

DCLF 4A

double check assembly
lead free



job name:	
job location:	
engineer:	
contractor:	
tag:	
po#:	
rep:	
wholesale dist.:	

description

the 2-1/2" - 12" backflow preventer shall be an Apollo model DCLF4A 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 stainless steel snap-in retainers (2-1/2" - 6") or stainless steel studs & nuts (8" - 12"). access to the check valves shall be by an Apollo quick-connect stainless steel coupling (2-1/2" - 6") or grooved couplings (8" - 12"). the bodies shall be stainless steel in 2-1/2" - 8" sizes and FDA epoxy coated ductile iron in 10" & 12" sizes. the lead free* Apollo ball valve test cocks shall have stainless steel 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 ASSE or USC FCCCHR approval curves.

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 flow up
- 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" - 12")
- AWWA C-510
- UL, ULC classified
- FM approved
- NSF/ANSI 61 water quality (2-1/2" - 12")
- NSF/ANSI 372 lead free (2-1/2" - 12")

performance rating

- maximum working pressure: 175 psi
- temperature range: 33°F - 140°F
- hydrostatic test pressure: 350 psi

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/stainless steel
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

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"	2 - NRS FLANGE X NRS FLANGE	D - DOMESTIC ASSEMBLY
	1 - W/ Y-STRAINER	0 - 3"	3 - OS&Y FLANGE X OS&Y FLANGE	
	(SHIPPED LOOSE)	A - 4"	4 - OS&Y FLANGE X MONITORED (MON.) BUTTERFLY VALVE GROOVE†	
		C - 6"	6 - OS&Y FLANGE X POST INDICATOR FLANGE**	
		E - 8"	7 - OS&Y FLANGE X OS&Y GROOVE	
		G - 10"	8 - OS&Y GROOVE X OS&Y GROOVE	
		H - 12"	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	

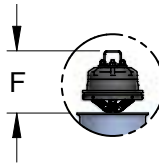
EXAMPLE:
4ALF 10A 03 = 4" size Lead Free Double Check Valve Assembly with OS&Y flanged inlet x OS&Y flanged outlet shut-off valves (shown above)

† butterfly valves not available in 12" size..

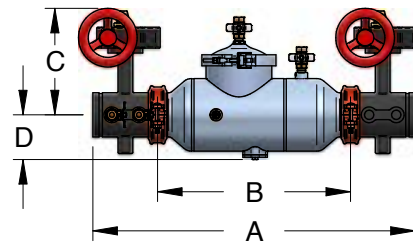
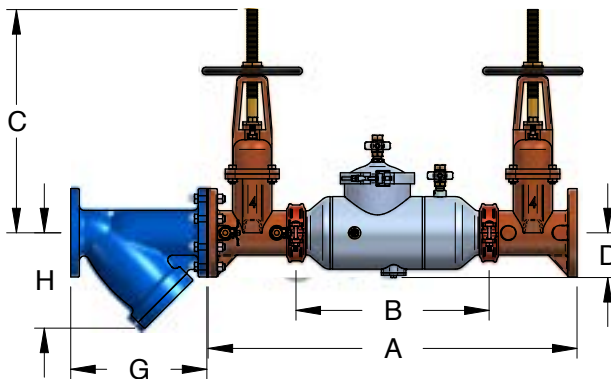
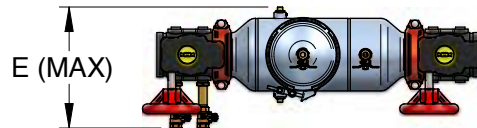
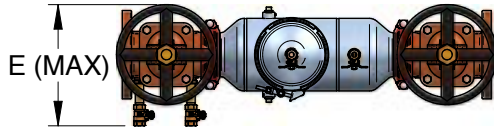
*lead free: the wetted surfaces of this product shall contain no more than 0.25% lead by weighted average. complies with federal public law 111-380. ANSI 3rd party approved and listed.

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internal component
removal space
requirements



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	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)	8.6	218	9.6	244	10.9	277	13	330	16.5	419	19	483	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)	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)	3.9	99	3.9	99	4.6	117	5.9	150	8.3	211	11.1	282	11.4	290
E (Max w/Gate or Butterfly Valves)	11	279	11.3	287	12.4	315	14.5	368	19.3	490	21.9	556	21.9	556
F (Check Removal Clearance)	4.8	122	4.8	122	6.5	165	7.5	191	7.5	191	10	254	10	254
G (Strainer Length)	10.9	277	11.6	295	14	356	18.6	472	25.5	648	26.1	663	30.1	765
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"	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)	22	10	23	10	39	18	75	34	208	94	702	318	805	365
Net Wt. (w/ Butterfly Valves)	84	38	90	41	116	53	176	80	386	175	921	418	N/A	N/A
Net Wt. (w/ NRS Gate Valves)	76	34	94	43	137	62	258	117	525	238	1209	548	1665	755
Net Wt. (w/ OS&Y Gate Valves)	94	43	110	50	165	75	317	144	600	272	1324	601	1780	807

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

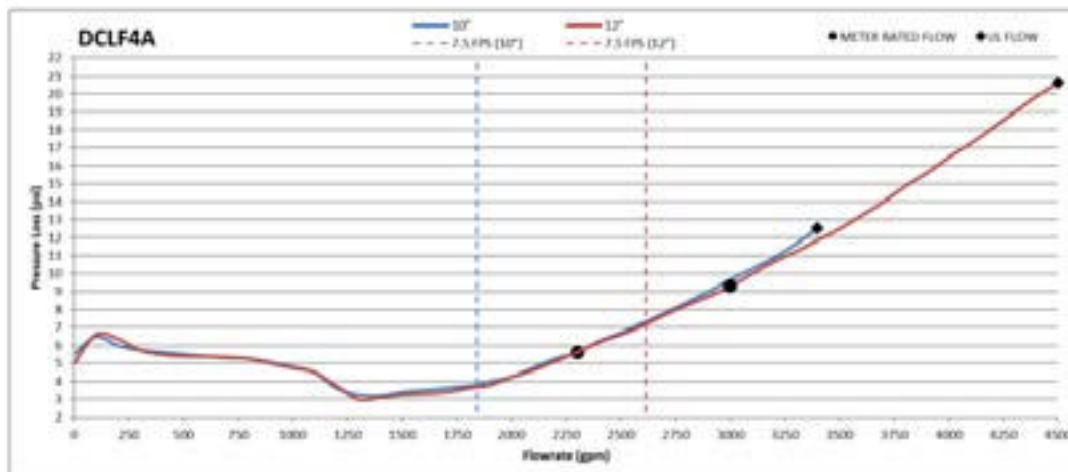
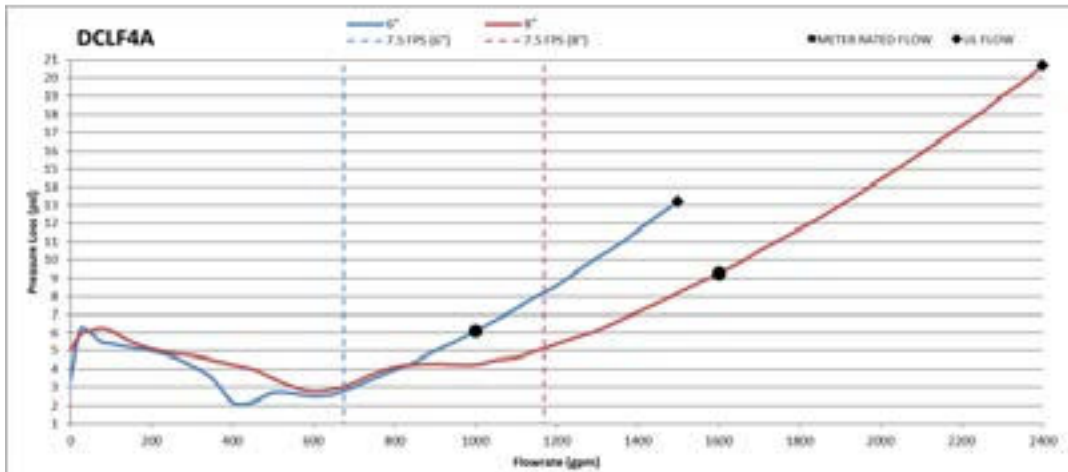
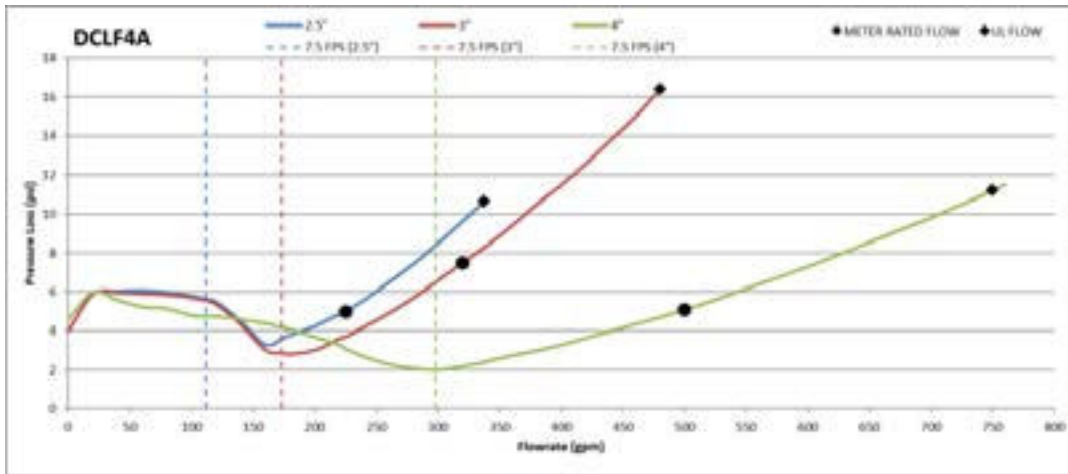
internal body connections are flanged on 12" size.

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

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FLOW CURVES



notes:

1. flow curves directly reflect data collected by an asse approved laboratory.
2. flow curves shown were recorded with gate shut-off valves. contact factory for more information.
3. all data points are based on ASSE increasing flow data, from zero GPM to rated flow (opening curve).
4. for high flow rates/pressure loss information – contact factory.