

ISKU-JET PUMPS

Stainless steel
automated water dispensers and
water pressure systems

WATER DISPENSERS



HVAC-4731011

ISKU-Jet 2 RS

- traditional pump
- light-weight
- for household water
- equipped with a dry-run protection
- easy to move



HVAC-4731010

ISKU-Jet 2 RP

- sturdy structure
- for household water
- equipped with a dry-run protection
- powerful



HVAC-4741003

ISKU-Jet 2 PRO

- for household water
- small pressure tank
- adjustable initial pressure
- equipped with a dry-run protection
- powerful

PRESSURE TANK SYSTEMS



ISKU-Jet 1/25 RP

HVAC-4741001

- factory-assembled, complete water pressure systems for detached and semi-detached houses, farms and high-level holiday housing and for increasing pressure in low-pressure water networks
- the whole water tank, including the membrane pressure tank, made of stainless steel
- membrane pressure tank can be opened and washed



ISKU-Jet 350 RP

HVAC-4741010

ISKU-JET 1 RP AND ISKU-JET 3 RP GENERAL PUMPS

Features and benefits of ISKU-Jet RP pumps

- The pump's capacity does not decrease over time as the impeller does not significantly wear down.
- Due to its structure, it is less sensitive to pollutants than a water-packed pump.
- The pump motor does not overload even when in heavy use.
- The pump does not need to be oiled during winter storage. Remember to remove water before storage.
- The pumps run with less noise than water-packed pumps with similar power.



ISKU-Jet 1 RP

HVAC-4731004

ISKU-Jet 3 RP

HVAC-4731006

Use sites

ISKU-Jet 1 RP

1 RP is an efficient, self-priming cold water pump that is suitable for single-phase pressure water systems. The maximum pressure of the pump is approximately 5.5 bar with sufficient volume for detached houses. As the 1 RP is a light-weight and portable pump, it is also suitable for irrigation, lifting water for the sauna, car washing and draining filtered water basins.

ISKU-Jet 3 RP

3 RP is an efficient, three-phase, stainless steel cold water pump. It is mainly used as a pump for three-phase water pressure systems. The maximum pressure of the pump is approximately 5.5 bar. The volume is sufficient for even heavier use.

Structure

ISKU-Jet 1 RP and 3 RP are centrifugal domestic water pumps that are equipped with an interior ejector. As centrifugal pumps, they operate noiselessly and reliably, and due to the interior ejector, have a good lifting capability. The interior ejector enables air venting from the suction side and increases the pressure created by the impeller. The electric motors of the ISKU-Jet RP pumps are air-cooled and splash-proof with a rotational speed 2,900 r/min. The axle seal is a high-quality, spring-loaded rotary seal which does not need to be adjusted. The pumps do not have other parts that require maintenance.

ISKU-Jet RP pumps are made of stainless steel material. The pump casing and axle are made of stainless steel; the impeller, guide vanes and ejector are wear-resistant, fibreglass reinforced Nylol.

INSTALLATION 1 RP AND 3 RP

The minimum size for the suction pipe is 1 RP 32 mm and 3 RP 40 mm.

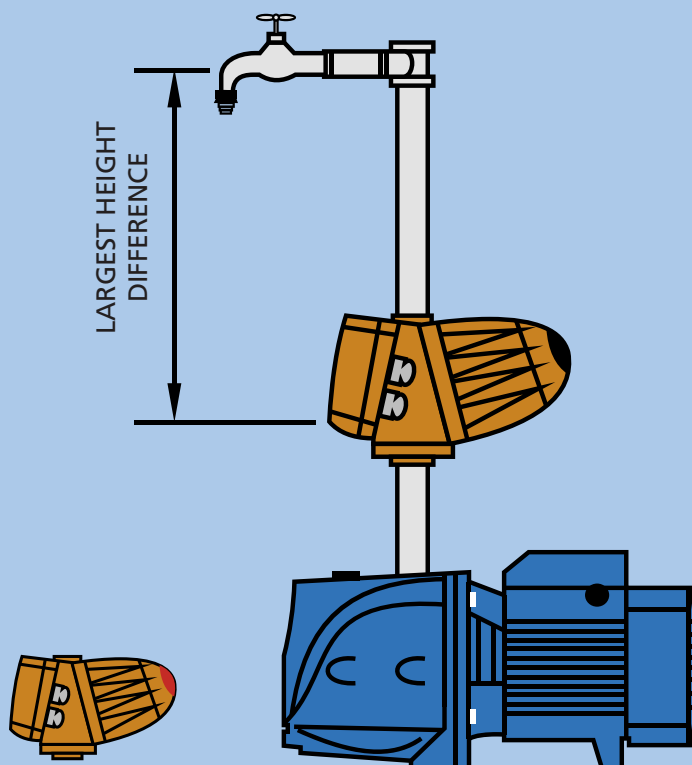
When the total head increases to over 7 m or the transport distance is over 80 m, a polyethylene pipe one size larger is recommended. A dump valve is installed at the end of the suction pipe. The fitting of the suction pipe must be a model that supports the pipe from the inside, and, during installation, the threads must also be sealed.

ISKU-Jet RP pumps must be installed in a space that is dry and where the temperature does not go below zero.

Remember to protect the electric motor with a motor-circuit switch during the electric installation. The Jet 1 RP electric motor has built-in thermal protection. When the pump is used to increase pressure in low-pressure systems, the pump must be equipped with a membrane pressure tank to compensate for pressure shocks.

ISKU-Jet RP pumps and suction pipes must be primed before the pump is switched on. Do not run the pumps dry.

Ensure that the three-phase 3 RP rotates in the direction of the arrow.



2,2 BAR VERSION ● = 18 M

TECHNICAL DETAILS

Type	1 RP	2 RP	3 RP	2 RS	2 PRO
Shaft power, kW	1.1 1-ph	1.1 1-ph	1.1 3-ph	0.6 1-ph	1.1 1-ph
Automated	no	yes	no	yes	yes
Connection cable	yes	yes	no	yes	yes
Pump inlet	R 1" int. thread	R 1" int. thread	R 1" int. thread	R 1" int. thread	R 1" int. thread
Pump outlet	R 1" int. thread	R 1" exterior thread	R 1" int. thread	R 1" exterior thread	R 1" exterior
Thread Maximum head (m)	8	8	8	8	8
Length x width x height, mm	390 x 210 x 210	390 x 230 x 430	390 x 210 x 210	370 x 230 x 420	390 x 230 x 430
Weight (kg)	11.8	13.5	11.8	10.2	15.2

Structure

ISKU-Jet 2 RP, 2 RS and 2 PRO water dispensers consist of the ISKU-JET centrifugal pump and a pressure switch. Electric connections and cables have been installed at the factory. A motor circuit switch must always be used for three-phase pumps.

Operation of ISKU-JET pressure switch: The pump starts when the pressure decreases below 2.2 bar (red model), in the PRO model the initial pressure is adjustable. When the water volume decreases below approximately 3 l/min, the pressure switch stops the pump. The pressure switch also has a dry-run protection which stops the pump when the pressure decreases below 0.5 bar when the pump is running. The dry-run protection can be switched off from the set-off button.

Pressure switch 1:

EasyPress 1 P2 max 0.75 kW 10 A (ISKU-Jet 2 RS).

Pressure switch 2:

EasyPress 2 P2 max 1.5 kW 16 A (ISKU-Jet 2 RP).

Operation of the Easypro 1-V, 16 A (ISKU-Jet PRO) pressure switch. The pump kicks on when the pressure

decreases below the set 1-5 bar (adjustable). When the water volume decreases below approximately 3 l/min, the pressure switch stops the pump.

The pressure switch also has a dry-run protection which stops the pump when the pressure decreases below 0.5 bar when the pump is running. The dry-run protection can be switched off from the set-off button. Max 200 l/min, 8 bar.

ISKU-Jet 1/25 RP is equipped with a 25 l stainless steel membrane pressure tank. The pump's on-and-off switch is controlled by the pressure switch.

Use sites

ISKU-Jet 2 RP, 2 RS and 2 PRO water dispensers are suitable water pressure systems for summer cottages and detached houses. They only take up a little space as they do not need to be used with a pressure tank. As they are portable, they are also suitable for irrigating and lifting water for sauna use. If ISKU-Jet 2 RP, 2 RS or 2 PRO are used to lift water from a lake, you can combine them with the WatMan lake water filter.

INSTALLATION 2 RP, 2 RS AND 2 PRO

Use the same installation instructions as for ISKU-Jet 1 RP and 3 RP pumps.

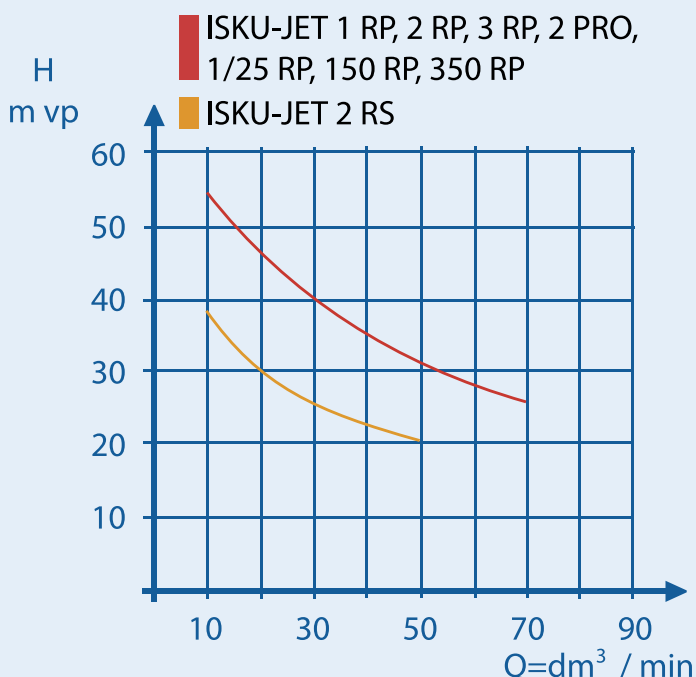
In addition, pay attention to the following in regard to the pressure switch:

The pressure pipes and related resistors should be adjusted on each installation site so that the operating pressure of the pump is over 1.5 bar.

Make sure you do not clamp the pressure switch into the pressure fitting of the pump too forcefully in order to avoid damaging the switch body.

The pressure pipe must be carefully aligned with the switch fitting. The switch and pump must not be left hanging from the pressure pipe.

ISKU-JET PUMPS AND PRESSURE TANK SYSTEMS, POWER CHARTS



ISKU-Jet pressure tank systems, complete water pressure systems



HVAC-4741001

ISKU-JET SYSTEM 1/25 RP

Motor kW 1.1 1-phase
Membrane pressure tank, stainless 25 l
Max. head 8 m
Water production volume 5–70 l/min
Pump inlet R 1" int. thread
Pump outlet R 1" int. thread
Length x width x height, mm 540 x 360 x 680



HVAC-4741008

ISKU-JET SYSTEM 150 RP

Motor kW 1.1 1-phase
Membrane pressure tank, stainless 50 l
Max. head 8 m
Water production volume 5–70 l/min
Pump inlet R 1" int. thread
Pump outlet R 1" it. / R 1 1/4" et.
Length x width x height, mm 600 x 570 x 580



HVAC-4741010

ISKU-JET SYSTEM 350 RP

Motor kW 1.1 3-phase
Membrane pressure tank, stainless 50 l
Max. head 8 m
Water production volume 3–70 l/min
Pump inlet R 1" int. thread
Pump outlet R 1" it. / R 1 1/4" et.
Length x width x height, mm 600 x 570 x 580

Indicative impact of suction distance on the maximum head

If the distance is over 80 m, we recommend using a suction pipe that is one size larger, similarly than with bigger ISKU-Jet pumps.

Length of suction pipe	Maximum head
- 20 m	8.0 m
21–40 m	7.0 m
41–60 m	6.0 m
61–100 m	5.0 m
101–150 m	3.5 m

ISKU-Jet pressure tank systems 1/25 RP, 150 RP and 350 RP are fully factory-assembled, complete water systems.

They include:

- stainless steel JET pump with a motor
- membrane pressure tank made of stainless steel which can be opened and washed
- adjustable pressure switch
- motor protection from overloading
 - three-phase motor-circuit protection
 - in single-phase devices, thermal protection in the coil
- pressure switch
- non-return valve
- built-in electrical works

The whole water tank in the ISKU-Jet pressure water system is made of stainless steel.

Water pressure systems 1/25 RP and 150 RP operate on 230 V 1-phase voltage, and the model 350 RP operates on 400 V 3-phase voltage.

Membrane pressure tank volumes are:

1/25 RP: 25 l, 150 RP and 350 RP: 50 l

See user manual here

Sales: dealers, HVAC shops and hardware stores
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Compared to a standard tank, the membrane pressure tank in ISKU-Jet water tank systems has the following benefits:

- 2.5 times greater capacity.
- Membrane pressure does not need to be vented; with pre-charge pressure air is separated from water by a rubber membrane. Longer maintenance intervals.
- The water is fresh because the membrane pressure tank empties completely before the pump kicks on.
- The ISKU-Jet water pressure system fits into a small space.

Examples of water volumes from a membrane pressure tank before the pump kicks on:

Min. press. bar	Max. press. bar	Capacity (water volume) l		
		25	50	2 x 50
1	2.0	6.6	16.5	33
1.5	3.0	7.5	18.8	37.6
2.0	3.5	6.6	16.5	33

Installation

ISKU-Jet pressure tank systems must be installed in a space where the temperature does not go below zero. Suction and pressure pipes are connected on the installation site where the device is also connected to the electrical grid. Internal connections have been completed at the factory. If the minimum limit of the pressure switch is adjusted, the tank's pre-charge pressure must be adjusted correspondingly so that the pre-charge pressure of an empty tank is approximately 0.2 bar lower than the minimum pressure of the pressure switch. Adjust the ISKU-Jet 2 PRO pump according to the user manual.

Use sites

ISKU-Jet 1/25 RP and 150 RP pressure tank systems are designed as water pressure systems for summer cottages and detached houses which only use single-phase current. ISKU-Jet 350 RP is the most common solution for an efficient water pressure system in detached houses. The standard pressure of the water pressure systems is 6 bar. The water volume and pressure provided by ISKU-Jet water pressure systems is sufficient to operate modern household appliances and thermostatic mixers, and they are suitable for lawn irrigation, among other uses.

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