

Wallace and Tiernan® Liquid Chemical Feed Systems

Chemtube® PPS Model M40 System

SIEMENS

The Chemtube® PPS Model M40 positive displacement peristaltic pump system is designed to handle a wide variety of chemicals and liquids. Simple operation consists of two rotating rollers that gradually compress as elastomeric tube, forcing liquid just ahead of each roller. The tube snaps back to its original shape after the rollers pass, refilling with liquid for the next discharge revolution. The pumped liquid only comes in contact with the tube interior and the end fittings.

Features

- Compact footprint
- Self priming
- No seals
- No valves to clog
- Clear front cover
- High suction lift capability

Technical Data

Materials of Construction:

- Pump Housing: Cast Iron
- Rotor: Carbon Steel
- Rollers: Carbon Steel
- Mounting Frame: Stainless Steel

Available Hose Material: Natural Isoprene, Buna N, EPDM, Hypalon®

Side Cover: Acrylic

Connection & Insert Materials: 316SS, PVC (max. B/P 6 Bar / 90 PSI), or Titanium

Connection Size: 1-1/2" ANSI 150 lb. Flange **Leak Detector Switch Rating:** 100 VA Max, 230 Volts, 2.5 amps

Operating Range:

- 20 to 1 with SCR Variable Speed Drive
- 10 to 1 or 100 to 1 with Invertor Drive

Accessories: Pulsation Dampeners, Calibration Columns, Pressure Relief Valves

Power Supply:

- 115/230 Volts Single Phase
- 230/460 Volts Three Phase

Fluid Temperature:

- -10° to 74°C (14 to 165° F) (Buna N Tube)
- -10° to 85°C (14 to 185° F) (Natural Isoprene Tube)
- -10° to 93°C (14 to 200° F) (EPDM Tube)
- -10° to 85°C (14 to 185° F) (Hypalon® Tube)

Max Discharge Pressure: 8 Bar (120 PSI)

Max Suction Lift: 8m (28 ft.)

Max Flooded Suction: 3 Bar (45 PSI)

Hose Size: 40mm (ID)

Motor Hp:

- Up to 3 HP Induction
- Up to 5 HP Inverter or Variable Speed

Weight: 249 kgs (550 lbs)

Shipping Weight: 272 kgs (600 lbs)



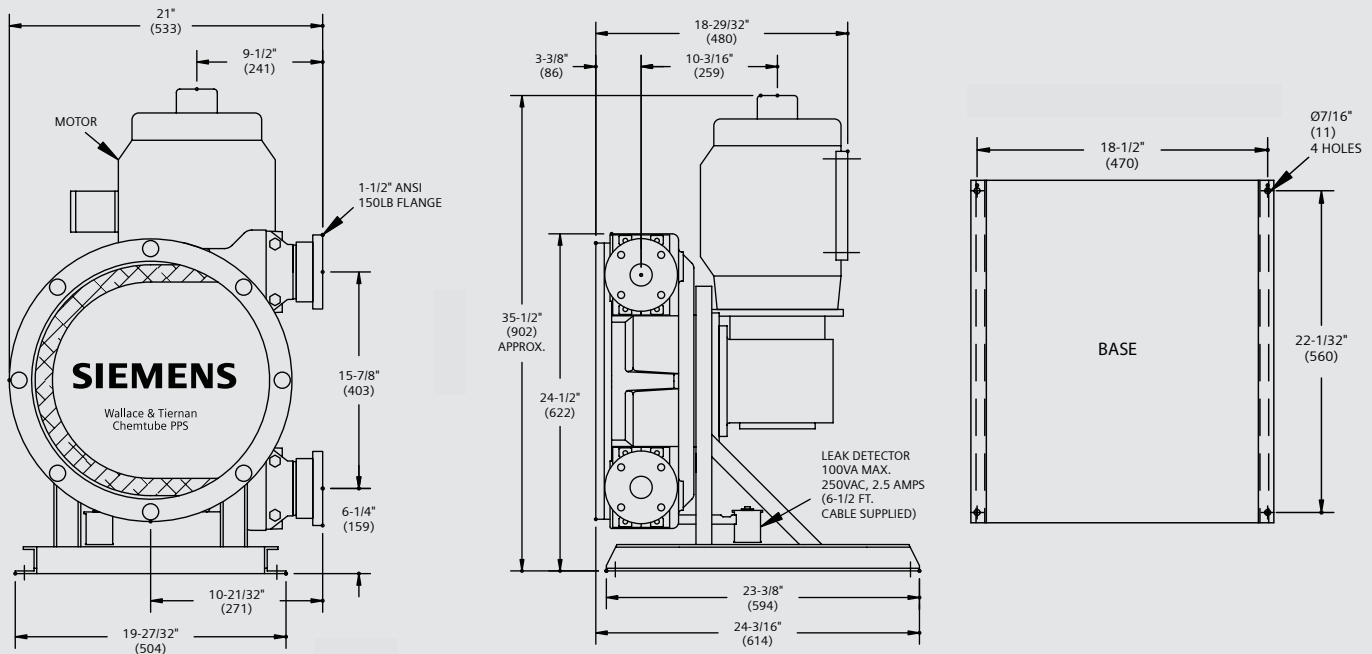
Key Benefits:

- Efficient and smooth, roller technology eliminates the need for an oil bath in the pump housing
- Flexible control options-constant speed, VFD and SCR
- Simplified service and maintenance
- Ideal for multi-phase fluids and slurries
- Early detection of hose failure - leak detector mounted at lowest point of housing
- Unobstructed flow-through pumping

| M40 Fixed Speed Right-Angle Drive Gearbox - up to 3 Bar (45 PSI) Max. | | | | | | |
|---|----------|------|---------------|-----|--------------|---------------|
| RPM | Capacity | | Back Pressure | | HP IND (Inv) | Duty Cycle |
| | LPH | GPH | BAR | PSI | | |
| 17.5 | 1325 | 350 | 3 | 45 | 1 (1-1/2) | Continuous |
| 22 | 1628 | 430 | 3 | 45 | 1 (1-1/2) | |
| 27 | 2082 | 550 | 3 | 45 | 1 (1-1/2) | |
| 31 | 2346 | 620 | 3 | 45 | 1 (2) | |
| 38 | 2990 | 790 | 2 | 35 | 1 (2) | Intermittent* |
| 44 | 3482 | 920 | 2 | 35 | 1 (2) | |
| 58 | 4542 | 1200 | 2 | 35 | 1-1/2 (3) | |
| 76 | 6056 | 1600 | 2 | 35 | 2 (3) | |
| 87.5 | 6850 | 1810 | 1 | 20 | 2 (3) | |
| 117 | 9084 | 2400 | 1 | 20 | 3 (5) | |

| M40 Fixed Speed Coaxial Gearbox - up to 8 bar (120 PSI) Max. | | | | | | |
|--|----------|------|---------------|-----|--------------|---------------|
| RPM | Capacity | | Back Pressure | | HP IND (Inv) | Duty Cycle |
| | LPH | GPH | BAR | PSI | | |
| 13.2 | 379 | 100 | 8 | 120 | 1 (2) | Continuous |
| 17 | 568 | 150 | 8 | 120 | 1 (2) | |
| 22 | 1040 | 275 | 8 | 120 | 1 (2) | |
| 27 | 1574 | 400 | 8 | 120 | 2 (2) | |
| 32 | 1703 | 450 | 8 | 120 | 2 (2) | Intermittent* |
| 39 | 2271 | 600 | 6 | 90 | 2 (2) | |
| 47 | 2839 | 750 | 6 | 90 | 3 (3) | |
| 56 | 4277 | 1130 | 4 | 60 | 3 (3) | |
| 70 | 5299 | 1400 | 4 | 60 | 3 (3) | |
| 88 | 6889 | 1820 | 3 | 45 | 3 (3) | |
| 141 | 10,219 | 2700 | 3 | 45 | 3 (3) | |

* Intermittent Duty: Max 1 hour running; Min. 1 hour off



Notes: All dimensions in () are mm. Dimensions shown are for right-angle drive gearbox. See WT.490.200.120.UA.CN for complete dimensions.

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The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

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