

Model RM-1 Riser Manifold Commercial and Residential

General Description

The TYCO commercial and residential Model RM-1 Riser Manifold provide the necessary waterflow alarm, pressure gauge, alarm test orifice, drain, and sight glass equipment in a single assembly for use in NFPA 13 commercial sprinkler systems and in NFPA 13D/13R residential sprinkler systems as follows:

NFPA 13*

- 1-1/2 in. (DN40)
Male Thread x Female Thread
- 2 in.–6 in. (DN50–DN150)
Groove x Groove

NFPA 13D

- 1 in. (DN25)
Female Thread x Female Thread

NFPA 13R

- 1-1/2 in. (DN40)
Male Thread x Female Thread
- 2 in. (DN50)
Groove x Groove

* Although the Riser Manifold described in this technical data sheet is intended for NFPA 13 sprinkler systems, it may be used for NFPA 13D or 13R residential sprinkler systems, where a test orifice of 2.8K or 4.2K is acceptable.

The variety of sizes and grooved end connections allow cost effective and easy transition to check valves, control valves, and system piping. The Model RM-1 Riser Manifolds may be installed either horizontally (flow switch on top) or vertically (flow going up) orientation, for both single sprinkler rises and floor control in high-rises.

Optional Pressure Relief Kits feature a 175 psi pressure relief valve and trim components for convenient integration into commercial and residential riser manifold assemblies.

The pressure relief valve, installed in manifold assemblies above the normally closed test and drain or drain valve, automatically bleeds system pressure exceeding 175 psi through a flexible hose connected to the manifold drain outlet (Ref. Figure 5), reducing system pressure to 175 psi.

NOTICE

The Model RM-1 Riser Manifolds described herein must be installed and maintained in compliance with this document, as well as with the applicable standards of the NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of these devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Approvals

UL and ULC Listed
FM Approved
Listed by California State Fire Marshall

Maximum Working Pressure

300 psi (20,7 bar)

Test Orifice

1 in.–3 in. (DN25–DN80) Manifolds: 2.8K
4 in.–6 in. (DN100–DN150) Manifolds: 4.2K

Finish

Red Painted



IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Nominal Riser Size Inches (DN)	End Connections		Nominal Dimensions Inches (mm)							Nominal Drain Size Inches (DN)
	Inlet	Outlet	A	B	C	D	E	F	G	
1-1/2 (40)	Thread MNPT	Thread FNPT	10 (254)	15-1/2 (394)	2-1/4 (57)	5-5/8 (143)	8-3/8 (213)	15 (381)	4-3/8 (111)	1-1/4 (32)
2 (50)	Groove	Groove	13 (330)	18 (457)	2-1/16 (53)	5-5/8 (143)	8-3/8 (213)	15-1/4 (388)	4-3/8 (111)	1-1/4 (32)
2-1/2 (65)	Groove	Groove	13 (330)	18-1/16 (460)	2-1/16 (53)	5-5/8 (143)	8-3/8 (213)	15-1/4 (388)	4-3/8 (111)	1-1/4 (32)
3 (80)	Groove	Groove	13 (330)	18-1/16 (460)	2-1/16 (53)	5-7/8 (150)	8-5/8 (219)	15-3/4 (400)	4-3/8 (111)	1-1/4 (32)
4 (100)	Groove	Groove	13 (330)	20-1/4 (514)	4-1/4 (108)	6-3/4 (172)	10-3/4 (273)	18-3/8 (467)	5-3/16 (132)	2 (50)
6 (150)	Groove	Groove	13 (330)	20-1/4 (514)	4-1/4 (108)	7-3/4 (197)	11-3/4 (300)	21 (533)	6-3/4 (172)	2 (50)

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| NO | DESCRIPTION | P/N |
| 1 | 300 psi/2000 kPa Water Pressure Gauge . . . | 90050001 |
| 2 | Test and Drain Valve, Model TD-1: 1-1/2-3 Inch (DN40-DN80) Size Manifolds, 1-1/4", 2.8K Orifice | A61G0420 |
| | 4-6 Inch (DN100-DN150) Size Manifolds, 2", 4.2K Orifice | A61G0601 |
| 3 | Flow Switch, VSR-M: 1-1/2" (DN40) | 91144815 |
| | 2" (DN50) | 91144802 |
| | 2-1/2" (DN65) | 91144825 |
| | 3" (DN80) | 91144803 |
| | 4" (DN100) | 91144804 |
| | 6" (DN150) | 91144806 |
| 4 | Field Replaceable Retard/Switch | 91144800 |

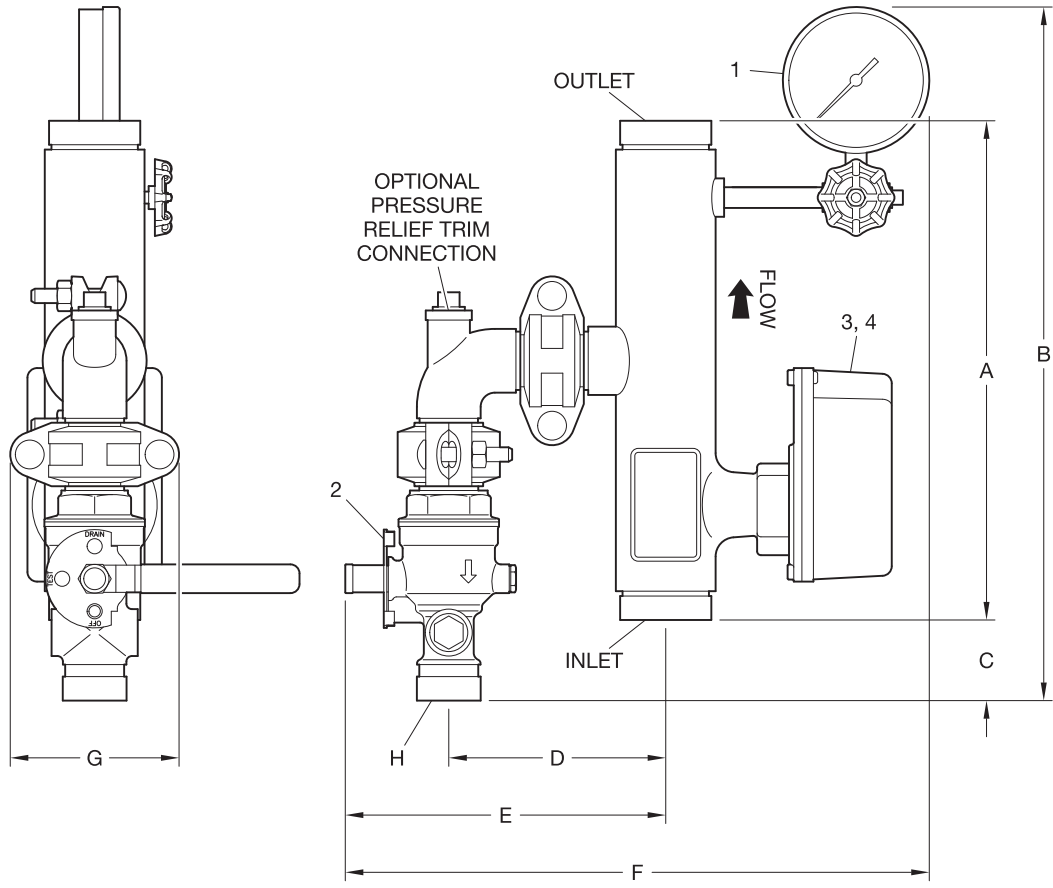


FIGURE 1
MODEL RM-1 COMMERCIAL RISER MANIFOLDS
1-1/2-6 INCH (DN40-DN150)

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name, including description and part number (P/N).

Riser Manifolds

Specify: Size (specify) Connection Type (specify inlet x outlet) Model RM-1 Riser Manifold, P/N (specify):

Commercial

1-1/2 in. (DN40) MT x FT	40551
2 in. (DN50) G x G	40601
2-1/2 in. (DN65) G x G	40611
3 in. (DN80) G x G	40621
4 in. (DN100) G x G	40651
6 in. (DN150) G x G	40661

Residential

1 in. (DN25) FT x FT	40671
1-1/2 in. (DN40) MT x FT	40571
2 in. (DN50) G x G	40591

Optional 175 psi Pressure Relief Kit
Specify: Pressure Relief Kit, Model RM-1 Riser Manifold, (specify Commercial or Residential application), (specify size range), P/N (specify):

Commercial

1-1/2 in. - 3 in. (DN40-DN80)	40721
4 in. - 6 in. (DN100-DN150)	40731

Residential

1 in.-2 in. (DN25-DN50)	40711
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Replacement Parts

Specify: Model RM-1 Riser Manifold (specify part description), P/N (specify from Figures 1, 2, 3, 4 or 5)