

# LIQUID TRAP

PRODUCT DATA SHEET—107

Continuous liquid removal and drainage  
 For solvent-based or powder processing systems

## Introduction

The Neutronics Liquid Trap is a preconditioning component used in addition to a standard sample conditioning package. The Liquid Trap is designed to remove liquids and droplets from the sample gas stream, preventing contamination or damage to the oxygen sensor and sample conditioning components. Large amounts of liquid will overload typical in-line filters allowing liquid to collect and clog upstream tubing and components. The liquid trap provides efficient liquid removal, increasing system reliability and reducing maintenance downtime.

## Operation

Sample gas enters the Liquid Trap through the inlet connection at the top of the assembly. The gas stream flows down through the inlet piping and reverses at the end, flowing back up through the body of the trap and out through the outlet. Liquid droplets continue to fall downward for discharge out the drain port. The Liquid Trap is suitable for solvent-based processing systems operating at positive pressures or under vacuum.

## Installation

The Liquid Trap must be vertically mounted in the sample line between the process vessel and the sample conditioning package. The recommended size of the inlet piping from the process connection to the liquid trap is 1/2" diameter minimum. The minimum outlet piping or tubing size is 3/8" diameter.

For continuous positive pressure applications, a needle valve or back pressure regulator is required on the drain line. For applications with operating pressures ranging from atmospheric to -55 in WC, a Negative Pressure Autodrain (ref. PDS-102) is required to prevent ambient air from entering the sample gas stream and to provide continuous drainage. The Liquid Trap must be installed at least 5 ft. above the Autodrain.

## Maintenance

The liquid trap contains no moving parts. Inspection and cleaning are required in accordance with standard preventative maintenance procedures and schedules.

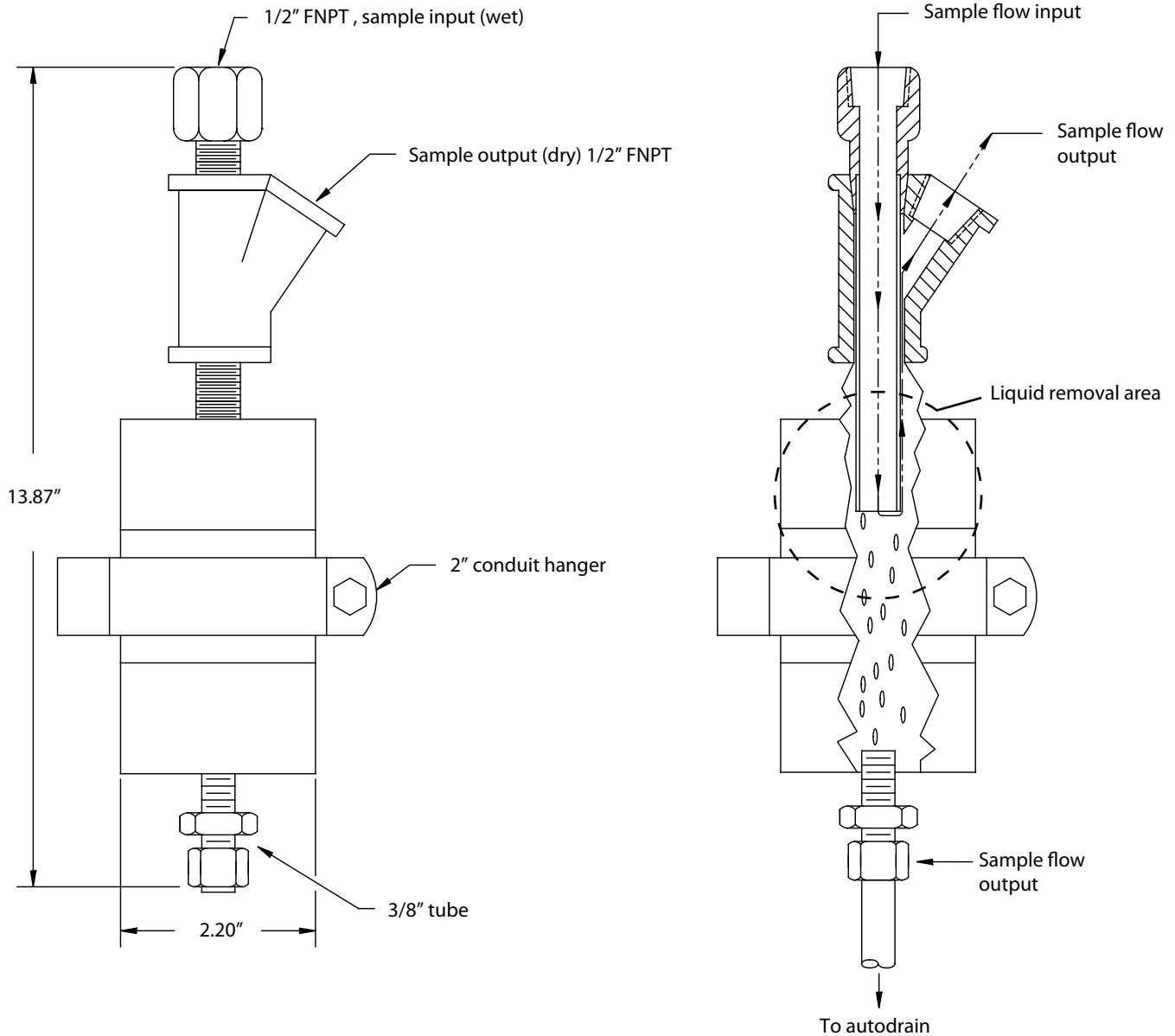


## Features

- Continuously removes entrained liquids and droplets from the sample stream
- Easy to maintain – with no moving parts, the liquid trap minimizes maintenance costs and unplanned downtime
- Efficient liquid removal with minimal pressure drop
- Meets a wide range of applications – suitable for use in positive pressure and vacuum operating conditions
- Corrosion resistant materials of construction – available in Stainless steel, Hastelloy, or brass/copper

# LIQUID TRAP — SPECIFICATIONS

Materials of construction	Stainless steel, Hastelloy, or brass/copper
Sample inlet	1/2" FNPT
Sample outlet	1/2" FNPT
Drain port	3/8" compression fitting



## Order information

Part No. 6-02-4000-22-1	Liquid trap	Stainless steel
Part No. 6-02-4000-70-0	Liquid trap	Hastelloy
Part No. 6-02-4000-23-1	Liquid trap	Brass/copper



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