# PENTAIR JUNG PUMPEN

# U3 SPEZIAL

DRAINAGE PUMPS

- For saline solutions up to 15 % salinity
- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device activatable and

deactivatable

- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- SiC mechanical seal
- · Moisture sealed cable inlet



#### **DESCRIPTION**

The U3 K(S) special is a variant of the U3 K(S) designed to pump aggressive media such as brine from water softeners, brackish water, condensate from gas condensing boilers, silage liquid, whey or liquid fertilizer.

Residential grey water from dish washers or washing machines (even boil wash program) or outdoor applications like drainage or rainwater can easily be handled by this pump.

Depending on the application it can be used either in a fix installation or as a mobile pump. For fix installations the pump can be combined with existing sumps but also with a variety of our chemically resistant tanks.

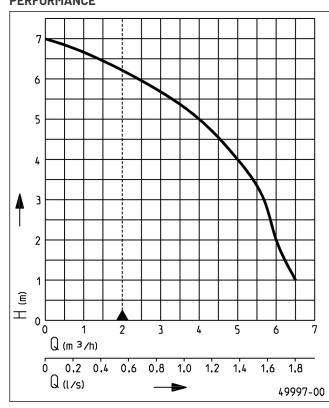
Aggressive media are not precicely specified and occur in countless different compositions. In order to provide reliability and warranty, please contact our technical support for consultance.

The U3 K(S) spezial provides the same technical features like the standard model U3 K(S). Guide rail systems offer the advantages of quick and easy maintenance. The Easyfix installation sets are particularly convenient. They are pre-assembled ready to plug in and can be installed as single or double systems.

Despite its high range of possible applications, the U3 K(S) spezial must not be used to pump effluent containing faeces or wastewater from urinal systems.

If submersible pumps are being used outdoors, the mandatory minimum length of the power cord is 10m. This is a directive from the VDE regulation 0100.

#### PERFORMANCE



| Туре             | Delivery head H[m] | 1   | 2   | 3   | 4   | 5   | 6   |
|------------------|--------------------|-----|-----|-----|-----|-----|-----|
| U3K/U3KS spezial | Flow rate Q [m³/h] | 6.5 | 6.0 | 5.7 | 5.0 | 4.0 | 2.4 |

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.





D 158-2110

#### **SCOPE OF SUPPLY**

Pump ready for connection acc. to EN 12050 with 90°, 11/4" 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-lubricat- | Impeller           | Vortex impeller, GFK |
|                     | ed                              | Motor housing      | Stainless steel      |
| Seal on motor side  | Rotary shaft seal               | Pump housing       | GRP                  |
| Oil chamber         | Yes                             | Submersible        | Yes                  |
| Seal on medium side | SiC mechanical seal             | Pressure outlet    | 1 1/4"               |

#### **ELECTRICAL DATA**

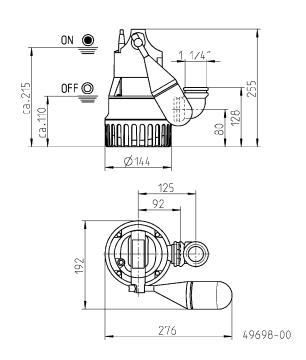
| Voltage         | 1/N/PE~230 V | Type of enclosure  | IP 68      |
|-----------------|--------------|--------------------|------------|
| Motor rating P1 | 0.32 kW      | Insulation class   | В          |
| Motor rating P2 | 0.22 kW      | Winding thermostat | Yes        |
| Current         | 1.4 A        | Motor protection   | Integrated |
| Wires           | 3G1,0        | Plug               | Safety     |

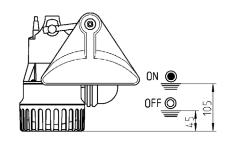
#### **U3 SPEZIAL**

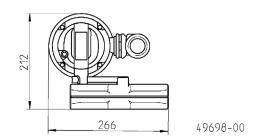
| Туре                        | Code No. | Power line  | Weight |
|-----------------------------|----------|-------------|--------|
| Without level control       |          |             |        |
| U3K spezial, 10 m cable     | JP50007  | 10m H07RN-F | 4.1 kg |
|                             |          |             | ,      |
| With built-in level control |          |             |        |
| U3KS spezial, 4 m cable     | JP50005  | 4m H07RN-F  | 3.7 kg |
| U3KS spezial, 10 m cable    | JP50006  | 10m H07RN-F | 4.4 kg |

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

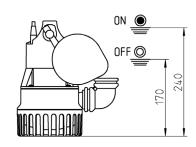
#### Dimensions and switching points special float (mm)

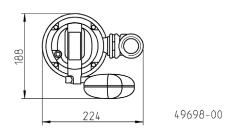




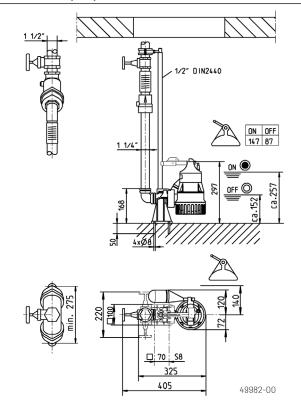


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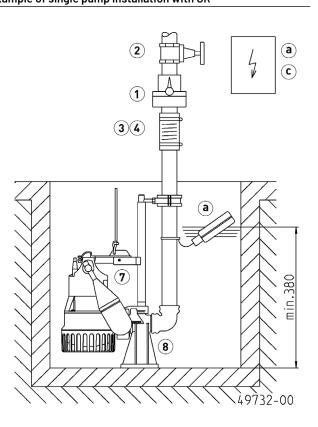




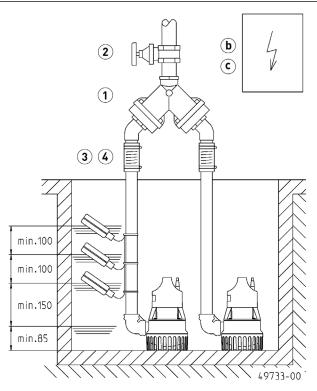
#### Dimensions GR (mm)



#### Example of single pump installation with GR

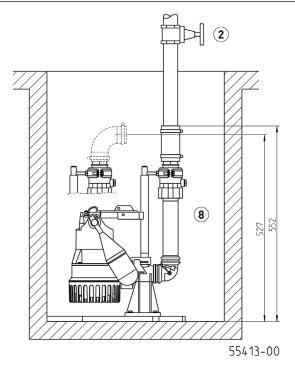


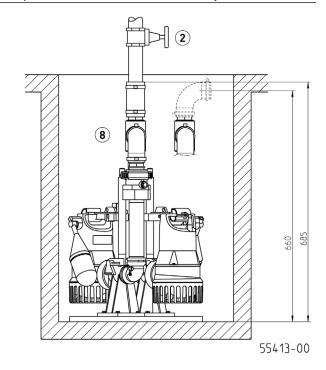
#### Example of duplex installation



#### Example of installation and dimensions Easyfix 32 Single (mm)

#### Example of installation and dimensions Easyfix 32 Duo (mm)





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

Single unit Easyfix 32 Single: sump min. 30x40 cm, Ø40 cm Duplex unit Easyfix 32 Duo: sump min. 45x40 cm, Ø55 cm Duplex unit Easyfix 32 Duo with special float: sump min. 50x50 cm Ø70 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 |                                  |               |          |
| B    | R32 EN 12050-4           | 11/4" (DN 32), PN 4              | 90x90(HxB)    | JP09739  |
| B .  | 11/4" (DN 32)            | for transportable use            | 90x90 (HxB)   | JP48845  |
|      | DR 40 EN 12050-4         | 1½" (DN 40), PN 4                | 200x280 (HxB) | JP09155  |
| 高·   | 2 Stop valve             | 11/4" (DN 32), PN 16             | 110x60 (HxB)  | JP44785  |
| B    |                          | brass, 1½" (DN 40), PN 16        | 125x60 (HxB)  | JP44786  |
| A B  | Ball valve               | 11/4", PVC, for aggressive media | 105x155 (HxB) | JP46111  |
| ± 10 | 3 Elastic connection     | 11/4" (DN 32), PN 3              | 100x42 (HxD)  | JP44773  |
| Ö    | 4 Hose band clamp        | 11/4"                            |               | JP44765  |

#### **MECHANICAL ACCESSORY**

|             |                             |                                                                      | Code No.           |
|-------------|-----------------------------|----------------------------------------------------------------------|--------------------|
| <b>5</b>    | Hose coupling Hose coupling | 11/4" (DN 32) brass, for transportable use                           | JP00327            |
| <b>(6</b> ) | House connection  Hose set  | 1½" – 38/32/25<br>11/4" (DN32), 15 m PVC hose c/w elbow              | JP44209<br>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            |
|             |                             | ex 2 m sump depth, per m 1 piece                                     | JP28314            |
|             | Easyfix 32 Single           | ready-to-connect installation set                                    | JP50308            |
|             | Easyfix 32 Duo              | ready-to-connect installation set with control unit for duplex units | JP50307            |
| 9           | Connection kit              | DN 32, with telescopable pressure pipe 30-90 cm                      | JP44609            |

#### **ELECTRICAL ACCESSORY**

|               |             |                              |                                                                                       | Code No. |
|---------------|-------------|------------------------------|---------------------------------------------------------------------------------------|----------|
| 0 1 44        | a           | Alarm unit<br>PTS.SA1        | Level alarm system with battery backup 320x240x150mm (WxDxH)                          | PTS.SA1  |
| , 66<br>65    |             | 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>(b</b> ) | Control for single units     |                                                                                       |          |
| TIII'         | _           | 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  |
| \$7# <u>#</u> |             | 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  |
| Z==           |             | 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                              | JP16726  |
|               |             | Weight                       | to stabilize the subm. ball contact switch                                            | JP44803  |
|               | <b>(c</b> ) | Rechargeable battery         | for mains independent alarm                                                           | JP44850  |
|               |             |                              |                                                                                       | JP47209  |