

Aluminum Pump Sampler



General safety requirements

- ▶ Read these directions for use carefully before using.
- ▶ Keep these directions for use where they will be accessible for all users.
- ▶ Failure to comply with the directions for use shall render all warranty conditions null and void and may lead to personal injury and material damage.
- ▶ The instrument must only be used by qualified skilled employees.

Safety instructions before using

- ▶ Follow the manufacturer's instructions and safety instructions of the medium you are sampling.
- ▶ Damage to the respiratory tract and other organs due to off-gassing media. Use in ventilated rooms or under a suitable exhaust hood.
- ▶ When working with explosive substances, follow the technical rules for combustible liquids (in accordance with TRBF – (German) Technical Rules on Combustible Liquids) and wear appropriate protective equipment (explosion zone 0, see annex).

- ▶ The instrument is not suitable for aggressive acids and bases. Vapours could destroy pump.

⚠ WARNING!

Possible sparking due to electrostatic discharge. Danger of explosion if combustible liquids are used.

- ▶ Connect the earthing terminal © before use.
- ▶ Wear the necessary protective clothing.

NOTE!

Before using, the instrument has to be cleaned to the extent of your (validated) cleaning process.

- ▶ Measures of manual cleaning have to be carried out in the cleaning/desinfection area and under consideration of occupational health and safety.
- ▶ Pay attention to the material resistance.

Safety instructions during and after use

CAUTION!

Liquid entering the instrument due to overfilling or tipping. Bodily injury due to escaping liquid and damage to the instrument.

- ▶ Shut down and secure the instrument immediately.
- ▶ Contact the dealer or manufacturer.

- ▶ The instrument must only be used within the confines of applicable material resistance and for its designated purpose. Any other type of use will affect the warranty/guarantee.
- ▶ Do not store the instrument with filled sample bottle.
- ▶ The instrument is not suitable for cleaning in a dishwasher.

Layout and function

- ▶ The instrument is made of conductive material and is suitable for filling non-aggressive, combustible liquids (group IIC, see annex) from a maximum suction depth of 5 m.
- ▶ The instrument is suitable for sampling liquids from 0 - 60 °C.
- ▶ The instrument is only suitable to take samples and not for continuous operation.
- ▶ Only use the instrument with the recommended sample bottles specified in the accessories.
- ▶ Protect the instrument against effects of weather exposure during storage.
- ▶ The instrument is maintenance-free.

Parts in contact with medium

- ▶ PA, electrically conductive (suction hose)
- ▶ Glass (sample bottle)
- ▶ EPDM (head gasket)
- ▶ Brass, nickel-plated brass (Hose weight)

Parts not in contact with medium

- ▶ Aluminium (pump head, pump cylinder, frame)
- ▶ NBR, EPDM (gaskets)
- ▶ PA, electrically conductive (handle)

Scope of delivery

1 x	Aluminium Sampler with frame	①
1 x	Sample bottle with closure, 500 ml (glass, GL45 thread)	②
5 x	Suction tube (PA, electrically conductive, black)	③
1 x	Tube weight (brass, nickel-plated brass)	④
1 x	Clamping screw	⑤
1 x	Earthing cable, length 2m	⑥
1 x	O-ring (EPDM)	
1 x	Hose cutter	
1 x	Directions for use	
20 x	Seal-it lead bottle seals	

- ▶ Check delivery for completeness and transport damage.
- ▶ Point out any damage in the packaging to the freight forwarder/supplier immediately.

Assembly

⚠ WARNING!

Danger of cutting when using the hose cutter.

- ▶ Keep hands away from the cutting area.

1. Screw the sample bottle ② onto the instrument finger-tight.
2. Guide the suction tube ③ through the open clamping screw ⑤ about 1-3 cm into the sample bottle.
3. Screw on the clamping screw finger-tight and fix the suction tube in place.
4. Place the free end of the suction tube in the liquid you are sampling. Ensure that the suction hose is not kinked.

- Place the tube weight ④ on the suction tube depending on the location where it will be used and tighten the union nut. The tube weight improves the stability of the suction tube.
- Ensure a horizontal and non-slip stand of the instrument.

NOTE!

Possible loss of the hose weight during use.

- ▶ Screw on the hose weight tightly with the cap nut.
- ▶ Verify that the hose weight is attached correctly before use.

- Activate the handle ⑦ and pump liquid into the sample bottle.
- To complete sampling, press the vacuum push button ⑧.
- Screw off the sample bottle and seal it.

WARNING!

Bodily injury due to escaping media when screwing off the sample bottle and pulling the suction hose out of the instrument.

- ▶ Dismount the instrument carefully.
- ▶ Wear the appropriate protective clothing.

Safe sampling

WARNING!

Possible sparking due to electrostatic discharge. Danger of explosion if combustible liquids are used.

- ▶ Connect the earthing terminal ⑥ before use.
- ▶ Wear the necessary protective clothing.

WARNING!

Bodily injury due to escaping media when overfilling the sample bottle. Liquids can be aspirated into the piston and can escape at the back of the instrument.

- ▶ Do not overfill the sample bottle.
- ▶ Wear the appropriate protective clothing.

After taking the sample

- Open the clamping screw and remove the suction tube.
- Take off the clamping screw and remove the O-ring and the flat gasket.
- Rinse the suction tube (together with the hose weight), O-ring, flat gasket, sample bottle and instrument with a pH-neutral liquid.

Troubleshooting

Problem	To eliminate the error
Pump is not generating a negative pressure	Repeat assembly steps 1 to 4. Seal or valve faulty (contact dealer or manufacturer).

Accessories

Type	Specification	Number	Item No.
Sample bottle (glass, GL45 thread)	100 ml	1	711 53140010
Sample bottle (glass, GL45 thread)	250 ml	1	711 53140025
Sample bottle (glass, GL45 thread)	500 ml	1	711 53140050
Sample bottle (glass, GL45 thread)	1000 ml	1	711 53140100
Suction tube (PA, electrically conductive, black, straight)	Ø 6x8 mm, length 220 cm	10	711 53051024
Suction tube (PE, transparent, straight)	Ø 6x8 mm, length 200 cm	10	711 53051022
Suction hose (PE, transparent, on roll)	Ø 6x8 mm, length 1 m	1	711 88050608
Tube weight	Brass	1	711 53051028

Annex

Operational directive in accordance with 1999/92/EC:

Zone 0	a potentially explosive atmosphere is assumed to be continuously present
Zone 1	a potentially explosive atmosphere is assumed to be occasionally present
Zone 2	a potentially explosive atmosphere is not anticipated (and if it does occur, then only rarely and briefly)

Product directive in accordance with 94/9/EC:

Group I	for use in mining
Group II	for use in other areas subject to explosion hazard
Group IIA	Maximum permitted gap > 0.9 mm
Group IIB	0.5 mm < maximum permitted gap < 0.9 mm
Group IIC	Maximum permitted gap < 0.5 mm