

# Products

## Oil-sealed Screw Vacuum Pumps VACUBE VQ 400 i to VQ 1650 iCH



Screw vacuum pump VACUBE VQ 1250 iCH

VACUBE is a new generation of intelligent, single-stage, oil-sealed screw vacuum pumps with Variable Speed Drive (VSD) technology.

VACUBE generates vacuum on demand. All pumps are controlled and maintained by an internal controller. The systems offer superior performance for a wide range of rough vacuum applications.

### Models

#### i – model

Ideal for standard vapor free applications as needed in central vacuum systems for holding, lifting and moving of parts and components.

#### iH – model

This variant is best suited for applications with high water vapor ingress. The high water vapor tolerance level makes the iH – model best suited for the humid applications.

#### iC – model

The iC – VACUBE variant is specifically designed to support the special needs in short cycling applications, as for example common in vacuum packaging or assembly lines for electronic equipment.

#### iCH – model

The combination of „iH“ and „iC“ offers high water vapor tolerance and the short cycling ability.

### Advantage to the User

- **Pump efficiency**
    - Variable speed drive (VSD)
    - Internal controller
  - **Power demand**
    - Sustainable power saving due to on-demand vacuum generation
  - **Work space environment**
    - Ultra-high oil retention system
    - Quiet operation, noise level bench mark
    - Small footprint – pallet size dimensions\*  
(\*up to 950 m<sup>3</sup>/h speed)
    - “Plug and play” system set up
  - **Sustainable productivity**
    - Programable operation modes
    - Long maintenance intervals
- **Forming and shaping**
    - Plastics (e.g. bath tubs, shower trays, white goods internals)
    - Packaging materials (e.g. thermoformed parts)
    - Glass items such as bottles and windscreens
    - Wood lamination
  - **Preserving**
    - Meat packaging (skin, modified atmosphere packaging MAP)
    - Poultry packaging
    - Canning
    - Food freeze drying
  - **Dehumidification**
    - Vacuum cooling
    - Roof tile and brick manufacture
    - Pipeline drying
  - **Special demands**
    - Altitude testing
    - Special evacuation duties
    - Coating
    - Clean environments

### Typical Applications

- **Holding, lifting and moving**
  - Print & Paper
  - Packaging
  - Electronic manufacturing
- **Woodworking**
  - Li-Ion cell manufacturing
  - Glass manufacturing



### Integrated Controller / Monitoring System

The VACUBE controller maintains the pressure within programmable limits by automatically adapting the motor speed. A number of programmable settings, e.g. the setpoint, the minimum stop time and the maximum number of

motor starts and several other parameters are hereby taken into account.

The controller stops the vacuum pump whenever possible to reduce the power consumption and restarts it automatically when the pressure increases.

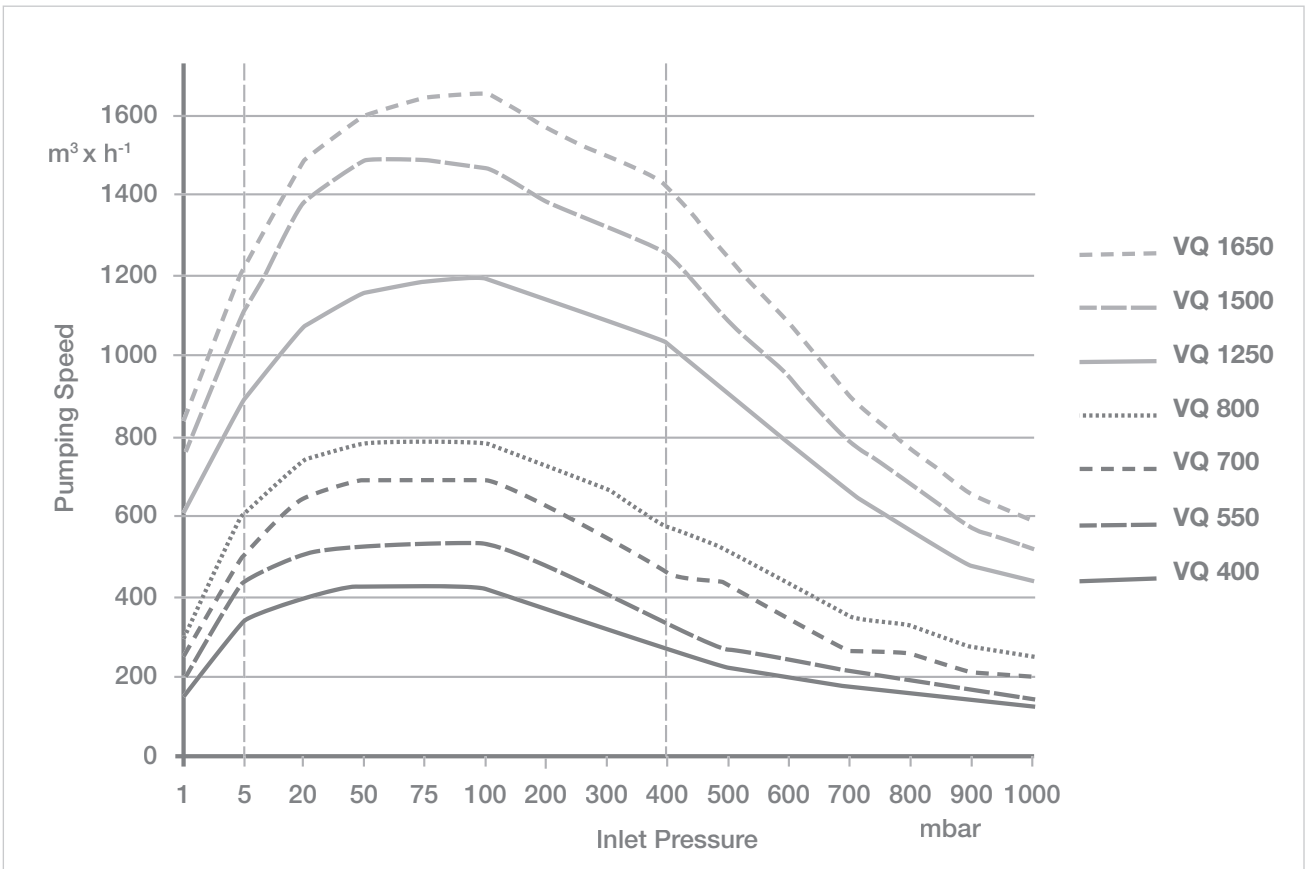
For H version pumps, the pump is equipped with a purge cycle which prevents and removes condensed water in the sealing oil.

The controller can be operated intuitively. A comfortable 3,5" – Color Display is used as graphic user interface to call up menus or to input customized settings easily. LED's inform about maintenance and service demands.

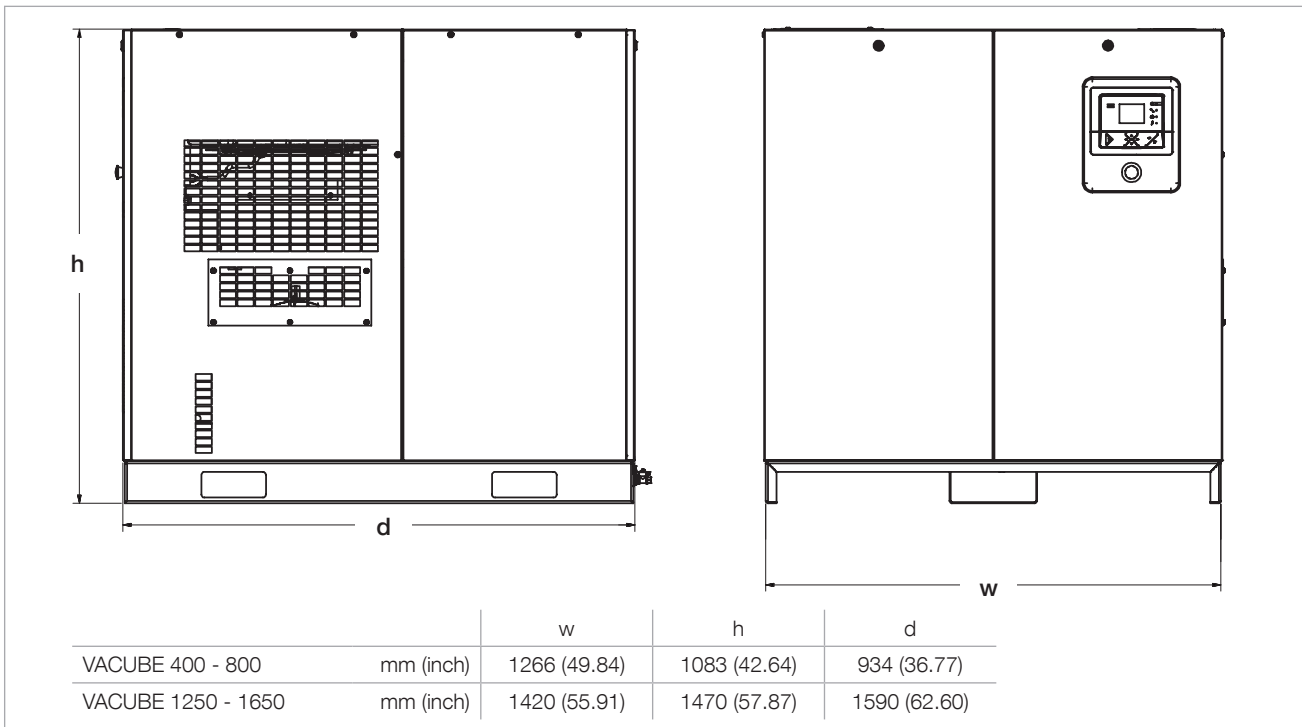
Multiple controllers can be linked with each other.

### Further features:

- Set point pressure selection
- Gas ballast on/off
- Displays:
  - Pressures (inlet, discharge)
  - Temperatures
  - Alarms and warnings
  - Counters (e.g. running hours, pump starts, etc.)
- Week timer function
- Language and unit selection



Pumping speed characteristics



Dimensional drawing VACUBE

### Technical Data

### VACUBE

#### VQ 400 VQ 550 VQ 700 VQ 800 VQ 1250 VQ 1500 VQ 1650

<b>Max. eff. pumping speed</b>	<b>m<sup>3</sup>/h / cfm</b>	420 / 247	530 / 310	700 / 412	790 / 465	1250 / 736	1490 / 877	1620 / 955
<b>Ultimate pressure</b>	<b>mbar / Torr</b>	0.35 / 0.26						
<b>Motorshaft power</b>	<b>kW / hp</b>	5.5 / 7.5	7.5 / 10	11 / 15	15 / 20	22 / 29	30 / 40	37 / 50
<b>Noise level</b>	<b>dB(A)</b>	51 - 65	51 - 65	51 - 73	51 - 76	65 - 75	65 - 75	65 - 80
<b>Ambient temperature</b>	<b>°C / °F</b>	0 - 46 / 32 - 115						
<b>Weight</b>	<b>kg / lbs</b>	500 / 1102	500 / 1102	510 / 1125	520 / 1147	1058 / 2333	1058 / 2333	1073 / 2366
<b>Motor protection class</b>	<b>IP</b>	54						
<b>Supply voltages*</b>		380 - 460V, 3ph, 50/60Hz						

\* other voltages available on request

**Ordering Information****VACUBE**

	<b>Part No.</b>
VACUBE VQ 400 i	<b>177040V01</b>
VACUBE VQ 400 iH	<b>177040V10</b>
VACUBE VQ 550 i	<b>177055V01</b>
VACUBE VQ 550 iC	<b>177055V05</b>
VACUBE VQ 550 iH	<b>177055V10</b>
VACUBE VQ 550 iCH	<b>177055V15</b>
VACUBE VQ 700 i	<b>177070V01</b>
VACUBE VQ 700 iC	<b>177070V05</b>
VACUBE VQ 700 iH	<b>177070V10</b>
VACUBE VQ 700 iCH	<b>177070V15</b>
VACUBE VQ 800 i	<b>177080V01</b>
VACUBE VQ 800 iC	<b>177080V05</b>
VACUBE VQ 800 iH	<b>177080V10</b>
VACUBE VQ 800 iCH	<b>177080V15</b>
VACUBE VQ 1250 i	<b>177125V01</b>
VACUBE VQ 1250 iH	<b>177125V10</b>
VACUBE VQ 1500 i	<b>177150V01</b>
VACUBE VQ 1500 iC	<b>177150V05</b>
VACUBE VQ 1500 iH	<b>177150V10</b>
VACUBE VQ 1500 iCH	<b>177150V15</b>
VACUBE VQ 1650 i	<b>177165V01</b>
VACUBE VQ 1650 iC	<b>177165V05</b>
VACUBE VQ 1650 iH	<b>177165V10</b>
VACUBE VQ 1650 iCH	<b>177165V15</b>