



SUBMERSIBLE PROGRESSIVE CAVITY PUMP SETS

1"-EVCU

Application

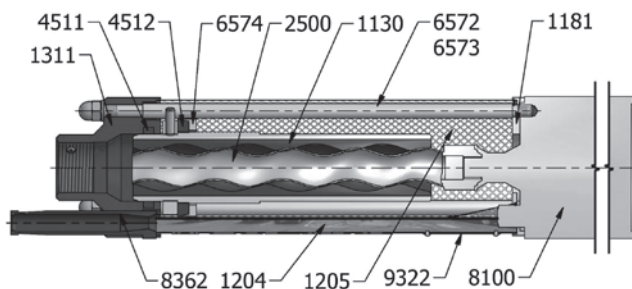
Submersible pump set 1" EVCU is destined for pumping potable water (pH 6.5 – 9.5) and service water up to temperature 35°C and acidity 4 – 12 pH. Practical application of the pump is namely for deep-well water pumping with max-depth 120 m and min. diameter of a borehole 100 mm (4"). Maximum number of pump set operations - 20 cycles/hour.

Design Description

Pump set 1" EVCU consists of a submersible three-phase electric motor and the progressive cavity pump.

Transmission of the electric motor power (8100) to the pump is carried out by the helix (2500) with the head with internal gearing of NEMA standards that is identical to the gearing of the electric motor shaft end. The helix and the electric motor shaft form one geared joint. Another joint forms the stator (1130) that is swing-mounted in the discharge casing (1311). Radial packing (4511) of the stator is an interface of suction and discharge pressure and axial packing ring eliminates axial load from discharge pressure. It also works as a rubber spring (4512) for the floating stator. Pump body structure is formed of four load-bearing screws (6572, 6573) on which the supporting plate (6574) of the rubber spring and the discharge casing (1311) are installed. The discharge casing is provided with lifting lugs for the suspension ropes and some tabs for a reverse wrench used for the borehole pump mounting and dismantling. The casing also fixes cable rubber grommet (8362). Pump jacket (1205) is of perforated stainless sheet. On the cable guard (1204) there are the rating plate (9322) and the firm's logo.

Information Cross-section of Pump



- 1130 - Stator
- 1181 - Electric motor plate
- 1204 - Cable guard
- 1205 - Pump jacket
- 1311 - Discharge casing
- 2500 - Helix
- 4511 - Wear ring
- 4512 - Rubber spring
- 6572,73 - Load-bearing screw
- 6574 - Supporting plate
- 8100 - Electric motor
- 8362 - Cable grommet
- 9322 - Rating plate



Material Options

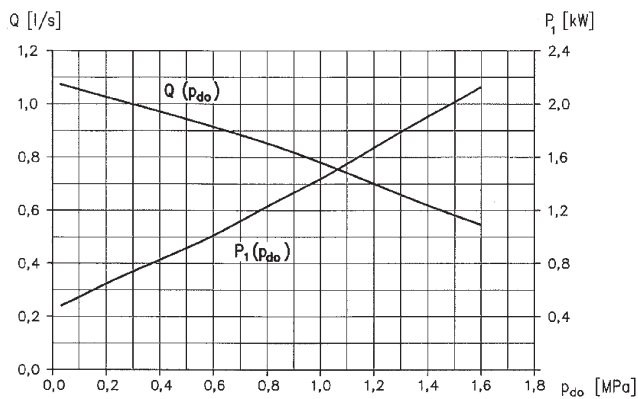
All parts of a submersible motor getting into contact with a pumped liquid are of the stainless steel AISI 316, the cable is provided with a thermoplastic insulation fully convenient to pumping potable water. The electric motor is sealed by a special mechanical seal in the material SiC/SiC version.

The pump is in an all-stainless material version in the material class "CrNi".

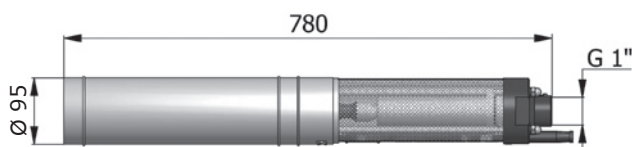
Performance Data

Pump set	1"-EVCU-16-12		
Max. delivery pressure	$P_{do\ max}$	MPa	1.2
Max. delivery head	H_{max}	m	120
Rate of flow	Q	$l.s^{-1}$	0.55
Discharge connection			G1"
Electric motor			MX 200 T4
Rated power input	P	kW	1.5
Speed	n	min^{-1}	2850
Voltage	U	V	400
Frequency	f	Hz	50
Motor breaking current	I	A	4.2
Connected cable		mm^2	4x1.5
Cable length (on request)		m	(50)
Pump set external diameter	$\varnothing D$	mm	95
Pump set height		mm	780
Min. diameter of borehole (well)		mm	100 (4")
Max. submersion of pump set under level		m	30
Pump set weight (without cable)		kg	17

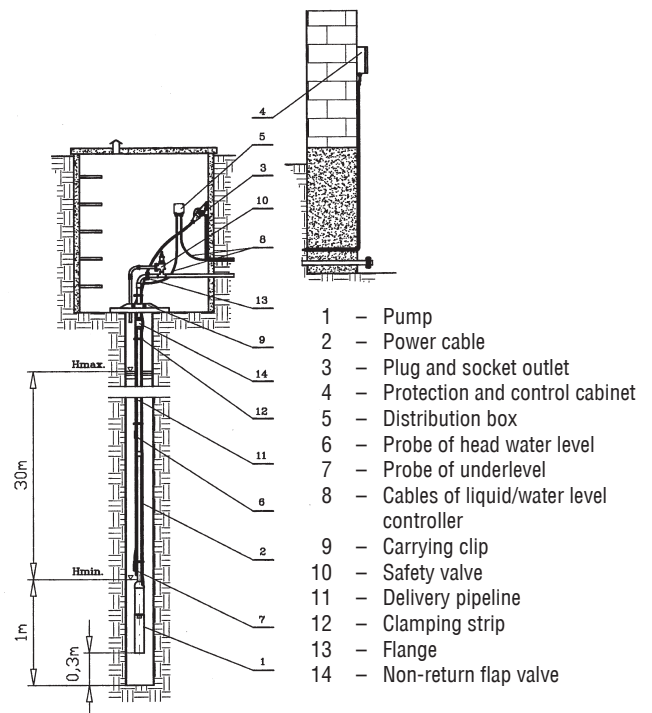
Pump Information Selection Chart



Dimensioned Drawing



Arrangement Version



- 1 - Pump
- 2 - Power cable
- 3 - Plug and socket outlet
- 4 - Protection and control cabinet
- 5 - Distribution box
- 6 - Probe of head water level
- 7 - Probe of underlevel
- 8 - Cables of liquid/water level controller
- 9 - Carrying clip
- 10 - Safety valve
- 11 - Delivery pipeline
- 12 - Clamping strip
- 13 - Flange
- 14 - Non-return flap valve

**THIS PRODUCT POSES NO DANGER TO ENVIRONMENT
THE PUMP DESIGN IS PATENT PROTECTED.**



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