

Model RPDA4AN Model RPDA24AN

REDUCED PRESSURE DETECTOR ASSEMBLY

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

SPECIFICATIONS

The 2 ½" - 12" Reduced Pressure Detector Assembly shall be an Apollo[®] Model RPDA4AN or RPDA24AN. The assembly shall be manufactured in America and carry a 5-year Apollo factory warranty. The normally vertical up / vertical down oriented body shall incorporate an internal swivel connection providing the ability to pivot the second check 180°, producing a vertical up RPDA assembly (2 ½" - 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 ½" - 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 assembly is a mainline RP 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 2nd check remaining closed. Assemblies with the optional Type 1 bypass consist of an RP 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 backsiphonage or backpressure from substances that are health and 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
 - Drop-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
- Small installation space required small footprint
- Approved for n-flow and vertical flow up (2 ½" 8" only)
- US Patents: 6.443,184; 7.025,085; 7.533,699; 8,240,333
- MADE IN THE USA

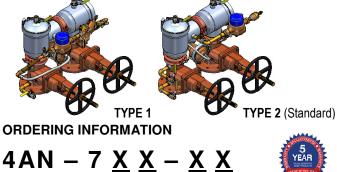
PERFORMANCE RATING

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

APPROVALS

Sizes 2 ½" – 8" (N-Flow and Vertical Up): ASSE 1047, CSA B64.4, UL, cUL, and FM

Sizes 10" & 12" (N-Flow only): UL and cUL



BYPASS TYPE SHUT-OFF VALVES SI7F **METER OPTION**

BYPASS TYPE

- □ 0 RP on bypass line, right side (Type 1)
- ☐ 2 SCV on bypass line, right side (Type 2 Standard)
- ☐ 3 RP 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

 \Box **C** – ft³/min \square **E** – gpm \square **G** – no meter

SHUT-OFF VALVES (Inlet x Outlet)

- 1 Less Shut-off Valves (see notes)
- 2 - NRS Fla x NRS Fla
- 3 - OS&Y Fla x OS&Y Fla
- 4 OS&Y Flg x Monitored (Mon.) Butterfly VIv 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 VIv Grv x Mon. Butterfly VIv 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 VIv Grv
- 14 Post Indicator Flg x Post Indicator Flg
- 16 Mon. Butterfly VIv Grv x Post Indicator Flg
- 17 Post Indicator Flg x OS&Y Grv
- 18 OS&Y Grv x Post Indicator Grv
- □ 19 Mon. Butterfly VIv 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 ½" 6")
- AGD4A8 (Fits 8")
- **AGD4A12IN** (Fits 10" & 12")

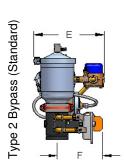


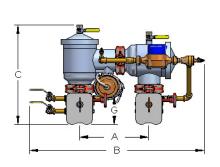
Model RPDA4AN Model RPDA24AN

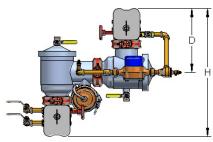
REDUCED PRESSURE DETECTOR ASSEMBLY

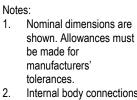
DIMENSIONS (in.) - WEIGHTS (lbs.)

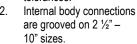
Size	2 1/2"	3"	4"	6"	8"	10"	12"
A (Centerline to Centerline)	12 ½	12 ½	14	16	18 ½	21	26 ¾
B (Gate Valves)	31	31	31 ¾	36 1/4	41 ½	49	55 ³ ⁄ ₄
B (Butterfly Valves)	32 ¾	32 3/4	35 1/4	40	44	54	N/A
C (Gate Valves)	19 %	20	22 ½	27 3/4	32 1/8	40	44
C (Butterfly Valves)	18 1/4	18 ½	20	24 3/4	28 ½	35	N/A
D (Gate Valves)	13	13 ½	14 1/8	18	21 %	24 3/4	28 ¾
D (Butterfly Valves)	11 ½	11 3⁄4	13 1/4	15 ¾	17 ½	19 3⁄4	N/A
E (OS&Y Open)	19 %	24 1/4	27 1/4	32 3/4	44 1/2	54	62 3/4
E (Butterfly Valves)	11 ½	12 1/8	12 1/8	15 %	22 1/4	23 1/8	N/A
E (NRS/PI)	14 1/8	16 ½	19 1/4	24 ½	29 1/4	36 %	40
F (OS&Y Open)	16 %	20 ½	22 3/4	28	37 3⁄4	46	53 1/8
F (Butterfly Valves)	8	8 %	9	10 1/8	12 1/8	13 ½	N/A
F (NRS/PI)	11 %	12 ¾	14 3/4	19	22 ½	26 ½	30
G (Gate Valves)	5 ½	6	6	9	9	9	10
G (Butterfly Valves)	4 1/8	4 1/2	4 %	6 ½	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 ½	25	29	35 3⁄4	N/A	N/A
I (Clearance needed for check removal)	6	6	6	8	8 ½	12	12
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Net Wt. (Less Valves)	58	58	48	83	325	861	987
Net Wt. (w/ Butterfly Valves)	85	88	92	151	456	1039	N/A
Net Wt. (w/ NRS/PI Gate Valves)	144	169	197	322	788	1507	2123
Net Wt. (w/ OS&Y Gate Valves)	154	179	203	332	802	1529	2177



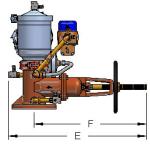


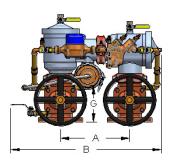


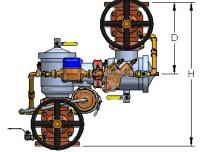




Internal body connections are flanged on 12" size.



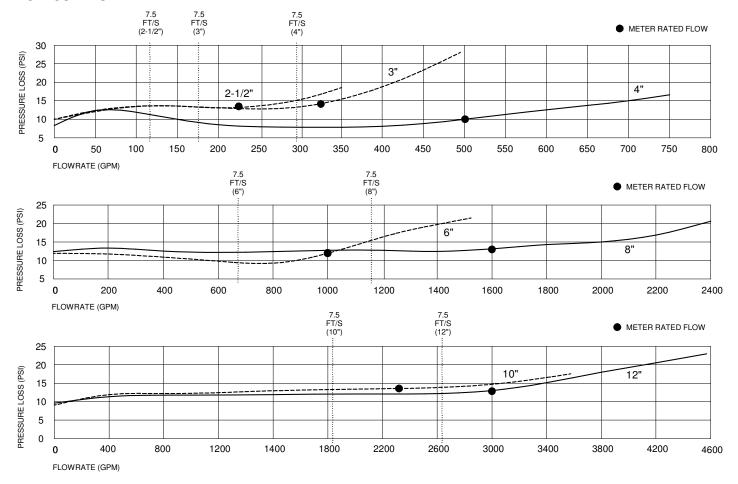






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FLOW CURVES



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.

RPDA4AN/RPDA24AN MATERIAL SPECIFICATIONS

Part Name	Material				
Body (2 ½" – 8")	Stainless Steel				
Body (10" & 12")	FDA Epoxy Coated Ductile Iron				
Relief Valve (2 1/2" - 12")	Bronze				
Bypass Line Valves	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 1/2" - 12")	Glass-filled PPO/Bronze/SS				
Springs	Stainless Steel				
Seat Discs	Chloramine-resistant Silicone				



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OPTIONAL VALVE SETTERS – Ordered Separately

(See SS1174 Submittal Sheet for details)

4 A N - 0 0 X - XSIZE TYPE

SIZE

□ 9-2½" □ E-8"

□ 0-3" □ G-10"

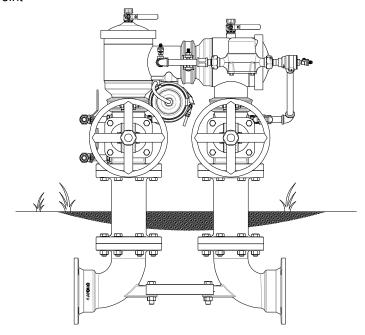
□ A – 4" □ H – 12"

□ C-6"

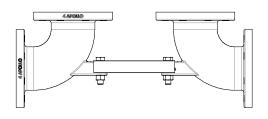
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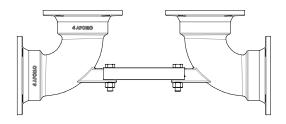
F - Flange X Flange

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)

