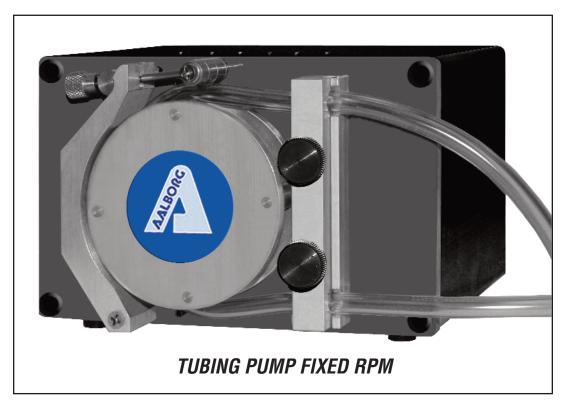


TUBING PUMPS FIXED RPM





Peristaltic Pump designed for liquids of low to high viscosities.

Laboratory, processing and OEM applications.

MAXIMUM LIFT HEAD: $900^{\circ} \text{ H}_2\text{O}$ (34 psig).

MAXIMUM SUCTION HEAD: 275" H₂O (21" Hg vacuum).

design features

- ✓ Economical.
- ✔ Adjustable Occlusion Wall.
- ✓ Stainless Steel Rollers and Shafts.
- ✓ Compact Design, Small Foot Print.
- ✓ Can Be Mounted In Any Direction.
- ✓ Long Tubing Life.
- ✔ Four rollers. To minimize pulsing, ten rollers optional.

	TYPICAL FLOW RATES WITH TYGON LAB TUBINGS [ml/min]						
	4 ROLLERS PUMP HEAD RPM						
INSIDE DIA"	3	10	20	30	40	50	
1/8"	8	14	30	45	60	74	
3/16"	17	38	69	99	130	160	
1/4"	20	57	110	162	215	267	
5/16"	32	82	160	230	303	377	

DIMENSIONS:

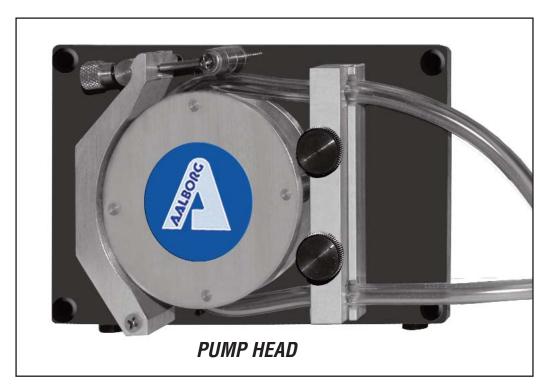
6 1/2" WIDE X 6 3/4" DEEP X 4 1/8" HIGH

MODEL NO.	DESCRIPTION
TPUFX120-03	Fixed RPM Pump 120VAC 3 RPM
TPUFX120-10	Fixed RPM Pump 120VAC 10 RPM
TPUFX120-20	Fixed RPM Pump 120VAC 20 RPM
TPUFX120-30	Fixed RPM Pump 120VAC 30 RPM
TPUFX120-40	Fixed RPM Pump 120VAC 40 RPM
TPUFX120-50	Fixed RPM Pump 120VAC 50 RPM
TPUFX240-03	Fixed RPM Pump 240VAC 3 RPM
TPUFX240-10	Fixed RPM Pump 240VAC 10 RPM
TPUFX240-20	Fixed RPM Pump 240VAC 20 RPM
TPUFX240-30	Fixed RPM Pump 240VAC 30 RPM
TPUFX240-40	Fixed RPM Pump 240VAC 40 RPM
TPUFX240-50	Fixed RPM Pump 240VAC 50 RPM

^{**} The selection of materials of construction is the responsibility of the customer. The company accepts no liability.

TURING PUMP HEADS





Simplicity of pump head design permits users to connect their own motor drives (optional see table below). Flow rates are determined by size and material of tubing.

PRINCIPLE OF OPERATION

Flexible tubing is squeezed by rotating rollers against a crescent shaped rigid wall. Liquid is primed into the inlet of the tubing by suction created by the rolling action and dispensing or transfer pumping of liquid commences.

MAXIMUM LIFT HEAD: 900" H₂O (34 psig).

MAXIMUM SUCTION HEAD: 275" H₂O (21" Hg vacuum).

ORDERING INFORMATION FOR TUBING PUMP HEAD ACCESSORIES					
MODEL NO.	DESCRIPTION				
TPU1	Pump head 4 Rollers for 1/16" wall tubing. Supplied with 18" long ¼ inside Diameter Silicone Tubing.				
TPU2	Pump head 10 Rollers for 1/16" wall tubing. Supplied with 18" long ¼ inside Diameter Silicone Tubing.				
MTRFX120-3	Optional Gear Motor 120 VAC, 3 RPM, fixed speed.				
MTRFX240-3	Optional Gear Motor 240 VAC, 3 RPM, fixed speed.				
MTRFX120-10	Optional Gear Motor 120 VAC, 10 RPM, fixed speed.				
MTRFX240-10	Optional Gear Motor 240 VAC, 10 RPM, fixed speed.				
MTRFX120-20	Optional Gear Motor 120 VAC, 20 RPM, fixed speed.				
MTRFX240-20	Optional Gear Motor 240 VAC, 20 RPM, fixed speed.				
MTRFX120-30	Optional Gear Motor 120 VAC, 30 RPM, fixed speed.				
MTRFX240-30	Optional Gear Motor 240 VAC, 30 RPM, fixed speed.				
MTRFX120-40	Optional Gear Motor 120 VAC, 40 RPM, fixed speed.				
MTRFX240-40	Optional Gear Motor 240 VAC, 40 RPM, fixed speed.				
MTRFX120-50	Optional Gear Motor 120 VAC, 50 RPM, fixed speed.				
MTRFX240-50	Optional Gear Motor 240 VAC, 50 RPM, fixed speed.				
MTRAD-60	Optional 12 VDC adjustable speed motor 60 RPM.				
MTRAD-300	Optional 12 VDC adjustable speed motor 300 RPM.				

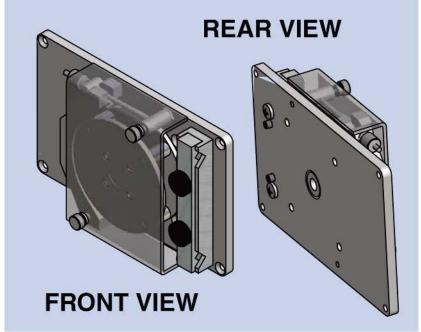
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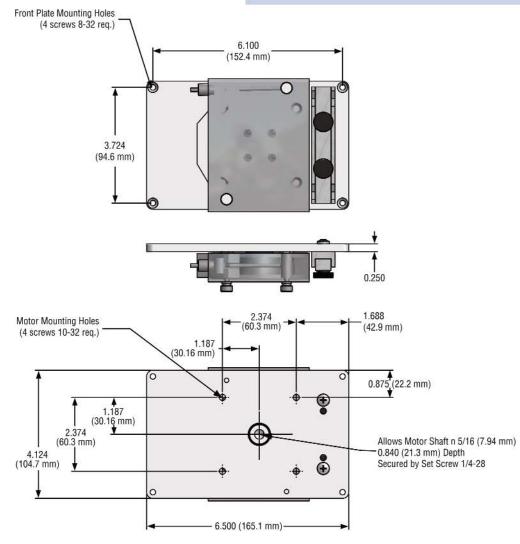
6 1/2" WIDE X 1 5/8" DEEP X 4 1/8" HIGH

TYPI	TYPICAL FLOW RATES WITH TYGON LAB TUBINGS [ml/ min]							
	4 ROLLERS PUMP HEAD RPM							
INSIDE DIA"	3	10	20	30	40	50		
1/8"	8	14	30	45	60	74		
3/16"	17	38	69	99	130	160		
1/4"	20	57	110	162	215	267		
5/16"	32	82	160	230	303	377		



TUBING PUMP HEAD DIMENSIONAL DRAWING





TUBING PUMPS VARIABLE SPEEDS





design features

- Economical, Compact design, Small Footprint.
- Adjustable Occlusion.
- Maintenance free brushless DC motors.
- ✓ Directionally reversible flow.
- Priming function.
- ✓ Four rollers are standard.
- Pumping speeds are electronically adjustable from 0 to 60 RPMs.

TUBING PUMPS VARIABLE SPEEDS WITH PRIME FUNCTION

SPECIFICATIONS

TUBING INSIDE DIAMETERS: 1/8", 3/16", 1/4" or 5/16".

TUBING WALL: 1/16".

RECOMMENDED TUBING MATERIALS:

PHARMED® VERSILIC® Silicone, TYGON® Sanitary,

NORPRENE®, TYGON® Long Flex.

**MATERIALS OF CONSTRUCTION

Anodized Aluminum, Stainless Steel Rollers and Shafts.

MODEL NO.	DESCRIPTION		
TPUAD-NA	Adjustable Speed Pump North America		
TPUAD-EU	Adjustable Speed Pump Europe		
TPUAD-AU	Adjustable Speed Pump Australia		
TPUAD-UK	Adjustable Speed Pump United Kingdom		

 $\begin{array}{lll} \textbf{MAXIMUM LIFT HEAD:} & 900\text{"}~\text{H}_2\text{O}~(34~\text{psig}). \\ \textbf{MAXIMUM SUCTION HEAD:} & 275\text{"}~\text{H}_2\text{O}~(21\text{"}~\text{Hg vacuum}). \end{array}$

DIMENSIONS: 6 1/2" WIDE X 6 3/4" DEEP X 4 1/8" HIGH

Motor control panel includes Power indication LED, REVERSE flow switch, SPEED regulation knob, BREAK switch and push button for PRIME function.

Pump head is designed for 1/8", 3/16", 1/4", and 5/16" inside diameter flexible tubing, 1/16" walls.

Recommended Tubing Materials: TYGON® 3603, Peroxide treated Silicone, Platinum treated Silicone, Pharmed®, NORPRENE®, HYPALON®.

Precision rollers are stainless steel.

Tubing occlusion is adjustable for increased pressure or longer tubing life.

TYPICAL FLOW RATES WITH TYGON LAB TUBINGS [ml/ min]						
INSIDE DIA"	4 ROLLERS PUMP HEAD RPM					
INSIDE DIA	3	10	20	30	40	50
1/8"	8	14	30	45	60	74
3/16"	17	38	69	99	130	160
1/4"	20	57	110	162	215	267
5/16"	32	82	160	230	303	377

^{**} The selection of materials of construction is the responsibility of the customer.
The company accepts no liability.

DISPENSER PLIMPS





Dispenser pumps are similar to Adjustable Speed models, except a programmable timer device is added to the controls. This permits dispensing over a selected time period by two different ways. A single volume of liquid is dispensed every time it is activated. Alternately, via a "D" connector at the rear of the pump, remote input dispensing functions are available.

Also available with individually programmable ON-OFF cycle timing.

Timers have seven ranges: 0.1-1 Seconds

1-10 Seconds 6-60 Seconds

1-10 minutes 6-60 minutes 1-10 hours 10-100 hours

design features

- ✔ Adjustable occlusion.
- ✓ Maintenance free brushless DC motors.
- ✔ Directionally reversible flow.
- ✔ Priming function.
- ✔ Four rollers are standard.
- ✔ Pumping speeds are electronically adjustable from 10 to 60 RPMs.

MODEL NO.	DESCRIPTION		
TPUDP-NA	Dispensing Pump NA		
TPUDP-EU	Dispensing Pump EA		
TPUDP-AU	Dispensing Pump AU		
TPUDP-UK	Dispensing Pump UK		

MAXIMUM LIFT HEAD: $900^{\circ} H_2O$ (34 psig).

MAXIMUM SUCTION HEAD: 275" H₂O (21" Hg vacuum).

TYPICAL	TYPICAL FLOW RATES WITH TYGON LAB TUBINGS [ml/ min]						
	4 ROLLERS PUMP HEAD RPM						
INSIDE DIA"	3	10	20	30	40	50	
1/8"	8	14	30	45	60	74	
3/16"	17	38	69	99	130	160	
1/4"	20	57	110	162	215	267	
5/16"	32	82	160	230	303	377	

DIMENSIONS:

7-3/4" WIDE X 8" DEEP X 6 1/8" HIGH.

SPECIFICATIONS

TUBING INSIDE DIAMETERS: 1/8", 3/16", 1/4" or 5/16".

TUBING WALL: 1/16".

RECOMMENDED TUBING MATERIALS:

 $PHARMED @\ VERSILIC @\ Silicone,\ TYGON @\ Sanitary,$

NORPRENE®, TYGON® Long Flex.

**MATERIALS OF CONSTRUCTION

Anodized Aluminum, Stainless Steel Rollers and Shafts.

FLEXIBLE TUBINGS



ORDERING INFORMATION FOR PUMP TUBING					
MODEL NO.	DESCRIPTION				
TB1LA2	Tubing Tygon ® R-3603 Lab grade 1/8" ID X 1/16" wall, 50 feet				
TB1LA3	Tubing Tygon ® R-3603 Lab grade 3/16" ID X 1/16" wall, 50 feet				
TB1LA4	Tubing Tygon ® R-3603 Lab grade 1/4" ID X 1/16" wall, 2 x 25 feet coils (50 feet)				
TB1LA5	Tubing Tygon ® R-3603 Lab grade 5/16" ID X 1/16" wall, 50 feet				
TB1LF2	Tubing Long Flex Life (LFL) 1/8" ID X 1/16" wall, 50 feet				
TB1LF3	Tubing Long Flex Life (LFL) 3/16" ID X 1/16" wall, 50 feet				
TB1LF4	Tubing Long Flex Life (LFL)1/4" ID X 1/16" wall, 50 feet				
TB1LF5	Tubing Long Flex Life (LFL) 5/16" ID X 1/16" wall, 50 feet				
TB1NO2	Tubing Norprene® Food Grade (FDA, 3A, NSF) 1/8" ID X 1/16" wall, 50 feet				
TB1NO3	Tubing Norprene® Food Grade (FDA, 3A, NSF) 3/16" ID X 1/16" wall, 50 feet				
TB1N04	Tubing Norprene® Food Grade (FDA, 3A, NSF) 1/4" ID X 1/16" wall, 50 feet				
TB1N05	Tubing Norprene® Food Grade (FDA, 3A, NSF) 5/16" ID X 1/16" wall, 50 feet				
TB1NI2	Tubing Norprene® Industrial Grade (FDA, 3A, NSF) 1/8" ID X 1/16" wall, 50 feet				
TB1NI3	Tubing Norprene® Industrial Grade (FDA, 3A, NSF) 3/16" ID X 1/16" wall, 50 feet				
TB1NI4	Tubing Norprene® Industrial Grade (FDA, 3A, NSF) 1/4" ID X 1/16" wall, 50 feet				
TB1IN5	Tubing Norprene® Industrial Grade (FDA, 3A, NSF) 5/16" ID X 1/16" wall, 50 feet				
TB1PH2	Tubing PHARMED® 1/8" ID X 1/16" wall, 25 feet				
TB1PH3	Tubing PHARMED® 3/16" ID X 1/16" wall, 25 feet				
TB1PH4	Tubing PHARMED® 1/4" ID X 1/16" wall, 25 feet				
TB1PH5	Tubing PHARMED® 5/16" ID X 1/16" wall, 25 feet				
TB1SI2	Tubing Silicone (SPX-50), peroxide cured 1/8" ID X 1/16" wall, 50 feet				
TB1SI3	Tubing Silicone (SPX-50), peroxide cured 3/16" ID X 1/16" wall, 50 feet				
TB1SI4	Tubing Silicone (SPX-50), peroxide cured 1/4" ID X 1/16" wall, 50 feet				
TB1SI5	Tubing Silicone (SPX-50), peroxide cured 5/16" ID X 1/16" wall, 50 feet				
TB1SA2	Tubing Silicone (3350), sanitary 1/8" ID X 1/16" wall, 50 feet				
TB1SA3	Tubing Silicone (3350), sanitary 3/6" iD X 1/16" wall, 50 feet				
TB1SA4	Tubing Silicone (3350), sanitary 1/4" ID X 1/16" wall, 50 feet				
TB1SA5	Tubing Silicone (3350), sanitary 5/16" ID X 1/16" wall, 50 feet				
TB1TY2	Tubing Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 1/8" ID X 1/16" wall, 50 feet				
TB1TY3	Tubing Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 3/16" ID X 1/16" wall, 50 feet				
TB1TY4	Tubing Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 1/4" ID X 1/16" wall, 50 feet				
TB1TY5	Tubing Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 5/16" ID X 1/16" wall, 50 feet				
TB1FR2	Tubing Fluran® (F-5500-A), Severe Enviornment Tubing 1/8" ID X 1/16" wall, 50 feet				
TB1FR3	Tubing Fluran® (F-5500-A), Severe Enviornment Tubing 3/16" ID X 1/16" wall, 50 feet				
TB1FR4	Tubing Fluran® (F-5500-A), Severe Enviornment Tubing 1/4" ID X 1/16" wall, 50 feet				
TB1FR5	Tubing Fluran® (F-5500-A), Severe Enviornment Tubing 5/16" ID X 1/16" wall, 50 feet				
TB1FL2	Tubing Tygon® F4040-A Fuel and Lubricant Appl. 1/8" ID X 1/16" wall, 50 feet				
TB1FL3	Tubing Tygon® F4040-A Fuel and Lubricant Appl. 3/16" ID X 1/16" wall, 50 feet				
TB1FL4	Tubing Tygon® F4040-A Fuel and Lubricant Appl. 1/4" ID X 1/16" wall, 50 feet				
TB1FL5	Tubing Tygon® F4040-A Fuel and Lubricant Appl. 5/16" ID X 1/16" wall, 50 feet				