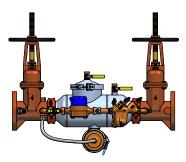


RPDALF 4A / RPDA2LF SERIES

REDUCED PRESSURE DETECTOR BACKFLOW PREVENTER ASSEMBLY



TYPE 1 BYPASS 2-1/2" - 8" 304 STAINLESS STEEL BODY



TYPE 2 BYPASS 2-1/2" - 8" 304 STAINLESS STEEL BODY



TYPE 2 BYPASS 10" - 12" FDA EPOXY COATED DUCTILE IRON BODY



TRIFORCE™ CHECK



Flow Curves - Page 63

The Apollo Model RPDALF 4A / RPDA2LF 4A Reduced Pressure Detector Assembly consists 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 and at the same time detect leakage or unauthorized use of water from fire or automatic sprinkler systems. The durable domestic stainless steel units (2-1/2" to 8") and the FDA epoxy coated ductile iron units (10" and 12") are easily maintained in line without any special tools. The TriForce™ check valves operate with a spring assist in the flowing condition to provide low flow rates which are documented by an independent laboratory.

Available in both Type 1 and Type 2 bypass configurations. The Type 2 bypass uses the first check of the mainline assembly as the first check of the bypass. The second check of the bypass is a single check valve with a model number and serial number for test recording. This arrangement complies with the National Backflow Standards. The arrangement provides the same level of protection as the Type 1 bypass and the testing procedure is the same.

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 Approval Laboratory
- Center Stem Guided TriForce[™] Check Valves
- Modular Captured Spring Relief Valve
- · Optional Air Gap Drain
- Lead-Free Standard
- US Patent Nos.: 6,443,184; 7,025,085;7,533,699
- Designed, Assembled and Tested in the USA
- 5 Year Warranty
- Optional Mounting of Bypass on Either Side for Ease of Installation

PERFORMANCE RATING

- Maximum Working Pressure: 175 psi
- Temperature Range: 33° to 140°F, 180°F Intermittent

APPROVALS

- ASSE 1047 (with Meter)
- CSA B64.4
- NSF/ANSI/CAN 61 Water Quality
- NSF/ANSI 372 Lead Free
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (2-1/2" - 8" Types 1 & 2) 10" & 12" + type 2 bypass only
- UL, ULC Classified
- FM Approved

STANDARD MATERIALS LIST

BODY (2-1/2"-8")	04 Stainless Steel COVERS (10" & 12"		FDA Epoxy Coated Ductile Iron
BODY (10" & 12")	FDA Epoxy Coated Ductile Iron CHECK VALVES		Bronze/Glass-Filled PPO/SS
COVERS (2-1/2"-6")	Glass Filled PPO/SS	SPRINGS	Stainless Steel
COVERS (8")	304 Stainless Steel	SEAT DISCS	Chloramine-Resistant Silicone

PART NUMBER MATRIX

4ALF	7 X	Х	Х	XX	XX
	BYPASS SUB-ASSEMBLY OPTIONS	SIZE	METER OPTION	SHUT-OFF VALVES (INLET x OUTLET)	OPTIONS
4ALF - Lead Free (Standard)	0 - Type 1 w/ 1/2" Reduced Pressure	9 - 2-1/2"	C - Cubic ft/min	03 - OS&Y FLANGE x OS&Y FLANGE	D - Domestic Assembly
	2 - Type 2 w/1/2" Single Check	0 - 3"	E - Gallons/min	04 - OS&Y FLANGE x Monitored (Mon.) Butterfly VALVE Groove†	
	3 - Type 1 w/ Bypass on Left*	A - 4"	G - Less Meter	06 - OS&Y FLANGE x Post indicator FLANGE]
	4 - Type 2 w/ Bypass on Left*	C - 6"		07 - OS&Y FLANGE x OS&Y Groove]
		E - 8"		08 - OS&Y Groove x OS&Y Groove]
	Type 2 & 4 only	G - 10"		09 - Mon. Butterfly Valve Groove x Mon. Butterfly Valve Groove†	
	Type 2 & 4 only	H - 12"		10 - OS&Y FLANGE x Post Indicator 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 72A E	3 = 4" size lead free reduced pressure dete	ctor assembl	y with OS&Y flange	d inlet x OS&Y flanged outlet shut-off valves Type 2 Bypass	w/ meter in gallons

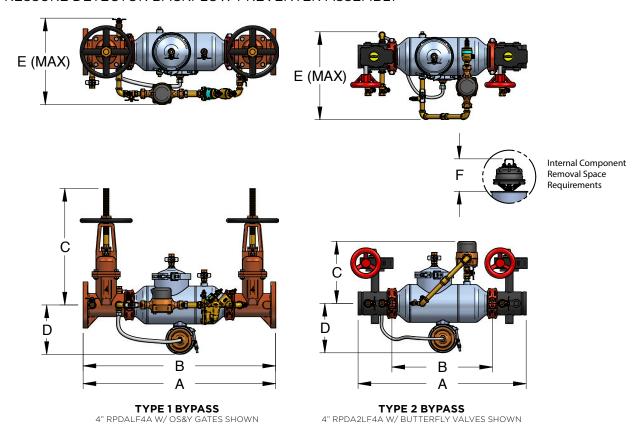
*Orientation of bypass looking downstream. Standard is right hand side. Left hand is on opposite side †Butterfly valves not available in 12" size.





RPDALF 4A / RPDA2LF SERIES

REDUCED PRESSURE DETECTOR BACKFLOW PREVENTER ASSEMBLY



DRAWING SHOWN DEPICTS 2-1/2" - 6" ASSEMBLIES. SEE SUBMITTAL SS1329 FOR DETAILED DRAWINGS FOR EACH SIZE.

DIMENSIONS

DIMENSIONS	2-1/2"	60MM	3"	75MM	4"	100MM	6"	150MM	8"	200MM	10"	250MM	12"	300MM
A (Butterfly Valves)	28	711	28.5	724	33	838	38.5	978	46	1168	52	1321	N/A	N/A
A (Gate Valves)	31	787	32	813	37.6	955	45.5	1156	53.1	1349	62.3	1582	65.4	1661
B (Less Shut-off Valves)	16	406	16	406	19.8	503	24.5	622	30	762	36	914	37	940
C (Butterfly Valves - Type 1)	8.6	218	9.6	244	10.9	277	13	330	16.5	419	N/A	N/A	N/A	N/A
C (Butterfly Valves - Type 2)	13.3	338	13.3	338	12.1	307	13.8	351	16.5	419	N/A	N/A	N/A	N/A
C (NRS/PI Gate Valves - Type 1)	11.8	300	13	330	14	356	17.8	452	21	533	N/A	N/A	N/A	N/A
C (NRS/PI Gate Valves - Type 2)	13.3	338	13.3	338	14	356	17.8	452	21	533	24.5	622	30	762
C (OS&Y Open)	16.4	417	20.5	521	22.8	579	27.3	693	37.8	960	45.8	1163	53.1	1349
D (Centerline to Bottom)	9	229	9	229	9.8	249	11	279	15.8	401	21	533	21.1	536
E (Max w/Gate or Butterfly Valves - Type 1)	15.5	394	15.5	394	16.6	422	19.4	493	22.4	569	N/A	N/A	N/A	N/A
E (Max w/Gate or Butterfly Valves - Type 2)	14.1	358	14.1	358	17.4	442	18.4	467	22	559	24.9	632	25	635
F (Check Removal Clearance)	4.8	122	4.8	122	6.5	165	7.5	191	7.5	191	10	254	10	254
Test Cocks (NPT)	1/2"	15	1/2"	15	1/2"	15	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 Valves)	31	14	32	15	48	22	84	38	228	103	762	346	865	392
Net Wt. (w/ Butterfly Valves)**	105	48	111	50	137	62	198	90	420	191	N/A	N/A	N/A	N/A
Net Wt. (w/ NRS Gate Valves)**	103	47	118	54	158	72	282	128	561	254	1299	589	1755	796
Net Wt. (w/ OS&Y Gate Valves)**	118	54	134	61	189	86	342	155	636	288	1413	641	1870	848

Notes:

Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances.

Internal body connections are grooved on 2-1/2"-10" sizes. Internal body connections are flanged on 12" size.

