

Parker C Series Colorflow Check Valve Service Manual

General Description

Series C check valves permit free flow in one direction, and dependable shut-off in the reverse direction.

Operation

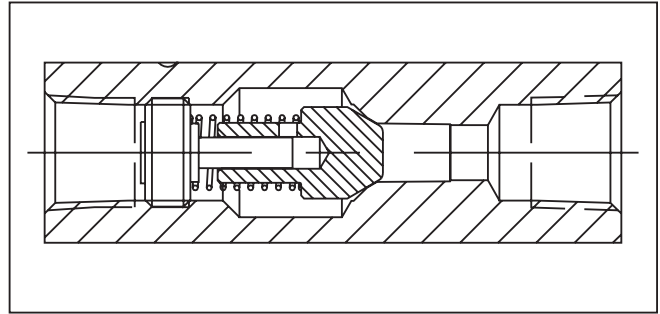
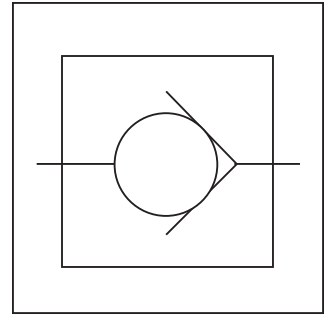
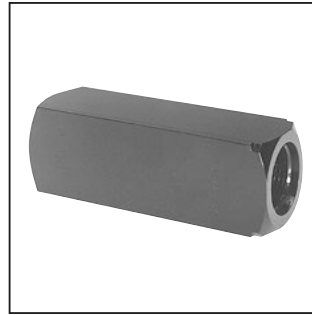
When pressure going through the valve is increased to the cracking level, the valve opens. When the pressure is reduced to below the cracking level, the valve closes.

Features

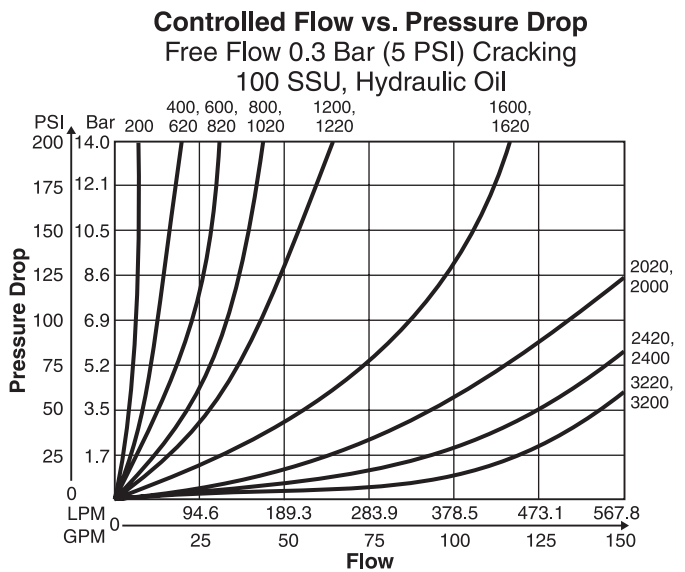
- Stainless steel poppets standard.
- Soft seal poppets are standard in some variations.
- Triangular retainers guide the poppets, and hold the spring firmly in place even under high velocity and shock.

Specifications

Maximum Operating Pressure	Brass: 140 Bar (2000 PSI); except for C1600 brass which is 35 Bar (500 PSI)
	Steel & Stainless: 345 Bar (5000 PSI) for 200 thru 1220; Steel: 207 Bar (3000 PSI) for all other sizes and styles
Material	Body: See ordering code Spring: 316 Stainless Steel Poppet: 416 Stainless Steel Retainer: 416 Stainless Steel Stainless Steel: 303 Stainless Steel Bodies
Poppets	Soft seal poppet is standard for 200 through 800/1020 size. For cracking pressures > 15 PSI, solid metal poppets are standard
Nominal Cracking Pressure	Standard: 0.4 Bar (5 PSI) Optional: 1.38 Bar (20 PSI), 4.48 Bar (65 PSI)
Temperature Range of Seal Compound	-40°C to +121°C (-40°F to +250°F) Nitrile (standard) -26°C to +205°C (-15°F to +400°F) Fluorocarbon



Performance Curves



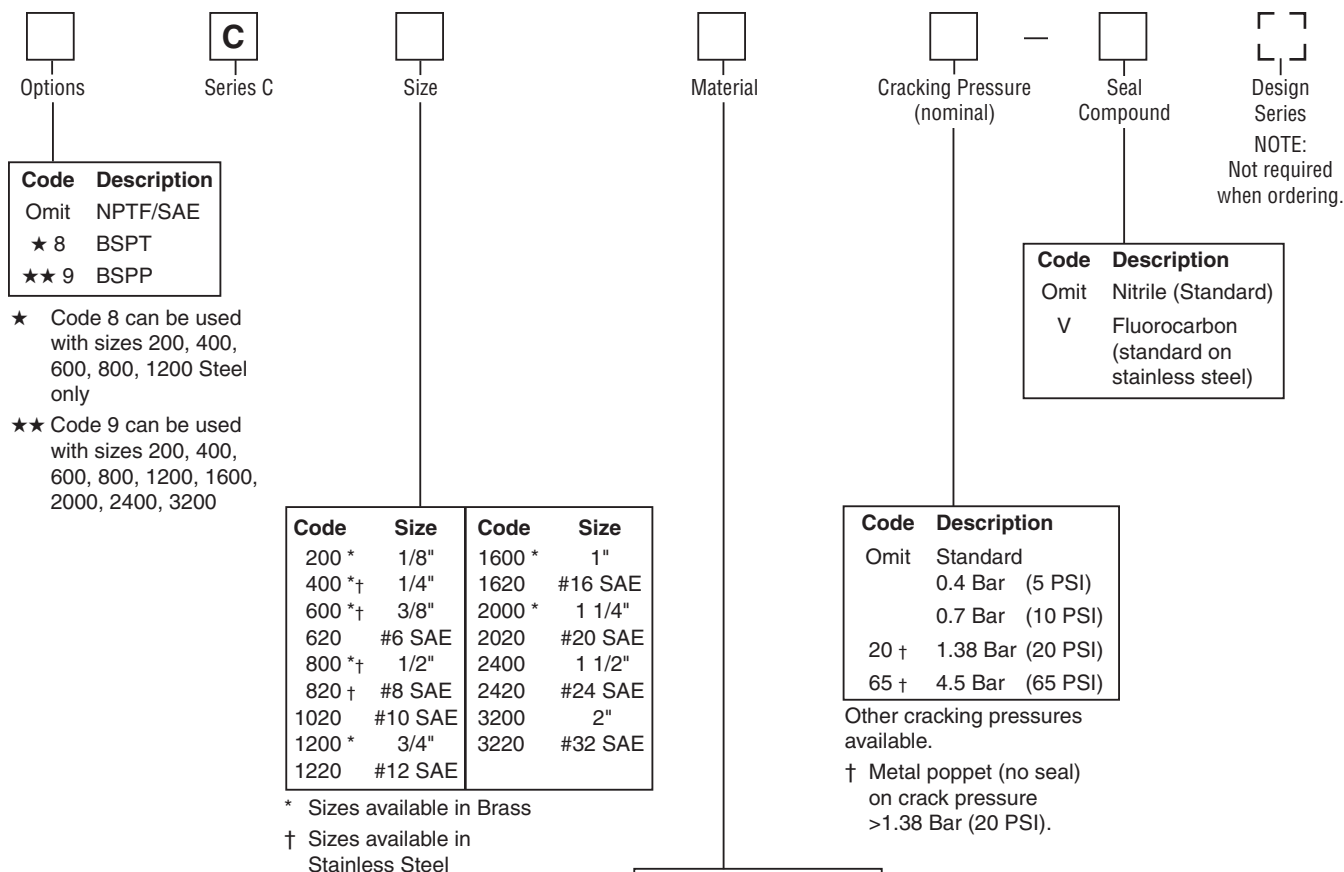
WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Cat3300_02.indd, ddp, 04/19



Ordering Information

Check Valves Series C

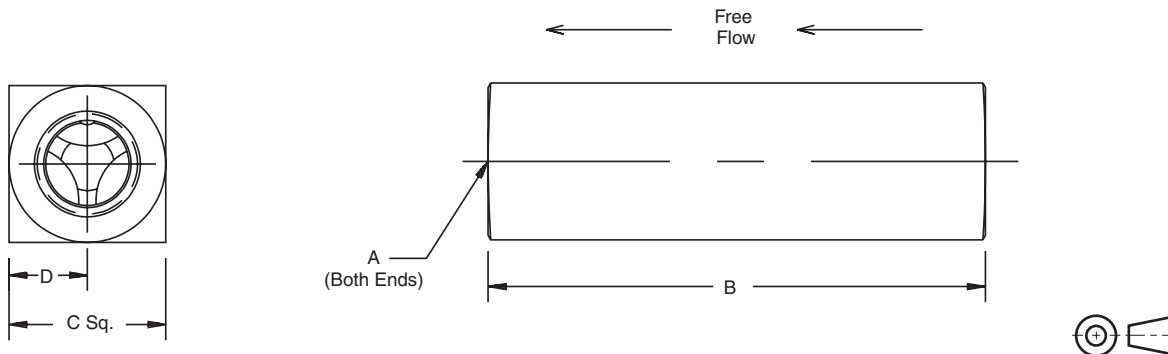


Model Number	Max Flow LPM (GPM)	Effective Orifice Area Control Flow in. ²	Effective Control Flow C _v
C200	11 (3)	0.023	0.53
C400	19 (5)	0.068	1.56
C620	19 (5)	0.068	1.56
C600	30 (8)	0.099	2.27
C820	30 (8)	0.099	2.27
C800	57 (15)	0.224	5.11
C1020	57 (15)	0.224	5.11
C1200	95 (25)	0.348	7.95
C1220	95 (25)	0.348	7.95
C1600	151 (40)	0.453	10.35
C1620	151 (40)	0.453	10.35
C2000	265 (70)	0.855	19.52
C2020	265 (70)	0.855	19.52
C2400	379 (100)	0.955	21.82
C2420	379 (100)	0.955	21.82
C3200	568 (150)	1.046	23.90
C3220	568 (150)	1.046	23.90

Dimensions

Check Valves Series C

Inch equivalents for millimeter dimensions are shown in (**)



Model Number	Weight kg (lbs.)	A	B	C	D
C200	0.05 (0.1)	1/8-27 NPTF	50.8 (2.00)	16.0 (0.63)	7.9 (0.31)
C400	0.2 (0.4)	1/4-18 NPTF	66.8 (2.63)	20.6 (0.81)	10.4 (0.41)
C600	0.2 (0.5)	3/8-18 NPTF	69.9 (2.75)	25.4 (1.00)	12.7 (0.50)
C620	0.2 (0.5)	9/16-18 UNF #6 SAE	79.2 (3.12)	25.4 (1.00)	12.7 (0.50)
C800	0.6 (1.3)	1/2-14 NPTF	87.4 (3.44)	31.8 (1.25)	16.0 (0.63)
C820	0.3 (0.7)	3/4-16 UNF #8 SAE	88.9 (3.50)	28.4 (1.12)	14.2 (0.56)
C1020	0.6 (1.3)	7/8-14 UNF #10 SAE	101.6 (4.00)	31.8 (1.25)	15.7 (0.62)
C1200	0.9 (2.0)	3/4-14 NPTF	98.6 (3.88)	38.1 (1.50)	19.1 (0.75)
C1220	0.9 (2.0)	1 1/6-12 UN #12 SAE	117.3 (4.62)	38.1 (1.50)	19.1 (0.75)
C1600	1.5 (3.3)	1-11 1/2 NPTF	127.0 (5.00)	44.5 (1.75)	22.4 (0.88)
C1620	1.5 (3.3)	1 5/16-12 UN #16 SAE	142.7 (5.62)	57.2 (2.25)	28.4 (1.12)
C2000	2.8 (6.2)	1 1/4-11 1/2 NPTF	143.0 (5.63)	57.2 (2.25)	28.7 (1.13)
C2020	2.8 (6.2)	1 5/8-12 UN #20 SAE	165.1 (6.50)	69.9 (2.75)	35.1 (1.38)
C2400	3.8 (8.4)	1 1/2-11 1/2 NPTF	143.0 (5.63)	69.9 (2.75)	35.1 (1.38)
C2420	3.8 (8.4)	1 7/8-12 UN #24 SAE	184.2 (7.25)	76.2 (3.00)	38.1 (1.50)
C3200	7.0 (15.4)	2-11 1/2 NPTF	165.1 (6.50)	88.9 (3.50)	44.5 (1.75)
C3220	7.0 (15.4)	2 1/2-12 UN #32 SAE	228.6 (9.00)	101.6 (4.00)	50.8 (2.00)