



MANIFOLD VALVE SAMPLE VALVE ASSEMBLY

U.S. Patent No. 5,469,751

Assure Representative Sampling When Sequencing Analyzers

Features

- No cross contamination
- Continuous sample flow in all lines
- All wetted surfaces continuously swept with high velocity sample
- Minimal purge time, no dead legs



Sample Sequencer® IV — the heart of analyzer sequencing systems. See data sheet 5.5.10.

The Sample Sequencer® IV can switch up to eight sample streams dedicated to one analyzer, lowering both acquisition and ongoing maintenance and reagent costs. The sequencer is capable of operating in a cycle or batch mode with a variety of signal outputs available.



Description

Sentry's patented manifold sample valve assembly is designed specifically for use in sequencing multiple samples to a single analyzer. It works in conjunction with Sentry's Sample Sequencer® IV or with other control systems. It is available in either a 4-valve or 8-valve configuration and is easy to install and configure.

To assure a representative sample from every line, all samples flow continuously whether in or out of sequence. Normally the common sample port is closed and the sample goes through the drain port. When a solenoid coil is energized, that particular sample goes through the common port and exits to the analyzer. (See **Figure 1**.) Additionally, the manifold design provides flow in both directions from the open valve. This eliminates dead legs and assures complete purging of the old sample. Also, purge time between samples after stream switching is minimized. Sample integrity is complete with a block and bleed feature on each valve preventing any possibility of cross flow contamination.

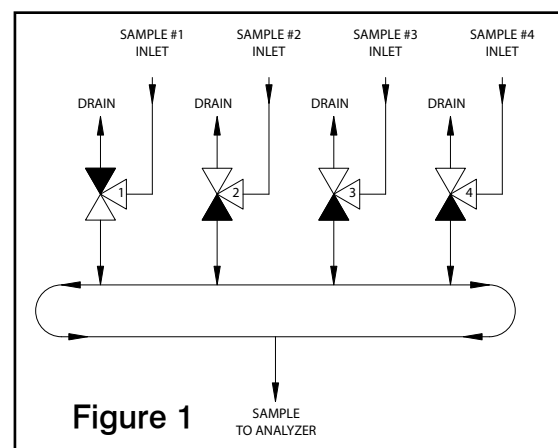
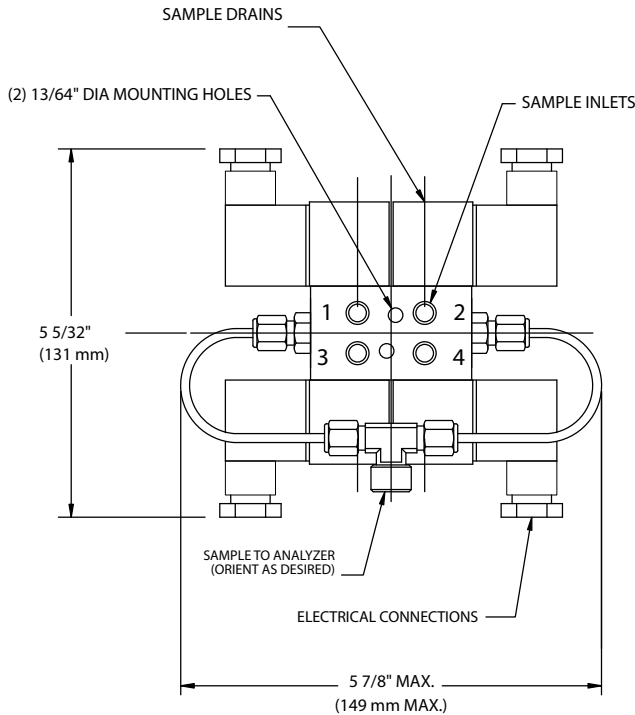
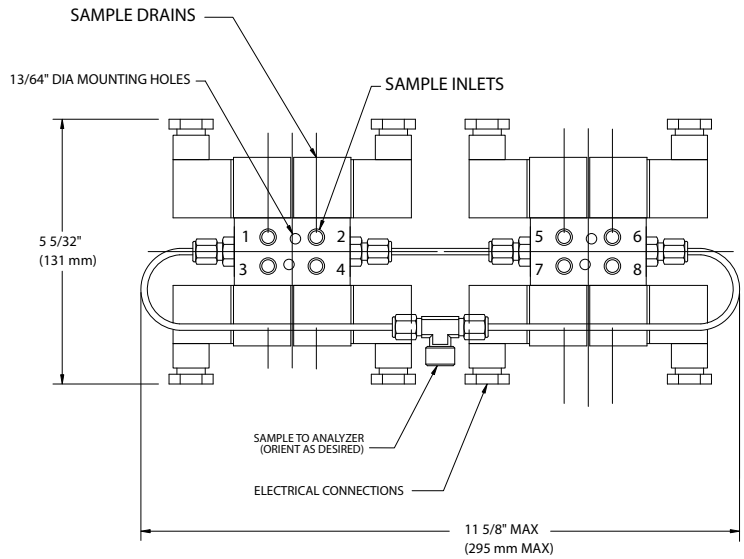


Figure 1
SAMPLE TO ANALYZER

MANIFOLD VALVE TECHNICAL DATA



4 VALVE CONFIGURATION



8 VALVE CONFIGURATION

SPECIFICATIONS

- Power 120, 240 VAC, 60 Hz (110, 220 VAC, 50 Hz) and 12*, 24 VDC, 3/8" cable grip NEMA 4 DIN connectors, 7 watts DC, 6.2 watts AC
- Connections 1/16" FNPT sample inlets, 1/8" FNPT analyzer outlet, 10-32 UNF drain outlet
- Pressure Rating 60 psig (4 barg)
- Temperature Rating 180°F (82°C) with AC solenoid
130°F (54°C) with DC solenoid
- Max. Ambient Temperature 120°F (49°C)
- Wetted Materials 300 Series Stainless Steel; Viton®
- Weight 4 valve: 1.7 lbs. (0.8 kg); 8 valve: 3.3 lbs. (1.5 kg)
- Pressure Drop Cv = 0.06
- Designed to Meet UL, CSA, IEC, CE
- Sample Sequencer® IV see data sheet 5.5.10

*Note: The Sample Sequencer™ IV is designed for use with 12 VDC coils only.

WARNING

It is solely the responsibility of the end-user, through its own analysis and testing, to select products and materials suitable for their specific application requirements, ensure they are properly installed, safely applied, properly maintained, and limit their use to their intended purpose. Improper selection, installation, or use may result in personal injury or property damage.



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QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV
ISO 9001:2008

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