

## US 73-US 253

### PONORNÁ KALOVÁ ČERPADLA

- pevné příměsi do 30 mm (US 73-153)
- pevné příměsi do 40 mm (US 253)
- Ochrana proti chodu nasucho
- Olejová komora
- SiC mechanická ucpávka nezávislá na smyslu otáčení
- Vyměnitelné těsnění přívodu kabelu



#### POPIS

Odstředivá ponorná drenážní čerpadla US 73-253 jsou vhodná pro nakládání se znečištěnou vodou a jsou schopna (bez kamenů) čerpat kapalinu s pevnými látkami do velikosti částic 30 a 40 mm. S touto řadou čerpadel lze manipulovat s vláknitými odpadními vodami v prádelnách nebo průmyslových myčkách a odpadními vodami z domácích myček a praček. Pro horkou vodu na průmyslovém a komerčním trhu doporučujeme US 73 a US 103 HE / HES.

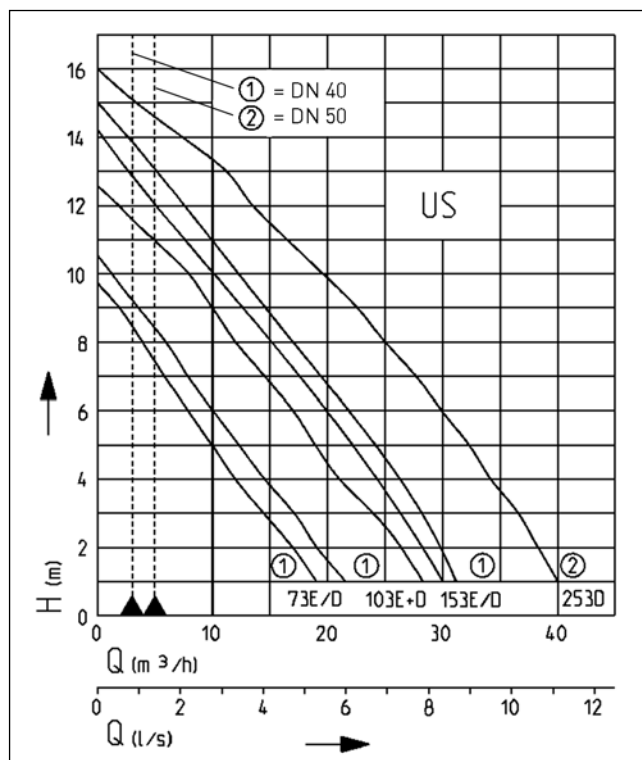
Tato řada čerpadel je vhodná pro stacionární použití. Pro snadné vyjmutí čerpadel z hlubokých jímek doporučujeme použít systémy vodicích kolejnic, které zajišťují snadnou údržbu a kontrolu.

Pro automatické monitorování olejové komory lze připojit kontrolu těsnosti.

Délka kabelu je 10 m. 3fázová čerpadla s vestavěným řízením hladiny (US 153 DS a US 253 DS) mají zástrčku CEE s fázovým měničem.

Odpadní čerpadla jsou testována Německým institutem pro stavební inženýrství a odpovídají platným konstrukčním a zkušebními zásadám.

#### VÝKONOVÉ KŘIVKY



Typ	Dopravní výška H [m]	1	2	3	4	5	6	7	8	9	10	11	12	13	14
US 73 E/ES	Průtok Q [m³/h]	19	17	15	12	10	8	6	4	2					
US 73 D/DS		22	20	17	15	12	10	8	6	4					
US 103 E/D/ES/DS		28	26	23	21	19	17	15	12	10	8	5	2		
US 153 E/ES		30	29	27	24	22	20	18	15	13	11	8	6	3	1
US 153 D/DS		31	30	28	26	23	21	19	17	14	12	10	8	5	3
US 253 D/DS		40	38	36	34	32	30	28	25	23	20	17	14	10	7

Vyhraujeme si právo na změnu specifikací bez předchozího upozornění. Výkon čerpadla podléhá tolerancím ISO 9906. Minimální rychlost proudění v tlakovém potrubí musí být podle EN 12056 0,7 m / s. Tyto údaje jsou ve výkonové křivce představovány jako mez použití.



# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

### SCOPE OF SUPPLY

Pump according to DIN EN 12050 ready for connection with 10 m cable. US 73 and US 103 with safety plug (1-phase) or CEE-Plug (3-phase).

US 153 and 253: Pumps without level control with free lead end. Pump with level control with CEE-motor protective plug and phase inverter (3-phase) or safety-plug (1-phase).

### MECHANICAL DATA

Pump	Vertical single-stage	Shaft	Stainless steel
Bearing	Ball bearings, grease-lubricated	Impeller	Vortex impeller, GFK
Seal on motor side	Duplex rotary shaft seals	Motor housing	Edelstahl (253: Grauguss)
Oil chamber	Yes	Pump housing	Grey cast iron
Seal on medium side	SiC mechanical seal	Submersible	Yes
Run dry protection	Yes	Pressure outlet	IG 1 1/2" (US253: 2")

### ELECTRICAL DATA

Power line	10m H07RN-F	Insulation class	B (253:F)
Type of enclosure	IP 68	Winding thermostat	Yes

### US 73-US 253

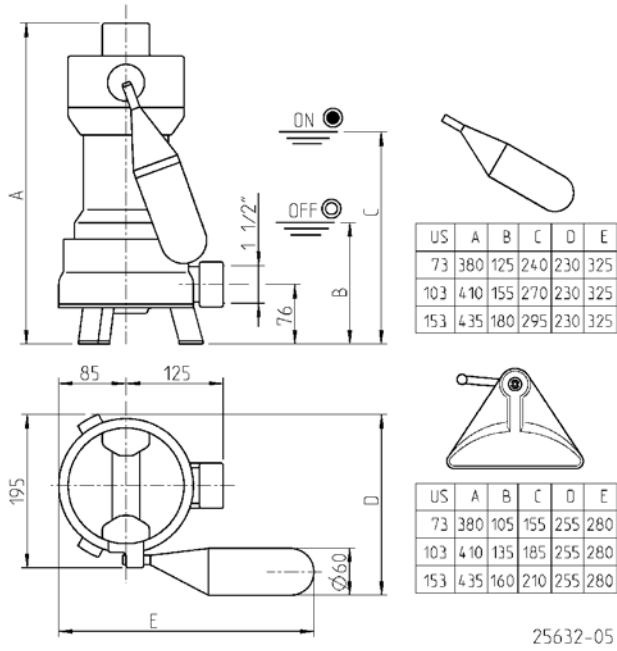
Type	Code No.	Voltage	Motor rating		Current	Wires	Motor protection	Plug	Free passage	Weight
			P1	P2						
<b>Without level control</b>										
US 73 E	<b>JP00676</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	30 mm	12.5 kg
US 73 D	<b>JP00677</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	30 mm	12.5 kg
US 103 E	<b>JP09280</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	30 mm	14.0 kg
US 103 D	<b>JP09258</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	30 mm	14.5 kg
US 153 E	<b>JP09311</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	on request <sup>1</sup>	Without	30 mm	14.5 kg
US 153 D	<b>JP09302</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	on request <sup>1</sup>	Without	30 mm	15.0 kg
<b>With built-in level control</b>										
US 73 ES	<b>JP00678</b>	1/N/PE~230 V	0.83 kW	0.50 kW	3.9 A	3G1,0	Integrated	Safety	30 mm	12.5 kg
US 73 DS	<b>JP00679</b>	3/PE~400 V	0.85 kW	0.60 kW	1.4 A	4G1,0	Integrated	CEE	30 mm	13.0 kg
US 103 ES	<b>JP09281</b>	1/N/PE~230 V	1.37 kW	0.98 kW	6.0 A	3G1,0	Integrated	Safety	30 mm	14.0 kg
US 103 DS	<b>JP09259</b>	3/PE~400 V	1.36 kW	1.06 kW	2.4 A	4G1,0	Integrated	CEE	30 mm	15.0 kg
US 153 ES	<b>JP09247</b>	1/N/PE~230 V	1.60 kW	1.21 kW	7.5 A	3G1,0	Integrated	Safety	30 mm	16.0 kg
US 153 DS	<b>JP09249</b>	3/PE~400 V	1.70 kW	1.41 kW	3.1 A	4G1,0	Integrated	CEE	30 mm	17.0 kg
<b>Without level control</b>										
US 253 D	<b>JP09303</b>	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	on request <sup>1</sup>	Without	40 mm	26.5 kg
<b>With built-in level control</b>										
US 253 DS	<b>JP09251</b>	3/N/PE~400 V	2.60 kW	2.10 kW	4.4 A	6G1,5	Integrated	CEE	40 mm	28.0 kg

<sup>1</sup>Protective motor plug necessary see accessory

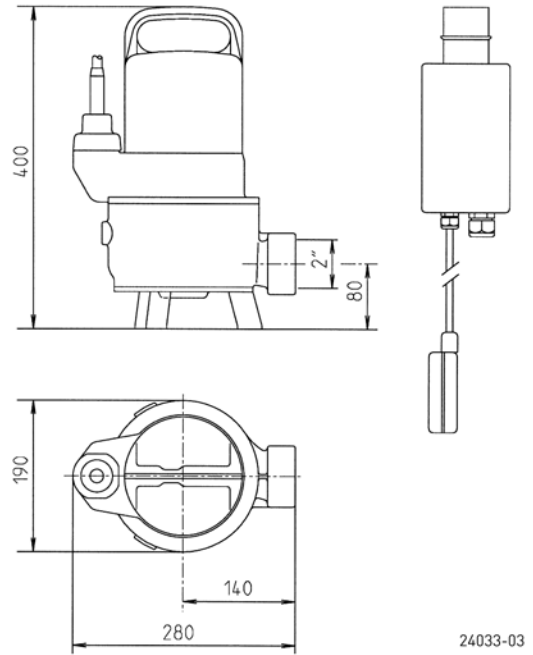
# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

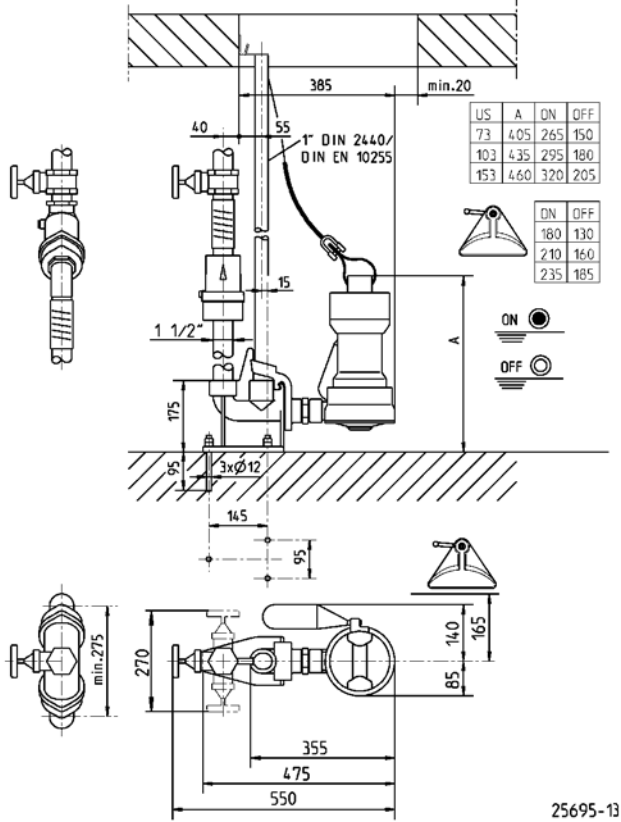
### Dimensions and switching points US 73, US 103, US 153 (mm)



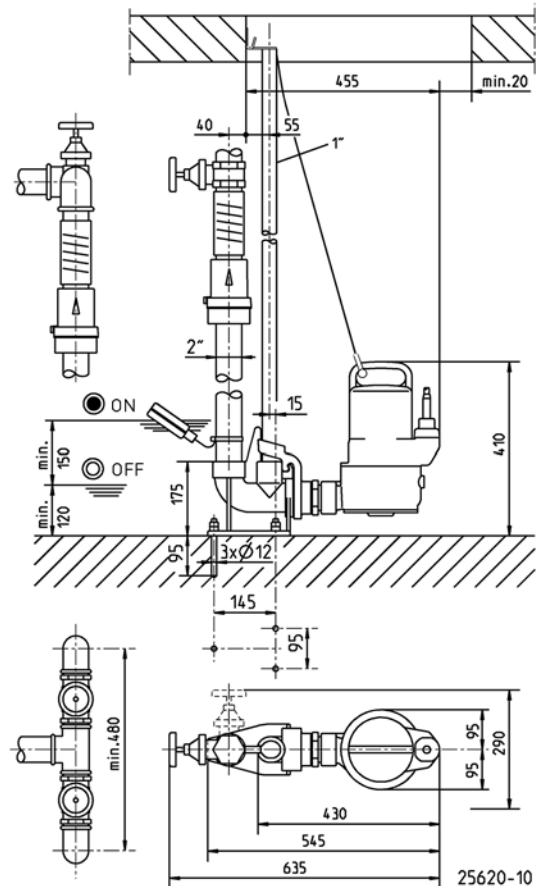
### Dimensions US 253 (mm)



### Dimensions and switching points with GR 40 (mm)



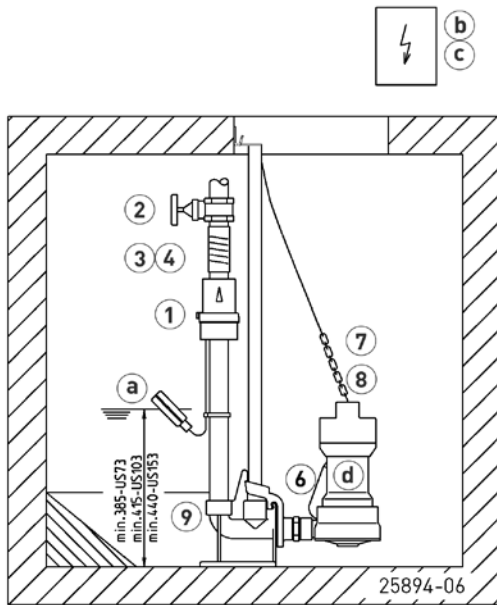
### Dimensions with GR 50 (mm)



# US 73-US 253

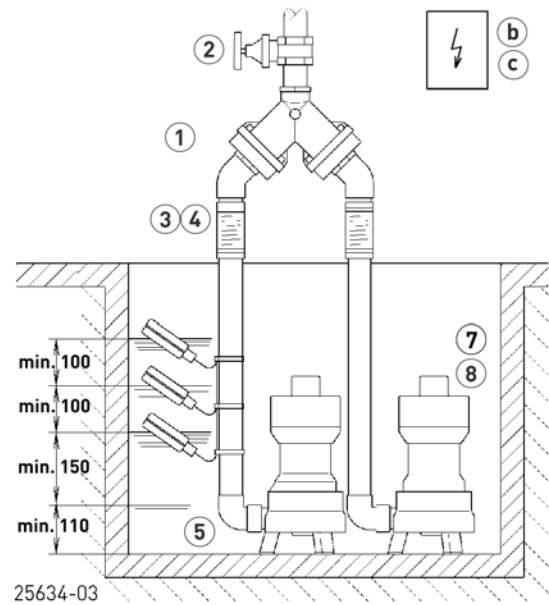
## SUBMERSIBLE DRAINAGE PUMPS

Example of single pump station with GR



Single unit 1½" with GR 40: sump area min. 40x60 cm  
 Single unit 1½" without GR: sump area min. 40x40 cm  
 Single unit 2" with GR 50 S: sump area min. 40x65 cm  
 Single unit 2" without GR: sump area min. 40x50 cm  
 Duplex unit 1½" with GR 40: sump area min. 60x60 cm  
 Duplex unit 1½" without GR: sump area min. 40x60 cm  
 Duplex unit 2" with GR 50: sump area min. 70x70 cm

Example of duplex pump station



Duplex unit 2" without GR: sump area min. 50x70 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




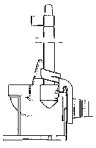
### MECHANICAL ACCESSORY

					Code No.
	<b>① Swing-type check valve</b>	R40 EN 12050-4	1½" (DN 40), PN 4	150x120 (HxB)	JP00317
		DR 40 EN 12050-4	1½" (DN 40), PN 4	200x280 (HxB)	JP09155
		R50 EN 12050-4	2" (DN 50), PN 4	150x120 (HxB)	JP00326
	<b>Ball-type check valve</b>	KE40 EN 12050-4	1½" (DN 40), PN 6	170x125 (HxB)	JP47974
		K50 EN 12050-4	2" (DN 50), PN 6	185x155 (HxB)	JP44782
			<b>② Stop valve</b>	brass, 1½" (DN 40), PN 16	
brass, 2" (DN 50), PN 16				140x70 (HxB)	JP44787
	<b>③ Elastic connection</b>		1½" (DN 40), PN 4	120x50 (HxD)	JP44777
			2" (DN 50), PN 4	150x63 (HxD)	JP44775
	<b>④ Hose band clamp</b>		1½"		JP44763
			2"		JP44764

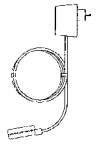
# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

### MECHANICAL ACCESSORY

			Code No.	
	⑤ Elbow	1½"	JP45953	
		2"	JP44771	
	⑥ Special float	for lower switching points	JP44795	
	⑦ Chain	certified, 2.5 m, 320 kg, 5 rings (EN 818 mod.)	JP45901	
		certified, 5.0 m, 320 kg, 8 rings (EN 818 mod.)	JP45902	
		certified, 7.5 m, 320 kg, 11 rings (EN 818 mod.)	JP47365	
	⑧ Webbing	with shackle	JP45168	
	⑨ Guide rail system	GR 40	JP25592	
		GR 50	JP25593	
		Guide rail 1"	1500 mm	JP48937
		Guide rail 1"	2000 mm	JP48938
		Guide rail 1"	2500 mm	JP48939
		Guide rail 1"	3000 mm	JP48940

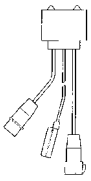







### ELECTRICAL ACCESSORY

			Code No.	
	a Alarm unit	AG3	subm. ball contact switch, mains dependent, potential-free contact, 3 m cable	JP44891
		AG10	subm. ball contact switch, mains dependent, potential-free contact, 9,5 m cable	JP44892
		<b>Washing machine stop</b>		
		AW3	subm. ball contact switch, mains dependent, 3 m cable	JP44895
		AW0	for alarm forwarding in case of several washing machines	JP44899

# US 73-US 253

## SUBMERSIBLE DRAINAGE PUMPS

### ELECTRICAL ACCESSORY

			Code No.
	<b>b Control for single units</b>		
	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
	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
	Control unit ND 1	400 V, subm. ball contact switch 3.0 m	JP16712
	Control unit ND 1A	400 V, subm. ball contact switch 3.0 m, alarm	JP16716
	Control unit ND 3	400 V, subm. ball contact switch 9.5 m	JP16713
	Control unit ND 3A	400 V, subm. ball contact switch 9.5 m, alarm	JP16717
		<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	JP45735
Control unit HIGHLOGO 2-00 E		230 V	JP47996
Control unit BD 00		400 V, for pumps U6, US 62-105, UV 300	JP45993
Control unit HIGHLOGO 2-00		400 V	JP47997
Control unit BD 25		400 V, for pumps US 151-155	JP45737
Control unit HIGHLOGO 2-25		400 V	JP47998
Control unit BD 46		400 V, for pumps US 251-253, UV 620-3, UV 625-3	JP45739
Control unit HIGHLOGO 2-46	400 V	JP47999	
	<b>Level control</b>		
	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 to stabilize the subm. ball contact switch	JP16726
	Weight		JP44803
	<b>Protective motor plug</b>		
	Protective motor plug, 8 A	230 V, for pumps without integrated motor protection	JP44753
	CEE motor protection 2,5-4,0 A	400 V, mandatory for pumps without integrated motor protection	JP44754
	CEE motor protection 4,0-6,0 A	400 V, mandatory for pumps without integrated motor protection	JP44751
	<b>c Rechargeable battery</b>	for mains independent alarm	JP44850
	<b>d Seal leak detector</b>	DKG	JP44900
	<b>e Smart Home</b>	FTJP radio transmitter	JP47209