

MTS Plug Valve

Series 465



1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 – 20"/DN50 – DN500

Pipe Material

- Duplex or Super Duplex Stainless Steel

Maximum Working Pressure

- Grooved ends: 1200 psi/8275 kPa/83 bar
- Butt Weld ends: 1450 psi/10,000 kPa/100 bar
- Flanged ends: Per flange specification up to 1450psi/10,000kPa/100bar

Operating Temperature

- Maximum operating temperature of 180°F/82°C.

Function

- Typically for use in reverse osmosis desalination applications.
- Intended for use in on-off service or control applications. See Plug Options.

Plug Options

- Victaulic offers the Series 465 Plug Valve with various plugs for different operating conditions.
- ON/OFF: For system and component isolation.
- CONTROL: Victaulic offers several types of control valve solutions.

Pipe Preparation

- Grooved end valves designed specifically for use on OGS or Victaulic StrengThin System formed ends. For additional information contact Victaulic.

2.0 CERTIFICATION/LISTINGS

UL Classified in accordance with ANSI/NSF 61 for cold +73°F/+23°C high flow, high velocity applications such as public water treatment facilities and ANSI/NSF 372.¹

¹ Reference ANSI/NSF - 2012, sec. 3.3.2.

NOTE

- Refer to Victaulic [submittal publication 02.06](#) for potable water approvals if applicable.

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	

3.0 SPECIFICATIONS – MATERIAL

Body: Stainless Steel, Duplex, Super Duplex and Special Alloys.

Bonnet: Stainless Steel, Duplex, Super Duplex and Special Alloys.

Plug: Stainless Steel, Duplex, Super Duplex and Special Alloys.

Seat and Seals: PTFE

Typical casting materials:

ASTM A-890 Grade 4A

ASTM A-890 Grade 5A

ASTM A-890 Grade 6A

ASTM A-351 CK3MCuN (254 SMO)

ASTM A-351 CF8M (316 SS)

ASTM A-351 CF3M (316L SS)

Other Stainless Steel and Alloys

Typical Specifications:

Victaulic MTS Plug valves 2 – 20"/50 – 500 mm sizes shall be both bi-directional and dead-end service capable to full rated pressure. Body, bonnet and plug material shall be stainless steel according to internationally recognized material standards. Sleeve material and all seals shall be PTFE. Valve shall have standard ISO 5211 flange mounting for ease of actuation. Ends shall be Victaulic StrengThin™ or Victaulic Original Grooved Systems (OGS), butt weld or flanged ends (ANSI Class/DIN Flange).

3.1 SPECIFICATIONS – TECHNICAL

Ends: Available with Victaulic Original Grooved System (OGS), StrengThin™, butt weld or flanged ends (ANSI Class/DIN Flange).

NOTE

- Transition valves are available having two different end configurations (for example, OGS x Flanged or StrengThin x Flanged valves may be provided). Contact Victaulic for details.

Production Hydrostatic Test: In accordance with API 598

Shell Test: 1.5 times design pressure

Closure Test: 1.1 times design pressure

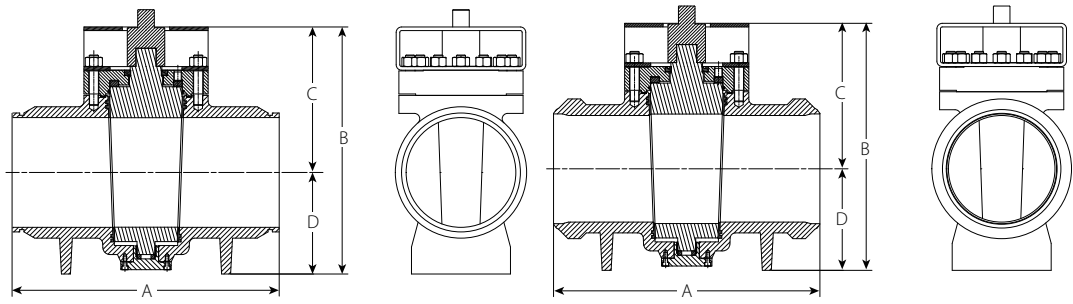
Service: ON/OFF (isolating) and Flow Control configurations available.

Operation: Manual (wrench/gearbox), Pneumatic, Hydraulic and Electric actuators.

Accessories: Many actuation accessories are available; Limit Switches, Positioners, Solenoids, Positions Transmitters, Communication Buses, Control Panels. Bonnet/shaft extensions are available upon request.

4.0 DIMENSIONS

Series 465 and 465B



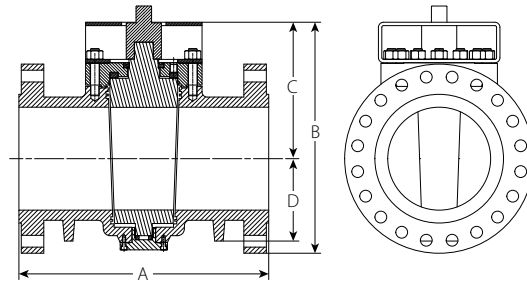
Series 465G Groove

Series 465B Butt Weld

Valve Size		Dimensions			
Nominal Diameter	Actual Outside Diameter	A End to End	B	C	D
inches DN	inches mm	inches mm	inches mm	inches mm	inches mm
2 DN50	2.375 60.3	8.5 216	10.0 254	6.9 175	3.1 79
2½ DN32	2.875 73.0	12.0 305	10.4 264	7.3 185	3.1 79
3 DN80	3.500 88.9	12.0 305	11.5 292	7.7 196	3.8 96
4 DN100	4.500 114.3	14.0 356	12.7 323	8.3 211	4.4 112
5 DN125	5.563 141.3	17.0 432	14.9 378	10.8 274	4.1 104
6 DN150	6.625 168.3	17.0 432	16.8 427	10.8 274	6.0 153
8 DN200	8.625 219.1	20.0 508	20.0 508	12.8 325	7.2 183
10 DN250	10.750 273.0	23.0 584	23.2 589	14.1 358	9.1 231
12 DN300	12.750 323.9	29.1 740	26.2 665	15.1 384	11.1 281
14 DN350	14.000 355.6	30.8 782	27.4 696	15.9 40	11.5 292
16 DN400	16.000 406.4	39.0 990	34.4 874	19.8 503	14.6 371
18 DN450	18.000 457.0	39.0 990	44.7 1135	28.7 729	16.0 406
20 DN500	20.000 508.0	39.0 990	44.7 1135	28.7 729	16.0 406

4.1 DIMENSIONS

Series 465F



Series 465F Flange

Valve Size		Dimensions			
Nominal Diameter	Actual Outside Diameter	A End to End	B	C	D
inches DN	inches mm	inches mm	inches mm	inches mm	inches mm
2 DN50	2.375 60.3	11.5 292	10.1 257	6.9 175	3.1 79
2½ DN32	2.875 73.0	13.0 330	11.0 279	7.3 185	3.1 79
3 DN80	3.500 88.9	14.0 355	11.8 300	7.7 196	3.8 96
4 DN100	4.500 114.3	17.0 431	13.7 348	8.3 211	4.4 112
5 DN125	5.563 141.3	22.0 558	17.3 439	10.8 274	4.1 104
6 DN150	6.625 168.3	22.0 558	17.8 452	10.8 274	6.0 153
8 DN200	8.625 219.1	26.0 660	21.1 536	12.8 325	7.2 183
10 DN250	10.750 273.0	31.0 787	24.1 612	14.1 358	9.1 231
12 DN300	12.750 323.9	33.0 838	26.1 663	15.1 384	11.1 281
14 DN350	14.000 355.6	35.0 889	27.8 706	15.9 404	11.5 292
16 DN400	16.000 406.4	39.0 990	33.3 846	19.8 503	14.6 371
18 DN450	18.000 457.0	43.0 1092	43.3 1100	28.7 729	16.0 406
20 DN500	20.000 508.0	47.0 1194	44.7 1135	28.7 729	16.0 406

NOTE








- Flange dimensions are in accordance with ASME B16.5 Class 600.

5.0 PERFORMANCE

Not applicable – contact Victaulic with any questions.

6.0 NOTIFICATIONS

Not applicable – contact Victaulic with any questions.

 WARNING					
					
<ul style="list-style-type: none">• Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.• Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.• Wear safety glasses, hardhat, and foot protection. <p>Failure to follow these instructions could result in death or serious personal injury and property damage.</p>					

7.0 REFERENCE MATERIALS

Typical Specifications

Victaulic MTS Plug valves 2 – 20"/50 – 500 mm sizes shall be both bi-directional and dead-end service capable to full rated pressure. Body, bonnet and plug material shall be stainless steel according to internationally recognized material standards. Sleeve material and all seals shall be PTFE. Valve shall have standard ISO 5211 flange mounting for ease of actuation. Ends shall be Victaulic StrengThin™ or Victaulic Original Grooved Systems (OGS), butt weld or flanged ends (ANSI Class/DIN Flange).

Valve Numbering System

V0465 020 1 1 A 1 A 1 4A P B

Series	Size		Plug Type	Class	End Type 1	Schedule End 1	End Type 2	Schedule End 2	Body/Bonnet Material	Seat Material	Operator
	In./mm	Code									
V0465	2/50	020	1 - On/Off	1 - 150	A - AGS Grooved	1 - Sch. 10	A - AGS Grooved	1 - Sch. 10	4A - ASTM A-890	P - PTFE	B - Bare Shaft
	2½/65	024	2 - Control	3 - 300	B - Butt Weld	2 - Sch. 20	B - Butt Weld	2 - Sch. 20	Grade 4A	R - RTFE	E - Electric
	3/80	030		6 - 600	F - Flanged (ANSI)	3 - Sch. 30	F - Flanged (ANSI)	3 - Sch. 30	5A - ASTM A-890		G - Gear Box
	4/100	040		7 - 1200	Flat Face	4 - Sch. 40	Flat Face	4 - Sch. 40	Grade 5A		H - Hydraulic
	5/125	050			G - OGS Grooved	6 - Sch. 60	G - OGS Grooved	6 - Sch. 60	6A - ASTM A-890		Actuator
	6/150	060			R - Flanged (ANSI)	8 - Sch. 80	R - Flanged (ANSI)	8 - Sch. 80	Grade 6A		L - Lever
	8/200	080			Raised Face	N - Not	Raised Face	N - Not	CK - ASTM A-351		N - Non
	10/250	100			S - Strengthen	Applicable	S - Strengthen	Applicable	CK3CuN		Actuation
	12/300	120				5 - Class 150		5 - Class 150	(254 SMO)		P - Pneumatic
	14/350	140				Flange		Flange	C8 - ASTM A-351		
	16/400	160				7 - Class 300		7 - Class 300	CF8M		
	18/450	180				Flange		Flange	(316SS)		
						9 - Class 600		9 - Class 600	C3 - ASTM A-351		
						Flange		Flange	CF8M		
						A - Sch. 10S		A - Sch. 10S	(316L)		
						B - Sch. 40S		B - Sch. 40S	5B - ASTM A-995		
						C - Sch. 80S		C - Sch. 80S	Grade 5A		

[02.06: Potable Water Approvals](#)

[25.01: Standard Groove Specification](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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Note

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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