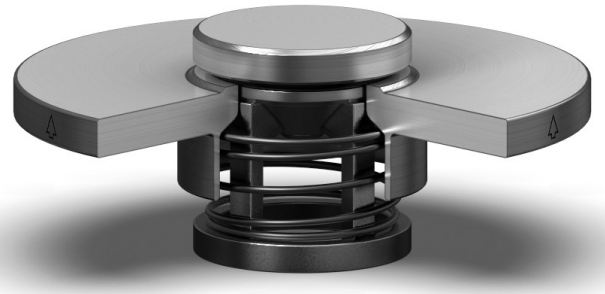
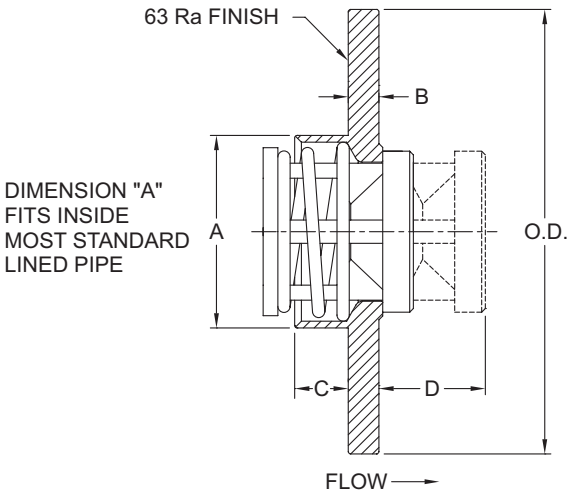
PED 2014/68/EU COMPLIANT
See Page 59 for Details

LINED PIPE INSERT



The **Lined Pipe Insert (LP)** check valve is designed to mate between two flanges on most lined pipe systems. It provides the simplest and most economical way to install a check valve in a lined piping system. No gaskets are required; just spread the flanges, center the valve and bolt the flanges together. LP valves are available in fluoropolymer (PTFE/FEP/PFA) and Alloy C-276 to satisfy the most demanding applications. The standard spring material is Alloy C-276. Other materials are available upon request. The LP valve can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

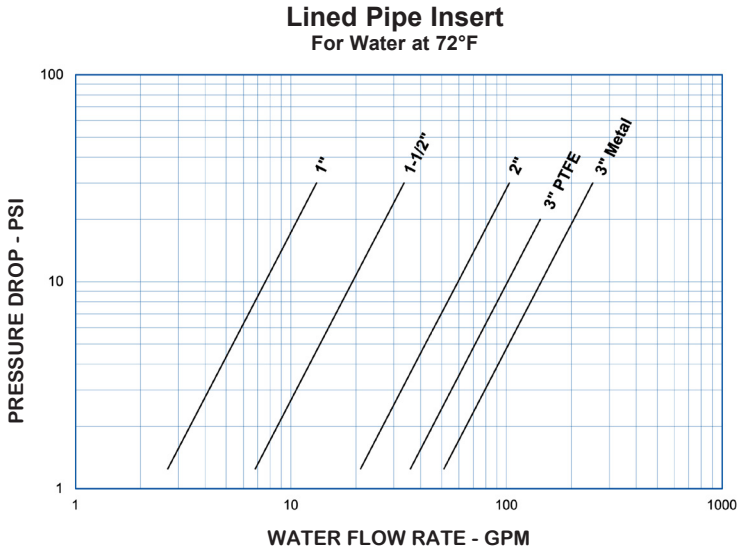


Nom. Pipe Size	Size Code	A	B	C		D ❶	OD	Orifice ❷ Diameter
				PTFE	HC			
1	H	0.590	1/4	0.26	0.26	0.53	2	0.348
1-1/2	J	1.120	1/4	0.46	0.42	0.78	2-7/8	0.593
2	K	1.570	1/4	0.79	0.44	1.01	3-5/8	1.135
3	M	2.520	5/16	0.77	0.66	1.43	5	1.555❸

❶ Maximum nominal dimension for a fully open valve with no spring.
❷ Orifice Diameter for PTFE valve may vary due to molding process.
❸ 3" PTFE valves use 1.385 Orifice Diameter.

Body Material ❹	Nominal Pipe Size	Non-Shock Pressure-Temp. Rating
Alloy C-276 (HC)	1" - 3"	ANSI Class 150 & 300
PTFE (TF)	1" - 2"	55 PSIG @ 100°F
	3"	20 PSIG @ 100°F

❹ See page 58 for material grade information. Contact the factory for availability of other materials.



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 LP C_V VALUES & VALVE WEIGHTS				
METAL C_V	**PTFE C_V**	SIZE	METAL	PTFE
2.4	**2.4**	1	4.0 oz.	1.0 oz.
6.1	**6.1**	1-1/2	8.8 oz.	2.2 oz.
18.8	**18.8**	2	14.4 oz.	3.2 oz.
45.8	**32.0**	3	2.3 lb.	9.0 oz.

See page 53 for Flow Formulae.
Valve weights are approximate.

HOW TO ORDER
CHECK-ALL STYLE LP

BODY MATERIAL
ALLOY C-276 = HC
PTFE = TF
See p. 3 for temperature ratings

SPRING CRACKING PRESSURES (PSI)
Must use decimal as a character unless selecting NO SPRING. *Specify Exact Setting*

SPRING RANGES		EXAMPLE
.000 TO .999	=	.500
1.00 TO 9.99	=	1.50
10.0 TO 85.0	=	15.0
NO SPRING	=	NOSPRG

STANDARD CRACKING PRESSURES ❶
.500

Note: Many other cracking pressures are available. All spring tolerances +/- 15%.

SPECIAL OPTIONS
T = FEP ENCAPSULATED SPRING
Contact the factory for more options
See page 4 for temperature rating

L P

VALVE STYLE

SIZE
1 = H
1-1/2 = J
2 = K
3 = M

SEAT MATERIAL ❷
AFLAS® = AS
BUNA-N = BN
EPDM ❸ = EP
KALREZ® (FFKM) = KZ
FLUOREZ® (FFKM) = FZ
"METAL-TO-METAL" = MT
NEOPRENE = NE
PTFE = TF
FKM = VT
See p. 3 for temperature ratings

SPRING MATERIAL
ALLOY C-276 = HC
316 SS = SS
INCONEL® X750 OR ALLOY X750 = IX
ALLOY 400 OR MONEL® 400 = MO
TITANIUM = TI
See p. 4 for temperature ratings

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

❶ .500 PSI is the only standard cracking pressure for spring materials other than Stainless Steel. 0.125 PSI springs are not recommended for installations with flow vertical down.

❷ "Metal-to-Metal" and PTFE seats are not resilient. See page 54 for allowable leakage rates.

❸ For PTFE valves, "TF" o-ring seats are not available, "MT" seats mean plastic to plastic. (No o-ring)