

# Lowara Product Guide

# VERTICAL MULTISTAGE PUMPS

## Inline Vertical Multistage Pump

### e-SV Series

The e-SV is a technologically advanced pump renowned for excellent performance and leading efficiencies with high reliability. With a wide range of sizes available, it is capable of meeting customer needs for various industries.

#### APPLICATIONS

- » AS/NZS 4020 Compliant; Suitable for drinking water
- » Ideal for use with the HYDROVAR® Variable Speed Drive (VSD) controller: see pages 31-32
- » Handling of water, free of suspended solids, in the civil, industrial and agricultural sectors
- » Pressure boosting and water supply systems
- » Irrigation systems
- » Wash systems
- » Water treatment plants
- » Handling of moderately aggressive liquids, demineralized water and glycol, etc
- » Circulation of hot and cold water for heating, cooling and airconditioning systems
- » Boiler feed
- » Pharmaceutical industries
- » Food and beverage industries

#### SPECIFICATIONS

##### PUMP

The e-SV pump is a non-self priming vertical multistage pump coupled to a standard motor. The liquid end, located between the upper cover and the pump casing, is held in place by tie rods. The pump casing is available with different configurations and connection types.

- » Delivery: up to 160 m<sup>3</sup>/hr
- » Head: up to 330m
- » Temperature of pumped liquid:
  - from -30°C to +120°C for standard version
- » Maximum operating pressure:
  - 1, 3, 5, 10, 15, 22SV with oval flanges: 16 bar (PN16)
  - 1, 3, 5, 10, 15, 22SV with round flanges or Victaulic®, Clamp or DIN 11851 connections: 25 bar (PN 25)
  - 33,46SV: 16, 25, 40 bar (PN16, PN25 or PN40)
  - 66, 92, 125SV: 16 or 25 bar (PN16 or PN25)
- » Tested in compliance with ISO 9906 - Annex A

##### MATERIALS

- » Standard construction:
  - 15V to 22SV all wetted parts in 304SS;
  - 33SV to 125SV wetted parts in 304SS/316SS/CI
- » SVS construction: 33SV to 92SV all wetted part in 304SS
- » SVN construction: all wetted parts in 316SS

##### MOTOR

- » Squirrel cage enclosed construction with external ventilation
- » Protection Class: IP 55
- » Insulation Class: F
- » Performances according to EN 60034-1
- » Standard voltage:
  - Single phase version: 220-240V, 50Hz
  - Three phase version: 220-240/380-415V, 380-415/660-690V, 50Hz for power above 3kW
  - Standard motors comply with MEPS

##### OPTIONS

- » High pressure pump, horizontal version, low NPSH version, high temperature version, passivated and electro-polished version are also available upon request

# VERTICAL MULTISTAGE PUMPS

## FEATURES of 1, 3, 5, 10, 15 & 22SV SERIES

- » Vertical multistage centrifugal pump. All metal parts in contact with the pumped liquid are made of stainless steel
- » Reduced axial thrusts enable the use of standard motors that are easily found in the market. The SM  $\geq 0,75$  kW and PLM surface motors have efficiency values that fall within the range normally referred to as efficiency class IE2
- » Seal housing chamber designed to prevent the accumulation of air in the critical area next to the mechanical seal
- » Mechanical seal according to EN 12756 (ex DIN 24960) and ISO 3069 for 1, 3, 5SV and 10, 15, 22SV ( $\leq 4$  kW) series
- » Easy maintenance. No special tools required for assembly or disassembly
- » With round flanges that can be coupled to counter-flanges, according to EN 1092

## FEATURES of 33, 46, 66, 92 & 125SV SERIES

- » Version G: vertical multistage centrifugal pump with impellers, diffusers and outer sleeve made entirely of stainless steel, and with pump casing and motor adaptor made of cast iron
- » Innovative axial load compensation system on pumps with higher head. This ensures reduced axial thrusts and enables the use of standard motors that are easily found in the market
- » Seal housing chamber designed to prevent the accumulation of air in the critical area next to the mechanical seal
- » The pumps for G and N versions are certified for drinking water use (as per AS/NZS 4020)
- » Standard version for temperatures ranging from  $-30^{\circ}$  to  $+120^{\circ}$  C
- » Pump body fitted with couplings for installing pressure gauges on both suction and delivery flanges
- » In-line ports with round flanges that can be coupled to counter-flanges, in compliance with EN 1092
- » Mechanical sturdiness and easy maintenance. No special tools required for assembly or disassembly

## OPTIONS

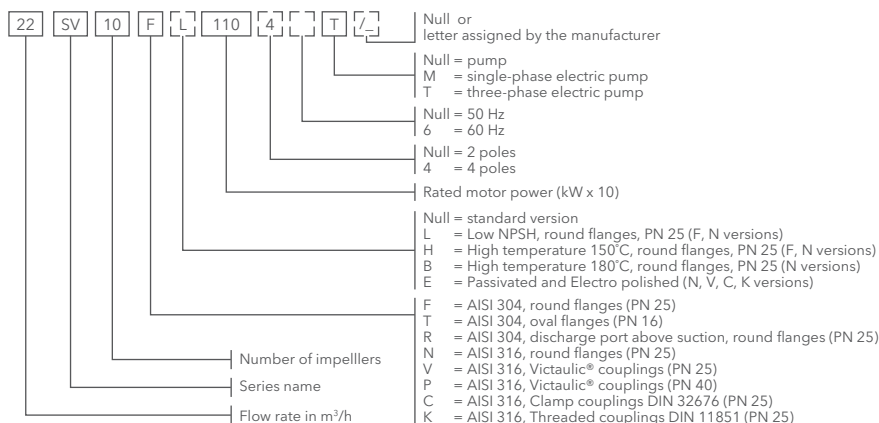
- » The following versions are available:
  - F:** round flanges, in-line delivery and suction ports, AISI 304
  - T:** oval flanges, in-line delivery and suction ports, AISI 304
  - R:** round flanges, delivery port above the suction port, with four adjustable positions, AISI 304
  - N:** round flanges, in-line delivery and suction ports, AISI 316
  - V:** Victaulic® couplings, in-line delivery and suction ports AISI 316
  - C:** Clamp couplings (DIN 32676), in-line delivery and suction ports, AISI 316
  - K:** thread couplings, (DIN 11851), in-line delivery and suction ports, AISI 316
- » Balanced mechanical seal according to EN 12756 (ex DIN 24960) and ISO 3069, which can be replaced without removing the motor from the pump for 10, 15 and 22SV ( $\geq 5,5$  kW) series
- » A second plug is available for 10, 15, 22SV series
- » Threaded, oval counter-flanges made of stainless steel are standard supply for the T versions
- » Round counter-flanges made of stainless steel are available on request for the F, R and N versions

V

R

T

## IDENTIFICATION CODE - 1, 3, 5, 10, 15, 22SV SERIES

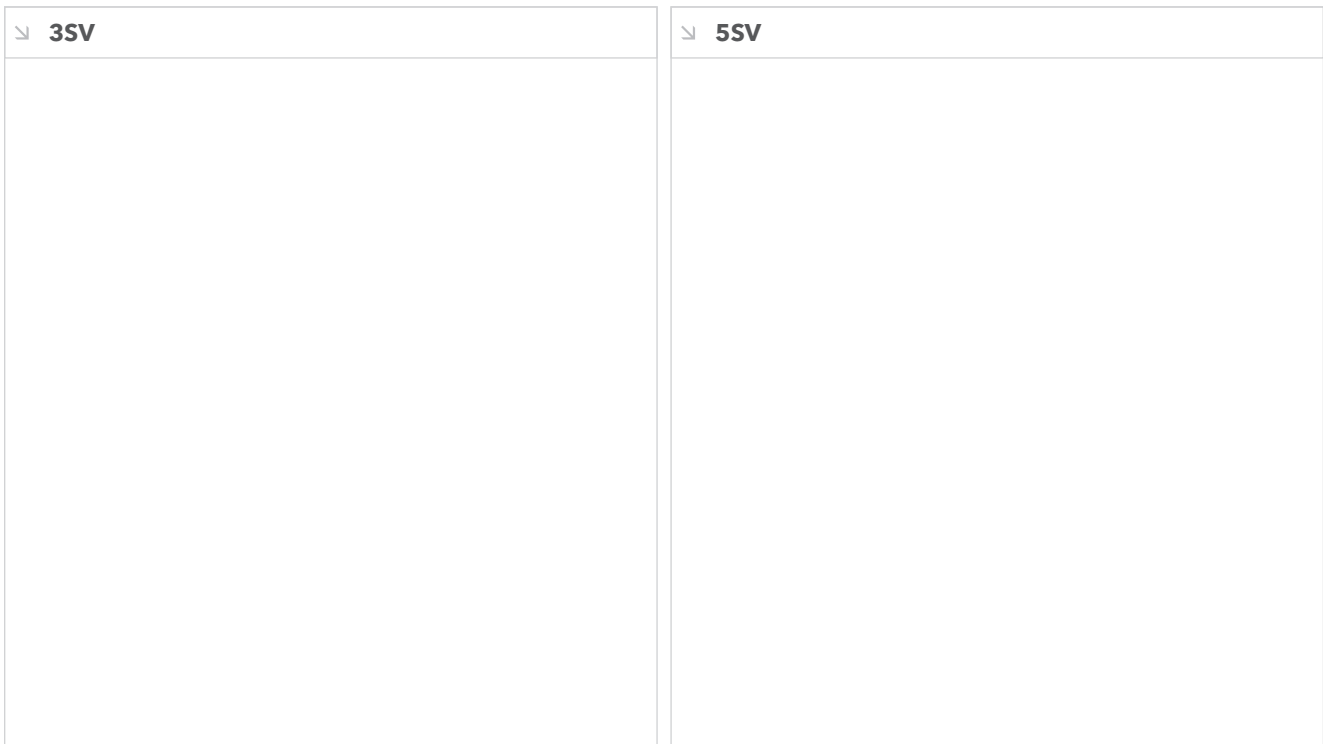
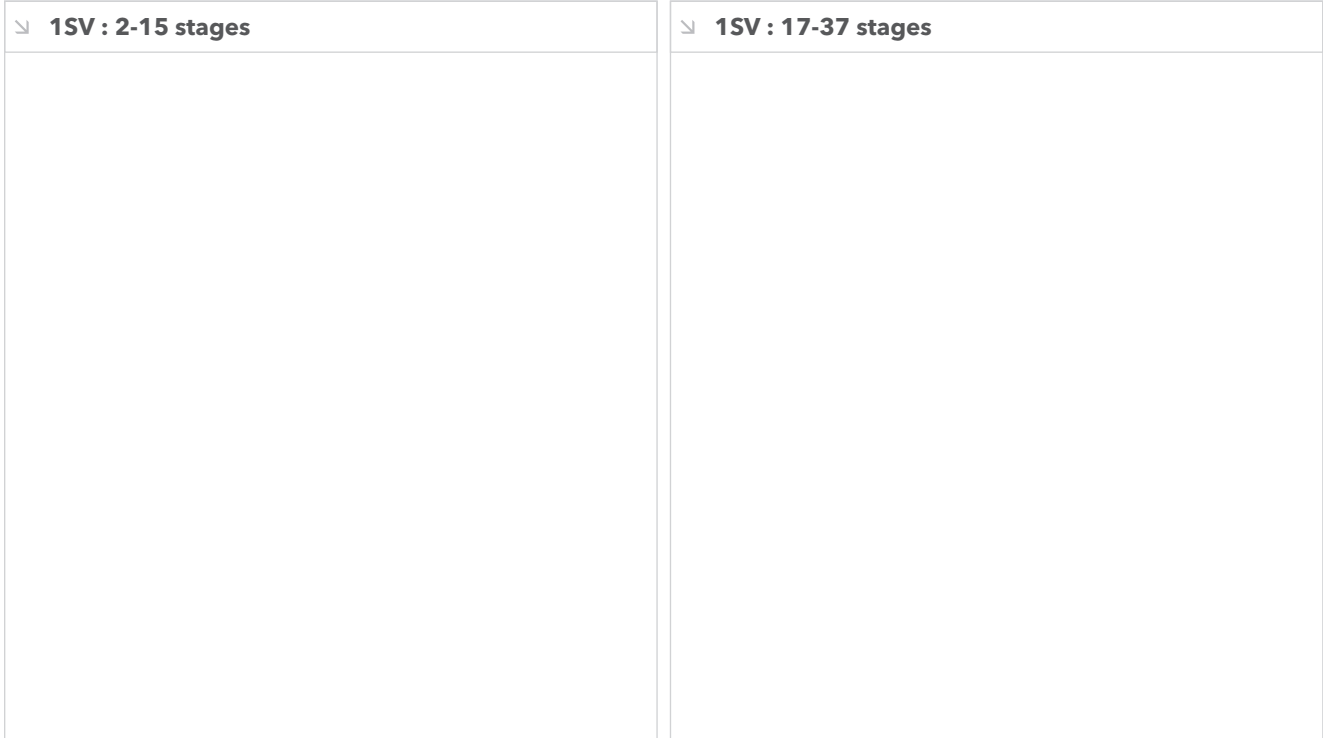


EXAMPLE: 22SV10F110T  
SV series electric pump, flow rate 22 m<sup>3</sup>/h, number of impellers 10, F version (AISI 304), round flanges, rated motor power 11 kW, 50 Hz frequency, three-phase.

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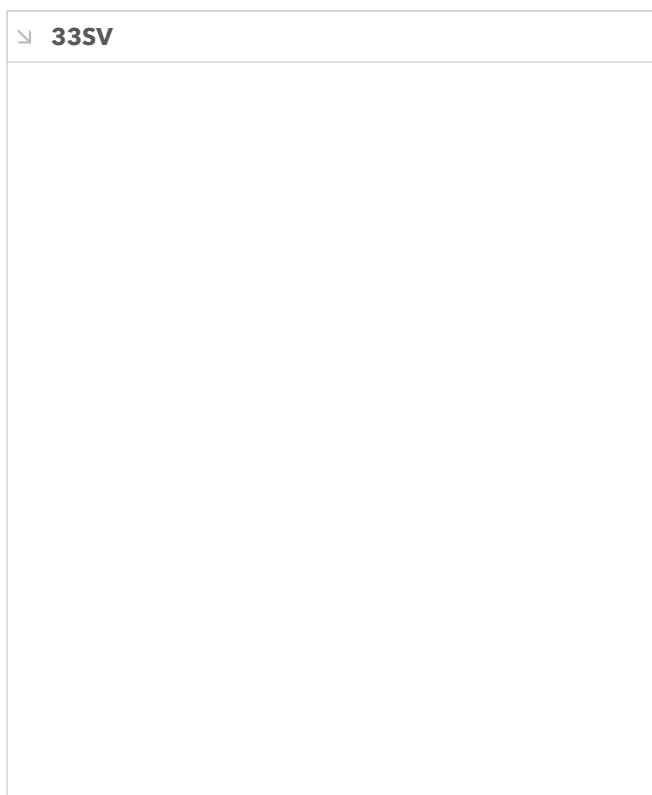
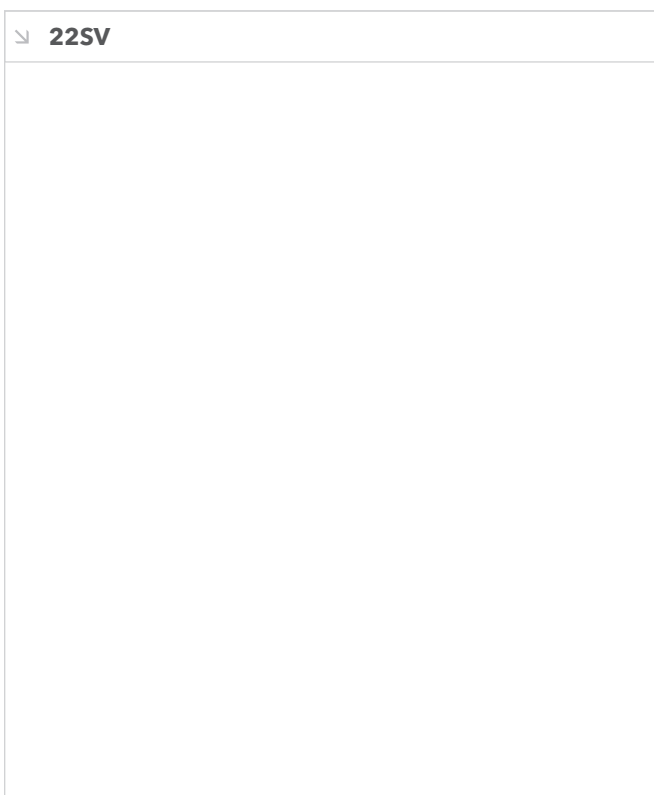
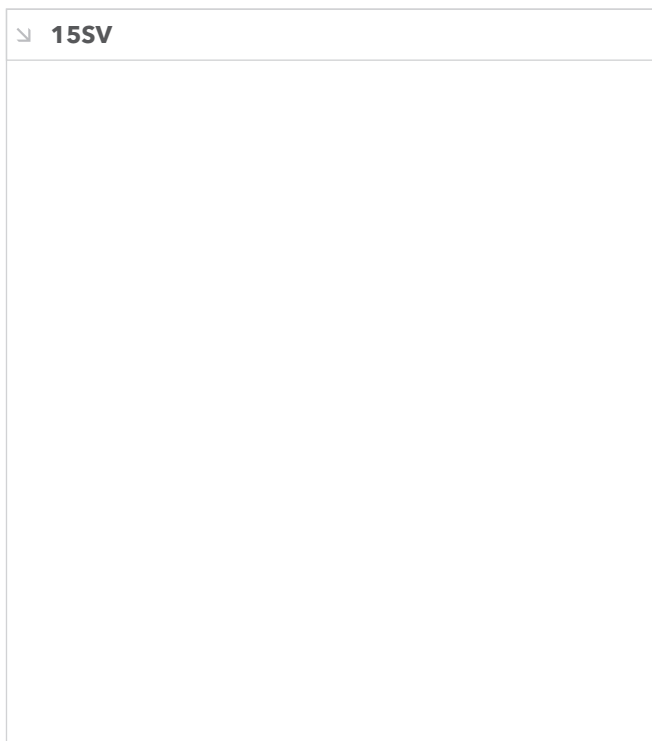
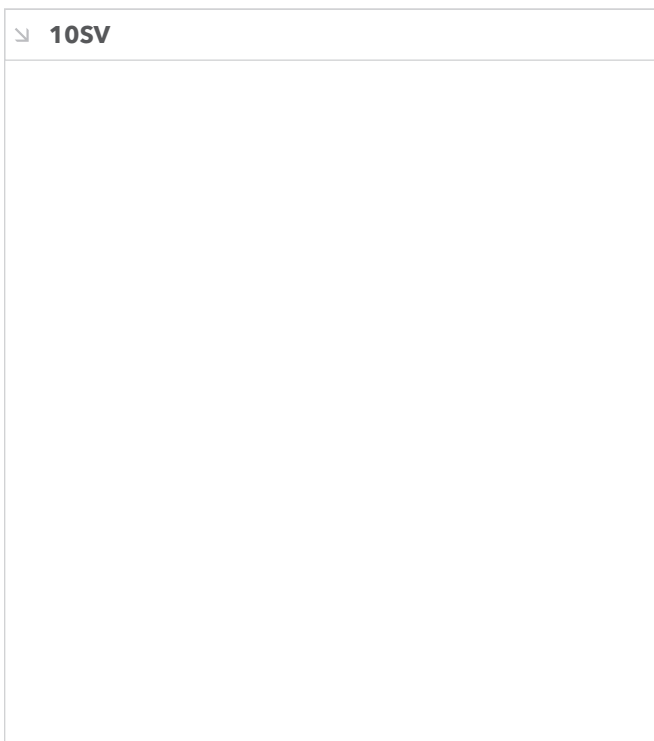
## PERFORMANCE CURVES AT 2900 RPM



# VERTICAL MULTISTAGE PUMPS

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## PERFORMANCE CURVES AT 2900 RPM



# VERTICAL MULTISTAGE PUMPS

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## PERFORMANCE CURVES AT 2900 RPM

