

 **CIRCLE SEAL CONTROLS, INC.**
 A division of CIRCOR International, Inc.

2200 SERIES CHECK VALVES

0 to 800 PSIG

Features

- Medium Flow
- Single Piece Design
- Resilient O-ring

Benefits

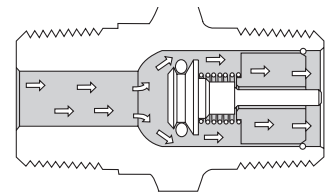
- Maintenance Free
- Dependable
- Economical

Technical Data

Body Materials:	• Brass, 316 Stainless Steel
O-ring Materials:	• Buna N, Ethylene Propylene, Neoprene, Silicone, Viton®
Operating Pressure:	• 0 to 800 PSIG (55 BAR)
Proof Pressure:	• 1,200 PSIG (83 BAR)
Cracking Pressure:	• 1 to 3 PSIG (.07 to .21 BAR)
Temperature Range:	• -70° F to +450° F (-57° C to +232° C) Based on o-ring material, see "How to Order"
Connection Sizes:	• 1/8 inch to 1 inch

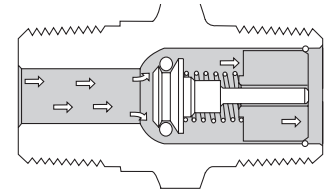
NOTE: Proper filtration is recommended to prevent damage to sealing surfaces.

How It Works



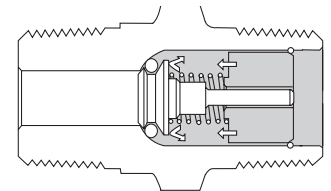
OPEN

Flow passes smoothly over poppet head with minimum turbulence and through the fluted guide without restriction.



CLOSING

O-ring automatically establishes line of contact with spherical seat to cushion closing and insure perfect sealing.



CLOSED

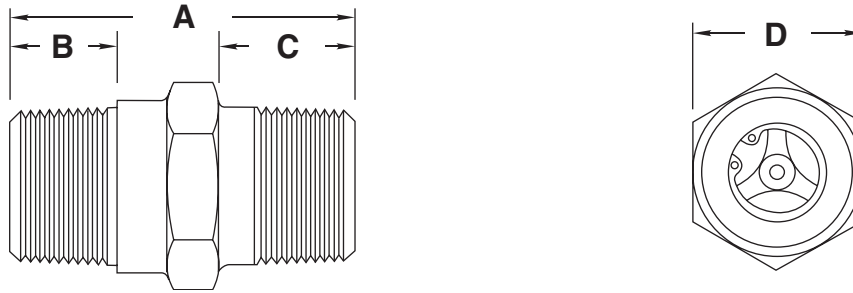
O-ring only seals. Full pressure is carried by metal-to-metal seat.

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Dimensions, Pressure Drop & Flow Rates



2200 Series Dimensions (inches), Male Pipe

Model Number	Size	A		B & C		D	
		MM	SS	MM	SS	MM	SS
1MM/SS	1/8"	1.30	1.32	.39	.40	.50	.50
2MM/SS	1/4"	1.59	1.70	.54	.60	.63	.63
3MM/SS	3/8"	1.59	1.73	.54	.61	.75	.75
4MM/SS	1/2"	2.13	2.20	.78	.81	.88	.88
6MM/SS	3/4"	2.15	2.33	.78	.86	1.13	1.13
8MM/SS	1"	2.57	2.68	.97	1.02	1.38	1.38

Maximum Allowable Pressure Drop

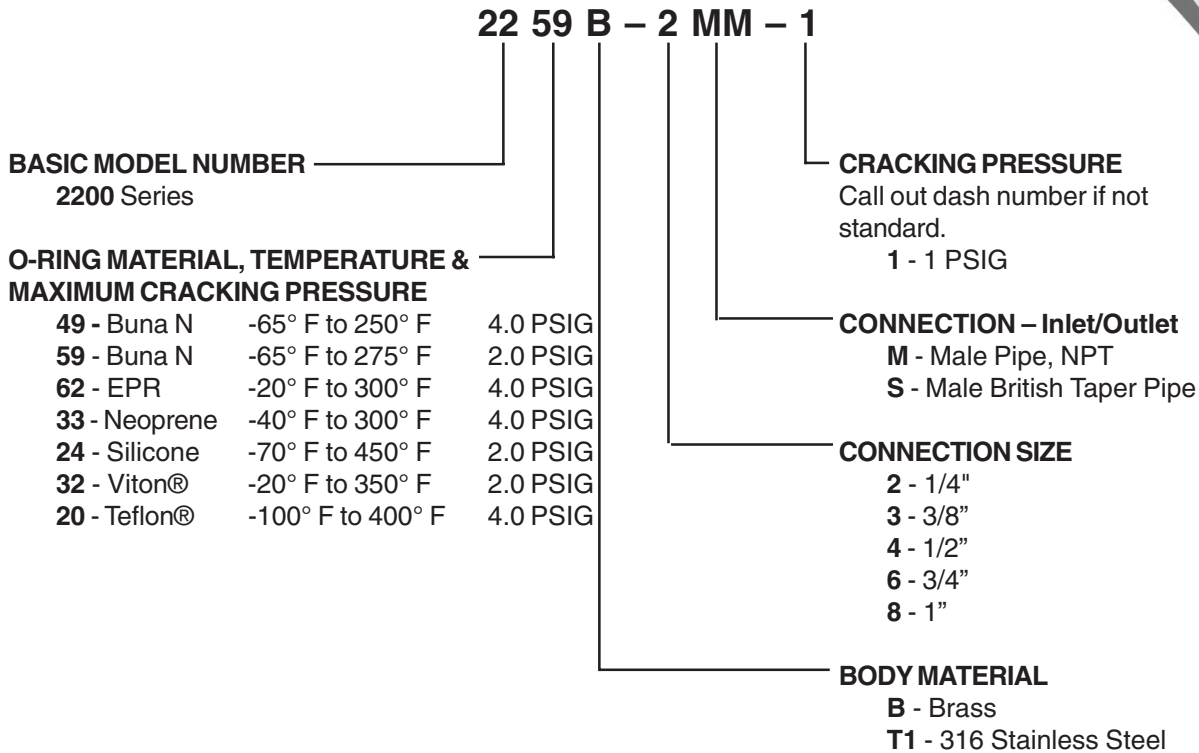
Model Number	Size	2249 & 2262		2224, 2232, 2233 & 2259	
		Air	Oil	Air	Oil
1MM/SS	1/8"	10 psid	15 psid	5 psid	10 psid
2MM/SS	1/4"	10 psid	15 psid	5 psid	10 psid
3MM/SS	3/8"	10 psid	15 psid	5 psid	10 psid
4MM/SS	1/2"	10 psid	15 psid	5 psid	10 psid
6MM/SS	3/4"	10 psid	15 psid	5 psid	10 psid
8MM/SS	1"	10 psid	15 psid	5 psid	10 psid

Flow Rates						
Valve Size	1MM	2MM	3MM	4MM	6MM	8MM
Cv (nominal)	0.26	0.74	1.1	2.1	4.7	6.6

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How to Order



Viton® is a registered trademark of DuPont Dow Elastomers. Teflon® is a registered trademark of the DuPont Company.

Please consult Circle Seal Controls or your local distributor for information on special connections, o-rings, operating pressures and temperature ranges.

LEAKAGE

2249, 2262	zero @ 3 psi to 800 psi
2259, 2232, 2233 & 2224	zero @ 1psi to 800 psi
2220	10 cc/min., max from zero to 75 psi; zero from 75 psi to 800 psi

CRACKING PRESSURE

MINIMUM CRACKING PRESSURE AVAILABLE - 0.1 PSI

MAXIMUM CRACKING PRESSURE AVAILABLE - 7.0 PSI

NOTE: Cracking pressure is defined as pressure at which flow is 5cc/min., except the 2220 Series for which flow is approximately .02 CFM. For standard cracking pressures and less, (example: 2259B-2MM-.3) the tolerance is +0%, -100%. For cracking pressure greater than standard, (example: 2259B-2MM-5), the tolerance is ±20%.

For Your Safety

It is the sole responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation and maintenance of these products. Material compatibility product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.