

NISUS (Thailand) Co.,Ltd.
Tel. 0-2898-8901-3 , Fax. 0-2898-7745
www.nisusthailand.co.th
e-mail : info@nisusthailand.co.th



FINISH THOMPSON INC.

DRUM/BARREL PUMPS






FINISH THOMPSON INC.

PUMP TUBE DATA

PF Series Pump Tubes

Sealless, High Performance

Unique double suction impeller provides high flow and high head. Handles acids, caustics, chemicals and flammables[†].

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



Construction Specifications

| Pump Series | Construction Materials | | Tube Dia. | Max. Temp.* | |
|-------------|------------------------|-------------------------------|-----------|-------------|-----|
| | Outer Tube | Internals | in (cm) | °F | °C |
| PFM | Polypro | 316 SS, Polypro, FKM, PVDF | 2 (5.1) | 160 | 71 |
| PFP | Polypro | Alloy 625, Polypro, FKM, PVDF | | 120 | 49 |
| PFV* | PVDF | Alloy 625, FKM, PVDF | | 220 | 105 |
| PFS | 316SS | 316SS, FKM, ETFE | | | |

*PFV-72 = 115°F (46°C)

Tube Lengths

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

Performance Data

| Pump Series | Hose Size | Maximum Flow** | | Maximum Head** | | Max. Sp Gravity | Max. Viscosity - cP | |
|-----------------------------------|-----------|--------------------|---------------|-----------------|------------|-----------------|---------------------|-----|
| | | Electric gpm (lpm) | Air gpm (lpm) | Electric ft (m) | Air ft (m) | | Electric | Air |
| PFP, PFM PFV, PFS [†] | 1" | 40 (151) | 22 (83) | 80 (24) | 38 (11.6) | 1.8 | 2,000 | 330 |

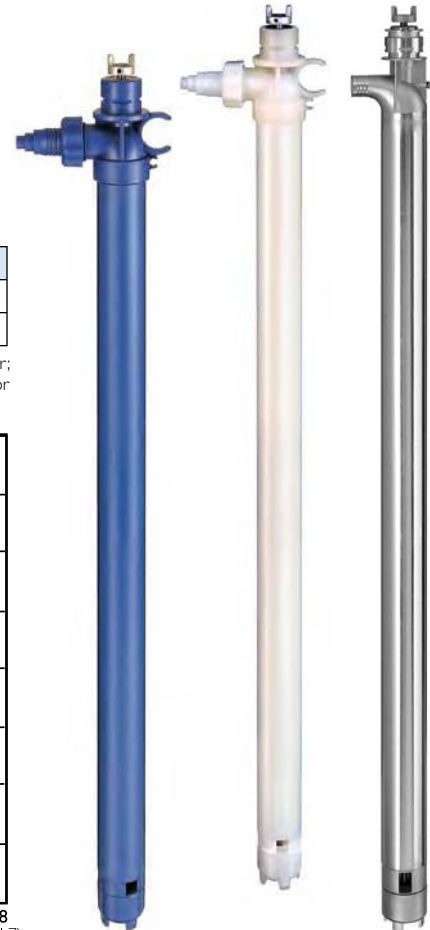
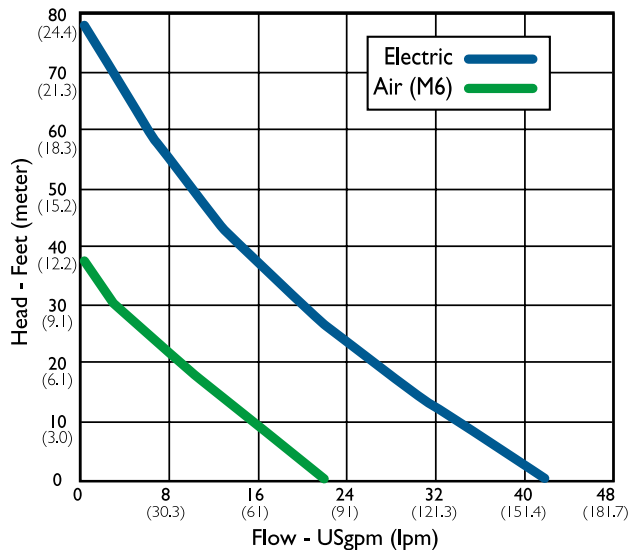
Viscosity Data

| Viscosity (cP) | 100 | 250 | 500 | 1,000 | 2,000 |
|-----------------------|---------|---------|---------|---------|--------|
| Max Flow gpm (lpm) | 24 (91) | 16 (61) | 11 (42) | 7 (26) | 4 (15) |
| Max Head feet (meter) | 52 (16) | 51 (16) | 48 (15) | 45 (14) | 28 (9) |

Note: 100-500 cP results using M3/M5V motor;
 500-2,000 cP results using M58/M59P motor

Motor Model

| Pump | Uses Model |
|------|---------------------|
| PF | M3V, M5V, M5V-US |
| | M3T, M5T |
| | M3X, M5X, M10X |
| | M58P, M59P |
| | M6, M6X |



[†]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.



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PUMP TUBE DATA

EF Series Pump Tubes

Sealless, Best Value

This pump provides an economical choice for light duty transfer. Ideal replacement for hand pumps.

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



Construction Specifications

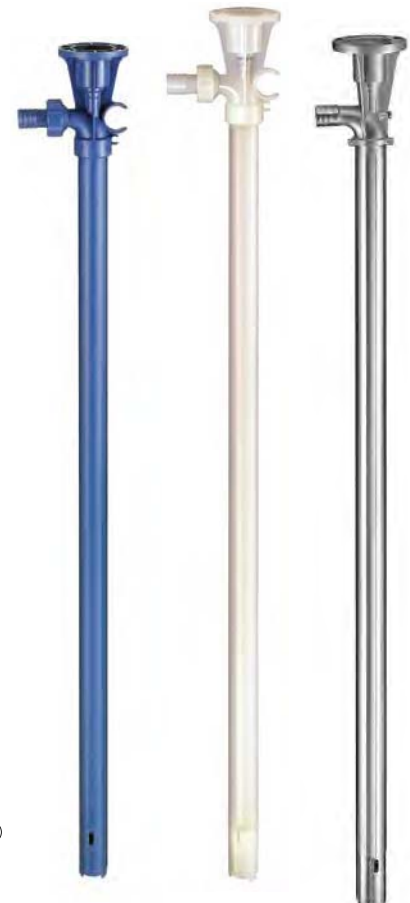
| Pump Series | Construction Materials | | Tube Dia. in (cm) | Max. Temp. | |
|-------------|------------------------|-----------------------------------|----------------------|------------|-----|
| | Outer Tube | Internals | | °F | °C |
| EFP | Polypro | 316SS, FKM, PTFE, PP | 1-1/4 (3.18) | 150 | 66 |
| EFV | Pure PP/ PVDF | Alloy 625, FKM, PTFE, ETFE, PP | | 160 | 71 |
| EFS | 316SS | 316SS, FKM, PTFE, ETFE | | 212 | 100 |

Performance Data

| Pump Series | Hose Size | Maximum Flow* | | Maximum Head* | | Max. Sp Gravity | Max. Viscosity - cP | |
|-----------------|-----------|-----------------------|------------------|--------------------|---------------|-----------------|---------------------|-----|
| | | Electric gpm (lpm) | Air gpm (lpm) | Electric ft (m) | Air ft (m) | | Electric | Air |
| EFP, EFV EFS | 3/4" | 17 (64.4) | 15 (56.8) | 20 (6.1) | 17 (5.2) | 1.2 | 300 | 300 |

Tube Lengths

16" (41cm), 27" (69cm), 40" (102cm), 48" (122cm)

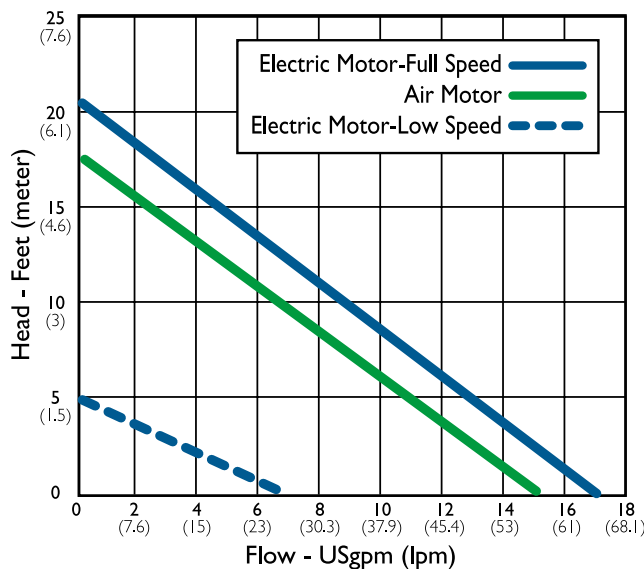


Viscosity Data

| Viscosity (cP) | 100 | 200 | 300 |
|-----------------------|--------|--------|--------|
| Max Flow gpm (lpm) | 7 (26) | 5 (19) | 4 (14) |
| Max Head feet (meter) | 16 (5) | 16 (5) | 16 (5) |

Motor Model

| Pump | Uses Model |
|-------------------|------------|
| EFP EFV EFS | S1, S2, S3 |
| | S4 |



[†]When pumping flammables or combustibles, use 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.




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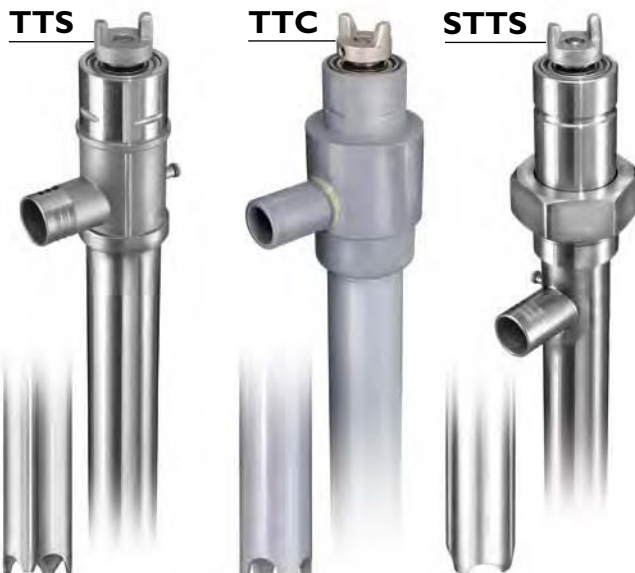
PUMP TUBE DATA

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 is sanitary construction.

Applications: Inks, paints, solvents[†], sodium hypochlorite, food products 



Construction Specifications

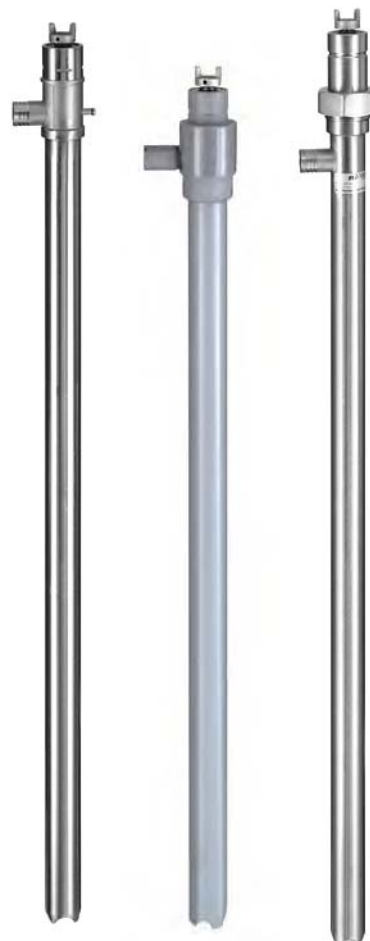
| Pump Series | Construction Materials | | Tube Dia. in (cm) | Max. Temp. | |
|-------------|------------------------|-----------------|----------------------|------------|----|
| | Outer Tube | Internals | | °F | °C |
| TTS | 316SS | 316SS, PTFE | 1-1/2 (3.8) | 150 | 66 |
| TTC | CPVC | Alloy 625, PTFE | 1-5/8 (4.1) | | |
| STTS | 316SS | 316SS, PTFE | 1-1/2 (3.8) | | |

Performance Data

| Pump Series | Hose Size | Maximum Flow* | | Maximum Head* | | Max. Sp Gravity | Max. Viscosity - cP | |
|-------------|-----------|-----------------------|------------------|--------------------|---------------|-----------------|---------------------|-------|
| | | Electric gpm (lpm) | Air gpm (lpm) | Electric ft (m) | Air ft (m) | | Electric | Air |
| TTS | 1" | 10 (38) | 16 (61) | 10 (3) | 30 (9) | 1.8 | 500 | 2,000 |
| TTC | | | | | | | | |
| STTS | | | | | | | | |

Tube Lengths

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



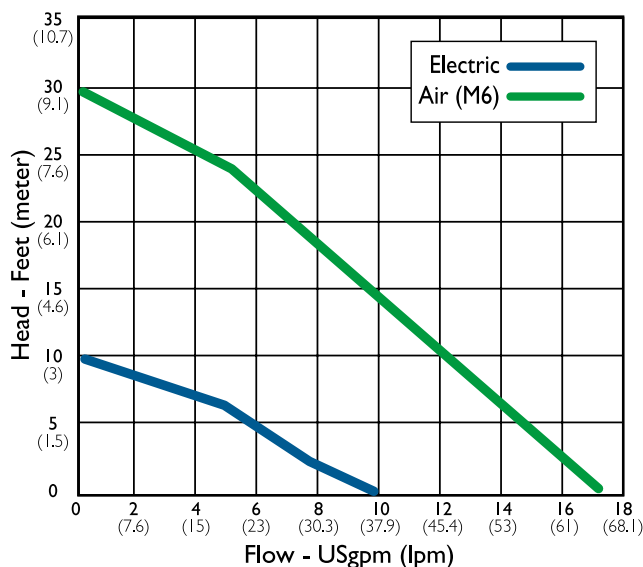
Viscosity Data

| Viscosity (cP) | 100 | 250 | 500 | 1,000 | 2,000 |
|-----------------------|--------|---------|---------|---------|--------|
| Max Flow gpm (lpm) | 7 (26) | 6 (23) | 3 (11) | 4 (15) | 3 (11) |
| Max Head feet (meter) | 25 (8) | 35 (11) | 48 (15) | 60 (18) | 28 (9) |

Note: 100-500 cP results using M7T/M8T motor;
 500-2,000 cP results using M6X motor

Motor Model

| Pump | Uses Model |
|------|------------|
| TTS | M7T, M8T |
| TTC | M7X |
| STTS | M6, M6X |



[†]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.



FINISH THOMPSON INC.

PUMP TUBE DATA

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) or 100,000 cP (LR model)

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



Construction Specifications

| Pump Series | Construction Materials | | Tube Dia. | | Max. Temp. | |
|-------------|------------------------|--------------------------|-----------|-----|------------|--|
| | Outer Tube | Internals | in (cm) | °F | °C | |
| BTS | 316SS | PTFE, 316SS | 2 (5.1) | 200 | 93 | |
| HVDP | 316SS | 316SS, Buna N, FKM, PTFE | 2 (5.1) | 180 | 82 | |

Motor Model

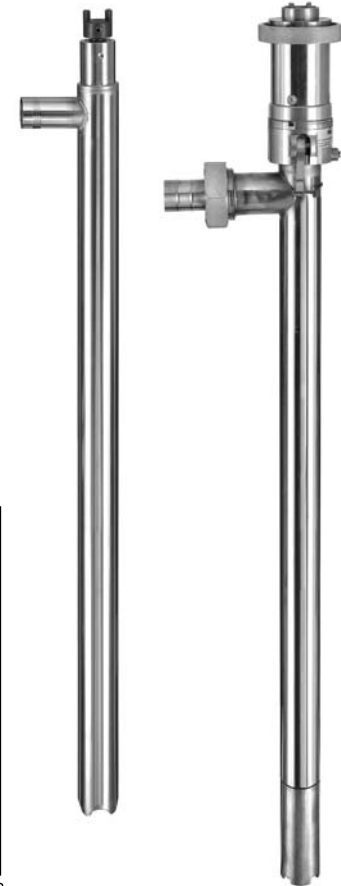
| Pump | Uses Model |
|---------|--------------------------------------|
| BTS | M15, M16, M17, M18, M19, M20 |
| HDVP-HR | M58H, M59H |
| HDVP-LR | M60, M61, M62, M63, M64, M65, M66 |

Tube Lengths

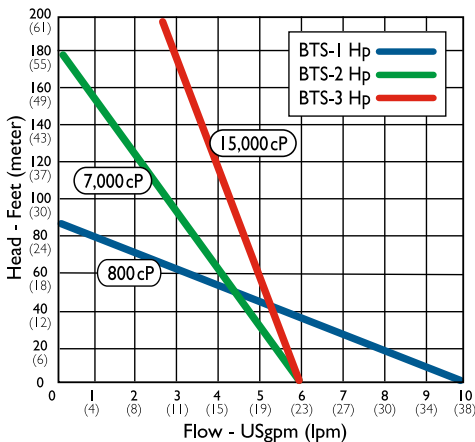
BTS: 40"(102cm)
 HVDP: 27"(69cm), 40"(102cm), 48"(122cm)

Performance Data

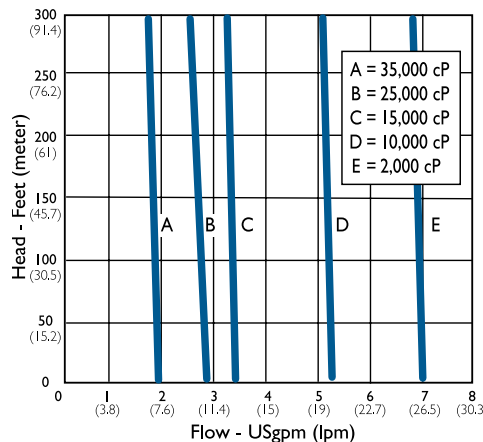
| Pump Series | Hose Size | Maximum Flow* | | Maximum Head* | | Max. Sp Gravity | Max. Viscosity - cP | |
|-------------|------------|--------------------|---------------|-----------------|------------|-----------------|---------------------|---------|
| | | Electric gpm (lpm) | Air gpm (lpm) | Electric ft (m) | Air ft (m) | | Electric | Air |
| BTS | 1-1/2" | 10 (38) | 10 (38) | 200 (61) | 200 (61) | 1.8 | 15,000 | 15,000 |
| HVDP-HR | 1-1/2", 2" | 9 (32) | 9 (32) | 300 (91) | 300 (91) | 1.8 | 20,000 | 20,000 |
| HVDP-LR | 1-1/2", 2" | 7 (27) | 7 (27) | 300 (91) | 300 (91) | 1.8 | 100,000 | 100,000 |



BTS Flow Data



HVDP Flow Data



[†]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.



FINISH THOMPSON INC.

MOTOR DATA for Drum/Barrel Pumps



M3V, M5V, M5V-US, M3V-UK

S1, S2, S3

M3T, M5T, M7T, M8T

M15, M16, M17

M58H, M59H, M58P, M59P

ODP (Open Drip Proof), Splashproof, IP24 Motors

| Model | Description | Type | Certification | Electrical Requirements | Power | | RPM | Max. Viscosity cP | Pump Series |
|---------|---|--|---------------|-------------------------|-------|-----|----------------|-------------------|-------------|
| | | | | | HP | W | | | |
| M3V | Quick connects to pump without tools. Downdraft cooling system and double wall housing. Continuous duty. A 12 ft. (3.5 m) cord with plug and integral circuit breaker are provided. | Universal - Variable speed for precise fluid control | CSA | 115VAC/50-60 Hz | 4/5 | 650 | 3,500-10,000 | 500 | PF |
| M5V | | | CE | 230VAC/50-60 Hz | 4/5 | 650 | 3,500-10,000 | 500 | PF |
| M5V-US* | | | CE | 230VAC/50-60 Hz | 4/5 | 650 | 3,500-10,000 | 500 | PF |
| M3V-UK | | | CE | 115VAC/50-60 Hz | 4/5 | 650 | 3,500-10,000 | 500 | PF |
| S1 | Ergonomic, lightweight design with downdraft cooling. Continuous duty. A 12 ft. (3.5 m) cord with plug and circuit breaker with manual reset are provided. | Universal - two speed double insulated | CSA | 115VAC/60 Hz | 1/3 | 250 | 8,000 / 14,000 | 300 | EF |
| S2 | | | CE | 230VAC/50-60 Hz | 1/3 | 250 | 8,000 / 14,000 | 300 | EF |
| S3 | | | CE | 115VAC/50-60 Hz | 1/3 | 250 | 8,000 / 14,000 | 300 | EF |

TEFC (Totally Enclosed Fan Cooled), IP54 Motors

| Model | Description | Type | Certification | Electrical Requirements | Power | | RPM | Max. Viscosity cP | Pump Series |
|--------|---|---|---------------|-------------------------|-------|-------|--------------|-------------------|-------------|
| | | | | | HP | W | | | |
| M3T | Molded plastic housing features integral handle. Continuous duty. A 12 ft. (3.5 m) cord with plug and circuit breaker with manual reset are provided. | Universal - Single Speed | CSA | 115VAC/50-60 Hz | 4/5 | 640 | 10,000 | 500 | PF |
| M5T | | Universal - Single Speed | CE | 230VAC/50-60 Hz | 4/5 | 640 | 10,000 | 500 | PF |
| M7T | | Induction | CSA | 115VAC/50-60 Hz | 2/3 | 500 | 2,850/3,450 | 500 | TT |
| M8T | | Induction | CE | 230VAC/50-60 Hz | 2/3 | 500 | 2,850/3,450 | 500 | TT |
| M15 | Continuous duty. A 12 ft. (3.5 m) cord is provided. | Induction | CSA, UL | 230/460V/60 Hz | 1 | 746 | 3,450 | 800 | BT |
| M16 | | | | 230/460V/60 Hz | 2 | 1,492 | 1,725 | 7,000 | BT |
| M17 | | | | 230/460V/60 Hz | 3 | 2,238 | 1,725 | 15,000 | BT |
| M58H | Molded plastic housing features integral handle. Continuous duty. A 12 ft. (3.5 m) cord with plug and circuit breaker with manual reset is provided. | Universal - Variable speed for precise fluid control. | CE | 115VAC/50-60 Hz | 1 1/3 | 1000 | 10,000 | 20,000 | HVDP |
| M59H | | | | 230VAC/50-60 Hz | 1 1/3 | 1000 | 10,000 | 20,000 | HVDP |
| M59HCE | | | | 230VAC/50-60 Hz | 1 1/3 | 1000 | 10,000 | 20,000 | HVDP |
| M58P | | | | 115VAC/50-60 Hz | 1 1/3 | 1000 | 5,000-10,000 | 2,000 | PF |
| M59P | | | | 230VAC/50-60 Hz | 1 1/3 | 1000 | 5,000-10,000 | 2,000 | PF |
| M59PCE | | | | 230VAC/50-60 Hz | 1 1/3 | 1000 | 5,000-10,000 | 2,000 | PF |

* Suitable for 230V, 60 Hz. Includes a NEMA 6-15 plug. Note: Maximum viscosity can vary by pump series.

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FINISH THOMPSON INC.

MOTOR DATA for Drum/Barrel Pumps



M3X, M5X, M7X, M10X

M6, M6X

M18, M19, M20

M65, M66

S4

Explosion Proof Motors

| Model | Description | Type | Certi- fication | Electrical Requirements | Power | | RPM | Max. Viscosity cP | Pump Series |
|-------|---|--------------------------|-------------------------------|----------------------------|-------|-----|-------------|----------------------|----------------|
| | | | | | HP | W | | | |
| M3X | Explosion proof design suitable for use in hazardous areas and ideal for applications with flammable liquids. The TEFC housing protects the motor internals from dust, corrosive vapors and water splashes. A 12ft. (3.5m) cord and internal circuit breaker are provided. Continuous duty rated. | TEFC, explosion proof | CSA | 115VAC/50-60 Hz | 3/10 | 230 | 5,000 | 10 | PF |
| M5X* | | | CE | 230VAC/50-60 Hz | 3/10 | 230 | 5,000 | 10 | PF |
| M7X | | | CSA | 115VAC/50-60 Hz | 2/3 | 500 | 2,850-3,450 | 400 | TT |
| M10X | | | CE/ATEX Ex II 2G Ex IIA T4 | 230VAC/50-60 Hz | 4/5 | 640 | 10,000 | 500 | PF |

Air Motors **

| Model | Description | Type | Certi- fication | Air Requirements | Power | | RPM | Max. Viscosity cP | Pump Series |
|-------|---|------|-----------------------------------|------------------------|-------|-------|--------------|----------------------|----------------|
| | | | | | HP | W | | | |
| M6 | 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. | Air | CE/ ATEX Ex II 5GDc + ICTa+40C | 80-100 psi @ 15-32 cfm | 1/2 | 370 | 300-9,000 | 1,500† | PF,TT |
| M6X | | | CE/ ATEX Ex II 5GDc + ICTa+40C | 80-100 psi @ 15-32 cfm | 3/4 | 560 | 300-6,000 | 2,000† | PF,TT |
| M18 | | | CE | 100 psi @ 40-70 cfm | 1 | 746 | 300-3,000 | 800 | BT |
| M19 | | | | 100 psi @ 80-120 cfm | 2 | 1,492 | 300-3,000 | 7,000 | BT |
| M20 | | | | 100 psi @ 120-170 cfm | 3 | 2,238 | 300-2,500 | 15,000 | BT |
| M65 | | | CE | 100 psi @ 25 cfm | 3/4 | 560 | 300-3,000 | 15,000 | HVDP |
| M66 | | | | 100 psi @ 70 cfm | 1-1/2 | 1000 | 300-3,000 | 100,000 | HVDP |
| S4 | | | CE | 40 psi @ 27 cfm | 1/2 | 370 | 300 - 11,000 | 300 | EF |

Note: Maximum viscosity can vary by pump series.

* Motor suitable for hazardous areas that do not require independent certification.

** An air motor is a non-electrical device which means the possibility of explosion from igniting flammables or combustibles is reduced. Air motor performance will depend upon user's compressor and system setup.

† Maximum viscosity for PF Series is 330 cP.

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e-mail : info@nisusthailand.co.th

Consult FTI's Chemical Resistance Chart (<http://www.finishthompson.com/downloads/drum-pumps/technical-flyers>) before selecting pump material.



Need help choosing a pump? Use the handy online Pump Selector at: www.finishthompson.com.

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.



Nozzles

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



Filter/ Lubricator Assembly

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



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.



Drum Adapters

Secures the pump tube in the barrels bung opening. Fits standard 2" IPS bung opening. Available in polypropylene, galvanized or stainless steel.



Wall Mount Bracket

Allows pump to be stored in an upright position



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921 Greengarden Road • Erie, PA 16501-1591 U.S.A.
Ph 814-455-4478 • Fax 814-455-8518
Email fti@finishthompson.com • www.finishthompson.com

NISUS (Thailand) Co.,Ltd.
Tel. 0-2898-8901-3 , Fax. 0-2898-7745
www.nisusthailand.co.th
e-mail : info@nisusthailand.co.th

Toll Free U.S.A. & Canada 1-800-934-9384
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