

**BOXER****25K Peristaltic Pump**

*Stepper Motor, Speed Control Options, Liquid Flow to 2100 ml/min*

**DESCRIPTION**

The 25K series is a versatile flip-top peristaltic pump offering flow to 2100 ml/min with an impressive range of features. The pump is driven by a 24 V stepper motor providing exceptional flow control with options for fully assembled drivers.

**Features:**

- › Stepper motor drive for accurate control of speed and flow
- › Flow to 2100 ml/min
- › Flip-top lid for tube loading within seconds
- › Removable head from base through 45° rotation + locking screw
- › Self-adjusting tube clamps
- › Continuous tube (neither connectors nor break in tube required)
- › Suitable for tube ID from 2.4 to 8.0 mm
- › Suitable for 1.6 and 2.4 mm wall tubing
- › 3 and 4 roller configurations

**SPECIFICATIONS****MOTOR**

Stepper Motor: NEMA 23, 24 VDC

Power Consumption (including A4 driver): 15-24 W

Stepper Motor RPM: to 800 rpm dependent on tube size and number of rollers

Stepper Motor Life: >10,000 hours

**GENERAL**

Max. Pressure: 2 bar (29 PSI)

Max Suction: 9.0 m H<sub>2</sub>O (29.5 Feet)

Max Ambient Temp: 60°C

Tube Materials: Pharm-a line

Weight: 1425 g

Optional sensors:

Optical speed / position sensor: For accurate feedback of rotor speed and location, 12 pulses per rotation

Speed / stall sensor: Single pulse per rotation

Lid sensor: For confirmation that tube locking clamp is securely in position

Optional Stepper Motor Drivers (motor mounted):

\*Model A4, P/N 6900.007- Analog with 0 to 5 V speed input

\*Model A4p, P/N 6900.113- Analog with speed potentiometer

\*Model iD, P/N 6900.011- Programmable digital driver with

LCD display, lid closure and stall detection

\* See "Boxer Stepper Motor Driver" data sheet

**ORDERING INFORMATION**

1) Select pump model

2) Select tubing model

Pump Model	Tube Wall Size	Number of Rollers	Stepper Motor/Driver
25001.000	1.6 mm	3	24V/None
25002.000	1.6 mm	4	24V/None
25004.000	2.4 mm	3	24V/None
25005.000	2.4 mm	4	24V/None
25057.000	1.6 mm	3	24V/6900.007
25058.000	1.6 mm	4	24V/6900.007
25060.000	2.4 mm	3	24V/6900.007
25061.000	2.4 mm	4	24V/6900.007
25051.000	1.6 mm	3	24V/6900.113
25052.000	1.6 mm	4	24V/6900.113
25354.000	2.4 mm	3	24V/6900.113
25055.000	2.4 mm	4	24V/6900.113
25011.000	1.6 mm	3	24V/6900.011
25012.000	1.6 mm	4	24V/6900.011
25014.000	2.4 mm	3	24V/6900.011
25015.000	2.4 mm	4	24V/6900.011

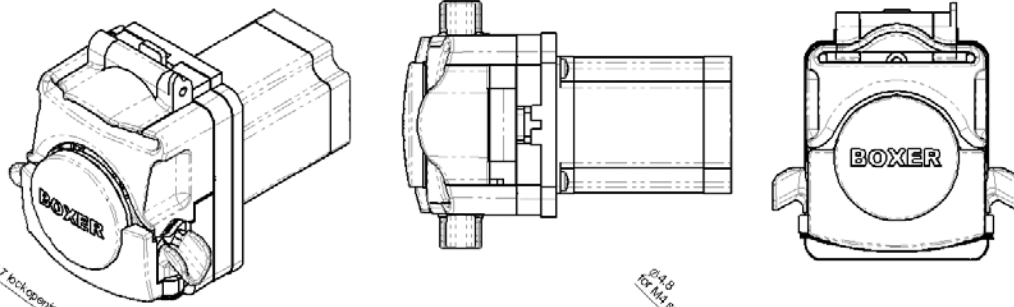
Flow Per Revolution		
Tube Size (ID x Wall Thickness (mm))	Flow per Revolution 3-Rollers (ml)	Flow per Revolution 4-Rollers (ml)
2.4 x 1.6	0.60	0.55
3.2 x 1.6	1.10	1.00
4.8 x 1.6	2.50	2.10
6.4 x 1.6 or 2.4	3.50	3.00
8.0 x 1.6 or 2.4	4.20	3.50

Flow at 100 RPM		
Tube Size (ID x Wall Thickness (mm))	3-Rollers (ml/min)	4-Rollers (ml)
2.4 x 1.6	60	55
3.2 x 1.6	110	100
4.8 x 1.6	250	210
6.4 x 1.6 or 2.4	350	300
8.0 x 1.6 or 2.4	420	350

Flow at Maximum Speed		
Tube Size (ID x Wall Thickness (mm))	Flow @ Max. Speed 3-Rollers (ml/min)	Flow @ Max. Speed 4-Rollers (ml/min)
2.4 x 1.6	480 @ 800 RPM	440 @ 800 RPM
3.2 x 1.6	660 @ 600 RPM	600 @ 600 RPM
4.8 x 1.6	1250 @ 500 RPM	1050 @ 500 RPM
6.4 x 1.6 or 2.4	1750 @ 500 RPM	1025 @ 400 RPM
8.0 x 1.6 or 2.4	2100 @ 500 RPM	1130 @ 400 RPM

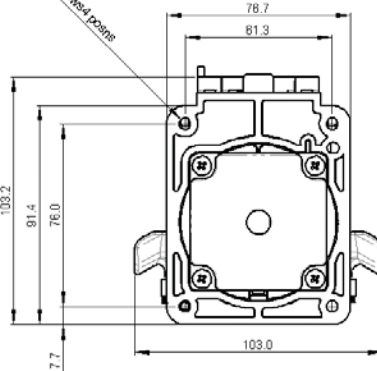
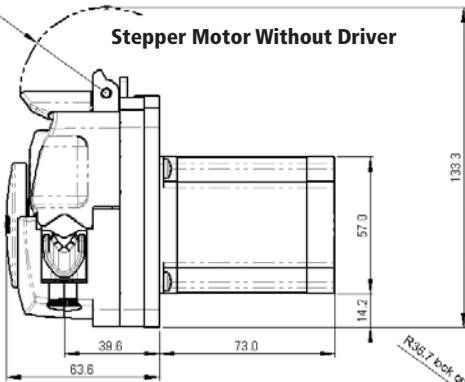
Model	Tubing-Single Lengths
25000.110	PHI ID Ø 2.4 mm x 1.6 mm wall x 25 cm
25000.111	PHI ID Ø 3.2 mm x 1.6 mm wall x 25 cm
25000.112	PHI ID Ø 4.8 mm x 1.6 mm wall x 25 cm
25000.113	PHI ID Ø 6.4 mm x 1.6 mm wall x 25 cm
25000.123	PHI ID Ø 6.4 mm x 2.4 mm wall x 25 cm
25000.114	PHI ID Ø 8.0 mm x 1.6 mm wall x 25 cm
25000.124	PHI ID Ø 8.0 mm x 2.4 mm wall x 25 cm
Model	Tubing-1m Lengths (or multiple of, example 3 x 1 m pieces will be supplied as single 3m length where possible)
82416.101	PHI ID Ø 2.4 mm x 1.6 mm wall x 1m
83416.101	PHI ID Ø 3.2 mm x 1.6 mm wall x 1m
84816.101	PHI ID Ø 4.8 mm x 1.6 mm wall x 1m
86416.101	PHI ID Ø 6.4 mm x 1.6 mm wall x 1m
82424.101	PHI ID Ø 6.4 mm x 2.4 mm wall x 1m
88016.101	PHI ID Ø 8.0 mm x 1.6 mm wall x 1m
88024.101	PHI ID Ø 8.0 mm x 2.4 mm wall x 1m

# DIMENSIONS (MM)



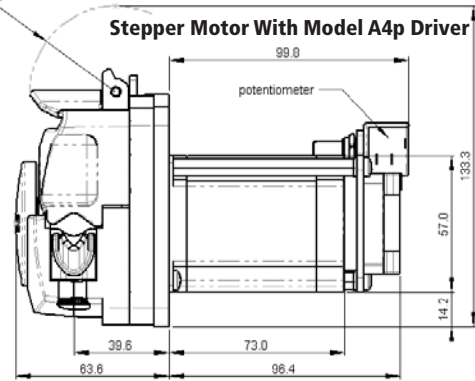
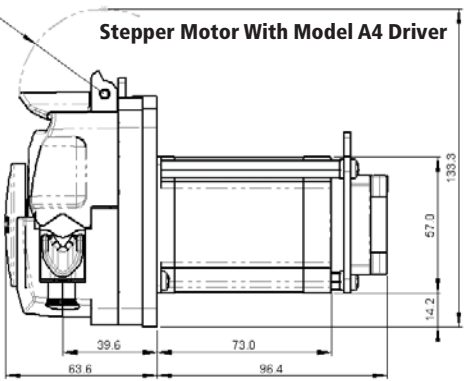
R35.7 lock opening curve

Ø4.8 for M4 screws points



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R35.7 lock opening curve

Ø4.8 for M4 screws points

