





• Mid-pressure Piston Pump





solutions to Precise Liquid Delivery

www.tautobiotech.com



Company Qualification

- First Batch of High-tech Enterprises in Shanghai
- ISO 9001:2000 certified
- CE certified
- One of the most famous manufacturers of scientific equipment in China
- Global leader of Countercurrent Chromatography
- First class R&D Team of piston pumps
- Tauto piston pumps have better performance than other similar products at home and abroad
- Applicable to pharmaceutical, chemical, petrochemical, metallurgical and other industries





High-Tech Enterprise Certificate



Common Features of TAUTO Piston Pumps

- 1 Dual self flushing pump heads for reduced pulsation
- 2 Dual ball and high quality plunger for consistent and precise flow performance
- **3** Materials resistant to chemicals used, including organic solvents
- 4 Overvoltage protection and flow correction system
- **6** Memorizing of flow rate and pressure setting
- 6 Prime purge valve removes the bubbles in the liquid
- **7** Rs-232 Serial Com Port for complete control & status monitoring
- 8 Communication with PLC (customization)
- 9 Simple front panel key pad controls with big led display



Software Functions

- 1 Real-time Display of Current Pressure, Set Pressure and Set Flow Rate
- **2** Real-time Display In Curve of Working Pressure
- **3** Operation via Computer
- 4 Timing Function For The Facility of Working Time Setting
- **5** Function of Saving Current Working Pressure For Checking
- 6 Function of Printing Important Parameters Such As Current Pressure



TBP Series Piston Pumps





TBP1002

TBP1T02

With the piping and pump head made of high-quality 316L stainless steel, TBP Series Piston Pumps can resist the corrosion of the organic solvents. Widely used in chemical, pharmaceutical, biological, chemical, biological and food areas, the pumps can meet the requirement of accurate liquid transmission for scientific research institutes and enterprises of the above fields.

Conventional Flow Type

Mode1	TBP1002	TBP1010	TBP5002	TBP5010	TBP2H02
Flow Rate	0. 1–10. ($0 \ \mathrm{m1/min}$	0.1-50.0 m1/min		$1-200~\mathrm{ml/min}$
Pressure	0-2.0 Mpa	0-10.0 Mpa	0-2.0 Mpa	0-10.0 Mpa	0-2.0 Mpa
Pulsation	≤ 0.0	08 Mpa	≤ 0.1	10 Mpa	≤ 0.20 Mpa
Pressure Accuracy		≤ 0.0	0.05 Mpa ≤ 0.10 Mpa		
Flow Accuracy		1%	≤ 1%		$\leq 2\%$ (1-50 m1/min) $\leq 1.5\%$ (50-200 m1/min)
Flow Precision		$\leq 1\%$		$\leq 1.5\% \ (1-50 \ ml/min)$ $\leq 1\% \ (50-200 \ ml/min)$	
Flow Path Material	Ruby, 316L Stainless Steel, Zirconia Ceramics				
Power Source	$220~\mathrm{V}~\pm~10\%$, $50/60~\mathrm{Hz}$				
Power	75 W				
Weight	12 Kg				
Dimensions	$360~\mathrm{mm}~ imes~260~\mathrm{mm}~ imes~160~\mathrm{mm}$				

High Flow Type

Model	TBP5H02	TBP1T02		
Flow Rate	$1500~\mathrm{ml/min}$	$1-1000~\mathrm{ml/min}$		
Pressure	0-	0-2.0 Mpa		
Pulsation	≤ 0.10 Mpa	≤ 0.20 Mpa		
Pressure Accuracy	≤ 0.05 Mpa	≤ 0.05 Mpa		
Flow Accuracy	≤2% (1-100 m1/min) ≤1.5% (100-500 m1/min)	$\leq 3\% (1-100 \text{ m}1/\text{min})$ $\leq 1.5\% (100-1000 \text{ m}1/\text{min})$		
Flow Precision	$\leq 1.5\% (1-100 \text{ m}1/\text{min})$ $\leq 1\% (100-500 \text{ m}1/\text{min})$	$\leq 1.5\% \ (1-100 \ ml/min)$ $\leq 1\% \ (100-1000 \ ml/min)$		
Flow Path Material	Ruby, 316L Stainles	Ruby, 316L Stainless Steel, Zirconia Ceramics		
Power Source	$220~\mathrm{V}~\pm$	220 V \pm 10%, 50/60 Hz		
Power		150 W		
Weight	22 Kg	30 Kg		
Dimensions	$400~\mathrm{mm}~ imes~290~\mathrm{mm}~ imes~170~\mathrm{mm}$	$500~\mathrm{mm}~ imes~380~\mathrm{mm}~ imes~220~\mathrm{mm}$		

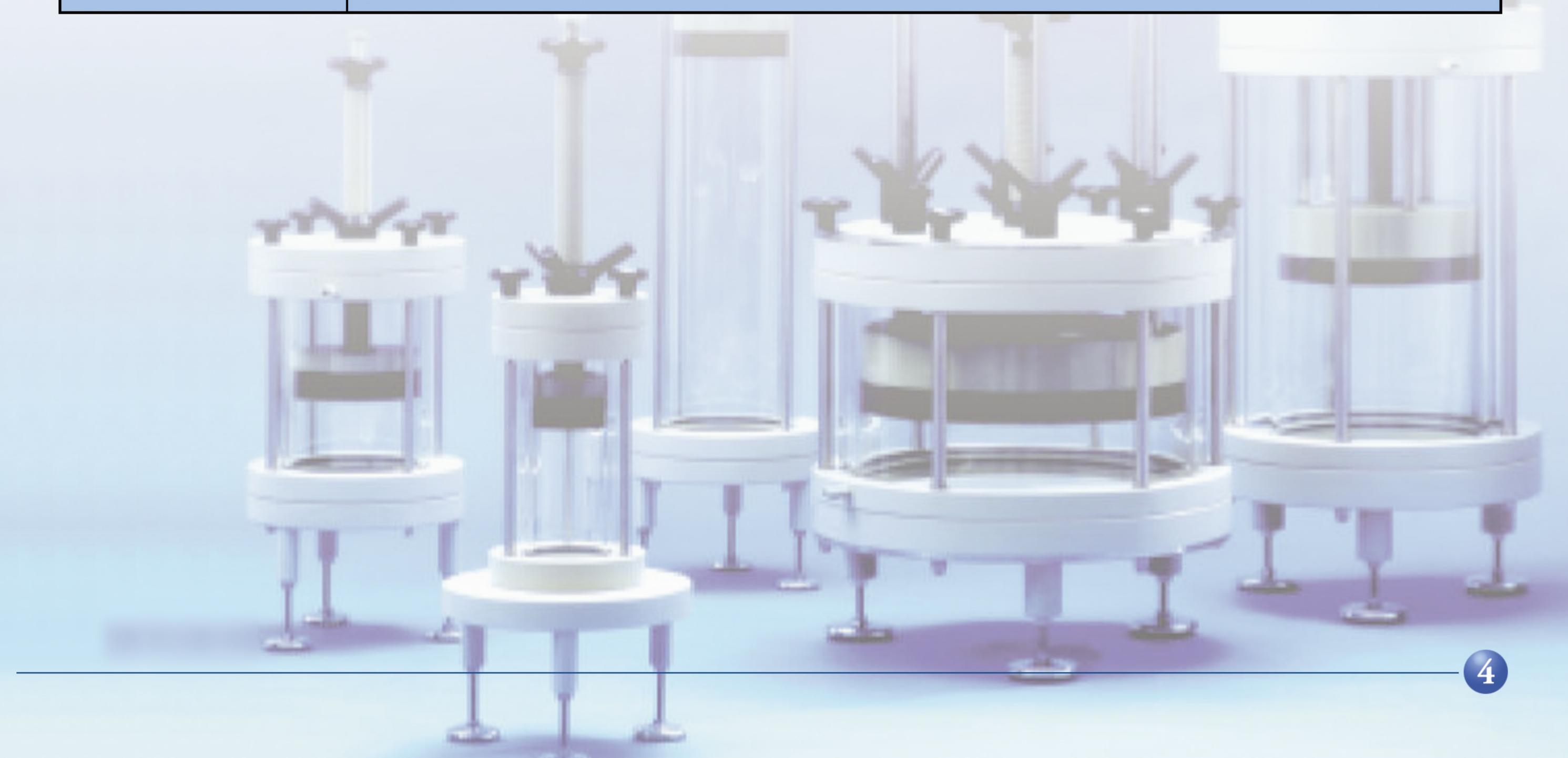
TBP-K Series Piston Pumps



TBP-K Series Piston Pumps(PEEK Pump Head)

With the piping and pump head made of PEEK material, TBP-K series can resist corrosion of chemicals, strong acid & alkali; as well as anti-hydrolysis and anti-fatigue. Mixed with toughness and rigidity, it has a broad scope of solvent compatibility, together with a full bio-compatibility that can protect the liquid with biological activity. This type is widely used in chemical, biological, petrochemical, coal, dyes, fine chemicals, pesticides, pharmaceuticals, food and other fields.

Mode1	TBP 1002K	TBP5002K	TBP2 H02K
Flow Rate	$0.1-10.0\ \mathrm{m1/min}$	0. 1-50.0 m1/min	$1-200~\mathrm{ml/min}$
Pressure	0 — 2.0 Mpa		
Pulsation	≤ 0.08 Mpa	≤ 0.10 Mpa	≤ 0.2 Mpa
Pressure Accuracy	≤ 0.05 Mpa		≤ 0.1 Mpa
Flow Accuracy	≤ 1%	≤ 1%	$\leq 2\% (1-50 \text{ m}1/\text{min})$ $\leq 1.5\% (50-200 \text{ m}1/\text{min})$
Flow Precision	≤ 1%		$\leq 1.5\% \ (1-50 \ m1/min)$ $\leq 1\% \ (50-200 \ m1/min)$
Flow Path Material	PEEK(polyether-ether-ketone), PTFE(polyfluortetraethylene), ruby, Zirconia Ceramics		
Power Source	$220 \text{V} \pm 10\%$, $50/60~\text{Hz}$		
Power	75 W		
Weight	12 Kg		
Dimensions	$360~\mathrm{mm}~ imes~260~\mathrm{mm}~ imes~160~\mathrm{mm}$		



TBP-T Series Piston Pumps



With the piping and pump head made of Titanium material, this type has the character of anti-corrosive to acid and alkali, and high strength. Widely used in metal, chemical, petrochemical, coal, dyes, fine chemicals, pesticides areas, the pumps can meet the requirements of strongly corrosion liquid transmission for scientific research institutes and enterprises in the above fields.

TBP-T Series Piston Pumps (Titanium Pump Head)

Mode1	TBP1002T	TBP 1010T	TBP5002T	TBP5010T	TBP2H02T
Flow Rate	0.1-10.0 m1/min		0.1-50.0 m1/min		$1-200~\mathrm{ml/min}$
Pressure	0-2.0 Mpa	0-10.0 Mpa	0-2.0 Mpa	0-10.0 Mpa	0-2.0 Mpa
Pulsation	≤ 0.08 Mpa		≤ 0.10 Mpa		≤ 0.20 Mpa
Pressure Accuracy		\leq 0.	0.05 Mpa		≤ 0.10 Mpa
Flow Accuracy		1%	\/\/	1%	≤2% (1-50 m1/min) ≤1.5% (50-200 m1/min)
Flow Precision				\leq 1.5% (1-50 m1/min) \leq 1% (50-200 m1/min)	
Flow Path Material	Titanium, ruby, Zirconia Ceramics				
Power Source	220 V \pm 10%, 50/60 Hz				
Power	75 W				
Weight	12 Kg				
Dimensions	$360~\mathrm{mm}~ imes~260~\mathrm{mm}~ imes~160~\mathrm{mm}$				

Grad Series Gradient Pumps



The Grad series middle-pressure binary gradient pump is made up of two high-quality pumps. Each of them can be operated separately, which avoid the disadvantage of falling apart when fault exists in one pump. The middle-pressure gradient is formed at the pump exit, which greatly lowered the mixed dead volume under low pressure gradient, and makes the gradient control much easier. The mixed way also dissolves the bubbles problem which always exists under low pressure gradient condition.

Mode 1	Grad10	Grad50	
Least Increment	$0.1~\mathrm{ml/min}$		
Increment Range	0. 1-10 $\mathrm{m}1/\mathrm{min}$	$0.1-50.0\ m1/min$	
Mixture Range	0.0 - 100%		
Gradient Accuracy	1%		
FlowRate	0. 1–10. 0 $\mathrm{m}1/\mathrm{min}$	$0.1-50.0\ m1/min$	
Pressure	0 — 5.0 Mpa		
Pulsation	≤ 0.08 Mpa	≤ 0.10 Mpa	
Pressure Accuracy	≤ 0.05 Mpa		
FlowPrecision	≤ 1%	$\leq 1\%$	
FlowRepeatability	$\leq 1\%$		
Flow Path Material	Ruby, 316L Stainless Steel, Zirconia Ceramics		
Power Source	$220 \text{V} \pm 10\%$, $50/60~\text{Hz}$		
Power	75 W		
Weight	12 Kg		
Dimensions	$360~\mathrm{mm}~ imes~260~\mathrm{mm}~ imes~160~\mathrm{mm}$		