

RPLF 4A SERIES

REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER ASSEMBLY



TRIFORCE™ CHECK



The Apollo® Model RPLF 4A Reduced Pressure Principle Backflow Preventers consist 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 hazard fluids by either back-pressure or back-siphonage. The durable domestic stainless steel units (2-1/2"-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
- Snap-In Check Retainers: 2-1/2"-6"
- Bolted-in Checks: 8"-12"
- Modular Captured Spring Relief Valve
- Low Pressure Loss as Documented by an Independent Approval Laboratory
- Center Stem Guided TriForce™ Check Valves
- Chloramine-Resistant Elastomers
- **Designed, Fabricated, Assembled and Tested in the USA**
- Lead Free Standard
- Optional Air Gap Drains
- 5 Year Warranty
- US Patent Nos.: 6,443,184; 7,025,085; 7,533,699

PERFORMANCE RATING

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

APPROVALS

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

STANDARD MATERIALS LIST

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

PART NUMBER MATRIX

4ALF	2 X	X	XX	XX
	Y-STRAINER	SIZE	SHUT-OFF VALVES	OPTIONS
4ALF - LEAD FREE STANDARD	0 - STANDARD	9 - 2-1/2"	01 - LESS SHUT-OFF VALVES	D - DOMESTIC ASSEMBLY
	1 - W/ Y-STRAINER (SHIPPED LOOSE)	0 - 3"	02 - NRS FLANGE X NRS FLANGE	R1 - RETROFIT*
		A - 4"	03 - OS&Y FLANGE X OS&Y FLANGE	R2 - RETROFIT*
		C - 6"	04 - OS&Y FLANGE X MONITORED (MON.) BUTTERFLY VALVE GROOVE ¹	R3 - RETROFIT*
		E - 8"	06 - OS&Y FLANGE X POST INDICATOR FLANGE	
		G - 10"	07 - OS&Y FLANGE X OS&Y GROOVE	*CUSTOM LENGTH RETROFIT ORDERS MUST BE ACCOMPANIED WITH SIGNED FROM #OFBFRETRO WITH EXACT LENGTH REQUIRED.
		H - 12"	08 - OS&Y GROOVE X OS&Y GROOVE	
			09 - MON. BUTTERFLY VALVE GROOVE X MON. BUTTERFLY VALVE GROOVE ¹	
			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 ¹	
			14 - POST INDICATOR FLANGE X POST INDICATOR FLANGE	
			16 - MON BUTTERFLY VALVE GROOVE X POST INDICATOR FLANGE ¹	
			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 ¹	
			23 - MON. BUTTERFLY VALVE GROOVE X OS&Y FLANGE	

EXAMPLE: 4ALF 20A 07 = 4" size lead free reduced pressure assembly with OS&Y flanged inlet x OS&Y grooved outlet shut-off valves.

¹ Butterfly valves not available in 12" size.