FOAM PROPORTIONING EQUIPMENT

WAFER STYLE FAM-PO RATIO CONTROLLERS

DESCRIPTION

The Buckeye Model FAM - PO Ratio Flow Controller is a proportioning device designed to meter the correct amount of foam concentrate into the water stream over a wide range of flows and pressures. These units are used in conjunction with either a bladder tank or a foam pump proportioning system.

The operating principle of the controller is based upon the use of a modified venturi. As the water passes through the inlet jet, a reduction in pressure in the annular area is created. This reduction allows the metering of the foam concentrate into the water stream through the foam concentrate metering orifice.

FEATURES

- U.L. Listed.
- Proportioner body and inlet nozzle are cast in ASTM 85-5-5-5 brass. Machine faced to ANSI B16.1 class 12.5.
- The 2 1/2" threaded controller is designed using a 2 1/2" FNPT threaded inlet and a 2 1/2" male NPT threaded outlet. All 3",4", 6" and 8" wafer style ratio controllers are designed to fit between two 150 lb. flat faced pipe flanges.
  To ensure a complete seal against each flange, each face of the controller is machined with 32 grooves per inch.
- The controller body is clearly marked with a flow direction arrow and label to identify the type of foam concentrate and percentage ratio.

FLOW RANGE

The following table lists the nominal flow range for each size ratio controller. The flow rates may vary when using other foam concentrates. Consult the Buckeye Engineering Department for specific applications.

BLADDER TANK FLOW RANGES

Size	AR-AFFF	AFFF
2 1/2"	130-400	30-400
3"	145-700	63-750
4"	240-1500	140-1600
6"	500-3000	270-3400
8"	1350-4500	500-5500

DESIGN INFORMATION

To ensure correct operation of a ratio controller when used with a bladder tank, the pressure of the foam concentrate at the controller must be within 2 psi of the incoming water pressure.

To ensure accurate proportioning over the flow range of the controller, it is recommended that a minimum water inlet pressure of 30 psi must always be available during operation of the system.

Review the controller dimension table (Table 1) for information on the minimum recommended length of straight pipe required upstream and downstream from the controller.

ORDERING INFORMATION

When ordering a Buckeye Ratio Flow Controller the following information is required:

1. Type and percentage of foam concentrate.
2. Minimum and maximum water inlet pressure expected at the controller.
3. Minimum and maximum foam solution flow rates expected.

ORDERING INFORMATION

Part Number	DESCRIPTION
FAM-PO 2.5	2 1/2" Threaded
FAM-PO 3.0	3" Wafer Style
FAM-PO 4.0	4" Wafer Style
FAM-PO 6.0	6" Wafer Style
FAM-PO 8.0	8" Wafer Style

PROPORTIONER DIMENSIONS (INCHES)

	2 1/2"	3"	4"	6"	8"
A	4.25	5.3	6.75	8.5	11.0
B	2.50	2.52	2.75	3.25	3.56
C	7	6 1/4	8	12 3/8	12 3/8
D	1	1 1/4	1 1/2	2	2 1/2
E	12	15	20	30	40
WGT.	8 lb.	10 lb.	20 lb.	40 lb.	70 lb.

*Straight pipe length required upstream (inches.)

TABLE 1