: Control Valves T: (713) 943-0688 • F: (713) 944-9445 • AmesFireWater.com  
 Canada: T: (888) 208-8927 • F: (905) 481-2316 • AmesFireWater.ca  
 Latin America: T: (52) 55-4122-0138 • AmesFireWater.com