QE71L—QE301L/QE71P—QE301P

QUADRUPLEX OIL LUBRICATED INDUSTRIAL VACUUM SYSTEM

MAKE IT BECKER.

figure TE250D system

MODEL	HP	END VACUUM ("Hg)	OPEN FLOW (SCFM)	FLOW @ 19"HG (SCFM)	BTU/HR (19"Hg)	BTU/HR (MAX VAC)	FLA (Per Pump)			SOUND [1] dB(A)
							208	230	460	
QE71L/P	2.4	29.9	182.2	60.2	37,738	31,119	7.1	7.0	3.5	67
QE101L/P	3.5	29.9	269.8	87.9	41,628	21,428	9.7	9.3	4.6	68
QE166L/P	6	29.9	430.8	147.8	66,025	34,121	18.7	18.4	9.2	72
QE201L/P	8.9	29.9	510.9	177.0	83,939	36,851	23.3	21.1	11.1	74
QE301L/P	12	29.9	725.1	256.5	116,081	56,642	33.8	33.6	16.8	76

(1) Per Pump dB(A) – According to DIN EN ISO 3744 (KpA = 3db(A)), 39.4 inch distance, at medium load, both connection sides piped
(2) All values listed are at 60Hz
(3) Reference data (atmosphere) 0"HgV,68°F; Tolerance:±5%

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THE BECKER ADVANTAGE SYSTEM

FEATURES OF THE QUADRUPLEX LUBRICATED ROTARY VANE

Industrial Vacuum System

BECKER ADVANTAGE L & P QUADRUPLEX EXPANDABLE VACUUM SYSTEM

Pneumatic vacuum system designed for industrial use. Features four Becker brand vacuum pumps, with integrated filtration and safety relief valves. Pumps, air receiver and control panel are mounted to modular skids to allow for future expansion of up to six pumps. Advantage P systems include a purge cycle to cleanse pumps of ingested gases and chemicals, increasing overall pump lifespan. All systems are tested for leaks and functionality before shipping.

The Advantage L & P quadruplex systems include:

- Four Becker Lubricated Rotary Vane vacuum pumps
- AMSE coded vacuum receiver with drain and bypass manifold
- Single point service for electrical and vacuum connections
- Integrated electrical panel with expandable system controls
    - Advantage P systems include one solenoid valve per pump prewired to the control panel
- Optional external filtration canisters (one per pump)
- Optional oil level and oil temperature monitors (per pump)

VACUUM PUMPS

All pumps used on our systems are Becker Manufactured and individually tested at factory before shipping. Becker oil lubricated rotary vane vacuum pumps feature:

- End vacuum of 29"Hg
- Integrated 2-micron paper inlet filter
- Gas ballast and anti-return valve
- Full Synthetic Vacuum Pump oil
    - ISO-100
- Oil sight glass for visual inspection
- Liquid filled vacuum gauges installed at the pump
- Simple maintenance procedures
- Single shaft direct drive through coupling
- IE3/NEMA PREMIUM efficiency motors
- TEFC Motors
- 208V/230V/460V/575V – 3-phase motor options

PLUMBING & RECEIVER

All vacuum pumps are plumbed to a manifold and connected to the air receiver. Check valves are installed at each pump inlet to prevent backflow in the system. Ball valves installed for pump and receiver isolation. One point connection for vacuum plumbing is standard for all Becker systems. Optional manifold and one point connection for exhaust plumbing is available.

All air receivers are ASME stamped to code and may have a mounted bypass and drain to allow for manual liquid removal.

CONTROL PANEL

NEMA type 3R, 4 & 12 enclosure with UL listing; mounted and prewired for expandable system controls. Expandable system panels are designed to allow easy installation of additional pump modules in the event new pumps are added to the original system (6 pump max per system). Becker expandable system controls are designed with lead/lag sequencing to maintain the desired vacuum range and provide automatic alternation of vacuum pumps to maintain equal run time between available pumps. Each system has adjustable minimum and maximum run timers to facilitate the correct activation of pumps in the system. Additional elements included are:

- 115V low voltage control transformer with fused primary and secondary
- Motor starters with overload protection
- Automatic low voltage transformer switching with alarm
- One Hand-Off-Auto switch per pump
- System run & alarm lamps
- Sound horn for notification of system alarms
- Silence/acknowledge alarm push button
- CVT failure lamp alert
- Isolated relays for remote alarm installation
- Preinstalled vacuum transducer

Panel also includes a 7" touchscreen LCD HMI unit to display system status. HMI provides access to basic system setup settings such as number of active pumps, vacuum high/low setpoints, and min/max run time. Live monitoring of each pump motor's average amperage and amperage per phase is also available.

PLC control unit offers the following communication services:

- Ethernet/IP slave device
- Modbus TCP
- SMS/email notifications
- Web server (WebVisu)

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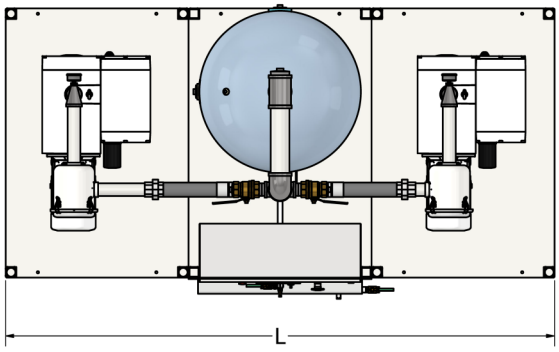
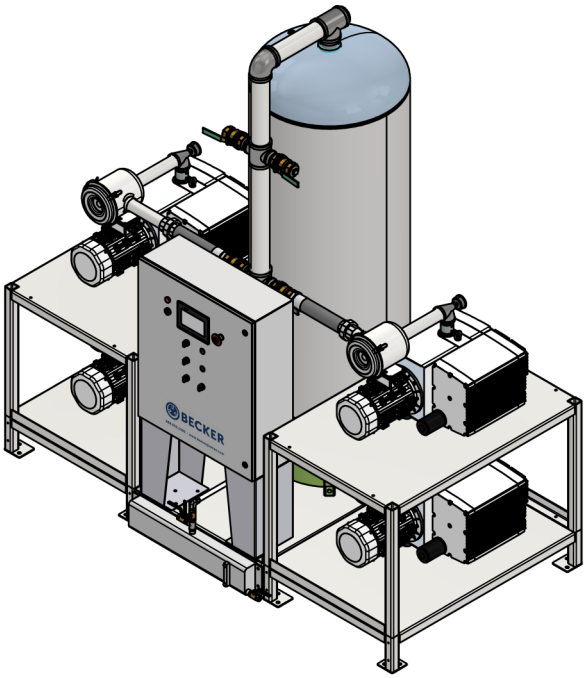
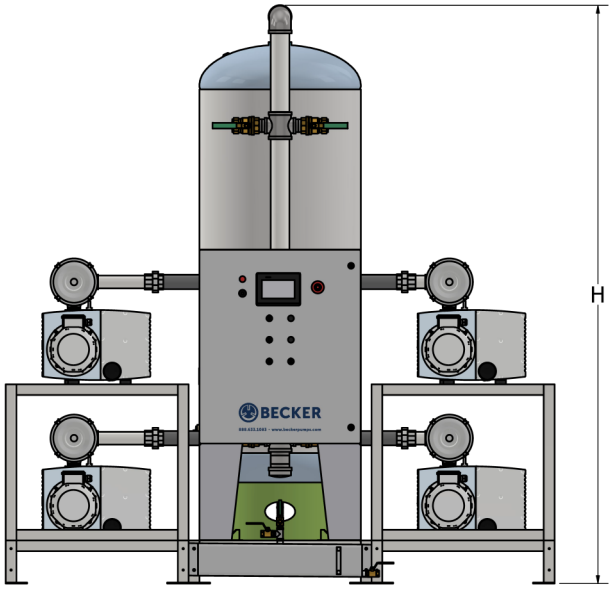
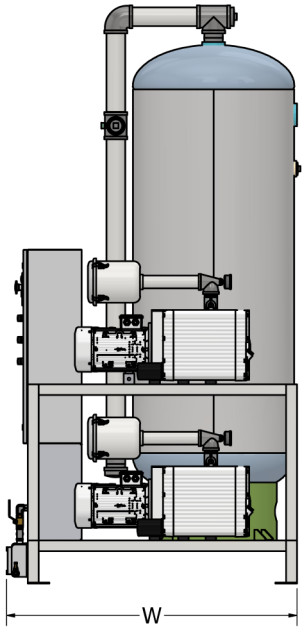
DIMENSIONS

MODEL	LENGTH (Inches)	WIDTH (Inches)	HEIGHT (Inches)	RECEIVER CAPACITY (Gallons)	INLET/ EXHAUST (Inches)	WEIGHT (Pounds)
QE71L/P	90	54	90	120	2	2,100
QE101L/P	90	54	90	120	2	2,610
QE166L/P	102	54	108	240	3	4,760
QE201L/P	102	54	108	240	3	4,960
QE301L/P	102	54	108	240	3	5,290

Dimensions subject to change.
Minimum clearance around system is 36 inches.
Contact factory for dimensional drawings.