JOSLYN PUMPS

MULTISTAGE STAINLESS STEEL CENTRIFUGAL PUMP

Joslyn Vertical Multistage in - line

JOSLYN PUMPS JVS/JHS

1. Application :

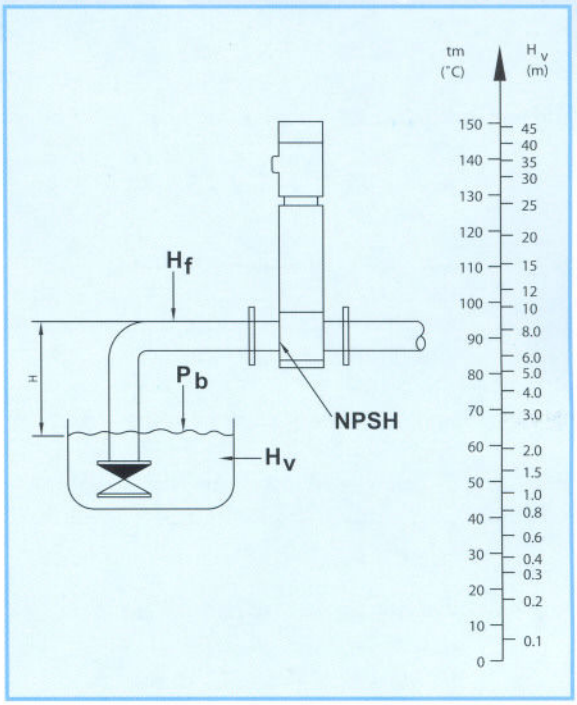
The JVS series is a multipurpose pump range suitable for a variety of different applications demanding reliable and cost efficient supply.

a. Thin, non-explosive liquids, not containing solid particles. JVMS handles various liquids from potable water to industrial liquids within a very wide temperature, flow and pressure scales.

b. When pumping liquids with a higher density (or) viscosity, the correction for the same has to be done for capacity, head and power factors.

Usage

- Pressure boosting in high-rise buildings, hotels etc.
- Municipal water supply and pressure boosting
- Boiler feed and condensate systems
- Washing plants and wash down
- Irrigation and dewatering
- Domestic water supply
- Cooling water systems
- Fire fighting



Check that the pump is not and will not be exposed to cavitation

b. Minimum inlet pressure - NPSH

Calculation of the inlet pressure "H" is recommended when....

- the liquid temperature is high
- the flow is significantly higher than the rated flow
- water is drawn from depths
- water is drawn through long pipes
- inlet conditions are poor

2. Codes :

Example

JVS S 2 - 20

- JVS — JOSYLYN Multistage Series. V - Vertical, H - Horizontal
- S — 60Hz only
- 2 — Rated flow rate in M^3 / hr
- 20 — Number of stages X 10

3. Technical Data :

a. Liquid Temperature

Normal operating - Ambient
Liquid - Std Design - -15°C to +90°C
Hot water - -15°C to +120°C

To avoid cavitation, make sure that there is a minimum pressure on the suction side of the pump. The maximum suction lift "H" in meters head can be calculated as follows

$H = Pb \times 10.2 - NPSH - H_f - H_v - H_s$

Pb = Barometric pressure in bar. (Barometric pressure can be set to 1 bar.) In closed systems, Pb indicates the system pressure in bar.

NPSH = Net Positive Suction Head in meters head. (To be read from the NPSH curve at the highest flow the pump will be delivering.)

H_f = Friction loss in suction pipe in meters head. (At the highest flow the pump will be delivering).

H_v = Vapor pressure in meters head. (To be read from the vapor pressure scale. "H_v" depends on the liquid temperature "T_m")

H_s = Safety margin = minimum 0.5 meters head. (To be read from the vapor pressure scale. "H_v" depends on the liquid temperature "T_m")

If the "H" calculated is positive, the pump can operate at a suction lift of maximum "H" meters head.

If the "H" calculated is negative, an inlet pressure of minimum "H" meters head is required.

c. Motor

The motor is totally enclosed, fan-cooled, 2-pole with principal dimensions in accordance with the EN standards

Electrical tolerances according to EN 60034

Electrical Data

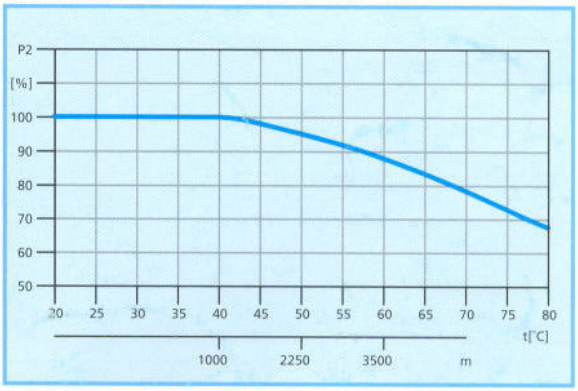
Mounting Designation	Up to 4kW: V18 From 5.5 kW: V1
Insulation Class	F
Efficiency class	Eff.2 Eff.1 - on request
Enclosure class	IP 55 IP 44 & IP 54 - on request
50Hz standard voltages	3 x 200 - 220 / 346 - 380V,±10% 3 x 220 - 240 / 380 - 415V. 3 x 380 - 415 ΔV 1 x 220-230 / 240 V
60Hz standard voltages	3 x 460 / 220 V.

Motor protection

Single phase motors have a built in thermal overload switch
Three phase motors must be connected to a motor starter in accordance with local regulations
Three phase motors from 3 kW and upwards have a built-in thermostat (PTC) according to DIN 44 082.

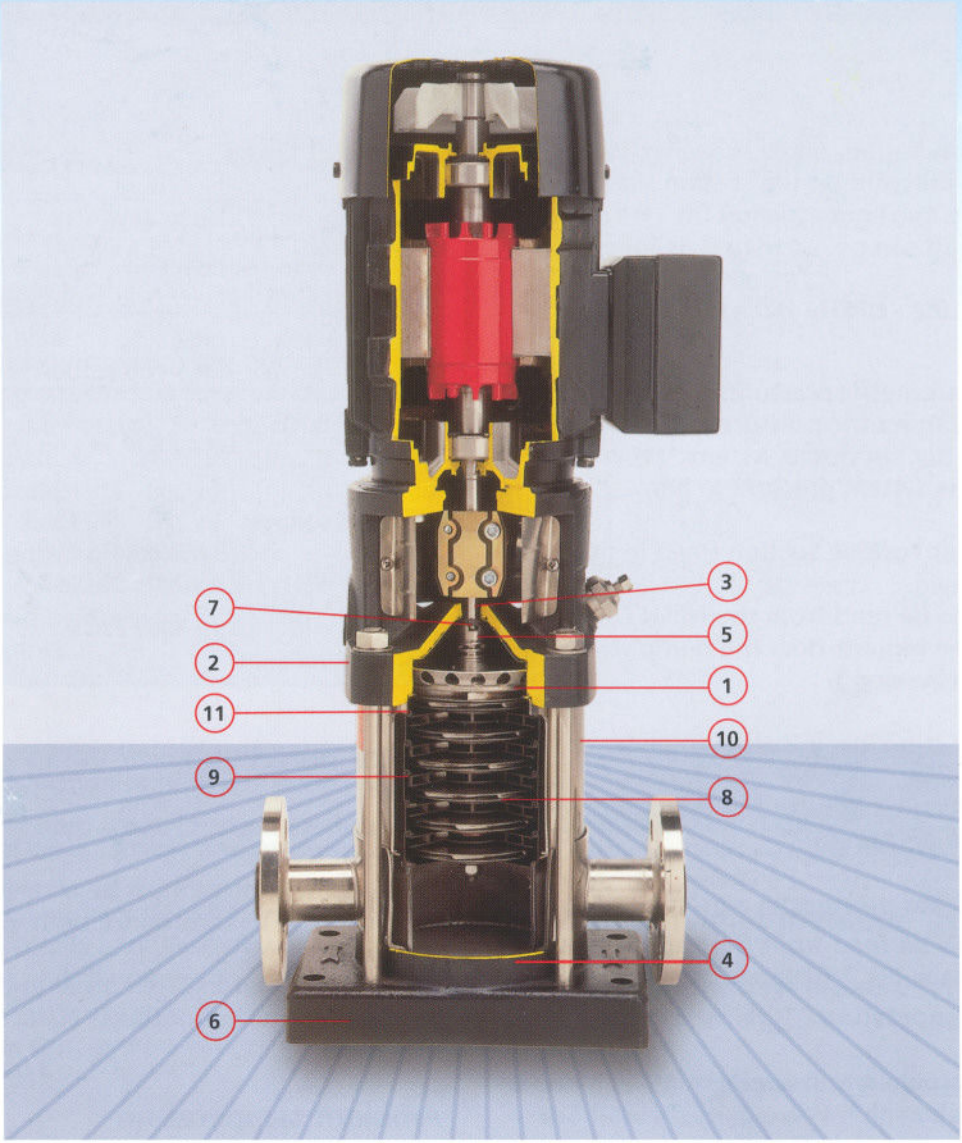
Ambient temperature

Maximum +50°C
If the ambient temperature exceeds +50°C or if the motor is located 1000 meters above sea level, the motor output (P2) must be reduced due to the low density and consequently low cooling effect of the air. In such cases, it may be necessary to use a motor with a higher output.



Material

Pump components can be supplied in SS 304 (or) SS 316 (table given below)



Materials : JVS/JVSS

1	Pump head	Cast iron EN-GJL-200
2	Pump head cover	Stainless steel 304
3	Shaft	Stainless steel 304 (or) 316
4	Base	Stainless steel 304 (or) 316
5	Shaft seal	Mechanical
6	Base plate	Cast iron EN-GJL-200
7	Rubber parts	EDPM or FKM
8	Impeller	Stainless steel 304 (or) 306
9	Chamber	Stainless steel 304 (or) 306
10	Outer sleeve	Stainless steel 304 (or) 306
11	O-ring for outer sleeve	EDPM or FKM

* Stainless steel on request