

Application

The U 5 K (S) is an extremely powerful and versatile centrifugal submersible pump for both stationary and portable use. The pump is suitable for faecal-free wastewater with solids up to 10 mm particle size. Thanks to the removable strainer base, it is possible to increase the free passage to 20 mm.

Stationary in a basement chamber or a collecting tank, with an automatic switch attached, the U 5 KS handles all dirty water arising from domestic drainage sources such as washing machines, dishwashers, washstands, etc. Deposit accumulation in the reservoirs and chambers is reduced to a minimum by means of a flushing device.

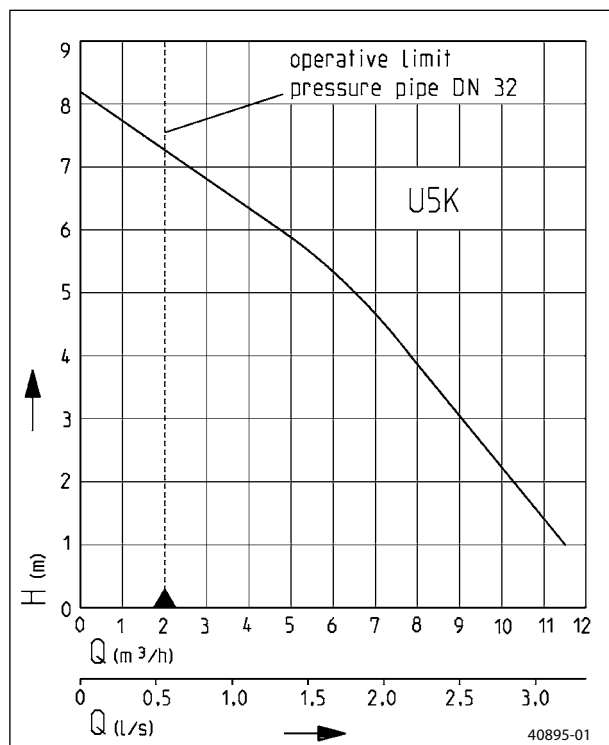
The guide rail system GR 32 offers all the advantages of fast and easy maintenance. If the sump or tank runs dry temporarily, the pump can be vented by providing a drill-hole in the spiral housing.

The U 5 K can be used as a portable unit for dealing with dirty water from garden ponds, flooded cellars or discharge chambers in laundry rooms or storage rooms. Thanks to its shallow, built-in suction system, it can reduce residual water level to no more than a few millimeters.

If submersible pumps are used outdoors, only a pump with 10 m cable without extension cable may be used in accordance with VDE Regulation 0100. For construction sites and garden ponds, a H07-type cable must be used.



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
- Low level pumping
- Flushing device
- Built-in level control
- Variable discharge branch
- Safe to run dry
- 10/20 mm free passage with EIP technology
- Swing-type check valve for portable use
- Moisture sealed cable inlet



Drainage pumps

Type		Maximum Height x Width x Depth	Discharge branch	Free passage	Cable quality	Cable length	Weight approx.	Code No.
Pump without level control (not to be utilised on construction sites, as per VDE regulations)								
U 5 K	without bend	280 x 168 x 190 mm	1 1/4"	20 mm	H05RN-F-3G0,75	10 m	4.7 kg	JP 09386
	with bend	280 x 168 x 250 mm						
Pumps with built-in level control								
U 5 KS	(acc. to VDE, not to be used outdoors)	280 x 202 x 290 mm	1 1/4"	20 mm	H05RN-F-3G0,75	3 m	4.5 kg	JP 09387
U 5 KS		280 x 202 x 290 mm	1 1/4"	20 mm	H07RN-F-3G1,00	10 m	5.4 kg	JP 09417

Performance

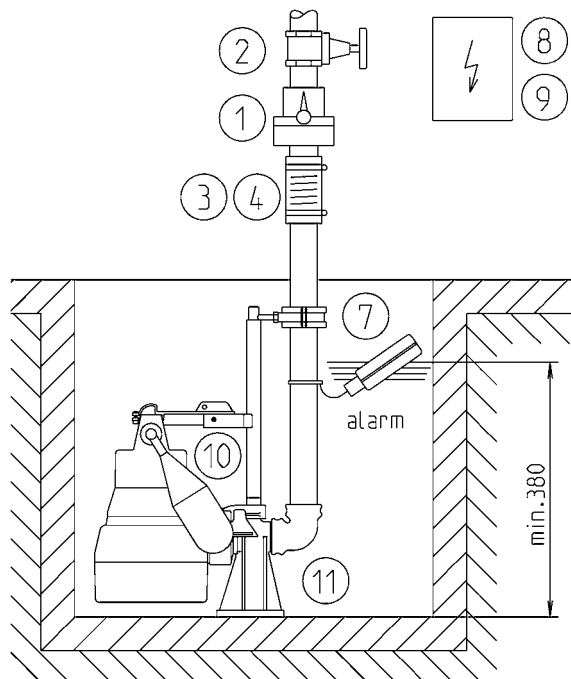
Type	Delivery head H [m]	1	2	3	4	5	6	7
U 5 K	Flow rate Q [m³/h]	11,5	10,5	9	7,5	6,5	4,5	2,5

Electrical Data

Type	Type of current	Voltage Volt	Motor rating kW		RPM min. ⁻¹	Current Ampere	Motor protection	Plug
U 5 K	1-phase	1/N/PE~230	P ₁	P ₂	2716	2.3	integrated	Safety-

Example of single pump installation with GR

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



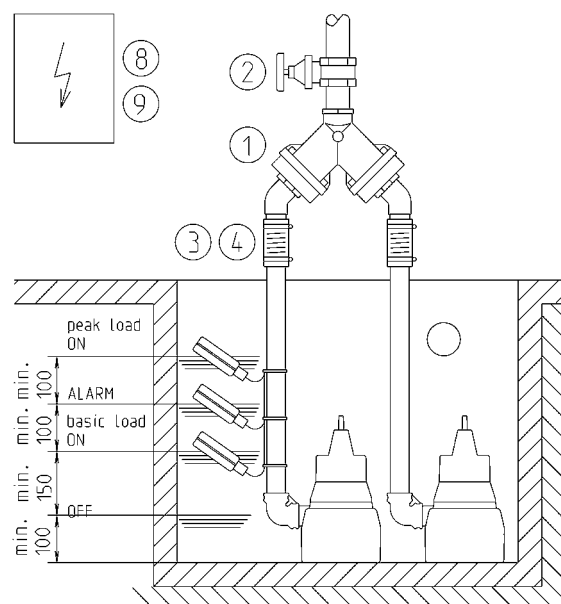
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In case of installation beneath the backpressure level the pressure tube must be taken in a loop over the local backup level acc. to EN 12056. Besides, it must be secured with a EN 12050-4-proofed swing-type check valve. Besides, it must be secured 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 32 min. 50 x 50 cm, Ø 60 cm (without ill.)
Sump area without GR min. 45 x 50 cm, Ø 55 cm

Suspend control unit in a dry room.

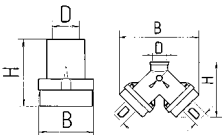
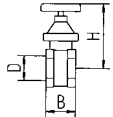


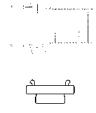

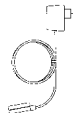
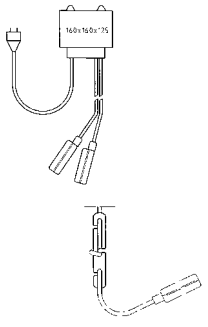

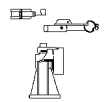


↑ Notice of min. distance !

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In accordance with DIN EN 12056-4 Abs. 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 5 K	U 5 KS
	①	Swing-type check valve 1¼" (DN 32), PN 4 DIN EN 12050-4	H 90 W 90 D 1¼"		JP 09739	•	•
		Duplex swing-type check valve 1½" (DN 40), PN 4 for duplex pump station DIN EN 12050-4	H 200 W 280 D 1½"		JP 09155	•	
	②	Stop valve 1¼" (DN 32), PN 16	H 110max. 60 W 60 D 1¼"		JP 11836	•	•
		1½" (DN 40), PN 16	125max. 60 W 60 D 1½"		JP 11837	•	
	③	Elastic connection 1¼" (DN 32), PN 3	H 100 D 42		JP 14329	•	•
	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	•	•
		Hose connection 1¼" - 38/32/25			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 ditto, with 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 with sub. ball contact switch 3.0 m			JP 16710	•	
		NE 2 with sub. ball contact switch 9.5 m			JP 16711	•	
		NE 1A with sub. ball contact switch 3.0 m and alarm system			JP 16714	•	
		NE 2A with sub. ball contact switch 9.5 m and alarm system			JP 16715	•	
		Counterweight (1 piece)			JP 17541	•	
		Duplex control unit (see section on level controls for description)					
		BD 00E			JP 00482	•	
	⑨	Rechargeable battery for off the line operation of the alarm system			JP 07562	•	•
		Special float assembly for low switching points (Switching height without GR ON 90 mm, OFF 40 mm)			JP 44207		•
		Special float assembly for narrow chambers (chamber min. 30x30 cm) Switching height without GR ON 265 mm, OFF 195 mm			JP 40856		•
		Float fixation for continuous pump operation			JP 42175		•
	⑪	Guide rail system GR 32			JP 44000	•	•
		Support for guide rail extension ex 2 m sump depth, per m 1 piece			JP 28314	•	•

Technical data

Pump

Vertical, single-stage, submersible, 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 5-blade impeller.

Bearings

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

Seal

A shaft seal, which is completely secure against running dry thanks to a three-fold radial shaft seal ring and intermediate oil chamber.

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 sewage resistant flexible cable.

Installation

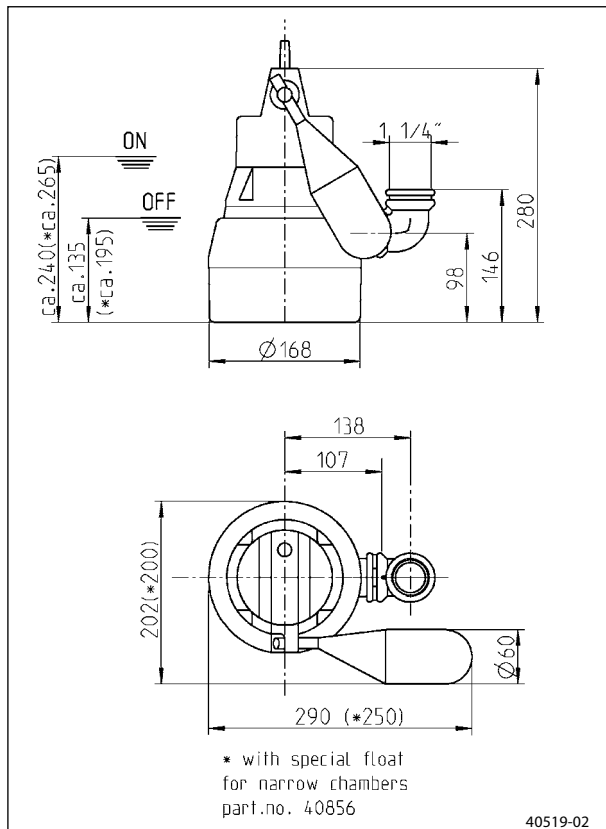
Install pump vertically (hose connection possible); if installed permanently, provide detachable connection, e.g. the uncomplicated and easy to maintain guide rail system GR 32.

Scope of supply

Pump ready for connection acc. to EN 12050 with 90°, 1 1/4" female connection elbow, cable and safety 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 5 KS (mm)



Dimensions GR 32 (mm)

