

SSV

SYNCHRONIZED STREAM SWITCHING VALVE

The Ham-Let SSV is designed to eliminate the risk of human error by preventing improper valve positioning.

The SSV is a unique compact assembly, constructed from 3 coupled valves which operates according to the application-specific sequence.

HAM-LET **SSV** - HOW IT WORKS

The Ham-Let SSV Instrumentation Synchronized Stream Switching Valve based on 3 coupled valves, operate by innovative gear and single handle, enables fail safe sampling process.

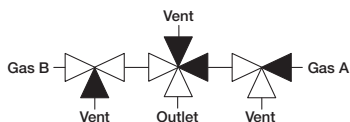
The interlocking safety-solution eliminates media mixing errors by simultaneous routing of the media as well as providing a clear indication of the valve position.

SSV HAS **3 POSITIONS** ACCORDING TO THE SAMPLING PROCESS SEQUENCE:

1 Calibration position



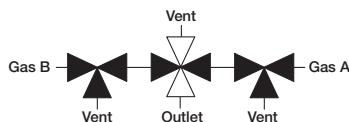
Streaming Gas B to the common outlet-venting the parallel path



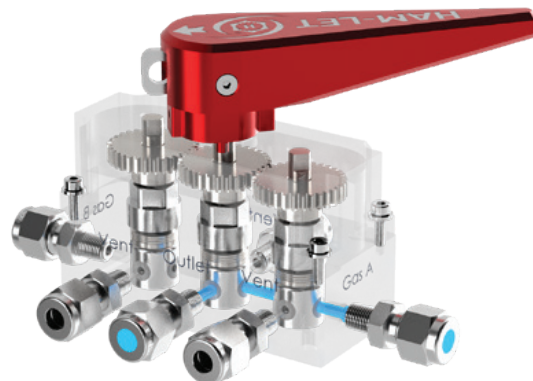
2 Venting position



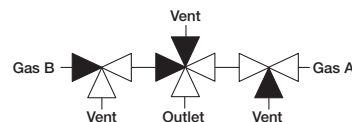
Venting the Inlet



3 Sampling position



Streaming Gas A to the common outlet-venting the parallel path



USE CASE GC AND MS SYSTEMS

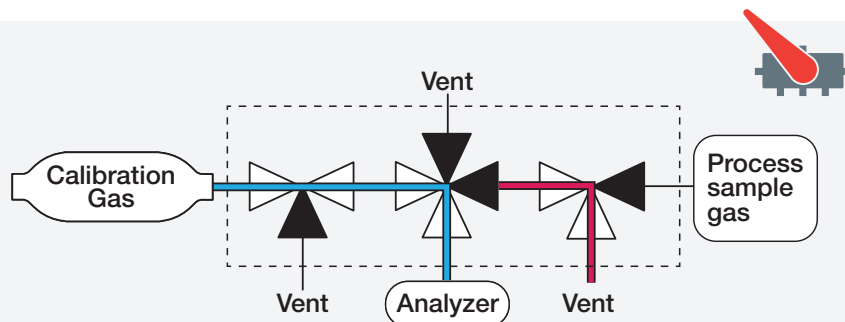
HAM-LET SSV can be configured for delivering process stream to gas chromatography (GC) or mass spectrometry (MS) analyzers, while maintaining double block and bleed arrangement for manual sample injection, as well as preventing cross contamination of the sample stream with the calibration stream.

The following sequence fits for a common sampling process with GC & MS analyzers:

1. Calibration position

Calibration media of known contents and quantities is passed through the analyzer, producing measurements of component concentration

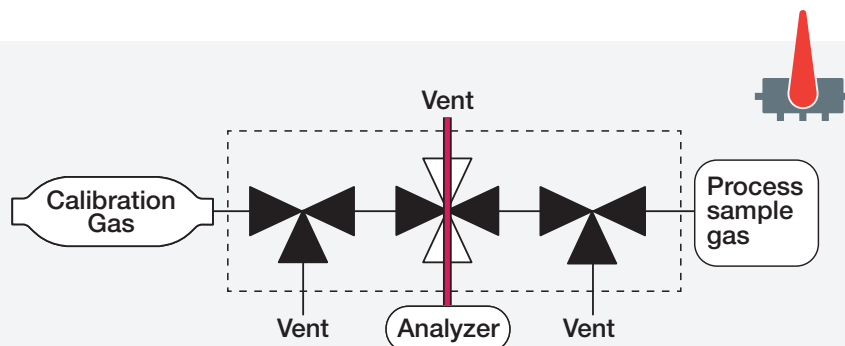
Risk of working without SSV:
 Small amount of calibration gas could leak into the sample stream and throw off the measurements



2. Venting position

Venting the analyzer from the calibration gas prior to the streaming of the sample gas to be analyzed.

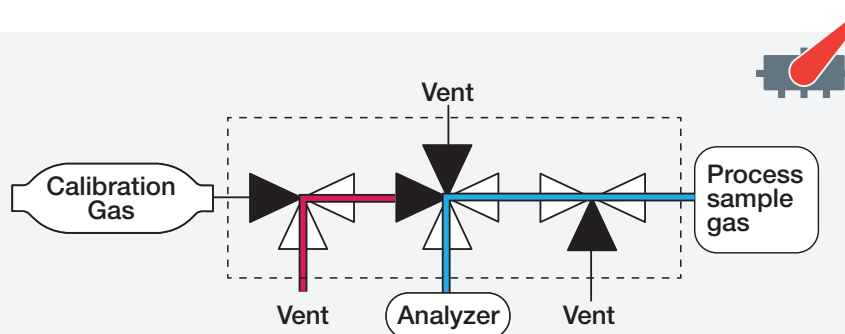
Risk of working without SSV:
 Calibration gas could stay in the analyzer and gives a false reading measurement



3. Sampling position

Sample media is passed through the Analyzer providing accurate measurements reading.

Risk of working without SSV:
 Mixing the sample gas with the calibration gas or could give a false reading measurements



HAM-LET SSV

FEATURES:

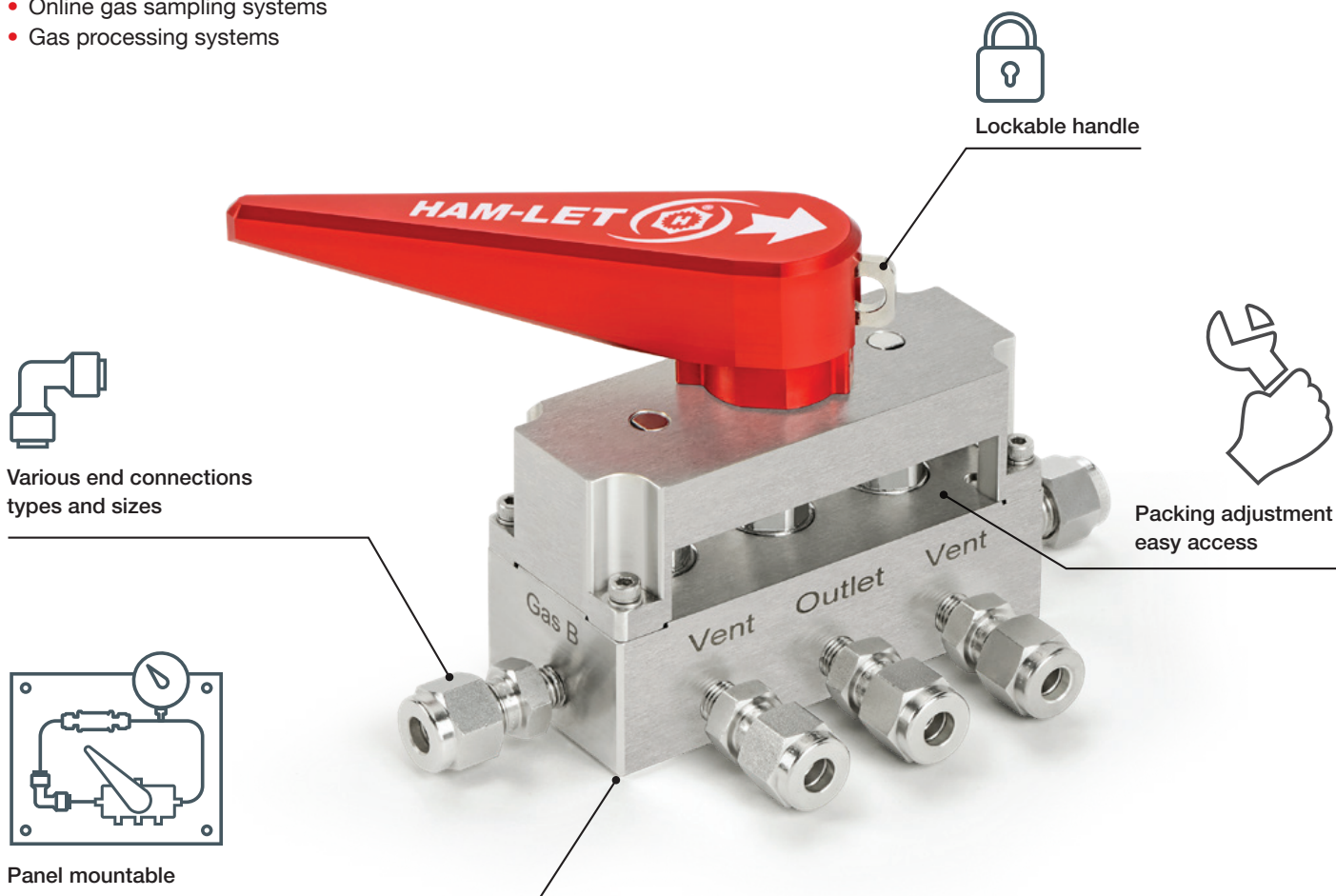
- 316 Stainless Steel construction
- MAWP-1500 psi
- Temperatures range: -20°C to 60°C
- Ø 2.2 mm orifice
- Packing adjustment easy access
- Lockable handle
- Panel mountable
- Variable end connection types and sizes

ADVANTAGES:

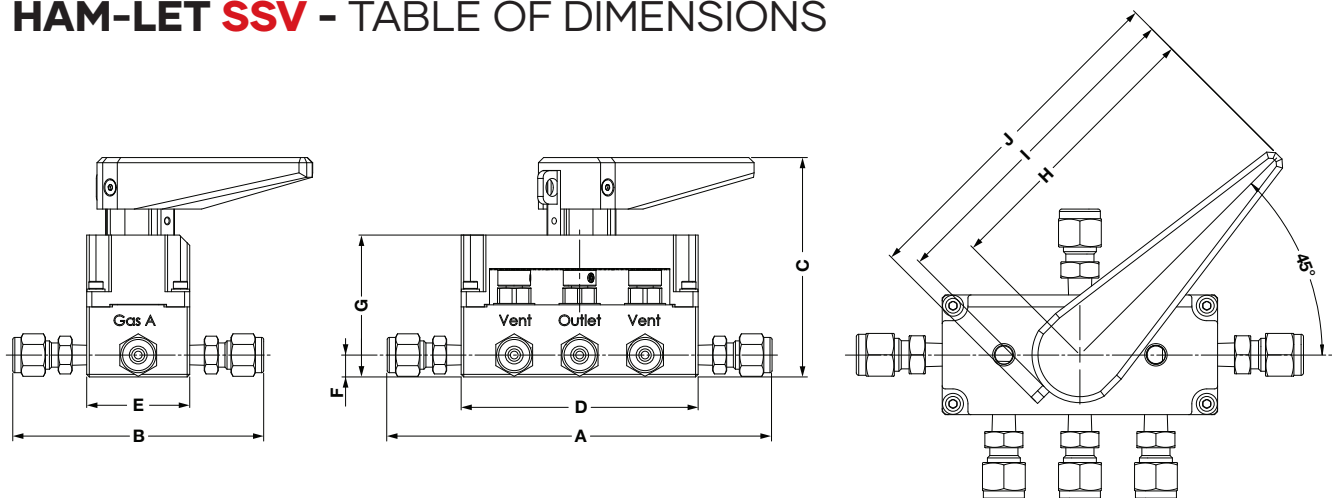
- **Fail Safe**
- Minimal dead volume ensures highest system efficiency by reducing purge time and expensive purge gas
- Compact design
- Full bore path
- Passivated wet parts
- Decrease unscheduled downtime and production losses
- Eliminates intermixing

APPLICATIONS:

- Sampling and calibration
- Online gas sampling systems
- Gas processing systems



HAM-LET **SSV** - TABLE OF DIMENSIONS



Connection		Orifice		CV	Dimensions																			
Type	Size				A Finger-tight		B Finger-tight		C		D		E		F		G		H		I		J	
					mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Let-Lok® Imperial	1/4"	2.2	0.086	0.2	149.4	5.88	97.4	3.83	85.2	3.35	92	3.62	40	1.57	8.5	0.33	46.6	1.83	94	3.7	110	4.33	115.5	4.54
Let-Lok® Metric	6mm	2.2	0.086	0.2	149.47	5.88	97.47	3.83	85.2	3.35	92	3.62	40	1.57	8.5	0.33	46.6	1.83	94	3.7	110	4.33	115.5	4.54

HAM-LET **SSV** - ORDERING INFORMATION

SSV		00		SS		L		1/4		R	
Valve Series		Valve Type		Body and End Material		End Connection Type		End Connection Size		Seat Material	
SSV		00	Let-Lok	SS	St.St. 316	L	Let-Lok®	1/8	3 mm	R	PFA
		10	Female			N	NPT	1/4	6 mm		
		80	Male			G	ISO parallel	3/8	10 mm		
						R	ISO Tapered				
						GL	Metal face seal				
						HL	One-Lok				