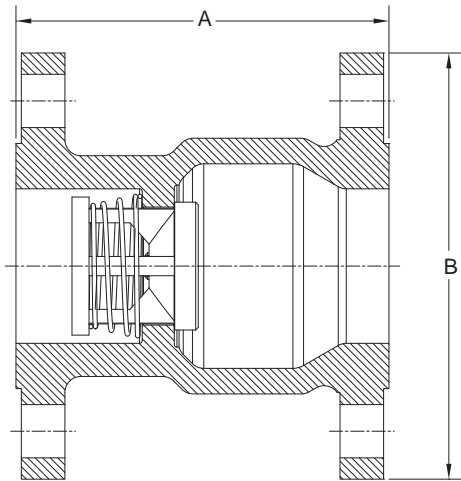


The **Check-All Flanged & Drilled (HV)** check valve is a one piece cast body valve with ASME/ANSI B16.5 Class 150 flanged ends. The HVFD series valve is used when higher flow rates and lower pressure drops are required. The valve is available in sizes 1 inch through 10 inches and standard materials of CF8M (cast 316 stainless), brass and WCB/WCC (cast carbon steel). The HVFD series valve is designed for use with mating ANSI class 150 flanges. Other materials are available upon request.

**NOTE: Some valve sizes can be supplied with B16.34 certification. Consult the factory for more information.**

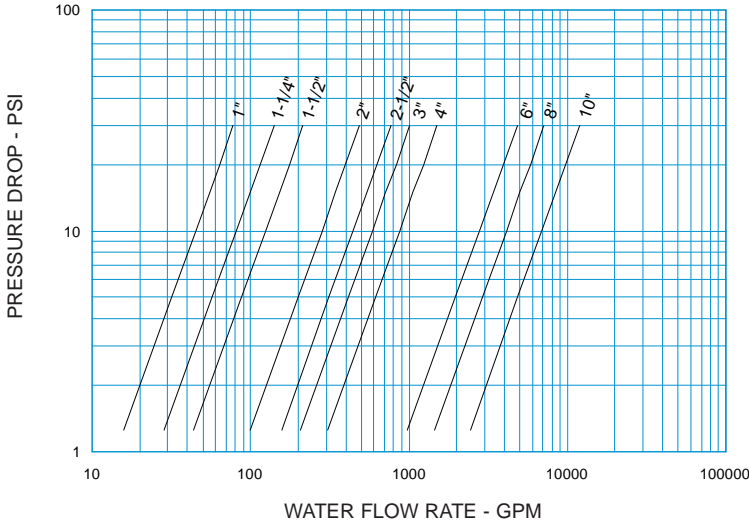


Nom. Pipe Size	Size Code	A	B	Orifice Diameter
1	H	3.75	4-1/4	0.890
1-1/4	I	3.80	4-5/8	1.135
1-1/2	J	4.38	5	1.385
2	K	5.13	6	2.025
2-1/2	L	7.28	7	2.560
3	M	8.38	7-1/2	3.280
4	N	9.69	9	3.875
6	P	13.75	11	6.380
8	Q	15.10	13-1/2	7.670
10	R	19.25	16	9.650

Cast Body Material <sup>①</sup>	Availability	Non-Shock Pressure-Temperature Rating
CF8M Stainless Steel (SS)	Standard	ASME/ANSI B16.5 Class 150
WCB/WCC Carbon Steel (CS)		
C836 Brass (BR)		

<sup>①</sup> See page 55 for material grade information.

**Horizontal Vertical Flanged & Drilled**  
For Water at 72°F



**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

STYLE HV (HVFD) C <sub>v</sub> VALUES & VALVE WEIGHTS			
C <sub>v</sub>	SIZE	SS & CS ALLOYS	BRASS
14.2	1	4.3 lb.	4.8 lb.
25.6	1-1/4	5.3 lb.	6.0 lb.
39.2	1-1/2	7.8 lb.	8.7 lb.
91.9	2	11.5 lb.	13 lb.
140	2-1/2	20.7 lb.	23 lb.
275	3	25.9 lb.	29.3 lb.
333	4	44 lb.	54.1 lb.
878	6	88 lb.	107 lb.
1375	8	153 lb.	193 lb.
2175	10	263 lb.	290 lb.

See page 50 for Flow Formulae.  
Valve weights are approximate.

**HOW TO ORDER  
CHECK-ALL STYLE HV (HVFD)**

**CAST BODY MATERIAL**

C836 BRASS = BR  
WCB/WCC CARBON STEEL = CS  
CF8M STAINLESS STEEL = SS  
**See p. 4 for temperature ratings**

**SPRING CRACKING PRESSURES**  
Replace "X" with actual desired setting.  
Must use decimal as a character.  
(PSI)                      FORMAT  
.000 TO .999 = .XXX  
1.00 TO 9.99 = X.XX  
10.0 TO 99.9 = XX.X  
NO SPRING = NOSPRG  
**STANDARD CRACKING PRESSURES<sup>①</sup>**  
.125 .500 1.50 3.50  
(Size H Only)

**Note: Many other cracking pressures are available. Consult factory.**

**VALVE STYLE**

**SIZE**

1	=	H
1-1/4	=	I
1-1/2	=	J
2	=	K
2-1/2	=	L
3	=	M
4	=	N
6	=	P
8	=	Q
10	=	R

**SEAT MATERIAL<sup>②</sup>**

AFLAS<sup>®</sup> = AS  
BUNA-N = BN  
EPDM<sup>③</sup> = EP  
KALREZ<sup>®</sup> = KZ  
"METAL-TO-METAL" = MT  
NEOPRENE = NE  
PTFE = TF  
VITON<sup>®</sup> = VT  
**See p. 4 for temperature ratings**

**SPRING MATERIAL**

316 SS = SS  
ALLOY C-276 = HC  
INCONEL<sup>®</sup> X-750 = IX  
MONEL<sup>®</sup> = MO  
17-7PH SS = PH  
TITANIUM = TI  
**See p. 5 for temperature ratings**

Listed above are the most common material selections. Please contact the factory for additional options.

<sup>①</sup> .500 PSI is the only standard cracking pressure for spring materials other than Stainless Steel. Cracking pressure tolerance is +/- 15%. .125 PSI springs are not recommended for installations with flow vertical down.

<sup>②</sup> Seat materials other than "metal-to-metal" have a maximum pressure rating of 1500 PSI. "Metal-to-Metal" and PTFE seats are not resilient. See page 51 for allowable leakage rates.

<sup>③</sup> EP seats not recommended for use with Carbon Steel valves.