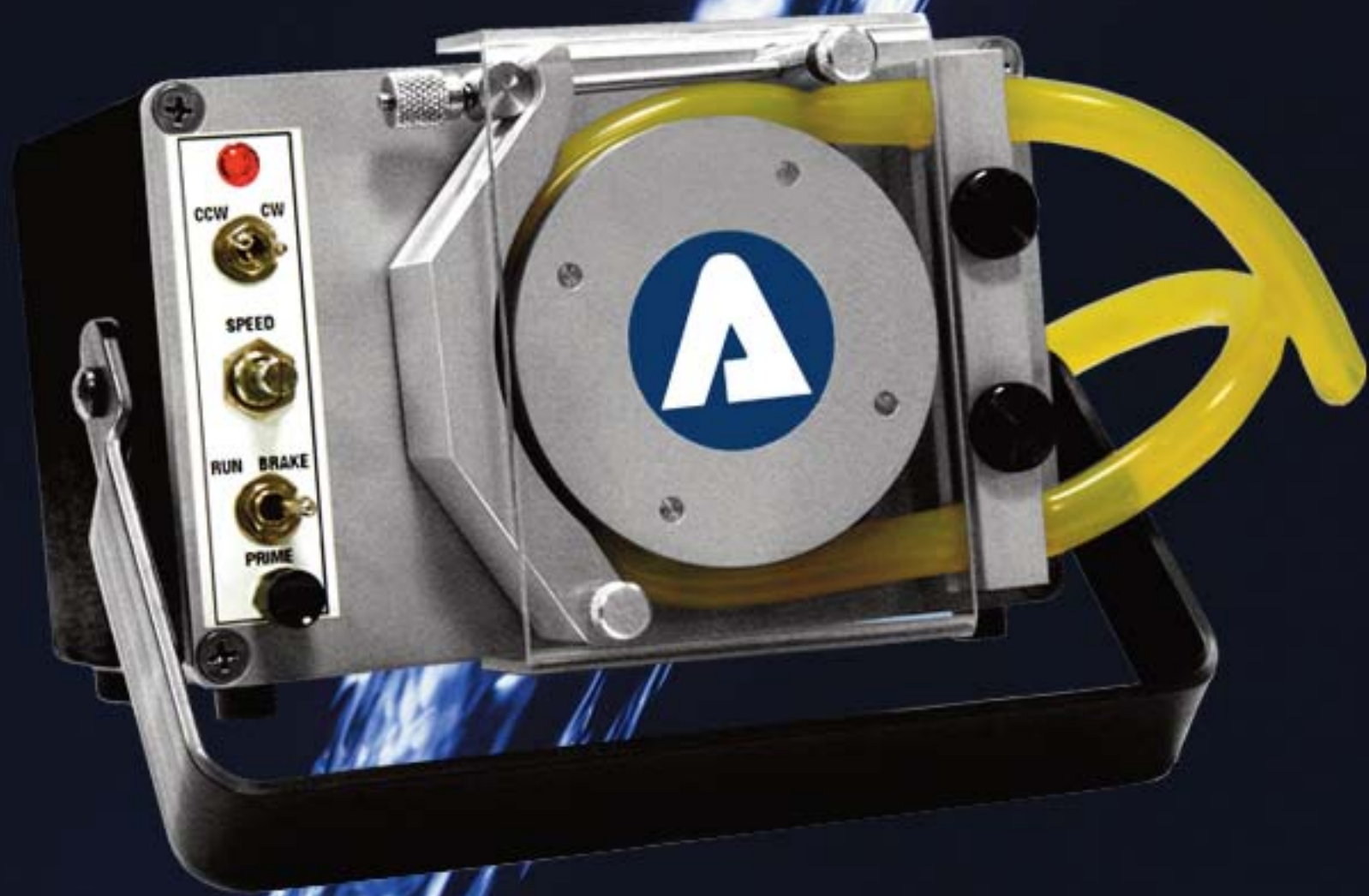


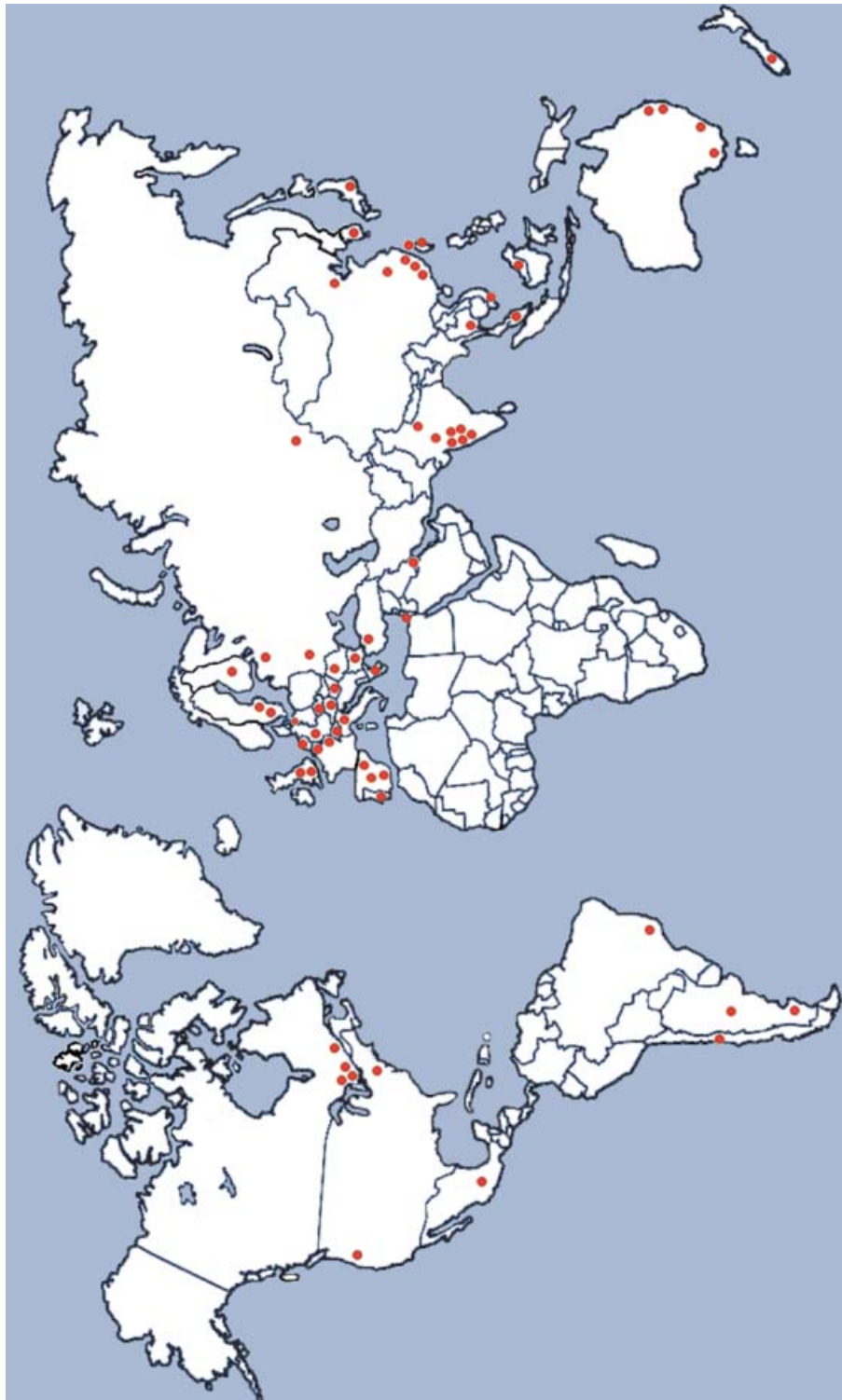
AALBORG



pumps



Worldwide Distribution



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

TPU

TPU SPECIFICATIONS

Page 2

TPUFX MODEL



Page 5

TPUAD MODEL



Page 6

TPUDP MODEL



Page 7

TPURP MODEL



Page 8

TPU PUMP HEAD



Page 9

TPV

TPV SPECIFICATIONS

Page 14

TPVAD MODELS



Page 18

TPVDP MODELS



Page 19

TPVRP MODELS

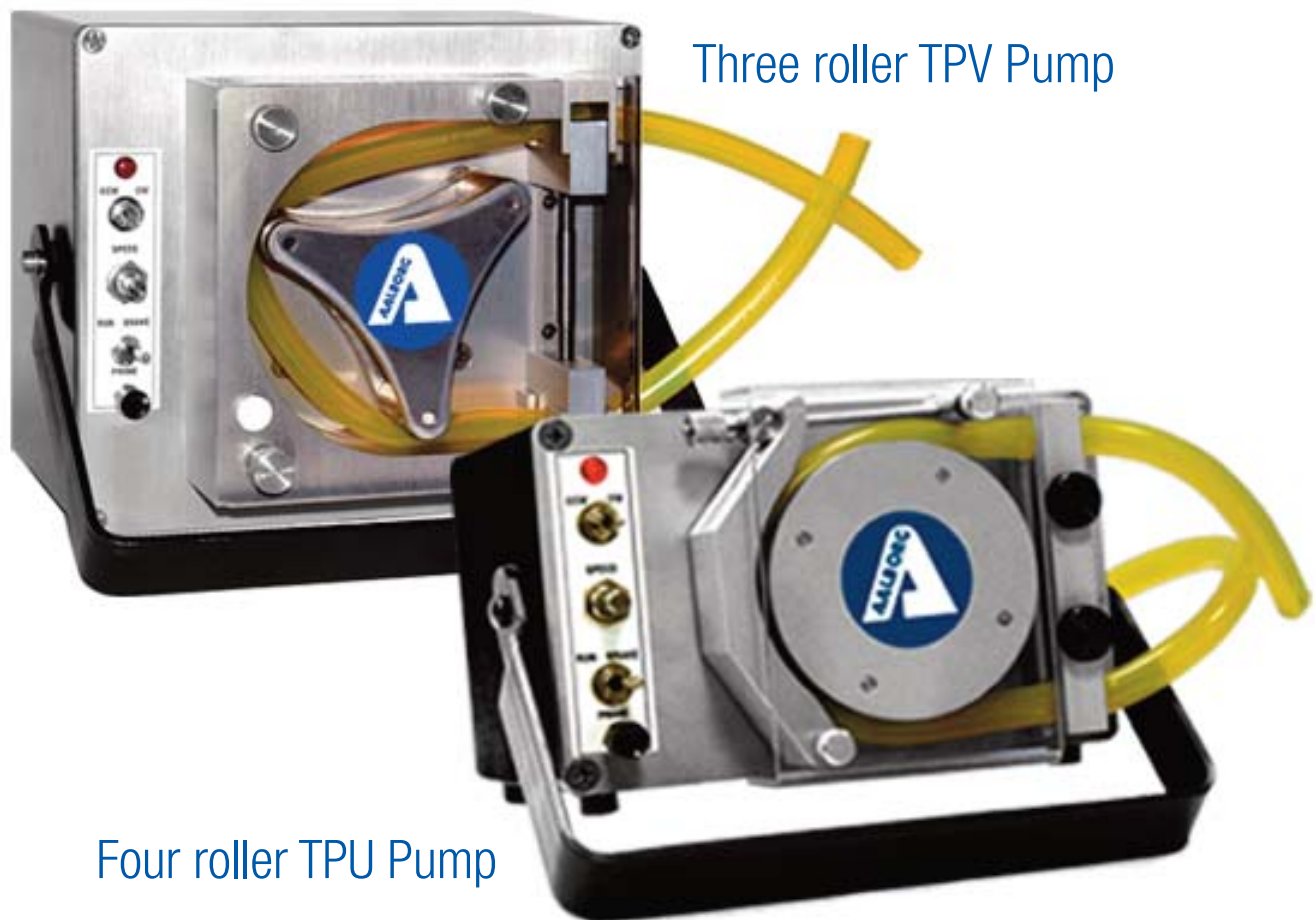


Page 20

PUMP HEADS



Page 21



Three roller TPV Pump

Four roller TPU Pump

General Description

Aalborg's TPU and 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.

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. The occlusion is adjustable on TPU models for increased pressure, or decreased pressure to extend tubing life.

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.

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.	0 – 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*	Power cord & plug.			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. H ₂ O (12.3 psig).				
MAXIMUM SUCTION, HEAD	350 in. H ₂ O (12.6 psig).				
RECOMMENDED TUBING MATERIALS 1/16 IN. WALL	Tygon® R-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	
REVERSIBLE FLOW	No	Yes	Yes	No	
PRIMING FUNCTION	No	Yes	Yes	No	
TIMING FUNCTION	No	No	Yes	No	

***Specific power cords & plugs 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.*

TPU **MATERIALS OF CONSTRUCTION

ANODIZED ALUMINUM

316 STAINLESS STEEL PRECISION ROLLERS AND SHAFTS

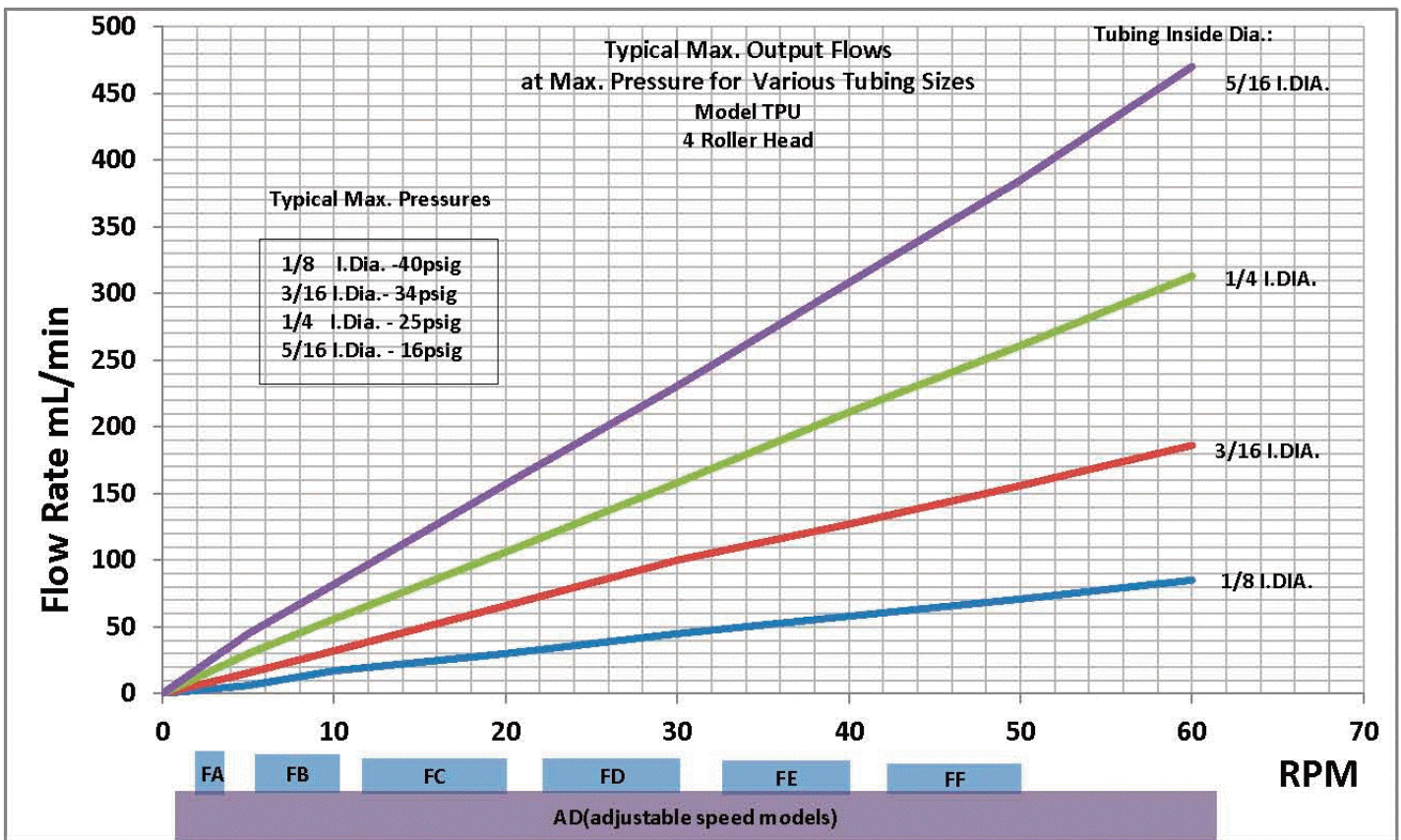
Flow Rate Graphs

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 10 to identify the ordering number for the pump(s) you have selected.

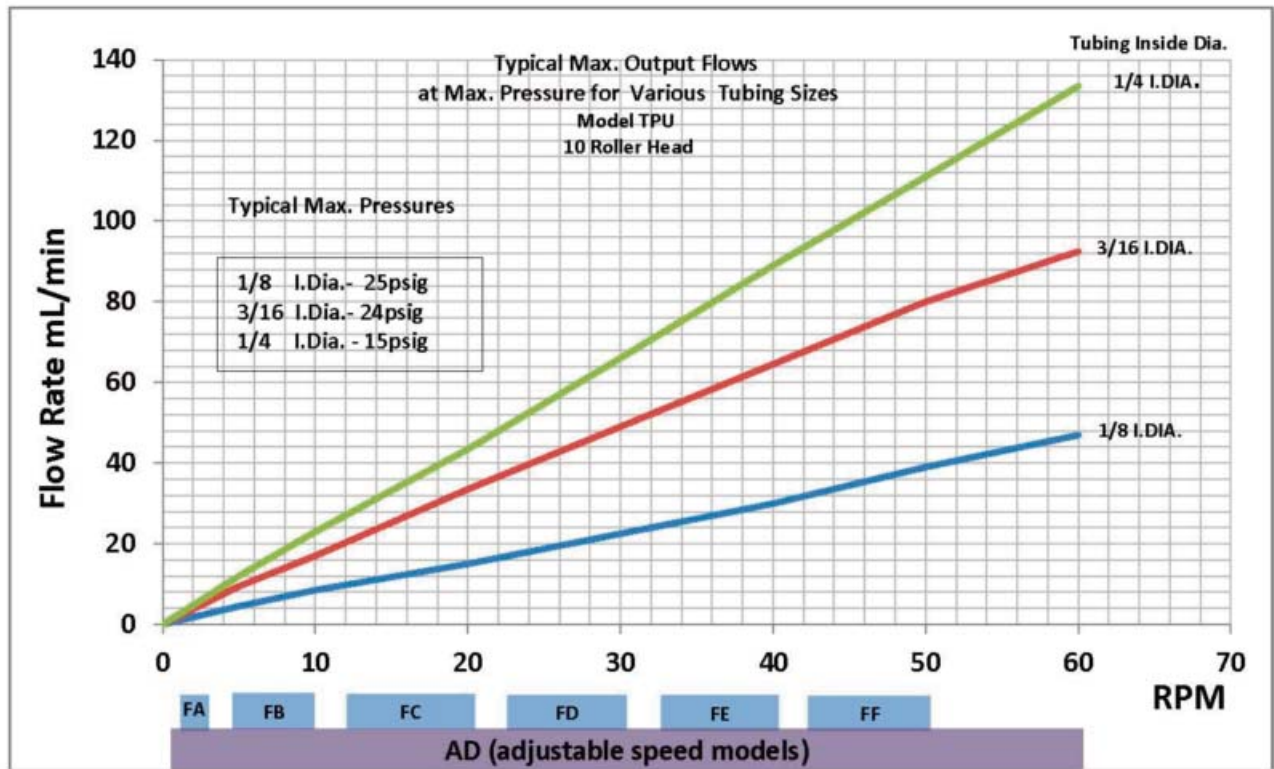
TPU1 Four-Roller Pumps:



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

TPU 2 Ten Roller Pumps:

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



FX Model Fixed RPM Tubing Pumps



Design Features

- ◆ Economical.
- ◆ 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.
- ◆ Safety cover.
- ◆ 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



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 0 to 60 RPM.

DP Model Adjustable RPM Dispenser Pumps



**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 0 to 60 RPM.

RP Model Adjustable RPM Dispenser Pumps



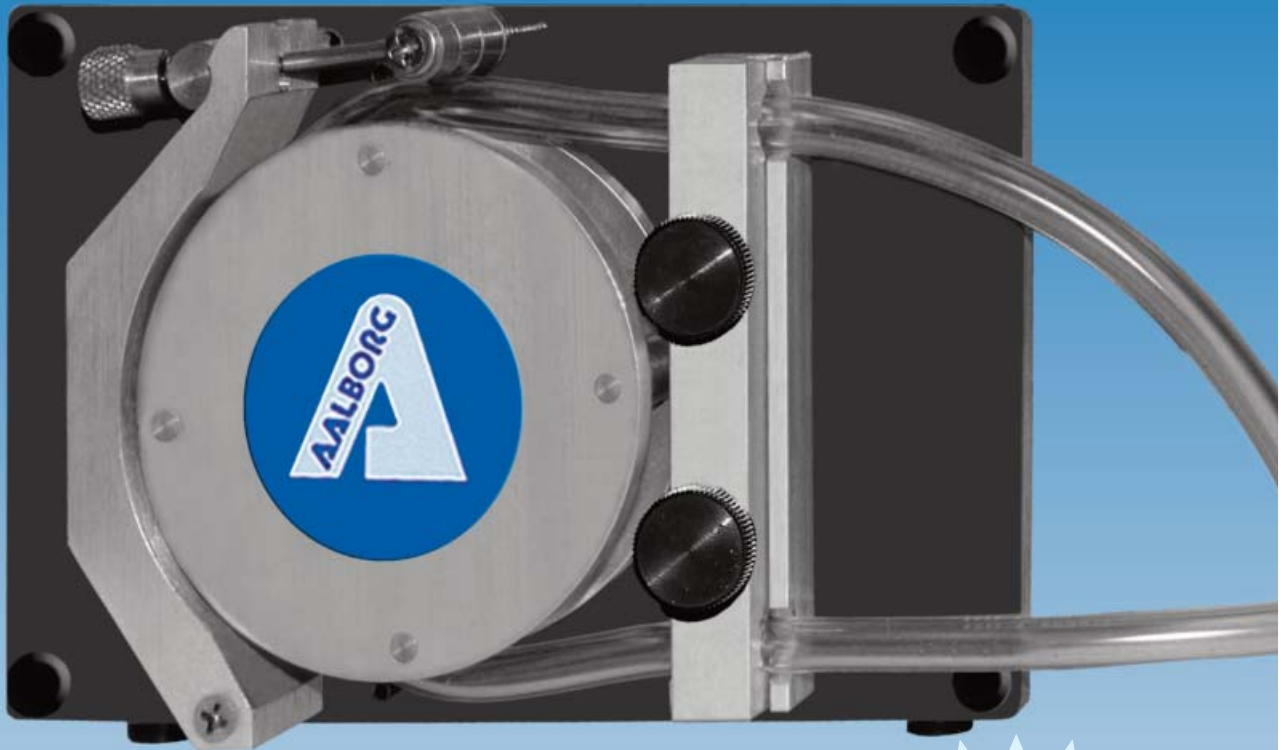
**Peristaltic Pumps
designed for liquids
of low to high viscosity:**

**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.
- ◆ 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 0 to 60 RPM.

Pump Head



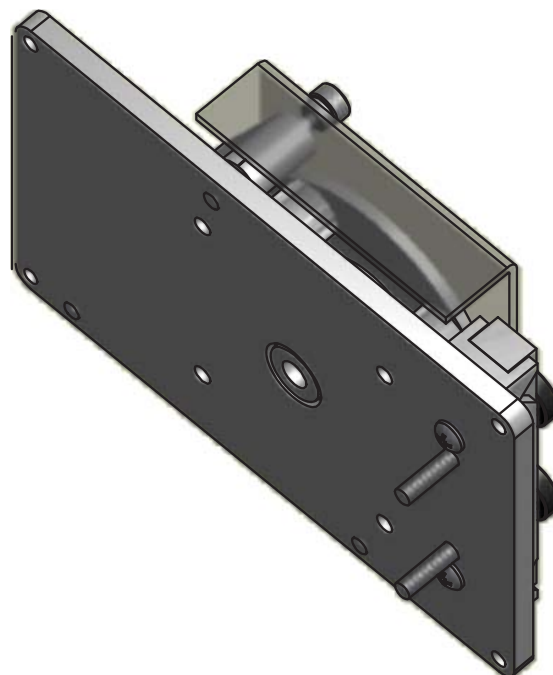
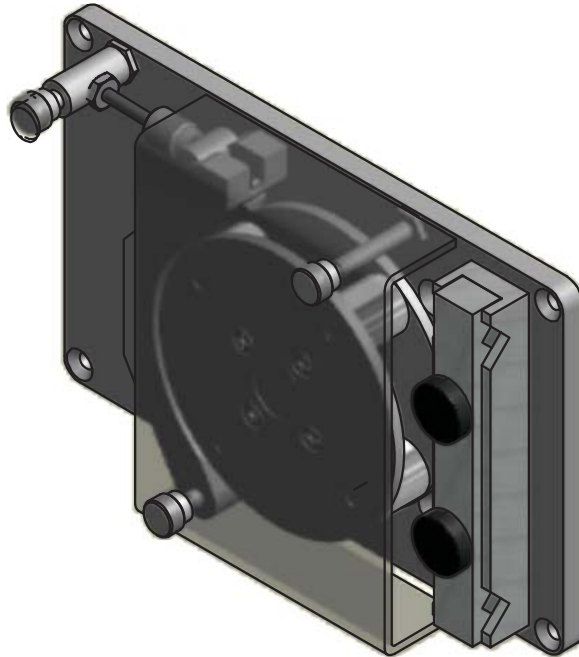
The simplicity of the pump head design provides users with the flexibility to connect their own motor or to purchase one from our catalog.

Design Features

- ◆ Economical & compact.
- ◆ 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.

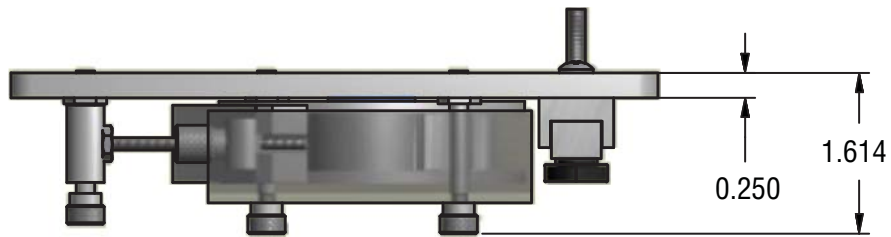
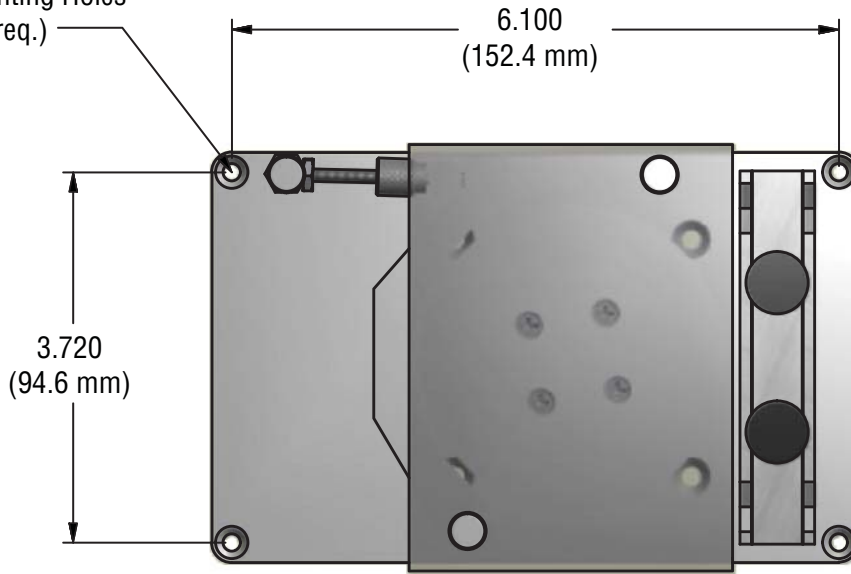
Front View



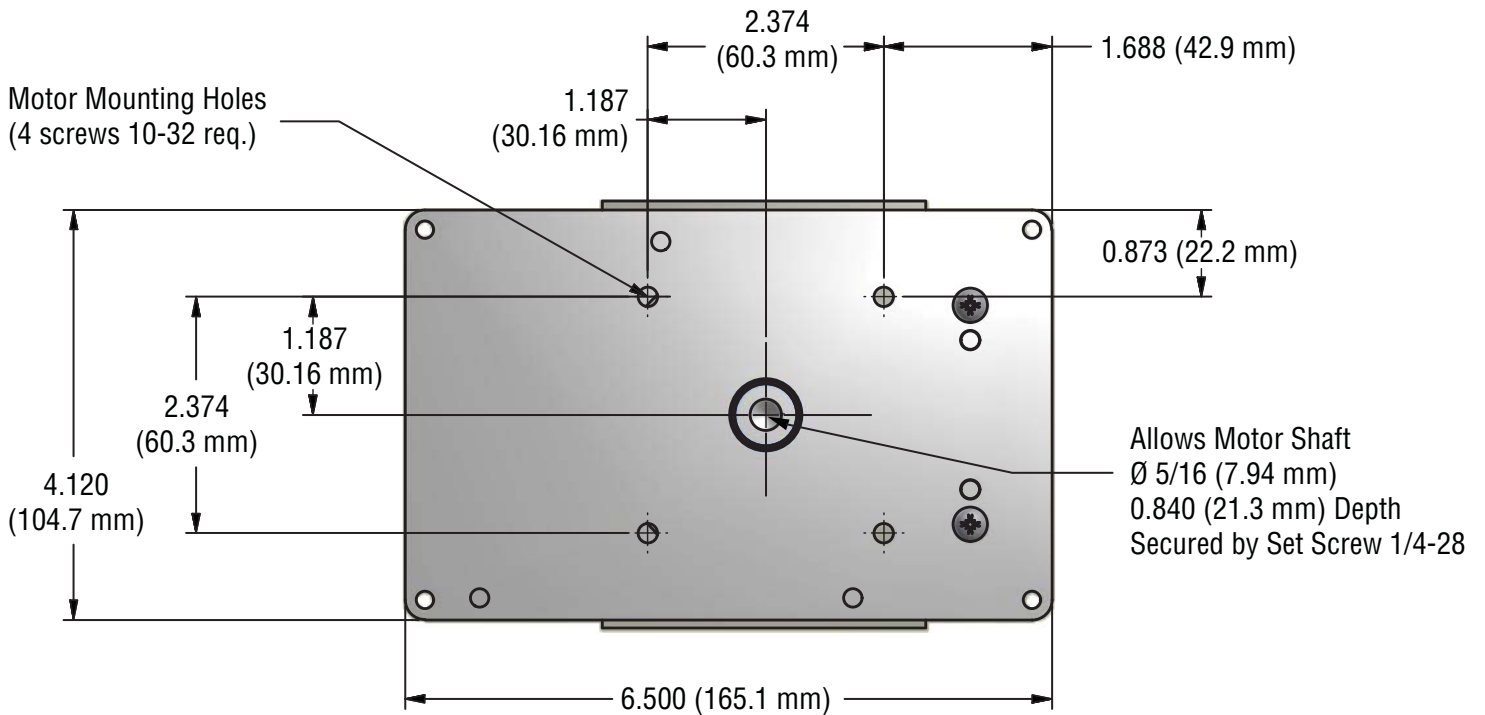
Rear Veiw



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



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



TP	MODEL																				
	<table border="1"> <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 border="1"> <tr> <th>CODE</th> <th>MOTOR & CONTROLS</th> </tr> <tr> <td>FA</td> <td>Fixed speed motor, nominal 3 RPM, no controls</td> </tr> <tr> <td>FB</td> <td>Fixed speed motor, nominal 10 RPM, no controls</td> </tr> <tr> <td>FC</td> <td>Fixed speed motor, nominal 20 RPM, no controls</td> </tr> <tr> <td>FD</td> <td>Fixed speed motor, nominal 30 RPM, no controls</td> </tr> <tr> <td>FE</td> <td>Fixed speed motor, nominal 40 RPM, no controls</td> </tr> <tr> <td>FF</td> <td>Fixed speed motor, nominal 50 RPM, no controls</td> </tr> <tr> <td>AD</td> <td>Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function</td> </tr> <tr> <td>DP</td> <td>Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer)</td> </tr> <tr> <td>RP</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	FA	Fixed speed motor, nominal 3 RPM, no controls	FB	Fixed speed motor, nominal 10 RPM, no controls	FC	Fixed speed motor, nominal 20 RPM, no controls	FD	Fixed speed motor, nominal 30 RPM, no controls	FE	Fixed speed motor, nominal 40 RPM, no controls	FF	Fixed speed motor, nominal 50 RPM, no controls	AD	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function	DP	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer)	RP	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer)
CODE	MOTOR & CONTROLS																				
FA	Fixed speed motor, nominal 3 RPM, no controls																				
FB	Fixed speed motor, nominal 10 RPM, no controls																				
FC	Fixed speed motor, nominal 20 RPM, no controls																				
FD	Fixed speed motor, nominal 30 RPM, no controls																				
FE	Fixed speed motor, nominal 40 RPM, no controls																				
FF	Fixed speed motor, nominal 50 RPM, no controls																				
AD	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function																				
DP	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer)																				
RP	Brushless DC motor, 0 – 60 RPM, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer)																				
	<table border="1"> <tr> <th>CODE</th> <th>POWER PLUG / INPUT VOLTAGE</th> </tr> <tr> <td>NA</td> <td>North America / 120 VAC</td> </tr> <tr> <td>EU</td> <td>Europe / 220 VAC</td> </tr> <tr> <td>AU</td> <td>Australia / 240 VAC</td> </tr> <tr> <td>UK</td> <td>United Kingdom / 240 VAC</td> </tr> </table>	CODE	POWER PLUG / INPUT VOLTAGE	NA	North America / 120 VAC	EU	Europe / 220 VAC	AU	Australia / 240 VAC	UK	United Kingdom / 240 VAC										
CODE	POWER PLUG / INPUT VOLTAGE																				
NA	North America / 120 VAC																				
EU	Europe / 220 VAC																				
AU	Australia / 240 VAC																				
UK	United Kingdom / 240 VAC																				
TP	U1	FC	—	NA																	

EXAMPLE: TPU1FC-NA

The example shown above is TPU1FC-NA: A TPU pump with 4 rollers, fixed speed set at 20 RPM, with a power plug for use in North America.

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 12).

For more technical details (Specifications and Materials of Construction), see page 2.

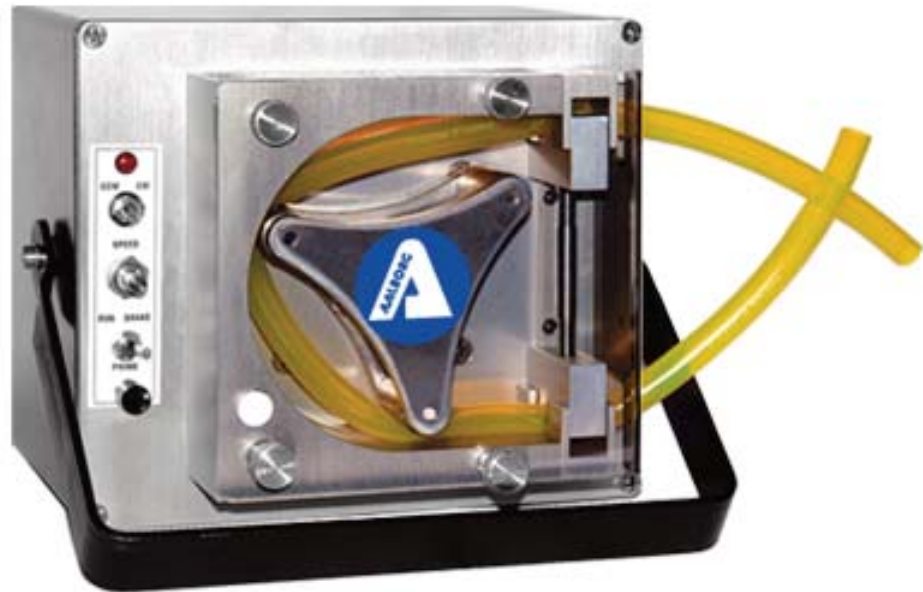
The following motors are available for purchase for use with TPU1 and TPU2 pump heads:

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
FA2	Fixed speed, nominal 3 RPM, 240 VAC
FB2	Fixed speed, nominal 10 RPM, 240 VAC
FC2	Fixed speed, nominal 20 RPM, 240 VAC
FD2	Fixed speed, nominal 30 RPM, 240 VAC
FE2	Fixed speed, nominal 40 RPM, 240 VAC
FF2	Fixed speed, nominal 50 RPM, 240 VAC
AD0*	Adjustable speed, 0 – 60 RPM, 24 VDC
AD3*	Adjustable speed, 0 – 300 RPM, 24 VDC

*These motors have an RPM counter.

Each motor comes with a mounting kit. Optionally, the motor can be mounted for you at the factory.

Typical Three Roller TPV Pump



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.

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	0 – 300 RPM.	
MOTOR	Brushless DC.	
POWER SUPPLY*	Power cord & plug.	
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. H2O (11.2 psig).	
MAXIMUM SUCTION, HEAD	310 in. H2O (11.2 psig).	
RECOMMENDED TUBING MATERIALS 1/16 IN. WALL	Tygon® R-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.	
FUSES	Two 2-Amp, 250 V, fast-acting, glass, 5 x 20 mm, UL-listed.	
REVERSIBLE FLOW	Yes.	
PRIMING FUNCTION	Yes.	
TIMING FUNCTION	No.	Yes.

*Specific power cords & plugs 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.

TPV **MATERIALS OF CONSTRUCTION

ANODIZED ALUMINUM

316 STAINLESS STEEL PRECISION ROLLERS AND SHAFTS

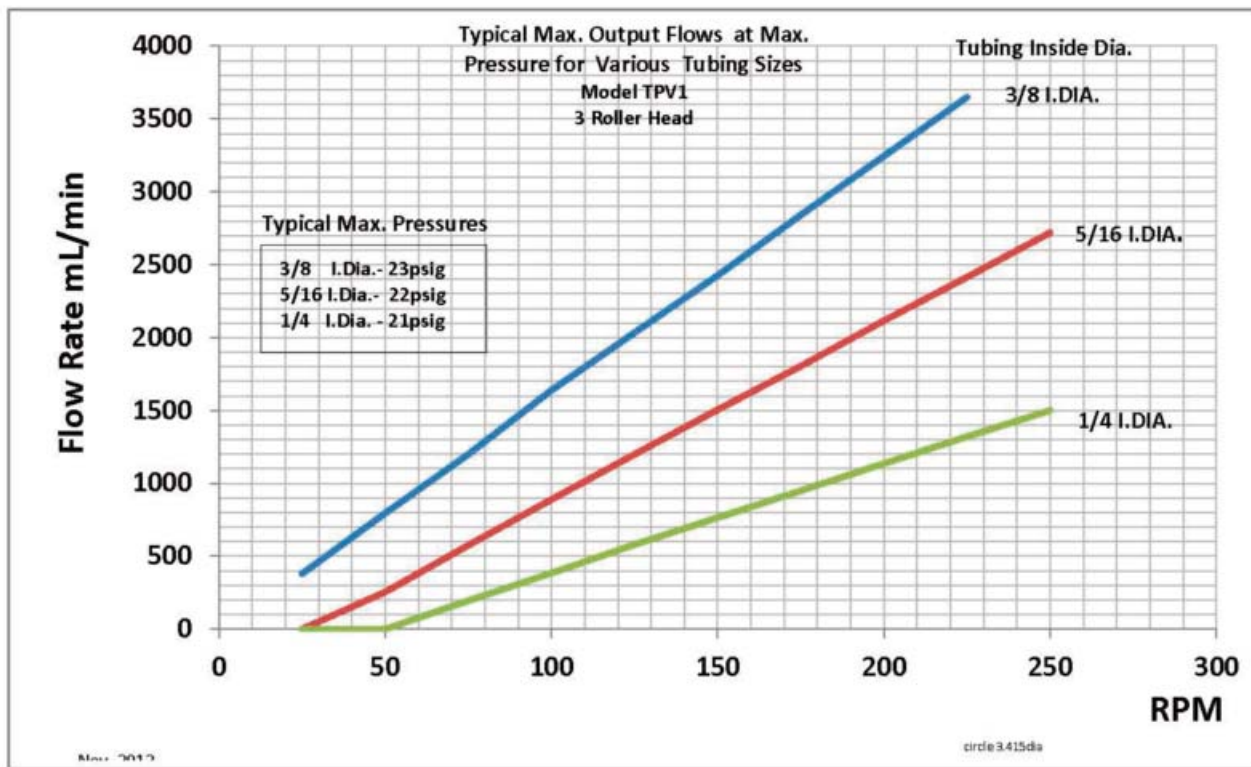
Flow Rate Graphs

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.

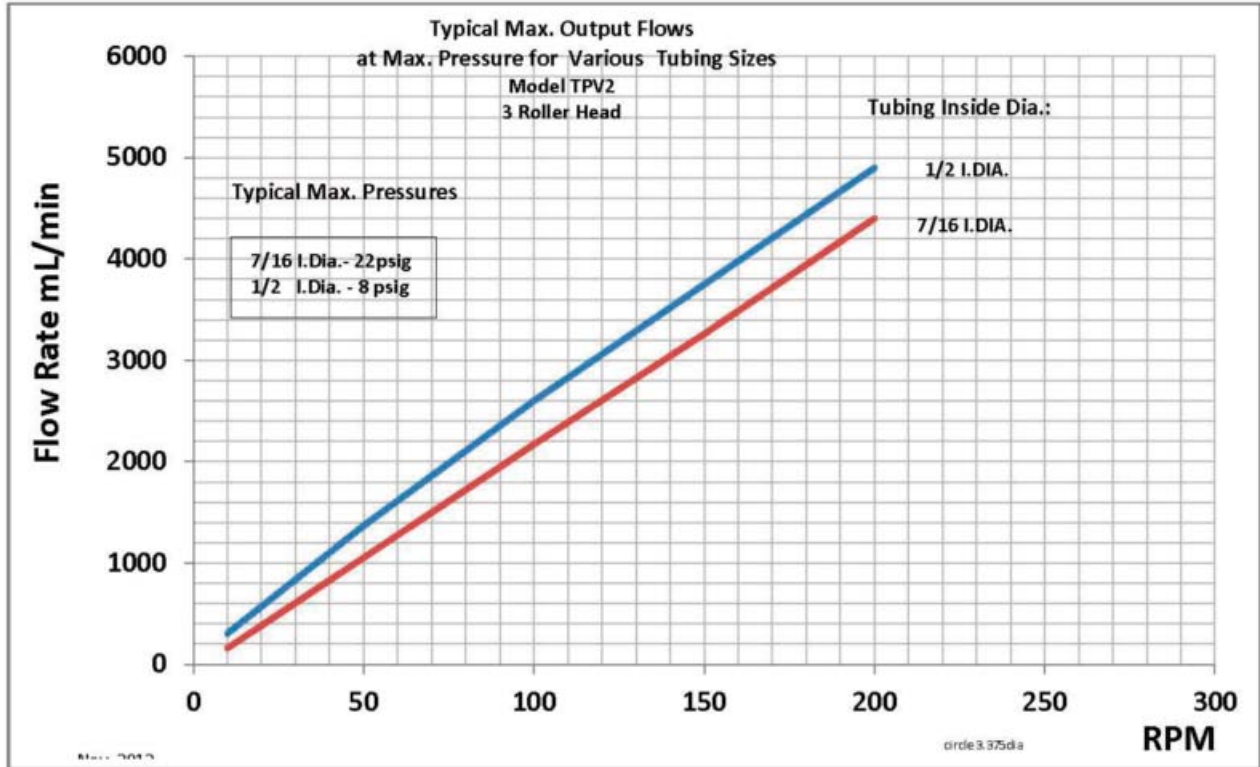
Armed with this information, consult the features sections that follow, then use the tables on page 19 to identify the ordering number for the pump(s) you have selected.

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



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):



AD Model Adjustable RPM Pumps



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 0 to 300 RPM.

DP Model Adjustable RPM Pumps with Dispensing



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 0 to 300 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



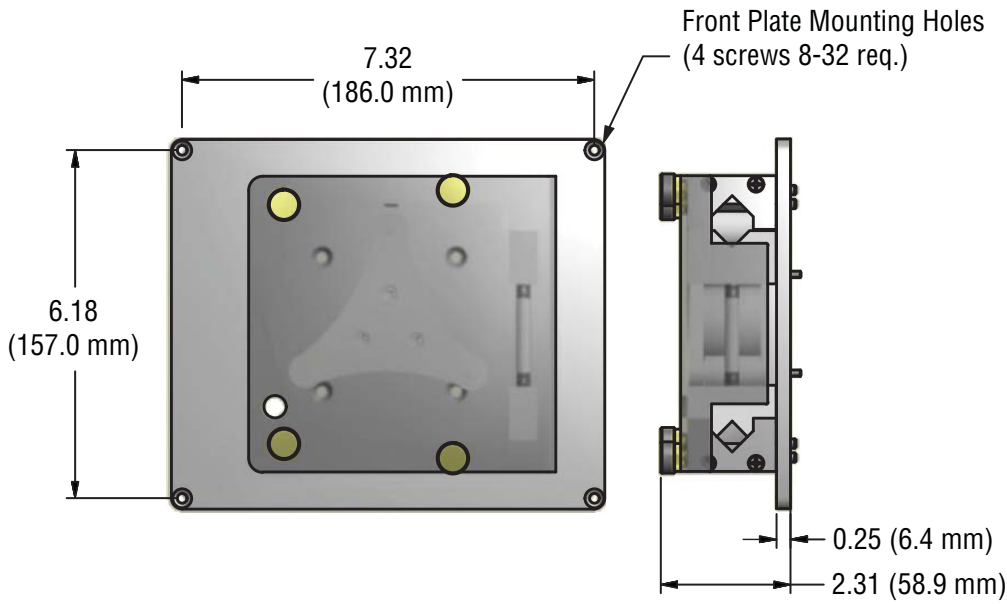
Larger
peristaltic Pumps
designed for liquids of
low to high viscosity:

Ideal for laboratory,
processing and
OEM applications.

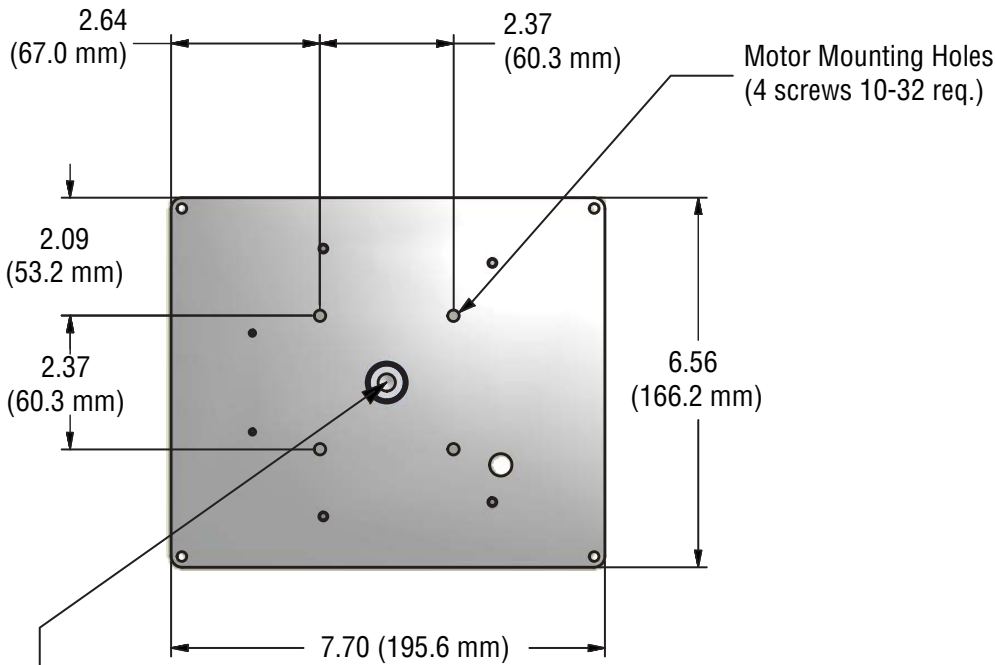
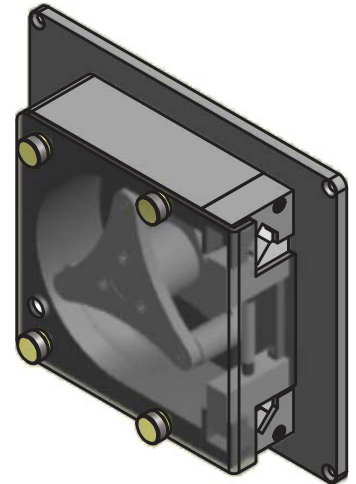
Design Features

- ◆ 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 0 to 300 RPM.
- ◆ Can be mounted in any direction.
- ◆ Long tubing life.
- ◆ Adjustable handle to carry, hang or stand.
- ◆ Safety cover.

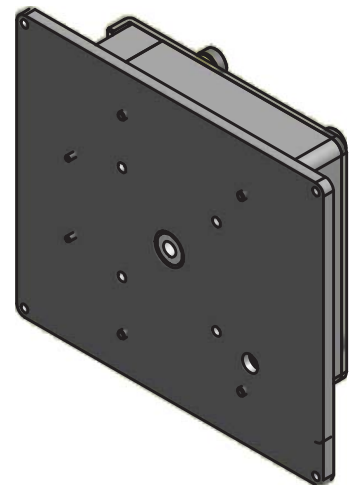
CODE	PUMP HEAD STYLES
TPV1	Pump Head 3 Rollers for 1/16" wall tubing.
TPV2	Pump Head 3 Rollers for 1/16" wall tubing.



Front View



Rear Veiw



Allows Motor Shaft \varnothing 5/16 (7.94 mm)
 0.840 (21.3 mm) Depth
 Secured by Set Screw 1/4-28



TP	MODEL										
	<table border="1"> <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 border="1"> <tr> <th>CODE</th> <th>MOTOR & CONTROLS</th> </tr> <tr> <td>AD</td> <td>Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function.</td> </tr> <tr> <td>DP</td> <td>Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer).</td> </tr> <tr> <td>RP</td> <td>Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer).</td> </tr> </table>	CODE	MOTOR & CONTROLS	AD	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function.	DP	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer).	RP	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer).		
CODE	MOTOR & CONTROLS										
AD	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function.										
DP	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Dispense function (Timer).										
RP	Brushless DC 0 – 300 RPM motor, RPM counter, Brake switch, Reverse Flow switch, Prime function, Auto-Cycle Dispense function (Timer).										
	<table border="1"> <tr> <th>CODE</th> <th>POWER PLUG / INPUT VOLTAGE</th> </tr> <tr> <td>NA</td> <td>North America / 120 VAC</td> </tr> <tr> <td>EU</td> <td>Europe / 220 VAC</td> </tr> <tr> <td>AU</td> <td>Australia / 240 VAC</td> </tr> <tr> <td>UK</td> <td>United Kingdom / 240 VAC</td> </tr> </table>	CODE	POWER PLUG / INPUT VOLTAGE	NA	North America / 120 VAC	EU	Europe / 220 VAC	AU	Australia / 240 VAC	UK	United Kingdom / 240 VAC
CODE	POWER PLUG / INPUT VOLTAGE										
NA	North America / 120 VAC										
EU	Europe / 220 VAC										
AU	Australia / 240 VAC										
UK	United Kingdom / 240 VAC										

TP V1 AD — NA

EXAMPLE: TPV1AD-NA

The example shown above is TPV1AD-NA: Is a TPV pump with the 3-roller head sized for use with 1/4 - 3/8 in. tubing, an adjustable speed 0 – 300 motor with the prime function and reversable speed, with a plug for use in North America.

To order a pump head alone, select TPV1 or TPV2. Adjustable RPM provided with no motor.

ORDERING INFORMATION FOR PUMP TUBING

TUBING ORDER NUMBER	DESCRIPTION
TB1LA2	Tygon® R-3603 Lab grade, 1/8 in. ID x 1/16 in. wall, 50 feet
TB1LA3	Tygon® R-3603 Lab grade, 3/16 in. ID x 1/16 in. wall, 50 feet
TB1LA4	Tygon® R-3603 Lab grade, 1/4 in. ID x 1/16 in. wall, 50 feet
TB1LA5	Tygon® R-3603 Lab grade, 5/16 in. ID x 1/16 in. wall, 50 feet
TB1LA6	Tygon® R-3603 Lab grade, 3/8 in. ID x 1/16 in. wall, 50 feet
TB1LA7	Tygon® R-3603 Lab grade, 7/16 in. ID x 1/16 in. wall, 50 feet
TB1LA8	Tygon® R-3603 Lab grade, 1/2 in. ID x 1/16 in. wall, 50 feet
TB1LF2	Long Flex Life (LFL), 1/8 in. ID x 1/16 in. wall, 50 feet
TB1LF3	Long Flex Life (LFL), 3/16 in. ID x 1/16 in. wall, 50 feet
TB1LF4	Long Flex Life (LFL), 1/4 in. ID x 1/16 in. wall, 50 feet
TB1LF5	Long Flex Life (LFL), 5/16 in. ID x 1/16 in. wall, 50 feet
TB1LF6	Long Flex Life (LFL), 3/8 in. ID x 1/16 in. wall, 25 feet
TB1LF7	Long Flex Life (LFL), 7/16 in. ID x 1/16 in. wall, 25 feet
TB1LF8	Long Flex Life (LFL), 1/2 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 (FDA, 3A, NSF), 1/8 in. ID x 1/16 in. wall, 50 feet
TB1NI3	Norprene® Industrial grade (FDA, 3A, NSF), 3/16 in. ID x 1/16 in. wall, 50 feet
TB1NI4	Norprene® Industrial grade (FDA, 3A, NSF), 1/4 in. ID x 1/16 in. wall, 50 feet
TB1NI5	Norprene® Industrial grade (FDA, 3A, NSF), 5/16 in. ID x 1/16 in. wall, 50 feet
TB1NI6	Norprene® Industrial grade (FDA, 3A, NSF), 3/8 in. ID x 1/16 in. wall, 50 feet
TB1NI7	Norprene® Industrial grade (FDA, 3A, NSF), 7/16 in. ID x 1/16 in. wall, 50 feet
TB1NI8	Norprene® Industrial grade (FDA, 3A, NSF), 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
TB1SI7	Silicone (SPX-50) peroxide-cured, 7/16 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

Continued

Continued

ORDERING INFORMATION FOR PUMP TUBING

TUBING ORDER NUMBER	DESCRIPTION
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
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	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 1/8 in. ID x 1/16 in. wall, 50 feet
TB1TY3	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 3/16 in. ID x 1/16 in. wall, 50 feet
TB1TY4	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 1/4 in. ID x 1/16 in. wall, 50 feet
TB1TY5	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 5/16 in. ID x 1/16 in. wall, 50 feet
TB1TY6	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 3/8 in. ID x 1/16 in. wall, 50 feet
TB1TY7	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 7/16 in. ID x 1/16 in. wall, 50 feet
TB1TY8	Silicone (XL-60), Long Life Pump Tubing, Tygoprene™ 1/2 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
TB1FR7	Fluran® (F-5500-A), Severe Environmental Tubing, 7/16 in. ID x 1/16 in. wall, 50 feet
TB1FR8	Fluran® (F-5500-A), Severe Environmental Tubing, 1/2 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

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.

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

Vortex In-Line and Insertion Flow Meters

Steam / Liquid and Gas Service

Smart Rate / Totalizer / Signal Conditioner

LCD Keypad • RS232 / 485 • Pulse Output • Alarms