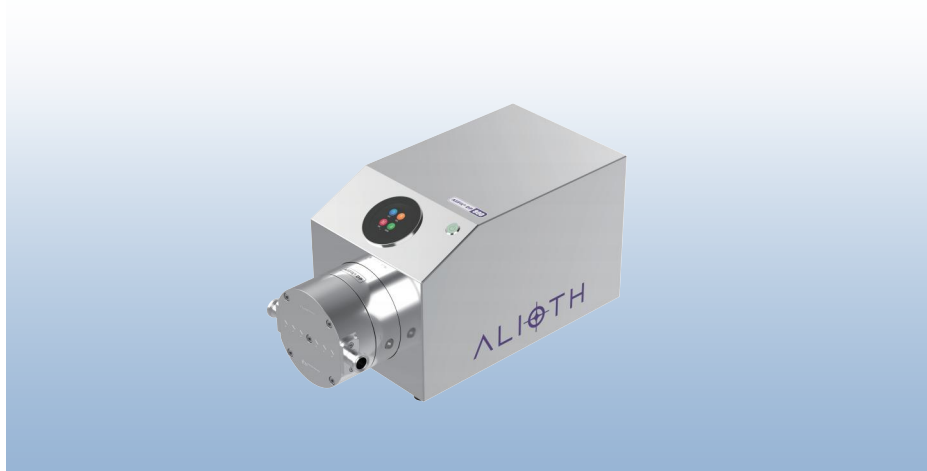


Alioth AliFit® High-Precision Diaphragm Pump



⊕ Product Introduction

Alioth cGMP-compliant High-precision diaphragm pump features 316L and medical-grade polymer flow paths delivering exceptional biocompatibility. Employing low-shear transfer technology, it greatly reduces physical damage to the conveyed medium. The unique zero-dead-space quick-disconnect design with complete fluid-path isolation from mechanical components eliminates contamination retention and leakage risks. Furthermore, this pump supports full-process CIP/SIP (Clean-in-Place/Sterilization-in-Place), meeting the requirements of stringent application scenarios such as biopharmaceuticals.

⊕ Key Features and Benefits

- Constructed with 316L stainless steel and medical-grade TPV composite materials. Materials comply with the following standards:
- -USP Class VI Certified Plastics, compliant with USP <87> and USP <88> Biological Reactivity Testing
 - -Compliant with USP <381> Elastomeric Closure Testing for Physicochemical Properties
 - -Compliant with USP <788> Particulate Matter Testing
 - -Compliant with FDA regulations CFR 177. 2600 for contact with aqueous food
 - -Patented pump head design reduces fluid pulsation and protects shear-sensitive media
 - -Patented diaphragm structure with a continuous operation life of over 1000h
 - -Modular design enables quick component replacement with low labor costs

⊕ Product Applications

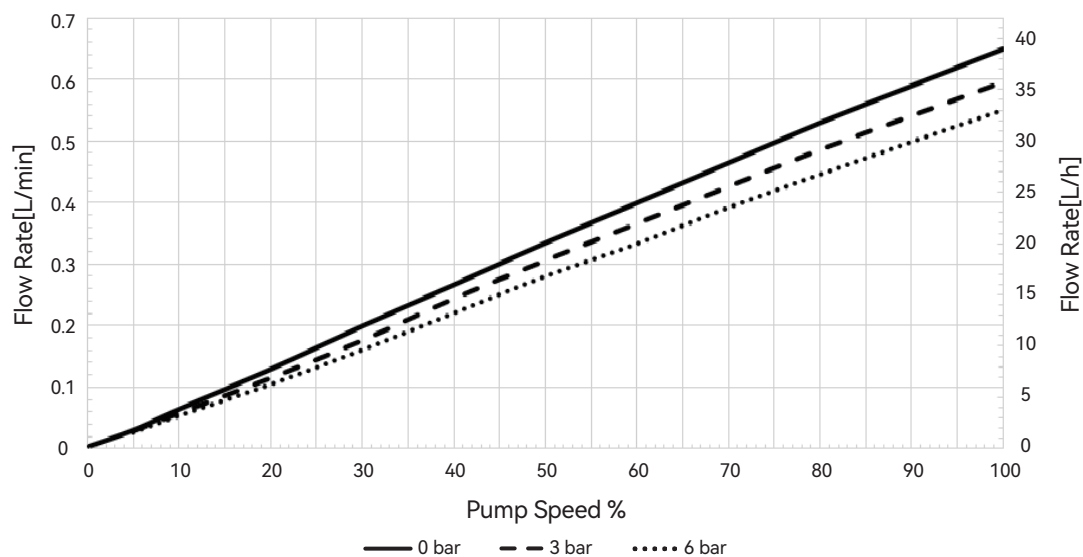
- Supporting systems: ultrafiltration system, filtration system, chromatography system, fermentation system, homogenization system, reactor system, etc.
- Suitable for processes such as liquid preparation, filtration, ultrafiltration, chromatographic separation, cultivation, degradation, etc.

Alioth AliFit® High-Precision Diaphragm Pump

Product Specifications – AliFit® DP 30

Flow Rate Maximum	30.0 lph (0.500 lpm)
Flow Rate Minimum	0.9 lph (0.015 lpm)
Operating Pressure	Temperature of Fluid < 40°C (104°F) 6bar (87 psi) Temperature of Fluid > 40°C (104°F) 4bar (58 psi)
Maximum Temperature	Fluid 80°C (176°F) CIP 90°C (194°F) SIP 130°C (266°F) Autoclave 130°C (266°F)
Maximum Rotational Speed	1200 rpm
Maximum Dry Suction Lift (Tested with purified water at 25°C)	10%pump speed: 0.5m; 30%pump speed: 1m 50%pump speed: 1.5m; 70%pump speed: 2m 100%pump speed: 2m
Product wetted surface(approx.)	69 cm²
Filling volume without connectors	6.6 ml
Approx.flow volume per rotation af free output	0.51 ml/r
Residual volume (Horizontal direction of the flow path)	5 ml
Connection Specification	1/4" TC
Pump Dimension(L×W×H)	278 mm X 179 mm X 178 mm
Pump Weight	7.0 kg
Power	100 W
Voltage	AC230V 50Hz ; AC110V 60Hz
Product Wetted Materials (Standard)	Pump Housing: 316L ; Pump Connector: 316L; Valve Plate: 316L Diaphragms: TPV; Valves: Silicone; O-rings: Silicone

Performance Charts

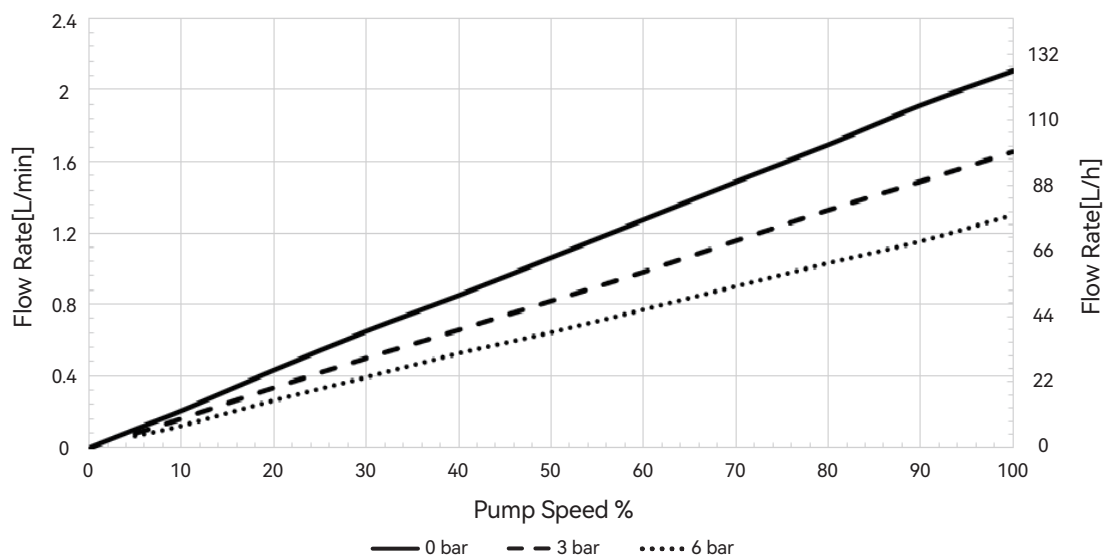


Alioth AliFit® High-Precision Diaphragm Pump

Product Specifications – AliFit® DP 100

Flow Rate Maximum	100 lph (1.667 lpm)
Flow Rate Minimum	0.3 lph (0.005 lpm)
Operating Pressure	Temperature of Fluid < 40°C (104°F) 6bar (87 psi) Temperature of Fluid > 40°C (104°F) 4bar (58 psi)
Maximum Temperature	Fluid 80°C (176°F) CIP 90°C (194°F) SIP 130°C (266°F) Autoclave 130°C (266°F)
Maximum Rotational Speed	2100 rpm
Maximum Dry Suction Lift (Tested with purified water at 25°C)	10%pump speed: 1m; 30%pump speed: 2m 50%pump speed: 2.5m; 70%pump speed: 2.5m 100%pump speed: 2.5m
Product wetted surface(approx.)	133 cm ²
Filling volume without connectors	18 ml
Approx.flow volume per rotation af free outpu	0.91 ml/r
Residual volume (Horizontal direction of the flow path)	5 ml
Connection Specification	3/8" TC
Pump Dimension(L×W×H)	285 mm X 170 mm X 178 mm
Pump Weight	8.2 kg
Power	100 W
Voltage	AC230V 50Hz ; AC110V 60Hz
Product Wetted Materials (Standard)	Pump Housing: 316L; Pump Connector: 316L; Valve Plate: 316L Diaphragms: TPV; Valves: Silicone; O-rings: Silicone

Performance Charts

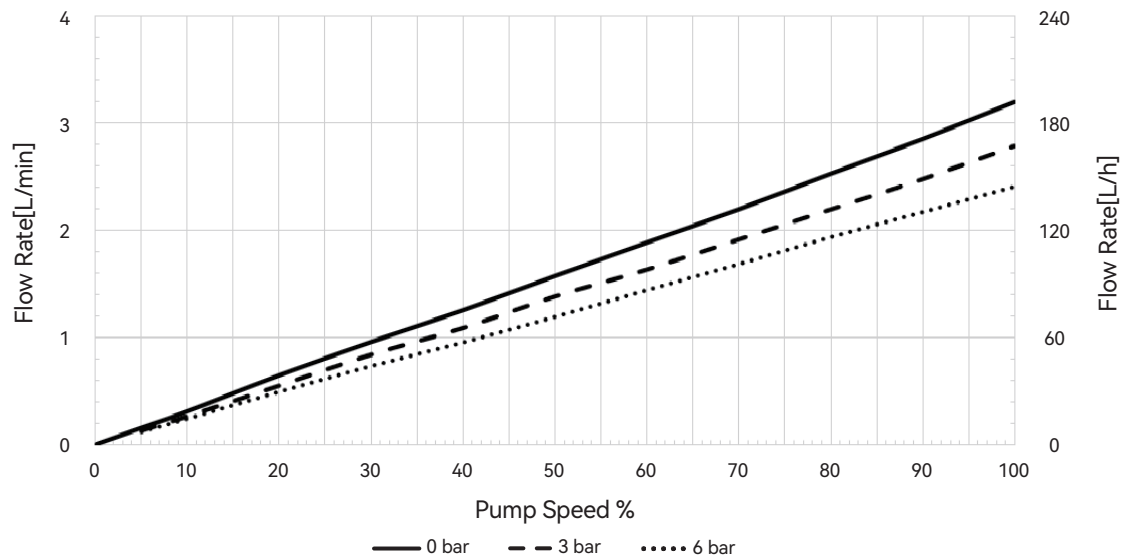


Alioth AliFit® High-Precision Diaphragm Pump

Product Specifications – AliFit® DP 180

Flow Rate Maximum	180.0 lph (3.000 lpm)
Flow Rate Minimum	0.6 lph (0.010 lpm)
Operating Pressure	Temperature of Fluid < 40°C (104°F) 6bar (87 psi) Temperature of Fluid > 40°C (104°F) 4bar (58 psi)
Maximum Temperature	Fluid 80°C (176°F) CIP 90°C (194°F) SIP 130°C (266°F) Autoclave 130°C (266°F)
Maximum Rotational Speed	1800 rpm
Maximum Dry Suction Lift (Tested with purified water at 25°C)	10%pump speed: 1m; 30%pump speed: 2m 50%pump speed: 2.5m; 70%pump speed: 2.5m 100%pump speed: 2.5m
Product wetted surface(approx.)	133 cm ²
Filling volume without connectors	18 ml
Approx.flow volume per rotation af free outpu	1.62 ml/r
Residual volume (Horizontal direction of the flow path)	5 ml
Connection Specification	3/8" TC
Pump Dimension(L×W×H)	285 mm X 170 mm X 178 mm
Pump Weight	8.2 kg
Power	100 W
Voltage	AC230V 50Hz ; AC110V 60Hz
Product Wetted Materials (Standard)	Pump Housing: 316L ; Pump Connector: 316L; Valve Plate: 316L Diaphragms: TPV; Valves: Silicone; O-rings: Silicone

Performance Charts

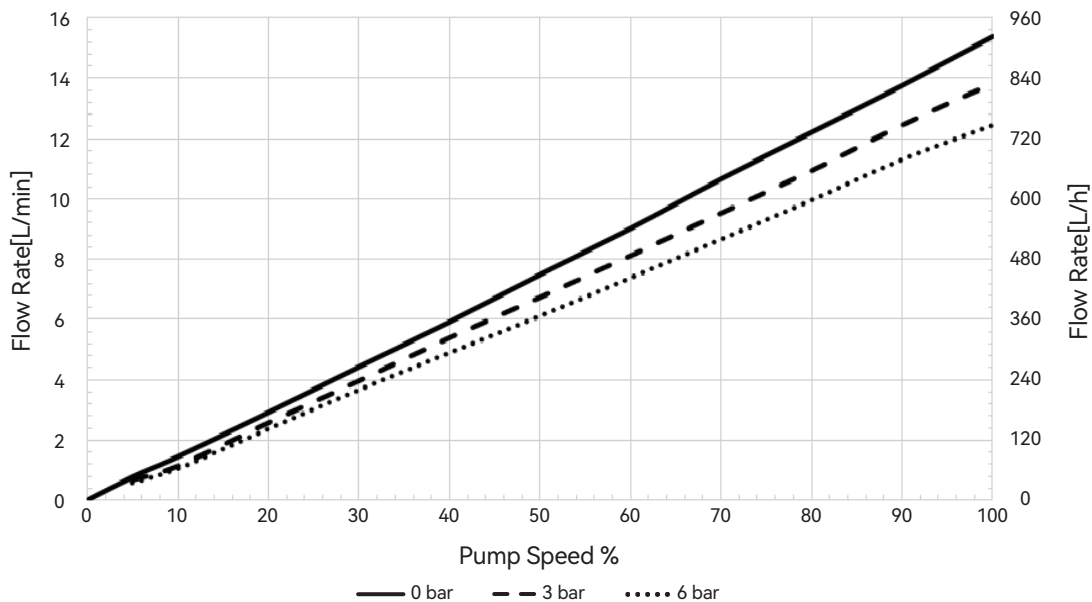


Alioth AliFit® High-Precision Diaphragm Pump

Product Specifications – AliFit® DP 800

Flow Rate Maximum	800.0 lph (13.333 lpm)
Flow Rate Minimum	3.6 lph (0.060 lpm)
Operating Pressure	Temperature of Fluid < 40°C (104°F) 6bar (87 psi) Temperature of Fluid > 40°C (104°F) 4bar (58 psi)
Maximum Temperature	Fluid 80°C (176°F) CIP 90°C (194°F) SIP 130°C (266°F) Autoclave 130°C (266°F)
Maximum Rotational Speed	1400 rpm
Maximum Dry Suction Lift (Tested with purified water at 25°C)	10%pump speed: 1.5m; 30%pump speed: 2m 50%pump speed: 2.5m; 70%pump speed: 2.5m 100%pump speed: 2.5m
Product wetted surface(approx.)	385 cm ²
Filling volume without connectors	94 ml
Approx.flow volume per rotation af free outpu	6.28 ml/r
Residual volume (Horizontal direction of the flow path)	10 ml
Connection Specification	3/4" TC
Pump Dimension(L×W×H)	450 mm X 211 mm X 228 mm
Pump Weight	24 kg
Power	750 W
Voltage	AC230V 50Hz ; AC110V 60Hz
Product Wetted Materials (Standard)	Pump Housing: 316L ; Pump Connector: 316L; Valve Plate: 316L Diaphragms: TPV; Valves: Silicone; O-rings: Silicone

Performance Charts

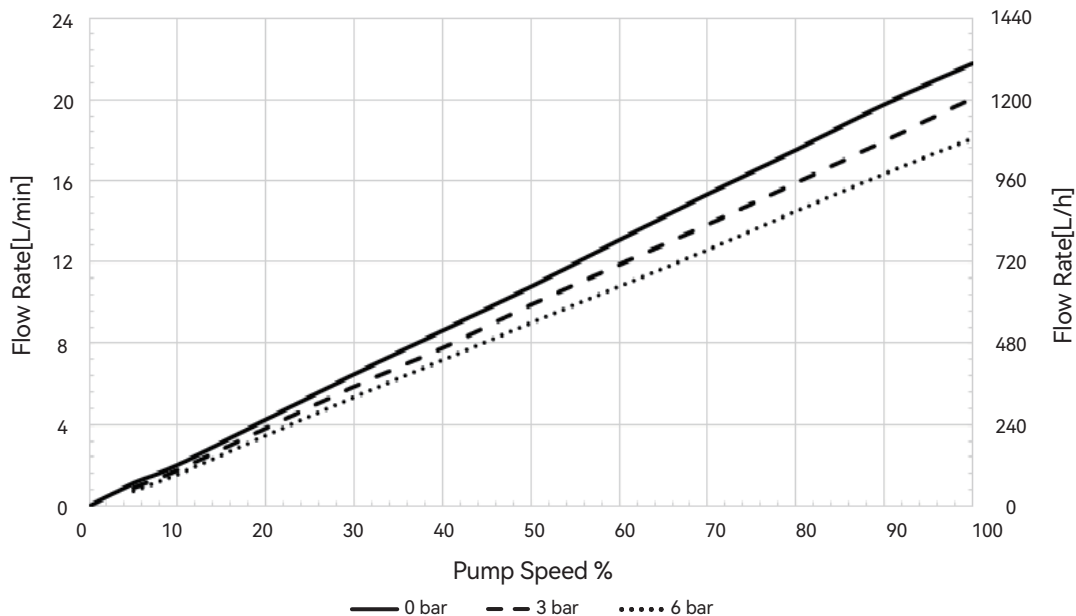


Alioth AliFit® High-Precision Diaphragm Pump

Product Specifications – AliFit® DP 1200

Flow Rate Maximum	1200.0 lph (20.000 lpm)
Flow Rate Minimum	6.9 lph (0.115 lpm)
Operating Pressure	Temperature of Fluid < 40°C (104°F) 6bar (87 psi) Temperature of Fluid > 40°C (104°F) 4bar (58 psi)
Maximum Temperature	Fluid 80°C (176°F) CIP 90°C (194°F) SIP 130°C (266°F) Autoclave 130°C (266°F)
Maximum Rotational Speed	1800 rpm
Maximum Dry Suction Lift (Tested with purified water at 25°C)	10%pump speed: 2m; 30%pump speed: 3.5m 50%pump speed: 4.5m; 70%pump speed: 4.5m 100%pump speed: 4.5m
Product wetted surface(approx.)	385 cm ²
Filling volume without connectors	94 ml
Approx.flow volume per rotation af free outpu	11.18 ml/r
Residual volume (Horizontal direction of the flow path)	10 ml
Connection Specification	3/4" TC
Pump Dimension(L×W×H)	450 mm X 211 mm X 228 mm
Pump Weight	24 kg
Power	750 W
Voltage	AC230V 50Hz ; AC110V 60Hz
Product Wetted Materials (Standard)	Pump Housing: 316L ; Pump Connector: 316L; Valve Plate: 316L Diaphragms: TPV; Valves: Silicone; O-rings: Silicone

Performance Charts



Alioth AliFit® High-Precision Diaphragm Pump

Ordering Information

Format	Quantity	Pump Type	Pump Flow Rate	System	Specification
PU=Pump	1=1 Set	D=Diaphragm pump	0030=0.9-30.0 l/h 0100=0.3-100.0 l/h 0180=0.6-180.0 l/h 0800=3.6-800.0 l/h 1200=6.9-1200.0 l/h	IC=Stand-alone Pump	1=Pump only

Accessories Information

Type	Accessories & Maintenance Kits					
	Description	Part No.	Description	Part No.	Description	Description
AliFit® DP30	Eccentric Shaft Assembly	DPSS0030ESU	Dedicated Maintenance Kit	DPSS0030DMP	Membrane & Unidirectional Valve Seal Kit	DPSS0030DSU
AliFit® DP100		DPSS0100ESU		DPSS0100DMP		DPSS0100DSU
AliFit® DP180		DPSS0300ESU		DPSS0300DMP		DPSS0300DSU
AliFit® DP800		DPSS0600ESU		DPSS0600DMP		DPSS0600DSU
AliFit® DP1200		DPSS1000ESU		DPSS1000DMP		DPSS1000DSU