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Job Location:	
Engineer:	
Contractor:	
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Wholesale Dist:	

### DESCRIPTION

The Apollo® MODEL RPLF 4A Reduced Pressure Principle Backflow Preventers consist of two independently acting, TriForce™ center stem guided check valves with a differential pressure relief valve located between the check valves. The unit is designed to give maximum protection against backflow of health or non-health hazard fluids by either back-pressure or back-siphonage. The durable domestic stainless steel units (2-1/2"-8") and the FDA epoxy coated ductile iron units (10" and 12") are easily maintained in the line without any special tools. The TriForce™ check valves operate with a spring assist in the flowing condition to provide excellent flow rates which are documented by an independent laboratory.

### FEATURES

- Domestic Stainless Steel Body: 2-1/2" – 8"
- FDA Epoxy Coated Ductile Iron Body: 10" & 12"
- Easy Maintenance – No Special Tools Required
- Snap-In Check Retainers: 2-1/2" – 6"
- Bolted-In Checks: 8" – 12"
- Low Pressure loss as Documented by an Independent Laboratory
- Center-Stem Guided TriForce™ Check Valves
- Approved for Horizontal Flow
- US Patents: 6,443,184; 7,025,085; 7,533,699; 8,240,333
- Made in the USA – ARRA Compliant

### PERFORMANCE RATING

- Maximum Working Pressure: 175 psi
- Temperature Range: 33 ° F – 140 ° F
- Hydrostatic Test Pressure: 350 psi

### APPROVALS

- Sizes 2-1/2" – 8": AWWA C511
- Sizes 2-1/2" – 12": ASSE 1013-2011, CSA B64.4, FM, IAPMO, UL\*, cUL\*
- \*UL and cUL installations Must Include Indicating-Type Shut-Off Valves
- NSF 372 (2-1/2" – 12")
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (2-1/2" – 8")

### STANDARD MATERIALS LIST

<b>BODY (2-1/2" - 8")</b>	304 Stainless Steel
<b>BODY (10" &amp; 12")</b>	FDA Epoxy Coated Ductile Iron
<b>COVERS (2-1/2" - 6")</b>	Glass Filled PPO/SS
<b>COVERS (8")</b>	304 Stainless Steel
<b>COVERS (10" &amp; 12")</b>	FDA Epoxy Coated Ductile Iron
<b>RELIEF VALVE</b>	LF C89836
<b>CHECK VALVES</b>	Bronze/Glass-filled PPO/SS
<b>SPRINGS</b>	Stainless Steel
<b>SEAT DISCS</b>	Chloramine-Resistant Silicone

### PART NUMBER MATRIX

4ALF	2 X	X	0 X	XX
	Y-STRAINER	SIZE	SHUT-OFF VALVES	OPTIONS
4ALF - LEAD FREE STANDARD	0 - STANDARD	9 - 2-1/2"	1 - LESS SHUT-OFF VALVES	D - DOMESTIC ASSEMBLY
	1 - W/ Y-STRAINER (SHIPPED LOOSE)	0 - 3"	2 - NRS FLANGE X NRS FLANGE	R1 - RETROFIT*
		A - 4"	3 - OS&Y FLANGE X OS&Y FLANGE	R2 - RETROFIT*
		C - 6"	4 - OS&Y FLANGE X MONITORED (MON.) BUTTERFLY VALVE GROOVE'	R3 - RETROFIT*
		E - 8"	6 - OS&Y FLANGE X POST INDICATOR FLANGE	
		G - 10"	7 - OS&Y FLANGE X OS&Y GROOVE	
		H - 12"	8 - OS&Y GROOVE X OS&Y GROOVE	*CUSTOM LENGTH RETROFIT ORDERS MUST BE ACCOMPANIED WITH SIGNED FROM #OFBFRETRO WITH EXACT LENGTH REQUIRED.
			9 - MON. BUTTERFLY VALVE GROOVE X MON. BUTTERFLY VALVE GROOVE'	
			10 - OS&Y FLANGE X POST INDICATOR GROOVE	
			11 - NRS GROOVE X NRS GROOVE	
			12 - NRS FLANGE X NRS GROOVE	
			13 - POST INDICATOR FLANGE X MON. BUTTERFLY VALVE GROOVE'	
			14 - POST INDICATOR FLANGE X POST INDICATOR FLANGE	
			16 - MON BUTTERFLY VALVE GROOVE X POST INDICATOR FLANGE'	
			17 - POST INDICATOR FLANGE X OS&Y GROOVE	
			18 - OS&Y GROOVE X POST INDICATOR GROOVE	
			19 - MON. BUTTERFLY VALVE GROOVE X POST INDICATOR GROOVE	
			20 - POST INDICATOR FLANGE X OS&Y FLANGE	
			21 - POST INDICATOR GROOVE X OS&Y GROOVE	
			22 - POST INDICATOR GROOVE X MON. BUTTERFLY VALVE GROOVE'	
			23 - MON. BUTTERFLY VALVE GROOVE X OS&Y FLANGE	

EXAMPLE: 4ALF 20A 07 = 4" size Lead Free Reduced Pressure Assembly with OS&Y flanged inlet x OS&Y grooved outlet shut-off valves.

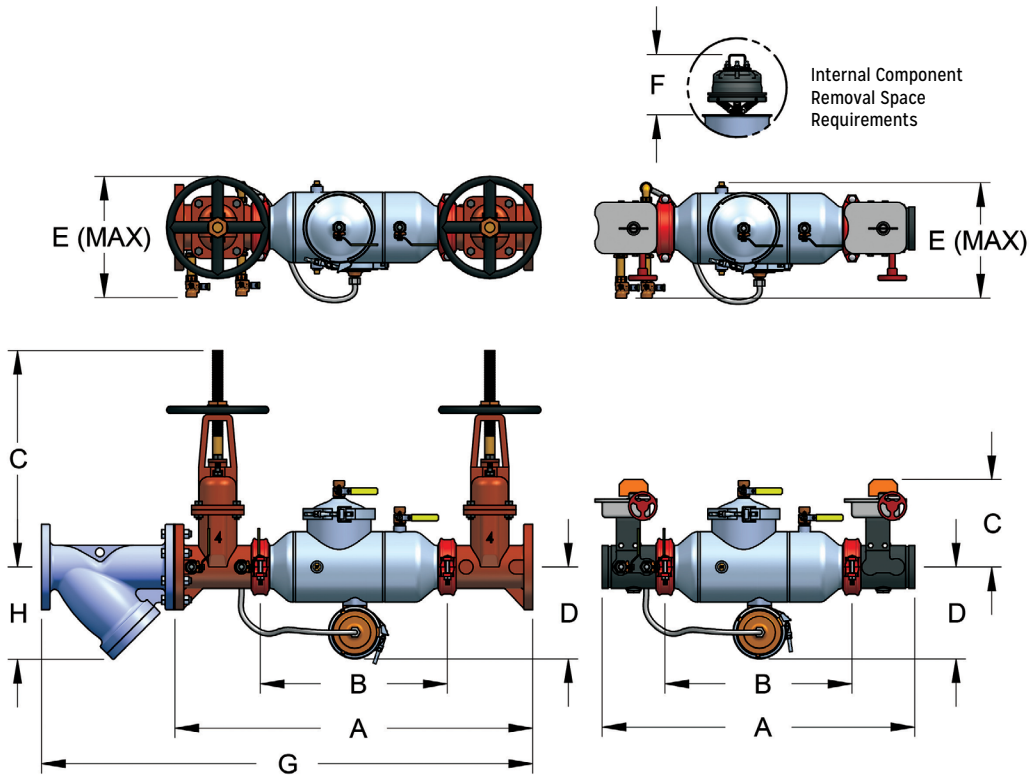
\* Butterfly valves not available in 12" size.

\*LEAD FREE: The wetted surfaces of this product shall contain no more than 0.25% lead by weighted average. Complies with Federal Public Law 111-380. ANSI 3rd party approved and listed.

## RPLF4A Series

Reduced Pressure Principle Backflow Preventer

### LEAD FREE



### DIMENSIONS

Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances ( $\pm 1/8"$  (3 mm) per joint)

DIMENSIONS	2-1/2"	60 MM.	3"	75 MM.	4"	100 MM.	6"	150 MM.	8"	200 MM.	10"	250 MM.	12"	300 MM.
A (Butterfly Valves)	28	711	28.5	724	33.3	846	38.9	988	46.4	1179	56.3	1328	N/A	N/A
A (Gate Valves)	31	787	32	813	38	965	45.9	1166	53.4	1356	62.3	1582	65.5	1664
B (less Shut-off Valves)	15.9	404	15.9	404	19.6	498	24.5	622	30	762	36	914	37	940
C (Butterfly Valves)	8	203	8.4	213	9.1	231	10.1	257	12	305	13.4	340	N/A	N/A
C (NRS/PI Gate Valves)	11.8	300	13	330	14	356	17.8	452	21	533	24.5	622	30	762
C (OS&Y Open)	18.8	478	20.3	515	22.1	562	29.4	747	36.8	934	45.2	1147	52.2	1326
D (Centerline to Bottom)	9.6	244	9.6	244	10.4	264	11.6	295	15.6	396	21	533	21	533
E (Width Max)	11.5	292	12	305	12.5	318	14.4	366	17.6	447	21	533	22	559
F (Check Removal Clearance)	4.8	122	4.8	122	6.5	165	7.5	191	7.5	191	10	254	10	254
G (With Strainer)	41.9	1064	43.6	1107	52	1321	64.5	1638	78.9	2004	88.4	2245	95.6	2428
H (Strainer Clearance)	8	203	8.8	224	9.5	241	12.6	320	16.4	417	19	483	22	559
Test Cocks (NPT)	1/2"	13	1/2"	13	1/2"	13	3/4"	20	3/4"	20	3/4"	20	3/4"	20
WEIGHTS	LB.	KG	LB.	KG	LB.	KG	LB.	KG	LB.	KG	LB.	KG	LB.	KG
Net Wt. (Less Shutoff's)	31	14	32	15	48	22	84	38	228	104	762	346	865	393
Ship Wt. (Less Shutoff's)	61	28	62	28	78	35	144	65	328	149	952	433	1055	480
Net Wt. (W/ Butterfly Valves)	58	26	62	28	92	42	152	69	359	163	980	445	N/A	N/A
Ship Wt. (W/ Butterfly Valves)	142	65	146	66	177	80	240	109	507	230	1170	532	N/A	N/A
Net Wt. (W/ NRS Valves)	85	39	103	47	143	65	267	121	545	248	1269	577	1725	784
Ship Wt. (W/ NRS Valves)	169	77	187	85	228	104	355	161	693	315	1459	663	1915	870
Net Wt. (W/ OS&Y Valves)	103	47	119	54	174	79	327	149	620	282	1384	629	1840	836
Ship Wt. (W/ OS&Y Valves)	187	85	203	92	259	118	415	189	176	80	1574	715	2030	923

Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances (1/8" per joint).

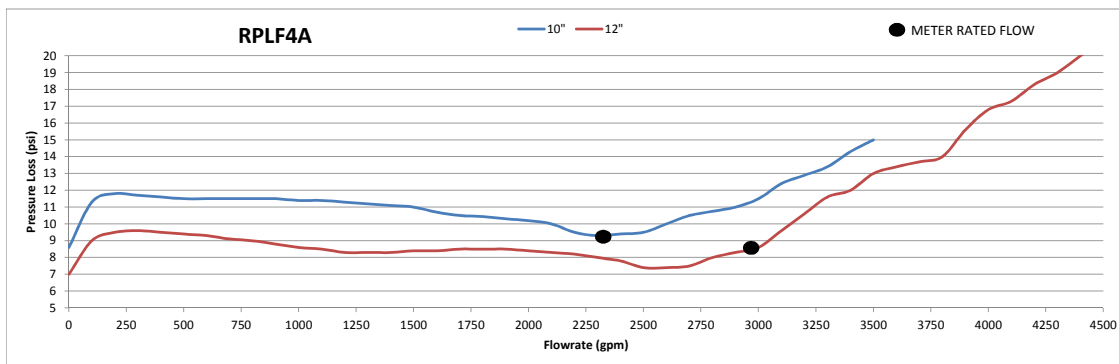
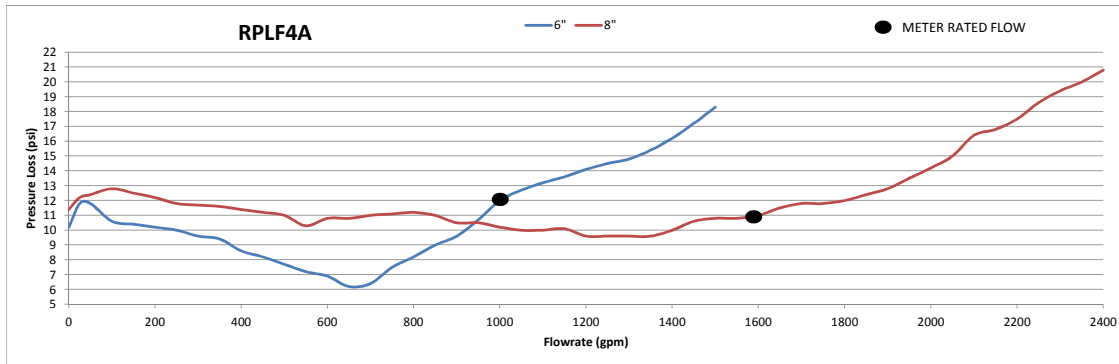
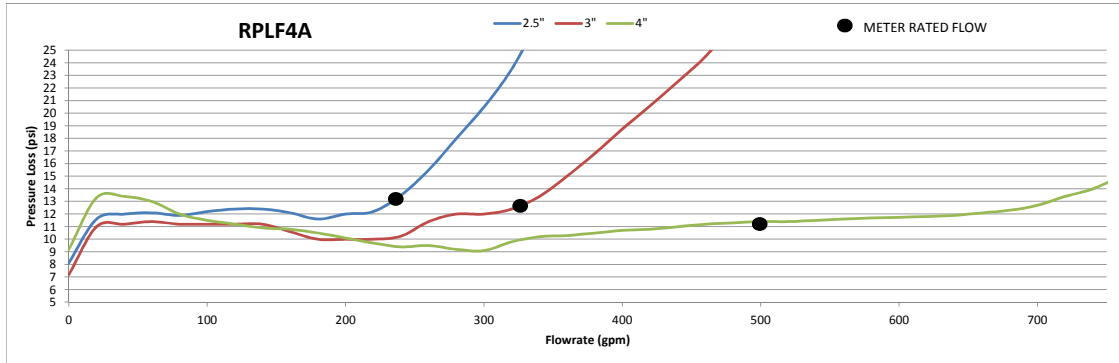
Internal body connections are grooved on 2 1/2" - 10" sizes.

Internal body connections are flanged on 12" size.

Strainer option only available for flanged-end shut-off options.

### FLOW CURVES

Pressure loss versus flow data as determined by independent approval agencies.



● Meter Rated Flow