

P720 Peristaltic Pumps

Instech's P720 peristaltic pumps deliver the accurate low flow rates of syringe pumps without the limits on delivered volume. They are ideal for animal IV infusion, tissue perfusion and other low-flow laboratory applications.

The pumps feature precision-machined pump heads, Swiss-made motor and gearhead assemblies, linear speed control, and compatibility with a range of tube set sizes and materials.



Coarse and fine speed dials permit accurate and repeatable flow rate control. Flow rates can also be controlled with an analog voltage input for remote control or closed-loop applications.

The pump's analog circuitry has been carefully designed to minimize electromagnetic radiation; for this reason, the pump is often used for tissue perfusion even in the presence of sensitive intracellular recordings.

Instech offers three models of this pump: the standard P720 for rate from 1 to 100 ml/hr, the ultra-low-flow P720/10K for flows below 5 ml/hr, and the higher-flow P720/66 for rates up to 1 L/hr. The two low-flow models feature an internal 9V lithium battery that will run the pump for up to 30 hours, protecting your experiments in the event of a power failure and making it easy to move an operating pump around the lab.

For research or industrial applications only.
Not approved for human use.



Part No.	Description	Unit
P720	Low-flow peristaltic pump, 2 tube sets*	ea
P720/66	High-flow peristaltic pump, 2 tube sets*	ea
P720/10K	Ultra-low-flow peristaltic pump, 2 tube sets*	ea
P720/TS	Single channel tube sets*	pkg of 5
P720/TSD	Dual channel tube sets*	pkg of 5
P720/NCA	Fittings for straight-through tube sets	pair
P720/NCTS	Straight-through tube sets, 1ft (30cm) long**	pkg of 5
RMC	Rod mounting clamp for P720 pumps	ea
KSK	Kapton® strip replacement kit	pkg of 20
720BATT	9V lithium battery for P720 pump	ea

* Specify tube set inlet and outlet connectors, material and inner diameter when ordering; see next page.

** Specify tube material and ID; e.g. **0155** for .015" silicone. Custom lengths are available.

Specifications

	P720	P720/10K	P720/66
Recommended flow rate range	1 - 100 ml/hr 15 - 1500 µl/min	0.04 - 5 ml/hr 0.7 - 80 µl/min	50 - 1000 ml/hr 1 - 17 ml/min
Maximum flow rate (.093" tube)	145 ml/hr	12 ml/hr	1100 ml/hr
Minimum flow rate (.015" tube)	0.2 ml/hr	0.02 ml/hr	2 ml/hr
Flow control range	>20:1	>14:1	>13:1
Accuracy	±5%	±5%	±5%
Repeatability	±3%	±3%	±3%
Motor gear ratio	900:1	10683:1	66:1
Power source	Wall-mounted 9VDC adapter (120VAC supplied; others available)		
Backup battery	9V lithium	9V lithium	NA
Backup battery life	~30 hours	~30 hours	NA
Dimensions	2.5 x 2.3 x 4.0" (6.4 x 5.7 x 10.2 cm)		
Weight	375g	375g	375g



Fittings for straight-through tube sets are available when connectors are not desired.

Kapton is a registered trademark of DuPont

<http://www.instechlabs.com/Pumps/peristaltic/>

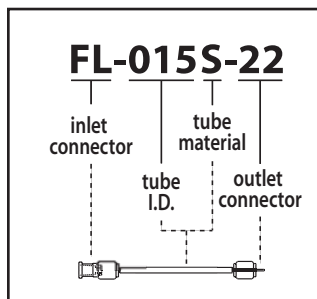
P720 Peristaltic Pumps

Tube Sets



A variety of tube sizes, tube materials, and connector types lets you tailor your P720 peristaltic pump to your application.

Tube sets typically last about one month under continuous operation. Dual channel sets place more stress on the pump than do single channel sets, which may shorten the life of the pump's motor.



Example tube set part number

New pumps include two tube sets of your choice; we cannot ship your pump until you specify tube sets. Additional tube sets are available in packages of five. Frequently ordered tube sets are held in stock; others can be made to order in two to three days.

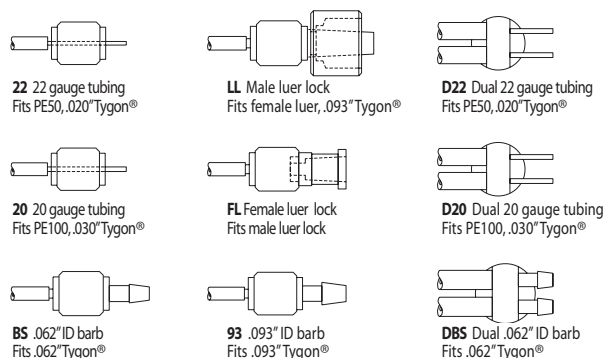
When ordering, create a part number as shown.

Frequently Ordered Tube Sets

Part Number	Flow Rates*	Typical Application
FL-015S-22	0.2 - 5 ml/hr	Laboratory animal infusion with 22ga swivels
FL-020S-20	0.3 - 11 ml/hr	Laboratory animal infusion with 20ga swivels
BS-031S-BS	0.8 - 21 ml/hr	General laboratory applications
BS-093S-BS	7 - 145 ml/hr	General laboratory applications
DBS-062S-DBS	3 - 75 ml/hr	Dual channel laboratory applications
DBS-062S-DBSU	3 - 75 ml/hr	Constant fluid levels in tissue chambers

*With standard model P720 pumps.

Connectors



P720 Tube Set Configurations

Tube Size	015	020	031	062	093
Inner diameter	.015" (.38mm)	.020" (.51mm)	.031" (.79mm)	.062" (1.6mm)	.093" (2.4mm)
FLOW RATES					
P720	0.2 - 5 ml/hr	0.3 - 11 ml/hr	0.8 - 21 ml/hr	3 - 75 ml/hr	7 - 145 ml/hr
P720/10K	0.02 - 0.45 ml/hr	0.04 - 0.95 ml/hr	0.08 - 1.8 ml/hr	0.3 - 6.3 ml/hr	0.9 - 12 ml/hr
P720/66	2 - 43 ml/hr	4 - 90 ml/hr	9 - 170 ml/hr	33 - 550 ml/hr	90 - 1100 ml/hr
MATERIALS Use silicone with saline and most drugs. Use C-FLEX® for solutions containing fats, such as IV diets. Use VITON® for petroleum-based fluids.					
S - Silicone	●	●	●	●	●
C - C-FLEX®		●	●	●	
V - VITON®				●	
CONNECTORS/CHANNELS					
22 - 22ga tubing	●	●			
20 - 20ga tubing	●	●			
BS - .062" ID soft plastic barb	●	●	●	●	●
LL - male luer lock	●	●	●	●	●
FL - female luer lock	●	●	●	●	●
93 - .093" ID soft plastic barb	●	●	●	●	●
D22 - dual channel 22ga tubing	●	●			
D20 - dual channel 20ga tubing	●	●			
DBS - dual channel .062" ID barb		●	●	●	

C-FLEX is a trademark of Consolidated Polymer Technologies
 VITON is a trademark of DuPont Dow Elastomers
 Tygon is a trademark of Saint Gobain Performance Plastics Corporation