Bellows Pumps
The Newest Technology in Piston Pumps
Applications

- Catalyzed coatings
- Varnish and lacquer
- High solid coatings
- Abrasive materials
- Solvent and waterborne materials
- Moisture-sensitive materials
- UV-cure coatings
- Flat line machine lines
- General finishing applications where open wet cups are not preferred

Operator Control Panel

- Air controls located at operator height for easy setting and monitoring

DataTrak™

- Easy-to-set runaway protection
- Pump diagnostics for maintenance
- Resettable batch counter tracks material usage and maintenance schedule

Merkur™ Bellows

The gentle pumping action of the Merkur Bellows Pump, combined with reduced sealing surfaces, provides superior handling of shear-sensitive materials, including UV coatings and waterborne materials.
Merkur Air Motor Technology
- Highest technology air motor on the market
- Low air consumption for increased efficiency
- Simple air motor design and minimal parts reduces repair time

Leak Proof Pump Lower
- Easy-to-flush design allows for fast color changes and reduced material waste
- 300 series stainless steel pump construction provides long-lasting durability
- Fewer parts and online replacement bellows seal means improved serviceability, lower cost of ownership and reduced downtime

1. **Air Valve**
   Provides smooth and rapid changeover

2. **Quick Removal Coupler**
   Allows for easy disassembly of the pump lower from the air motor

3. **Rotatable Inlet Fitting**
   Inlet can be rotated 360 degrees for easy access

4. **Improved Bellows Seal Design**
   Eliminates throat seal leakage and lubrication

5. **Overflow Chamber (Optional)**
   D-shaped seal and overflow chamber contains the material within the pump in case of bellows leakage

6. **Throat and Piston Packings**
   - Spring-loaded to maintain long packing life – no adjustments needed
   - Available with V-Packing seals for abrasives or U-Cup seals for UV coatings

Merkur is designed to provide a smooth, rapid changeover for a better, more consistent finish and less user fatigue.

![Diagram of Merkur piston pump components]

Less Pulsation for Better Results

- Quick changeover and recovery minimizes pulsation and creates an even film thickness
- Longer changeover and pressure spike creates inconsistent finish
Known for its robust design, the Glutton pump features a bellows seal that virtually eliminates the possibility of air or moisture contaminating the fluid.

Choose the heavy-duty Glutton when no other pump can handle the job!

**Applications**
- Air spray and HVLP supply
- Circulating systems
- Catalyzed coatings
- Varnish and lacquer
- High solid coatings
- Abrasive materials
- Solventborne and waterborne fluids
- Moisture sensitive materials
- UV-cure coatings
- Flatline machine lines
- General finishing applications where open wet cups are not preferred
Compact Design

1. Vertical Ball Check
   - Reversible seats for uniform wear and long service life
   - External check allows for quick maintenance for materials that pack or mat out easily

2. External Air Valve
   - Easy installation and maintenance

3. Outlet Manifold
   - Simplifies plumbing and installation

4. Pump Stand
   - Included for easy mounting

5. Cylinder and Displacement Rod
   - Designed to handle a broad range of coatings

6. Piston Seal
   - Multiple configurations for material compatibility

7. Heavy-Duty Bellows Seal (Optional)
   - Designed for longer life in abrasive applications

8. Carbide Seat Accessory
   - Ideal for abrasive materials
## Package Description:

**Pump:** Package includes pump, pump only air controls. Siphon tube, hoses, and guns are not included.

**AA:** Air-Assisted Airless package includes pump, pump and gun air controls, G15 or G40 guns, fluid hose, gun fluid hose, gun air hose, 5 gallon (19 l) pail suction hose and tube

**AL:** Airless™ package includes pump, pump air controls, XTR™ gun, fluid hose, gun fluid hose, 5 gallon (19 l) pail suction hose and tube

**ES:** Electrostatic package includes pump, pump and gun air controls, PRO AA Xs4 Smart Gun, fluid hose, gun fluid hose, gun air hose, 5 gallon (19 l) pail suction hose and tube

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<tbody>
<tr>
<td><strong>Pump Volume per Cycle</strong></td>
<td>150 cc</td>
<td>100 cc</td>
<td>50 cc</td>
<td>150 cc</td>
<td>100 cc</td>
<td>150 cc</td>
<td>50 cc</td>
<td>100 cc</td>
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<tr>
<td><strong>Air Motor Displacement</strong></td>
<td>400 cc</td>
<td>700 cc</td>
<td>400 cc</td>
<td>1200 cc</td>
<td>1200 cc</td>
<td>1800 cc</td>
<td>700 cc</td>
<td>1800 cc</td>
</tr>
<tr>
<td><strong>Maximum Fluid Outlet Pressure</strong></td>
<td>500 psi (35 bar)</td>
<td>1200 psi (83 bar)</td>
<td>1500 psi (103 bar)</td>
<td>1500 psi (103 bar)</td>
<td>2300 psi (158 bar)</td>
<td>2400 psi (165 bar)</td>
<td>2500 psi (172 bar)</td>
<td>3500 psi (241 bar)</td>
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<tr>
<td><strong>Maximum Air Inlet Pressure</strong></td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
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<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td><strong>Fluid Flow @ 60 cpm</strong></td>
<td>2.4 gpm (9.0 lpm)</td>
<td>1.6 gpm (6.0 lpm)</td>
<td>0.8 gpm (3.0 lpm)</td>
<td>2.4 gpm (9.0 lpm)</td>
<td>1.6 gpm (6.0 lpm)</td>
<td>2.4 gpm (9.0 lpm)</td>
<td>0.8 gpm (3.0 lpm)</td>
<td>1.6 gpm (6.0 lpm)</td>
</tr>
<tr>
<td><strong>Air Consumption @ 100 psi (7 bar) @ 20 cpm</strong></td>
<td>6 scfm (0.17 m³/min)</td>
<td>9 scfm (0.17 m³/min)</td>
<td>6 scfm (0.17 m³/min)</td>
<td>12 scfm (0.17 m³/min)</td>
<td>17 scfm (0.17 m³/min)</td>
<td>17 scfm (0.17 m³/min)</td>
<td>26 scfm (0.17 m³/min)</td>
<td>26 scfm (0.17 m³/min)</td>
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<tr>
<td><strong>Fluid Inlet Size</strong></td>
<td>1” npt(m)</td>
<td>3/4” npt(m)</td>
<td>3/4” npt(m)</td>
<td>1” npt(m)</td>
<td>3/4” npt(m)</td>
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<td>3/4” npt(m)</td>
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<tr>
<td><strong>Fluid Outlet Size</strong></td>
<td>3/4” npt(m)</td>
<td>3/8” npt(m)</td>
<td>3/8” npt(m)</td>
<td>3/4” npt(m)</td>
<td>3/8” npt(m)</td>
<td>3/4” npt(m)</td>
<td>3/8” npt(m)</td>
<td>3/8” npt(m)</td>
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<tr>
<td><strong>Air Inlet (Air Controls)</strong></td>
<td>3/8” npt(f)</td>
<td>3/8” npt(f)</td>
<td>3/8” npt(f)</td>
<td>3/8” npt(f)</td>
<td>3/8” npt(f)</td>
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</table>

Note: Graco recommends 20 cpm or less for intermittent pumping applications and 12 cpm or less for continuous pumping applications.

### Merkur Bellows Ordering Information

| Seal Mount | Package Description | Pump | Drains | Fluid Filters | DataTrak
<table>
<thead>
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<tbody>
<tr>
<td>U-Cup</td>
<td>Wall Pump</td>
<td>*</td>
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<tr>
<td>V-Packing</td>
<td>Wall Pump</td>
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<td>Pump</td>
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<tr>
<td><strong>AA</strong></td>
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<tr>
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<td><strong>ES</strong></td>
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</table>

### Additional Information

- Graco recommends 20 cpm or less for intermittent pumping applications and 12 cpm or less for continuous pumping applications.
Spray Guns
Refer to the spray gun brochure for additional model numbers. All guns include tip of choice.
24C853 G15 Carbide Air-Assisted Spray Gun
24C855 G40 Air-Assisted Spray Gun
24C857 G40 RAC Air-Assisted Spray Gun
XTR501 XTR-5 Airless Spray Gun
24A573 PRO Xs AA Smart Electrostatic Spray Gun

Accessories
238926 Back Pressure Regulator
102397 Fluid Gauge
238890 Fluid Regulator
243340 Pail Cover with Agitator
Use to agitate material in a 5 gal (18.9 l) pail
222121 Fluid Regulator, Stainless Steel
Maximum working pressure: 1500 psi (103 bar, 10.3 MPa)
Regulator range: 150-1200 psi (10-28 bar, 1-8.2 MPa)
24A587 Pump Outlet Fluid Filter, Stainless Steel
60 mesh (250 micron), 5000 psi (350 bar, 25 MPa)
256425 Fluid Filter Drain Valve, Stainless Steel
5000 psi (350 bar, 35 MPa)
224458 Replacement Filter Screen Element
3-pack elements, 30 mesh, SST
224459 Replacement Filter Screen Element
3-pack elements, 60 mesh, SST
24A540 Air Control Gauge Covers
5 sheets of 10 covers
24B187 Second AA Gun Kit
Includes air regulator and gauge
239850 Heater
120 (v)
239851 Heater
240 (v)
24E298 Overflow Chamber Kit

PTFE Seals
24J858* Reinforced PTFE V-Packing Kit for 50 cc Displacement Pump
24J859* Reinforced PTFE V-Packing Kit for 100 cc Displacement Pump
24J860* Reinforced PTFE V-Packing Kit for 150 cc Displacement Pump
24J850* PTFE Bellows Kit for 50 cc Displacement Pump
24J851* PTFE Bellows Kit for 100 cc and 150 cc Displacement Pump

Suction Hoses
24A954 55 gal (208 l) Drum Suction Hose and Strainer, 3/4 in fluid inlet
24A958 55 gal (208 l) Drum Suction Hose and Strainer, 1 in fluid inlet
24A842 PTFE Lined Suction Hose for 5 gal (19 l) Pails and Strainer, 3/4 in inlet
24A845 PTFE Lined Suction Hose for 5 gal (19 l) Pails and Strainer, 1 in inlet

Gun Hoses
256390 25 ft Air Hose
241812 25 ft Fluid Hose: 3300 psig (228 bar)
24A955 50 ft Bundled Air and Fluid Hose: 3300 psig (228 bar)
256389 50 ft Air Hose
24B562 50 ft Fluid Hose: 3300 psig (228 bar)
24A588 Hose Clips: Pack of 10

Technical Specifications

<table>
<thead>
<tr>
<th>Ratio</th>
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<tbody>
<tr>
<td>Output per cycle</td>
<td>355 cc</td>
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<tr>
<td>Max working pressure</td>
<td>400 psi (28 bar)</td>
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<td>Max air input pressure</td>
<td>100 psi (7 bar)</td>
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<td>Output at 60 cpm</td>
<td>5.6 gpm (21.2 lpm)</td>
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<td>Pump inlet size</td>
<td>1.25 npt(f)</td>
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<td>Pump outlet size</td>
<td>1 npt(f)</td>
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<td>Pump manual</td>
<td>307843</td>
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Pump Construction

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<th>Seals</th>
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<tr>
<td>CS</td>
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<td>CS</td>
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Instruction and Parts Manuals
312799 Merkur Bellows AA and Airless Spray Package
312798 Merkur Electrostatic Spray Package
312795 Merkur Bellows Pump Assembly
312793 Merkur Bellows Displacement Pump
312796 Merkur Air Motor
*Use with materials that cause chemical compatibility concerns with UHMWPE, such as acid catalyst materials

Glutton Bellows Ordering Information and Accessories

Merkur Bellows Accessories

DataTrak
24A575 Upgrade Kit for 400 cc Air Motors
24A576 Upgrade Kit for 700 cc, 1200 cc and 1800 cc Air Motors
24A592 Upgrade Kit for DataTrak with Cycle Count Only

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Accessories
206221 Glutton Wall Bracket
102969 Loctite® High Strength Sealant
To secure piston shafts to the piston stud.
223319 Return Tube Kit for returning circulated fluid back to a 55 gal drum
Includes SST return tube, SST bushing and SST elbow
208259 55 Gallon (200 Liter) Suction Kit
Suction hose (3/4 in ID x 6 ft (1.8 m)), elbow, bung adapter, riser tube, 3/4 in npt(f) outlet fitting.
204385 Elevator with Fixed Mounting
Use with 237949 and 237579 to raise and lower pump when changing drums
237949 Stainless Steel Drum Cover Kit (55 gal)
Includes SST drum cover, agitator gasket, access hole plug and fasteners
237579 Air Control Kit for 204385 elevator to raise and lower drum cover
222345 Air Filter/Regulator/Lubricator Kit

Replacement Parts
220656 Air Valve and Pilot Valve Repair Kit
24C134 Piston Seals and Bellows Kit – UHMWPE
24C135 Piston Seals and Bellows Kit – Nylon
220658 Piston Seal Kit – Urethane
221134 Carbide Ball and Seat Kit (2 each)
189432 Fluid Piston – SST
686499 Fluid Piston – Ceramic
ABOUT GRACO

PROVEN QUALITY, LEADING TECHNOLOGY.

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company’s success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco’s ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

GRACO LOCATIONS

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Call today for product information or to request a demonstration.
877-84GRACO (1-877-844-7226) or visit us at www.graco.com.

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