

Victaulic® Series UH1 Stainless Steel Annular Corrugated Flex pipe



1.0 PRODUCT DESCRIPTION

Available Sizes

- ½ – 2"/DN15 – DN50

Available Lengths

- 12"/305 mm
- 18"/457 mm
- 24"/610 mm
- 36"/914 mm

End Connections

- Male NPT
- Female NPT
- Sweat
- Copper Press¹

Function

- Provides simplified coil circuit installation

Maximum Working Pressure

- 400 psi/2758 kPa/28 bar

Operating Temperature Range

- –4°F to +250°F/–20°C to +121°C

Application

- Hot and cold water treated systems
- Recommended only for closed-loop systems

¹ Copper press ends are rated to 300 psi

2.0 CERTIFICATION/LISTINGS

Not applicable – contact Victaulic with any questions.

3.0 SPECIFICATIONS – MATERIAL

Corrugated Tubing and Braid Wire for ½" to 2": Stainless steel 304L

Collar/Weld fitting: Stainless steel 304

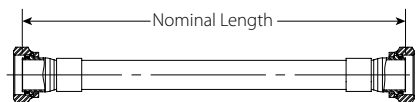
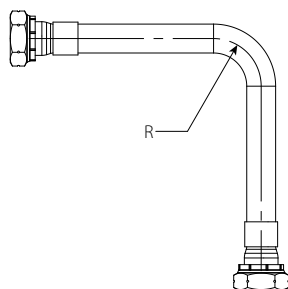
Nut: 304 Stainless Steel

Gasket Seal: Victaulic EPDM

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

4.0 DIMENSIONS

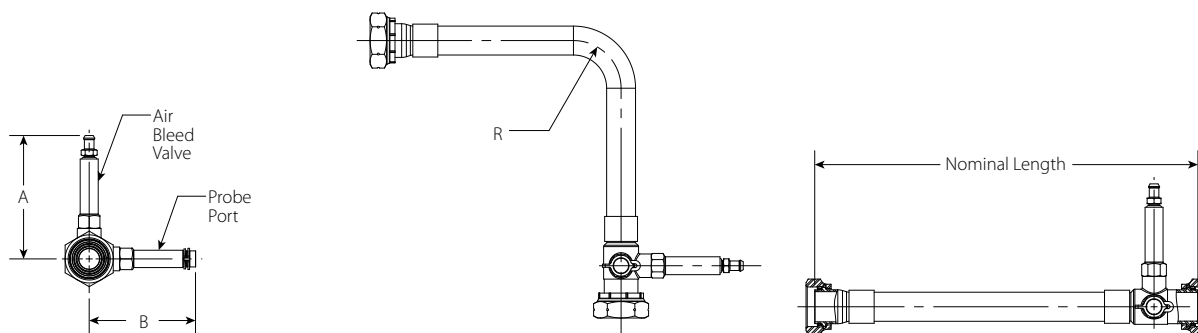
Flex Pipe Dimensions Without PT



Hose	Rated Pressure	Minimum Static Bend Radius	Nominal Length	Approximate Weight (Each)
Nominal inches DN	psi kpa	R inches mm	inches mm	lbs kg
½ DN15	400 2758	1.5 38.1	12	0.7
			305	0.3
			18	0.8
			457	0.4
			24	0.9
			610	0.4
¾ DN20	400 2758	2.0 50.8	36	1.1
			914	0.5
			12	0.8
			305	0.4
			18	1.0
			457	0.5
1 DN25	400 2758	2.5 63.5	24	1.1
			610	0.5
			36	1.4
			914	0.6
			12	1.0
			305	0.5
1 ¼ DN32	400 2758	3.0 76.2	18	1.2
			457	0.5
			24	1.3
			610	0.6
			36	1.7
			914	0.8
1 ½ DN40	400 2758	3.5 88.9	12	2.5
			305	1.1
			18	2.8
			457	1.3
			24	3.1
			610	1.4
2 DN50	400 2758	4.5 114.3	36	3.7
			914	1.7
			12	2.7
			305	1.2
			18	3.2
			457	1.5
			24	3.6
			610	1.6
			36	4.5
			914	2.0
			12	3.9
			305	1.8
			18	4.5
			457	2.0
			24	5.1
			610	2.3
			36	6.2
			914	2.8

4.0 DIMENSIONS

Flex Pipe Dimensions With PT



Hose	Dimensions		Rated Pressure	Minimum Static Bend Radius	Nominal Length	Approximate Weight (Each)
Nominal inches DN	A inches mm	B inches mm	psi kpa	R inches mm	inches mm	lbs kg
½ DN15	3.8 97.7	3.3 84.4	400 2758	1.5 38.1	12	1.0
					305	0.5
					18	1.3
					457	0.6
					24	1.4
¾ DN20	3.8 97.7	3.3 84.4	400 2758	2.0 50.8	610	0.6
					36	1.6
					914	0.7
					12	1.3
					305	0.6
1 DN25	3.8 97.7	3.3 84.4	400 2758	2.5 63.5	18	1.5
					457	0.7
					24	1.6
					610	0.7
					36	1.9
1 ¼ DN32	4.1 103.3	3.5 89.9	400 2758	3.0 76.2	914	0.9
					12	1.5
					305	0.7
					18	1.6
					457	0.7
1 ½ DN40	4.2 107.3	3.7 94.0	400 2758	3.5 88.9	24	1.9
					610	0.9
					36	2.2
					914	1.0
					12	3.0
2 DN50	4.4 111.8	3.9 98.5	400 2758	4.5 114.3	305	1.4
					18	3.3
					457	1.5
					24	3.6
					610	1.6
					36	4.3
					914	2.0
					12	3.3
					305	1.5
					18	3.8
					457	1.7
					24	4.2
					610	1.9
					36	5.1
					914	2.3
					12	4.6
					305	2.1
					18	5.2
					457	2.4
					24	6.0
					610	2.7
					36	6.9
					914	3.1

5.0 PERFORMANCE

Flow Coefficient

Size Nominal	Nominal Length	Flow Coefficient	
		Straight Form	90°
inches DN	inches mm	Cv Kv	Cv Kv
½ DN15	12	8.5	7.2
	305	7.4	6.2
	18	7.4	6.4
	457	6.4	5.5
	24	6.5	5.6
	610	5.6	4.8
¾ DN20	36	5.3	5.2
	914	4.6	4.5
	12	23.0	14.6
	305	19.9	12.6
	18	19.0	13.3
	457	16.4	11.5
1 DN25	24	16.5	12.3
	610	14.3	10.6
	36	12.6	11.0
	914	10.9	9.5
	12	32.0	23.5
	305	27.7	20.3
1 ¼ DN32	18	25.9	19.0
	457	22.4	16.5
	24	23.6	18.8
	610	20.4	16.3
	36	19.8	16.5
	914	17.1	14.2
1 ½ DN40	12	67.5	46.1
	305	58.4	39.9
	18	55.0	41.8
	457	47.6	36.1
	24	49.9	38.1
	610	43.1	32.9
2 DN50	36	41.9	33.5
	914	36.2	29.0
	12	111.3	64.1
	305	96.2	55.5
	18	88.7	57.7
	457	76.7	49.9
	24	79.5	51.6
	610	68.8	44.6
	36	63.6	47.9
	914	55.0	41.5
	12	165.9	104.3
	305	143.5	90.2
	18	132.3	91.0
	457	114.4	78.7
	24	120.3	85.6
	610	104.1	74.0
	36	106.7	80.0
	914	92.3	69.2

5.0 PERFORMANCE

Equivalent Length

Size	Nominal Length	Equivalent Length (Sch 40 Pipe in Same Nominal Diameter)		Equivalent Length (L Copper Pipe in Same Nominal Diameter)	
		Straight Form	90°	Straight Form	90°
Nominal inches DN	inches mm	ft m	ft m	ft m	ft m
$\frac{1}{2}$ DN15	12	2.6	3.6	1.9	2.6
	305	1	1	1	1
	18	3.4	4.7	2.5	3.4
	457	1	1	1	1
	24	4.4	6.0	3.2	4.3
	610	1	2	1	1
	36	6.7	7.0	4.8	5.0
	914	2	2	1	2
$\frac{3}{4}$ DN20	12	1.5	1.7	3.8	4.2
	305	0	1	1	1
	18	2.2	2.5	4.6	5.0
	457	1	1	1	2
	24	2.6	3.3	5.3	12.3
	610	1	1	2	4
	36	5.1	5.6	6.7	7.3
	914	2	2	2	2
1 DN25	12	2.7	5.1	3.5	6.4
	305	1	2	1	2
	18	4.2	7.7	5.3	9.7
	457	1	2	2	3
	24	5.0	7.9	6.3	10.0
	610	2	2	2	3
	36	7.2	10.4	9.0	13.1
	914	2	3	3	4
1 $\frac{1}{4}$ DN32	12	2.5	5.4	2.3	4.9
	305	1	2	1	2
	18	3.8	6.6	3.5	6.0
	457	1	2	1	2
	24	4.7	8.0	4.2	7.2
	610	1	2	1	2
	36	6.6	10.3	6.0	9.3
	914	2	3	2	3
1 $\frac{1}{2}$ DN40	12	2.1	6.2	2.1	3.3
	305	1	2	1	1
	18	3.3	7.7	3.3	7.7
	457	1	2	1	2
	24	4.1	9.7	4.1	9.7
	610	1	3	1	3
	36	6.3	11.2	6.4	11.2
	914	2	3	2	3
2 DN50	12	3.4	8.6	3.9	9.9
	305	1	3	1	3
	18	5.3	11.3	6.1	13.0
	457	2	3	2	4
	24	6.5	12.8	7.4	14.7
	610	2	4	2	4
	36	8.2	14.6	9.4	16.8
	914	2	4	3	5

5.0 PERFORMANCE (CONTINUED)

Union Tailpieces

Hose Size Family	Outlet Size and Type	Male NPT	Female NPT	Copper Press ¹	Sweat
½ – 1"	¾"	–	–	–	P004UH1503
	½"	P004UH1404	P004UH1304	P004UH1604	P004UH1504
	¾"	P004UH1406	P004UH1306	P004UH1606	P004UH1506
	1"	P004UH1410	P004UH1310	P004UH1610	P004UH1510
1 ¼ – 1 ½"	½"	P012UH1404	–	–	–
	¾"	P012UH1406	–	–	–
	1"	P012UH1410	–	–	–
	1 ¼"	P012UH1412	P012UH1312	P012UH1612	P012UH1512
	1 ½"	P012UH1414	P012UH1314	P012UH1614	P012UH1514
2"	1"	P020UH1410	–	–	–
	1 ¼"	P020UH1412	–	–	–
	1 ½"	P020UH1414	–	–	–
	2"	P020UH1420	P020UH1320	P020UH1620	P020UH1520

¹ Copper press ends are rated to 300 psi

Replacement Seals

Hose Size Family	Partcode	Replacement PT Port	Partcode
½ – 1"	P000UH1002	Replacement Manual Air Vent	P000UH1008

6.0 NOTIFICATIONS

⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

- The installer shall understand the use of this product and why it was specified for the particular application.
- The installer shall understand common industry safety standards and potential consequences of improper product installation.
- It is the responsibility of the system designer to verify suitability of 300-series stainless steel flexible hose for use with the intended fluid media within the piping system and external environments.
- The effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on 300-series stainless steel flexible hose must be evaluated by the material specifier to confirm system life will be acceptable for the intended service.

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

7.0 REFERENCE MATERIALS

[I-Koil.Kit: Koil-Kit Coil Pack Installation and Maintenance Instructions](#)

[08.16: Victaulic Balancing Valves TA Series 786H/787H/788/789 and Series 78KH](#)

[08.29: Victaulic Differential Pressure Controller TA Series 793/794](#)

[08.30: Victaulic KOIL-KIT™ Coil Pack](#)

[08.34: Victaulic Automatic Balancing Valves Series 76T, 76B, 76K, 76V & 76G and 76F](#)

[08.37: Victaulic Compact Pressure Independent Balancing and Control Valve \(Compact-P\) TA Series 7CP](#)

[08.38: Victaulic TBV Terminal Balancing and Control Valves Series TC – On/Off Control Series TCM – Modulating Control](#)

[08.47: Victaulic Compact Differential Pressure Controller TA Series 7DA](#)

[08.55: Victaulic Pressure Independent Balancing and Modulating Control Valve TA Series 7MP](#)

[I-UH1: Victaulic Series UH1 Braided Flexible Hose Installation and Use Guidelines](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 victaulic.com.

Warranty

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

Intellectual Property Rights

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Note

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