

# Victaulic® Pipe Clamp Anchors Nos. A81, A82, A83 and A84



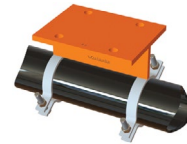
No. A81



No. A82



No. A83



No. A84

## 1.0 PRODUCT DESCRIPTION

### Available Sizes

- 2 – 12"/DN50 – DN300

### Application

- An engineered pipe clamp anchor can be connected to the existing concrete and steel structure to direct the piping movement and distribute the load from the piping system to the supporting structure
- For use on Schedule 40 or greater carbon steel pipe.

### NOTE

- As the pipe clamp anchor is attached directly to the pipe, the potential for galvanic corrosion must be considered.

## 2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under Victaulic's Quality Management System, as certified by LPCB in accordance with ISO 9001:2018.

## 3.0 SPECIFICATIONS – MATERIAL

**Plate:** Carbon steel conforming to ASTM A36.

**Structure Tubing:** ASTM A500 Grade C.

**Clamps:** Carbon steel conforming to ASTM A653 Grade 33.

**Clamp Bolts/Nuts:** Carbon steel hex bolts meeting the requirements of ASTM A307 Grade A. Carbon steel hex nuts meeting ASTM A563 Grade A.

**Structure Bolts/Nuts:** Carbon steel hex bolts meeting the requirements of ASTM F2125 Grade A325. Carbon steel heavy hex nuts meeting ASTM A563 Grade A.

**Coating:** (specify choice)

Standard: Orange coating.

Optional: Hot dip galvanized structure product conforming to ASTM A123. Hot dip galvanized bolts and nuts conforming to ASTM A153.

Optional: Contact Victaulic with your requirements for other coatings.

Fastening selection/method by others.<sup>1</sup>

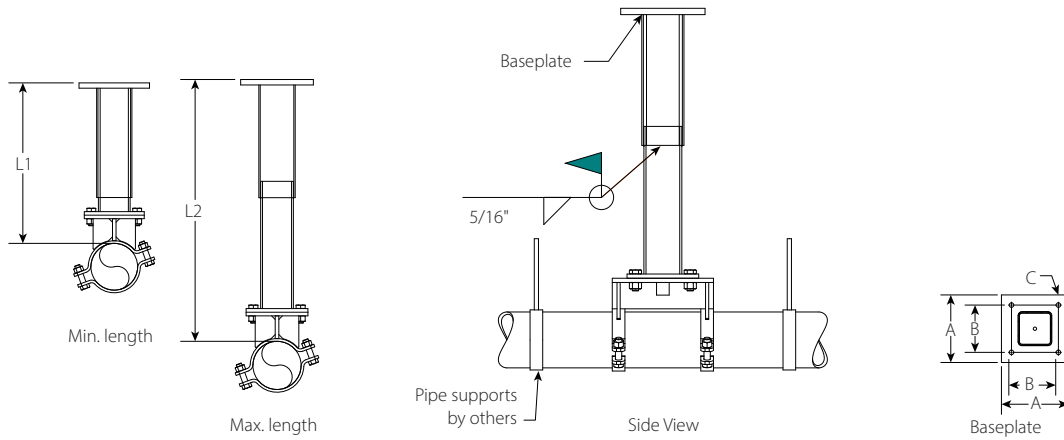
<sup>1</sup> Material, type, length, and capacity shall be the responsibility of others. Product fastening design service is available from Victaulic upon request.

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

## 4.0 DIMENSIONS

### No. A81 Long Adjustable Pipe Clamp Anchor

Top of Pipe to Structure: 22 3/4 – 36”



Pipe Size		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	L1 Minimum Length inches mm	L2 Maximum Length inches mm	A Base Plate Width inches mm	B Bolt Hole Spacing inches mm	C Bolt Hole Diameter inches mm	Approximate (Each) lbs kg
2 DN50	2.375 60.3	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	72.2 32.8
2½	2.875 73.0	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	72.6 32.9
3 DN80	3.500 88.9	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	72.8 33.0
4 DN100	4.500 114.3	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	76.4 34.7
5	5.563 141.3	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	78.4 35.6
6 DN150	6.625 168.3	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	102.7 46.6
8 DN200	8.625 219.1	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	104.8 47.5
10 DN250	10.750 273.0	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	127.0 57.6
12 DN300	12.750 323.9	22.75 578	36.00 914	10.00 254	7.00 175	0.6875 17.5	130.4 59.1

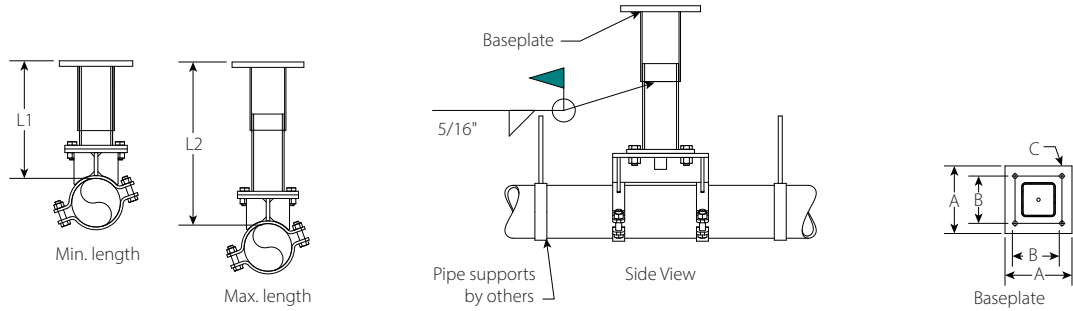
#### NOTES

- The maximum and minimum adjustable lengths are measured from the top of the pipe to the top of the base plate.
- The product can be either anchored to concrete structures or welded to the steel frames from the base plate. The design of the anchorage and the welds shall be engineered for each specific project. Design service of the product connection to the structure is available from Victaulic upon customer request.
- The clamps shall be installed with the standard torque listed in the Minimum Torque table in section 5.0.
- For product installation requirement refer to document [L-A80](#): Victaulic Pipe Clamp Anchor Installation Instructions.

## 4.1 DIMENSIONS

### No. A82 Short Adjustable Pipe Clamp Anchor

Top of Pipe to Structure: 16 – 22 ½"



Pipe Size		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	L1 Minimum Length inches mm	L2 Maximum Length inches mm	A Base Plate Width inches mm	B Bolt Hole Spacing inches mm	C Bolt Hole Diameter inches mm	Approximate (Each) lbs kg
2 DN50	2.375 60.3	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	61.3 27.8
2½	2.875 73.0	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	61.6 28.0
3 DN80	3.500 88.9	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	61.9 28.1
4 DN100	4.500 114.3	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	65.5 29.7
5	5.563 141.3	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	67.5 30.6
6 DN150	6.625 168.3	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	88.5 40.1
8 DN200	8.625 219.1	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	90.5 41.1
10 DN250	10.750 273.0	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	112.7 51.1
12 DN300	12.750 323.9	16.00 406	22.50 572	10.00 254	7.00 175	0.6875 17.5	116.1 52.7

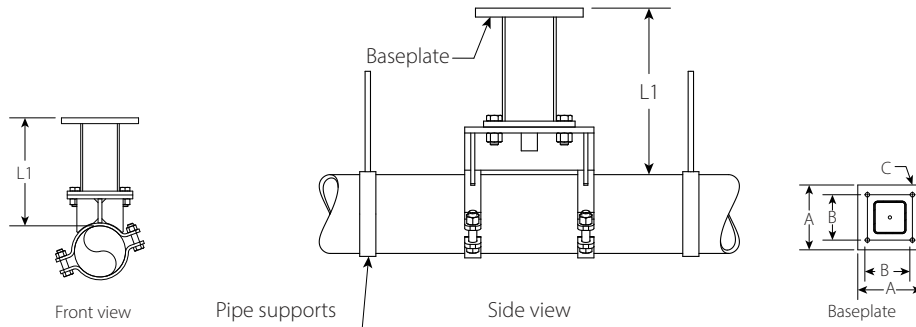
#### NOTES

- The maximum and minimum adjustable lengths are measured from the top of the pipe to the top of the base plate.
- The product can be either anchored to concrete structures or welded to the steel frames from the base plate. The design of the anchorage and the welds shall be engineered for each specific project. Design service of the product connection to the structure is available from Victaulic upon customer request.
- The clamps shall be installed with the standard torque listed in the Minimum Torque table in section 5.0.
- For product installation requirement refer to document [I-A80](#): Victaulic Pipe Clamp Anchor Installation Instructions.

## 4.2 DIMENSIONS

### No. A83 Long Fixed Pipe Clamp Anchor

Top of Pipe to Structure: 8", 11" or 14"



Pipe Size		Dimensions								
Nominal inches DN	Actual Outside Diameter inches mm	Option #1		Option #2		Option #3		A Base Plate Width inches mm	B Bolt Hole Spacing inches mm	C Bolt Hole Diameter inches mm
		L1 inches mm	Weight Approx. (Each) lbs kg	L1 inches mm	Weight Approx. (Each) lbs kg	L1 inches mm	Weight Approx. (Each) lbs kg			
2 DN50	2.375 60.3	8.00 203	48.3 21.9	11.00 279	51.2 23.2	14.00 356	54.2 24.6	10.00 254	7.00 175	0.6875 17.5
2½	2.875 73.0	8.00 203	48.6 22.0	11.00 279	51.6 23.4	14.00 356	54.5 24.7	10.00 254	7.00 175	0.6875 17.5
3 DN80	3.500 88.9	8.00 203	48.8 22.1	11.00 279	51.8 23.5	14.00 356	54.8 24.8	10.00 254	7.00 175	0.6875 17.5
4 DN100	4.500 114.3	8.00 203	52.4 23.8	11.00 279	55.4 25.1	14.00 356	58.4 26.5	10.00 254	7.00 175	0.6875 17.5
5	5.563 141.3	8.00 203	54.4 24.7	11.00 279	57.4 26.0	14.00 356	60.4 27.4	10.00 254	7.00 175	0.6875 17.5
6 DN150	6.625 168.3	8.00 203	71.3 32.3	11.00 279	75.1 34.1	14.00 356	78.9 35.8	10.00 254	7.00 175	0.6875 17.5
8 DN200	8.625 219.1	8.00 203	73.3 33.3	11.00 279	77.1 35.0	14.00 356	81.0 36.7	10.00 254	7.00 175	0.6875 17.5
10 DN250	10.750 273.0	8.00 203	95.6 43.3	11.00 279	99.4 45.1	14.00 356	103.2 46.8	10.00 254	7.00 175	0.6875 17.5
12 DN300	12.750 323.9	8.00 203	99.0 44.9	11.00 279	102.8 46.6	14.00 356	106.6 48.3	10.00 254	7.00 175	0.6875 17.5

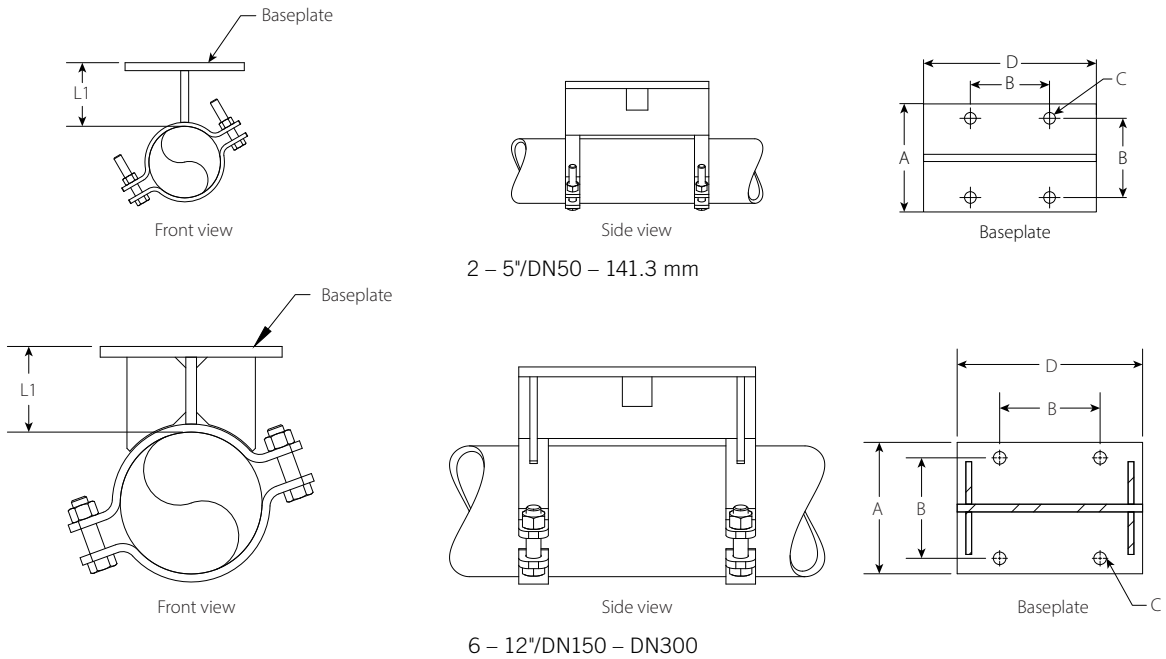
#### NOTES

- The L1 length is measured from the top of the pipe to the top of the base plate. L1 product length is customizable through special engineered product based on specific project requirement.
- The product can be either anchored to concrete structures or welded to the steel frames from the base plate. The design of the anchorage and the welds shall be engineered for each specific project. Design service of the product connection to the structure is available from Victaulic upon customer request.
- The clamps shall be installed with the standard torque listed in the Minimum Torque table in section 5.0.
- For product installation requirement refer to document [I-A80](#): Victaulic Pipe Clamp Anchor Installation Instructions.

### 4.3 DIMENSIONS

#### No. A84 Short Fixed Pipe Clamp Anchor

Top of Pipe to Structure: 3", 4" or 5"



Pipe Size		Dimensions									
Nominal inches DN	Actual Outside Diameter inches mm	Option #1		Option #2		Option #3		A Base Plate Width inches mm	B Bolt Hole Spacing inches mm	C Bolt Hole Diameter inches mm	D Base Plate Length inches mm
		L1 inches mm	Weight Approx. (Each) lbs kg	L1 inches mm	Weight Approx. (Each) lbs kg	L1 inches mm	Weight Approx. (Each) lbs kg				
2 DN50	2.375 60.3	3.00 76	13.1 6.0	4.00 102	14.3 6.5	5.00 127	15.4 7.0	7.50 191	5.50 140	0.8125 20.6	8.00 203
2½	2.875 73.0	3.00 76	13.5 6.1	4.00 102	14.6 6.6	5.00 127	15.7 7.1	7.50 191	5.50 140	0.8125 20.6	8.00 203
3 DN80	3.500 88.9	3.00 76	13.7 6.2	4.00 102	14.8 6.7	5.00 127	16.0 7.2	7.50 191	5.50 140	0.8125 20.6	8.00 203
4 DN100	4.500 114.3	3.00 76	17.0 7.7	4.00 102	18.4 8.4	5.00 127	19.9 9.0	7.50 191	5.50 140	0.8125 20.6	10.00 254
5	5.563 141.3	3.00 76	19.0 8.6	4.00 102	20.4 9.3	5.00 127	21.9 9.9	7.50 191	5.50 140	0.8125 20.6	10.00 254
6 DN150	6.625 168.3	3.00 76	31.4 14.2	4.00 102	34.2 15.5	5.00 127	37.1 16.8	8.50 216	6.50 165	0.8125 20.6	12.00 305
8 DN200	8.625 219.1	3.00 76	33.4 15.1	4.00 102	36.3 16.5	5.00 127	39.1 17.8	8.50 216	6.50 165	0.8125 20.6	12.00 305
10 DN250	10.750 273.0	3.00 76	54.9 24.9	4.00 102	58.5 26.5	5.00 127	62.1 28.2	10.00 254	6.50 165	0.8125 20.6	14.00 356
12 DN300	12.750 323.9	3.00 76	58.3 26.4	4.00 102	61.9 28.1	5.00 127	65.5 29.7	10.00 254	6.50 165	0.8125 20.6	14.00 356

**NOTES**

- The L1 length is measured from the top of the pipe to the top of the base plate. L1 product length is customizable through special engineered product based on specific project requirement.
- The product can be either anchored to concrete structures or welded to the steel frames from the base plate. The design of the anchorage and the welds shall be engineered for each specific project. Design service of the product connection to the structure is available from Victaulic upon customer request.
- The maximum gravity hanger spacings at the product installation point shall be no more than 8 feet.
- The clamps shall be installed with the standard torque listed in the Minimum Torque table in section 5.0.

## 5.0 PERFORMANCE

### Minimum Torque of the Clamp Bolts

Bolt Size inches	Torque Value ft-lbs
5/16	10
1/2	35
5/8	65
3/4	85
7/8	100
1	120

**NOTES**

- The pipe clamp anchor shall be installed directly on the pipe, not on top of the pipe insulation.
- Torque values in the table above are suggested for the clamp bolt installation on Schedule 40 piping or higher.
- Installation torque of the other structure high strength bolts shall follow industry standard.

## 5.1 PERFORMANCE

### Design Load Capacity

Size		Design Load Capacity
Nominal inches DN	Actual Outside Diameter inches mm	
2 DN50	2.375 60.3	460 209
2 1/2	2.875 73.0	700 319
3 DN80	3.500 88.9	950 434
4 DN100	4.500 114.3	1460 663
5	5.563 141.3	2080 949
6 DN150	6.625 168.3	2820 1285
8 DN200	8.625 219.1	4500 2045
10 DN250	10.750 273.0	4750 2160
12 DN300	12.750 323.9	4860 2209

**NOTES**

- Reference the tabulated capacities in this table for application without welding clamps to the pipe. For anchor loads higher than the capacities shown in the table, welding the clamps to the pipe is required. Refer to [publication I-A80](#): Victaulic Pipe Clamp Anchor Installation Instructions for recommended clamp-to-pipe weld with corresponding enhanced A84 anchor capacities.
- For A81, A82, and A83 products, the design load capacity should not be exceeded. The capacity of A84 can only be enhanced by approved welding shown in Victaulic installation guide [I-A80](#)
- The pipe clamp anchor shall be utilized to primarily resist axial load paralleled to the pipe direction. Contact Victaulic if the pipe clamp anchor is applied to resist loads from other directions.
- The ultimate capacity of the pipe clamp anchor is affected by the distance from the pipe to the base plate and the fastening method from the base plate to the support structure. Contact Victaulic for product application on a specific project.

## 6.0 NOTIFICATIONS

### WARNING



- 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

Failure to follow these instructions could result in death or serious personal injury and property damage.

## 7.0 REFERENCE MATERIALS

[I-A80: Victaulic Pipe Clamp Anchor Installation Instructions](#)

[I-100: Victaulic Field Installation Handbook](#)

### 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, 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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