

### APPLICATION

The U3K(S) is an extremely versatile centrifugal submersible pump for stationary and portable use. EIP technology for safer operation, integrated flushing device for reducing deposits and integrated low level pumping for preventing flooding are only a few of the innovative features that set this pump apart.

The pump removes rain water, lightly polluted water and domestic waste water from household dishwashers and washing machines (also high temperature).

In stationary use the U3KS with automatic switching removes the water from drains in cellars, laundries or storerooms and serves as a flood protection. The guide rail system GR 32 offers all the advantages of fast and easy maintenance. Our ready-to-install collecting tanks extend the range of uses. If the sump or tank runs dry temporarily, the pump can be vented by providing a drill-hole in the spiral housing.

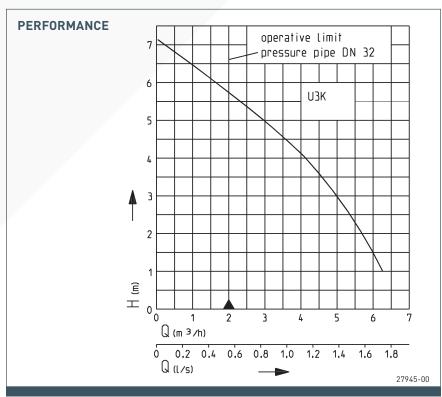
For mildly aggressive media such as brackish water, condensate from condensing boilers, liquid manure etc., the U 3 K (S) spezial should be used. For heavily contaminated water we recommend the waste water pumps of the US-range.

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.

- Continuous operation
- Low level pumping
- Flushing device
- Built-in level control
- Variable discharge branch
- Safe to run dry
- EIP technology
- Swing-type check valve for portable use
- Moisture sealed cable inlet



U3KS with built-in level control



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.

### **DRAINAGE PUMPS**

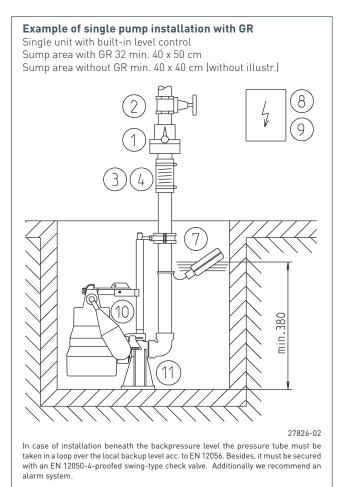
Туре		Height x Width	Dis- charge branch	Free passage	Cable quality	Cable length	Weight approx	Code No.		
Pump without level control (not to be utilised on construction sites, as per VDE regulations)										
U3K	without bend with bend	255 x 170 mm 255 x 225 mm	11/4"	10 mm	H05RN-F-3G0,75	10 m	3.7 kg	JP00205		
Pumps with built-in level control										
U3KS (a	.cc. to VDE. not to be used outdoors)	255 x 275 mm	11⁄4"	10 mm	H05RN-F-3G0.75	4 m	3.4 kg	JP00206		
U3KS		255 x 275 mm	11⁄4"	10 mm	H07RN-F-3G1.0	10 m	4.3 kg	JP09808		

### PERFORMANCE

Туре	Delivery head H [m]	1	2	3	4	5	6
U3K	Flow rate Q [m³/h]	6.5	5.5	5.0	4.0	3.0	1.5

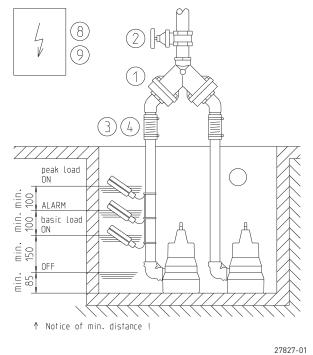
### **ELECTRICAL DATA**

Туре	Type of	Voltage	Motor rating kW		RPM	Current	Motor	Plug
	current	Volt	P <sub>1</sub>	P <sub>2</sub>	min-1	Ampere	protection	
U3K	1-phase	1/N/PE~230	0.32	0.20	2720	1.4	integrated	Safety-



## Example of duplex pump installation

Duplex unit with control unit Sump area with GR 32 min. 50 x 50 cm (without illustr.) Sump area without GR min. 50 x 50 cm Suspend control unit in a dry room.



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.	U3K	U3KS
	Swing-type check DIN EN 12050-4	<u>H</u> 90	B 90	<u>D</u> 1¼"	JP09739	•	•	
	DoppelSwing-type check valve 11/2" (DN 40),							
B					D 1½"	JP09155	•	
×~ ××±								
	Stop valve	1¼" (DN 32), PN 16	<u>H</u> 110	B max. 60	<u>D</u> 11⁄4"	JP44785	•	•
		11⁄2" (DN 40), PN 16	125	max. 60	11⁄2"	JP44786	•	
D 3								
I I I I I I I I I I I I I I I I I I I	Elastic connectio	<b>n</b> 1¼" (DN 32), PN 3	<u>н</u> 100	<u>D</u> 42	JP44773	•	•	
	Hose band clamp					JP44765	•	•
	Hose coupling 1¼" (DN 32) Messing, für transportablen Einsatz						•	•
	Hose connection	JP44209	٠	•				
6	Hose set, 15 m P\	/C hose c/w elbow				JP43550	•	•
	<b>Alarm unit AG3</b> with sub. ball contact switch, separate, mains-dependent, with potential free contact and 3 m cable							•
	Alarm unit AG10 ditto, with 9.5 m cable							•
	<b>Alarm unit washing machine stop AW3</b> with submersible ball contact switch with 3 m cable, separate, mains-dependent						•	•
	Separate level co	scriptior	n)					
	NE 1 with sub. ball contact switch 3.0 m						•	
	NE 2 with sub. ball contact switch 9.5 m						٠	
	NE 1A with sub. ball contact switch 3.0 m and alarm system						٠	
	NE 2A with sub. ball contact switch 9.5 m and alarm system						•	
	Counterweight (1 piece) Duplex control unit (see section on level controls for description)						•	
	Duplex control un BD 00E	JP45735						
		Subm. switch pack B with 3 subm. ball contact switches						
	with 9.5 m cable and fixing device						•	
	Subm. switch pack BmG with 3 subm. ball contact switches with 9.5 m cable and counterweight						٠	
9	Rechargeable bat	JP44850	•	•				
	<b>Special float assembly</b> for low switching points (Switching height without GR ON 105 mm, OFF 45 mm;					JP44795		•
	switching height with GR 32 ON 135 mm, OFF 75 mm) Special float assembly for narrow chambers (min. 30 x 30 cm)							
	Switching height without GR ON 240 mm, OFF 120 mm							•
	Float fixation for	JP42175		•				
	Guide rail system GR 32						•	•
	Support for guide	JP28314	•	•				
(P)	Connection kid DN 32 with telescopable pressure pipe					JP44609	٠	•

### **TECHNICAL DATA**

### Pump

Vertical, single-stage, submersible, foot strainer with 10 mm free passage – detachable for activating low level pumping. Spiral casing with 1¼" (male) radial pressure branch and integrated swing-type check valve, spiral casing with flushing device for drain cleaning, 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, spiral 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°, 1¼" female connection elbow, cable and plug, S model with automatic level float switch.



