Manual or automated Sampling Systems

for safe, representative and closed sampling of aggressive or toxic media out of reactors and tanks – quick, reliable, without any process interruption.

Modular Design

PFA-lined Reactor Sampling Systems are available such as SRS-P or SRS-P-E for manual operation resp. SRS-P-P with air driven diaphragm pump. Flange connections acc. to ANSI 150lbs.

The systems operate, i.e. extract the required sample by means of vacuum or under pressurized conditions. In addition to the basic units, a large variety of accessories and options can be selected and the system will be assembled easily and complete, just according to the given specification.

Versions

SRS-P
manually

SRS-P-P
with diaphragm pump

Main Features

- Robust construction, assuring easy and safe operation
- Simple extension with additional components resp. upgrading of existing systems
- Main valve standard 1"-150lbs, PFA-lined, manually operated
- 2-hole mounting plates for easy installation of additional valves or connections
- Ball seat made of Perfluor, for wear-free and reliable sealing of the PTFE hollow ball

Operating Conditions

• Operating pressure main valve	232 psi
• Operating pressure sight glass unit	145 psi
• Temperature range main valve	-40°F up to +400°F, depending on material selection
• Vacuum (suction head approx. 9.84 ft)	7.25 psia
• Sampling volume standard	150 / 250 ml (5.07 / 8.45 oz)

Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificates acc. to EN 10204-3.1/2.2/2.1

Systems **PFA-lined** (opt. PFA-AS conductive)

SRS-P	Standard version, manually operated
SRS-P-E	with PVDF suction nozzle (ejector)
SRS-P-P	with PTFE diaphragm pump (opt. PTFE-AS)

Special systems, options and accessories acc. to detailed specification

SRS-P

manually operated

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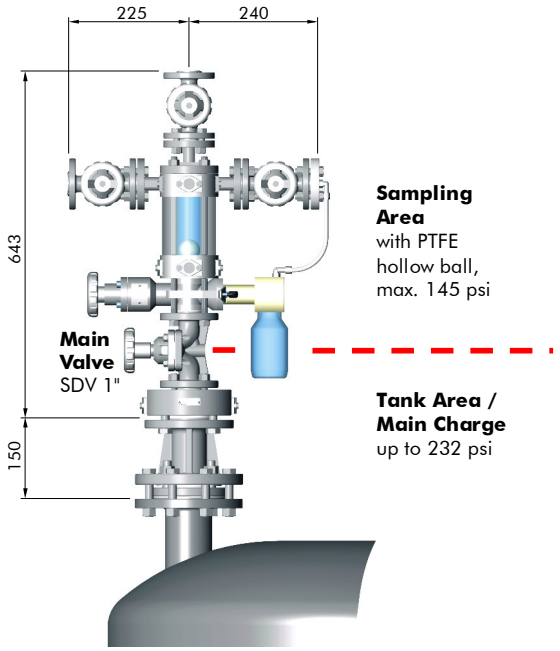
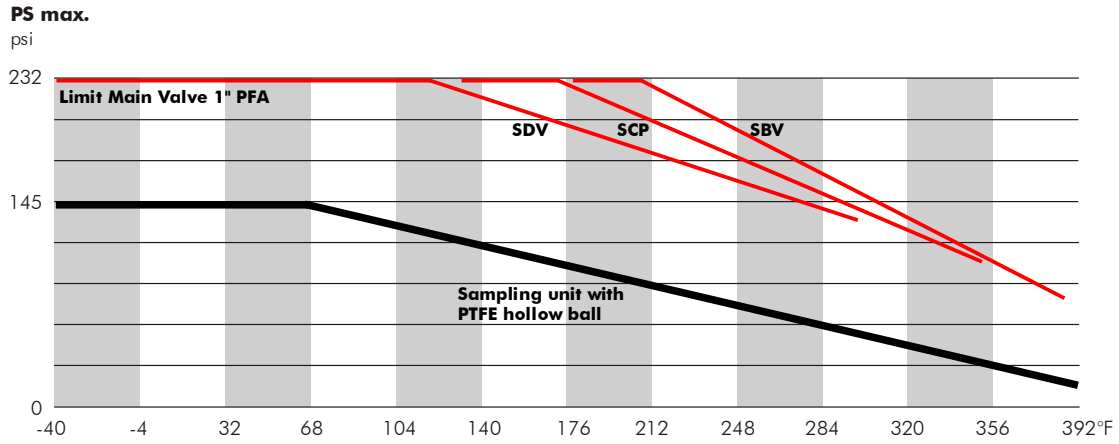


Main Features

- Robust construction, assuring easy and safe operation at any time
- Sampling volume standard 150 ml (5.07 oz) resp. 250 ml (8.45 oz)
- Simple extension with additional components resp. upgrading of existing systems
- Main Valve standard 1"-150lbs, PFA-lined, manually operated (optional with SDV Diaphragm Valve, SCP Cylindrical Plug Valve or SBV Ball Valve)
- 2-hole mounting plates for easy installation of additional valves or connections
- Various reserve connections
- Ball seat made of Perfluor, for wear-free and reliable sealing of the PTFE hollow ball
- Flange connections acc. to ANSI (DIN optional)

Operating Conditions / PT Diagram



Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
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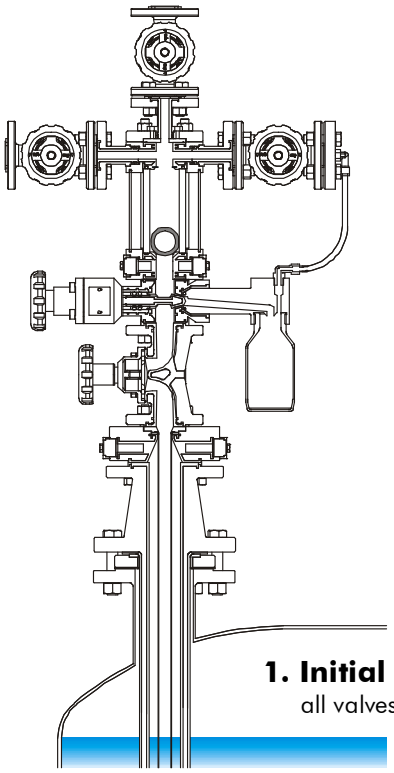
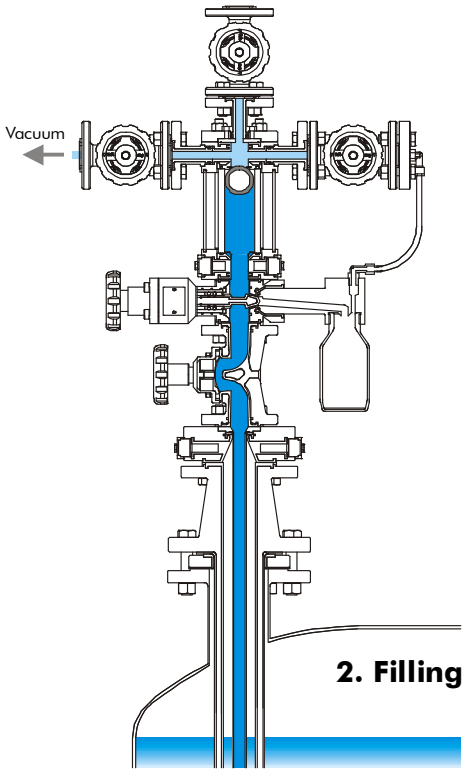
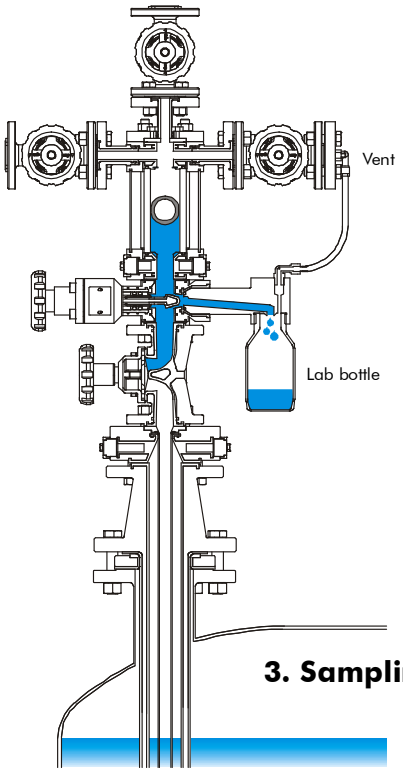
Function of SRS-P manually operated, with vacuum or pressurized tanks



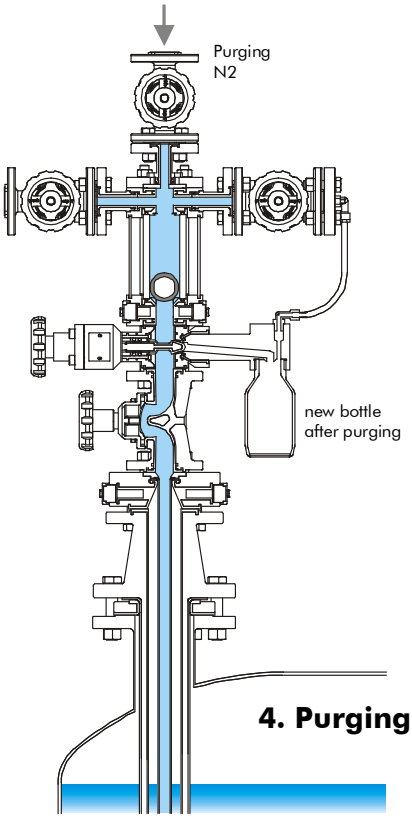
1. Initial position
all valves closed



2. Filling



3. Sampling



4. Purging

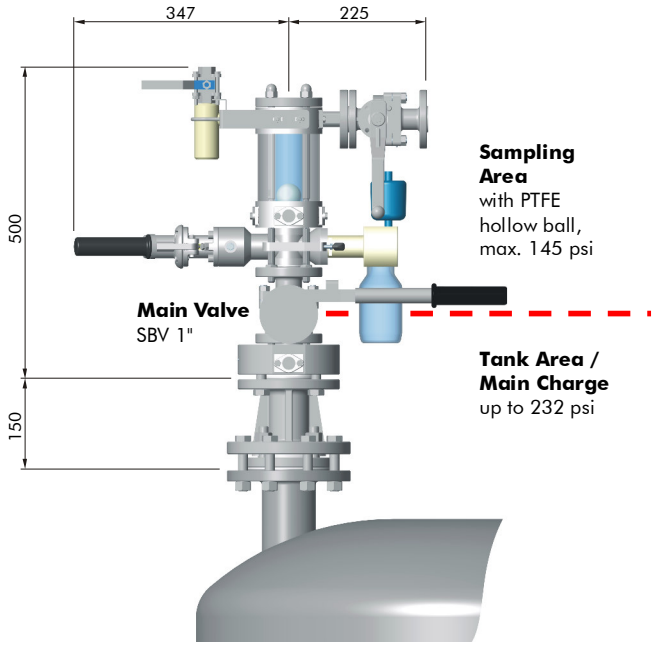
SRS-P-E

manually operated, with suction nozzle

for safe, representative and closed sampling of aggressive or toxic media out of reactors and tanks – quick, reliable, without process interruptions.

Modular Design

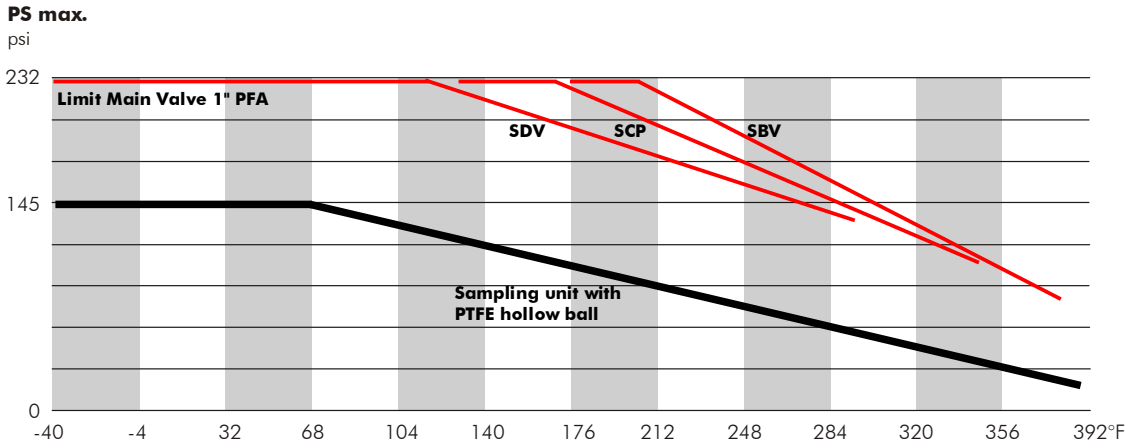
The systems operate, i.e. extract the required sample by means of vacuum through the suction nozzle.



Main Features

- Robust construction, assuring easy and safe operation at any time
- Sampling volume standard 150 ml (5.07 oz) resp 250 ml (8.45 oz).
- Simple extension with additional components resp. upgrading of existing systems
- Main Valve standard 1"-150lbs, PFA-lined, manually operated (optional with SDV Diaphragm Valve, SCP Cylindrical Plug Valve or SBV Ball Valve)
- 2-hole mounting plates for easy installation of additional valves or connections
- Various reserve connections
- Ball seat made of Perfluor, for wear-free and reliable sealing of the PTFE hollow ball
- Flange connections acc. to ANSI (DIN optional)

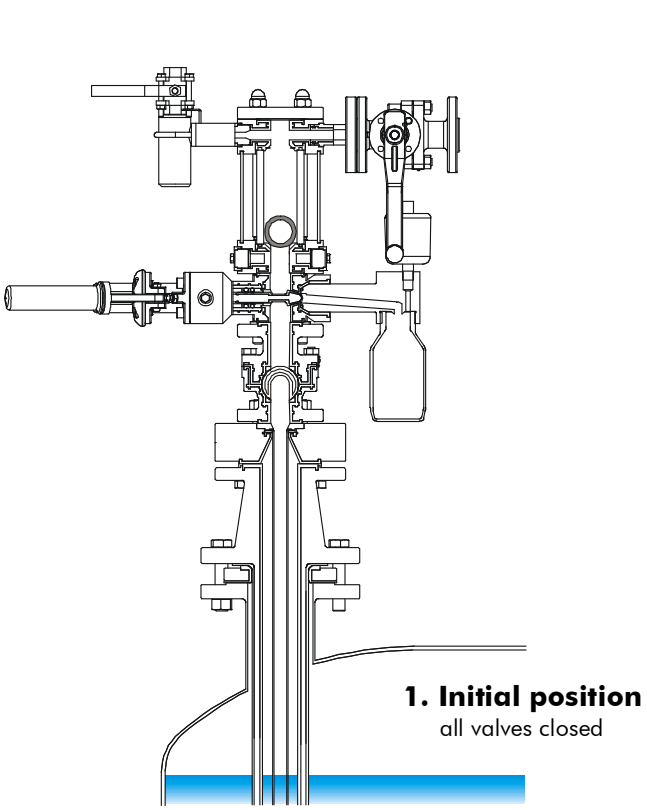
Operating Conditions / PT Diagram



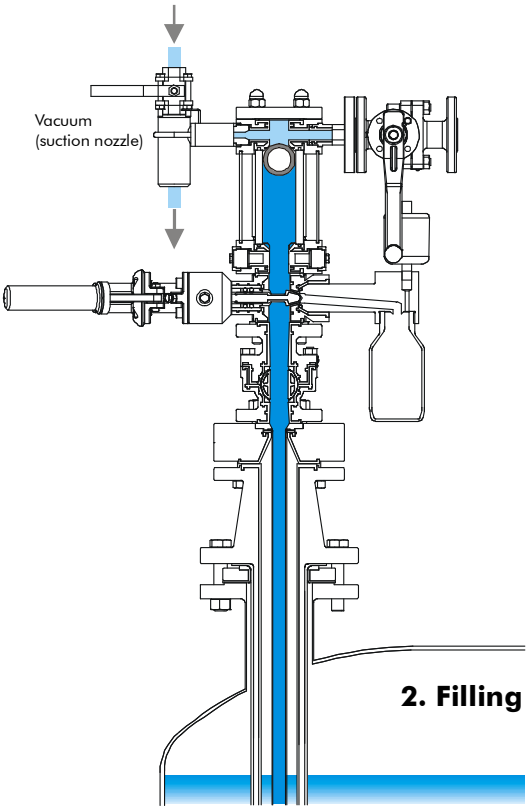
Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificates acc. to EN 10204-3.1/2.2/2.1

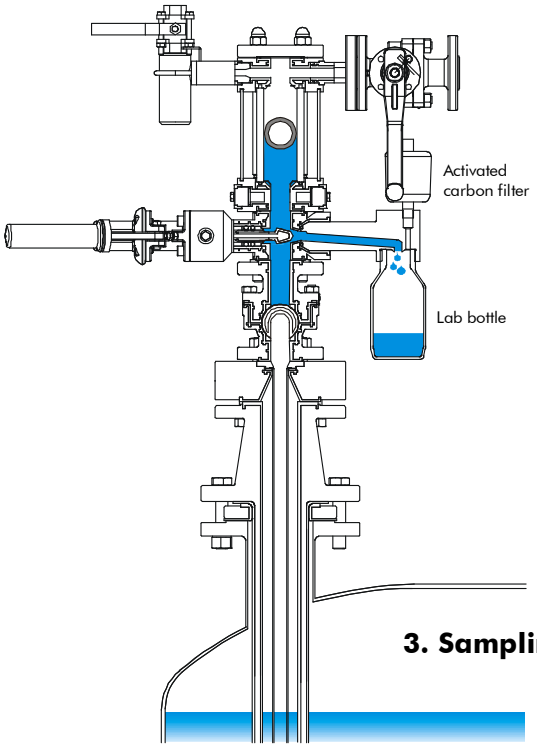
Function of SRS-P-E manually operated, with vacuum through suction nozzle



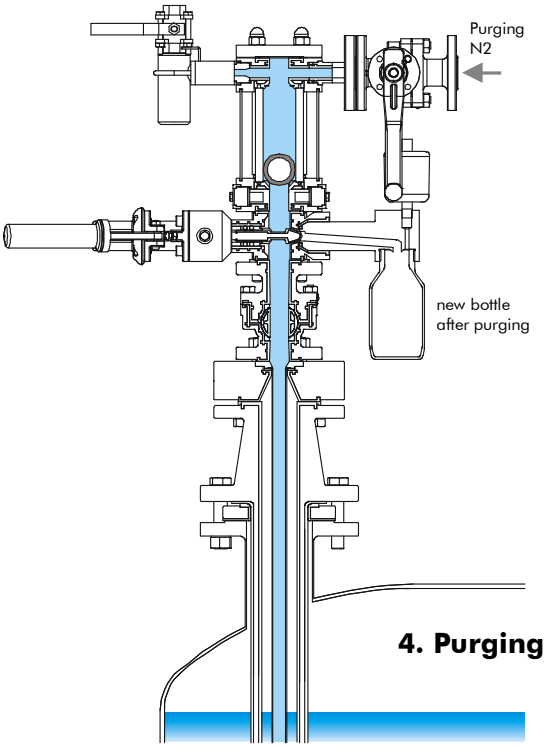
1. Initial position
all valves closed



2. Filling



3. Sampling



4. Purging

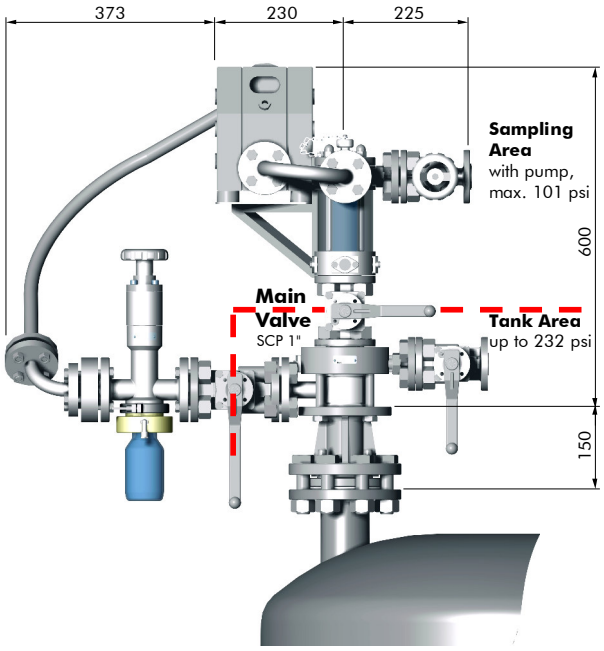
SRS-P-P

with air driven diaphragm pump

for safe, representative and closed sampling of aggressive or toxic media out of reactors and tanks – quick, reliable, without process interruptions.

Modular Design

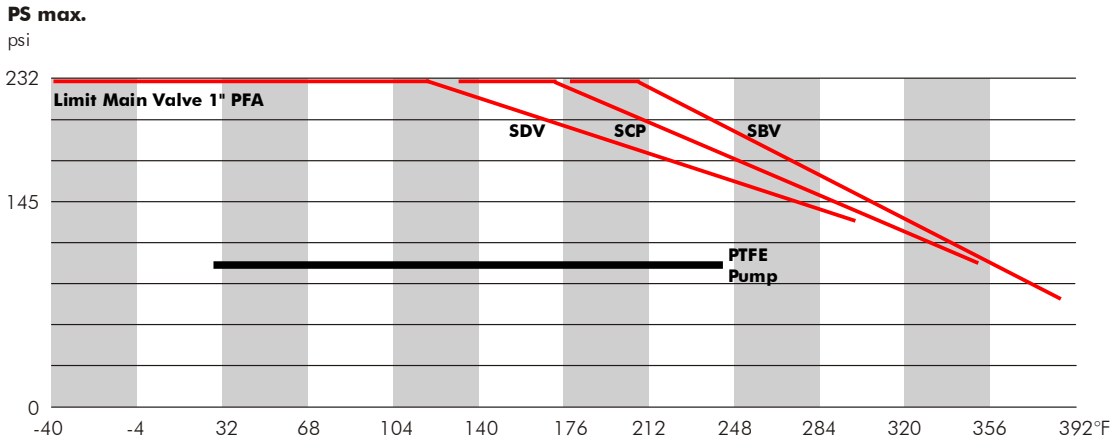
The systems operate, i.e. extract the required sample by means of vacuum through the diaphragm pump.



Main Features

- Robust construction, assuring easy and safe operation at any time
- Sampling volume standard 150 ml (5.07 oz) resp. 250 ml (8.45 oz)
- Simple extension with additional components resp. upgrading of existing systems
- Main Valve standard 1"-150lbs, PFA-lined, manually operated (optional with SDV Diaphragm Valve, SCP Cylindrical Plug Valve or SBV Ball Valve)
- 2-hole mounting plates for easy installation of additional valves or connections
- Various reserve connections
- Air driven diaphragm pump made of PTFE or PTFE-AS (conductive)
- Flange connections acc. to ANSI (DIN optional)

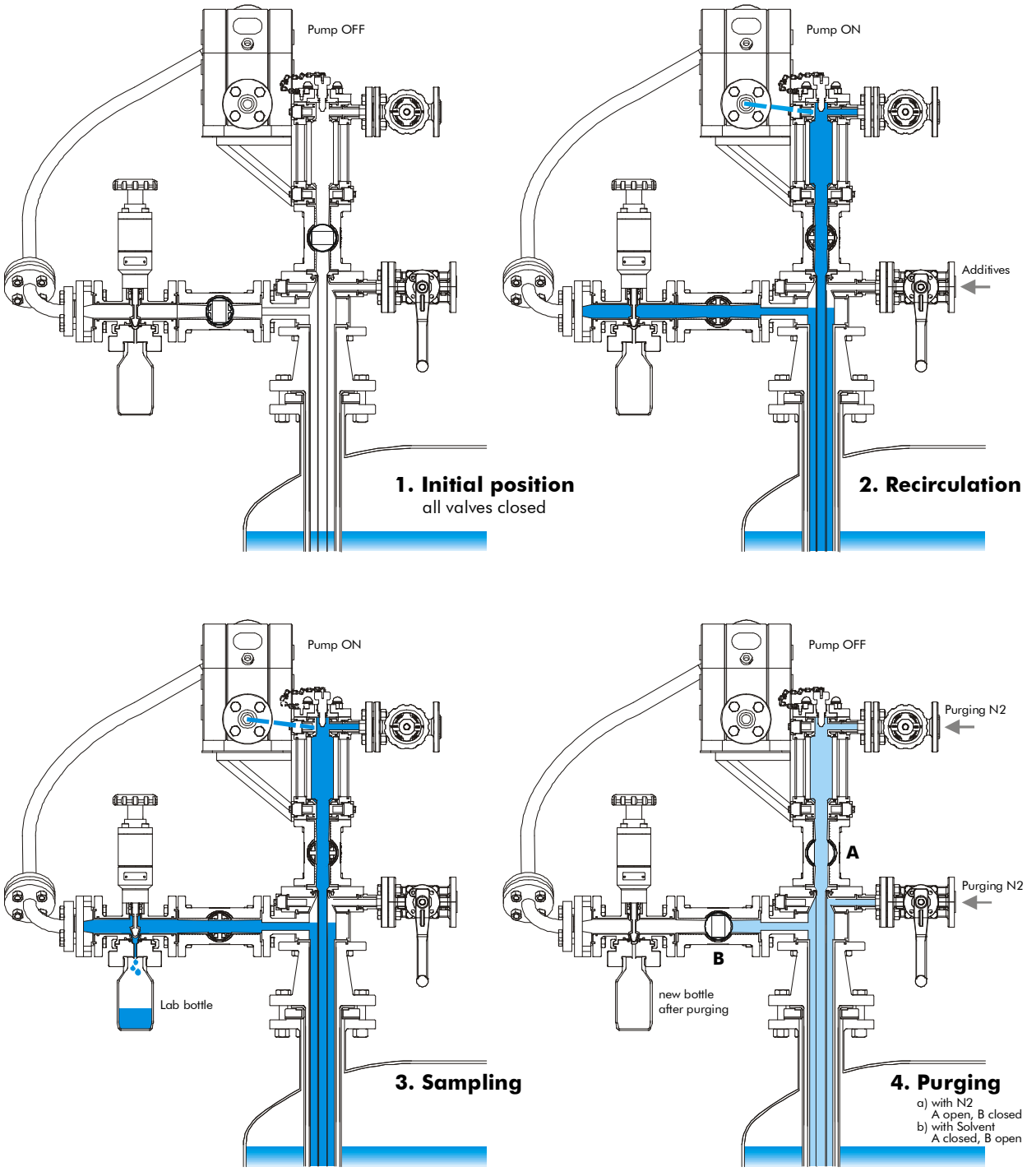
Operating Conditions / PT Diagram



Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, resp. API 598.
- Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificates acc. to EN 10204-3.1/2.2/2.1

Function of SRS-P-P with vacuum through air driven diaphragm pump



Specification of a complete SRS Reactor Sampling System

(function from approx. 7.25 psia vacuum absolute, up to pressurized system)

Date:_____ Distribution / Sales agent:_____
Company:_____ Name:_____ Department:_____
Street:_____ City / State:_____
Phone:_____ Fax:_____ E-Mail:_____

☐ New plant ☐ Renovation ☐ Refurbishing ☐ Project name:_____

☐ Reactor type / Supplier:_____ ☐ Size / Contents:_____ Liters ☐ Material:_____

☐ Quantity:_____ ☐ Delivery time required:_____

Does customer have already any sampling systems? ☐ Yes / Supplier and type:_____ ☐ No
Problems with existing type? ☐ Yes / what problems?: _____ ☐ No

Design data of the system

1) Flange connection on reactor: ☐ Size_____ Class_____ lbs ☐ others: _____
2.) Dip pipe: ☐ Yes / Dip pipe straight ☐ Yes / Dip pipe bend (add sketch) ☐ No
3.) Material dip pipe: ☐ 316L ☐ PTFE encapsulated ☐ others:_____
4.) Length of dip tube from reactor flange connection:_____ mm
5) Material sampling system: ☐ 316L ☐ Teflon-PFA lined ☐ others:_____
6.) How does customer take the sample out of reactor: ☐ with vacuum
☐ with vacuum, via suction nozzle
☐ with existing pressure of the reactor
☐ with air driven diaphragm pump (flow circulation)
7.) Additional, wished functions: ☐ pH-monitored ☐ temperature-monitored ☐ Redox-monitored
(with Diaphragm Pump) ☐ others:_____
8) Sampling with gas return circuit via by-pass: ☐
9.) Sampling with IN-LINE Sampling Valve via 90° vertical adapter: ☐
10.)Actuator IN-LINE-Sampling Valve: ☐ Handwheel ☐ Handwheel, spring return ☐ Deadman lever
11.)Deadman lever at the main valve: ☐ Yes ☐ No
12.)Sampling volume:_____ ml
13.)No. of tests within 24 hours.:_____
14.)Sampling taken into: ☐ open bottle → ☐ GL45 ☐ customers bottle
☐ closed bottle with septa ☐ GL32 ☐ customers bottle
☐ Safety cabinet / Enclosure
15.)PTFE Suction hose diameter x length: ☐ 0.35/0.47x_____inch ☐ 0.63/0.75x_____inch ☐ others:_____
16)Suction lift, dry with the air driven diaphragm pump:_____ ft
17)Additional valves and type for cleaning / purge / vent:_____
18)Additional accessories :_____
19)Test / certificates:_____
20)Remarks:_____

Process media

1) Name of media / chemical composition :_____
2) Concentration in %:_____
3) Working pressure or vacuum during sampling:_____ psi / vacuum psia
4) Design pressure: _____ psi / vacuum psia
5) Working temperature during sampling:_____ °F
6) Design temperature:_____ °F
7) Viscosity during sampling: _____ cp
8) Solid particles during sampling: ☐ Yes / particle size:_____ my ☐ No

Contact person:_____ Answer until:_____ Enclosures:_____