PERISTALTIC PUMPS

Where Medicine meets Engineering

MöllerMedical
In addition to our wide range of standard products, **SPQ** can also provide individual solutions according to your needs. Customized variants of our peristaltic pump are even available for small quantities. Our engineering development team supports you from the early concept design phase according to your needs. We offer standard-tube sets as well as customized tube systems according to your specification suitable for our peristaltic pumps. Möller Medical has its own cleanroom manufacturing.

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Flow rates determined pumping water at 20°C with 1m suction height and open delivery outlet. The flow rates may vary – depending on tube material, suction height, outlet pressure and viscosity of the media pumped.

Calculation of the flow rate:

- Select peristaltic pump and tubing
- Rotor RPM min. x flow rate per revolution = flow rate min.
- Rotor RPM max. x flow rate per revolution = flow rate max.

Example of the SPQ 095 with tube ID 5.00 mm:
- 72 RPM x 2.52 ml/revolution = 181 ml/min. (minimum)
- 152 RPM x 2.52 ml/revolution = 383 ml/min. (maximum)

Flow rate of SPQ 095 with tube ID 5.00 mm from 181-383 ml/min.

Specifications subject to change.

Further tube materials on request.
With the LaboVAR Series we offer you ready-to-use devices with the well-known advantages of peristaltic pumps for handling and dosing in laboratory, industry, and trade. The LaboVAR is available in 2 sizes.

**LaboVAR 72G**

- **TECHNICAL DATA**
  - Flow Rate: 0.2-200 ml/min.
  - Differential Pressure: 0-145 RPM
  - RPM: 0-145 RPM
  - Speed Control: digital via touch screen
  - Operating Modes: RPM, Percentage of max. RPM, Timer
  - Applicable Tube Dimensions: ID 1.0-4.0 mm
  - No. of Rollers: 3, spring loaded
  - Motor Type: Stepper Motor
  - Interfaces: analog, FC, RS232, USB
  - Housing: High Performance Plastics
  - Dimensions: 170 x 200 x 140 mm
  - Power Supply: 100-240 V, 50-60 Hz
  - Accessories: Foot Switch

- **TECHNICAL DATA**
  - Flow Rate: 70-1,750 ml/min.
  - Differential Pressure: 2.5 bar
  - RPM: 0-145 RPM
  - Speed Control: digital via touch screen
  - Operating Modes: RPM, Percentage of max. RPM, Timer
  - Applicable Tube Dimensions: ID 8.0 mm
  - No. of Rollers: 2, spring loaded
  - Motor Type: 24V EC
  - Interfaces: analog, FC, RS232, USB
  - Housing: Stainless Steel
  - Dimensions: 170 x 220 x 240 mm
  - Power Supply: 100-240 V, 50-60 Hz
  - Accessories: Foot Switch

**LaboVAR 225**

- **PERISTALTIQ**
  - We offer extensive possibilities for customization of our peristaltic pumps for use in critical medical, analytic, and diagnostic applications.

- **USABILITY**
  - **Easy Tube Loading**
    - We offer a variety of easy load principles.
  - **HMI touch**
    - The universal HMI with touch screen allows an easy and intuitive operation of our drive units. The graphical user interface can be set up individually.

- **SENSORS**
  - **Pressure limitation**
    - A safety limitation for the pumping pressure can be realized actively (pressure sensors at the tube set) or mechanically (spring-loaded rollers) depending on your specification.
  - **Pressure detection**
    - Reliable pressure monitoring and high accuracy regulation of the pumping pressure. For example, the pressure in our CSF management system LiquoGuard® is measured and regulated with an accuracy of approx. 1 mbar.
  - **Air bubble sensor**
    - Permanent noninvasive ultrasonic monitoring of the tubing for air inclusions. The pump automatically switches off as soon an inclusion is detected.

- **DRIVE**
  - **One-Way Clutch**
    - The one-way clutch prevents manual turning of the pump rotor in the wrong direction, e.g. while inserting a new pump tube.
  - **Motor Controller**
    - Our motor controller provides highest accuracy and speed capabilities as well as the possibility of automatic calculation of the pumped volume.
  - **Rotary Encoder**
    - The rotary encoder allows flow and volume metering using a DC motor.

More features required?
Ask us!
Möller Medical has long-term development experience and can provide you with competent assistance for new developments and technical challenges working up to volume production. Naturally, we guarantee confidentiality for your intellectual property.

Examples of customer development projects:
- Laboratory pumps with electronic flow and volume control
- Peristaltic pumps and tube systems for numerous applications
- Special cannulae for chemical analytics, diagnostics and medical applications
- PCR-cuvette for laboratory medicine
- Irrigation pump for cardiology and tumor therapy
- High precision chromatography columns

Möller Medical’s customers include various large companies in the field of chemical analysis and diagnostics.
Möller Medical, founded in 1949, is specialized in the production of components and devices in the field of **analytics, diagnostics, medical technology** as well as **precision engineering**. Möller Medical is particularly active in the demanding OEM business and supplier to various large companies in the field of medical technology and analytics/diagnostics. The company is certified manufacturer of components and devices. The lion’s share of the turnover is generated in medical technology and analytics.

Möller Medical is certified according to EN ISO 13485 and EN ISO 9001 and entitled to CE-labeling according to EU-directive 93/42/EEC and 98/79/EEC.