

Lifting Station Type ABS Synconta 801

Synthetic prefabricated sump, designed as a single pumping station for the automatic pumping of wastewater and sewage from locations and areas below the backwash level in accordance with EN 12050-1. Designed as a complete wastewater sump for below-ground installation and for fitting with pumps from the Piranha and AS ranges.

Construction

- Installed with a plastic or concrete lid, outside the building in open ground. Synconta is suitable for installations according to EN 124; Group 1 permissible traffic tonnage 5 kN/m².
 Maximum permissible outside pressure 0.2 bar.
- Stainless steel discharge pipe with external thread (1¼" for DN 32 tank, 2" for DN 50). 1¼" or 2" to 63 mm plastic pipe coupling is available as an accessory.
- Synconta DN 32 for one Piranha pump.
- Synconta DN 50 for one AS pump.
- Four inflow ports (1 x DN 100, 3 x DN 150) for DIN push-on connection. One port DN 70 for venting and use as a cable duct.
- Simple pump installation and maintenance, it is not necessary
 to enter the sump. With self-sealing coupling system the
 pump seals itself automatically when lowered by guide rail into
 position on the pedestal.
- Pump control by automatic level control system.
- Maximum allowable temperature of medium 40 °C, short term to 60 °C (max. 5 minutes).

Motor

Water pressure sealed, squirrel cage 2-pole induction motor with double shaft seals and oil chamber.

Insulation: Class F to 155 °C. Protection type: IP68.

Pump types

- Submersible wastewater pump type ABS AS. With Contrablock or vortex hydraulics for pumping clear water, wastewater and sewage with large solid particles present. Up to 40 mm solids passage.
- Submersible grinder pump type ABS Piranha. Shredding system hydraulics which can cut and pump wastewater containing solids through small diameter discharge lines from 1¼".



Tank

Synthetic, corrosion-resistant tank in accordance with EN 12050-1. Supplied as standard with plastic lid, pedestal and installation kit including ball type non-return valve and shut-off valve. Pump and level control not included.

Capacity: 460 liters (760 with extension and riser).

Weight *: 65 kg (DN 32). 72 kg (DN 50).

Materials

Tank		Polyethylene		
	Motor housing	Cast iron EN-GJL-250		
AS	Rotor shaft	Stainless steel 1.4021 (AISI 420)		
	Volute	Cast iron EN-GJL-250		
	Impeller, Bottom plate	Cast iron EN-GJL-250		
	Fasteners	Stainless steel 1.4401 (AISI 316)		
Piranha	Upper lid *	Stainless steel 1.4301 (AISI 304)		
	Motor housing	Cast iron EN-GJL-250		
	Rotor shaft	Stainless steel 1.4021 (AISI 420)		
	Volute	Cast iron EN-GJL-250		
	Impeller **	Cast iron EN-GJL-250		
	Fasteners	Stainless steel 1.4401 (AISI 316)		

^{*} Piranha 08/09

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^{*} Includes installation pipework but not weight of pump.

^{**} Polyamide for Piranha 08

Technical data

Pump type:	Piranha	Piranha	Piranha	Piranha		
Std. (no Ex)	08 W/KS	08 D/KS	09 W/KS	09 D/KS	_	
Pump discharge internal thread	G 1¼"	G 1¼"	G 1¼"	G 1¼"		
Hydraulics	Macerator	Macerator	Macerator	Macerator	_	
Solids passage (mm)	n.a. ⁽¹	n.a. ⁽¹	n.a. ⁽¹	n.a. ⁽¹	-	
Motor power * (kW): P, P ₂	1.41 1.00	1.34 1.00	2.56 1.84	2.56 2.00	-	
Rated current (A)	6.41	2.71	11.6	4.64	_	
Rated voltage (V)	220-240 1~	400 3~	220-240 1~	400 3~	_	
Speed (r/min)	2900	2900	2900	2900		
Cable ** (HO7RN-F)	3G 1.0	4G 1.0	3G 1.0	4G 1.0	-	
Pump weight (kg)	18	18	23	23	_	
Pump type: Std. & Ex	Piranha S12/2 W	Piranha S12/2 D	Piranha S17/2 W	Piranha S17/2 D	Piranha S21/2 D	Piranha S 26/2D
Pump discharge internal thread	G 1¼"					
Hydraulics	Macerator	Macerator	Macerator	Macerator	Macerator	Macerator
Solids passage (mm)	n.a. ⁽¹					
Motor power * (kW): P,	1.77 1.20	1.69 1.20	2.36 1.65	2.31 1.70	2.79 2.10	3.43 2.60
Rated current (A)	8.22	3.29	10.60	3.97	4.75	5.64
Rated voltage (V)	220-240 1~	400 3~	220-240 1~	400 3~	400 3~	400 3~
Speed (r/min)	2900	2900	2900	2900	2900	2900
Cable ** (TLO7RN-F)	4G 1.5					
Pump weight (kg)	32	32	32	32	37	40
Pump type: Std. & Ex	AS 0530 S12/2 W	AS 0530 S12/2 D	AS 0530 S17/2 D	AS 0530 S26/2 D		
Pump discharge internal thread	G 2"	G 2"	G 2"	G 2"	-	
Hydraulics	Vortex	Vortex	Vortex	Vortex	_	
Solids passage (mm)	40	40	40	40	_	
Motor power * (kW): P, P ₂	1.77 1.20	1.69 1.20	2.31 1.70	3.43 2.60	-	
Rated current (A)	8.22	3.29	3.97	5.64	-	
Rated voltage (V)	220-240 1~	400 3~	400 3~	400 3~	-	
Speed (r/min)	2900	2900	2900	2900	_	
Cable ** (TLO7RN-F)	4G 1.5	4G 1.5	4G 1.5	4G 1.5	-	
Pump weight (kg)	34	34	34	40		

 $^{^{(1)}}$ Piranha shredding system; * P $_{_{1}}$ = Power at mains, P $_{_{2}}$ = Power at motor shaft; ** Special rubber compound, free-end cable.

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Single phase versions require a start-and-run capacitor when operated without control panel.

When fitting AS 0530 a 2-inch threaded nipple adaptor is required and must be supplied by the customer.

Performance curves

Piranha 08-S26 H 36 32 28 24 20 16 12 8 4 4 0 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5

 $H = Total\ Head\ Q = Discharge\ Volume.$ Curves to ISO 9906 (60 Hz available on request)

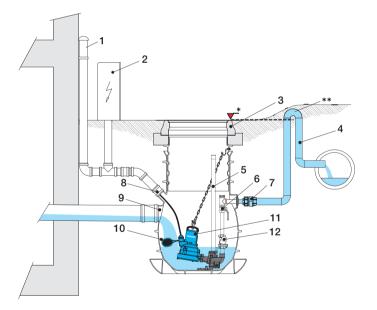
20 18 16 14 12 10 8 6 4 2 **Q** 0 70 18 l/s 0 10 12

AS 0530

Installation

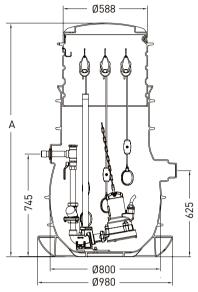
Attention to the backwash level is of vital importance for effective dewatering. All outflow points located below the backwash level must be protected against back flow according to standard EN 12056.

- 1. Ventilation pipe to be brought above roof level.
- 2. Sulzer control panel.
- 3. Concrete lid on cast iron frame (not suitable for vehicular traffic).
- 4. DN 50 discharge pipe.
- 5. Guide rail.
- 6. Shut-off valve.
- 7. 11/4" or 2" to 63 mm coupling.
- 8. DN 70 connection port for cable duct and vent pipe.
- 9. DN 100/150 inlet.
- 10. KS float switch level control.
- 11. Sulzer submersible pump.
- 12. Ball type non-return valve.
- * Backwash level.



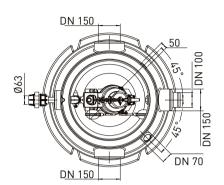
^{**} Backwash loop with base above the backwash level.

Dimensions (mm)



Synconta 801 with plastic lid

A = min 1420 max 1645 with riser, 2245 with riser and extension kit



Inlet diameters (mm)

DN 70	+0.2	Lu
DN 70	Ø75 -1.0	
DN 400	+0.3	
DN 100	Ø110 -1.0	
DN 450	+0.5	
DN 150	Ø160 -1.5	И

Accessories

art no.
4995000
4505000
3740039 3740040
2665180
2665181
2665182
1180521
1185001

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