



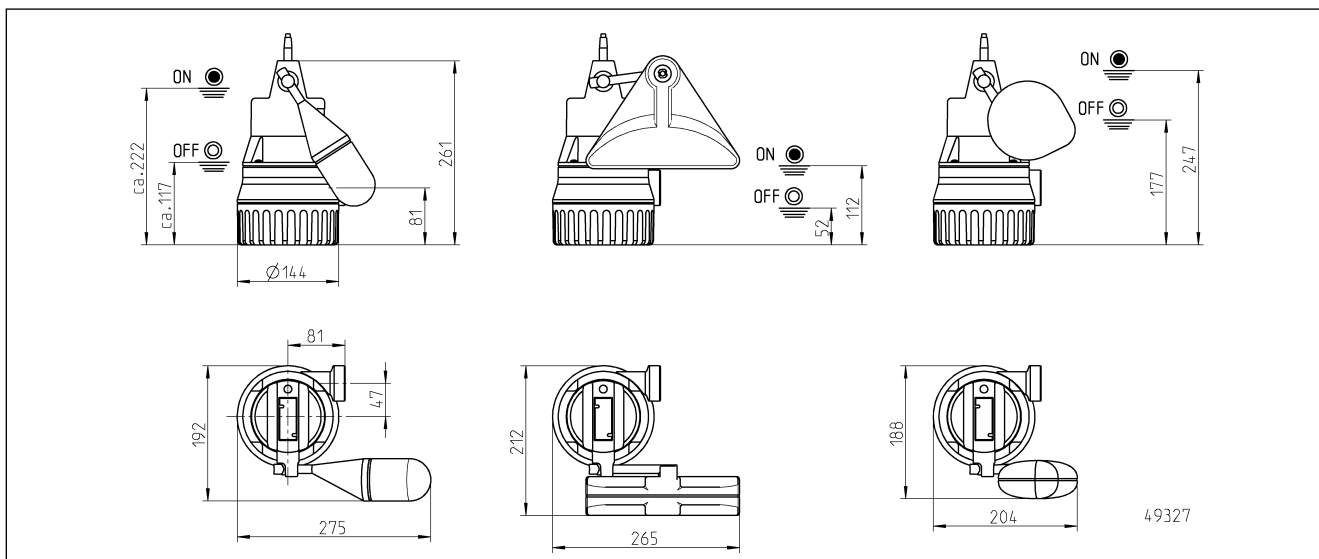
**PUMP TECHNICAL
SERVICES LIMITED**



U2 KS

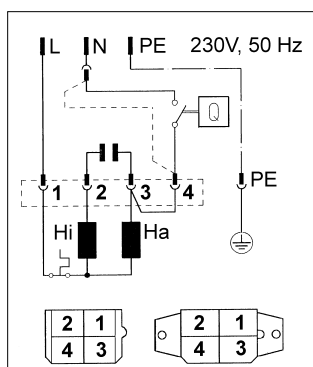
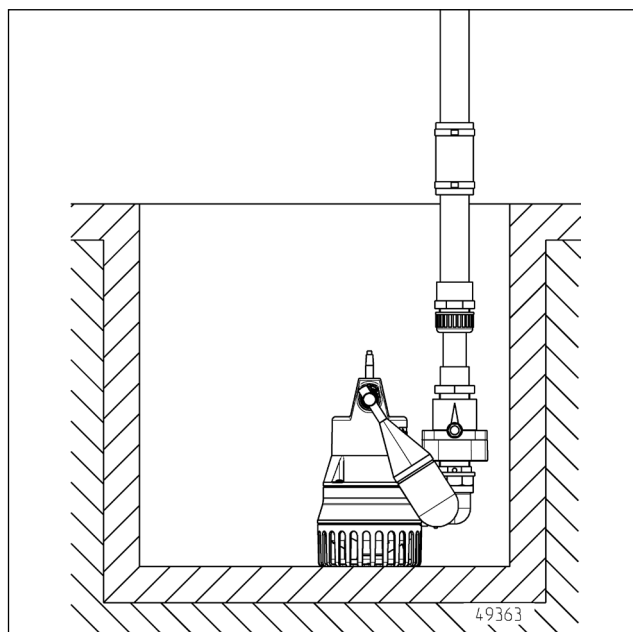
EN Instruction Manual

DE - Technische Daten • EN - Technical Data • FR - Caractéristiques Techniques NL •
 Technische Gegevens • IT - Dati Tecnici • PL - Dane Techniczne



	U2 KS	
	[kg]	3,8 / 4,8
	DN	32
	[mm]	10
P1	[W]	300
P2	[W]	200
U	[V]	1/N/PE ~230
f	[Hz]	50
I	[A]	1,2

H[m]	Q[m³/h]
5	0,5
4	3,0
3	5,5
2	6,3
1	6,5



You have purchased a product made by Pentair Jung Pumpen and with it, therefore, also excellent quality and service. Secure this service by carrying out the installation works in accordance with the instructions, so that our product can perform its task to your complete satisfaction. Please remember that damage caused by incorrect installation or handling will adversely affect the guarantee.

This appliance can be used by children aged 8 years or over and by persons with limited physical, sensory or intellectual capabilities, or with limited experience and knowledge, provided that they are supervised or have been instructed in the safe use of the appliance and are aware of the dangers involved. Children must not be allowed to play with the appliance. Cleaning and user maintenance must not be carried out by children unless they are supervised.

Damage prevention in case of failure

Like any other electrical device, this product may fail due to a lack of mains voltage or a technical defect.

If damage (including consequential damage) can occur as a result of product failure, the following precautions can be taken at your discretion:

- Installation of a water level dependent (under circumstances, mains-independent) alarm system, so that the alarm can be heard before damage occurs.
- Inspection of the collecting tank/chamber for tightness up to the top edge before – or at the latest, during – installation or operation of the product.
- Installation of backflow protection for drainage units that can be damaged by wastewater leakage upon product failure.
- Installation of a further product that can compensate in case of failure of the other product (e.g. duplex unit).
- Installation of an emergency power generator.

As these precautions serve to prevent or minimise consequential damage upon product failure, they are to be strictly observed as the manufacturer's guideline – in line with the standard DIN EN specifications as state of the art – when using the product (Higher Regional Court Frankfurt/Main, Ref.: 2 U 205/11, 06/15/2012).

SAFETY INSTRUCTIONS

This instruction manual contains essential information that must be observed during installation, operation and servicing. It is therefore important that the installer and the responsible technician/operator read this instruction manual before the equipment is installed and put into operation. The manual must always be available at the location where the pump or the plant is installed.

Failure to observe the safety instructions can lead to the loss of all indemnity.

In this instruction manual, safety information is distinctly labelled with particular symbols. Disregarding this information can be dangerous.



General danger to people



Warning of electrical voltage

NOTICE! Danger to equipment and operation

Qualification and training of personnel

All personnel involved with the operation, servicing, inspection and installation of the equipment must be suitably qualified for this work and must have studied the instruction manual in depth to ensure that they are sufficiently conversant with its contents. The supervision, competence and areas of responsibility of the personnel must be precisely regulated by the operator. If the personnel do not have the necessary skills, they must be instructed and trained accordingly.

Safety-conscious working

The safety instructions in this instruction manual, the existing national regulations regarding accident prevention, and any internal working, operating and safety regulations must be adhered to.

Safety instructions for the operator/user

All legal regulations, local directives and safety regulations must be adhered to.

The possibility of danger due to electrical energy must be prevented.

Leakages of dangerous (e.g. explosive, toxic, hot) substances must be discharged such that no danger to people or the environment occurs. Legal regulations must be observed.

Safety instructions for installation, inspection and maintenance works

As a basic principle, works may only be carried out to the equipment when it is shut down. Pumps or plant that convey harmful substances must be decontaminated.

All safety and protection components must be re-fitted and/or made operational immediately after the works have been completed. Their effectiveness must be checked before restarting, taking into account the current regulations and stipulations.

Unauthorised modifications, manufacture of spare parts

The equipment may only be modified or altered in agreement with the manufacturer. The use of original spare parts and accessories approved by the manufacturer is important for safety reasons. The use of other parts can result in liability for consequential damage being rescinded.

Unauthorised operating methods

The operational safety of the supplied equipment is only guaranteed if the equipment is used for its intended purpose. The limiting values given in the "Technical Data" section may not be exceeded under any circumstances.

Instructions regarding accident prevention

Before commencing servicing or maintenance works, cordon off the working area and check that the lifting gear is in perfect condition.

Never work alone. Always wear a hard hat, safety glasses and safety shoes and, if necessary, a suitable safety belt.

Before carrying out welding works or using electrical devices, check to ensure there is no danger of explosion.

People working in wastewater systems must be vaccinated against the pathogens that may be found there. For the sake of your health, be sure to pay meticulous attention to cleanliness wherever you are working.

Make sure that there are no toxic gases in the working area.

Observe the health and safety at work regulations and make sure that a first-aid kit is to hand.

In some cases, the pump and the pumping medium may be hot and could cause burns.

For installations in areas subject to explosion hazards, special regulations apply!

APPLICATION

WARNING!

The pump must only be connected to sockets that have been installed properly in accordance with the regulations and are protected with at least 10 A (slow) and RCD-safety switches (30mA).

DANGER!

The pump must never be used when a person is in the water.

U2 KS submersible pumps are suitable for pumping domestic waste water without stones. This includes also water from household dishwashers and household washing machines.

NOTICE! In outdoor applications, only pumps with at least a 10-metre mains cable must be used.

When using the pumps, the relevant national laws, regulations and stipulations must be adhered to, for example:

- Domestic contaminated and waste water (e.g. EN 12056 in Europe)
- Installation of low voltage systems (e.g., VDE 0100 in Germany)

For non-standard utilization conditions, further regulations must be observed (e.g. VDE 0100 in Germany, part 701: bathrooms and shower rooms; part 702: swimming pools and fountains and part 737: outdoor use).

Temperatures

The pumped medium must have a temperature of max 35°C.

The submersible pump is frost-resistant down to -20°C when stored in dry conditions. When installed, however, it must not be allowed to freeze in the water.

Transport

The pump must always be lifted by the handle and never by the power supply cable! The pump should only be lowered into deeper chambers or pits using a rope or chain.

ELECTRICAL CONNECTION

NOTICE! Only qualified electricians may carry out electrical works to the pump or the controls.

WARNING!

Before carrying out any works: disconnect the pump and the controls from the mains and take steps to ensure that no one else can reconnect them to the power supply.

The relevant standards (such as EN standards), country-specific regulations (such as VDE in Germany), and the regulations of the local power supply companies must be observed.

NOTICE! Never put the mains plug or a free lead end in water! If water gets into the plug, this can cause malfunctions and damage.

Observe the operating voltage (see the type plate)!

The pump is provided with a winding thermostat. In case of unacceptably high temperatures it switches off the pump to protect it against possible damage. Unacceptably high temperatures may result e.g. from dry running or mechanical or electrical overload.

CAUTION!

The pump is switched on again automatically after cooling down - risk of injury!

For this reason, always disconnect the device from the mains before remedying the fault! In order to do this, unplug from the mains supply or remove the pre-fuses of the pump controls!

INSTALLATION

For installations in accordance with EN 12056-4, the pressure pipe must be laid in a loop above the local backflow level and protected with a backflow prevention valve. A correspondingly larger diameter pipe should be used for longer pressure pipe-lines to avoid pipe friction losses.

Permanent venting may be necessary if the pump runs dry from time to time (pressure outlet surfaced). This can occur for example if the residual water in the collecting chamber evaporates or if the pump runs in "snore" mode during the test run.

To vent the pump housing the attached elbow must be drilled at the marked location to provide a 6 mm drill-hole.

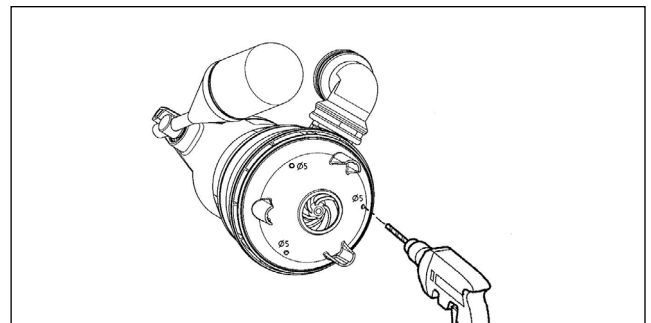
NOTICE! If the pump is malfunctioning, part of the contents of the oil reservoir could escape into the pumping medium.

Dimensions of chamber: 40x40 cm

Flushing device

The pump can keep the intake section at the bottom of the chamber clear of deposits to a large extent if you carry out a small modification. This reduces the performance of the pump only insignificantly.

This modification is carried out as follows. Detach the foot strainer and carefully drill a hole into the 3 markings with the $\varnothing 5$ symbols. Deburr the drillholes. When reattaching the foot strainer, ensure that the new drill-holes are not covered by the bars of the foot strainer.



Low level pumping

Flooded areas can be pumped out leaving only few mm of residual water without the need for optional extras (U2: 5mm). To do so, the foot strainer must be levered off with a screwdriver. In the case of pumps with an attached control, the float switch must be locked in the ON position. It is not possible therefore in low level pumping to operate the pump in switching mode.

To make the pump operate, the drainage hose must be emptied before each pumping run and there must be a minimum water

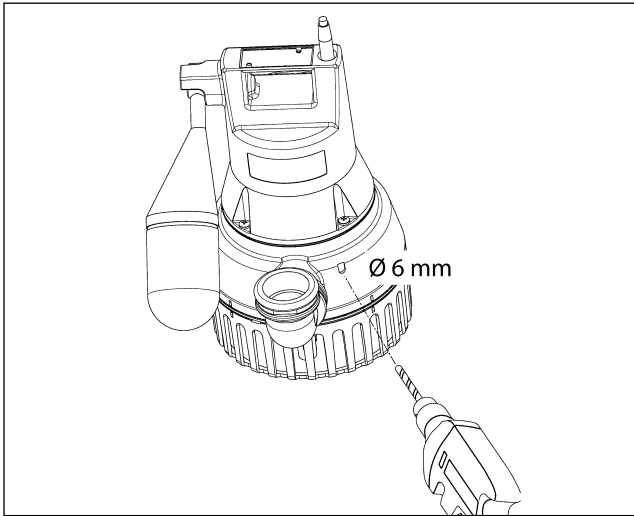
level available, for U2: 40 mm.

⚠ CAUTION!

For safety reasons, mobile operation is only allowed with a foot strainer.

If a hose is used as a pressure line, care must be taken to ensure that for every pumping operation the hose is completely empty before the pump is submersed. Any residual liquid would obstruct the ventilation of the pump housing and therefore also hinder the pumping operation. For the same reason, the pump would not operate if it was switched on before being submersed.

The pump can also be vented by providing a 6 mm drill-hole in the pump housing.



MAINTENANCE

Maintenance and inspection of this product must be carried out in accordance with EN 12056-4.

⚠ WARNING!

Before carrying out any works: disconnect the pump and the controls from the mains and take steps to ensure that no one else can reconnect them to the power supply.

⚠ WARNING!

Check the mains cable for signs of mechanical and chemical damage. Damaged or kinked cables must be replaced by the manufacturer.

⚠ CAUTION!

Do not touch the pump until all rotating parts have come to a standstill.

NOTICE! If the water contains high levels of iron or lime, insufficient cleaning can result in irreparable damage to the seal and thus also to the pump motor in the long term.

Consequently, the pump must be cleaned at regular intervals according to the hardness of the water.

Cleaning

The foot strainer prevents coarse impurities from entering the pump. Regular cleaning of the float and the foot strainer ensures optimum performance and operation.

Tightening torque M_A for A2 screw materials for Amtec 5,0 $M_A = 2 \text{ Nm}$

QUICK TIPS FOR REMEDYING FAULTS

Pump does not work

- Check mains current (do not use a pin gauge)
- Fuse faulty = may be too weak (please refer to Electrical Connection)
- Mains supply cable damaged = repair to be carried out by manufacturer only

Pump runs but does not pump

- Empty the pressure pipe or hose to allow the non-return valve to open and the air to escape from the pump housing, it may be necessary to carry out a ventilation drilling

Impeller blocked

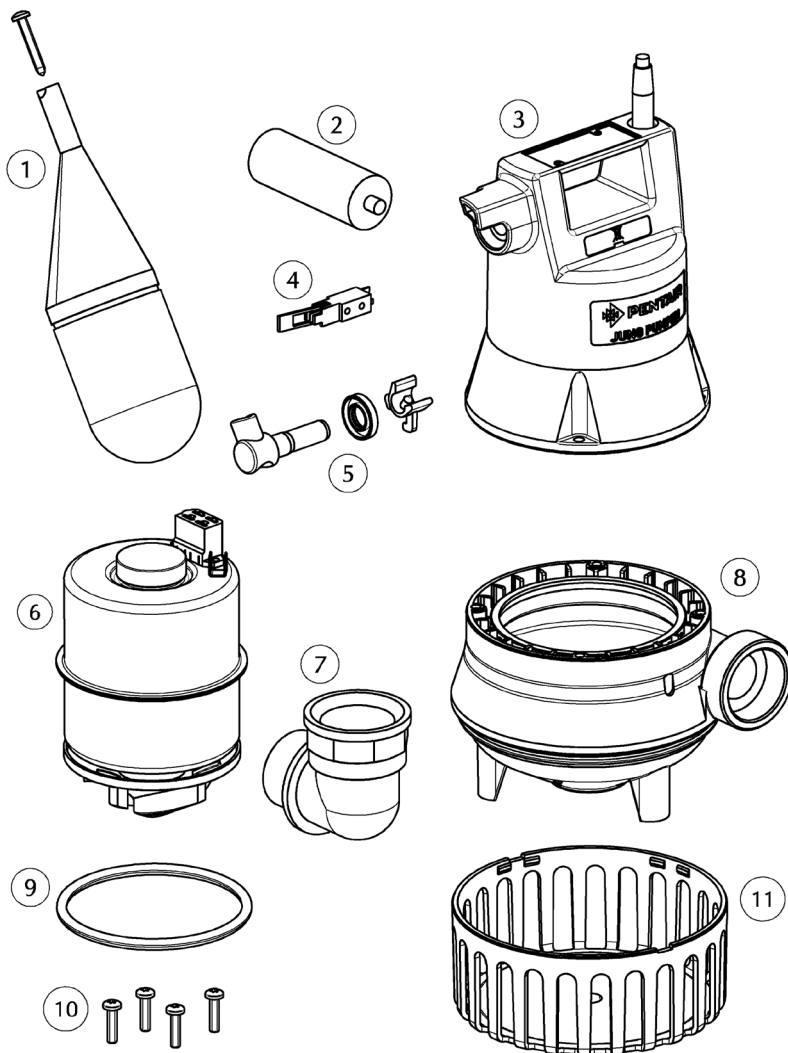
- Solids and fibrous matter have become lodged in the pump housing = clean

Decreased pumping performance

- Foot strainer obstructed = clean
- Pressure pipe obstructed = clean
- Rotor worn out = repair to be carried out by the manufacturer

U2 KS

Ersatzteile - Spare parts - Pièces de rechange - Reserveonderdelen - Parti di ricambio - Reservedele - Reservdelar
 Varaosat - Części zamienne - Náhradní díly - Alkatrészek - Piese de schimb - Запасные части - 备件



①	Schwimmer	Float	JP42771
②	Kondensator	Capacitor	JP46353
③	Anschlusseinheit	Top cover	
	U2 KS, 4m		JP50035
	U2 KS, 10 m		JP50036
	U2 KS, 10m, ANZ		JP50037
④	Mikroschalter	Microswitch	JP46351
⑤	Schaltwelle	Shift shaft	JP42770
⑥	Motor	Motor	JP50039
⑦	Winkel	Elbow	JP50038
⑧	Spiralgehäuse	Volute casing	JP46934
⑨	Dichtungssatz	Seal set	JP46354
⑩	Schraubensatz	Screw set	JP42773
⑪	Siebfuß	Strainer base	JP46360

EU-Konformitätserklärung
EU-Prohlášení o shodě
EU-Overensstemmelseserklæring
EU-Declaration of Conformity
EU-Vaatumustenmukaisuusvakuutus

EU-Déclaration de Conformité
EU-Megfelelőségi nyilatkozat
EU-Dichiarazione di conformità
EU-Conformiteitsverklaring
EU-Deklaracja zgodności

EU-Declaratiþe de conformitate
EU-Vyhlášení o zhode
EU-Försäkran om överensstämmelse

DE - Richtlinien - Harmonisierte Normen
CS - Směrnice - Harmonizované normy
DA - Direktiv - Harmoniseret standard
EN - Directives - Harmonised standards
FI - Direktiivi - Yhdenmukaistettu standardi

FR - Directives - Normes harmonisées
HU - Irányelve - Harmonizált szabványok
IT - Direttive - Norme armonizzate
NL - Richtlijnen - Geharmoniseerde normen
PL - Dyrektywy - Normy zharmonizowane

RO - Directivă - Norme coroborate
SK - Smernice - Harmonizované normy
SV - Direktiv - Harmoniserade normer

- **2006/42/EG (MD)** **EN 809:1998/AC:2010, EN ISO 12100:2010, EN 60335-1:2012/A11:2014**
- **2011/65/EU (RoHS)**
- **2014/30/EU (EMC)** **EN 55014-1:2006/A2:2011, EN 55014-2:1997/A2:2008, EN 60034-1:2010**
EN 61000-3-2:2014, EN 61000-3-3:2013

JUNG PUMPEN GmbH - Industriestr. 4-6 - 33803 Steinhagen - Germany - www.jung-pumpen.de

DE - Wir erklären in alleiniger Verantwortung, dass das Produkt den aufgeführten Richtlinien entspricht.
CS - Prohlašujeme na svou výlučnou odpovědnost, že výrobek odpovídá jmenovaným směrnici.
DA - Vi erklærer under ansvar at produktet i overensstemmelse med de retningslinjer
EN - We hereby declare, under our sole responsibility, that the product is in accordance with the specified Directives.
FI - Me vakuutamme omalla vastuullamme, että tuote täyttää ohjeita.
FR - Nous déclarons sous notre propre responsabilité que le produit répond aux directives.
HU - Kizárólagos felelősségünk tudatában kijelentjük, hogy ez a termék megfelel az Európai Unió fentnevezett irányelveinek.
IT - Noi dichiariamo sotto la nostra esclusiva responsabilità che il prodotto è conforme alle direttive citate
NL - Wij verklaren geheel onder eigen verantwoordelijkheid dat het product voldoet aan de gestelde richtlijnen.
PL - Z pełną odpowiedzialnością oświadczamy, że produkt odpowiada postanowieniom wymienionych dyrektyw.
RO - Declaram pe proprie răspundere că produsul corespunde normelor prevăzute de directivele mai sus menționate.
SK - Na výlučnú zodpovednosť vyhlasujeme, že výrobok spĺňa požiadavky uvedených smerníc.
SV - Vi försäkrar att produkten på vårt ansvar är utförd enligt gällande riktlinjer.

U2 KS (JP50025)

U2 KS (JP50026)

DE - Weitere normative Dokumente CS - Jinými normativními dokumenty DA - Andre normative dokumenter EN - Other normative documents FI - Muiden normien FR - Autres documents normatifs HU - Egyéb szabályozó dokumentumokban leírtaknak IT - Altri documenti normativi NL - Verdere normative documenten PL - Innymi dokumentami normatywnymi RO - Alte acte normative SK - Iným záväzným dokumentom SV - Vidare normerande dokument:

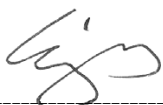
EN 60335-2-41:2003/A2:2010


EN 62233:2008/AC:2008


DE - Bevollmächtigter für technische Dokumentation CS - Oprávněná osoba pro technickou dokumentaci DA - Autoriseret person for teknisk dokumentation EN - Authorized person for technical documentation FI - Valtutettu henkilö tekninen dokumentaatio FR - Personne autorisée à la documentation technique HU - Hivatalos személyi műszaki dokumentáció IT - Persona abilitata per la documentazione tecnica NL - Bevoegd persoon voor technische documentatie PL - Pełnomocnik ds. dokumentacji technicznej RO - Persoană autorizată pentru documentație tehnică SK - Oprávněná osoba pre technickú dokumentáciu SV - Auktoriserad person för teknisk dokumentation:


JUNG PUMPEN - Stefan Sirges - Industriestr. 4-6 - 33803 Steinhagen


Steinhagen, 10-10-2018



Stefan Sirges, General Manager


i.V. Rüdiger Rokohl, Sales Manager

 <small>0197</small>	JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany <small>13</small> 401.14.1810	EN 12050-2:2001 Abwasserbeanlage für fäkalienfreies Abwasser DN 32	Sammeln und automatisches Heben von fäkalienfreiem Abwasser innerhalb und außerhalb von Gebäuden über die Rückstauebene
	U2 KS (JP50025)	U2 KS (JP50026)	
BRANDVERHALTEN NPD WASSERDICHTHEIT Bestanden WIRKSAMKEIT (HEBEWIRKUNG) - Förderung von Feststoffen - Rohranschlüsse - Lüftung - Mindestfließgeschwindigkeit - Freier Mindestdurchgang der Anlage - Mindestnutzsvolumen			
MECHANISCHE FESTIGKEIT - Tragfähigkeit und strukturelle Stabilität des Sammelbehälters für die Verwendung außerhalb von Gebäuden - Strukturelle Stabilität des Sammelbehälters für die Verwendung innerhalb von Gebäuden GERÄUSCHPEGEL ≤ 70 dB(A) DAUERHAFTIGKEIT - der Wasser- und Luftdichtheit - der Hebewirkung - der mechanischen Festigkeit GEFAHRLICHE SUBSTANZEN NPD			

 <small>0197</small>	JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany <small>13</small> 401.14.1810	EN 12050-2:2001 Lifting plant for faecal-free wastewater DN 32	Collecting and automatically lifting faecal-free waste water above the backflow level in buildings and sites
	U2 KS (JP50025)	U2 KS (JP50026)	
REACTION TO FIRE NPD WATERTIGHTNESS Pass EFFECTIVENESS (LIFTING EFFECT) - Pumping of solids - Pipe connections - Ventilation - Minimum flow velocity - Minimum free passage of the plant - Minimum useful volume MECHANICAL RESISTANCE - Load bearing capacity and structural stability of collection tank for use - Structural stability of collection tank for use inside buildings NOISE LEVEL ≤ 70 dB(A) DURABILITY - of structural stability - of lifting effectiveness - of mechanical resistance DANGEROUS SUBSTANCES NPD			

 <small>0197</small>	JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany <small>13</small> 401.14.1810	EN 12050-2:2001 Station de relevage pour effluents exempts de matières fécales DN 32	Collecte et relevage des eaux usées exemptes de matières fécales à l'intérieur et à l'extérieur des bâtiments au-dessus du niveau de refoulement
	U2 KS (JP50025)	U2 KS (JP50026)	
ÉTANCHÉITÉ À L'EAU NPD satisfaisant EFFICACITÉ (PERFORMANCE DE RELEVAGE) - Refoulement de matières solides - Raccords de tuyaux - Aération - Débit minimum - Passage libre minimal de l'installation - Volume utile minimal RESISTANCE MÉCANIQUE - Capacité de charge et stabilité structurale du collecteur pour une utilisation à l'extérieur des bâtiments - Stabilité structurelle du collecteur pour une utilisation à l'intérieur des bâtiments NIVEAU SONORE ≤ 70 dB(A) RESISTANCE - de la stabilité structurelle - de la performance de relevage - de la résistance mécanique SUBSTANCES DANGEREUSES NPD			

 <small>0197</small>	JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany <small>13</small> 401.14.1810	EN 12050-2:2001 Afvalwaterpompinstallatie voor afvalwater zonder fecaliën DN 32	Verzamelen en automatisch pompen van afvalwater zonder fecaliën binnen en buiten gebouwen boven het terugstuwniveau
	U2 KS (JP50025)	U2 KS (JP50026)	
Branddrag NPD Waterdichtheid succesvol RENDEMENT (POMPWERKING) - Transport van vaste stoffen - Buisaansluitingen - Verfluchtingsleidingen - Minimum doorstromingsnelheid - Minimum vrije doorgang van de installatie - Minimum nuttig volume MECHANISCHE VASTHEID - Draagkracht en structurele stabiliteit van de verzamelcontainer voor het gebruik buiten gebouwen - Structurele stabiliteit van de verzamelcontainer voor het gebruik binnen gebouwen GELUIDSNIVEAU ≤ 70 dB(A) DUURZAAMHEID - van de structurele stabiliteit - van de pompwerking - van de mechanische vastheid GEVAARLIJKE STOFFEN NPD			

CE 0197	
JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany 13 401.14.1810	
EN 12050-2:2001 Stazione di sollevamento per acque di scarico prive di sostanze fecali DN 32	
U2 KS (JP50025)	U2 KS (JP50026)
Raccolta e sollevamento automatico di acque reflue prive di sostanze fecali all'interno o all'esterno di edifici sopra il livello di ristagno	

INFIAMMABILITÀ	NPD
IMPERMEABILITÀ	Superata
EFFICACIA (CAPACITÀ DI SOLLEVAMENTO)	
- Pompaggio di materiali solidi	Superata
- Collegamenti al tubo	Superata
- Ventilazione	NPD
- Velocità di scorrimento minima	Superata
- Passaggio libero minimo dell'impianto	Superata
- Volume utile minimo	NPD
RESISTENZA MECCANICA	
- Capacità di carico e stabilità strutturale del serbatoio di raccolta per l'uso al di fuori degli edifici	NPD
- Stabilità strutturale del serbatoio di raccolta per l'uso all'interno degli edifici.	NPD
SOGLIA DI RUMOROSITÀ	≤ 70 dB(A)
DUREVOLEZZA	
- della stabilità strutturale	NPD
- della capacità di sollevamento	Superata
- della resistenza meccanica	NPD
SOSTANZE PERICOLOSE	NPD

CE 0197	
JUNG PUMPEN GmbH - Industriestr. 4-6 33803 Steinhagen, Germany 13 401.14.1810	
EN 12050-2:2001 Instalacja przepompowni ścieków dla ścieków fekalnych DN 32	
U2 KS (JP50025)	U2 KS (JP50026)
Zbieranie i automatyczne przepompowywanie ścieków fekalnych wewnątrz budynków i poza nimi powyżej poziomu cofki	

WŁAŚCIWOŚCI OGNIOWE	NPD
SZCZELNOŚĆ WODNA	Pozytywnie
SPRAWNOŚĆ (SKUTECZNOŚĆ TŁOCZENIA)	
- Tłoczenie substancji stałych	Pozytywnie
- Przyłącza rurowe	Pozytywnie
- Wentylacja	NPD
- Minimalna prędkość przepływu	Pozytywnie
- Minimalna, swobodna przepustowość instalacji	Pozytywnie
- Minimalna objętość użytkowa	NPD
WYTRZYMAŁOŚĆ MECHANICZNA	
- Nośność i stabilność konstrukcyjna zbiornika podczas stosowania poza budynkami	NPD
- Nośność i stabilność konstrukcyjna zbiornika podczas stosowania w budynkach	NPD
POZIOM HAŁASU	≤ 70 dB(A)
TRWAŁOŚĆ I WYTRZYMAŁOŚĆ	
- stabilność konstrukcyjna	NPD
- skuteczność tłoczenia	Pozytywnie
- wytrzymałość mechaniczna	NPD
SUBSTANCJE NIEBEZPIECZNE	NPD



**PUMP TECHNICAL
SERVICES LIMITED**

