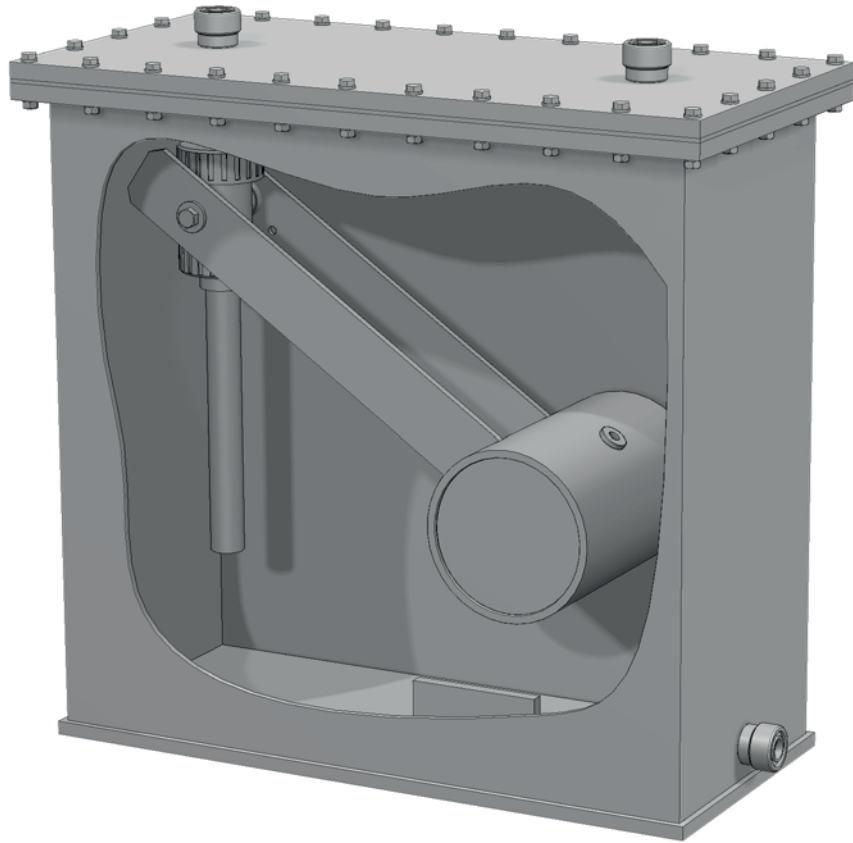


Operating instructions

- Types: 871
 872
 873
 874
 875
 876
 877



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 Germany
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 Fax: +49 5673 999-01

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Keep the operating instructions for future use!	
Please state here the exact type of your float valve. (can be read off the product description on the float valve)	
Type	:
These data are important in case of queries or for ordering spare parts and must absolutely be stated.	

Translation of the original operating instructions!



Operating instructions

Operating instructions

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Operating instructions






1. General

1.1 General user information

The regulations applicable to the place of installation are to be observed before the commissioning and during the operation of the product from **sera**.

Always read these instructions and particularly the safety instructions before installation and commissioning of the **sera** product.

1.2 Symbols and notes used in these operating instructions

Notes (Text and symbol)	Danger type			Meaning (in the operating instructions)
	Danger to life	Risk of injury	Dam. to property	
DANGER! 	X	X	X	Identifies imminent danger that could lead to death or serious injury if not avoided.
WARNING! 	X	X	X	Indicates a potentially dangerous situation that could lead to death or serious injury and damage to property if not avoided.
CAUTION! 		X	X	Indicates a potentially dangerous situation that could lead to slight or minor injury or damage to property if not avoided.
ATTENTION! 			X	Indicates a potentially dangerous situation that could lead to damage to property if not avoided.
NOTE! 				Indicates information which help to facilitate the work and is useful for a trouble-free operation.

Operating instructions

1.3 Quality instructions

Observance of these operating instructions and, in particular, the safety instructions, helps to

- avoid dangers to persons, machines and environment,
- increase reliability and service life of the product and the complete system,
- reduce repair cost and downtime.

The **sera** quality management and quality assurance system for pumps, systems, valves and fittings and compressors is certified according to ISO 9001:2008.

The **sera** products meet the valid safety and accident prevention regulations.



ATTENTION!

Always keep these operating instructions within reach at the place of installation.



WARNING!

Pay attention to the safety data sheet of the medium! The owner must take corresponding accident prevention measures to protect operating personnel from danger through the delivery media used!

2. Safety instructions

2.1 Personnel qualification and training

The personnel for operation, maintenance, inspection and installation must be suitably qualified for their tasks. The owner must clearly define responsibility and supervision of the personnel.

If the personnel do not have the knowledge required, then personnel is to be trained and instructed correspondingly. Such training can be provided by the manufacturer / supplier upon order of the owner. In addition, the owner has to ensure that personnel have understood the operating instructions completely.

2.2 Dangers in case of inobservance of the safety instructions

Inobservance of these safety instructions can result in danger to persons, hazards to the environment and damage to the product.

Inobservance of the safety instructions may lead to:

- Failure of important functions of the product/system.
- Inobservance of prescribed methods for maintenance and servicing.
- Danger to persons through chemical influences.
- Hazards to the environment through leaking dangerous media.

2.3 Safety conscious working

The safety instructions specified in this operating manual, the national regulations for accident prevention, the safety regulations for the pumped medium valid at the place of installation as well as internal working-, operating-, and safety instructions of the owner are to be observed.

2.4 Safety instructions for owner / operator

Leaking hazardous delivery media supplies are to be disposed off in such a way that any danger to persons and the environment is excluded. The legal regulations are to be observed.

Operating instructions

2.5 Safety instructions for maintenance, servicing and installation work

The owner must ensure that any maintenance-, servicing- and installation work is only entrusted to authorized and suitably qualified personnel who have carefully read and understood the operating instructions.

Only those spare parts are to be used which meet the requirements of the specified operating conditions.

Threaded joints and connections may only be disconnected when the system is not under pressure.

2.6 Arbitrary modification and production of spare parts

Modifications of or changes to the product are only permitted after previous agreement of the manufacturer. Original spare parts and accessories which were approved by the manufacturer are essential for safety reasons.



CAUTION!

If the product is modified without authorization of the manufacturer or spare parts are used which are not approved, any warranty claim becomes null and void.

2.7 Improper operations

Operating safety of the supplied product is only guaranteed if the product is used as intended, according to the descriptions in Chapter „Intended use“ of these operating instructions.

2.8 Intended use

The **sera** product is only to be deployed according to the intended purpose stated in the product description. If the product is to be used for other applications, then the suitability of the suction lance for the new operating conditions must be discussed with **sera** beforehand!

Criteria for operation of the product in accordance with the intended use:

- Observe characteristics of the medium (please see safety- and product data sheet of the delivery medium – the safety data sheet is to be provided by the supplier / owner of the pumped medium).
- Resistance of the materials which come into contact with the pumped medium.
- Operating conditions at the place of installation.
- Temperature of the pumped medium.
- Max. pressure of the product.

2.9 Personal protection for maintenance and service


National safety regulations for the pumped medium must strictly be adhered to.

In case of accidents check whether the following substances are emitted:

- Leaking fluids.
- Leaking vapours.

Emissions are to be monitored by corresponding control systems of the total installation.

Operating instructions




Wear protective clothing, gloves, breathing mask and a face protecting mask.





ATTENTION!



Personal protective equipment must be provided by the owner!

NOTE!









NOTE!

3. Transport and storage

3.1 General

sera - products are checked for perfect condition and function previous to shipment. Check for transport damage immediately after arrival of goods. If damage is found, this is to be reported immediately to the responsible carrier and the manufacturer.



The packaging material must be disposed of appropriately!

NOTE!

3.2 Storage

An undamaged packaging protects the unit during storage and should only be opened when the product is installed. Proper storage increases the service life of the product and includes prevention of negative influences such as heat, moisture, dust, chemicals etc.

The following storage specifications are to be observed:

- Storage place: cool, dry, dustfree and slightly ventilated
- Storage temperature between +2°C and +40°C
- Relative air humidity not more than 50 %.
- The maximum storage time is 12 months.

Do not store solvents, fuels, lubricants, chemicals, acids, disinfectants and similar in the storage room.

Operating instructions

4. Product description

sera float valve serves to keep the pressure on the suction side of dosing pumps constant and to reduce a too high admission pressure.

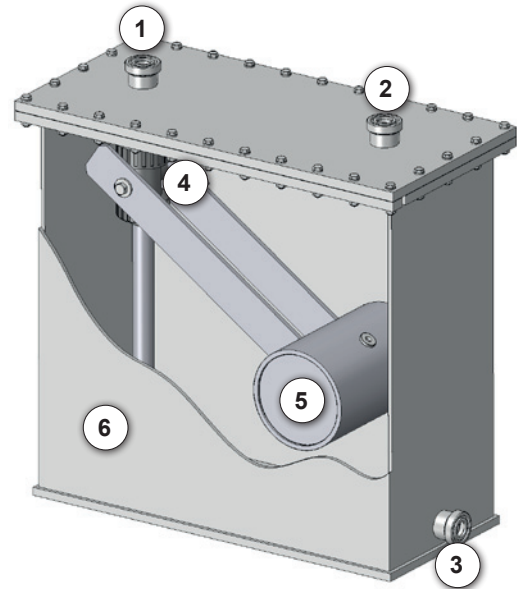
1	Fluid inlet
2	Vent connection
3	Fluid outlet
4	Shut-off fitting
5	Float
6	Float housing

Function description

The ball valve (4) closes when the float (5) is rising and guarantees a specific fill level of the liquid in the float case (6). This prevents overfilling.

Field of application

- Only for liquids, free of solids.



4.1 Temperature range

The temperature range of the float valves is between +10°C und +40°C (in relation to water).

The temperature range changes depending on the medium ► this must be checked by the owner.

5. Technical data

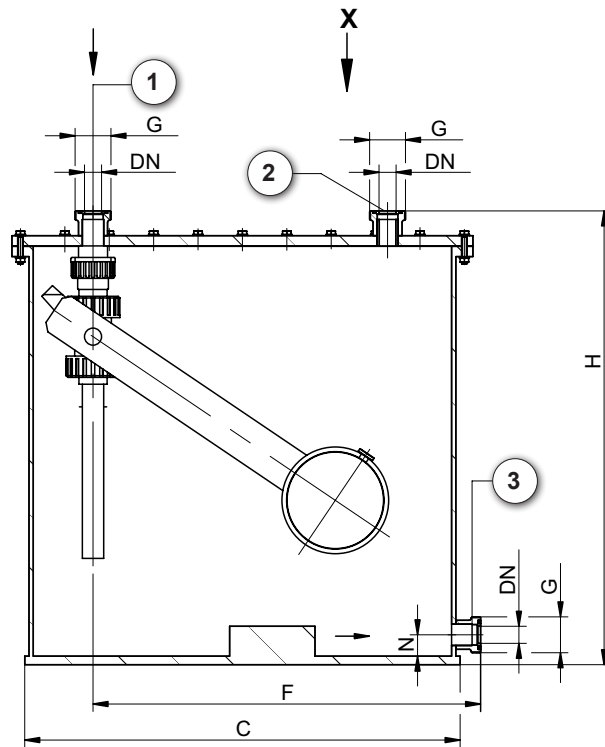
Type	Nominal width DN	Max. admissible operating pressure bar	Useable volume (appr.) Litres	Total volume (appr.) Litres
871	10	10	13	17
872	15	10	39	49
873	20	10	38	49
874	25	10	37	49
875	32	10	59	77
876	40	10	57	77
877	50	10	78	111

Materials

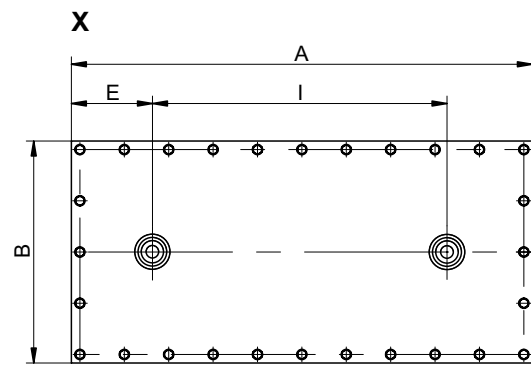
Housing	Connection seal	Cover seal
<ul style="list-style-type: none"> ■ PVC-U ■ PP 	<ul style="list-style-type: none"> ■ EPDM ■ FPM 	<ul style="list-style-type: none"> ■ CSM ■ FPM

Operating instructions

5.1 Dimensions



1	Fluid inlet
2	Vent connection
3	Fluid outlet



Type	G	A	B	C	E	F	H	I	N
mm									
871	G3/4	405	190	375	80	329	394	230	30
872	G1	540	260	520	95	457	537	345	35
873	G1 1/4	540	260	520	95	457	537	345	35
874	G1 1/2	540	260	520	95	457	537	345	35
875	G2	688	340	612	123	550	630	363	55
876	G2 1/4	688	340	612	123	550	630	363	55
877	G2 3/4	759	360	705	140	635	733	374	65

Operating instructions

6. Installation

- The float valve (1) is installed in the suction line (2).
- Vent pipe (3) should only be led 1 m max. upwards (otherwise a level monitoring should be provided). Shut-off fitting (4) and vent pipe (3) are not included in our standard scope of supply.



ATTENTION!

At the outlet of the vent pipe only the atmospheric pressure must be pending.

Don't integrate any shut-off fittings into the vent pipe (3)!



NOTE!

In case of malfunction (caused e.g. by solids in the medium) medium can escape via the vent pipe. Suitable collecting devices (5) with respective alarms (6) are to be provided on site or the float valve has to be equipped with a suitable level control (in case of order this must be communicated to the manufacturer in time).



CAUTION!

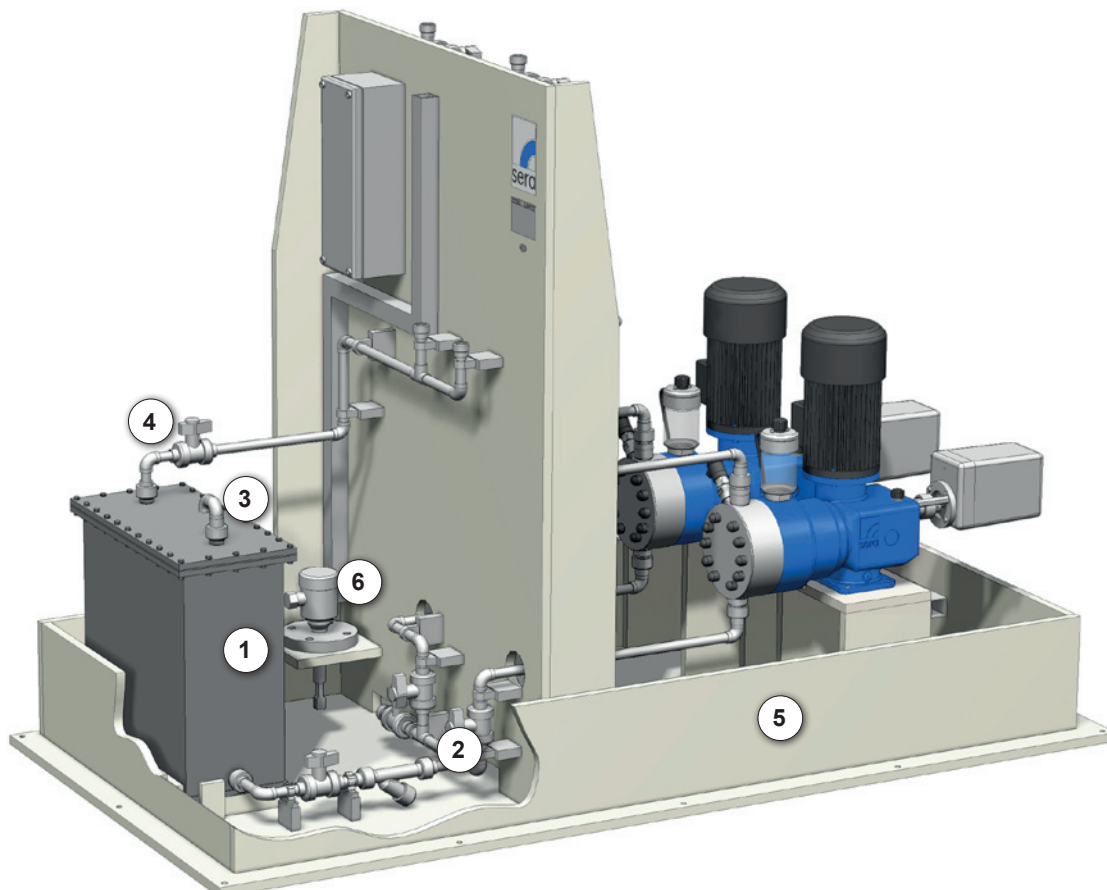
In case of degassing, odorous and toxic media the vent pipe has to be connected to a suitable absorber. The pressure loss in the absorber must not exceed 50 mbar.



NOTE!

Always provide for a suitable shut-off fitting (4) at the liquid inlet (automatic fitting in case of critical media). Automatic fitting has to be approached on site.

Example of installation:



Operating instructions

7. Decommissioning

The following points must be observed when you decommission:

- Switch off the unit.
- Disconnect the unit from the power supply.
- Empty the product.



DANGER!

After the chemical was drained, rinse the unit / product with water or a suitable medium until there are no more chemical residues!
Note the compatibility of the rinsing medium with the chemical according to the safety data sheet.

Exothermic reactions must be avoided by all means!

8. Disposal

- Shut-down the product. Please see "Decommissioning".

8.1 Dismantling and transport

- Package the suction lance and ship.



NOTE!

A clearance certificate must be filled in when systems are returned to the manufacturer (see Chapter „Clearance certificate“).

Acceptance will be rejected if this clearance certificate is not attached.



WARNING!

The consignor is responsible for leaking fluids!

8.2 Complete disposal

- Remove all fluid residues.
- Dismount materials and send them to a suitable waste disposal company!



WARNING!

The consignor is responsible for leaking fluids!

Operating instructions

9. Clearance certificate



NOTE!

Inspection / repair of machines and machine parts is only carried out after the opposite clearance certificate was filled in correctly and completely by authorized and qualified personnel.



NOTE!

Acceptance will be refused if parts are returned to the manufacturer without a proper clearance certificate.

All industrial companies are obligated by the legal provisions for occupational health, e.g. the workplaces ordinances, the Ordinance on Hazardous Substances, the regulations for prevention of accidents and the environmental protection regulations such as the Waste Management Act and the German Household Water Act to protect their employees or man and the environment from detrimental effects when handling hazardous substances.

Should special safety precautions be necessary despite careful draining and cleaning of the product the necessary information are to be provided.

Machines which are operated with radioactive media shall only be inspected and/or repaired in the safety area of the owner by a sera specialized fitter.

The clearance certificate is part of the inspection-/repair order.
sera reserves the right to refuse acceptance of the order for other reasons.



NOTE!

Please make a copy and leave the original with the operating instructions!
(can also be downloaded from: www.sera-web.com)

Operating instructions

Clearance Certificate

Product

Type

Serial-No.

the product was carefully emptied before shipping / delivery, and cleaned inside and outside. YES

Conveying medium

Designation

Concentration

 %

Properties

Please tick!

If either of the listed properties, then enclose the appropriate safety and handling instructions.



Harmless



Toxic



Corrosive



Flammable



Oxidising



Unhealthy



Explosive



Dangerous for the environment



Irritant



Bio-hazardous



Radioactive

The product was used with health or water-polluting substances and came up with labeling requirements and pollution prone media in contact. YES

NO

Special security arrangements with respect to health or water-hazardous media are in the further handling not required

required

The following safety precautions regarding rinsing, residual liquids and waste disposal are required:

Process data

The product was used with the following operating conditions described conveying medium:

Temperature

 °C

Pressure

 bar

Sender

Company: _____

Telephone: _____

Contact person: _____

FAX: _____

Address: _____

E-mail: _____

Zip code, City: _____

Your order No: _____

We confirm that we have the information in this safety certificate (Clearance Certificate) have been correctly and completely and that the returned parts were carefully cleaned.

The parts are sent free of residues of dangerous amount.

Place, Date

Department

Signature
(and company stamp)

Operating instructions

NOTES

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