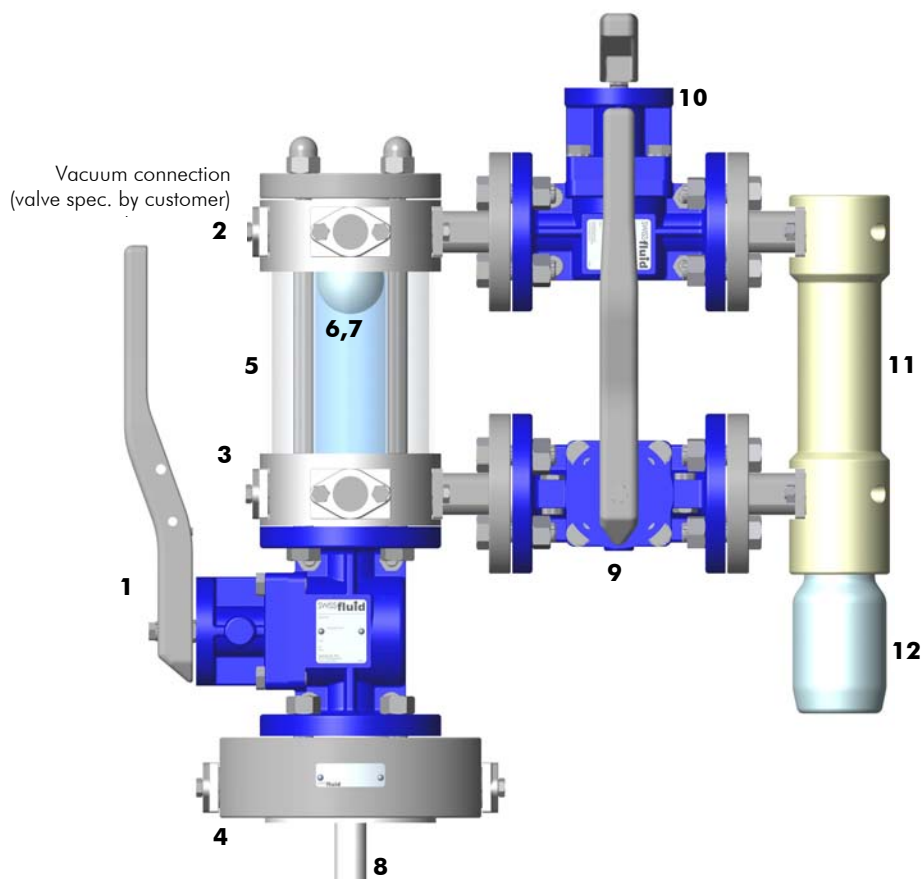




Function of manually operated systems

A dip pipe conforming to the tank configuration is mounted onto an existing tank flange. Flange dimensions, length, configuration and type of dip pipe must be clearly specified by the customer. The dip pipe is needed for the protection and proper guidance of the flexible PTFE suction hose (8) supplied with the sampling system.

Starting point for sampling: Prior to start-up, system needs to be cleaned – all valves to be in closed position.



Sampling under vacuum conditions

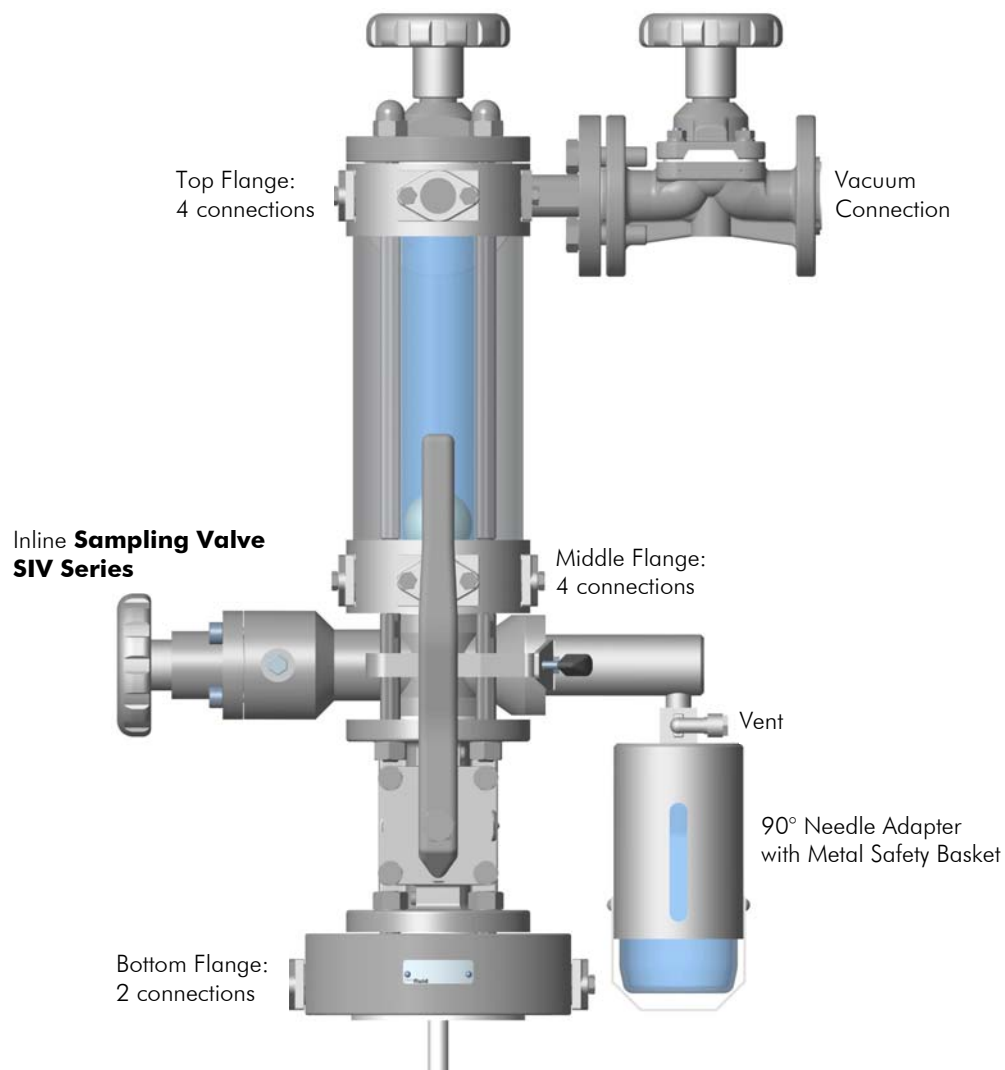
Open charging valve (1) slowly. Open vacuum valve installed at top flange (2). Through the vacuum created in the system, tank content rises through the suction hose (8), main valve (1) and sight glass (5). With the rising of the liquid level, the hollow ball (6) is lifted and finally pressed smoothly against the ball seat (7), stopping the suction flow. Close main valve (1) and vacuum valve. Open drain valve (9) and vent valve (10). Sample now can flow into the sampling bottle (12).

Entrapped gases are released through by-pass (11, solid PTFE or hose) resp. vent valve (10) back into the tank. Remaining sample liquid can be forced back into the tank through the suction hose with nitrogen gas introduced through the connection in the top flange (2) or middle flange (3). The system can be purged with nitrogen through the same connections. After conclusion of sampling and purging of the system, all valves must be closed again for starting new sampling procedure. Independant of sampling, any gas or add products can be provided through the connection in bottom flange (4).

Special systems, options and accessories acc. to detailed specification

Option: with Inline Sampling Valve SIV Series

Instead of using a by-pass, at critical applications we recommend to install the proven bottle system SIV Series. With this alternative, return circuit of gas will be released by the vent connection of the 90° adapter to the atmosphere or into activated carbon filter device. With needle adapter and bottle with septa the probe is free of any contaminations.



Typical Applications

Sampling Systems SRS Series, ideally suited for continuous, fully enclosed monitoring of process data resp. performance, called for by modern process control systems: quick, totally confined – without any process interruptions!

Due to its modular conception, all Swissfluid sampling systems feature a highly flexible approach to service-driven sampling in most industrial processes!