

SCCBV SERIES

High Purity
Ball Valves

CARTEN
Ultra High Purity Valves



PRODUCT APPLICATIONS

The Carten SCCBV series stainless steel ball valves are single lateral distribution lines for clean dry air (CDA), utility nitrogen, house nitrogen, instrument air (IA) and other non process distribution services. The SCCBV series is a Full Bore, High Flow design for lateral horizontal and cross bulk gas distribution requirements. The SCCBV series is the first choice in the semiconductor industry where containment, purity and integrity are critical to the customers needs. Applications include:

- ▶ Low purity gas service
- ▶ CDA, UN2, HN2, IA systems
- ▶ In line isolation valve, single lateral (3-Way) and double lateral (4-Way) configurations

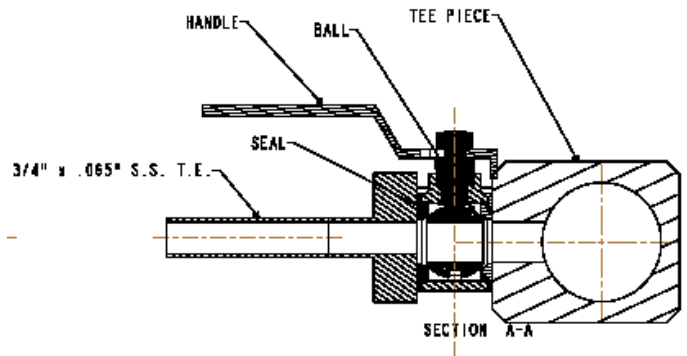
PRODUCT FEATURES

- ▶ 316 CF8M Body and 316L Barstock Flanges Design for High Integrity
- ▶ Standard Operating Pressure of 375psi (25bar).
- ▶ Operating Temperature Range -17°C (0°F) to 82.2°C (180°F)
- ▶ Outboard Leak Tested, Rated to 1×10^{-6} at 250PSI
- ▶ Cleaned to Semiconductor Standards for High Purity Systems
- ▶ Purged and Final packaged in CLASS 10 Cleanroom. Double-bag packaging with N₂ Gas supplied from liquid source
- ▶ 316L TEE and Cross Pieces for lateral line installations

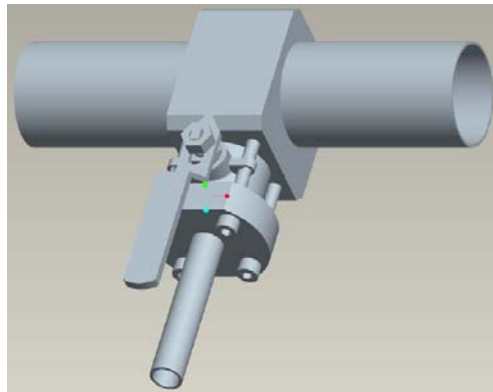
CONSTRUCTION MATERIALS

- ▶ 316 CF8M Body & 316L St. St. Barstock Flanges
- ▶ Virgin PTFE Seats & Seals (standard)
- ▶ 316L Tube Stubs
- ▶ 316L TEE/Cross Pieces

SCCBV SERIES - Cut Section View (Full Bore Type)



SCCBV SERIES - Product Image



SCCBV SERIES - Technical Data

CONSTRUCTION MATERIAL	Wetted Areas	316L Stainless Steel, PTFE
	Non-Wetted Areas	Stainless Steel
TEMPERATURE RANGE	SCCBV Series	-17°C to 82°C (-0°F to 180°F)
FLOW COEFFICIENT	SCCBVXXX-250	1.00
	SCCBVXXX-375	2.50
	SCCBVXXX-500	8.00
	SCCBVXXX-750	20.00
	SCCBVXXX-1000	34.00
	SCCBVXXX-1500	130.00
	SCCBVXXX-2000	480.00
	SCCBVXXX-2500	480.00
	SCCBVXXX-3000	1250.00
	SCCBVXXX-4000	2500.00
	SCCBVXXX-6000	2600.00
LINE PRESSURE	SCCBV Series	375psi (25bar) Standard

Specifications subject to change without notice

LEAK RATES	Across The Seat	1x10 ⁻⁶ scc/s He Max. at 250PSI
	Outboard	1x10 ⁻⁶ scc/s He Max. at 250PSI
CLEANLINESS/ PACKAGING	Assembled and tested in CLASS 10 cleanroom. Double-bag packaging (2 mil nylon inner bag, 6 mil polyethylene outer bag) with N ₂ gas environment supplied from liquid source.	
STANDARD FINISH	Electropolished to 30Ra (0.80 μm) on all wetted surfaces	
OPTIONS	<ul style="list-style-type: none"> ◆ Surface Finish – 15Ra, 25Ra, etc. ◆ Delrin Seats & Seals ◆ Pneumatic Actuation ◆ Integrated Compression End Connections from 1/4" through to 1" ◆ 2-Way In line Isolation 	

Component Selection

The total system design must be considered when selecting a valve to ensure performance. Valve application, materials compatibility, installation, operation and maintenance are the responsibility of the system design engineer.

NOTE 1: Dimensional drawings shown are for reference only. Please contact the manufacturer for customer drawings showing updated dimensions. Also contact the manufacturer for the various configurations available.