

Application

The U 6 K range of pumps is suitable for stationary and portable use.

It can be used as a drainage pump for mildly contaminated waste and ground water, in sumps with rain water, drainage or seepage water, silage liquor and also liquid manure. The high quality mechanical seal also makes the pump suitable for extracting abrasive media.

In stationary use the U 6 K ES/DS removes the waste water from domestic appliances such as dishwashers and washing machines (also high temperature), but not from urinals and lavatories. The guide rail system GR 32 offers all the advantages of fast and easy maintenance. Our ready-to-install collecting tanks extend the options for installation and use.

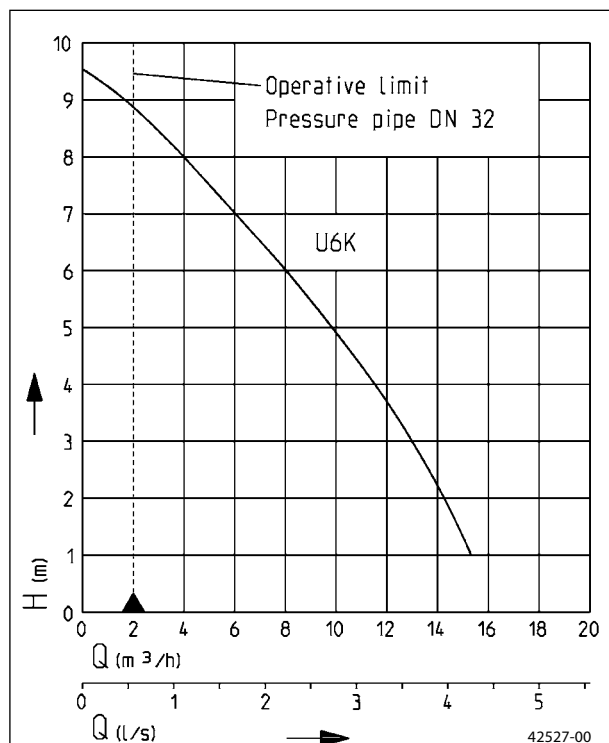
For supporting sewage water with heavy pollution we recommend our US series. Especially for the transportable use, in building site areas for example, our building pumps UB should be used.

If centrifugal submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100.



U 6 K with built-in level control

Performance



We reserve the right to change specifications without notice
Pump performance is subject to ISO 9906 tolerances
The minimum flow velocity in the pressure piping must be 0.7 m/s according to EN 12056.
This data is represented in the performance curve as a limit of application.

- Continuous operation
- Flushing device
- Replaceable moisture sealed cable inlet
- Low level pumping by removing the strainer base
- SiC mechanical seal independent of rotation direction
- Safe to run dry
- 10/20 mm free passage with EIP technology



Submersible drainage pumps

Type	Maximum Height x Width	Discharge branch	Free passage	Cable quality H07RN-F-	Cable length	Weight approx.	Code No.
Pumps without level control							
U 6 K E	335 x 175 mm	1¼"	20 mm	3G1.0	10 m	6.0 kg	JP 00226
U 6 K D	335 x 175 mm	1¼"	20 mm	4G1.0	10 m	6.5 kg	JP 00228
Pumps with built-in level control (acc. to VDE, only to be used outdoors with 10 m cable)							
U 6 K ES	335 x 210 mm	1¼"	20 mm	3G1.0	3 m	5.5 kg	JP 00227
U 6 K DS	335 x 210 mm	1¼"	20 mm	4G1.0	3 m	6.0 kg	JP 00229
U 6 K ES	335 x 210 mm	1¼"	20 mm	3G1.0	10 m	6.0 kg	JP 09260
U 6 K DS	335 x 210 mm	1¼"	20 mm	4G1.0	10 m	7.0 kg	JP 09261

Performance

Type	Delivery head H [m]	1	2	3	4	5	6	7	8	9
U 6 K E/ES/D/DS	Flow rate Q [m³/h]	15.5	14.0	12.5	11.0	9.0	7.5	5.5	3.5	1.5

Electrical Data

Type	Type of current	Voltage Volt	Motor rating kW		RPM min. ⁻¹	Current Ampere	Motor protection	Plug
U 6 K E/ES	1-phase	1/N/PE~230	P ₁	P ₂	2645	3.3	integrated	Safety-CEE-
U 6 K D/DS	3-phase	3/PE~400	0.75	0.49	2645	3.3		
U 6 K D/DS	3-phase	3/PE~400	0.75	0.55	2678	1.3		

Example of single pump installation with GR

Single unit with built-in level control
Sump area **with** GR 32 min. 40 x 50 cm
Sump area **without** GR min. 40 x 40 cm (without illustr.)

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In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Besides, it must be secured with an EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

Example of duplex pump installation

Duplex unit with control unit
Sump area **with** GR min. 50 x 50 cm (without illustration)
Sump area **without** GR min. 50 x 50 cm















Suspend control unit in a dry room.

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↑ Notice of min. distance !

In accordance with DIN EN 12056-4 section 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.

Accessories

		Code No.	U 6 K E	U 6 K D	U 6 K ES	U 6 K DS
	① Swing-type check valve 1¼" (DN 32), PN 4 DIN EN 12050-4	JP 09739	•	•	•	•
	H W D 90 90 1¼"					
	Duplex swing-type check valve 1½" (DN 40), PN 4 for duplex pump station, DIN EN 12050-4	JP 09155	•	•		
	H W D 200 280 1½"					
	② Stop valve 1¼" (DN 32), PN 16	JP 11836	•	•	•	•
	H W D 110 max. 60 1¼"					
	1½" (DN 40), PN 16	JP 11837	•	•		
	H W D 125 max. 60 1½"					
	③ Elastic connection 1¼" (DN 32), PN 3	JP 14329	•	•	•	•
	H D 100 42					
	④ Hose band clamp 1¼"	JP 03573	•	•	•	•
	⑤ Hose coupling 1¼" (DN 32) brass, for portable use	JP 00327	•	•	•	•
	Solid fire hose coupling 1 ¼", male thread	JP 41559	•	•	•	•
	Coupling wrench	JP 25708	•	•	•	•
	Reducer 1 1/4" - 3/8/32/25	JP 44209	•	•	•	•
	⑥ Flexible hose 1¼" (DN 32), PVC red, per m, for portable use	JP 00334	•	•	•	•
	⑦ Alarm system with submersible ball contact switch, separate, mains-dependent, with potential-free contact and 3 m cable	JP 16723			•	•
	Alarm system with sub. ball contact switch ,ditto, 9.5 m cable	JP 24434			•	•
	Alarm system AW 3 for washing-machines with submersible ball contact switch with 3 m cable, separate, mains-dependent	JP 25090	•	•	•	•
	Alarm system AW 10 for washing-machines ditto, with 9.5 m cable	JP 25091	•	•	•	•
	⑧ Separate level controls for single unit (see level controls for description)					
	NE 1 (1-phase) with sub. ball contact switch 3.0 m	JP 16710	•			
	NE 2 (1-phase) with sub. ball contact switch 9.5 m	JP 16711	•			
	ND 1 (3-phase) with sub. ball contact switch 3.0 m	JP 16712		•		
	ND 3 (3-phase) with sub. ball contact switch 9.5 m	JP 16713		•		
	NE 1A (1-phase) with sub. ball contact switch 3.0 m and alarm	JP 16714	•			
	NE 2A (1-phase) with sub. ball contact switch 9.5 m and alarm	JP 16715	•			
	ND 1A (3-phase) with sub.ball contact switch 3.0 m a. alarm	JP 16716		•		
	ND 3A (3-phase) with sub. ball contact switch 9.5 m and alarm	JP 16717		•		
	Counterweight (1 piece)	JP 17541	•	•		
	Controls for duplex unit (see section on Level controls for description)					
	BD 00E (1-phase)	JP 00482	•			
	BD 00 (3-phase)	JP 00299		•		
	Subm. switch pack B with 3 subm. ball contact switches with 9.5 m cable and fixing device	JP 16725	•	•		
	Subm. switch pack BmG with 3 subm. ball contact switches with 9.5 m cable and counterweight	JP 16726	•	•		
	⑨ Rechargeable battery for off the line operation of the alarm	JP 07562	•	•	•	•
	⑩ Special float assembly for low switching points (Switching height without GR ON 130 mm, OFF 80 mm)	JP 44207			•	•
	Special float assembly for narrow chambers (min. 30 x 30 cm) Switching height without GR ON 300 mm, OFF 230 mm	JP 40856			•	•
	⑪ Float fixation for continuous pump operation	JP 42175			•	•
	⑪ Guide rail system GR 32	JP 09277	•	•	•	•
	Support for guide rail extension ex 2 m sump depth, per m 1 peace	JP 28314	•	•	•	•

* only for single units

Technical data

Pump

Vertical, single-stage, submersible, with foot strainer with 10 mm free passage – detachable for activating low level pumping. With the pump base installed, free passage is 20 mm. Volute casing with 1 1/4" male radial pressure branch, EIP-technology hydraulics with open 6-blade impeller.

Bearings

Common shaft for pump and motor, mounted in ball bearings and permanently grease lubricated.

Seal

Silicon carbide mechanical seal, intermediate oil chamber, shaft seal ring towards the motor section, safe to run dry.

Motor

Submersible motor, type of enclosure IP 68, insulation class B, motor thermostat for emergency switch-off on overheating with automatic switch-on after sufficient cooling, switched on via plug or automatic switching, moisture sealed cable inlet for protecting the pump in the event of damage to the cable, continuous operation when not submerged on account of its motor jacket cooling.

Material

Motor housing, shaft and screws in stainless steel, volute casing, impeller and control head in plastic (GRP), rubber insulated flexible cable.

Installation

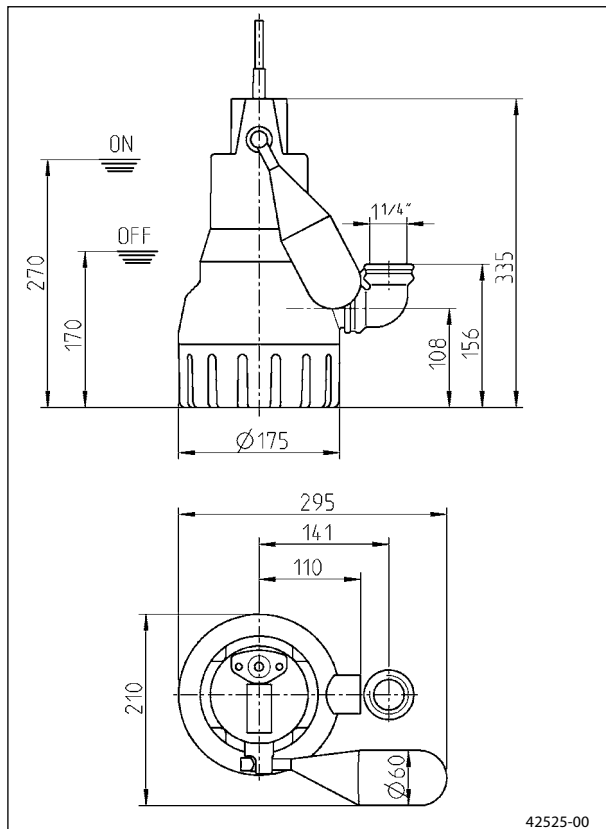
Install pump vertically (hose connection possible); if installed permanently, provide detachable connection, e.g. the uncomplicated and easy to maintain guide rail system GR 32.

Scope of supply

Pump ready for connection acc. to EN 12050 with 90°, 1 1/4" female connection elbow, cable and plug, S model with automatic level float switch.

The pump is delivered fitted with a strainer base which can be swapped for any of the accompanying pedestals in cases where a 20 mm clear passage is required.

Dimensions U 6 K (mm)



Dimensions GR 32 (mm)

