

# Double Disc Check Valve

## Series 415



17.37



### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 2 – 18" (DN50 – DN450)

#### Pressure Class

- Up to 1200psi (83 Bar)

#### Application

- Typically for use in seawater desalination service. Exclusively for use with pipe and Victaulic products which feature ends formed with the Victaulic Original Groove System(OGS) or Victaulic groove for StrengThin™ Systems. (see section 7.0 for Reference Materials).

### 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 NSF 372.<sup>1</sup>

<sup>1</sup> Reference ANSI/NSF - 2012, sec.3.3.2.

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

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**Body:** Duplex, and Super Duplex Stainless Steels or Special Alloys

**Disc:** Duplex, and Super Duplex Stainless Steels or Special Alloys

**Shaft:** Duplex, and Super Duplex Stainless Steels or Special Alloys

**Spring:** X-750 Nickel Alloy

**Seals:** PTFE

**Standard Seat:** EPDM

**Ends:** Victaulic Original Grooved System (OGS), Victaulic groove for StrengThin™ Systems.

**Casting Materials: (specify choice)**

Standard:

ASTM A-890 Grade 5A

optional:

ASTM A-890 Grade 4A

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

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### 3.1 SPECIFICATIONS – TECHNICAL

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**Production Hydrostatic Test** in accordance with API 598

Shell Test: 1.5 times design pressure

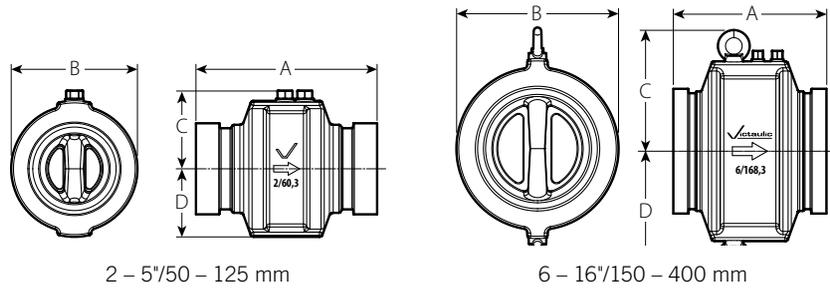
Closure Test: 1.1 times design pressure

**Service:** Non-Return

**Materials:** According to international standards such as ASTM, DIN and EN

## 4.0 DIMENSIONS

### Style 415



Valve Size		Dimensions			
Nominal inches DN	Actual Outside Diameter inches mm	A End to End inches mm	B inches mm	C inches mm	D inches mm
2 50	2.375 60.3	5.25 133	3.75 93	2.26 58	1.97 50
2 ½ 65	2.875 73.0	5.81 148	4.72 120	2.81 72	2.46 63
3 80	3.500 88.9	6.10 155	4.94 126	2.89 74	2.60 66
4 100	4.500 114.3	6.65 169	6.69 170	4.06 103	3.70 94
5 125	5.563 141.3	7.09 180	8.03 204	5.12 130	4.47 114
6 150	6.625 168.3	8.74 222	9.25 235	6.89 175	6.89 175
8 200	8.625 219.1	10.24 260	11.81 300	7.96 202	7.96 202
10 250	10.750 273.0	11.09 282	13.23 336	10.20 259	10.20 259
12 300	12.750 323.9	13.43 341	16.73 425	11.62 295	11.62 295
14 350	14.000 355.6	14.20 361	18.23 463	12.25 311	12.25 311
16 400	16.000 406.4	16.53 420	20.63 524	13.70 348	13.70 348
18 450	18.000 457	18.425 468	22.637 575	14.892 378.25	14.892 378.25

#### NOTES

- Lifting eyes are provided in sizes 6-16" / 150-400mm to aid in lifting the valve during installation only. They are not intended for use as piping system supports.
- Flow through the valve must be in the direction indicated by the arrow cast into the valve body.
- Placement of check valves too close to sources of unstable flow (For example but not limited to: pumps, elbows, expanders, reducers or other similar devices) will shorten the life of the valve and potentially may damage the system. Sound piping practices dictate a minimum of five (5) times the pipe diameter for general use. Distance between three (3) and five (5) diameters are allowable provided the flow velocity is less than eight (8) feet per second (2.4 meters per second). Distance less than three (3) diameters are not recommended and will violate the Victaulic product warranty.

## 5.0 PERFORMANCE

### Typical Specifications

Victaulic Series 415 Double Disc Check Valves 2 – 18"/DN50 – DN450 sizes shall be Non-Return service capable to full rated pressure. Body material shall be duplex and super duplex stainless steels or special alloys, according to internationally recognized ASTM, EN, and DIN. Seals shall be PTFE or EPDM. Ends shall be Victaulic grooved ends for StrengThin™ Systems or Victaulic Original Grooved Systems (OGS).

### Valve Numbering System

V0415
020
9
G
G
4A
M

Series	Size		Plug Type	End Type 1	End Type 2	Body Material	Seat Material
	In./mm	Code					
V0415	2/50	020	9 - Check Dual Plate	G - OGS Grooved S - StrengThin™	G - OGS Grooved S - StrengThin™	4A - ASTM A-890 Grade 4A	M - Metal E - EPDM
	2½/65	024				5A - ASTM A-890 Grade 5A	
	3/80	030				6A - ASTM A-890 Grade 6A	
	4/100	040				CK - ASTM A-351 CK3CuN (254 SMO)	
	5/125	050				C8 - ASTM A-351 CF8M (316SS)	
	6/150	060				C3 - ASTM A-351 CF8M (316L)	
	8/200	080				5B - ASTM A-995 Grade 5A	
	10/250	100					
	12/300	120					
	14/350	140					
	16/400	160					
	18/450	180					

## 6.0 NOTIFICATIONS

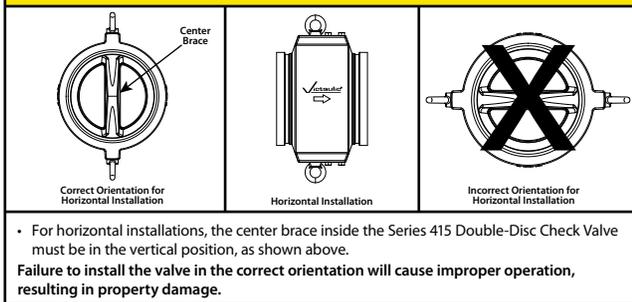
### WARNING

Verify that the valve's mating ends are supplied with the same groove profile as the adjoining pipe:

- Valves with Original Groove System (OGS) mating ends must be used only with pipe prepared to OGS specifications.
- Valves with StrengThin™ mating ends must be used only with pipe prepared to StrengThin specifications with the Victaulic VSF216 equipment.
- DO NOT attempt to assemble this valve with pipe that has been prepared to any other grooved system.

Failure to follow these instructions will cause product failure, resulting in death or serious personal injury and property damage.

### CAUTION



## 7.0 REFERENCE MATERIALS

### 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](http://www.victaulic.com).

### Warranty

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

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