

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 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. 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 ½" - 6") or grooved couplings (covers) and SS bolts (relief valves) (8" – 12"). The bodies shall be SS in $2\frac{1}{2}$ " – 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

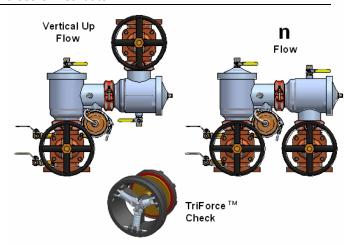
- Stainless steel body: 2 1/2" 8"
- FDA epoxy coated ductile iron body: 10" & 12"
- Easy maintenance no special tools required
 - Drop-in check retainers: 2 ½" − 6"
 - Bolted-in checks: 8" 12"
- Low pressure loss as documented by ASSE or USC FCC&HR Backflow Preventer approval agencies
- Center-stem guided TriForce[™] check valves
- Small installation space required small footprint
- Approved for n-flow and vertical flow up
- US Patent Nos. 6,443,184; 7,025,085; 7,533,699
- MADE IN THE USA

PERFORMANCE RATING

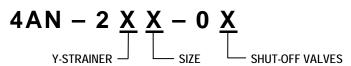
Maximum Working Pressure 175 psi Temperature Range 33 ° F – 140 ° F Hydrostatic Test Pressure 350 psi

APPROVALS

Sizes 2 $\frac{1}{2}$ " – 8": ASSE 1013, CSA B64.4, IAPMO, UL, cUL, and FM



ORDERING INFORMATION



Y-STRAINER

- □ 0 None (Standard)
- ☐ 1 With Y-Strainer (Flanged only, shipped loose)

SIZE

□ 9-2½" □ 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 VIv Grv
- ☐ 6 OS&Y Flg x Post Indicator Flg (Not in 2 ½" size)
- ☐ 7 OS&Y Flg x OS&Y Grv
- 8 OS&Y Grv x OS&Y Grv
- □ 9 Mon. Butterfly VIv Grv x Mon. Butterfly VIv Grv
- **□ 10** OS&Y Flg x Post Indicator Grv (Not in 2 ½" size)
- □ 11 NRS Grv x NRS Grv
- □ 12 NRS Flg x NRS Grv

VALVE SETTER (Optional - See SS1174 for details)

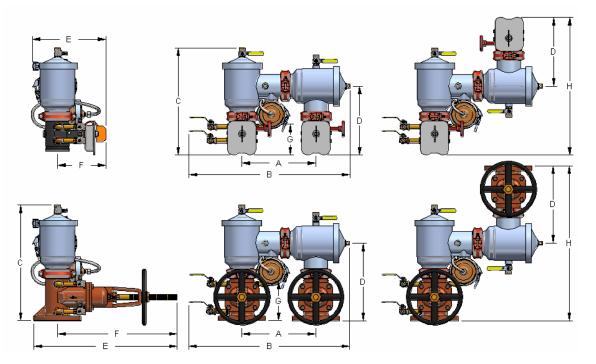
- ☐ FS Flange x Flange Setter
- ☐ MJFS Mech. Joint x Flange Setter
- □ MJS Mech. Joint x Mech. Joint Setter

AIR GAP DRAIN (Optional - See SS1176 for details)

- **AGD4A6** (Fits $2\frac{1}{2}$ " 6")
- ☐ **AGD4A8** (Fits 8")
- ☐ **AGD4A12IN** (Fits 10" & 12")

DIMENSIONS (in.) – WEIGHTS (lbs.)

<u>DIMENSIONS (in.) – WEIGHTS (lbs.)</u>							
Size	2 ½"	3"	4"	6"	8"	10"	12"
A (Centerline to Centerline)	12 ½	12 ½	14	16	18 ½		
B (Gate Valves)	24 ½	24 ½	27	32	36 ½		
B (Butterfly Valves)	27 ½	27 ½	30 ¾	36	37 %		
C (Gate Valves)	19 %	20	22 ½	27 ¾	32 1/8		
C (Butterfly Valves)	18 1/4	18 ½	20	24 ¾	28 ½		
D (Gate Valves)	13	13 ½	14 1/8	18	21 %		
D (Butterfly Valves)	11 ½	11 ¾	12 ½	14 ½	17 ½		
E (OS&Y Open)	24 1/8	26 %	27 1/4	35 %	44 ½		
E (Butterfly Valves)	15 ¾	16 1/8	12 1/8	15 %	22 1/4	C	D
E (NRS/PI)	19 1/8	20 1/8	19 1⁄4	24 ½	29 1/4	Z	N
F (OS&Y Open)	16 %	18 %	22 3/4	30 1/8	37 ¾		
F (Butterfly Valves)	8	8 %	9	10 %	12 1/8		
F (NRS/PI)	11 %	12 %	14 ¾	19	22 ½	Z	Z
G (Gate Valves)	5 ½	6	6	9	9	Ш	Ш
G (Butterfly Valves)	4 1/8	4 ½	4 ³ / ₈	6 ½	5 1/4	_	Д.
H (Gate Valves)	26	27	29 ¾	36	42 ¾		
H (Butterfly Valves)	23	23 ½	25	29	35 ¾		
I (Clearance needed for check removal)	6	6	6	8	8 ½		
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"		
Net Wt. (Less Valves)	39	39	48	83	325		
Net Wt. (w/ Butterfly Valves)	66	69	92	151	456		
Net Wt. (w/ NRS Gate Valves)	125	150	197	322	788		
Net Wt. (w/ OS&Y Gate Valves)	135	160	203	332	802		



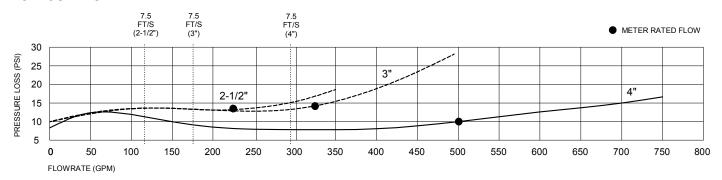


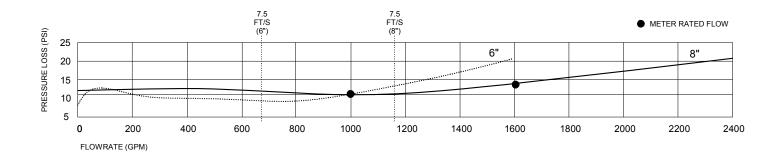
Notes:

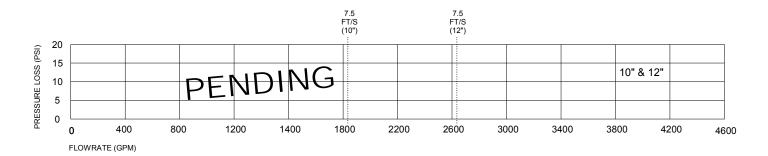
- Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances
- tolerances.

 2. Internal body connections are grooved on 2 ½" 10" sizes.
- 3. Internal body connections are flanged on 12" size.

FLOW CURVES







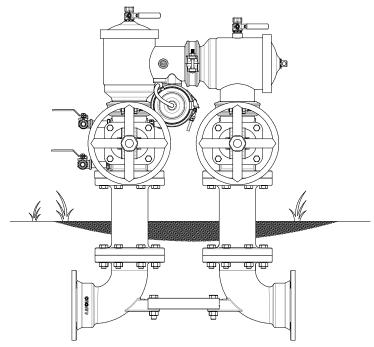
Notes:

- 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.

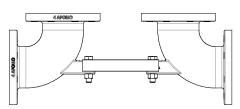
RP4AN MATERIAL SPECIFICATIONS

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

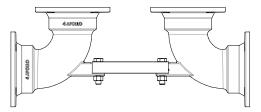
OPTIONAL VALVE SETTERS
See SS1174 Submittal Sheet for details



Mechanical Joint X Flange Setter (MJFS)







Mechanical Joint X Mechanical Joint Setter (MJS)





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