

1/2" – 6", full port

for safe and representative sampling of aggressive or even toxic liquids from pressurized pipelines without any process interruptions.

Modular Design

SSB Sampling ball valves are distinguished by their fixed sample volume of 40ml (1.35oz) which is isolated from the process as the valve is being operated.

The sturdy bodies are made of stainless steel casting 1.4408 (CF-8M), optional with chemically resistant linings such as PFA or PFA-AS (conductive).



CE Conformity acc. to European Pressure Equipment Directive 2014/68/EU (PED)

Main Features

- Full-port design, no pressure drop
- Fixed sample volume of approx. 40ml (1.35oz)
- Sample isolated from process as valve is operated
- Only one opening to the atmosphere
- Lockable handle with two stops for easy 180° degree motion
- ISO-flange according to ISO 5211 allows direct automation with pneum. or el. actuators
- Zero stem leakage provided by an innovative stem sealing mechanism
- Easy maintenance, same spare parts for all sizes
- Piggable

Options

- Purge Connection
- Vertical adapter
- Pneumatic or electric actuator (with optional timer unit)
- Adj. bottle support with spring-loaded plate
- Safety cabinet (SS or PP) with windows
- Activated carbon filter
- Sealing plug



With vertical adapter



With pneum. actuator

Operating Conditions

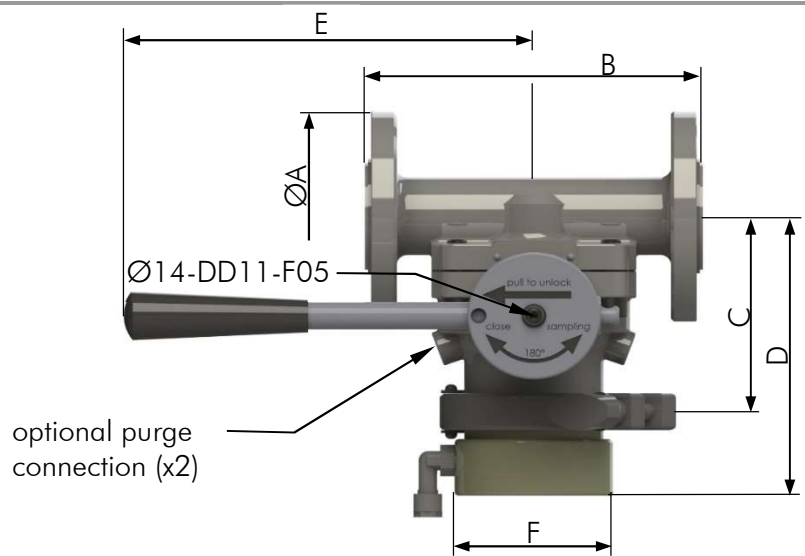
- Temperature range from -40°F up to +300°F (400°F), depending on lining material
- Pressure range from 0.01 psi up to 232 psi, depending on size/pressure/temperature

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
- Testing of the plastic lining for porosity with 35 kV

Manual Valve

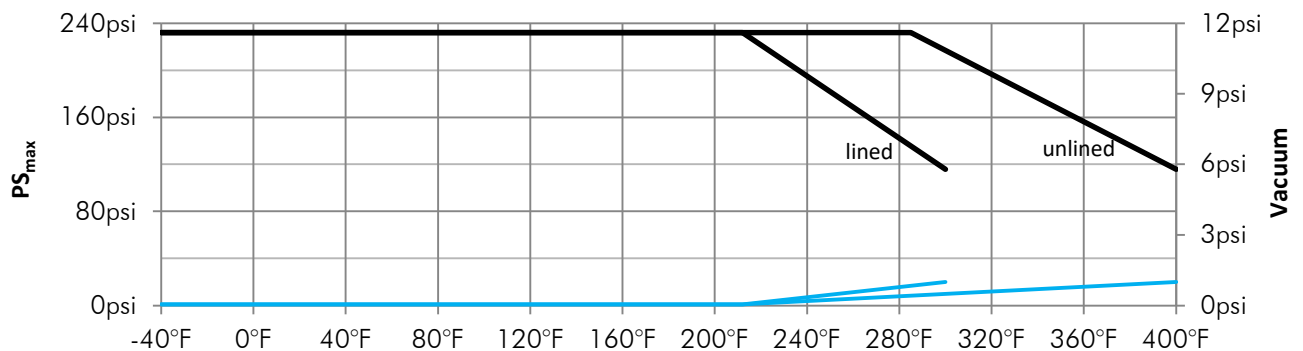
Standard version with handlever



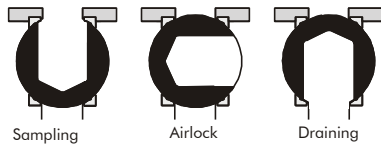
Dimensions in inches

Sizes Size nom.	ØA	B	C	D	E	F	torque [in.lbs]	Valve [lbs]	Handle [lbs]
1/2"	3.5	6.3	3.8	5.5	10	3.1	180	10	2.0
3/4"	3.88	6.3	3.9	5.6	10	3.1	180	11	2.0
1"	4.25	6.5	3.9	5.6	10	3.1	180	11	2.0
1 1/2"	5.0	6.5	4.2	5.9	10	3.1	180	14	2.0
2"	6.0	7.0	4.4	6.1	10	3.1	180	17	2.0
3"	7.5	8.0	5.0	6.7	10	3.1	180	27	2.0
4"	9.0	9.0	4.4	7.2	10	3.1	180	42	2.0
6"	11.2	11.0	6.5	8.2	10	3.1	180	57	2.0

Pressure-/Temperature Diagram



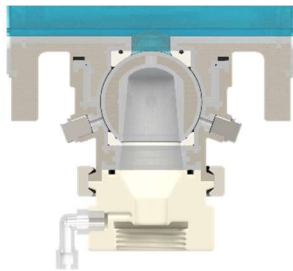
Principle of operation type SSB (Sampling under pressure, with laboratory bottle)



Horizontal installation

Sample volume/Charge ca. 1.35 oz (40 ml)

Comment: depending on the desired volume, the sampling procedure is repeated accordingly
 Option: Safety lock to prevent unauthorised operation of the valve



Valve in closed position

The sampling ball valve is installed in a horizontal process line. The line still has full passage and is piggable.

In closed valve position, the hand lever is in the horizontal starting position by means of a mechanical stop. The ball seals upwards.



Valve in open position for sampling

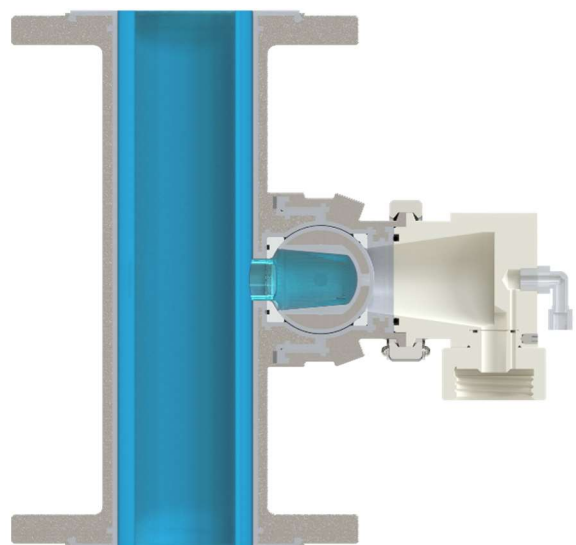
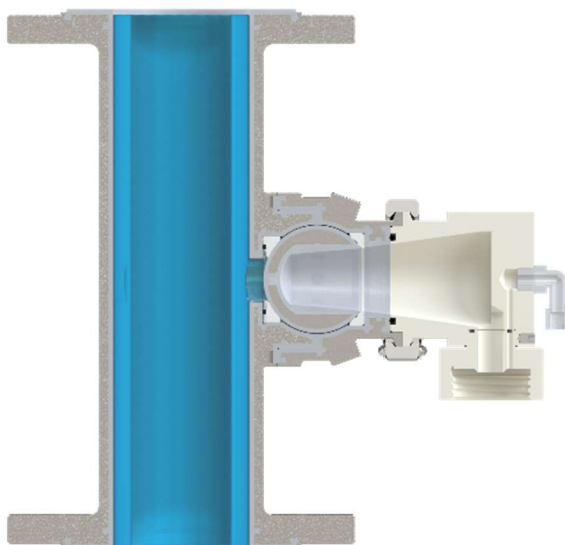
The process medium flows through the valve in any ball-position. For sampling, the hand lever is operated counterclockwise by 180° until it stops. The cavity of the ball is filled with the representative sample.

After only a few seconds the hand lever can be turned back to its original position. During the process, the enclosed sample flows into the laboratory bottle.

Vertical installation

Sample/Charge ca. 1.35 oz (40 ml)

Sampling procedure as described under horizontal installation.

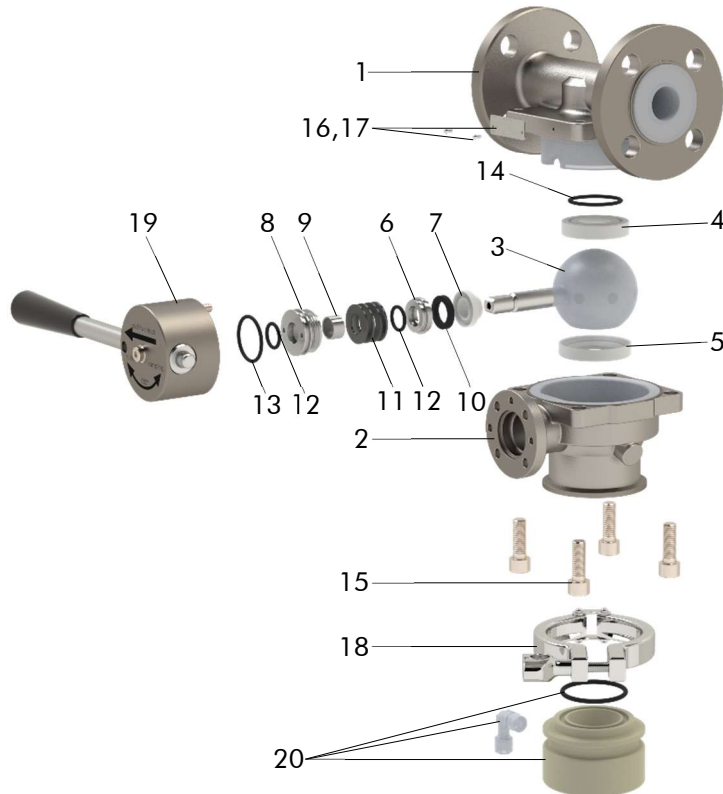


Manual Valve (Picture showing Valve 1" PN16 CF-8M, PFA-lined, with Handlelever)

Parts List

Manual Valve

compl.



Item	Qty.	Description	Material description	Material No.
1	1	Body 1"	CF-8M/PFA	1.4408/PFA
2	1	Ball Housing	CF-8M/PFA	1.4408/PFA
3	1	Ball encapsulated 40ml	SS-Duplex/ETFE	1.4462/ETFE
4	1	Ball Seat spring loaded	PFA	-
5	1	Ball Seat	PFA	-
6	1	Pressure Sleeve	SS316L	1.4404
7	1	Sealing Sleeve	PTFE	-
8	1	Threaded Bushing	SS316L	1.4404
9	1	Bearing 1409 DU	C.St./PTFE	-
10	1	Elastomer Insert	VMQ	-
11	4	Belleville Spring	Spring Steel	1.8159
12	2	O-Ring	FPM	-
13	1	O-Ring	FPM	-
14	1	O-Ring	FFPM	-
15	4	Socket Head Cap Screw	A2-70	1.4301
16	1	Name Plate 42x14	A2-70	1.4301
17	2	Hammer Screw 2.49x4.76	A2	1.4301
18	1	Clamp	SS304	1.4301
19	1	Handlelever compl.	SS316L	1.4404
20	1	Adapter compl. GL45 horizontal	PTFE-R/PVDF	-

Project- / Customer Data

		Inquiry/Date: _____	Ref. SF _____
Company:		Contact Person:	Phone:
Address:		Function:	Fax:
ZIP/Place:		Department:	E-mail:
Project:		Phone direct:	Mobile:

Application
Media / Chemical Composition:

<input type="checkbox"/> liquid	<input type="checkbox"/> powdery	<input type="checkbox"/> crystallizing	<input type="checkbox"/> sticky	<input type="checkbox"/> Spec. Grav. ____
<input type="checkbox"/> gaseous	<input type="checkbox"/> Solids ____ %	<input type="checkbox"/> viscous	<input type="checkbox"/> Flow Velocity ____ m/s	
<input type="checkbox"/> abrasive	<input type="checkbox"/> Particle ____ mm	<input type="checkbox"/> Visc. ____ cp	<input type="checkbox"/> Flow Rate ____ m ³ /hr	

Pressure

 max. ____ bar
 min. ____ bar

Temperature

 max. ____ °C
 min. ____ °C

Mode
 On/Off
 Flow Control
 ____ cycles/ ____

Installation / Environment
 horizontal
 vertical
 Room dry
 Room humid
 outdoor

Remarks: _____

SSB Product Code

Specification of a complete Ball Valve SSB Series

Product Code	Nom. Size	Body	Body	Body lining	Elastomer	Ball (encaps./solid)	Ball Seats	Options
SSB	1"	150lbs	G15	A85	E67	U91	B85	...
	DN15 – 150	PN16		A85 PFA	E60 EPDM	U91 ETFE	B85 PFA	Pu Purge connection
	½" - 6"	PN40		A86 PFA-AS	E67 FPM	U86 PFA-AS	B86 PFA-AS	RAL Special paint
		ANSI150#		- unlined	E68 VMQ	S34 SS316L	B80 PTFE	... others
						S43 C-276	B81 PTFE-T	
						XX Others	B95 PTFE-R	

Note: Actuators, Adapter options and accessories to be specified separately.