



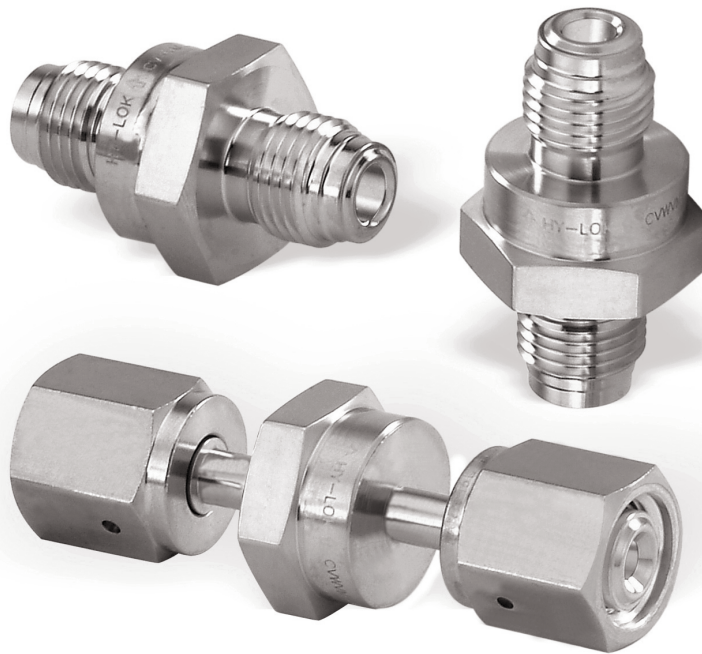
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Catalog No. H-CW100
Jun. 2026



All Welded Check Valves

CVW Series



Design & Engineering

- All Welded design provides excellent sealing of fluid
- Compact Design
- Maximum working pressure is up to 3000 psig (206bar)
- Temperature rating is up to 400°F (204°C)
- ZCR, tube butt weld, and Hy-Lok tube fitting
- 100% helium leak tested

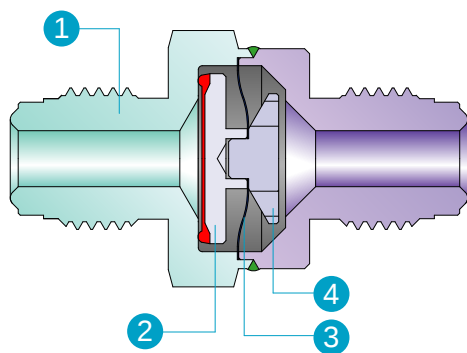
Application

- Semiconductor
- Biotech
- Pharmaceutical
- Ultra-Pure, Flammable, or toxic Fluid line

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Cleaning & Testing

Passivation is done at Nitrogen environment. Fine cleaning is one by Ultrasonic cleansing with resistivity over 18M Ω D.I water after finishing the passivation. Inboard helium leak tested to a rate of 4×10^{-9} cm³ /s.

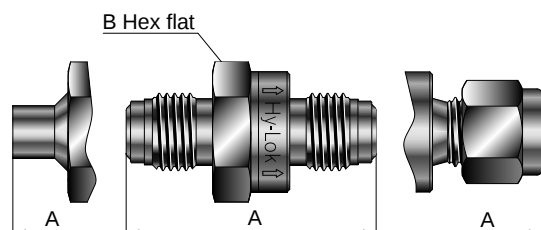
Assembly & Packaging

Assembly and Packaging is performed in the clean room of Class 10. Valves are packed with anti-static polyethylene bag that is pressured into the high purity nitrogen gas.

Dimensions

All Dimensions are in millimeters, except for the O.D size.

In case of the end connection for Hy-Lok tube fitting, dimensions shown with Hy-Lok nuts in finger-tight position, where applicable.



Single & Double Melt 316L / A479

Material

No.	Description	Material / ASTM Specification
1	Body	Single & Double Melt 316L / A479
2	Poppet	Single & Double Melt 316L / A479
3	Spring	Elgiloy / AMS5876
4	Stopper	Single & Double Melt 316L / A479

Specification

Cracking Pressure	Max. Pressure Drop	Pressure - Temperature Ratings	
		Temperature F°(°C)	Working Pressure psig (bar)
Less than 2 psig	145 psig	-10(-23) to 100(37)	3000(206)
		200(93)	2530(174)
		300(148)	2270(156)
		400(204)	2065(142)

*Reseal pressure : Up to 2psig Back Pressure

Internal Surface Grade

Grade	Designator	Roughness Average Ra.	Packing Standard Class 10
B.A.	B	0.25 μ m (10 μ in)	Double
High(E.P)	H	0.13 μ m (5 μ in)	

End Connection	Ordering No.	Size	Cv	A	B
Male ZCR Fitting	CVWVM-4	1/4"	0.7	45.7	22.2 (7/8")
	CVWVM-8	1/2"		52.3	25.4 (1")
Hy-Lok Tube Fitting	CVWH-4	1/4"	0.55	49.8	22.2 (7/8")
	CVWH-6M	6mm			
Female ZCR Fitting	CVWVF-4	1/4"	0.7	62.0	22.2 (7/8")
	CVWVF-8	1/2"		63.0	
Tube Butt Weld	CVWBW-4	1/4"	0.55	31.5	22.2 (7/8")
	CVWBW-6	3/8"			
	CVWBW-8	1/2"	0.7		
	CVWBW-6M	6mm			

Ordering Informations

CVW	BW	4	BU	H	SM6L
Series Designator • CVW - All Welded Check Valve	End Connection Designator • VM - Male ZCR Fitting • BW - Tube Butt Weld • H - Hy-Lok Tube Fitting • VF - Female ZCR Fitting	Size Designator • 4 - 1/4" • 6 - 3/8" • 8 - 1/2"	Seal Material Designator • Nil - FKM (Standard) • BU - Buna-N • EP - Ethylene Propylene • F - FFKM	Surface Grade Designator • Nil - Grade "B.A." • H - Grade "High(EP)"	Body Material Designator • SM6L - Single Melt 316L ASTM A479

SAFETY in VALVE SELECTION

Proper installation, material compatibility, operation and maintenance of the valves is the responsibility of the user. The total system design must be taken into consideration to ensure optimal performance and safety.