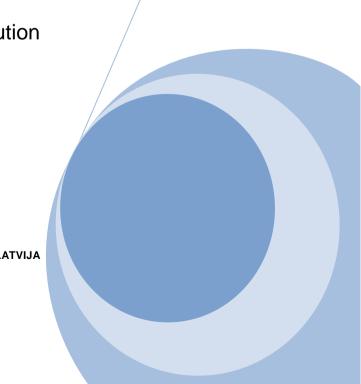


Pumping equipment – for urea-water solution (AdBlue pump)

SIA CrossChem

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# Pumping equipment - for urea-water solution (AdBlue pump)

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#### 1. General Information

Installation and maintenance may be performed by qualified personnel only!

#### 1.1. Field of application

Pumping equipment is designed for urea-water solution for pumping equipment for use must comply with official regulations.

### 1.2. 1.2 Pump technical parameters

Pump head m	Max yield m3 / h	Weight kg	Output P₁ [BT]	Voltage V / Hz	Rated current A
42	2,7	9,8	800	1-230 / 50	3,8
42	2,7	9,8	800	1-230 / 50	3,8

Pumps can pump urea solution of urea concentration up to 40% free of floating particles.

Pumping of other substances permitted only in agreement with the company CrossChem SIA (LLC).

- Maximum substance temperature .: 35 ° C
- Minimum substance temperature. 5 ° C
- Maximum suction height: 7 m
- Suction and Pressure Pipe socket: Rp 1
- Maximum working pressure: 6 bar
- Revolutions per: 2900 n / min
- Insulation class: B
- Protection class: IP 44
- Electrical connection: 230V ~ + / 6%, 50Hz

When ordering spare parts, specify all the type parameters of the manufacturer's information plate.

# 2. Safety engineering

These instructions contain important information, which must be followed when installing and operating the pump. The installer and the operator in charge must read these instructions before installation and commissioning. The general safety instructions described in "Safety measures", as well as the safety instructions in the further sections marked with danger signs are to be followed carefully,

#### 2.1 Danger signs in the safety instructions



Safety measures, non-compliance with which can result in staff injuries, are denoted by the sign:



Warning of electric voltage:



This sign is used to warn that non-compliance with the appropriate safety instructions can result in damage and dysfunction of the pump/equipment:

### 2.2 Staff qualifications

The pump can be installed by appropriately qualified staff only.

### 2.3 Risks caused by non-compliance with the safety rules

Non-compliance with the safety rules could result in staff injuries or irreversible damage of the pumping equipment. Non-compliance with the safety instructions could invalidate any claim for damages. Careless operation can cause problems such as:

- ! Disturbance of critical functions of the pump and other equipment,
- ! Staff injuries due to electrical and mechanical causes.

### 2.4 User's safety rules

The existing accident prevention rules must be complied with.

Any hazards related to electrical energy should be averted.

# 2.5 Test and assembly safety information

ATTENTION!

The operator must ensure that all test and assembly work is carried out by authorized and qualified professionals, who are thoroughly familiar with these instructions.

Works with the pump/equipment should only be performed, when the device is completely stopped.

#### 2.6 Arbitrary production and modification of spare parts

Any changes in the pumping equipment and its installation can only be made in coordination with CrossChem SIA., Reg. No. 40003888244. The safety is ensured by using the original parts and accessories authorized by the manufacturer. The use of any other parts will make the manufacturer's liability for any consequences null and void.

### 2.7 Prohibited methods of operation

The safety of the pump and the installation can be guaranteed only when used in accordance with the paragraph 1 of the instructions. In no case the limit values shown in the catalogue or in the technical description can be exceed or fell short of.



### 3 Transportation and storage

ATTENTION!

During transportation and temporary storage, the pump should be protected from moisture, frost and mechanical damage. The pumps should be stored at the temperatures between +5 ° C and + 35 ° C

#### 4 Description of the product and accessories

Self-priming centrifugal pumping system. All metal parts in contact with liquid are made of stainless steel. The engines with single phase power supply are equipped with thermal protection, which cuts the engine at overload. After the engine cooling the pump switches off automatically. The tightness is provided by a sliding end seal.

ATTENTION!

Pump dry running operation mode is prohibited.

Dry running would damage the end seal

The manufacturer's warranty does not cover any damages resulting from "dry running" of the pump.

#### 4.1 Description of equipment

This is a portable pumping equipment. Single-phase power, equipped with a portable bodywork, connecting cable and plug with an earthing contact.

4.2 The delivery package includes:

- Pumping equipment with a handle.
- Stainless steel base.
- 4 m hose Ø20.
- 1.5 m Ø20 hose or Ø25 1.5 m hose.
- Check valve (only for pumps equipped with check valves).
- Manual or automatic NT plastic gun.
- The counter recording the maximum speed of 70 l/min., with an accuracy of +/- 1% (only for equipment fitted with a meter).
- FastFit, consisting of 3 components (washer, PVC nut 6x60, Nylatron nipple) or one-piece FastFit.
- NT brace 4 pcs.
- User and operating instructions.

Manufacturer reserves the right to technical changes.

### 5 Mounting / Installation

#### 5.1 Mounting

ATTENTION!

The equipment must be located in a dry and well ventilated room with a temperature not less than +5 ° C.

Suction and pressure pipes are installed on the site.

By connecting to the IBC container, the equipment is fastened at the top of the IBC container.

The suction pipe must be completely sealed with the NT clamps.

Equipment may not be loaded with the pipe strain and weight.

Equipment installation area must be horizontal and flat.

#### 5.2 Connecting the power



The electrical work must be performed by a qualified electrician in strict compliance with rules, norms and standards of electrical installation.

Check the current type and voltage.

If you have fitted a protective disconnection device, it must satisfy the 30 mA.

Single-phase mains fuse 10 A.

Electrical plug connection is to be protected from moisture and placed so that it cannot be flooded.

Provide the grounding.

## 6 Commissioning

Check whether the fluid level in the tank is sufficient.



If there is a possibility that the suction pipe is empty, do not leave the pump unattended, AVOID idle running!

Prime the pump with a liquid through the pouring hole. The pump can suck the liquid itself only when fully primed.

The pumps and pumping equipment must not be lifted, carried or fixed by the power cables.

The pump should not be placed directly under the water spout.

Pressure relay is adjusted in accordance with the data in section 1.2.

#### 7 Maintenance



#### Disconnect the pump from the power grid before beginning any maintenance and repairs!

Equipment virtually does not require any maintenance. A periodic check of the pump and sealing is advisable. On freezing risk, the equipment is to be drained.

Before a prolonged downtime, the equipment must be thoroughly rinsed (the drain plug located on the lower part) and dried.

Equipment must be stored in a dry place.

Before re-starting operation, make sure the pump rotates easily, briefly turning the pump on and off .

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### 8 Fault, causes, solutions

Fault	Causes	Solutions	
Engine does not work	There is no mains voltage, the fuse has burned out, the thermal protection or dry running protection sensor has been triggered	Check the power connection, the fuse. Allow to cool the thermal protection sensor (-15 min.). Clarify and eliminate the reasons of disfunction (the pump is located in the sun, the liquid temperature exceeds 35 ° C, the fluid to be pumped is contaminated, the dry run because of a fall in the water level).	
	The working wheel is blocked	Clear the pump.	
	The pump is not primed	Prime the pump.	
	Air in the suction pipe	Check the fluid level, seal the pipeline.	
The engine runs, but the pump does not	Suction height is exceeding the permitted levels	Place the pump lower (closer to the fluid to be pumped).	
work	Suction and/or pressure pipe is clogged	Clean the pipes.	
	The pump runs idle	Eliminate the reasons for idle running	
Insufficient feed	Clogged pump or pipeline	Clean the pump and pipeline.	
	Air in the suction pipe	Eliminate leakage, seal the pipeline.	
the pump turns on and off frequently	Damaged seal of the pipe connections	Eliminate leakage.	
the pump is vibrating	Clogged pump or pipeline	Clean the pump and pipeline.	
	Problem with the power connection	Check the power connection.	

### 9 Warranty rules

Attributable to the electric pump and meter.

Does not apply to freezing, mechanical damage, electrical voltage fluctuations, the moving parts.

# To avoid losing the warranty, the user must ensure the following:

- 1. Keep the packaging undamaged (to ensure the transportation of the pump, the performance of warranty)
- 2. Do not use a pump for pumping other liquids, without a prior agreement with the manufacturer.
- 3. Do not run the pump without fluid.
- 4. The electrical connection must have a grounding.
- 5. The operating external / ambient t <sup>0</sup> C +5 / +35.
- 6. When applying for warranty, the purchase the document should be presented

ATTENTION!

If you have any questions related to the priming system, maintenance, assembly, purchasing and/or others please contact:

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