

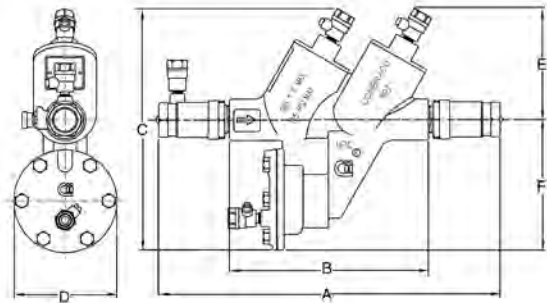
# BACKFLOW PREVENTION CATALOG

## Reduced Pressure Backflow Preventers

### RP 40S SERIES



Sizes 1/4", 3/8", 1/2", 3/4", 1"



See page 52 for air gap drain information.

### STAINLESS STEEL REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER

The Apollo Series RP 40S Stainless Steel Reduced Pressure Principle Backflow Preventer is designed to give maximum protection against backflow caused by either backpressure or back-siphonage from a cross-connection wherein a contaminant hazard exists (i.e. a health hazard), or a pollutant hazard exists (i.e. a non-hazard). The assembly is composed of two spring-loaded poppet type check valves and a mechanically independent, hydraulically dependent pressure differential relief valve set in an integral stainless steel body. Three of the testcocks 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.

#### FEATURES

- Stainless steel body and covers
- Easy to install and repair
- Internal sensing passage
- Low head loss
- Reversible/Removable seat discs
- Replaceable seats
- Comes standard with Apollo® stainless steel full port ball valves with stainless steel handles
- **Lead-Free** standard
- Maximum working pressure 175 psig
- Temperature range 33°F-180°F
- Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California
- ASSE 1013
- CSA
- Designed, cast, manufactured, assembled and tested in South Carolina, USA
- 5 year, domestic warranty

#### MATERIALS

Part	Material
Body and Covers	316 Stainless Steel (CF8M)
Springs	Stainless Steel
Fasteners	Stainless Steel
Poppets	Glass-Filled Celcon®
Seat Discs	Silicone Rubber
Diaphragm and O-Rings	FDA Fluorocarbon
Replaceable Seats	Glass-Filled PPO
Test Cocks & Handles	Stainless Steel

Contact local water authorities for installation/service requirements.

#### FACTORY CODE

40 2 X	X	T X	S X
Y-STRAINER	SIZE	SHUT-OFF VALVES	OPTIONS (CAN BE COMBINED)
0 = Standard 1 = w/SS Y-strainer (shipped loose)	1 = 1/4" 2 = 3/8" 3 = 1/2" 4 = 3/4" 5 = 1"	1 = Less ball valves (UL classified-3/4",1") 2 = w/SS ball valves, w/SS Tee Handles (Standard)	LL = Locking lever handles

#### DIMENSIONS

Model No. Factory No. Size	(x = Shut-off valve configuration) See Page 62 For Flow Curves									
	RP40S14 40 201 TxS 1/4"	RP40S14 40 201 TxS 6 mm.	RP40S38 40 202 TxS 3/8"	RP40S38 40 202 TxS 10 mm.	RP40S12 40 203 TxS 1/2"	RP40S12 40 203 TxS 12 mm.	RP40S34 40 204 TxS 3/4"	RP40S34 40 204 TxS 20 mm.	RP40S1 40 205 TxS 1"	RP40S1 40 205 TxS 25 mm.
A	10-1/2	267	10-1/2	267	10-1/2	267	13-1/2	343	15-1/4	387
B	5-3/4	146	5-3/4	146	5-3/4	146	7-15/16	202	7-15/16	202
C	6-7/8	175	6-7/8	175	6-7/8	175	9	229	9	229
D	2-5/8	68	2-5/8	68	2-5/8	68	4-1/16	103	4-1/16	103
E	3-3/16	81	3-3/16	81	3-3/16	81	4-3/8	111	4-3/8	111
F	3-3/4	95	3-3/4	95	3-3/4	95	5-1/8	130	5-1/8	130
Test Cocks	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT	1/8 x 1/4 NPT
<b>WEIGHTS</b>	<b>lbs.</b>	<b>kg.</b>	<b>lbs.</b>	<b>kg.</b>	<b>lbs.</b>	<b>kg.</b>	<b>lbs.</b>	<b>kg.</b>	<b>lbs.</b>	<b>kg.</b>
Net Wt. (w/o Ball Valves)	4.3	2.0	4.3	2.0	4.1	1.9	8.1	3.8	8.1	3.7
Net Wt. (with Ball Valves)	5.5	2.5	5.5	2.5	5.4	2.4	10.8	4.9	11	5.0
Shpg. Wt. (w/o Ball Valves)	5.2	2.4	5.1	2.3	5	2.3	9.8	4.4	9.6	4.3
Shpg. Wt. (with Ball Valves)	6.4	2.9	6.4	2.9	6.3	2.8	12.3	5.6	12.8	5.8