



The  
Sampling  
Connection

## MODEL MBP BACK PURGE SAMPLER PANEL

**Safe, accurate sampling for tanks, pipes and vessels**

### Features

- Eliminate sample waste or sample recovery
- Sampler and sample line are purged in each sample cycle ensuring a representative sample
- Spring-loaded sampling valve assures operator safety

### Description

The Sentry back purge sampler makes the advantages of closed loop type samplers available for applications where there is no separate return or drain line connection. By purging the sample source and the sampler as part of every sampling cycle, a new representative sample is taken each and every time.

Two types of samplers are available based on the sample volume required. The standard model MBP is designed for sample volumes above 1 oz. (30 ml) and is available in various sample flow path and connection sizes. The low volume model MBP back purge sampler is designed specifically for minimal flow path size so sample volumes as low as 0.033 oz. (1 ml) can be taken representatively.

### How It Works

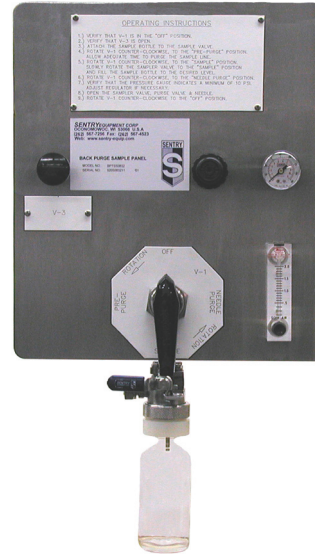
The sampler only requires the connection of a compressed gas source for purging, the sample source, and a vent line. All operations are controlled with a 4-position sample selection valve.

**Off Position:** Both the purge gas and sample source are blocked and isolated by the selection valve.

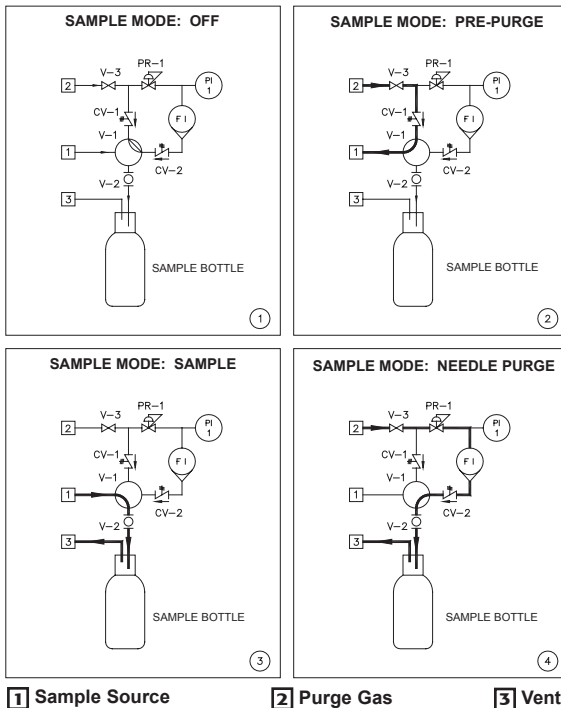
**Pre-Purge Mode:** The purge gas is routed back through the sample line to the sample source. The amount of pre-purge time is based on the line size, length of the line, sample viscosity, etc.

**Sample Mode:** The representative sample from the source flows through the sample line and selection valve to the needle/tube stub sampler assembly. The operator uses the spring loaded sample valve to fill the sample bottle to the desired level safely.

**Needle Purge Mode:** An adjustable flow of regulated purge gas is routed to the sampler so the operator can purge the needle/tube stub. The selection valve is placed in the off mode again and the sampler is clean and secured, awaiting another sampling process.



BACK PURGE SAMPLE PANEL



# BACK PURGE SAMPLER OPTIONS

## Size Chart

Size	Designator
1/4" (6 mm)	LC1/4 (low volume)
1/4" (6 mm)	C1/4
3/8" (10 mm)	C3/8
1/2" (15 mm)	C1/2

Standard end connections are compression. Purge gas and vent connections are 1/4" (6 mm) compression on all models.

## Sampler Interface

Needle Assembly (O.D.)		
Process	Vent	Designator
0.065"	0.065"	11
0.065"	0.083"	12
0.083"	0.083"	22
0.110"	0.083"	32
0.083"	0.110"	23
Tube Stub Assembly (O.D.)		
0.188"	0.140"	44

- Add V for Viton® or K for Kalrez® to specify O-rings.
- Consult factory for other needle/tube stub arrangements.

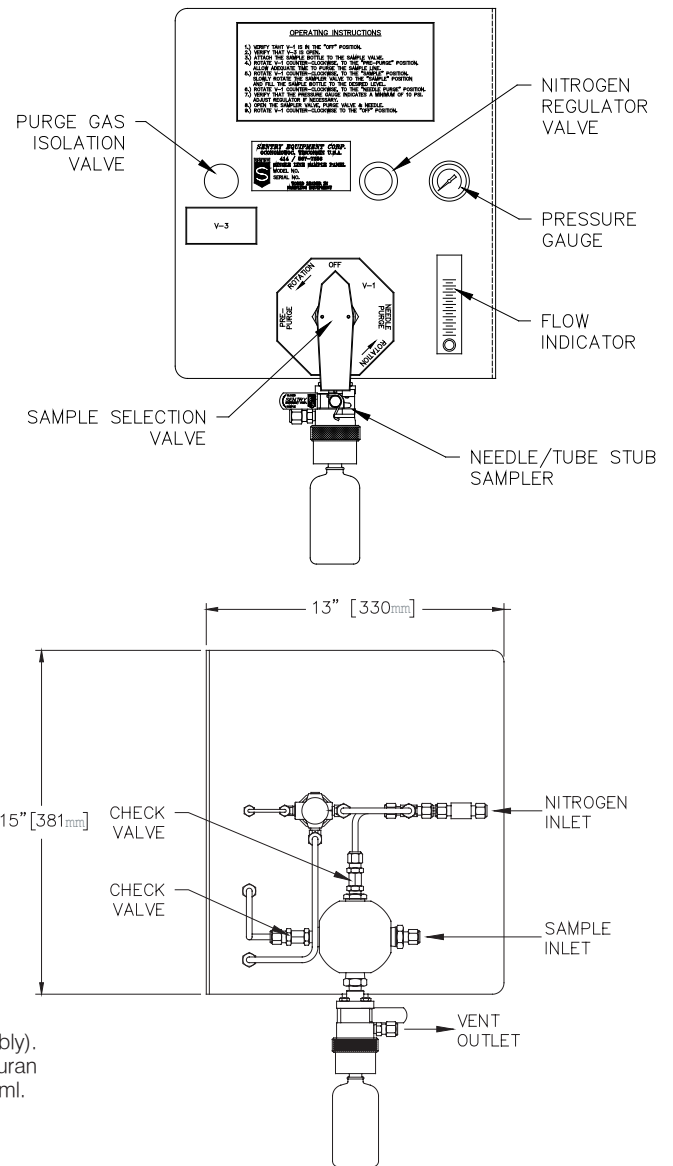
## Sample Bottle Size and Type

Boston Round		Schott/Duran	
Size: oz. (ml)	Designator	Size: ml	Designator
2 (60)	B2	50	S50
4 (125)	B4	100	S100
8 (250)	B8	250	S250
16 (500)	B16	500	S500
32 (1000)	B32	1000	S1000

- Add S for septum cap (needle assembly) or P for plain cap (tube stub assembly).
- Boston Round bottle cap/thread interfaces per GPI finish standards. Schott/Duran bottle cap/thread interfaces per ISO 4796. Glass vials available in 4, 20 or 40 ml.
- Standard septum material is Teflon®-coated silicone.
- Consult factory for other bottle or septum arrangements.

**Options:** Enclosures for containment and other special features available. Please consult factory.

**Example:** Model MBP-C3/8-44V B8P is a back purge sampler with 3/8" connections and min. flow path diameter to the sampler tube stub. Tube stub is 0.188", vent is 0.144" and bottle is 8 oz. Boston Round with a plain cap. O-Rings are Viton®.



## SPECIFICATIONS

Wetted Materials ..... 316 Stainless Steel, Viton® or Kalrez®  
 Shroud ..... Nylon (when applicable)  
 Pressure Rating ..... Sample: 250 psig (17.3 barg) @ 150° F (65° C)  
 Purge gas: 20% above sample pressure not to exceed 300 psig (20.7 barg)  
 Needle Purge ..... Purge gas regulator: 5 to 50 psig (0.3 to 3.5 barg) adjustable; Rotameter: 0-2 SCFH, valved  
 Mounting ..... Pipe or wall

### 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.



## SENTRY EQUIPMENT CORP

PO Box 127  
 Oconomowoc, WI 53066 USA  
 Phone: 262-567-7256  
 Fax: 262-567-4523

**E-mail:**  
 sales@sentry-equip.com

**Website:**  
 www.sentry-equip.com

For further information, contact:

**Rometec srl**

Via Alessandro Minuziano, 87 - 89  
 00128 - Roma

Tel 06-5061635 Fax 065061542

P.Iva 0412062100

**www.rometec.it**

*The Sampling Connection*