

BACKFLOW PREVENTERS RP-40 SERIES

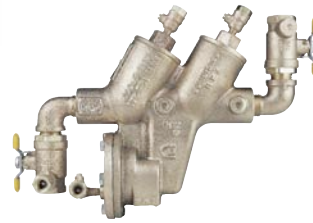
Reduced Pressure Backflow Preventers RP-40 N and Z Series

N and Z Flow Reduced Pressure Principle

The Apollo Series RP-40 Reduced Pressure Principle Backflow Preventer is designed to give maximum protection against backflow caused by either back-pressure or back-siphonage. The durable, but economical, device is easily maintained in the line without any special tools. It consists of two independently acting spring-loaded poppet check valves with an automatic differential relief valve located between the check valves. The diaphragm and the sensing passage are built into the all bronze body to eliminate possible damage. The assembly offers installation flexibility by providing inlet and outlet bronze elbows to meet space requirements, adaptability and lower installation cost. The No. 3 and No. 4 test cocks are mounted at the top to assure easy access during repair and maintenance when unit is installed in tight places.

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 internal sensing passage, on the relief valve diaphragm. In the area between the check valves, called the zone, the pressure is maintained at 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 valve 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.



Z-Flow



N-Flow

Sizes 3/4", 1", 1-1/4", 1-1/2", 2"
Shown with option (F) - SAE threaded test cocks

MATERIALS	
Body, covers & elbows	Bronze
Springs	Stainless Steel
Poppets	Glass-Filled Celcon®
Seat Discs	Silicone Rubber
Diaphragm	Nitrile and Nylon
R.V. Stem	PPO
Fasteners	Stainless Steel
Replaceable Seats	Glass-Filled PPO
Ball Valve Handles	Stainless Steel

Contact local water authorities for installation/service requirements.

See Backflow Catalog for dimensions and flow curves

FEATURES

- Maximum protection against back-pressure/back-siphonage
- Flexibility in installation
- Low installation cost
- Compact
- Internal sensing passage
- Low head loss
- Reversible/Removable seat discs
- Replaceable seat rings
- Lead-Free¹ option
- 5 year, domestic warranty
- Comes standard with Apollo full port ball valves with stainless steel handles
- Maximum working pressure 175 psi
- Temperature range 33°F-180°F
- UL Classified (less shutoffs)
- USC FCCCHR
- AWWA 511
- ASSE 1013
- CSA B64.4
- Designed, manufactured, assembled and tested in South Carolina, USA

40 [X] - 20 [X] - T [X] [X] [X]

	Size	Shut-Off Valves	Flow	Options (can be combined)
40 - Standard	4-3/4"	1- less ball valves (UL Classified)	N - n-Flow Z - Z-Flow	F- SAE threaded test cocks L- Lever handles (3/4" & 1") LL- locking lever handles (1-1/4", 1-1/2", 2")
40LF - Lead Free ¹	5-1"			
	6-1-1/4"	2- w/ball valves (Standard) 4- w/union ball valves		
	7-1-1/2"			
	8-2"			

Example:

40-208-T4NLL = 2" Reduced Pressure Backflow Preventer with union ball valves, with N-flow, and locking lever handles

See page 134 for air gap drain information.