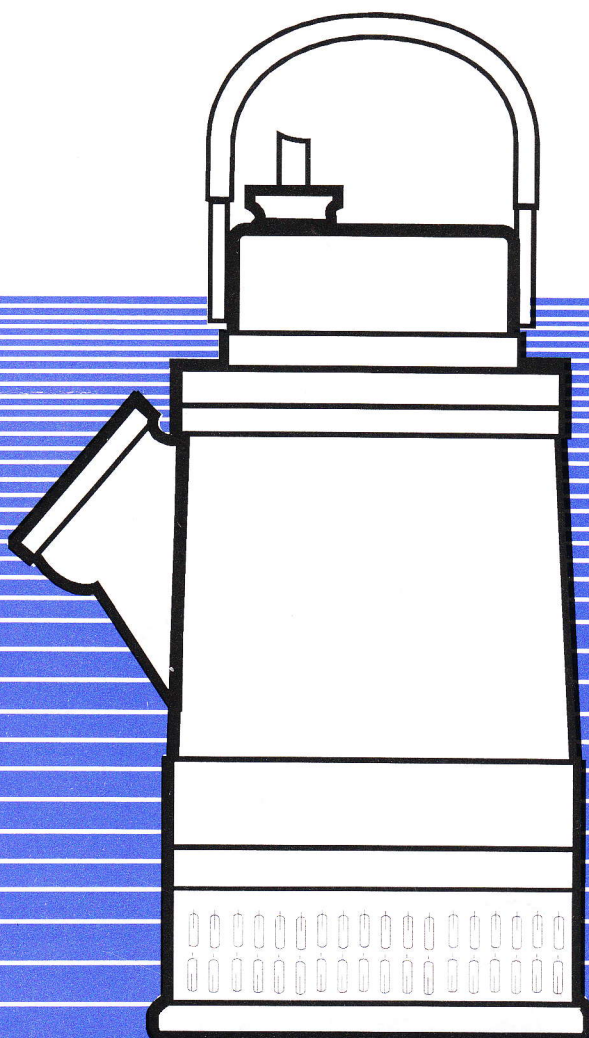




Submersible sludge pump

KDDF 080-02-N



Application

Submersible sludge pumps are intended for environments without explosion risk, for pumping water containing mud, sand, chips and similar stuffs of abrasive effects, amounting to 30 percent of a pumped liquid mass.

Max. temperature of a pumped liquid 40 °C
Max. density of a pumped liquid 1,150 kg.m⁻³
Max. size of solids 5 mm
Value pH ranging from 5 to 7.5 pH
Max. submersion of a pump-set 10 m

Besides vertical position, pumps may work in both horizontal and inclined positions.

They have proved successful namely in building industry, when digging out cellars and land reclamation, liquidation of floods consequences, e.g. drainage of flooded cellars, basements, and so on.

Pumps are not suitable for pumping water with content of oil and hydrocarbons.

Design

Pumps are of single stage type; submersible monoblock with dry built-in electric motor, being separated from the hydraulic part by a pair of mechanical seals and an oil pool. Discharge branch is placed in the upper part of the pump mantle, so the stator tube is cooled with a flowing liquid during an operation. Cable outlet is located in the terminal board cover and it is directed upwards.

Material options

Main parts of this pumps are of the following constructional materials:

Impeller cast iron
Shaft stainless steel
Impeller nu..... stainless steel

Most of constructional parts of the pump are of light aluminium alloy.

Pump control

Peripheral electrics for control and protection of pumps shall be solved in the frame of a pumping station project or any construction works.

More detailed information on protection is given in Operation Instructions.

Accessories

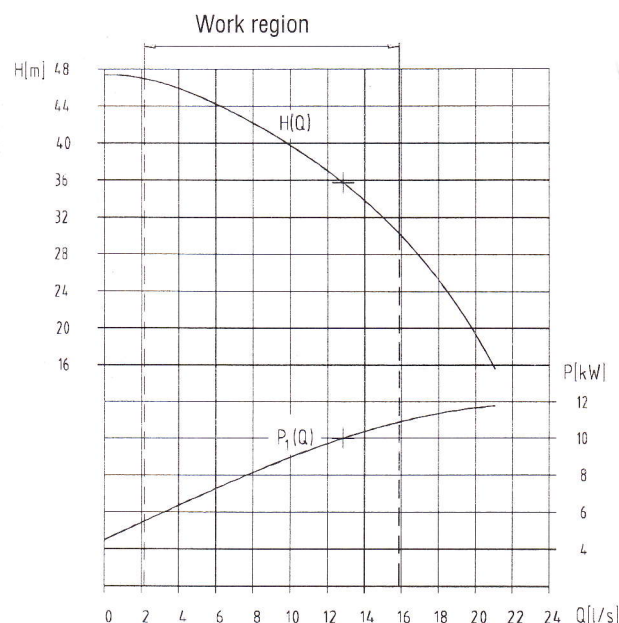
As an integral part of every pump delivery is the following outfit:

- rubber six-core cable in entire length of 50 m
- Fire discharge hose DN 75 of polyamide fibre

Main performance data

Rate of flow	Q [l/s]	12.8
Delivery head	H [m]	35.7
Pump-set power input	P _{1max} [KW]	13.2
Speed	n [1/min]	2,900
Voltage – as standard	U [V]	400 V
Frequency	f [HZ]	50
Thermal receptor – disconnecting contact		2.5 A; 250 V
Short-circuit current		98A
Cut-out current with voltage 400 V I [A]		21
Cable		HO7 RN-F 6 G 2, 5
Pump weight without accessory m [kg]		73.5

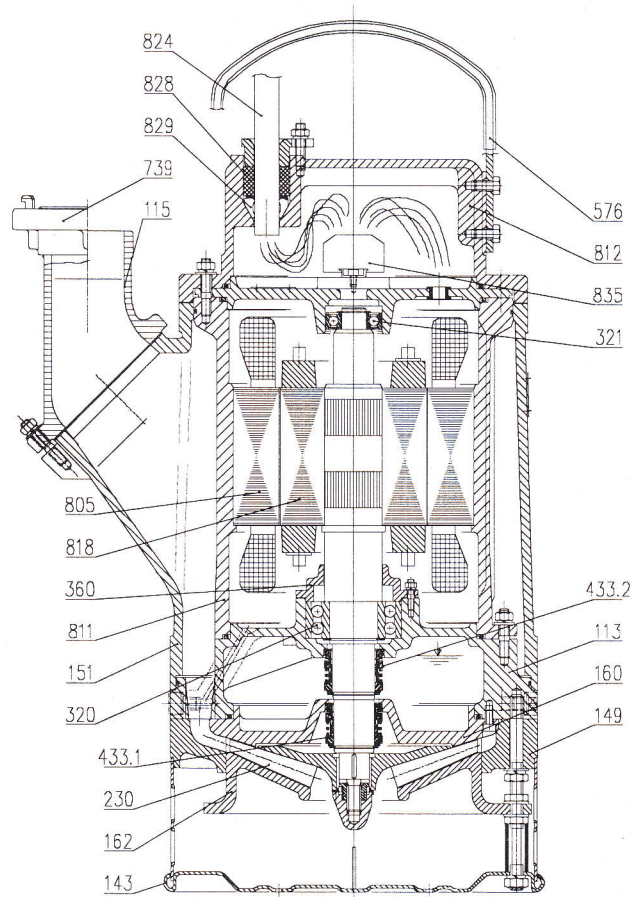
Selection Chart



Pump total performance characteristic is given in informative chart.

Informative entire characteristics Q-H, Q-P conforms to pumping clean water of density $\rho = 1,000 \text{ kg.m}^{-3}$. With rising density of a pumped liquid the power input P_1 may increase.

Section through pump

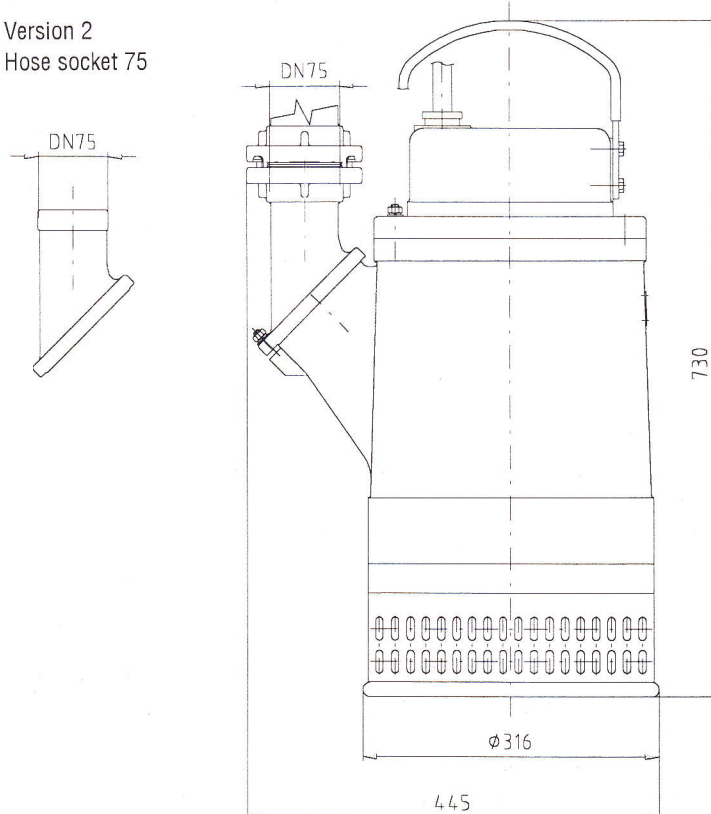


- 113 - Bush
- 114 - Discharge elbow
- 143 - Suction strainer
- 149 - Diffuser
- 151 - Pump mantle
- 160 - Bush bottom
- 230 - Impeller
- 320 - Lower bearing
- 321 - Upper bearing
- 360 - Bearing cover
- 433.1 - Mechanical seal Crane
- 433.2 - Mechanical seal Crane
- 576 - Handle
- 739 - Pressure coupling
- 805 - Electric motor
- 812 - Terminal guard cover
- 818 - Rotor
- 824 - Cable
- 828 - Rubber liner of bushing
- 829 - Clamping ring
- 835 - Terminal board

Pump dimensions

Version 1
Neck quick coupler 75

Version 2
Hose socket 75



SIGMA GROUP a.s.
DIVIZE SPOTŘEBNÍ ČERPADLA
J. Sigmunda 79
783 50 Lutín
Czech Republic
Tel.: +420 68 / 565 1322
Fax: +420 68 / 565 1300

