

Submersible Grinder Pump Type ABS Piranha 08 - 110

SULZER

Submersible pumps for problem-free pumping of sewage containing faecal matter in pipe lines from 1¼" (DN 32).

Applications

Piranha submersible pumps have been designed for effective and economic dewatering using discharge lines of small diameter, in private, municipal and industrial areas.

- Sewage removal from living units and houses in remote settlements where the laying of a conventional sewer would be too expensive, where large ground undulations are present or where it is only possible to lay pipe lines of small diameter.
- Sewage removal from motorway resting sites, communal buildings and for renovation of buildings or areas of a city.
- For use in slaughter houses, food processing plants, paper factories, agriculture and similar areas.
- Piranha 08 and 09 are specially designed for private and domestic applications.
- Maximum allowable temperature of the medium is 40 °C, or short term to 60 °C (max. 5 minutes).

Construction

The water pressure-tight, encapsulated fully flood-proof motor and the pump section form a compact, robust, unit construction.

Bearings

The stainless steel motor shaft is supported in lubricated-for-life ball bearings.

Shaft sealing

Piranha 08 - S26: Between motor and hydraulic section by means of a high quality sealing unit using a silicon carbide mechanical seal. Seal at motor side is by oil lubricated lip seal.

Discharge

Piranha 08 and 09: DN 32 flange with G 1¼" internal thread.

Shredding system

Spiral bottom plate and stationary cutter ring combined with a shredding rotor located before the impeller, for optimum blockage-free running.

Temperature monitoring

Thermal sensors in the stator to switch off the pump in the case of overheating and switch on automatically after cooling down (optional for non-Ex Piranha-S model). Temperature and leakage relays are required (see accessories table).

Seal monitoring

DI system consisting of a sensor in the motor and oil chambers which signals an inspection alert if there is leakage at the shaft seals (not in oil chamber on Ex Piranha-S). Not available for Piranha 08 and 09; optional for non-Ex Piranha-S. Temperature and leakage relays are required (see accessories table).



Features

- Unique Piranha shredding system capable of shredding items such as cloths and plastic bags.
- For the pumping of wastewater containing sewage, offall, organic and industrial effluent.
- Piranha 08 and 09 fitted with MF modular motor; Piranha-S with AS, Piranha PE with XFP Premium Efficiency IE3.
- Piranha 08 and 09 available as KS version with float switch.
- Small discharge lines from 1¼" (DN 32).
- Installations are possible where large ground undulations are present.
- Standard and Ex-versions (see motor data below).
- Piranha 08 and 09 have capacitor in upper lid and do not require a control box.
- Low installation costs due to small diameter discharge pipework.

Motor

Three-phase 400 V or single-phase 220-240 V, 50 Hz, 2-pole (2900 r/min) or 4-pole (1450 r/min).

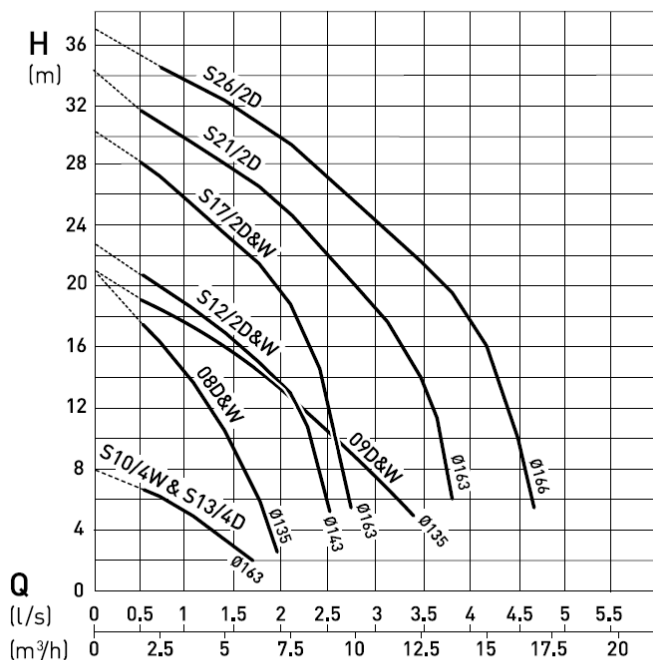
Cooled by amply dimensioned cooling areas.

Piranha 08 & 09: insulation class F, protection type IP 68, non-Ex only.

Technical data

Piranha W = 1-phase D = 3-phase	Discharge		Motor power** (kW)		Rated current (A)	Rated voltage (V)	Speed (r/min)	Cable size***	Weight**** (kg)
	Flange DN	Internal thread *	P ₁	P ₂					
08W	32	G 1¼"	1.41	1.00	6.41	220-240 1~	2900	3G1.0	18
08D	32	G 1¼"	1.34	1.00	2.71	400 3~	2900	4G1.0	18
09W	32	G 1¼"	2.56	1.84	11.60	220-240 1~	2900	3G1.0	23
09D	32	G 1¼"	2.56	2.00	4.64	400 3~	2900	4G1.0	23

Performance curves

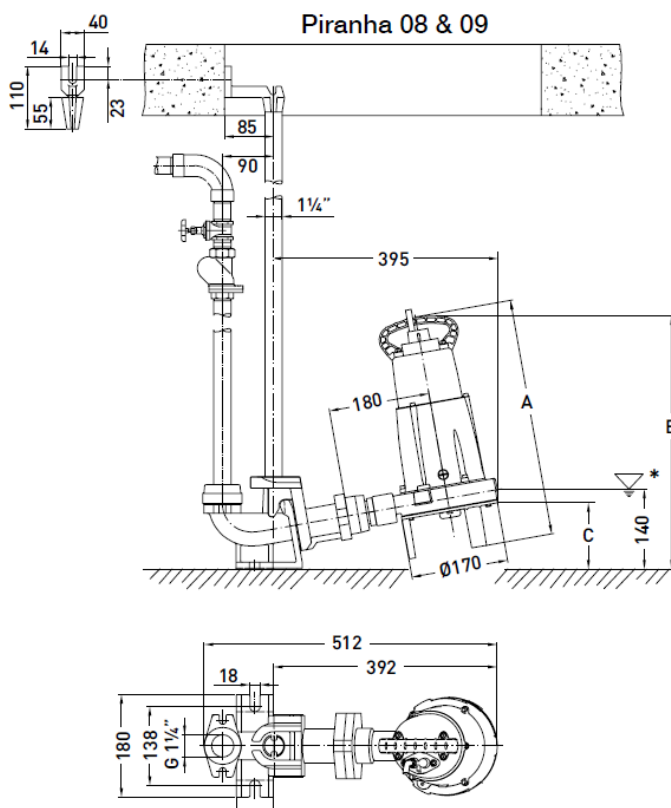


H = Total Head; Q = Discharge Volume.

Curves to ISO 9906 (60 Hz available on request)

N.B. please use the ABSEL program to validate pump selection.

Dimensions (mm)



Piranha 08 - PE110/2E: Minimum sump opening \varnothing 625 mm.

Pedestal base secured using M10 masonry anchor bolts, drill hole size 14 mm.

* Lowest switch-off point for automatic operation.

Piranha	A	B	C
08	420	445	117
09	445	470	108