

DCDALF4AN series

double check detector assembly
lead free



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

description

the 2-1/2" - 12" lead free double check detector assembly shall be an Apollo model DCDALF4AN or DCDA2LF4AN. 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 drop-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 assembly is a mainline double check valve with a type 2 bypass consisting of a lead free* single check (SCV) and meter bypassing the mainline second check to prevent backflow while accurately measuring all flows up to 2 gpm with the mainline 2nd check remaining closed. assemblies with the optional Type 1 bypass consist of a lead free* double check valve and meter which bypasses both mainline checks and accurately meters all flows up to 2 gpm with both mainline checks closed. the Apollo 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
- drop-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
- 5 year warranty
- small installation space required - small footprint
- chloramine-resistant elastomers
- lead free standard
- optional valve setters eliminate need for thrust blocks below grade
- us patent nos.: 6,443,184; 7,025,085; 7,533,699
- made in the usa (d option)
- optional mounting of bypass on either side for ease of installation

approvals

- ASSE 1048 (with meter)
- UL, ULC classified
- CSA B64.5
- approved by the foundation for cross-connection control and hydraulic research at the university of southern california (2-1/2" - 8" type 1 bypass, 10" - 12" type 2 only)
- FM approved
- NSF/ANSI 61 water quality
- NSF/ANSI 372 lead Ffree

performance rating

- maximum working pressure: 175 psi
- temperature range: 33°F - 140°F, 180°F intermittent

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

part number matrix

4ANLF	6 X	X	X	X [X]	X
	BYPASS SUB-ASSEMBLY OPTIONS	SIZE	METER OPTION	SHUT-OFF VALVES (INLET X OUTLET)	OPTIONS
4ANLF - LEAD FREE	0 - TYPE 1 W/ 1/2" DOUBLE CHECK	9 - 2-1/2"	C - CUBIC FEET/MIN	1 - LESS SHUT-OFF VALVES	D - DOMESTIC ASSEMBLY
	2 - TYPE 2 W/1/2" SINGLE CHECK (STD)	0 - 3"	E - GALLONS/MIN	3 - OS&Y FLANGE X OS&Y FLANGE	
	3 - TYPE 1 W/ BYPASS ON LEFT*	A - 4"	G - LESS METER	4 - OS&Y FLANGE X MONITORED (MON.) BUTTERFLY VALVE GROOVE [†]	
	4 - TYPE 2 W/ BYPASS ON LEFT*	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	
				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	

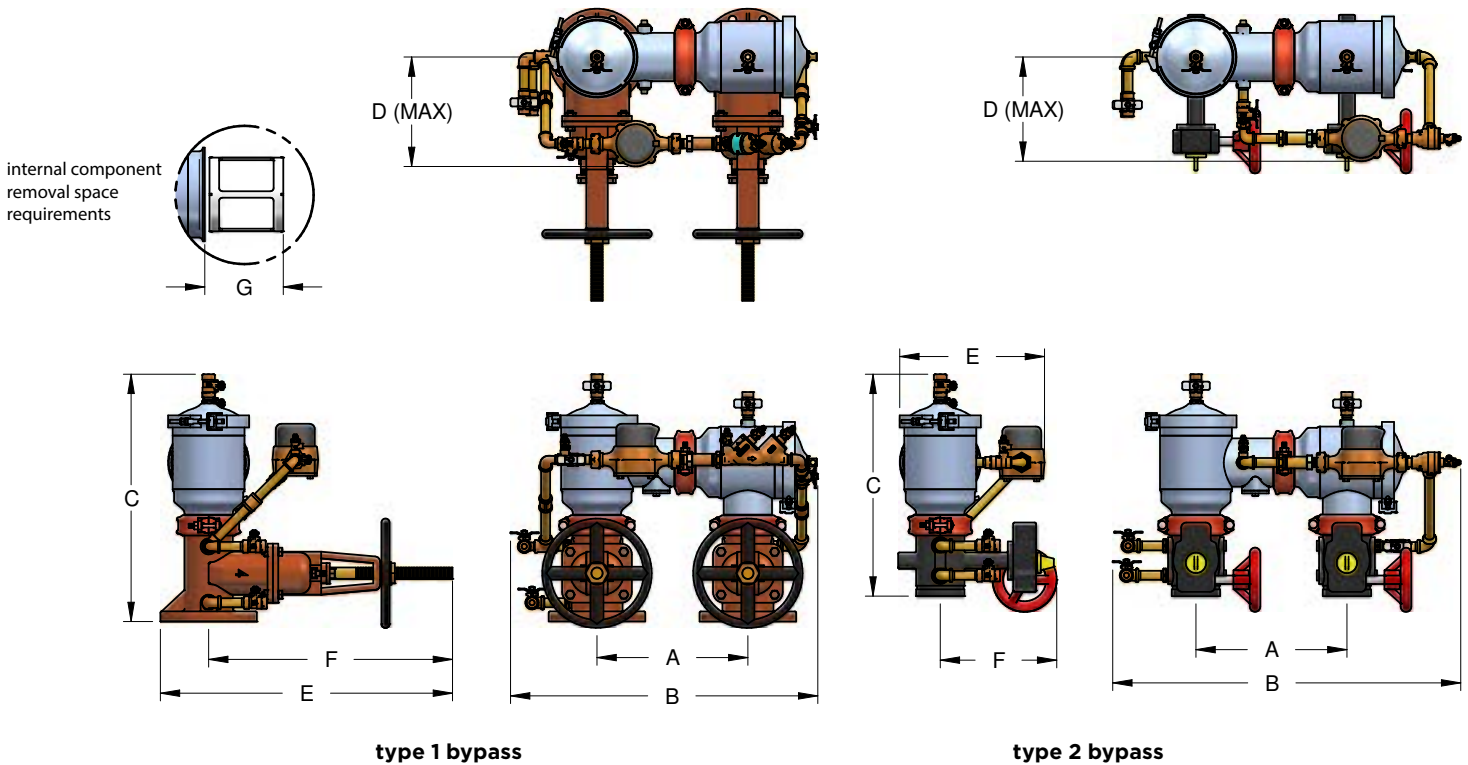
EXAMPLE: 4ANLF 62A E7 = 4" size Lead Free Double Check Detector Assembly with OS&Y flanged inlet x OS&Y grooved outlet shut-off valves with Type 2 bypass w/ meter in GPM

*orientation of bypass looking downstream. standard is right hand side. left hand is on opposite side
[†]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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dimensions

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

DIMENSIONS	2-1/2"	60MM	3"	75MM	4"	100MM	6"	150MM	8"	200MM	10"	250MM	12"	300MM
A (Centerline to Centerline)	12.5	318	12.5	318	14	356	16	406	18.5	470	21	533	26.8	681
B (Lay Length Space - Butterfly Valves)	27.8	705	30.0	762	31.0	787	34.3	870	38.0	965	45.8	1162	N/A	N/A
B (Lay Length Space - Gate Valves)	31	787	31	787	31.8	808	36.3	922	41.5	1054	49	1245	55.8	1417
C (Butterfly Valves - Top to Flange)	18.8	476	19.0	483	20.8	527	25.0	635	29.5	749	34.8	883	N/A	N/A
C (Gate Valves - Flange to Top)	19.6	498	20	508	22.5	572	27.8	706	32.1	815	40	1016	44	1118
D (Centerline To Bottom - Butterfly Valves)	11.5	292	11.8	298	12.5	318	14.6	371	17.9	454	19.8	502	N/A	N/A
D (Centerline to Bottom - Gate Valves)	13	330	13.5	343	14.9	378	18	457	21.4	544	24.8	630	28.8	732
E (Maximum Width - Butterfly Valves)	13.1	333	13.1	333	15.3	389	16.1	410	23.5	597	24.3	618	15.3	389
F (Centerline Width - Butterfly Valves)	8.6	219	9.6	244	10.9	276	12.5	318	16.5	419	18.1	460	N/A	N/A
F (Maximum Width - NRS/PI Gate Valves)	15.6	396	16.9	429	18.6	472	23.8	605	29.1	739	36.3	922	40	1016
F (Maximum Width - OS&Y Valves Open)	22.7	575	24.2	514	26.6	679	34.4	875	44.9	1140	57.9	1471	61.9	1572
G (Centerline to Width - Butterfly Valves)	8	203	8.4	213	9	229	10.9	277	12.9	328	13.5	343	N/A	N/A
G (Centerline to Width - NRS/PI Gate Valves)	11.8	300	13	330	14	356	17.8	452	21	533	24.5	622	30	762
G (Centerline to Width - OS&Y Valves Open)	18.8	478	20.3	515	22.1	562	29.4	747	36.8	934	45.2	1147	52.2	1326
H (Check Removal Clearance)	6	152	6	152	6	152	8	203	8.5	216	12	305	12	305
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. (w/Butterfly Valves)	108.4	49	113.4	51	138.4	63	196.4	89	489.0	222	1013.0	459	N/A	N/A
Ship Wt. (W/Butterfly Valves)	169.4	77	174.4	79	199.4	90	276.4	125	624.0	283	1203.0	546	N/A	N/A
Net Wt. (w/ Post Indicator Valves)	84	38	101	46	134	61	257	117	622	283	1292	587	1770	805
Ship Wt. (w/ Post Indicator Valves)	145	66	161	73	195	89	337	153	757	344	1482	674	1960	891
Net Wt. (w/ OS&Y Valves)	102	46	117	53	165	75	316	144	697	317	1407	640	1885	857
Ship Wt. (w/ OS&Y Valves)	163	74	178	81	226	103	396	180	832	378	1597	726	2075	943

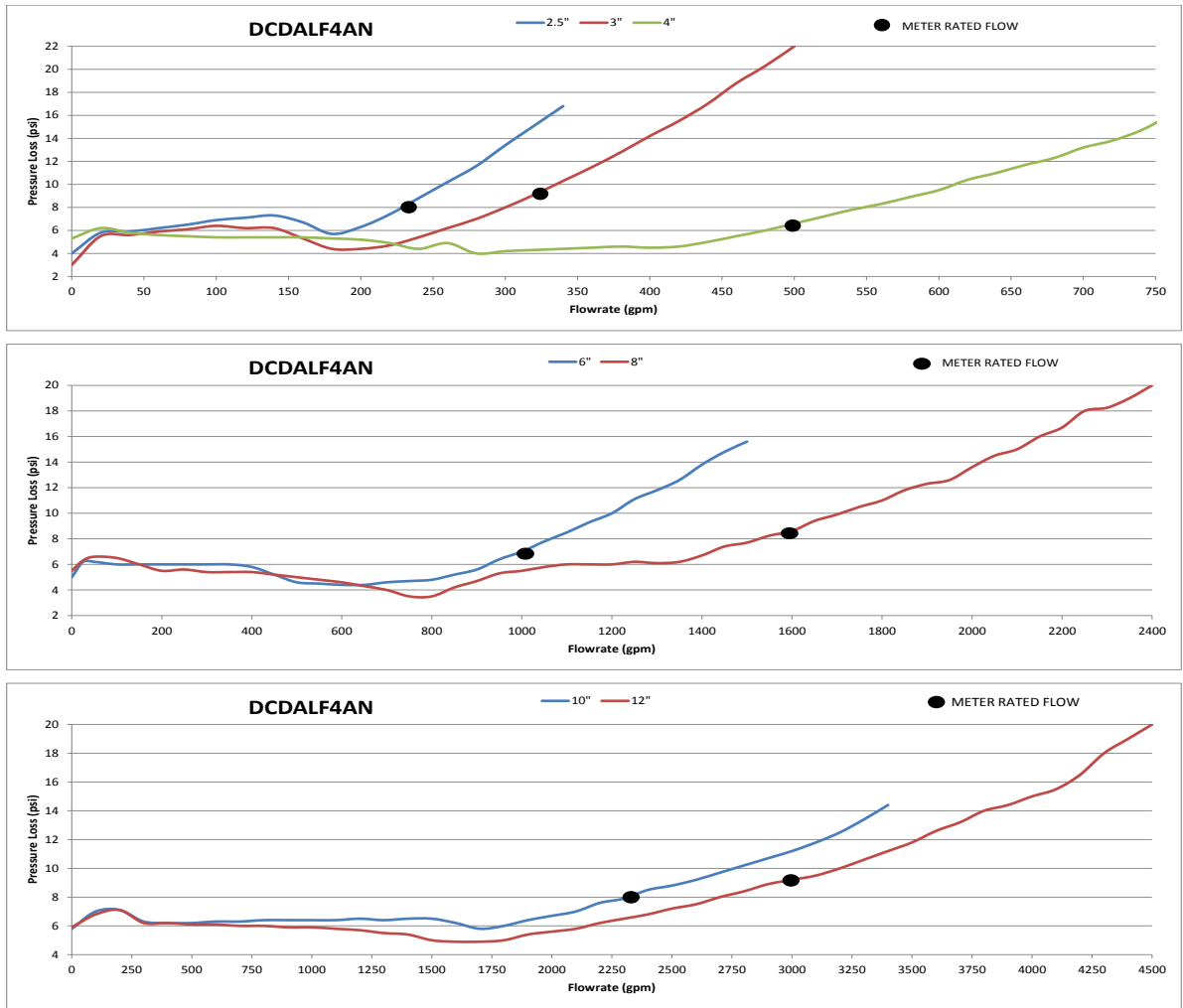
internal body connections are grooved on 2-1/2" to 10" sizes.
internal body connections are flanged on 12" size.



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FLOW CURVES



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.