82 Inline Sampling Ball Valves

PM 82 M.00 e

January 2007

# **Inline Sampling Ball Valves SSV-B Series**

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

### **Modular Design**

Inline Sampling Ball Valves SSV-B Series are available as DIN- or ANSI-valves, with standard handlever for 90° operation. The valves are distinguished by its dead-space-free design as well as the extremely short outlet way for the representative sample.

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



## **Hauptmerkmale**

- Full-port design, no pressure drop
- Only one opening to the atmosphere
- Easy and safe operation handlever, optionally with pneum. quarter turn actuator
- One-piece ball/shaft, PFA-encapsulated, for defined sampling volume of approx. 45 ml
- All-purpose valve unit installation on large size pipelines, vessels etc.
- Sizes DN15 80 PN16, 1/2" 3"-150lbs
- Face to face acc. to EN 558-1, range 1

Conformity acc. to European
Pressure Equipment Directive 97/23/EC (PED)

#### Standard



Valve with bare shaft

with handlever 180° and spring-loaded protection tube

#### **Options / Accessories**

- Bodies with heating jacket
- Bottle support, adjustable
- Flange plate for 180° operation
- Safety cabinet with inspection windows
- Flanges with groove, PN40, ANSI 300lbs etc.
- Safety padlock
- Activated carbon filter
- Vertical adapter
- Metal safety basket

# **SSV-B: Technical Data, Construction**

SWISS Fluid

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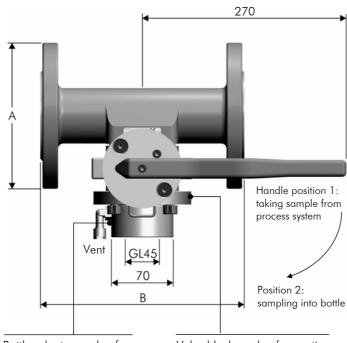
# **Operating Conditions**

- Temperature range from -40°C up to +200°C (depending on selected materials)
- Line pressure max. 16 bar

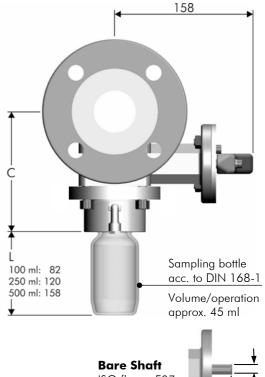
## **Testing / Marking**

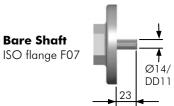
- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1

#### **Construction of Valve**



Bottle adapter made of PTFE glassfibre-reinforced, with PVDF vent connection Valve block made of ss casting 1.4408 (CF-8M), valve seat of PTFE and PFA-encapsul. ball (core made of Duplex 1.4462)





**Technical Data** Dimensions in mm (Kv = Cv / 1.16)

DN	<b>A</b> DIN	<b>A</b> Ansi	<b>B</b> DIN	<b>B</b> Ansi	С	<b>Cv</b> m³/h	Nm**	Kg*
15/1/2"	95	95	160	160	119	14	35	5.3
20/3/4"	98	98	160	160	125	25	35	6.3
25/1"	115	108	160	165	125	58	35	6.8
40/11/2"	150	127	200	165	132	145	35	8.9
50/2"	165	152	230	178	137	230	35	10.6
80/3"	200	190	310	203	151	620	35	16.0

F/F acc. to DIN EN 558-1 range 1 resp. range 3 and ASME B16.10  $\,$ 

# **SSV-B: Function**

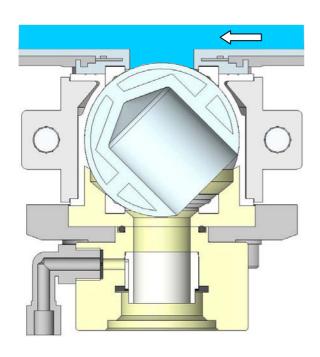
SWISS Fluid

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### Operating Principle SSV-B Series (Sampling under pressure, with bottle)

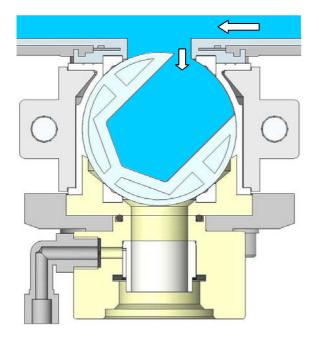


#### Valve in closed position

The valve is installed into a horizontal pipeline. The process line still provides full passage and allows easy cleaning at any time.

In closed valve position, the handlever is in its initial vertical position, assured by a mechanical stop.

In order to prevent any unauthorized operation, the lever can be equipped with a safety padlock.



#### Valve in opened position for sampling

Liquid product flows through the process system. For taking out a sample, handlever is rotated counterclockwise, i.e.  $90^{\circ}$  (opt.  $180^{\circ}$ ) towards the mechanical stop.

Thus, the entire volume of the sampling ball is being filled with product.

After a few seconds, lever is rotated 90° downwards into its initial position. Trapped media is moved downwards in order to flow into the lab bottle as a representative sample.

Depending on the required volume, sampling procedure has to be repeated accordingly.

## **Applications**

The SSV-B Inline Sampling Ball Valve is ideally suited when viscous or even solids-containing media has to be handled.

# SSV-B: Parts List Valve compl., manual

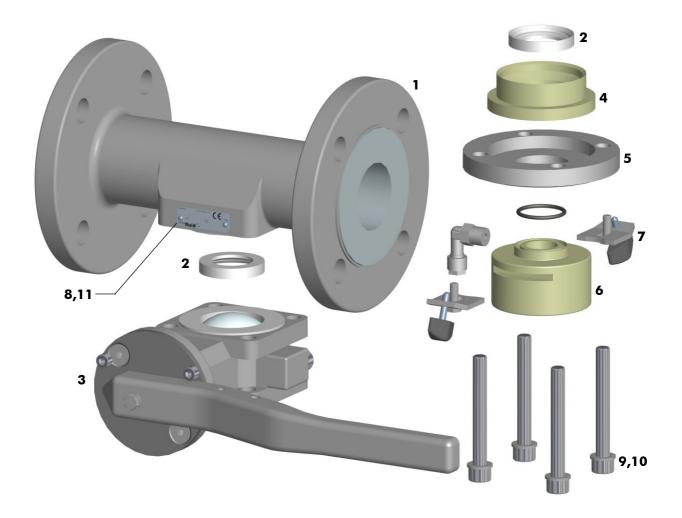


82 Inline Sampling Ball Valves, plastomer-lined

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# **Standard Version** (Picture showing DN 50 PN16, Stainless Steel PFA/PTFE-lined, with handlever)



Item	Qty.	Description	R	Materials		No.
				Stainless Steel	lined	
1	1	Body DN50 PN16 1.4408		CF-8M	PFA	1.4408
2	2	Ball Seat	•	PTFE		
3	1	Valve Unit with Handlever		CF-8M/PTFE	PFA	1.4408
4	1	Ball Outlet		PTFE-R		
5	1	Spacer		SS316L		1.4404
6	1	Bottle Adapter with O-Ring and Vent Connection	•	PTFE-R/PVDF		
7	2	Fixing Clamp with Wing Nut		SS316L		1.4404
8	1	Name Plate 42x14 CE		A2		1.4301
9	4	Socket Head Cap Screw M10x80		A2-70		1.4310
10	2	Lock Washer M10		A2		1.4310
11	2	Hammer Screw 2.49x4.76		A2		1.4310

 $\mathbf{R} = \text{Spare Parts} \quad \bullet = \text{recommended} \quad \bullet = \text{optional}$