

**RPLF 4An SERIES**

**n STYLE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY**



**n FLOW**



**VERTICAL UP FLOW**



**OPTIONAL VALVE SETTER**



**TRIFORCE™ CHECK**

The Apollo® RPLF 4An Reduced Pressure Principle Backflow Preventer consists of two independently acting, TriForce™ center stem guided check valves with a differential pressure relief valve located between the check valves. The unit is designed to give maximum protection against backflow of health or non-health hazardous fluids by either back-pressure or back-siphonage. The normally vertical up/vertical down oriented body incorporates an internal swivel connection providing the ability to pivot the second check 180° to a vertical up/vertical up flow. The durable domestic stainless steel units (2-1/2" to 8") and the FDA epoxy coated ductile iron units (10" and 12") are easily maintained in the line without any special tools. The TriForce™ check valves operate with a spring assist in the flowing condition to provide excellent flow rates which are documented by an independent laboratory.

**OPERATION**

During normal flow conditions, the two check valves are held off their seats, supplying water downstream. The relief valve is held shut by supply pressure acting through the sensing tube on the relief valve diaphragm. In the area between the check valves, called the zone, the pressure is maintained approximately 7 psi lower than supply pressure. Should a back-pressure or back-siphonage condition occur, the second check valve will seal, prohibiting the backflow of water. Should the second check become fouled, the pressure in the zone will increase causing the differential relief valve to open to atmosphere. This will maintain the pressure in the zone at least 2 psi lower than supply pressure.

**FEATURES**

- Domestic 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 an Independent Approval Laboratory
- Center Stem Guided TriForce™ Check Valves
- Modular Captured Spring Relief Valve
- Optional Air Gap Drains
- Small Installation Space Required/Footprint
- Approved for n-Flow and Vertical Up Flow
- Chloramine-Resistant Elastomers
- Lead Free Standard
- Optional Valve Setters
- US Patent Nos.: 6,443,184; 7,025,085; 7,533,699
- **Designed, Fabricated, Assembled and Tested in the USA**
- 5 Year Warranty

**PERFORMANCE RATING**

- Maximum Working Pressure; 175 psi
- Temperature Range; 33° to 140°F, 180°F Intermittent

**APPROVALS**

- ASSE 1013
- CSA B64.4
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (2-1/2" - 8")
- AWWA C-511
- UL, ULC Classified
- FM Approved
- NSF/ANSI 372 Lead Free

**STANDARD MATERIALS LIST**

<b>BODY (2-1/2" - 8")</b>	304 Stainless Steel	<b>RELIEF VALVE</b>	Bronze (C84400/LF C89836)
<b>BODY (10" &amp; 12")</b>	FDA Epoxy Coated Ductile Iron	<b>CHECK VALVES</b>	Bronze/Glass-Filled PPO/SS
<b>COVERS (2-1/2" - 6")</b>	Glass Filled PPO/SS	<b>SPRINGS</b>	Stainless Steel
<b>COVERS (8")</b>	304 Stainless Steel	<b>SEAT DISCS</b>	Chloramine-Resistant Silicone
<b>COVERS (10" &amp; 12")</b>	FDA Epoxy Coated Ductile Iron		

**PART NUMBER MATRIX**

4ANLF	2 X	X	XX	X
	Y-STRAINER	SIZE	SHUT-OFF VALVES	OPTIONS
4ANLF - LEAD FREE	0 - STANDARD 1 - W/ Y-STRAINER (SHIPPED LOOSE)	9 - 2-1/2" 0 - 3" A - 4" C - 6" E - 8" G - 10" H - 12"	01 - LESS SHUT-OFF VALVES 02 - NRS FLANGE X NRS FLANGE 03 - OS&Y FLANGE X OS&Y FLANGE 04 - OS&Y FLANGE X MONITORED (MON.) BUTTERFLY VALVE GROOVE† 06 - OS&Y FLANGE X POST INDICATOR FLANGE 07 - OS&Y FLANGE X OS&Y GROOVE 08 - OS&Y GROOVE X OS&Y GROOVE 09 - MON. BUTTERFLY VALVE GROOVE X MON. BUTTERFLY VALVE GROOVE† 10 - OS&Y FLANGE X POST INDICATOR GROOVE 11 - NRS GROOVE X NRS GROOVE 12 - NRS FLANGE X NRS GROOVE 13 - POST INDICATOR FLANGE X MON. BUTTERFLY VALVE GROOVE† 14 - POST INDICATOR FLANGE X POST INDICATOR FLANGE 16 - MON BUTTERFLY VALVE GROOVE X POST INDICATOR FLANGE† 17 - POST INDICATOR FLANGE X OS&Y GROOVE 18 - OS&Y GROOVE X POST INDICATOR GROOVE 19 - MON. BUTTERFLY VALVE GROOVE X POST INDICATOR GROOVE 20 - POST INDICATOR FLANGE X OS&Y FLANGE 21 - POST INDICATOR GROOVE X OS&Y GROOVE 22 - POST INDICATOR GROOVE X MON. BUTTERFLY VALVE GROOVE† 23 - MON. BUTTERFLY VALVE GROOVE X OS&Y FLANGE	D - DOMESTIC ASSEMBLY
EXAMPLE: 4A 215 A4LL = 4" size Reduced Pressure Assembly with OS&Y flanged inlet x OS&Y grooved outlet shut-off valves				
EXAMPLE: 4AN 20A 03 = 4" size reduced pressure assembly with OS&Y flanged inlet x OS&Y flanged outlet shut-off valves				

† Butterfly valves not available in 12" size.