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SPECIALISTS AT PROVIDING OEM SOLUTIONS
Original equipment manufacturers who produce the smallest medical equipment, to those who produce the largest off-road machinery, count on MTE for quality hydraulic products at the right price. MTE is known worldwide for their expertise in the design and manufacture of dependable hydraulic pumps, motors, proportionators and power packages.

MANUFACTURING FLEXIBILITY THAT’S UNMATCHED
MTE combines decades of applied engineering skills with unique manufacturing capabilities to provide true value. Whether purchasing individual components or a complete package, a high level of reliability and performance is engineered into every product we market. Our products are designed using standard components that can be easily modified for your specific application, saving time and costs.

QUALITY & VALUE THAT ENHANCES YOUR PROJECT
We use the latest technologies for high-precision inspection of all components. Post-production testing assures trouble-free operation and maximum durability. At MTE, we supply hydraulic products that enhance the quality and value of your products.

FROM BASIC PRODUCTS TO COMPLEX ASSEMBLIES
If hydraulic gear pumps, motors, proportionators or complex power packages are to be part of your next project, you can count on MTE. We’ll provide you with the right solution for your specific requirements.
HYDRAULIC PUMPS

MTE gear pumps are made in three series of models with displacements ranging from 0.5 GPM to 35 GPM. MTE pumps are designed to provide greater torque efficiencies – especially at high speeds and elevated pressures. Numerous shaft, bearing, mounting and seal options are available. Each model is designed to operate as either a single rotation or bi-rotational pump, depending on the application.

TYPICAL APPLICATIONS

- MATERIAL HANDLING
- AGRICULTURAL EQUIPMENT
- CONSTRUCTION & MOBILE EQUIPMENT
- FLUID TRANSFER SYSTEMS

200 SERIES

300 SERIES

400 SERIES

MTE Hydraulic Pump Specifications

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>DISPLACEMENT (GALLONS/REV)</th>
<th>DISPLACEMENT (CUIN./REV)</th>
<th>AVG. SLIP (GPM/100 PSI)</th>
<th>PRESSURE MAX. (PSI)</th>
<th>SPEED MAX. (RPM)</th>
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<td>100</td>
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All numbers given are nominal values and should be used for reference only. All product specifications are subject to change without prior notice.
Two-stage hi-low pumps are available in our 200 and 300 series. These pumps feature an internal unloading valve that diverts high-volume flow at minimum pressure when high-pressure flow is required. The pumps are designed to direct couple to gas engines or AC electric motors that turn up to 3800 RPM for 200 series, and 3500 RPM for 300 series models. The unloading feature assures that a small, efficient motor can be utilized effectively. MTE two-stage pumps are available in a number of different pump combinations, as well as shaft and porting configurations.

**TYPICAL APPLICATIONS**

- **LOGSPLITTERS**
- **TRASH COMPACTORS**
- **PRESS APPLICATIONS**

### 200 SERIES

- **HYDRAULIC SCHEMATIC**

### 300 SERIES

- **HYDRAULIC SCHEMATIC**

### MTE Log splitter (Hi-Lo) Pump Specifications

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>NOMINAL FLOW (GPM)</th>
<th>REQUIRED DRIVE HP</th>
<th>MAX WORKING PRESSURE (PSI)</th>
<th>MAX SPEED RPM</th>
<th>SHAFT DIAMETER (IN.)</th>
<th>SHAFT DIAMETER (IN.)</th>
<th>PORTS</th>
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</table>

All numbers given are nominal values and should be used for reference only. All product specifications are subject to change without prior notice. SHAFT EXTENSION ON ALL PUMPS = 1.5 IN.
HYDRAULIC MOTORS

MTE gear motors are made in three series of models with displacements ranging from 0.5 GPM to 35 GPM. Our unique gear tooth design and trapping reliefs provide quiet, smooth operation at high speeds and pressures. Our high pressure shaft seal will withstand continuous back pressures up to 200 PSI. Anti-friction needle bearings are standard for speeds ranging from 500 RPM to 4,000 RPM. Steel backed, leaded bronze bearings are utilized for higher speed applications. MTE motors are available in single or bi-rotational operation, with built-in check valves.

TYPICAL APPLICATIONS

- DRIVES FOR SPRAYER PUMPS
- FANS
- COMPRESSORS
- MOWERS
- SPREADERS
- ROTARY BRUSHES

**HYDRAULIC SCHEMATIC**

**200 SERIES**

**300 SERIES**

**400 SERIES**

**MTE Hydraulic Motor Specifications**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>DISPLACEMENT GALLONS/REV</th>
<th>DISPLACEMENT CU.IN./REV</th>
<th>TORQUE IN(3X100PSI)</th>
<th>AVG. SLIP GPM/100 PSI</th>
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*All numbers given are nominal values and should be used for reference only.*

*All product specifications are subject to change without prior notice.*
Pump/motor units are available in both our 100 and 200 series in a number of configurations where a complete self-contained hydraulic system is not required. Displacements available range from 0.1 GPM to 5 GPM. Single or multiple section gear pumps can be close-coupled to standard, heavy duty and permanent magnet 12 and 24 VDC motors, with or without start solenoids. Pumps can be built with integral relief, check and solenoid valves and can accept a variety of porting arrangements and sizes.

TYPICAL APPLICATIONS

- AERIAL LIFTS
- CAB TILT
- AUXILIARY POWER UNIT FOR MOBILE EQUIPMENT
- PLATFORM LIFT
- SCISSOR LIFT
Lift, check, and dump units are the most commonly used power units. The displacements range from 0.1 GPM to 5 GPM. This type of unit is used in any application which requires pressure to lift, combined with the ability to hold the load and lower it on command. LCD circuits include integral 2-way, 2-position manual or solenoid actuated release valves, relief and check valves. In addition, a pressure compensating flow control valve can be inserted in the lowering valve cavity to control the lowering speed.

**TYPICAL APPLICATIONS**

- CARLIFT
- SCISSOR LIFT
- COMPACTORS
LIFT/CHECK/DUMP DC POWER UNITS

TYPICAL APPLICATIONS

- Tailgate
- RV Leveling
- Scissor Lift

100 SERIES, 3-INCH MOTOR

200 SERIES, 4.5-INCH MOTOR

200 SERIES, 4.5-INCH MOTOR

HYDRAULIC SCHEMATIC

PRESSURE/RETURN PORT

AUXILIARY RETURN PORT

HYDRAULIC SCHEMATIC

PRESSURE/RETURN PORT
Bi-rotational power units are used to control double acting cylinders, bi-rotational hydraulic motors or two LCD circuits on one machine. This system incorporates individual relief valves, checks and lowering valves for each direction. These valves are pre-wired to function in conjunction with the appropriate motor starter. This system provides very precise holding and position control. A lowering flow control can be incorporated, in one direction, to control speed. Displacements range from 0.1 GPM to 4 GPM.

**TYPICAL APPLICATIONS**

- Bale Spikes
- Dump Trailers
- Agricultural Equipment
- Truck Gates
- Presses
- Personnel Lifts
- Lift Equipment
Pressure & return units are typically used where remote or complex valve or valve/manifold circuits are required. Displacements range from 0.1 GPM to 5 GPM. Normally the system relief valve and load drop check are included in the power unit. The power units shown have both SAE threaded ports and manifold mounting surfaces. Units can accommodate additional cartridge-type valve manifolds for more complex hydraulic circuits.

**TYPICAL APPLICATIONS**

- Medical & Chiropractic Tables or Beds
- Agricultural Equipment
- Lifting Systems
- Mobile Lifts

**100 SERIES, 115 VAC**

**100 SERIES, 12 VDC**

**200 SERIES, 115/230 VAC**

**200 SERIES, 12 VDC**
MTE proportionators divide flow from a single hydraulic source into two or more equal or proportionate circuits, in order to intensify or reduce the pressure of each. Three series are available to accept input up to 50 GPM per section and can also be assembled into multiple sections to satisfy your exact needs.

**200 SERIES**

**300 SERIES**

**400 SERIES**

### TYPICAL APPLICATIONS

- Car Wash Systems
- Fuel Distribution Systems
- Multiple-Nozzle Machinery
- Lubrication Systems
- Cylinder Control & Pressure Intensifiers

### Proportionator Specifications

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Displacement Gals/Rev</th>
<th>Displacement Culs/Rev</th>
<th>Max Inlet GPM Per Section</th>
<th>Pressure Max. PSI</th>
<th>Max PSI Differential Between Sections</th>
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<td>1500</td>
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</table>

All numbers given are nominal values and should be used for reference only. All product specifications are subject to change without prior notice.
The hydraulic systems shown are intended to give you some idea of the flexibility we can offer. MTE draws upon unmatched modification experience and design maturity to continue to satisfy specific application needs. That’s why MTE products are the choice of leading original equipment manufacturers throughout the world.

Need help designing special applications or developing an integrated system? Our skilled sales and engineering staff, combined with our production and purchasing resources, are available to help satisfy the requirements unique to your application.
CUSTOM SOLUTIONS FROM STANDARD COMPONENTS

By design, all of our pumps and motors are built to accept a variety of manufacturing modifications and interchangeable components so that they can be easily adapted to a wide range of applications. We can supply pumps or motors that are “custom” in terms of system requirements, while they are “standard” in terms of cost. The configuration choices are completely yours. We offer an unrivaled selection of different gear, shaft, porting and mounting options. Numerous valves and accessory options are available. At MTE, we continue to invest in research and development to ensure that we will always bring our customers the latest in equipment advancements. Contact us today with your specific application requirements.

MTE... dependability, performance and value.
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