

## SA-77 Liquid Accumulator - the Premium Sampler at a substantially less than premium price.



Single Stroke Sampler  
w/ Glass Receiver



Multi-Stroke Sampler  
w/ plastic receiver



EHP Electric Sampler w/  
Inter-locking sample control  
and double redundant  
safety shutoff



ELP Double Redundant  
Sampling Shutoff



The SA-77 line of liquid samplers provide an accurate, safe and cost effective alternative to hand 'grab' samples for liquid hydrocarbon compositional analysis. It makes continuous proportional sampling 'practical and possible' as well as economical at any site.

Automated proportional sampling is safer for personnel than 'grab' sampling and with its self contained "dual shutoff system" the SA-77 will potentially eliminate environmental concerns through possible mishap at sample points. As well, Sampling Best Practices and Published Directives advocate continuous proportional sampling wherever possible as the only method to obtain truly representative samples for analysis from group, single or test lines.

The SA-77 sampler can be used to obtain proportional to flow or proportional to time (or both) sampling in facilities with pressure ratings up to 1440psig (600 ANSI). Multiple versions are available to meet your application requirements for temperature, entrained hazardous gases, process viscosity or cycle/sample rate. All variations are ABSA approved with CRNs for all provinces in Canada available on request. All variations comply with ASME B31.3 piping standards.

Common applications or installations include: oil production sites, test sites and custody transfer sites. Oil pipeline collection sites and truck, train or ship loading and unloading sites. Oil processing and upgrading sites. Water and wastewater handling and processing sites. And food and beverage processing and production.

All models except those with the 5.0L HDPE bottles can be mounted into the externally ventable housing pt#: SA77VENTCABINETFG optionally legs and handle can be mounted, for portability as shown.



SA-77VENTCABINETFG  
- add-on cabinet legs & handle for  
portability and controlled venting.

Part Number		Receiver Bottle Volume	Receiver Bottle Material	Operating Temp. range	Proc. Op. Press. Range	Spool Material	Std. Seal Material	Sample Gravity ° API
SA-77MXXGXAFSLAS	Multi-Stroke Units	1.6 L	Glass	-9 to 232°C	20-750psig	316 SST	AFLAS	22-30+
SA-77MXXGXHP		1.6 L	Glass	-25 to 121°C	20-1440psig	Delrin	HSN	22-30+
SA-77MXXGXHTS2		1.6 L	Glass	-25 to 232°C	20-750psig	316 SST	AFLAS	22-30+
SA-77MXXGXXS2		1.6 L	Glass	-25 to 121°C	20-750psig	Delrin	HSN	22-30+
SA-77MXXPXHO		1.875 L	App Note *	-25 to 60°C	20-500psig	Delrin	HSN	15-22
SA-77MXXPXHP		1.875 L	App Note *	-25 to 60°C	20-1440psig	Delrin	HSN	22-30+
SA-77MXXPXXS2		1.875 L	App Note *	-25 to 60°C	20-750psig	Delrin	HSN	22-30+
SA-77SXXGX	Single Stroke Units	1.6 L	Glass	-25 to 121°C	20-750psig	Delrin	HSN	22-30+
SA-77SXXGXAFSLAS		1.6 L	Glass	-9 to 232°C	20-750psig	Delrin	AFLAS	22-30+
SA-77SXXGXHP		1.6 L	Glass	-25 to 121°C	20-1440psig	Delrin	HSN	22-30+
SA-77SXXGXHT		1.6 L	Glass	-25 to 232°C	20-750psig	316 SST	AFLAS	22-30+
SA-77SXXGXHO		1.6 L	Glass	-25 to 121°C	20-500psig	Delrin	HSN	15-22
SA-77SXXPX		1.875 L	App Note *	-25 to 60°C	20-750psig	Delrin	HSN	22-30+
SA-77SXXPXAFSLAS		1.875 L	App Note *	-25 to 60°C	20-750psig	Delrin	AFLAS	22-30+
SA-77SXXPXHP		1.875 L	App Note *	-25 to 60°C	20-1440psig	Delrin	HSN	22-30+
SA-77SXXPXHO		1.875 L	App Note *	-25 to 60°C	20-500psig	Delrin	HSN	15-22
SA-77ELP5LSOASSY	Custody Transfer / Pipeline Electric Hi Pressure Sampler	5.0 L	App Note *	-25 to 160°C	20-250psig	Delrin	HSN	19-38
SA77-EHPUCONTROL		5.0 L	App Note *	-25 to 160°C	20-3000psig	n/a	KEL-F	19-38
SA77-EHOUCONTROL			App Note *	-25 to 160°C	20-500psig	n/a	KEL-F	15-22

**ALL PROCESS WETTED PARTS ARE RATED FOR UP TO 10% H2S CONTENT**

**Application Notes:**

The multi-stroke sampler (SA-77M... above) accepts a constant pneumatic signal or an intermittent pneumatic signal with long cycle times as its control signal. It then incorporates an onboard pneumatic timer to allow personnel to set the time between sample cycles at any point between 1 sample/min and 60 samples/minute. Typical application examples include separator packages with long dump cycles or truck, rail or ship unloading stations. Indicated in the above table with the 'M' in the 5th character position of the part number.

The single-stroke sampler (SA-77S... above) uses an intermittent air supply as its control signal on the control inlet and takes one sample of adjustable size per pneumatic cycle. Typical application examples include separator packages at individual well or satellite group produced oil facilities. In this instance the pneumatic outlet signal from the level controller can be tee'd to the sampler as well as the dump valve. Indicated in the above table with the 'S' in the 5th character position of the part number.

SA77-EHP is a fully electric sampler with proportional to flow and/or proportional to time sample control signal received from PLC, DCS or

other control system via pulsed 24VDC signal. CSA Approved for Class I Div 1 Groups C&D, Class I Div 2 Groups A&B, and Class II Div 1 Groups E, F, & G hazardous locations.

SA77-ELP is an economical method to provide safe and secure sampling shutoff at truck, ship or container unloading stations, custody transfer stations, or pipeline sampling stations. It provides a mechanical sample shutoff as well as an electrical signal to the sample control loop to indicate that the receiver bottle is full.

Units in the above table with the HO suffix in the part numbers are for use on Heavy Oil applications. Also denoted with the lower gravity specification. Those with suffix HP are the family of samplers designed for high pressure applications and hold a CRN for 600 ANSI (1440psig).

Included with each sampler is an instructions and parts manual, 2" pipe mount u-bolts, probe of customer choice, and two sample receiver bottles of customer choice.

\* All samplers with plastic (HDPE) receiver bottles can be ordered with either standard 1.6L HDPE or optional 5.0L FluorHDPE receiver bottles. The latter are internally Fluorinated High Density Polyethylene Class 6 Containers. Fluorination provides rigidity and stain resistance to the container.

**Approvals and Standards**

ANSI	ASME	CRN	ERCB
300 & 600	B31.3	for all Provinces	Directive 17

Assorted Sample Probes available  
1 included with each sampler



Peterson Instruments  
#123, 5655-10 street NE  
Calgary AB,  
Canada T2E 8W7

Viton® is a trademark of DuPont Performance Elastomers  
API Gravity = (141.5/Specific Gravity) - 131.5  
Specifications subject to change without notice.

1-800-667-7993  
p: 1-403-291-9169  
f: 1-403-291-0960  
e: sales@petersoninst.com  
w: www.petersoninst.com