



# Bellows Pumps

The Newest Technology in Piston Pumps



PROVEN QUALITY. LEADING TECHNOLOGY.

# 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.

## 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





# 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 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

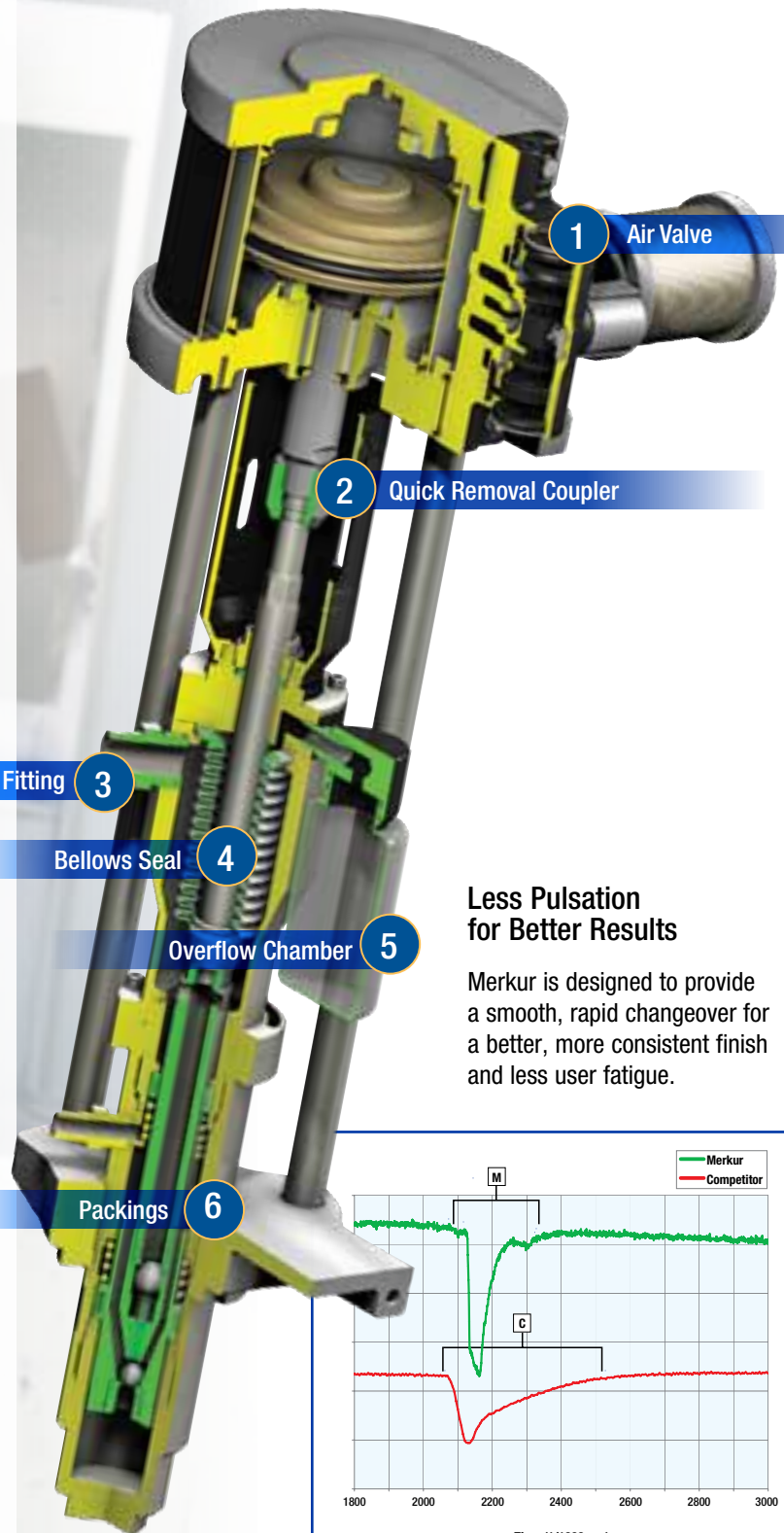
Eliminates throat seal leakage and lubrication

### 5. Overflow Chamber (Optional)

D-shaped seal and overflow chamber contains the material within the pump in case of bellows leakage

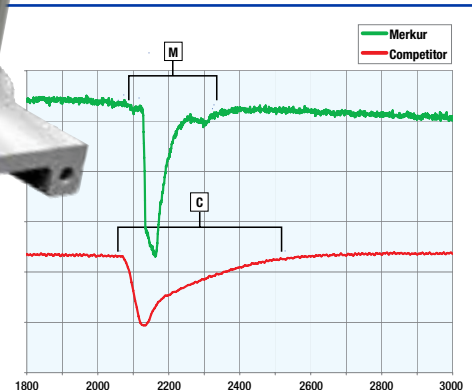
### 6. Throat and Piston Packings

- Spring-loaded to maintain long packing life – no adjustments needed
- Available with V-Packing seals for abrasives or U-Cup seals for UV coatings



## Less Pulsation for Better Results

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



- M** — Quick changeover and recovery minimizes pulsation and creates an even film thickness
- C** — Longer changeover and pressure spike creates inconsistent finish

# Glutton® 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

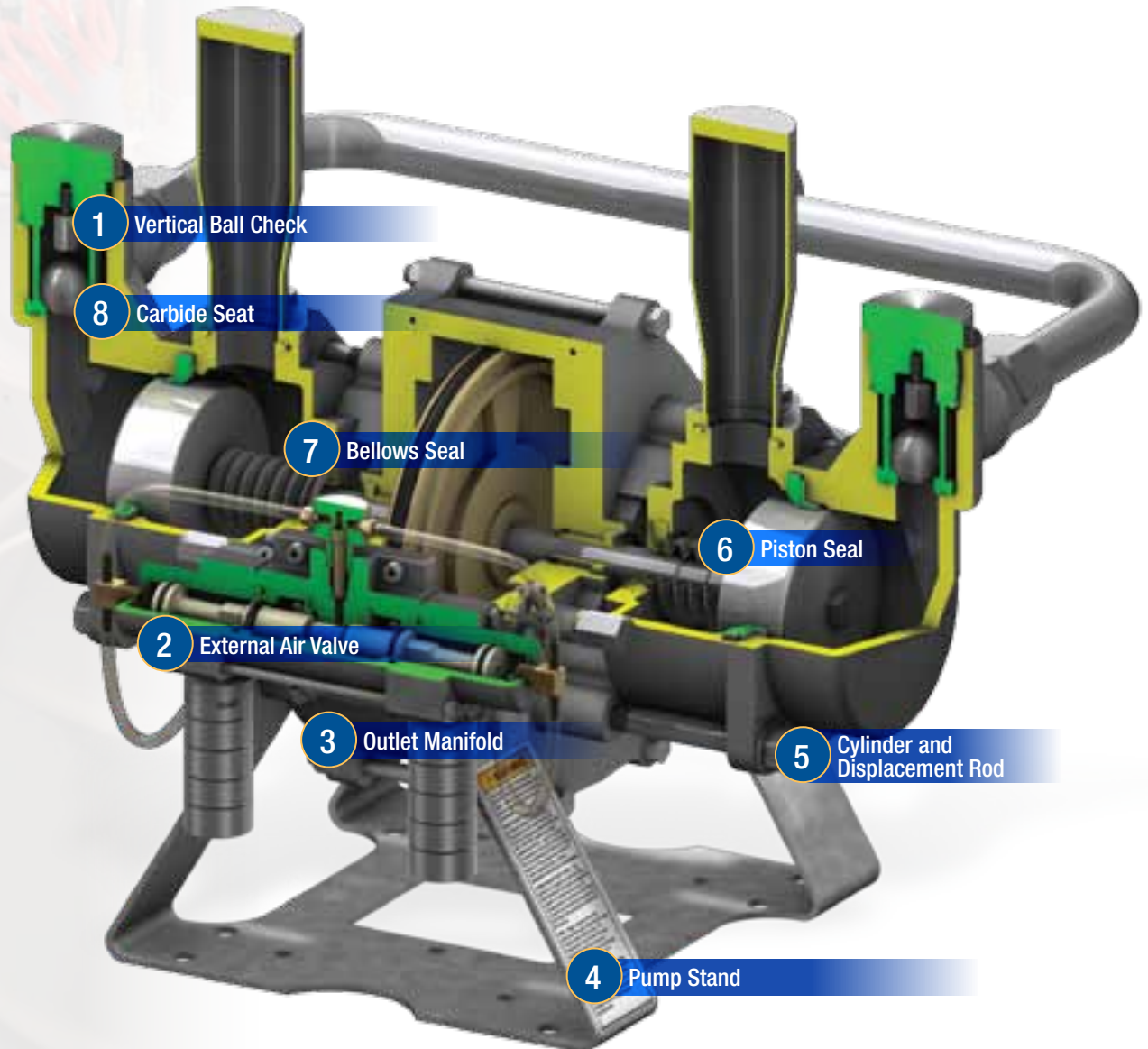
- Multiple configurations for material compatibility

### 7. Heavy-Duty Bellows Seal (Optional)

- Designed for longer life in abrasive applications

### 8. Carbide Seat Accessory

- Ideal for abrasive materials



# Merkur Bellows Ordering Information

## 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

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	500 psi (35 bar)	1200 psi (83 bar)	1500 psi (103 bar)	1500 psi (103 bar)	2300 psi (158 bar)	2400 psi (165 bar)	2500 psi (172 bar)	3500 psi (241 bar)
Maximum Air Inlet Pressure	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 (7 bar)
Fluid Flow @ 60 cpm	2.4 gpm (9.0 lpm)	1.6 gpm (6.0 lpm)	0.8 gpm (3.0 lpm)	2.4 gpm (9.0 lpm)	1.6 gpm (6.0 lpm)	2.4 gpm (9.0 lpm)	0.8 gpm (3.0 lpm)	1.6 gpm (6.0 lpm)
Air Consumption @ 100 psi (7 bar) @ 20 cpm	6 scfm (0.17 m3/min)	9 scfm (0.17 m3/min)	6 scfm (0.17 m3/min)	17 scfm (0.48 m3/min)	17 scfm (0.48 m3/min)	26 scfm (0.74 m3/min)	9 scfm (0.17 m3/min)	26 scfm (0.74 m3/min)
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										
V-Packaging	Wall	Pump				G05B01	G12B01	G15B01	G15B51	G23B01	G24B01	G25B01	G35B01		
						G05B02	G12B02	G15B02	G15B52	G23B02	G24B02	G25B02	G35B02		
						G05B05	G12B05	G15B09	G15B59	G23B09	G24B09	G25B09	G35B09		
						G05B06	G12B06	G15B10	G15B60	G23B10	G24B10	G25B10	G35B10		
		AA							G15B03	G15B53	G23B03	G24B03	G25B03	G35B03	
									G15B04	G15B54	G23B04	G24B04	G25B04	G35B04	
									G15B11	G15B61	G23B11	G24B11	G25B11	G35B11	
									G15B12	G15B62	G23B12	G24B12	G25B12	G35B12	
		Cart	Pump					G05B03	G12B03	G15B05	G15B55	G23B05	G24B05	G25B05	G35B05
								G05B04	G12B04	G15B06	G15B56	G23B06	G24B06	G25B06	G35B06
								G05B07	G12B07	G15B13	G15B63	G23B13	G24B13	G25B13	G35B13
								G05B08	G12B08	G15B14	G15B64	G23B14	G24B14	G25B14	G35B14
	AA								G15B07	G15B57	G23B07	G24B07	G25B07	G35B07	
									G15B08	G15B58	G23B08	G24B08	G25B08	G35B08	
									G15B15	G15B65	G23B15	G24B15	G25B15	G35B15	
									G15B16	G15B66	G23B16	G24B16	G25B16	G35B16	
	AL										G23B35	G24B35	G25B33	G35B35	
											G23B36	G24B36	G25B34	G35B36	
										G15B83	G23B33	G24B33		G35B33	
										G15B84	G23B34	G24B34		G35B34	
	U-Cup	Wall	Pump				G05B09	G12B09	G15B17	G15B67	G23B17	G24B17	G25B17	G35B17	
							G05B10	G12B10	G15B18	G15B68	G23B18	G24B18	G25B18	G35B18	
							G05B13	G12B13	G15B25	G15B75	G23B25	G24B25	G25B25	G35B25	
							G05B14	G12B14	G15B26	G15B76	G23B26	G24B26	G25B26	G35B26	
AA								G15B19	G15B69	G23B19	G24B19	G25B19	G35B19		
								G15B20	G15B70	G23B20	G24B20	G25B20	G35B20		
							G15B27	G15B77	G23B27	G24B27	G25B27	G35B27			
							G15B28	G15B78	G23B28	G24B28	G25B28	G35B28			
Cart		Pump					G05B11	G12B11	G15B21	G15B71	G23B21	G24B21	G25B21	G35B21	
							G05B12	G12B12	G15B22	G15B72	G23B22	G24B22	G25B22	G35B22	
							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				

Note: 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
244573	PRO Xs AA Smart Electrostatic Spray Gun

## Accessories

238926	Back Pressure Regulator
102397	Fluid Gauge 3000 psi (206 bar, 20.6 MPa)
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

## 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

## Suction Hoses

24A954	55 gal (208 l) Drum Suction Hose and Strainer, 3/4 in fluid inlet
24B598	55 gal (208 l) Drum Suction Hose and Strainer, 1 in fluid inlet
24B424	PTFE Lined Suction Hose for 5 gal (19 l) Pails and Strainer, 3/4 in inlet
24B425	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

## 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

## 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

## Technical Specifications

Ratio	Glutton 4:1
Output per cycle	355 cc
Max working pressure	400 psi (28 bar)
Max air input pressure	100 psi (7 bar)
Output at 60 cpm	5.6 gpm (21.2 lpm)
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 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

### 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

### 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

#### AUSTRALIA

Graco Australia Pty Ltd.  
Suite 17, 2 Enterprise Drive  
Bundoora, Victoria 3083  
Australia  
Tel: 61 3 9467 8558  
Fax: 61 3 9467 8559

#### CHINA

Graco Hong Kong Ltd.  
Shanghai Representative Office  
Room 118 1st Floor  
No.2 Xin Yuan Building  
No.509 Cao Bao Road  
Shanghai, 200233  
The People's Republic of China  
Tel: 86 21 649 50088  
Fax: 86 21 649 50077

### INDIA

Graco Hong Kong Ltd.  
India Liaison Office  
Room 432, Augusta Point  
Regus Business Centre 53  
Gurgaon, Haryana  
India 122001  
Tel: 91 124 435 4208  
Fax: 91 124 435 4001

### JAPAN

Graco K.K.  
1-27-12 Hayabuchi  
Tsuzuki-ku  
Yokohama City, Japan 2240025  
Tel: 81 45 593 7300  
Fax: 81 45 593 7301

### KOREA

Graco Korea Inc.  
Shinhan Bank Building  
4th Floor #1599  
Gwanyang-Dong, Dongan-Ku,  
Anyang-si, Korea 431-060  
Tel: 82 31 476 9400  
Fax: 82 31 476 9801

## SALES/ DISTRIBUTION/ SERVICE

Call today for product information or to request a demonstration.

**877-84GRACO (1-877-844-7226) or visit us at [www.graco.com](http://www.graco.com).**

Graco Inc. is registered to I.S. EN ISO 9001

North America  
Customer Service  
800-328-0211  
Fax 877-340-6427