# **ETL500 Stepper**





# **HYDRAULIC DATA\***

Tube bore (ID mm)	ML / REV**	100 RPM	400 RPM	600 RPM (interm. only)
0.5	0.025	2.5	10	15
0.8	0.07	7	30	50
1.6	0.3	30	120	180
3.2	1.00	100	400	600
4.8	2.10	210	840	1260
6.4	3.60	360	1440	2160
8.0	5.30	530	2120	3180

<sup>\*</sup> Approximate values at free flow with Pharm-A-Clear® tubing and 3 roller configuration. \*\* Values calculated from 100 RPM.

### **ELECTRICAL DATA**

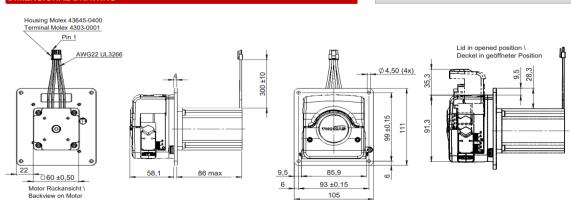
Motor type	2-phase bipolar stepper motor	
Nominal voltage	Depending on driver board	
Required driver	Bipolar, up to 4.2 A*	
Motor speed	0-600 rpm	
Operation	CW/CCW	
Max. recommended motor speed continuous operation	400 rpm	
Max. power consumption	22 W	
Motor insulation class	В	
Inductance at 1 kHz, 1V	2.2 mH	
Winding resistance	0.61 Ω	

<sup>\*</sup> For most peristaltic applications the current draw will not exceed 2.8 A

## **GENERAL DATA\***

Pump type	Single-channel peristaltic pump	
Media temperature	5 - 80 °C, consider tube temp. range	
Ambient temperature	10 - 45 °C	
Storage temperature	-30 to +70 °C	
Max. continuous system pressure	2 bar	
Max. vacuum	95%	
Weight	1900 g	

# DIMENSIONAL DRAWING



## MODEL KEY

Pos	Options	Description	
1	ETL500	Product Line	
2	F	Fluid / liquid	
3	0 / 1	Tubing: without tubing (0), with tubing (1)	
4	AT / FT	Adjustable Tube Holders, Fixed Tube Holders	
5	16 / 24	Designed for tube wall thickness 1,6 mm (16) or 2,4 mm (24)	
6	NA / 0	Nominal Voltage NA = Not Applicable: nominal input voltage depends on control board; control board not included / 0 = pump head only	
7	ST / 0	Stepper Motor / 0 = pump head only	
8	0600 / 0	Motor speed: <b>0-600</b> rpm stepper motor (external control board required) / <b>0</b> = pump head only	
9	AP / 0	Adapter Plate included / 0 = no adapter plate	
10	MP / 0	Mounting Plate included / 0 = no mounting plate	
11	3 / 4	Number of rollers: 3 rollers or 4 rollers	
12	LT/MT/ST/LST	Occlusion setting for tube specification: Large Tubing (PHI-8.0X1.6, PHI-6.4X1.6, PHI-4.8X1.6) PLTS-LH-4.8X1.6) Large Silicone Tubing (PLTS-LH-8.0x1.6, PLTS-LH-6.4x1.6) Medium Tubing (PHI-3.2X1.6, PHI-1.6X1.6, PLTS-LH-3.2X1.6, PLTS-LH-1.6X1.6, PHI-3.2X1.6, PLTS-LH-1.6X1.6, PHI-3.2X1.6, PLTS-LH-1.6X1.6, PHI-3.2X1.6, PLTS-LH-1.6X1.6) Small Tubing (PHI-0.8X1.6, PHI-0.5X1.6, PLTS-LH-0.8x1.6, PLTS-LH-0.5x1.6)	

### ORDER INFORMATION

Part Number	Model Key
59997520	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-3-ST
59997530	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-4-ST
59997540	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-3-MT
59997550	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-4-MT
59997560	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-3-LT
59997570	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-4-LT
59997580	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-3-LST
59997590	ETL500-F-0-AT-16-NA-ST-0600-AP-MP-4-LST
Other configurations	Upon request
To order call	(714) 312-5531
Or go online @	https://www.usathomas.com/

# OPTIONS

Fixed tube setting (no adjustment wheel)	
Custom colors	
Pump model for thick wall (2.4 mm) tubing	
Lid opening sensor	
Custom occlusion setting based on customer specification	
Pump head only (see separate data sheet)	
Control board (39999740), potentiometer (39999750), motor cable (39999720)	

Motor Connection:
Pin 1 = Schwarz \ Black
Pin 2 = Grün \ Green
Pin 3 = Rot \ Red
Pin 4 = Blau \ Blue