Submersible sump pumps U 3 K NIRO

Application

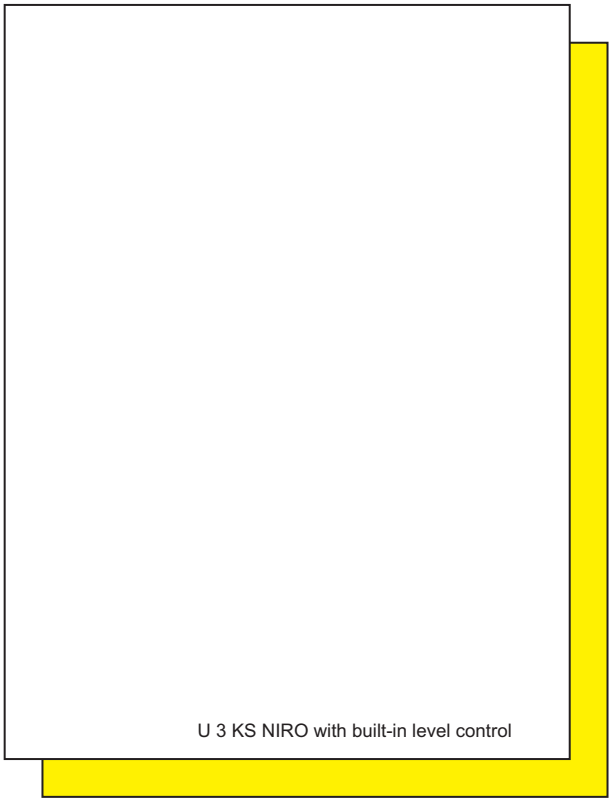
The U 3 K (S) NIRO is an extremely versatile submersible pump for stationary and portable use. EIP technology for safer operation, integrated flushing device for reducing deposits and integrated low level pumping for preventing flooding are only a few of the innovative features that set this pump apart.

The pump removes rain water, lightly polluted water and domestic waste water from household dishwashers and washing machines (also high temperature), but not urinal or lavatory effluent.

In stationary use the U 3 KS 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.

For mildly aggressive media such as brackish water, condensate from condensing boilers, liquid manure etc the U 3 K 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.

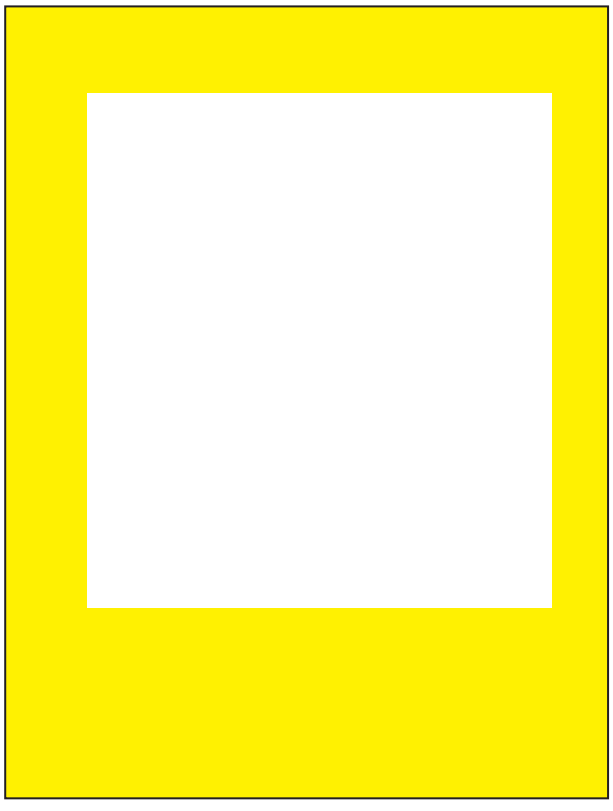


U 3 KS NIRO with built-in level control

- Built-in level control
- Variable discharge branch
- Safe to run dry
- Continuous operation
- Low level pumping
- Flushing device

- EIP-Technique
- Integrated swing-type check valve for portable use
- Moisture sealed cable inlet

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.



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

Submersible sump pumps

Type	Height x Width (max.)	Discharge branch	Free passage	Cable quality	Cable length	Weight	Code No.
Pump without level control							
U 3 K NIRO without bend	255 x 170 mm	1 1/4“	10 mm	H05RN-F-3G0,75	10 m	3,7 kg	205
U 3 K NIRO with bend	255 x 225 mm						
Pump with built-in level control							
U 3 KS NIRO	255 x 275 mm	1 1/4“	10 mm	H05RN-F-3G0,75	3 m	3,4 kg	206
U 3 KS NIRO	255 x 275 mm	1 1/4“	10 mm	H07RN-F-3G1,0	10 m	4,3 kg	9808

Performance

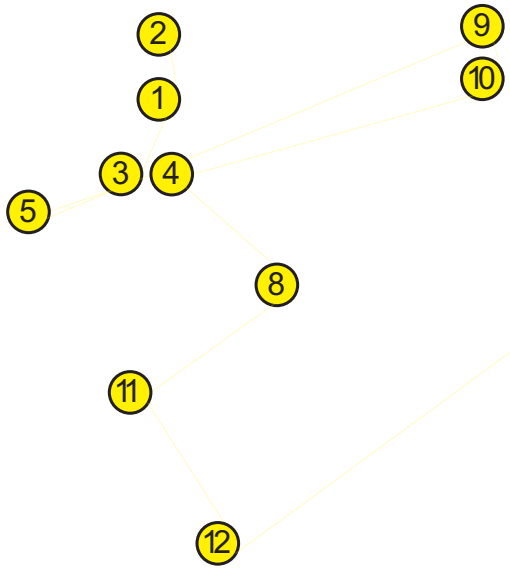
Type	Delivery head H [m]	1	2	3	4	5	6
U 3 K NIRO	Flow rate Q [m^3/h]	6,5	5,5	5,0	4,0	3,0	1,5

Electrical data

Type	Type of current	Voltage Volt	Motor rating kW P_1	P_2	RPM min^{-1}	F.L.C. Amp.	Motorprotection	Plug
U 3 K NIRO	1-phase	1N~230	0,32	0,20	2720	1,4	incorporated	safety-

Single pump installation with GR

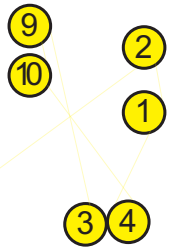
Single unit with built-in level control
Sump area with GR 32 min. 40 x 50 cm
Sump area without GR min. 40 x 40 cm (without illustration)
When using a cover panel, a ventilation facility must be provided.



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



Accessories

		Code No.	U 3 K NIRO	U 3 KS NIRO
1	Swing-type check valve 1 1/4“ (DN 32), PN 4 EN 12050-4 H 90 B 90 D 1 1/4“	9739	●	●
	Double swing-type check valve 1 1/2“ (DN 40), PN 4 for double pump station EN 12050-4 H 200 B 280 D 1 1/2“	9155	●	
2	Stop valve 1 1/4“ (DN 32), PN 16 H 110 L max. 60 D 1 1/4“	11836	●	●
	1 1/2“ (DN 40), PN 16 H 125 L max. 60 D 1 1/2“	11837	●	
3	Elastic connection 1 1/4“ (DN 32), PN 3 H 100 D 42	14329	●	●
4	Hose band clamp 1 1/4“	3573	●	●
5	Cover plate* c/w frame, seal and pipe conduct LW 420	1255	●	●
	Blind plate* c/w frame and seal LW 420	322	●	●
6	Hose coupling 1 1/4“ (DN 32), brass, for portable use	327	●	●
7	Flexible hose 1 1/4“ (DN 32), PVC, red, per m, for portable use	334	●	●
8	Alarm system with submersible ball contact switch with 3 m cable, separate mainsdependent, with potential free contact	16723	●	●
	Alarm system ditto. with 9,5 m cable	24434	●	●
	Alarm system for washing-machines AW 3 with submersible ball contact switch with 3 m cable, seperate, mainsdependent	25090	●	●
	Alarm system for washing-machines AW 10 ditto, with 9,5 m cable	25091	●	●
9	Separate level controlfor single unit			
	NE1 with subm. ball contact switch 3,0 m	16710	●	
	NE2 with subm. ball contact switch 9,5 m	16711	●	
	NE 1A with subm. ball contact switch 3,0 mand alarm system	16714	●	
	NE2A with subm. ball contact switch 9,5 mand alarm system	16715	●	
	Counterweight (1 piece)	17541	●	
	Duplex control unit			
	BD 00E	482	●	
	Subm. switch pack B with 3 subm. ball contact switches with 9,5 m cable and fixing devices	16725	●	
	Subm. switch pack BmG with 3 subm. ball contact switches with 9,5 m cable and counterweight	16726	●	
10	Rechargeable batteryfor off the line operation of the alarm system	7562	●	●
11	Special float for low switching points (Switching hight without GR ON 105 mm, OFF 45 mm; switching hight with GR 32 ON 140 mm, OFF 75 mm)	17424		●
12	Guide rail system GR 32	9277	●	●
	Support for guide rail extension ex 2 m sump depth, per m 1 piece	28314	●	●

* only for single units

Technical data

Pump
Vertical, single-stage, submersible, foot strainer with 10 mm free passage – detachable for activating the low level pumping, volute casing with 1¼“ (male) radial pressure branch, 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 grease lubricated for life

Seal
Shaft sealing (3-times) by means of shaft sealing rings and intermediate oil chamber, safe to run dry

Motor
Submersible motor, type of enclosure IP 68, insulation class B, motor thermostat for emergency switch-off on over-heating 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 flexible cable

Installation
Install pump vertically (hose connection possible), if installed permanently, provide detachable connection, eg guide rail system GR 32

Scope of supply
Pump ready for connection acc. to EN 12050 with 90°, 1¼“ female connection elbow, cable and plug, S model with automatic level float switch

Dimensions (mm) U 3 K NIRO

Dimensions (mm) GR 32

