

INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS
SAMPLER TYPE PSS

Note: **These samplers are designed and supplied for incorporation with other equipment.**

Warning: **Ensure that any part of body is kept clear of sampler at all times during operation, testing and servicing.**

Isolate air and electricity supply before working on sampler.

INSTALLATION

The automatic sampler can be installed using two methods, either split pre-mount adaptors, (to ease installation process) or welded spigot and flange.

Whichever method is used, the sampler position should be at least two metres away from any bends or conveying disturbance to allow an even product distribution at the chosen sampling point.

1. If the sampler is supplied pre-mounted on a wrap-around adapter, choose the correct sample location on the conveying line and cut an appropriate size hole in the tube - ensuring it is free from burrs, fit halve sections and bolt together. Ensure that the sample tube slot is facing the flow of product. Take care not to overtighten the clamp bolts during assembly.

The sampler should be mounted at an angle of at least 45 degrees to allow product to fall to the sample container. (This angle should be increased for poor flowing materials)

2. If the sampler is supplied mounted onto a length of tube adaptor with a diameter equivalent to the conveying line, remove a section equal to the pre-mount so that the sample tube slot faces the flow of product and clamp in position.

3. Mount the sample container in a convenient location below the sampler. Best results are obtained if the container is directly below the sampler.

Ensure the flexible tube is not kinked.

4. The optional controller should be mounted in a vibration free location suited to the controller.

5. A single solenoid valve is fitted as standard with air connection made to the cylinder. If a filter regulator has been supplied (option) it should be mounted as close to the solenoid valve as possible. Operating air should be free from moisture and 4-5 Bar. Oil mist lubrication is unnecessary.

OPERATION/ADJUSTMENTS

Sampling is achieved when the sample tube extends into the conveying line by means of the pneumatic cylinder, the sample tube fills with product and retracts, the sampled product is then discharged under gravity (assisted by the captured air pressure) to the collection point. By using a double seal arrangement, the sample catchment area is fully isolated from the collection point during operation.

Operation of the sampler is controlled by the fully adjustable cyclic timer, if supplied.

The sampler can be operated in manual mode to give a one shot operation or in auto mode to give continual cyclic operation to produce a composite sample.

The duration the sample tube is in the stream of product is set by the pulse dial on the cyclic timer. This time should not exceed 3 seconds.

When in the auto mode the frequency of sampler operation is set by the pause dial on the cyclic timer. Maximum pause time is 60 minutes.

The speed of the sampler tube is controlled by air restrictors fitted in the exhaust ports of the solenoid operated air valve. This is factory set to approximately 0.1 M/S.

MAINTENANCE

NOTE:

ISOLATE AIR AND ELECTRICITY SUPPLY BEFORE WORKING ON SAMPLER.

The sampler is fitted with ptfе chevron seals. The seals and spacer should be inspected every 10,000 cycles. Failure to inspect may result in sampler malfunction and possible damage.

For seal inspection/replacement the following procedure should be carried out.

Disconnect electrical and air supplies and remove sampler from situ. Remove covers, loosen M6 screw opposite discharge spout on top of the sampler (this aligns internal spacer). Undo cylinder flange and draw out the sample tube from the body whilst still attached to the cylinder. Remove Retainer and seal clamp from the body and push out the seals and spacer. Replace or return the seals and other parts in the reverse order.