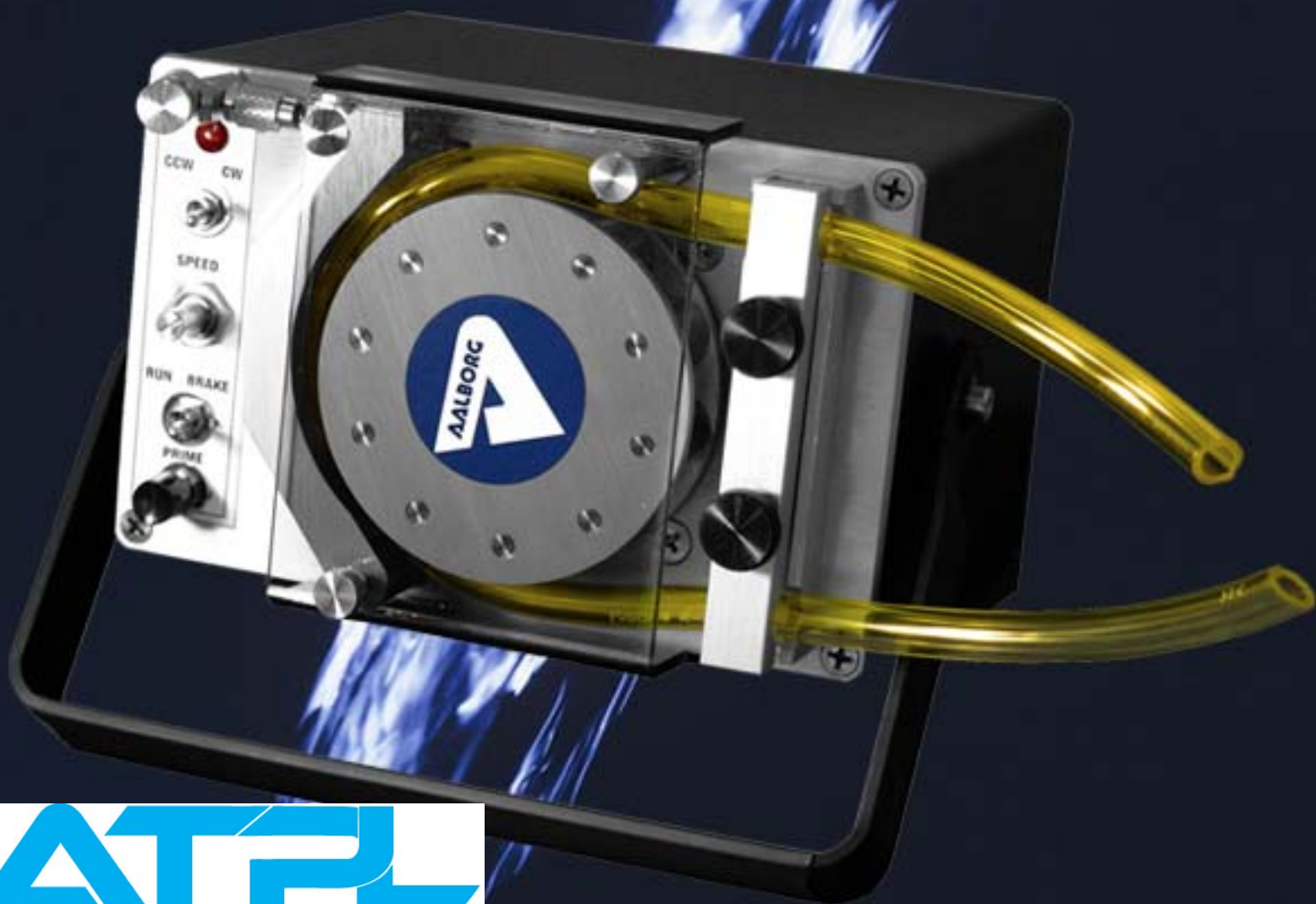


AALBORG



ATPL
Aspire Technology Pte Ltd
YOUR INTEGRATED SOLUTION

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Email: aspire@asptech.com.sg

pumps



Visit our web site at: **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 /2008 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.

Table of Contents

GENERAL DESCRIPTION / PRINCIPLES OF OPERATION

Page 1

TPT

TPT MODEL



Page 2

TPU

TPUFX MODEL



TPU SPECIFICATIONS

Page 4

TPUAD MODEL



Page 8

TPUDP MODEL



Page 9

TPURP MODEL



Page 10

TPU PUMP HEADS



Page 11

Page 12

TPV

TPVAD MODELS



TPV SPECIFICATIONS

Page 17

TPVDP MODELS



Page 21

TPVRP MODELS



Page 22

TPV PUMP HEADS



Page 23

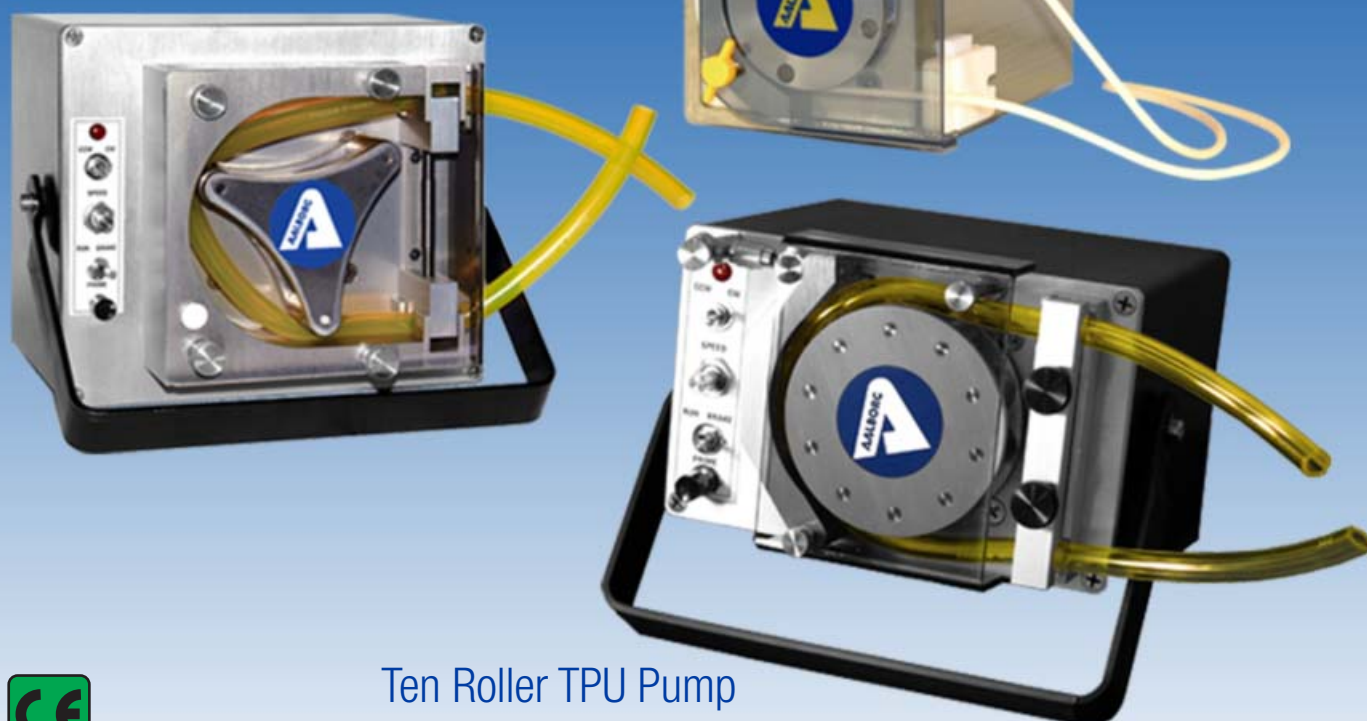
Page 24

FLEXIBLE TUBING

Page 27

Four Roller TPT Pump

Three Roller TPV Pump



Ten Roller TPU Pump

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 needs to be
ordered separately

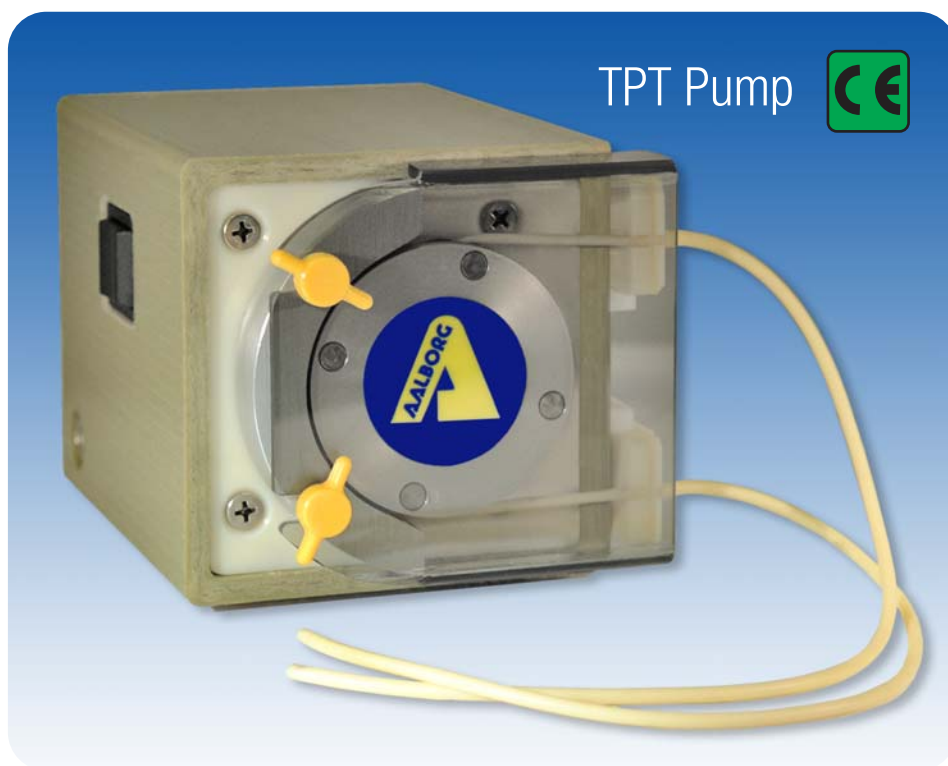
TPT Mini Peristaltic Pumps

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 TPV 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

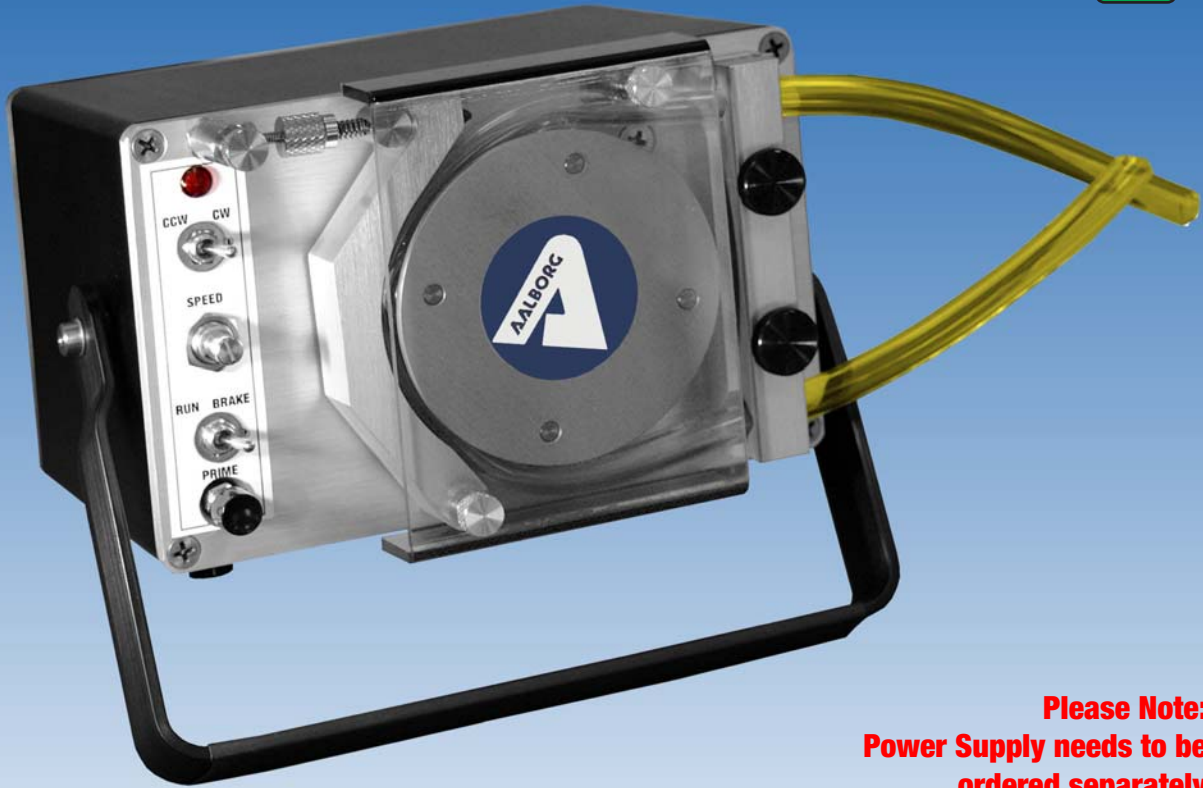
- ◆ 4 roller aluminum pump head.
- ◆ Cast bronze self-lubricating rollers..
- ◆ Continuous duty 24 VDC brush style gear motor with internal permanent magnet.
- ◆ CW-OFF-CCW switch.
- ◆ Safety shield to prevent finger contact with moving parts.
- ◆ Lightweight 3.5 lb.
- ◆ Compact 5" x 4" footprint.
- ◆ Tubing Loops of different materials and sizes including fittings are available.
- ◆ Manual or pre-set Counter feature indicates the number of revolutions. (not included).

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 needs to be
ordered 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

	TPU FX FIXED RPM	TPU AD ADJUSTABLE RPM	TPU DP or RP ADJUSTABLE RPM DISPENSING	TPU1 PUMP HEAD	TPU2 PUMP HEAD
ROLLERS	4 standard, 10 optional.			4	10
PUMPING SPEEDS	Preset to 3, 10, 20, 30, 40 or 50 RPM.	10 – 60 RPM.		Speeds depend on the motor you add to the pump head.	
MOTOR	AC Shaded Pole.	Brushless DC.		Motor (including mounting kit) available for separate purchase; factory mounting optional.	
POWER SUPPLY*	Optional desktop power supply and cord. See ordering on page 15 (needs to be ordered separately).			N/A	
ELECTRICAL REQUIREMENT	110 or 240 VAC	90-264 VAC		N/A	
DIMENSIONS	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.	
MAXIMUM LIFT, PUMP HEAD	340 in. H2O (12.3 psig).				
MAXIMUM SUCTION, HEAD	350 in. H2O (12.6 psig).				
RECOMMENDED TUBING MATERIALS 1/16 IN. WALL	Tygon® E-3603, peroxide-treated silicone, platinum-treated silicone, PharMed® Versilic® silicone, Tygon® Sanitary silicone, Norprene® Tygon® Long Flex Life, and Hypalon®.				
TUBING SIZES (INSIDE Ø)	1/8 in., 3/16 in. , 1/4 in. or 5/16 in.				
FUSES	Two 2-Amp, 250 V, fast-acting, glass, 5 x 20 mm, UL-listed.	N/A	N/A	N/A	
REVERSIBLE FLOW	No	Yes	Yes	No	
PRIMING FUNCTION	No	Yes	Yes	No	
TIMING FUNCTION	No	No	Yes	No	
CE COMPLIANT	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.

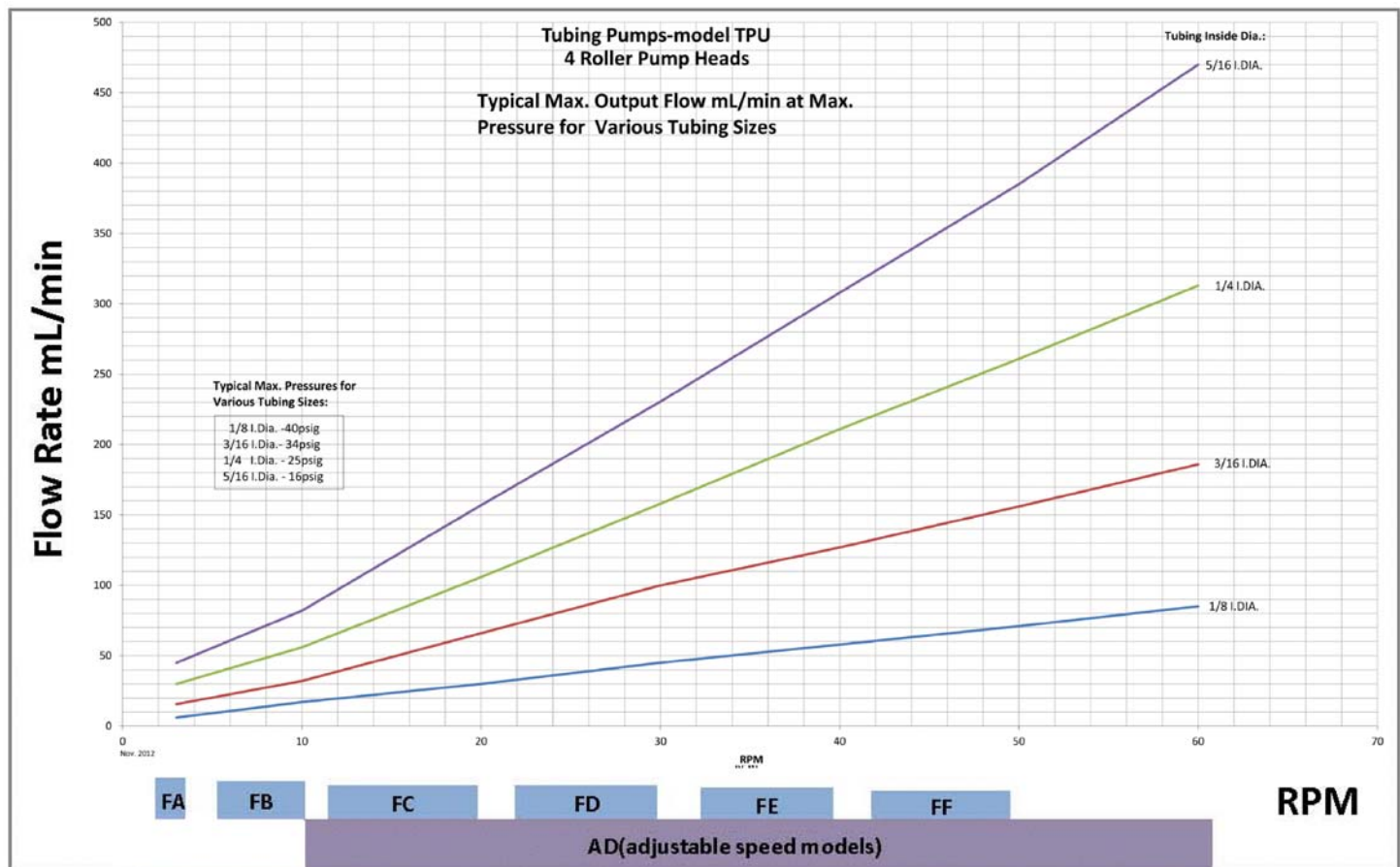
Flow Rate Graphs

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:

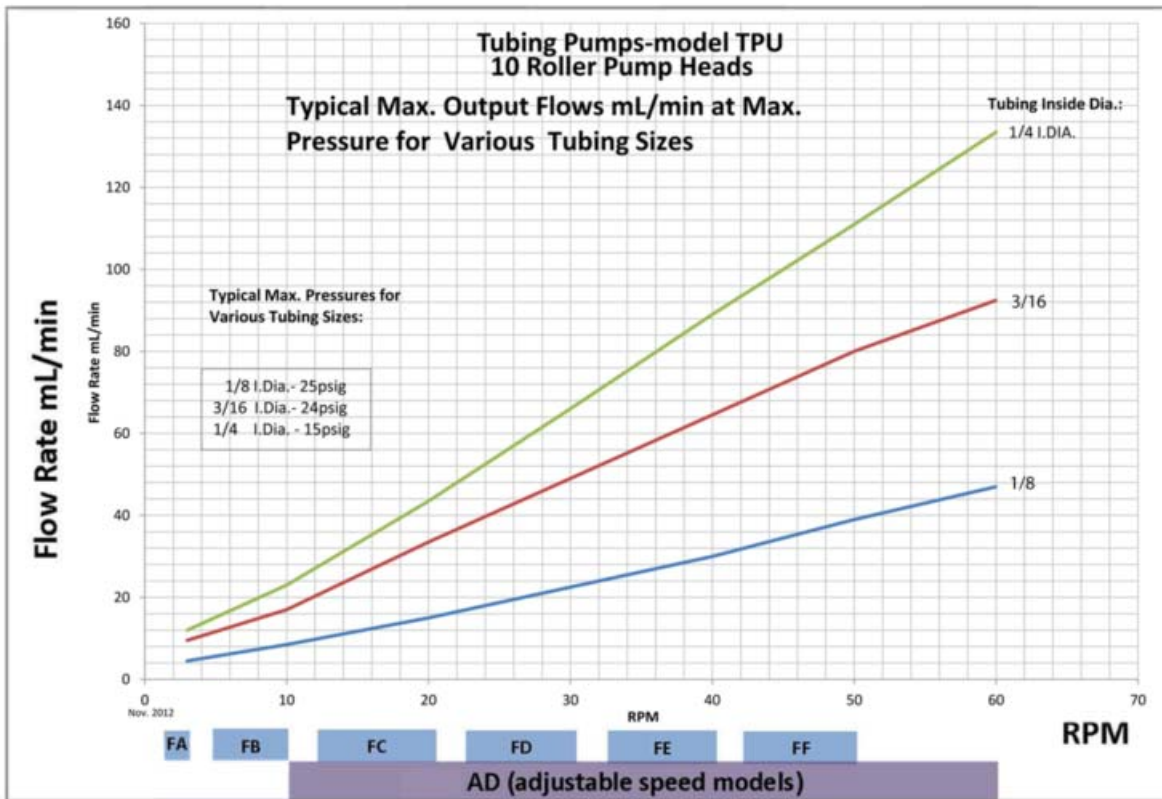


Flow graphs represent typical flow rates based on tubing material and fluid pumped.

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



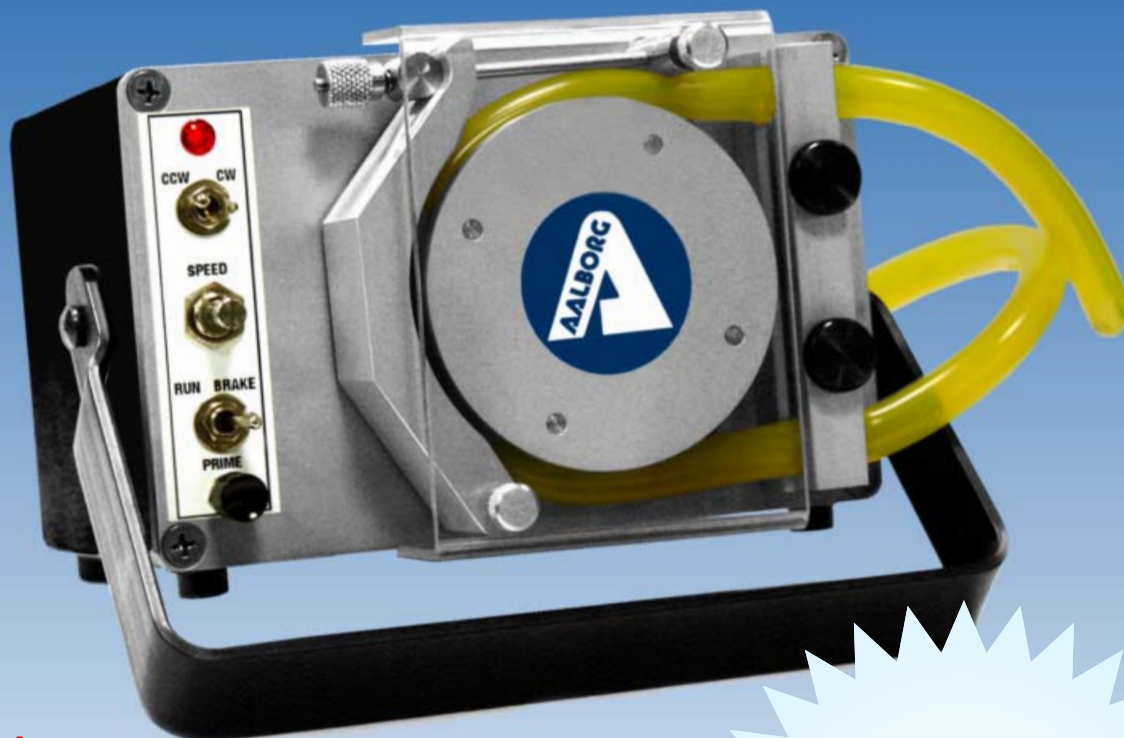
Design Features

- ◆ 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 needs to be
ordered 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 needs to be
ordered 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 needs to be
ordered 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.

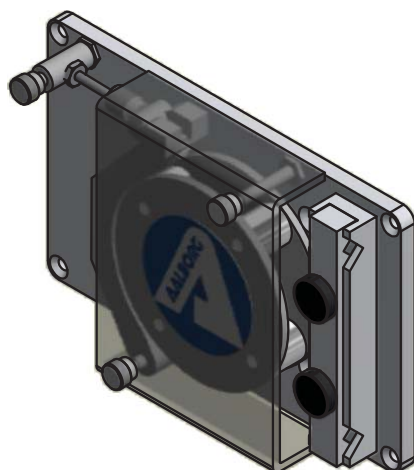
Design Features

- ◆ 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. H₂O (12.3 psig).
- ◆ Maximum Suction: 350 in. H₂O (12.6 psig).

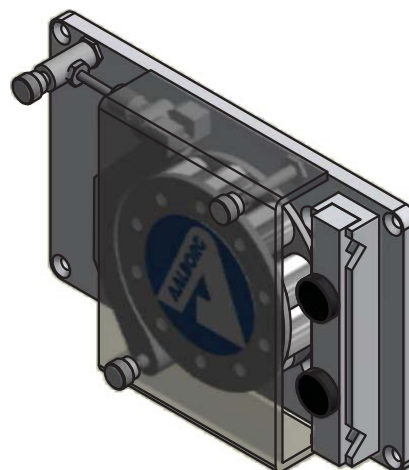
CODE	PUMP HEAD STYLES
TPU1	Pump Head 4 Rollers for 1/16" wall tubing.
TPU2	Pump Head 10 Rollers for 1/16" wall tubing.

FRONT VIEW

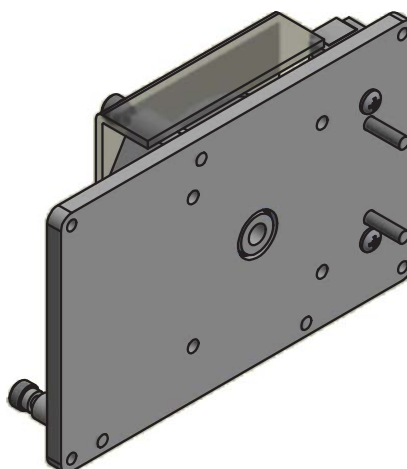
TPU1



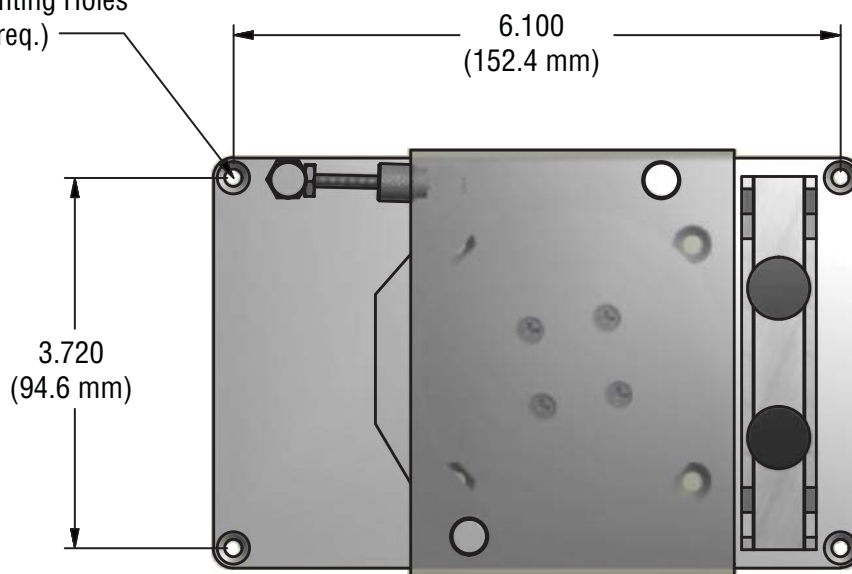
TPU2



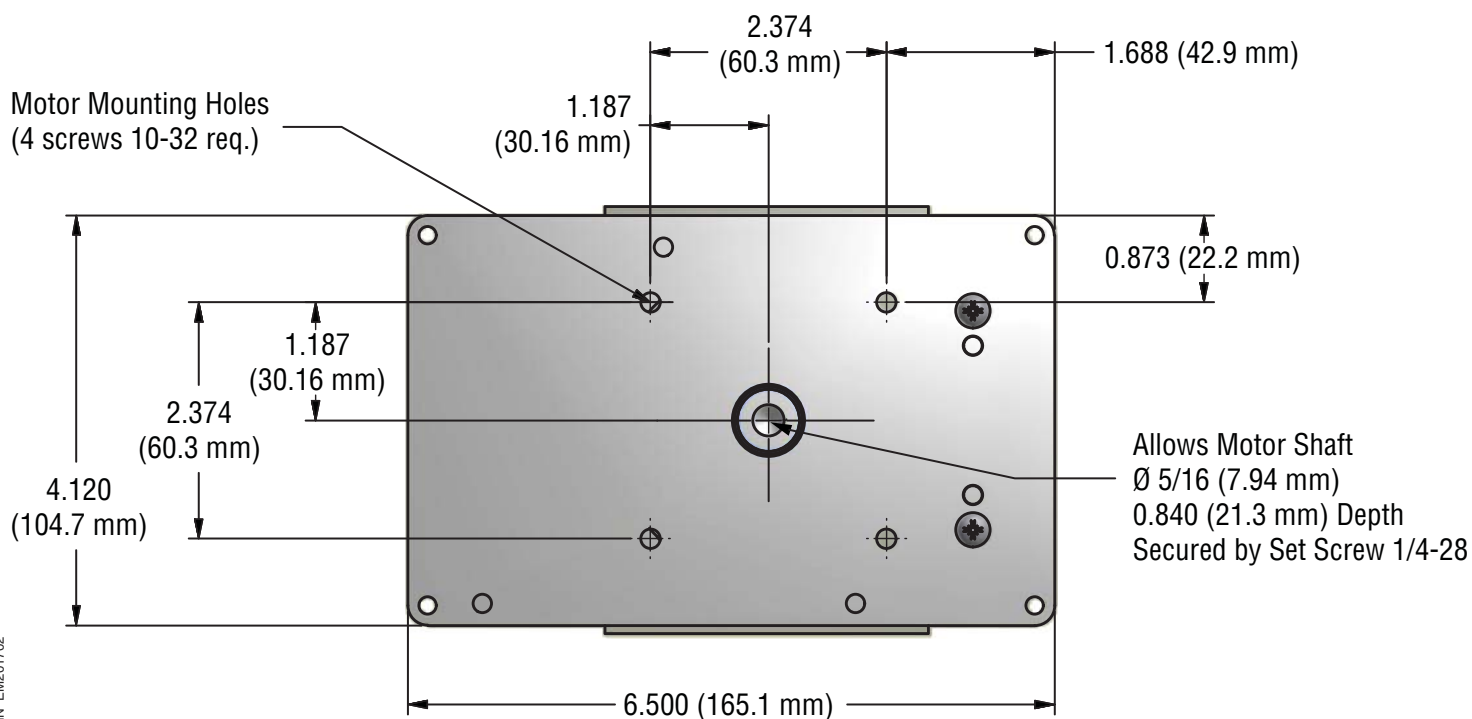
REAR VIEW



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



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



TP	MODEL												
	<table> <tr> <th>CODE</th><th>HEAD STYLE</th></tr> <tr> <td>U1</td><td>4 rollers</td></tr> <tr> <td>U2</td><td>10 rollers</td></tr> </table>	CODE	HEAD STYLE	U1	4 rollers	U2	10 rollers						
CODE	HEAD STYLE												
U1	4 rollers												
U2	10 rollers												
	<table> <tr> <th>CODE</th><th>MOTOR & CONTROLS</th></tr> <tr> <td>FA1</td><td>Fixed speed motor, nominal 3 RPM, 115 VAC, no controls</td></tr> <tr> <td>FB1</td><td>Fixed speed motor, nominal 10 RPM, 115 VAC, no controls</td></tr> <tr> <td>FC1</td><td>Fixed speed motor, nominal 20 RPM, 115 VAC, no controls</td></tr> <tr> <td>FD1</td><td>Fixed speed motor, nominal 35 RPM, 115 VAC, no controls</td></tr> <tr> <td>FF1</td><td>Fixed speed motor, nominal 50 RPM, 115 VAC, no controls</td></tr> </table>	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
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FD1	Fixed speed motor, nominal 35 RPM, 115 VAC, no controls												
FF1	Fixed speed motor, nominal 50 RPM, 115 VAC, no controls												
	<table> <tr> <th colspan="2">OPTIONAL TPU POWER CORDS FOR FIXED SPEED MOTORS</th></tr> <tr> <th>MODEL NO.</th><th>DESCRIPTION</th></tr> <tr> <td>POWCOR</td><td>Power Cord for TPU, 115 VAC, North America</td></tr> </table>	OPTIONAL TPU POWER CORDS FOR FIXED SPEED MOTORS		MODEL NO.	DESCRIPTION	POWCOR	Power Cord for TPU, 115 VAC, North America						
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MODEL NO.	DESCRIPTION												
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	<table> <tr> <th>CODE</th><th>MOTOR & CONTROLS</th></tr> <tr> <td>AD0</td><td>Brushless DC motor, 10 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function</td></tr> <tr> <td>DP0</td><td>Brushless DC motor, 10 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer)</td></tr> <tr> <td>RP0</td><td>Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer)</td></tr> </table>	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)				
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	<table> <tr> <th colspan="2">OPTIONAL TPU POWER SUPPLIES FOR ADJUSTABLE SPEED MOTORS</th></tr> <tr> <th>MODEL NO.</th><th>DESCRIPTION</th></tr> <tr> <td>PS-TP-110NA</td><td>Power Supply for TPU, 110 Vac North America</td></tr> <tr> <td>PS-TP-230EU</td><td>Power Supply for TPU, 230 Vac Europe</td></tr> <tr> <td>PS-TP-240UK</td><td>Power Supply for TPU, 240 Vac United Kingdom</td></tr> <tr> <td>PS-TP-240AU</td><td>Power Supply for TPU, 240 Vac Australia</td></tr> </table>	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
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:

CODE	MOTOR & CONTROLS
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
AD0*	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 needs to be
ordered 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
ROLLERS	3.	
PUMPING SPEEDS	50-350 RPM.	
MOTOR	Brushless DC.	
*POWER SUPPLY	Optional desktop power supply and power cord. See ordering information on page 26 (needs to be ordered separately).	
ELECTRICAL REQUIREMENT	110 – 250 V.	
DIMENSIONS	7.7 in. (196 mm) WIDE x 7.45 in. (189 mm) DEEP x 6.56 in. (167 mm) HIGH excluding handle.	
MAXIMUM LIFT, PUMP HEAD	310 in. H ₂ O (11.2 psig).	
MAXIMUM SUCTION, HEAD	310 in. H ₂ O (11.2 psig).	
RECOMMENDED TUBING MATERIALS 1/16 IN. WALL	Tygon® E-3603, peroxide-treated silicone, platinum-treated silicone, PharMed®, Versilic, silicone, Tygon, Sanitary silicone, Norprene®, Tygon® Long Flex Life, and Hypalon®.	
TUBING SIZES (INSIDE Ø)	1/4 in. , 5/16 in., 3/8 in., 7/16 in. or 1/2 in.	
REVERSIBLE FLOW	Yes.	
PRIMING FUNCTION	Yes.	
TIMING FUNCTION	No.	Yes.
CE COMPLIANT	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.

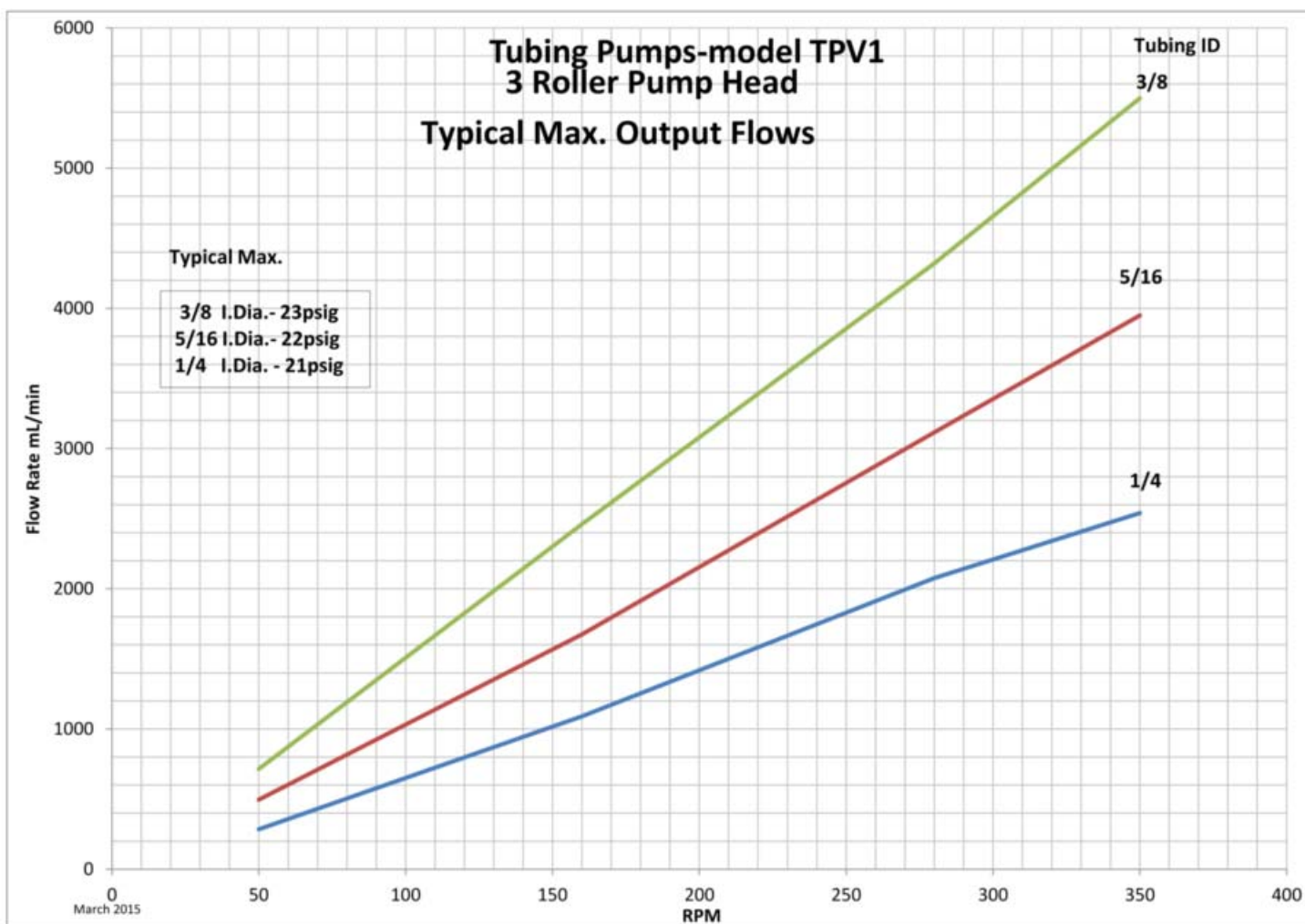
Flow Rate Graphs

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.

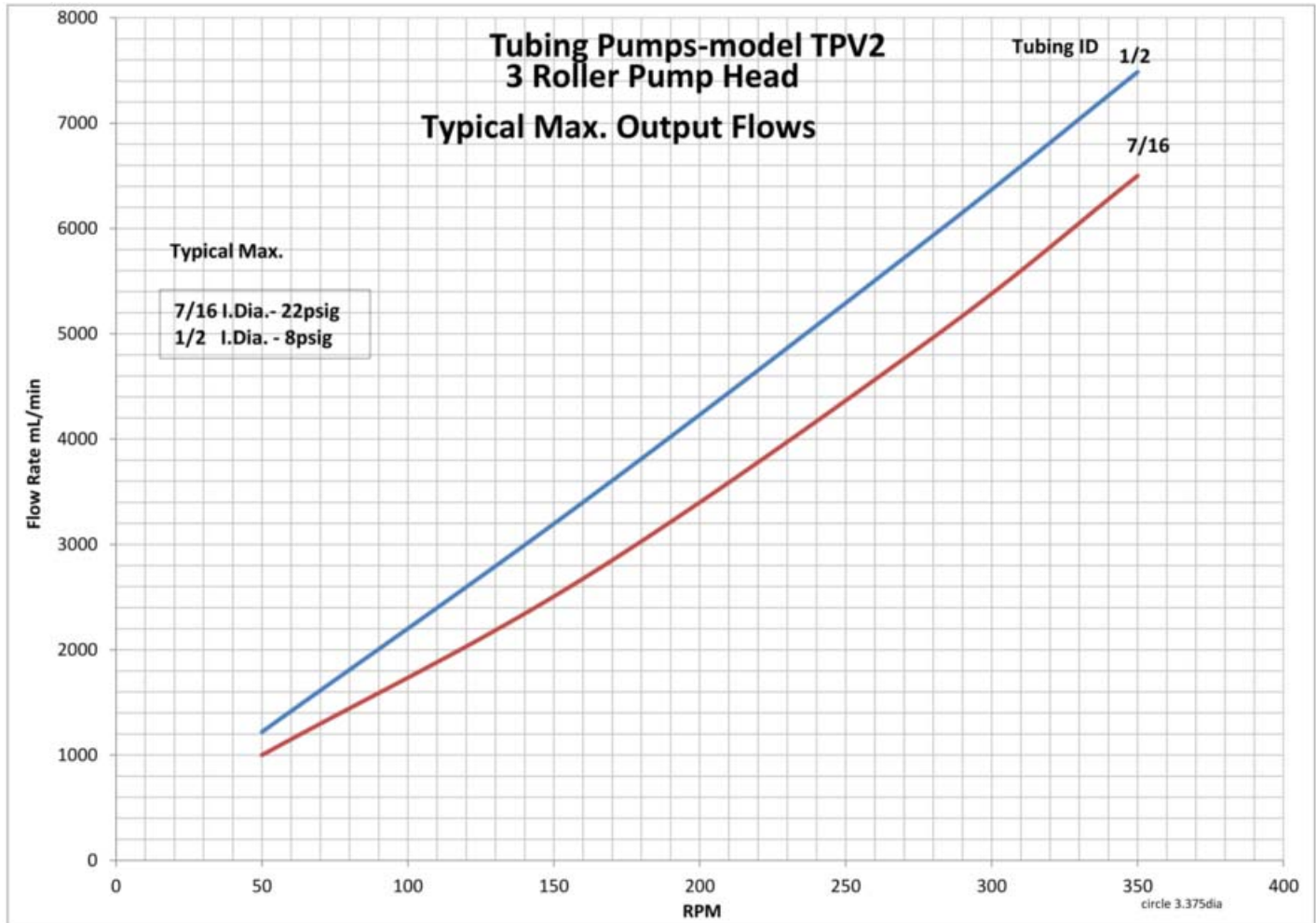
TPV1 Pumps (1/4 to 3/8 in. ID):



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

The Flow Rate graph for TPV2 pumps (7/16 to 1/2 in. ID) are on the following page.

TPV2 Pumps (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 needs to be
ordered 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 needs to be
ordered 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 needs to be
ordered 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

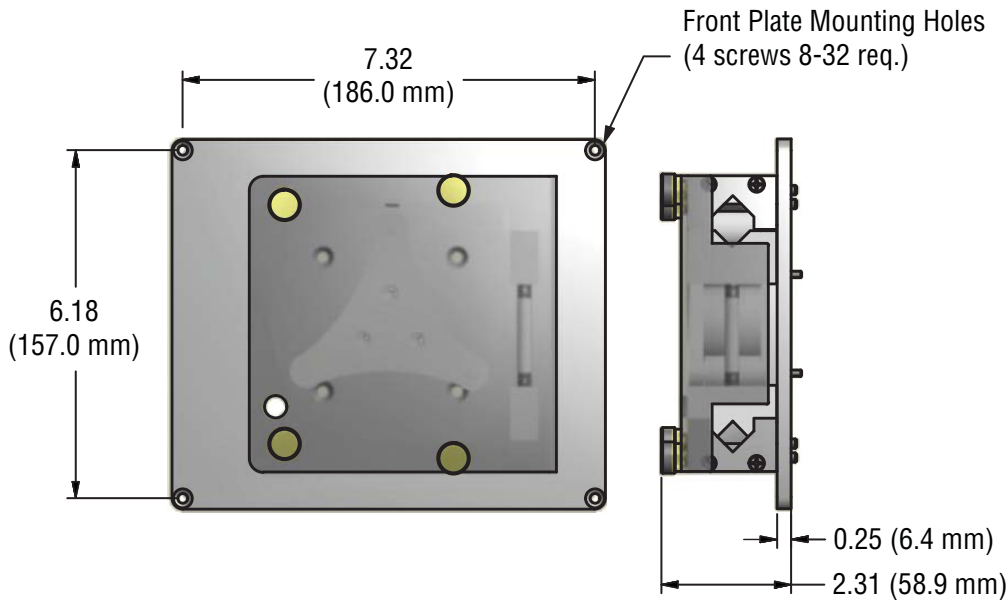


The simplicity
of the pump head design
provides users
with the flexibility
to connect their own motor
or to purchase one
from our catalog.

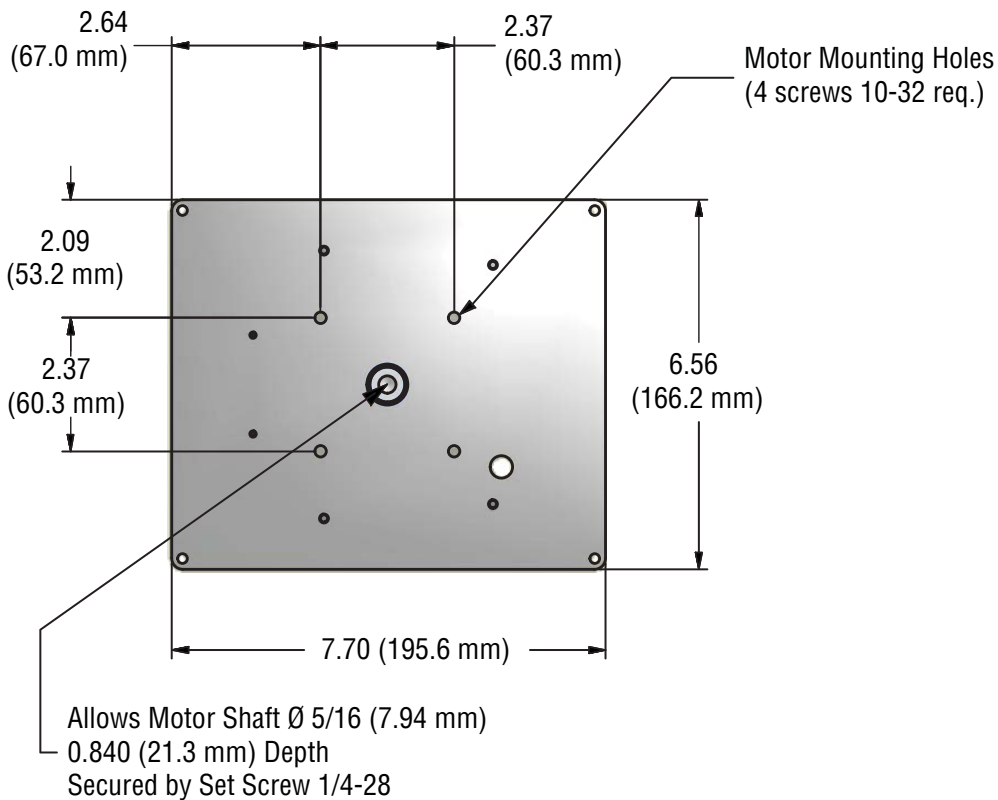
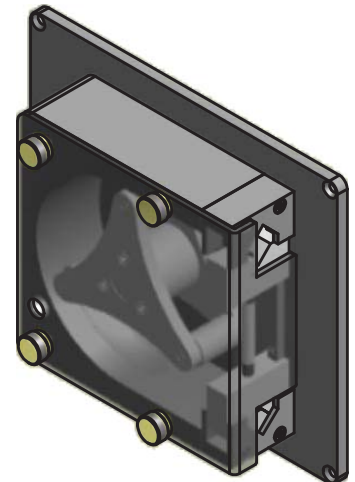
Design Features

- ◆ Economical & compact.
- ◆ Stainless Steel Rollers & Shafts.
- ◆ Safety cover.
- ◆ Can be mounted in any direction.
- ◆ 3 Rollers.
- ◆ Maximum Lift: 340 in. H₂O (12.3 psig).
- ◆ Maximum Suction: 350 in. H₂O (12.6 psig).

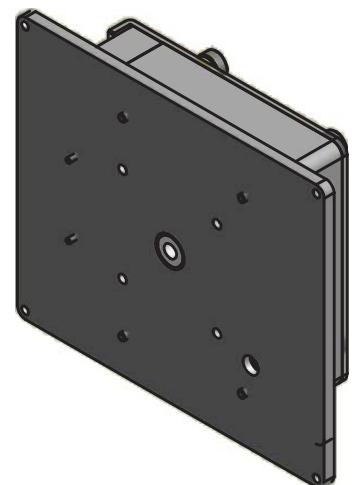
CODE	PUMP HEAD STYLES
TPV1	Pump Head 3 Rollers for 1/16" wall tubing.
TPV2	Pump Head 3 Rollers for 1/16" wall tubing.



Front View



Rear View



TP	MODEL								
	<table> <tr> <th>CODE</th><th>HEAD STYLE STYLES</th></tr> <tr> <td>V1</td><td>3 rollers on pump head for tubing I.D. 1/4 - 3/8 in.</td></tr> <tr> <td>V2</td><td>3 rollers on pump head for tubing I.D. 7/16 - 1/2 in.</td></tr> </table>	CODE	HEAD STYLE STYLES	V1	3 rollers on pump head for tubing I.D. 1/4 - 3/8 in.	V2	3 rollers on pump head for tubing I.D. 7/16 - 1/2 in.		
CODE	HEAD STYLE STYLES								
V1	3 rollers on pump head for tubing I.D. 1/4 - 3/8 in.								
V2	3 rollers on pump head for tubing I.D. 7/16 - 1/2 in.								
	<table> <tr> <th>CODE</th><th>MOTOR & CONTROLS</th></tr> <tr> <td>AD3</td><td>Brushless DC 50 – 350 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function.</td></tr> <tr> <td>DP3</td><td>Brushless DC 50 – 350 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer).</td></tr> <tr> <td>RP3</td><td>Brushless DC 50 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer).</td></tr> </table>	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).
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 TPV1 AND TPV2 PUMP HEADS	
OPTIONAL TPV POWER SUPPLIES	
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
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EXAMPLE: TPV1AD3

The example shown above is TPV1AD3: Is a TPV pump with the 3-roller head sized for use with 1/4 - 3/8 in. tubing, an adjustable speed 50 – 350 motor with the prime function and reversable speed.

To order a pump head alone, select TPV1 or TPV2.

ORDERING INFORMATION FOR TPU and TPV PUMP TUBING

TUBING ORDER NUMBER	DESCRIPTION
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

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

ORDERING INFORMATION FOR TPT PUMP TUBING

TUBING ORDER NUMBER	DESCRIPTION
TB2LA1	Tygon [®] E-3603 Lab grade, 1/16 in. ID x 1/32 in. wall, 25 feet
TB2LA2	Tygon [®] E-3603 Lab grade, 1/8 in. ID x 1/32 in. wall, 25 feet
TB2LA9	Tygon [®] E-3603 Lab grade, 1/32 in. ID x 1/32 in. wall, 25 feet
TB2SI1	Silicone (SILCON), 1/16 in. ID x 1/32 in. wall, 25 feet
TB2SI2	Silicone (SILCON), 1/18 in. ID x 1/32 in. wall, 25 feet
TB2SU1	Surgical rubber (Latex) 1/16 in. ID x 1/32 in. wall, 25 feet
TB2SU2	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***
Klosterrunsstraße 18 P.O. Box 1321 Müllheim D-79379 Germany **Telefon:** +49 (0)7631 5545
Fax: +49 (0)7631 14740 • **Web:** www.analyt-mtc.de • **E-mail:** info@analyt_mtc.de *SGS ISO9001 Certification is not applicable.

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PTFE - PFA

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

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VALVES

Barstock

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PTFE

Chemically Inert • Needle or Metering

Proportionating Solenoid

Stainless • For Controlling Gas or Liquid Flow

• Pulse width Modulated

SMV • Stepping Motor Valve

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Tubing Pumps

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