

DOURO

VERTICAL INLINE MULTISTAGE PUMP



Overview

The DOURO vertical inline multistage pump is engineered for reliable, high-efficiency fluid transfer across industrial and commercial applications. Designed with precision-machined stainless steel impellers and a compact vertical structure, it delivers consistent performance under demanding conditions. With the option of stainless steel or cast iron base pump connections, the DOURO adapts to diverse installation environments. Key features include low-vibration operation, space-saving inline installation, easy maintenance access, and compatibility with a wide range of fluid types. Built to international standards, the DOURO series is the answer to all your pump needs in the field — delivering long service life, energy efficiency, and dependable operation for water supply, HVAC, pressure boosting, and critical process systems.

Pump Structure Design

Vertical inline multistage design with stainless steel impellers and guide vanes. The pump features a compact structure with suction and discharge ports on the same axis, allowing direct inline installation. Available with stainless steel or cast iron base pump connection, providing flexibility to match specific application requirements and environmental conditions.

Motor

Douro Series motor with OEM Reinha Motor Totally enclosed, fan-cooled, 2 pole standard motors,
Enclosure class : IP55, Insulations class : F
Efficiency Class : IE3 (IE4/IE5 available as options)
Voltage : 220-240/380-415V

Pump Operating Conditions

Pumping liquids which are thin, clean, non-flammable, non-combustible or non-explosive with no solid particles or fibres.

Max. ambient temperature: +40°C

Range liquid temperature: -15°C to +120°C

Max. altitude above sea level: 1000 m

Pump Performance

The motors used for the measurements are based on 2900 rpm or 2950 rpm

Tolerances to ISO 9906.

Measurements have been made with airless water at a temperature of 20°C.

Curves apply to kinematic viscosity of 1mm²/s.

Select a best efficiency point of the pump which is operating within the recommended curve of the pump performance.

Designation

DOURO- SVH/SVHT/ 10/120

Series Name _____

SVH - Stainless steel type _____

SVHT - Cast Iron Type _____

Rated Capacity (m³/h) _____

Number of Stages x 10 _____

Applications

Water Management

- Transfer Pump
- Booster Pump
- Water Filter
- Irrigation Pump

General Industry

- Cooling Pump
- Jockey Fire fighting Pump
- Booster Pump
- Transfer Pump

Building Service

- Cooling Pump
- Transfer Pump
- Jokey Fire Fighting Pump
- Booster Pump

Minimum Inlet Pressure, NPSHa

Cavitation may occur if the following conditions exist during the operation of the water pump:

- Pressure in the pump lower than the vaporization pressure of the conveying liquid
- Actual flow is significantly greater than the rated flow
- High Liquid Temperature
- The Water tank or pool is lower than the pump inlet
- To avoid cavitation, make sure there is a minimum pressure on the inlet side of the pump. The maximum suction range H (m) can be calculated as follows:
- $NPSHa = P_b - H - H_f - H_v$
- $NPSHa > NPSHr + HS$

P_b = Atmospheric pressure (can be set to bar)

$NPSHr$ = Net positive suction head (read from max flow rate on NPSH curve)

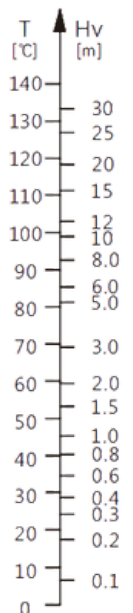
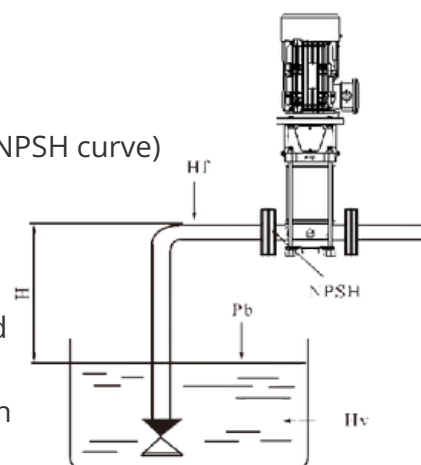
H_f = Pipeline loss at inlet

H_v = Vaporization pressure

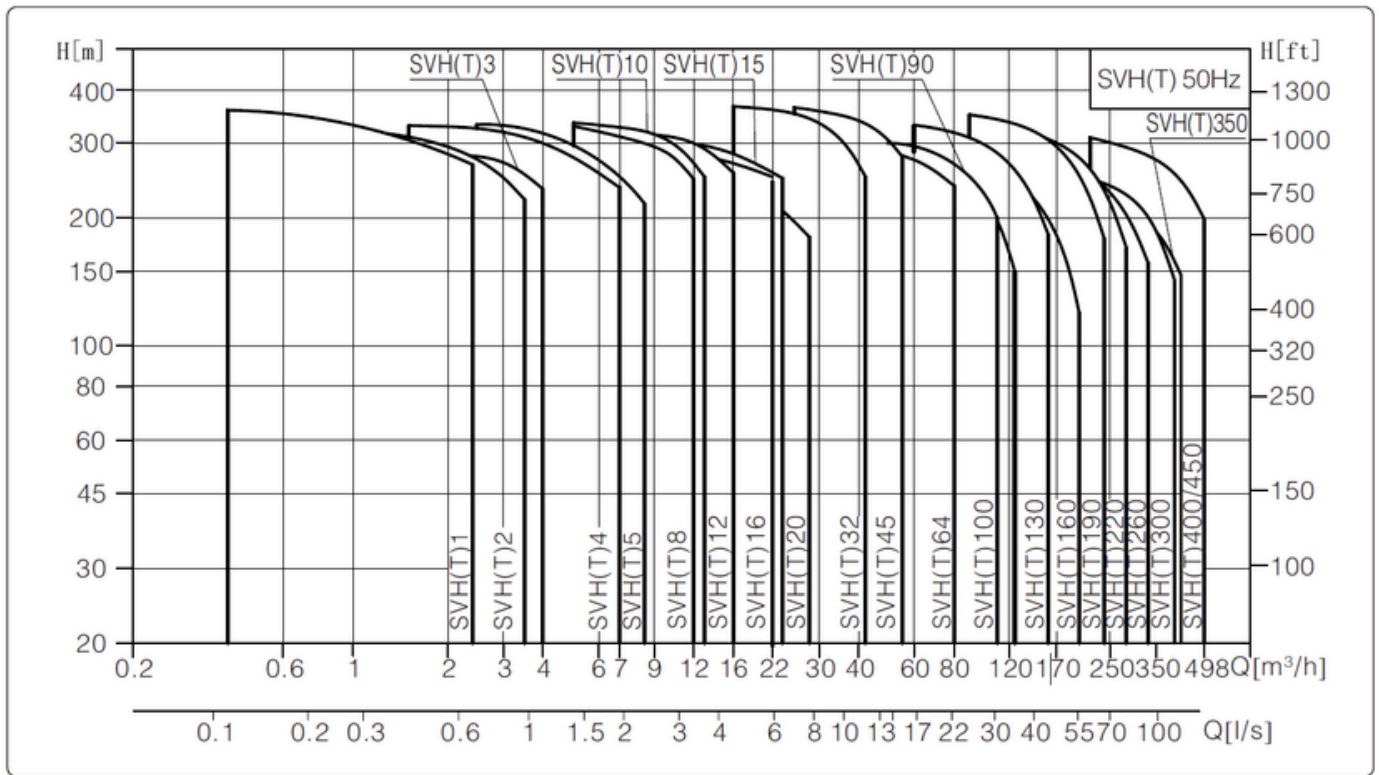
HS = Safety margin, minimum 0.5m head

If the calculated value of H is positive, the pump can be operated at the maximum suction range H.

If the calculated value of H is negative, there must be a head with a minimum inlet pressure H.



PERFORMANCE RANGE - DOURO SVH/SVHT



Junction Box Positioning

