

# **Bellows Pumps**

The Newest Technology in Piston Pumps



PROVEN QUALITY. LEADING TECHNOLOGY.

# Merkur<sup>™</sup> 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.

### **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<sup>™</sup>

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



# **Powerful Capabilities in a Unique Piston Pump**

### 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 colour 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

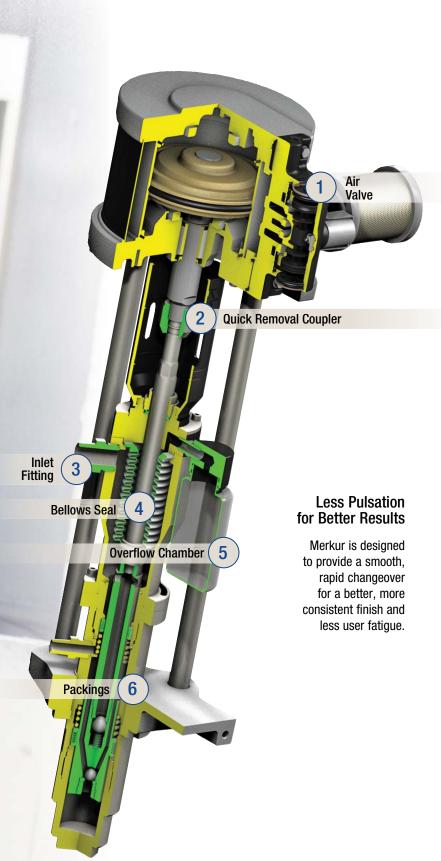
Eliminates throat seal leakage and lubrication

#### 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



# **Glutton<sup>™</sup> Bellows**

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



# The Heavy-Duty, Low Maintenance Solution

### **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

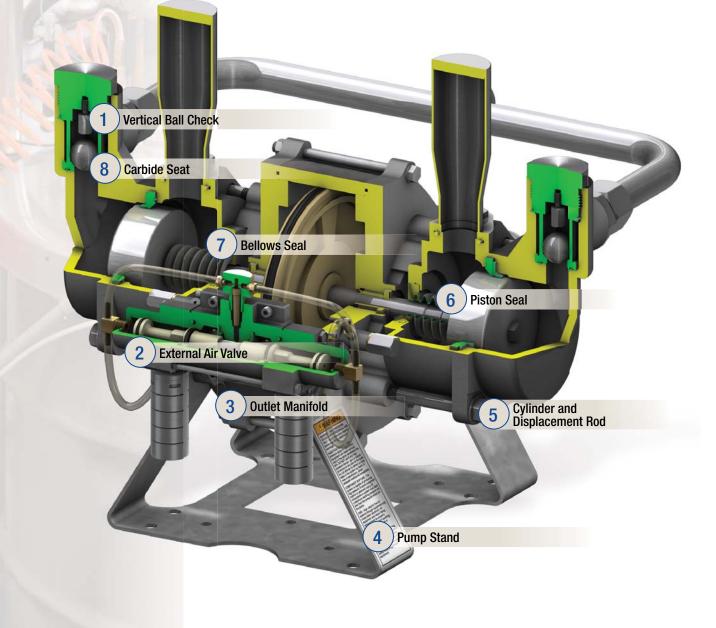
• Multiple configurations for material compatibility

#### 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, 19 liter (5 gallon) pail suction hose and tube
- AL: Airless<sup>™</sup> package includes pump, pump air controls, XTR<sup>™</sup> gun, fluid hose, gun fluid hose, 19 liter (5 gallon) 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, 19 liter (5 gallon) pail suction hose and tube

Ratio	5:1	12:1	15:1	15:1	23:1	24:1	25:1	35:1
Pump Volume per Cycle	150 cc	100 cc	50 cc	150 cc	100 cc	150 cc	50 cc	100 cc
Air Motor Displacement	400 cc	700 cc	400 cc	1200 cc	1200 cc	1800 cc	700 cc	1800 cc
Maximum Fluid Outlet Pressure	35 bar (500 psi)	83 bar (1200 psi)	103 bar (1500 psi)	103 bar (1500 psi)	158 bar (2300 psi)	165 bar (2400 psi)	172 bar (2500 psi)	241 bar (3500 psi)
Maximum Air Inlet Pressure	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)	7 bar (100 psi)
Fluid Flow @ 60 cpm	9.0 l/min. (2.4 gpm)	6.0 l/min. (1.6 gpm)	3.0 l/min. (0.8 gpm)	9.0 l/min. (2.4 gpm)	6.0 l/min. (1.6 gpm)	9.0 l/min. (2.4 gpm)	3.0 l/min. (0.8 gpm)	6.0 l/min. (1.6 gpm)
Air Consumption @ 7 bar (100 psi) @ 20 cpm	0.17 m <sup>3</sup> /min (6 scfm)	0.17 m <sup>3</sup> /min (9 scfm)	0.17 m <sup>3</sup> /min (6 scfm)	0.48 m <sup>3</sup> /min (17 scfm)	0.48 m <sup>3</sup> /min (17 scfm)	0.74 m <sup>3</sup> /min (26 scfm)	0.17 m <sup>3</sup> /min (9 scfm)	0.74 m <sup>3</sup> /min (26 scfm)
Fluid Inlet Size	1" npt(m)	3/4" npt(m)	3/4" npt(m)	1" npt(m)	3/4" npt(m)	1" npt(m)	3/4" npt(m)	3/4" npt(m)
Fluid Outlet Size	3/4" npt(m)	3/8" npt(m)	3/8" npt(m)	3/4" npt(m)	3/8" npt(m)	3/4" npt(m)	3/8" npt(m)	3/8" npt(m)
Air Inlet (Air Controls)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)	3/8" npt(f)

Seal	Mount	Package	Drain Valves	Fluid Filter	DataTrak								
				•		G05B01	G12B01	G15B01	G15B51	G23B01	G24B01	G25B01	G35B01
		윤		•	•	G05B02	G12B02	G15B02	G15B52	G23B02	G24B02	G25B02	G35B02
		Pump				G05B05	G12B05	G15B09	G15B59	G23B09	G24B09	G25B09	G35B09
	페				•	G05B06	G12B06	G15B10	G15B60	G23B10	G24B10	G25B10	G35B10
	Wall		•	•				G15B03	G15B53	G23B03	G24B03	G25B03	G35B03
		-	•	•	•			G15B04	G15B54	G23B04	G24B04	G25B04	G35B04
		¥						G15B11	G15B61	G23B11	G24B11	G25B11	G35B11
					•			G15B12	G15B62	G23B12	G24B12	G25B12	G35B12
6				•		G05B03	G12B03	G15B05	G15B55	G23B05	G24B05	G25B05	G35B05
kin		Pump		•	•	G05B04	G12B04	G15B06	G15B56	G23B06	G24B06	G25B06	G35B06
V-Packing		Pu				G05B07	G12B07	G15B13	G15B63	G23B13	G24B13	G25B13	G35B13
>					•	G05B08	G12B08	G15B14	G15B64	G23B14	G24B14	G25B14	G35B14
			•	•				G15B07	G15B57	G23B07	G24B07	G25B07	G35B07
	Cart	A	•	•	•			G15B08	G15B58	G23B08	G24B08	G25B08	G35B08
	ပိ	4						G15B15	G15B65	G23B15	G24B15	G25B15	G35B15
					•			G15B16	G15B66	G23B16	G24B16	G25B16	G35B16
		_	•	•						G23B35	G24B35	G25B33	G35B35
		AL	•	•	•					G23B36	G24B36	G25B34	G35B36
		ES	•	•					G15B83	G23B33	G24B33		G35B33
		ü	•	•	•				G15B84	G23B34	G24B34		G35B34
				•		G05B09	G12B09	G15B17	G15B67	G23B17	G24B17	G25B17	G35B17
	Wall	Pump		•	•	G05B10	G12B10	G15B18	G15B68	G23B18	G24B18	G25B18	G35B18
		Pu				G05B13	G12B13	G15B25	G15B75	G23B25	G24B25	G25B25	G35B25
					•	G05B14	G12B14	G15B26	G15B76	G23B26	G24B26	G25B26	G35B26
			•	•				G15B19	G15B69	G23B19	G24B19	G25B19	G35B19
		AA	•	•	•			G15B20	G15B70	G23B20	G24B20	G25B20	G35B20
								G15B27	G15B77	G23B27	G24B27	G25B27	G35B27
U-Cup					•			G15B28	G15B78	G23B28	G24B28	G25B28	G35B28
D-U	Cart			•		G05B11	G12B11	G15B21	G15B71	G23B21	G24B21	G25B21	G35B21
		Pump		•	•	G05B12	G12B12	G15B22	G15B72	G23B22	G24B22	G25B22	G35B22
		Pul				G05B15	G12B15	G15B29	G15B79	G23B29	G24B29	G25B29	G35B29
					•	G05B16	G12B16	G15B30	G15B80	G23B30	G24B30	G25B30	G35B30
		AA	•	•				G15B23	G15B73	G23B23	G24B23	G25B23	G35B23
			•	•	•			G15B24	G15B74	G23B24	G24B24	G25B24	G35B24
								G15B31	G15B81	G23B31	G24B31	G25B31	G35B31
					•			G15B32	G15B82	G23B32	G24B32	G25B32	G35B32
Noto	Grad	0 1000	mmand	20 opr	or looo	for intermittent ou	maina applications	and 12 cnm or lea	a for continuous r	umping application			

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

# **Merkur Bellows Accessories**

#### **Spray Guns**

Refer to the spray gun brochure for additional model numbers. All guns include tip of choice.

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			
244573	PRO Xs4 AA Smart Electrostatic Spray Gun			
_				
Accesso	ries			
238926	Back Pressure Regulator			
102397	Fluid Gauge			
	206 bar (20.6 MPa, 3000 psi)			
238890	Fluid Regulator			
243340	Pail Cover with Agitator - SST			
	Use to agitate material in a 19 I (5 gal) pail			
222121	Fluid Regulator, Stainless Steel			
	Maximum working pressure: 103 bar (10.3 MPa, 1500 psi) Regulator range: 10-83 bar (1-8.3 MPa, 150-1200 psi)			
24A587	Pump Outlet Fluid Filter, Stainless Steel			
248307	60 mesh (250 micron), 350 bar (25 MPa, 5000 psi)			
256425	Fluid Filter Drain Valve, Stainless Steel			
	350 bar (25 MPa, 5000 psi)			
224458	Replacement Filter Screen Element			
	2-pack elements, 30 mesh, SST			
224459	Replacement Filter Screen Element			
	2-pack elements, 60 mesh, SST			

Air Control Gauge Covers

5 sheets of 12 covers

Second AA Gun Kit Includes air regulator and gauge

Heater 120 (v)

#### 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
Custian	lassa
Suction	noses
24A954	208 I (55 gal) Drum Suction Hose and Strainer, 3/4 in fluid inlet
24B598	208 I (55 gal) Drum Suction Hose and Strainer, 1 in fluid inlet
24B424	PTFE Lined Suction Hose for 19 I (5 gal) Pails and Strainer, 3/4 in inlet
24B425	PTFE Lined Suction Hose for 19 I (5 gal) Pails and Strainer, 1 in inlet
Gun Hos	es
256390	7.5 m (25 ft) Air Hose
241812	7.5 m (25 ft) Fluid Hose: 228 bar (3300 psi)
24A955	15 m (50 ft) Bundled Air and Fluid Hose: 228 bar (3300 psi)
256389	15 m (50 ft) Air Hose
2/R562	15 m (50 ft) Eluid Hose: 228 har (3300 nsi)

- **24B562 15 m (50 ft) Fluid Hose:** 228 bar (3300 psi)
- 24A588 Hose Clips: Pack of 10

#### **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

# **Glutton Bellows Ordering Information and Accessories**

#### **Technical Specifications**

24A540

24B187

239850

Ratio	Glutton 4:1
Output per cycle	355 cc
Max working pressure	28 bar (400 psi)
Max air input pressure	7 bar (100 psi)
Output at 60 cpm	21.2 l/min. (5.6 gpm)
Pump inlet size	1.25 npt(f)
Pump outlet size	1 npt(f)
Pump manual	307843

#### **Pump Construction**

Material	Seals	Glutton 4:1
CS	Nylon	237008
CS	UHMWPE	220663
SST	Nylon	237011
SST	UHMWPE	220666

#### 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 200 liter (55 gallon) drum
	Includes SST return tube, SST bushing and SST elbow
208259	200 liter (55 Gallon) Suction Kit
	Suction hose (3/4 in ID x 1.8 m (6 ft)), 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 200 litr (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
Replacen	nent Parts

#### 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**

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**

#### CONTACT

ASIA PACIFIC

1-27-12 Hayabuchi

Tel: 81.45.593.7300

Fax: 81.45.593.7301

Yokohama City, Japan 2240025

JAPAN

Graco K.K.

Tsuzuki-ku

*MAILING ADDRESS* P.O. Box 1441 Minneapolis, MN 55440-1441 Tel: 612.623.6000 Fax: 612.623.6777

#### AMERICAS

*MINNESOTA* Worldwide Headquarters Graco Inc. 88-11th Avenue N.E. Minneapolis, MN 55413

# ASIA PACIFIC

#### *CHINA* Graco Hong Kong Ltd. Representative Office Room 118 1st Floor No.2 Xin Yuan Building No.509 Cao Bao Road Shanghai, P.R. China 200233 Tel: 86.21.649.50088 Fax: 86.21.649.50077

#### **EUROPE**

*BELGIUM* European Headquarters Graco N.V. Industrieterrein-Oude Bunders Slakweidestraat 31 3630 Maasmechelen, Belgium Tel: 32.89.770.700 Fax: 32.89.770.777

#### **ASIA PACIFIC**

KOREA Graco Korea Inc. Choheung Bank Building 4th Floor #1599 Gwanyang-Dong, Dongan-Ku, Anyang-Si, Gyunggi-Do, Korea 431-060 Tel: 82(Korea).31.476.9400 Fax: 82(Korea).31.476.9801

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Graco is certified ISO 9001.

#### EUROPE

+32 89 770 700 FAX +32 89 770 777 WWW.GRACO.BE