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DESCRIPTION

The Apollo® Model DCDA4SG Double Check Detector Assembly is designed to prevent contamination of the potable water supply due to back-siphonage or backpressure from substances that are non-health hazards. The device consists of a mainline double check valve with a by-pass line. The by-pass consists of a water meter and an approved Apollo® double-check valve with Apollo® ball valves as shutoffs. The by-pass serves to measure water use of up to 3 gpm. Grooved connections on an epoxy-coated ductile iron body allow for easy connection to butterfly valves or gate valves. *Note: Model DCDA4SG replaces Model 4S-600 (also known as Model DCDA) in all sizes except 10".*

FEATURES

- Lightweight
- Short lay length
- Low pressure loss
- Modular check valves
- Individual access to check valves
- Corrosion resistant epoxy-coated ductile iron body
- US Patents #5,711,341 and #6,343,618
- **MADE IN THE USA**

PERFORMANCE RATING

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

APPROVALS

- Horizontal and Vertical Up Approvals
- ASSE 1048
- CSA B64.5
- FM Approved
- UL® Classified
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California

***UL and FM installations must include indicating-type shutoff valves.**

STANDARD MATERIALS LIST

| | |
|-----------------------------------|-------------------------------|
| BODY (MAINLINE) | FDA Epoxy Coated Ductile Iron |
| BYPASS DC | Bronze (C84400/LF C89836) |
| COVERS (2-1/2" - 6") | FDA Epoxy Coated Steel |
| COVERS (8") | FDA Epoxy Coated Ductile Iron |
| ELBOWS | FDA Epoxy Coated Ductile Iron |
| CHECK VALVES (2-1/2" - 6") | Glass-Filled PPO |
| CHECK VALVES (8") | Bronze |
| SPRINGS | Stainless Steel |
| SEAT DISCS | Chloramine-Resistant EPDM |

PART NUMBER MATRIX

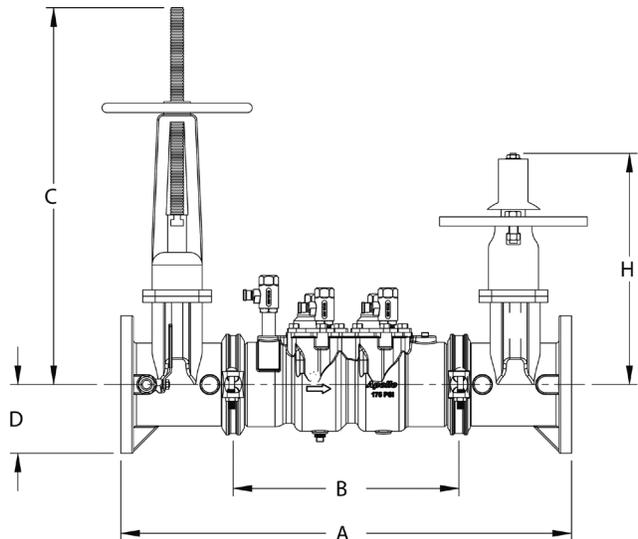
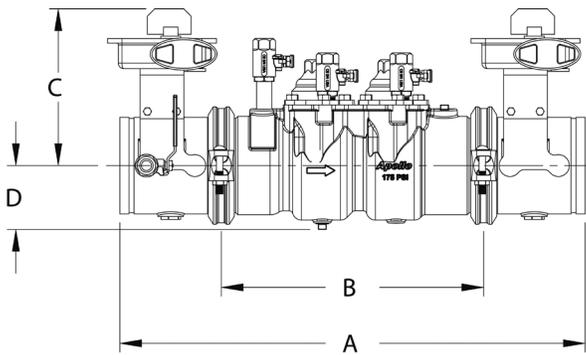
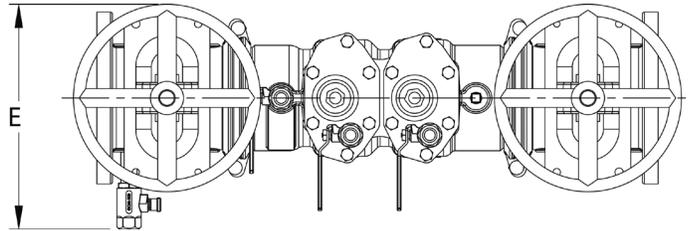
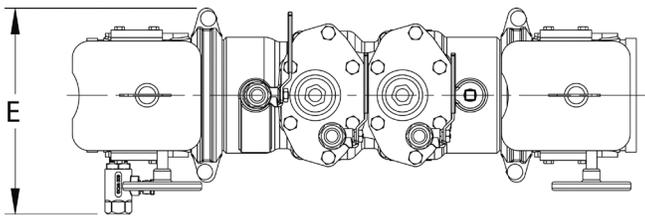
| 4SG [X] | 60 X | X | [X] | X |
|----------------|------------|--------------------|---|-----------------------|
| | SIZE | METER OPTION | SHUT-OFF VALVES (INLET X OUTLET) | OPTION |
| 4SG - STANDARD | 9 - 2-1/2" | C - CUBIC FEET/MIN | 3 - OS&Y FLANGE X OS&Y FLANGE | D - DOMESTIC ASSEMBLY |
| | 0 - 3" | E - GALLONS/MIN | 4 - OS&Y FLANGE X MONITORED BUTTERFLY VALVE GROOVE | |
| | A - 4" | G - LESS METER | 6 - OS&Y FLANGE X FLANGE POST INDICATOR | |
| | C - 6" | | 7 - OS&Y FLANGE X OS&Y GROOVE | |
| | E - 8" | | 8 - OS&Y GROOVE X OS&Y GROOVE | |
| | | | 9 - MON. BUTTERFLY VALVE GROOVE X MON. BUTTERFLY VALVE GROOVE | |

*10" body is flanged internal connections only (Model 4S)

DIMENSIONS

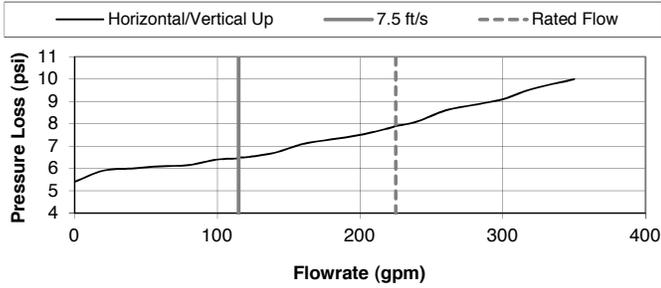
| SIZE | 2 1/2" | 3" | 4" | 6" | 8" |
|-------------------------------|------------|--------|--------|--------|--------|
| A (Butterfly Valves)* | 29 | 29-1/2 | 29-3/4 | 32 | 43 |
| A (Gate Valves)* | 32 | 33 | 34-1/2 | 39 | 50-1/4 |
| B (Grooved End Body) | 17 | 17 | 16-1/2 | 18 | 27 |
| C (Butterfly Valves) | 8 | 8-1/2 | 9-1/4 | 10-1/4 | 12 |
| C (OS&Y Open) | 16-3/8 | 18-7/8 | 22-3/4 | 30-1/8 | 37-3/4 |
| D (Butterfly Valves) | 4-1/2 | 4-1/2 | 4-1/2 | 4-1/2 | 6-1/2 |
| D (Gate Valves) | 3-1/2 | 3-3/4 | 4-1/2 | 5-1/2 | 6-3/4 |
| E | 9 | 9 | 9 | 9 | 10-3/4 |
| H (Post Indicator Valve) | Not Avail. | 12-3/8 | 14-3/4 | 19 | 22-1/2 |
| Test Cocks (NPT) | 1/2 | 1/2 | 1/2 | 3/4 | 3/4 |
| WEIGHTS | LB. | LB. | LB. | LB. | LB. |
| Net Wt. (Less Valves) | 65 | 65 | 65 | 72 | 395 |
| Net Wt. (w/ Butterfly Valves) | 92 | 95 | 109 | 140 | 526 |
| Net Wt. (w/ OS&Y Valves) | 161 | 186 | 220 | 321 | 872 |

Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances.
Internal body connections are grooved on 2 1/2" - 8" sizes.

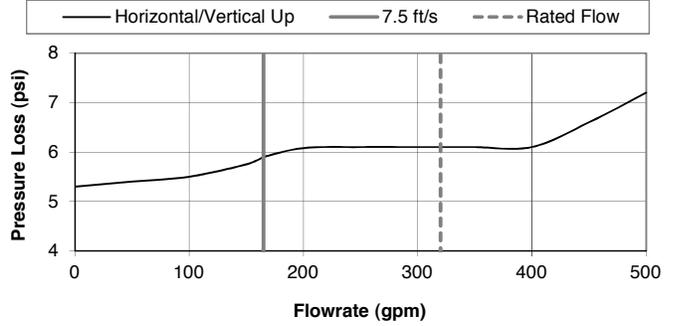


FLOW CURVES

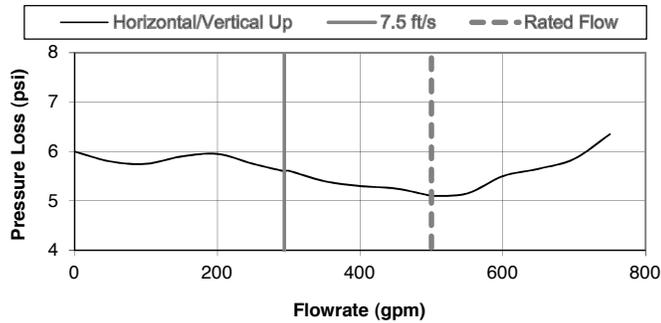
2 1/2"



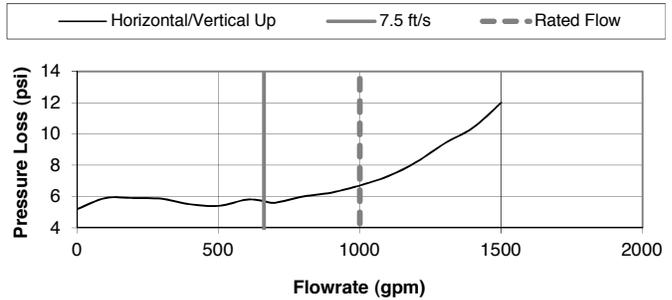
3"



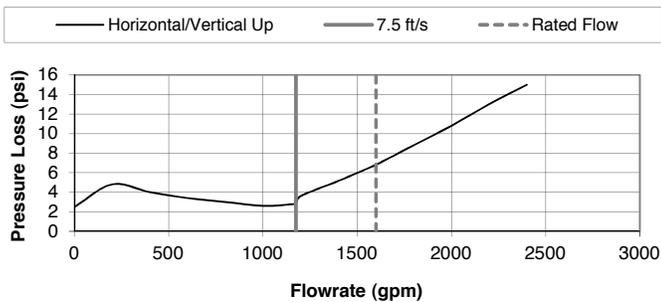
4"



6"



8"



Flow curves directly reflect data collected by USC's Foundation for Cross-Connection Control and Hydraulic Research Approval curve documents.

Flow curves shown were recorded with butterfly shut-off valves.*

All data points are based on USC increasing flow data, from zero GPM to rated flow (opening curve).

Refer to Apollo Model DC4S (Formerly 4S-600 Series) for 10" valve information.

* Flow curves with gate valves are slightly lower. Contact factory for more information.