



LB-1PV, LB-1SS

Liquid Stop LB-1PV and LB-1SS

for protecting gas analyzers and gas-phase chromatographs against liquid ingress

Special Features

- Safe protection against liquid ingress
- Reliable separation of liquid ingress
- Also suitable for high pressures
- Available in stainless steel and PVDF
- Easy change of the hydrophobic protective membrane
- With wall-mounting bracket

Application

The M&C Liquid Stops LB-1PV and LB-1SS are suitable for the protection of analyzers against the ingress of liquids from the upstream sample gas conditioning system. This prevents serious damage to the analyzer.

The most practical positioning of the LB-1 is downstream of the sample conditioning unit, directly in front of the flow meter of the analyzer or gas chromatograph.

Description

The hydrophobic protective membrane of the M&C liquid stop LB-1... is positioned between the two screwed parts of the housing. It is supported by a porous glass pre-filter to ensure form stability.

The pore width of the protective membrane is designed in such a way that gas molecules and vapours can pass through, but liquid molecules are retained.

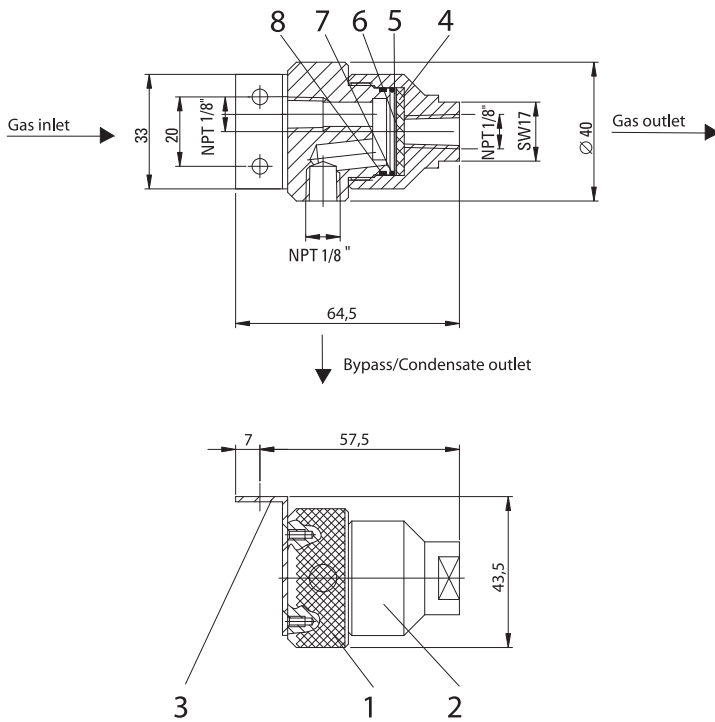
The gas inlet and outlet are arranged horizontally in the housing. The liquid outlet/bypass points downwards when mounted.

The horizontal flow direction of the gas and the gravity-induced draining of any liquids at the protective membrane prevent the liquid from penetrating to the analyzer.

Possible liquid can be drained by means of the peristaltic pump SR25.2, float steam trap with separator function, e.g. ADS-SS or collecting vessel TG1 (immersion vessel). The LB-1 offers an appropriate connection option for this purpose.

The membrane replacement is very easy to perform. The optimum positioning of the sealing o-ring always ensures a reliable sealing of both housing sections.

Filter inlet and outlet can be rotated 180° at the wall-mounting bracket so that flexible adaptation to local conditions is possible during installation.

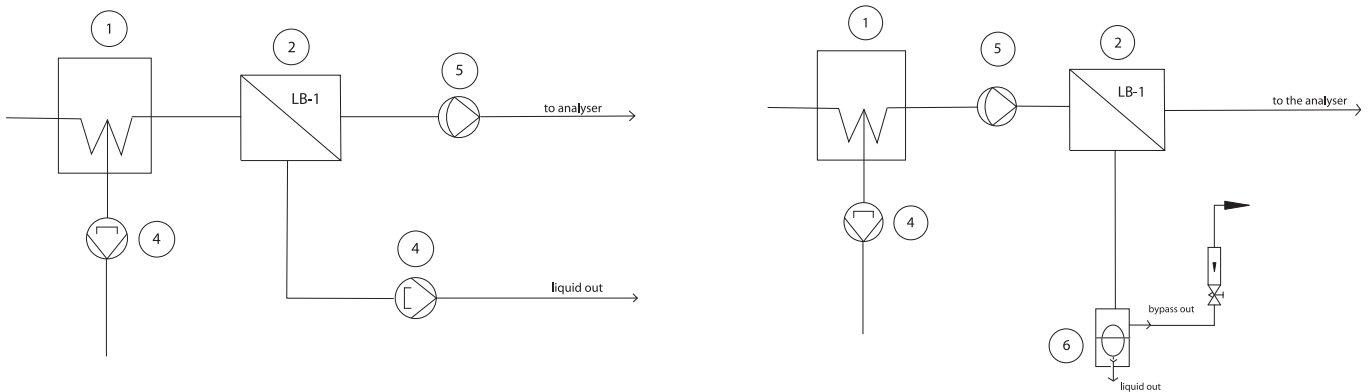


Dimensions in mm

Technical Data

Liquid stop	LB-1PV	LB-1SS
Part No.	03F4005	03F4000
Gas flow	Max. 200 NI/h	
Gas pressure	0.3 to 2 bar abs. ΔP max. 0.5 bar	0.3 to 10 bar abs. ΔP max. 0.5 bar
Differential pressure with clean protection membrane, medium air, 20 °C [68 °F]	50 100 mbar 100 200 NI/h	
Temperature sample gas	Max. +80 °C [176 °F]	Max. +100 °C [212 °F]
Ambient temperature	0 to +60 °C [32 to 140 °F]	
Storage temperature	-25 to +80 °C [-13 to 176 °F]	
Stagnant space	4 ml	
Material of gas-bearing parts	PVDF, FKM, PTFE, Polyester, glass	SS 316Ti, FKM, PTFE, Polyester, glass
Membrane characteristic (AATCC 118-1989ASTM)	Degree of oil repellency 6	
Sample gas/drain connections	NPT 1/8"i DIN ISO 228/1	
Mounting/weight	Wall-mounting/approx. 0.3 kg [≈ 0.7 lbs]	

Application examples



- 1 Gas cooler
- 2 Liquid stop LB-1
- 4 Liquid drain with peristaltic pump SR25.1
- 5 Gas sample pump
- 6 Separator and automatic liquid drain ADS-SS