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MODEL UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY (With or Without Control Valve) 11/4", 11/2", 2", 21/2", 76.1mm, 3", 4", 6", 165.1mm, 8"

GENERAL DESCRIPTION

The Globe Series "UMC" Universal Manifold Check is a first of its kind, UL Listed and FM Approved, complete floor control station or shotgun riser assembly. It is pressure rated for 300 psi (20,6 bar). It provides the most compact "footprint" while delivering all of the necessary components for your floor control station as required by the NFPA Standards. With its multiple available configurations, it allows the contractor to order the suitable configuration for the site specific needs. The "UMC" Universal Manifold Check is more than just a traditional stand-alone manifold. It serves as a complete floor control station as well as a complete shotgun riser assembly inclusive of Control Valve with Internal Supervisory Switch; Check Valve; Flow Switch; Test and Drain Assembly; Adjustable Pressure Relief Valve Assembly pre-piped to drain; supply gauge (4", 6" and 8") and system gauge (1 1/4" through 8"). The "UMC" Universal Manifold Check replaces the need to order individual "Riser Manifolds" plus control valves, check valves, and relief valve kits as all of these components are integrated into the one compact design, saving space as well as the labor to connect these separate components. For sizes 3" and smaller, an 18" long stainless steel braided flexible hose is included with the UMC for connecting the Test and Drain valve to a drain stack. The design takes into account both "left-hand" and "right-hand" orientations. (8" version available preassembled in right-hand orientation only)

FLOOR CONTROL ASSEMBLY

The UMC may be utilized to meet the NFPA 13 requirements for Floor Control Valve Assemblies where there are multistory buildings exceeding two stories in height requiring zoning by floor or whenever separate control and floor zoning is specified. The UMC has been engineered with space savings in mind for those commonly installed applications in stairwell landings and small alcoves. All UMC assemblies include the NFPA 13 required Listed Pressure Relief Valve which is pre-piped to drain. The relief valve is preset for 175 psi and is adjustable to 310 psi for high pressure system conditions. In addition to the relief valve, the UMC is equipped with a Test and Drain Valve. The Test and Drain Valve contains a test orifice of K2.8 so that it may be utilized for flow testing any system with sprinklers having K-Factors of 2.8 or larger.

Note: NFPA 13 requires that a test connection providing a flow rate equal to or less than one sprinkler of a type having the smallest orifice on the system is to be provided.

A pressure gauge is provided above the check valve clapper for sizes 11/4" through 3" to meet the gauge requirement per NFPA 13 for Floor Control Assemblies. Typically the supply side gauge is not required for multistory buildings with floor control stations as a system gauge would be on the main feed/riser but all Model UMC Manifold Check Valves are equipped with a 1/4" (DN 8) port below the clapper to accommodate a second gauge if desired.



MODEL UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY

SHOTGUN RISER ASSEMBLY

"Shotgun Riser Assemblies" are those assemblies which are typically installed in vertical orientations on individual system Risers. The Globe "Shotgun" Riser Manifold Assembly is available in 4 inch (DN 100), 6 inch (DN 150), and 8 inch (DN 200) sizes and is equipped with a control valve; check valve; flow switch; test and drain valve with NFPA required pressure relief valve; 2 gauges (system and supply). Sizes 4 inch (DN 100), 6 inch (DN 150), and 8 inch (DN 200) are equipped with a pressure gauge on both system side and supply side of the check valve clapper. The 8" UMC consists of a Universal Manifold, a Victaulic Series 717 Grooved Check Valve and an optional Victaulic Series 705 Grooved Butterfly Valve.

TECHNICAL DATA

Approvals

- cULus
- FM

Maximum System Working Pressure

300 psi (20.6 Bar)

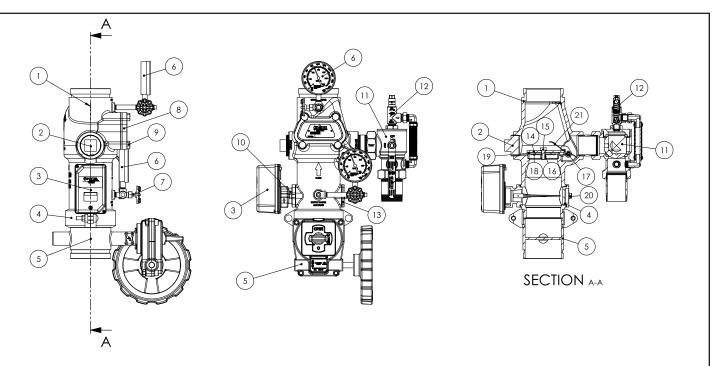
End Connections

See Table A

Materials of Construction

See Figure 1

*Multiple Patents Pending



SIDE VIEW

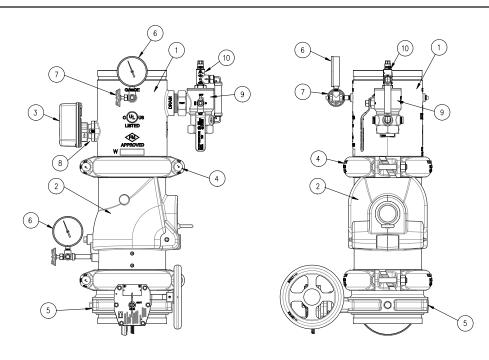
FRONT VIEW

ITEM NO.	DESCRIPTION	MATERIAL
1	UMC VALVE BODY	DUCTILE IRON
2	RECESSED HEX PLUG	STAINLESS STEEL
3	FLOW SWITCH	SEE FLOW SWITCH TECHNICAL LITERATURE
4	RIGID COUPLING	SEE COUPLING TECHNICAL LITERATURE
5	BUTTERFLY CONTROL VALVE WITH INTERNAL SUPERVISORY SWITCH	SEE GLOBE BUTTERFLY CONTROL VALVE TECHNICAL LITERATURE
6	PRESSURE GAUGE	PLASTIC
7	THREEWAY VALVE	BRONZE
8	UMC COVER PLATE	DUCTILE IRON
9	BOLT	STAINLESS STEEL
10	FLOW SWITCH ADAPTER	DUCTILE IRON
11	MODEL UTD TEST AND DRAIN	SEE GLOBE TECHNICAL DATASHEET GFV570
12	MODEL ARV ADJUSTABLE RELIEF VALVE	SEE GLOBE TECHNICAL DATASHEET GFV575
13	FLOW SWITCH PLUG	DUCTILE IRON
14	UMC VALVE CLAPPER	STAINLESS STEEL
15	UMC VALVE CLAPPER RETAINING BOLT	STAINLESS STEEL
16	UMC VALVE CLAPPER RETAINING NUT	STAINLESS STEEL
17	UMC VALVE HINGE PIN	STAINLESS STEEL
18	CLAPPER FACING RETAINING RING	STAINLESS STEEL
19	CLAPPER FACING	EDPM
20	FLOW SWITCH PLUG BOLT	STAINLESS STEEL
21	CLAPPER SPRING	STAINLESS STEEL

NOTE:

- 4" (DN100) shown as reference
- See ordering procedure for replacement part kits and Table A through G for part numbers for all sizes and configurations
- Flow switch rotated 90 degrees on 1-1/4" through 2 1/2" sizes

FIGURE 1: MODEL UMC MANIFOLD CHECK ASSEMBLY MATERIALS OF CONSTRUCTION (11/4" - 6")



FRONT VIEW

SIDE VIEW

ITEM NO.	DESCRIPTION	MATERIAL
1	UM VALVE BODY	DUCTILE IRON
2	SERIES 717 CHECK VALVE	DUCTILE IRON BODY SEE VICTAULIC SUBMITTAL 10.08
3	FLOW SWITCH	SEE FLOW SWITCH TECHNICAL LITERATURE
4	RIGID COUPLING	SEE COUPLING TECHNICAL LITERATURE
5	BUTTERFLY CONTROL VALVE WITH INTERNAL SUPERVISORY SWITCH	SEE VICTAULIC SUBMITTAL 10.81
6	PRESSURE GAUGE	PLASTIC
7	3-WAY SOG VALVE	BRONZE
8	FLOW SWITCH ADAPTER	DUCTILE IRON
9	MODEL UTD TEST AND DRAIN	SEE GLOBE TECHNICAL DATASHEET GFV570
10	MODEL ARV ADJUSTABLE RELIEF VALVE	SEE GLOBE TECHNICAL DATASHEET GFV575

NOTE

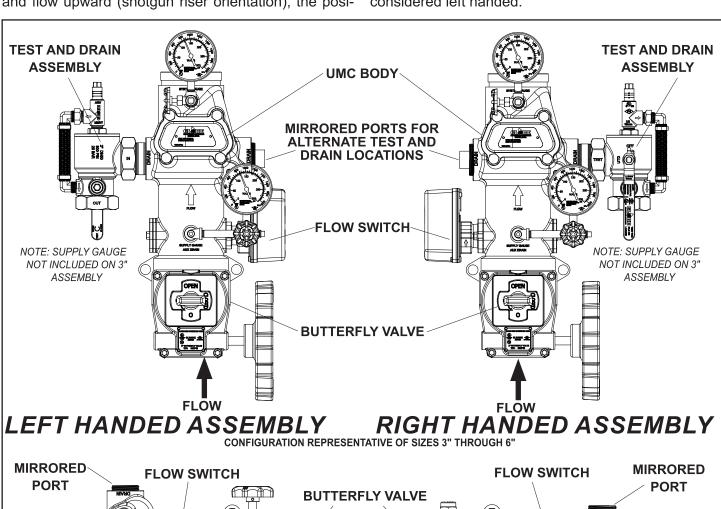
FIGURE 2: MODEL UMC MANIFOLD CHECK ASSEMBLY MATERIALS OF CONSTRUCTION (8")

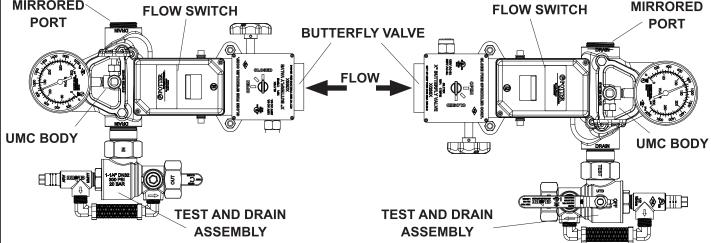
[•] See ordering procedure for replacement part kits and Table A through G for part numbers for all sizes and configurations

MODEL UMC MANIFOLD CHECK VALVE ASSEMBLY LEFT HANDED VS RIGHT HANDED

Both the shotgun riser assembly and the floor control station assembly are available as left handed or right handed assembly. The determining factor of the left handed vs right handed is the position of the Model UTD Test and Drain. While looking at the faceplate with the Model UMC valve in the vertical orientation and flow upward (shotgun riser orientation), the posi-

tion of the Model UTD Test and Drain determines the "Hand" of the valve. If the Model UTD Test and Drain is connected to the port on the right side of the valve body, it is considered a right handed assembly. If the Model UTD Test and Drain is connected to the port on the left side of the Model UMC valve the assembly is considered left handed.





LEFT HANDED ASSEMBLY RIGHT HANDED ASSEMBLY

CONFIGURATION REPRESENTATIVE OF SIZES 1 1/4" THROUGH 2 1/2"

FIGURE 3: MODEL UMC MANIFOLD CHECK VALVE ASSEMBLY LEFT HANDED VS RIGHT HANDED

TABLE A: 11/4" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
1 1/4"	R	GL300T	MXF THREADED	1"	317800-R-B-H	24.0 (10.9)
1 1/4"	R	NONE	MXF THREADED	1"	317800-R-H	19.0 (8.6)
1 1/4"	L	GL300T	MXF THREADED	1"	317800-L-B-H	24.0 (10.9)
1 1/4"	L	NONE	MXF THREADED	1"	317800-L-H	19.0 (8.6)
1 1/4"	R	NONE	GXG	1"	317843-R-H	19.0 (8.6)
1 1/4"	R	GL300G	GXG	1"	317843-R-B-H	24.0 (10.9)
1 1/4"	R	SERIES 728	GXG	1"	317843-R-V-H	24.0 (10.9)
1 1/4"	L	NONE	GXG	1"	317843-L-H	19.0 (8.6)
1 1/4"	L	GL300G	GXG	1"	317843-L-B-H	24.0 (10.9)
1 1/4"	L	SERIES 728	GXG	1"	317843-L-V-H	24.0 (10.9)

TABLE B: 11/2" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
1 1/2"	R	GL300T	MXF THREADED	1"	317803-R-B-H	24.0 (10.9)
1 1/2"	R	NONE	MXF THREADED	1"	317803-R-H	18.3 (8.3)
1 1/2"	L	GL300T	MXF THREADED	1"	317803-L-B-H	24.0 (10.9)
1 1/2"	L	NONE	MXF THREADED	1"	317803-L-H	18.3 (8.3)
1 1/2"	R	NONE	GXG	1"	317844-R-H	18.3 (8.3)
1 1/2"	R	GL300G	GXG	1"	317844-R-B-H	24.0 (10.9)
1 1/2"	R	SERIES 728	GXG	1"	317844-R-V-H	24.0 (10.9)
1 1/2"	L	NONE	GXG	1"	317844-L-H	18.3 (8.3)
1 1/2"	L	GL300G	GXG	1"	317844-L-B-H	24.0 (10.9)
1 1/2"	L	SERIES 728	GXG	1"	317844-L-V-H	24.0 (10.9)

TABLE C: 2" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
2"	R	GL300G	GXG	1"	317806-R-B-H	26.0 (11.8)
2"	R	SERIES 705	GXG	1"	317806-R-V-H	26.0 (11.8)
2"	R	NONE	GXG	1"	317806-R-H	19.2 (8.7)
2"	L	GL300G	GXG	1"	317806-L-B-H	26.0 (11.8)
2"	L	SERIES 705	GXG	1"	317806-L-V-H	26.0 (11.8)
2"	L	NONE	GXG	1"	317806-L-H	19.2 (8.7)

TABLE D: $2\frac{1}{2}$ " (DN65)/76.1 MM MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
2 1/2"	R	GL300G	GXG	1 1/4"	317809-R-B-H	31.0 (14.1)
2 1/2"	R	SERIES 705	GXG	1 1/4"	317809-R-V-H	31.0 (14.1)
2 1/2"	R	NONE	GXG	1 1/4"	317809-R-H	23.5 (10.7)
2 1/2"	L	GL300G	GXG	1 1/4"	317809-L-B-H	31.0 (14.1)
2 1/2"	L	SERIES 705	GXG	1 1/4"	317809-L-V-H	31.0 (14.1)
2 1/2"	L	NONE	GXG	1 1/4"	317809-L-H	23.5 (10.7)
76.1 mm	R	GLR300G	GXG	1 1/4"	317809-D-R-B-H	31.0 (14.1)
76.1 mm	R	NONE	GXG	1 1/4"	317809-D-R-H	23.5 (10.7)
76.1 mm	L	GLR300G	GXG	1 1/4"	317809-D-L-B-H	31.0 (14.1)
76.1 mm	L	NONE	GXG	1 1/4"	317809-D-L-H	23.5 (10.7)

TABLE E: 3" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
3"	R	GLR300G	GXG	1 1/4"	317812-R-B-H	59.0 (26.8)
3"	R	SERIES 705	GXG	1 1/4"	317812-R-V-H	59.0 (26.8)
3"	R	NONE	GXG	1 1/4"	317812-R-H	35.4 (16.1)
3"	L	GLR300G	GXG	1 1/4"	317812-L-B-H	59.0 (26.8)
3"	L	SERIES 705	GXG	1 1/4"	317812-L-V-H	59.0 (26.8)
3"	L	NONE	GXG	1 1/4"	317812-L-H	35.4 (16.1)

TABLE F: 4" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
4"	R	GLR300G	GXG	2"	317817-R-B	87.5 (39.7)
4"	R	SERIES 705	GXG	2"	317817-R-V	87.5 (39.7)
4"	R	NONE	GXG	2"	317817-R	58.9 (26.7)
4"	L	GLR300G	GXG	2"	317817-L-B	87.5 (39.7)
4"	L	SERIES 705	GXG	2"	317817-L-V	87.5 (39.7)
4"	L	NONE	GXG	2"	317817-L	58.9 (26.7)

TABLE G: 6" (DN150)/165.1MM MODEL UMC ASSEMBLY CONFIGURATIONS

SIZE	ASSEMBLY R-RIGHT L-LEFT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE SHIPPING WEIGHTS LBS. (kg)
6"	R	GLR300G	GXG	2"	317818-R-B	124.5 (56.5)
6"	R	SERIES 705	GXG	2"	317818-R-V	124.5 (56.5)
6"	R	NONE	GXG	2"	317818-R	80.0 (36.3)
6"	L	GLR300G	GXG	2"	317818-L-B	124.5 (56.5)
6"	L	SERIES 705	GXG	2"	317818-L-V	124.5 (56.5)
6"	L	NONE	GXG	2"	317818-L	80.0 (36.3)
165.1 mm	R	GLR300G	GXG	2"	317818-D-R-B	124.5 (56.5)
165.1 mm	R	NONE	GXG	2"	317818-D-R	80.0 (36.3)
165.1 mm	L	GLR300G	GXG	2"	317818-D-L-B	124.5 (56.5)
165.1 mm	L	NONE	GXG	2"	317818-D-L	80.0 (36.3)

TABLE H: 8" MODEL UMC ASSEMBLY CONFIGURATIONS

SIZ	E	ASSEMBLY R-RIGHT	CONTROL VALVE	UMC BODY END CONNECTIONS	MODEL UTD TEST AND DRAIN SIZE	PART NUMBER	APPROXIMATE WEIGHTS LBS. (kg)
8"		R	Series 705	GXG	2"	317798-01	177 (80.3)
8"	1	R	NONE	GXG	2"	317798-02	123 (55.8)