# Vacuum Dehydrator | SVD01

## Introduction

The Schroeder Vacuum dehydrator SVD01 serves to dewater, degas and filter hydraulic and lubricating fluids. It is ideal for fluid tank sizes of up to 500 gallon, with its flow rate of up to 1.3 gpm, under normal water ingression rates of the fluid.

It works on the principal of vacuum dewatering to extract free and dissolved water as well as free and dissolved gases. By using KLC filter technology, with its high dirt holding capacity to remove particulate contamination, the SVD01 is very cost effective.

Its compact and mobile construction makes it ideally suited for service work or for use in tight spaces. In the version for permanent installation, it provides continuous protection for applications where operating fluids require optimal and continues care.

## **Features**

- Small, compact and easy to operate unit for quick use during service calls or emergencies
- Reliable and convenient for continuous or occasional use
- Optional integrated heater to increase the rate of water extraction, especially for colder or higher viscosity fluids
- Optional integrated water content and particulate measurement technology with continues display of the measurements and storage of the values
- Lower residual water content, gas content and particulate contamination lead to longer oil change intervals, improve life expectancy of components, higher machine availability and reduction in the Life Cycle Cost of equipment.









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Dry Mass: 265 lbs (120 kg)   Inlet Connections: G1/2" (BSPP)   Outlet Connections: G1/2" (BSPP)   Flow Rate: 80 gallons/hour (1.3 gpm)   Inlet Pressure: Atmospheric   Operating Pressure: up to 65 psi (4.5 bar)   Fluid Service Temperature: 50° F to 175°F (10°C to 79°C)   Fluid Viscosity: 1000 SUS, up to 4000 SUS with optional heater   Power Supply: 230 VAC, 60 Hz, 16 AMP, optional 460 VAC, 60 Hz   Attainable Water Content: < 100 PPM   Optional Relative Humidity Display: Standard, 0-99% Range   Seals: Standard NBR, Optional Viton
Inlet Connections: G1/2" (BSPP)   Outlet Connections: G1/2" (BSPP)   Flow Rate: 80 gallons/hour (1.3 gpm)   Inlet Pressure: Atmospheric   Operating Pressure: up to 65 psi (4.5 bar)   Fluid Service Temperature: 50° F to 175°F (10°C to 79°C)   Fluid Viscosity: 1000 SUS, up to 4000 SUS with optional heater   Power Supply: 230 VAC, 60 Hz, 16 AMP, optional 460 VAC, 60 Hz   Attainable Water Content: < 100 PPM   Optional Relative Humidity Display: Standard, 0-99% Range   Seals: Standard NBR, Optional Viton
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<b>Operating Fluids:</b> Mineral based hydraulic and lubrication fluids
Model Code

How to Build a Valid Model Number:							
BOX 1 BOX 2 BOX 3 BOX 4 BOX 5 BOX 6 BOX 7 BOX 8 BOX 9							
Example: NOTE: One option per box							
BOX 1 BOX 2 BOX 3 BOX 4 BOX 5 BOX 6 BOX 7 BOX 8 BOX 9							
SVD – 01 – H – S – 23 – 24H – 05 – TWS – = SVD01HM2324H05TWS							

BOX 1	BOX 2	BOX 3	BOX 4	
Dewatering Unit	Flow Rate	Fluid	Mobility	
SVD	01 = 1.3 gpm	H = Hydraulic & Synthetic Fluid V = Others (Viton Seals optional	S = Stationary M = Caster Base	

BOX 5	BOX 6	BOX 7	BOX 8
Voltage	Power	Media (KLC Element)	Option
23 = 230VAC/60Hz/1Phase	12X = 1200 Watts	02	None = Omit
46 = 460VAC/60Hz/3Phase	24H = 2400 Watts with heater	05	TWS = Water Sensor with display
		10	TCMTWS = Contamination and Water Sensor
		20	

### Heater

By using the optional built-in heater, the dewatering capacity can be increased in the case of high viscosity operating fluids or operating fluids at low temperatures. If the temperature of the operating fluid is raised by 18 degrees Fahrenheit then the dewatering capacity increases by up to 50%. The ideal temperature for dewatering is 120 to 140 degrees Fahrenheit. Generally, the heater option has to be chosen, and the heater has to be in operation, for operating viscosities of between 1700 and 4000 SUS.

## Design

As a rough guide, a Vacuum Dehydrator should be sized according to the tank volume of the system. Therefore, a SVD01 can be used on tank volumes up to 500 gallons under normal water ingress conditions. Generally, it must observed that the size is dependent on the application, the operating fluid condition such as starting water concentration, fluid temperature, ambient temperature, the amount of operating fluid as well as the water infiltration rate into the system. These factors greatly affect dewatering performance. It is for that reason that the specifications can only serve as a starting point.