



HY-GRADE Series P Corrosion-Resistant Check Valves

A wafer check valve with a **unique combination** of plastics (Teflon, Kynar, or UHMWPE) and alloys (Hastelloy, Titanium or Zirconium) designed to provide **MAXIMUM** performance and **long term** dependability under the most corrosive conditions.

Valve Body and Outer Shell have
NO external holes or levers;
NO FUGITIVE EMISSIONS

THICK Plastic Body
(9-36 mm) to provide
long-term corrosion
resistance.

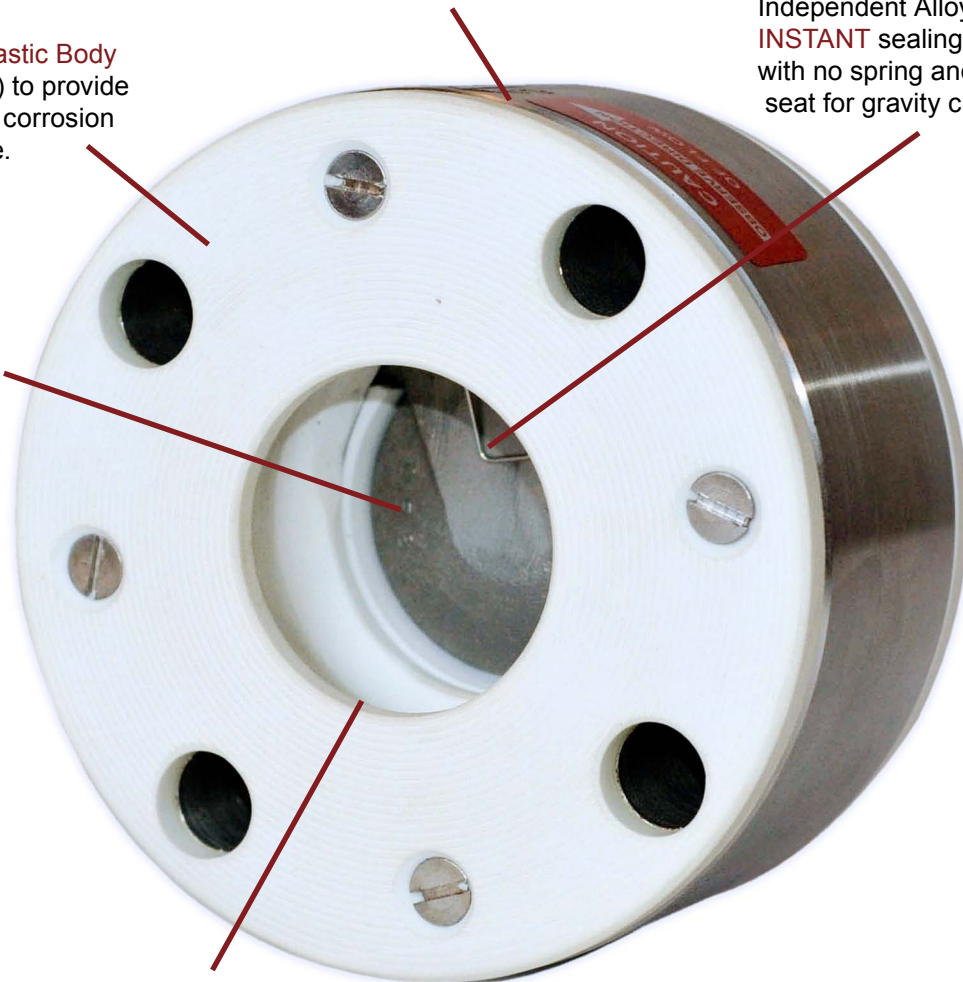
Independent Alloy Spring for
INSTANT sealing. Also available
with no spring and with an angled
seat for gravity closure

SOLID Alloy Flapper
and Shaft provides the
necessary RESISTANCE
to cold flow & deformation

Large unobstructed
bore and bellied body for
MAXIMUM FLOW capacity
and LOW pressure drop

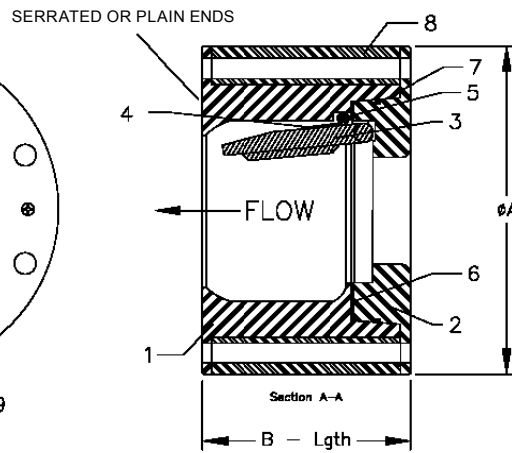
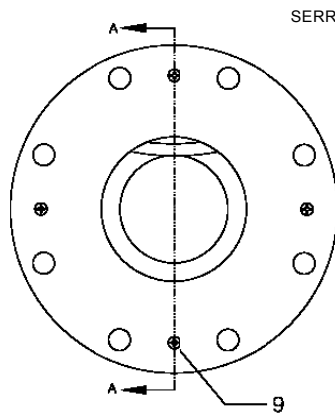
Typical Applications Include:

Cl₂
ClO₂
CH₃COOH
H₂SO₄
HCl
HF





SOLID ALLOY DISK
THICK LINER
LARGE UNOBSTRUCTED
FLOW PATH



PARTS LIST

ITEM	PART NAME
1	BODY
2	SEAT INSERT
3	FLAPPER
4	SPRING
5	SPRING PIN
6	SEAT SEAL
7	INSERT RING
8	OUTER SHELL
9	SCREW (4)

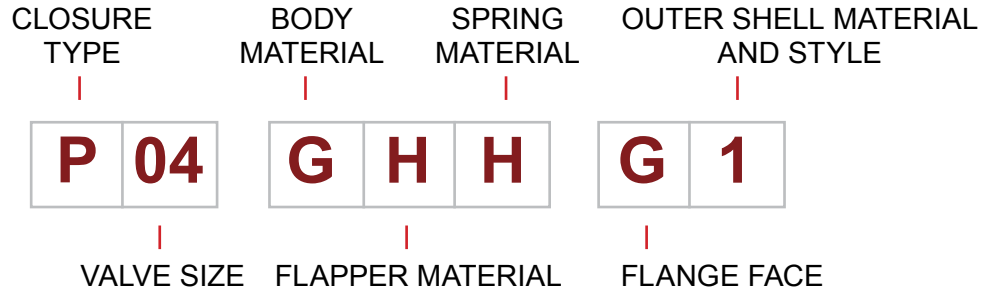
Series P Installation Dimensions

SIZE	CWP	A-Dia		B-LTH		C-Dia		Bolt Holes				Bolt Circle	Flange Face	WEIGHT		
		inch	mm	inch	mm	inch	mm	Qty	Diameter		inch			mm	lbs.	kg.
									inch	mm		Thrds				
1" 25mm	200	4-1/4	108	2-3/8	60	7/8	22	4	5/8	16	1/2-13	3-1/8	79	S/-FF	5	2
1-1/2" 40mm	200	5	127	2-7/8	73	1-5/16	33	4	5/8	16	1/2-13	3-7/8	98	S/-FF	10	5
2" 50mm	200	6	152	3	76	1-3/4	44	4	3/4	19	5/8-11	4-3/4	121	S/-FF	14	6
2-1/2" 65mm	200	7	178	3-1/4	83	1-7/8	48	4	3/4	19	5/8-11	5-1/2	140	S/-FF	20	9
3" 75mm	200	7-1/2	191	3-5/8	92	2-11/16	68	4	3/4	19	5/8-11	6	152	S/-FF	29	13
4" 100mm	200	9	229	3-3/4	95	3-3/8	86	8	3/4	19	5/8-11	7-1/2	191	S/-FF	40	18
6" 150mm	200	11	279	4-3/4	121	4-3/4	121	8	7/8	22	3/4-10	9-1/2	241	S/-FF	61	28
8" 200mm	200	13-1/2	343	6-1/4	159	6-3/4	171	8	7/8	22	3/4-10	11-3/4	298	S/-FF	136	62
10" 250mm	200	16	406	7-1/4	184	8	203	12	1	25	7/8-9	14-1/4	362	S/-FF	180	82
12" 300mm	200	19	483	9	229	9-7/8	251	12	1	25	7/8-9	17	432	S/-FF	340	155

SERIES P MODEL NUMBER EXAMPLE

P04-GHH-G1 = 4" spring-assisted check valve with a Teflon glass filled body. Alloy C-276 flapper, Alloy C276 spring, Serrated face, and a 316 S.S. Outer Shell (with thru holes)

PA06-GT-G4 = 6" spring-assisted check valve with a Teflon glass filled body. Titanium Gr.2 Disc, Serrated face, and a Carbon Steel Outer Shell (with thru holes)



Closure Type	
Code	Description
P	Spring-Assisted Closure
PA	Gravity Closure with Angled Seat (no spring)
<i>Both Closure Types Work in the Horizontal or Vertical - Up Positions</i>	

Body Material	
Code	Description
G	Teflon® (25% glass filled)
K	Kynar®
U	Ultra High Molecular Weight Polyethylene® (UHMWPE)
O	OTHER

Spring Material	
Code	Description
H	Alloy C276
T	Titanium
M	Monel
<i>Note: Spring Code is Omitted When Ordering Closure Type "PA"</i>	

Spring Material
AVAILABLE IN SIZES 1" - 12"
<i>Meet ANSI Series 125 or 150 Flanges with Maximum Operating Pressure of 200 PSI.</i>

Flapper Material	
Code	Description
H	Alloy C276
T	Titanium Gr. 2
B	Alloy B-2
Z	Zirconium
O	Other

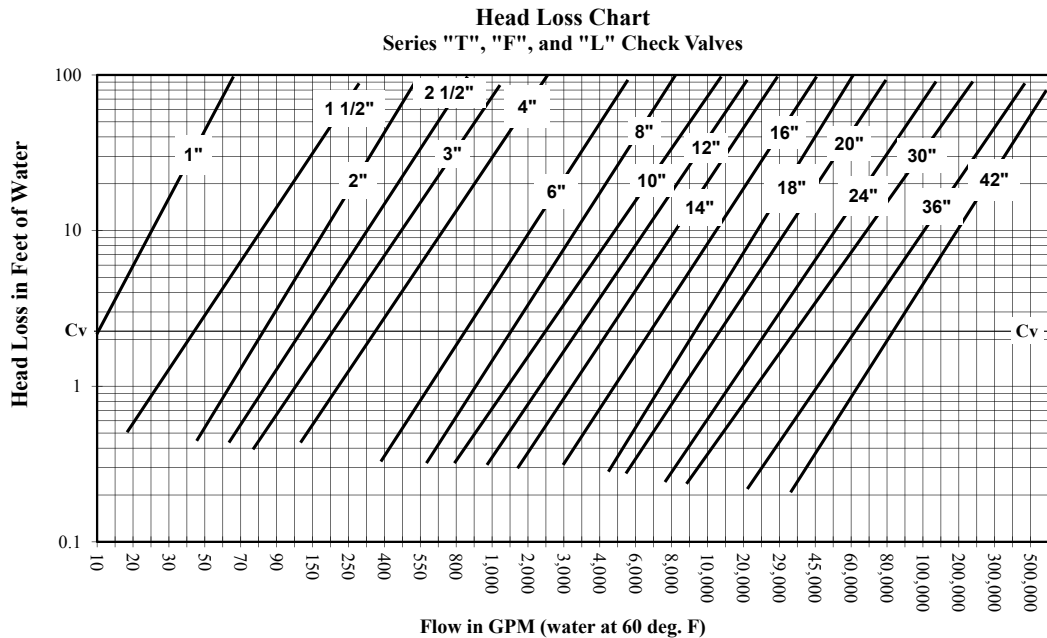
Flange Face	
Code	Description
F	Non-Serrated
G	Serrated
<i>Note: Gaskets are NOT required for installation.</i>	

Outside Shell Material & Style	
Code	Description
1	316 SS - with Thru-Holes
2	316 SS-with Threaded Holes
4	Carbon Steel - with Thru-Holes
5	Carbon Steel - with Threaded Holes

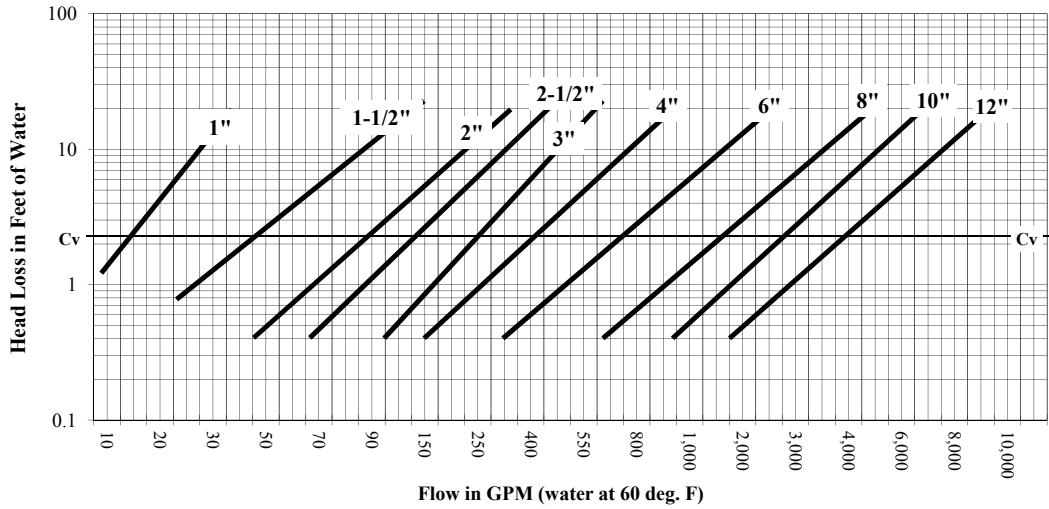
CALCULATED CRACKING PRESSURE

SIZE	SPRING ASSISTED		NON-SPRING ASSISTED	
	HORIZONTAL FLOW	VERTICAL UP FLOW	HORIZONTAL FLOW	VERTICAL UP FLOW
1"	0.67	0.78	0.01	0.12
1-1/2"	0.28	0.39	0.01	0.11
2"	0.32	0.43	0.01	0.12
2-1/2"	0.52	0.64	0.01	0.13
3"	0.21	0.31	0.01	0.11
4"	0.17	0.31	0.01	0.13
6"	0.25	0.43	0.02	0.18
8"	0.12	0.31	0.02	0.18
10"	0.16	0.38	0.02	0.22
12"	0.21	0.43	0.02	0.22
14"	0.19	0.41	0.02	0.21
16"	0.15	0.49	0.02	0.34
18"	0.12	0.34	0.02	0.22
20"	0.08	0.37	0.02	0.29
24"	0.06	0.31	0.02	0.24
30"	0.06	0.28	0.02	0.23
36"	0.06	0.29	0.02	0.24

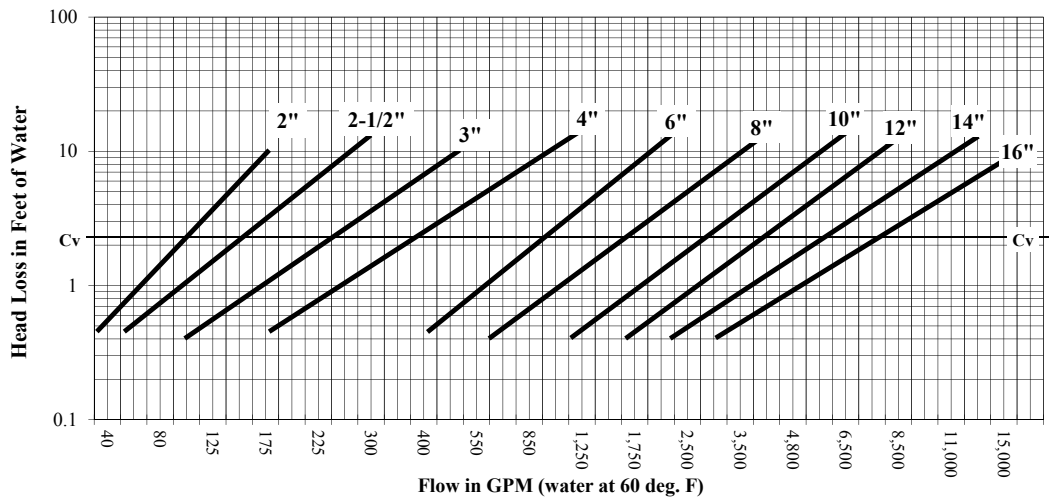
1 PSI = 27.72" water = 0.069 bar



Head Loss Chart
Series "P" Plastic Bodied Check Valves



Head Loss Chart
Series "H" Flanged, Butt-weld or Hub Ended Check Valves



Head Loss Chart
Series "D" Dual Plate Check Valves

