



CBG SERIES CHECK VALVES

High performance check valves for critical applications

Catalog 4130-CBG | June 2025



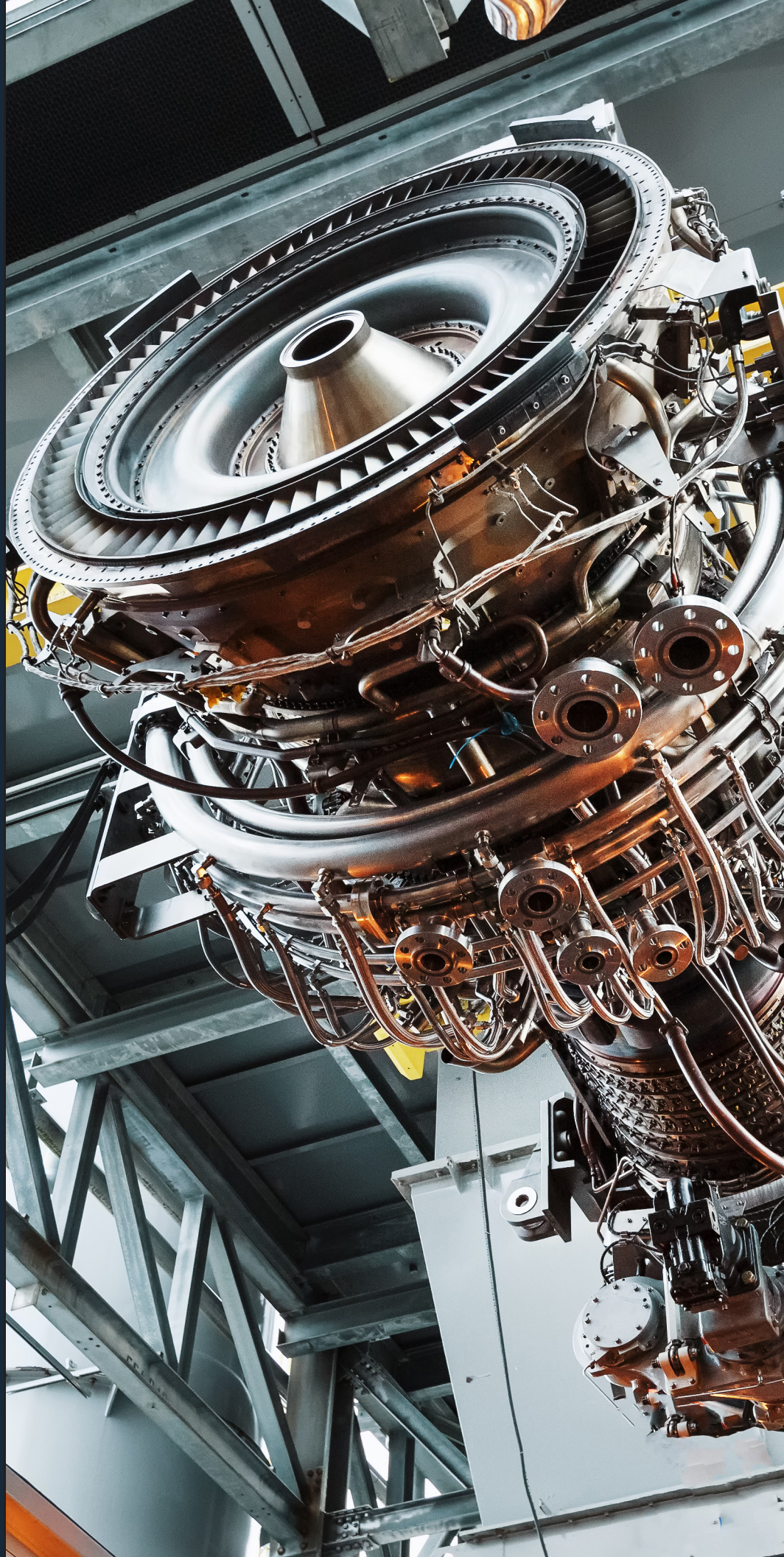
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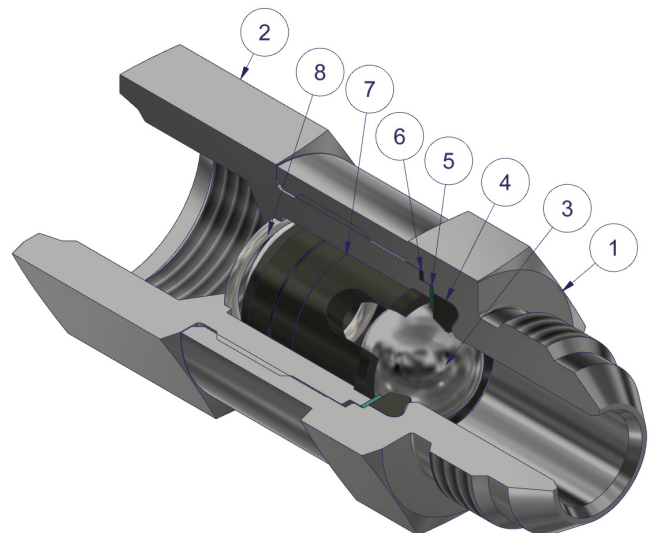
Product Highlights

The Parker CBG Series Check Valves are designed for unidirectional flow control of fluids and gases. The distinctive floating ball valve design combined with resilient reinforced PTFE copolymer seat materials provides for superior zero leakage performance in difficult service conditions in power generation, oil/gas production, and chemical processing. Specifically designed for higher temperature (up to 500°F) dual-fuel gas turbine applications with precise cracking pressures and optional fixed-orifice flow control, these check valves are the superior choice for demanding service conditions.

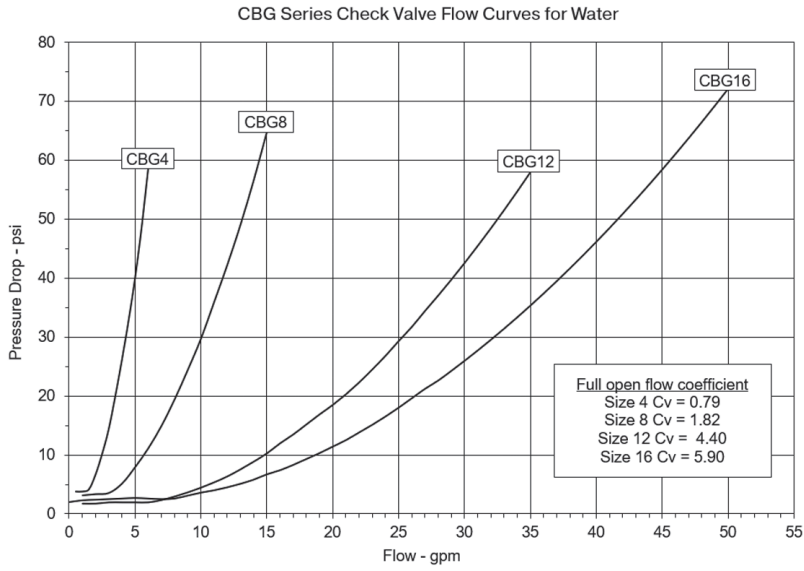
Features:	Benefits:
Patented floating ball design	<ul style="list-style-type: none"> • Self-centering floating ball immune to poppet misalignment problems. • Wedge seat design prevents seat blowout at high flow rates and pressure drops.
Reinforced PTFE Copolymer seat materials.	<ul style="list-style-type: none"> • Reliable and consistent bubble tight seal. • High temperature capable up to 500°F. • Best-in-class chemical resistance. • Immune to explosive decompression failure common with elastomer seats.
PTFE coated poppet	<ul style="list-style-type: none"> • Smooth and reliable operation, especially with lower crack pressure applications.
Custom design development capability for specific OEM applications	<ul style="list-style-type: none"> • For improvements on existing or new system designs.
Available in a wide diversity of lengths and end connections	<ul style="list-style-type: none"> • Drop-in replacement. • Eliminates adapter fittings.

Material of Construction

Item#	Description	Material
1	Cap	ASTM A479 Type 316
2	Body	ASTM A479 Type 316
3	Ball	316 Stainless Steel
4	Seat	Parkerfill or Parker Carbon Reinforced PTFE Copolymer
5	Seat Washer	316 Stainless PTFE Coated
6	Body Gasket	Grafoil®
7	Ball Cage	316 Stainless PTFE Coated
8	Crack Spring	Inconel or 316 Stainless

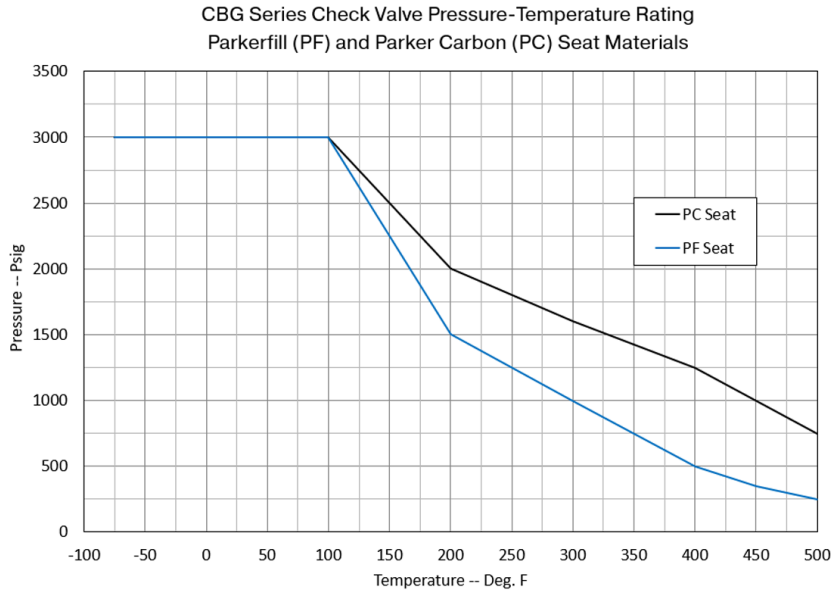


Flow Data



Valve Size	End Connection Size Range	Recommended Liquid Flow Range
CBG4	1/4" – 1/2"	1 – 6 gpm
CBG8	1/2" – 3/4"	4 – 15 gpm
CBG12	3/4" – 1"	10 – 35 gpm
CBG16	1" – 1-1/4"	20 – 50 gpm

Pressure and Temperature Rating



Item	Rating
Shell Pressure Max.	5000 psi
Parker Carbon Seat Check Pressure Max.	3000 psi @ 100°F 750 psi @ 500°F
ParkerFill Seat Check Pressure Max.	3000 psi @ 100°F 250 psi @ 500°F
Shutoff	Class VI (Bubble Tight)
Maximum Temperature	500°F

How to Build a Part Number

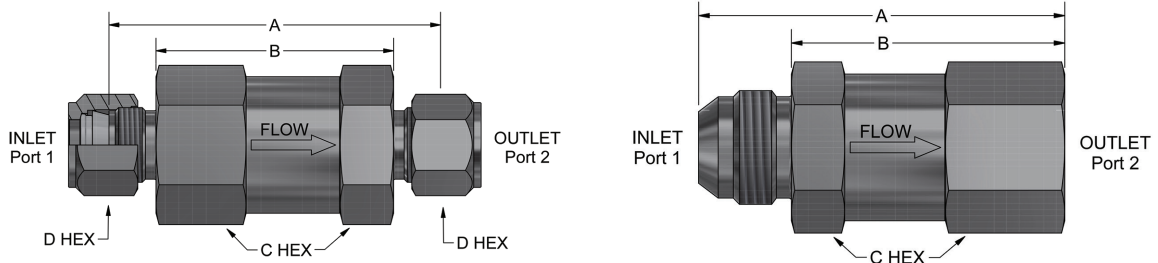
Typical Part Number example: **12X12G5-CBG12L-15-PF-SS**

(part number is created based on customer selection of product parameters, see below for example)

12	X	12	G5	-	CBG12L	-	15	-	PF	-	SS
Inlet Connection Size	Inlet Connection Type	Outlet Connection Size	Outlet Connection Type	-	Valve Series	-	Crack Pressure**	-	Seat Material	-	Body Material
4 1/4"	A Parker A-Lok®	4 1/4"	A Parker A-Lok®		CBG4L		1		PF Parkerfill		SS 316 Stainless Steel
6 3/8"	Z Parker CPI™	6 3/8"	Z Parker CPI™		CBG8L		5		PC Parker Carbon		
8 1/2"	M Male NPT	8 1/2"	M Male NPT		CBG12L		10				
10 5/8"	F Female NPT	10 5/8"	F Female NPT		CBG16L		15				
12 3/4"	G5 SAE J1926/2 O-Ring Port	12 3/4"	G5 SAE J1926/2 O-Ring Port				20				
16 1"	F5 SAE J1926/1 O-Ring Port Stud	16 1"	F5 SAE J1926/1 O-Ring Port Stud				30				
	X SAE J514 37° Flare		X SAE J514 37° Flare				35				
	LO Seal-Lok O-Ring Face Seal		LO Seal-Lok O-Ring Face Seal				45				
	LX Seal-Lok Extreme Metal Face Seal		LX Seal-Lok Extreme Metal Face Seal				50				
							100				
							120				

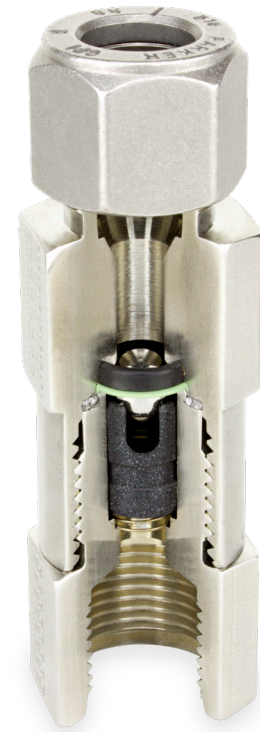
** Listed crack pressures are not available on all valve sizes.

Dimension



Basic Part Number	End Connections		Dimensions				Orifice Diameter
	Inlet Port 1	Outlet Port 2	A	B Hex	C Hex	D Hex	
CBG4							
4A-CBG4L	1/4 A-LOK	1/4 A-LOK	2.40	1.56	1	9/16	0.187
4Z-CBG4L	1/4 CPI	1/4 CPI					
4M-CBG4L	1/4 MALE NPT	1/4 MALE NPT					
4A4F5-CBG4L	1/4 MALE NPT	1/4 MALE SAE J1926/2	2.40			9/16	0.187
6A-CBG4L	3/8 A-LOK	3/8 A-LOK	2.67	1.74	1	11/16	0.281
6A6M-CBG4L	3/8 A-LOK	3/8 MALE NPT	2.88	1.84			
8A6M-CBG4L	1/2 A-LOK	3/8 MALE NPT	2.70	1.66			
8A8G5-CBG4L	1/2 A-LOK	1/2 FEMALE SAE J1926/1	2.52	2.05			
8A-CBG4L	1/2 A-LOK	1/2 A-LOK	2.89	1.96			
8Z-CBG4L	1/2 CPI	1/2 CPI	2.89	1.96			
8A8M-CBG4L	1/2 A-LOK	3/8 FEMALE NPT	3.00	1.75			
8F8M-CBG4L	1/2 FEMALE NPT	1/2 MALE NPT	3.25	---	1-1/4	---	
8F-CBG4L	1/2 FEMALE NPT	1/2 FEMALE NPT	3.25	---		---	
CBG8							
8A-CBG8L	1/2 A-LOK	1/2 A-LOK	3.30	2.36	1-3/8	7/8	0.406
8Z-CBG8L	1/2 CPI	1/2 CPI					
10A-CBG8L	5/8 A-LOK	5/8 A-LOK					
10Z-CBG8L	5/8 CPI	5/8 CPI	3.56	2.62	1-1/8	---	0.437
12A-CBG8L	3/4 A-LOK	3/4 A-LOK					
12Z-CBG8L	3/4 CPI	3/4 CPI	3.41	2.94	7/8	1	
8F8M-CBG8L	1/2 FEMALE NPT	1/2 MALE NPT					
12X12G5-CBG8L	3/4 FLARED 37° SAE J514	3/4 FEMALE SAE J1926/1	3.34	2.87	7/8	1	
8A8G5-CBG8L	1/2 A-LOK	1/2 FEMALE SAE J1926/1					
10A8G5-CBG8L	5/8 A-LOK	1/2 FEMALE SAE J1926/1	3.84	3.37	1-1/8	---	
10G58A-CBG8L	5/8 FEMALE SAE J1926/1	1/2 A-LOK					
10G510A-CBG8L	5/8 FEMALE SAE J1926/1	5/8 A-LOK	3.80	3.08	---	---	
12A12G5-CBG8L	3/4 A-LOK	3/4 FEMALE SAE J1926/1					
12F512G5-CBG8L	3/4 MALE SAE J1926/2	3/4 FEMALE SAE J1926/1					
CBG12							
12A-CBG12L	3/4 A-LOK	3/4 A-LOK	4.42	3.48	1-5/8	1-1/8	0.563
12Z-CBG12L	3/4 CPI	3/4 CPI					
16A-CBG12L	1 A-LOK	1 A-LOK	4.46	3.32	1-1/2	---	
16Z-CBG12L	1 CPI	1 CPI					
12X12M-CBG12L	3/4 FLARED 37° SAE J514	3/4 MALE NPT	4.38	2.75	---		
12G512A-CBG12L	3/4 FEMALE SAE J1926/1	3/4 A-LOK	4.42	3.95	1-1/8		
12G516A-CBG12L	3/4 FEMALE SAE J1926/1	1 A-LOK	4.51	3.76	1-1/2		
CBG16							
16A-CBG16L	1 A-LOK	1 A-LOK	4.20	3.07	1-7/8	1-1/2	0.725
16Z-CBG16L	1 CPI	1 CPI					
16L-CBG16L	1 SEAL-LOK ORFS SAE J1453	1 SEAL-LOK ORFS SAE J1453	4.32	2.93	---		

Other types and arrangements of end connections and valve lengths are available. Contact Parker Instrumentation for availability



If you have questions about the products contained in this catalog, or their applications, please contact:

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