

# Model RPDA4A Model RPDA24A

# REDUCED PRESSURE DETECTOR ASSEMBLY

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

#### **SPECIFICATIONS**

The 2 1/2" - 12" Reduced Pressure Detector Assembly shall be an Apollo® Model RPDA4A or RPDA24A. 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  $\frac{1}{2}$ " - 6") or SS studs & nuts (8" - 12"). Access to the check valves and relief valve internals shall be by an Apollo® quickconnect 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 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 2<sup>nd</sup> 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. Both RP relief valves shall be positioned at the bottom of their respective assemblies with separate center-access covers. The pressure drop across the assembly shall be documented by ASSE or USC FCCC&HR approval curves. The assembly shall prevent contamination of the potable water supply due to back-siphonage or back pressure from substances that are health or non-health hazards.

## **FEATURES**

- Stainless steel body: 2 1/2" 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<sup>™</sup> 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**

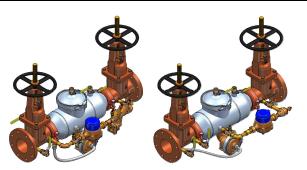
Maximum Working Pressure 175 psi Temperature Range 33 °F – 140 °F Hydrostatic Test Pressure 350 psi



#### **APPROVALS**

Sizes 2 1/2" - 8": ASSE 1047, CSA B64.4, UL, cUL, and FM

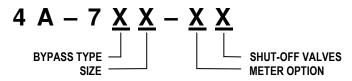
Sizes 10" & 12": UL. cUL



TYPE 1

TYPE 2 (Standard)

### **ORDERING INFORMATION**



### **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 ½" ☐ A - 4" ☐ E - 8" ☐ H - 12" ☐ 0 - 3" ☐ C - 6" ☐ G - 10"

### **METER OPTION**

 $\square$  **C** – ft<sup>3</sup>/min  $\square$  **E** – gpm  $\square$  **G** – no meter

#### **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
- ☐ 7 OS&Y Flg x OS&Y Grv
- 8 OS&Y Grv x OS&Y Grv
- **3** 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

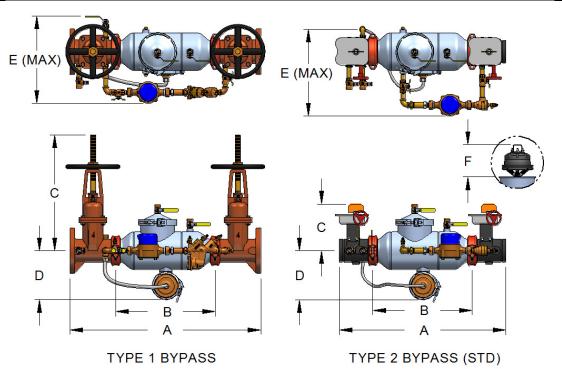
Notes: Post Indicator options not available in 2 ½" size Butterfly options not available in 12" size



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# **DIMENSIONS (in.) – WEIGHTS (lbs.)**

Size	2 1/2"	3"	4"	6''	8"	10"	12"
A (Butterfly Valves)	28 ±	28 ½ ±	33 ¼ ±	38 ½ ±	46 ¾ ±	52 ¼ ±	N/A
A (Gate Valves)	31 ±	32 ±	38 ±	45 ½ ±	53 ¾ ±	62 ¼ ±	65 ½ ±
B (Less Shut-off Valves)	15 %	15 %	19 %	24 ½	30	36	37
C (Butterfly Valves)	8	8 %	9 1/8	10 1/8	12	13 %	N/A
C (NRS/PI Gate Valves)	11 %	12 %	14 3/4	19	22 ½	26 ½	30
C (OS&Y Open)	16 %	18 %	22 3/4	30 1/8	37 3/4	45 ¾	53 1/8
D	9 %	9 %	10 %	11 %	15 %	21	21
E (MAX)	17	17	17	20	21 ½	26 ½	27 ½
F (Check Removal Clearance)	4 3/4	4 3/4	6 ½	7 ½	7 ½	10	10
Test Cocks (NPT)	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"
Net Wt. (Less Valves)	48	49	65	101	245	787	890
Net Wt. (w/ Butterfly Valves)	75	79	109	169	376	1005	N/A
Net Wt. (w/ OS&Y Gate Valves)	144	170	220	350	722	1673	2082



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 1/2" - 12")	Bronze
Check Valves (2 1/2" - 12")	Glass-filled PPO/Bronze/SS
Bypass Valves	Bronze
Springs	Stainless Steel
Seat Discs	Chloramine-resistant Silicone

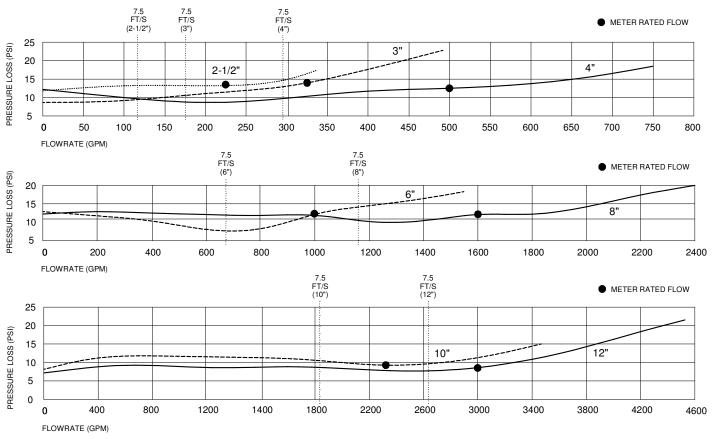
### Notes:

- Nominal dimensions are shown.
   Allowances must be made for manufacturers' tolerances (1/8" per joint).
- 2. Internal body connections are grooved on  $2\frac{1}{2}$ " 10" sizes.
- 3. 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 Meter Rated Flow (opening curve).
- 4. For high flow rates/pressure loss information contact factory.

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

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

