

High-Performance Filtration Solution With Diaphragm Pump Module



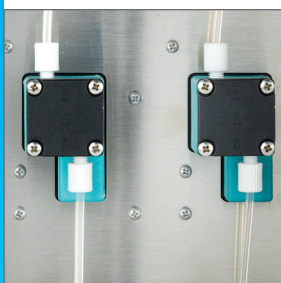
Precise Flow

It delivers accurate pumping rates from 2.0 mL/min to 100 mL/min with minimal flow drop under back pressure, utilizing low shear technology and stepper motor control.



Reduced Pulsation

With "Rapid Intake" stroke technology, the module minimizes pulsation for a reliable, quasi-continuous flow during filtration.



Contamination Prevention

The pump's flexible diaphragm is isolated from the motor, preventing contamination while offering broad chemical compatibility for various applications.



Compact and Quiet

Its space-saving design, featuring compression fittings and in-line filters, makes it ideal for efficient normal flow filter screening and sizing in diverse environments.



Diaphragm Pump Module

To Enhance Filter Screening System Performance

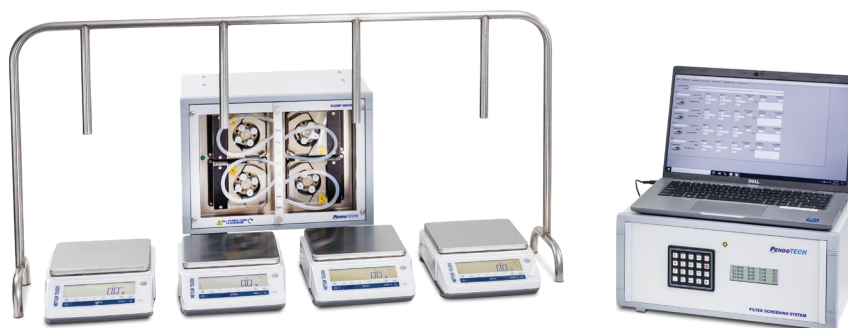
The Diaphragm Pump Module serves as a crucial accessory for the METTLER TOLEDO Pendotech Filter Screening System, employing durable, low-shear diaphragm pump technology that reduces flow drop under back pressure. Its rapid intake mechanism utilizes a flexible diaphragm driven by an eccentric motor shaft to draw liquid in through the inlet valve during the downward stroke and expel it through the outlet valve on the upward stroke. The working chamber of the pump is completely isolated from the motor. The intake stroke operates at maximum speed, while the output stroke is finely tuned for consistent dispensing, resulting in low-pulsation flow. With a low internal hold-up volume and extensive chemical compatibility, this compact and quiet module includes compression fittings for size 16 tubing (1/8 inch ID/1/4 inch OD), a removable Lexan cover, and in-line 35-micron inlet filters to safeguard the pump's check valves. The pump can generate pressures up to 60 psi/4 bar, making it highly effective for filter screening. When integrated with the system and a PC-based GUI, the Pump Module offers a powerful and compact filtration solution.

Specifications

Enclosure (with legs not retracted)	H x W x D: 9.85 x 13.8 x 10.3 inch (250 x 351 x 263 mm) Approx: 6.80 kg Material: Aluminum with powder polyester paint Front panel: 304 stainless steel with Lexan® cover Back panel: Anodized aluminum
Power Inlet with Power Switch	IEC 320 cord connection, 100 – 240 Volts, 50 – 60 Hertz, 2 amp max
Fuse	2 amps (housed integral with the Power Switch) at full voltage range
Environmental Operating Range	All components rated to a temperature range of 5°C to 40°C (41°F to 104°F) Humidity: 0 to 95% relative humidity, no condensation
Pump Diaphragm Lifetime	>10,000 hours
Diaphragm Pump Fittings	Compression fitting for 1/8 inch ID/1/4 inch OD tubing (Masterflex size 16)
Fluid Property Range	Permissible temperature of the medium being handled: 5°C to 80°C (41°F to 176°F). The dosing pump has been developed for liquids with viscosities of up to 150 cSt. If particles greater than 25 micron are present, a filter is recommended.
Analog Pump Control	One DB-25 male connector. Configured for 4-20 mA signals from Pendotech Filter Screening System (if in analog mode) Control System Settings for Pump Setup: 0.5ml/rotation Maximum RPMs: 200 Flow Range: 2.0 to 100 mL/min Accuracy: +/- 5% of value, repeatability: +/- 1%
Diaphragm Pump Hold Up Volume	Total pump: ~0.530mL
Tubing for Connection of Pump to Panel	1/8 inch ID, 0.318 cm Length: 12 cm per piece Hold-up: 1 mL per piece Tubing total: 2 mL for one train
Hold Up Volume per Train	~2.5 mL

Ordering Information

Ordering Information	Order Number
Diaphragm Pump Module for Pendotech Filter Screening System	PDKT-NFFSS-PUMP



METTLER TOLEDO Pendotech
Process Analytics

www.pendotech.com

For more information

Subject to technical changes.

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