

# Flow Measurement & Control \_ Rotameters

## Model 7300 Series and Model 7400 Series Proportioners and Mixers

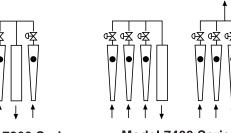


Model 7300 Series

#### Description

Matheson's Model 7300 and 7400 Series Flowmeters are 150mm multi-tube flowmeter manifolds used for proportioning or mixing multiple gas streams. They are available in three basic configurations.

- Two gases in One stream out (proportioner)
- Three gases in One stream out (mixer)
- Four gases in One stream out (mixer)



Model 7300 Series

Model 7400 Series



Model 7400 Series

Tubes are available in several 150mm reference scale flow ranges. Be sure to request calibration data for the gases you will be metering. All tubes are supplied with a single glass float.

Standard with the 7300 and 7400 series is the uniquely designed Tube Cube<sup>®</sup>. Also, FM-1050 150mm flow tubes are used.

Tubes are backpressure compensated by mounting the control valve (utility or high accuracy) on the outlet side of the tube. A highly sensitive pressure regulator is recommended for each of the inlet gas streams to avoid fluctuations in gas flow which could cause inaccuracies in mixing concentration.

#### Specifications

Maximum Pressure: Temperature Ranges: 200 psig 20° to 250°F (-30° to 120°C)

To ensure that you receive the correct model for your application, please specify:

- Pressure (20 or 50 psig)
- Total flow rate
- · Percent of each gas
- Special calibration

## Model 7300 Series and Model 7400 Series

Proportioners and Mixers (continued)

Flow Tube Capacities for 7300 and 7400 Series Proportioners and Mixers,	
150mm Reference Scale	

Tube No.	Float Material	Air (SCCM)	Utility Valve Size	HA Valve Size
E910*	Glass	11-104	7	1
E101	Glass	6-60	7	1
E201	Glass	10-100	7	1
E301	Glass	38-380	7	3
E401	Glass	88-880	7	3
		(SLPM)		
E501	Glass	0.23-2.3	8	4
E601	Glass	0.4-4	8	5
E701	Glass	0.88-8.8	9	6
E801	Glass	2.4-24	9	6

All flow rates are at 70°F and 14.7 psia

\*0-100 calibrated correlated reference tube scale only

Ordering Information											
	Model Series	Number of Metering Tubes	End Blocks/ Seal Material	Valve Types	Connections	Accessories	Connection Orientation	Flow Tube (Capacities)	Flow Tube (Capacities)		
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### Model Number Generator For 7300 And 7400 Series Proportioners & Mixers

#### MODEL SERIES

- F = Three and four tube Model FM-1050 Glass Tube MultiTube Mixers with 150mm tube
- G = Two tube Model FM-1050 Glass Tube Proportioners with 150mm tube

#### NUMBER OF METERING TUBES\*

- 2 =Two Tube Unit
- 3 = Three Tube Unit
- 4 = Four Tube Unit
- \*Two Tube Only for Proportioners

#### END BLOCKS/SEAL MATERIAL

- 1 = Aluminum with Buna-N Seals
- 4 = 316 Stainless Steel with Viton Seals
- 6 = 316 Stainless Steel with Teflon Seals
- A = Aluminum with Viton Seals
- D = 316 Stainless Steel with Buna-N Seals
- E = 316 Stainless Steel with EPR Seals
- N = 316 Stainless Steel with Kalrez Seals

- VALVE TYPES
- B = Utility Valve on Outlet
- D = High Accuracy Valve on Outlet
- K = Hole Only

#### CONNECTIONS

- 1 = 1/8'' NPT Female
- 2 = 1/4'' NPT Female
- 3 = 1/8'' Tube
- 4 = 1/4'' Tube 5 = 1/8'' Hose
- 6 = 1/4" Hose (3/16"-3/8" Hose Tapered)

#### ACCESSORIES

- 0 = None
- 5 = Base Plate Assembly
- MMSP-003-XX Clean for Oxygen Service
- +/- 1% Accuracy, Full Scale, With Certification, Reference Scales
- +/- 5% Accuracy, Full Scale with
- Certification, Gases, Direct Read

#### CONNECTION ORIENTATION

1 = Back In/Back Out

#### FLOW TUBE (CAPACITIES)

EXXX = See Capacity Table For 7300 and 7400 Series Flowmeters

#### ADDITIONAL OPTIONS

Silk Screen Charge

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