

Ismatec® Reglo Peristaltic Pumps



Reglo ICC

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 Quick



Reglo Digital

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	MK-78001-58
	8				MK-78001-60
	12				MK-78001-62
3	6		MK-78001-68		
	8		MK-78001-70		
	12		MK-78001-72		
4	6		MK-78001-78		
	8		MK-78001-80		
	12		MK-78001-82		
Panel-mount pumps					
2	8	Ismatec three-stop tubing	157 x 127 x 145	24 VDC	MK-78001-43
3	8		169 x 127 x 145		MK-78001-45
4	8		182 x 127 x 145		MK-78001-47
4	12		182 x 127 x 145		MK-78001-49

[MK-78016-98](#) Replacement MS/CA Click'n'go tubing cassette, POM-C

[MK-78016-96](#) 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 Pumps

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]

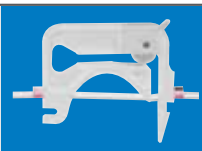
Flow Rate Setting: 2-digit potentiometer [µL/min or mL/min]

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	
No. of rollers	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.

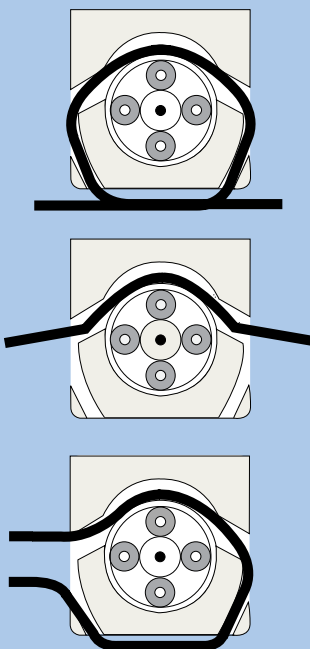
Ordering Information



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	MK-78016-00	MK-78016-02
MS-2/08	0.004 to 57		8					MK-78016-10	MK-78016-12
MS-2/12	0.003 to 38		12					MK-78017-25	MK-78017-27
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	MK-78017-30	MK-78017-32
MS-4/08	0.003 to 35		8					MK-78016-30	MK-78016-32
MS-4/12	0.002 to 24		12					MK-78017-35	MK-78017-37
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	MK-78016-40	MK-78016-42
MS-2/08	0.002 to 57		8					MK-78017-00	MK-78017-02
MS-2/12	0.002 to 38		12					MK-78016-45	MK-78016-47
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	MK-78017-40	MK-78017-42
MS-4/08	0.002 to 35		8					MK-78017-10	MK-78017-12
MS-4/12	0.001 to 24		12					MK-78017-20	MK-78017-21



Flexible layout for tubing appropriate to your application.



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.

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

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

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	MK-78018-00
					230, 50	MK-78018-02

[MK-78016-91](#) Foot switch for start/stop operation, 6-ft cable

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