



Microsart® maxi.vac | Microsart® mini.vac

Laboratory Vacuum Pumps for Microbiology Analysis

Vacuum pumps



Microsart® maxi.vac Laboratory Vacuum pump 22 l/min for 3- and 6-place manifolds

Description

Microsart® maxi.vac and Microsart® mini.vac are especially designed to meet the requirements of microbiology laboratories. The absolute vacuum is limited to 100 mbar. The adjustable vacuum allows for trouble free working according to ISO 8199 ("Water quality: General guide to enumeration of micro-organisms by culture). The differential pressure during filtration should not exceed 700 mbar to allow a gentle enrichment of the microorganisms.



Microsart® mini.vac Laboratory Vacuum pump 6 l/min for 1-branch manifolds and individual filter holders

Efficient filtration

The intelligent pump design facilitates easy and efficient operation, even in limited working space. The noise development during operation is reduced by 50% compared to conventional membrane pumps. An integral part of the pumps is a newly structured membrane which guarantees leak-proof operation.

The pumps are available in two sizes. The small compact pump Microsart® mini.vac with 6 l/min air flow is ideal for single vacuum filtrations and the standard pump Microsart® maxi.vac, with 22 l/min air flow, for 3- to 6-place manifolds.

- Compliance with ISO 8199 "Water Testing Guideline"
- Adjustable vacuum
- Reduced noise
- Structured Membrane – Patented protection against leakage
- Compact design – Small foot print
- Maintenance-free, 5,000 operating hours guaranteed

Technical Specifications

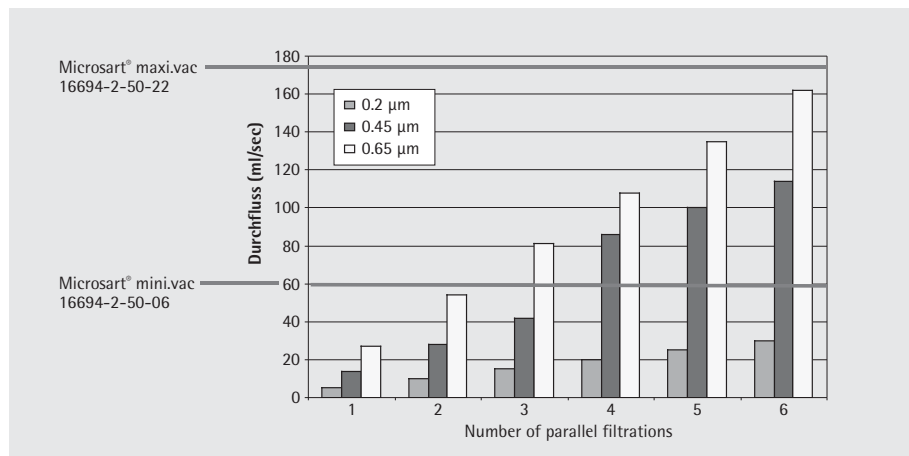
Microsart® maxi.vac Laboratory Vacuum Pump 22 l

Delivery	22 (l/min)
Absolute Vacuum	100 (mbar)
Noise level [100 mbar]	57.5 – 59.0 dBA
Operating Pressure (max)	1 (bar)
Materials (contact with filtrate possible)	Aluminum, CR (Neoprene), NBR (Perbunan)
Connectors for Tube	ID 9 (mm)
Ambient Temperature	5 ... 40°C
Mains 16694-2-50...	230 V/50 Hz
Mains 16694-1-60...	115 V/60 Hz
Motor Protection	IP 44
Power P1	130 W
Operating Current	0.9 A
Weight	7.1 kg
Dimensions L×H×W (mm)	261×204×110

Microsart® mini.vac Laboratory Vacuum Pump 6 l

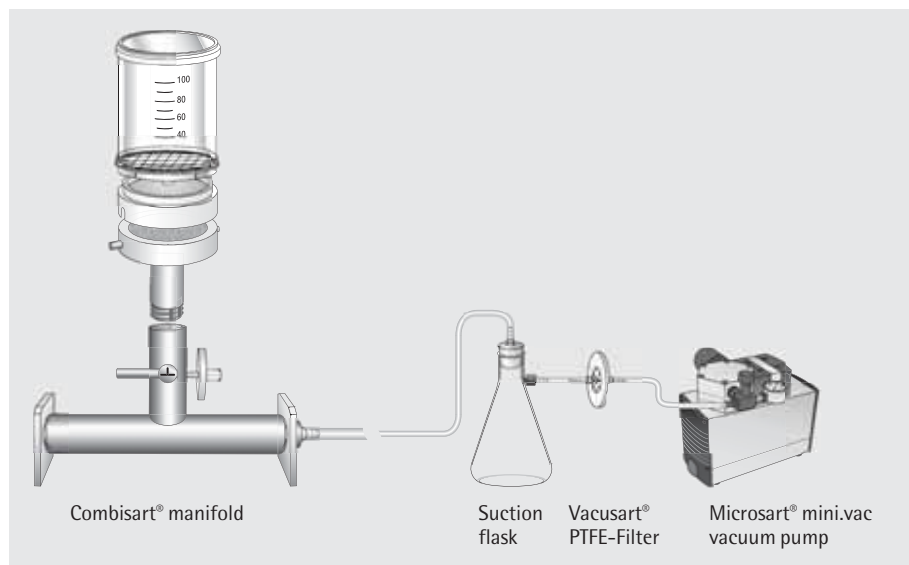
Delivery	6 (l/min)
Absolute Vacuum	100 (mbar)
Noise level [100 mbar]	53.5 dBA
Operating Pressure (max)	2.5 (bar)
Materials (contact with filtrate possible)	PPS, EPDM, FPM (Viton)
Connectors for Tube	ID 4 (mm)
Ambient Temperature	5 ... 40°C
Mains 16694-2-50...	230 V/50 Hz
Mains 16694-1-60...	115 V/60 Hz
Motor Protection	IP 20
Power P1	65 W
Operating Current	0.63 A
Weight	1.9 kg
Dimensions L×H×W (mm)	164×141×90

Pump capacity at stable vacuum 100 mbar



The graph illustrates the maximum potential of the Laboratory Vacuum pumps during filtration with standard Cellulose Nitrate membranes of different pore sizes. In example, the 6 l vacuum pump delivers enough air flow for three filtrations in parallel with 0.45 µm membranes.

Characteristic set-up of a laboratory vacuum filtration



More information about vacuum filtration equipment is available at:
www.sartorius-stedim.com/microbio – Colony Counting – Combisart Hardware Set-Ups

Ordering Information Microsart® maxi.vac Laboratory Vacuum Pump 22 l

Order Number	Mains	Delivery
16694-2-50-22	230 V	22 l/min
16694-1-60-22	115 V	22 l/min

Spare Parts Microsart® maxi.vac

Order Number	Description
1EV---0002	Fine adjustment head incl. vacuometer
1EH---0002	Sound absorber
1ED---0055	Repair part set incl. membrane, sealing ring, valves

Ordering Information Microsart® mini.vac Laboratory Vacuum Pump 6 l

Order Number	Mains	Delivery
16694-2-50-06	230 V	6 l/min
16694-1-60-06	115 V	6 l/min

Spare Parts Microsart® mini.vac

Order Number	Description
1EV---0001	Fine adjustment head incl. vacuometer
1EH---0001	Sound absorber
1ED---0054	Repair part set incl. membrane, sealing ring, valves
1EV---0003	Fine adjustment head incl. manometer

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