



Model DCDA4A Model DCDA24A DOUBLE CHECK DETECTOR ASSEMBLY

Job Name:	Contractor:
Job Location:	P.O. Number:
Engineer:	Representative:
Tag:	Wholesale Distributor:

SPECIFICATIONS

The 2 1/2" – 12" Double Check Detector Assembly shall be an Apollo® Model DCDA4A or DCDA24A. 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 SS in 2 1/2" – 8" sizes and FDA epoxy-coated ductile iron in 10" & 12" sizes. The assembly consists of a mainline double check valve with a Type 2 bypass consisting of a single check (SCV) and meter bypassing the mainline second check to prevent backflow while accurately measuring all flows up to 2 gpm while the mainline 2nd check remains closed. Assemblies with the optional Type 1 bypass consist of a double check valve and meter which bypass both mainline checks and accurately meter all flows up to 2 gpm with the mainline checks closed. The Apollo® domestic ball valve test cocks shall have SS handles. The pressure drop across the assembly shall be documented by ASSE or USC FCCC&HR Approval curves. The assembly shall prevent contamination of the potable water supply due to back-siphonage or backpressure from substances that are non-health hazards.

FEATURES

- 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 ASSE or USC FCCC&HR Backflow Preventer approval agencies
- Center-stem guided TriForce™ check valves
- Approved for horizontal (2 1/2"-12") and vertical flow up (2 1/2" - 8")
- US Patent Nos. 6,443,184; 7,025,085; 7,533,699
- **MADE IN THE USA**

PERFORMANCE RATING

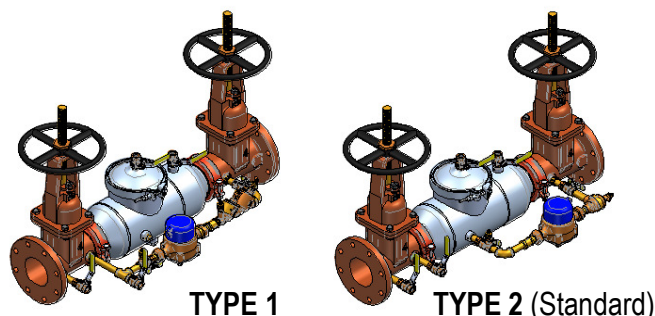
Maximum Working Pressure 175 psi
Temperature Range 33 °F – 140 °F
Hydrostatic Test Pressure 350 psi



APPROVALS

Sizes 2 1/2" – 8" (Horizontal & Vertical Flow Up):
ASSE 1048, CSA B64.5, UL, cUL, and FM

Sizes 10" & 12" (Horizontal): UL, cUL



ORDERING INFORMATION

4 A – 6 X X – X X

BYPASS TYPE SIZE SHUT-OFF VALVES METER OPTION

BYPASS TYPE

- ☐ 0 – DC on bypass line, right side (Type 1)
- ☐ 2 – SCV on bypass line, right side (Type 2 - Standard)
- ☐ 3 – DC on bypass line, left side (Type 1)
- ☐ 4 – SCV on bypass line, left side (Type 2)

SIZE

- ☐ 9 – 2 1/2" ☐ A – 4" ☐ E – 8" ☐ H – 12"
- ☐ 0 – 3" ☐ C – 6" ☐ G – 10"

METER OPTION

- ☐ C – ft³/min ☐ E – gpm ☐ G – no meter

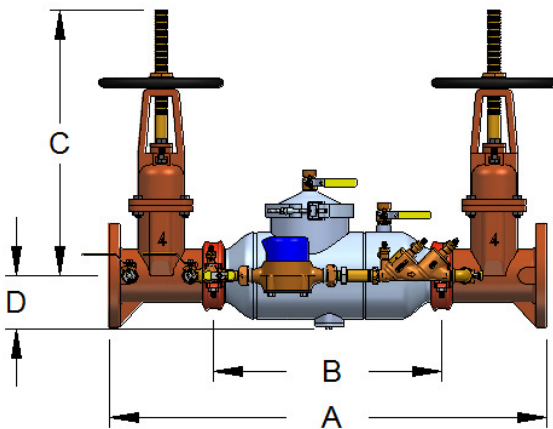
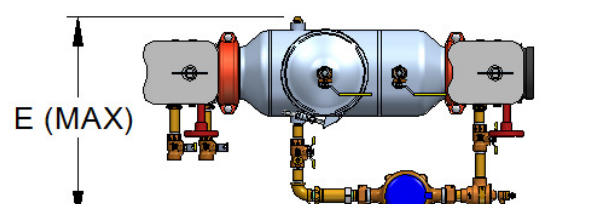
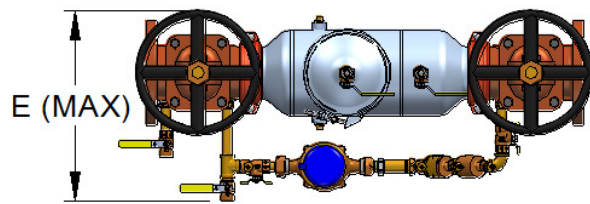
SHUT-OFF VALVES (Inlet x Outlet)

- ☐ 1 – Less Shut-off Valves (see notes)
- ☐ 2 – NRS Flg x NRS Flg
- ☐ 3 – OS&Y Flg x OS&Y Flg
- ☐ 4 – OS&Y Flg x Monitored (Mon.) Butterfly Vlv Grv
- ☐ 6 – OS&Y Flg x Post Indicator Flg
- ☐ 7 – OS&Y Flg x OS&Y Grv
- ☐ 8 – OS&Y Grv x OS&Y Grv
- ☐ 9 – Mon. Butterfly Vlv Grv x Mon. Butterfly Vlv Grv
- ☐ 10 – OS&Y Flg x Post Indicator Grv
- ☐ 11 – NRS Grv x NRS Grv
- ☐ 12 – NRS Flg x NRS Grv
- ☐ 13 – Post Indicator Flg x Mon. Butterfly Vlv Grv
- ☐ 14 – Post Indicator Flg x Post Indicator Flg
- ☐ 16 – Mon. Butterfly Vlv Grv x Post Indicator Flg
- ☐ 17 – Post Indicator Flg x OS&Y Grv
- ☐ 18 – OS&Y Grv x Post Indicator Grv
- ☐ 19 – Mon. Butterfly Vlv Grv x Post Indicator Grv

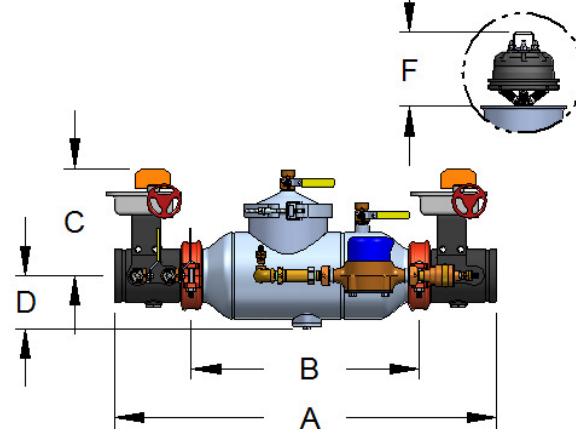
Notes: Post Indicator options not available in 2 1/2" size
Butterfly options not available in 12" size

DIMENSIONS (in.) – WEIGHTS (lbs.)

Size	2 1/2"	3"	4"	6"	8"	10"	12"
A (Butterfly Valves)	28 ±	28 1/2 ±	33 1/4 ±	38 7/8 ±	46 3/8 ±	52 1/4 ±	N/A
A (Gate Valves)	31 ±	32 ±	38 ±	45 7/8 ±	53 3/8 ±	62 1/4 ±	65 1/2 ±
B (Less Shut-off Valves)	15 7/8	15 7/8	19 5/8	24 1/2	30	36	37
C (Butterfly Valves)	8	8 3/8	9 1/8	10 1/8	12	13 3/8	N/A
C (NRS/PI Gate Valves)	11 3/8	12 3/8	14 3/4	19	22 1/2	26 1/2	30
C (OS&Y Open)	16 3/8	18 7/8	22 3/4	30 1/8	37 3/4	45 3/4	53 1/8
D	3 7/8	3 7/8	4 5/8	6	8 1/8	11 3/4	12
E (MAX)	17	17	17	20	21 1/2	26 1/2	26 1/2
F (Check Removal Clearance)	4 3/4	4 3/4	6 1/2	7 1/2	7 1/2	10	10
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Net Wt. (Less Valves)	37	38	54	90	223	722	825
Net Wt. (w/ Butterfly Valves)	64	68	98	158	354	940	N/A
Net Wt. (w/ OS&Y Gate Valves)	133	159	209	339	700	1608	2017



TYPE 1 BYPASS



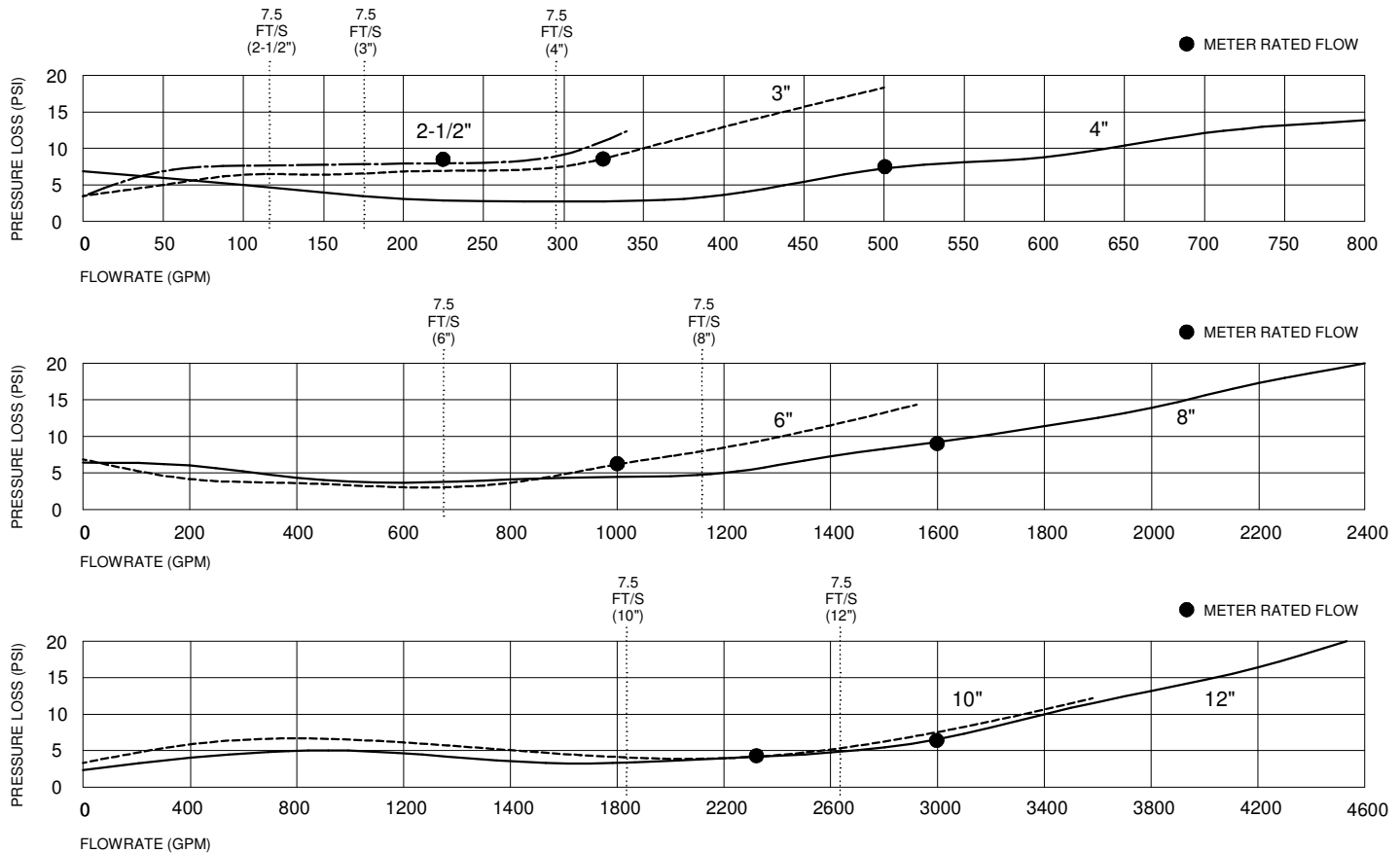
TYPE 2 BYPASS (STD)

Part Name	Material
Body (2 1/2" – 8")	Stainless Steel
Body (10" & 12")	FDA Epoxy Coated Ductile Iron
Covers (2 1/2" – 6")	Glass-filled PPO/Stainless Steel
Cover (8")	Stainless Steel
Covers (10" & 12")	FDA Epoxy Coated Ductile Iron
Check Valves (2 1/2" – 12")	Glass-filled PPO/Bronze/SS
Bypass Valves	Bronze
Springs	Stainless Steel
Seat Discs	Chloramine-resistant Silicone

Notes:

- 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.

FLOW CURVES



Notes:

1. Flow curves directly reflect data collected by an ASSE approved laboratory.
2. Flow curves shown were recorded with butterfly shut-off valves. Flow curves with gate valves are slightly lower. 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.

