

# MULTICUT SEWAGE CUTTER PUMP

- External adjustable cutting mechanism
- Cutting system of hardened stainless steel
- Reliable solids transport due to improved cutting technology
- Controllable oil chamber
- SiC mechanical seal
- Moisture-sealed cable inlet with plug-in cable connection
- Installed motor protection



### DESCRIPTION

Centrifugal submersible sewage pumps fitted with the MultiCut cutting system are used as stationary appliances in pressurized drainage systems for discharge in sparsely populated areas or of detached houses. They are suitable for pumping domestic wastewater with the usual additions (as specified in German standard DIN 1986, Part 3).

On account of the upstream cutting system, the pressurised line as from DN 32 - as from DN 80 minimum without cutting system - may be routed parallel to the terrain.

Operating conditions up to a temperature of the material to be transported of  $40^\circ\,\text{Celsius}$ 

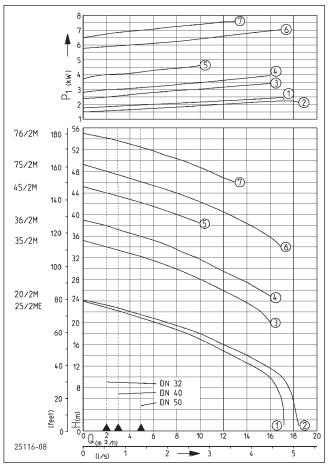
Submerged motor: Continuous operation (S1)

Emerged motor: Intermittent operation (S3)(e.g. 20% = 2 min. operation, 8 min. break)

The unique MultiCut cutting system ensures a maximum of operational safety at outstanding delivery characteristics. Fitted with a cutter plate made of hardened stainless steel and a three bladed knife, it disintegrates coarse additions in the wastewater with more than 200,000 cutting processes per minute before they can enter the pump hydraulics. Solids which cannot be transported are rejected outside of the pump by the cutting rotor as the cutting system is located upstream from the pump hydraulics. Specifically arranged grooves on the cutter plate ensure additional safety as the cutting unit is permanently cleaned automatically during the delivery.

MultiCut sewage pumps are recommended for: wastewater containing solids and fibrous matter / wastewater containing sewage / domestic wastewater without sewage / mechanically cleaned wastewater.

## PERFORMANCE



	Туре	Delivery head H [ m ]	6	9	12	15	18	21	25	28	32	34	36	38	40	44	46	48	50	52	54
2	20/2 M plus	Flow rate Q[m³/h]	18	17	16	13	10	6													
1	25/2 ME		17	16	15	12	9	5													
3	35/2 M							16	13	10	5										
4	36/2 M								16	14	10	7	5	2							
5	45/2 M													10	8	2					
6	75/2 M											17	16	15	13	8	5	2			
(7)	76/2 M																13	11	9	6	3

Specifications can be changed without notice. Performance subject to ISO 9906 tolerances. This data is represented in the performance curve as a limit of application.

#### SCOPE OF SUPPLY

Sewage pump without explosion-proof with 10 m cable, without plug, without base.

#### **MECHANICAL DATA**

Pump	Vertical single-stage
Free passage	7 mm
Bearing	Ball bearings, grease-lubricated
Seal on motor side	Duplex shaft seal, from 75/2M: mechanical seal
Oil chamber	Yes
Seal on medium side	SiC mechanical seal

Run dry protection	Yes
Impeller	Vortex impeller, grey cast iron 20/2 M: GFK
Motor housing	Grey cast iron
Pump housing	Grey cast iron
Submersible	Yes
Pressure outlet	DN 32
Cutter assembly	Hardened stainless steel

#### **ELECTRICAL DATA**

Power line	10m H07RN-F
Type of enclosure	IP 68
Insulation class	F

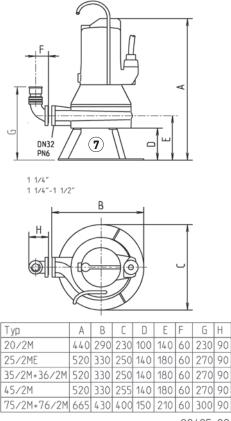
Winding thermostat	Yes
Motor protection	Thermostat

#### MULTICUT

-	Code No.				_	07						
Туре	Code No.	Voltage	P1	P2	Current	Wires	Fuse	S3	Weight			
Without level c	Without level control											
20/2 M plus	JP50350	3/PE~400 V	2.40 kW	1.91 kW	4.0 A	6G1,5	10 A	25 %	29.0 kg			
25/2 ME*	JP50356*	1/N/PE~230 V	2.70 kW	2.04 kW	12.0 A	6G1,5	16 A	35 %	38.0 kg			
35/2 M	JP50357	3/PE~400 V	3.70 kW	3.04 kW	6.6 A	6G1,5	10 A	40 %	40.5 kg			
36/2 M	JP50363	3/PE~400 V	4.20 kW	3.42 kW	7.3 A	6G1,5	10 A	30 %	40.5 kg			
45/2 M	JP50369	3/PE~400 V	4.84 kW	3.93 kW	7.9 A	6G1,5	10 A	25 %	42.0 kg			
75/2 M	JP50375	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg			
76/2 M	JP50377	3/PE~400/690 V	7.70 kW	6.60 kW	13.2 A/7.7 A	10G2,5	20 A	30 %	90.0 kg			
*25/2 ME requir	es controller w	ith built in capacitor	to operate. Co	ontroller mo	del: PPC-1502	5-D						

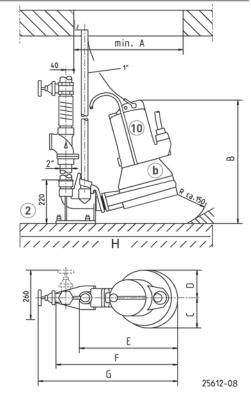
Туре	Code	Stocked
<b>2</b> 20/2 M plus	JP50350	AU
1 25/2 ME*	JP50356*	AU
<b>3</b> 35/2 M	JP50357	AU
<b>4</b> 36/2 M	JP50363	AU
<b>5</b> 45/2 M	JP50369	AU
6 75/2 M	JP50375	AU
<b>7</b> 76/2 M	JP50377	AU

#### Dimensions pump base (mm)



22625-09

#### Example of guide rail installation (mm)



	Α	В	C	D	Ε	F	G	Н	min.
20/2M plus	430	450	110	110	380	500	585	400 x	700mm
25/2ME-36/2M	470	490	125	125	420	540	635	400 x	700mm
45/2M	470	490	130	125	420	540	635	400 x	700mm
75/2M+76/2M	545	625	155	140	500	615	705	400 x	800mm

				Code No.
	(2) Guide rail system GR 35	11/2″ female t	hread for MultiCut pumps	JP14094
<u>_/[</u> ]	(7) Pump base	M M 220	20/2M 25/2ME - 45/2M 75/2M - 76/2M	JP44759 JP20980 JP22302
	<b>9</b> Pipe connection	1 1/4″ (female	thread)	JP16870
	(10) Flushing tube	Туре О	08 Ex, 20/2	JP45408
		Type I	10/ 45/	JP28221
E		Type II	55/ 100/	JP28222

#### MECHANICAL ACCESSORY

#### PUMP CONTROLLER

Туре	Code no.	Single pump controller	Dual pump controller	Float switch 10 m	Float switch 15 m	Float switch 20m	Float switch 30 m	Float switch 40 m
Without level	control							
20/2 M plus	JP50350	PPC-15006-B	PPC-30030-A					
25/2 ME*	JP50356*	PPC-15025-D	NA					
35/2 M	JP50357	PPC-15006-C	PPC-30030-C					
36/2 M	JP50363	PPC-15006-C	PPC-30030-C	FSW-10M	FSW-15M	FSW-20M	FSW-30M	FSW-40M
45/2 M	JP50369	PPC-15006-C	PPC-30030-C					
75/2 M	JP50375	PPC-15006-D	PPC-30030-D					
76/2 M	JP50377	PPC-15006-D	PPC-30030-D					