

WALWORTH API 602 PISTON CHECK VALVES

Piston Check valves are generally used to protect pumps or similar equipment, allowing the flow in only one direction and preventing flow reversal due to back pressure.

The piston check valves are designed with globe valve bodies, producing an increased drop pressure in the pipeline. This design provides a tight seal as well as a fast reaction to the closure impulse.

Metal seated check valves may not provide drop tight sealing when used in gas system or fluid system with low back flow pressure or fluids containing particles.

Piston Check Valves are supplied spring loaded as per Customer request for installation in vertical position.

DESIGN FEATURES

- Valves in accordance with API-602.
- Socket weld, threaded, combined or flanged RF or RTJ ends.
- Bolted or Welded Bonnet options.
- Low fugitive emissions control.
- Nace service either MR-0175 or MR-0103
- Test in accordance with API-598.
- Horizontal Fluid Control
- Vertical Fluid Control with Spring (As per Customer request)

Body to cover joint designed to apply a uniform load to the gasket to assure a leak proof seal.

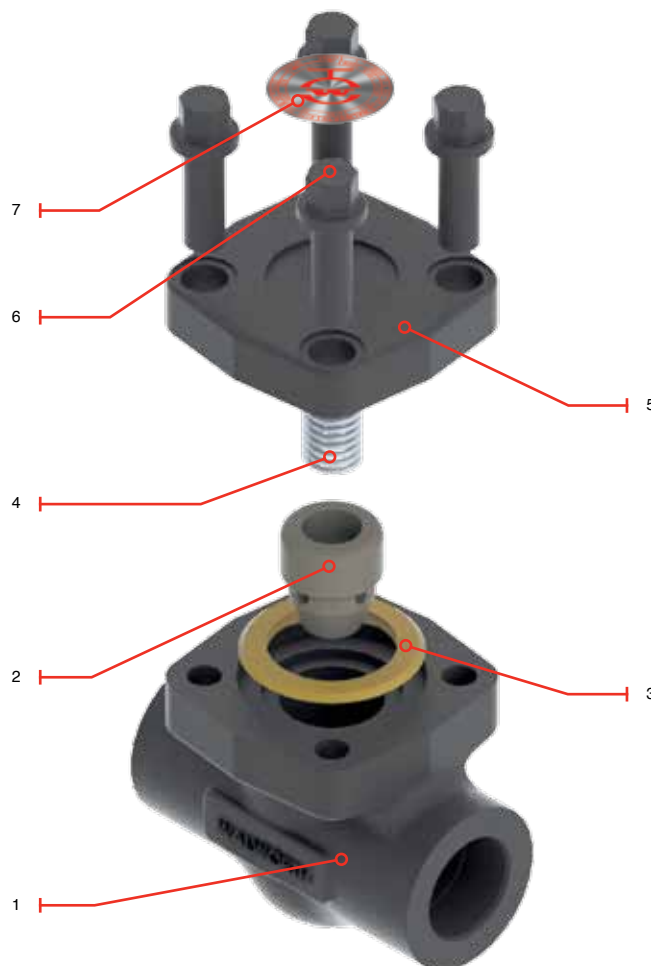
Guided piston to assure a correct seal.

Spring to allow a mounting in a vertical line available upon request.

Stellite seat provides increased resistance to wear abrasion and erosion of sealing surface.

REGULAR BILL OF MATERIALS

No.	DESCRIPTION	TRIM 8 A 105N
1	BODY	A105
2	PISTON	A276-420
3	GASKET	304+FLEXIBLE GRAPHITE
4	SPRING	A276-304
5	COVER	A105
6	COVER BOLT	A193-B7
7	IDENTIFICATION PLATE	ALUMINIUM



API 602 PISTON CHECK VALVES TH & SW, CLASS 800

Design Characteristics

- API 602 & ASME B16.34
- Bolted cover
- Piston type disc
- Standard or Full Port
- Threaded, Socket Weld Or Threaded X Socket Weld
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control(As per Customer request)

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Standard	800 Bolted Cover	5540S	Threaded
		5540SW	Socket Weld
		5540SSW	Threaded X Socket Weld
Full	800 Bolted Cover	5548S	Threaded
		5548SW	Socket Weld
		5548SSW	Threaded X Socket Weld
Standard	800 Welded Cover	5547S	Threaded
		5547SW	Socket Weld
		5547SSW	Threaded X Socket Weld
Full	800 Welded Cover	5549S	Threaded
		5549SW	Socket Weld
		5549SSW	Threaded X Socket Weld

Dimensions and Weights

Fig. 5540 Bolted Cover, Standard Port

Sizes	in	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	6	10	13	19	25	32	38	51
A	in	3.11	3.11	3.11	3.62	4.37	4.72	5.98	6.77
	mm	79	79	79	92	111	120	152	172
B	in	2.15	2.15	2.15	2.15	2.83	3.19	3.70	4.41
	mm	54.5	54.5	54.5	54.5	72.0	81.0	94.0	112.0
C	in	0.26	0.39	0.39	0.51	0.69	0.91	1.12	1.38
	mm	6.5	10.0	10.0	13.0	17.5	23.0	28.5	35.0
D	in	1.34	1.34	1.34	1.57	1.93	2.28	2.52	3.07
	mm	34.0	34.0	34.0	40.0	49.0	58.0	64.0	78.0
Weight	lb	3.3	3.3	3.08	4.18	5.72	9.24	11.66	19.8
	kg	1.5	1.5	1.4	1.9	2.6	4.2	5.3	9.0

Fig. 5547 Welded Cover, Standard Port

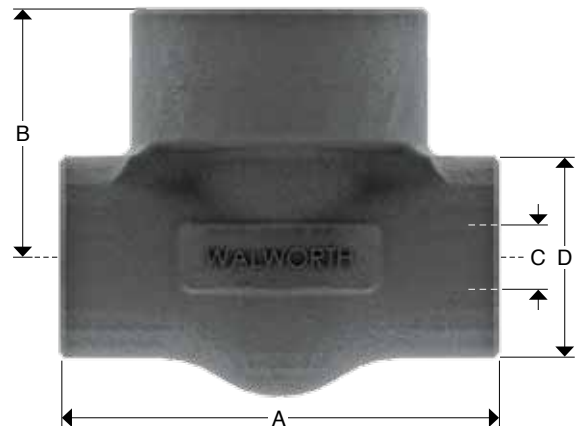
Sizes	in	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	6	10	13	19	25	32	38	51
A	in	3.11	3.11	3.11	3.62	4.37	4.72	5.98	6.77
	mm	79	79	79	92	111	120	152	172
B	in	2.15	2.15	2.15	2.15	2.83	3.19	3.70	4.41
	mm	54.5	54.5	54.5	54.5	72.0	81.0	94.0	112.0
C	in	0.26	0.39	0.39	0.51	0.69	0.91	1.12	1.38
	mm	6.5	10.0	10.0	13.0	17.5	23.0	28.5	35.0
D	in	1.34	1.34	1.34	1.57	1.93	2.28	2.52	3.07
	mm	34.0	34.0	34.0	40.0	49.0	58.0	64.0	78.0
Weight	lb	3.3	3.3	3.08	4.18	5.72	9.24	11.66	19.8
	kg	1.5	1.5	1.4	1.9	2.6	4.2	5.3	9.0

Fig. 5548 Bolted Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	3.62	4.37	4.72	5.98	6.77	8.66
	mm	92	111	120	152	172	220
B	in	2.17	2.83	3.19	3.70	4.41	5.20
	mm	55	72	81	94	112	132
C	in	0.51	0.69	0.91	1.12	1.38	1.38
	mm	13	17.5	23	28.5	35	35.0
D	in	1.57	1.93	2.28	2.52	3.07	3.46
	mm	40	49.0	58	64.0	78	88.0
Weight	lb	4.18	5.72	9.24	11.66	19.8	24.2
	kg	1.9	2.6	4.2	5.3	9.0	11.0

Fig. 5549 Welded Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	3.62	4.37	4.72	5.98	6.77	8.66
	mm	92	111	120	152	172	220
B	in	2.17	2.83	3.19	3.70	4.41	5.20
	mm	55	72	81	94	112	132
C	in	0.51	0.69	0.91	1.12	1.38	1.38
	mm	13	17.5	23	28.5	35	35.0
D	in	1.57	1.93	2.28	2.52	3.07	3.46
	mm	40	49.0	58	64.0	78	88.0
Weight	lb	4.18	5.72	9.24	11.66	19.8	24.2
	kg	1.9	2.6	4.2	5.3	9.0	11.0



API 602 PISTON CHECK VALVES TH & SW, CLASS 1500

Design Characteristics

- API 602 & ASME B16.34
- Bolted cover
- Piston type disc
- Standard or Full Port
- Threaded, Socket Weld Or Threaded X Socket Weld
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Standard	1500 Bolted Cover	5541S	Threaded
		5541SW	Socket Weld
		5541SSW	Threaded X Socket Weld
Full	1500 Bolted Cover	5559S	Threaded
		5559SW	Socket Weld
		5559SSW	Threaded X Socket Weld
Standard	1500 Welded Cover	5545S	Threaded
		5545SW	Socket Weld
		5545SSW	Threaded X Socket Weld
Full	1500 Welded Cover	5569S	Threaded
		5569SW	Socket Weld
		5569SSW	Threaded X Socket Weld

Dimensions and Weights

Fig. 5541 Bolted Cover, Standard Port

Sizes	in	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	6	10	13	19	25	32	38	51
A	in	3.11	3.11	3.62	4.37	4.72	5.98	6.77	8.66
	mm	79	79	92	111	120	152	172	220
B	in	2.87	2.87	2.87	2.87	3.31	3.82	4.53	5.20
	mm	73	73	73	73	84	97	115	132
C	in	0.26	0.39	0.39	0.51	0.69	0.91	1.12	1.38
	mm	6.5	10.0	10.0	13.0	17.5	23.0	28.5	35.0
D	in	1.34	1.34	1.65	1.93	2.28	2.52	3.07	3.46
	mm	34.0	34.0	42.0	49.0	58.0	64.0	78.0	88.0
Weight	lb	4.84	4.84	5.28	6.38	10.12	14.3	23.1	34.1
	kg	2.2	2.2	2.4	2.9	4.6	6.5	10.5	15.5

Fig. 5545 Welded Cover, Standard Port

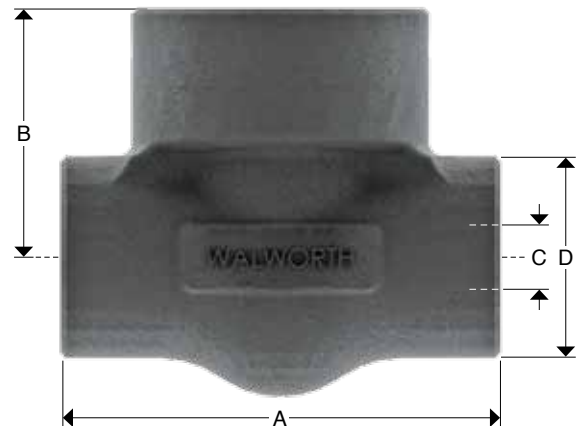
Sizes	in	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	6	10	13	19	25	32	38	51
A	in	3.11	3.11	3.62	4.37	4.72	5.98	6.77	8.66
	mm	79	79	92	111	120	152	172	220
B	in	2.87	2.87	2.87	2.87	3.31	3.82	4.53	5.20
	mm	73	73	73	73	84	97	115	132
C	in	0.26	0.39	0.39	0.51	0.69	0.91	1.12	1.38
	mm	6.5	10.0	10.0	13.0	17.5	23.0	28.5	35.0
D	in	1.34	1.34	1.65	1.93	2.28	2.52	3.07	3.46
	mm	34.0	34.0	42.0	49.0	58.0	64.0	78.0	88.0
Weight	lb	4.84	4.84	5.28	6.38	10.12	14.3	23.1	34.1
	kg	2.2	2.2	2.4	2.9	4.6	6.5	10.5	15.5

Fig. 5559 Bolted Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	4.37	4.72	5.98	6.77	8.66	10.24
	mm	111	120	152	172	220	260
B	in	2.87	3.31	3.82	4.53	5.20	5.20
	mm	73	84	97	115	132	132
C	in	0.51	0.69	0.91	1.12	1.38	1.38
	mm	13.0	17.5	23.0	28.5	35.0	35.0
D	in	1.93	2.28	2.52	3.07	3.46	3.46
	mm	49.0	58.0	64.0	78.0	88.0	88.0
Weight	lb	6.38	10.12	14.3	23.1	34.32	37.4
	kg	2.9	4.6	6.5	10.5	15.6	17.0

Fig. 5569 Welded Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	4.37	4.72	5.98	6.77	8.66	7.87
	mm	111	120	152	172	220	250
B	in	2.87	3.31	3.82	4.53	5.20	5.20
	mm	73	84	97	115	132	132
C	in	0.51	0.69	0.91	1.12	1.38	1.38
	mm	13.0	17.5	23.0	28.5	35.0	35.0
D	in	1.93	2.28	2.52	3.07	3.46	3.46
	mm	49.0	58.0	64.0	78.0	88.0	88.0
Weight	lb	6.38	10.12	14.3	23.1	34.32	37.4
	kg	2.9	4.6	6.5	10.5	15.6	17.0



API 602 PISTON CHECK VALVES TH & SW, CLASS 2500

Design Characteristics

- API 602 & ASME B16.34
- Welded cover
- Piston type disc
- Standard or Full Port
- Threaded, Socket Weld Or Threaded X Socket Weld
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Standard	2500	5542S	Threaded
	Welded	5542SW	Socket Weld
	Bonnet	5542SSW	Threaded X Socket Weld
Full	2500	5642S	Threaded
	Welded	5642SW	Socket Weld
	Bonnet	5642SSW	Threaded X Socket Weld

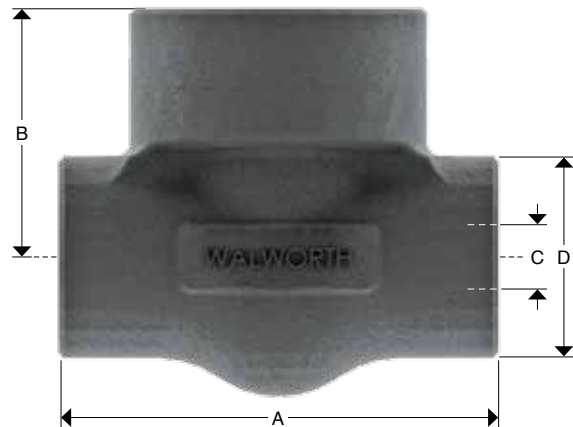
Dimensions and Weights

Fig. 5542 Welded Cover, Standard Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	5.91	5.91	6.69	7.87	7.87	9.84
	mm	150	150	170	200	200	250
B	in	4.02	4.02	4.21	5.04	5.04	5.63
	mm	102	102	107	128	128	143
C	in	0.43	0.55	0.75	0.98	1.10	1.38
	mm	11	14	19	25	28	35
D	in	2.05	2.05	2.52	3.15	3.15	3.74
	mm	52.0	52.0	64.0	80.0	80.0	95.0
Weight	lb	17.6	17.16	26.4	42.9	42.46	59.4
	kg	8	7.8	12	19.5	19.3	27

Fig. 5642 Welded Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A	in	5.91	6.69	7.87	7.87	9.84	PCR
	mm	150	170	200	200	250	PCR
B	in	4.02	4.21	5.04	5.04	5.63	PCR
	mm	102	107	128	128	143	PCR
C	in	0.55	0.75	0.98	1.10	1.38	PCR
	mm	14	19	25	28	35	PCR
D	in	2.05	2.52	3.15	3.15	3.74	PCR
	mm	52.0	64.0	80.0	80.0	95.0	PCR
Weight	lb	17.16	26.4	42.9	42.46	59.4	PCR
	kg	7.8	12	19.5	19.3	27	PCR



API 602 PISTON CHECK VALVES RF/RTJ, CLASS 150, 300 & 600

Design Characteristics

- API 602 & ASME B16.34
- Bolted cover
- Piston type disc
- Standard port
- Integral flanged ends (Raised Face or Ring Type Joint)
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Standard	150	5815RF	Flanged Raised Face
		5815RTJ	Flanged Ring Type Joint
Standard	300	5830RF	Flanged Raised Face
		5830RTJ	Flanged Ring Type Joint
Standard	600	5860RF	Flanged Raised Face
		5860RTJ	Flanged Ring Type Joint

Dimensions and Weights

Fig. 5815 Standard Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	4.25	4.63	5.00	5.50	6.50	8.00
	mm	108	117	127	140	165	203
A (RJ)	in	-	-	5.50	6.00	7.00	8.50
	mm	-	-	140	153	178	216
B	in	2.15	2.15	2.83	3.19	3.7	4.41
	mm	54.5	54.5	72.0	81.0	94	112.0
C	in	0.39	0.51	0.69	0.91	1.12	1.38
	mm	10.0	13.0	17.5	23.0	28.5	35.0
Weight	lb	7.48	9.68	18.04	19.58	26.4	31.46
	kg	3.4	4.4	8.2	8.9	12.0	14.3

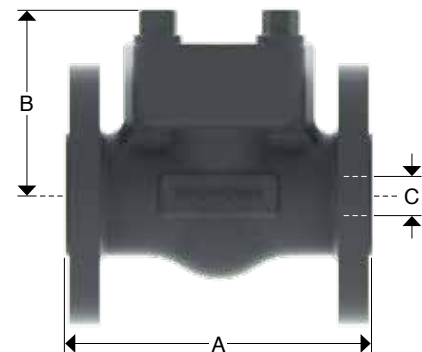


Fig. 5830 Standard Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	6.00	7.00	8.00	8.50	9.00	10.50
	mm	152	178	203	216	229	267
A (RJ)	in	6.4375	7.50	8.50	9.00	9.50	11.125
	mm	163	191	216	229	242	283
B	in	2.15	2.15	2.83	3.19	3.7	4.41
	mm	54.5	54.5	72.0	81.0	94	112.0
C	in	0.39	0.51	0.69	0.91	1.12	1.38
	mm	10.0	13.0	17.5	23.0	28.5	35.0
Weight	lb	8.14	10.56	19.36	21.12	30.14	39.16
	kg	3.7	4.8	8.8	9.6	13.7	17.8

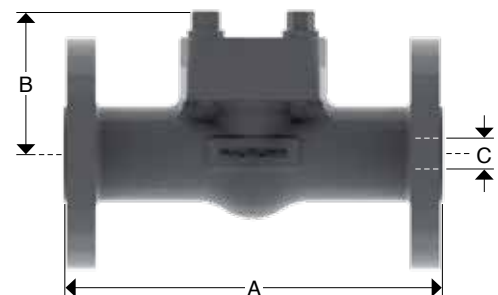


Fig. 5860 Standard Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	6.50	7.50	8.50	9.00	9.50	11.50
	mm	165	190	216	229	241	292
A (RJ)	in	6.44	0.75	1.00	1.25	1.50	11.63
	mm	163	190	216	229	241	295
B	in	2.15	2.15	2.83	3.19	3.7	4.41
	mm	54.5	54.5	72.0	81.0	94	112.0
C	in	0.39	0.51	0.69	0.91	1.12	1.38
	mm	10.0	13.0	17.5	23.0	28.5	35.0
Weight	lb	7.48	12.76	20.9	22.88	34.32	53.9
	kg	3.4	5.8	9.5	10.4	15.6	24.5



API 602 PISTON CHECK VALVE RF/RTJ, CLASS 150, 300 & 600

Design Characteristics

- API 602 & ASME B16.34
- Bolted cover
- Piston type disc
- Full Port
- Integral flanged ends (Raised Face or Ring Type Joint)
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Full	150	5818RF	Flanged Raised Face
		5818RTJ	Flanged Ring Type Joint
Full	300	5838RF	Flanged Raised Face
		5838RTJ	Flanged Ring Type Joint
Full	600	5868RF	Flanged Raised Face
		5868RTJ	Flanged Ring Type Joint

Dimensions and Weights

Fig. 5818 Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	4.25	4.63	5.00	5.50	6.50	8.00
	mm	108	117	127	140	165	203
A (RJ)	in	-	-	5.50	6.00	7.00	8.50
	mm	-	-	140	153	178	216
B	in	2.15	2.83	3.19	3.70	4.41	5.20
	mm	54.5	72.0	81.0	94.0	112.0	132.0
C	in	.51	.68	.9	1.12	1.38	1.57
	mm	13.0	17.5	23.0	28.5	35	40
Weight	lb	7.48	9.68	18.04	19.58	26.4	31.46
	kg	3.4	4.4	8.2	8.9	12.0	14.3

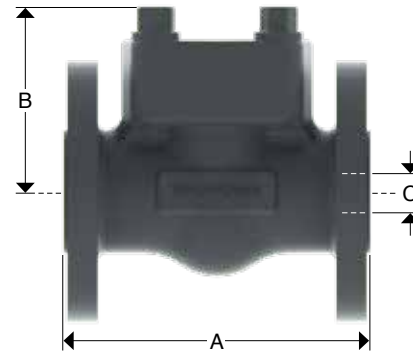


Fig. 5838 Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	6.00	7.00	8.00	8.50	9.00	10.50
	mm	152	178	203	216	229	267
A (RJ)	in	6.4375	7.50	8.50	9.00	9.50	11.125
	mm	163	191	216	229	242	283
B	in	2.15	2.83	3.19	3.70	4.41	5.20
	mm	54.5	72.0	81.0	94.0	112.0	132.0
C	in	.51	.68	.9	1.12	1.38	1.57
	mm	13.0	17.5	23.0	28.5	35	40
Weight	lb	8.14	10.56	19.36	21.12	30.14	39.16
	kg	3.7	4.8	8.8	9.6	13.7	17.8



Fig. 5868 Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	6.50	7.50	8.50	9.00	9.50	11.50
	mm	165	190	216	229	241	292
A (RJ)	in	6.44	0.75	1.00	1.25	1.50	11.63
	mm	163	190	216	229	241	295
B	in	2.15	2.83	3.19	3.70	4.41	5.20
	mm	54.5	72.0	81.0	94.0	112.0	132.0
C	in	.51	.68	.9	1.12	1.38	1.57
	mm	13.0	17.5	23.0	28.5	35	40
Weight	lb	7.48	12.76	20.9	22.88	34.32	53.9
	kg	3.4	5.8	9.5	10.4	15.6	24.5



API 602 PISTON CHECK VALVE RF/RTJ, CLASS 1500

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Standard	1500 Bolted Cover	15815RF 15815RTJ	Flanged Raised Face Flanged Ring Type Joint

PORT	CLASS	CATALOG FIGURE No.	ENDS TYPES
Full	1500 Welded Cover	15885RF 15885RTJ	Flanged Raised Face Flanged Ring Type Joint

Design Characteristics

- API 602 & ASME B16.34
- Bolted Cover
- Piston type disc
- Standard Port
- Integral flanged ends (Raised Face or Ring Type Joint)
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

Design Characteristics

- API 602 & ASME B16.34
- Welded Cover
- Piston type disc
- Full Port
- Integral flanged ends (Raised Face or Ring Type Joint)
- Spiral wound gasket
- Integral Seat Ring
- Horizontal Fluid Control
- Piston with spring optional for vertical fluid control (As per Customer request)

Dimensions and Weights

Fig. 15815 Bolted Cover, Standard Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	8.50	9.00	10.00	11.00	12.00	14.50
	mm	216	229	254	279	305	368
A (RJ)	in	8.50	9.00	10.00	11.00	12.00	14.625
	mm	216	229	254	279	305	371
B	in	2.87	2.87	3.31	3.82	4.53	5.20
	mm	73	73	84	97	115	132
C	in	0.39	0.51	0.69	0.91	1.12	1.38
	mm	10.0	13.0	17.5	23.0	28.5	35.0
Weight	lb	20.68	24.64	31.68	35.2	47.3	61.6
	kg	9.4	11.2	14.4	16.0	21.5	28.0

Fig. 15885 Welded Cover, Full Port

Sizes	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	mm	13	19	25	32	38	51
A (RF)	in	8.50	9.00	10.00	11.00	12.00	14.50
	mm	216	229	254	279	305	368
A (RJ)	in	8.50	9.00	10.00	11.00	12.00	14.625
	mm	216	229	254	279	305	371
B	in	2.87	3.31	3.82	4.53	5.20	PCR
	mm	73	84	97	115	132	PCR
D	in	0.51	0.69	0.91	1.12	1.38	PCR
	mm	13.0	17.5	23.0	28.5	35.0	PCR
Weight	lb	24.64	31.68	35.2	47.3	61.6	PCR
	kg	11.2	14.4	16.0	21.5	28.0	PCR

