

'CVH' Check Valves

Guided poppet design and precision ground surfaces for 10,000 PSI service; 1/4" to 2" NPT/SAE/BSPP/BSPT/6149



The DMIC 'CVH' Check Valve is a quality leader in the worldwide marketplace. Computer optimized flow passages and super heavy duty construction results in a 10,000 PSI rated product which will provide greatly extended service in 3,000 and 5,000 PSI applications.

- ☑ **Precision ground** oversize poppet landing zone for longevity, factory tested for zero leakage - install with confidence
- ☑ Designed for **10,000 PSI maximum operating pressure**
- ☑ **Standard 5 PSI & 65 PSI cracking pressures**, with rapid delivery for 15 PSI, 30 PSI, 75 PSI and 135 PSI - call with your custom requirement
- ☑ Hybrid models with **SAE Code 61 4-Bolt** and **Split Flange** available
- ☑ Spring laid out such that it never fully packs, extending life expectancy
- ☑ One piece steel construction eliminates leakage from joints

'CVH' Physical Parameters

BODY:	Carbon Steel (Opt. All Stainless Steel)
POPPET:	Hardened Carbon Steel (Opt. All S/S) Precision Ground Hard Seat
SPRING:	Helical, Spring Steel
POPPET LANDING ZONE:	Carbon Steel, Oversize (Opt. All S/S)
RETAINER:	Spiral, Spring Steel
SEALING:	Metallic Hard Seat
TEMP RANGE:	-5°F/195°F (-20°C/90°C)

'CVH' Ordering Codes

CVH 65 - 2000 S

MODEL:

CVH: Carbon Steel 10,000 PSI
CVH: Stainless Steel 6,000 PSI

CRACKING PRESSURE:

Stock Options:

05: 5 PSI (0,35 Bar)
65: 65 PSI (4,5 Bar)

Rapid Delivery Options:

15: 15 PSI (1,03 Bar)
30: 30 PSI (2,1 Bar)
75: 75 PSI (5,2 Bar)
135: 135 PSI (9,3 Bar)

NOMINAL SIZE:

Expressed in 1/1000ths inch.
Example: 0375 = 3/8", 1 1/2 = 1500

INLET PORT THREAD:

Standard US/Canada:

N: NPTF S: SAE ORB

Metric Standard:

B: BSPP

Optional Threads (Call DMIC):

B: BSPP T: BSPT
IU: ISO6149 Other: CALL

Check Valve Part No.	Nominal Size	Port Thread	PERFORMANCE DATA		DIMENSIONS (inch. mm)		
			Flow GPM ¹	Working Pressure	A Hex	B Length	Lbs. kg
CVH**-0250N	1/4"	1/4" NPTF	5 GPM 19 l/m	10,000 PSI 680 Bar	0.75 19,1	2.19 55,5	0.24 0,11
CVH**-0250S		#4 SAE					
CVH**-0250B		1/4" BSPP					
CVH**-0250IU		12mm ISO6149					
CVH**-0375N	3/8"	3/8" NPTF	8 GPM 30 l/m	10,000 PSI 680 Bar	0.94 23,8	2.50 63,5	0.48 0,22
CVH**-0375S		#6 SAE					
CVH**-0375B		3/8" BSPP					
CVH**-0375IU		16mm ISO6149					
CVH**-0500N	1/2"	1/2" NPTF	15 GPM 57 l/m	10,000 PSI 680 Bar	1.13 28,6	3.13 79,4	0.64 0,29
CVH**-0500S		#8 SAE					
CVH**-0500B		1/2" BSPP					
CVH**-0500IU		18mm ISO6149					
CVH**-0750N	3/4"	3/4" NPTF	25 GPM 95 l/m	10,000 PSI 680 Bar	1.38 34,9	3.81 96,9	1.03 0,47
CVH**-0750S		#12 SAE					
CVH**-0750B		3/4" BSPP					
CVH**-0750IU		22mm ISO6149					
CVH**-1000N	1"	1" NPTF	40 GPM 152 l/m	10,000 PSI 680 Bar	1,75 44,5	4,31 109,6	2,00 0,91
CVH**-1000S		#16 SAE					
CVH**-1000B		1" BSPP					
CVH**-1000IU		33mm ISO6149					
CVH**-1250N	1 1/4"	1 1/4" NPTF	70 GPM 266 l/m	10,000 PSI 680 Bar	2.13 54,0	5.04 128,0	2.71 1,23
CVH**-1250S		#20 SAE					
CVH**-1250B		1 1/4" BSPP					
CVH**-1250IU		42mm ISO6149					
CVH**-1500N	1 1/2"	1 1/2" NPTF	100 GPM 380 l/m	10,000 PSI 680 Bar	2.50 63,5	5.50 139,7	4.97 2,26
CVH**-1500S		#24 SAE					
CVH**-1500B		1 1/2" BSPP					
CVH**-1500IU		48mm ISO6149					
CVH**-2000N	2"	2" NPTF	150 GPM 570 l/m	10,000 PSI 680 Bar	3.25 82,6	6.75 171,5	9.86 4,48
CVH**-2000S		#32 SAE					
CVH**-2000B		2" BSPP					
CVH**-2000IU		60mm ISO6149					



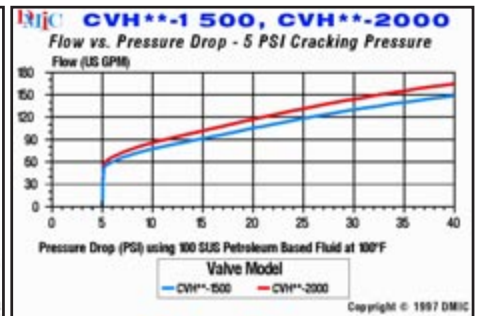
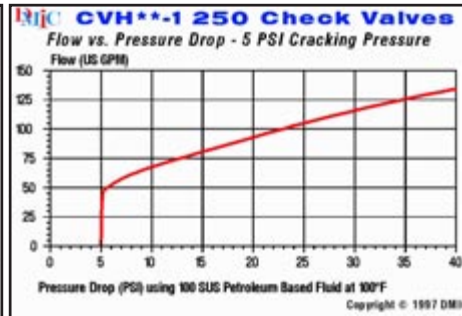
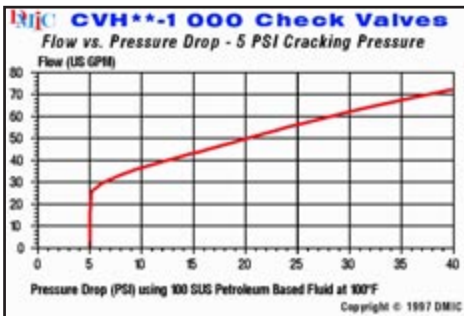
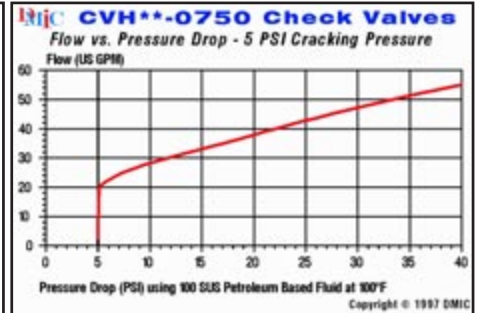
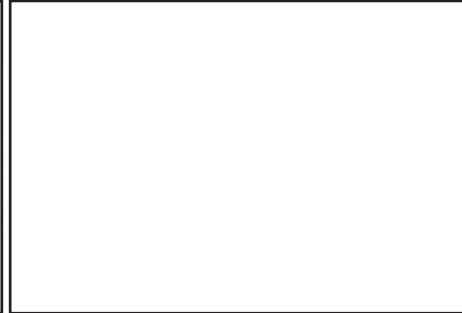
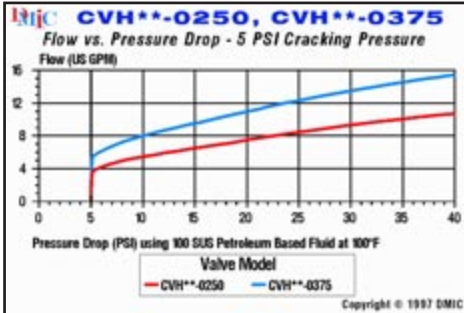
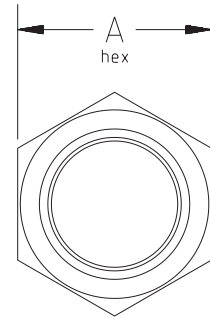
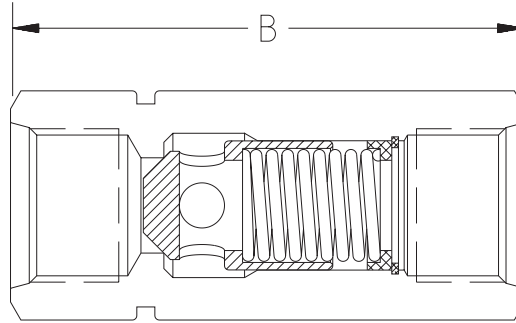
'CVH' Internal Parts BOM (FYI Only)

Pos	Qty	Description
P01	1	Valve Body
P02	1	Poppet
P03	1	Spring, specify PSI setting
P04	1	Spring Seat
P05	1	Spiral Retainer

This valve series is factory sealed and disassembly will destroy the valve and void the warranty. Due to our policy of continual product improvement, specifications may change without notice. When designing by spec, please request a certified print.

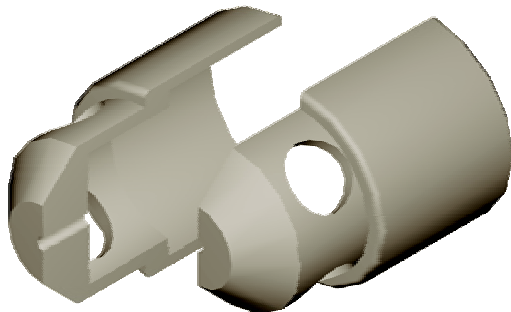


'CVH' Dimensions & Flow Characteristics



Poppet Orifice Option

For metered reverse flow, rapid-stock & custom sizes



CVH xx - 1000 S /062

ORIFICE SIZE SELECTION

The orifice size is specified in 1/1000" units. Select an available orifice from the table and append as "slash code" to check valve p/n.

Rapid delivery sizes are denoted with smiley faces. Please call for custom-order orifice sizes.

With the poppet orifice option, the designer can achieve metered flow in the opposite direction. This is useful for safety bleed and other specific applications. DMIC's flexible manufacturing allows you to select from rapid delivery standard sizes or specify a custom-order orifice diameter.

CVH Valve Size	ORIFICE DIAMETER, RAPID AVAILABILITY BY VALVE MODEL					
	1/32"	1/16"	3/32"	1/8"	5/32"	3/16"
Orifice Code->	/031	/062	/093	/125	/156	/188
CVH**-0250	☺					
CVH**-0375	☺	☺				
CVH**-0500	☺	☺	☺			
CVH**-0750		☺	☺	☺		
CVH**-1000			☺	☺	☺	
CVH**-1250				☺	☺	☺
CVH**-1500					☺	☺
CVH**-2000						☺



'CVH' Stainless Steel

Top Grade "All Stainless Steel" Check Valves; Hand Seated & Tested Parts; 1/2" to 2" N/S/B/T/IU



You'll probably **never** have to replace a stainless 'CVH' once it's installed. DMIC's S/S 'CVH' expresses our dedication to craftsmanship in a premium stainless steel design for food service, aerospace, military, and other high end applications where only the best will do. After six years of production, no S/S 'CVH' Check Valve had yet been returned for defect or repair, due to hand matching and assembly, individual quality control & testing, and **the realization that the customer who specifies a S/S 'CVH' expects nothing less than the best.**

'CVH' Part Number	Port Size	Working Pressure	
		PSI	Bar
CVH**-0250*-21	1/4"	6,000 PSI	413 Bar
CVH**-0375*-21	3/8"		
CVH**-0500*-21	1/2"		
CVH**-0750*-21	3/4"		
CVH**-1000*-21	1"		

'CVH' Part Number	Port Size	Working Pressure	
		PSI	Bar
CVH**-1250*-21	1 1/4"	6,000 PSI	413 Bar
CVH**-1500*-21	1 1/2"		
CVH**-2000*-21	2"		

'CVH' shares external dimensions with the 'CVH' Carbon Steel series, see page 17.

Check Valve Construction

Chances are you will never have to replace a DMIC Check Valve, because they are built to last a long time

OPTIONAL. Poppet orifice option for designer flexibility & safety.

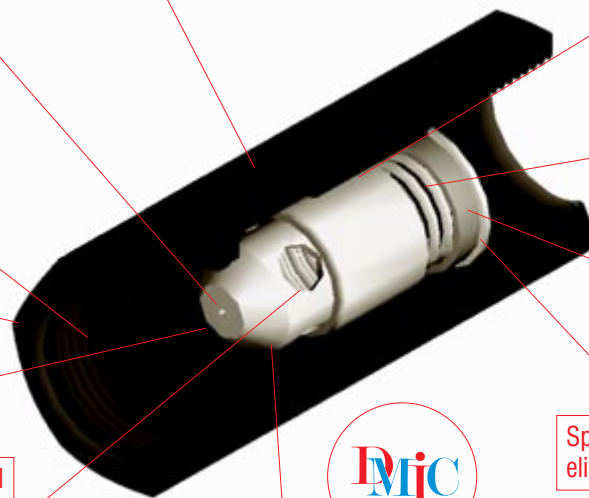
One piece steel body eliminates leakage from joints, especially at elevated pressures up to 10,000 PSI (680 Bar). All-S/S model option.

We make them in standard and metric threads for rapid delivery worldwide.

Black Oxide finishing.

Hardened parts for durability.

Computer generated contour of internal fluid passages and equalization of cross-sectional areas reduce pressure drop and increase laminar flow through the valve. DMIC features one of the lowest DP designs on the market today.



Spring is laid out so it never fully packs, extending high cycle life expectancy.

Oversize spring seating surface and Poppet landing zone features high precision to minimize wear.

Spiral retainer secures the internals, to eliminate possibility of reverse collapse.

Your guarantee of a properly engineered fluid control valve.

NEW ! Refined poppet contour further aids laminar flow.

