PORTABLE FLUID TRANSFER SOLUTIONS
DRUM/BARREL PUMPS





PUMPING SOLUTIONS AROUND THE WORLD

FINISH THOMPSON INC.

finishthompson.com

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

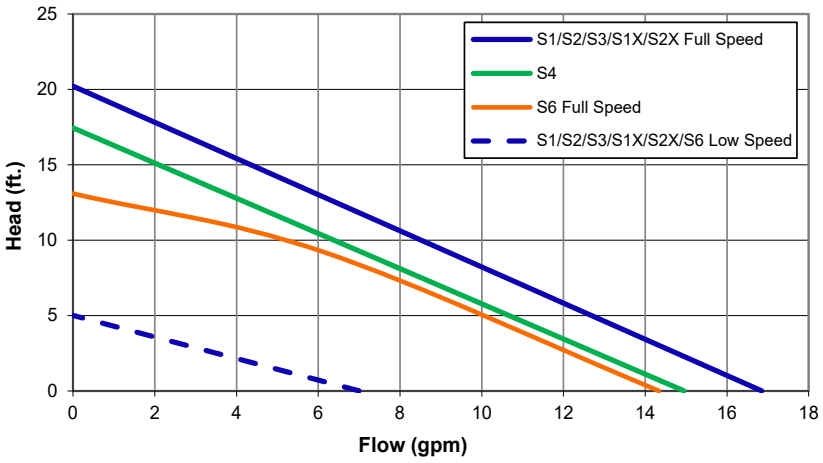
TUBE LENGTHS

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

AXIAL FLOW IMPELLER

Designed to produce higher flow rates.





See **MOTOR DATA** pages for applicable motor models.

BUILT-IN STRAINER

Prevents solids from entering the tube and damaging the pump.



PUMP MODEL	CONSTRUCTION MATERIALS	
	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

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

**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.*

***Maximum specific gravity is dependent on fluid viscosity; maximum fluid viscosity is dependent upon specific gravity.*

SF SERIES PUMP TUBES

Sealless, High Performance

Dual impeller options provides either high flow or high head with 41mm tube diameter for smaller bung openings.

- *Polypropylene (PP), Pure PVDF, Pure PP/PVDF, 316SS*
- *Interchangeable with motors*
- *Integral strainer on high-flow versions*
- *Up to 1200 cP*

APPLICATIONS

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

SF SERIES SPECIFICATIONS

- Maximum flow*: up to 37 gpm (140 lpm)
- Maximum head*: up to 83 ft (25 m)
- Maximum temperature:
  - -Polypropylene 175° F (79° C)
  - -PVDF** 140° F (60° C)
  - -316SS 212° F (100° C)
- Maximum specific gravity: 2.0
- Maximum viscosity: up to 1,200 cP
- 1.6 in (4.1 cm) tube diameter
- 1 in (2.5 cm) discharge

TUBE LENGTHS

27" (69cm), **40"** (102cm), **48"** (122cm), **54"** (137cm), **60"** (152cm), **72"** (183cm)

SFP/SFM
SFM-DEF



SFV
SFVV



SFS



Discharge Spouts

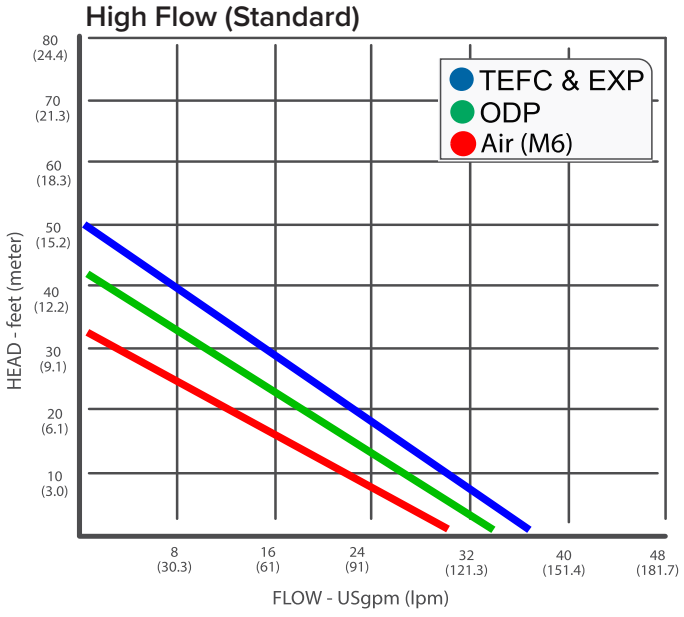


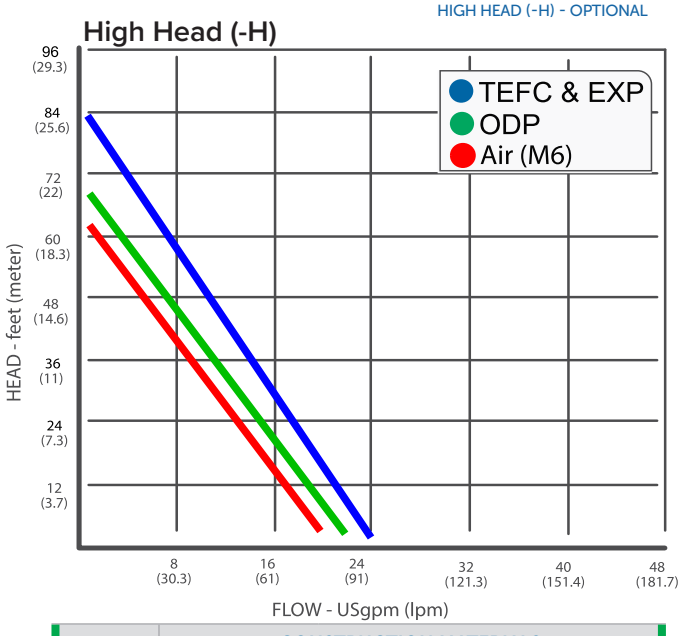
IMPELLERS

HIGH FLOW - STANDARD



HIGH HEAD (-H) - OPTIONAL





See **MOTOR DATA** pages for applicable motor models.

PUMP MODEL	CONSTRUCTION MATERIALS	
	OUTER TUBE	INTERNALS
SFM (-H)	Polypropylene	316SS, PP, FKM, PTFE
SFP (-H)	Polypropylene	Alloy 625, PP, FKM, PTFE
SFV (-H)	Pure PP/ PVDF	Alloy 625, PP, FKM, ETFE, PTFE
SFVV (-H)	Pure PVDF	Alloy 625, PVDF, FKM, ETFE, PTFE
SFS (-H)	316SS	316SS, FKM, ETFE, PTFE

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

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

***SFVV54(-H), SFVV60(-H), SFVV72(-H) = 115° F (46° C) maximum temperature*

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

PF SERIES PUMP TUBES

Sealless, High Performance

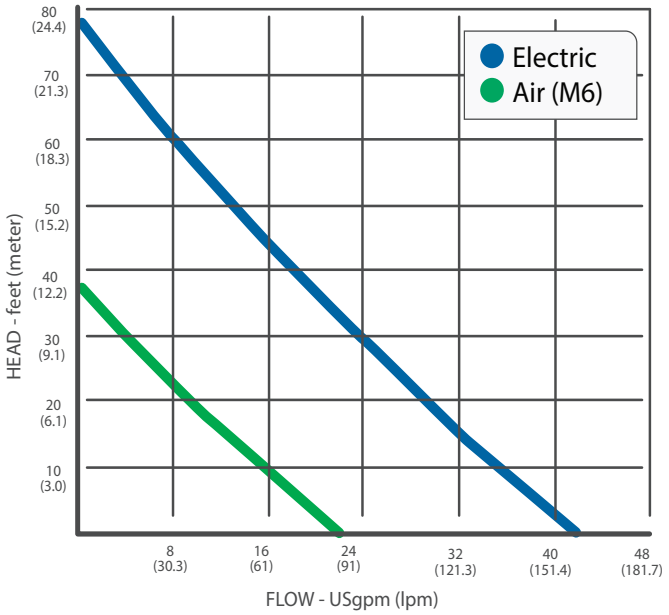
Unique double suction impeller provides high flow and high head. Sealless design improves reliability. Model PFS offers FDA-compliant material and ATEX certified options.

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 68º F (20º 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.

PFM/PFP PFV PFS



TUBE LENGTHS

27" (69cm), **40"** (102cm), **48"** (122cm), **54"** (137cm), **60"** (152cm), **72"** (183cm)



DOUBLE-SUCTION CENTRIFUGAL IMPELLER

Double suction impeller provides both high flow rates and high discharge pressure.

THREADED FOOT

Heavy duty threaded foot prevents breakage.



PUMP MODEL	CONSTRUCTION MATERIALS	
	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

TT SERIES PUMP TUBES

Sealed, Medium Viscosity/Flow

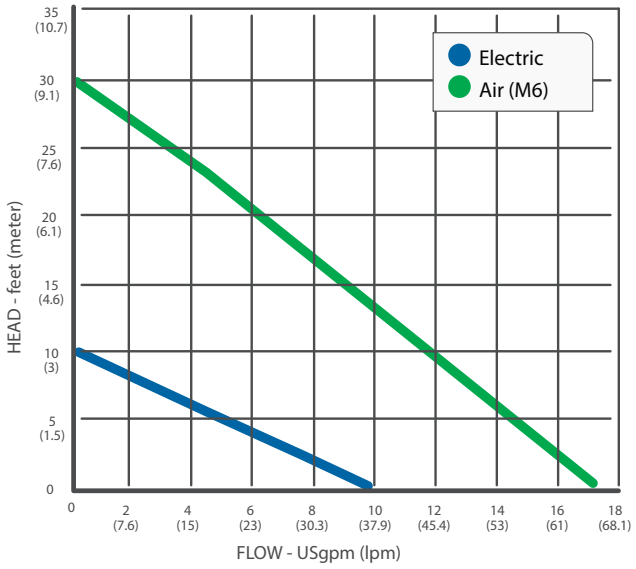
Sealed pump with PTFE screw-type lifting compressors. Ideal for liquids containing small particulate or solvents. Model STTS constructed of FDA-compliant materials.

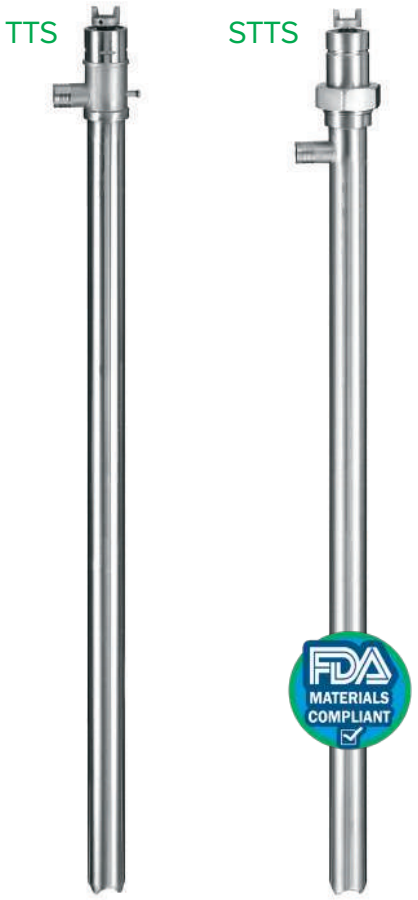
APPLICATIONS

Inks, paints, solvents†, sanitary, food products

TT SERIES SPECIFICATIONS

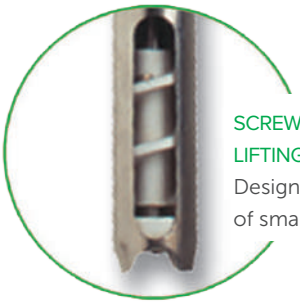
- Maximum flow*: up to 16 gpm (61 lpm)
- Maximum head*: up to 30 ft (9 m)
- Maximum temperature: 150° F (66° C)
- Maximum specific gravity: 1.8
- Maximum viscosity: up to 50 cP with electric motor
  up to 2,000 cP with air motor
- 1-1/2 in (3.8 cm) tube diameter (TTS, STTS)
- 1 in (2.5 cm) discharge





TUBE LENGTHS

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



SCREW-TYPE LIFTING COMPRESSOR

Designed to allow passage of small solids.



BOTTOM BEARING/STRAINER

PTFE bottom bearing/strainer prevents potentially damaging large solids from entering the pump.

See **MOTOR DATA** pages for applicable motor models.

PUMP MODEL	CONSTRUCTION MATERIALS	
	OUTER TUBE	INTERNALS
TTS	316SS	316SS, PTFE
STTS	316SS	316SS, PTFE

†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.*

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.

BTS



HVDP



APPLICATIONS

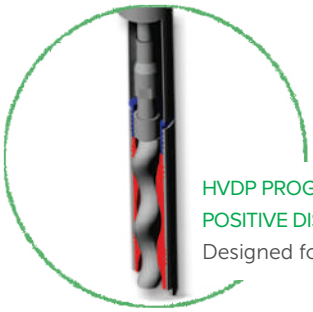
Oils, resins, solvents†, waxes, adhesives, gear lube, glycerin, silicone, lotions, polymers, honey, juice concentrate, hair and bath gel, corn syrup, etc.

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 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)



BT SCREW-TYPE LIFTING COMPRESSOR
Designed to allow passage of small solids.

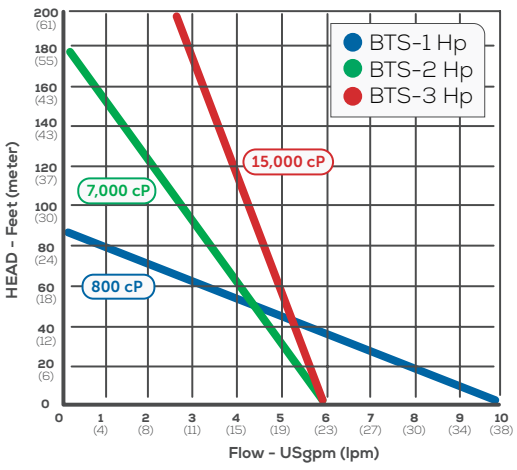


HVDP PROGRESSIVE CAVITY POSITIVE DISPLACEMENT
Designed for high viscosities.

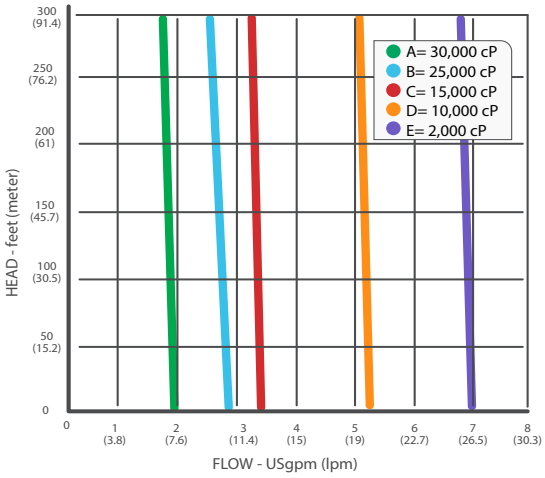
TUBE LENGTHS

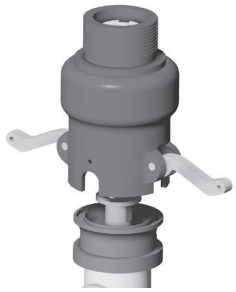
BTS: 40"(102cm)
IVDP: 27"(69cm), **40"**(102cm), **48"**(122cm)

BTS FLOW DATA



HVDP FLOW DATA





UNIQUE CAMLOCK FEATURE
For quick disassembly of the HVDP.

See **MOTOR DATA** pages for applicable motor models.

PUMP MODEL	CONSTRUCTION MATERIALS	
	OUTER TUBE	INTERNALS
BTS	316SS	PTFE, 316SS
HVDP	316SS	316SS, Buna N, FKM, PTFE

†When 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.*

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†, flammables†

TM SERIES SPECIFICATIONS

- Maximum circulation: 14 gpm (53 lpm)
- Maximum temperature: 200° F (93° C)
- Maximum specific gravity: 1.8
- Maximum viscosity: 1500* cP
- 2 in (5.1 cm) tube diameter
- 1 in (2.5 cm) discharge

*Dependent on motor used.

TMS



TUBE LENGTHS

40" (102cm)

- 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.





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 MODEL	CONSTRUCTION MATERIALS	
	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

MODEL	DESCRIPTION	CERTIFICATION	ELECTRICAL REQUIREMENTS	INPUT W	OUTPUT W	RPM	MAXIMUM VISCOSITY cP	PUMP SERIES
M3V	Quick connects to pump without tools. Downdraft cooling system and double wall housing. Continuous duty, variable speed. 12 ft. (3.5 m) cord and integral circuit breaker included.	QPS	115VAC/50-60 Hz	650	400	3,500-10,000	500/2,000	PF/SF
M5V		CE	230VAC/50-60 Hz	650	400	3.500-10,000	500/2,000	PF/SF
M5V-US		CE	230VAC/50-60 Hz	650	400	3,500-10,000	500/2,000	PF/SF
M3V-UK		CE	115VAC/50-60 Hz	650	400	3,500-10,000	500/2,000	PF/SF
S1	Ergonomic, lightweight design with downdraft cooling. Continuous duty, dual speed, double insulated. 12 ft. (3.5 m) cord and manual reset circuit breaker included.	QPS	115VAC/60 Hz	230	110	8,000 / 14,000	300	EF
S2		CE	230VAC/50-60 Hz	230	110	8,000 / 14,000	300	EF
S3			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	CERTIFICATION	ELECTRICAL REQUIREMENTS	INPUT W	OUTPUT W	RPM	MAXIMUM VISCOSITY cP	PUMP SERIES
M3TV	IP55. 12 ft. (3.5 m) cord w/ plug, downdraft cooling, variable speed, solid state overload protection, zero voltage release. & quick connection to pump without tools.	QPS	115VAC/60 Hz	1000	680	0-12,000	1,200/2,000	SF/PF
M5TV		CE	230VAC/50-60 Hz	1000	680	0-12,000	1,200/2,000	SF/PF
M7TV		QPS	115VAC/60 Hz	450	250	0-6,000	50/ 100	TT/ TM
M8TV		CE	230VAC/50-60 Hz	450	250	0-6,000	50/ 100	TT/ TM
M15	IP54. A 12 ft. (3.5 m) cord is provided.	Independent Testing Laboratory Approval	230/460V/60 Hz	Varies by mfg.	0.75 kW	3,450	800	BT
M16			230/460V/60 Hz		1.5 kW	1,725	7,000	BT
M17			230/460V/60 Hz		2.2 kW	1,725	15,000	BT
M73	IP55. 12 ft. (3.5 m) cord with plug. Single speed with manual circuit breaker.	QPS	115V/1ph/60 Hz	1000 W	680 W	12,000	10,000	HVDP
M74		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 protection, zero voltage release, downdraft cooling & quick connection to pump w/out tools.	QPS	115V/1ph/60 Hz	1000 W	680 W	0-12,000	20,000	HVDP
M76		CE	230V/1ph/50-60 Hz	1000 W	680 W	0-12,000	20,000	HVDP

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

ONLINE PUMP SELECTOR DRUM PUMPS

**U.S. Patent No. 9,273,697*

Note: Maximum viscosity can vary by pump series.

MOTOR DATA
For Drum/Barrel Pumps



M3XV, M5XV, MX7V, M8XV



S1X, S2X, S2X-HT



M6, M6X



M18, M19, M20



M65, M66



S4

EXPLOSION PROOF MOTORS

MODEL	DESCRIPTION	CERTIFICATION	ELECTRICAL REQUIREMENTS	INPUT W	OUTPUT W	RPM	MAXIMUM VISCOSITY cP	PUMP SERIES
M3XV	Continuous duty, IP55. 12 ft. (3.5 m) cord without plug. Variable speed, solid state overload protection, zero voltage release, down draft cooling & quick connection to pump without tools.	QPS Class I, Div. 1, Gr D, T4	115VAC/60 Hz	1000	680	0-12,000	1,200/2,000	SF/PF
M7XV		QPS Class I, Div. 1, Gr D, T4	115VAC/60 Hz	450	250	0-6,000	50/ 100	TT/TM
M5XV+		CE/ATEX/IECEx Ex ll 2G Ex db ib IIB T5 Gb	230VAC/50-60 Hz	1000	680	0-12,000	1,200/2,000	SF/PF
M5XV-HT+		CE/ATEX/IECEx Ex ll 2G Ex db ib IIB T4 Gb -20°C≤T_{amb}≤60°C	230VAC/50-60 Hz	1000	680	0-12,000	1,200/2,000	SF/PF
M8XV		CE/ATEX/IECEx Ex ll 2G Ex db ib IIB T5 Gb	230VAC/50-60 Hz	450	250	0-6,000	50/ 100	TT/TM
S1X	Continuous duty, IP55, 12 ft. (3.5 m) cord without plug. Dual speed, thermal and current overload protection, rugged double wall aluminum motor housing.	QPS Class I, Div. 1, GrD, T3	115VAC/60 Hz	210	100	9,000/14,000	100/300	EF
S2X+		CE/ATEX/IECEx Ex II 2G Ex db IIB T5 Gb	230VAC/50-60 Hz	210	100	9,000/14,000	100/300	EF
S2X-HT+		CE/ATEX/IECEx ExII 2G Ex db IIB T4 Gb -20°C ≤T_{amb}≤60°C	230VAC/50-60Hz	210	100	9,000/14,000	100/300	EF

+ Above ATEX motors are not for use in North America

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	330	PF
						1,000	TM
						1,200	SF
						1,500	TT
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	330	PF
						1,500	TM
						2,000	TT
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 @ 25 cfm	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 only are ATEX certified. M6/M6X/S4 models are CE certified.
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, LPM, or CMH, 20 cP maximum +/-0.5% accuracy and repeatability.
- Can easily be field calibrated.
- Corrosion resistant Polypropylene or PVDF.
- Engineered connections for fast assembly to PF, SF, and EF series drum pumps.





Discharge Tubing

Flexible tubing connects to the pump discharge. Available in PVC, Reinforced PVC, EPDM for Diesel Exhaust Fluid (DEF), FDA Compliant Buna-N, Chemical Grade Polyethylene (UHMWPE), and Conductive Polyethylene for flammable 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, BSP, or Buttress bung opening. Available in galvanized steel, stainless steel, carbon filled polypropylene, and PVC.



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

Nozzles provide a convenient way to control liquid flow. Available in Polypropylene, PVDF, 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



MSDB SERIES
PREMIUM MULTI-STAGE
MAGNETIC DRIVE
SEALLESS CENTRIFUGAL
PUMPS



ONLINE PUMP SELECTOR PROGRAM IS DESIGNED TO ALLOW YOU TO EASILY SEARCH FINISH THOMPSON'S COLLECTION OF CENTRIFUGAL AND DRUM PUMPS TO FIND THE PRODUCTS THAT MEET APPLICATION CRITERIA.

finishthompson.com

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