

# Victaulic® Vic-300 MasterSeal™ Butterfly Valve

## Series 761



10-Position Handle



Lever Lock Handle



Gear Operator

### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 2 – 12"/DN50 – DN300

#### Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 300 psi/2100 kPa/21 bar
- Full working pressure for bi-directional, dead end services

#### Operating Temperature

- Dependent on seat selection from section 3.0

#### Application

- For use in carbon steel, ductile iron, and plastic piping systems.

#### NOTE

- Not recommended for use in stainless steel piping or copper tubing systems. Refer to [publication 17.40](#): Victaulic Vic-300 MasterSeal™ Stainless Steel Butterfly Valve – Series 461 or [publication 22.14](#): Victaulic Copper Connection Butterfly Valve – Series 608N for more information.

#### Actuation Options

- Standard ISO 5211 mounting flange (2 – 12"/DN50 – DN300)
- ISO 5211 mounting flange with ISO 5211 diagonal square head drive (2 – 12"/DN50 – DN300)
- 10-position handle (2 – 6"/DN50 – DN150)
  - Infinitely variable service with memory stop; Padlockable
- Lever lock handle (8 – 12"/DN200 – DN300)
  - Infinitely variable service with memory stop; Padlockable
- Gear operator (2 – 12"/DN50 – DN300)
- Additional 2"/50 mm neck extension available when more than 2"/50 mm of insulation is needed (2 – 8"/DN50 – DN200)
- 4 ½"/120 mm-long handle wheel input shaft extension (2 – 8"/DN50 – DN200)
- 3 ½"/90 mm-long handle wheel input shaft extension (10 – 12"/DN250 – DN300)

#### NOTES

- A padlockable valve refers to those valves which can be padlocked to lockout equipment for preventing inadvertent valve operation. When used in conjunction with an appropriate lockout/tagout system, multiple padlocks may be used. The valve may be padlocked either fully open or fully closed.
- A tamper-resistant option is also available, which is meant to deter theft, vandalism or other malicious activity. The handles and associated components are assembled with tamper-resistant fasteners which are designed for one-time assembly. Attempts to defeat the padlock by partial disassembly of the valve will likely result in evidence of such activity. The valve may be padlocked either fully open or fully closed.
- Handwheel input shaft extensions are not for use with chainwheels.

**ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.**

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

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## 2.0 CERTIFICATION/LISTINGS

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The Series 761 is UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C potable water service and ANSI/NSF 372.

The Series 761 in sizes 76.1 mm, 88.9 mm, 114.3 mm, 165.1 mm, 168.3 mm, 219.1 mm and 273.0 mm have CCC approval. Valve construction and performance meet or exceed MSS-SP-67 requirements.

Compliant with Closure/Seat Leakage Rate A per EN 12266-1, EN 1074-1, EN 1074-2 and ISO 5208.

### NOTE

- See [publication 02.06](#): Victaulic Approvals for Potable Water Products - ANSI/NSF 61 and ANSI/NSF 372 for more details.

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## 3.0 SPECIFICATIONS – MATERIAL

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### Series 761 Vic-300 MasterSeal™ Butterfly Valve

**Body:** Ductile iron conforming to ASTM A536, Grade 65-45-12.

**End Face, 2 – 6"/DN50 – DN150:** Ductile iron conforming to ASTM A536, Grade 65-45-12.

**Seal Retainer, 8 – 12"/DN200 – DN300:** Ductile iron conforming to ASTM A536, Grade 65-45-12.

**Coating:** Black alkyd enamel.

### Disc: (specify choice)

Standard: Ductile iron conforming to ASTM A536, Grade 65-45-12, with electroless nickel coating conforming to ASTM B733.

Optional: Stainless steel, conforming to ASTM A351, Grade CF8M.

Optional: 2 – 6"/DN50 – DN150 only – Aluminum bronze, Grade C95500.

### Seat: (specify choice)

#### Victaulic EPDM

EPDM (Green color code). Temperature range –30°F to +230°F/–34°C to +110°C. NOT RECOMMENDED FOR PETROLEUM SERVICES OR STEAM SERVICES.

#### Victaulic Nitrile

Nitrile (Orange color code). Temperature range +10°F to +150°F/–12°C to +65°C. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/60°C. NOT RECOMMENDED FOR HOT WATER SERVICES OR STEAM SERVICES.

#### Victaulic Fluoroelastomer

Fluoroelastomer (Blue color code). Temperature range +20°F to +300°F/–7°C to +149°C. NOT RECOMMENDED FOR HOT WATER SERVICES OR STEAM SERVICES

### Stem:

Standard: 416 stainless steel conforming to ASTM A582.

Optional:<sup>1</sup> 17-4PH stainless steel conforming to ASTM A564.

### Stem Seal Cartridge:

Standard: C36000 brass.

Optional:<sup>1</sup> 17-4PH stainless steel conforming to ASTM A564.

<sup>1</sup> Contact Victaulic for available material combination options.

### 3.0 SPECIFICATIONS – MATERIAL (CONTINUED)

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**Bearings:** Fiberglass and 316 stainless steel with TFE lining.

**Stem Seal:** Furnished in same material as seat.

**Stem Retaining Ring:** Carbon steel.

**10 Position Handle:**

For sizes 2 – 6"/DN50 - DN150: Zinc-plated carbon steel handle with zinc-plated carbon steel latch plate and zinc-plated carbon steel fasteners, infinitely variable, padlockable and includes memory stop. Optionally available with tamper-resistant hardware.

**Lever Lock Handle:**

For size 8"/DN200: Painted ductile iron conforming to ASTM A536, Grade 65-45-12, with carbon steel latch plate and zinc-plated carbon steel fasteners.

For size 8"/DN200: Infinitely variable, padlockable and includes memory stop. Optionally available with tamper-resistant hardware.

For sizes 10 – 12"/DN250 - DN300: Painted ductile iron conforming to ASTM A536, Grade 65-45-12, with carbon steel handle extension and zinc-plated carbon steel fasteners.

**Gear Operator (with options below):**

Handwheel with memory stop.

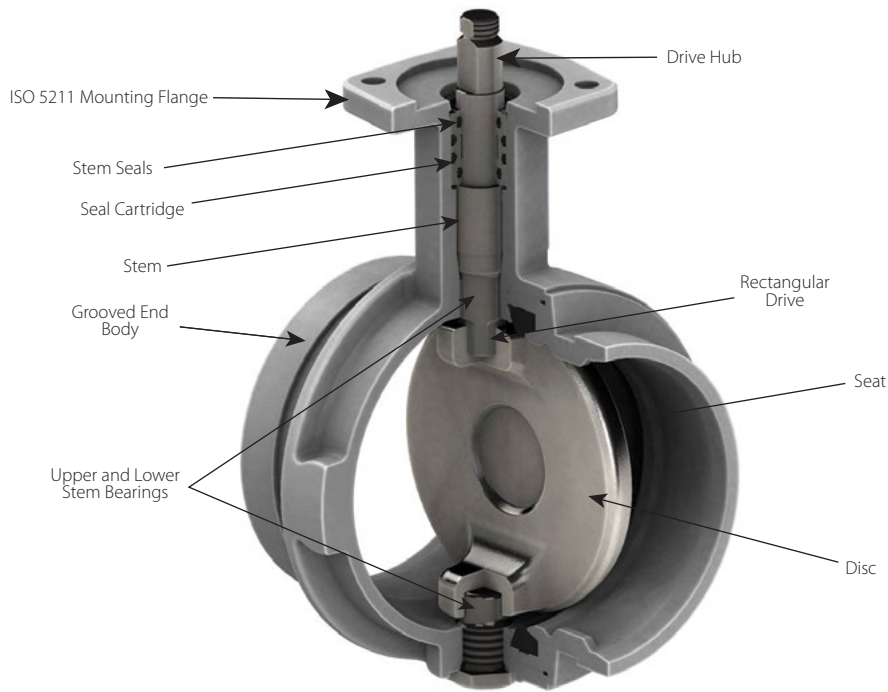
Handwheel with chainwheel.

2" square nut.

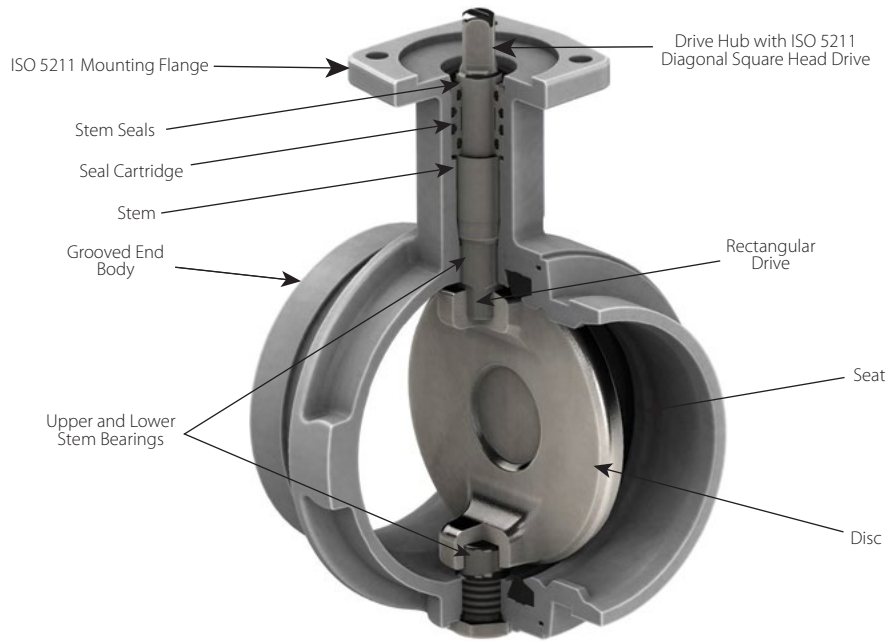
Thermal barrier.

### 3.0 SPECIFICATIONS – MATERIAL (CONTINUED)

#### Series 761 Vic-300 MasterSeal™ Butterfly Valve



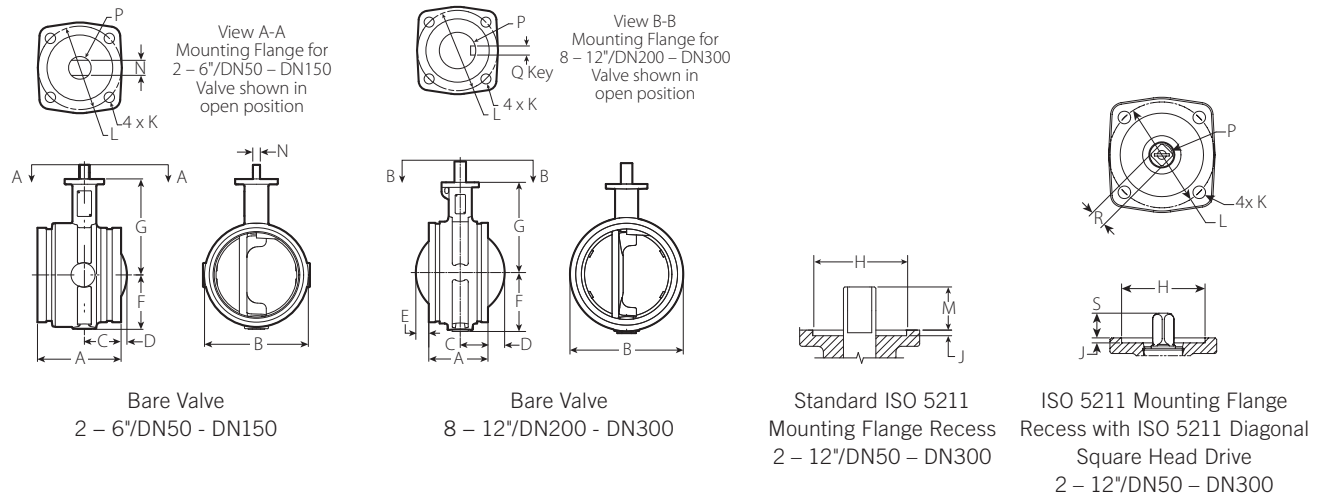
Standard ISO 5211 Mounting Flange



With ISO 5211 Diagonal Square Head Drive

## 4.0 DIMENSIONS

### Series 761 Vic-300 MasterSeal™ Butterfly Valve – Bare Valve



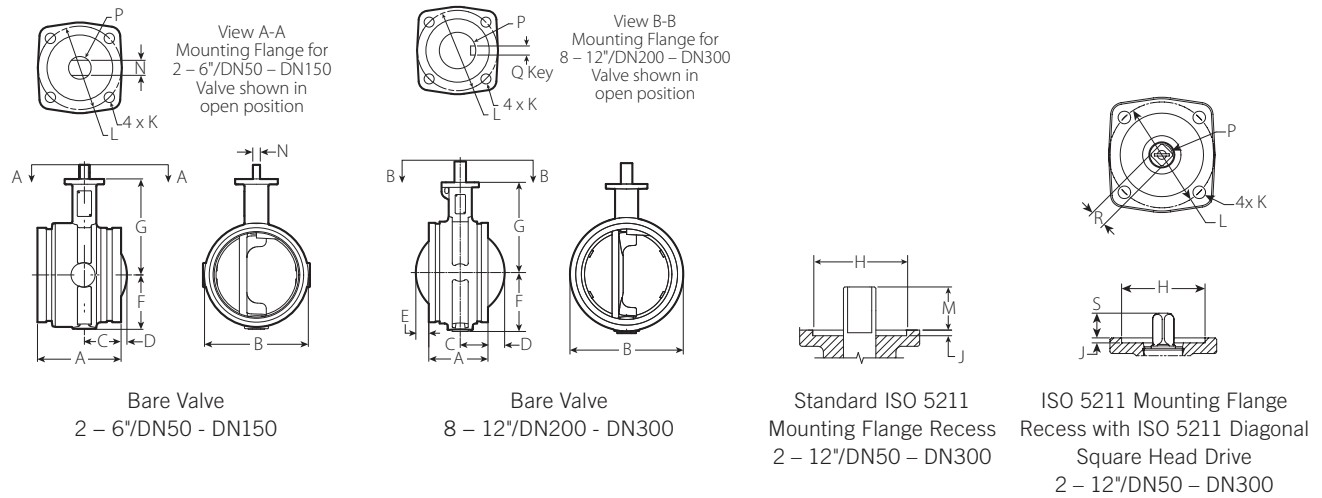
Size		Dimensions									Weight	
Nominal	Actual Outside Diameter	A End to End	B	C	D	E	F	G	H	Q-Key	Approx. (Each)	ISO 5211 Flange Designation
inches DN	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg	
2	2.375 60.3	3.21 81.5	3.25 82.6	1.44 36.6	- -	- -	1.81 46.0	3.81 96.8	2.17 55.2	- -	3.5 1.6	F07
2½	2.875 73.0	3.77 95.8	4.00 101.6	1.77 45.0	- -	- -	2.10 53.3	4.25 108.0	2.17 55.2	- -	5.0 2.3	F07
DN65	3.000 76.1	3.77 95.8	4.00 101.6	1.77 45.0	- -	- -	2.10 53.3	4.25 108.0	2.17 55.2	- -	5.0 2.3	F07
3	3.500 88.9	3.77 95.8	4.50 114.3	1.77 45.0	- -	- -	2.35 59.7	4.50 114.3	2.17 55.2	- -	6.0 2.7	F07
	4.250 <sup>2</sup> 108.0	4.63 117.6	5.50 139.7	2.20 55.8	- -	- -	2.88 73.2	5.25 133.4	2.17 55.2	- -	9.3 4.2	F07
4	4.500 114.3	4.63 117.6	5.50 139.7	2.18 55.4	- -	- -	2.88 73.2	5.25 133.4	2.17 55.2	- -	9.3 4.2	F07
	5.250 <sup>2</sup> 133.0	5.88 149.4	6.30 160.0	2.58 65.5	- -	- -	3.34 84.8	6.25 158.8	2.17 55.2	- -	16.8 7.6	F07
DN125	5.500 139.7	5.88 149.4	6.30 160.0	2.58 65.5	- -	- -	3.34 84.8	6.25 158.8	2.17 55.2	- -	16.8 7.6	F07
5	5.563 141.3	5.88 149.4	6.30 160.0	2.58 65.5	- -	- -	3.34 84.8	6.25 158.8	2.17 55.2	- -	16.8 7.6	F07
	6.250 <sup>2</sup> 159.0	5.88 149.4	7.30 185.4	2.58 65.5	0.42 10.6	- -	3.83 97.3	6.75 171.5	2.17 55.2	- -	20.0 9.1	F07
	6.500 165.1	5.88 149.4	7.30 185.4	2.58 65.5	0.42 10.6	- -	3.83 97.3	6.75 171.5	2.17 55.2	- -	20.0 9.1	F07
6	6.625 168.3	5.88 149.4	7.30 185.4	2.58 65.5	0.42 10.6	- -	3.83 97.3	6.75 171.5	2.17 55.2	- -	20.0 9.1	F07
200A <sup>3</sup>	216.3	5.38 136.7	10.00 254.0	2.38 60.5	1.50 38.1	0.88 22.4	5.00 127.0	8.00 203.2	2.13 54.1	0.188 x 0.88 4.78 x 22.35	34.0 15.4	F07
8	8.625 219.1	5.33 135.4	10.00 254.0	2.33 59.2	1.47 37.4	0.80 20.3	5.00 127.0	8.00 203.2	2.17 55.2	0.188 x 0.88 4.78 x 22.35	34.3 15.6	F07
250A <sup>3</sup>	267.4	7.88 200.2	12.25 311.2	3.00 76.2	1.88 47.8	0.00 0.0	6.38 162.1	9.75 247.7	2.75 69.9	0.312 x 1.88 7.92 x 47.75	76.1 34.5	F10
10	10.750 273.0	6.40 162.6	12.25 311.2	3.00 76.2	1.81 45.9	1.41 35.8	6.13 155.7	9.75 247.7	2.76 70.1	0.312 x 1.88 7.92 x 47.75	72.0 32.7	F10
300A <sup>3</sup>	318.5	7.88 200.2	14.25 362.0	3.00 76.2	2.75 69.9	0.88 22.4	7.38 187.5	10.75 273.1	2.75 69.9	0.312 x 1.88 7.92 x 47.75	93.6 42.5	F10
12	12.750 323.9	6.50 165.1	14.25 362.0	3.00 76.2	2.80 71.0	2.30 58.4	7.13 181.1	10.75 273.1	2.76 70.1	0.312 x 1.88 7.92 x 47.75	88.0 39.9	F10

<sup>2</sup> Contact Victaulic for availability.

<sup>3</sup> Japanese Industrial Standard (JIS) size.

## 4.0 DIMENSIONS (CONTINUED)

### Series 761 Vic-300 MasterSeal™ Butterfly Valve – Bare Valve



Size		Dimensions									Weight	
Nominal	Actual Outside Diameter	J	K	L	M	N	P	R <sup>4</sup>	S	Q-Key	Approx. (Each)	ISO 5211 Flange Designation
inches DN	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg	
2 DN50	2.375 60.3	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.32 8.0	0.43 11.0	0.35 9.0	0.48 12.2	–	3.5 1.6	F07
2½	2.875 73.0	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.32 8.0	0.43 11.0	0.35 9.0	0.48 12.2	–	5.0 2.3	F07
DN65	3.000 76.1	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.32 8.0	0.43 11.0	0.35 9.0	0.48 12.2	–	5.0 2.3	F07
3 DN80	3.500 88.9	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.32 8.0	0.43 11.0	0.35 9.0	0.48 12.2	–	6.0 2.7	F07
	4.250 <sup>2</sup> 108.0	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.43 11.0	0.59 15.0	0.43 11.0	0.61 15.5	–	9.3 4.2	F07
4 DN100	4.500 114.3	0.13 3.3	0.34 8.6	2.756 70.0	0.94 23.9	0.43 11.0	0.59 15.0	0.43 11.0	0.61 15.5	–	9.3 4.2	F07
	5.250 <sup>2</sup> 133.0	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	16.8 7.6	F07
DN125	5.500 139.7	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	16.8 7.6	F07
5	5.563 141.3	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	16.8 7.6	F07
	6.250 <sup>2</sup> 159.0	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	20.0 9.1	F07
	6.500 165.1	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	20.0 9.1	F07
6 DN150	6.625 168.3	0.13 3.3	0.34 8.6	2.756 70.0	1.07 27.2	0.50 12.7	0.75 19.1	0.55 14.0	0.89 22.6	–	20.0 9.1	F07
200A <sup>3</sup>	216.3	0.13 3.3	0.38 9.7	2.75 69.9	1.25 31.8	–	0.88 22.2	–	–	0.188 x 0.88 4.78 x 22.35	34.0 15.4	F07
8 DN200	8.625 219.1	0.13 3.3	0.34 8.6	2.756 70.0	1.16 29.5	–	0.88 22.2	0.67 17.0	1.15 29.2	0.188 x 0.88 4.78 x 22.35	34.3 15.6	F07
250A <sup>3</sup>	267.4	0.13 3.3	0.50 12.7	4.00 101.6	2.25 57.2	–	1.25 31.8	–	–	0.312 x 1.88 7.92 x 47.75	76.1 34.5	F10
10 DN250	10.750 273.0	0.13 3.3	0.43 11.0	4.016 102.0	2.25 57.2	–	1.25 31.8	0.87 22.0	1.32 33.5	0.312 x 1.88 7.92 x 47.75	72.0 32.7	F10
300A <sup>3</sup>	318.5	0.13 3.3	0.50 12.7	4.00 101.6	2.25 57.2	–	1.25 31.8	–	–	0.312 x 1.88 7.92 x 47.75	93.6 42.5	F10
12 DN300	12.750 323.9	0.13 3.3	0.43 11.0	4.016 102.0	2.24 56.9	–	1.25 31.8	0.87 22.0	1.31 33.3	0.312 x 1.88 7.92 x 47.75	88.0 39.9	F10

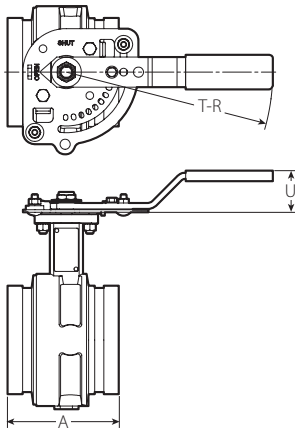
<sup>2</sup> Contact Victaulic for availability.

<sup>3</sup> Japanese Industrial Standard (JIS) size.

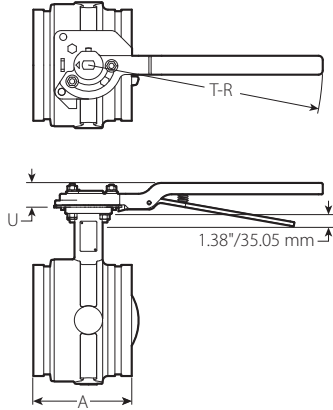
<sup>4</sup> Diagonal square head drive follows a C11 clearance fit.

## 4.1 DIMENSIONS

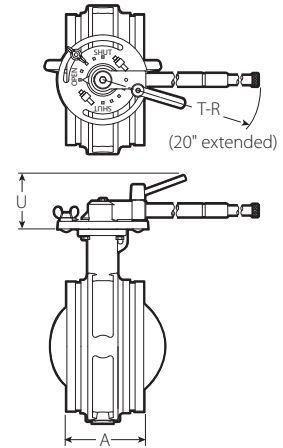
### Series 761 Vic-300 MasterSeal™ Butterfly Valve - With Handle



10-Position Handle with Memory Stop  
2 – 6"/DN50 - DN150



Lever Lock Handle with Memory Stop  
8"/DN200



Lever Lock Handle with Memory Stop  
10 - 12"/DN250 - DN300

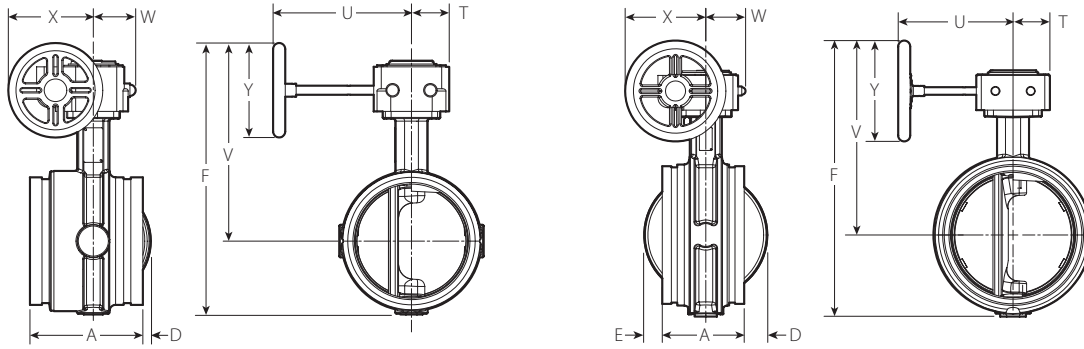
Size		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	A End to End inches mm	T-R inches mm	U inches mm	Approximate (Each) lb kg
2 DN50	2.375 60.3	3.21 81.5	7.00 177.8	1.57 39.9	6.0 2.7
2½	2.875 73.0	3.77 95.8	7.00 177.8	1.57 39.9	7.5 3.4
DN65	3.000 76.1	3.77 95.8	7.00 177.8	1.57 39.9	7.5 3.4
3 DN80	3.500 88.9	3.77 95.8	7.00 177.8	1.57 39.9	8.5 3.9
	4.250 <sup>2</sup> 108.0	4.63 117.6	8.50 215.9	1.64 41.7	11.8 5.4
4 DN100	4.500 114.3	4.63 117.6	8.50 215.9	1.64 41.7	11.8 5.4
	5.250 <sup>2</sup> 133.0	5.88 149.4	12.00 304.8	1.64 41.7	20.0 9.1
DN125	5.500 139.7	5.88 149.4	12.00 304.8	1.64 41.7	20.0 9.1
5	5.563 141.3	5.88 149.4	12.00 304.8	1.64 41.7	20.0 9.1
	6.250 <sup>2</sup> 159.0	5.88 149.4	12.00 304.8	1.64 41.7	23.2 10.5
	6.500 165.1	5.88 149.4	12.00 304.8	1.64 41.7	23.2 10.5
6 DN150	6.625 168.3	5.88 149.4	12.00 304.8	1.63 41.4	23.2 10.5
200A <sup>3</sup>	216.3	5.38 136.7	14.00 355.6	1.50 38.1	37.5 17.0
8 DN200	8.625 219.1	5.33 135.4	14.00 355.6	1.51 38.4	37.5 17.0
250A <sup>3</sup>	267.4	6.38 162.1	11.63 295.4	4.50 114.3	84.0 38.1
10 DN250	10.750 273.0	6.40 162.6	11.66 296.2	4.50 114.30	84.0 38.1
300A <sup>3</sup>	318.5	6.50 165.1	11.63 295.4	4.50 114.3	100.0 45.4
12 DN300	12.750 323.9	6.50 165.1	11.66 296.2	4.50 114.3	100.0 45.4

<sup>2</sup> Contact Victaulic for availability.

<sup>3</sup> Japanese Industrial Standard (JIS) size.

## 4.2 DIMENSIONS

### Series 761 Vic-300 MasterSeal™ Butterfly Valve - With Gear Operator



Gear Operator  
2 – 6"/DN50 - DN150

Gear Operator  
8 – 12"/DN200 - DN300

Size		Dimensions										Weight
Nominal	Actual Outside Diameter	A End to End	D	E	F	T	U	V	W	X	Y	Approximate (Each)
inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	lb
DN	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
2	2.375	3.21	–	–	8.65	1.57	4.76	6.84	1.89	3.64	3.9	6.0
DN50	60.3	81.5	–	–	219.7	40.0	121.0	173.8	48.0	92.5	100.0	2.7
2½	2.875	3.77	–	–	9.38	1.57	4.76	7.28	1.89	3.64	3.9	7.5
	73.0	95.8	–	–	238.3	40.0	121.0	185.0	48.0	92.5	100.0	3.4
DN65	3.000	3.77	–	–	9.38	1.57	4.76	7.28	1.89	3.64	3.9	7.5
	76.1	95.8	–	–	238.3	40.0	121.0	185.0	48.0	92.5	100.0	3.4
3	3.500	3.77	–	–	9.88	1.57	4.76	7.53	1.89	3.64	3.9	8.5
DN80	88.9	95.8	–	–	251	40.0	121.0	191.3	48.0	92.5	100.0	3.9
4	4.500	4.63	–	–	11.16	1.57	4.76	8.28	1.89	3.64	3.9	11.8
DN100	114.3	117.6	–	–	283.5	40.0	121.0	210.4	48.0	92.5	100.0	5.4
DN125	5.500	5.88	–	–	13.15	1.97	7.20	9.81	2.20	4.43	4.9	20.8
	139.7	149.4	–	–	334.1	50.0	183.0	249.3	56.0	112.5	125.0	9.4
5	5.563	5.88	–	–	13.15	1.97	7.20	9.81	2.20	4.43	4.9	20.8
	141.3	149.4	–	–	334.1	50.0	183.0	249.3	56.0	112.5	125.0	9.4
	6.500	5.88	0.41	–	14.14	1.97	7.20	10.31	2.20	4.43	4.9	24.0
	165.1	149.4	10.5	–	359.2	50.0	183.0	262.0	56.0	112.5	125.0	10.9
6	6.625	5.88	0.41	–	14.14	1.97	7.20	10.31	2.28	4.43	4.9	24.0
DN150	168.3	149.4	10.5	–	359.2	50.0	183.0	261.9	57.9	112.5	125.0	10.9
200A <sup>3</sup>	216.3	5.38	1.50	0.88	16.75	2.00	7.25	11.63	2.25	4.38	5.00	36.6
		136.5	38.1	22.4	425.5	50.8	184.2	295.0	57.2	111.3	127.0	16.6
8	8.625	5.33	1.47	0.8	16.63	1.97	7.20	11.56	2.20	4.43	4.9	38.3
DN200	219.1	135.4	37.4	20.4	422.5	50.0	183.0	293.7	56.0	112.5	125.0	17.4
250A <sup>3</sup>	267.4	7.88	1.88	0.00	21.63	2.88	9.00	15.25	3.13	6.25	7.88	81.3
		200.2	47.8	0.0	549.4	73.2	228.6	387.4	79.5	158.8	200.2	36.9
10	10.750	6.40	1.81	1.41	21.55	2.87	8.98	15.18	3.11	6.30	7.9	81.5
DN250	273.0	162.6	45.9	35.7	547.4	73.0	228.0	385.7	79.0	160.0	200.0	39.0
300A <sup>3</sup>	318.5	7.88	2.88	0.88	23.63	2.88	9.00	16.25	3.13	6.25	7.88	98.9
		200.2	73.2	22.4	600.2	73.2	228.6	413.0	79.5	158.8	200.2	44.8
12	12.750	6.50	2.79	2.29	23.54	2.87	8.98	16.18	3.11	6.30	7.9	97.5
DN300	323.9	165.1	70.9	58.3	598	73.0	228.0	411.1	79.0	160.0	200.0	44.2

<sup>3</sup> Japanese Industrial Standard (JIS) size.