

# DOUBLE DOOR CHECK VALVES

2" (50mm) - 12" (300mm)



## BRAY/RITE

# Double Door Check Valve

The Bray/Rite double door check valve is designed for energy efficient protection against flow reversal.

Featuring dual lightweight discs, responsive independent springs and a durable resilient seat for reliable flow-activated operation with tight sealing and reduced water hammer potential.

### COST EFFICIENT DESIGN

- > Low weight and short laying length saves initial cost, requires less space, and is easier to install.

### QUICK CLOSE

- > Independent springs provide quick-closing, non-slam shutoff for reduced water hammer potential.

### LOW CRACKING PRESSURE

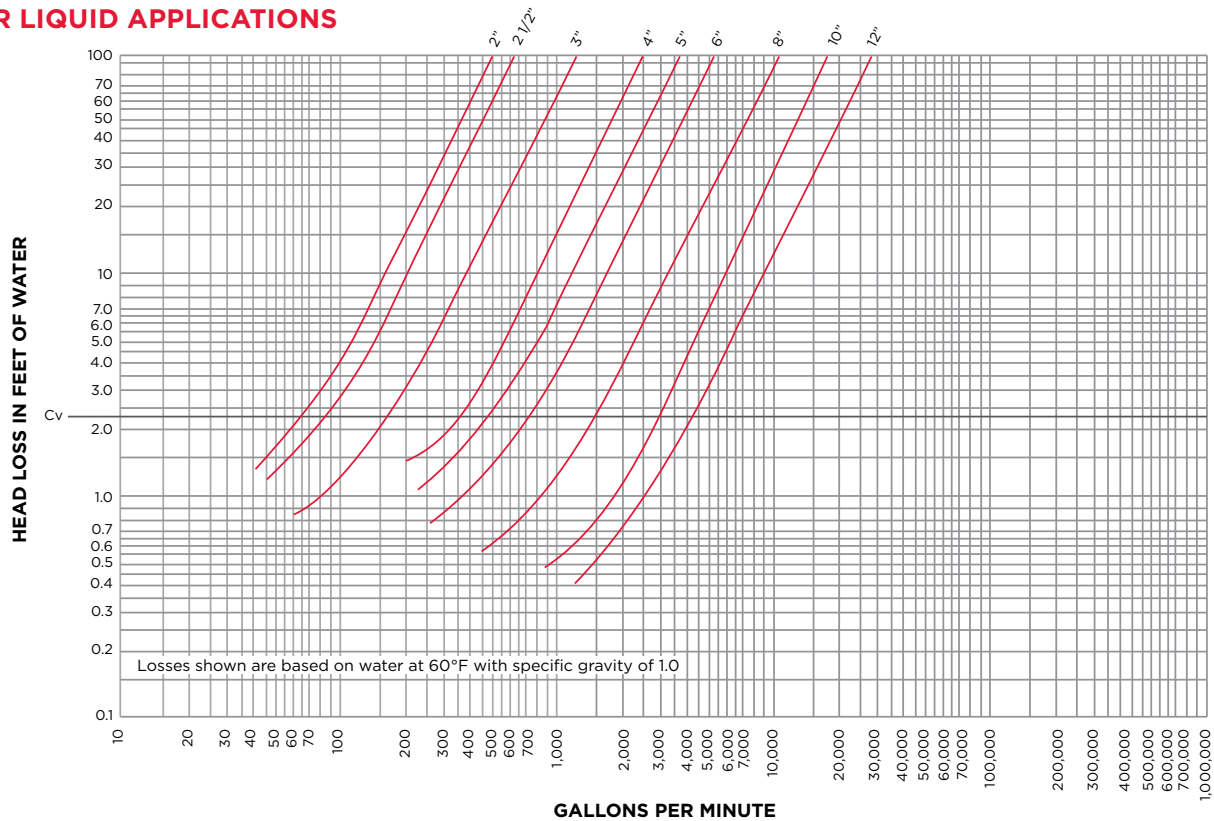
- > Lightweight, spring-loaded discs have low cracking pressure for energy efficient operation.

### MINIMAL HEAD LOSS

- > Contoured body provides a short and straight flow path with minimal turbulence.



**FOR LIQUID APPLICATIONS**



**FOR GAS APPLICATIONS**

$$\Delta P = \frac{GT}{P} \left( \frac{Q}{1360Cv} \right)^2$$

Cv = Flow Coefficient  
 G = Specific Gravity of Gas  
 P = Inlet Pressure in psia (psig + 14.7)  
 ΔP = Pressure Drop Across Valve in psi

$$SCFH = ACFH \left( \frac{P}{14.7} \right) \left( \frac{520}{T} \right)$$

Q = Gas Flow Rate in SCFH  
 T = Absolute Temperature (°F + 460)  
 ACFH = Actual Cubic Feet per Hour  
 SCFH = Standard Cubic Feet per Hour

**STANDARDS & CERTIFICATIONS**

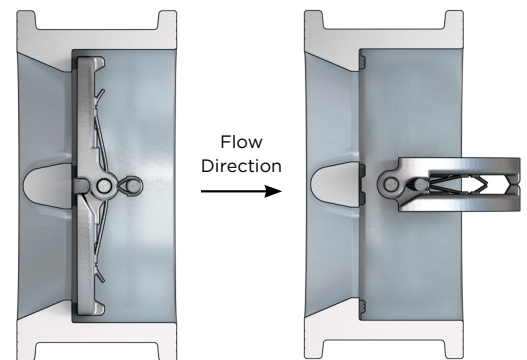
- > ASME B16.5 Class 150 flange connection.
- > Designed according to API 594 and tested according to API 598.
- > All valves are registered to a Canadian Registration Number (CRN) Canada wide.
- > All valves are 'CE' marked in accordance to PED 2014/68/EU.

**DUAL INDEPENDENT SPRINGS**

- > Increased disc responsiveness over a single spring for reduced water hammer potential.

**EXTENDED SPRING LEGS**

- > Prevent seat scrubbing for reduced wear and increased service life.



## PRESSURE TEMPERATURE RATINGS

<b>Pressure Class</b>	Class 150
<b>Testing Pressure</b>	Shell: 450 PSI Seat: 325 PSI
<b>Working Temperature</b>	-50F to 300F EPDM -40F to 250F Buna

## MATERIAL CONFIGURATIONS

Additional material configurations available upon request. XX = size of valve in inches (example: D0415XEZNSF designates a 4" valve).

Part Number	DXX15DEZNSF	DXX15DBZ	DXX15XEZ
<b>Body Material</b>	Ductile Iron ASTM A536 Gr. 65-45-12	Ductile Iron ASTM A536 Gr. 65-45-12	Stainless Steel ASTM A351 CF8M
<b>Discs</b>	Stainless Steel ASTM A351 CF8M	Stainless Steel ASTM A351 CF8M	Stainless Steel ASTM A351 CF8M
<b>Pins</b>	SS316	SS316	SS316
<b>Springs</b>	SS316	SS316	SS316
<b>Plugs</b>	SS316	SS316	SS316
<b>Spacers</b>	PTFE	PTFE	PTFE
<b>Seats</b>	EPDM	Buna	EPDM
<b>Marked</b>	NSF-G, CE	CE	CE



## DIMENSIONS

DN	(mm)	50	65	80	100	125	150	200	250	300
	(in)	2	2-1/2	3	4	5	6	8	10	12
<b>Face-to-face</b>	(mm)	54	60	67	67	83	95	127	140	181
<b>API594</b>	(in)	2.126	2.362	2.638	2.638	3.668	3.740	5	5.512	7.126
<b>Flange diameter</b>	(mm)	104	123	135	162	192	218	273	328	378
	(in)	4.094	4.843	5.315	6.378	7.559	8.583	10.748	12.913	14.882