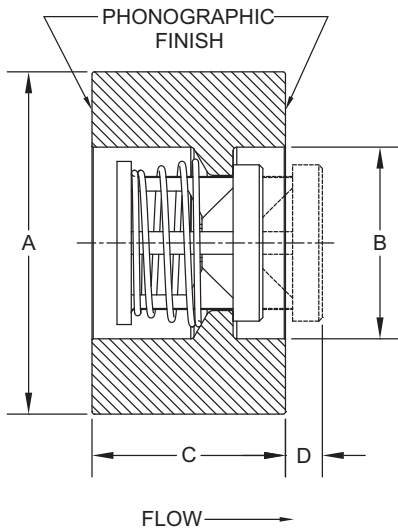


The **Wafer Insert (WV)** valve is designed to fit between two mating ANSI flanges. Two gaskets are required, instead of the one normally used in a flanged joint. The “drop in” valve body fits inside the bolt circle for quick installation and removal in rigid piping applications where the use of the F1, F6, or FP (**see our Flange Insert series on page 6**) is not practical. Many valves in this series meet API 594 requirements. Consult the factory for complete details.

Wafer Insert valves can be used as check valves, low pressure relief valves, and vacuum breakers by simply using different spring settings.

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



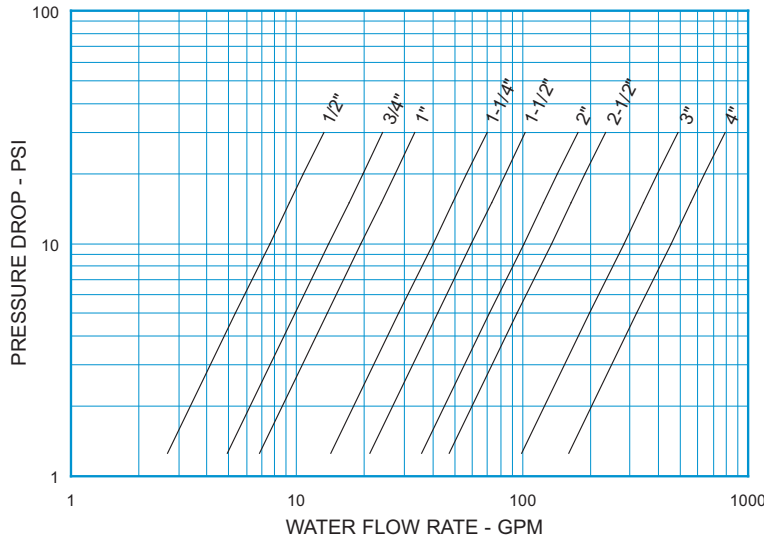
Nom. Pipe Size	Size Code	A	B	C	D ^①	Orifice Diameter
1/2	D	1-3/8	0.62	1.38	N/A	0.348
3/4	F	1-3/4	0.82	1.38	N/A	0.464
1	H	2	1.05	1.38	0.35	0.593
1-1/4	I	2-1/2	1.38	1.63	0.27	0.890
1-1/2	J	2-7/8	1.61	1.63	0.54	1.135
2	K	3-5/8	2.07	2.39	0.17	1.385
2-1/2	L	4-1/8	2.47	2.63	0.31	1.555
3	M	5	3.07	2.89	0.42	2.025
4	N	6-3/16	4.03	2.89	1.25	2.560

^①Maximum nominal dimension for a fully open valve with no spring.

Body Material ^②	Nominal Pipe Size	Non-Shock Pressure-Temperature Rating
316 Stainless Steel (SS) Carbon Steel (CS) Alloy 20 (A2) Alloy C-276 (HC) Alloy B (HB) Monel [®] (MO) Titanium (TI)	1/2 - 2-1/2	ANSI Class 150 - 1500
	3	ANSI Class 150 - 900
	4	ANSI Class 150 - 600
Brass (BR)	1/2 - 4	ANSI Class 150 - 300

^②See page 55 for material grade information.

Wafer Insert
For Water at 72°F

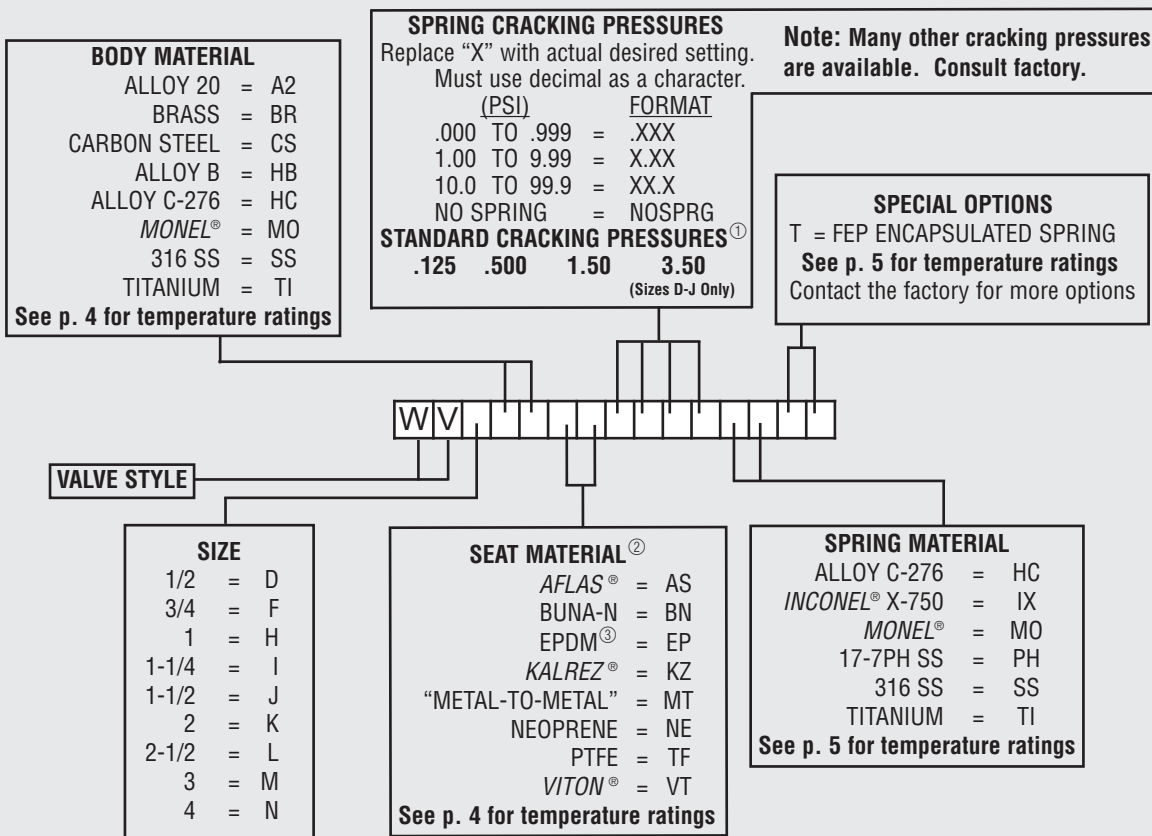


Note: All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

STYLE WV(WIV) C _v VALUES & VALVE WEIGHTS			
C _v	SIZE	SS & CS ALLOYS	BRASS
2.4	1/2	9.5 oz.	10.2 oz.
4.4	3/4	12.6 oz.	13.5 oz.
6.1	1	1.0 lb.	1.1 lb.
12.7	1-1/4	1.8 lb.	1.9 lb.
18.8	1-1/2	2.4 lb.	2.5 lb.
32.0	2	5.2 lb.	5.6 lb.
42.5	2-1/2	7.2 lb.	7.7 lb.
89.0	3	11.4 lb.	12.4 lb.
144	4	17.0 lb.	18.2 lb.

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

HOW TO ORDER
CHECK-ALL STYLE WV (WIV)



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

- ① .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.
- ② 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.
- ③ EP seats not recommended for use with Carbon Steel valves.