



SENTRY MANIFOLD SWITCHING VALVE

Sample Conditioning Automation

SAMPLE CONDITIONING

The patented Sentry® manifold switching valve assembly is designed specifically for use in sequencing multiple samples to a single analyzer. It works in conjunction with the Sentry Sample Sequencer® 5 or with other control systems. It is available as either a four- or eight-port configuration and is easy to install and configure.

MODELS

L1 (Four-port) | L2 (Eight-port)

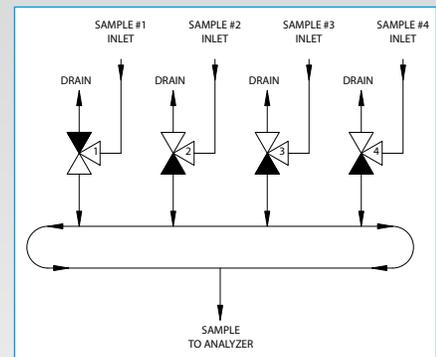
BENEFITS

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, right).

The manifold design provides flow in both directions from the open valve. This eliminates dead legs, assures complete purging of the old sample, and minimizes purge time between samples. Additionally, sample integrity is maintained with a block and bleed feature on each valve that prevents any possibility of cross-flow contamination.

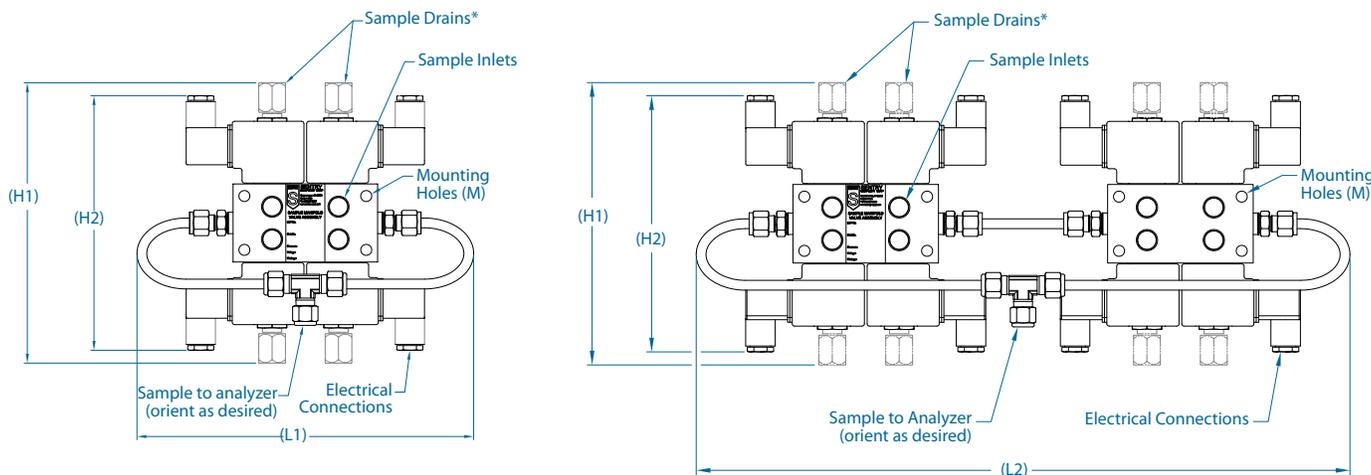
FEATURES

- No cross-flow contamination with valve block and bleed feature
- Continuous sample flow in all lines
- All wetted surfaces continuously swept with high velocity sample
- Minimal purge time, no dead legs
- 1/8-inch and 1/4-inch valves available



Operation

Manufactured under one or more U. S. patents: 5,469,751



DIMENSIONS

size	L1 (4-port model)	L2 (8-port model)	M	H1	H2
1/8 in. manifold	5-7/8 in. (149 mm.) max.	11-5/8 in. (295 mm.) max.	13/64 in.	*fittings shown for 1/4 in. manifold only	5-5/32 in. (131 mm.)
1/4 in. manifold	8-7/8 in. (225 mm.) max.	16-7/8 in. (428 mm) max.	9/32 in.	7-3/16 in. (182 mm.)	5-5/32 in. (131 mm.)

SPECIFICATIONS

description	1/8-inch manifold	1/4-inch manifold
voltage	12 VDC standard; optional 120, 240 VAC, 60 Hz (110, 220 VAC, 50 Hz) and 24 VDC†	
power	7 W DC, 6.2 W AC	9.5 W DC, 8.7 W AC
electrical connection	3/8 in. cable grip NEMA 4 DIN connectors	0.236–0.315 in. cable range, NEMA 4 DIN connectors
connections	sample inlets: 1/16 in. FNPT analyzer outlet: 1/8 in. FNPT drain outlet: 10-32 UNF	sample inlets: 1/4 in. FNPT analyzer outlet: 1/4 in. tube comp. fitting drain outlet: 1/4 in. FNPT
pressure rating	60 psig (4 barg)	100 psig (6.9 barg)
sample temperature	max 130°F (54°C)	0 to 150°F (-18° to 65°C)
ambient temperature	max 120°F (49°C)	0° to 104°F (-18° to 40°C)
wetted materials	300 series stainless steel; Viton elastomers	
weight	4-port: 1.7 lb (0.8 kg) 8-port: 3.3 lb (1.5 kg)	4-port: 6.5 lb (3.0 kg) 8-port: 13 lb (6.0 kg)
pressure drop	Cv = 0.06	Cv = 0.284
standards	UL, CSA, IEC, CE, ROHS	UL, CSA, CE, ROHS
Sample Sequencer 5	Please reference spec sheet S-SW-SPS-00138 for more information	

†The Sentry Sample Sequencer 5 is designed for use with 12 VDC coils only.

sentry-equip.com

966 Blue Ribbon Circle North, Oconomowoc, WI 53066 U.S.A. | +1-262-567-7256 | sales@sentry-equip.com



© 2015 Sentry Equipment Corp. All rights reserved. All product and company names are property of their respective owners. It is solely the responsibility of end users, through their own testing and analysis, to select products and materials suitable for their specific application requirements, ensure they are properly installed, safely applied and properly maintained, and to limit their use to their intended purpose. Improper selection, installation or use may result in personal injury or property damage.

S-SW-SPS-00143-12 1-17

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =