



Job Name:	
Job Location:	
Engineer:	
Contractor:	
Tag:	
PO#:	
Rep.:	
Wholesale Dist.:	

DESCRIPTION

The 2-1/2" - 12" Backflow Preventer shall be an Apollo® Model DCLF 4A Lead Free* Double Check Valve. The assembly shall be manufactured in America and carry a 5-year Apollo® factory warranty. The TriForce™ center stem guided check valves shall feature reversible silicone rubber seat discs. The check valves shall be held in place by SS snap-in retainers (2-1/2" - 6") or SS studs & nuts (8" - 12"). Access to the check valves shall be by an Apollo® quick-connect SS coupling (2-1/2" - 6") or grooved couplings (8" - 12"). The bodies shall be domestic SS in 2-1/2" - 8" sizes and FDA epoxy coated ductile iron in 10" & 12" sizes. The lead free* Apollo® domestic ball valve test cocks shall have SS handles. The assembly shall prevent contamination of the potable water supply due to back-siphonage or backpressure from substances that are non-health hazards. The pressure drop across the assembly shall be 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 Approval Laboratory
- Center Stem Guided TriForce™ Check Valves
- Approved for Horizontal and Vertical Up Flow
- Chloramine-Resistant Elastomers
- Lead Free Standard
- US Patent Nos. 6,443,184; 7,025,085; 7,533,699
- Made in the USA (D Option)
- 5 Year Warranty

APPROVALS

- ASSE 1015-2011
- CSA B64.5
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (2-1/2" - 8")
- AWWA C-510
- IAPMO
- UL, ULC Classified
- FM Approved
- NSF/ANSI 61 Water Quality (2-1/2" - 12")
- NSF/ANSI 372 Lead Free (2-1/2" - 12")

STANDARD MATERIALS LIST

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

PERFORMANCE RATING

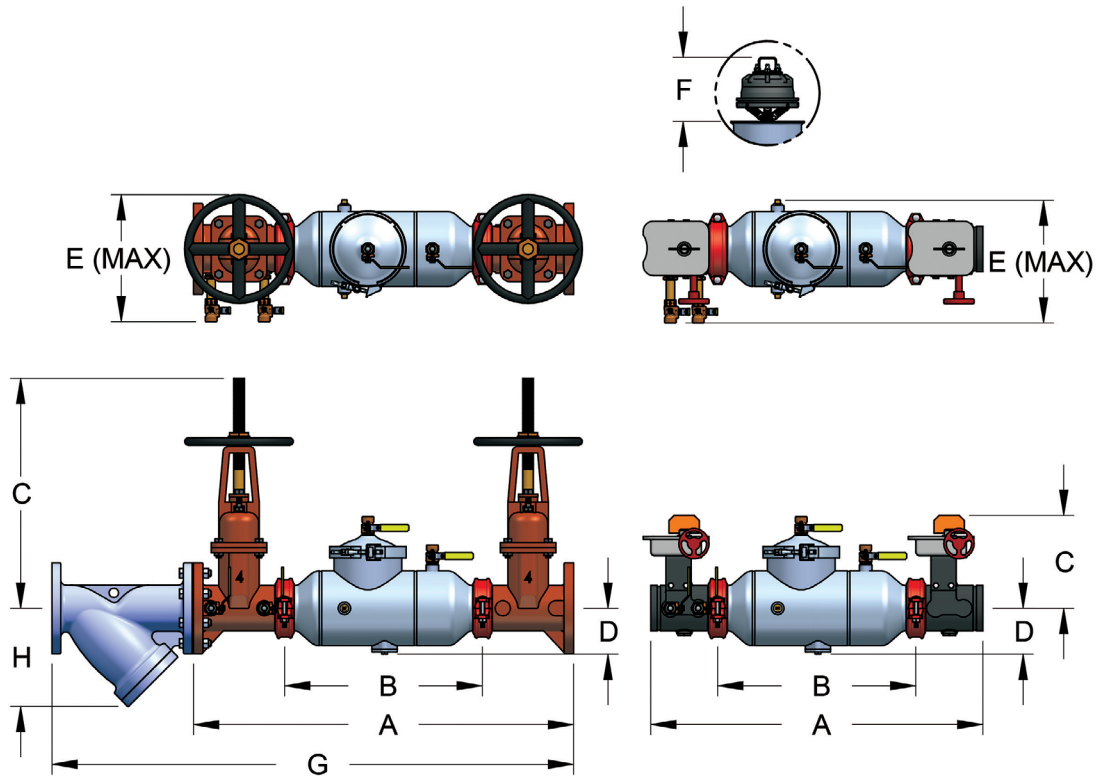
- Maximum Working Pressure: 175 psi
- Temperature Range: 33°F - 140°F, 180°F intermittent

PART NUMBER MATRIX

4ALF	1X	X	OX [X]	XX
	Y-STRAINER	SIZE	SHUT-OFF VALVES (INLET X OUTLET)	OPTIONS
4ALF - LEAD FREE STANDARD	0 - STANDARD	9 - 2-1/2"	1 - LESS SHUT-OFF VALVES	D - DOMESTIC ASSEMBLY
	1 - W/Y-STRAINER	0 - 3"	2 - NRS FLANGE X NRS FLANGE	R1 - RETROFIT*
	(SHIPPED LOOSE)	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	*CUSTOM LENGTH RETROFIT
		H - 12"	8 - OS&Y GROOVE X OS&Y GROOVE	ORDERS MUST BE ACCOMPANIED WITH SIGNED FROM #OFB-FRETRO 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 10A 03 = 4" size Lead Free Double Check Valve Assembly with OS&Y flanged inlet x OS&Y flanged outlet shut-off valves (shown above)

*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.



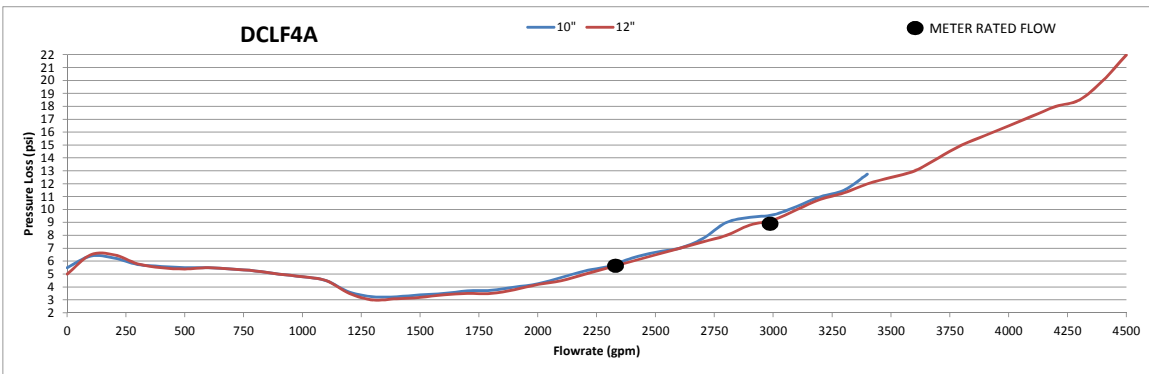
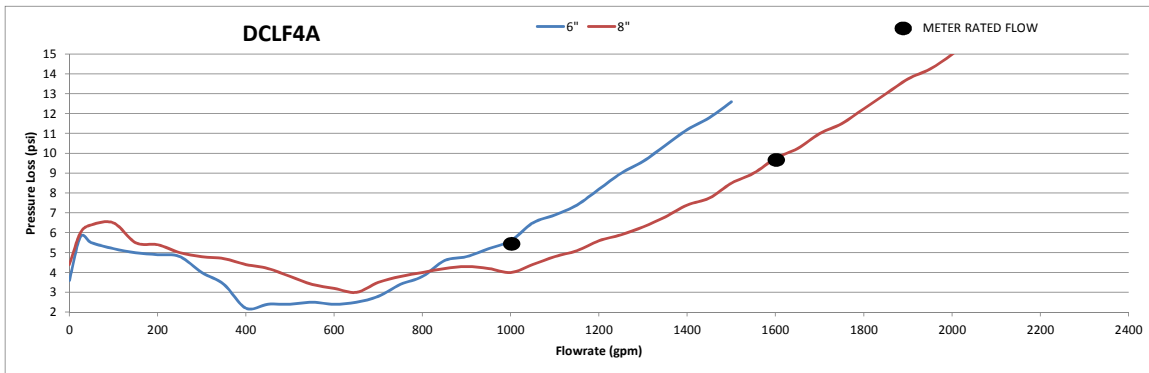
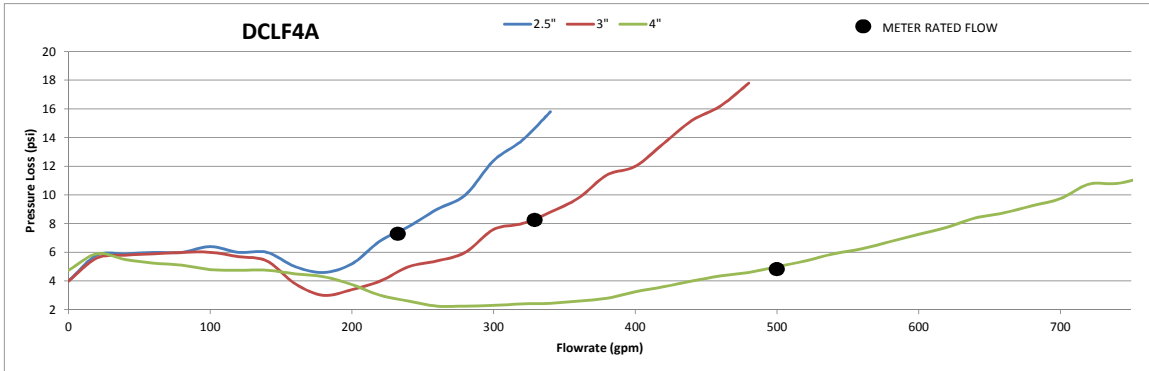
DIMENSIONS

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

SIZE	2-1/2"	65 MM	3"	80MM	4"	100MM	6"	150MM	8"	200MM	10"	250MM	12"	300MM
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)	3.9	99	3.9	99	4.6	117	6	152	8.1	206	11.8	300	12	305
E (Width Max)	10.5	267	11	279	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 Valves)	22	10	23	10	39	18	75	34	208	95	702	319	805	366
Ship Wt. (Less Shutoff Valves)	52	24	53	24	69	31	135	61	308	140	892	405	995	452
Net Wt. (w/ Butterfly Valves)	49	22	53	24	83	38	143	65	339	154	920	418	N/A	N/A
Ship Wt. (w/ Butterfly Valves)	133	60	137	62	147	67	231	105	487	221	1110	505	N/A	N/A
Net Wt. (w/ NRS Valves)	76	35	94	43	137	62	258	117	525	239	1209	550	1665	757
Ship Wt. (w/ NRS Valves)	160	73	178	81	222	101	346	157	673	306	1399	636	1855	843
Net Wt. (w/ OS&Y Valves)	94	43	110	50	165	75	317	144	600	273	1324	602	1780	809
Ship Wt. (w/ OS&Y Valves)	178	81	194	88	253	115	406	185	748	340	1514	688	1970	895

Internal body connections are grooved on 2-1/2" to 10" sizes.
Internal body connections are flanged on 12" size.
Strainer option only available for flanged-end shut-off options.

FLOW CURVES



Notes:
 Flow curves directly reflect data collected by an independent laboratory.
 Flow curves shown were recorded with gate shut-off valves. Contact factory for more information.
 All data points are based on ASSE increasing flow data, from zero GPM to rated flow (opening curve).
 For high flow rates/pressure loss information - contact factory.