

Victaulic Vortex™ Hybrid Fire Extinguishing System Series 950 Water Tanks



1.0 PRODUCT DESCRIPTION

Application

- Provides a water supply for Victaulic Vortex systems
- Tanks are supplied with pressure gauges, supervised water level switches, and sight glass
- Components shipped unassembled

Size

- Series 950 water supply tank options are available in 10, 30, 60, 80, 120, 200 and 400 gallon tank configurations

Operating Temperature

- 40°F to 130°F/14°C to 55°C

2.0 CERTIFICATION/LISTINGS



- Stainless steel 30 gallon tank is constructed in accordance with ASME BPVC Section VIII Div 1 and CE-marked in accordance with the EU Pressure Equipment Directive (PED 2014/68/EU).
- Carbon steel tanks are designed and constructed in accordance with ASME BPVC Section VIII Div. 1 – Rules for Construction of Pressure Vessels.
- The Series 950 water tank is included within the scope of FM-Approved Victaulic Vortex systems.

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

3.0 SPECIFICATIONS – MATERIAL

Water Tank w/Trim

Water Tank:

Carbon Steel

Optional: Stainless steel

Exterior Finish: Epoxy coated red paint

Interior Finish: Epoxy coated white paint (carbon steel tanks only)

Gauge Assembly: Brass

Nitrogen Inlet Assembly: Brass

Liquid Level Switch Assembly: Stainless steel

Sight Window: Stainless steel

Fill Assembly:

Ball Valve: Brass

Check Valve: Brass

Fittings: Zinc plated carbon steel

Drain Valve Assembly:

Ball Valve: Brass

Fittings: Zinc plated carbon steel

Relief Valve: Brass

Water Tank Regulated Charge Kit

Regulator: Brass

Braided Hose: Stainless steel

Fittings: Zinc plated steel

3.1 SPECIFICATIONS – ELECTRICAL

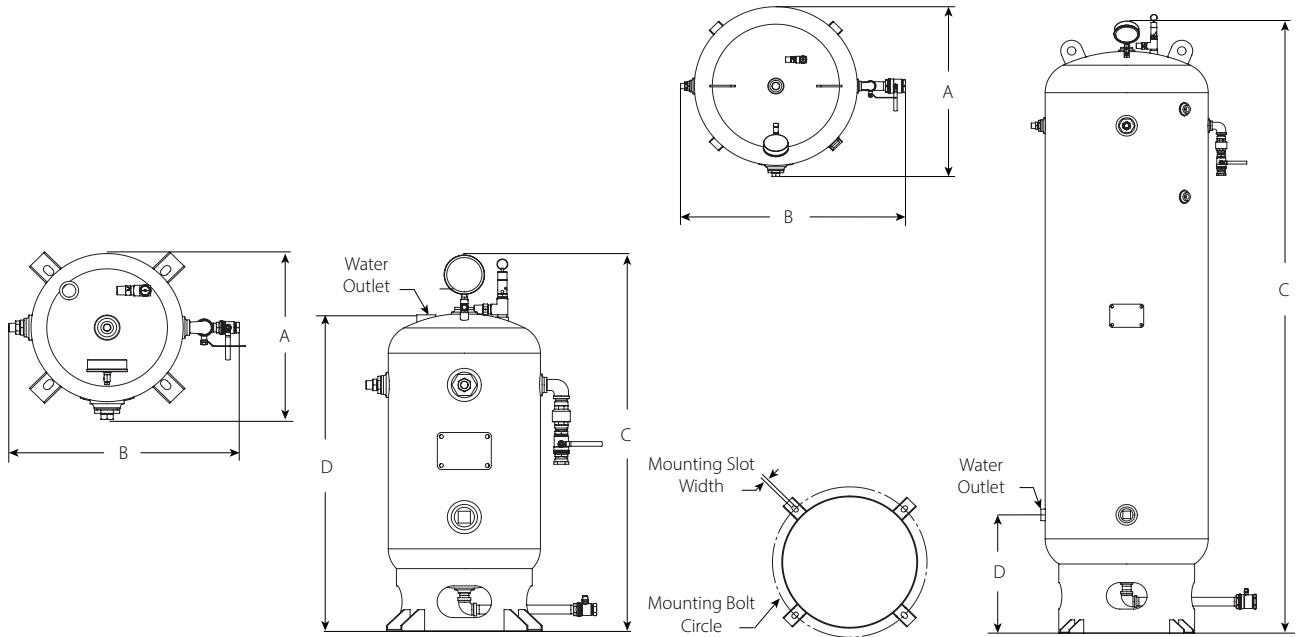
Liquid Level Switch:

- Contact Rating: 0.3 amps @ 30 24VDC

4.0 DIMENSIONS

Series 950

Water Tanks



Size	Dimensions				Water Outlet Size	Mounting Slot Width	Mounting Bolt Diameter	Weight	
	Nominal	A	B	C				D	Empty
Gallons Liters	inches mm	inches mm	inches mm	inches mm	NPT	inches mm	inches mm	lb kg	lb kg
10	15.7	21.2	35.5	28.8	1"	0.531	14.38	52	135
38	399	538	902	732		13.49	365.3	24	61
30	17.7	22.2	57.9	12.0	1"	0.688	14.75	105	355
114	450	564	1471	305		17.48	374.7	48	161
30 ¹	17.7	22.2	57.9	12.0	1"	0.688	14.75	144	394
114 ¹	450	564	1471	305		17.48	374.7	65	179
60	21.7	24.8	68.8	14.4	1"	0.688	18.75	189	689
228	551	630	1748	366		17.48	476.3	86	313
80	25.7	28.8	72.2	15.9	1"	0.688	22.75	249	916
304	653	732	1834	403		17.48	577.9	113	416
120	25.7	33.1	92.6	17.9	1"	0.688	22.75	353	1354
456	653	841	2352	454		17.48	577.9	160	614
200	31.7	36.1	97.7	18.4	1"	0.688	28.75	640	2308
760	805	917	2482	467		17.48	730.3	290	1047
400	37.7	40.8	130.8	21.6	2"	0.688	34.75	1072	4408
1520	958	1036	3322	549		17.48	882.7	486	1999

¹ Stainless steel

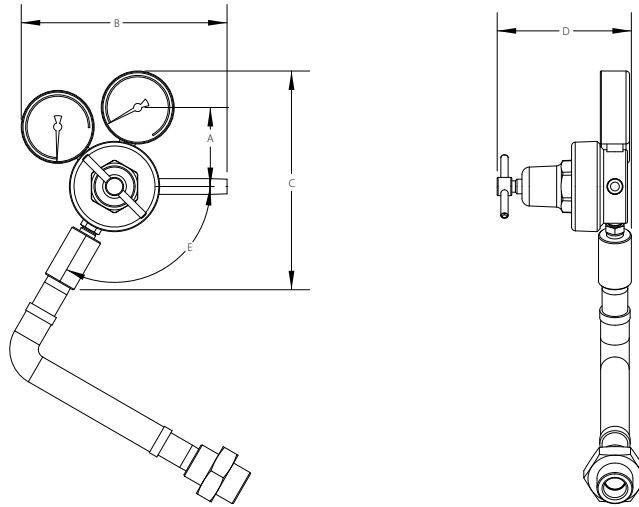
NOTES

- Captive water supply for use with the Victaulic Vortex™ system includes pressure gauge with bleeder and fill assembly with garden hose thread connection and check valve.
- Fill connection: 3/4" Garden Hose Thread (GHT).
- Water Outlet: 1" NPT for 10 – 200 gallon tank, 2" NPT for 400 gallon tank.
- Drain Valve Assembly: 1/2" NPT 10 – 80 gallon tank, 1" NPT 120 – 400 gallon tank.
- Lifting lugs provided for 60 gallon and larger tanks.
- Nitrogen Inlet: 1/2" NPT

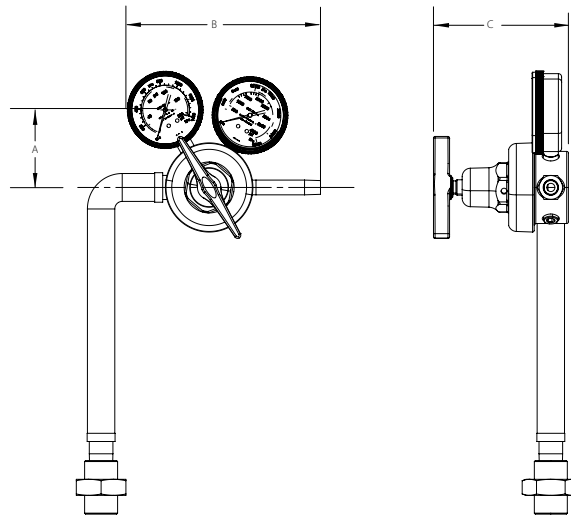
4.0 DIMENSIONS (CONTINUED)

Series 950

Water Tank Regulated Charge Kit



Standard



High Capacity

Size	Dimensions								Weight	
Nominal Type	A inches mm	B inches mm	C inches mm	E Degree	D inches mm	Outlet Braided Hose Size inches mm	Outlet Braided Hose Length inches mm	Inlet Connection	Outlet Connection	Approx. (Each) lb kg
Standard	2.7 69	7.1 179	7.5 190	120	4.6 116	0.5 13	36.0 914	¼" MNPT	½" FNPT	7 3
High Capacity	2.8 71	7.2 183	5.0 127	N/A	N/A	0.5 13	36.0 914	¼" MNPT	½" FNPT	9 4

NOTES

- Water Tank Regulated Charge Kit includes two pressure gauges, ½" braided hose and fittings to attach to the nitrogen inlet on the water tanks.
- Inlet Connection: ¼" Male NPT
- Outlet Connection: ½" Female NPT"
- High capacity water tank regulator is supplied with a 1" MNPT (inlet) x 1 ¼" FNPT (outlet) pressure relief valve set to 180 PSI. The pressure relief valve is a field installed part. This pressure relief valve shall be installed in parallel with the pressure relief valve supplied with the water tanks.

5.0 PERFORMANCE





Water Tank Regulated Charge Kit

Size Type	Maximum Inlet Pressure	Maximum Outlet Pressure	Maximum Water Flow Rate	Pressure Relief Valve Set Pressure
	PSI BAR	PSI BAR	GPM LPM	PSI BAR
Standard	3000	150	32	150
	207	10	121	10
High Capacity	3000	150	96	180
	207	10	364	12

- Carbon steel water supply tanks are rated to 200 psi.
- Stainless steel water supply tanks are rated to 180 psi.
- Standard pressure relief valves are set at 150 psi/ 10 bar with 275 SCFM/7.76 Sm³/min capability.
- High Capacity pressure relief valves are set at 180psi/12 bar with 1175 SCFM/33.3 Sm³/min capability.

6.0 NOTIFICATIONS

⚠ WARNING

- Always refer to the applicable Victaulic Vortex™ Hybrid Fire Extinguishing System General Design, Installation, and Maintenance Manual before specifying or installing any Victaulic Vortex™ products.
- Wear safety glasses, hardhat, and foot protection during installation and maintenance of a Victaulic Vortex™ Hybrid Fire Extinguishing System.
- It is the customer's responsibility to verify hybrid emitter material compatibility and that the proper size hybrid emitter and water flow control cartridge are specified in the system design.

Failure to follow instructions and warnings can cause system failure, resulting in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

- [10.17: FireLock™ Ball Valve Series 728 Submittal](#)
- [70.03: Series 951 Panels for use with Victaulic Vortex™ 1500 Hybrid Fire Extinguishing Systems](#)
- [70.04: Victaulic Vortex™ Series 950 49L and 80L DOT/ISO Cylinder Assemblies](#)
- [70.06: Victaulic Vortex™ 1500 Hybrid Fire Extinguishing System Submittal](#)
- [70.07: Victaulic Vortex™ 1500 Hybrid Fire Extinguishing System – Active Release Manifold Submittal](#)
- [70.12: Victaulic Vortex™ Emitters Submittal](#)
- [70.16: Victaulic Vortex™ Series 953 Flow Cartridge and Strainer Kit](#)

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 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.

Warranty

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

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