

Newco®

Forged Steel Bolted & Welded Bonnet Check Valves

Manufactured by Newmans™

Sizes: 1/2" thru 2" • Pressure Class: 150 thru 1500



Typical Newco Forged Steel Bolted Check Valve Expanded View

1. Body: Newco forged steel bodies provide low resistance flow and optimum strength and performance.

2. Cover Studs: The cover studs secure the bonnet to the body.

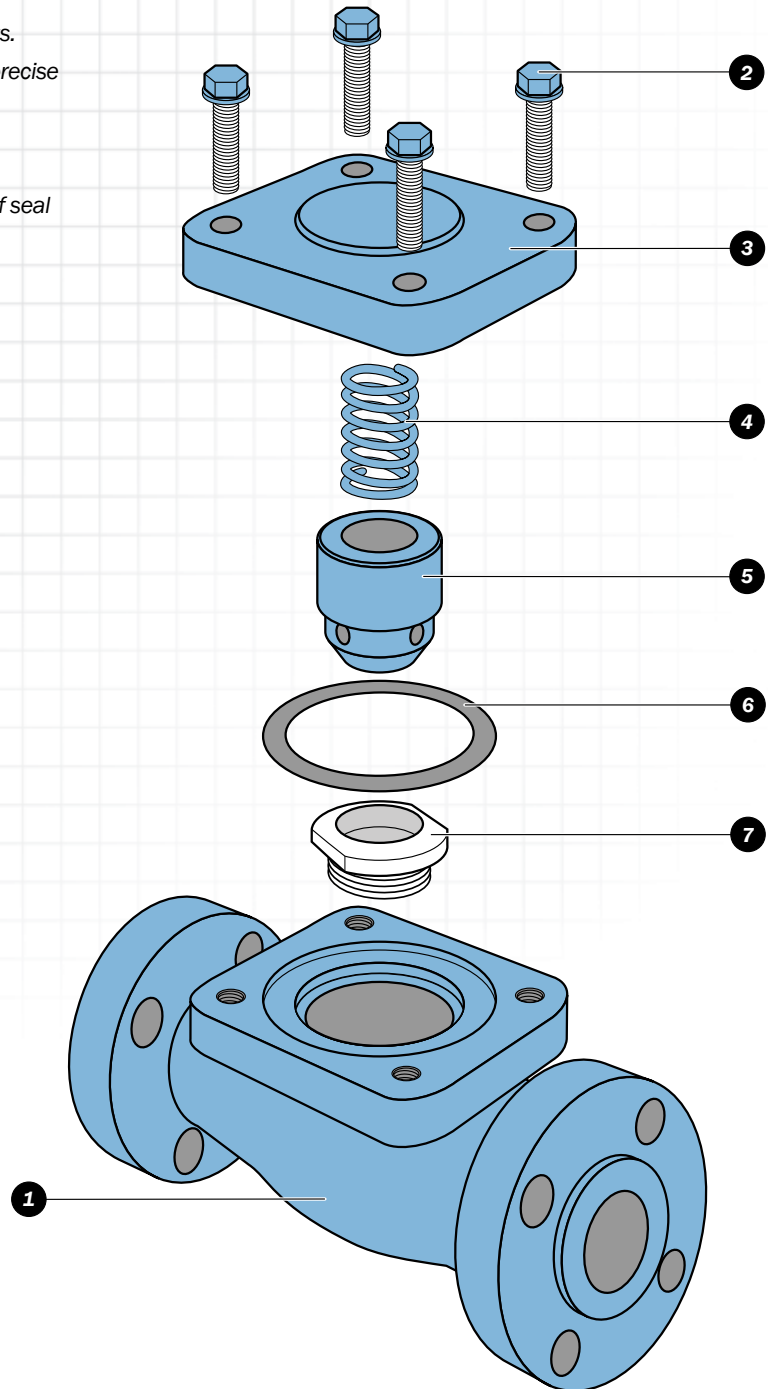
3. Cover: The cover allows access to internal components.

4. Spring: The spring is precision made and loaded for precise pressures.

5. Piston: Newmans piston is machined to the tightest tolerances to ensure trouble free shutoff and cycling.

6. Cover Gasket: The cover gasket creates a leak-proof seal between the bonnet and the body.

7. Seat: The seat ensures a stable shutoff. The seat is precision ground for optimal seating.



Forged Steel Lift & Swing Checks
Bolted & Welded Cover
Conventional Port
Class 800 thru 1500

Sizes: 1/2" thru 2" (1/4" & 3/8" available upon request)

Design and Manufacturing Standards

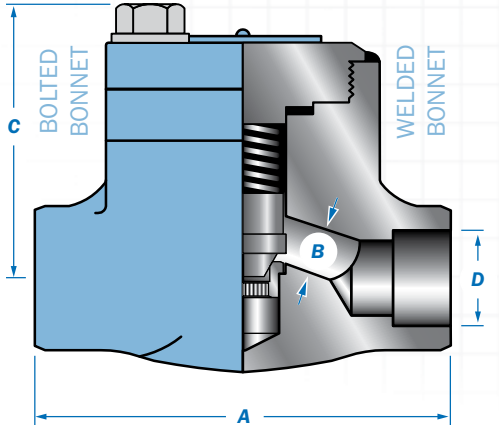
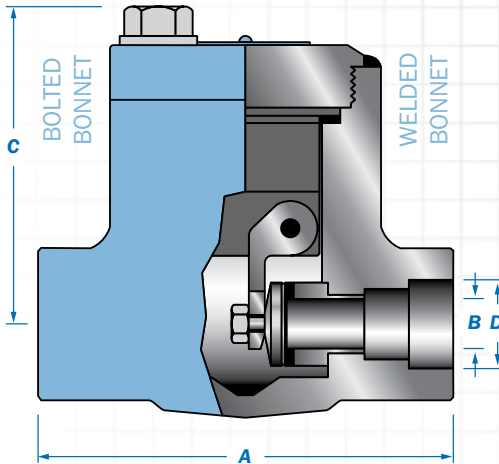
Valve Design: API 602

Pipe Threads, General Purpose, Inch: ASME B1.20.1

Socket Welding: ASME B16.11

Tested in Accordance with: API 598

Recommended Spare Parts*



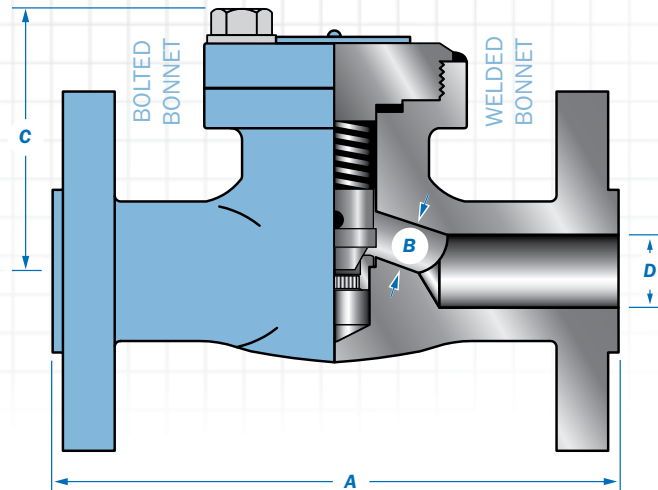
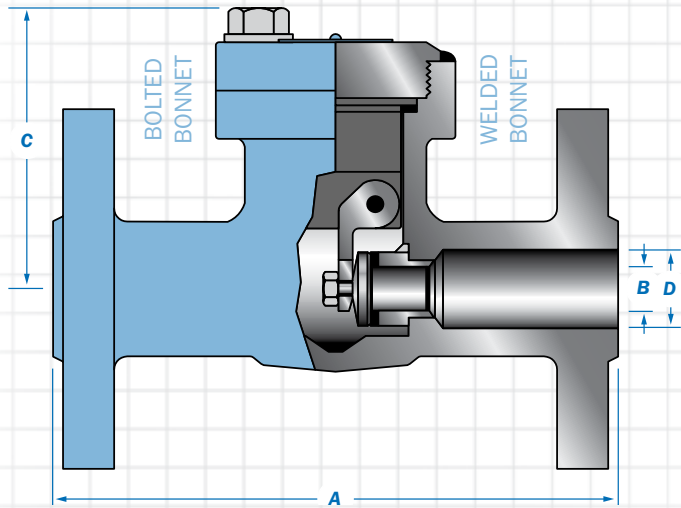
Class 800 thru 1500
Bolted & Welded Bonnet Lift & Swing Check

Size in.	Class 800 BB Lift										Class 800 BB Swing																											
	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.																		
mm	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45						
1/2	3.2	3.1	0.35	0.39	1.9	1.9	0.85	2.4	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2.4	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2.4	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2.4	2.1		
15	80	78.7	9	9.9	49	49	21.6	1.1	1	80	78.7	9	9.9	49	40.6	21.6	1.1	1	80	78.7	9	9.9	49	40.6	21.6	1.1	1	80	78.7	9	9.9	49	40.6	21.6	1.1	1		
3/4	3.5	3.6	0.49	0.54	2.2	2.1	1.07	4	2.6	3.5	3.6	0.49	0.55	2.2	1.8	1.07	4	2.5	3.5	3.6	0.49	0.55	2.2	1.8	1.07	4	2.5	3.5	3.6	0.49	0.55	2.2	1.8	1.07	4	2.5		
20	90	91.4	12.5	13.9	55	53.3	27.2	1.8	1.2	90	91.4	12.5	13.9	55	45.7	27.2	1.8	1.1	90	91.4	12.5	13.9	55	45.7	27.2	1.8	1.1	90	91.4	12.5	13.9	55	45.7	27.2	1.8	1.1		
1	4.3	4.4	0.68	0.69	2.8	2.7	1.33	5.7	4.3	4.3	4.4	0.68	0.71	2.8	2.3	1.33	5.7	3.9	4.3	4.4	0.68	0.71	2.8	2.3	1.33	5.7	3.9	4.3	4.4	0.68	0.71	2.8	2.3	1.33	5.7	3.9		
25	110	111.8	17.5	17.5	70	68.6	33.8	2.6	2	110	111.8	17.5	18	70	58.4	33.8	2.6	1.8	110	111.8	17.5	18	70	58.4	33.8	2.6	1.8	110	111.8	17.5	18	70	58.4	33.8	2.6	1.8		
1-1/4	5	4.7	0.88	0.9	3	3.3	1.67	7.9	11.5	5	4.7	0.88	0.95	3	3.3	1.67	7.9	10.6	5	4.7	0.88	0.95	3	3.3	1.67	7.9	10.6	5	4.7	0.88	0.95	3	3.3	1.67	7.9	10.6		
32	127	119.4	22.5	22.9	77	83.8	42.4	3.6	5.2	127	119.4	22.5	24.1	77	83.8	42.4	3.6	4.8	127	119.4	22.5	24.1	77	83.8	42.4	3.6	4.8	127	119.4	22.5	24.1	77	83.8	42.4	3.6	4.8		
1-1/2	6.1	6	1.14	1.18	4.1	3.7	1.92	12.1	9.9	5	4.7	1.14	1.41	4.1	3.1	1.92	12.1	8.8	5	4.7	1.14	1.41	4.1	3.1	1.92	12.1	8.8	5	4.7	1.14	1.41	4.1	3.1	1.92	12.1	8.8		
40	155	152.4	29	29.9	105	94	48.8	5.5	4.5	127	119.4	29	29	105	78.7	48.8	5.5	4	127	119.4	29	29	105	78.7	48.8	5.5	4	127	119.4	29	29	105	78.7	48.8	5.5	4		
2	6.7	6.8	1.38	1.45	4.7	4.4	2.41	18.5	17	5.1	5.5	1.44	1.44	4.7	3.7	2.41	18.5	13.2	5.1	5.5	1.44	1.44	4.7	3.7	2.41	18.5	13.2	5.1	5.5	1.44	1.44	4.7	3.7	2.41	18.5	13.2		
50	170	172.7	35	36.8	120	111.8	61.2	8.4	7.7	130	139.7	36.6	36.6	119	94	61.2	8.9	6	130	139.7	36.6	36.6	119	94	61.2	8.9	6	130	139.7	36.6	36.6	119	94	61.2	8.9	6		
Size in.	Class 800 WB Lift										Class 800 WB Swing																											
	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.																		
mm	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45				
1/2	3.2	3.1	0.35	0.39	1.9	1.9	0.85	2	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2	2.1	3.2	3.1	0.35	0.39	1.9	1.6	0.85	2	2.1		
15	80	78.7	9	9.9	49	49	21.6	0.9	1	80	78.7	9	9.9	49	40.6	21.6	0.9	1	80	78.7	9	9.9	49	40.6	21.6	0.9	1	80	78.7	9	9.9	49	40.6	21.6	0.9	1		
3/4	3.5	3.6	0.49	0.54	2.2	2.1	1.07	2.6	2.6	3.5	3.6	0.49	0.55	2.2	1.8	1.07	2.6	2.5	3.5	3.6	0.49	0.55	2.2	1.8	1.07	2.6	2.5	3.5	3.6	0.49	0.55	2.2	1.8	1.07	2.6	2.5		
20	90	91.4	12.5	13.9	56	53.3	27.2	1.2	1.2	90	91.4	12.5	13.9	56	45.7	27.2	1.2	1.1	90	91.4	12.5	13.9	56	45.7	27.2	1.2	1.1	90	91.4	12.5	13.9	56	45.7	27.2	1.2	1.1		
1	4.3	4.4	0.68	0.69	2.7	2.7	1.33	4.6	4.3	4.3	4.4	0.68	0.71	2.7	2.3	1.33	4.6	3.9	4.3	4.4	0.68	0.71	2.7	2.3	1.33	4.6	3.9	4.3	4.4	0.68	0.71	2.7	2.3	1.33	4.6	3.9		
25	110	111.8	17.5	17.5	69	68.6	33.8	2.1	2	110	111.8	17.5	18	69	58.4	33.8	2.1	1.8	110	111.8	17.5	18	69	58.4	33.8	2.1	1.8	110	111.8	17.5	18	69	58.4	33.8	2.1	1.8		
1-1/4	5	4.7	0.88	0.9	3.2	3.3	1.67	7.5	11.5	5	4.7	0.88	0.95	3.2	3.3	1.67	7.5	10.6	5	4.7	0.88	0.95	3.2	3.3	1.67	7.5	10.6	5	4.7	0.88	0.95	3.2	3.3	1.67	7.5	10.6		
32	127	119.4	22.5	22.9	80	83.8	42.4	3.4	5.2	127	119.4	22.5	24.1	80	83.8	42.4	3.4	4.8	127	119.4	22.5	24.1	80	83.8	42.4	3.4	4.8	127	119.4	22.5	24.1	80	83.8	42.4	3.4	4.8		
1-1/2	6.1	6	1.14	1.18	3.7	3.7	1.92	11.7	9.9	5	4.7	1.14	1.41	3.7	3.1	1.92	11.7	8.8	5	4.7	1.14	1.41	3.7	3.1	1.92	11.7	8.8	5	4.7	1.14	1.41	3.7	3.1	1.92	11.7	8.8		
40	155	152.4	29	29.9	95	94	48.8	5.3	4.5	127	119.4	29	29	95	78.7	48.8	5.3	4	127	119.4	29	29	95	78.7	48.8	5.3	4	127	119.4	29	29	95	78.7	48.8	5.3	4		
2	6.7	6.8	1.38	1.45	4.1	4.4	2.41	17.2	17	5.1	5.5	1.38	1.44	4.1	3.7	2.41	17.2	13.2	5.1	5.5	1.38	1.44	4.1	3.7	2.41	17.2	13.2	5.1	5.5	1.38	1.44	4.1	3.7	2.41	17.2	13.2		
50	170	172.7	35	36.8	105	111.8	61.2	7.8	7.7	130	139.7	35	36.6	105	94	61.2	7.8	6	130	139.7	35	36.6	105	94	61.2	7.8	6	130	139.7	35	36.6	105	94	61.2	7.8	6		
Size in.	Class 1500 BB Lift										Class 1500 BB Swing																											
	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.	A	B	C	D	Wt.																		
mm	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45	41	45				
1/2	3.5	4.4	0.35	0.39	2.2	3.1	0.85	4.8	7.5	3.5	4.4	0.35	0.55	2.2	3.1	0.85	4.8	7.9	3.5	4.4	0.35	0.55	2.2	3.1	0.85	4.8	7.9	3.5	4.4	0.35	0.55	2.2	3.1	0.85	4.8	7.9		
15	90	111.8	9	9.9	55	78.7	21.6	2.2	3.4	90	111.8	9	13.97	55	78.7	21.6	2.2	3.6	90	111.8	9	13.97	55	78.7	21.6	2.2	3.6	90	111.8	9	13.97	55	78.7	21.6	2.2	3.6		
3/4	4.3	4.4	0.43	0.51	2.8	3.1	1.07	6.8	10.6	4.3	4.4	0.43	0.55	2.8	3.1	1.07	6.8	9.5	4.3	4.4	0.43	0.55	2.8	3.1	1.07	6.8	9.5	4.3	4.4	0.43	0.55	2.8	3.1	1.07	6.8	9.5		
20	110	111.8	11	12.95	70	78.7	27.2	3.1	4.8	110	111.8	11	13.97	70	78.7	27.2	3.1	4.3	110	111.8	11	13.97	70	78.7	27.2	3.1	4.3	110	111.8	11	13.97	70	78.7	27.2	3.1	4.3		
1	4.7	5.1	0.57	0.66	3	3.8	1.33	9.2	15.2	4.7	4.5	0.57	0.71	3	3.8	1.33	9.2	23.5	4.7	4.5	0.57	0.71	3	3.8	1.33	9.2	23.5	4.7	4.5	0.57	0.71	3	3.8	1.33	9.2	23.5		
25	120	129.5	14.5	16.76	77	96.5	33.8	4.2	6.9	120	129.5	14.5	18.03	77	96.5	33.8	4.2	10.7	120	129.5	14.5	18.03	77	96.5	33.8	4.2	10.7	120	129.5	14.5	18.03	77	96.5	33.8	4.2	10.7		
1-1/4	5.1	-	0.74	-	4.1	-	1.67	12.8	-	5.1	-	0.74	-	4.1	-	1.67	12.8	-	-	5.1	-	0.74	-	4.1	-	1.67	12.8	-	-	5.1	-	0.74	-	4.1	-	1.67	12.8	-
32	130	-	19	-	105	-	42.4	5.8	-	130	-	19	-	105	-	42.4	5.8	-	-	130	-	19	-	105	-	42.4	5.8	-	-	130	-	19	-	105	-	42.4	5.8	-
1-1/2	6.7	6.8	1.06	1.18	4.5	4.7	1.92	20.7	19.4	5.1	5.5	1.06	1.14	4.5	4.7	1.92	20.7	27.7	5.1	5.5	1.06	1.14	4.5	4.7	1.92	20.7												

Forged Steel Lift & Swing Checks
Bolted & Welded Cover
Conventional Port
Class 150 thru 1500
Sizes: 1/2" thru 2" (1/4" & 3/8" available upon request)

Design and Manufacturing Standards

Valve Design: ASME B16.34
Flange Dimensions: ASME B16.5
Face-to-Face Dimensions: ASME B16.10
Tested in Accordance with: API 598
Recommended Spare Parts*



Class 150 thru 1500
Bolted & Welded Bonnet - Lift & Swing Check

Size in. mm	Class 150										Wt.	
	A		B (lift)		B (swing)		C		D			
	41	45	41	45	41	45	41	45	41	45		
1/2	4.3		0.35		0.4		2.8	1.6	0.5		6.2	
15	108		9		10		70	40.6	12.7		2.8	3.4
3/4	4.6		0.49		0.4		3.2	1.8	0.75		8.8	
20	118		12.5		10		80	45.7	19.1		4	4.4
1	5		0.68		0.7		3.6	2.3	1		11.7	
25	127		17.5		18		92	58.4	25.4		5.3	8.2
1-1/2	6.5		1.14		1.2		3.9	3.1	1.5		19.8	
40	165		29		29.5		100	78.7	38.1		9	12
2	8		1.37		1.4		5.5	3.7	2		33	
50	203		35		36.5		140	94	50.8		15	14.3

Size in. mm	Class 300										Wt.			
	A (lift)		A (swing)		B (lift)		B (swing)		C			D		
	41	45	41	45	41	45	41	45	41	45		41	45	
1/2	6		6		0.35		0.4		2	1.6	0.5		6.2	8.1
15	152.5		152.5		9		10		50	40.6	12.7		2.8	3.7
3/4	7		7		0.49		0.6		2.2	1.8	0.75		10.3	10.6
20	178		178		12.5		14		55	45.7	19.1		4.7	4.8
1	8		8.5		0.68		0.7		2.8	2.3	1		12.5	19.4
25	203		216		17.5		18		70	58.4	25.4		5.7	8.8
1-1/2	9		9.5		1.14		1.2		3.9	3.1	1.5		26	30.1
40	229		241		29		30		98	78.7	38.1		11.8	13.7
2	10.5		10.5		1.37		1.4		4.3	3.7	2		37.4	39.2
50	267		267		35		36.5		110	94	50.8		17	17.8

Size in. mm	Class 600										Wt.	
	A		B (lift)		B (swing)		C		D			
	41	45	41	45	41	45	41	45	41	45		
1/2	6.5		0.35		0.4		2	1.6	0.5		6.4	8.8
15	165		9		10		50	40.6	12.7		2.9	4
3/4	7.5		0.49		0.6		2.2	1.8	0.75		10.6	12.8
20	191		12.5		14		55	45.7	19.1		4.8	5.8
1	8.5		0.68		0.7		2.8	2.3	1		21.3	20.9
25	216		17.5		18		70	58.4	25.4		9.7	9.5
1-1/2	9.5		1.14		1.2		3.9	3.1	1.5		26.4	34.3
40	241		29		30		98	78.7	38.1		12	15.6
2	11.5		1.37		1.4		4.3	3.7	2		38.1	53.9
50	292		35		36.5		110	94	50.8		17.3	24.5

Size in. mm	Class 1500										Wt.	
	A		B (lift)		B (swing)		C		D			
	41	45	41	45	41	45	41	45	41	45		
1/2	8.5		0.43		0.6		3.5		0.5		16.7	
15	216		11		14		90		12.7		7.6	
3/4	9		0.57		0.7		4.1		0.69		23.8	
20	229		14.5		18		105		17.5		10.8	
1	10		0.74		0.9		4.7		0.87		31.9	
25	254		19		24		120		22.1		14.5	
1-1/2	12		1.22		1.4		6.3		1.37		68.2	
40	305		31		36		160		34.8		31	
2	14.5		1.48		1.6		6.7		1.87		94.6	
50	368		37.5		40		170		47.5		43	

Typical Bill of Materials
(See page 12 for available materials.)

Component	Material	ASTM Spec
Body	Carbon Steel	A105N
Seat Ring	Stainless Steel	A479-410
Piston	Stainless Steel	A479-410
Rivet	Brass	Commercial
Spring	Stainless Steel	A479-316
Nameplate	Aluminum	Commercial
* Gasket	Stainless Steel 316 W/Graphite Spiral Wound	
Cap	Carbon Steel	A105N
Cap Bolt	Alloy Steel	A193-B7

Note: Dimensions: Inches/Millimeters - Weights: Pounds/Kilograms. Larger sizes available on request. Dimensions are subject to change without notice.