

HIRSCHMANN®



rotarus®

Selection criteria

Flow rate range of the rotarus® drives



Series 30

- Flow rate range 0.0075 – 4,250 ml/min
- Range of speed 10 – 350 1/min
- Changeable pump heads
- Channels 1-12
- Pump direction change
- Speed configuration (increments) 0.1
- Digital interface
- Designed for continuous operation
- Power supply 100-240 VAC
- CE standard
- Depth/width/height 190/83/220 mm
- Weight 4,4 kg
- Available as rotarus® smart



Series 40

- Flow rate range 0.0022 – 3,000 ml/min
- Range of speed 3 – 200 1/min
- Changeable pump heads
- Channels 1-12
- Pump direction change
- Speed configuration (increments) 0.1
- Digital interface
- Designed for continuous operation
- Power supply 100-240 VAC
- CE standard
- Depth/width/height 225/83/220 mm
- Weight 4,7 kg
- Available as rotarus® smart



Series 50

- Flow rate range 0.0001 – 1,500 ml/min
- Range of speed 0.2 – 100 1/min
- Changeable pump heads
- Channels 1-12
- Pump direction change
- Speed configuration (increments) 0.1
- Digital, analogue and optional serial interface
- Designed for continuous operation
- Power supply 100-240 VAC
- CE standard
- Depth/width/height 205/100/220 mm
- Weight 7,1 kg
- Available as rotarus® standard, flow, volume



Series 80

- Flow rate range 0.039 – 4,960 ml/min
- Range of speed 50 – 3,100 1/min
- Changeable pump heads
- Channels 1-12
- Pump direction change
- Speed configuration (increments) 0.1
- Digital, analogue and serial interface
- Designed for continuous operation
- Power supply 100-240 VAC
- CE standard
- Depth/width/height 270/100/220 mm
- Weight 10,1 kg
- Available as rotarus® fast



Series 100

- Flow rate range 0.0036 – 5,400 ml/min
- Range of speed 5 – 500 1/min
- Changeable pump heads
- Channels 1-12
- Pump direction change
- Speed configuration (increments) 0.1
- Digital, analogue and optional serial interface
- designed for continuous operation
- Power supply 100-240 VAC
- CE standard
- Depth/width/height 270/100/220 mm
- Weight 9,8 kg
- Available as rotarus® standard, flow, volume

You will find detailed information in our data sheets on
www.hirschmannlab.com/en/Info-Center/Downloads/Datenblaetter



Flow rate range

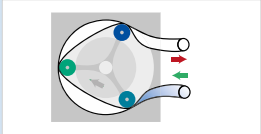
Peristaltic pump, accuracy approx. +/- 5 %



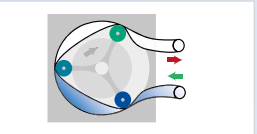
Flow rate each channel of peristaltic pump heads in ml/min:

pump head type	Series 30	Series 40	Series 50	Series 80*	Series 100
PK 10-16	3.8 - 4250	1.1 - 3000	0.08 - 1500	20 - 4960	1.9 - 5400
PK 10-24	33 - 3800	10 - 2300	0.66 - 1100		17 - 5200
MKF 4-8	0.036 - 82.1	0.011 - 65.7	0.0009 - 22.7	0.20 - 82.1	0.021 - 82.1
MKF 8-4	0.69 - 160	0.21 - 91.4	0.014 - 45	3.5 - 228	0.34 - 228
MKF 12-8	0.007 - 20.2	0.002 - 11.6	0.0001 - 6.5	0.039 - 27.2	0.0036 - 27.2

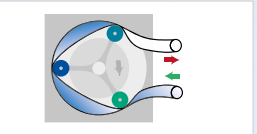
* peristaltic pump heads possible, but piston pumps preferred



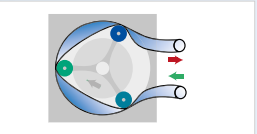
1. The tube is tensioned between the tubing bed and the rotor. Each roller compresses the tube.



2. The rotor rollers move along the tube. The tube is squeezed continually through the rollers which displace the liquid in the direction of the roller head motion.



3. The tube behind the roller resumes its original shape, creates a vacuum and suctioning the liquid.



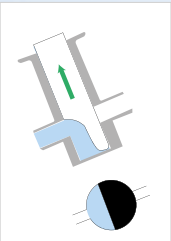
4. The process begins anew.

Piston pump, accuracy approx. +/- 1 %

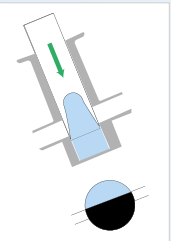


Flow rate each channel of piston pump heads in ml/min:

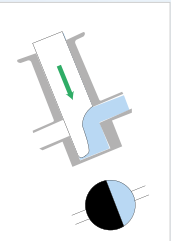
pump head type	Series 30	Series 40	Series 50	Series 80	Series 100
TKF RH 00	0.025 - 8.8	0.008 - 5	0.0005 - 2.5	0.125 - 78	0.0125 - 12.5
TKF RH 0	0.05 - 18	0.015 - 10	0.001 - 5.0	0.25 - 155	0.025 - 25
TKF RH 1	0.10 - 35	0.03 - 20	0.002 - 10	0.5 - 310	0.05 - 50
TKF QP-Q1	0.128 - 112	0.038 - 64	0.0026 - 32	0.64 - 576	0.064 - 160
TKF QP-Q2	0.288 - 252	0.086 - 144	0.0058 - 72	1.4 - 1296	0.144 - 360
TKF QP-Q3	0.512 - 448	0.154 - 256	0.0102 - 128	2.6 - 2304	0.256 - 640



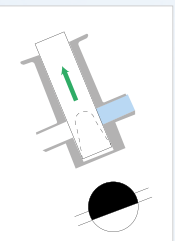
1. Suctioning



2. Reversal point



3. Ejection



4. Reversal point

The functional principle

HIRSCHMANN®

Hirschmann Laborgeräte GmbH & Co. KG
Hauptstraße 7-15 · 74246 Eberstadt Germany
Fon +49 7134 511-0 · Fax +49 7134 511-990
www.hirschmannlab.com · info@hirschmannlab.com



X2230430100