



Model RP4AN

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER

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

SPECIFICATIONS

The 2 1/2" – 12" Reduced Pressure Principle Backflow Preventer shall be an Apollo® Model RP4AN. The assembly shall be manufactured in America and carry a **5-year** Apollo® factory warranty. The normally vertical up / vertical down (n-shape) oriented body shall incorporate an internal swivel connection providing the ability to pivot the second check 180°, producing a vertical up RP assembly (2 1/2" – 8" only). 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 and relief valve internals shall be by an Apollo® quick-connect SS coupling (2 1/2" – 6") or grooved couplings (covers) and SS bolts (relief valves) (8" – 12"). The bodies shall be SS in 2 1/2" – 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 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 and vertical flow up
 - Vertical flow up approval (2 1/2" – 8" only)
- US Patents: 6,443,184; 7,025,085; 7,533,699; 8,240,333
- **MADE IN THE USA**

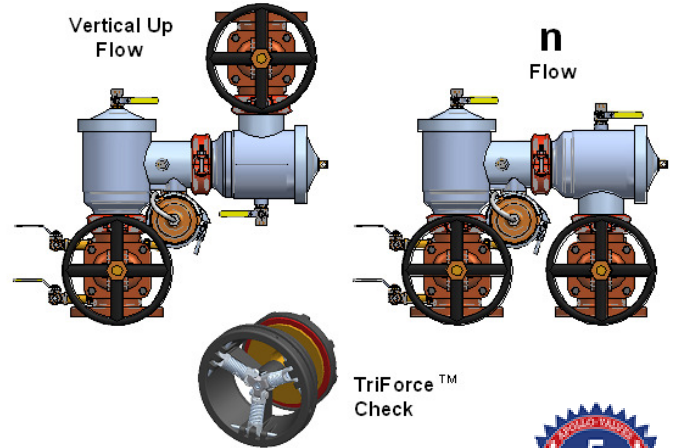
PERFORMANCE RATING

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

APPROVALS

Sizes 2 1/2" – 8" (N-Flow and Vertical Up):
 ASSE 1013, CSA B64.4, IAPMO, UL, cUL, and FM

Sizes 10" & 12" (N-Flow only):
 ASSE 1013, CSA B64.4, IAPMO, UL, and cUL



ORDERING INFORMATION

4AN – 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 1/2"
- 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

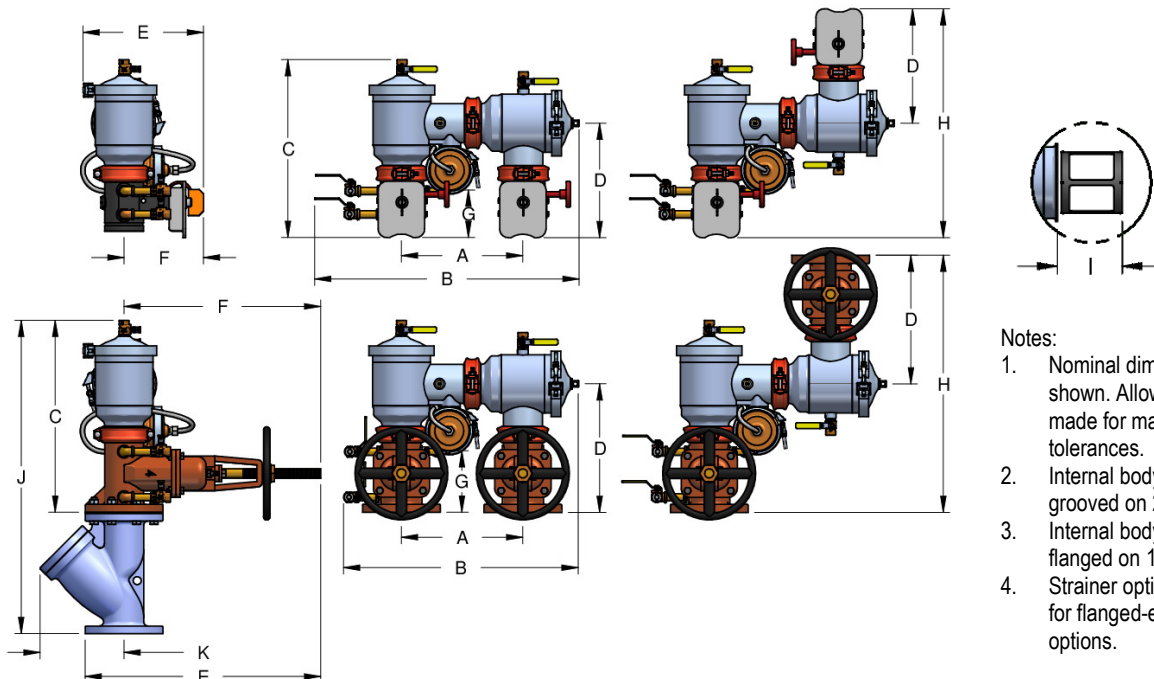
*Notes: Post Indicator options not available in 2 1/2" size
 Butterfly options not available in 12" size*

AIR GAP DRAIN (Optional – See SS1176 for details)

- AGD4A6** (Fits 2 1/2" – 6")
- AGD4A8** (Fits 8")
- AGD4A12IN** (Fits 10" & 12")

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)	24 1/2	24 1/2	27	32	40 3/4	49	55 3/4
B (Butterfly Valves)	27 1/2	27 1/2	30 3/4	36	37 3/8	43	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 (Gate Valves)	13	13 1/2	14 7/8	18	21 3/8	24 3/4	28 3/4
D (Butterfly Valves)	11 1/2	11 3/4	12 1/2	14 1/2	17 7/8	19 3/4	N/A
E (OS&Y Open)	19 7/8	24 1/2	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 (Gate Valves)	5 1/2	6	6	9	9	9	10
G (Butterfly Valves)	4 1/8	4 1/2	4 3/8	6 1/2	5 1/4	4	N/A
H (Gate Valves)	26	27	29 3/4	36	42 3/4	N/A	N/A
H (Butterfly Valves)	23	23 1/2	25	29	35 3/4	N/A	N/A
I (Clearance needed for check removal)	6	6	6	8	8 1/2	12	12
J	30 1/2	31 5/8	36 1/2	46 3/8	53 5/8	66 1/8	74 1/8
K	8	8 3/4	9 1/2	12 5/8	16 3/8	19	22
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Net Wt. (Less Valves)	39	39	48	83	325	841	966
Net Wt. (w/ Butterfly Valves)	66	69	92	151	456	1019	N/A
Net Wt. (w/ NRS Gate Valves)	125	150	197	322	788	1487	2103
Net Wt. (w/ OS&Y Gate Valves)	135	160	203	332	802	1509	2157

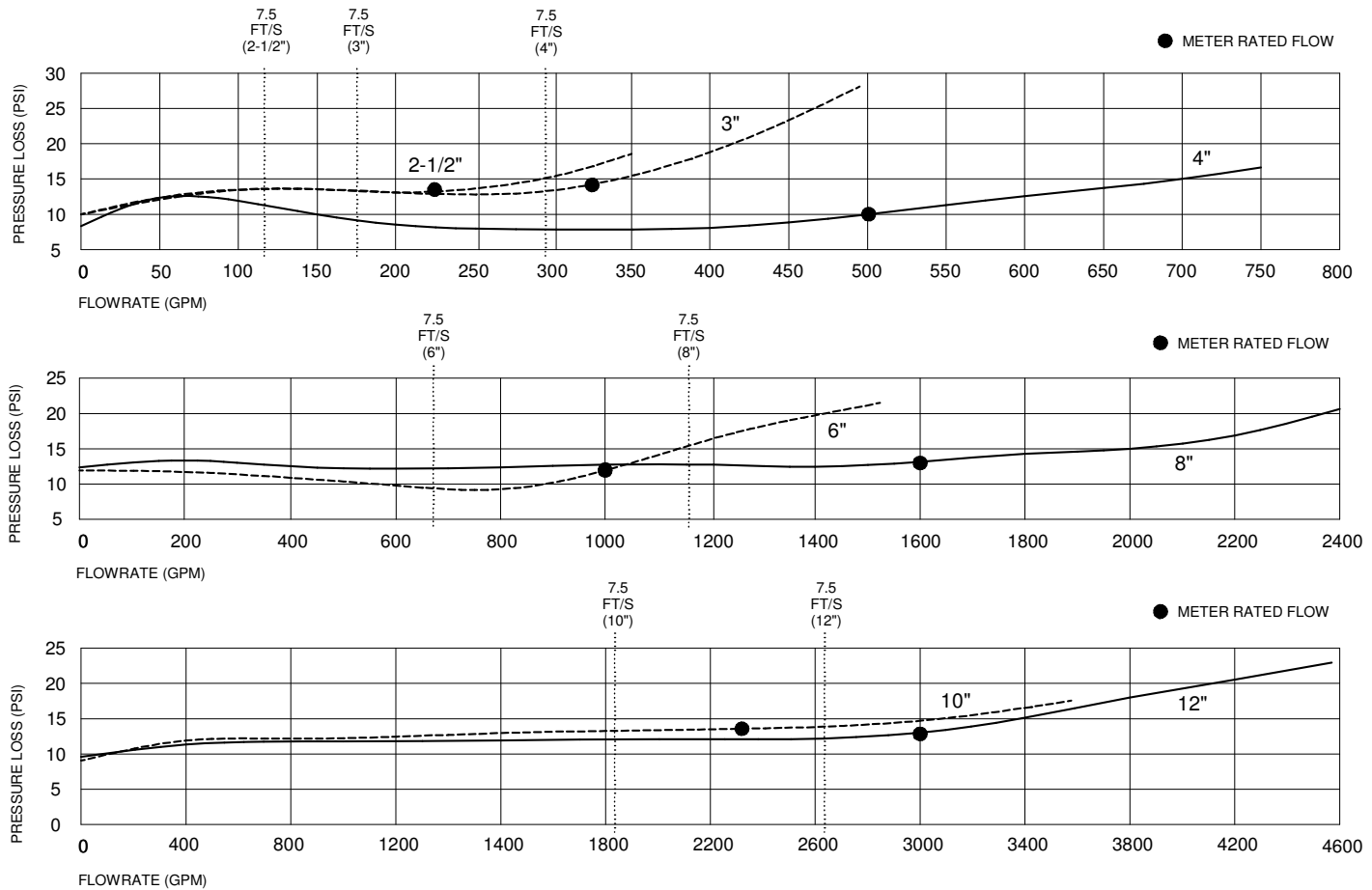




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FLOW CURVES



Notes:

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

RP4AN MATERIAL SPECIFICATIONS

Part Name	Material
Body (2 1/2" – 8")	Stainless Steel
Body (10" & 12")	FDA Epoxy Coated Ductile Iron
Relief Valve (2 1/2" – 12")	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

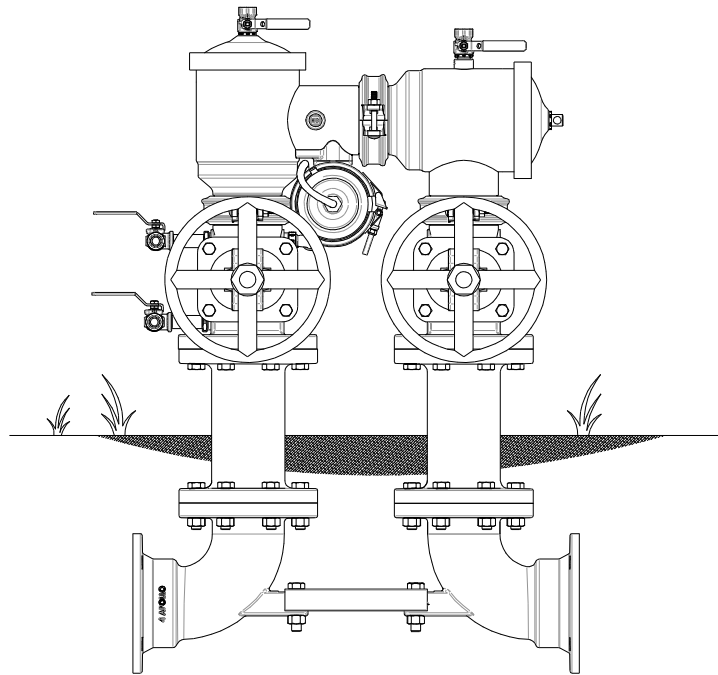
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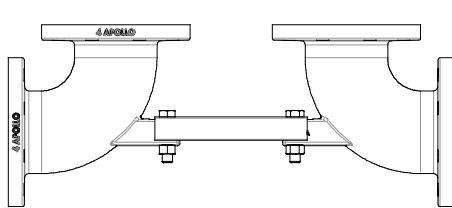
- | | |
|-----------------------------------|----------------------------------|
| <input type="checkbox"/> 9 – 2 ½” | <input type="checkbox"/> E – 8” |
| <input type="checkbox"/> 0 – 3” | <input type="checkbox"/> G – 10” |
| <input type="checkbox"/> A – 4” | <input type="checkbox"/> H – 12” |
| <input type="checkbox"/> C – 6” | |

TYPE

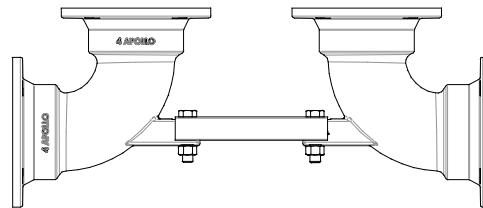
- F – Flange X Flange
 MJF – Mechanical Joint X Flange
 MJ – Mech. Joint X Mech. Joint



Mechanical Joint X Flange Setter (Model MJFS)



Flange X Flange Setter (Model FS)



Mechanical Joint X Mechanical Joint Setter (Model MJS)

