

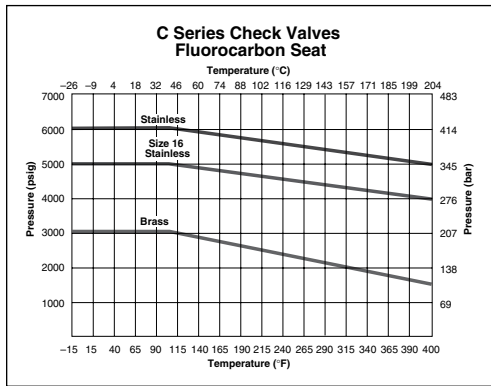
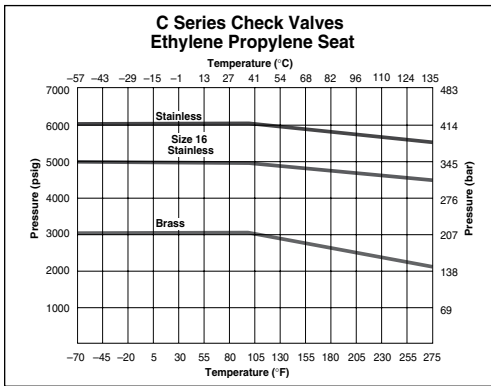
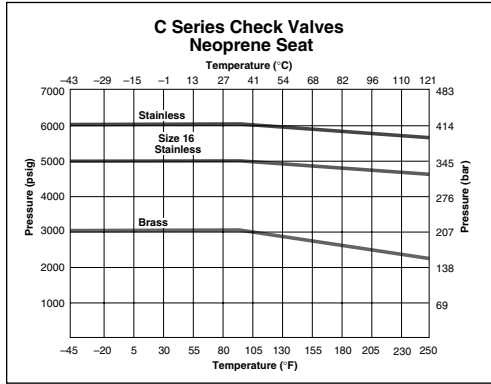
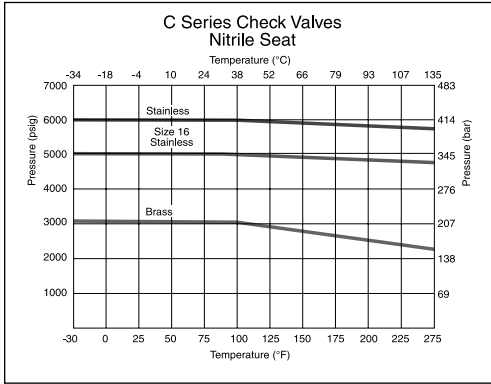
**General Description:** Parker C Series Check Valves are designed for uni-directional flow control of fluids and gases in industries such as chemical processing, oil and gas production and transmission, pharmaceutical, pulp and paper, power and utilities.

- Features:**
- Resilient, custom molded, blow-out resistant seat design
  - Back stopped poppet minimizes spring stress
  - 100% factory tested for both crack and reseal
  - Cracking pressures include: 1/3, 1, 5, 10, 25, 50, 75, and 100 psi.

**Specifications:**

<b>Pressure Rating:</b>	
316 SS— 1/8" to 3/4":	6000 psig CWP
1":	5000 psig CWP
All sizes with PTFE Seats:	4000 psig CWP
Brass— 1/8" to 1"	3000 psig CWP
<b>Temperature Rating:</b>	
Fluorocarbon Rubber	-15°F to +400°F
Nitrile	-30°F to +275°F
Ethylene Propylene Rubber	-70°F to +275°F
Neoprene Rubber	-45°F to +250°F
PTFE	-65°F to +400°F
Highly Fluorinated Fluorocarbon Rubber	-15°F to +200°F
<b>Orifice:</b>	.078" to .656"
<b>C<sub>v</sub>:</b>	.18 to 6.56

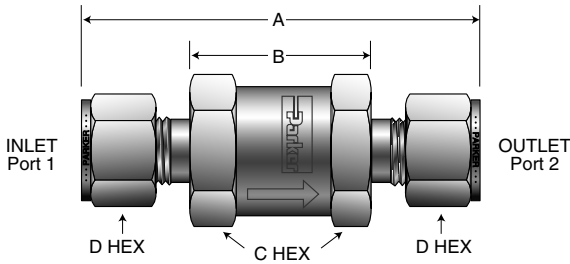
**PRESSURE VS. TEMPERATURE**



Note: To determine MPa, multiply bar by 0.1

Check Valves

C Series



Model Shown: 4Z-C4L-1-SS

Part No.	End Connections		Flow Data			Dimensions			
	Inlet (Port 1)	Outlet (Port 2)	Orifice (in.)	C <sub>v</sub>	x <sub>1</sub> ‡	A† (in.)	B (in.)	C (in.)	D (in.)
2A-C2L	1/8" A-LOK® Compression	1/8" A-LOK® Compression	.093	.22	0.46	2.29	1.09	.625	.438
2F-C2L	1/8" Female NPT	1/8" Female NPT	.125	.31	0.52	1.86	-	.625	-
2M-C2L	1/8" Male NPT	1/8" Male NPT	.125	.31	0.52	1.77	1.01	.625	-
2Z-C2L	1/8" CPI™ Compression	1/8" CPI™ Compression	.093	.22	0.46	2.29	1.09	.625	.438
2M2A-C2L	1/8" Male NPT	1/8" A-LOK® Compression	.093	.22	0.46	2.03	1.05	.625	.438
2M2F-C2L	1/8" Male NPT	1/8" Female NPT	.125	.31	0.52	1.81	1.43	.625	-
2M2Z-C2L	1/8" Male NPT	1/8" CPI™ Compression	.093	.22	0.46	2.03	1.05	.625	.438
4A-C4L	1/4" A-LOK® Compression	1/4" A-LOK® Compression	.187	.75	0.53	2.42	1.03	.750	.563
4F-C4L	1/4" Female NPT	1/4" Female NPT	.187	.75	0.53	2.40	-	.750	-
4M-C4L	1/4" Male NPT	1/4" Male NPT	.187	.75	0.53	2.18	1.04	.750	-
4Q-C4L	1/4" UltraSeal	1/4" UltraSeal	.180	.72	0.53	1.97	1.04	.750	-
4V-C4L	1/4" VacuSeal	1/4" VacuSeal	.187	.75	0.53	2.22	.98	.750	-
4Z-C4L	1/4" CPI™ Compression	1/4" CPI™ Compression	.187	.75	0.53	2.42	1.03	.750	.563
4M4A-C4L	1/4" Male NPT	1/4" A-LOK® Compression	.187	.75	0.53	2.29	1.02	.750	.563
4M4F-C4L	1/4" Male NPT	1/4" Female NPT	.187	.75	0.53	2.29	1.72	.750	-
4M4Z-C4L	1/4" Male NPT	1/4" CPI™ Compression	.187	.75	0.53	2.29	1.02	.750	.563
6A-C6L	3/8" A-LOK® Compression	3/8" A-LOK® Compression	.281	2.09	0.74	3.27	1.75	1.000	.688
6F-C6L	3/8" Female NPT	3/8" Female NPT	.359	2.26	0.77	3.03	-	1.000	-
6M-C6L	3/8" Male NPT	3/8" Male NPT	.359	2.26	0.77	2.96	1.82	1.000	-
6Q-C6L	3/8" UltraSeal	3/8" UltraSeal	.250	2.02	0.73	2.75	1.80	1.000	-
6Z-C6L	3/8" CPI™ Compression	3/8" CPI™ Compression	.281	2.09	0.74	3.27	1.75	1.000	.688
6M6A-C6L	3/8" Male NPT	3/8" A-LOK® Compression	.281	2.09	0.74	3.09	1.76	1.000	.688
6M6F-C6L	3/8" Male NPT	3/8" Female NPT	.359	2.26	0.77	2.95	2.38	1.000	-
6M6Z-C6L	3/8" Male NPT	3/8" CPI™ Compression	.281	2.09	0.74	3.09	1.76	1.000	.688
8A-C8L	1/2" A-LOK® Compression	1/2" A-LOK® Compression	.423	3.30	0.77	4.08	2.34	1.250	.875
8F-C8L	1/2" Female NPT	1/2" Female NPT	.453	3.53	0.81	3.56	-	1.250	-
8M-C8L	1/2" Male NPT	1/2" Male NPT	.453	3.53	0.81	3.56	2.05	1.250	-
8Q-C8L	1/2" UltraSeal	1/2" UltraSeal	.375	2.93	0.71	3.28	2.33	1.250	-
8V-C8L	1/2" VacuSeal	1/2" VacuSeal	.406	3.17	0.75	3.56	2.05	1.250	-

(continued on next page)

Part No.	End Connections		Flow Data			Dimensions			
	Inlet (Port 1)	Outlet (Port 2)	Orifice (in.)	C <sub>v</sub>	x <sub>r</sub> ‡	A† (in.)	B (in.)	C (in.)	D (in.)
8Z-C8L	1/2" CPI™ Compression	1/2" CPI™ Compression	.423	3.30	0.77	4.08	2.34	1.250	.875
8M8A-C8L	1/2" Male NPT	1/2" A-LOK® Compression	.423	3.30	0.77	3.82	2.19	1.250	.875
8M8F-C8L	1/2" Male NPT	1/2" Female NPT	.453	3.53	0.81	3.56	2.80	1.250	-
8M8Z-C8L	1/2" Male NPT	1/2" CPI™ Compression	.423	3.30	0.77	3.82	2.19	1.250	.875
12A-C12L	3/4" A-LOK® Compression	3/4" A-LOK® Compression	.594	6.01	0.38	4.34	2.60	1.375	1.125
12F-C12L	3/4" Female NPT	3/4" Female NPT	.594	6.01	0.38	4.09	-	1.375	-
12M-C12L	3/4" Male NPT	3/4" Male NPT	.594	6.01	0.38	4.09	2.58	1.375	-
12Q-C12L	3/4" UltraSeal	3/4" UltraSeal	.500	5.63	0.37	3.78	2.64	1.375	-
12V-C12L	3/4" VacuSeal	3/4" VacuSeal	.594	6.01	0.38	4.64	2.64	1.375	-
12Z-C12L	3/4" CPI™ Compression	3/4" CPI™ Compression	.594	6.01	0.38	4.34	2.60	1.375	1.125
12M12A-C12L	3/4" Male NPT	3/4" A-LOK® Compression	.594	6.01	0.38	4.22	2.59	1.375	1.125
12M12F-C12L	3/4" Male NPT	3/4" Female NPT	.594	6.01	0.38	4.09	3.34	1.375	-
12M12Z-C12L	3/4" Male NPT	3/4" CPI™ Compression	.594	6.01	0.38	4.22	2.59	1.375	1.125
16A-C16L	1" A-LOK® Compression	1" A-LOK® Compression	.656	6.56	0.27	4.63	2.53	1.625	1.500
16F-C16L	1" Female NPT	1" Female NPT	.656	6.56	0.27	4.84	-	1.625	-
16M-C16L	1" Male NPT	1" Male NPT	.656	6.56	0.27	4.52	2.63	1.625	-
16Z-C16L	1" CPI™ Compression	1" CPI™ Compression	.656	6.56	0.27	4.63	2.53	1.625	1.500
16M16A-C16L	1" Male NPT	1" A-LOK® Compression	.656	6.56	0.27	4.58	2.59	1.625	1.500
16M16F-C16L	1" Male NPT	1" Female NPT	.656	6.56	0.27	4.68	3.73	1.625	-
16M16Z-C16L	1" Male NPT	1" CPI™ Compression	.656	6.56	0.27	4.58	2.59	1.625	1.500

†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  $P_2 - P_1 / P_1 = x_r$ .

**HOW TO ORDER**

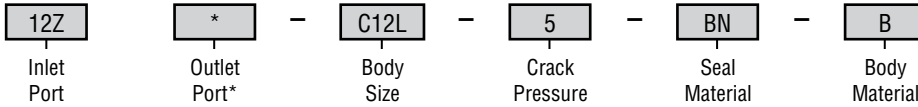
The correct part number is easily derived from the following sequence. The six product characteristics required are coded as shown below.

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

Inlet Port	Outlet Port*	Body Size	Crack Pressure	Seal Material	Body Material
2A, 2F, 2M, 2Z	2A, 2F, 2M, 2Z	<b>C2L</b>		<b>Blank</b> — Fluorocarbon Rubber	
4A, 4F, 4M, 4Q, 4V, 4Z	4A, 4F, 4M, 4Q, 4V, 4Z	<b>C4L</b>	1/3 psi	<b>BN</b> — Nitrile	
6A, 6F, 6M, 6Q, 6Z	6A, 6F, 6M, 6Q, 6Z	<b>C6L</b>	1 psi	<b>EPR</b> — Ethylene Propylene Rubber	<b>B</b> — Brass
8A, 8F, 8M, 8Q, 8V, 8Z	8A, 8F, 8M, 8Q, 8V, 8Z	<b>C8L</b>	5 psi	<b>NE</b> — Neoprene Rubber	<b>SS</b> — 316 Stainless Steel
12A, 12F, 12M, 12Q, 12V, 12Z	12A, 12F, 12M, 12Q, 12V, 12Z	<b>C12L</b>	10 psi		
			25 psi	<b>*T</b> — PTFE	
16A, 16F, 16M, 16Z	16A, 16F, 16M, 16Z	<b>C16L</b>	50 psi	<b>**KZ</b> — Highly Fluorinated Fluorocarbon Rubber	
			75 psi		
			100 psi		

\* Only available with stainless steel valves.    \*\* Not available on C2 series.

**Part Number Example:**



Describes a C series check valve with 3/4" OPI™ compression inlet and outlet ports, a 5 psi cracking pressure, nitrile seal and brass body construction.