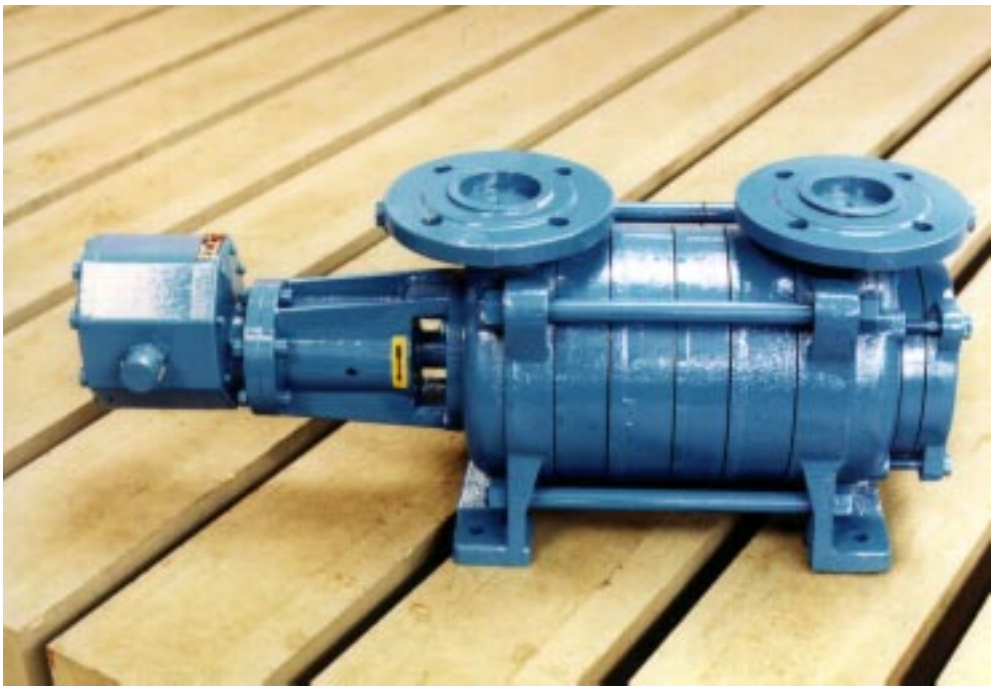
SIGMA PUMPY HRANICE



SELF-PRIMING PUMPS **80-SVA**

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426
2.98
16.09

Applications

The self-priming pumps series 80 SVA in the execution 001 are used to pump the drinking and service water up to temperature 90˚C without any mechanical impurities. The pumps in the execution 002 are designed to pump combustible liquids of classes I.-IV. They are possible to be used for pumping the oils to max. viscosity 37 mm ^{2}.s $^{-1}$ and the temperature up to 90˚C. The advantage of these pumps are their self-priming ability.

Description

The pumps 80 SVA are rotary, segmental, horizontal and self-priming ones for the direct connection with the driving engine. Delivery head is increasing with the stages number which are placed between the suction and delivery casings.
The pump stage consists of the suction and discharge inserts between them the impeller is running,
at the same time the discharge insert nearby the delivery casing is called final discharge insert. From the opposite side of the delivery casing the evacuative stage is added which consists of the suction transfering ring, the impeller and the closing cap. This stage fullfil the function for self-priming, that means the air exhaust and the vapours one from the pump.
The pump shaft is from the driven side placed in the ball bearing. The other shaft end is placed in the sliding bush which is lubricated by the pumped liquid.
The shaft sealing is by means of the mechanical stuffing-box which is placed in the suction casing. Material stuffing-box execution is different from the execution 001(for water) and 002 (for combustible liquids).

Sense of rotation

The pumps 80-SVA are right turning, that means the shaft speed turning direction is in the clockwise one viewing from the driven side on the pump.

Material design

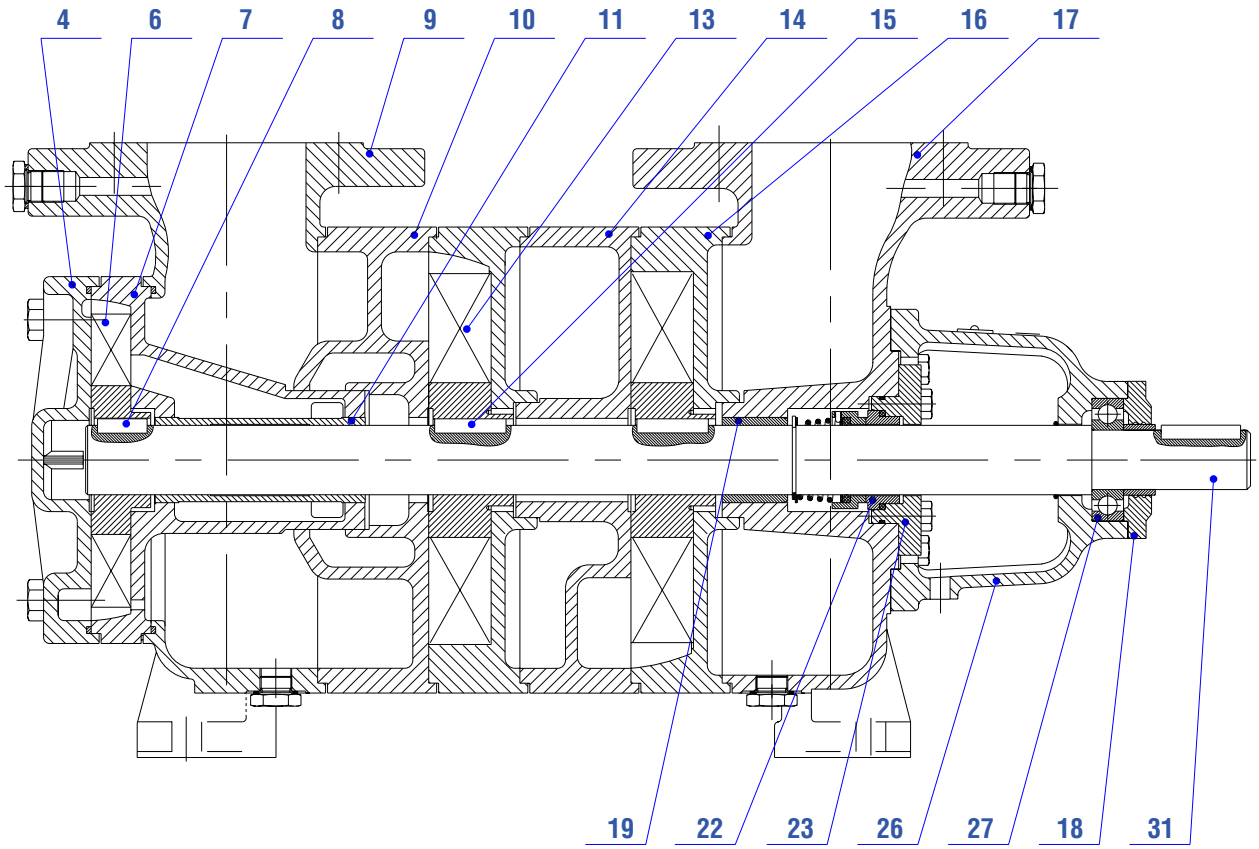
Suction and delivery casings, suction and discharge inserts, closing cap, transfering suction ring, final discharge insert, bearing housing and bearing cap are made from grey cast iron.
Shaft is made from stainless steel.
Sliding bushes are made from brass.
Mechanical stuffing box is in the quality responsible the liquid being pumped.

Specification

Name	Units	Parameters
Flow range	l.s^{-1}	4 - 12
Delivery head range	m	120 - 10
Supplies range	kW	27 - 4
Operating turning speeds	min^{-1}	1450
Maximum liquid temperature	˚C	90
Pump weight	kg	58 - 90

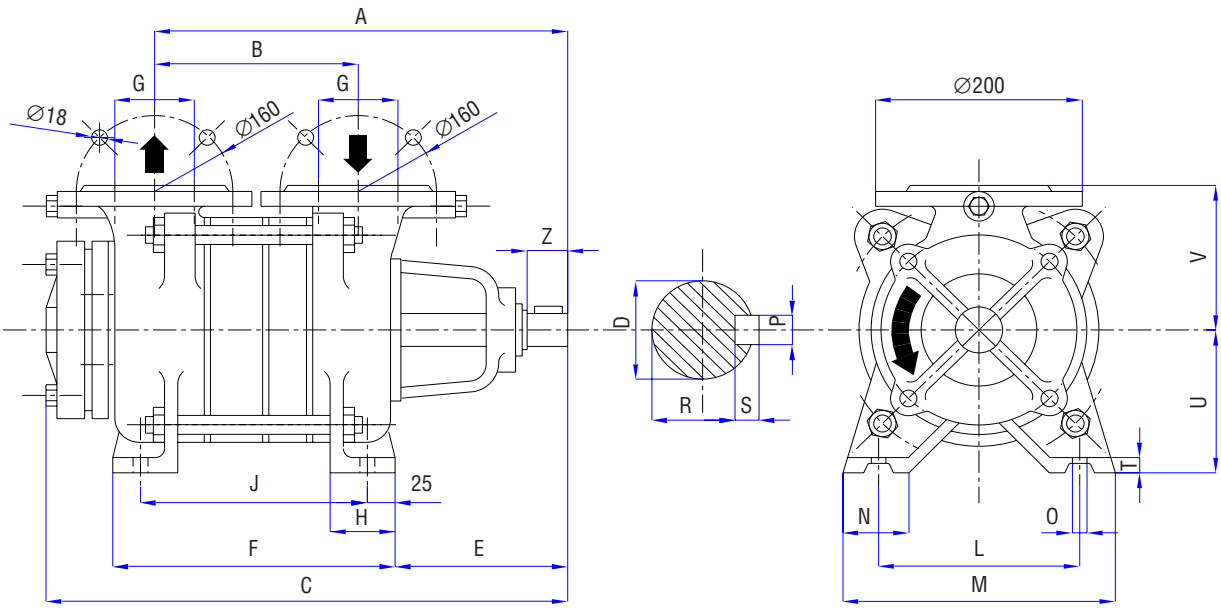
Parameters are valid for water t = 20˚C, p = 1000 kg.m ^{3} and speeds n = 1450 min.$^{-1}$

Informative sectional drawing of the pump



4	Closing cap	16	Suction insert
6	Impeller	17	Suction casing
7	Suction ring transfering	18	Bearing caps
8	Key	19	Bush
9	Delivery casing	22	Mechanical stuffing box
10	Discharge insert	23	Stuffing box gland
11	Bush	26	Bearing housing
13	Impeller	27	Bearing
14	Key	31	Shaft
15	Discharge insert		

Dimensional drawing of the pump



The pump	A	B	C	D	E	F	G	H	J	L	M	N	O	P	R	S	T	U	V	Z
80-SVA-1˚	415	203	522	30	172	288	DN80 PN16	70	238	200	255	55	15	8	25.9	7	18	150	160	48
80-SVA-2˚	517	305	624			390			340											
80-SVA-3˚	619	407	726			492			442											

Informative sectional diagram of the pump