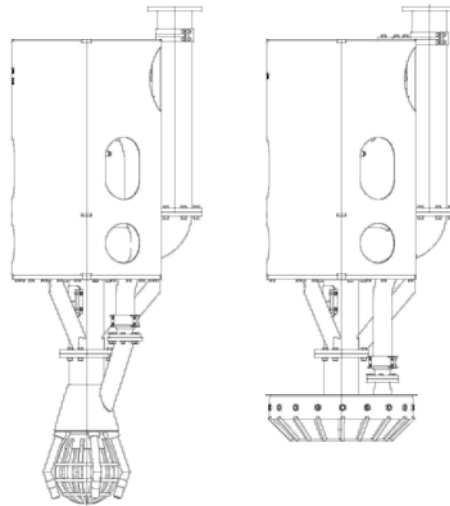


SPEC SHEET DOP 200



M200D0010 / 0711



Submersible dredge pump, type DOP 200

A hydraulically driven, submersible dredge pump with wear resistant pump parts. The construction details are as follows.

Specifications

Dimensions

Suction diameter	200 mm
Discharge connection diameter	200 mm
Flange dimensions	O.D. 340 mm; PCD 295 mm, 8xø22
Impeller diameter (vanes)	470 mm
Width in the impeller	125 mm
Spherical pump passage	125 mm

Materials

Pump casing	Ni-hard 4
Impeller	Bainitic Nodular
Wearing plates	Ni-hard 4
Suction mouth	Ni-hard 4
Shaft	Steel 34CrNiMo6

Hydraulics

Drive	Parker hydraulic motor
Maximum required oil flow	300 l/min. (continuous)
Continuous Required Oil Pressure	250 bar (delta p)
Motor speed with this flow	Approx. 1,200 r.p.m.
Quick release coupling Snaptite	
Pressure	1¼" 75C20-20RP
Return	1¼" 75N20-20RP
Leak	1" 75N16-16RP

SPEC SHEET

DOP 200



Pump performance

Pump speed with max. oil flow : approx. 1,200 r.p.m.
Max. available power at pump shaft : approx. 115 kW
Capacity DOP 200 : 500 - 900 m³/h

Jetwater

Discharge connection : 100 mm
Flange dimensions : O.D. 220 mm; PCD 180 mm, 8xø18
Advised minimum available capacity : 180 m³/h, at 8,5 bar

Impeller

The impeller is of a closed type with 3 vanes and is statically balanced. It is secured on the impeller shaft by a torque coupling. Sense of rotation, seen to the suction side: **Counter-clockwise.**

Sealing

An oil lubricated mechanical seal seals the shaft.

Working depth

Maximum working depth for the standard executed DOP pump is -40 meters. However, greater working depths are possible after special adjustments.

Execution

- The suction pipe is provided with a suction mouth with 4 jetwater nozzles and a dirt grid (figure A). Or, alternatively with a flat suction head with jet water ring and dirt grid (figure B).
- A protective casing, made of steel, is surrounding the dredge pump and hydraulic motor.
- The hydraulic motor is suitable for continuous operation under and above the water.
- The hydraulic oil has to be cooled by means of a cooler on the power pack.
- The hydraulic valve block with the necessary built-in safety valves, is mounted on the hydraulic motor and provided with quick release hose couplings and contra couplings.
- An optional suspension frame for the relieve of the hydraulic hoses is mounted on the protective casing.

Conservation

Shot blasted SA 2.5, 1 layer of primer and one top layer.

Tools

Impeller pressure piece, toolset mechanical seal, impeller hook.

Maintenance

All pump parts are replaceable.

Transport

- Weight approx. 1360 kg.
- L x B x H, approx. 320 x 120 x 100 cm.

Options

- Hydraulically driven cutter unit; various other suction heads.
- Hydraulic hose set, flexible dredge hose and jet water hose.
- Diesel driven hydraulic power pack; or electrically driven.
- Jet water pump.
- Hose suspension frame
- Various dredging instrumentation.
- Various hoisting equipment

SPEC SHEET DOP 200

M200DCUT / 0708



Cutter unit for DOP 200

A hydraulically driven cutter unit for mounting at the DOP 200. The construction details are as follows.

Specifications

Cutter

Type	5-750 RU
Number of arms	5
Knife type	serrated edge or plain, changeable
Number of knives per arm	3
Largest diameter	Ø 750 mm

Materials

Arms	cast steel 52
Knives	cast steel 30Mn5, hard welded
Suction mouth	steel

Hydraulics

Cutter drive	Poclair Hydraulic Motor, Suitable for Submersible Usage
Maximum required oil flow	approx. 45 l/min. (continuous)
Continuous required oil pressure	approx. 225 bar (delta p)
Cutter power	approx. 16 kW
Speed motor - cutter	approx. 35 rpm

Loose delivery

Stauff clamps : to be mounted in DOP casing to prevent the hydraulic hoses from flapping

Transport

- Weight approx. 400 kg.
- L x B x H, approx. 114 x 95 x 95 cm.

Option

- Top plate with coupling for connecting the DOP pump to the excavator or cutter ladder.