

MODERN TECHNOLOGIES AND LONG - TERM EXPERIENCE

■ 32 - CVXU



SUBMERSIBLE PUMP

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The Submersible Pump 32 - CVXU

Applications

The submersible pump set 32-CVXU is intended for pumping of clean water up to temperature 30° C and acidity pH = 6÷8,5 from narrow bore holes of minimum diameter 150mm (6"); up to total head 166m and maximum depth of submersion 120m. The pump can also pump dirty water with maximum content 50 g/m³ of nonabrasive fine solids of particle size up to 0,2mm. However, the content of the impurities and minerals as well as water hardness influence life time of the pump and it is necessary to count on faster worn-out and pump fouling. Working position is vertical with the pump up.

The pumps are frequently used in pumping stations as a water source to supply various residential buildings as well as buildings in industry with water; for sports fields irrigation and everywhere a higher quantity of water from deeper bore-holes is necessary to pump out.

Materials

The main parts of the pump are made from grey cast iron, Motor surface sheet and shaft are made of stainless steel. The motor is made acc. to NEMA standard.

Description

The submersible pump set 32-CVXU is produced from 4 stages to 14 stages size. The pump is of centrifugal, multistage design, with radial flow impellers. It is driven by submersible electric motor. The pump is of clockwise rotation viewing from pump branch.

The electric motor is mounted under the pump. Its special design makes safety operation under water level possible.

The inlet of pumped water is in lower part of the pump. The delivery outlet of the pump G2" is provided with reducing nipple 2" x 5/4" and backflow preventer with female thread 5/4".

Accessories

The pump set is supplied including cable 07xH2-F of length according to customer request. We are also able to supply motor circuit breaker set and/or submersible electrodes as sensors for protection against dry operation.

Technical Data

No. of stages	Delivery head range H[m]	Flow rate range Q[l.s ⁻¹]	Maximum delivery head H _{max} [m]	Minimum delivery head H _{min} [m]	Weight m [kg]	Electric motor			
						Type	Output [kW]	Rated Current I [A]	Voltage U [V]
4	46 - 25	1,1 to 2,5	52	25	27	MX4 200 T4	1,5	4,1	400
5	59 - 33		63	33	31	MX4 300 T4	2,2	5,8	
6	72 - 40		77	40	33				
7	84 - 47		92	47	41	MX4 400 T4	3	7,4	
8	96 - 55		103	55	43				
9	107 - 63		115	63	49	MX4 550 T4	4	10,2	
10	119 - 71		129	71	51				
11	130 - 79		141	79	54				
12	142 - 86		153	86	59	MX4 750 T4	5,5	14,5	
13	154 - 93		165	93	61				
14	166 - 101		178	101	63				

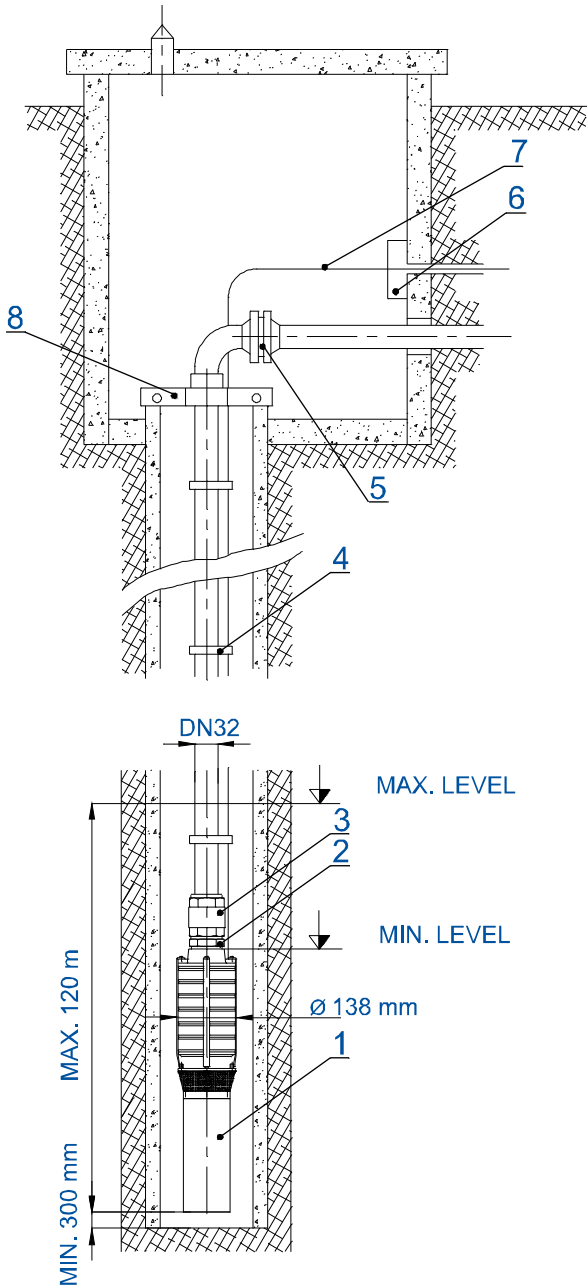
The parameters are valid for water, temperature t = 20 °C, density ρ = 1000 kg/m³, speed n = 2900 R.P.M.

The pump cannot be operated at delivery head on the outlet from the pump lower than the allowed minimum one! Operating the pump under the lower limit the motor will be overloaded and can be damaged.

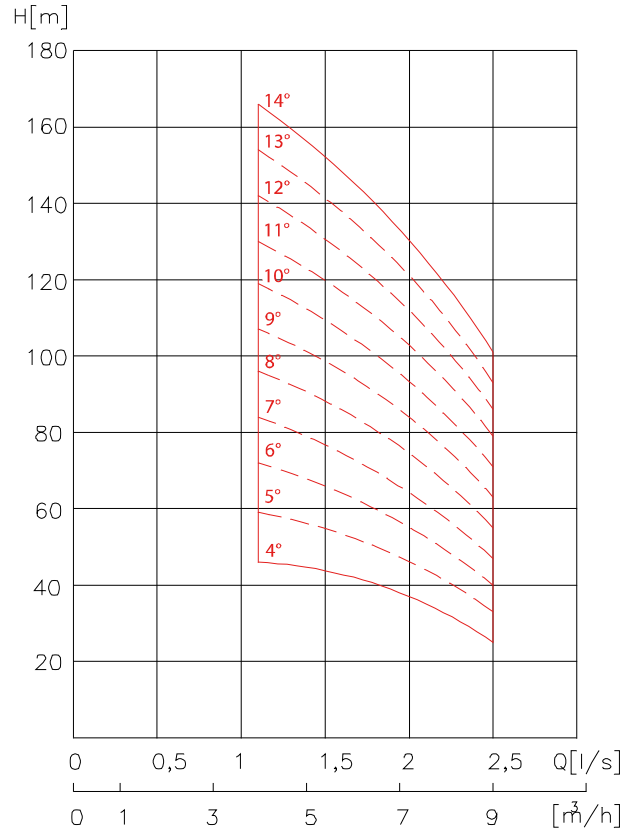
The pump has to be started into closed discharge.

The Submersible Pump 32 - CVXU

Submersible Pump Installation Sketch



Informative Performance Chart of Pump

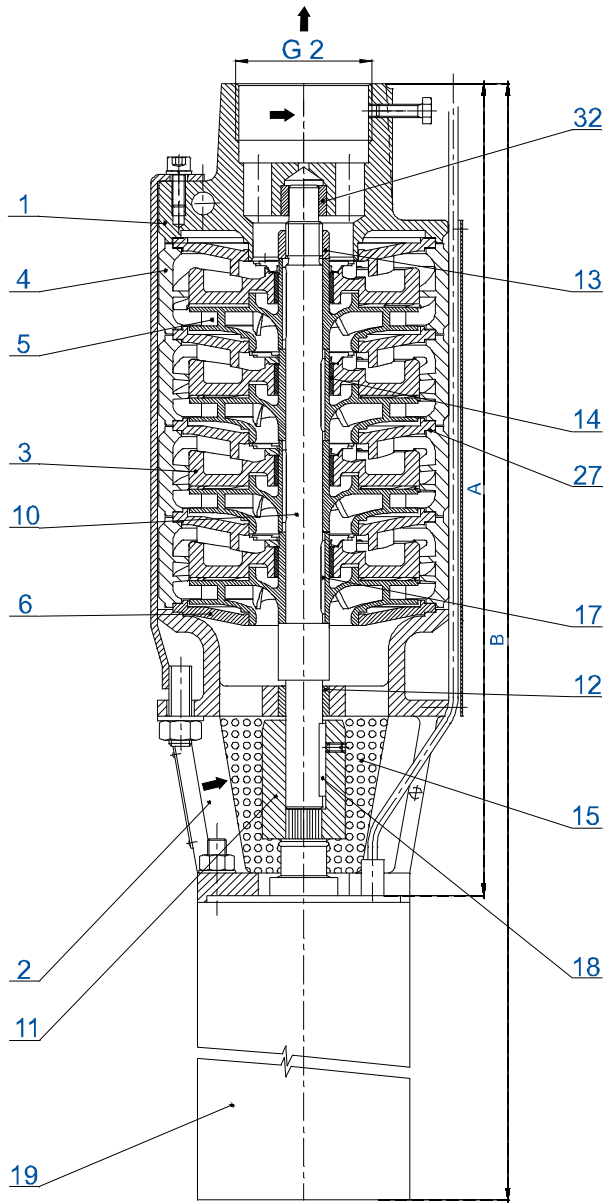


- 1 Submersible pump set
- 2 Reducing nipple 2"x1¼"
- 3 Backflow preventer 5/4"
- 4 Cable clamp
- 5 Flange
- 6 Terminal box
- 7 El.cable (length to request)
- 8 Carrying pipe clamp

Pos. 2 and 3 are supplied with pump as standard accessories.

The Submersible Pump 32 - CVXU

Informative Sectional Drawing of Pump



- 1 Pump discharge cover
- 2 Bellhousing
- 3 Difusser
- 4 Difusser cover
- 5 Impeller
- 6 Suction insert
- 10 Shaft
- 11 Coupling
- 12 Sleeve
- 13 Nut M16x1,5
- 14 Sleeve 26x22x13,2
- 15 Coupling guard
- 17 Key 5h9x3x32
- 18 Key 5h9x5x32
- 19 Submersible motor
- 27 Stage gasket 114x106x0,15
- 32 Discharge bushing

PUMP	A	B
32-CVXU-4°	356	745
32-CVXU-5°	396	825
32-CVXU-6°	436	865
32-CVXU-7°	476	1035
32-CVXU-8°	516	1075
32-CVXU-9°	556	1205
32-CVXU-10°	596	1245
32-CVXU-11°	636	1285
32-CVXU-12°	676	1425
32-CVXU-13°	716	1465
32-CVXU-14°	756	1505

The delivery outlet of the pump G2" is provided with reducing nipple 2" x 5/4" and backflow preventer with female thread 5/4".