



Suction Pump Spread
SAPS-006

SPT Offshore



SPT Offshore operates a hydraulically powered shallow water suction pump unit (SPU) SAPS-006. SAPS-006 is capable of operating in water depths to 120m and is fully powered and controlled from the surface. SAPS-006 is suitable for installation of large single suction piles as well as suction pile founded structures, e.g. manifolds or wellhead protection structures.

SAPS-006 is powered by a hydraulic power pack via a set of 160m hydraulic hoses. Adequate monitoring of the installation / recovery process is guaranteed by various pressure sensors which transmit their data to the surface monitoring unit.

SAPS-006 houses a 150m³/hr water pump capable of generating pressures up to 5 bar. The pump output can be

adjusted by varying the flow within the hydraulic power pack. Diver or ROV operated valves allow for switching from suction (installation) to pressure (retrieval) operation. A manifold comprising four (4) valves enables connection of the SPU to various suction piles using 2" hoses. The hoses may be outfitted with special connectors (KAMLOK) allowing quick connection and disconnection.

SAPS-006 can be outfitted with small mudmats in order to be able to install the SPU on the seabed next to the suction pile or structure.

SAPS-006 is equipped with the following electronic instrumentation for monitoring of the operations:

- pressure sensors - internal pressure (2x)
- pressure sensors - ambient pressure (1x)



Manifold for connection of max. 4 water hoses



Monitoring unit pressure sensors

Specifications Suction Pump Spread SAPS-006

Suction Pump Unit (SPU)

- Weight 1.5 mt
- Dimensions 2.0 x 1.5 x 1.9 m
- Max. water depth 120 m
- Max water flow 150 m³/hr
- Max diff. pressure 5 bar
- Piping size 102 mm (4")
- Nr. of connections 4 x
- Hose size 51 mm (2")
- Hose length 25 m

Water Pump Drive

- Speed 1,750 rpm
- Shaft power 23 kW
- Oil consumption requirements 75 l/min @ 220 bar

Umbilical

- 1" Pressure hose 4 x 40 m length
- 1" Return hose 4 x 40 m length
- 1/2" Drain hose 4 x 40 m length
- Strain relief
- Data cables sensors

Hydraulic Power-Pack Power Supply

- 380 VAC / 50 Hz or 440 VAC / 60 Hz
- Power 110 kVA / 88 kW
- Max. Working Press. 280 bar
- Main Power Cable 25 m
- Oil Cooler Air Cooled
- Dimensions LxBxH 2.60 x 1.40 x 1.85 m
- Weight 2 mt
- RPM variable

Control:

- Monitoring Unit
- Ambient pressure 0 – 10 bar sensor
- Pile pressure 0 – 10 bar sensor
- Discharge pressure 0 – 10 bar sensor
- Power 230 VAC @ 50 - 60 Hz