PORTABLE FLUID TRANSFER SOLUTIONS DRUM/BARREL PUMPS



PUMPING SOLUTIONS AROUND THE WORLD

finishthompson.com

PF SERIES PUMP TUBES

Sealless, High Performance

Unique double suction impeller provides high flow and high head. Sealless design improves reliability. Model PFS offers FDA-compliant material and ATEX certified options.



APPLICATIONS

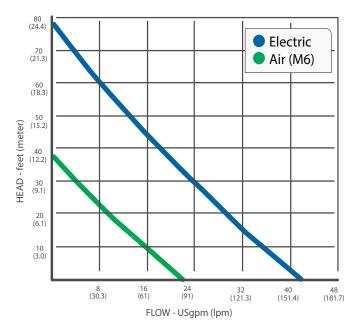
Acids, bases, solvents[†], flammables[†], water treatment chemicals, cleaners, plating solutions, kidney dialysis solutions, sanitary, diesel exhaust fluid (DEF)/AdBlue

PF SERIES SPECIFICATIONS

- Maximum flow*: up to 40 gpm (151 lpm)
- Maximum head*: up to 80 ft (24 m)
- Maximum temperature:

-Polypropylene	160° F (71° C)
-PVDF**	120° F (49°C)
-316SS	220° F (105°C)

- Maximum specific gravity: 1.8
- Maximum viscosity: up to 2,000 cP with electric motor up to 330 cP with air motor
- 2 in (5.1 cm) tube diameter
- 1 in (2.5 cm) discharge
- Pat. US D658, 274S; Pat. ZL 201130042124.3; OHIM Pat. 001839002-0003



See MOTOR DATA pages for applicable motor models.

When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

*All testing performed with water at 68° F (20° C) in a full container with the discharge barb at maximum opening. Actual performance may vary by +/- 10%.

**PFV-72 = 115° F (46° C) maximum temperature

Actual performance will decrease with increased fluid viscosity and specific gravity.



TUBE LENGTHS

27" (69cm), **40**" (102cm), **48**" (122cm), **60**" (152cm), **72**" (183cm)



THREADED FOOT Heavy duty threaded foot

prevents breakage.



PUMP	CONSTRUCTION MATERIALS					
MODEL	OUTER TUBE	INTERNALS				
PFM	Polypropylene	316SS, PP, FKM, PVDF. PTFE				
PFP	Polypropylene	Alloy 625, PP, FKM, PVDF, PTFE				
PFV	PVDF	Alloy 625, FKM, PVDF . PTFE				
PFS	316SS	316SS, FKM, ETFE, PTFE				

EF SERIES PUMP TUBES

Sealless, Best Value

This pump provides an economical choice for light duty transfer. Ideal replacement for hand pumps. ATEX certified options available.



APPLICATIONS

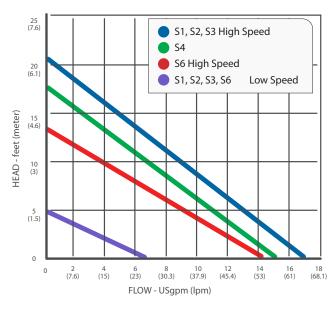
Light acids and bases, solvents[†], flammables[†], plating solutions, sodium hypochlorite, cleaners, coolants, diesel exhaust fluid (DEF)/AdBlue

EF SERIES SPECIFICATIONS

- Maximum flow*: up to 17 gpm (64.4 lpm)
- Maximum head*: up to 20 ft (6.1 m)
- Maximum temperature:

-Polypropylene	150° F (66°C)
-PVDF	160° F (71° C)
-316SS	212° F (100°C)

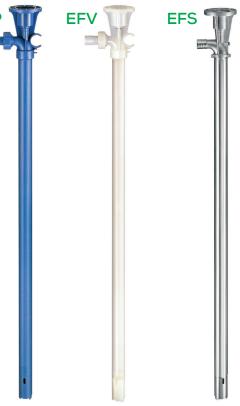
- Maximum** specific gravity: 1.6
- Maximum^{**} viscosity: 300 cP with electric/air motor 100 cP with 12V motor
- 1-1/4 in (3.2 cm) tube diameter (EFP, EFS)
 1-5/16 in (3.3 cm) tube diameter (EFV)
- 3/4 in (1.9 cm) discharge
- Pat. US D658,273 S; Pat. US D657,849 S; Pat. ZL 201130042121.X; Pat. ZL 201130042107.X; OHIM Pat. 001839002-0002; OHIM Pat.001839002-0001



See MOTOR DATA pages for applicable motor models.

†When pumping flammables or combustibles, use air drive motors on stainless steel tubes with static protection kit.

*All testing performed with water at 68°^c (20°C). Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity. **Maximum specific gravity is dependent on fluid viscosity; maximum fluid viscosity is dependent upon specific gravity.



TUBE LENGTHS

EFP/EFV: 16" (41cm), 27" (69cm), 40" (102cm), 48" (122cm), 54" (137 cm) EFS: 16" (41cm), 27" (69cm), 40" (102cm), 48" (122cm)



BUILT-IN STRAINER

Prevents solids from entering the tube and damaging the pump.



PUMP	CONSTRUCTION MATERIALS						
MODEL	OUTER TUBE	INTERNALS					
EFP	Polypropylene	316SS, FKM, PTFE, PP					
EFV	Pure PP/PVDF	Alloy 625, FKM, PTFE, ETFE, PP					
EFS	316SS	316SS, FKM, PTFE, ETFE					

TT SERIES PUMP TUBES

Sealed, Medium Viscosity/Flow

Sealed pump with PTFE screw-type lifting compressors. Ideal for liquids containing small particulate or solvents. Model STTS constructed of FDA-compliant materials.

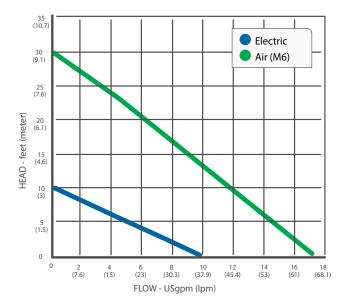


APPLICATIONS

Inks, paints, solvents[†], sanitary, sodium hypochlorite, food products

TT SERIES SPECIFICATIONS

- Maximum flow^{*}: up to 16 gpm (61 lpm)
- Maximum head*: up to 30 ft (9 m)
- Maximum temperature: 150° F (66° C)
- Maximum specific gravity: 1.8
- Maximum viscosity: up to 500 cP with electric motor up to 2,000 cP with air motor
- 1-1/2 in (3.8 cm) tube diameter (TTS, STTS) 1-5/8 in (4.1 cm) tube diameter (TTC)
- 1 in (2.5 cm) discharge



See MOTOR DATA pages for applicable motor models.

†When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

*All testing performed with water at 68°F (20°C). Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.

TTS	STTS

TUBE LENGTHS

TTC, TTS - 27" (69cm), 40" (102cm), 48" (122cm) STTS - 40" (102cm)



BOTTOM BEARING/STRAINER PTFE bottom bearing/strainer prevents potentially damaging

Designed to allow passage



PUMP MODEL	CONSTRUCT	ION MATERIALS
FOMF MODEL	OUTER TUBE	INTERNALS
TTS	316SS	316SS, PTFE
TTC	CPVC	Alloy 625, PTFE
STTS	316SS	316SS, PTFE

BT/HVDP PUMP TUBES

High Viscosity/High Head

BT Series - High viscosity sealed design with PTFE screw-type lifting compressors for liquids up to 15,000 cP

HVDP Series - Progressive cavity, positive displacement, mechanically sealed pump for high viscosity liquids up to 20,000 cP (HR model - *pictured*) or 100,000 cP (LR model). FDA-compliant material options.



APPLICATIONS

Oils, resins, solvents[†], waxes, adhesives, gear lube, glycerin, silicone, lotions, polymers, honey, juice concentrate, hair and bath gel, corn syrup, etc.

BT & HVDP SERIES SPECIFICATIONS

- Maximum flow*: up to 10 gpm (38 lpm)
- Maximum head*:

BTS 200 ft (61 m) HVDP over 300 ft (91 m)

- Maximum temperature: BTS 200° F (93° C) HVDP 180° F (82° C)
- Maximum specific gravity: 1.8
- Maximum viscosity:

BTS FLOW DATA

- BTS
 15,000 cP

 HVDP-HR
 20,000 cP

 HVDP-LR
 100,000 cP
- 2 in (5.1 cm) tube diameter
- BTS discharge: 1-1/2 in (3.8 cm) HVDP discharge: 1-1/2 in (3.8 cm) or 2 in (5 cm)

BTS-1 Hp 180 BTS-2 Hp **160** BTS-3 Hp **140** (43) HEAD - Feet (meter) 15.000 cF 120 (37) 7,000 cF **100** (30 **80** (24) 800 cP **60** (18) **40** (12) **20** (6) 0 **2** (8) 0 **1** (4) 3 (11) **4** (15) 5 (19) 6 (23) 7 (27) **8** (30) 9 10 (34) (38) Flow - USgpm (lpm)

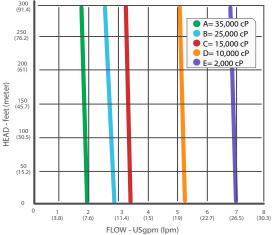
HVDP FLOW DATA

BT SCREW-TYPE

of small solids.

LIFTING COMPRESSOR

Designed to allow passage



PUMP MODEL

BTS

HVDP

HVDP PROGRESSIVE CAVITY

POSITIVE DISPLACEMENT

Designed for high viscosities.



UNIQUE CAMLOCK FEATURE For quick disassembly of the HVDP.

INTERNALS

PTFE, 316SS

316SS, Buna N, FKM, PTFE

CONSTRUCTION MATERIALS

See MOTOR DATA pages for applicable motor models.

tWhen pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

*Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.

TUBE LENGTHS BTS: 40"(102cm) HVDP: 27"(69cm), 40"(102cm), 48"(122cm)

BTS

OUTER TUBE

316SS

316SS

TB SERIES PUMP TUBES

Sealed, Lightweight Economy Drum Pump

Lightweight pumps suitable for low to medium viscosity mild corrosives, solvents, and chemicals. Fits smaller bung openings.



APPLICATIONS

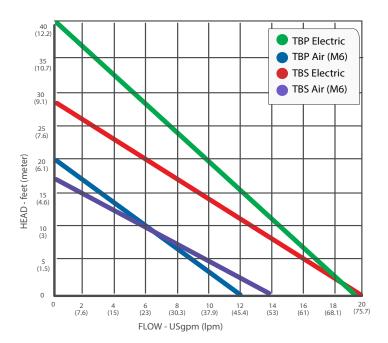
Acids, bases, solvents[†], water treatment chemicals, bleach, swimming pool chemicals, cleaners

TB SERIES SPECIFICATIONS

- Maximum flow*: up to 20 gpm (75.7 lpm)
- Maximum head*:

TBS 28ft (8.53 m) TBP 39.5 (12 m)

- Maximum temperature: 150° F (66° C)
- Maximum specific gravity: 1.4
- Maximum viscosity: 200 cP
- 1-1/2 in (3.8 cm) tube diameter (TBS) 1-21/32 in (4.1 cm) tube diameter (TBP)
- 1 in (2.5 cm) discharge





TUBE LENGTHS TBS - 40" (102cm) TBP - 27" (69cm), 40" (102cm), 48" (122cm)



The TBP variable flow barb allows flow to be increased

by removing steps on barb.

PUMP	CONSTRUCTION MATERIALS					
MODEL	OUTER TUBE	INTERNALS				
TBS	316SS	316SS, PTFE				
TBP	Pure polypropylene	Pure PVDF, Alloy 625, PTFE				

See MOTOR DATA pages for applicable motor models.

†When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

*All testing performed with water at 68°F (20°C). Actual performance can vary by +/- 10%. Actual performance will decrease with increased fluid viscosity and specific gravity.

TM SERIES PUMP MIXER

Sealed, Light/Medium Viscosity

Sealed mixer with 4-blade turbine mixing/blending capability. Ideal for mixing drums with settled materials.



APPLICATIONS

Dyes, inks, paints, stains, mild corrosives, solvents $^{\dagger},$ flammables †

TM SERIES SPECIFICATIONS

- Maximum circulation: 14 gpm (53 lpm)
- Maximum temperature: 200° F (93°C)
- Maximum specific gravity: 1.8
- Maximum viscosity: 1000 cP
- 2 in (5.1 cm) tube diameter
- 1 in (2.5 cm) discharge
- Fluid is pulled into the top of the mixer tube and is discharged under pressure out of the bottom in a continuous blending cycle.
- Top-to-bottom mixing action allows rapid suspension of settled solids.





TUBE LENGTHS

TMS

TURBINE

Provides high intensity mixing and suspension of settled solids.



See MOTOR DATA pages for applicable motor models.

†When pumping flammables or combustibles, use explosion proof electric or air drive motors on stainless steel tubes with static protection kit.

PUMP	CONSTRUCTION MATERIALS					
MODEL	OUTER TUBE	INTERNALS				
TMS	316SS	316SS, PTFE				

MOTOR DATA For Drum/Barrel Pumps











M3V, M5V, M5V-US, M3V-UK S1, S2, S3, S6

M3TV, M5TV, M7TV, M8TV

M15, M16, M17

M73, M74, M75, M76

ODP (OPEN DRIP PROOF), SPLASHPROOF, IP24 MOTORS

			INPUT	OUTPUT				
MODEL	DESCRIPTION	CERTIFICATION	ELECTRICAL REQUIREMENTS	w	w	RPM	MAXIMUM VISCOSITY cP	PUMP SERIES
M3V	Quick connects to pump without tools.	QPS	115VAC/50-60 Hz	650	400	3,500-10,000	500	PF, TB
M5V	Downdraft cooling system and double wall housing. Continuous duty, variable speed. 12 ft. (3.5 m) cord and integral circuit breaker included.	CE	230VAC/50-60 Hz	650	400	3.500-10,000	500	PF, TB
M5V-US		CE	230VAC/50-60 Hz	650	400	3,500-10,000	500	PF, TB
M3V-UK		CE	115VAC/50-60 Hz	650	400	3,500-10,000	500	PF, TB
S1	Ergonomic, lightweight design with downdraft cooling. Continuous duty,	QPS	115VAC/60 Hz	230	110	8,000 / 14,000	300	EF
S2	dual speed, double insulated. 12 ft.	05	230VAC/50-60 Hz	230	110	8,000 / 14,000	300	EF
S3	 (3.5 m) cord and manual reset circuit breaker included. 	CE	115VAC/50-60 Hz	230	110	8,000 / 14,000	300	EF
S6*	Lightweight, cordless, dual speed, built- in rechargeable li-ion battery, overload protection. Charging jack w/ flip cover.	CE	12V (10.8V w/ work load)	150	100	8,000/12,000	100	EF

TEFC (TOTALLY ENCLOSED FAN COOLED) MOTORS

MODEL DESCRIPTION	DESCRIPTION	CERTIFICATION	ELECTRICAL	INPUT	OUTPUT	RPM	MAXIMUM	PUMP
MODEL	DEL DESCRIPTION CERTIFICATION REQUIREM	REQUIREMENTS	W	W	КРМ	VISCOSITY cP	SERIES	
M3TV	IP55. 12 ft. (3.5 m) cord w/ plug,	QPS	115VAC/60 Hz	1000	680	0-12,000	2000	PF, TB
M5TV	downdraft cooling, variable speed,	CE	230VAC/50-60 Hz	1000	680	0-12,000	2000	PF, TB
M7TV	solid state overload protection, zero voltage release. & quick connection to pump without tools.	QPS	115VAC/60 Hz	450	250	0-6,000	500	TT, TM
M8TV		CE	230VAC/50-60 Hz	450	250	0-6,000	500	TT, TM
M15	IP54. A 12 ft. (3.5 m) cord is provided.	Independent	230/460V/60 Hz	Varies by mfg.	0.75 kW	3,450	800	BT
M16		Testing Laboratory	230/460V/60 Hz		1.5 kW	1,725	7,000	BT
M17		Approval	230/460V/60 Hz		2.2 kW	1,725	15,000	BT
M73	IP55. 12 ft. (3.5 m) cord with plug. Sin-	QPS	115V/1ph/60 Hz	1000 W	680 W	12,000	10,000	HVDP
M74	gle speed with manual circuit breaker.	CE	230V/1ph/50-60 Hz	1000 W	680 W	12,000	10,000	HVDP
M75	IP55. 12 ft. (3.5 m) cord with plug. Variable speed, solid state overload	QPS	115V/1ph/60 Hz	1000 W	680 W	0-12,000	20,000	HVDP
M76	protection, zero voltage release, downdraft cooling & quick connection to pump w/out tools.	CE	230V/1ph/50-60 Hz	1000 W	680 W	0-12,000	20,000	HVDP

*U.S. Patent No. 9,273,697 Note: Maximum viscosity can vary by pump series.

Use the handy online Pump Selector at www.finishthompson.com for help choosing a pump.



MOTOR DATA For Drum/Barrel Pumps











M3XV, M5XV, MX7V, M8XV

M6, M6X

M18, M19, M20

M65, M66

S4

EXPLOSION PROOF MOTORS

			ELECTRICAL	INPUT	OUTPUT		MAXIMUM	PUMP
MODEL DESCRIPTION	DESCRIPTION	CERTIFICATION	REQUIREMENTS	w	w	RPM	VISCOSITY cP	SERIES
M3XV		QPS	115VAC/60 Hz	1000	680	0-12,000	2000	PF
M7XV	Continuous duty, IP55. 12 ft. (3.5 m) cord. M3XV & M5XV sold with plug. M7XV & M8XV sold without plug. Variable speed, solid state overload protection, zero voltage release, down- draft cooling & quick connection to pump w/out tools.	QPS	115VAC/60 Hz	450	250	0-6,000	500	TT, TM
M5XV		CE/ATEX Ex II 2G Ex db ib IIB T5 Gb	230VAC/50-60 Hz	1000	680	0-12,000	2000	PF
M5XV-HT		CE/ATEX Ex II 2G Ex db ib IIB T4 Gb	230VAC/50-60 Hz	1000	680	0-12,000	2000	PF
M8XV		CE/ATEX Ex II 2G Ex db ib IIB T5 Gb	230VAC/50-60 Hz	450	250	0-6,000	500	TT, TM

AIR MOTORS *

MODEL	DESCRIPTION	CERTIFICATION	AIR REQUIREMENTS	OUTPUT W	RPM	MAXIMUM VISCOSITY cP	PUMP SERIES
M6/M6A	Lightweight, easy to handle yet powerful. Operates from customer-supplied compressed air source. Variable speed via supplied control valve. Motors are provided with muffler and control valve.	CE/ATEX II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T135°C Db +1°C≤T _{amb} ≤40°C [‡]	80-100 psi @15-32 cfm	400	300-9,000	1,500 [†]	PF, TT, TB
M6X/M6XA		CE/ATEX II 2G Ex h IIC T4 Gc II 2D Ex h IIIC T135°C Dc +1°C≤T _{amb} ≤40°C [†]	80-100 psi @15-32 cfm	600	300-6,000	2,000†	PF, TT, TB, TM
M18		CE	100 psi @ 40-70 cfm	750	300-3,000	800	BT
M19			100 psi @ 80-120 cfm	1500	300-3,000	7,000	BT
M20			100 psi @ 120-170 cfm	2200	300-2,500	15,000	BT
M65		CE	100 psi @ 25cfm	560	300-3,000	15,000	HVDP
M66			100 psi @ 70 cfm	1000	300-3,000	100,000	HVDP
S4/S4A		CE/ATEX II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T135°C Db +1°C≤T _{amb} ≤40°C [†]	40 psi @ 27 cfm	400	300 -11,000	300	EF

*An air motor is a non-electrical device which means the possibility of explosion from igniting flammables or combustibles is reduced.

\$M6A/M6XA/S4A motor models <u>only</u> are ATEX certified. M6/M6X/S4 models are CE certified. Maximum viscosity for PF Series is 330 cP. \$Maximum viscosity can vary by pump series.

Note: Air motor performance will depend upon user's compressor and system setup.

ACCESSORIES

Flow Meters

- Dispense precise amount of fluids from containers.
- Handles chemicals and corrosive liquids.
- Large LCD display in GPM or LPM, 20 cP maximum +/-1% accuracy and repeatability.
- All models are factory calibrated.
- Some models may be field calibrated.
- Batch control versions available.
- Corrosion resistant polypropylene or PVDF.
- Engineered connections for fast assembly to PFM, PFP and PFV drum pumps.





Discharge Tubing

Flexible tubing connects to the pump discharge. Available in PVC, reinforced PVC and special EPDM for Diesel Exhaust Fluid applications.

Strainers

Strainers attach to pump tubes preventing foreign objects from entering the pump.





Wall Mount Bracket

Allows pump to be stored in an upright position.

Drum Adapters

Secures the pump tube in the barrel's bung opening. Fits standard 2" NPT bung opening. Available in polypropylene, galvanized or stainless steel.



Chargers

Double insulated with LED charge status indicator for recharging S6 battery motor. Available in 115V with US plug, 230V with Euro plug or 12V for use in most vehicle outlets.



Static Protection Kit

Increases safety when transferring flammable or combustible liquids. Kit includes cross-linked polyethylene grounded hose, ground wire and clamps.





Air Hose

15 feet (4.6m) air hose assembly sold separately.

Filter/ Lubricator Assembly



Conditions compressed air by removing free moisture and solids. Also lubricates the air for longer air motor life.



Nozzles provide a convenient way to control liquid flow. Available in polypropylene, aluminum and stainless steel.

OTHER GREAT PRODUCTS FROM FINISH THOMPSON



UC SERIES ANSI DIMENSIONAL MAGNETIC DRIVE PUMPS



DB & SP SERIES

PREMIUM MAGNETIC DRIVE SEALLESS CENTRIFUGAL PUMPS



AP SERIES SEALED STAINLESS STEEL CENTRIFUGAL PUMPS



VKC SERIES VERTICAL MAGNETIC DRIVE SEALLESS

CENTRIFUGAL PUMPS



GP SERIES SEALED PLASTIC CENTRIFUGAL PUMPS



MSKC SERIES MULTI-STAGE MAGNETIC

DRIVE SEALLESS CENTRIFUGAL PUMPS



PREMIUM AODD PUMPS



FINISH THOMPSON INC. - HEADQUARTERS

921 Greengarden Road | Erie, PA 16501 800.934.9384 | ph 814.455.4478 | fx 814.455.8518 email fti@finishthompson.com FINISH THOMPSON GmbH- EUROPE CENTER

Otto-Hahn-Strasse 16 | Maintal, D-63477 Germany 49 (0)6181-90878-0 | fx 49 (0)6181-90878-18 email fti@finishthompson.com