



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



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

Carbon Steel Fittings

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.

Cast Flange Adapter Nipples: Cast carbon steel, conforming to ASTM A216 Grade WCB.

Coating: Zinc coating.

NOTE

- Contact Victaulic for other coating options.

Stainless Steel Fittings

Cast Fittings: Stainless steel, conforming to ASTM A351 Grade CF8M.

Cast Flange Adapter Nipples: Stainless steel, conforming to ASTM A351 Grade CF8M.

4.0 DIMENSIONS

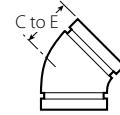
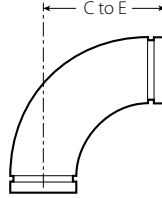
Elbows

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

No. 890S Long Radius 90° Elbow (Cast Stainless Steel)

No. 811C & No. 811HC 45° Elbow (Cast Carbon Steel)

No. 811S 45° Elbow (Cast Stainless Steel)



Size		No. 890C, No. 890HC & No. 890S Long Radius 90° Elbow			No. 811C, No. 811HC & No. 811S 45° Elbow		
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	Approx. Weight		C to E inches mm	Approx. Weight	
			No. 890C No. 890S Sch. 40 lb kg	No. 890HC Sch. 80 lb kg		No. 811C No. 811S Sch. 40 lb kg	No. 811HC Sch. 80 lb kg
2 DN50	2.375 60.3	4.38 111	4.0 1.8	4.4 2.0	2.75 70	2.7 1.3	3.1 1.4
2½	2.875 73.0	5.13 130	6.2 2.8	6.6 3.0	3.00 76	4.0 1.8	4.4 2.0
DN65	3.000 76.1	5.13 130	7.1 3.2	7.5 3.4	3.00 76	4.6 2.1	5.1 2.3
3 DN80	3.500 88.9	5.88 149	8.6 3.9	10.1 4.6	3.38 86	5.7 2.6	6.8 3.1
4 DN100	4.500 114.3	7.50 191	16.1 7.3	18.5 8.4	4.00 102	10.1 4.6	11.2 5.4
DN125	5.500 139.7	10.75 273	32.8 14.9	38.8 17.6	5.50 140	19.6 8.9	23.4 10.6
6	6.500 165.1	10.75 273	39.4 17.9	43.0 19.5	5.50 140	23.8 10.7	25.6 11.6
DN150	6.625 168.3	10.75 273	37.7 17.1	47.0 21.3	5.50 140	22.3 10.2	28.0 12.7
8 DN200	8.625 219.1	14.25 362	72.1 32.7	92.8 42.1	7.25 184	42.8 19.4	55.3 25.1

NOTES

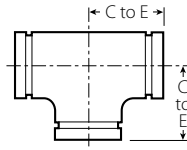
- The cast carbon steel fittings listed above (No. 890C, No. 890HC, No. 811C and No. 811HC) feature reduced C to E dimensions, when compared to the fabricated carbon steel fittings (No. 890, No. 890H, No. 811 and No. 811H) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- Dimensions shown have been rounded up to nearest 1/16" / 3 mm.

4.1 DIMENSIONS

Tee

No. 820C & No. 820HC Tee (Cast Carbon Steel)

No. 820S Tee (Cast Stainless Steel)



Size		No. 820C, No. 820HC & No. 820S		
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	Approx. Weight	
			No. 820C No. 820S Sch. 40 lb kg	No. 820HC Sch. 80 lb kg
2 DN50	2.375 60.3	4.38 111	8.4 3.8	6.6 3.0
2½	2.875 73.0	5.13 130	9.5 4.3	10.8 4.9
	3.000 76.1		9.8 4.4	10.7 4.9
3 DN80	3.500 88.9	5.88 149	14.1 6.4	16.5 7.5
4 DN100	4.500 114.3	7.50 191	26.2 11.9	30.4 13.8
	5.500 139.7		49.4 22.4	60.9 27.6
DN125	6.500 165.1	10.75 273	57.3 26.0	70.7 32.1
	6.625 168.3		61.3 27.8	76.1 34.5
6 DN150	8.625 219.1	10.75 273	124.5 56.5	155.4 70.5
8 DN200		14.25 362		

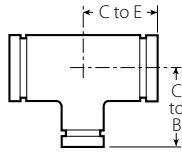
NOTES

- The cast carbon steel fittings listed above (No. 820C and No. 820HC) feature reduced C to E dimensions, when compared to the fabricated carbon steel fittings (No. 820 and No. 820H) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- Dimensions shown have been rounded up to nearest 1/32 mm.

4.2 DIMENSIONS

Reducing Tee

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



Size				No. 825 & 825H Reducing Tee					
Nominal inches DN	Actual Outside Diameter inches mm	C to E inches mm	C to B inches mm	Approx. Weight					
				No. 825 Sch. 40 lb kg	No. 825H Sch. 80 lb kg				
2½ x 2½ x 2 DN50	2.875 x 2.875 x 2.375	5.63	5.38	8.7	11.9				
	73.0 73.0 60.3	143	137	4.0	5.4				
x DN65 x 2 DN50	3.000 x 3.000 x 2.375	3.75	3.75	6.2	6.7				
	76.1 76.1 60.3	95	95	2.8	3.0				
3 x 3 x 2 DN80 DN80 DN50	3.500 x 3.500 x 2.375	6.00	5.63	11.1	15.4				
	88.9 88.9 60.3	153	143	5.0	7.0				
	2½ 2.875	6.00	5.88	11.8	16.4				
	73.0	153	149	5.3	7.4				
DN65	3.000	4.25	4.25	8.5	9.7				
	76.1	108	108	3.9	4.4				
	4 x 4 x 2 DN100 DN100 DN50	4.500 x 4.500 x 2.375	6.88	6.13	16.9	24.1			
		114.3 114.3 60.3	175	156	7.7	10.9			
2½ 2.875		6.88	6.38	17.6	25.0				
73.0		175	162	8.0	11.4				
DN65	3.000	5.00	5.00	13.6	15.4				
	76.1	127	127	6.2	7.0				
	3 3.500	6.88	6.51	18.2	25.9				
	DN80 88.9	175	165	8.3	11.7				
x DN125 x 3 DN80	5.500 x 5.500 x 3.500	5.50	5.50	19.4	23.7				
	139.7 139.7 88.9	140	140	8.8	10.8				
x x DN65	6.500 x 6.500 x 3.000	6.50	6.50	27.1	23.7				
	165.1 165.1 76.1	165	165	12.3	10.8				
3 DN80	3.500	6.50	6.50	27.3	33.5				
	88.9	165	165	12.4	15.2				
4 DN100	4.500	6.50	6.50	28.1	34.3				
	114.3	165	165	12.7	15.6				
6 x 6 x 2½ DN150 DN150 DN65	6.625 x 6.625 x 2.875	8.38	7.38	39.7	61.2				
	168.3 168.3 73.0	213	187	18.0	27.8				
	3.000	6.50	6.50	27.5	24.1				
	76.1	165	165	12.5	10.9				
	3 3.500	8.38	7.51	40.4	62.3				
	DN80 88.9	213	191	18.3	28.2				
	4 4.500	8.38	7.87	41.7	64.3				
	DN100 114.3	213	200	18.9	29.2				
DN125	5.500	6.50	6.50	29.3	36.4				
	139.7	165	165	13.4	16.5				
8 x 8 x 4 DN200 DN200 DN100	8.625 x 8.625 x 4.500	10.00	8.87	69.9	108.6				
	219.1 219.1 114.3	254	225	31.7	49.3				
	6.500	7.75	7.75	48.4	61.7				
	165.1	197	197	22.0	28.0				
	6 6.625	10.00	9.37	75.1	116.6				
	DN150 168.3	254	238	34.1	52.9				

NOTES

- The fittings listed above (No. 825 and No. 825H) are made using wrought carbon steel fittings and welded pipe nipples.
- Dimensions shown have been rounded up to nearest 1/16" / 3 mm.

4.3 DIMENSIONS

Flange Adapter Nipples

No. 845FC ANSI Class 150 Flange Adapter Nipple (Cast Carbon Steel) (Flat Face)

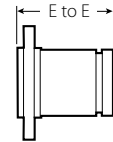
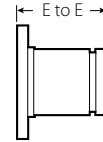
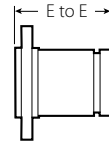
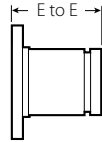
No. 845FS ANSI Class 150 Flange Adapter Nipple (Cast Stainless Steel) (Flat Face)

No. 845RC ANSI Class 150 Flange Adapter Nipple (Cast Carbon Steel) (Raised Face)

No. 845RS ANSI Class 150 Flange Adapter Nipple (Cast Stainless Steel) (Raised Face)

No. 846FC ANSI Class 300 Flange Adapter Nipple (Cast Carbon Steel) (Flat Face)

No. 846RC ANSI Class 300 Flange Adapter Nipple (Cast Carbon Steel) (Raised Face)



Flat Face

Raised Face

Flat Face

Raised Face

Size		No. 845FC & No. 845FS ANSI Class 150 Flange Adapter Nipple		No. 845RC & No. 845RS ANSI Class 150 Flange Adapter Nipple		No. 846FC ANSI Class 300 Flange Adapter Nipple		No. 846RC ANSI Class 300 Flange Adapter Nipple	
Nominal inches DN	Actual Outside Diameter inches mm	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg
2 DN50	2.375 60.3	4.00 102	6.6 3.0	4.00 102	6.8 3.1	4.00 102	8.2 3.7	4.00 102	8.4 3.8
2½	2.875 73.0	4.00 102	9.7 4.4	4.00 102	9.5 4.3	4.00 102	11.7 5.3	4.00 102	11.9 5.4
3 DN80	3.500 88.9	4.00 102	11.7 5.3	4.00 102	12.1 5.5	4.00 102	15.9 7.2	4.00 102	16.1 7.3
4 DN100	4.500 114.3	6.00 152	18.7 8.5	6.00 152	19.2 8.7	6.00 152	28.7 13.0	6.00 152	28.7 13.0
6 DN150	6.625 168.3	6.00 152	30.9 14.0	6.00 152	28.0 12.7	6.00 152	49.6 22.5	6.00 152	47.8 21.7
8 DN200	8.625 219.1	6.00 152	42.3 19.2	6.00 152	48.5 22.0	6.00 152	73.9 33.5	6.00 152	72.3 32.8

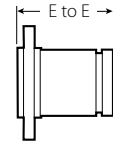
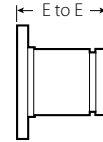
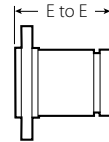
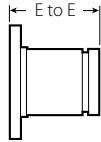
NOTES

- The cast carbon steel fittings listed above (No. 845FC, No. 845RC, No. 846FC, and No. 846RC) feature reduced E to E dimensions, when compared to the fabricated carbon steel fittings (No. 845F, No. 845R, No. 846F, and No. 846R) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- Dimensions shown have been rounded up to nearest 1/32 mm.

4.3 DIMENSIONS (Continued)

Flange Adapter Nipples

- No. 845EF PN16 Flange Adapter Nipple (Cast Carbon Steel) (Flat Face)
- No. 845EFS PN16 Flange Adapter Nipple (Cast Stainless Steel) (Flat Face)
- No. 845ER PN16 Flange Adapter Nipple (Cast Carbon Steel) (Raised Face)
- No. 845ERS PN16 Flange Adapter Nipple (Cast Stainless Steel) (Raised Face)
- No. 846EF PN25 Flange Adapter Nipple (Cast Carbon Steel) (Flat Face)
- No. 846ER PN25 Flange Adapter Nipple (Cast Carbon Steel) (Raised Face)



Flat Face

Raised Face

Flat Face

Raised Face

Size		No. 845EF & No. 845EFS PN16 Flange Adapter Nipple		No. 845ER & No. 845ERS PN16 Flange Adapter Nipple		No. 846EF PN25 Flange Adapter Nipple		No. 846ER PN25 Flange Adapter Nipple	
Nominal inches DN	Actual Outside Diameter inches mm	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg	E to E inches mm	Approx. Weight lb kg
2 DN50	2.375	4.00	6.7	4.00	6.9	4.00	8.3	4.00	8.5
	60.3	102	3.0	102	3.1	102	3.8	102	3.9
DN65	3.000	4.00	9.8	4.00	10.1	4.00	11.1	4.00	11.5
	76.1	102	4.4	102	4.6	102	5.0	102	5.2
3 DN80	3.500	4.00	9.9	4.00	12.2	4.00	16.1	4.00	16.3
	88.9	102	4.5	102	5.5	102	7.3	102	7.4
4 DN100	4.500	6.00	11.8	6.00	19.4	6.00	29.0	6.00	29.0
	114.3	152	5.4	152	8.8	152	13.2	152	13.2
DN125	5.500	6.00	23.8	6.00	24.4	6.00	35.1	6.00	35.7
	139.7	152	10.8	152	11.1	152	15.9	152	16.2
DN150	6.500	6.00	29.0	6.00	29.7	6.00	42.2	6.00	42.9
	165.1	152	13.2	152	13.5	152	19.1	152	19.5
6 DN150	6.625	6.00	31.2	6.00	28.3	6.00	50.1	6.00	48.3
	168.3	152	14.2	152	12.8	152	22.7	152	21.9
8 DN200	8.625	6.00	42.7	6.00	49.0	6.00	74.6	6.00	73.0
	219.1	152	19.4	152	22.2	152	33.8	152	33.1

NOTE

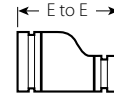
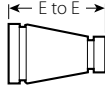
- Dimensions shown have been rounded up to nearest 1/32 mm.

4.4 DIMENSIONS

Reducers

No. 850C & No. 850HC Concentric Reducer (Cast Carbon Steel)

No. 851C & No. 851HC Eccentric Reducer (Cast Carbon Steel)



Size				No. 850C & No. 850HC Concentric Reducer				No. 851C & No. 851HC Eccentric Reducer			
Nominal inches DN		Actual Outside Diameter inches mm		E to E inches mm	Approx. Weight		E to E inches mm	Approx. Weight			
					No. 850C Sch. 40 lb kg	No. 850HC Sch. 80 lb kg		No. 851C Sch. 40 lb kg	No. 851HC Sch. 80 lb kg		
2½	x	2	x	4.00	2.4	2.6	4.00	2.4	2.5		
		DN50		102	1.1	1.2	102	1.1	1.2		
	x	2	x	4.00	2.9	3.3	4.00	2.4	2.5		
DN65		DN50		102	1.3	1.5	102	1.1	1.2		
3	x	2	x	4.00	2.9	3.3	4.00	2.8	3.2		
DN80		DN50		102	1.3	1.5	102	1.3	1.5		
		2½		4.00	3.1	3.6	4.00	3.0	3.5		
				102	1.4	1.6	102	1.4	1.6		
		3		4.00	3.7	4.2	4.00	3.1	3.5		
		DN65		102	1.7	1.9	102	1.4	1.6		
4	x	2	x	4.00	4.0	4.6	4.00	4.0	4.8		
DN100		DN50		102	1.8	2.1	102	1.8	2.2		
		2½		4.00	5.1	4.8	4.00	4.0	4.9		
				102	2.3	2.2	102	1.8	2.2		
		3		4.00	4.2	4.8	4.00	4.2	4.8		
		DN65		102	1.9	2.2	102	1.9	2.2		
		3		4.00	5.5	5.7	4.00	4.2	4.9		
		DN80		102	2.5	2.6	102	1.9	2.2		
DN125	x	DN65	x	4.00	5.0	6.2	4.00	5.2	6.2		
				102	2.3	2.8	102	2.4	2.8		
		3		4.00	5.1	6.3	4.00	5.2	6.2		
		DN80		102	2.3	2.9	102	2.4	2.8		
		4		4.00	5.5	6.6	4.00	5.6	6.6		
		DN100		102	2.5	3.0	102	2.5	3.0		
6	x	2½	x	10.88 (f)	12.2	13.2	10.88 (f)	12.2	13.7		
DN150				276	5.5	6.0	276	5.5	6.2		
		3		4.00	6.6	7.9	4.00	6.5	7.8		
		DN65		102	3.0	3.6	102	2.9	3.5		
		3		10.88 (f)	12.9	13.9	10.88 (f)	12.9	14.4		
		DN80		276	5.9	6.3	276	5.9	6.5		
		4		5.50	7.7	9.2	5.50	10.0	11.8		
		DN100		140	3.5	4.2	140	4.4	5.4		
8	x	4	x	11.75 (f)	20.4	25.5	11.75 (f)	20.5	26.0		
200		DN100		298	9.3	11.6	298	9.3	11.8		
		6		4.50	10.8	12.6	4.50	11.3	14.2		
				114	4.9	5.7	114	5.1	6.4		
		6		6.00	13.4	17.5	6.00	15.8	20.3		
		DN150		152	6.1	8.0	152	7.2	9.2		

NOTES

- The cast carbon steel fittings listed above (No. 850C, No. 850HC, No. 851C and No. 851HC) feature reduced E to E dimensions, when compared to the fabricated carbon steel fittings (No. 850, No. 850H, No. 851 and No. 851H) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- (f) = Fabricated fitting.
- Dimensions shown have been rounded up to nearest 1/8"/3 mm.

4.5 DIMENSIONS

Cap

No. 860C & No. 860HC Cap (Cast Carbon Steel)



Size		No. 860C & No. 860HC Cap		
Nominal inches DN	Actual Outside Diameter inches mm	E to E inches mm	Approx. Weight	
			No. 860C Sch. 40 lb kg	No. 860HC Sch. 80 lb kg
2 DN50	2.375 60.3	2.38 60	1.3 0.6	1.5 0.7
2½	2.875 73.0	2.75 70	2.0 0.9	2.2 1.0
DN65	3.000 76.1	2.75 70	2.2 1.0	2.4 1.1
3 DN80	3.500 88.9	3.00 76	2.6 1.2	3.1 1.4
4 DN100	4.500 114.3	3.50 89	4.4 2.0	5.1 2.3
DN125	5.500 139.7	4.25 108	7.1 3.2	8.6 3.9
DN150	6.500 165.1	4.75 121	9.0 4.1	11.2 5.1
6 DN150	6.625 168.3	4.75 121	9.3 4.2	11.5 5.2
8 DN200	8.625 219.1	6.00 152	16.8 7.6	21.4 9.7

NOTES

- The cast carbon steel fittings listed above (No. 860C and No. 860HC) feature reduced E to E dimensions, when compared to the fabricated carbon steel fittings (No. 860 and No. 860H) previously shown in this submittal. Please contact Victaulic for fabricated fitting information.
- Dimensions shown have been rounded up to nearest 1/32 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: Victaulic 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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