

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Deringer™ 50X Low Head Loss Reduced Pressure Detector Assembly 4"

The Deringer™ 50X 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

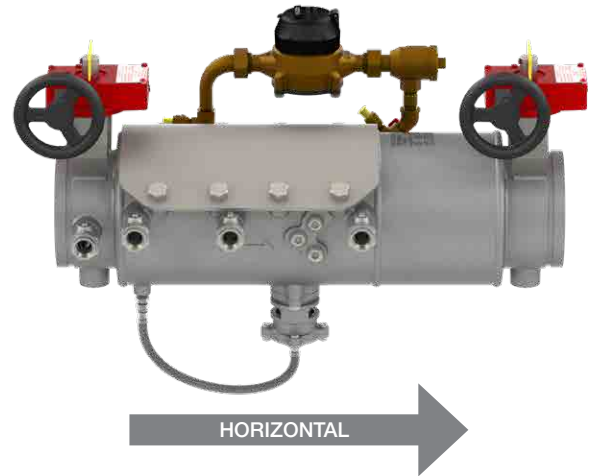
- Oversized checks for extreme performance
- Poppet action first check for more reliable relief valve closure
- Stainless steel braided wire sensing line
- Stem includes tamper switch groove
- In-line serviceable gate valves
- Stainless steel housing
- Tamper-resistant test cocks
- Patented Dual-action™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

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.



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

Specification

The Deringer 50X Reduce Pressure Detector assembly (RPDA-II) shall use two independent check modules contained within a single valve housing constructed of entirely of stainless steel. 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 valve assembly shall include two resiliently seated and in-line 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. The 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.



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

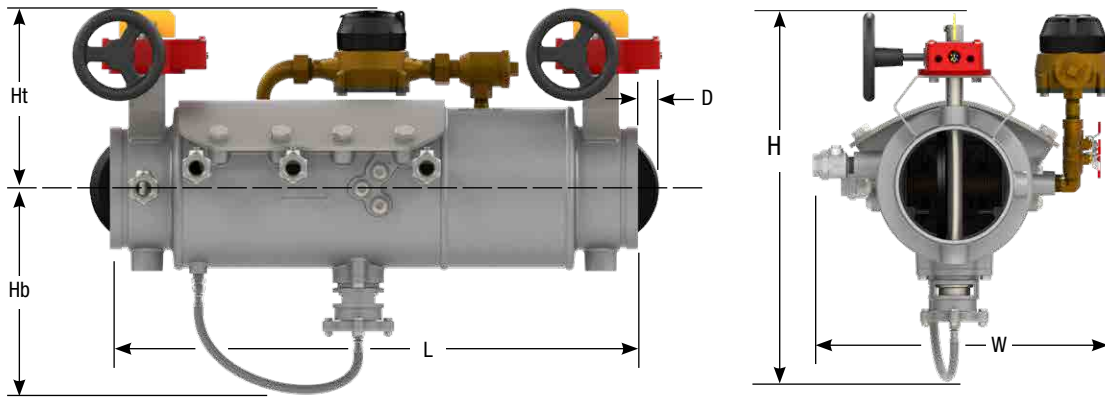
UL Certified to ANSI/NSF/CAN 372 LEAD FREE

End Connections

- IPS Groove for Steel Pipe: AWWA C606
- Flange Adapters: ANSI B16.1 Class 125

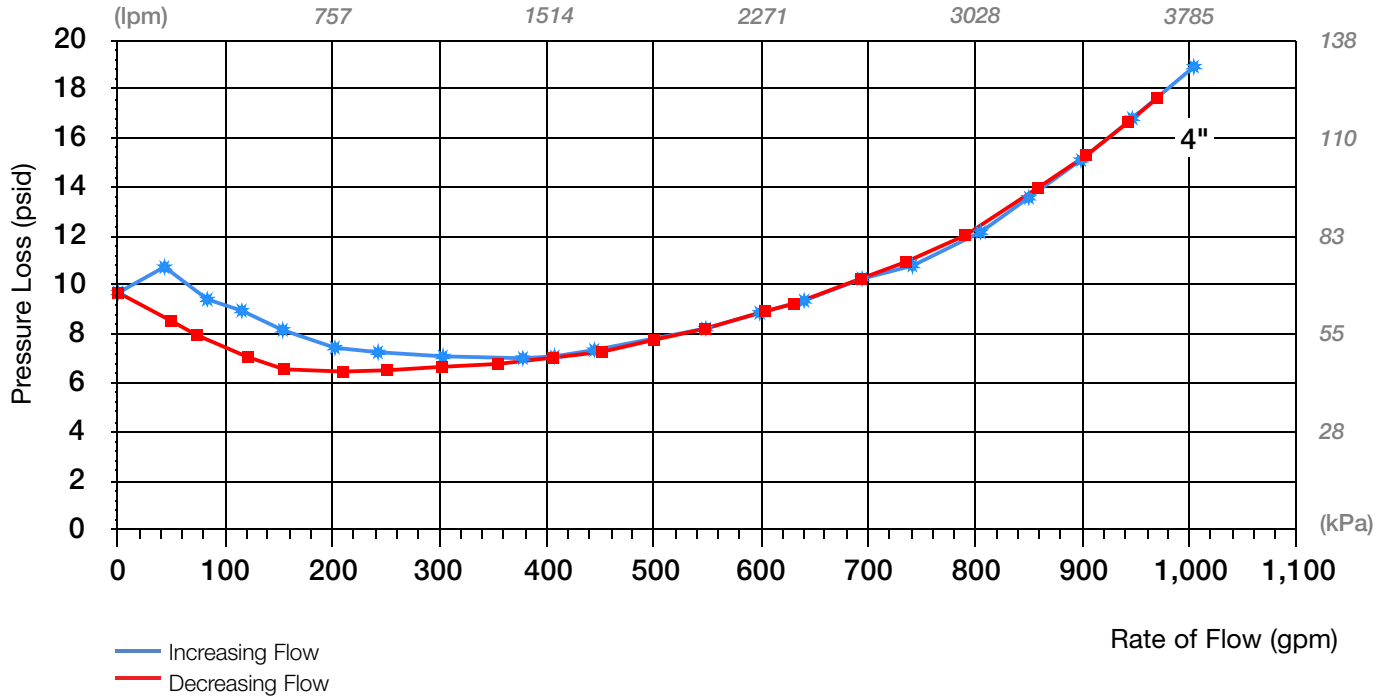


Dimensions — Weights



Size	Model	Ht		Hb		L		D		H		W		Weight	
in.		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
4	50X	9.7	246	10.5	267	23.6	599	1.0	25	20.2	513	15.2	386	73.7	33

Flow Performance



A WATTS Brand

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USA: Control Valves T: (713) 943-0688 • F: (713) 944-9445 • AmesFireWater.com
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