

## Series GH1



Series GH1



Series GH1-C2C

### 1.0 PRODUCT DESCRIPTION

#### Available Sizes by Component

- Series GH1-C2C 1"/DN25 Nominal ID Braided Hose: 25, 30, 42, 54, 66"/635, 762, 1067, 1372, 1677 mm.
- Series GH1 1 ¼"/DN30 thru 2 ½" Nominal ID Braided Hose: 24, 36, 48"/610, 914, 1219 mm.
- Series GH1 3"/DN80 thru 4"/DN100 Nominal ID Braided Hose: 36, 48"/914, 1219 mm.
- Series GH1 DN65 Nominal ID Braided Hose: 1000, 1250 mm/39.4, 49.2"

#### Hose Connections Connections:

- 1"/25 mm Grooved IGS (captured couplings)
- 1 ¼"/32 mm thru 4"/100mm Grooved OGS (couplings not included)

#### Minimum Bend Radius

- See table in Section 4

#### Maximum Working Temperature

- 225°F/107°C

#### Maximum Working Pressure

- Series GH1-C2C 1"/DN 25 Nominal ID Braided Hose: 200 psi/1375 kPa (FM), 175 psi/1206 kPa (UL)
- Series GH1 1 ¼"/DN30 thru 2 ½" Nominal ID Braided Hose: 300 psi/2068 kPa (UL and FM)
- Series GH1 3"/DN80 thru 4"/DN100 Nominal ID Braided Hose: 200 psi/1375 kPa (UL and FM)
- Series GH1 DN65 Nominal ID Braided Hose: 200 psi/1375 kPa (UL and FM)

### 2.0 CERTIFICATION/LISTINGS



#### NOTE

- The Series GH1 Braided Hose is certified as a flexible pipe fitting to UL 213 – *Standard for Safety – Rubber Gasketed Fittings for Fire Protection Service* and FM 1920 – *Approval Standard for Pipe Couplings and Fittings for Aboveground Fire Protection Systems*.

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

### 3.0 SPECIFICATIONS – MATERIAL

#### Series GH1

**Braided Flexible Hose:** 300-series Stainless Steel

**Collar/Weld Fitting:** 300-series Stainless Steel

**Series GH1-C2C (1"/DN25 size only)**

**Coupling Retainer Ring:** Polyethylene

**Housing:** Ductile iron conforming to ASTM A 536, Grade 65-45-12. Ductile iron conforming to ASTM A 395, Grade 65-45-15, is available upon special request.

#### Coupling Housing Coating:

- Orange enamel (North America, Asia Pacific).
- Red enamel (Europe).
- Hot dipped galvanized.

#### Gasket:<sup>1</sup>

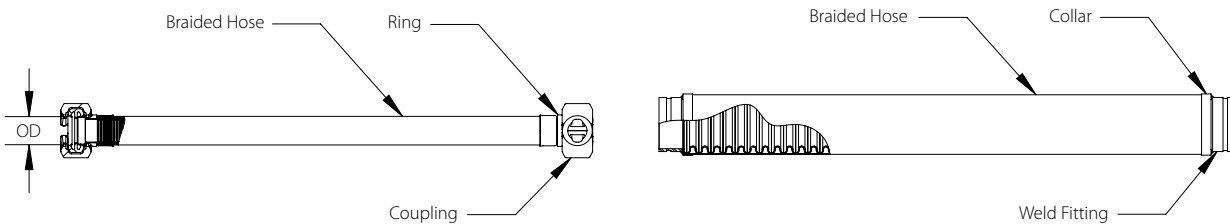
##### Grade “E” EPDM (Type A) Vic-Plus™ Pre-lubricated Gasket

EPDM (Violet Color Code). Applicable for wet and dry (oil-free air) fire protection systems only. Listed/Approved for continuous use in wet and dry systems. Listed/Approved for dry systems at -40°F/-40°C and above. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

<sup>1</sup> Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service guidelines and for a listing of services which are not compatible.

**Bolts/Nut:** Zinc electroplated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A 449 and physical requirements of ASTM A 183.

**Linkage:** CrMo Alloy Steel zinc electroplated per ASTM B633 Zn/Fe 5, Type III Finish



## 4.0 DIMENSIONS

### Series GH1 Braided Hose

#### Bend Radius

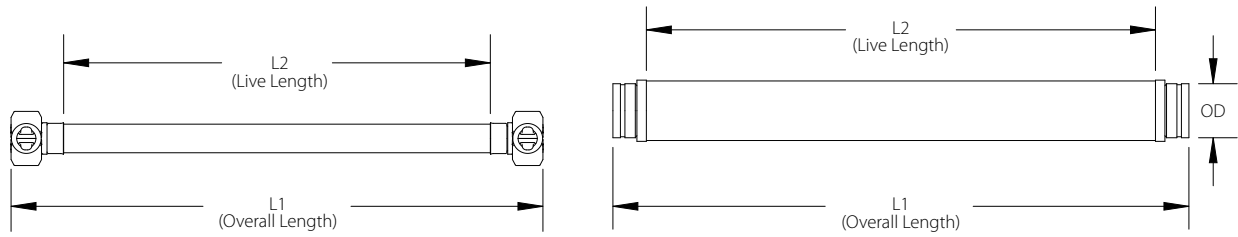
Hose Inside Diameter inches DN	Grooved End Nominal Diameter inches DN	Grooved End Actual Diameter Outside Diameter inches mm	"R" Minimum Bend Radius inches mm	Maximum Number of 90 degree Bends at Minimum Bend Radius				
				Length				
				25"/635mm	31"/762mm	43"/1067mm	55"/1372mm	67"/1677mm
1 DN25	1 DN25	1.315 33.7	2 51	1	2	2	2	2

Hose Inside Diameter inches DN	Grooved End Nominal Diameter inches DN	Grooved End Actual Diameter Outside Diameter inches mm	"R" Minimum Bend Radius inches mm	Maximum Number of 90 degree Bends at Minimum Bend Radius				
				Length				
				24"/610mm	36"/914mm	1000mm/39"	48"/1219mm	1250mm/49"
1 ¼ DN32	1 ¼ DN32	1.66 42.4	4 102	1	2	-	2	-
1 ½ DN 40	1.5 x 1 DN40 x DN25	1.900 x 1.315 48.3 x 33.4	5 127	-	2	-	-	-
1 ½ DN40	1 ½ DN40	1.9 48.3	5 127	1	2	-	2	-
2 DN50	2 DN50	2.375 60.3	6 152	1	1	-	2	-
2 ½	2 ½	2.875 73	8 203	1	1	-	1	-
DN65	DN65	3.000 76.1	8 203	-	-	1	-	1
3 DN80	3 DN80	3.5 88.9	10 254	-	1	-	1	-
4 DN100	4 DN100	4.5 114.3	13 330	-	1	-	1	-

## 4.0 DIMENSIONS

### Series GH1 Braided Hose

#### Hose Length

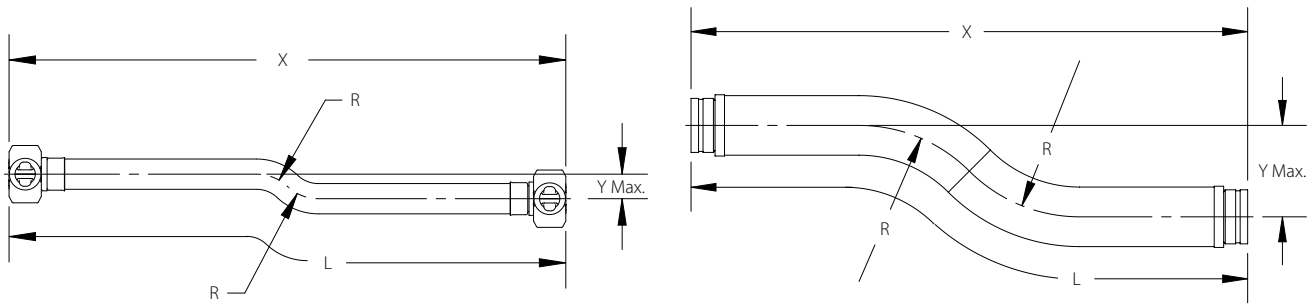


Hose Inside Diameter inches DN	Grooved End Nominal Diameter inches DN	Grooved End Actual Diameter inches mm	"R" Minimum Bend Radius inches mm	Length		Weight lb N
				L1 (Overall Length) inches mm	L2 (Live Length) inches mm	
1 DN25	1 DN25	1.315 33.7	2	25.0	20.1	2.8
			51	635	512	12.5
			2	30.0	25.1	3.1
			51	762	639	13.8
			2	42.0	37.1	3.8
			51	1067	943	16.9
			2	54.0	49.1	4.5
51	1372	1248	20.0			
2	66.0	61.1	5.2			
51	1677	1553	23.1			
1 ¼ DN32	1 ¼ DN32	1.660 42.4	4	24.0	18.5	2.5
			102	610	470	11.1
			4	36.0	30.5	3.5
			102	915	775	15.6
			4	48.0	42.5	4.4
102	1220	1080	19.6			
1 ½ DN40	1.5 x 1 DN40 x DN25	1.900 x 1.315 48.3 x 33.4	5	36.0	30.5	4.5
			127	915	775	20.0
1 ½ DN40	1 ½ DN40	1.9 48.3	5	24.0	18.5	3.2
			127	610	470	14.2
			5	36.0	30.5	4.5
			127	915	775	20.0
			5	48.0	42.5	5.8
127	1220	1080	25.8			
2 DN50	2 DN50	2.375 60.3	6	24.0	18.5	4.0
			152	610	468	17.8
			6	36.0	30.5	5.6
			152	915	773	24.9
			6	48.0	42.5	7.2
152	1220	1077	32.0			
2 ½	2 ½	2.875 73	8	24.0	18.5	6.3
			203	610	468	28.0
			8	36.0	30.5	8.8
			203	915	773	39.2
			8	48.0	42.5	11.3
203	1220	1077	50.3			
DN65	DN65	3.00 76.1	8	39.4	33.9	9.5
			203	1000	858	42.3
			8	49.3	43.6	11.8
			203	1250	1108	52.5
3 DN80	3 DN80	3.5 88.9	10	36.0	30.5	10.6
			254	915	773	47.2
			10	48.0	42.5	13.5
			254	1220	1077	60.1
4 DN100	4 DN100	4.5 114.3	13	36.0	30.5	15.9
			330	915	773	70.8
			13	18.0	42.5	20.5
			330	458	1077	91.2

## 4.0 DIMENSIONS

### Series GH1 Braided Hose

#### S-Bend

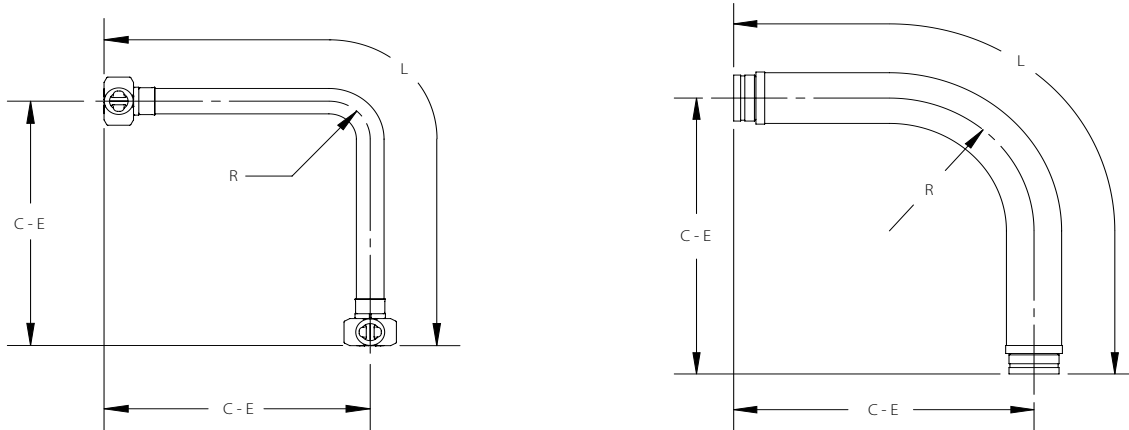


Hose Inside Diameter inches mm	Grooved End Nominal Diameter inches DN	Grooved End Actual Diameter inches mm	"R" Minimum Bend Radius inches mm	Length		
				L (Hose Length) inches mm	Ymax (Max Offset) inches mm	X at Ymax (takeout at max offset) inches mm
1 DN25	1 DN25	1.315 33.7	2	25.0	1.1	24.6
			51	635	28	625
			2	30.0	1.1	29.6
			51	762	28	752
			2	42.0	1.1	41.6
			51	1067	28	1057
1 ¼ DN32	1 ¼ DN32	1.660 42	4.0	24.0	2.3	23.4
			102	610	60	594
			4.0	36.0	2.3	35.4
			102	915	60	899
1 ½ DN40	1.5 x 1 DN40 x DN25	1.900 x 1.315 48.3 x 33.4	5.0	36.0	2.9	35.2
			127	915	75	895
1 ½ DN40	1 ½ DN40	1.900 48	5.0	24.0	2.9	23.2
			127	610	75	590
			5.0	36.0	2.9	35.2
			127	915	75	895
2 DN50	2 DN50	2.375 60	6.0	24.0	3.5	23.1
			153	610	90	586
			6.0	36.0	3.5	35.1
			153	915	90	891
2 ½	2 ½	2.875 73	6.0	48.0	3.5	47.1
			153	1220	90	1196
			8.0	24.0	4.7	22.7
			204	610	120	578
DN65	DN65	3.00 76.1	8.0	36.0	4.7	34.7
			204	915	120	883
			8.0	48.0	4.7	46.7
			204	1220	120	1188
3 DN80	3 DN80	3.5 89	8	39.4	4.7	38.1
			203	1000	120	969
			8	49.3	4.7	47.9
4 DN100	4 DN100	4.5 114	203	1250	120	1218
			10.0	36.0	5.9	34.4
			254	915	149	875
4	4	4.5	10.0	48.0	5.9	46.4
			254	1220	149	1180
			12.0	36.0	7.0	34.1
4	4	4.5	305	915	179	867
			12.0	48.0	7.0	46.1
			305	1220	179	1172

## 4.0 DIMENSIONS

### Series GH1 Braided Hose

#### 90° Bend



Hose Internal Diameter inches mm	Grooved End Nominal Diameter inches DN	Grooved End Actual Diameter inches mm	"R" Minimum Bend Radius inches mm	Length	
				L (Hose Length) inches mm	C to E inches mm
1 DN25	1 DN25	1.315 33.7	2	25.0	12.9
			51	635	328
			2	30.0	15.4
			51	762	392
			2	42.0	21.4
			51	1067	544
1 ¼ DN32	1 ¼ DN32	1 ½ 42	2	54.0	27.4
			51	1372	696
			2	66.0	33.4
			51	1677	849
			4.0	24.0	12.9
			102	610	328
1 ½ DN40	1.5 x 1 DN40 x DN25	1.900 x 1.315 48.3 x 33.4	4.0	36.0	18.9
			102	915	481
			4.0	48.0	24.9
			102	1220	633
			5.0	36.0	19.1
			127	915	486
1 ½ DN40	1 ½ DN40	1 ¾ 48	5.0	24.0	13.1
			127	610	333
			5.0	36.0	19.1
			127	915	486
			5.0	48.0	25.1
			127	1220	638
2 DN50	2 DN50	2.375 60	6.0	24.0	13.3
			153	610	338
			6.0	36.0	19.3
			153	915	491
			6.0	48.0	25.3
			153	1220	643
2 ½	2 ½	2 ¾ 73	8.0	24.0	13.7
			204	610	348
			8.0	36.0	19.7
			204	915	501
			8.0	48.0	25.7
			204	1220	653
DN65	DN65	3.00 76.1	8	39.4	21.4
			203	1000	544
			8	49.3	26.3
			203	1250	669
3 DN80	3 DN80	3.5 89	10.0	36.0	20.2
			254	915	514
			10.0	48.0	26.2
			254	1220	666
4 DN100	4 DN100	4.5 114	13.0	36.0	20.8
			331	915	529
			13.0	48.0	26.8
			331	1220	681

**5.0 PERFORMANCE – FRICTION LOSS DATA**

**Series GH1 Braided Hose**

**Frictionloss**







Hose Size inches DN	Hose Length inches mm	Equivalent Length (ft of Sch 40 pipe in same nominal diameter)	
		S-Bend ft m	90° Bend ft m
1 DN25	25.0	14.0	12.0
	635	5	4
	30.0	19.0	17.0
	762	6	6
	42.0	24.0	21.0
	1067	8	7
1 ¼ x 1 ¼ DN32 x DN32	54.0	25.0	23.0
	1372	8	8
	66.0	29.0	27.0
	1677	9	9
	24	12.0	10.0
	610	4	4
1 ½ x 1 DN40 x DN25	36	15.0	13.0
	914	5	4
	48	17.1	15.0
	1219	6	5
1 ½ x 1 ½ DN40 x DN40	36	19.9	14.0
	914	7	5
	24	11.5	11.6
	610	4	4
2 x 2 DN50 x DN50	36	16.0	14.0
	914	5	5
	48	19.9	16.4
	1219	7	5
2 ½ x 2 ½	24	13.3	13.8
	610	5	5
	36	20.0	18.0
	914	7	6
DN65	48	26.5	21.5
	1219	9	7
	24	13.0	10.0
	610	4	4
3 x 3 DN80 x DN80	36	16.6	11.8
	914	6	4
	48	23.0	18.0
	1219	8	6
4 x 4 DN100 x DN100	39.4	17.0	12.0
	1000	6	4
	49.3	24.0	19.0
	1250	8	6
3 x 3 DN80 x DN80	36	15.6	12.9
	914	5	4
	48	24.0	19.0
	1219	8	6
4 x 4 DN100 x DN100	36	20.8	16.4
	914	7	5
	48	28.0	23.0
	1219	9	8

**Installation Reference**

1. Bend hose to the desired angle and do not exceed the minimum bend radius.
2. Install grooved coupling per the published installation instructions.
3. Additional restraints may be required to prevent excess movement.
4. Hose shall not be subjected to tension or compression

## 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.

**⚠ WARNING**

- 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.
- It is the responsibility of the owner of a building or their authorized agent to provide the sprinkler system installer with any knowledge that the water supply might be contaminated with or conducive to the development of microbiologically influenced corrosion (MIC), including as required by NFPA 13. Failure to identify adverse water quality issues may affect the VicFlex product and void the manufacturer's warranty.

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

- Victaulic VicFlex Series GH1 and Series GH1-C2C Braided Hose may be painted provided the paint is compatible with stainless steel and zinc-plated carbon steel or ductile iron.
- Victaulic VicFlex Series GH1 penetrating through non-fire rated gypsum wall (drywall) will function as designed, provided the components are installed in accordance with the respective installation instructions referenced in this document.

## 7.0 REFERENCE MATERIALS

[25.01: Victaulic OGS Groove Specifications](#)

[25.14: Victaulic IGS Groove Specifications](#)

[45.11: Victaulic FireLock™ Series FL-QR/DRY/ESFR Dry Fast Response ESFR Pendent Sprinklers, K16.8 \(24.25\)](#)

[I-C2C: Flexible Hose with Captured Couplings](#)

### 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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### 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 I-C2C for the product you are installing. Handbooks are included with each shipment of Victaulic products for 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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