

## Midisart® 2000 Sterile Venting Units, Light in Weight and Easy to Connect



Re-usable complete filtration units with naturally hydrophobic PTFE membrane for reliable sterile venting of small fermenters and of containers for culture media.

Midisart 2000 units have been designed for maximum handling ease and reliability. Tapered hose nipples ensure a simple, secure hold for tubing with an inner diameter of 6–12 mm. Due to the low weight of only 20 g, the connected tubing is not snapped off. The membrane is reinforced with polypropylene gauze for stability to pressures of up to 3 bar (43.5 psi). The 20 cm<sup>2</sup> large filter area allows high flow rates at low differential pressures.

Each unit is printed with lot number and individual piece number on the housing for total security and traceability.

### Minisart® HY ready to connect units for the sterile venting of small containers and bottles

These 26 mm units consist of a polyester-strengthened 0.2 µm PTFE membrane in a cyrolite housing with luer lock connectors (female top, male bottom).

#### Specifications for Midisart 2000 units

Connectors	Choice of conical hose nipples for tubing with 6–12 mm inner diameter (with slip-fit for luer syringes), or 1/8" male NPT.
Biosafety	All materials pass the USP Plastics Test Class VI.
Bubble point	Min. value with isopropanol for 0.2 µm unit = 1.4 bar (140 kPa, 20.3 psi) (1.1 bar after autoclaving) and 0.9 bar (90 kPa, 13 psi) for 0.45 µm unit.
Air flow rate	Typical values for 0.2 µm pore size: 1.1 l/min at 0.02 bar (.29 psi) (1.8 l/min for 0.45 µm) 2.0 l/min at 0.05 bar (.72 psi) (4.6 l/min for 0.45 µm) 5.0 l/min at 0.1 bar (1.45 psi) (8.5 l/min for 0.45 µm)
Filter area	20 cm <sup>2</sup>
Filling volume	Approx. 3 ml
Housing diameter	62 mm
Materials	PTFE membrane filter aus PTFE, reinforced with polypropylene gauze, polypropylene housing.
Max. recommended operating pressure	3 bar (300 kPa, 43.5 psi)
Max. temperature	134°C
Sterilization method	By autoclaving at 121°C (at least 20 times) or 134°C. E and G packs are presterilized with ethylene oxide.
Hold-up volume	Approx. 0.5 ml after (1 ml before) bubble point
Water penetration point	4.0 bar (58 psi) (0.2 µm) and 3.0 bar (43.5 psi) (0.45 µm)

#### Specifications for Minisart HY

Bubble point	Min. value with isopropanol 1.2 bar (17.4 psi)
Air flow rate	Approx. 1.4 l/min at Δ = 0.1 bar (1.45 psi)
Filter area	5.3 cm <sup>2</sup>
Housing burst pressure	Min. value 6.0 bar (600 kPa, 87 psi)
Water penetration point	Min. 4.0 bar (400 kPa, 58 psi)

Order numbers see next page.



#### Order numbers for Midisart 2000 units

With hose nipple connector

17804 E	0.45 $\mu\text{m}$ , sterile, individually packed, pack of 12
17804 G	0.45 $\mu\text{m}$ , sterile, individually packed, pack of 25
17805 E	0.2 $\mu\text{m}$ , sterile, individually packed, pack of 12
17805 G	0.2 $\mu\text{m}$ , sterile, individually packed, pack of 25
17805 UPN	0.2 $\mu\text{m}$ non sterile, bulk packed, pack of 100



With 1/8" male NPT connectors

17804 NPE	0.45 $\mu\text{m}$ , sterile, individually packed, pack of 12
17804 NPG	0.45 $\mu\text{m}$ , sterile, individually packed, pack of 25
17805 NPE	0.2 $\mu\text{m}$ , sterile, individually packed, pack of 12
17805 NPG	0.2 $\mu\text{m}$ , sterile, individually packed, pack of 25



#### Order numbers for Minisart HY

16596 HYK	Sterile, individually packed, pack of 50
16596 HYQ	Non-sterile, pack of 500

Special brochure available on request. Order no. SL-1021-e