Model RP4A

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER

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

SPECIFICATIONS

The 2 ½" – 12" Reduced Pressure Principle Backflow Preventer shall be an Apollo® Model RP4A. 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 ½" – 6") or SS studs & nuts (8" – 12"). Access to the check valves and relief valve internals shall be by an Apollo® quick-connect SS coupling (2 ½" – 6") or grooved couplings (covers) and SS bolts (relief valves) (8" – 12"). The bodies shall be SS in 2 ½" – 8" sizes and FDA epoxy coated ductile iron in 10" & 12" sizes. 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 health or 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 ½" – 8"
- FDA epoxy coated ductile iron body: 10" & 12"
- Easy maintenance – no special tools required
  - Snap-in check retainers: 2 ½" – 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 flow
- US Patents: 6,443,184; 7,025,085; 7,533,699; 8,240,333
- **MADE IN THE USA**

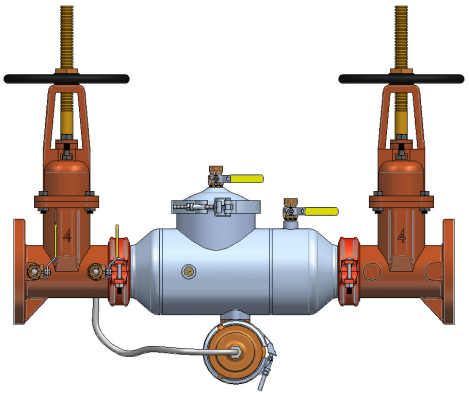
PERFORMANCE RATING

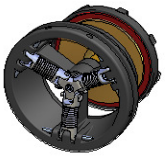
Maximum Working Pressure 175 psi
Temperature Range 33 °F – 140 °F
Hydrostatic Test Pressure 350 psi

APPROVALS

Sizes 2 ½" – 8": ASSE 1013, CSA B64.4, IAPMO, UL, cUL, and FM

Sizes 10" & 12": ASSE 1013, CSA B64.4, IAPMO, UL, and cUL





TriForce™ Check

ORDERING INFORMATION

4 A – 2 X X – 0 X

Y-STRAINER — SIZE — SHUT-OFF VALVES

Y-STRAINER

- ❒ **0** – None (Standard)
- ❒ **1** – With Y-Strainer (Flanged only, shipped loose)

SIZE

- ❒ **9 – 2 ½"** ❒ **A – 4"** ❒ **E – 8"** ❒ **H – 12"**
- ❒ **0 – 3"** ❒ **C – 6"** ❒ **G – 10"**

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 ½" size
Butterfly options not available in 12" size

AIR GAP DRAIN (Optional – *See SS1176 for details*)

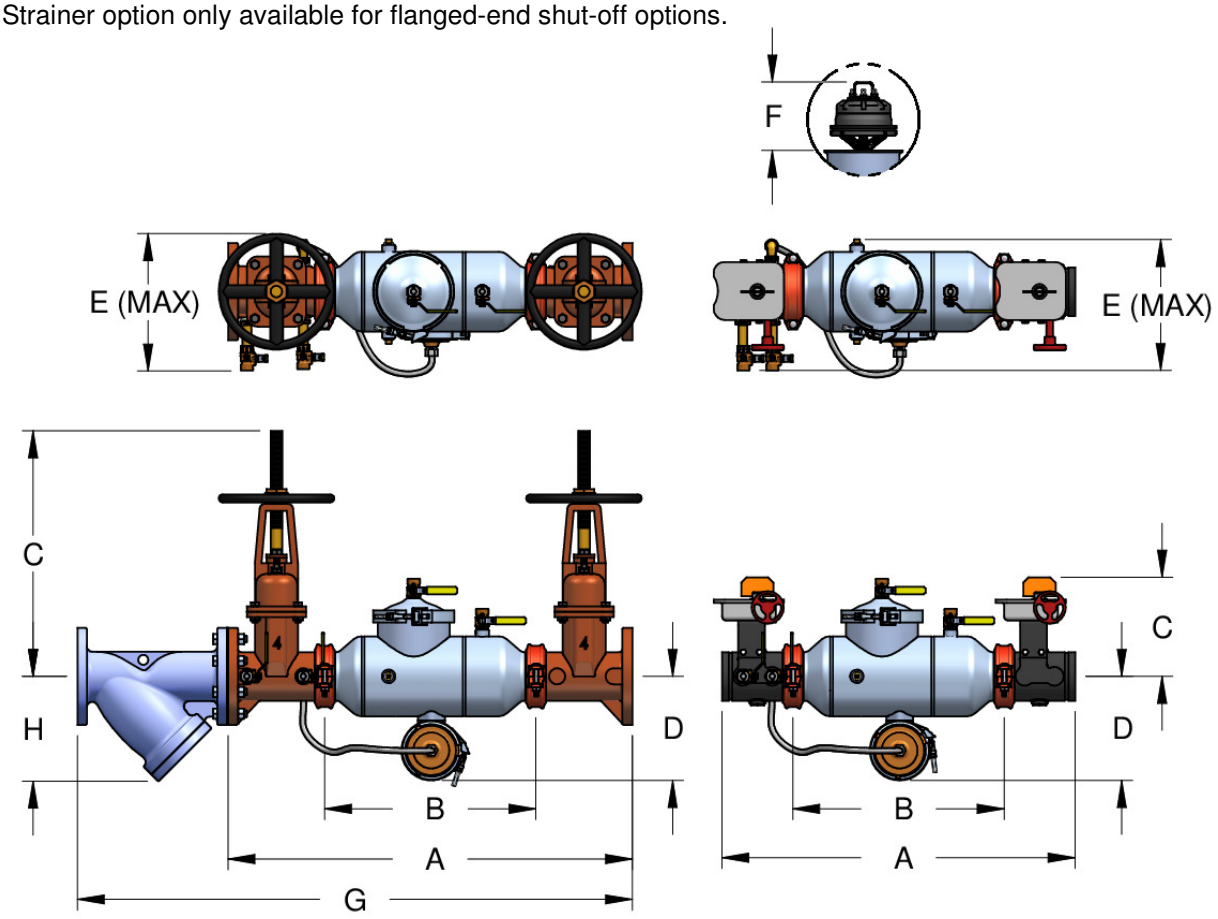
- ❒ **AGD4A6** (Fits 2 ½" – 6")
- ❒ **AGD4A8** (Fits 8")
- ❒ **AGD4A12IN** (Fits 10" & 12")

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DIMENSIONS (in.) – WEIGHTS (lbs.)

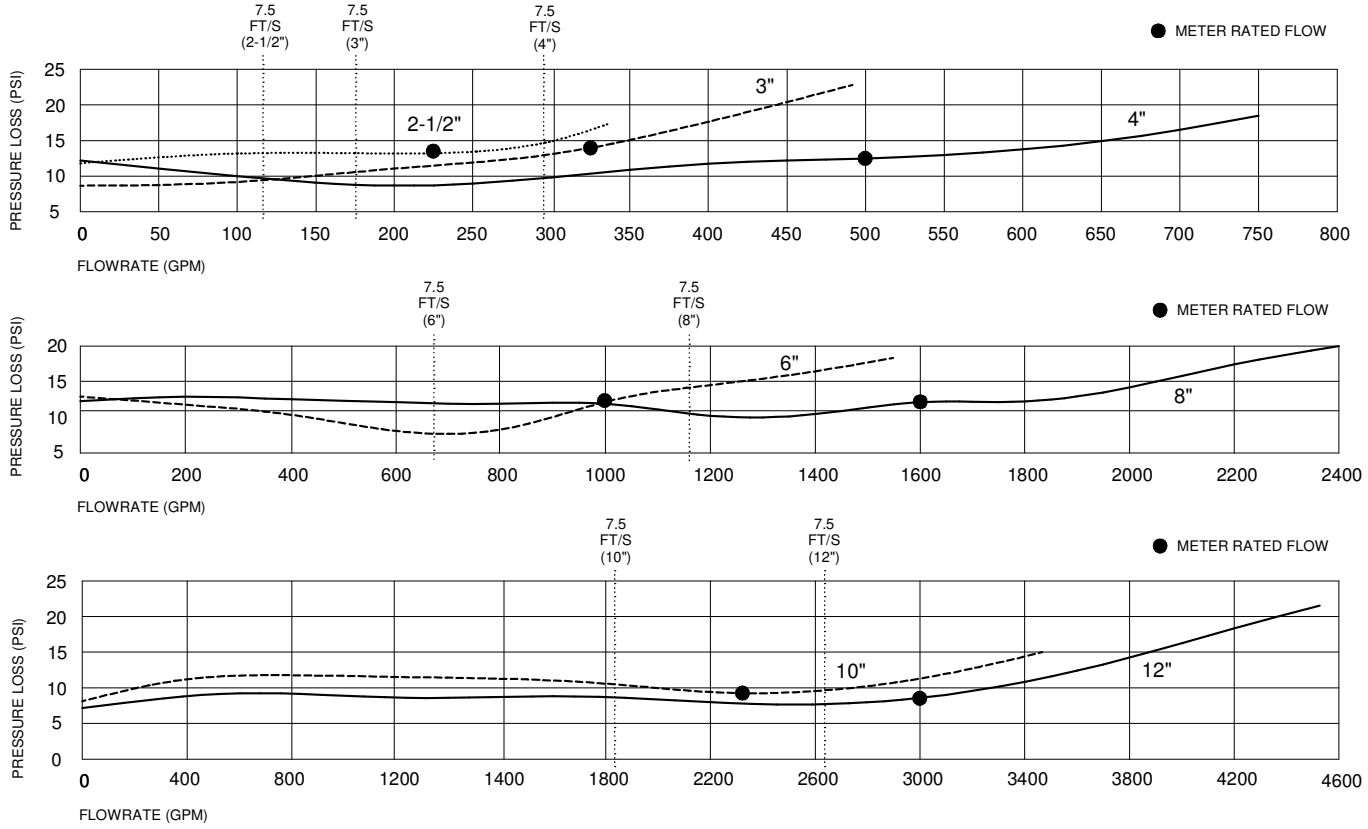
Size	2 ½”	3”	4"	6"	8"	10”	12”
A (Butterfly Valves)	28 ±	28 ½ ±	33 ¼ ±	38 ⅞ ±	46 ⅜ ±	52 ¼ ±	N/A
A (Gate Valves)	31 ±	32 ±	38 ±	45 ⅞ ±	53 ⅜ ±	62 ¼ ±	65 ½ ±
B (Less Shut-off Valves)	15 ⅞	15 ⅞	19 ⅝	24 ½	30	36	37
C (Butterfly Valves)	8	8 ⅜	9 ⅛	10 ⅛	12	13 ⅜	N/A
C (NRS/PI Gate Valves)	11 ⅜	12 ⅜	14 ¾	19	22 ½	26 ½	30
C (OS&Y Open)	16 ⅜	18 ⅞	22 ¾	30 ⅛	37 ¾	45 ¾	53 ⅛
D	9 ⅝	9 ⅝	10 ⅜	11 ⅝	15 ⅝	21	21
E (MAX)	11 ½	12	12 ½	14 ⅜	17 ⅝	21	22
F (Check Removal Clearance)	4 ¾	4 ¾	6 ½	7 ½	7 ½	10	10
G	41 ⅞	43 ⅝	52	64 ½	74 ⅞	88 ⅜	95 ⅝
H	8	8 ¾	9 ½	12 ⅝	16 ⅜	19	22
Test Cocks (NPT)	½”	½”	½”	¾”	¾”	¾”	¾”
Net Wt. (Less Valves)	31	32	48	84	228	762	865
Net Wt. (w/ Butterfly Valves)	58	62	92	152	359	980	N/A
Net Wt. (w/ NRS Gate Valves)	117	143	197	323	691	1608	2003
Net Wt. (w/ OS&Y Gate Valves)	127	153	203	333	705	1648	2057

Notes:
1. Nominal dimensions are shown. Allowances must be made for manufacturers’ tolerances (⅛” per joint).
2. Internal body connections are grooved on 2 ½” – 10” sizes.
3. Internal body connections are flanged on 12” size.
4. 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 butterfly shut-off valves (2 ½" – 10"). Flow curves with gate valves are slightly lower. Contact factory for more information. Curve for 12" recorded with gate valves.
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.

RP4A MATERIAL SPECIFICATIONS

Part Name	Material
Body (2 ½" – 8")	Stainless Steel
Body (10" & 12")	FDA Epoxy Coated Ductile Iron
Covers (2 ½" – 6")	Glass-filled PPO/Stainless Steel
Cover (8")	Stainless Steel
Covers (10" & 12")	FDA Epoxy Coated Ductile Iron
Relief Valves (2 ½" – 12")	Bronze
Check Valves (2 ½" – 12")	Glass-filled PPO/Bronze/SS
Springs	Stainless Steel
Seat Discs	Chloramine-resistant Silicone

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