

CARTEN

FLOW SOLUTIONS - **WE GO BEYOND**

INTRODUCING CARTEN'S BVM SERIES

1/4 TURN STAINLESS STEEL
2-WAY BALL VALVES



BVM Series

Carten Ball Valves

Semiconductor standards applied to ball valves for the market, twin ferrule compression connections and quarter turn functionality ensures suitability for specified applications.

Key Features

Available in line sizes up to 1"

PTFE internal and external seals

1/4 turn handle

Off-shelf compression fittings standard

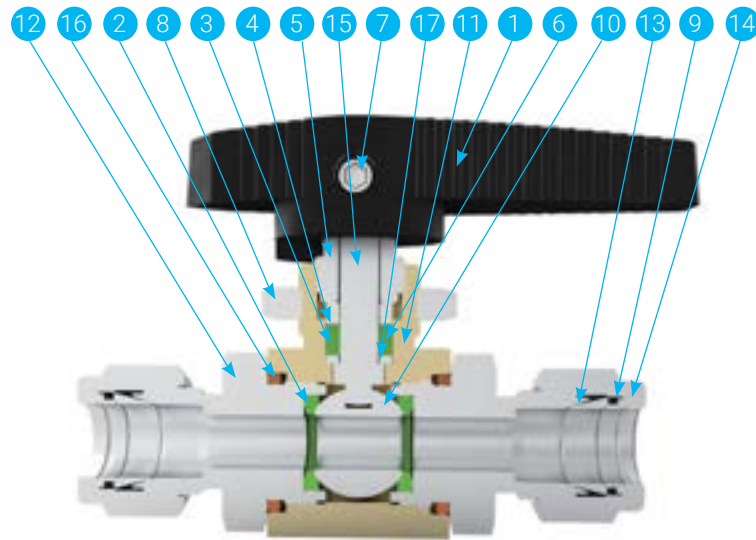
Typical Applications

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

Key Specifications

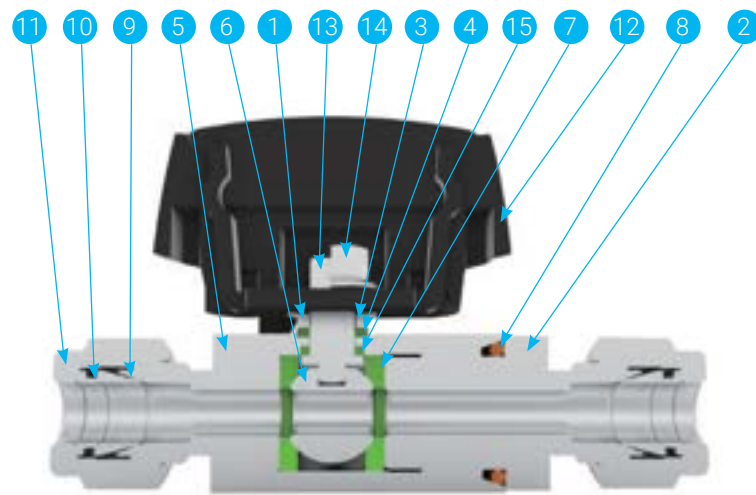
Materials of Construction	Cleanliness	Specifications
316 stainless body and ball	<30Ra micro-inch surface roughness	100 %Leak tested using Mass spectrometer <1x10 ⁻⁶ scc/s at 250 PSI
316 stainless flange and components	Cleaned for Oxygen Service CFOS	
Forged or barstock 316 source		

Material of Construction



BVM 250 - 750

No.	Part	QTY	Material
1	Handle	1	NYLON
2	Seal packing for ball	2	PTFE
3	Seal packing bottom for stem	1	PTFE
4	Packing	1	SS304
5	Gland nut	1	SS304
6	Stem bearing	1	PTFE
7	Hex socket cap screw	1	SS304
8	Panel nut	1	SS304
9	Back ferrule	2	SS316
10	Ball	1	SS316
11	Body	1	SS316
12	Body cap	2	SS316
13	Front ferrule	2	SS316
14	Nut	2	SS316
15	Stem	1	SS316
16	O-ring	2	VITON
17	Seal packing for stem	2	SS316



BVM 1000

No.	Part	QTY	Material
1	Sprngs	1	SS316
2	Body cap	1	SS316
3	Stem washer	1	SS316
4	Seal packing for stem	1	PTFE
5	Body	1	SS316
6	Ball	1	SS316
7	Seal packing for ball	2	PTFE
8	O-ring	1	VITON
9	Front ferrule	2	SS316
10	Back ferrule	2	SS316
11	Nut	2	SS316
12	Handle	1	NYLON
13	Stem	1	SS316
14	Nut	1	SS304
15	Seal packing for stem	1	PTFE

BVM Series Technical Specifications

Maximum Operating Pressure	BVM Series	250 psig (17.2 bar)
Maximum Operating Temperature	PTFE Seat	-65°F (-54°C) to 302°F (150°C)
Description	Line (Body) Size Inch	Cv
BVM 250	1/4 (.250)	0.7
BVM 375	3/8 (.375)	2.0
BVM500	1/2 (.500)	4.2
BVM 750	3/4 (.750)	4.2
BVM 1000	1 (1.000)	9.2
Helium Leak Test Performed with 100% Helium	Across the Seat Outboard Pressure Test	<1 x 10 ⁻⁶ scc/s He <1 x 10 ⁻⁶ scc/s He
Cleanliness and Packaging	Tested in a ISO Class 4 Cleanroom. Purged and Final Packaged in a ISO Class 4 Cleanroom using Double-bag Vacuum Packing.	
Standard Finish	30Ra (0.80 µm) cleaned for oxygen service (CFOS)	

Order Information

Sample: BVM500-1/2" C/LOK

Series	Size	Connection Size
BVM – Manual 1/4 Turn Version	250 (1/4")	1/4" C/LOK
	375 (3/8")	3/8" C/LOK
	500 (1/2")	1/2" C/LOK
	750 (3/4")	3/4" C/LOK
	1000 (1")	1" C/LOK

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.