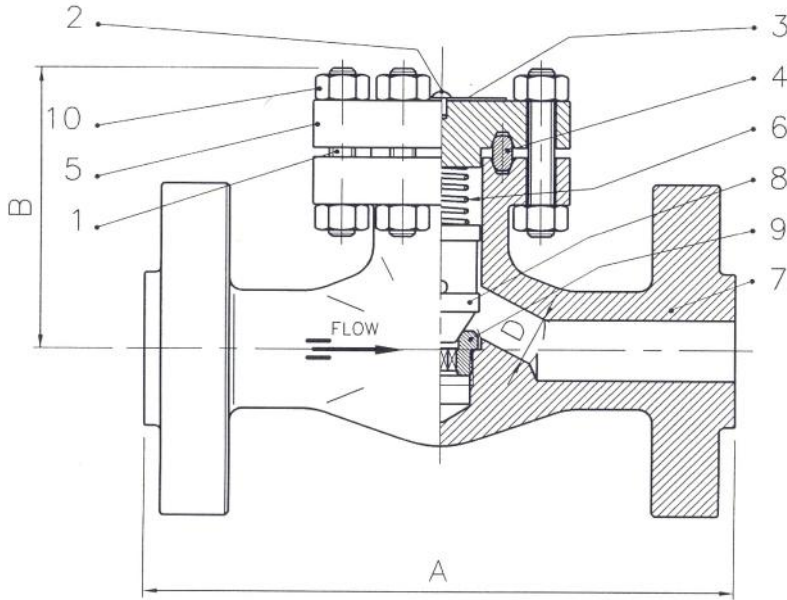


1500-2500 Lbs

DT-FPCV-006



BASIC DESIGN STANDARDS

Basic Design	<u>ISO 15761- BS 5352</u>
Wall Thickness / Pressure / Temperature	According to ANSI B16.34
Ends	<u>RF according to ANSI</u>
Dimensions	<u>B16.5</u>
Bore	<u>Reduced & Full</u>

TEST PRESSURE TO API 598 bar

Class	Shell (water)	Seat (water)	Seat (air)
1500	388	285	6.0
2500	638	468	6.0

** Also available BALL check valve type

BILL OF MATERIALS STANDARD ACCORDING TO ASTM

No	Part Name	Carbon Steel		Alloy Steel	Stainless Steel
		A105/F6	A105/F6 HF	F11/F6 HF	SS316
01	Rivet	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
02	Name Plate	Aluminium	Aluminium	Aluminium	INOX
03	Bolts B/C	A193 B7	A193 B7	A193 B7	A193 B8
04	Spring	A479 TP316	A479 TP316	A479 TP316	A479 TP316/L
05	Cover	ASTM A105N	ASTM A105N	ASTM A182 Gr. F11	ASTM A182 Gr. F316L
06	*Gasket B/C	F316 + Graphoil	F316 + Graphoil	F316 + Graphoil	F316 + Graphoil
07	Piston	A479 TP410	A479 TP410 + ST.6	A479 TP410 + ST.6	A479 TP316L
08	Seat	A479 TP410	A479 TP410 + ST.6	A479 TP410 + ST.6	A479 TP316L
09	Body	ASTM A105N	ASTM A105N	ASTM A182 Gr. F11	ASTM A182 Gr. F316L

* Recommended Spare Parts

1500-2500 Lbs

SIZE (Full Bore)		DIMENSION in mm (ANSI 1500#) Ring Joint B/B Gasket / WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	216	90	11	-	7.6
3/4"	20	229	105	14.5	-	10.8
1"	25	254	120	19	-	14.5
1-1/2"	40	305	160	31	-	31
2"	50	368	170	37.5	-	43

SIZE (Full Bore)		DIMENSION in mm (ANSI 2500#) Ring Joint B-B Gasket / WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	264	10	10	-	9.8
3/4"	20	273	14	14	-	11.8
1"	25	308	19	19	-	16.5
1-1/2"	40	384	28	28	-	37
2"	50	451	35	35	-	58

FORGED STEEL PISTON CHECK VALVES CLASS 1500-2500 LBS

1500-2500 Lbs

FORGED STEEL PISTON CHECK VALVES CLASS 1500-2500 LBS

ASTM A105	PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34		
Temperature °C	WORKING PRESSURE (bar.g)		
	ASTM A105N (a)		
	1500#		2500#
-29 to 38	255.5		425.5
93	232.8		387.9
149	226.2		377.2
204	218.6		364.1
260	206.6		344.1
316	188.6		314.5
343	185.2		308.6
371	183.8		306.2
399	173.8		289.7
427	142.1		236.6
454	92.4		153.8
482	59.3		98.6
510	35.5		59.3
538	17.9		29.7

(a) Permissible, but not recommended for prolonged usage above 427 °C

ASTM A182 F316	PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34		
Temperature °C	WORKING PRESSURE (bar.g)		
	ASTM F316 (b)		
	1500#		2500#
-29 to 38	248.3		413.8
93	213.4		355.9
149	192.8		321.4
204	177.2		295.2
260	164.8		274.5
316	155.5		259.3
343	153.1		255.2
371	149.7		249.7
399	147.2		245.5
427	145.5		242.8
454	144.1		240.0
482	143.1		238.6
510	133.1		222.1
538	120.7		201.0
566	118.6		197.6
593	105.2		175.5
621	81.7		135.9
649	63.8		106.6
677	50.7		84.8
704	40.3		66.9
732	33.1		55.2
760	26.2		43.4
788	20.0		33.4
816	14.1		23.8

(b) Permissible, but not recommended for prolonged usage above 427 °C

1500-2500 Lbs

ASTM A182 F11	PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34	
Temperature °C	WORKING PRESSURE (bar.g)	
	ASTM F11 (c)	
	1500#	2500#
-29 to 38	258.6	431.0
93	258.6	431.0
149	249.0	414.8
204	239.0	398.3
260	229.3	382.1
316	208.6	347.6
343	202.8	338.3
371	195.9	326.3
399	183.4	305.5
427	175.2	291.7
454	167.9	280.0
482	154.8	258.3
510	110.0	183.1
538	74.5	124.1
566	49.7	82.8
593	33.1	55.2
621	21.4	35.5
649	13.1	21.7

(c) For welding end valves only: Flanged end ratings terminate at 538°C

FORGED STEEL PISTON CHECK VALVES CLASS 1500-2500 LBS