

**NEW
PRODUCTS &
FEATURES**

WELCH
An Ingersoll Rand Business

LP500 Precision Fluid Handling for Laboratories



LP500 Precision Fluid Handling for Laboratories

Engineered for excellence. With advanced digital control, quick-change design, and durable components, the LP500 variable speed peristaltic pump ensures smooth, precise operation every time. It's the ultimate solution for labs that demand accuracy and efficiency.



UNMATCHED ACCURACY

Digitally controlled speed accuracy up to 0.2% ensures precise dosing and filling for critical lab processes, reducing waste and improving reproducibility.



PRECISE



CLEAN. FAST. RELIABLE.

Quick, hassle-free tube loading along with backflow prevention features minimize downtime, keeping your process on track.



EFFICIENT



POWER THAT LASTS

A high-performance stepper motor ensures precise speed control and extended operational life, reducing wear and maintenance for consistent, long-term reliability.



RELIABLE

PERFORMANCE YOU CAN COUNT ON

Your Benefits

Precision You Can Trust

- Precision digital speed control ($\pm 0.2\%$) supports repeatable fluid transfer and dispensing.
- Reduces waste and improves reproducibility for critical lab processes

Efficiency That Saves Time

- Quick tube loading minimizes downtime
- Backflow prevention keeps operations smooth and reliable

Durability for Long-Term Use

- High-performance stepper motor extends operational life
- Lower maintenance needs for consistent performance



1. USER-FRIENDLY INTERFACE

Simple interface with digital display and keypad for quick speed, flow direction, and start/stop adjustments.

2. QUIET OPERATION

Ensures a quiet laboratory environment

3. TAILORED PERFORMANCE

Available in two configurations: LP500-L (low flow) and LP500-H (high flow)

4. SOFT START & STOP

Minimizes downtime due to premature wear & tear

5. EXTERNAL CONTROL

Allows for remote control via RS485, 4-20mA, 0-5V, or 0-10V for integration with DeltaV & other lab controllers

6. INNOVATIVE TUBE HOLDERS & OCCLUSION DESIGN

No tube adjustments required

7. EASY HEAD REPLACEMENT

Tool free pump head change for maintenance, cleaning, or different performance ranges

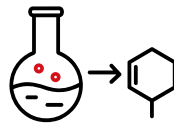
Applications



LAB



DENSITY
GRADIENT
TUBE FILLING



CHEMICAL
SYNTHESIS
REACTIONS



BACTERIAL / CELL
CULTURE



FOOD
& BEVERAGE

Technical Data

PARAMETER	UNIT	LP500-L Low Flow Configuration		LP500-H High Flow Configuration	
Compatible tubing					
Material		Silicone			
Wall-Thickness	mm (inches)	1.6 (1/16)			
Bore Sizes (ID)	mm (inches)	3.2 (1/8)	4.8 (3/16)	6.4 (1/4)	8.0 (5/16)
Flow Rates					
100rpm	mL/min	100	219	310	494
300rpm	mL/min	290	608	876	1188
600rpm	mL/min	559	1170	1569	1955
Motor speed adjustment range	rpm	0.1-600			
Max continuous system pressure	bar	0.3			
Operating modes		Internal control, external control, timing, foot switch, dual foot switch			
Voltage	VAC	100-240			
Frequency	Hz	50/60			
Ambient temperature	°C (°F)	0-40 (32-104)			
Drive IP rating	IP	31			
Weight	kg (lbs)	4.4 (9.69)			
Dimensions L x W x H	mm (inches)	316 x 180 x 197 (12.44 x 7.09 x 7.76)			

Ordering Information

DESCRIPTION	PART NO.
LP500 Drive with Pump Head - Low Flow Configuration (LP500-L)	5501-01
LP500 Drive with Pump Head - High Flow Configuration (LP500-H)	5502-01
ETL500 Pump Head - Low Flow Configuration	5501K-01
ETL500 Pump Head - High Flow Configuration	5502K-01
Platinum Cured Silicone Tubing 3.2mm ID x 1.6mm wall thickness; Length 15m	5500KT-03
Platinum Cured Silicone Tubing 4.8mm ID x 1.6mm wall thickness; Length 15m	5500KT-04
Platinum Cured Silicone Tubing 6.4mm ID x 1.6mm wall thickness; Length 15m	5500KT-06
Platinum Cured Silicone Tubing 8.0mm ID x 1.6mm wall thickness; Length 15m	5500KT-08