

INSTALLATION, MAINTENANCE, SAFETY, STORAGE AND HANDLING INSTRUCTIONS

BEFORE INSTALLATION THESE INSTRUCTIONS MUST BE FULLY READ AND UNDERSTOOD.

Foreword

In accordance with the requirements of the European Equipment Directive 97/23/EC and 99/36/EC. This document provides installation, maintenance, storage and handling instructions for DOPAK Sampling Systems series DPM, HD, DPJ, DPT, S23, S32, S32-(L)G, DPO and Sample Stations.

Hazard Potentials

1. disregard of instructions
2. improper use of product
3. insufficiently qualified personnel

Storage / Protection / Selection / Handling Instructions

Storage

When DOPAK Sampling Systems are to be stored prior to being installed, storage should be in the originally delivered packing with all protection remaining in place. Storage should be off the ground in a clean, dry indoor area.

Protection

DOPAK Sampling Systems are delivered with protection according to customers specification or in accordance with the Quality Assurance Manual.

Selection

Ensure that the Sampling System material of construction and pressure/temperature limitations marked on the product are suitable for the service and process conditions. If in doubt, please contact the supplier.

Handling

The Sampling System should be handled by competent personnel. All connection protectors should stay in place until the system is ready to be installed.

Safety Instructions

It is important to take the following precautions before you start working on the system:

1. Personnel installing, maintaining or making adjustments to the Sampling System must be competent and utilise approved equipment and clothing normally used to work with process media where the system is installed.
2. The process must be depressurized, drained and vented before installing the Sampling System.
3. Handling of all systems must be carried out by personnel trained in all aspects of manual and mechanical handling techniques.
4. Ensure that the Sampling System design pressure/temperature limitations marked on the product are equal to or better than the service conditions.
5. Do not misuse the Sampling System.

Installation Instructions

General

1. Install the Sampling System according to your own local technical instructions.

Connections

2. Threaded connections should be checked on both the Sampling System and the mating component for thread form and cleanliness. Use a thread tape or sealant to prevent galling. Parallel threads usually depend on additional seals or gaskets.
3. Flanged connections and gaskets should be clean and undamaged. Ensure pipe mating flanges are aligned correctly, bolting should be easily inserted through the mating flange holes. Tighten the flange bolts in diagonal pattern.

4. The connecting piping must be separately supported and properly braced to prevent unlimited forces and vibrations being transferred to the Sampling System.

Cleaning and fitting

5. Should there be any possibility of abrasive particles (weld slag, sand, chemical clean residue etc.) within the piping system, this could damage the valve seating. The piping system needs to be thoroughly flushed clean prior to operation. Fit the Sampling System into the piping system ensuring easy access of operating mechanism and easy and safe visibility of metering instruments.
6. Make sure when installing the Dopak Sampling System that the handle is in closed position or rest position and install the sampler completely as supplied, i.e. with sleeve to protect the needles.
7. Check the probe length if the sampler is equipped with a probe.

DOPAK Sampling System with sleeve, needle assembly or SBA

8. Be sure that the sampler is being installed with the sleeve or bottle adapter pointing downwards, i.e. sleeve or bottle adapter in vertical position. The slots in the sleeve should point to the operator to enable the operator to determine the liquid level in the bottle. To achieve this, the sleeve can be positioned by means of the set screw(s) in the neck of the sleeve.
9. Check the vent line for possible blockages to prevent high pressure build up in the bottle. The system does not allow a total blockage of the vent line.

DOPAK Sampling System with purge connection

10. The Sampling System may be equipped with pressure regulators which have to be set prior to start of operation. It is advisable to set the regulator for back purge slightly higher than the process pressure and the regulator for needle purge slightly higher than atmospheric pressure in order to prevent "liquid bubbling". The regulator for cylinder purge on S32-(L)G Sampling Systems should be set significantly higher than the pressure in the vent line.

Sample containers

11. Ensure that the correct sample containers (sample bottles or sample cylinders) are used for the DOPAK Sampling System.
12. Sampling cylinders are transportable pressure vessels. Ensure that the correct product identification labelling according European Directive 99/36/EC is attached to the cylinder before actual operation.

Commissioning / testing

13. We strongly advise to commission the Sampling System by taking a trial sample with non hazardous product in order to ensure that the sampler is performing as designed.
14. Please check the system for leakage before use. All Dopak Sampling Systems are fully checked and tested before they are dispatched.

Maintenance Instructions

The DOPAK Sampling System must be checked for leakage and functionality on a regular base. For replacement of seats and seals of the valves we refer to the special instructions added to the repair sets.

DOPAK Sampling System with sleeve and needle assembly

1. Check on a regular basis the sharpness of the needles and check the vent line for blockages. The needles can be easily inspected by removing the sleeve. The sleeve can be removed by loosening the set screws at the side of the sleeve. Do not forget to reinstall the sleeve after inspecting the needles !

DOPAK Sampling System with sampling cylinders

2. For sampling cylinders a regular inspection program should be set up according European Directive 99/36/EC for transportable pressure vessels.