

General Description: Parker CO Series Check Valves are designed for uni-directional flow control of fluids and gases in industries such as chemical processing, oil and gas production and transmission, pharmaceutical, pulp and paper, power and utilities. The CO Series Check Valve is particularly suitable for applications requiring high integrity leak rates and re-sealing capabilities.

Features:

- Seal integrity across the seat and to atmosphere is tested to 4×10^{-9} std atm-cc/sec (4×10^{-10} kPa – L/sec) for the CO4L with fluorocarbon rubber seals. All other sizes and seal materials are tested to 1×10^{-5} std atm-cc/sec (1×10^{-6} kPa – L/sec).
- Special seat seal design provides a repeatable high integrity seal and accurate cracking pressures
- 100% factory tested.
- Cracking pressures include: 1/3, 1, 5, 10, 25, 50, 75, and 100 psi.
- Valves are available with Male and Female NPT, CPI™, A-LOK®, UltraSeal, Male and Female VacuSeal, and Tube Adapter
- Heat code traceability
- Color coded identification labels indicate seal material

Specifications

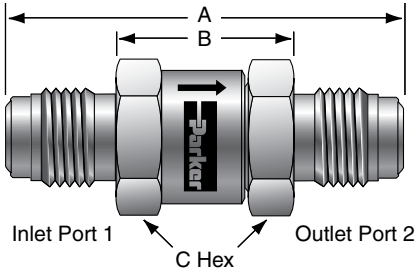
Pressure Rating: 6000 psig CWP

Temperature Rating:

Fluorocarbon Rubber	-15 °F to 400 °F
Buna-N Rubber	-30 °F to 250 °F
Ethylene Propylene Rubber	-70 °F to 275 °F
Highly Fluorinated Fluorocarbon Rubber	-15 °F to 200 °F

Orifice: .156" to .406"

Cv: .43 to 2.65



Model Shown: 4V-CO4L-5-KZ-SS

Label Color Cross Reference

Label Color	Seal Material
Brown	Fluorocarbon Rubber
Black	Buna-N Rubber
Purple	Ethylene Propylene Rubber
Green	All others

Testing: All valves are 100% tested for crack, re-seal, and helium leakage.

D = Hex of nuts where applicable.

CHECK VALVES

CO SERIES

Part No.	End Connections		Flow Data Orifice			Dimensions			
	Inlet (Port 1)	Outlet (Port 2)	(in.)	C _v	x _t †	A † (in.)	B (in.)	C (in.)	D (in.)
4A-CO4L-***-SS	1/4" A-LOK® Compression	1/4" A-LOK® Compression	.187	.62	.73	2.39	1.00	.750	.563
4F-CO4L-***-SS	1/4" Female NPT	1/4" Female NPT	.187	.62	.73	2.38	-	.750	-
4M-CO4L-***-SS	1/4" Male NPT	1/4" Male NPT	.187	.62	.73	2.09	.95	.750	-
4Q-CO4L-***-SS	1/4" UltraSeal	1/4" UltraSeal	.180	.58	.72	1.91	.98	.750	-
4V-CO4L-***-SS	1/4" VacuSeal	1/4" VacuSeal	.187	.62	.73	2.22	.98	.750	-
4V1-CO4L-***-SS	1/4" Female VacuSeal	1/4" Female VacuSeal	.182	.59	.75	2.67	.98	.750	.750
4Z-CO4L-***-SS	1/4" CPI™ Compression	1/4" CPI™ Compression	.187	.62	.73	2.39	1.00	.750	.563
4M4A-CO4L-***-SS	1/4" Male NPT	1/4" A-LOK® Compression	.187	.62	.73	2.25	.98	.750	.563
4M4F-CO4L-***-SS	1/4" Male NPT	1/4" Female NPT	.187	.62	.73	2.26	1.69	.750	-
4M4Z-CO4L-***-SS	1/4" Male NPT	1/4" CPI™ Compression	.187	.62	.73	2.25	.98	.750	.563
6A-CO6L-***-SS	3/8" A-LOK® Compression	3/8" A-LOK® Compression	.281	1.70	.73	3.17	1.65	1.00	.688
6F-CO6L-***-SS	3/8" Female NPT	3/8" Female NPT	.328	1.85	.69	3.03	-	1.00	-
6M-CO6L-***-SS	3/8" Male NPT	3/8" Male NPT	.328	1.85	.69	2.78	1.64	1.00	-
6Z-CO6L-***-SS	3/8" CPI™ Compression	3/8" CPI™ Compression	.281	1.70	.73	3.17	1.65	1.00	.688
8V-CO6L-***-SS	1/2" VacuSeal	1/2" VacuSeal	.328	1.85	.69	3.57	2.06	1.00	-
8V1-CO6L-***-SS	1/2" Female VacuSeal	1/2" Female VacuSeal	.328	1.85	.69	3.57	1.65	1.00	1.062
8A-CO8L-***-SS	1/2" A-LOK® Compression	1/2" A-LOK® Compression	.406	2.65	.75	3.37	1.63	1.25	.875
8F-CO8L-***-SS	1/2" Female NPT	1/2" Female NPT	.406	2.65	.75	3.60	-	1.25	-
8M-CO8L-***-SS	1/2" Male NPT	1/2" Male NPT	.406	2.65	.75	3.16	1.65	1.25	-
8Q-CO8L-***-SS	1/2" UltraSeal	1/2" UltraSeal	.375	2.55	.78	3.01	2.05	1.25	-
8V-CO8L-***-SS	1/2" VacuSeal	1/2" VacuSeal	.406	2.65	.75	3.56	2.05	1.25	-
8V1-CO8L-***-SS	1/2" Female VacuSeal	1/2" Female VacuSeal	.375	2.55	.78	3.65	1.73	1.25	1.062
8Z-CO8L-***-SS	1/2" CPI™ Compression	1/2" CPI™ Compression	.406	2.65	.75	3.37	1.63	1.25	.875

*Cracking Pressure **Seal Designator

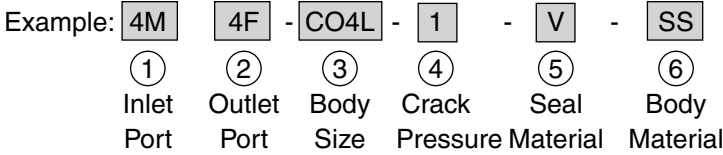
†For CPI™ and A-LOK®, dimensions are measured with nuts in the finger tight position.

‡Tested in accordance with ISA S75.02. Gas flow will be choked when P₁ - P₂ / P₁ = x_t.

HOW TO ORDER

The correct part number is easily derived by following the circled number sequence. The six product characteristics required are coded as shown below.

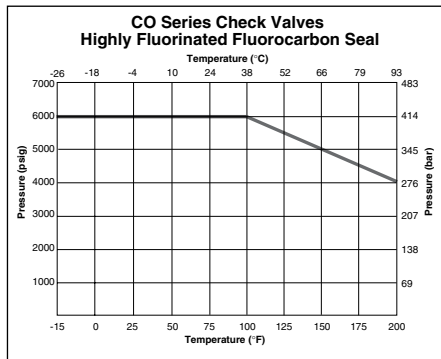
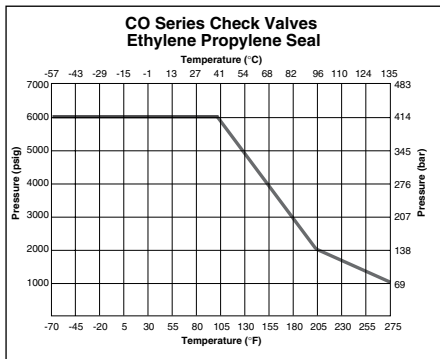
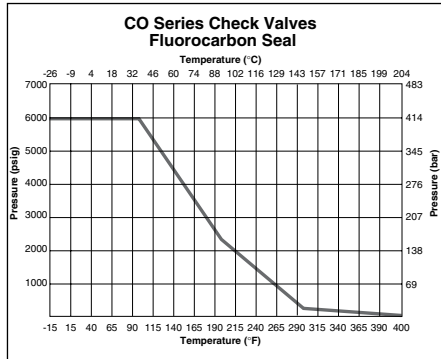
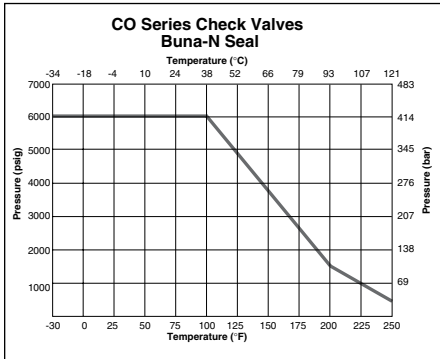
*Note: If both the inlet and outlet ports are the same, eliminate the outlet port designator.



Describes a CO Series Check Valve with 1/4" male NPT inlet and a 1/4" female NPT outlet, 1 psig cracking pressure, fluorocarbon rubber seals, and stainless steel body construction.

① Inlet Port	② Outlet Port	③ Body Size	④ Crack Pressure	⑤ Seat & Seal Material	⑥ Body Material
4A, 4F, 4M, 4Q, 4V, 4V1, 4Z	4A, 4F, 4M, 4Q, 4V, 4V1, 4Z	CO4L	1/3 psi 1 psi 5 psi 10 psi 25 psi 50 psi 75 psi 100 psi	V—Fluorocarbon Rubber BN—Buna-N Rubber EPR—Ethylene Propylene Rubber KZ—Highly Fluorinated Fluorocarbon Rubber	SS—316 Stainless Steel
6A, 6F, 6M, 6Z, 8V, 8V1	6A, 6F, 6M, 6Z, 8V, 8V1	CO6L			
8A, 8F, 8M, 8Q, 8V1, 8Z	8V, 8A, 8F, 8M, 8Q, 8V, 8V1, 8Z	CO8L			

PRESSURE VS. TEMPERATURE



Note: To determine MPa, multiply bar by 0.1

