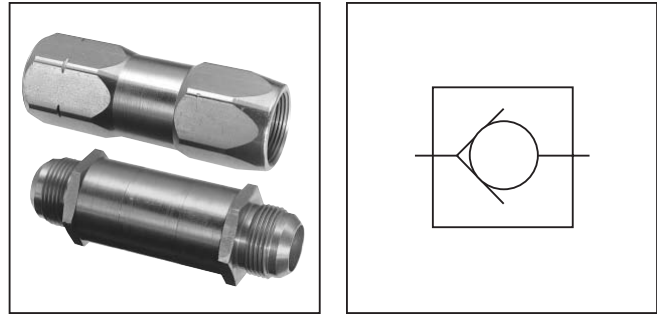


General Description

Series VCL check valves operate at free flow in one direction. Reverse flow is blocked.

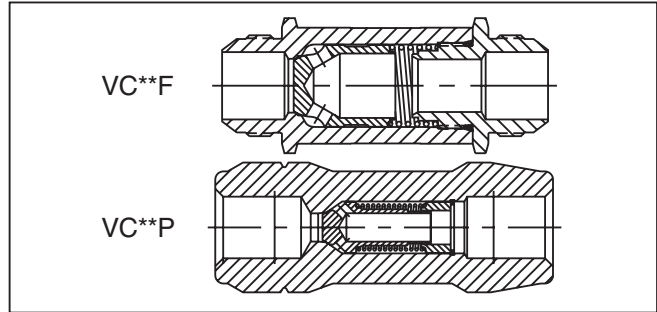
Operation

The spring keeps the poppet closed until the valve reaches the preset pressure. The valve stays open until the pressure goes below the spring setting.



Features

- Poppet spring is isolated from liquid flow stream minimizing turbulence.
- Close tolerance fit between poppet and poppet retainer creates a cushion that protects valve from surge shock damage.



Specifications

Models VCL*P (female pipe to female pipe)

Valve Model	Max. Oper. Press. Bar (PSI)	Material	Rated Flow LPM (GPM)	Cracking Press. ΔP Bar (PSI)	Total ΔP Bar (PSI)	Port Size
VCL4P05 VCL4P65	207 (3000) 207 (3000)	Steel† Steel†	23 (5) 23 (5)	0.3 (5) 4.5 (65)	0.6 (8.3) 5.0 (72.5)	1/4 NPSF 1/4 NPSF
VCL6P05 VCL6P65	207 (3000) 207 (3000)	Steel† Steel†	30 (8) 30 (8)	0.3 (5) 4.5 (65)	0.4 (6.0) 4.6 (66.0)	3/8 NPSF 3/8 NPSF
VCL8P05 VCL8P65	207 (3000) 207 (3000)	Steel† Steel†	45 (15) 45 (15)	0.3 (5) 4.5 (65)	0.5 (7.2) 4.6 (66.0)	1/2 NPSF 1/2 NPSF
VCL12P05 VCL12P65	207 (3000) 207 (3000)	Steel† Steel†	100 (25) 100 (25)	0.3 (5) 4.5 (65)	0.8 (11.0) 4.6 (67.0)	3/4 NPSF 3/4 NPSF
VCL16P05 VCL16P65	207 (3000) 207 (3000)	Steel† Steel†	133 (35) 133 (35)	0.3 (5) 4.5 (65)	0.4 (5.3) 4.6 (66.0)	1 NPSF 1 NPSF
VCL20P05 VCL20P65	207 (3000) 207 (3000)	Steel† Steel†	189 (50) 189 (50)	0.3 (5) 4.5 (65)	1.1 (15.9) 5.4 (78.0)	1-1/4 NPSF 1-1/4 NPSF

† All steel construction with zinc chromate plating.

Models VCL*F (male 37° flare to male 37°)

Valve Model	Max. Oper. Press. Bar (PSI)	Material	Standard Seals	Rated Flow LPM (GPM)	Cracking Press. ΔP Bar (PSI)	Total ΔP Bar (PSI)	Port Size
VCL6F05 VCL6F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	23 (5) 23 (5)	0.3 (5) 4.5 (65)	0.6 (8.3) 5.0 (72.5)	9/16-18 UNF (SAE 6)
VCL8F05 VCL8F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	30 (8) 30 (8)	0.3 (5) 4.5 (65)	0.4 (6.0) 4.6 (66.0)	3/4-16 UNF (SAE 8)
VCL10F05 VCL10F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	45 (15) 45 (15)	0.3 (5) 4.5 (65)	0.5 (7.2) 4.6 (66.0)	7/8-14 UNF (SAE 10)
VCL12F05 VCL12F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	100 (25) 100 (25)	0.3 (5) 4.5 (65)	0.8 (11.0) 4.6 (67.0)	1 1/16-12 UN (SAE 12)
VCL16F05 VCL16F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	133 (35) 133 (35)	0.3 (5) 4.5 (65)	0.4 (5.3) 4.6 (66.0)	1 5/16-12 UN (SAE 16)
VCL20F05 VCL20F65	207 (3000) 207 (3000)	Steel† Steel†	Nitrile O-Rings Nitrile O-Rings	189 (50) 189 (50)	0.3 (5) 4.5 (65)	1.1 (15.9) 5.4 (78.0)	1 5/8-12 UN (SAE 20)

† All steel construction with zinc chromate plating.

VCL
 Series VCL

Size

Code	Description
4*	1/4"
6	3/8"
8	1/2"
10†	5/8"
12	3/4"
16	1"
20	1 1/4"

* 37° flare (F) not available in size 4.

† NPSF (P) not available in size 10.

Port Style

Code	Description
F	37° Flare Tube Both Ends
P	NPSF Female Both Ends

Cracking Pressure

Code	Description
05	0.3 Bar (5 PSI)
65	4.5 Bar (65 PSI)

A

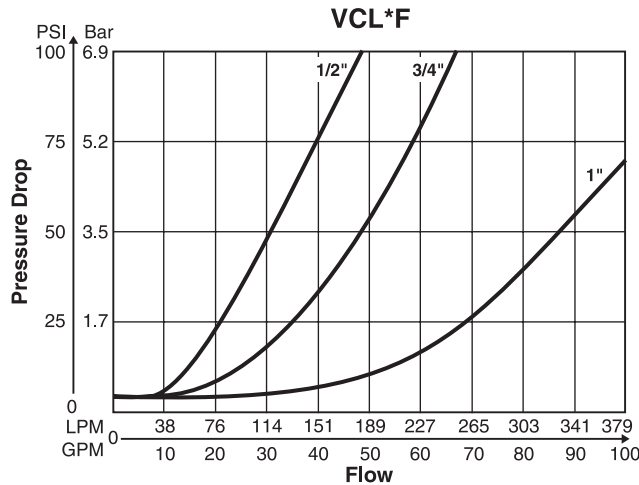
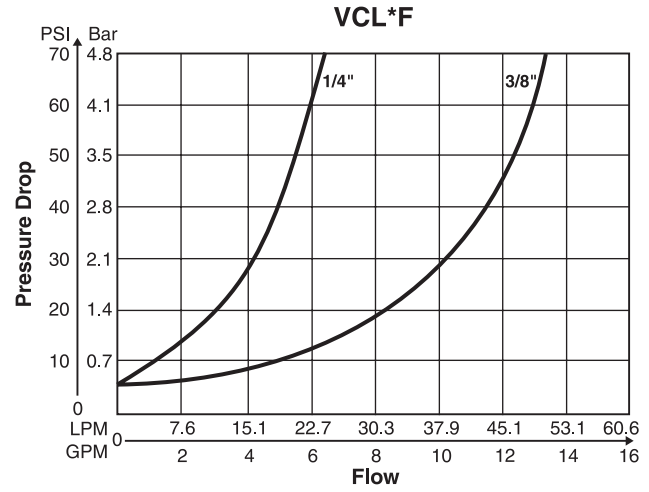
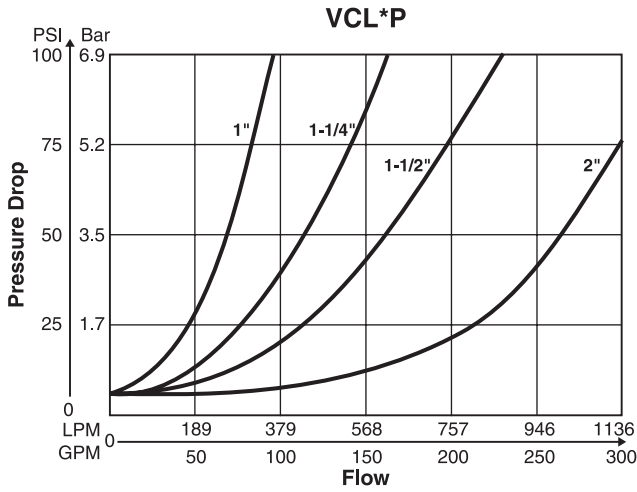
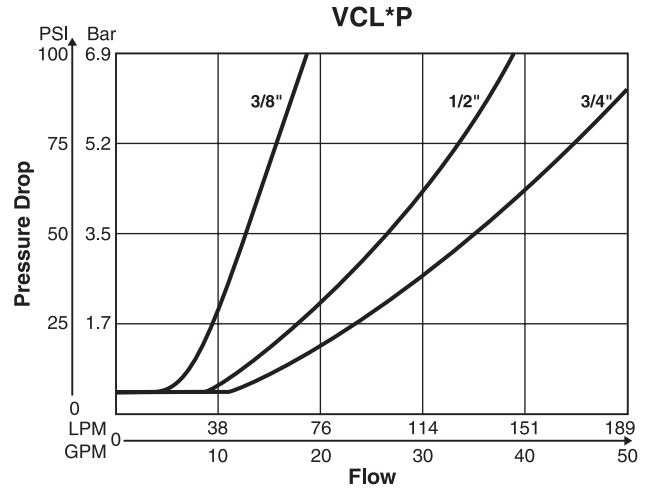
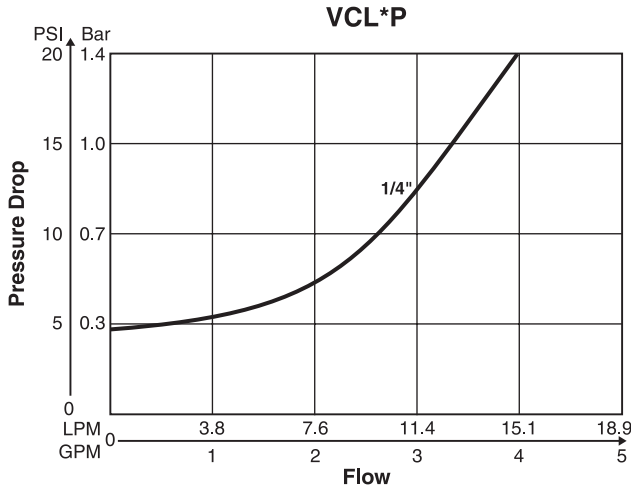
Seal Compound

Code	Description
Omit	Nitrile (Standard)
V *	Fluorocarbon

* Only available with "F" port style.

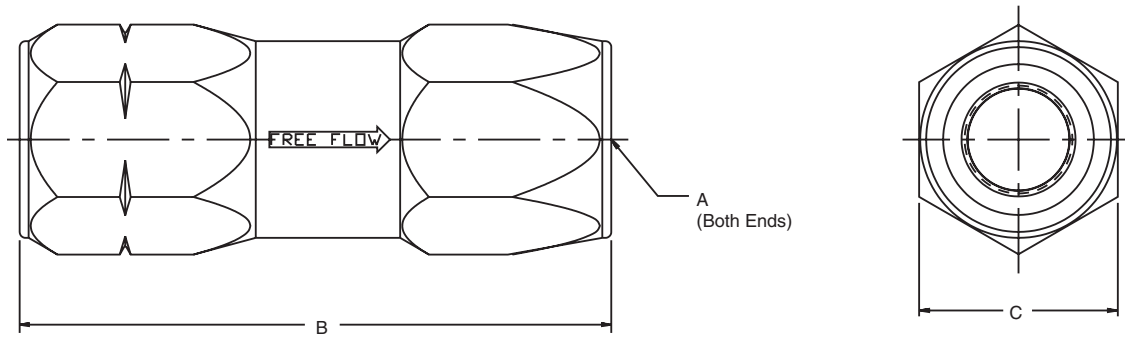
Design Series

NOTE:
 Not required when ordering.



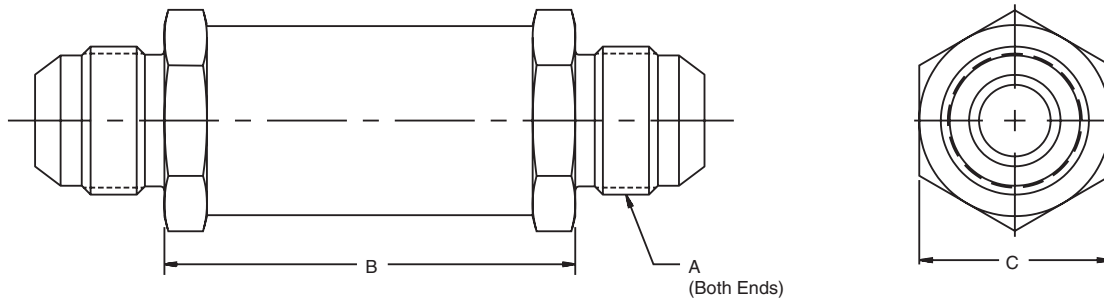
Inch equivalents for millimeter dimensions are shown in (**)

Models VCL*P



Model Code	Weight kg (lbs.)	A	B	C
VCL4P**A	0.2 (0.4)	1/4-1/8 NPSF	62.0 (2.44)	20.6 (0.81)
VCL6P**A	0.3 (0.7)	3/8-18 NPSF	69.9 (2.75)	22.4 (0.88)
VCL8P**A	0.4 (0.9)	1/2-14 NPSF	88.9 (3.50)	26.9 (1.06)
VCL12P**A	0.5 (1.2)	3/4-14 NPSF	98.6 (3.88)	34.8 (1.37)
VCL16P**A	0.8 (1.8)	1-11 1/2 NPSF	124.0 (4.88)	40.6 (1.60)
VCL20P**A	2.0 (4.3)	1 1/4-11 1/2 NPSF	125.0 (4.94)	50.8 (2.00)

Models VCL*F



Model Code	Weight kg (lbs.)	A	B	C
VCL6F**A	0.2 (0.4)	9/16-18 UNF (SAE 6)	44.5 (1.75)	20.6 (0.81)
VCL8F**A	0.3 (0.7)	3/4-16 UNF (SAE 8)	56.4 (2.22)	25.4 (1.00)
VCL10F**A	0.4 (0.9)	7/8-14 UNF (SAE 10)	61.2 (2.41)	28.4 (1.12)
VCL12F**A	0.5 (1.2)	1 1/16-12 UN (SAE 12)	69.9 (2.75)	35.1 (1.38)
VCL16F**A	0.8 (1.8)	1 15/16-12 UN (SAE 16)	84.1 (3.31)	44.1 (1.62)
VCL20F**A	2.0 (4.3)	1 5/8-12 UN (SAE 20)	84.1 (3.31)	47.8 (1.88)

