

Ismatec® Reglo Peristaltic Pumps

Ideal for space-limited applications

- Get the benefits of peristaltic dispensing with these compact, easy-to-use pumps
- Reglo ICC models offer independent channel control—each channel can be individually set to a different flow rate and/or rotational direction
- Reglo Analog and Digital models provide multichannel pumping, remote control, and easy tubing changes with Click'n'go™ tubing cassettes
- Choose the single-channel Reglo Quick™ model for a higher flow rate, flexible tubing configuration, and easy tubing changes

Reglo ICC



Reglo Digital



Reglo Quick



Reglo ICC (Independent Channel Control) Pumps

- Set each channel to pump at different speeds and directions
- Independent channel calibration minimizes the tube-to-tube differences offering excellent accuracy
- Control each channel individually via front panel or up to eight pumps remotely via USB or RS-232 interface—eliminates the clutter of multiple pumps
- Click'n'go™ tubing cassettes allow quick changeovers

Use the Reglo ICC pump to control up to four channels, each with independent functionality—start, stop, dispense, reverse, aspirate, and calibrate. Time-based routines allow for complex experiment development. Control up to eight pumps at once, via the USB hub or by daisy-chaining the RS-232 connectors. Windows®-based software is included. Select from benchtop or panel-mount models.



Specifications

Motor type: stepper motor (1/channel)

Speed range: 0.1 to 100 rpm, 0.01 rpm resolution

Interfaces: USB 2.0, Mini-B, RS-232

Protection rating: IP30

Weight: 2.7 kg

Power consumption: 30 W

Differential pressure: 1.0 bar (14.5 psi)

Operating Modes

Flow rate: continuous operation at a set rate and direction

Volume over time: dispensing a desired volume over a desired time

Volume: dispensing a desired volume at a set flow rate

Time mode: dispensing for a set time duration with a set flow rate

Volume with pause: dispensing a set volume over multiple cycles with defined pause time in between

Time with pause: dispensing for a set time duration over multiple cycles with defined pause time in between

Calibration: allows each channel to be calibrated for dispensed fluid volume accuracy

Flow Ranges (mL/min per channel)



| Tubing ID (mm) | 6 rollers | 8 rollers | 12 rollers |
|----------------|----------------|----------------|-----------------|
| 0.13 | 0.0002 to 0.14 | 0.0002 to 0.11 | 0.0001 to 0.093 |
| 0.51 | 0.0019 to 1.9 | 0.0017 to 1.7 | 0.0016 to 1.6 |
| 0.57 | 0.0024 to 2.4 | 0.0021 to 2.1 | 0.0019 to 1.9 |
| 0.64 | 0.0030 to 3.0 | 0.0026 to 2.6 | 0.0024 to 2.4 |
| 0.95 | 0.0064 to 6.4 | 0.0056 to 5.6 | 0.0050 to 5.0 |
| 1.02 | 0.0073 to 7.3 | 0.0063 to 6.3 | 0.0056 to 5.6 |
| 1.42 | 0.013 to 13 | 0.011 to 11 | 0.0094 to 9.4 |
| 1.75 | 0.019 to 19 | 0.016 to 16 | 0.013 to 13 |
| 1.85 | 0.021 to 21 | 0.017 to 17 | 0.014 to 14 |
| 2.54 | 0.033 to 33 | 0.027 to 27 | 0.019 to 19 |
| 2.79 | 0.036 to 36 | 0.031 to 31 | 0.021 to 21 |
| 3.17 | 0.043 to 43 | 0.035 to 35 | 0.024 to 24 |

Ordering Information



| No. of channels | No. of rollers | Tubing accepted | Size (mm) | Power | Catalog number | | |
|--------------------------|----------------|---------------------------|---------------------------|--------------------------|-----------------|--------|----------|
| Benchtop pumps | | | | | | | |
| 2 | 6 | Ismatec three-stop tubing | 193 x 125 x 170 | 100 to 240 VAC, 50/60 Hz | ISM4206 | | |
| | 8 | | | | ISM4208 | | |
| | 12 | | | | ISM4212 | | |
| 3 | 6 | | ISM4306 | | | | |
| | 8 | | ISM4308 | | | | |
| | 12 | | ISM4312 | | | | |
| 4 | 6 | | 218 x 125 x 170 | | ISM4406 | | |
| | 8 | | | | ISM4408 | | |
| | 12 | | | | ISM4412 | | |
| Panel-mount pumps | | | | | | | |
| 2 | 8 | | Ismatec three-stop tubing | | 157 x 127 x 145 | 24 VDC | ISM4208P |
| 3 | 8 | | | | 169 x 127 x 145 | | ISM4308P |
| 4 | 8 | 182 x 127 x 145 | | ISM4408P | | | |
| 4 | 12 | 182 x 127 x 145 | | ISM4412P | | | |

IS3510A Replacement MS/CA Click'n'go tubing cassette, POM-C

IS3610A MS/CA Click'n'go tubing cassette, PVDF

POM-C = polyoxymethylene copolymer, PVDF = polyvinylidene fluoride

Reglo Analog and Digital Pumps

- Consistent flow and reduced tubing wear for improved results
- Easy tubing changes—Click'n'go™ minicartridges snap in place
- No maintenance—rollers are self-lubricating
- Select twelve roller pumps for smoother flow

Analog Pump

Control speed remotely with an analog input signal. Start/stop or change direction via contact closure; monitor speed through frequency output.

Digital Dispensing Pumps with LED Display

- The smallest dispensing pump with calibration function for flow rate and dispensing volume
- Dispense by time: 0.1 seconds to 999.9 hours
- Batches: set delay between dispensed volumes
- Rollers backstep to prevent drips

Remote control capabilities: RS-232 to control all operating functions; 0 to 5, 0 to 10 VDC, 0 to 20, 4 to 20 mA for speed control, start/stop, reverse direction, and autostart via contact closure; foot switch.

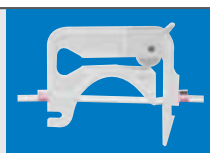


Specifications Analog [Digital]

- Motor type:** DC motor
- Speed setting:** 2 to 99%, 1% resolution [rpm, 0.1 rpm resolution]
- Flow Rate Setting:** 2-digit potentiometer [μ L/min or mL/min]
- Protection rating:** IP30
- Power consumption:** 20 W [75 W]

High-Pressure Applications?

Pumps are also available with pressure lever cassettes for applications at elevated differential pressure conditions (>1 bar). Contact our Application Specialists for information.



Flow Ranges (mL/min per channel)



| No. of channels | 2 | | 2 | | 2 | | 4 | | 4 | | 4 | |
|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| | 6 | | 8 | | 12 | | 6 | | 8 | | 12 | |
| Speed rpm | 1.6 | 160 | 1.6 | 160 | 1.6 | 160 | 1.0 | 100 | 1.0 | 100 | 1.0 | 100 |
| Tubing ID (mm) | mL/min per channel | | mL/min per channel | | mL/min per channel | | mL/min per channel | | mL/min per channel | | mL/min per channel | |
| | Minimum [†] | Maximum [‡] | Minimum [†] | Maximum [‡] | Minimum [†] | Maximum [‡] | Minimum [†] | Maximum [‡] | Minimum [†] | Maximum [‡] | Minimum [†] | Maximum [‡] |
| 0.13 | 0.003 | 0.22 | 0.002 | 0.17 | 0.002 | 0.15 | 0.002 | 0.14 | 0.002 | 0.11 | 0.001 | 0.093 |
| 0.25 | 0.008 | 0.76 | 0.007 | 0.65 | 0.007 | 0.61 | 0.005 | 0.48 | 0.005 | 0.41 | 0.004 | 0.38 |
| 0.51 | 0.031 | 3.1 | 0.027 | 2.7 | 0.025 | 2.5 | 0.019 | 1.9 | 0.017 | 1.7 | 0.016 | 1.6 |
| 0.76 | 0.067 | 6.7 | 0.058 | 5.8 | 0.053 | 5.3 | 0.042 | 4.2 | 0.036 | 3.6 | 0.033 | 3.3 |
| 1.02 | 0.12 | 12 | 0.10 | 10 | 0.090 | 9.0 | 0.073 | 7.3 | 0.063 | 6.3 | 0.056 | 5.6 |
| 1.22 | 0.16 | 16 | 0.14 | 14 | 0.12 | 12 | 0.10 | 10 | 0.088 | 8.8 | 0.075 | 7.5 |
| 1.52 | 0.24 | 24 | 0.20 | 20 | 0.17 | 17 | 0.15 | 15 | 0.13 | 13 | 0.10 | 10 |
| 1.85 | 0.34 | 34 | 0.28 | 28 | 0.21 | 21 | 0.21 | 21 | 0.17 | 17 | 0.13 | 13 |
| 2.54 | 0.53 | 53 | 0.44 | 44 | 0.31 | 31 | 0.33 | 33 | 0.27 | 27 | 0.19 | 19 |
| 3.17 | 0.68 | 68 | 0.57 | 57 | 0.38 | 38 | 0.43 | 43 | 0.35 | 35 | 0.24 | 24 |

Note: Approximate values are determined with water, at 22°C, no differential pressure, Tygon tubing.

[†]Minimum flow rates shown are for the Reglo Digital models. The minimum flow rate for Reglo Analog models = 2% of maximum flow rate.

[‡]Maximum flow rates shown are for both the Reglo Analog and Reglo Digital models.

Ordering Information



| Model | Flow range per channel | No. of channels | No. of rollers | Speed range | Tubing accepted | Size (mm) | Weight (kg) | Catalog number | |
|--|------------------------|-----------------|----------------|----------------|---------------------------|-----------------|-------------|----------------|----------------|
| | | | | | | | | 115 VAC, 60 Hz | 230 VAC, 50 Hz |
| Reglo Analog pumps | | | | | | | | | |
| MS-2/06 | 0.005 to 68 | 2 | 6 | 1.6 to 160 rpm | Ismatec three-stop tubing | 178 x 100 x 143 | 2.0 | ISM830-115 | ISM830-230 |
| MS-2/08 | 0.004 to 57 | | 8 | | | | | ISM829-115 | ISM829-230 |
| MS-2/12 | 0.003 to 38 | | 12 | | | | | ISM795-115 | ISM795-230 |
| MS-4/06 | 0.003 to 43 | 4 | 6 | 1.0 to 100 rpm | Ismatec three-stop tubing | 190 x 100 x 143 | 2.1 | ISM828-115 | ISM828-230 |
| MS-4/08 | 0.003 to 35 | | 8 | | | | | ISM827-115 | ISM827-230 |
| MS-4/12 | 0.002 to 24 | | 12 | | | | | ISM796-115 | ISM796-230 |
| Reglo Digital dispensing pumps with LED display | | | | | | | | | |
| MS-02/6 | 0.003 to 68 | 2 | 6 | 3.2 to 160 rpm | Ismatec three-stop tubing | 178 x 100 x 143 | 4.4 | ISM831-115 | ISM831-230 |
| MS-2/08 | 0.002 to 57 | | 8 | | | | | ISM832-115 | ISM832-230 |
| MS-2/12 | 0.002 to 38 | | 12 | | | | | ISM596-115 | ISM596-230 |
| MS-4/06 | 0.002 to 43 | 4 | 6 | 2.0 to 100 rpm | Ismatec three-stop tubing | 190 x 100 x 143 | 4.6 | ISM833-115 | ISM833-230 |
| MS-4/08 | 0.002 to 35 | | 8 | | | | | ISM834-115 | ISM834-230 |
| MS-4/12 | 0.001 to 24 | | 12 | | | | | ISM597-115 | ISM597-230 |



Reglo Quick™ Pump

- Four-roller head achieves flow rates up to 230 mL/min
- Easy tubing replacement for reduced downtime
- Compact design frees valuable benchtop space

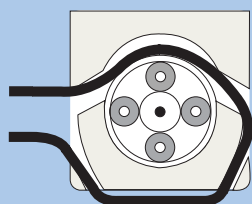
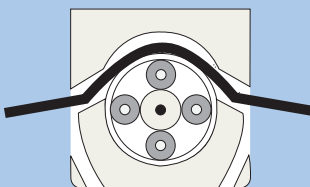
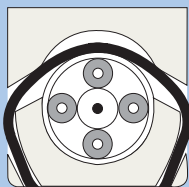
Wide opening angle makes the tube bed easily accessible for a quick tubing change. Only use with Tygon® LFL, Tygon Lab/LMT-55, Tygon HC, PharMed® BPT, peroxide-cured silicone, and Santoprene® tubing.

Flow Ranges (mL/min)



| Tubing ID (mm) | Wall thickness (mm) | Flow range |
|----------------|---------------------|------------|
| 3.2 | 1.6 | 2.1 to 103 |
| 4.8 | 1.6 | 4.6 to 230 |

Flexible layout for tubing appropriate to your application.



Specifications

Motor type: DC motor

Speed range: 3.2 to 160 rpm

Speed setting: 1 to 99%, 1% resolution; 2-digit potentiometer

Interfaces:

Analog input: speed control (0 to 5 or 0 to 10 VDC; 0 to 20 or 4 to 20 mA)

Analog output: speed monitoring (0 to 8 kHz)

Digital input (TTL level): start/stop, rotation direction

Protection rating: IP30

Size: 178 x 100 x 143 mm (pump head closed)

Weight: 2.2 kg

Power consumption: 30 W

Ordering Information

ISO9001:2008
CERTIFIED SUPPLIER



| Model | Flow range | No. of channels | No. of rollers | Tubing accepted | Power (VAC, Hz) | Catalog number |
|-------------|-------------------|-----------------|----------------|---------------------|-----------------|----------------|
| Reglo Quick | 2.1 to 230 mL/min | 1 | 4 | Ismatec pump tubing | 115, 60 | ISM897-115 |
| | | | | | 230, 50 | ISM897-230 |

ISM891 Foot switch for start/stop operation, 6-ft cable