

High Performance Liquid Transfer

SPEC SHEET | LIQUID HANDLING

MINIPULS® 3 PERISTALTIC PUMP

The compact MINIPULS® 3 is a high-performance, low-pulse, peristaltic pump with interchangeable pump heads for delivering a diverse variety of liquids.

Low-Pulse Liquid Transfer

Utilizing positive displacement pump technology, liquid flows nearly pulse-free as a result of ten stainless steel rollers (standard model). MINIPULS 3 produces smooth flows with excellent accuracy and precision, even at high flow rates.

Flexible Flow Rates & Tubing to Meet Your Needs

With a choice of six quickly interchangeable pump heads, you'll have a wide range of flow rates to use for your applications. A wide range of accepted tubing types and sizes give you much greater flexibility in terms of the flow rate range that is available with each pump head.

- Four standard models (1, 2, 4, or 8 channels): 0.3 µL/min to 30 mL/min (maximum pressure: 0.5 MPa)
- Two high flow models (2 or 4 channels): 1 mL/min to 220 mL/min (maximum pressure: 0.3 MPa)

Easy to Operate

MINIPULS 3 is simple to operate, and easy to install and maintain. With a keypad control and easy-to-read LCD screen, the start/stop, flow direction, increase/decrease flow rate, and prime functions are readily accessible. Remote start/stop is also possible.



MINIPULS® 3 PERISTALTIC PUMP AND PUMP HEADS

Description	Part Number	Maximum Flow Rate	Number of Channels
Pump Module MINIPULS 3	F155001	-	-
R1 Pump Head	F117604	up to 30 mL/min	1
R2 Pump Head	F117800	up to 30 mL/min	2
R4 Pump Head	F117606	up to 30 mL/min	4
R8 Pump Head	F117608	up to 30 mL/min	8
R2/HF Pump Head (High Flow)	F117830	up to 220 mL/min	2
R4/HF Pump Head (High Flow)	F117831	up to 220 mL/min	4

TUBING - MINIPULS® 3 PERISTALTIC PUMP

TUBING FOR R1, R2, R4, AND R8 PUMP HEADS

Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing) (Length = Approx. 40 cm / 16 in.)	Color Coded Stops		Extension Tubing 3 m (118 in.)	Connectors	Maximum Flow Rate (mL/min)
PVC	0.25	F117932	●	●	F117952	F117985	0.4
	0.38	F117933	●	●	F117953	F117986	0.7
	0.51	F117934	●	●	F117954	F117986	1.4
	0.76	F117936	●	●	F117956	F117987	2.1
	1.02	F117938	○	○	F117958	F1179941	4.1
	1.30	F117940	○	○	F117960	F1179941	6.2
	1.52	F117942	●	●	F117962	F1179941	9.1
	1.65	F117943	●	●	F117963	F1179941	10.5
	2.06	F117945	●	●	F117965	F1179941	15.7
	2.29	F117946	●	●	F117966	F1179941	19.7
	2.79	F117948	●	○	F117968	F1179951	23.2
	3.18	F117949	●	○	F117969	F1179951	29.0
Iso-Versinic® or Viton®	0.5	F1817741	●	●	F117740	F117986	1.8
	1.0	F1817743	●	●	F117742	F1179941	4.0
	2.0	F1817745	●	●	F117744	F1179941	12.6
	3.0	F117747	●	●	F117746	F1179951	27.3
	4.0	F117749	●	●	F117748	-	33.0
Silicone	0.64	F1825111	●	○	F1825131	F117987	1.5
	1.02	F1825112	○	○	F1825132	F1179941	4.1
	2.06	F1825113	●	●	F1825133	F1179951	14.7
	2.79	F1825114	●	○	F117975	F1179951	22.8
Santoprene™ or PharMed®	0.51	F1825101	●	●	F1825121	F117986	1.4
	1.02	F1825102	○	○	F1825122	F1179941	4.8
	2.06	F1825103	●	●	F1825123	F1179941	15.0

TUBING FOR R2/HF & R4/HF HIGH FLOW PUMP HEADS

Material	Internal Diameter (mm)	Reference Tubing (Calibrated Tubing) (Length = 3 m / 118 in.)	Maximum Flow Rate (mL/min)
PVC	2.06	F117965	24
	2.29	F117966	29
	2.79	F117968	41
	3.16	F117969	49
	4.0	F117970	75
	5.0	F117980	113
	6.0	F117981	163
	8.0	F117982	213
Iso-Versinic® or Viton®	2.0	F117744	23
	3.0	F117746	48
	4.0	F117748	86
	6.0	F117750	181
Silicone	2.0	F1825133	25
	3.0	F117975	44
	4.0	F117976	71
	5.0	F117977	115
	6.0	F117978	150
	7.0	F117979	220
Santoprene™ or PharMed®	2.0	F1825123	25
	3.2	F1825124	53
	6.4	F1825125	171

TECHNICAL SPECIFICATIONS - MINIPULS® 3 PERISTALTIC PUMP

DESCRIPTION	SPECIFICATION
Operating Temperature	4–40°C: No warm-up time is required before operation
Position	Upright only (vertical ±5°)
Head Speed	0.01 to 48 rpm
Motor Speed Stability	0.5% for any variation, torque, or temperature
Continuous Speed Adjustment	From 0 to 48 rpm by 0.01 increments up to 9.99 rpm, above 9.99 rpm by 0.1 increments
Flow Rate Range	Maximum: MP model 30 mL/min (1.8 L/h, 4mm tubing), HF model 220 mL/min (13.2 L/h, 8 mm tubing) Minimum: 0.3 µL/min (0.25 mm tubing)
Maximum Back Pressure	0.5 MPa (72.5 psi) for MP models, 0.3 MPa (43.5 psi) for HF models
Peristaltic Tubing Diameter	0.25 to 4 mm (ID) for MP models, 2 to 8 mm (ID) for HF models
Dimensions without Pump Heads (W x D x H)	15.0 x 17.4 x 18.5 cm (5.9 x 6.9 x 7.3 in.)
Weight	2.5 kg (5.5 lbs)