

SPECIFICATIONS

GENERAL SPECIFICATIONS

The backflow preventer shall be a Reduced Pressure Principle and shall include a tightly closing resilient-seated gate valve on each end of the body. The assembly shall be fitted with four (4) properly located resilient-seated test cocks.

The assembly shall have two (2) independent and internally loaded check valves and a pressure differential relief valve located between the check valves.

The backflow preventer shall be suitable for **supply pressure up to 175 psi and water temperatures from 33 to 140° F.**

DESCRIPTION

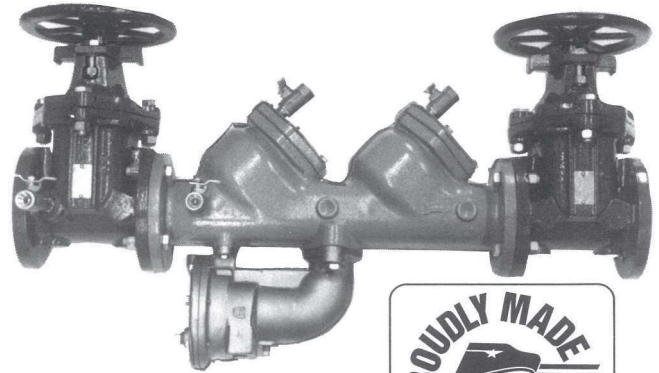
The Conbraco Series 40-200 Reduced Pressure Backflow Preventer consists of two independently acting, spring-loaded check valves with a differential pressure relief valve located between the check valves. The all bronze relief valve module is easily removed from the ductile iron check valve body. Pressure sensing passages are built into the bronze relief valve module to prevent possible damage from mishandling or vandalism. The unit is available with inlet and outlet shutoff valves. Four test cocks, three on the backflow preventer valve body and one on the inlet shutoff valve, complete the assembly.

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 backpressure/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.

Reduced Pressure Principle

Sizes 2-1/2" – 3" – 4"



FEATURES

- Maximum Protection against Backpressure/ Backsiphonage
- Removal Bronze Seats
- Replaceable Discs
- Internal Sensing Passage
- Designed For Easy Maintenance
- Low Head Loss
- Economical
- Corrosion Resistant
- Maximum Working Pressure 175 PSI
- Operating Temperature Range 33-140° F

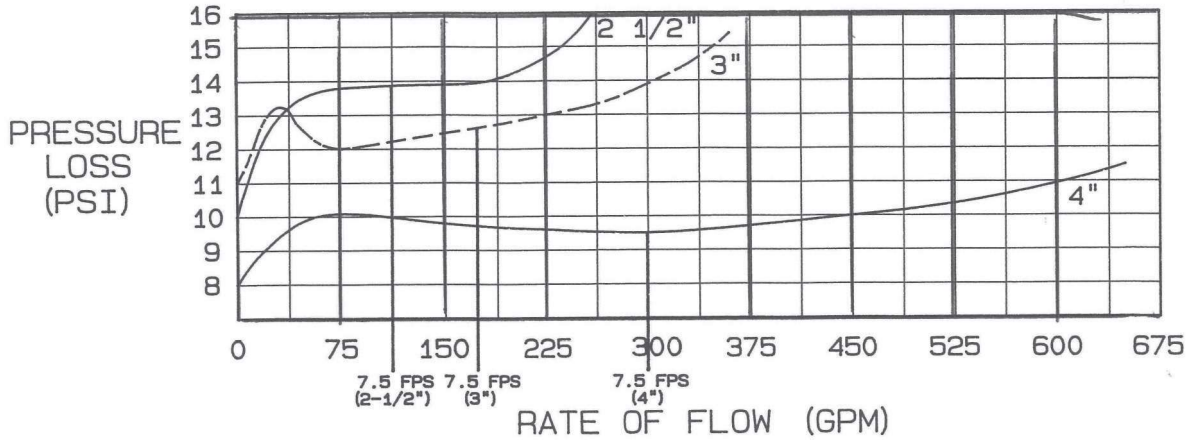
APPROVALS

The Series 40-200 is approved under the following standards: USC's FCCC & HR Manual, Sec. 10, ASSE .1013, AWWA C-511, IAPMO, CSA B64.4, UL Classified and FM.

UL, FM approved backflow preventers must include OS&Y gate valves.

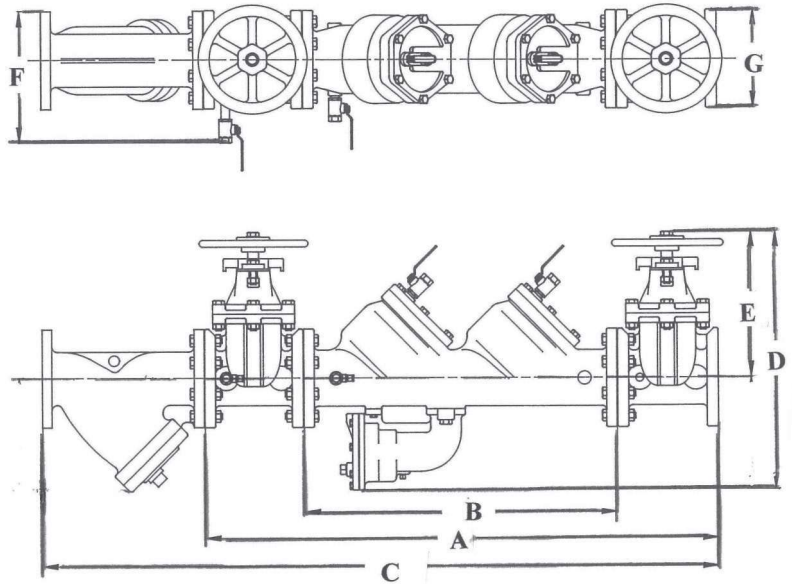


FLOW CURVES



DIMENSIONS (in.) – WEIGHTS (lbs.)

Size	2 1/2"	3"	4"
A*	37 5/16	38 5/16	46 3/4
B*	22 1/16	22 1/16	28 1/2
(flanged-end body)			
C*	47 15/16	49 15/16	61 3/4
D (NRS)	20 7/8	21 7/8	25 3/16
D(OS&Y Open)	25 7/8	28 3/8	33 3/16
E (NRS)	11 3/8	12 3/8	14 3/4
E (OS&Y Open)	16 3/8	18 7/8	22 3/4
F	9 5/8	10 3/8	11 7/8
G	7	7 1/2	9
Test Cocks (NPT)	1/2	1/2	1/2
Net Wt. (Less Valves)	120	122	196
Net Wt. (w/ OS&Y shut-off valves)	229	259	402



* Nominal dimensions are shown. Allowances must be made for manufacturers' tolerances.

MATERIALS

1. Body	Epoxy Coated (FDA Approved) Ductile Iron
2. Springs	Stainless Steel
3. Seats	Bronze
4. C.V. Discs	EPDM
5. R.V. Disc	Silicone
6. R.V. Diaphragm	Buna N and Nylon
7. R.V. Body	Bronze
8. Fasteners	Stainless Steel

ORDERING NUMBERS

Size	Ordering Number	SUFFIX NUMBERS
2-1/2"	40-209	-01 less gate valves
3"	40-200	-02 with NRS gate valves
3"	40-20A	-03 with OS&Y gate valves

2 1/2" - 3" - 4" RP CHECK VALVES

- 1 Shut Off
- 2 Nipple
- 3 Test Cock
- 4 Nut
- 5 Gasket
- 6 Bolt
- 7 Body
- 8 Name Plate
- 9 Screw
- 10 Ck Seat O'Ring
- 11 Ck Seat
- 12 Ck Stem
- 13 Ck Stem O'Ring
- 14 Ck Disc Retainer Nut
- 15 Ck Disc Retainer
- 16 Ck Disc
- 17 Disc Holder
- 18 #1 Ck Spring
- 19 #2 Ck Spring
- 20 Spring Retainer
- 21 Nut
- 22 O'Ring
- 23 Cover
- 24 Bolt
- 25 Test Cock

