

HIGH-VACUUM PUMPING UNITS HP 40 B2 AND HP 63 B2

vacuubrand

HP 40 B2

..... **22** l/s

..**1 x 10⁻⁶** mbar

0.75 x 10⁻⁶ Torr

HP 63 B2

..... **37** l/s

..**1 x 10⁻⁶** mbar

0.75 x 10⁻⁶ Torr

High-performance, reliable and easy-to-operate vacuum equipment is essential for successful and time-saving work in many science laboratories. The VACUUBRAND High-Vacuum Pumping Units HP 40 B2 and HP 63 B2 have these characteristics and fulfil practical requirements.

COMPONENTS OF HIGH-VACUUM PUMPING UNITS HP 40 B2 AND HP 63 B2

- Air-cooled oil diffusion pump
- Two-stage rotary-vane pump: RZ 2.5 (for HP 40 B2) or RZ 6 (for HP 63 B2) as backing pump
- All connecting tubing and valves, including high-vacuum and ventilation valves and by-pass line

All components are mounted on a portable stand and the pumping unit is ready to connect.



HP 40 B2

SPECIAL FEATURES OF VACUUBRAND HIGH-VACUUM PUMPING UNITS

● Efficient

The backing pump generates the necessary backing pressure so that the diffusion pump can always attain its full pumping capacity of 22 l/s (37 l/s resp.) and ultimate vacuum of approx. 10⁻⁶ mbar* (with pump fluid DC 704 and cold trap).

● Rapid

The pumping units have a high-vacuum butterfly valve on top of the diffusion pump, bypass line and valves. The valves are lever-operated, clearly indicating open/close position. This makes them particularly efficient for rapid evacuation cycles where the oil diffusion pump stays heated and ready for operation.

● Functional and easy to operate

Smaller experimental set-ups can be mounted directly on the high-vacuum pumping units. Switches for backing and diffusion pump are centrally grouped on a panel. A short operation diagram makes the units easy to use. All valves and switches are operated from the front. The pumping units are vacuum-tight after switching off (with gas ballast valve closed).

● Compact and sturdy

Pumps, valves and tubing are compactly mounted on a pillar stand. Due to its small overall dimensions, light weight and air cooling, the pumping unit can be easily transported to the systems to be evacuated, and can be accommodated almost everywhere. Due to their air-cooled space-saving design, the high-vacuum pumping units are often used as table-top on laboratory benches.

● Economical

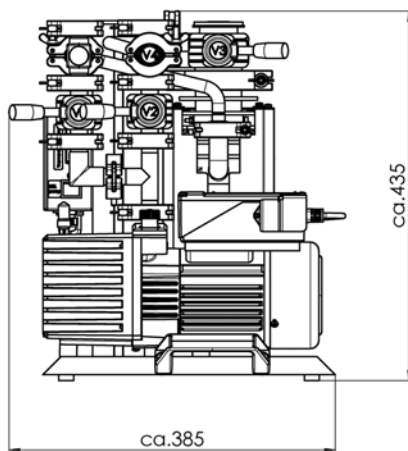
The High-Vacuum Pumping Units HP 40 B2 and HP 63 B2 have a power consumption of only 0.4 kW and 0.54 kW and do not require any water supply. They are very economical compared to wide-range turbomolecular pumps, since there is no costly regular maintenance (e.g. replacement of rotor bearings).

* Measured with nitrogen cold trap and cold-cathode ionisation vacuum gauge, directly at the high-vacuum valve

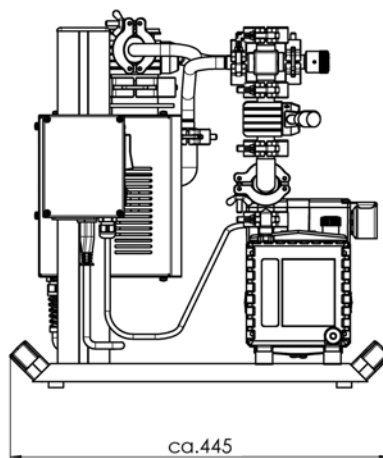
HIGH-VACUUM PUMPING UNITS

HP 40 B2 AND HP 63 B2

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Dimensions in mm



HP 40B2

..... 22 l/s

.. 1×10^{-6} mbar

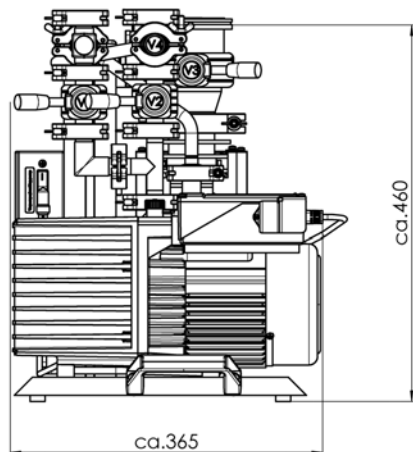
0.75×10^{-6} Torr

HP 63B2

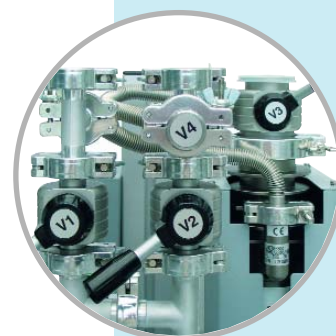
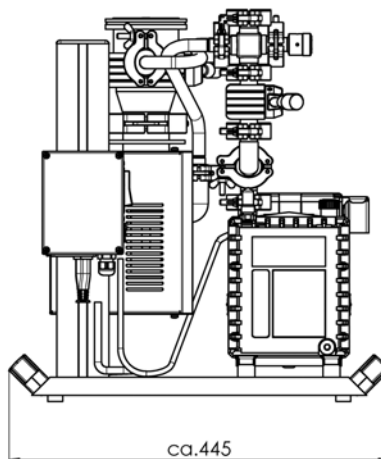
..... 37 l/s

.. 1×10^{-6} mbar

0.75×10^{-6} Torr



Dimensions in mm



HP 40 B2
High vacuum and
bypass line

TECHNICAL DATA

		HP 40 B2	HP 63 B2
High-vacuum inlet		small flange NW 40	clamped flange ISO K 63
Connection for vacuum gauge heads		2 x small flange NW 10	2 x small flange NW 10
Outlet connection		hose nozzle NW 10	hose nozzle NW 10
Diffusion pump, air cooled: volume flow rate for air at inlet	l/s	22	37
Ultimate vacuum	mbar//Torr	1×10^{-6} // 0.75×10^{-6}	1×10^{-6} // 0.75×10^{-6}
Backing pump, two-stage		RZ 2.5	RZ 6
Diffusion pump fluid DC 704 (approx.)	ml	30	30
Heating power	kW	0.20	0.20
Warm-up time approx.	min	7	7
Dimensions (L x W x H)	mm	445 x 385 x 435	445 x 365 x 460
Weight approx.	kg	25.4	30.9

Items supplied: The high-vacuum pumping units HP 40 B2 and HP 63 B2 are supplied with pumping fluid, assembled and ready for use, IEC socket, 2 metre mains cables with CEE, CH and UK plugs, rubber feet, handles and instructions for use.

ORDERING INFORMATION

		HP 40 B2	HP 63 B2
230 V ~ 50-60 Hz	plug CEE/CH/UK	69 90 29	69 90 37

ACCESSORIES

Fluid for oil diffusion pumps DC 704	0.1 l	68 73 00	68 73 00
	0.5 l	68 73 01	68 73 01
Oil mist filter for backing pump	FO R 2/2.5/5/6	69 80 03	69 80 03
Pirani Vacuum Gauge	VAP 5 Set	see page 128	