

## Application

The U 3 K (S) is an extremely versatile 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), but not urinal or lavatory effluent.

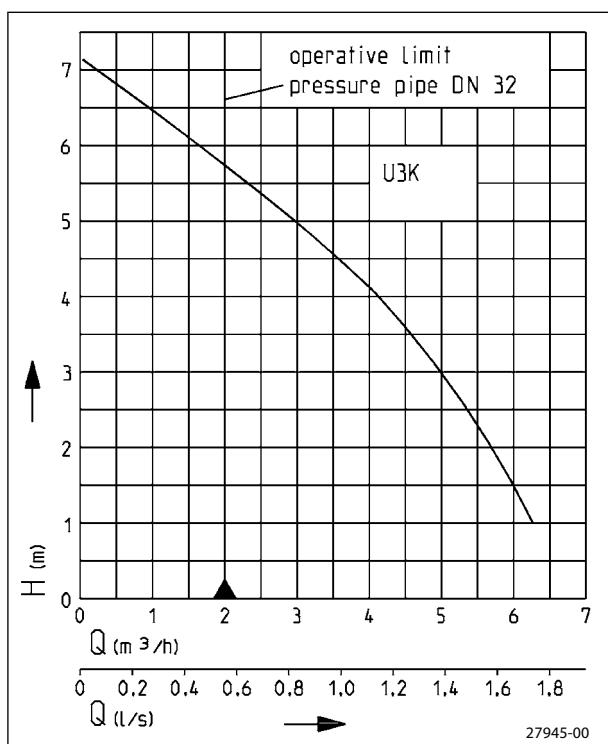
In stationary use the U 3 KS with automatic switching removes the water from drains in cellars, laundries or storerooms and serves as a flood protection. The guide rail system GR 32 offers all the advantages of fast and easy maintenance. Our ready-to-install collecting tanks extend the range of uses. 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.



## 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

■ EIP technology

■ Swing-type check valve  
for portable use

■ Moisture sealed  
cable inlet



# Drainage pumps U 3 K

## Drainage pumps

Type	Maximum Height x Width	Discharge branch	Free passage	Cable quality	Cable length	Weight approx.	Code No.
<b>Pump without level control</b> (not to be utilised on construction sites, as per VDE regulations)							
U 3 K	without bend with bend	255 x 170 mm 255 x 225 mm	1 1/4"	10 mm	H05RN-F-3G0.75	10 m	3.7 kg
U 3 KS	(acc. to VDE, not to be used outdoors)	255 x 275 mm	1 1/4"	10 mm	H05RN-F-3G0.75	3 m	3.4 kg
<b>Pumps with built-in level control</b>							
U 3 KS	255 x 275 mm	1 1/4"	10 mm	H07RN-F-3G1.0	10 m	4.3 kg	09808

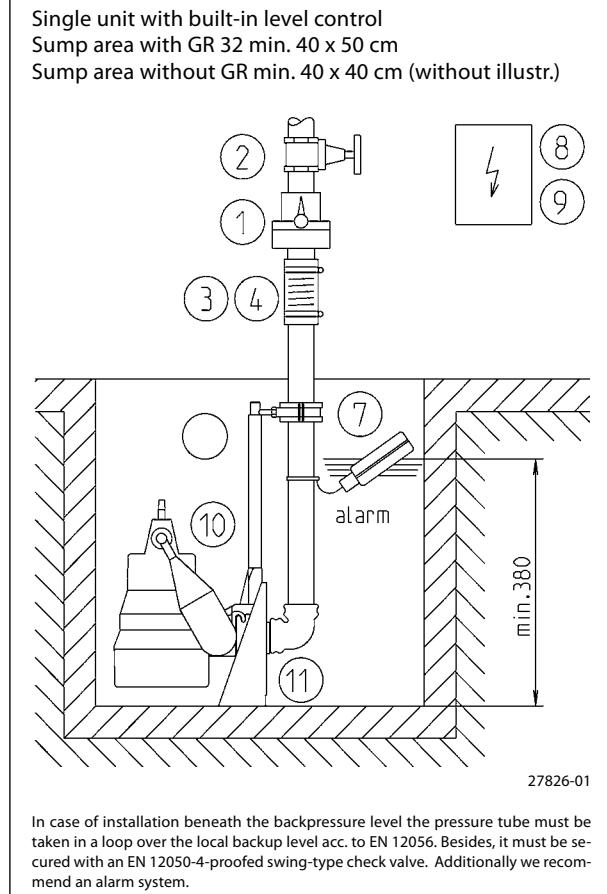
## Performance

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

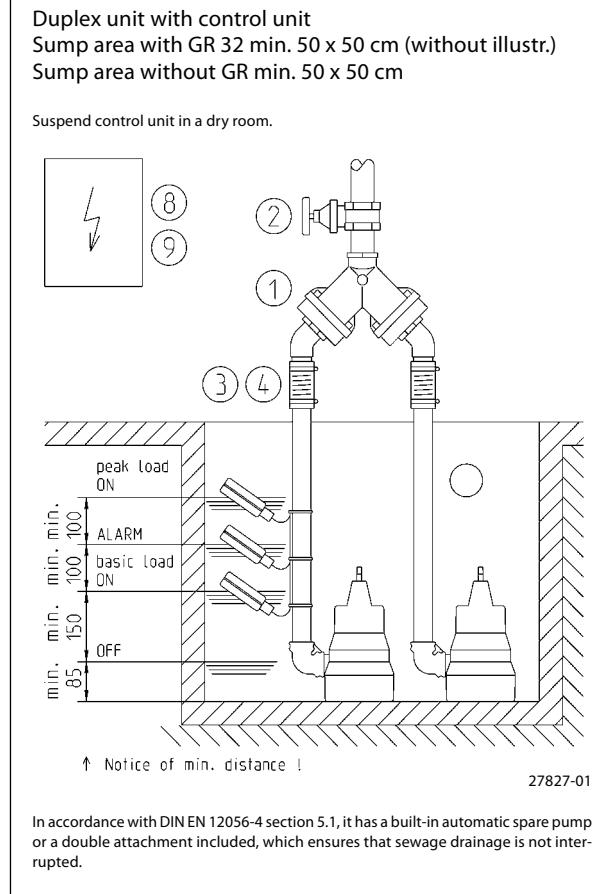
## Electrical Data

Type	Type of current	Voltage Volt	Motor rating kW P <sub>1</sub>	P <sub>2</sub>	RPM min. <sup>-1</sup>	Current Ampere	Motor protection	Plug
U 3 K	1-phase	1/N/PE~230	0.32	0.20	2720	1.4	integrated	Safety-

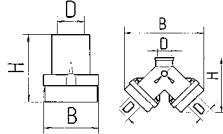
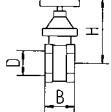
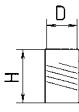
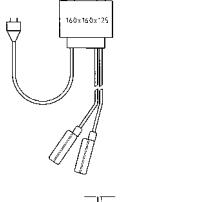
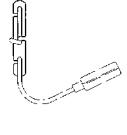
## Example of single pump installation with GR



## Example of duplex pump installation



## Accessories

			Code No.	U 3 K	U 3 KS
	<b>①</b> <b>Swing-type check valve 1 1/4" (DN 32), PN 4</b> DIN EN 12050-4	H 90    W 90    D 1 1/4"	09739	●	●
	<b>Duplex swing-type check valve 1 1/2" (DN 40), PN 4 for duplex pump station</b> DIN EN 12050-4	H 200    W 280    D 1 1/2"	09155	●	
	<b>②</b> <b>Stop valve</b> 1 1/4" (DN 32), PN 16 1 1/2" (DN 40), PN 16	H 110 max. 60 1 1/4"    D 125 max. 60 1 1/2"	11836    11837	●    ●	
	<b>③</b> <b>Elastic connection 1 1/4" (DN 32), PN 3</b>	H 100    D 42	14329	●	●
	<b>④</b> <b>Hose band clamp 1 1/4"</b>		03573	●	●
	<b>⑤</b> <b>Hose coupling 1 1/4" (DN 32), brass, for portable use</b>		00327	●	●
	<b>⑥</b> <b>Flexible hose 1 1/4" (DN 32), PVC red, per m, for portable use</b>		00334	●	●
	<b>⑦</b> <b>Alarm system</b> with submersible ball contact switch, separate, mains-dependent, with potential free contact and 3 m cable <b>Alarm system</b> ditto, with 9.5 m cable <b>Alarm system AW 3 for washing-machines</b> with submersible ball contact switch with 3 m cable, separate, mains-dependent <b>Alarm system AW 10 for washing-machines</b> ditto, with 9.5 m cable		16723    24434    25090    25091		●    ●    ●    ●
	<b>⑧</b> <b>Separate level controls</b> for single unit (see level controls for description) NE 1 with sub. ball contact switch 3.0 m NE 2 with sub. ball contact switch 9.5 m NE 1A with sub. ball contact switch 3.0 m and alarm system NE 2A with sub. ball contact switch 9.5 m and alarm system Counterweight (1 piece)		16710    16711    16714    16715    17541	●    ●    ●    ●    ●	
	Duplex control unit (see section on level controls for description) BD 00E 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		00482    16725    16726	●    ●    ●	
	<b>⑨</b> <b>Rechargeable battery</b> for off the line operation of the alarm system		07562	●	●
	<b>⑩</b> <b>Special float assembly</b> for low switching points (Switching height without GR ON 105 mm, OFF 45 mm; switching height with GR 32 ON 135 mm, OFF 75 mm) <b>Special float assembly</b> for narrow chambers (min. 30 x 30 cm) Switching height without GR ON 240 mm, OFF 120 mm		17424    40856		●    ●
	<b>Float fixation</b> for continuous pump operation		42175		●
	<b>⑪</b> <b>Guide rail system</b> GR 32 Support for guide rail extension ex 2 m sump depth, per m 1 piece		09277    28314	●    ●	●

## Technical data

### Pump

Vertical, single-stage, submersible, foot strainer with 10 mm free passage – detachable for activating low level pumping. Spiral casing with 1 1/4" (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.

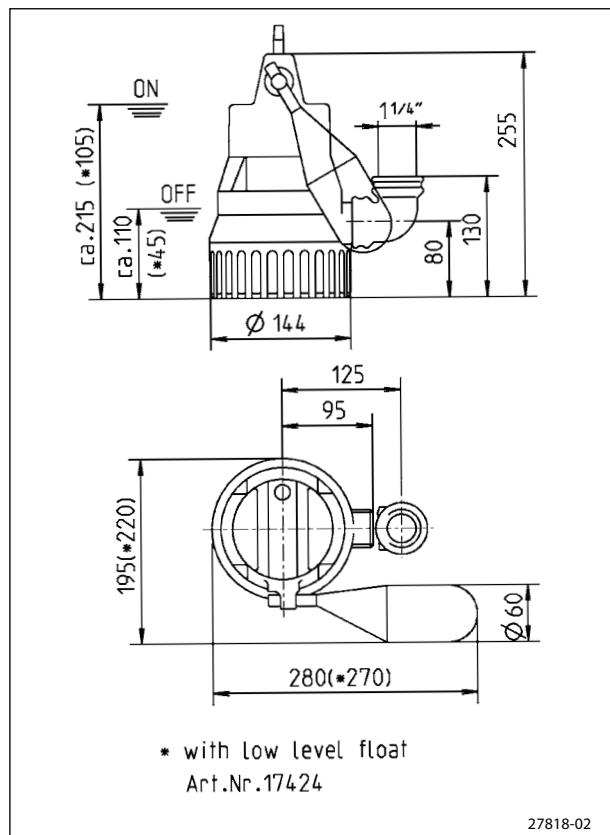
### Installation

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°, 1 1/4" female connection elbow, cable and plug, S model with automatic level float switch.

## Dimensions U 3 KS (mm)



## Dimensions GR 32 (mm)

