

Victaulic® Braided Flexible Hose Series BH1



1.0 PRODUCT DESCRIPTION

Nominal Hose ID

- ¾ – 6"/DN20 – DN150 diameter

End Connections

- ¾ – 6"/DN20 – DN150: Victaulic Original Groove System (OGS) x OGS
- 1 ¼ – 2"/DN32 – DN50: OGS x Male NPT/Pipe Thread ISO 7-1 (BSPT/R)
- 1 ¼ – 2"/DN32 – DN50: OGS x ISO 228-1 Male Pipe Thread (BSPP/G)¹
- 1 – 2"/DN25 – DN50: ISO 228-1 Male Pipe Thread (BSPP/G) x ISO 228-1 Male Pipe Thread (BSPP/G)¹

¹ Victaulic provides the required seal for ISO 228-1 Male Pipe Thread (BSPP/G) End Connections

Maximum Working Pressure

- ¾ – 2"/DN20 – DN50 diameter: 400 psi/2758 kPa/28 Bar
- 2 ½"/DN65 diameter: 300 psi/2068 kPa/21 Bar
- 3 – 4"/DN80 – DN100 diameter: 200 psi/1379 kPa/14 Bar
- 6"/DN150 diameter: 175 psi/1207 kPa/12 Bar

Operating Temperature Range

- For ISO 228-1 male pipe thread (BSPP/G) x ISO 228-1 male pipe thread (BSPP/G) end connections only:
–40°F to +250°F/–40°C to +121°C
- For any OGS end connections: Reference the specific product publication for the coupling being used

Minimum Bend Radius

Hose shall be installed in accordance with the [I-BH1](#): Victaulic® Series BH1 Braided Flexible Hose Installation and Use Guidelines.

Hose Size	Minimum Static Bend Radius
inches DN	inches mm
¾ DN20	2 51
1 DN25	2 ½ 64
1 ¼ DN32	3 76
1 ½ DN40	3 ½ 89
2 DN50	4 ½ 114
2 ½	8 203
3 DN80	10 254
4 DN100	13 330
6 DN150	19 483

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

2.0 CERTIFICATIONS/LISTINGS

Product manufactured by Victaulic and/or certified suppliers in accordance with ISO-9001.

3.0 SPECIFICATIONS – MATERIAL

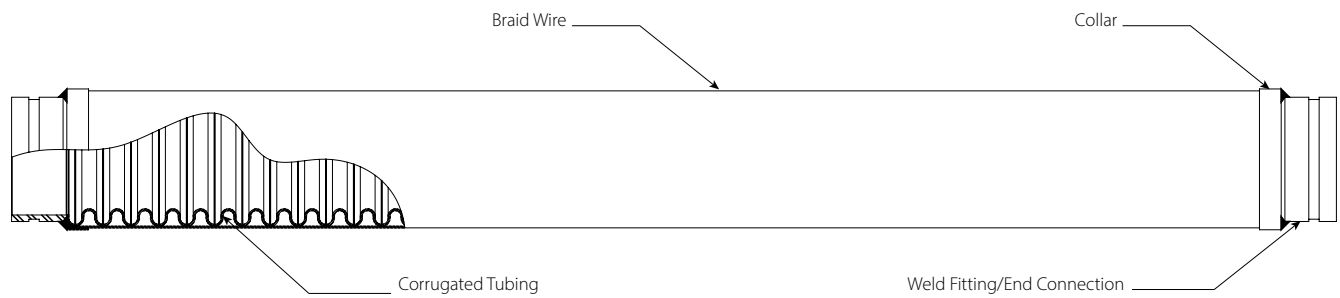
Series BH1:

Corrugated Tubing and Braid Wire: Stainless steel 304L

Collar: Stainless steel 304

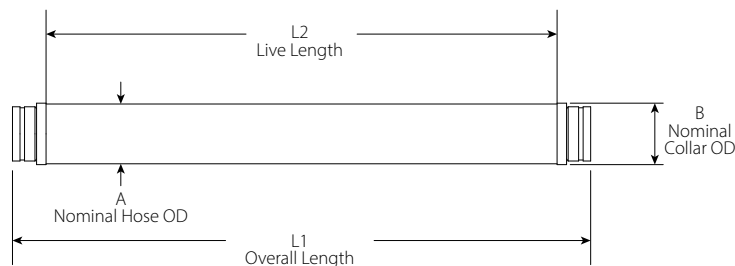
Weld Fitting/End Connection: Stainless steel 304L

Seal Material for ISO 228-1 Male Pipe Thread (BSPP/G) End Connections: EPDM



4.0 DIMENSIONS

Hose Lengths for OGS x OGS End Connections

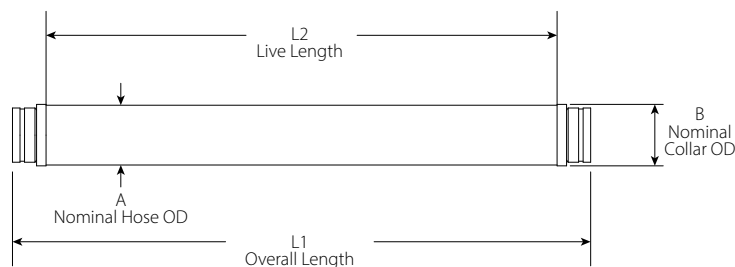


Size			Length		Hose Weight lb N
Nominal Hose ID inches DN	A Nominal Hose OD inches mm	B Nominal Collar OD inches mm	L1 Overall Length inches mm	L2 Live Length inches mm	
¾ DN20	1.071 27.2	1.260 32.0	12	6.4	0.8
			305	163	3.4
			18	12.4	1.0
			457	315	4.4
			24	18.4	1.2
			610	467	5.5
			36	30.4	1.7
			914	772	7.5
1 DN25	1.320 33.5	1.560 39.5	48	42.4	2.2
			1219	1077	9.6
			72	66.4	3.4
			1829	1687	15.0
			18	12.4	1.3
			457	315	5.6
			24	18.4	1.5
			610	467	6.8
1 ¼ DN32	1.690 42.8	1.890 48.0	36	30.4	2.1
			914	772	9.3
			48	42.4	2.6
			1219	1077	11.7
			72	66.4	4.2
			1829	1687	18.6
			18	12.4	2.0
			457	315	8.9
1 ½ DN40	2.040 52.0	2.280 58.0	24	18.4	2.5
			610	467	11.0
			36	30.4	3.5
			914	772	15.3
			48	42.4	4.4
			1219	1077	19.7
			72	66.4	7.0
			1829	1687	30.6
			18	12.4	2.5
			457	315	11.3
			24	18.4	3.2
			610	467	14.2
			36	30.4	4.5
			914	772	20.1
			48	42.4	5.8
			1219	1077	26.0
			72	66.4	9.0
			1829	1687	40.2

- Contact Victaulic for custom lengths.

4.0 DIMENSIONS (CONTINUED)

Hose Lengths for OGS x OGS End Connections



Size			Length		Hose Weight lb N
Nominal Hose ID inches DN	A Nominal Hose OD inches mm	B Nominal Collar OD inches mm	L1 Overall Length inches mm	L2 Live Length inches mm	
2 DN50	2.450 62.3	2.680 68.0	24	18.4	4.0
			610	467	17.8
			36	30.4	5.6
			914	772	24.9
			48	42.4	7.2
			1219	1077	31.9
			72	66.4	11.2
			1829	1687	49.8
			24	18.4	6.3
			610	467	27.9
2½	3.330 84.6	3.670 93.2	36	30.4	8.8
			914	772	39.1
			48	42.4	11.3
			1219	1077	50.4
3 DN80	3.880 98.6	4.200 106.8	36	30.4	10.6
			914	772	47.0
			48	42.4	13.5
			1219	1077	60.2
			36	30.4	15.9
			914	772	70.7
			48	42.4	20.5
4 DN100	4.960 126.0	5.280 134.0	1219	1077	91.1
			39	33.1	27.8
			1000	841	123.8
6 DN150	7.030 178.5	7.340 186.5	51	44.9	35.3
			1300	1141	157.0
			53	46.9	36.5
			1350	1191	162.4

- Contact Victaulic for custom lengths.

5.0 PERFORMANCE

Flow Coefficients

Size	Length	Flow Coefficient	
Nominal Hose ID inches DN	Overall inches mm	Straight Form Cv Kv	90° Cv Kv
¾ DN20	12	29.1	17.7
	305	25.1	15
	18	22.6	15.7
	457	19.5	14
	24	18.9	14.2
	610	16.3	12
	36	14.9	12.2
1 DN25	914	12.9	11
	48	12.1	10.7
	1219	10.4	9
	72	9.3	8.8
	1829	8.0	8
	18	37	24
	457	32	20
1 ¼ DN32	24	31	22
	610	27	19
	36	25	19
	914	22	16
	48	21	17
	1219	18	15
	72	23	20
1 ½ DN40	1829	20	17
	18	80	47
	457	69	41
	24	68	44
	610	59	38
	36	55	38
	914	47	33
2 DN50	48	47	34
	1219	40	30
	72	38	29
	1829	33	25
	39	2215	1067
	1000	1909	920
	51	2007	1031
2 ½ DN63	1300	1730	889
	53	1804	996
	1350	1555	859
	36	845	398
	914	729	343
	48	733	390
	1219	632	336
3 DN80	36	500	241
	914	431	208
	48	407	229
	1219	351	197
	36	407	229
	914	351	197
	48	407	229
4 DN100	1219	351	197
	36	407	229
	914	351	197
	48	407	229
	1219	351	197
	36	407	229
	914	351	197
6 DN150	48	407	229
	1219	351	197
	36	407	229
	914	351	197
	48	407	229
	1219	351	197
	36	407	229

Size	Length	Flow Coefficient	
Nominal Hose ID inches DN	Overall inches mm	Straight Form Cv Kv	90° Cv Kv
2 DN50	24	185	112
	610	160	97
	36	150	99
	914	129	86
	48	129	90
	1219	111	78
	72	105	78
2 ½ DN63	1829	90	67
	24	275	172
	610	237	148
	36	255	161
	914	220	139
	48	239	152
	1219	206	131
3 DN80	36	500	241
	914	431	208
	48	407	229
	1219	351	197
	36	845	398
	914	729	343
	48	733	390
4 DN100	1219	632	336
	39	2215	1067
	1000	1909	920
	51	2007	1031
	1300	1730	889
	53	1804	996
	1350	1555	859

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.

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

- 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 system designer's responsibility to verify suitability of materials for use with the intended fluid media within the piping system and external environment.
- The material specifier shall evaluate the internal and external effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on materials 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

[06.04: Victaulic® Standard Flexible Coupling Style 77](#)

[06.33: Victaulic® QuickVic™ Rigid Coupling Style 107V](#)

[06.34: Style 07-TCS Rigid Coupling for Technical Cooling Systems](#)

[08.51: Victaulic® ICSS – Low-Lead Balancing Valve TA Series 76X](#)

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

[08.74: TA Series 7SM Control Valve](#)

[17.16: Victaulic® Stainless Steel OGS Fittings](#)

[17.25: Victaulic® Stainless Steel Rigid Coupling Style 489](#)

[17.40: Victaulic® Vic-300 MasterSeal™ Stainless Steel Butterfly Valves Series 461 and Series E461](#)

[I-07-TCS: Victaulic® Style 07-TCS Rigid Coupling for Technical Cooling Systems Installation Instructions](#)

[I-BH1: Victaulic® Series BH1 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

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.