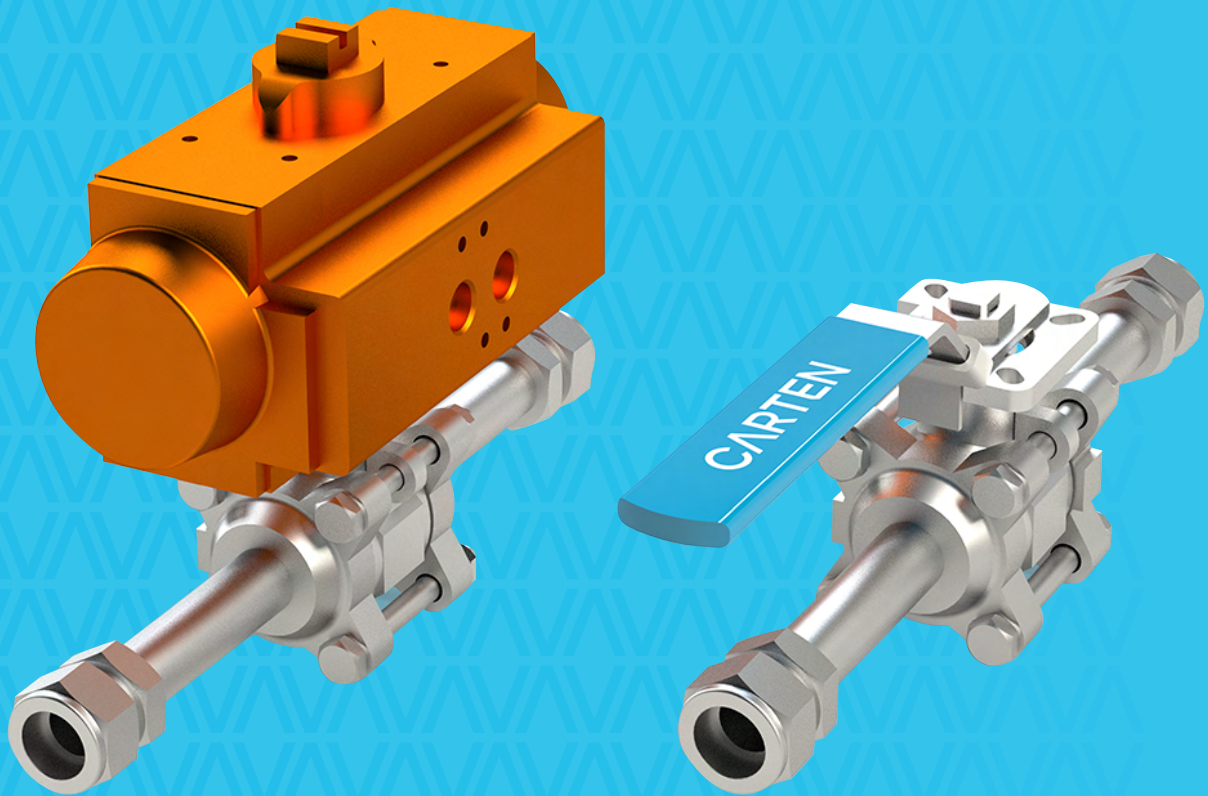


CARTEN

FLOW SOLUTIONS - **WE GO BEYOND**

INTRODUCING CARTEN'S CBV SERIES HIGH PURITY BALL VALVES



CBV Series

Carten Ball Valves

Semiconductor standards applied to ball valves for the market, C/LOK connectivity and semiconductor grade processing and analysis ensures suitability for specified applications.

Key Features

Available in line
Sizes up to 6"

PTFE
Internal and
External seals

Iso 5211 direct
Mounting pad +
Lockable handle
As standard

Purge
Connections
Possible

Typical Applications

Vacuum exhaust, CFOS compatibility, low purity gas distribution, low purity laterals POC (low purity), shut-off functionality for gas distribution and high volume abatement.

Key Specifications

Materials of Construction	Cleanliness	Specifications	Options
316L CF3M Body Material	Manufactured in Class 10 Cleanroom	Leak tested using Mass spectrometer <1x10 ⁻⁶ mbar.l/s	Manual or pneumatic
PTFE Body seat	30 Ra BA as standard	<30Ra micro-inch surface roughness	TFM 1600 internal / external seals for lower temp to -40°C
PTFE stem packing	Cleaned using 18.2MΩ-cm DI water	Pressure tested 100% production control	Purge connections
316 CF8M BALL			Sensors (pneumatic only)
			Welded Tee For POC Connections (SCCBVT)

CBV Series Specifications

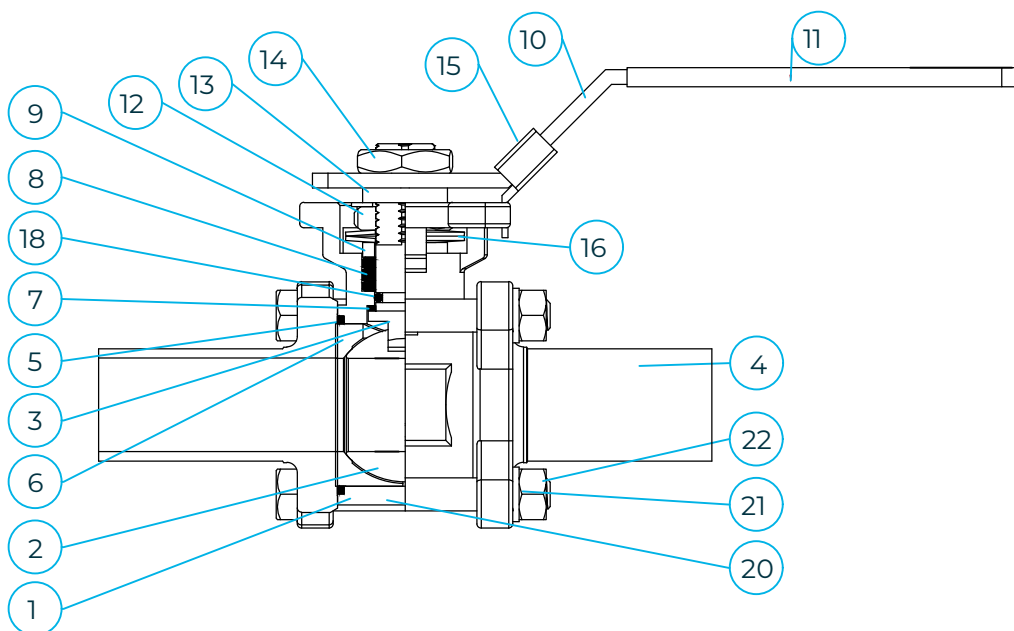
Series	Size	Operating Pressure	Standard * Operating Temperature	Operating Mode	Cv Value	Body Material	Body Seat	Stem Packing	Surface Finish	Rated Leak Spec
CBV 250	1/4"	375 PSI	0-150 °C	Lever Handle	1.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 375	3/8"	375 PSI	0-150 °C	Lever Handle	2.50	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 500	1/2"	375 PSI	0-150 °C	Lever Handle	8.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 750	3/4"	375 PSI	0-150 °C	Lever Handle	20.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 1000	1"	375 PSI	0-150 °C	Lever Handle	34.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 1500	1 1/2"	375 PSI	0-150 °C	Lever Handle	130.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 2000	2"	375 PSI	0-150 °C	Lever Handle	480.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 2500	2 1/2"	375 PSI	0-150 °C	Lever Handle	500.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 3000	3"	375 PSI	0-150 °C	Lever Handle	1250.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 4000	4"	375 PSI	0-150 °C	Lever Handle	2500.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 6004	6"	250 PSI	0-150 °C	Lever Handle	2600.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max
CBV 6000	6"	250 PSI	0-150 °C	Gear Operated **	5000.00	316L CF3M	PTFE	PTFE	30Ra BA	1 x 10 ⁻⁶ SCC/SEC He max

* Optional for lower temp -40 to 150°C with TFM SEALS

** Lever handle supplied loose

Order Information

NO.	PART NAME	MATERIAL	QTY
1	BODY	CF3M AS PER ASTM A351	1
2	BALL	CF8M AS PER ASTM A351	1
3	STEM	Gr.316 AS PER ASTM A276	1
4	END CAP	CF3M AS PER ASTM A351	2
5	BODY SEAL	PTFE OR TFM1600	2
6	SEAT	PTFE OR TFM1600	2
7	THRUST WASHER	PTFE OR TFM1600	1
8	STEM PACKING	PTFE OR TFM1600	1
9	GLAND BUSH	Gr.304 AS PER ASTM A276	1
10	HANDLE	Gr.304 AS PER ASTM A276	1
11	HANDLE COVER	PLASTIC	1
12	STEM NUT	Gr.304 AS PER ASTM A276	1
13	HANDLE WASHES	Gr.304 AS PER ASTM A276	1
14	HANDLE NUT	Gr.304 AS PER ASTM A276	1
15	LOCKING DEVICE	Gr.304 AS PER ASTM A276	1
16	BELLEVILLE WASHER	Gr.301 AS PER ASTM A276	2
17	TAB WASHER	Gr.304 AS PER ASTM A276	1
18	STEM O-RING	VITON	1
19	STOP PIN	Gr.304 AS PER ASTM A276	1
20	BOLT	Gr.304 AS PER ASTM A276	1/2"~3"=4 4"=6,6"=8
21	BOLT WASHER	Gr.304 AS PER ASTM A276	1/2"~2"=4 2-1/2"~3"=8 4"=12,6"=16
22	HEX NUT	Gr.304 AS PER ASTM A276	1/2"~2"=4 2-1/2"~3"=8 4"=12,6"=16



Order Information

Sample: CBV 1000 - 065 - PC2

CBV 1000 - 065 - Blank - PC2

Manual Version - 1" - 1" TE = 065 - 1" TE = 065 - 1/4" Up and Downstream Purge Connection

Series	Size	Inlet Connection	Outlet Connection ¹	Purge Type ⁴	Handle Colour ²	Actuator Designator ³	Actuator Accessories ³
CBV – Manual Version	250 (1/4")	1/4" TE = 035	1/4" TE = 035	Blank - No Purge	Blue Handwheel Standard	NC - Normally Closed	PS (Proximity Sensor)
CBVA – Pneumatic Air Operated Version	375 (3/8")	1/4" FSM M	1/4" FSM M	PC1 - 1/4" Downstream Purge Connection		NO - Normally Open	PSEx (Explosion Proof Proximity Sensor)
	500 (1/2")	1/4" FSM FM	1/4" FSM FM	PC2 - 1/4" Up and Downstream Purge Connection			
	750 (3/4")	1/4" C/LOK	1/4" C/LOK	PC3 - 1/4" Upstream Purge Connection			
	1000 (1")	3/8" TE = 035	3/8" TE = 035	PV1 - 1/4" Downstream Purge Valve			
	1500 (1.5")	3/8" C/LOK	3/8" C/LOK	PV2 - 1/4" Up and Downstream Purge Valve			
	2000 (2")	1/2" TE = 049	1/2" TE = 049	PV3 - 1/4" Upstream Purge Valve			
	2500 (2.5")	1/2" FSM M(S)	1/2" FSM M(S)	PC15 - 1/2" Downstream Purge Connection			
	3000 (3")	1/2" FSM FM	1/2" FSM FM	PC25 - 1/2" Upstream and Downstream Purge Connection			
	4000 (4")	1/2" C/LOK	1/2" C/LOK	PC35 - 1/2" Upstream Purge Connection			
	6000 (6")	3/4" TE = 065	3/4" TE = 065	PV15 - 1/2" Downstream Purge Valve			
		3/4" FSM M(S)	3/4" FSM M(S)	PV25 - 1/2" Upstream and Downstream Purge Valve			
		3/4" FSM FM	3/4" FSM FM	PV35 - 1/2" Upstream Purge Valve			
		3/4" C/LOK	3/4" C/LOK				
		1" TE = 065	1" TE = 065				
		1" FSM M(S)	1" FSM M(S)				
		1" FSM FM	1" FSM FM				
		1" C/LOK	1" C/LOK				
		1.5" TE = 065	1.5" TE = 065				
		2" TE = 065	2" TE = 065				
		2.5" TE = 065	2.5" TE = 065				
		3" TE = 065	3" TE = 065				
		3" TE = 065	3" TE = 065				
		4" TE = 083	4" TE = 083				
		6" TE = 109	6" TE = 109				

FSM = Face Seal Metal - VCR® type connections
100% compatible with VCR® brand

¹ Only Specify the Outlet connection when different from the Inlet connection

Note: Diffent sized C/LOK Outlet connections available but cannot be larger than Inlet, different sized TE or FSM connections only available upon special request

² Manual Version only ³ Actuated Version only

⁴ PC = FSM MALE CAPPED
PV = DIAPHRAGM VALVE WITH FSM MALE CAPPED

CARTEN

FLOW SOLUTIONS - **WE GO BEYOND**

Carten Controls Ltd.,
Unit 613, Northern Extension
Waterford Industrial Park,
Waterford Ireland

Tel: +353 (0)51 355436
Email: sales@cartencontrols.com
Website: <http://www.cartencontrols.com>

Fujikin (Deutschland) GmbH
Immermannstraße 33 -
D-40210 Düsseldorf, Germany.

Tel: +49 (0) 211-350458
Email: info@fujikin.de
Website: <http://www.fujikin.de>

Carten Controls and Fujikin Deutschland are members of the Fujikin Carp Group (FCG) with Headquarters in Osaka Japan.