# Victaulic® OGS-200 Grooved End Fittings





#### 1.0 PRODUCT DESCRIPTION

#### **Available Sizes**

• 2 - 8"/DN50 - DN200

### **Maximum Working Pressure**

• Fitting pressure ratings are equivalent to the pressure ratings of the Victaulic coupling used to install them (see section 6.0 for Reference Materials).

#### **Function**

- · Connects pipe sections, provides change in direction, and adapts sizes or components.
- All fittings are supplied with the Victaulic OGS-200 groove profile. These fittings are used exclusively with pipe, valves and accessories featuring the Victaulic OGS-200 groove profile (see section 6.0 for Reference Materials).

#### **Codes and Requirements**

• Fittings utilizing the Victaulic OGS-200 groove profile are designed in accordance with ASME B31.1, ASME B31.3 and ASME B31.9 codes.

#### NOTE

• Coatings applied to the fitting's and pipe's outer diameter in and around the Victaulic groove can interfere with the effectiveness of the joining solution and are not recommended. Contact Victaulic with questions related to fitting and pipe coatings.

### 2.0 CERTIFICATION/LISTINGS







### 3.0 SPECIFICATIONS - MATERIAL

Cast Fittings: Cast carbon steel, conforming to ASTM A216 Grade WCB.

Fabricated Fittings: Wrought carbon steel, conforming to ASTM A234 Grade WPB and ASTM A106 Grade B.

### Flange Adapter Nipples:

Cast Flange Adapter Nipples: Class 150 and Class 300 Flanges: Cast carbon steel, conforming to ASTM A216 Grade WCB and ANSI B16.5, raised or flat face.

Fabricated Flange Adapter Nipples: Class 150 and Class 300 Flanges: Wrought carbon steel, conforming to ASTM A234 Grade WPB and ASTM A106 Grade B, raised or flat face.

### Coating:

Zinc coating.

#### NOTE

Contact Victaulic for other coating options.

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

System No.	Location		Spec Section	
Submitted By	Date		Approved	

Spec Section	Paragraph	
Approved	Date	



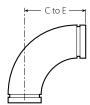


### 4.0 DIMENSIONS

### **Elbows**

No. 890C & No. 890HC Long Radius 90° Elbow (Cast)

No. 811C & No. 811HC 45° Elbow (Cast)





Size			k No. 890HC is 90° Elbow		No. 811C & No. 811HC 45° Elbow		
	Actual		Approx	. Weight		Approx	. Weight
Nominal	Outside Diameter	C to E	No. 890C Sch. 40	No. 890HC Sch. 80	C to E	No. 811C Sch. 40	No. 811HC Sch. 80
inches	inches	inches	lb	lb	inches	lb	lb
DN	mm	mm	kg	kg	mm	kg	kg
2	2.375	4.38	4.0	4.4	2.75	2.7	3.1
DN50	60.3	111	1.8	2.0	70	1.3	1.4
2 1/2	2.875	5.13	6.2	6.6	3.00	4.0	4.4
	73.0	130	2.8	3.0	76	1.8	2.0
3	3.500	5.88	8.6	10.1	3.38	5.7	6.8
DN80	88.9	149	3.9	4.6	86	2.6	3.1
4	4.500	7.50	16.1	18.5	4.00	10.1	11.2
DN100	114.3	191	7.3	8.4	102	4.6	5.4
6	6.625	10.75	37.7	47.0	5.50	22.3	28.0
DN150	168.3	273	17.1	21.3	140	10.2	12.7
8	8.625	14.25	72.1	92.8	7.25	42.8	55.3
DN200	219.1	362	32.7	42.1	184	19.4	25.1

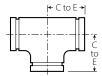
- The cast fittings listed above (No. 890C, No. 890HC, No. 811C and No. 811HC) feature different C to E dimensions than the fabricated fittings (No. 890, No. 890H, No. 811 and No. 811H) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- $\bullet \;\;$  Dimensions shown have been rounded up to nearest % "/3 mm.



# 4.1 DIMENSIONS

# Tee

No. 820 & No. 820H Tee (Fabricated)



S	ze	No. 820 & No. 820H Tee					
			Approx. Weight				
Nominal	Actual Outside Diameter	C to E	No. 820 Sch. 40	No. 820H Sch. 80			
inches	inches	inches	lb	lb			
DN	mm	mm	kg	kg			
2	2.375	5.13	5.6	7.9			
DN50	60.3	130	2.5	3.6			
21/2	2.875	5.63	9.6	13.1			
	73.0	143	4.4	5.9			
3	3.500	6.00	12.2	16.9			
DN80	88.9	153	5.5	7.7			
4	4.500	6.88	20.1	28.6			
DN100	114.3	175	9.1	13.0			
6	6.625	8.38	46.1	71.2			
DN150	168.3	213	20.9	32.3			
8	8.625	10.00	77.9	121.0			
DN200	219.1	254	35.3	54.9			

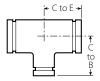
- The fittings listed above (No. 820 and No. 820H) are made using wrought carbon steel fittings and welded pipe nipples.
- Dimensions shown have been rounded up to nearest  $\frac{1}{8}$ "/3 mm.



# 4.2 DIMENSIONS

# **Reducing Tee**

No. 825 & No. 825H Grooved Branch (Fabricated)



	Size							No. 825 & 825H Reducing Tee					
									Approx	Weight			
	-	<b>Nomina</b> inches DN	l			Actual Outside Diameter inches mm		C to E inches mm	C to B inches mm	No. 825 Sch. 40 Ib kg	No. 825H Sch. 80 Ib kg		
2½	X	2½	x	2 DN50	2.875 x 73.0	2.875 x 73.0	2.375 60.3	5.63 143	5.38 137	8.7 4.0	11.9 5.4		
3 DN80	х	3 DN80	х	2 DN50	3.500 x 88.9	3.500 x 88.9	2.375 60.3	6.00 153	5.63 143	11.1 5.0	15.4 7.0		
				2½			2.875 73.0	6.00 153	5.88 149	11.8 5.3	16.4 7.4		
4 DN100	Х	4 DN100	X	2 DN50	4.500 x 114.3	4.500 x 114.3	2.375 60.3	6.88 175	6.13 156	16.9 7.7	24.1 10.9		
				2½			2.875 73.0	6.88 175	6.38 162	17.6 8.0	25.0 11.4		
				3 DN80			3.500 88.9	6.88 175	6.51 165	18.2 8.3	25.9 11.7		
6 DN150	х	6 DN150	X	21/2	6.625 x 168.3	6.625 x 168.3	73.0	8.38 213	7.38 187	39.7 18.0	61.2 27.8		
				3 DN80			3.500 88.9	8.38 213	7.51 191	40.4 18.3	62.3 28.2		
				4 DN100			4.500 114.3	8.38 213	7.87 200	41.7 18.9	64.3 29.2		
8 DN200	X	8 DN200	X	4 DN100		8.625 x 219.1	4.500 114.3	10.00 254	8.87 225	69.9 31.7	108.6 49.3		
				6 DN150			6.625 168.3	10.00 254	9.37 238	75.1 34.1	116.6 52.9		

- The fittings listed above (No. 825 and No. 825H) are made using wrought carbon steel fittings and welded pipe nipples
- $\bullet$  Dimensions shown have been rounded up to nearest % "/3 mm.



### 4.3 DIMENSIONS

### Flange Adapter Nipples

No. 845FC ANSI Class 150 Flange Adapter Nipple (Cast) (Flat Face, for use with Sch. 40 Pipe)

No. 845RC ANSI Class 150 Flange Adapter Nipple (Cast) (Raised Face, for use with Sch. 40 Pipe)

No. 846FC ANSI Class 300 Flange Adapter Nipple (Cast) (Flat Face, for use with Sch. 80 Pipe)

No. 846RC ANSI Class 300 Flange Adapter Nipple (Cast) (Raised Face, for use with Sch. 80 Pipe)









Flat Face

Raised Face

Flat Face

Raised Face

			riat race		Raiseu race		riat race		Raiseu race	
s	Size		No. 845FC ANSI Class 150 Flange Adapter Nipple		No. 845RC ANSI Class 150 Flange Adapter Nipple		No. 846FC ANSI Class 300 Flange Adapter Nipple		RC ANSI 0 Flange r Nipple	
<b>Nominal</b> inches	Actual Outside Diameter inches	E to E	Approx. Weight	E to E	Approx. Weight	E to E	Approx. Weight	E to E	Approx. Weight	
DN	mm	mm	kg	mm	kg	mm	kg	mm	kg	
2	2.375	4.00	6.6	4.00	6.8	4.00	8.2	4.00	8.4	
DN50	60.3	102	3.0	102	3.1	102	3.7	102	3.8	
21/2	2.875	4.00	9.7	4.00	9.5	4.00	11.7	4.00	11.9	
	73.0	102	4.4	102	4.3	102	5.3	102	5.4	
3	3.500	4.00	11.7	4.00	12.1	4.00	15.9	4.00	16.1	
DN80	88.9	102	5.3	102	5.5	102	7.2	102	7.3	
4	4.500	6.00	18.7	6.00	19.2	6.00	28.7	6.00	28.7	
DN100	114.3	152	8.5	152	8.7	152	13.0	152	13.0	
6	6.625	6.00	30.9	6.00	28.0	6.00	49.6	6.00	47.8	
DN150	168.3	152	14.0	152	12.7	152	22.5	152	21.7	
8	8.625	6.00	42.3	6.00	48.5	6.00	73.9	6.00	72.3	
DN200	219.1	152	19.2	152	22.0	152	33.5	152	32.8	

- The cast fittings listed above (No. 845FC, No. 845FC, No. 846FC, and No. 846FC) feature different C to E dimensions than the fabricated fittings (No. 845F, No. 846F, and No. 846F) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- Dimensions shown have been rounded up to nearest 1/8"/3 mm.



### 4.4 DIMENSIONS

### Reducers

No. 850 & No. 850H Concentric Reducer (Fabricated)
No. 851 & No. 851H Eccentric Reducer (Fabricated)





Size				50 & 850H tric Reducer		No. 851 & 851H Eccentric Reducer							
						Approx	Weight		Approx. Weight				
	Actual Outside Nominal Diameter		Outside		Outside		E to E	No. 850 Sch. 40	No. 850H Sch. 80	E to E	No. 851 Sch. 40	No. 851H Sch. 80	
inches		i	nches		inches	lb	lb .	inches	lb	lb .			
DN			mm		mm	kg	kg	mm	kg	kg			
2½ x 65 E	2 DN50	2.875 73.0	х	2.375 60.3	8.75 222	3.7 1.7	5.0 2.3	8.75 222	3.7 1.7	5.0 2.3			
3 x DN80 E	2 DN50	3.500 88.9	х	2.375 60.3	8.75 222	4.5 2.0	6.2 2.8	8.75 222	4.5 2.0	6.2 2.8			
	21/2			2.875 73.0	8.75 222	5.1 2.3	7.1 3.2	8.75 222	5.1 2.3	7.1 3.2			
4 x DN100 E		4.500 114.3	Х	2.375 60.3	9.38 283	6.4 2.9	9.1 4.1	9.38 283	6.4 2.9	9.1 4.1			
_	21/2						2.875 73.0	9.38 283	6.9 3.1	9.9 4.5	9.38 283	6.9 3.1	9.9 4.5
	3 DN80			3.500 88.9	9.38 283	7.4 3.4	10.6 4.8	9.38 283	7.4 3.4	10.6 4.8			
6 x DN150		6.625 168.3	Х	2.875 73.0	10.88 276	12.2 5.5	18.8 8.5	10.88 276	12.2 5.5	18.8 8.5			
	3 DN80			3.500 88.9	10.88 276	12.9 5.9	19.9 9.0	10.88 276	12.9 5.9	19.9 9.0			
D	4 0N100			4.500 114.3	11.00 279	14.2 6.5	21.9 10.0	11.00 279	14.2 6.5	21.9 10.0			
8 x 200 D		8.625 219.1	х	4.500 114.3	11.75 298	20.4 9.3	31.7 14.4	11.75 298	20.4 9.3	31.7 14.4			
D	6 N150			6.625 168.3	11.75 298	23.8 10.8	36.9 16.8	11.75 298	23.8 10.8	36.9 16.8			

### NOTES

- The fittings listed above (No. 850, No. 850H, No. 861 and No. 851H) are made using wrought carbon steel fittings and welded pipe nipples.
- Dimensions shown have been rounded up to nearest %"/3 mm.

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### 4.5 DIMENSIONS

#### Cap

#### No. 860 & No. 860H Cap (Fabricated)



S	ize	No. 860 & 860H Cap					
			Approx. Weight				
Nominal	Actual Outside Diameter	E to E	No. 860 Sch. 40	No. 860H Sch. 80			
inches	inches	inches	lb	lb			
DN	mm	mm	kg	kg			
2	2.375	4.13	1.6	2.3			
DN50	60.3	105	0.7	1.0			
21/2	2.875	4.13	2.3	3.1			
	73.0	105	1.0	1.4			
3	3.500	4.63	3.4	4.7			
DN80	88.9	117	1.5	2.1			
4	4.500	5.25	5.3	7.5			
DN100	114.3	133	2.4	3.4			
6	6.625	6.25	11.2	17.4			
DN150	168.3	159	5.1	7.9			
8	8.625	7.00	18.9	29.4			
DN200	219.1	178	8.6	13.3			

#### **NOTES**

- The fittings listed above (No. 860 and No. 860H) are made using wrought carbon steel fittings and welded pipe nipples.
- Dimensions shown have been rounded up to nearest ½"/3 mm.

### 5.0 NOTIFICATIONS

Not applicable - contact Victaulic with any questions.

### 6.0 REFERENCE MATERIALS

24.01: Victaulic Pipe Preparation Tools

25.12: Victaulic OGS-200 Roll Groove Specifications

100.02: Victaulic Rigid Coupling Style 870

I-100: Victaulic Field Installation Handbook

IT-870: Installation Instructions Style 870 Rigid Coupling

### 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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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.

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