

Ordering Information

	Connection Fittings	
	DN 40 ISO-KF	DN 63 ISO-K
	Part No.	Part No.
Combination filter 5 filter elements in stage 1 and 5 elements in stage 2 (elements not included)	180497V	180499V
straight-thru configuration, same as above except inlet on bottom	180498V	-
Stacking modules includes 2 stages (5 elements ea.), 11.25" (286 mm) tall, all attachment hardware included (filter elements not included)	180500V	180500V
Cooling Option base, 0.5 – 1.0 GPM (2 – 4 LPM) water flow recommended	180501V	180501V

Ordering Information

	Filter Elements
	Part No.
Copper gauze	180502V
Stainless steel gauze	180503V
Molecular sieve	180504V
Porous mixture of sodium hydroxide and potassium hydroxide	180505V
Activated charcoal	180506V
Pleated polypropylene 2 micron (99% efficient)	180507V
Pleated polypropylene 5 micron (99% efficient)	180508V
Pleated polypropylene 20 micron (99% efficient)	180509V

Ordering Information

	Adapters (Stainless Steel)
	Part No.
DN 40 ISO-KF to 1 1/4" NPT (male)	899 627
DN 40 ISO-KF to 2" NPT (male)	899 629
DN 63 ISO-K to 2" NPT (male)	721 03 040

Products

Oil-sealed Screw Vacuum Pumps
VACUBE VQ 400 i to VQ 4800 iH



VACUBE VQ models

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 low-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.

Advantages to the User

- Pump efficiency**
 - Variable speed with on-board frequency controller (FC)
 - Smart controller with intuitive interface
 - 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 790 m³/h speed)
 - “Plug and pump” system set up
 - Sustainable productivity**
 - Programable operation modes
 - Long maintenance intervals
- Woodworking**
 - Li-Ion cell manufacturing**
 - Glass manufacturing**
 - 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
 - Food applications**
 - 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

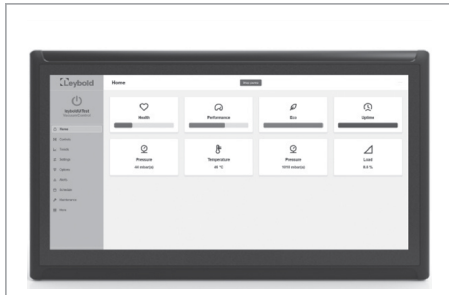
On-Board Controllers

Central Controller Multi-VAControl

Every VACUBE comes with an on-board controller as standard. Two controller platforms are available, MK5 and Leybold VAControl®.



VACUBE with MK5 controller



VACUBE with Leybold VAControl® controller

Central controller

Multi-VAControl

When one pump is not enough, we offer a complete system with multiple VACUBE pumps, all centralized together via the Multi-VAControl central controller.

Advantages to the User

- An easy-to-install solution for central vacuum systems: the central controller and the pumps are connected by communication cables
- Pump redundancy: the spare pump can also be connected to the central vacuum, and managed by the Multi-VAControl
- A highly-connected system: we offer local or cloud connectivity
- A future-proof set-up: more pumps can be added easily when your needs increase

MK5 Controller

The MK5 controller offers 1st generation smart controls to our VACUBES:

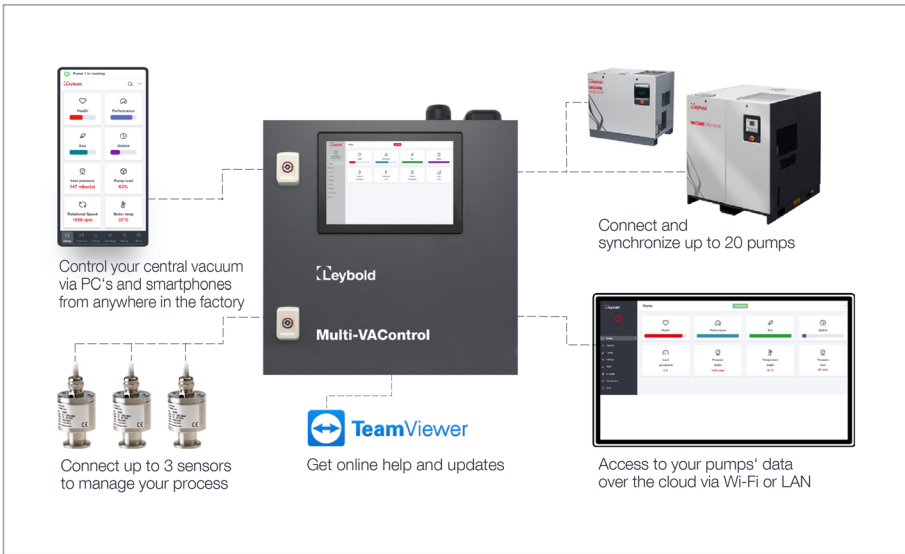
- Setpoint pressure control
- Temperature management
- Gas ballast management
- Alarms and warnings
- Timers and work period calendar
- Maintenance intervals follow-up

VACUBES with the MK5 controller can also be connected to a PLC via fieldbus. Moreover, it is possible to look up the screen parameters from a local Ethernet connection.

Leybold VAControl® Controller

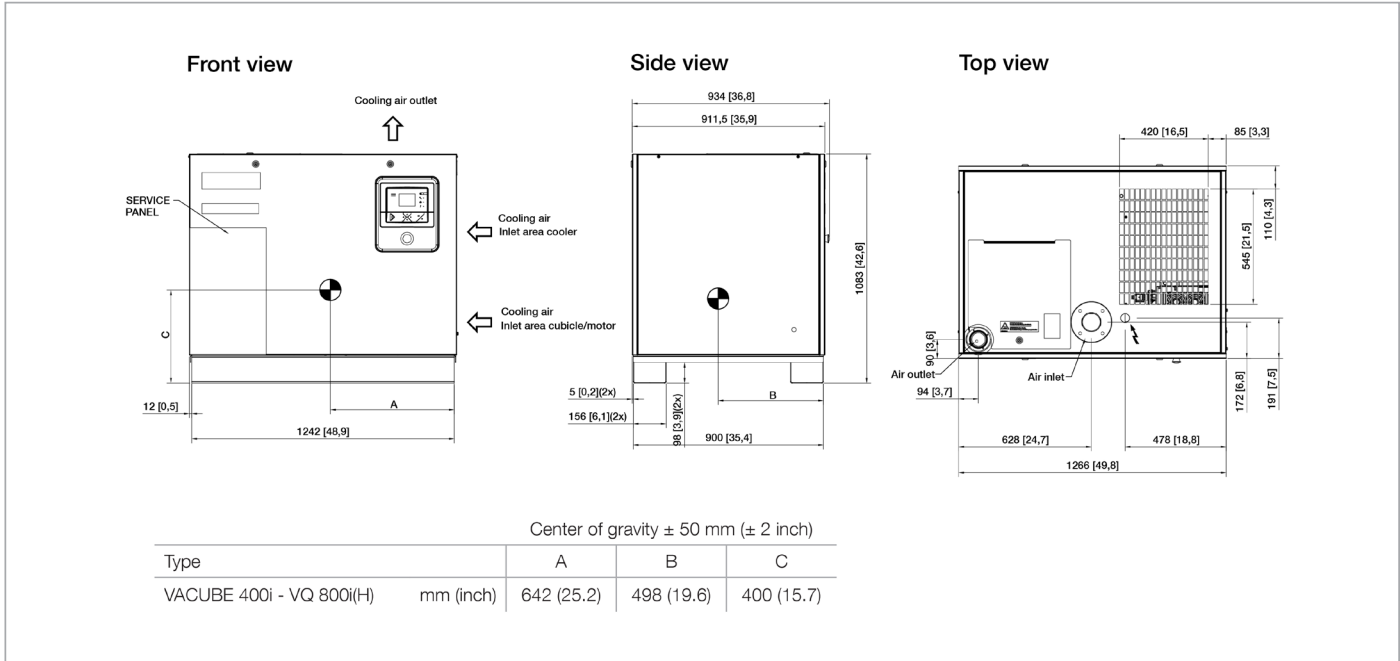
The Leybold VAControl® controller takes VACUBE to another dimension. All features of the MK5 controller remain available. VAControl adds performance and connectivity to help you manage your VACUBE in the most efficient way:

- Check, use or program your VACUBE from remote, whether you want to use local access, Wi-Fi, LAN or Cloud communication
- Your VACUBE records and processes its own performance data, to help you with diagnostics
- Monitor your vacuum performance and your energy efficiency in an intuitive way

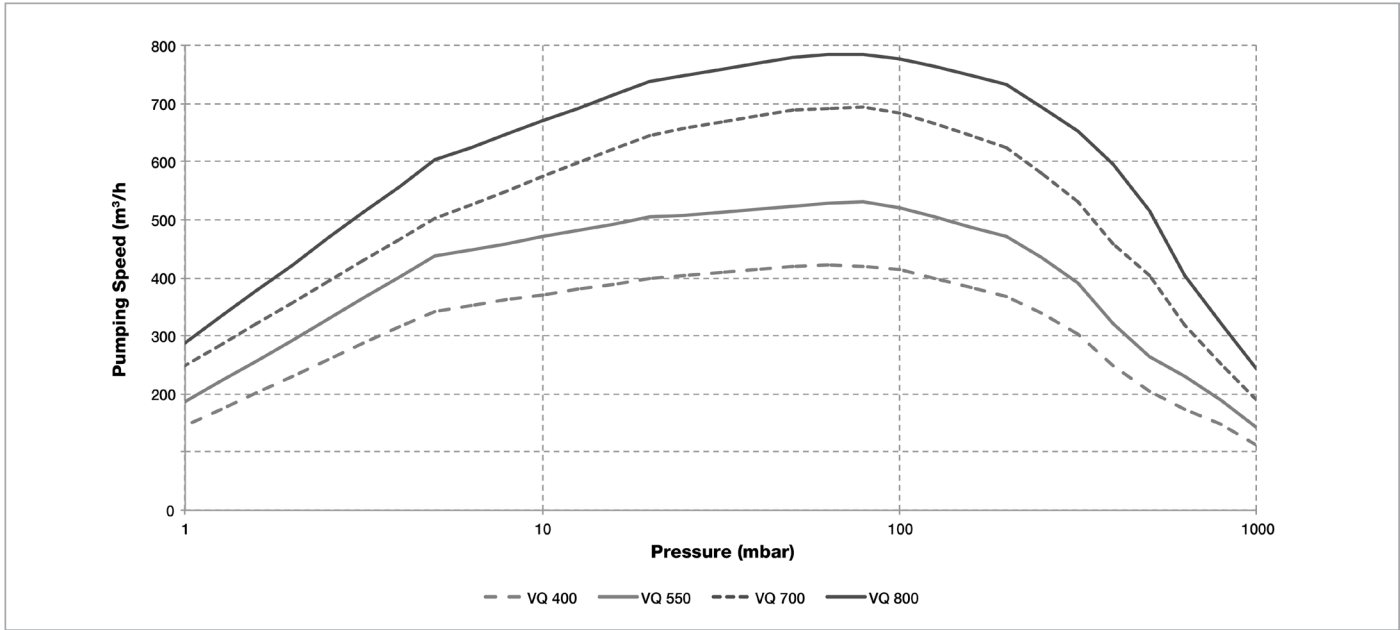


Synchronization example of multiple VACUBE pumps with Multi-VAControl

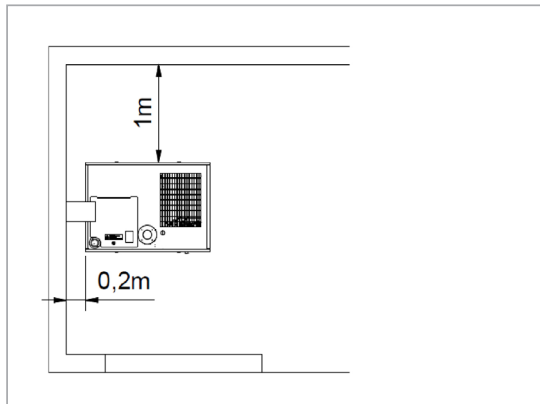
VACUBE 400 to 800 m³/h



Dimensional drawing VACUBE VQ 400i - VQ 800i(H) - all dimensions in mm



Pumping speed characteristics VACUBE VQ 400i - VQ 800i(H)



Installation requirements
VACUBE VQ 400i - VQ 800i(H)

Technical Data

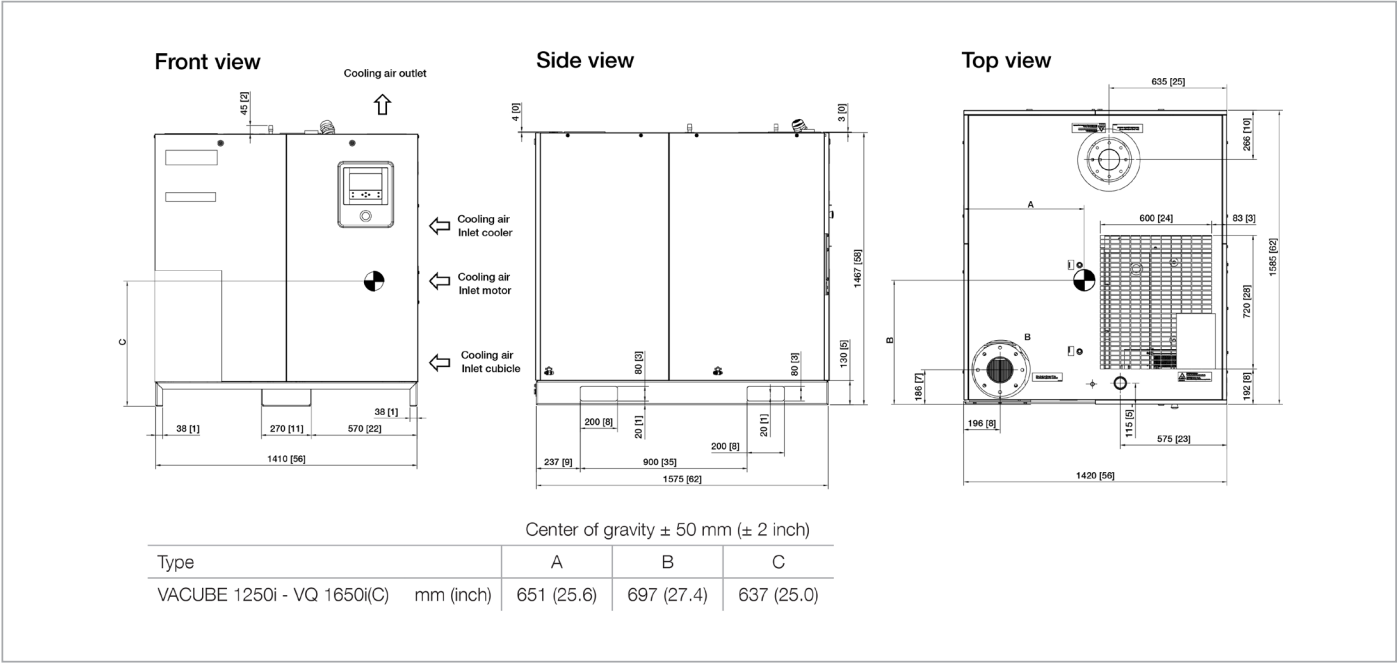
		VACUBE			
		VQ 400	VQ 550	VQ 700	VQ 800
Max. eff. pumping speed ¹⁾	m³/h (cfm)	420 (247)	530 (310)	700 (412)	790 (465)
Ultimate pressure ¹⁾	mbar (Torr)	0.35 / 0.26			
Optimal pressure range ¹⁾	mbar (Torr)	5-400 (3.75-300)			
Controller type		VAControl			
Motorshaft power	kW (hp)	5.5 / 7.5	7.5 / 10	11 / 15	15 / 20
Noise level	dB(A)	51 – 65		51 – 73	51 – 76
Ambient temperature	°C (°F)	0 – 46 (32 – 115)			
Weight	kg (lbs)	500 / 1102		510 / 1125	520 / 1147
Protection class	IP	54			
Supply voltages		380 – 460 V, 3ph, 50/60Hz			
Pump cooling		Air-cooled, vertical cooling air flow			
Inlet flange	DN	80 PN 10			
Exhaust flange	DN	65 non std.			

¹⁾ To DIN 28 400 and following numbers

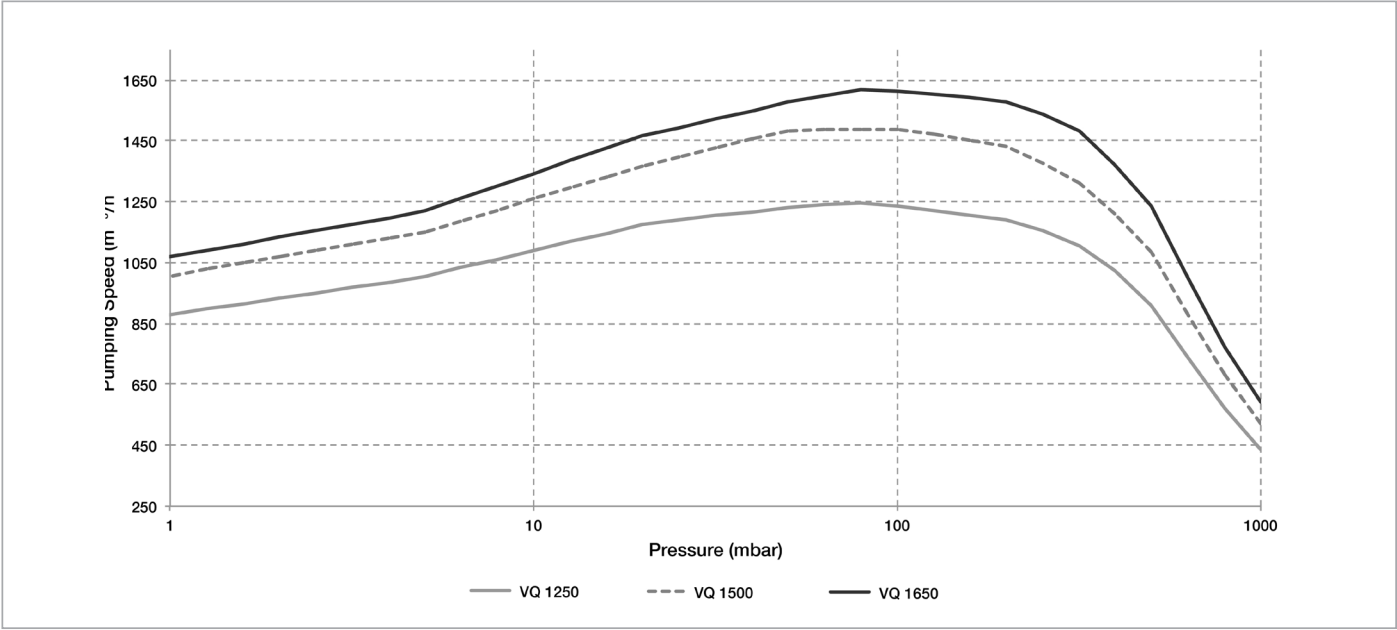
Ordering Information

		VACUBE			
		VQ 400	VQ 550	VQ 700	VQ 800
	Part No.	Part No.	Part No.	Part No.	Part No.
i - Model with front panel	10770400V01	10770550V01	10770700V01	10770800V01	
iH - Model with front panel	10770400V10	10770550V10	10770700V10	10770800V10	
i - Model with HMI	10770400V05	10770550V05	10770700V05	10770800V05	
iH - Model with HMI	10770400V15	10770550V15	10770700V15	10770800V15	
Accessories					
Multi-VAControl® central controller	10430001V01				
Wi-Fi option for VACUBE or Multi-VAControl®	3002615051				
NPT 3" threaded inlet	177005A50				
NPT 2-1/2" threaded outlet	177005A60				
Manual inlet valve for VQ400-800	177005A78				
Power transformer 200-230 V	177005A80		177005A82	177005A83	
Power transformer 500-575 V	177005A84		177005A86	177005A87	

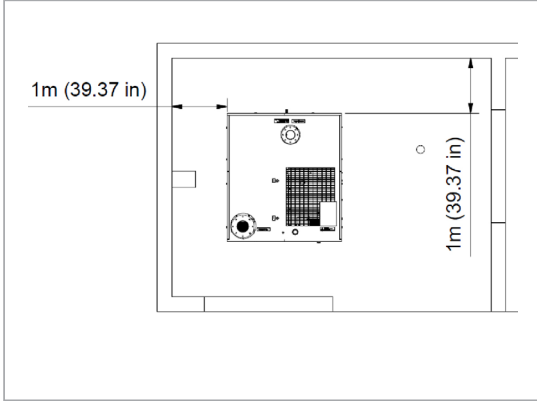
VACUBE 1250 to 1650 m³/h



Dimensional drawing VACUBE VQ 1250i - VQ 1650i(C) - all dimensions in mm



Pumping speed characteristics VACUBE VQ 1250i - VQ 1650i(C)



Installation requirements
VACUBE VQ 1250i - VQ 1650i(C)