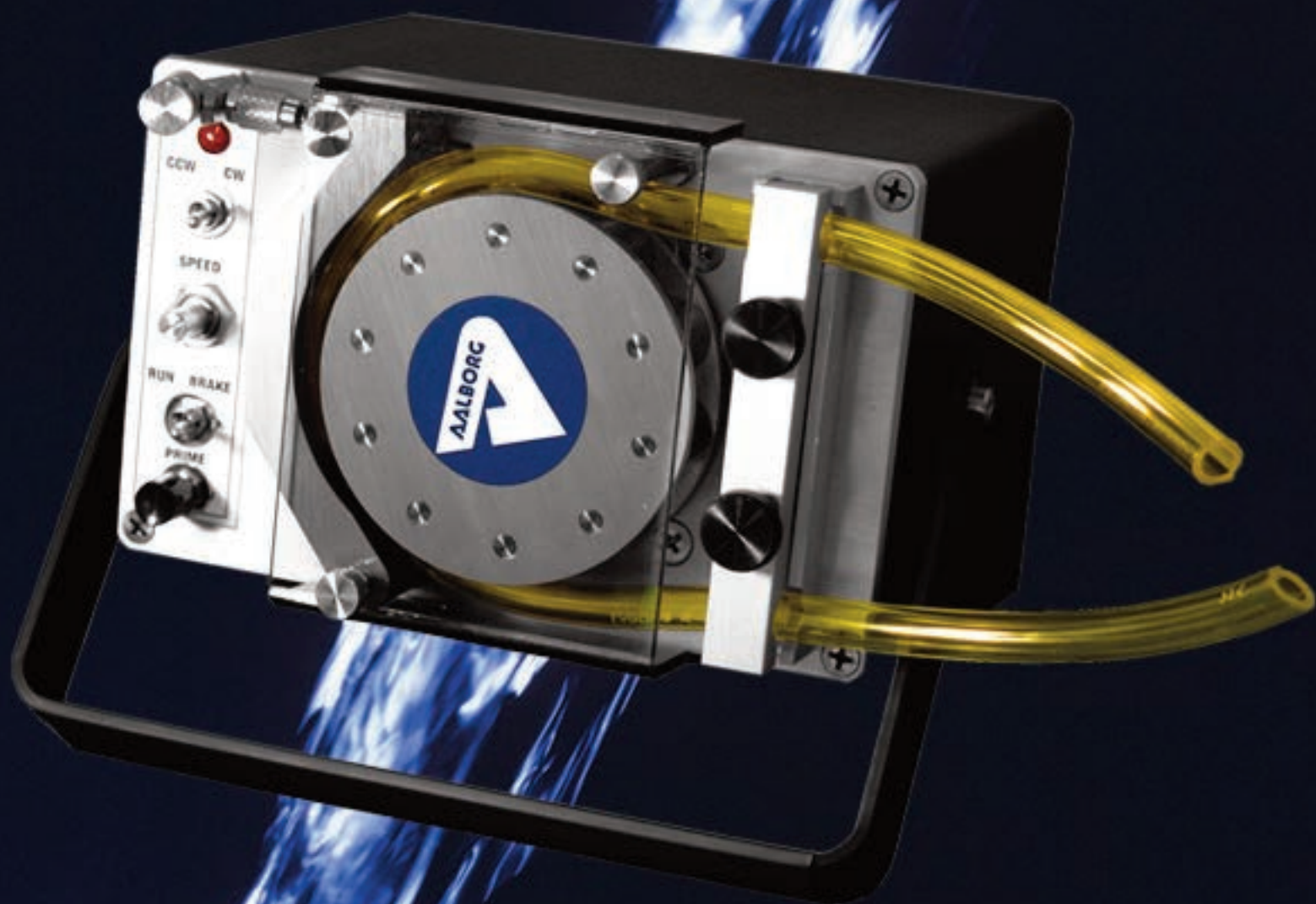


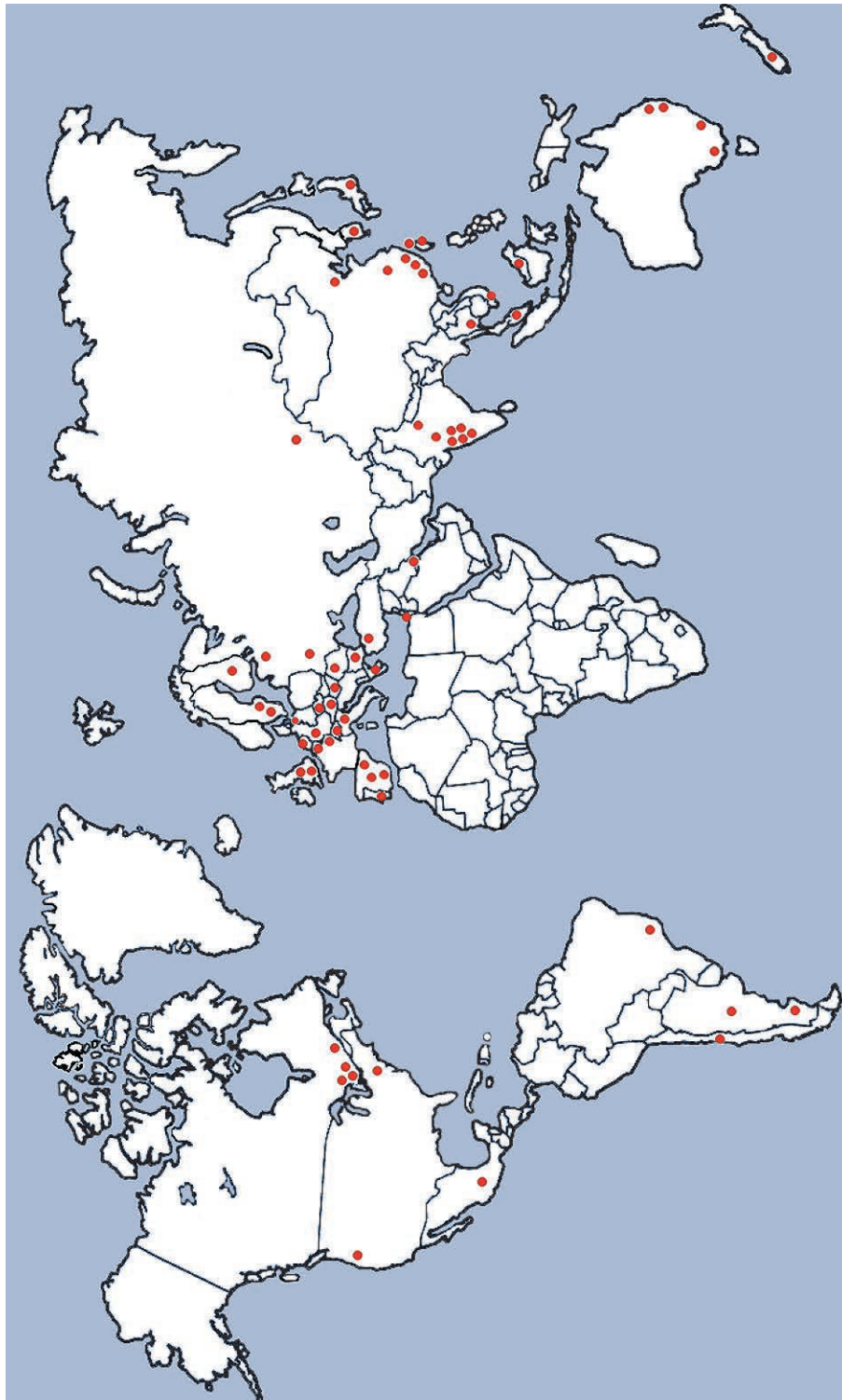
# AALBORG



pumps



# Worldwide Distribution



Visit our web site at: [www.aalborg.com](http://www.aalborg.com)





## About the Company

Founded in 1972, AALBORG® is well-known throughout the world as a primary manufacturer of precision instrumentation for flow measurement and control.

### We operate two divisions:

**The Electronics Division** produces a line of Peristaltic Pumps, Thermal Mass Flow Controllers, Vortex Shedding Flow Meters, Proportioning Solenoid and Motor driven control valves.

**The Variable Area Division** manufactures a complete line of glass tube rotameters. These flow meters are available with aluminum, brass, stainless steel or PTFE wetted components. AALBORG® also manufactures a unique line of PFA tube meters for ultrapure or corrosive applications. Precision barstock stainless steel or brass needle valves, as well as PTFE valves, are also manufactured in this division.

## NIST Traceable

NIST traceable flow meter calibrations are performed in our state of the art laboratories.

## Technical Assistance

Technical Assistance is readily available. Customers are invited to contact the company or our distributors to discuss individual requirements. OEM applications are welcome.

## ISO9001 /2015 Certification

AALBORG® has been ISO 9001 certified since April of 1995. We are very proud of the design features and the exceptionally high quality for which our products which have been known since 1972. It is our policy that through strict enforcement of exacting manufacturing standards the AALBORG® brand name continues to be associated with a reputation of high quality and reliability. Our products are backed by meticulous innovative engineering combined with efficient manufacturing practices and a highly skilled work force guaranteeing total customer satisfaction.

## Our Mission

It is the policy of AALBORG® to develop, produce and deliver products and services which consistently conform to or exceed customer requirements.

Our commitment is to provide cutting-edge technology combined with a sincere desire to serve our customers and produce the highest quality products attainable.

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### TPV SPECIFICATIONS

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## FLEXIBLE TUBING

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Four Roller TPT Pump

Three Roller TPV Pump



Ten Roller TPU Pump

Order Online: [Peristaltic Pumps](#)

### General Description

Aalborg's TPT, TPU and TPV model peristaltic pumps are designed for safety and long tubing life. They are economical, easy to load, sturdy, and compact with small footprints. Designed for use with liquids of widely diverse viscosities, they are suitable for laboratory, processing, and OEM applications, including fuel with the appropriate tubing. Power supplies for all pumps (except TPUFX) need to be ordered separately. For power supply part numbers please consult the Accessories tables on pages 3, 15 and 26.

### Principles of Operation

Flexible tubing, which conveys fluid from source to destination, is squeezed inside the pump head by rotating rollers against a rigid, crescent-shaped Occlusion Wall. The rollers induce suction in a pulsing rhythm. TPT and TPU models offer adjustable occlusion for increased pressure, or decreased pressure to extend tubing life.

TPU and TPV pumps are comprised of front panels with controls, pump heads, motors, rigid cases with rubber feet and handles. The moveable handles are practical for carrying the pump, lifting and angling the pump face plate, and making the controls more user accessible.



TPT Pump



**Please Note:**  
Power Supply sold separately

## TPT Mini Peristaltic Pumps

Economical Model TPT Mini Peristaltic Pumps are designed for liquids. Simple to load and operate, two plastic thumb-screws allow easy Occlusion Wall adjustments, provide longer tubing life, and secure the safety shield. Two plastic slide on/off tube holders assure quick tubing loop replacements.

User-selectable flow rates from 1.90 mL/min. to 25 mL/min. are dependent on the tubing material and ID; 1/32" wall tubing is required. Power supplies for all TPT pumps need to be ordered separately. For power supply part numbers please consult the Accessories table on pages 3. TPT Pumps are CE compliant.

### Typical Flow Rates Based on Tubing Sizes:

TUBING SIZE	FLOW mL/min
1/32" ID x 1/32" wall.	1.9
1/16" ID x 1/32" wall.	7.0
1/8" ID x 1/32" wall.	25.0



**For dependable and safe pumping of liquids at very low flow rates.**

**Design Features**

- ◆ 4 roller aluminum pump head.
- ◆ Cast bronze self-lubricating rollers.
- ◆ Continuous duty 24 VDC brush style gear motor with internal permanent magnet.
- ◆ CW-OFF-CCW switch.
- ◆ Safety shield to prevent finger contact with moving parts.
- ◆ Lightweight 3.5 lb.
- ◆ Compact 5" x 4" footprint.
- ◆ Tubing Loops of different materials and sizes including fittings are available.
- ◆ Optional resetable counter.

CODE	MOTOR AND CONTROLS
TPT2D3	DC motor, max RPM 25 rev/Min.
TPT2D4	DC motor, max RPM 25 rev/Min Counter Option.

ACCESSORIES	
PS-13A-24	Power Supply 24 VDC, 1.08 Amp, and 2.1 mm center- positive DC jack (needs to be ordered separately).
LOOPT1/32	Tubing and fittings 1/32" ID x 1/32" wall E- 3603.
LOOPT1/16	Tubing and fittings 1/16" ID x 1 /32" wall E- 3603.
LOOPT1/8	Tubing and fittings 1/8" ID x 1/32" wall E- 3603.
LOOPL1/16	Tubing and fittings 1/16" ID x 1 /32" wall surgical rubber.
LOOPL1/8	Tubing and fittings 1/8" ID x 1/32" wall surgical rubber.
LOOPS1/16	Tubing and fittings 1/16" ID x 1 /32" wall silicon rubber.
LOOPS1/8	Tubing and fittings 1/8" ID x 1/32" wall silicon rubber.

TPT Pumps are ideal for laboratory, processing, pH control, nutrient dosing, environmental sampling functions, R&D, aggressive fluids, and OEM applications.

## Four Roller TPU Pump



**Please Note:**  
Power Supply sold separately

## General Description

Aalborg's TPU four and ten roller model peristaltic pumps are designed for safety and long tubing life. They are economical, easy to load, sturdy, and compact for a small footprint. Designed for use with liquids of widely diverse viscosities, they are suitable for laboratory, processing, and OEM applications, including fuel with the appropriate tubing. A Remote Start option is available on Dispenser Pumps using the 9-pin female D-connector located on the rear panel.

Power supplies for all TPU pumps (except TPUFX) need to be ordered separately. For power supply part numbers please consult the Accessory table on pages 15. TPU Pumps are CE compliant (except TPUFX).

## Principles of Operation

Flexible tubing, which conveys fluid from source to destination, is squeezed inside the pump head by rotating rollers against a rigid, crescent-shaped Occlusion Wall. The rollers induce suction in a pulsing rhythm. TPU models offer adjustable occlusion for increased pressure, or decreased pressure to extend tubing life.

TPU four and ten roller pumps are comprised of front panels with controls, pump heads, motors, rigid cases with rubber feet and handles. The moveable handles are practical for carrying the pump, lifting and angling the pump face plate, and making the controls more user accessible.



**TPU SPECIFICATIONS**

	<b>TPU FX FIXED RPM</b>	<b>TPU AD ADJUSTABLE RPM</b>	<b>TPU DP or RP ADJUSTABLE RPM DISPENSING</b>	<b>TPU1 PUMP HEAD</b>	<b>TPU2 PUMP HEAD</b>
<b>ROLLERS</b>	4 standard, 10 optional.			4	10
<b>PUMPING SPEEDS</b>	Preset to 3, 10, 20, 30, 40 or 50 RPM.	10 – 60 RPM.		Speeds depend on the motor you add to the pump head.	
<b>MOTOR</b>	AC Shaded Pole.	Brushless DC.		Motor (including mounting kit) available for separate purchase; factory mounting optional.	
<b>POWER SUPPLY*</b>	Optional desktop power supply and cord. See ordering on page 15 (needs to be ordered separately).			N/A	
<b>ELECTRICAL REQUIREMENT</b>	110 or 240 VAC	90-264 VAC		N/A	
<b>DIMENSIONS</b>	6.50 in. (165 mm) WIDE x 6.57 in. (167 mm) DEEP x 4.12 in. (105 mm) HIGH excluding handle.			6.50 in. (165 mm) WIDE x 1.61 in. (41 mm) DEEP x 4.12 in. (105 mm) HIGH.	
<b>MAXIMUM LIFT, PUMP HEAD</b>	340 in. H <sub>2</sub> O (12.3 psig).				
<b>MAXIMUM SUCTION, HEAD</b>	350 in. H <sub>2</sub> O (12.6 psig).				
<b>RECOMMENDED TUBING MATERIALS 1/16 IN. WALL</b>	Tygon® E-3603, peroxide-treated silicone, platinum-treated silicone, PharMed® Versilic® silicone, Tygon® Sanitary silicone, Norprene® Tygon® Long Flex Life, and Hypalon® .				
<b>TUBING SIZES (INSIDE Ø )</b>	1/8 in., 3/16 in., 1/4 in. or 5/16 in. - for 4 rollers. 1/8 in., 3/16 in., 1/4 in. - for 10 rollers.				
<b>FUSES</b>	Two 2-Amp, 250 V, fast-acting, glass, 5 x 20 mm, UL-listed.	N/A	N/A	N/A	
<b>REVERSIBLE FLOW</b>	No	Yes	Yes	No	
<b>PRIMING FUNCTION</b>	No	Yes	Yes	No	
<b>TIMING FUNCTION</b>	No	No	Yes	No	
<b>CE COMPLIANT</b>	No	Yes	Yes	Yes	

**TPU \*\*MATERIALS OF CONSTRUCTION**

**ANODIZED ALUMINUM**

**316 STAINLESS STEEL PRECISION ROLLERS AND SHAFTS**

\* Specific power cords are available for North America, Europe, UK and Australia.

\*\* The selection of tubing materials is the responsibility of the customer; the company accepts no liability.

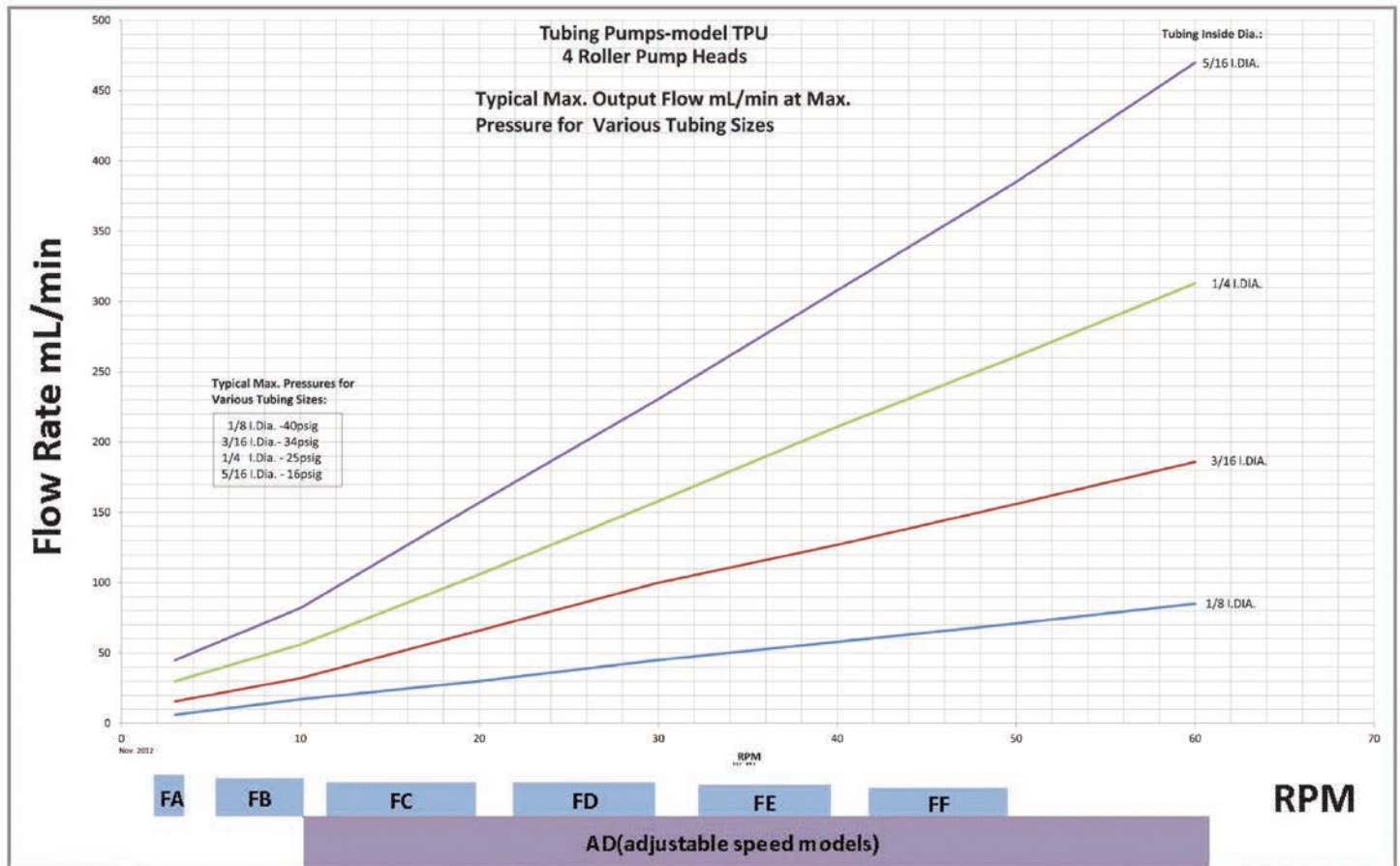
## Flow Rate Graphs

To select the pump that best corresponds to your needs using the Flow Rate graphs:

1. Locate the desired flow rate where it intersects with the tubing diameter plot lines.
2. Project the intersections to the RPM axis at the bottom of the graph.
3. If your chosen flow rate falls between the fixed RPM choices (the blue boxes labeled FA, FB, etc.), pick the next larger speed or order an adjustable RPM pump, represented by the purple AD (adjustable speed models) box.

Armed with this information, consult the features sections that follow, then use the tables on page 15 to identify the ordering number for the pump(s) you have selected.

### TPU1 Four-Roller Pumps:

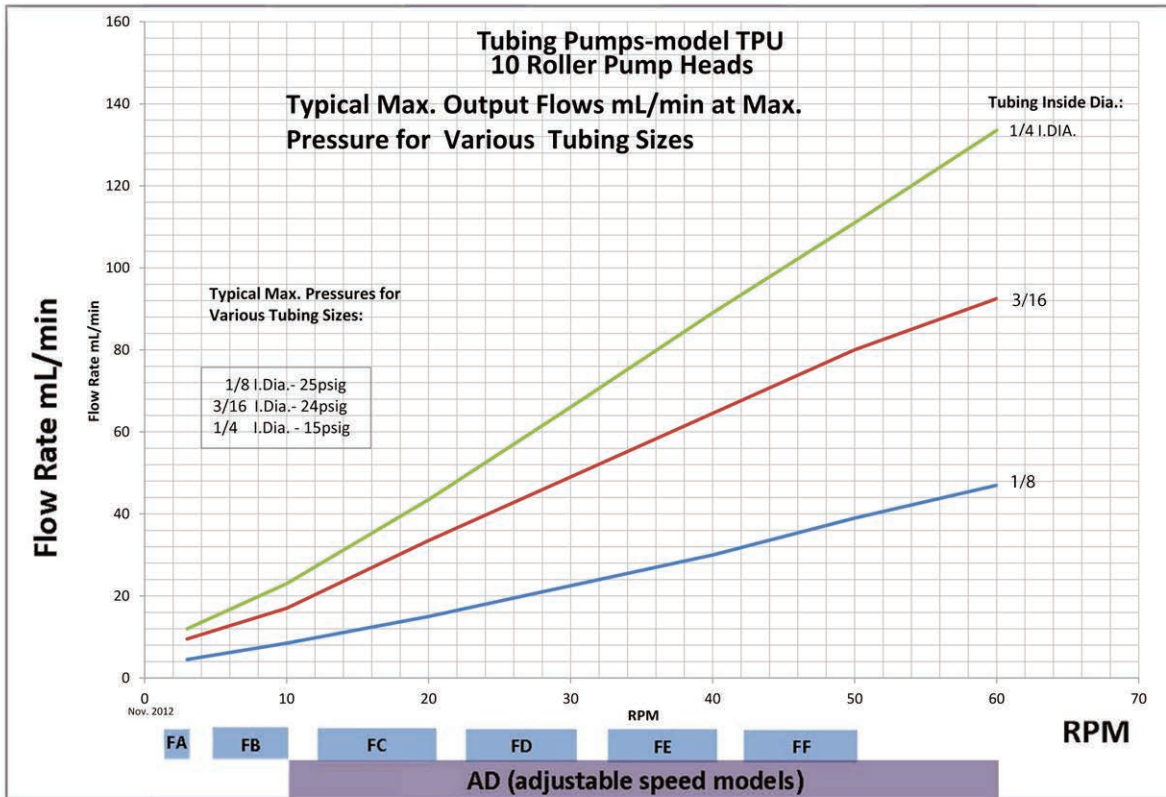


Flow graphs represent typical flow rates based on tubing material and fluid pumped.

The Flow Rate graph for 10-roller pumps is on the following page.

## TPU2 Ten Roller Pumps:

Note: That 5/16-inch I.D. tubing is not recommended for use with the 10-roller pumps.



Flow graphs represent typical flow rates based on tubing material and fluid pumped.

## FX Model Fixed RPM Tubing Pumps



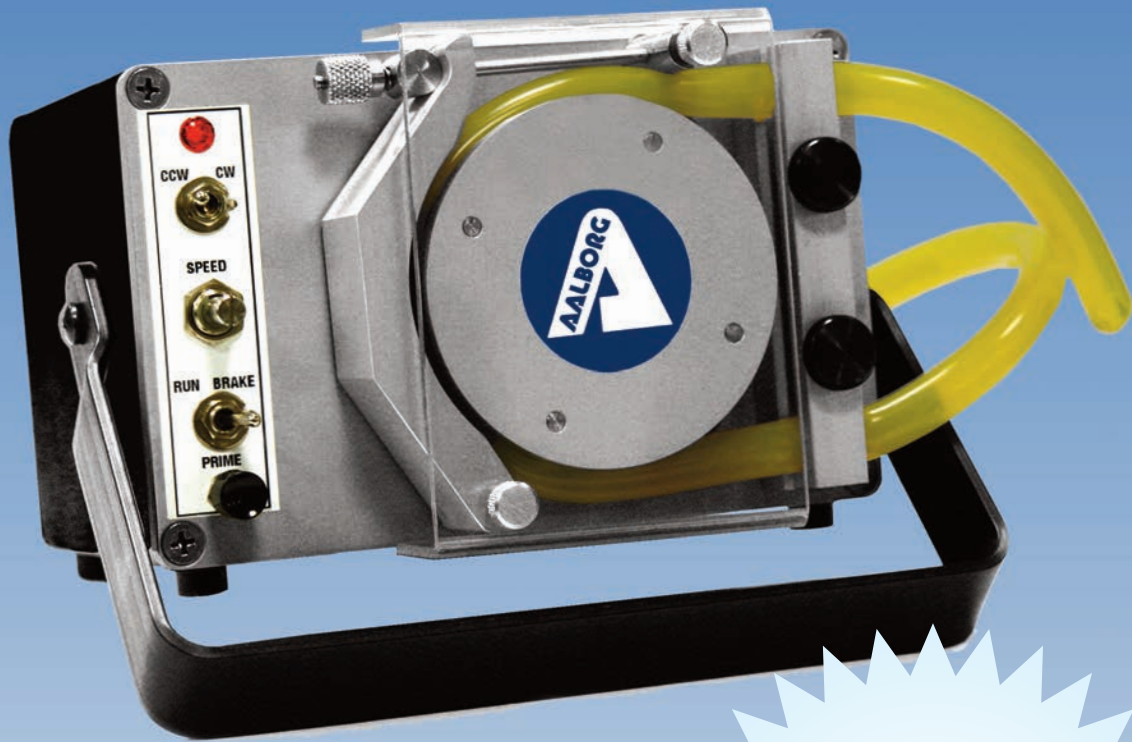
## Design Features

- ◆ Economical & compact.
- ◆ Adjustable Occlusion Wall.
- ◆ Stainless Steel Rollers and Shafts.
- ◆ Compact design for small foot print.
- ◆ Can Be Mounted In Any Direction.
- ◆ Long Tubing Life.
- ◆ 4 Rollers, 10 optional to minimize pulsing.
- ◆ Adjustable handle to carry, stand or hang.
- ◆ Wide choice of preset speeds.

Peristaltic Pumps  
designed for liquids  
of low to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

## AD Model Adjustable RPM Tubing Pumps with Prime



**Please Note:**  
Power Supply sold separately

Peristaltic Pumps  
designed for liquids  
of low to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

## Design Features

- ◆ Economical & compact.
- ◆ Adjustable Occlusion Wall.
- ◆ Stainless Steel Rollers & Shafts
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Safety cover.
- ◆ Can be mounted in any direction.
- ◆ Long tubing life.
- ◆ 4 Rollers, 10 optional to minimize pulsing.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Speed adjustable from 10 to 60 RPM.

## DP Model Adjustable RPM Dispenser Pumps



**Please Note:**  
Power Supply sold separately

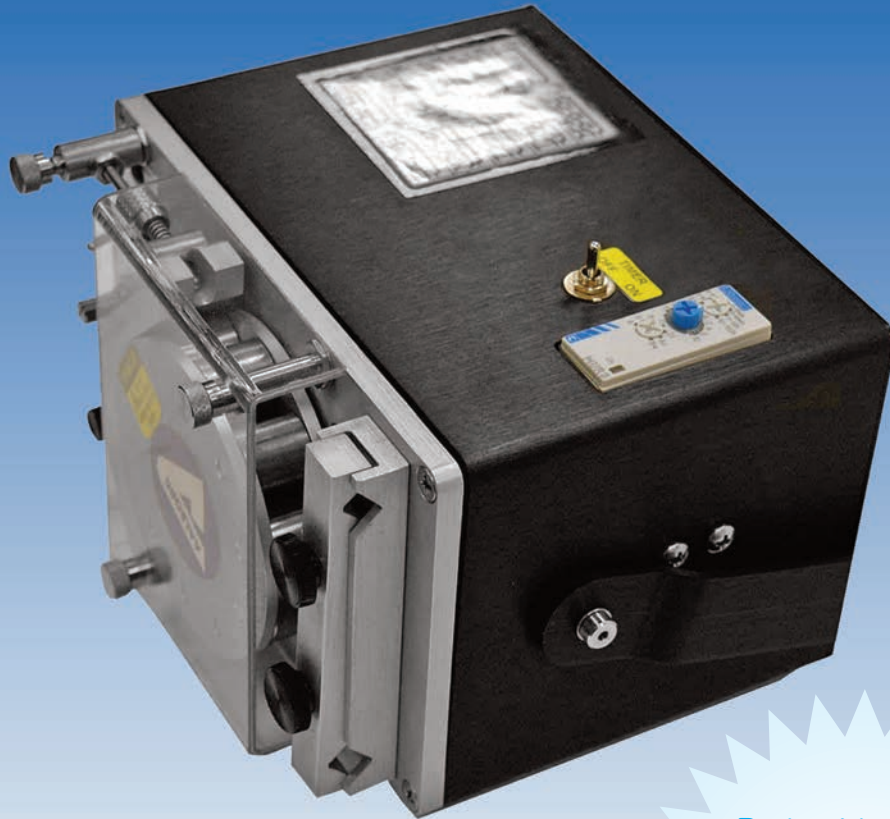
Peristaltic Pumps  
designed for liquids  
of low to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

### Design Features

- ◆ Economical & compact.
- ◆ Adjustable Occlusion Wall, long tubing life.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Programmable timer.
- ◆ The TPUDP timer relay can be set to dispense or stop dispensing liquids over a selected time period to either single shot mode or continuous pulse mode.
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ A Remote Start option is available using the 9-pin female D-connector located on the rear panel, via pins 1 and 5.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Can be mounted in any direction.
- ◆ 4 Rollers, 10 optional to minimize pulsing.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.
- ◆ Speed adjustable from 10 to 60 RPM.

## RP Model Adjustable RPM Dispenser Pumps



**Please Note:**  
Power Supply sold separately

Peristaltic Pumps  
designed for liquids  
of low to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

### Design Features

- ◆ Economical & compact.
- ◆ Adjustable Occlusion Wall, long tubing life.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Programmable timer.
- ◆ The TPURP timer relay can be set to dispense liquids over a selected time period, and to stop dispensing for another selected time period.
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ A Remote Start option is available using the 9-pin female D-connector located on the rear panel, via pins 1 and 5.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Can be mounted in any direction.
- ◆ 4 Rollers, 10 optional to minimize pulsing.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.
- ◆ Speed adjustable from 10 to 60 RPM.

## TPU1 Four Roller Pump Heads



The simplicity of the pump head design provides users with the flexibility to connect their own motor or to purchase one from our catalog.

## Design Features

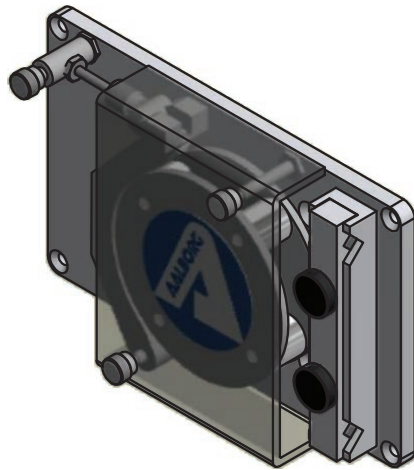
- ◆ Economical & compact.
- ◆ Adjustable Occlusion Wall for long tubing life.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Safety cover.
- ◆ Can be mounted in any direction.
- ◆ 4 Rollers or 10 Rollers to minimize pulsing.
- ◆ Maximum Lift: 340 in. H<sub>2</sub>O (12.3 psig).
- ◆ Maximum Suction: 350 in. H<sub>2</sub>O (12.6 psig).



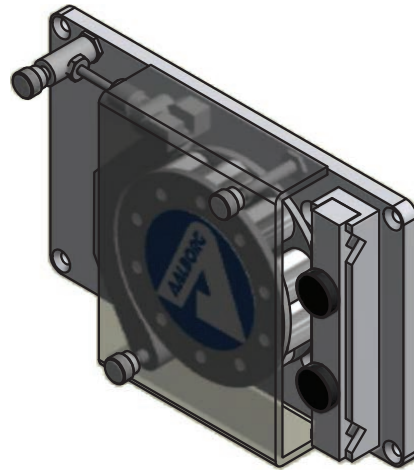
CODE	PUMP HEAD STYLES
TPU1	Pump Head 4 Rollers for 1/16" wall tubing.
TPU2	Pump Head 10 Rollers for 1/16" wall tubing.

## FRONT VIEW

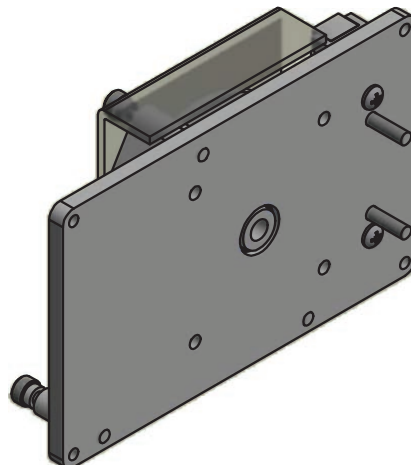
**TPU1**



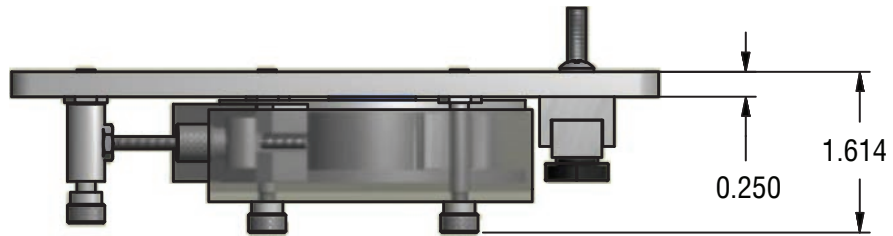
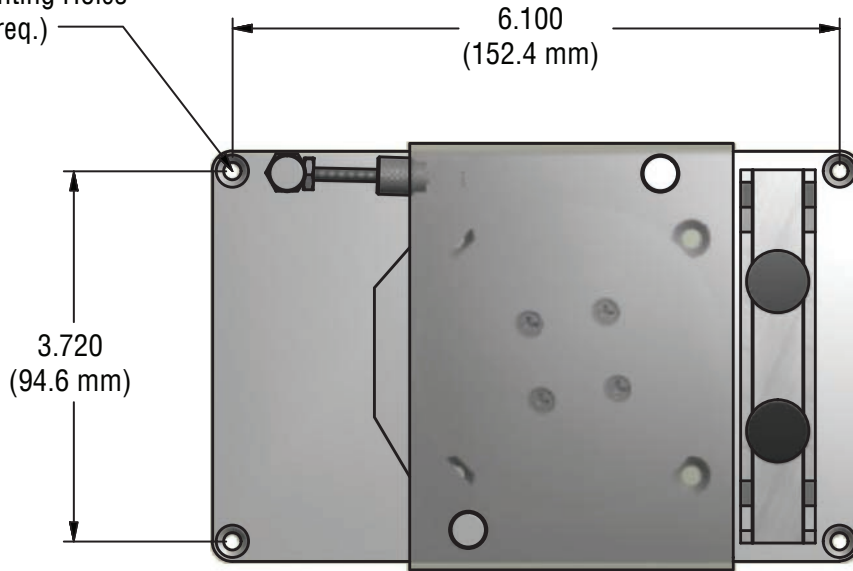
**TPU2**



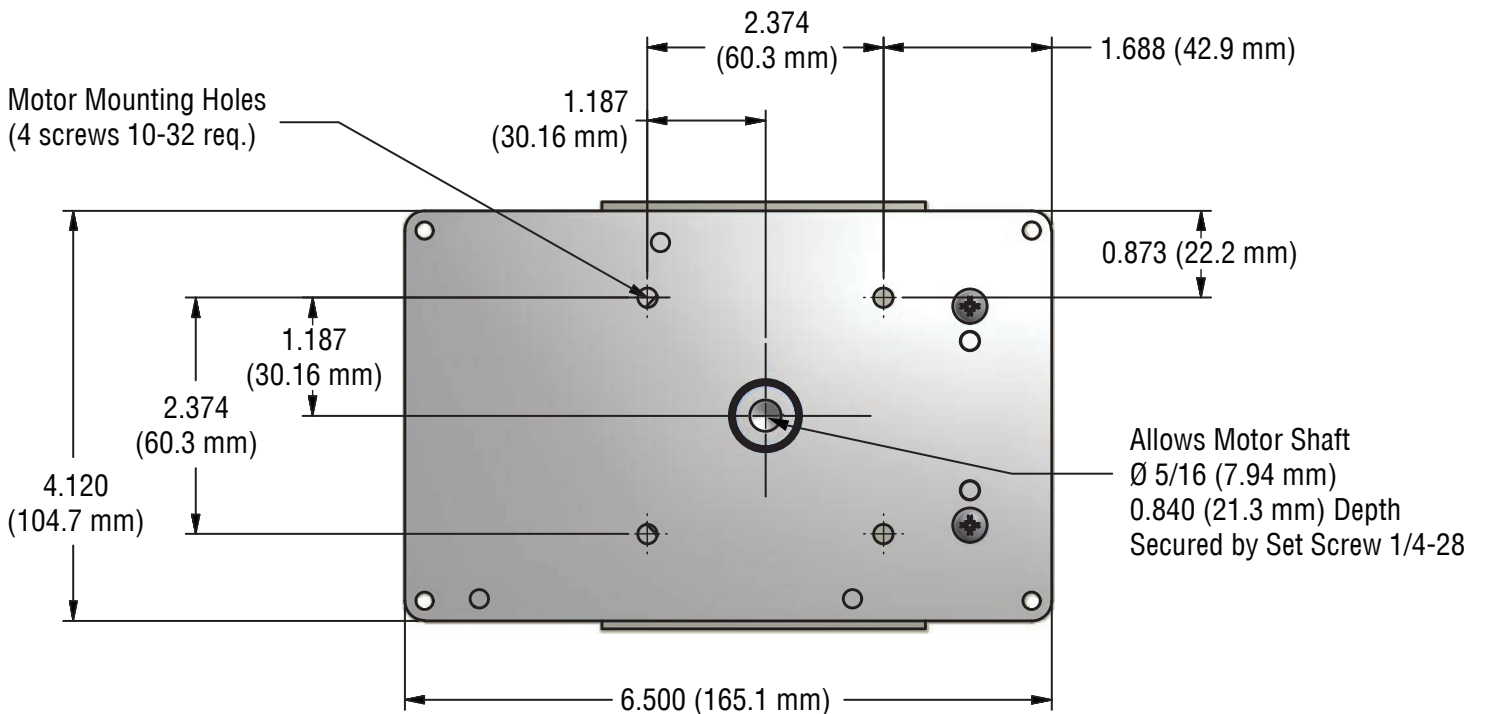
## REAR VIEW



Front Plate Mounting Holes  
(4 screws 8-32 req.)



Motor Mounting Holes  
(4 screws 10-32 req.)



TP	MODEL
----	-------

CODE	HEAD STYLE
U1	4 rollers
U2	10 rollers

CODE	MOTOR & CONTROLS
FA1	Fixed speed motor, nominal 3 RPM, 115 VAC, no controls
FB1	Fixed speed motor, nominal 10 RPM, 115 VAC, no controls
FC1	Fixed speed motor, nominal 20 RPM, 115 VAC, no controls
FD1	Fixed speed motor, nominal 35 RPM, 115 VAC, no controls
FF1	Fixed speed motor, nominal 50 RPM, 115 VAC, no controls

OPTIONAL TPU POWER CORDS FOR FIXED SPEED MOTORS	
MODEL NO.	DESCRIPTION
POWCOR	Power Cord for TPU, 115 VAC, North America

CODE	MOTOR & CONTROLS
AD0	Brushless DC motor, 10 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function
DP0	Brushless DC motor, 10 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer)
RP0	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer)

OPTIONAL TPU POWER SUPPLIES FOR ADJUSTABLE SPEED MOTORS	
MODEL NO.	DESCRIPTION
PS-TP-110NA	Power Supply for TPU, 110 Vac North America
PS-TP-230EU	Power Supply for TPU, 230 Vac Europe
PS-TP-240UK	Power Supply for TPU, 240 Vac United Kingdom
PS-TP-240AU	Power Supply for TPU, 240 Vac Australia

TP U1 FC1

### EXAMPLE: TPU1FC1

The example shown above is TPU1FC1: TPU pump with 4 rollers, fixed speed set at 20 RPM.

To order a pump head alone, select TPU1 or TPU2. It is neither fixed or adjustable RPM as it is provided with no motor. Motors are available for purchase (see page 16).

For more technical details (Specifications and Materials of Construction), see page 5.

The following motors are available for purchase for use with TPU1 and TPU2 pump heads:

<b>CODE</b>	<b>MOTOR &amp; CONTROLS</b>
FA1	Fixed speed, nominal 3 RPM, 120 VAC
FB1	Fixed speed, nominal 10 RPM, 120 VAC
FC1	Fixed speed, nominal 20 RPM, 120 VAC
FD1	Fixed speed, nominal 30 RPM, 120 VAC
FE1	Fixed speed, nominal 40 RPM, 120 VAC
FF1	Fixed speed, nominal 50 RPM, 120 VAC
ADO*	Adjustable speed, 10 – 60 RPM, 24 VDC
KIT-TPUMTG	Optional Mounting Kit

\*These motors have an RPM counter.

Optionally, the motor can be mounted for you at the factory.

## Typical Three Roller TPV Pump



**Please Note:**  
**Power Supply sold separately**

## General Description

Aalborg's TPV model peristaltic pumps are designed for safety and long life. They are economical, easy to load, sturdy, and compact for a small footprint. Designed for use with liquids of widely diverse viscosity, they are suitable for laboratory, processing and OEM applications, even fuel with the appropriate tubing. Power supplies for all TPV pumps need to be ordered separately. For power supply part numbers please consult the Accessories table on pages 26. TPV Pumps are CE compliant.

## Principles of Operation

Flexible tubing, which conveys fluid from source to destination, is squeezed inside the pump head by rotating rollers against a rigid, crescent-shaped occlusion wall. The rollers induce suction in a pulsing rhythm.

Each pump is comprised of a front panel with controls, a pump head, a motor, a rigid case with four rubber feet and a handle. The handle is practical both to carry the pump and, when rotated beneath the pump, to serve as a base that lifts and angles the pump face, making the controls even more easily accessible to the user.

**TPV SPECIFICATIONS**

	TPV AD ADJUSTABLE RPM	TPV DP OR RP ADJUSTABLE RPM DISPENSING
<b>ROLLERS</b>	3.	
<b>PUMPING SPEEDS</b>	50-350 RPM.	
<b>MOTOR</b>	Brushless DC.	
<b>*POWER SUPPLY</b>	Optional desktop power supply and power cord. See ordering information on page 26 (needs to be ordered separately).	
<b>ELECTRICAL REQUIREMENT</b>	110 – 250 V.	
<b>DIMENSIONS</b>	7.7 in. (196 mm) WIDE x 7.45 in. (189 mm) DEEP x 6.56 in. (167 mm) HIGH excluding handle.	
<b>MAXIMUM LIFT, PUMP HEAD</b>	310 in. H <sub>2</sub> O (11.2 psig).	
<b>MAXIMUM SUCTION, HEAD</b>	310 in. H <sub>2</sub> O (11.2 psig).	
<b>RECOMMENDED TUBING MATERIALS 1/16 IN. WALL</b>	Tygon® E-3603, peroxide-treated silicone, platinum-treated silicone, PharMed®, Versilic, silicone, Tygon, Sanitary silicone, Norprene®, Tygon® Long Flex Life, and Hypalon®.	
<b>TUBING SIZES (INSIDE Ø )</b>	1/4 in. , 5/16 in., 3/8 in., 7/16 in. or 1/2 in.	
<b>REVERSIBLE FLOW</b>	Yes.	
<b>PRIMING FUNCTION</b>	Yes.	
<b>TIMING FUNCTION</b>	No.	Yes.
<b>CE COMPLIANT</b>	Yes.	Yes.

**TPV \*\*MATERIALS OF CONSTRUCTION**

**ANODIZED ALUMINUM**

**316 STAINLESS STEEL PRECISION ROLLERS AND SHAFTS**

\* Optional: Specific power cords are available for North America, Europe, UK and Australia.

\*\*The selection of materials of construction, is the responsibility of the customer. The company accepts no liability.



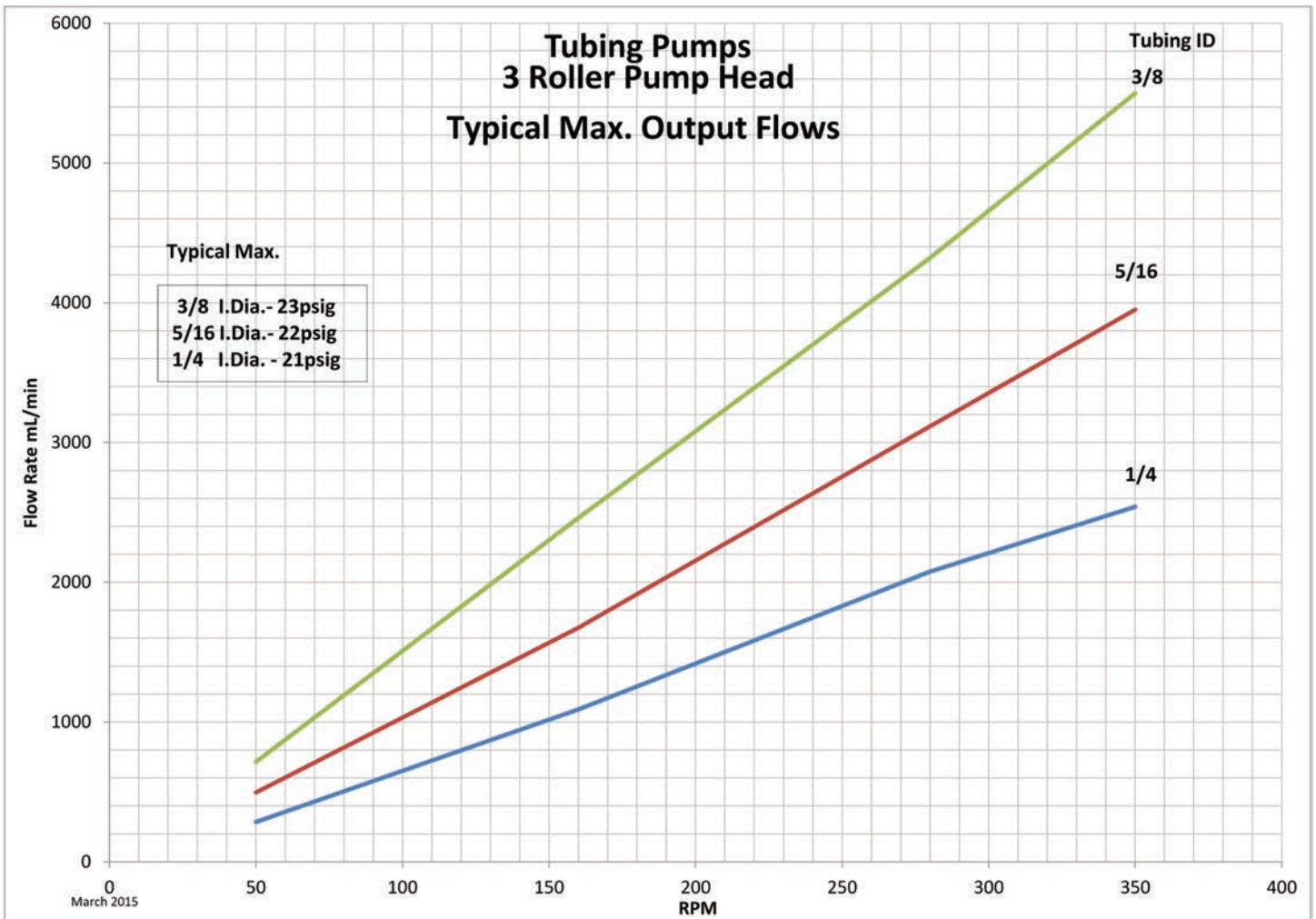
## Flow Rate Graphs

To select the pump that best corresponds to your needs using the Flow Rate graphs:

1. Locate the desired flow rate where it intersects with the tubing diameter plot lines.
2. Project the intersections to the RPM axis at the bottom of the graph.

Armed with this information, consult the features sections that follow, then use the tables on page 26 to identify the ordering number for the pump(s) you have selected.

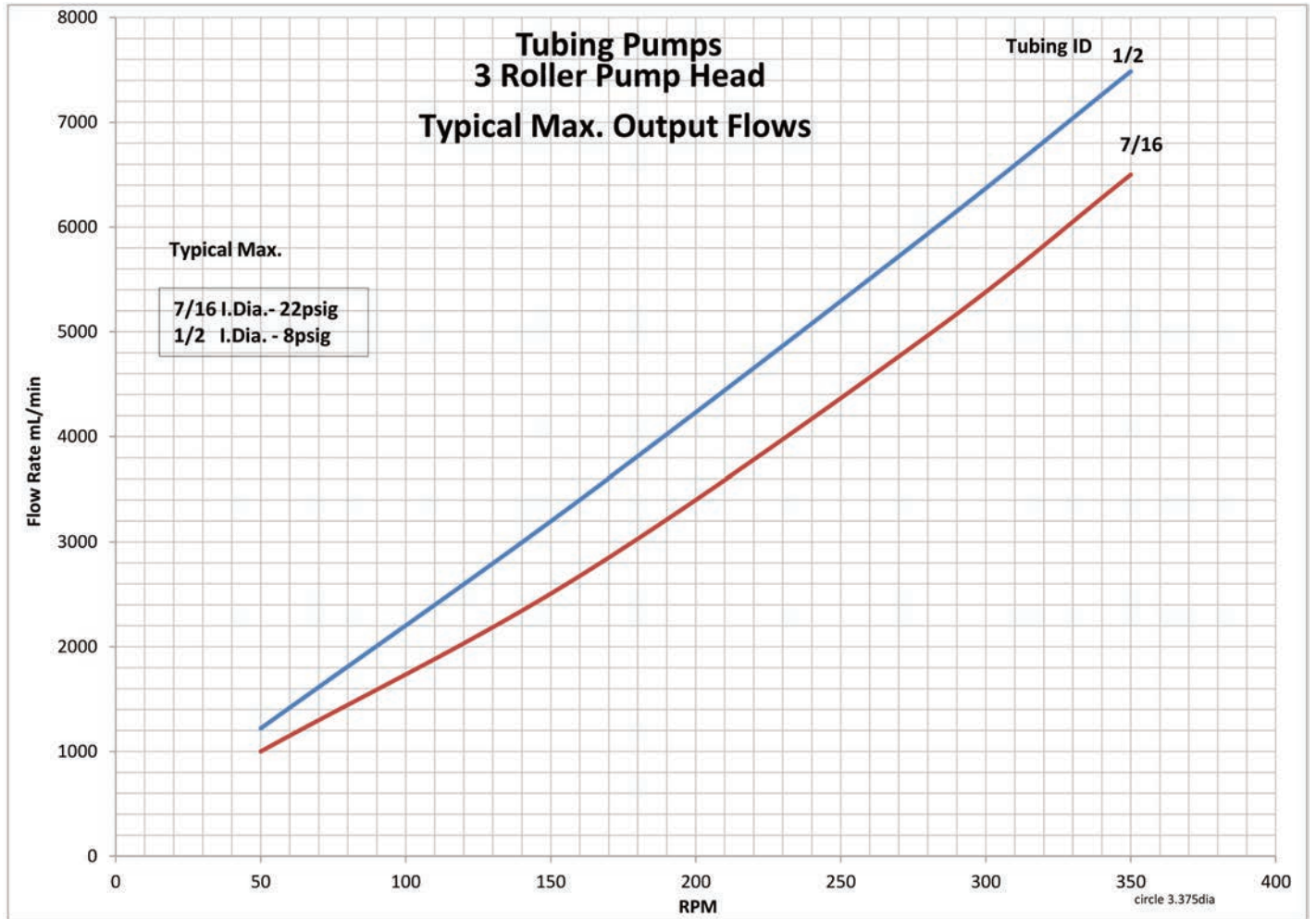
### 1/4 to 3/8 in. ID:



Flow graphs represent typical flow rates based on tubing material and fluid pumped.

The Flow Rate graph for 7/16 to 1/2 in. ID are on the following page.

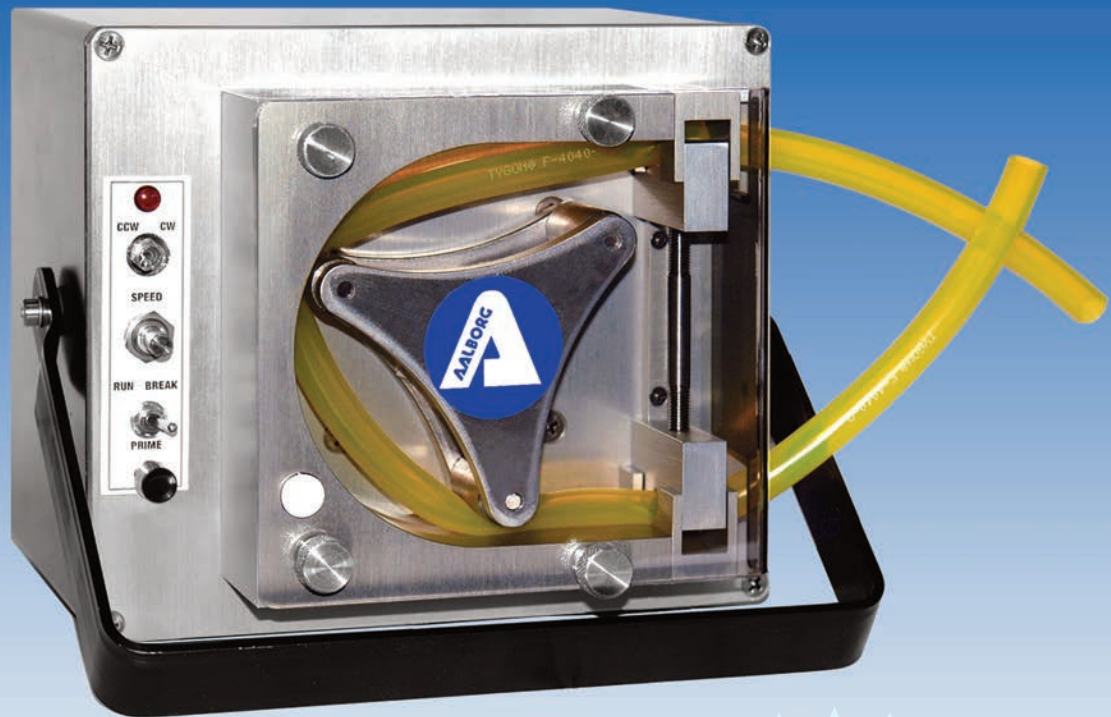
7/16 to 1/2 in. ID:



Flow graphs represent typical flow rates based on tubing material and fluid pumped.



## AD Model Adjustable RPM Pumps



**Please Note:**  
Power Supply sold separately

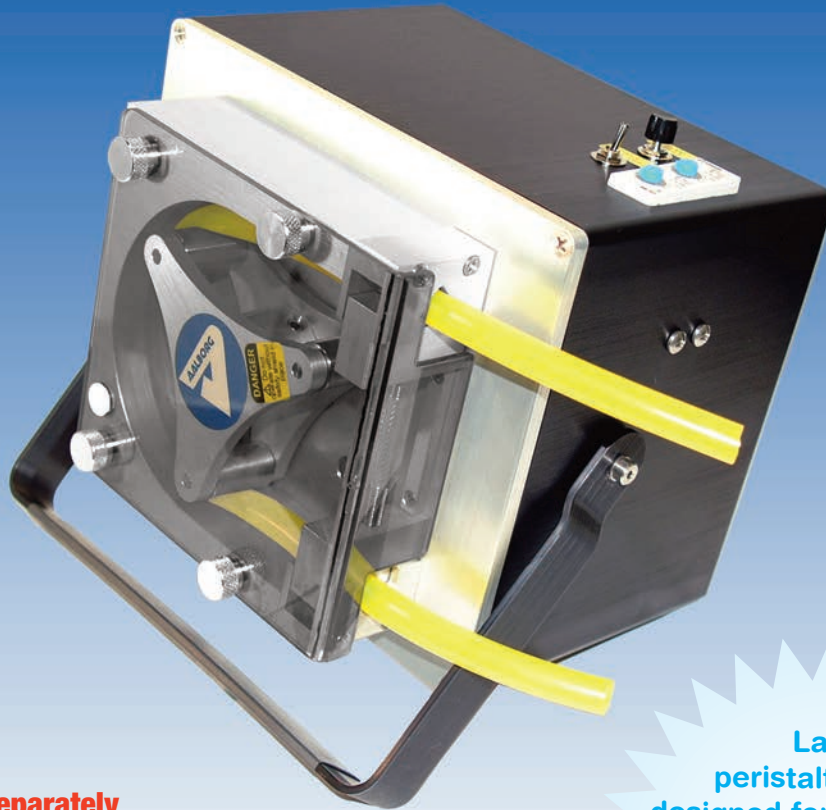
Peristaltic Pumps  
designed for liquids  
of low to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

## Design Features

- ◆ Economical & compact.
- ◆ Unique adjustable tubing holder assembly.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Can be mounted in any direction.
- ◆ 3 Rollers.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.
- ◆ Speed adjustable from 50 to 350 RPM.

## DP Model Adjustable RPM Pumps with Dispensing



**Please Note:**  
Power Supply sold separately

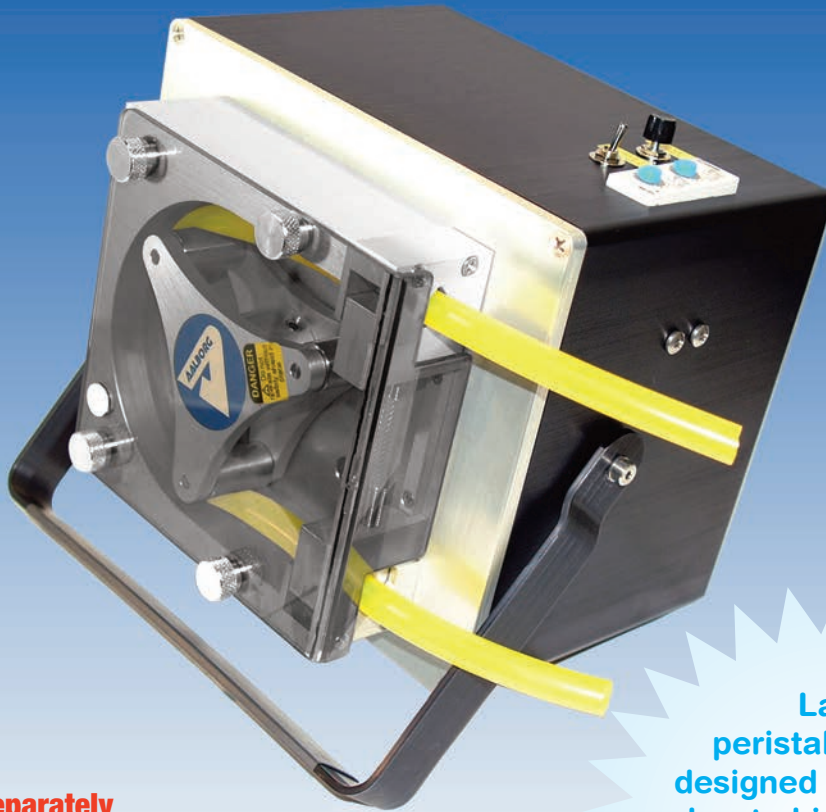
Larger  
peristaltic Pumps  
designed for liquids of low  
to high viscosity:

Ideal for laboratory,  
processing and  
OEM applications.

### Design Features

- ◆ Economical & compact.
- ◆ Unique adjustable tubing holder subassembly.
- ◆ Fixed Occlusion Wall.
- ◆ 3 Stainless Steel Rollers & Stainless Steel Shafts.
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ A Remote Start option is available using the 9-pin female D-connector located on the rear panel, via pins 1 and 5.
- ◆ Programmable timer.
- ◆ The TPVDP timer relay can be set to dispense or stop dispensing liquids over a selected time period to either single shot mode or continuous pulse mode.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Speed adjustable from 50 to 350 RPM.
- ◆ Can be mounted in any direction.
- ◆ Long tubing life.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.

## RP Model Adjustable RPM Pumps with Dispensing



**Please Note:**  
Power Supply sold separately

Larger  
peristaltic Pumps  
designed for liquids of  
low to high viscosity:

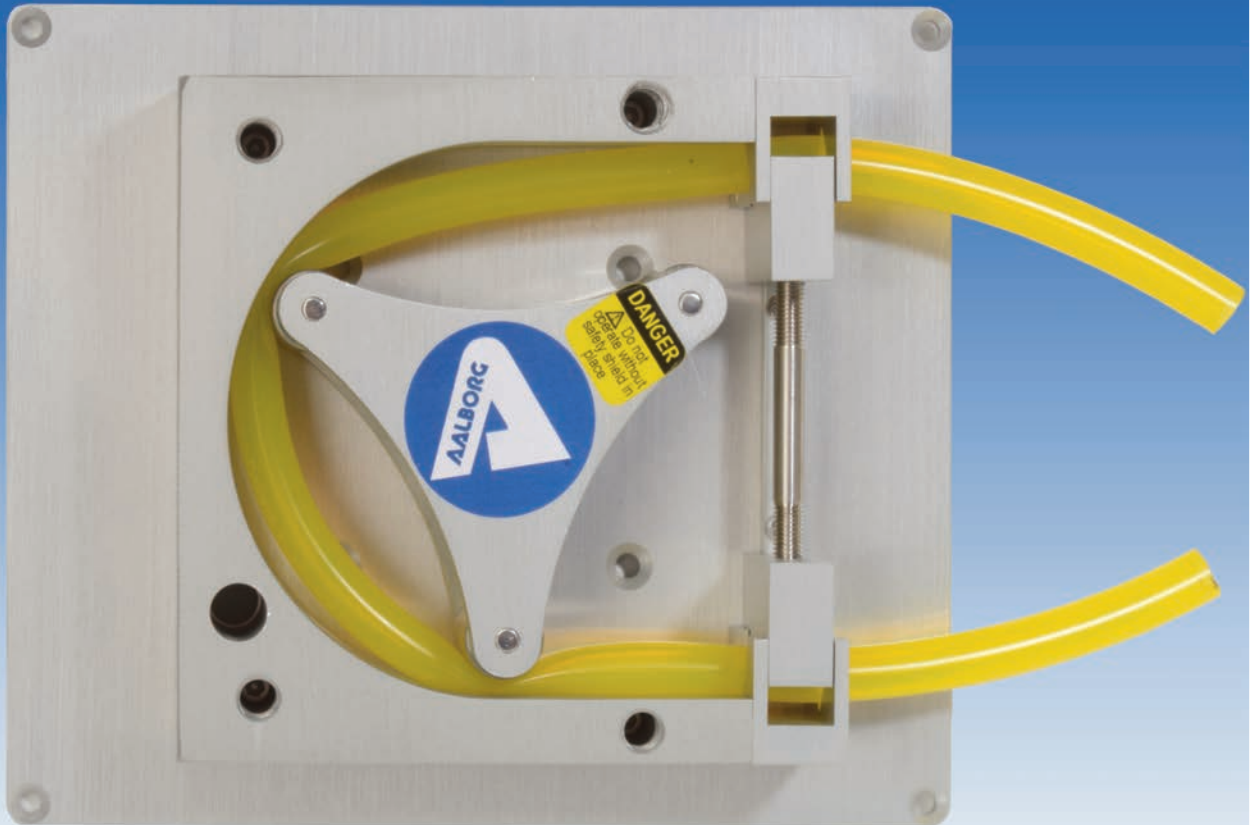
Ideal for laboratory,  
processing and  
OEM applications.

### Design Features

- ◆ Economical & compact.
- ◆ Unique adjustable tubing holder subassembly.
- ◆ Fixed Occlusion Wall.
- ◆ 3 Stainless Steel Rollers & Stainless Steel Shafts.
- ◆ Controls for Prime, Brake, RPM, Reverse flow direction, Power LED.
- ◆ Programmable timer.
- ◆ The TPVRP timer relay can be set to dispense liquids over a selected time period, and to stop dispensing for another selected time period.
- ◆ Maintenance-free 24 VDC brushless motor.
- ◆ Speed adjustable from 50 to 350 RPM.
- ◆ Can be mounted in any direction.
- ◆ Long tubing life.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.



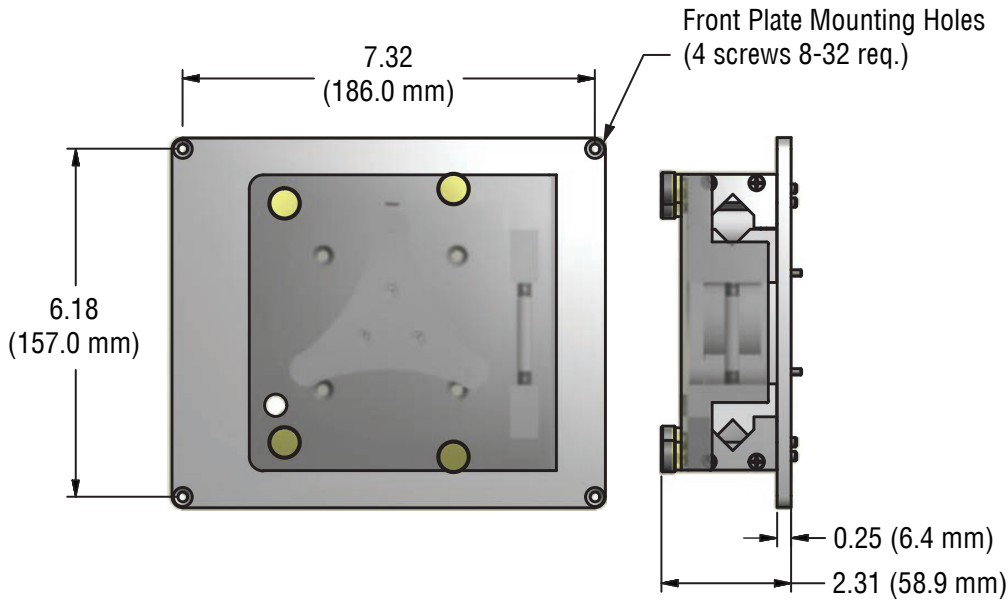
## TPV Three Roller Pump Head



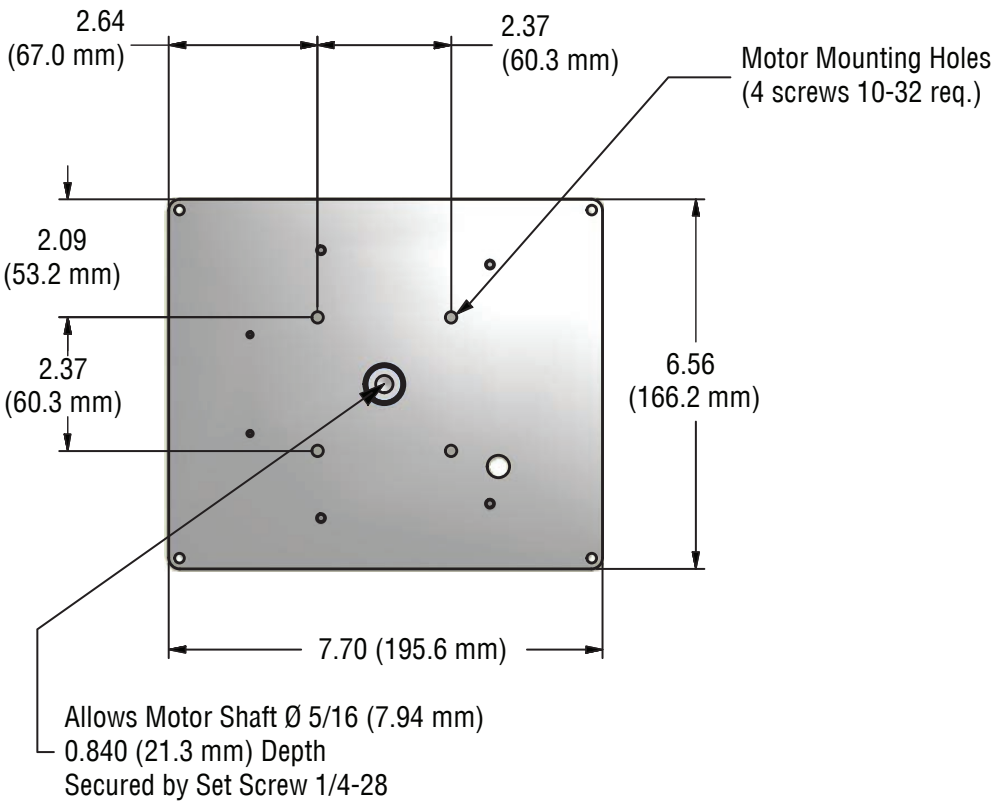
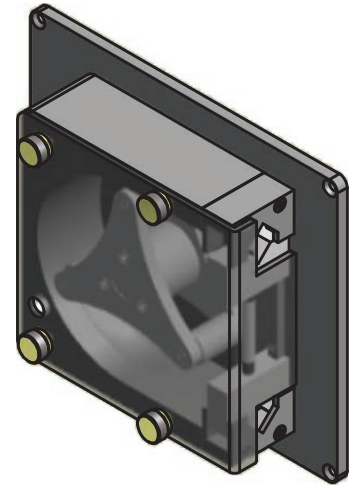
## Design Features

- ◆ Economical & compact.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Safety cover.
- ◆ Can be mounted in any direction.
- ◆ 3 Rollers.
- ◆ Maximum Lift: 340 in. H<sub>2</sub>O (12.3 psig).
- ◆ Maximum Suction: 350 in. H<sub>2</sub>O (12.6 psig).

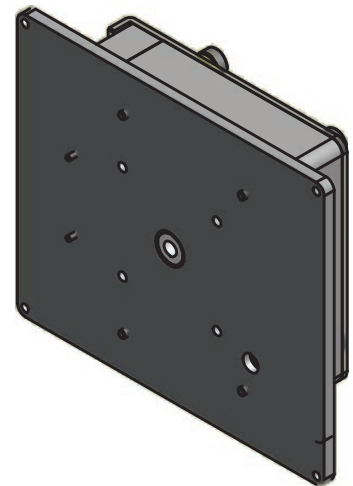
The simplicity of the pump head design provides users with the flexibility to connect their own motor or to purchase one from our catalog.



Front View



Rear View



TP	MODEL
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CODE	HEAD STYLE STYLES
V1	3 rollers on pump head for tubing I.D. 1/4 - 1/2 in.

CODE	MOTOR & CONTROLS
AD3	Brushless DC 50 – 350 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function.
DP3	Brushless DC 50 – 350 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer).
RP3	Brushless DC 50 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer).

**THE FOLLOWING MOTORS ARE AVAILABLE FOR PURCHASE FOR USE WITH PUMP HEADS**

MODEL NO.	DESCRIPTION
AD3	Adjustable Speed 50-350 RPM, 24 VDC
KIT-TPUMTG	Optional Mounting Kit

**ACCESSORIES**

**OPTIONAL TPV POWER SUPPLIES**

MODEL NO.	DESCRIPTION
PS-TP-110NA	Power Supply for TPV, 110 Vac North America
PS-TP-230EU	Power Supply for TPV, 230 Vac Europe
PS-TP-240UK	Power Supply for TPV, 240 Vac United Kingdom
PS-TP-240AU	Power Supply for TPV, 240 Vac Australia

TP      V1      AD3

**EXAMPLE: TPV1AD3**

The example shown above is TPV1AD3: Is a TPV pump with the 3-roller head sized for use with 1/4 - 1/2 in. tubing, an adjustable speed 50 – 350 motor with the prime function and reversable speed.

To order a pump head alone, select TPV1.

**ORDERING INFORMATION FOR TPU and TPV PUMP TUBING**

<b>TUBING ORDER NUMBER</b>	<b>DESCRIPTION</b>
TB1LA2	Tygon® E-3603 Lab grade, 1/8 in. ID x 1/16 in. wall, 50 feet
TB1LA3	Tygon® E-3603 Lab grade, 3/16 in. ID x 1/16 in. wall, 50 feet
TB1LA4	Tygon® E-3603 Lab grade, 1/4 in. ID x 1/16 in. wall, 50 feet
TB1LA5	Tygon® E-3603 Lab grade, 5/16 in. ID x 1/16 in. wall, 50 feet
TB1LA6	Tygon® E-3603 Lab grade, 3/8 in. ID x 1/16 in. wall, 50 feet
TB1LA7	Tygon® E-3603 Lab grade, 7/16 in. ID x 1/16 in. wall, 50 feet
TB1LA8	Tygon® E-3603 Lab grade, 1/2 in. ID x 1/16 in. wall, 50 feet
TB1LF2	Tygon® S3 (E-LFL) 1/8 in. ID x 1/16 in. wall, 25 feet
TB1LF3	Tygon® S3 (E-LFL) 3/16 in. ID x 1/16 in. wall, 25 feet
TB1LF4	Tygon® S3 (E-LFL) 1/4 in. ID x 1/16 in. wall, 25 feet
TB1LF5	Tygon® S3 (E-LFL) 5/16 in. ID x 1/16 in. wall, 25 feet
TB1N02	Norprene® Food grade (FDA, 3A, NSF), 1/8 in. ID x 1/16 in. wall, 50 feet
TB1N03	Norprene® Food grade (FDA, 3A, NSF), 3/16 in. ID x 1/16 in. wall, 50 feet
TB1N04	Norprene® Food grade (FDA, 3A, NSF), 1/4 in. ID x 1/16 in. wall, 50 feet
TB1N05	Norprene® Food grade (FDA, 3A, NSF), 5/16 in. ID x 1/16 in. wall, 50 feet
TB1N06	Norprene® Food grade (FDA, 3A, NSF), 3/8 in. ID x 1/16 in. wall, 50 feet
TB1NI2	Norprene® Industrial grade, 1/8 in. ID x 1/16 in. wall, 50 feet
TB1NI3	Norprene® Industrial grade, 3/16 in. ID x 1/16 in. wall, 50 feet
TB1NI4	Norprene® Industrial grade, 1/4 in. ID x 1/16 in. wall, 50 feet
TB1NI5	Norprene® Industrial grade, 5/16 in. ID x 1/16 in. wall, 50 feet
TB1NI6	Norprene® Industrial grade, 3/8 in. ID x 1/16 in. wall, 50 feet
TB1NI7	Norprene® Industrial grade, 7/16 in. ID x 1/16 in. wall, 50 feet
TB1NI8	Norprene® Industrial grade, 1/2 in. ID x 1/16 in. wall, 50 feet
TB1PH2	PharMed®, 1/8 in. ID x 1/16 in. wall, 25 feet
TB1PH3	PharMed®, 3/16 in. ID x 1/16 in. wall, 25 feet
TB1PH4	PharMed®, 1/4 in. ID x 1/16 in. wall, 25 feet
TB1PH5	PharMed®, 5/16 in. ID x 1/16 in. wall, 25 feet
TB1PH6	PharMed®, 3/8 in. ID x 1/16 in. wall, 25 feet
TB1SI2	Silicone (SPX-50) peroxide-cured, 1/8 in. ID x 1/16 in. wall, 50 feet
TB1SI3	Silicone (SPX-50) peroxide-cured, 3/16 in. ID x 1/16 in. wall, 50 feet
TB1SI4	Silicone (SPX-50) peroxide-cured, 1/4 in. ID x 1/16 in. wall, 50 feet
TB1SI5	Silicone (SPX-50) peroxide-cured, 5/16 in. ID x 1/16 in. wall, 50 feet
TB1SI6	Silicone (SPX-50) peroxide-cured, 3/8 in. ID x 1/16 in. wall, 50 feet
TB1SI8	Silicone (SPX-50) peroxide-cured, 1/2 in. ID x 1/16 in. wall, 50 feet
TB1SA2	Silicone (3350), sanitary, 1/8 in. ID x 1/16 in. wall, 50 feet
TB1SA3	Silicone (3350), sanitary, 3/16 in. ID x 1/16 in. wall, 50 feet
TB1SA4	Silicone (3350), sanitary, 1/4 in. ID x 1/16 in. wall, 50 feet
TB1SA5	Silicone (3350), sanitary, 5/16 in. ID x 1/16 in. wall, 50 feet

*Continued*

*Continued*

**ORDERING INFORMATION FOR TPU and TPV PUMP TUBING**

<b>TUBING ORDER NUMBER</b>	<b>DESCRIPTION</b>
<b>TB1SA6</b>	Silicone (3350), sanitary, 3/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1SA7</b>	Silicone (3350), sanitary, 7/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1SA8</b>	Silicone (3350), sanitary, 1/2 in. ID x 1/16 in. wall, 50 feet
<b>TB1TY2</b>	Tygon™ (XL-60), Long Life Pump Tubing, 1/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1TY3</b>	Tygon™ (XL-60), Long Life Pump Tubing 3/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1TY4</b>	Tygon™ (XL-60), Long Life Pump Tubing 1/4 in. ID x 1/16 in. wall, 50 feet
<b>TB1TY5</b>	Tygon™ (XL-60), Long Life Pump Tubing 5/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1TY6</b>	Tygon™ (XL-60), Long Life Pump Tubing, 3/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1FR2</b>	Fluran® (F-5500-A), Severe Environmental Tubing, 1/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1FR3</b>	Fluran® (F-5500-A), Severe Environmental Tubing, 3/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1FR4</b>	Fluran® (F-5500-A), Severe Environmental Tubing, 1/4 in. ID x 1/16 in. wall, 50 feet
<b>TB1FR5</b>	Fluran® (F-5500-A), Severe Environmental Tubing, 5/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1FR6</b>	Fluran® (F-5500-A), Severe Environmental Tubing, 3/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL2</b>	Tygon® F4040-A Fuel and Lubricant Appl., 1/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL3</b>	Tygon® F4040-A Fuel and Lubricant Appl., 3/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL4</b>	Tygon® F4040-A Fuel and Lubricant Appl., 1/4 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL5</b>	Tygon® F4040-A Fuel and Lubricant Appl., 5/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL6</b>	Tygon® F4040-A Fuel and Lubricant Appl., 3/8 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL7</b>	Tygon® F4040-A Fuel and Lubricant Appl., 7/16 in. ID x 1/16 in. wall, 50 feet
<b>TB1FL8</b>	Tygon® F4040-A Fuel and Lubricant Appl., 1/2 in. ID x 1/16 in. wall, 50 feet

**ORDERING INFORMATION FOR TPT PUMP TUBING**

<b>TUBING ORDER NUMBER</b>	<b>DESCRIPTION</b>
<b>TB2LA1</b>	Tygon® E-3603 Lab grade, 1/16 in. ID x 1/32 in. wall, 25 feet
<b>TB2LA2</b>	Tygon® E-3603 Lab grade, 1/8 in. ID x 1/32 in. wall, 25 feet
<b>TB2LA9</b>	Tygon® E-3603 Lab grade, 1/32 in. ID x 1/32 in. wall, 25 feet
<b>TB2SI1</b>	Silicone (SILCON), 1/16 in. ID x 1/32 in. wall, 25 feet
<b>TB2SI2</b>	Silicone (SILCON), 1/18 in. ID x 1/32 in. wall, 25 feet
<b>TB2SU1</b>	Surgical rubber (Latex) 1/16 in. ID x 1/32 in. wall, 25 feet
<b>TB2SU2</b>	Surgical rubber (Latex) 1/8 in. ID x 1/32 in. wall, 25 feet



## EUROPEAN SERVICE CENTER

Authorized service and Calibration Facility For Aalborg Products located in **Germany MTC-Aalborg\***

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**Fax:** +49 (0)7631 14740 • **Web:** www.analyt-mtc.de • **E-mail:** info@analyt\_mtc.de \*SGS ISO9001 Certification is not applicable.

## Products Manufactured By Aalborg

### ROTAMETERS

#### Single Tube

Aluminum / Brass / Stainless • Interchangeable Glass Flow Tubes • Optional Valves

#### Multiple Tube

Two to Six Channels • Aluminum or Stainless

#### PTFE Single and Multiple Tube

Chemically Inert • 1 to 4 Channels • Interchangeable Glass Flow tubes

#### PTFE - PFA

Chemically Inert • Low to Medium Flow of Corrosive Liquids with PFA Flow Tube

#### Kits

Aluminum / Stainless / PTFE • Including Five Glass Flow Tubes and a Set of Floats

#### Gas Proportioners

Aluminum / Stainless • Used for Blending Two or Three Gases

#### Medium Range

Glass Safety Shield • Dual Air and Water Scale

#### Optical Sensor Switch

Non-Invasive Means for Detection of a High or Low Flow

#### High Flow Industrial Stainless Steel Flow Meters

Heavy Duty Stainless Steel • Direct Reading Air and Water Scales

### VALVES

#### Barstock

Brass or Stainless • Standard or High Precision

#### PTFE

Chemically Inert • Needle or Metering

#### Proportionating Solenoid

Stainless • For Controlling Gas or Liquid Flow

• Pulse width Modulated

**SMV • Stepping Motor Valve**

### PERISTALTIC PUMPS

**Fixed RPM Pumps**

**Pump Heads**

**Tubing Pumps**

**Variable Speeds**

**Dispensing Pumps**

**Flexible Tubings**

### ELECTRONIC METERS & CONTROLLERS

#### Low Cost Mass Flow Meters

Aluminum or Stainless • With or Without LCD Readout

#### Low Cost Mass Flow Controllers

Aluminum or Stainless • With or Without LCD Readout

#### Mass Flow Controllers

Stainless • One to Four Channel Systems

#### Digital Mass Flow Controllers

Auto Zero • Totalizer • Alarms • Built in RS485

#### Multi Parameter Digital Mass Flow Meters

Displays Flow Pressure and Temperature

#### Paddle Wheel Meters

For Liquids • Optional Temperature Measurements

#### Smart Rate / Totalizer / Signal Conditioner

LCD Keypad • RS232 / 485 • Pulse Output • Alarms