

U3

DRAINAGE PUMPS

- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- Moisture sealed cable inlet



DESCRIPTION

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.

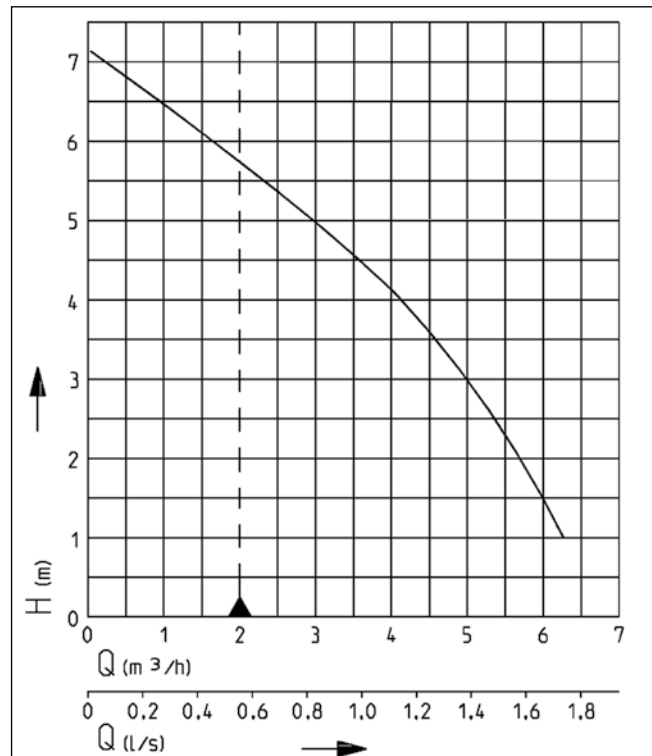
The pump removes rain water, lightly polluted water and domestic waste water from household dishwashers and washing machines (also high temperature).

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 U3K(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



| Type | Delivery head H [m] | 1 | 2 | 3 | 4 | 5 | 6 |
|----------|---------------------|-----|-----|-----|-----|-----|-----|
| U3K/U3KS | Flow rate Q [m³/h] | 6.5 | 5.5 | 5.0 | 4.0 | 3.0 | 1.5 |

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.



U3

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SCOPE OF SUPPLY

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

MECHANICAL DATA

| | | | |
|---------------------|----------------------------------|--------------------|----------------------|
| Pump | Vertical single-stage | Run dry protection | Yes |
| Free passage | 10 mm | Shaft | Stainless steel |
| Bearing | Ball bearings, grease-lubricated | Impeller | Vortex impeller, GFK |
| Seal on motor side | Rotary shaft seal | Motor housing | Stainless steel |
| Oil chamber | Yes | Pump housing | GRP |
| Seal on medium side | 2-fold rotary shaft seals | Submersible | Yes |
| | | Pressure outlet | 1 1/4" |

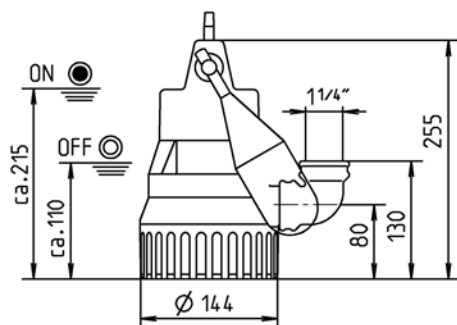
ELECTRICAL DATA

| | | | |
|-------------------|--------------|--------------------|------------|
| Voltage | 1/N/PE~230 V | Insulation class | B |
| Motor rating P1 | 0.32 kW | Winding thermostat | Yes |
| Motor rating P2 | 0.2 kW | Motor protection | Integrated |
| Current | 1.4 A | Plug | Safety |
| Type of enclosure | IP 68 | | |

U3

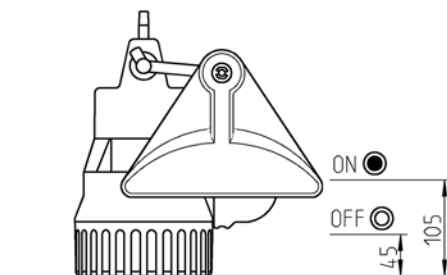
| Type | Code No. | Power line | Wires | Weight |
|------------------------------------|----------|-------------|--------|--------|
| Without level control | | | | |
| U3K, 10 m cable | JP00205 | 10m H05RN-F | 3G0,75 | 3.7 kg |
| With built-in level control | | | | |
| U3KS, 4 m cable | JP00206 | 4m H05RN-F | 3G0,75 | 3.4 kg |
| U3KS, 10 m cable | JP09808 | 10m H07RN-F | 3G1,0 | 4.3 kg |

Dimensions and switching points U3K (mm)



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Dimensions and switching points special float (mm)

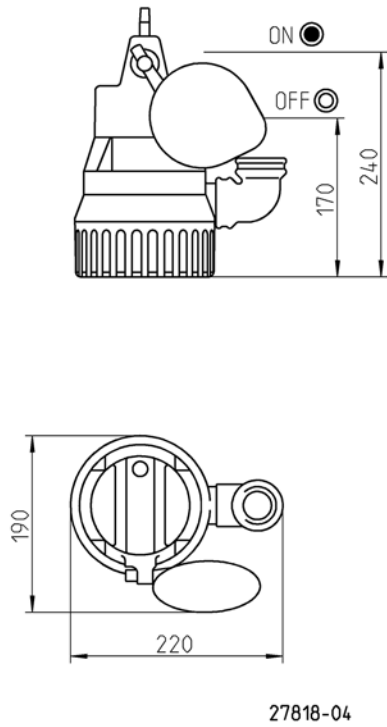


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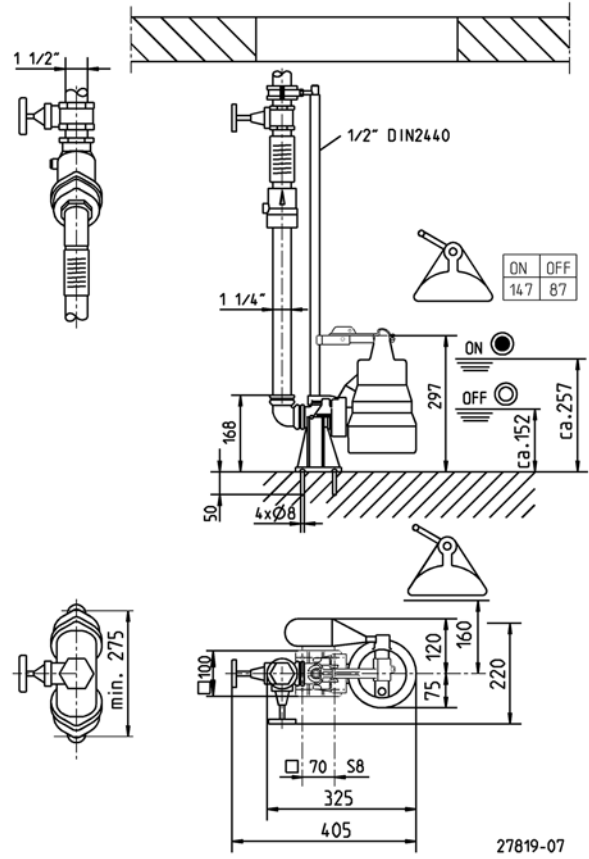
U3

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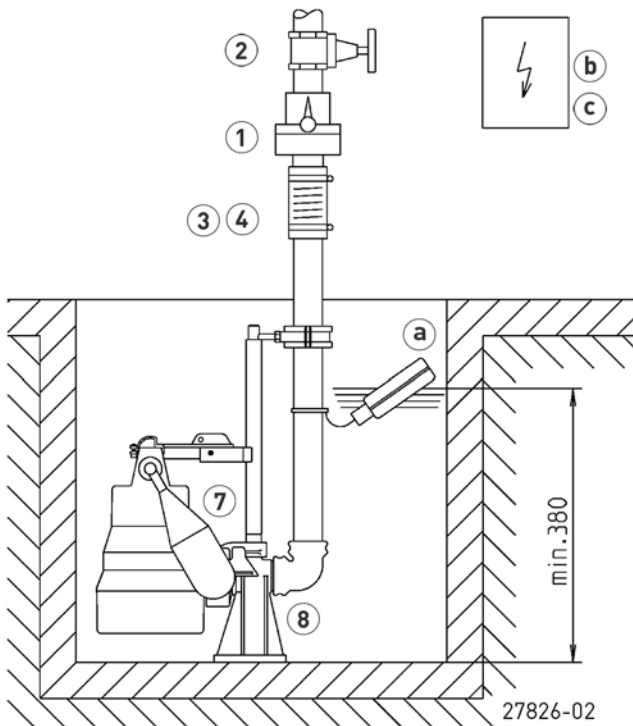
Dimensions and switching points special float (mm)



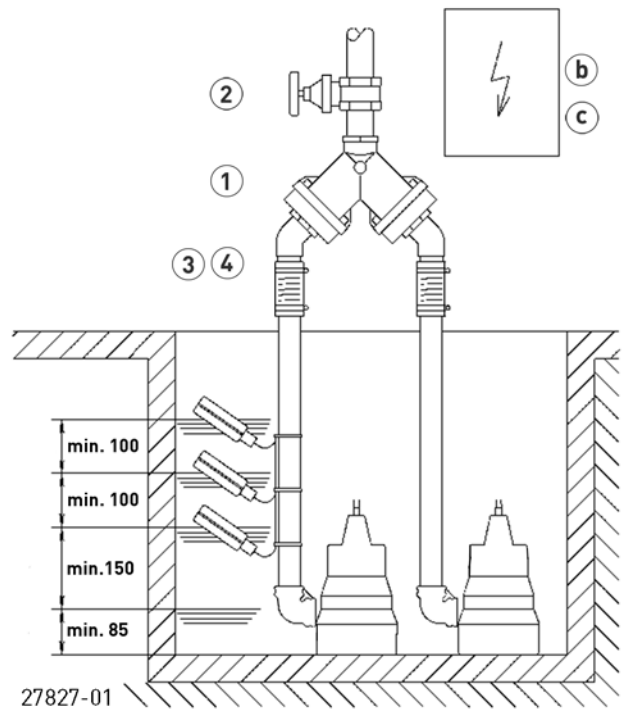
Dimensions GR 32



Example of single pump installation with GR



Example of duplex installation



U3



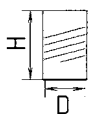


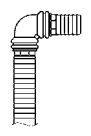





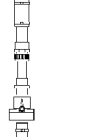
DRAINAGE PUMPS

Single unit with GR: sump area min. 40x50 cm or Ø 50 cm
 Single unit without GR: sump area min. 40x40 cm or Ø 40 cm
 Duplex unit with GR: sump area min. 50x50 cm, Ø 60 cm
 Duplex unit without GR: sump area min. 50x50, Ø 55 cm

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. Additionally we recommend an alarm system. In accordance with 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. Suspend control unit in a dry room


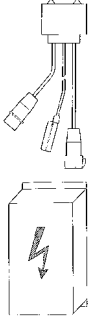



MECHANICAL ACCESSORY

| | | | | Code No. |
|---|----------------------------------|------------------|---|------------------------------|
|  | ① Swing-type check valve | R32 EN 12050-4 | 1/4" (DN 32), PN 4 | 90x90 (HxB) JP09739 |
| | | DR 40 EN 12050-4 | 1/2" (DN 40), PN 4 | 200x280 (HxB) JP09155 |
|  | ② Stop valve | | 1/4" (DN 32), PN 16 | 110x60 (HxB) JP44785 |
| | | | brass, 1/2" (DN 40), PN 16 | 125x60 (HxB) JP44786 |
|  | ③ Elastic connection | | 1/4" (DN 32), PN 3 | 100x42 (HxD) JP44773 |
|  | ④ Hose band clamp | | 1/4" | JP44765 |
|  | ⑤ Hose coupling | Hose coupling | 1/4" (DN 32) brass, for transportable use | JP00327 |
| | | House connection | 1/4" - 38/32/25 | JP44209 |
|  | ⑥ Hose set | | 1 1/4" (DN32), 15 m PVC hose c/w elbow | JP43550 |
|  | ⑦ Special float | | for lower switching points | JP44795 |
|  | | | for narrow chambers (mind. 30x30 od Ø30 cm) | JP40856 |
|  | Float fixation | | for continuous pump operation | JP42175 |
|  | ⑧ Guide rail system | | GR 32 | JP44000 |
|  | Support for guide rail extension | | ex 2 m sump depth, per m 1 piece | JP28314 |
|  | ⑨ Connection kit | | DN 32, with telescopic pressure pipe 30-90 cm | JP44609 |

U3

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ELECTRICAL ACCESSORY

| | | | Code No. |
|---|-----------------------------------|---|----------------|
|  | a Alarm unit PTS.SA1 | Level alarm system with battery backup 320x240x150mm (WxDxH) | PTS.SA1 |
| | PTS.HLA | High Level alarm unit. 182x180x111mm (HxWxD) | PTS.HLA |
| | Power Isolation Alarm | Isolate appliance - in event of alarm no more water will be fed into the alarm system | P734 |
|  | b Control for single units | | |
| | Control unit NE 1 | 230 V, subm. ball contact switch 3.0 m | JP16710 |
| | Control unit NE 1A | 230 V, subm. ball contact switch 3.0 m, alarm | JP16714 |
| | Control unit NE 2 | 230 V, subm. ball contact switch 9.5 m | JP16711 |
| | Control unit NE 2A | 230 V, subm. ball contact switch 9.5 m, alarm | JP16715 |
|  | Control for duplex units | | |
| | Control unit BD 00 E | 230 V, for pumps U3-U6, US 62-105, UV 300, 08/2 ME | JP45735 |
| | Control unit HIGHLOGO 2-00 E | 230 V | JP47996 |
|  | Level control | | |
| | Subm. switch pack B | 3 subm. ball contact switch with 9.5 m and fixing devices | JP16725 |
| | Subm. switch pack BmG | 3 subm. ball contact switch with 9.5 m and counterweight to stabilize the subm. ball contact switch | JP16726 |
|  | c Rechargeable battery | | |
| | | for mains independent alarm | JP44850 |
| | | | JP47209 |