PTFE Diaphragm Vacuum Pump 20 L/min, 8 mbar Double-Stage Oil-Free Pump for Corrosive Gases

Model **MSVACP-D20SWISS** | Brand **Master Science**





The Master Science Double-Stage PTFE Diaphragm Vacuum Pump is built for vacuum work where the gas stream carries acid or alkaline vapour. The pump head is PTFE, the diaphragm is a PTFE composite and the valve plates are FFPM, so the parts that meet the media resist chemical attack.

KEY HIGHLIGHTS

- Handles corrosive vapour
- Deep vacuum without oil
- Long diaphragm life
- Safe for long runs

AT A GLANCE

5-40°C	1450 rpm
MEDIA AND AMBIENT TEMPERATURE	RATED SPEED

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

Scan to view online

Overview

Two pumping stages reach an ultimate vacuum of 8 mbar at up to 20 L/min. Because it runs dry, there is no oil to change and no oil mist in the lab. It is rated for continuous operation, stays under 60 dB and has overheat protection.

For higher flow at moderate vacuum, see also our chemical-resistant PTFE diaphragm vacuum pump range, which complements the Master Science Double-Stage PTFE Diaphragm Vacuum Pump.

Oil pumps and rubber-diaphragm pumps struggle with aggressive solvents. The Master Science Double-Stage PTFE Diaphragm Vacuum Pump addresses:

Key Benefits

Handles corrosive vapour
PTFE head, PTFE composite diaphragm and FFPM valves let the Master Science Double-Stage PTFE Diaphragm Vacuum Pump work with strong acid and alkali gases.

Deep vacuum without oil
Two stages reach 8 mbar with no oil changes and no oil mist.

Long diaphragm life
The composite diaphragm resists fatigue better than rubber types.

Safe for long runs
Continuous duty rating plus overheat protection suit all-day evaporation work.

Technical Specifications

GENERAL

General	Full specifications of the Master Science Double-Stage PTFE Diaphragm Vacuum Pump:
Brand	Master Science
Model Number	MSVACP-D20SWISS
SKU	MSVACP-D20SWISS
Brand	Master Science
Model	MSVACP-D20SWISS
SKU	MSVACP-D20SWISS
General	Max. pumping speed: 20 L/min
Pump head type	Double-stage
Ultimate vacuum	8 mbar
General	Max. operating pressure: 1 bar
Rated speed	1450 rpm
Suitable media	Strong acid and strong alkaline gases
Pump head material	PTFE
Diaphragm material	PTFE composite
Valve plate material	FFPM
Operating mode	Continuous
Noise	<60 dB
Interface	10 mm

ENVIRONMENT

Media and ambient temperature	5-40°C
Ambient relative humidity	<80%

POWER

Power supply	110 V / 220 V, 50 Hz
Rated power	130 W

DIMENSIONS & WEIGHT	
Dimensions (L×W×H)	315 × 165 × 210 mm
Net weight	11.5 kg

VACUUM PROBLEMS THE MASTER SCIENCE DOUBLE-STAGE PTFE DIAPHRAGM VACUUM PUMP SOLVES	
Corroded pump parts	PTFE and FFPM wetted parts withstand acid and alkali vapour.
Oil changes and oil mist	Dry running removes oil maintenance and contamination.
Weak vacuum for evaporation	A two-stage head reaches 8 mbar for low-boiling and mid-boiling solvents.
Noisy bench equipment	Operation stays under 60 dB with low vibration.

Applications

The Master Science Double-Stage PTFE Diaphragm Vacuum Pump is mainly used for: Rotary evaporation Vacuum drying ovens Vacuum concentration Vacuum distillation Solid-phase extraction manifolds

Chemical resistance

- PTFE pump head
- PTFE composite diaphragm with high corrosion and fatigue resistance
- FFPM valve plates

Performance

- 20 L/min maximum pumping speed
- 8 mbar ultimate vacuum from a double-stage head
- 1450 rpm rated speed, 10 mm interface

Operation

- Oil-free, maintenance-free design
- Low noise (<60 dB) and low vibration
- Overheat protection, continuous operation

Standard Accessories Included

- Diaphragm vacuum pump (main unit)