



# Model DCDA4AN Model DCDA24AN 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 DCDA4AN or DCDA24AN. 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 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 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 2<sup>nd</sup> check remaining closed. Assemblies with the optional Type 1 bypass consist of a 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® 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 ASSE or USC FCCC&HR Approval curves.

## FEATURES

- 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 ASSE or USC FCCC&HR Backflow Preventer approval agencies
- Center-stem guided TriForce™ check valves
- Small installation space required – small footprint
- Approved for n-flow
- US Patent Nos. 6,443,184; 7,025,085; 7,533,699
- MADE IN THE USA

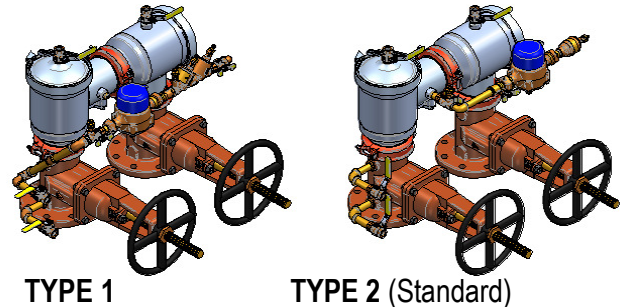
## PERFORMANCE RATING

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

## APPROVALS

Sizes 2 1/2" – 8":  
 ASSE 1048, CSA B64.5, UL, cUL, and FM

Sizes 10" & 12": UL, cUL



## ORDERING INFORMATION

4AN – 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 – ft<sup>3</sup>/min
- E – gpm
- G – no meter

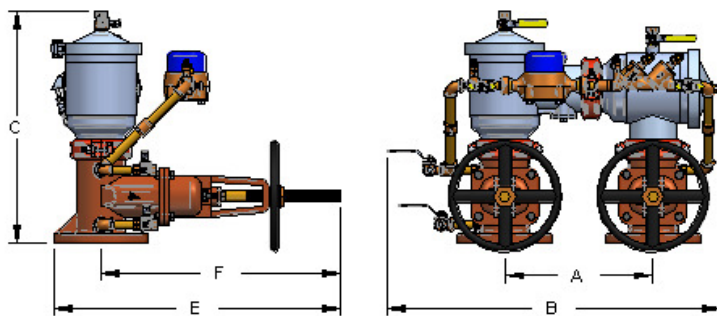
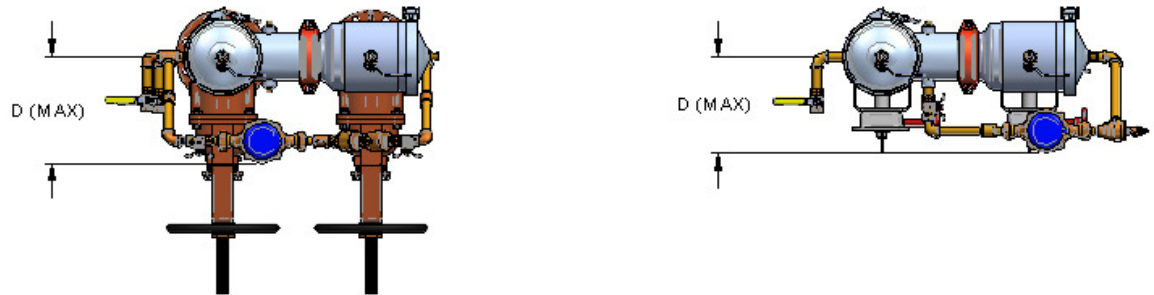
### SHUT-OFF VALVES (Inlet x Outlet)

- 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

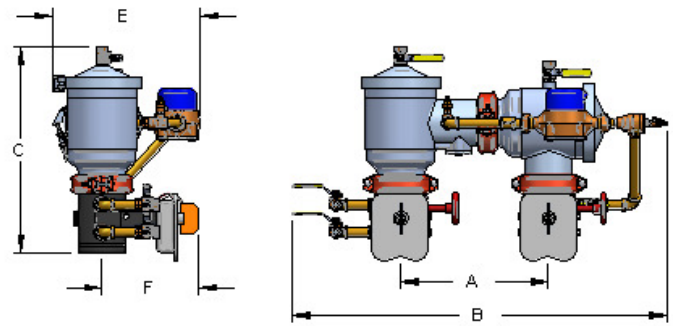
*Notes: Post Indicator options not available in 2 1/2" size  
 Butterfly options not available in 12" size*

**DIMENSIONS (in.) – WEIGHTS (lbs.)**

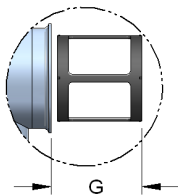
Size	2 1/2"	3"	4"	6"	8"	10"	12"
A (Centerline to Centerline)	12 1/2	12 1/2	14	16	18 1/2	21	26 3/4
B (Gate Valves)	31	31	31 3/4	36 1/4	41 1/2	49	55 3/4
B (Butterfly Valves)	32 3/4	32 3/4	35 1/4	40	44	54	N/A
C (Gate Valves)	19 5/8	20	22 1/2	27 3/4	32 1/8	40	44
C (Butterfly Valves)	18 1/4	18 1/2	20	24 3/4	28 1/2	35	N/A
D	10	10	10 1/8	11 1/4	12 1/2	14 3/8	15 1/4
E (OS&Y Open)	19 7/8	24 1/4	27 1/4	32 3/4	44 1/2	54	62 3/4
E (Butterfly Valves)	11 1/2	12 1/8	12 7/8	15 7/8	22 1/4	23 1/8	N/A
E (NRS/PI)	14 7/8	16 1/8	19 1/4	24 1/2	29 1/4	36 3/8	40
F (OS&Y Open)	16 3/8	20 1/2	22 3/4	28	37 3/4	46	53 1/8
F (Butterfly Valves)	8	8 3/8	9	10 7/8	12 7/8	13 1/2	N/A
F (NRS/PI)	11 3/8	12 3/8	14 3/4	19	22 1/2	26 1/2	30
G (Clearance needed for check removal)	6	6	6	8	8 1/2	12	12
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Net Wt. (Less Valves)	45	45	54	89	320	805	930
Net Wt. (w/ Butterfly Valves)	72	75	99	157	451	983	N/A
Net Wt. (w/ OS&Y Gate Valves)	141	166	209	338	797	1473	2121



Type 1 Bypass



Type 2 Bypass (Standard)



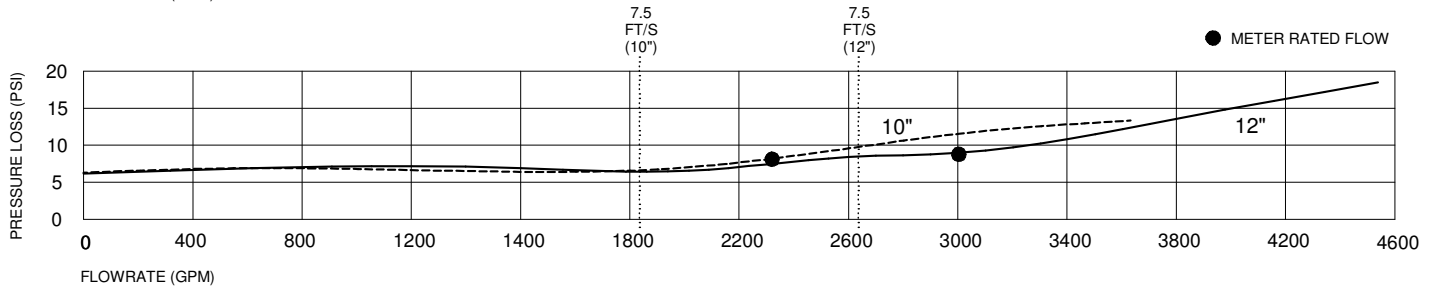
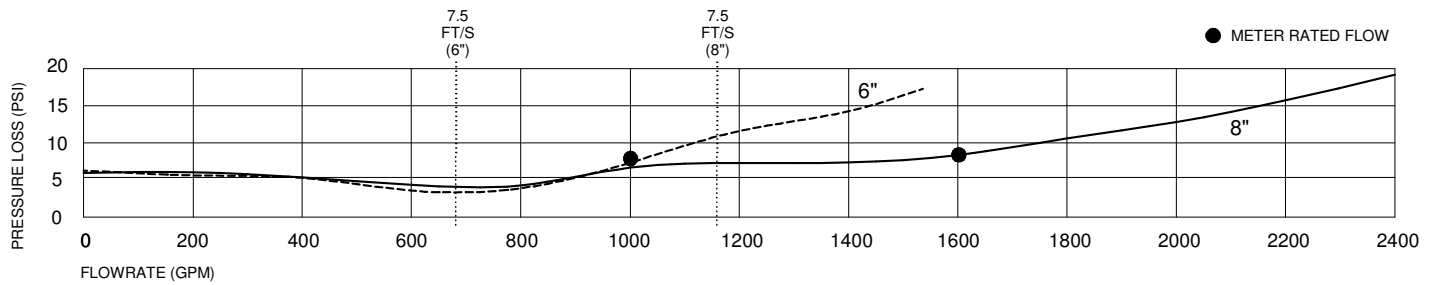
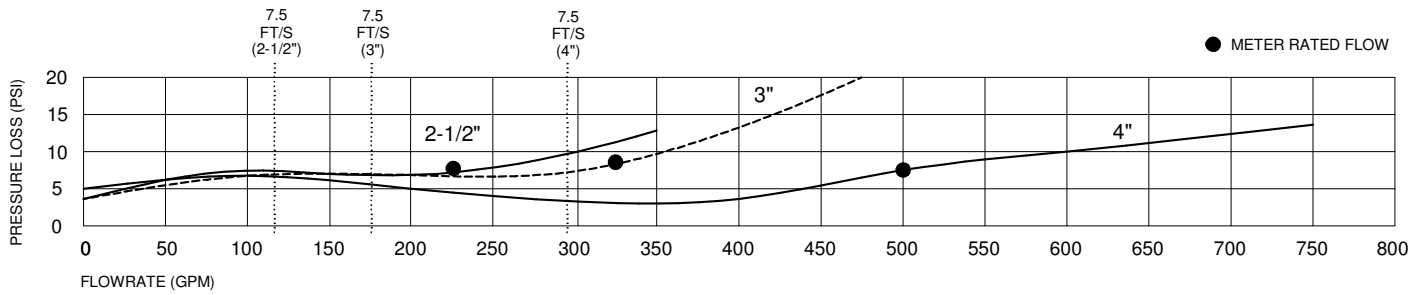
**Notes:**

1. Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances.
2. Internal body connections are grooved on 2 1/2" – 10" sizes.
3. Internal body connections are flanged on 12" size.



# Model DCDA4AN Model DCDA24AN DOUBLE CHECK DETECTOR ASSEMBLY

## 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.

### DCDA4AN/DCDA24AN MATERIAL SPECIFICATIONS

Part Name	Material
Mainline Body (2 1/2" – 8")	Stainless Steel
Mainline Body (10" & 12")	FDA Epoxy Coated Ductile Iron
Bypass DC	Bronze
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
Springs	Stainless Steel
Seat Discs	Chloramine-resistant Silicone

**OPTIONAL VALVE SETTERS – Ordered Separately**  
*(See SS1174 Submittal Sheet for details)*

**4 A N – 0 0 X – X**

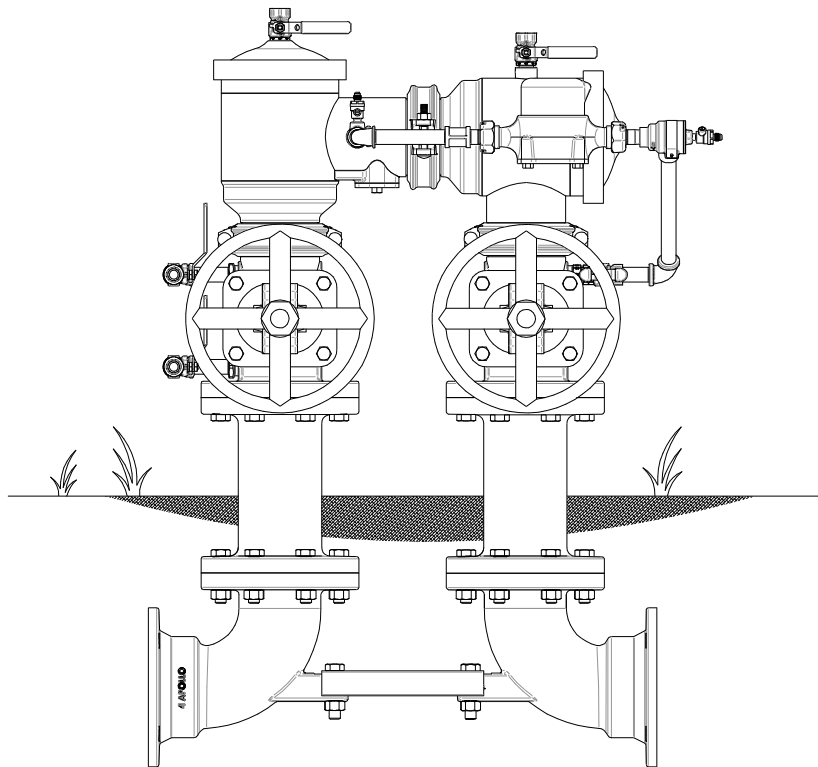
SIZE \_\_\_\_\_ TYPE \_\_\_\_\_

**SIZE**

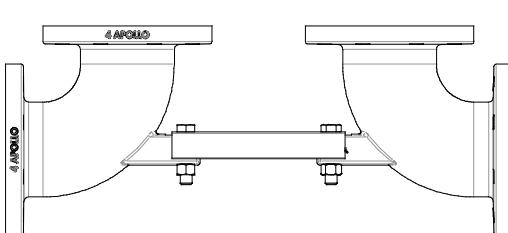
- |                                     |                                  |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> 9 – 2 1/2" | <input type="checkbox"/> E – 8"  |
| <input type="checkbox"/> 0 – 3"     | <input type="checkbox"/> G – 10" |
| <input type="checkbox"/> A – 4"     | <input type="checkbox"/> H – 12" |
| <input type="checkbox"/> C – 6"     |                                  |

**TYPE**

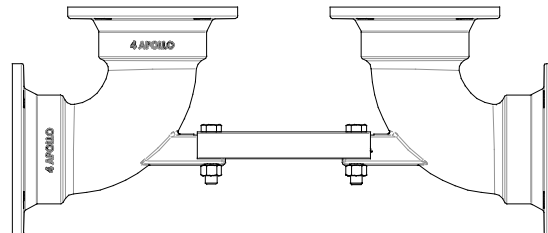
- F** – Flange X Flange  
**MJF** – Mechanical Joint X Flange  
**MJ** – Mech. Joint X Mech. Joint



Mechanical Joint X Flange Setter (Model MJFS)



Flange X Flange Setter (Model FS)



Mechanical Joint X Mechanical Joint Setter (Model MJS)

