

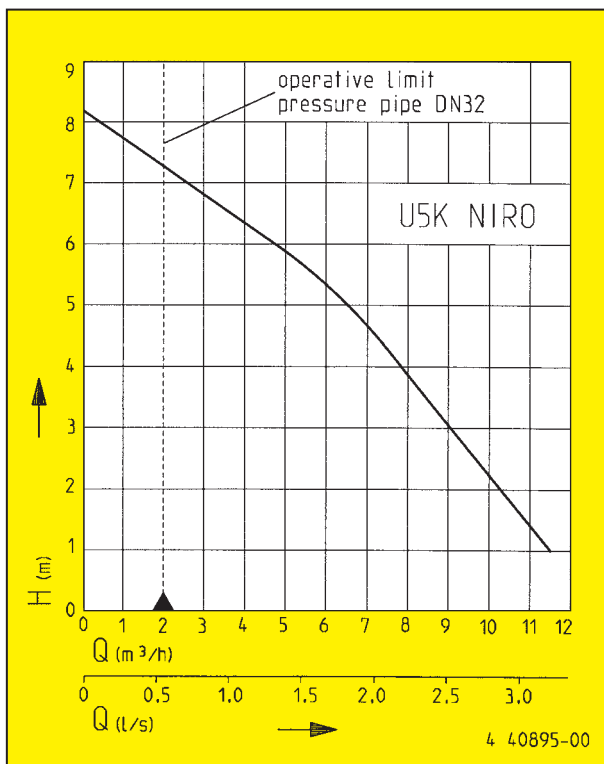
## Application

The U 5 K(S) Niro is an extremely versatile submersible pump for stationary and portable use. It can handle effluent of up to 10 mm particle size. Thanks to the removable strainer base, it is possible to increase free passage to 20 mm. Stationary in a basement chamber or a collecting tank, with an automatic switch attached, the U 5 KS handles all dirty water arising from domestic drainage sources such as washing machines, dishwashers, washstands, etc. Deposit accumulation in the reservoirs and chambers is reduced to a minimum by means of a flushing device. The guide rail system GR 32 offers all the advantages of fast and easy maintenance. The U 5 K can be used as a portable unit for dealing with dirty water from garden ponds, flooded cellars or discharge chambers in laundry rooms or storage rooms. Thanks to its shallow, built-in suction system, it can reduce residual water level to no more than a few millimetres. If submersible pumps are used outdoors, only a pump with a 10 m cable, without an extension cable, may be used in accordance with VDE Regulation 0100. For construction sites and garden ponds, an H07-type cable must be used.



U 5 KS Niro with built-in level control

The minimum flow velocity in the pressure piping must be 0,7 m/s according to EN 12056. This data is represented in the Q/H performance curve as a limit of application.



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 tolerances.

- ▶ Built-in level control
- ▶ Variable discharge branch
- ▶ Safe to run dry
- ▶ Continuous operation
- ▶ Low level pumping
- ▶ Flushing device
- ▶ 10/20 mm free passage with EIP-technique
- ▶ Integrated swing-type check valve for portable use
- ▶ Moisture sealed cable inlet



## Submersible sump pumps

Type	Max. Height x Width x Depth	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 5 K NIRO without bend	280 x 168 x 250 mm	1 1/4"	20 mm	H05RN-F-3G0,75	10 m	4,7 kg	<b>09386</b>
with bend	280 x 168 x 190 mm						
<b>Pumps with built-in level control</b>							
U 5 KS NIRO	280 x 168 x 290 mm	1 1/4"	20 mm	H05RN-F-3G0,75	3 m	4,5 kg	<b>09387</b>
(acc. to VDE, not to be used outdoors)							
U 5 KS NIRO	280 x 168 x 290 mm	1 1/4"	20 mm	H05RN-F-3G1,00	10 m	5,4 kg	<b>09417</b>

## Performance

Type	Delivery head H [m]	1	2	3	4	5	6	7
U 5 KS NIRO	Flow rate Q [m <sup>3</sup> /h]	11	10,5	9	7,5	6,5	4,5	2,5

## Electrical data

Type	Type of current	Voltage Volt	Motor rating kW P <sub>1</sub> P <sub>2</sub>	RPM min <sup>-1</sup>	F.L.C. Amp.	Motorprotection	Plug
U 5 KS NIRO	1-phase	1/N/PE~230	0,52 0,38	2716	2,3	incorporated	safety-

### Single pump installation with GR

Single unit with built-in level control  
 Sump area **with GR 32** min. 40 x 50 cm  
 Sump area **without GR** min. 40 x 40 cm (without illustration)  
 When using a cover panel, a ventilation facility must be provided.

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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 a EN 12050-4-proofed swing-type check valve. Additionally we recommend an alarm system.

### Duplex pump installation

Duplex unit with control unit  
 Sump area **with GR 32** min. 50 x 50 cm (without illustration)  
 Sump area **without GR** min. 50 x 50 cm  
 Suspend control unit in a dry room.

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↑ Notice of min. distance !

In accordance with DIN EN 12056-4 Abs. 5.1, it has a built-in automatic spare pump or a double attachment included, which ensures that sewage drainage is not interrupted.



## Technical data

### Pump

Vertical, single-stage, submersible shaft encapsulated, foot strainer with 10 mm free passage – detachable for activating low level pumping, volute casing with 1 1/4" (male) radial pressure branch and integrated swing-type check valve, annular case 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 reservoir.

### 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.

### Materials

Motor housing, shaft and screws in stainless steel, volute casing, impeller and control head in plastic (GRP), rubber insulated foul water resistant flexible cable.

### Installation

Install pump vertically (hose connection possible); if installed permanently, provide detachable connection, e.g. 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. The pump is delivered fitted with a sieve foot which can be swapped for any of the accompanying base feet in cases where a 20 mm clear passage is required.

