

# U3 SPEZIAL

## DRAINAGE PUMPS

- For saline solutions up to 10% salinity
- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Run dry protection
- EIP Technology
- SiC mechanical seal
- Moisture sealed cable inlet



### DESCRIPTION

Die U3K(S) is a special model made from high-quality resistant materials. This model is suitable for both stationary and portable use and is also able to handle aggressive media such as liquids containing salt, brackish water, condensate, silage liquor, whey and liquid fertilizer in the agricultural industry.

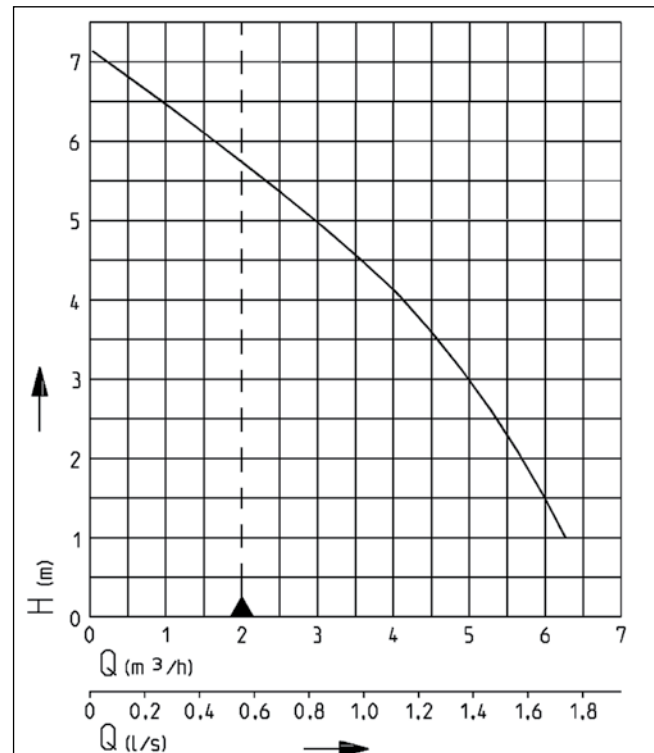
Contaminated water at high temperatures from dishwashers and washing machines (also high temperature) as well as condensate from gas condensing boilers can also be removed with the pump. For stationary operation the pump can also be combined with either the collecting tank supplied or with a large number of our chemical-resistant collecting tanks.

For other aggressive media we advise you to consult us. The difference in the characteristics of the various media does not make it possible for us to provide a guarantee.

This pump provides the same outstanding innovative technical features as the standard model. For stationary use in drains the guide rail system GR 32 also 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.

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.

### PERFORMANCE



| Type                     | Delivery head H [m] | 1   | 2   | 3   | 4   | 5   | 6   |
|--------------------------|---------------------|-----|-----|-----|-----|-----|-----|
| U3K-spezial/U3KS-spezial | 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.



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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 | SiC mechanical seal              | Submersible        | Yes                  |
|                     |                                  | Pressure outlet    | 1 1/4"               |

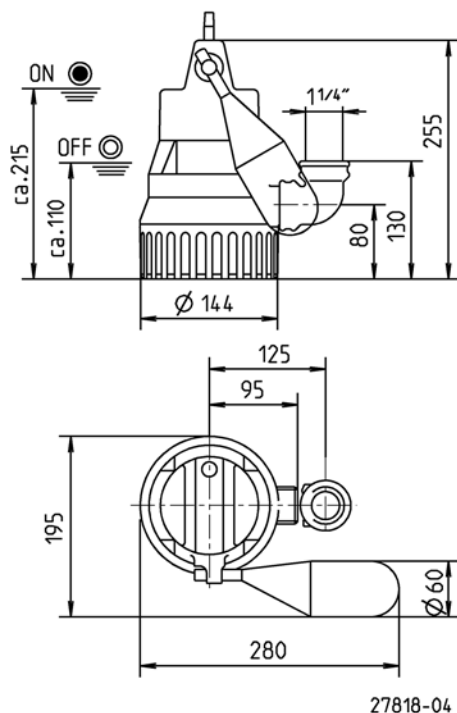
### ELECTRICAL DATA

|                 |              |                    |            |
|-----------------|--------------|--------------------|------------|
| Voltage         | 1/N/PE~230 V | Type of enclosure  | IP 68      |
| Motor rating P1 | 0.32 kW      | Insulation class   | B          |
| Motor rating P2 | 0.2 kW       | Winding thermostat | Yes        |
| Current         | 1.4 A        | Motor protection   | Integrated |
| Wires           | 3G1,0        | Plug               | Safety     |

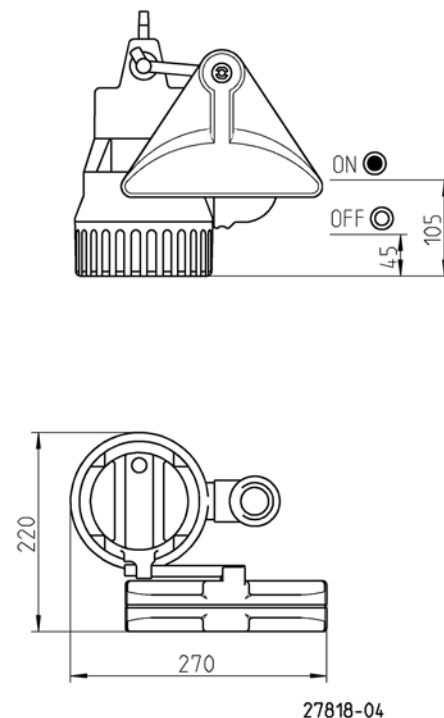
### U3 SPEZIAL

| Type                               | Code No.       | Power line  | Weight |
|------------------------------------|----------------|-------------|--------|
| <b>Without level control</b>       |                |             |        |
| U3K-spezial, 10 m cable            | <b>JP09562</b> | 10m H07RN-F | 4.3 kg |
| <b>With built-in level control</b> |                |             |        |
| U3KS-spezial, 4 m cable            | <b>JP09563</b> | 4m H07RN-F  | 3.6 kg |
| U3KS-spezial, 10 m cable           | <b>JP45195</b> | 10m H07RN-F | 4.3 kg |

#### Dimensions and switching points U3KS spec. (mm)



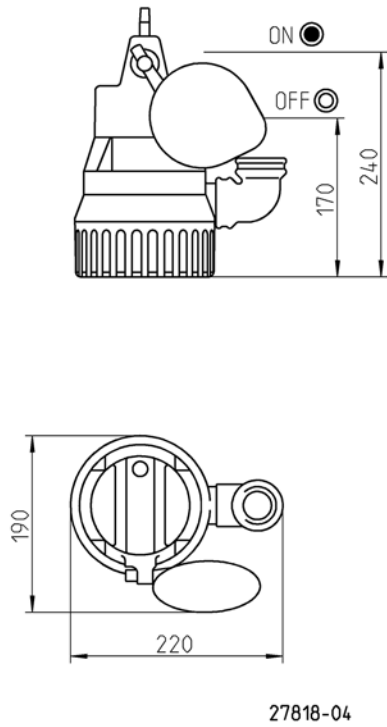
#### Dimensions and switching points special float (mm)



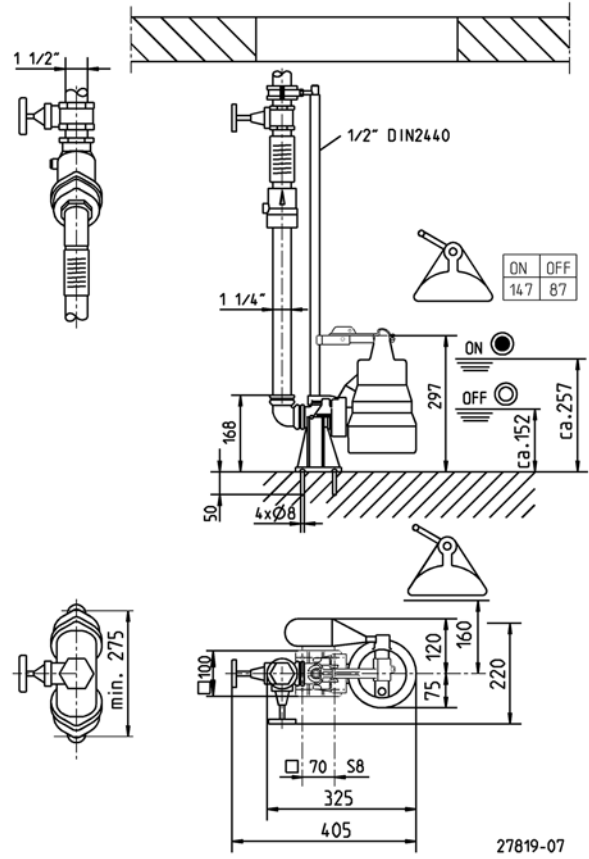
# U3 SPEZIAL

## DRAINAGE PUMPS

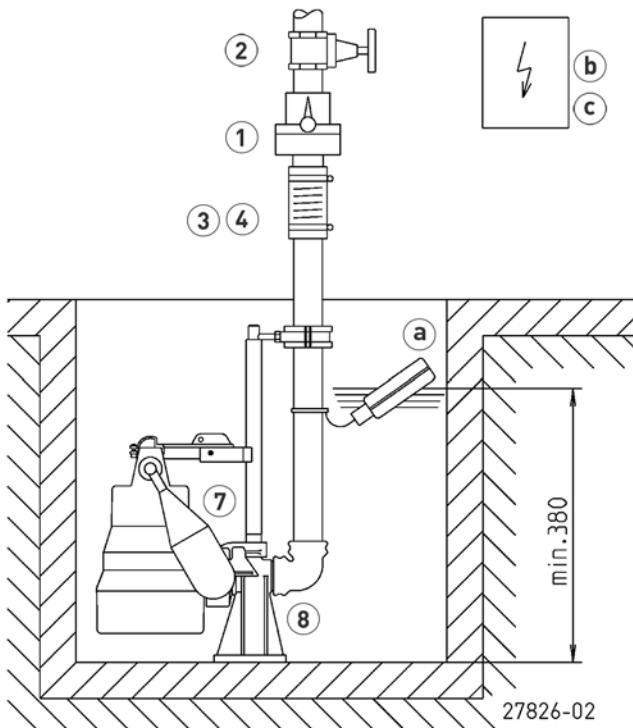
### Dimensions and switching points special float (mm)



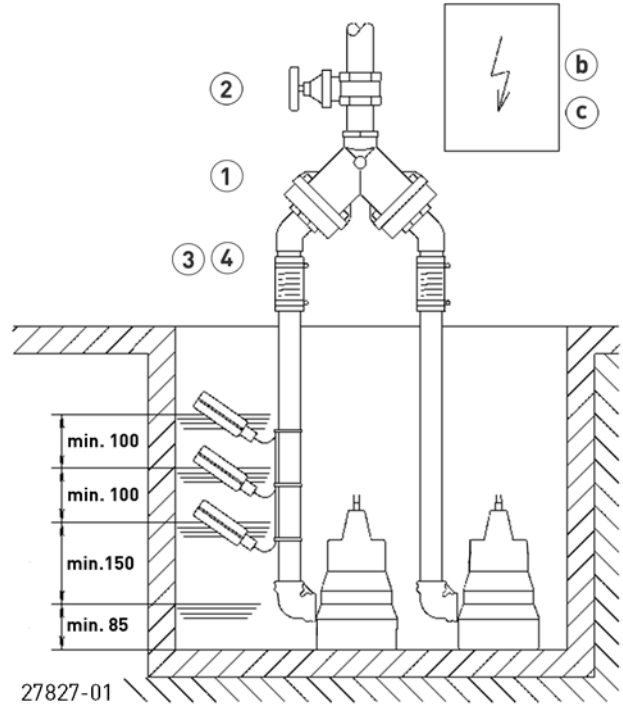
### Dimensions GR (mm)



### Example of single pump installation with GR



### Example of duplex installation



# U3 SPEZIAL






## 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


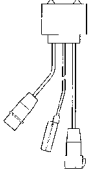



### MECHANICAL ACCESSORY

|   |                                  |   |               | Code No. |
|---|----------------------------------|---|---------------|----------|
|    | <b>① Swing-type check valve</b>  |   |               |          |
|   | 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  |
|   | <b>② Stop valve</b>              | brass, 1/2" (DN 40), PN 16                    | 125x60 (HxB)  | JP44786  |
|    | Ball valve                       | 1/4", PVC, for aggressive media               | 105x155 (HxB) | JP46111  |
|   | <b>③ Elastic connection</b>      | 1/4" (DN 32), PN 3                            | 100x42 (HxD)  | JP44773  |
|  | <b>④ Hose band clamp</b>         | 1/4"  |               | JP44765  |
|  | <b>⑤ Hose coupling</b>           |   |               |          |
|   | Hose coupling                    | 1/4" (DN 32) brass, for transportable use     |               | JP00327  |
|  | House connection                 | 1/4" - 38/32/25                               |               | JP44209  |
|   | <b>⑥ Hose set</b>                | 1 1/4" (DN32), 15 m PVC hose c/w elbow        |               | JP43550  |
|  | <b>⑦ Special float</b>           | for lower switching points                    |               | JP44795  |
|  |                                  | for narrow chambers (mind. 30x30 od Ø30 cm)   |               | JP40856  |
|  | Float fixation                   | for continuous pump operation                 |               | JP42175  |
|  | <b>⑧ Guide rail system</b>       | GR 32   |               | JP44000  |
|   | Support for guide rail extension | ex 2 m sump depth, per m 1 piece              |               | JP28314  |
|  | <b>⑨ Connection kit</b>          | DN 32, with telescopic pressure pipe 30-90 cm |               | JP44609  |

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## DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

|   |                                   |   | Code No.       |
|---|-----------------------------------|---|----------------|
|    | <b>a Alarm unit</b><br>PTS.SA1    | Level alarm system with battery backup 320x240x150mm (WxDxH)  | <b>PTS.SA1</b> |
|   | PTS.HLA                           | High Level alarm unit. 182x180x111mm (HxWxD)  | <b>PTS.HLA</b> |
|   | Power Isolation Alarm             | Isolate appliance - in event of alarm no more water will be fed into the alarm system               | <b>P734</b>    |
|    | <b>b Control for single units</b> |   |                |
|   | Control unit NE 1                 | 230 V, subm. ball contact switch 3.0 m  | <b>JP16710</b> |
|   | Control unit NE 1A                | 230 V, subm. ball contact switch 3.0 m, alarm   | <b>JP16714</b> |
|   | Control unit NE 2                 | 230 V, subm. ball contact switch 9.5 m  | <b>JP16711</b> |
|   | Control unit NE 2A                | 230 V, subm. ball contact switch 9.5 m, alarm   | <b>JP16715</b> |
|    | <b>Control for duplex units</b>   |   |                |
|   | Control unit BD 00 E              | 230 V, for pumps U3-U6, US 62-105, UV 300, 08/2 ME  | <b>JP45735</b> |
|   | Control unit HIGHLOGO 2-00 E      | 230 V   | <b>JP47996</b> |
|   | <b>Level control</b>              |   |                |
|   | Subm. switch pack B               | 3 subm. ball contact switch with 9.5 m and fixing devices   | <b>JP16725</b> |
|   | Subm. switch pack BmG             | 3 subm. ball contact switch with 9.5 m and counterweight to stabilize the subm. ball contact switch | <b>JP16726</b> |
|  | Weight                            |   | <b>JP44803</b> |
|   | <b>c Rechargeable battery</b>     | for mains independent alarm   | <b>JP44850</b> |
|   |                                   |   | <b>JP47209</b> |

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DRAINAGE PUMPS