

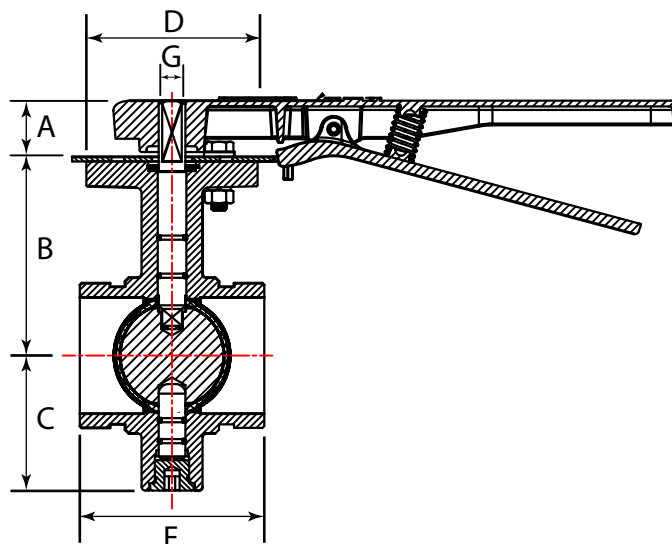
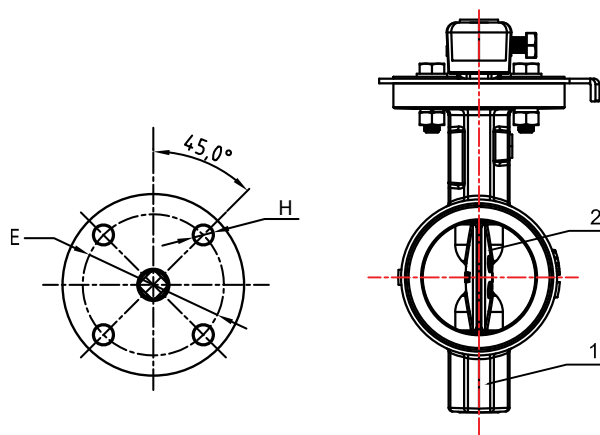
Grooved End Butterfly Valve - Lever Handle & Gear Operator



Fig. 67BFVG
Grooved End Butterfly Valve

- 300 psi working pressure
- EPDM 200° F maximum working temperature
- NBR 180° F maximum working temperature
- 10-Position lever handle or gear operator
- Grease fitting on gear operator
- Upper and lower shafts - Stainless Steel Grade 420 ASTM A-276
- O-Rings - EPDM or NBR
- Handwheel - Ductile Iron
- Lever Handle - ASTM A-536 Ductile Iron
- Lever Handle Lengths - 2" - 6" Valves = 10", 8" Valves = 13"
- Suitable for "Dead End" Service

No.	Part	Material Specification
1	Body	ASTM A-536 Ductile Iron, Epoxy Coated
2	Disc	ASTM A-536 Ductile Iron with either EPDM or NBR Coating



Pipe Size	Part Number				A	B	C	D	E	F	G	H	Hand- wheel	Weight w/Lever	Weight w/Gear
	EPDM		NBR												
	Lever	Gear	Lever	Gear											
in / mm					in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	in / mm	lb / kg	lb / kg
2 50	67BFVGE020	67BFVGE020	67BFVGN020	67BFVNG020	1.26 32.0	4.84 123.0	2.17 55.0	3.54 90.0	2.76 70.0	3.19 81.0	0.43 11.0	0.39 10.0	5.75 146.0	6.7 3.0	11.95 5.4
2-1/2 65	67BFVGE024	67BFVGE024	67BFVGN024	67BFVNG024	1.26 32.0	5.00 127.0	2.64 67.0	3.54 90.0	2.76 70.0	3.81 96.8	0.43 11.0	0.39 10.0	5.75 146.0	7.5 3.4	12.75 5.8
3 80	67BFVGE030	67BFVGE030	67BFVGN030	67BFVNG030	1.26 32.0	4.57 116.0	3.07 78.0	3.54 90.0	2.76 70.0	3.81 96.8	0.43 11.0	0.39 10.0	5.75 146.0	8.7 3.9	13.8 6.3
4 100	67BFVGE040	67BFVGE040	67BFVGN040	67BFVNG040	1.26 32.0	5.59 142.0	3.58 91.0	3.54 90.0	2.76 70.0	4.56 115.8	0.55 14.0	0.39 10.0	5.75 146.0	12.2 5.5	16.35 7.4
5 125	67BFVGE050	67BFVGE050	67BFVGN050	67BFVNG050	1.26 32.0	5.87 149.0	4.69 119.0	3.54 90.0	2.76 70.0	5.81 147.6	0.55 14.0	0.39 10.0	5.75 146.0	17.3 7.9	24.0 10.9
6 150	67BFVGE060	67BFVGE060	67BFVGN060	67BFVNG060	1.26 32.0	6.61 168.0	5.31 135.0	3.54 90.0	2.76 70.0	5.81 147.6	0.67 17.0	0.39 10.0	5.75 146.0	27.1 12.3	41.0 18.4
8 200	67BFVGE080	67BFVGE080	67BFVGN080	67BFVNG080	1.57 40.0	7.95 202.0	6.30 160.0	4.92 125.0	4.01 102.0	5.25 133.4	0.67 17.0	0.47 12.0	11.50 292.0	32.5 14.6	46.5 20.9
10 250	-	67BFVGE100	-	67BFVNG100	1.57 40.0	9.00 228.6	7.80 198.0	4.92 125.0	4.01 102.0	6.25 158.8	0.87 22.0	0.47 12.0	11.50 292.0	- -	93.0 41.9
12 300	-	67BFVGE120	-	67BFVNG120	1.57 40.0	10.50 266.7	9.06 230.0	4.92 125.0	4.01 102.0	6.50 165.1	0.87 22.0	0.47 12.0	11.50 292.0	- -	111.0 49.9



Fig. 67CV-A
Grooved Swing Check Valve

- Designed for use in wet pipe systems
- For vertical* or horizontal installation
- 300 psi working pressure
- EPDM or NBR coated disc; brass seat
- Groove dimensions to AWWA C-606
- Fusion bonded epoxy coated interior & exterior
- Color – Black

*Upward flow only.



Fig. 67CVR-A
UL/FM Grooved Riser Check Valve

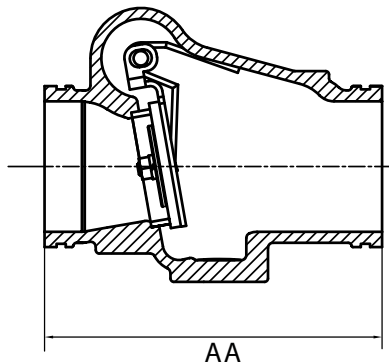
- Designed for use in wet pipe fire sprinkler systems
- Factory NPT tapped and plugged for drain and gauge connections
- Gauge connections: 1/2" NPT
- For vertical or horizontal installation
- 300 psi working pressure
- EPDM coated disc; bronze seat
- Groove dimensions to AWWA C-606
- Fusion bonded epoxy coated interior & exterior
- Color – Red



Fig. 67CVRKIT
UL/FM Grooved Riser Check Valve Trim Kit

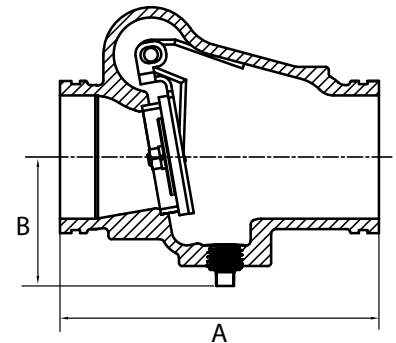
- Designed for use with Fig. 67CVR-A

Size IN	Part Number	Weight lb
2-1/2	67CVRKIT024030	5.25
3	67CVRKIT024030	5.25
4	67CVRKIT040	8.00
6	67CVRKIT060080	8.05
8	67CVRKIT060080	8.05



Part	Material	Material Specification
Body	Ductile Iron	ASTM A-536 Grade 65-45-12
Body Seat CV	Stainless Steel	AISI 316
Body Seat CVR	Bronze	ASTM B62
Disc	Stainless or Ductile Iron	ASTM A-536 Grade 65-45-12
Disc Coating	Vulcanized Rubber	EPDM or NBR**
Shaft	Stainless Steel	AISI 316
Spring	Stainless Steel	AISI 304
Shaft Plug	Stainless Steel	AISI 304
Gasket	Rubber	EPDM or NBR**

**NBR available for Fig. 67CV-A only.



Pipe Size in / mm	Part Number			AA in / mm	A in / mm	B in / mm	Weight lb / kg
	Fig. 67CVE-A - EPDM	Fig. 67CVN-A - NBR	Fig. 67CVR-A - EPDM				
2 50	67CVE3020A	67CVN3020A	-	6.73 171.0	7.50 190.0	2.50 63.0	5.9 2.7
2-1/2 65	67CVE3024A	67CVN3024A	67CVRE3024A	7.25 184.0	7.25 184.0	3.50 89.0	8.1 3.7
3 80	67CVE3030A	67CVN3030A	67CVRE3030A	7.75 197.0	7.75 197.0	3.75 95.0	10.6 4.8
4 100	67CVE3040A	67CVN3040A	67CVRE3040A	8.11 206.0	8.11 206.0	4.25 108.0	17.4 7.9
5 125	67CVE3050A	67CVN3050A	-	9.76 248.0	10.50 267.0	4.50 114.0	32.0 14.5
6 150	67CVE3060A	67CVN3060A	67CVRE3060A	11.50 292.0	12.75 324.0	5.25 133.0	36.5 16.6
8 200	67CVE3080A	67CVN3080A	67CVRE3080A	14.00 355.0	14.60 371.0	6.25 160.0	60.4 27.4
10 250	67CVE3100A	67CVN3100A	-	18.00 457.0	17.00 432.0	7.40 188.0	134.0 60.7
12 300	67CVE3120A	67CVN3120A	-	21.00 533.0	19.50 495.0	8.10 205.0	194.0 88.0

Fire Protection Grooved End Butterfly Valve



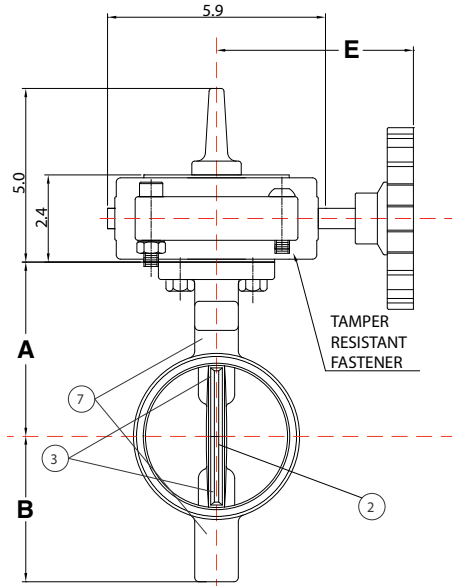
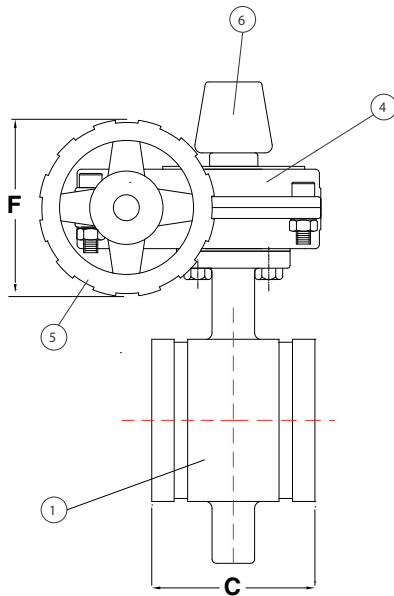
Fig. 67BFVGET

Grooved End Butterfly Valve with Indicator

- 300 psi working pressure
- UL Listed
- FM Approved
- California State Fire Marshall Approval No. 7770-2252:0500
- Factory installed replaceable double tamper switch
- Approved for indoor and outdoor use
- Grooved ends
- Gear operated



No.	Part	Materials Specification
1	Body	ASTM A-536 DI, Epoxy Coated
2	Disc	ASTM A-536 DI, EPDM Encapsulated
3	Upper and Lower Stems	AISI Type 431 Stainless Steel
4	Gear Housing	ASTM A-536 Ductile Iron, Zinc Electroplated
5	Hand Wheel	ASTM A-536 Ductile Iron
6	Flag Indicator	ASTM A-536 Ductile Iron
7	O-Rings (All)	EPDM



Pipe Size in / mm	Part Number	A in / mm	B in / mm	C in / mm	E in / mm	F in / mm	Weight lb / kg
2-1/2 65	67BFVGET024	4.02 102	2.80 71	3.82 97	5.28 134	5.00 127.0	19.0 8.63
3 80	67BFVGET030	4.29 109	3.19 81	3.82 97	5.28 134	5.00 127.0	20.4 9.25
4 100	67BFVGET040	5.04 128	3.74 95	4.57 116	5.28 134	5.00 127.0	23.6 10.71
6 150	67BFVGET060	6.02 153	5.24 133	5.83 148	5.28 134	8.70 221.0	42.4 19.28
8 200	67BFVGET080	7.24 184	6.46 164	5.24 133	8.27 210	8.70 221.0	52.6 23.9

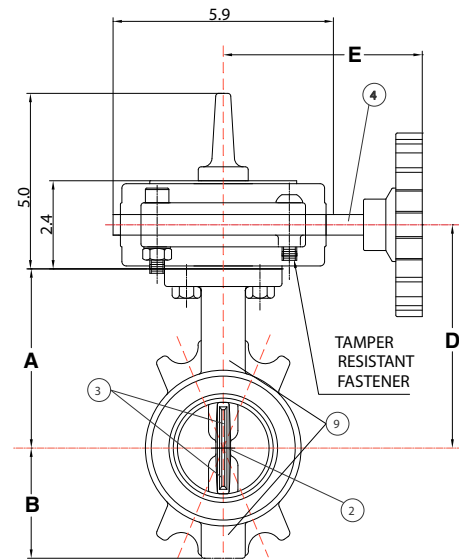
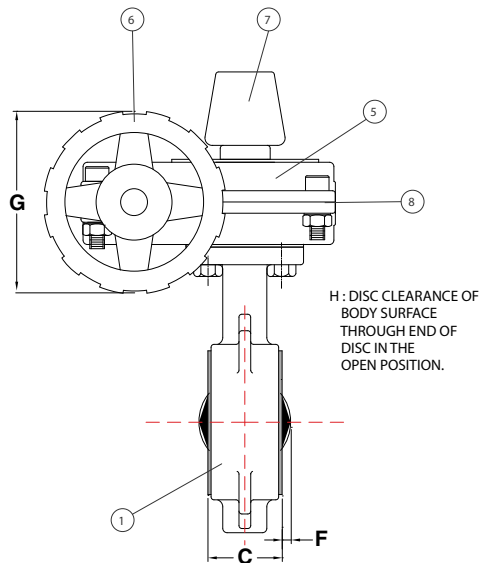
Fig. 67BFVWET

Wafer End Butterfly Valve with Indicator Flag

- 300 psi working pressure
- UL/ULC Listed
- FM Approved
- California State Fire Marshall Approval No. 7770-2252:0500
- Factory installed replaceable double tamper switch
- Approved for indoor and outdoor use
- Install between (2) Class 125/150 flanges
- Gear operated



No.	Part	Material Specification
1	Body	ASTM A-536 DI, Nylon-11 Coated
2	Disc	ASTM A-536 DI, EPDM Encapsulated
3	Upper & Lower Stems	AISI Type 420 Stainless Steel
4	Input Shaft	AISI Type 410 Stainless Steel
5	Gear Housing	ASTM A-536 Ductile Iron
6	Handwheel	ASTM A-536 Ductile Iron
7	Flag Indicator	ASTM A-536 Ductile Iron
8	Gear Housing Gasket	EPDM
9	O-Rings (All)	EPDM



Pipe Size in / mm	Part Number	A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm	Weight lb / kg
2-1/2 65	67BFVWET024	5.35 136.0	3.43 87.0	1.81 46.0	6.54 166.0	5.31 135.0	0.32 8.2	5.00 128	22.0 10.0
3 80	67BFVWET030	5.63 143.0	3.66 93.0	1.81 46.0	6.81 173.0	5.31 135.0	0.57 14.5	5.00 128	23.0 10.4
4 100	67BFVWET040	6.14 156.0	4.29 109.0	2.05 52.0	7.32 186.0	5.31 135.0	0.89 22.7	5.00 128	27.0 12.2
6 150	67BFVWET060	7.40 188.0	5.67 144.0	2.20 56.0	8.58 218.0	8.66 193.0	1.79 45.4	8.70 220	33.0 15.0
8 200	67BFVWET080	8.74 222.0	6.54 166.0	2.28 58.0	9.92 252.0	8.66 193.0	2.72 69.1	8.70 220	45.0 20.3

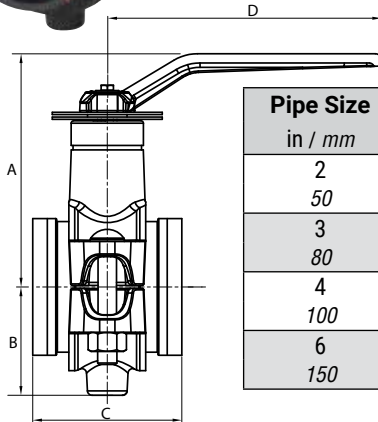
Grooved Butterfly Valves - Oil Patch



Fig. 67LPN
"Low Profile"
Grooved Butterfly Valve

- Designed for use in oil, gas and mining services
- Ductile Iron housing
- Carbon Steel body, NBR Elastomer Lined
- 316 Stainless Steel disc
- 2-position cast handle with padlock feature
- 200 psi working pressure
- Color - Black

Part	Material	Material Specification
Housing	Ductile Iron	ASTM A-536, 65-45-12
Body	Carbon Steel	NBR Elastomer Lined
Seat	NBR	
Disc	Stainless Steel	AISI 316
Stem	Stainless Steel	AISI 416
O-Ring	NBR	
Bolt/Nuts	Carbon Steel	Zinc Plated
Handle	Ductile Iron	ASTM A-536, 65-45-12



Pipe Size in / mm	Part Number	A in / mm	B in / mm	C in / mm	D in / mm	Weight lb / kg
2 50	67LPN2020	4.70 120.0	1.90 48.0	3.20 81.0	5.50 140.0	3.80 1.70
3 80	67LPN2030	5.95 151.0	2.75 70.0	3.85 97.0	7.00 178.0	7.45 3.40
4 100	67LPN2040	7.10 180.0	3.50 89.0	4.50 116.0	9.00 229.0	12.50 5.87
6 150	67LPN2060	9.00 230.0	4.50 114.0	5.80 148.0	12.00 305.0	31.10 14.15

Fig. 67BFVG
Grooved End Butterfly Valve

- 300 psi working pressure
- NBR 180° F maximum working temperature
- 10-Position lever handle or gear operator
- Grease fitting on gear operator
- Upper and lower shafts - Stainless Steel Grade 420 ASTM A-276
- O-Rings - NBR
- Body - ASTM A-536 Ductile Iron, Epoxy Coated
- Disc - ASTM A-536 Ductile Iron with NBR Coating
- Handwheel - Ductile Iron
- Lever Handle - ASTM A-536 Ductile Iron
- Lever Handle Lengths - 2" - 6" Valves = 10", 8" Valves = 13"
- Suitable for "Dead End" Service

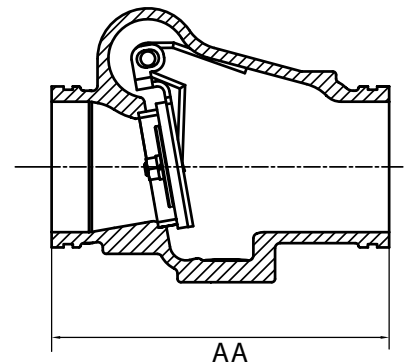
See page 147 for drawings



Pipe Size in / mm	Part Number NBR		A in / mm	B in / mm	C in / mm	D in / mm	E in / mm	F in / mm	G in / mm	H in / mm	Hand-wheel in / mm	Weight w/Lever lb / kg	Weight w/Gear lb / kg
	Lever	Gear											
2 50	67BFVGNL020	67BFVNGG020	1.26 32.0	4.84 123.0	2.17 55.0	3.54 90.0	2.76 70.0	3.19 81.0	0.43 11.0	0.39 10.0	5.75 146.0	6.7 3.0	11.95 5.4
2-1/2 65	67BFVGNL024	67BFVNGG024	1.26 32.0	5.00 127.0	2.64 67.0	3.54 90.0	2.76 70.0	3.81 96.8	0.43 11.0	0.39 10.0	5.75 146.0	7.5 3.4	12.75 5.8
3 80	67BFVGNL030	67BFVNGG030	1.26 32.0	4.57 116.0	3.07 78.0	3.54 90.0	2.76 70.0	3.81 96.8	0.43 11.0	0.39 10.0	5.75 146.0	8.7 3.9	13.8 6.3
4 100	67BFVGNL040	67BFVNGG040	1.26 32.0	5.59 142.0	3.58 91.0	3.54 90.0	2.76 70.0	4.56 115.8	0.55 14.0	0.39 10.0	5.75 146.0	12.2 5.5	16.35 7.4
5 125	67BFVGNL050	67BFVNGG050	1.26 32.0	5.87 149.0	4.69 119.0	3.54 90.0	2.76 70.0	5.81 147.6	0.55 14.0	0.39 10.0	5.75 146.0	17.3 7.9	24.0 10.9
6 150	67BFVGNL060	67BFVNGG060	1.26 32.0	6.61 168.0	5.31 135.0	3.54 90.0	2.76 70.0	5.81 147.6	0.67 17.0	0.39 10.0	5.75 146.0	27.1 12.3	41.0 18.4
8 200	67BFVGNL080	67BFVNGG080	1.57 40.0	7.95 202.0	6.30 160.0	4.92 125.0	4.01 102.0	5.25 133.4	0.67 17.0	0.47 12.0	11.50 292.0	32.5 14.6	46.5 20.9
10 250	-	67BFVNGG100	1.57 40.0	9.00 228.6	7.80 198.0	4.92 125.0	4.01 102.0	6.25 158.8	0.87 22.0	0.47 12.0	11.50 292.0	-	93.0 41.9
12 300	-	67BFVNGG120	1.57 40.0	10.50 266.7	9.06 230.0	4.92 125.0	4.01 102.0	6.50 165.1	0.87 22.0	0.47 12.0	11.50 292.0	-	111.0 49.9

Fig. 67CV-A
Grooved Swing Check Valve

- Designed for use in wet pipe systems
- For vertical* or horizontal installation
- 300 psi working pressure
- NBR coated disc; brass seat
- Groove dimensions to AWWA C-606
- Fusion bonded epoxy coated interior & exterior
- Color - Black



Pipe Size in / mm	Part Number Fig. 67CVN-A - NBR	AA in / mm	B in / mm	Weight lb / kg
2 50	67CVN3020A	6.73 171.0	2.50 63.0	5.9 2.7
2-1/2 65	67CVN3024A	7.25 184.0	3.50 89.0	8.1 3.7
3 80	67CVN3030A	7.75 197.0	3.75 95.0	10.6 4.8
4 100	67CVN3040A	8.11 206.0	4.25 108.0	17.4 7.9
5 125	67CVN3050A	9.76 248.0	4.50 114.0	32.0 14.5
6 150	67CVN3060A	11.50 292.0	5.25 133.0	36.5 16.6
8 200	67CVN3080A	14.00 355.0	6.25 160.0	60.4 27.4
10 250	67CVN3100A	18.00 457.0	7.40 188.0	134.0 60.7
12 300	67CVN3120A	21.00 533.0	8.10 205.0	194.0 88.0

Part	Material	Material Specification
Body	Ductile Iron	ASTM A-536 Grade 65-45-12
Body Seat	Brass	ASTM B62 C83600
Disc	Stainless or Ductile Iron	ASTM A-536 Grade 65-45-12
Disc Coating	Vulcanized Rubber	NBR
Shaft	Stainless Steel	AISI 316
Spring	Stainless Steel	AISI 304
Shaft Plug	Stainless Steel	AISI 304
Gasket	Rubber	NBR

Fig. 67CVO
Grooved Swing Check Valve with Bonnet

- Designed for use in oil, gas and mining services
- For horizontal installation only
- Removable bonnet for inline access and service
- 300 psi working pressure
- 316 Stainless Steel disc
- Color - Black

Part	Material	Material Specification
Body	Ductile Iron	ASTM A-536
Disc	Stainless Steel	AISI 316
Bolts	Carbon Steel	ASTM A-183
Gasket	Rubber	NBR

Pipe Size in / mm	Part Number	A in / mm	B in / mm	Weight lb / kg
2 50	67CVON3020	9.00 229.0	5.12 130.0	11.00 5.00
3 80	67CVON3030	10.75 273.0	6.00 152.0	19.20 8.73
4 100	67CVON3040	12.00 305.0	6.88 175.0	33.50 15.20
6 152	67CVON3060	16.15 410	8.86 225	52.6 23.9

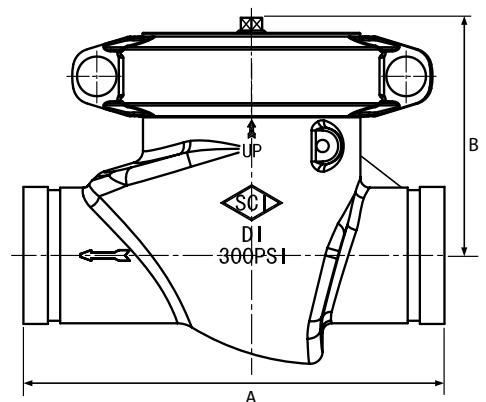
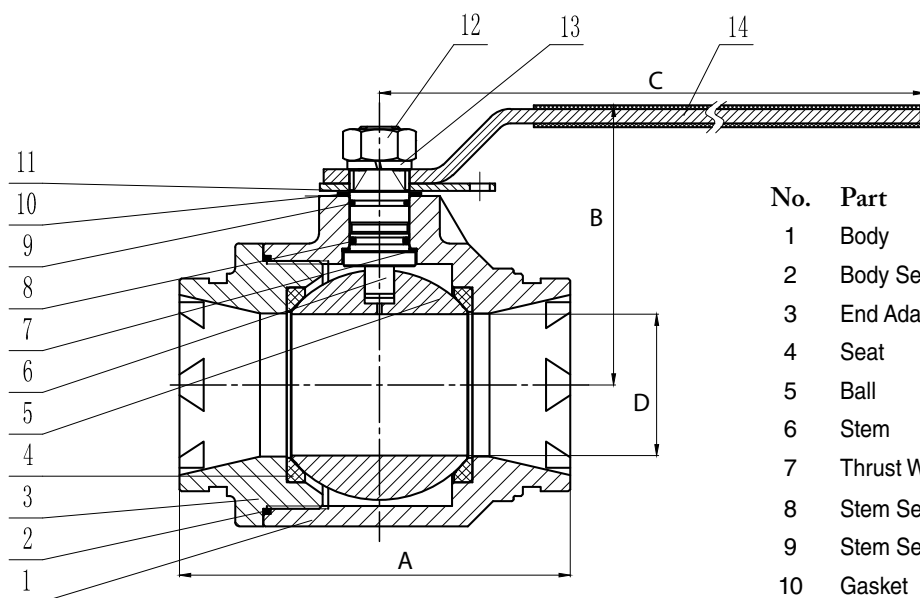




Fig. 67GBV
Grooved Ball Valve

- Ductile Iron body, standard port
- NACE Compliant
- 316 Stainless Steel ball and stem
- PTFE body seat
- Viton® B Stem seals
- Lever handle with padlock feature
- Grooved end dimensions to AWWA C-606
- 2" - 4": 1,000 psi working pressure
- 6": 1,500 psi working pressure
- Color - Black

Not for use in potable water systems



No.	Part	Materials Specification
1	Body	ASTM A395 60-40-18
2	Body Seal	Viton B
3	End Adapter	ASTM A395 60-40-18
4	Seat	PTFE + 15% GF
5	Ball	ASTM A182 F316
6	Stem	ASTM A176 316
7	Thrust Washer	PTFE
8	Stem Seal	Viton B
9	Stem Seal	Viton B
10	Gasket	PTFE
11	Stop Plate	Carbon Steel + Ni
12	Nut	Carbon Steel + Zn
13	Spring Washer	Spring Steel
14	Handle	Carbon Steel

Pipe Size in / mm	Part Number	A in / mm	B in / mm	C in / mm	D in / mm	Weight lb / kg
2 50	67GBV1020	5.51 140.0	4.29 109.0	8.54 216.9	1.50 38.1	9.5 4.32
3 80	67GBV1030	6.73 170.9	5.57 141.5	10.00 254.0	2.56 65.0	22.2 10.09
4 100	67GBV1040	8.27 210.1	5.92 150.4	13.50 342.9	3.00 76.2	35.7 16.23
6 150	67GBV1060	10.12 257.0	10.13 257.3	39.37 1000.0	5.00 127.0	97.5 44.32