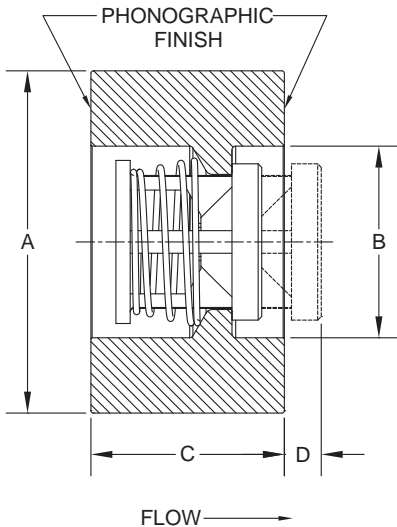


The **Wafer Insert (WV)** valve is designed to fit between two mating ANSI flanges. Two gaskets are required, instead of the one normally used in a flanged joint. The “drop in” valve body fits inside the bolt circle for quick installation and removal in rigid piping applications where the use of the F1, F6, or FP (**see our Flange Insert series on page 5**) is not practical. Many valves in this series can meet API 594 and/or B16.34 requirements. Consult the factory for more information.

The Wafer Insert valve can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.



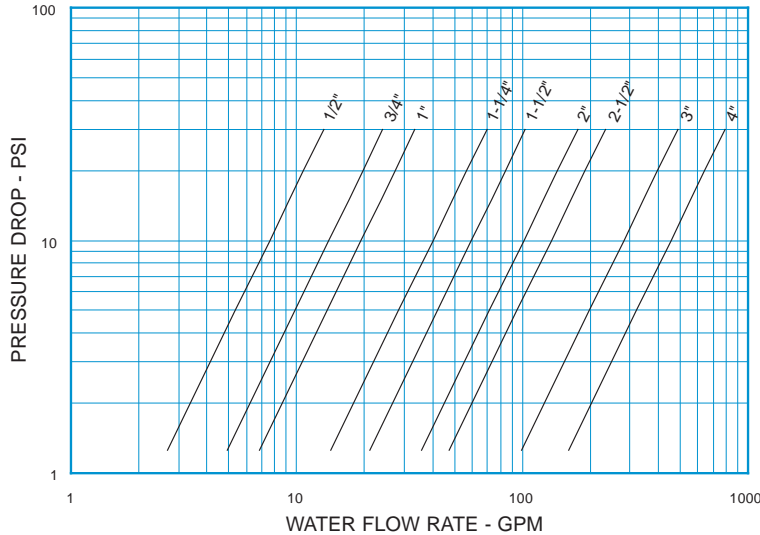
Nom. Pipe Size	Size Code	A	B	C	D ①	Orifice Diameter
1/2	D	1-3/8	0.62	1.38	N/A	0.348
3/4	F	1-3/4	0.82	1.38	N/A	0.464
1	H	2	1.05	1.38	0.35	0.593
1-1/4	I	2-1/2	1.38	1.63	0.27	0.890
1-1/2	J	2-7/8	1.61	1.63	0.54	1.135
2	K	3-5/8	2.07	2.38	0.17	1.385
2-1/2	L	4-1/8	2.47	2.62	0.31	1.555
3	M	5	3.07	2.88	0.42	2.025
4	N	6-3/16	4.03	2.88	1.25	2.560

① Maximum 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) Alloy 400 or Monel® (MO) Titanium (TI)	1/2" - 2-1/2"	ANSI Class 150 - 1500 (1500 PSIG for o-ring seats)
	3"	ANSI Class 150 - 900 (1500 PSIG for o-ring seats)
	4"	ANSI Class 150 - 600
Brass (BR)	1/2" - 4"	ANSI Class 150 - 300

② See page 54 for material grade information.

**Wafer Insert**  
For Water at 72°F

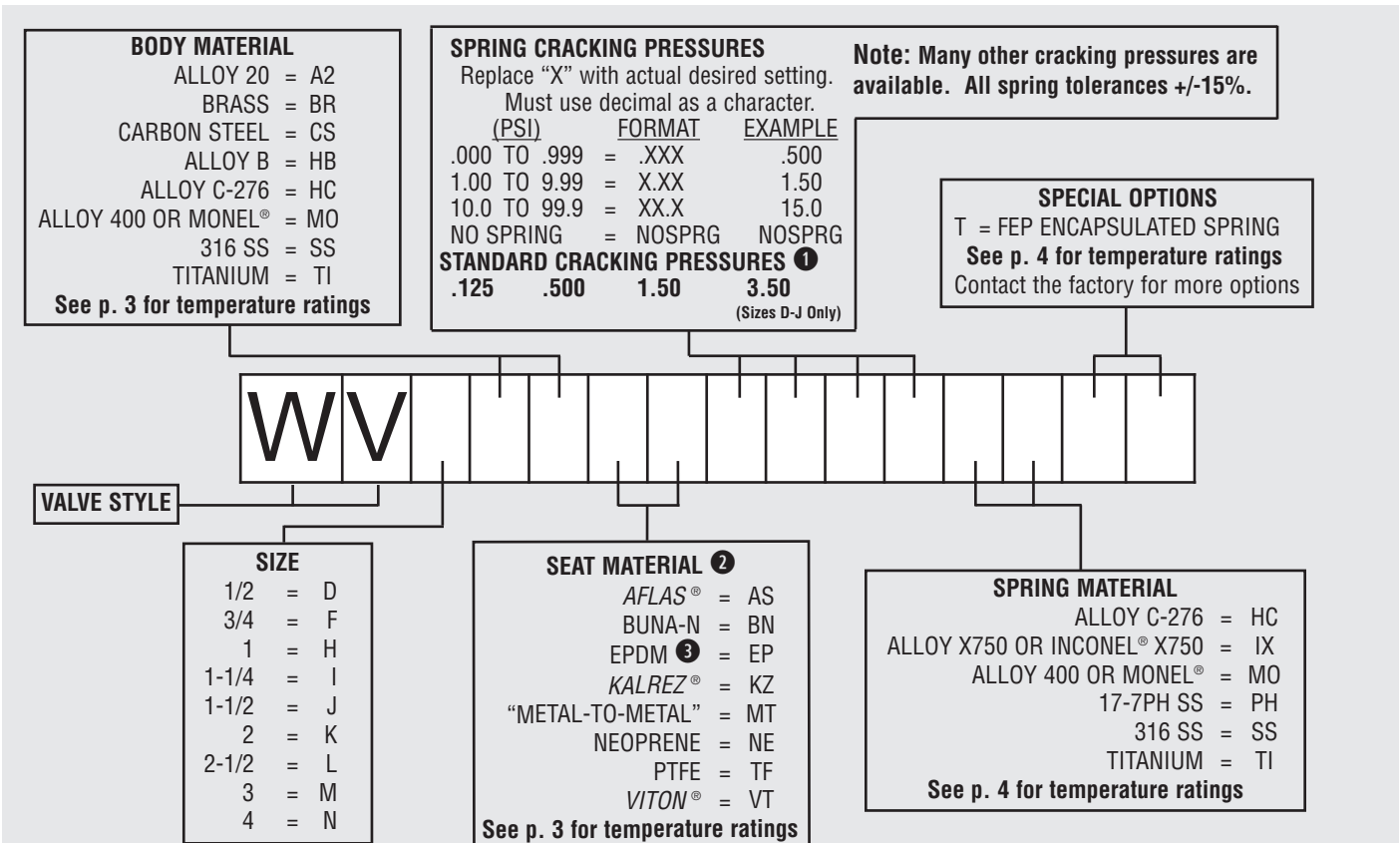


**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

STYLE WV C <sub>v</sub> VALUES & VALVE WEIGHTS			
C <sub>v</sub>	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	17.2 lb.	18.4 lb.

See page 49 for Flow Formulae.  
Valve weights are approximate.

**HOW TO ORDER  
CHECK-ALL STYLE WV**



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. .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 50 for allowable leakage rates.
- ③ EP seats not recommended for use with Carbon Steel valves.