Glass Industry

Sealant and Adhesive Equipment for Window Applications

PROVEN QUALITY. LEADING TECHNOLOGY.

Advanced Technology for the Glass Industry

Improve productivity and reduce your cost of ownership

Graco systems are engineered and built to outperform the competition. They incorporate innovative features that streamline operations and reduce downtime.

- Built with high-quality parts for longer life and reliability – and less downtime for maintenance
- Advanced pumping technology creates a better, more consistent bead – which results in reduced rework
- Better pumping technology also means less wasted material
- For unique applications, Graco can also custom-engineer your equipment solution

Graco is dedicated to providing the highest level of service through its knowledgeable, qualified global team of distributors. With Graco's ongoing investment in new technologies, you are assured a world-class product offering that helps maximize your plant's production capacity.

For more information, contact Graco at **877-844-7226** or email **info@graco.com**.

First choice for productivity and reliability

From hot melt systems to ambient supply systems to plural-component proportioners, Graco offers a complete line of sealant and adhesive dispensing equipment, each configured to fit your specific application. Count on Graco equipment for advanced technologies, superior quality and consistent performance that improves your productivity and throughput.

Using one global supplier makes sense. Here's why:

- Similar equipment functionality across your plant
- Easier maintenance with common wear parts
- Better service and support with a global distribution network
- Common and shared parts which provide low carrying costs
- Simplified training

Advanced, intuitive controls

Graco's Advanced Display Module and DataTrak™ units feature:

- Immediate access to information
- Material usage and flow tracking
- Pump runaway protection
- Preventive maintenance strategy support
- Easy programming and servicing
- Simplified training
- Optional password protection
- Data download to USB
- Multiple language support

A Complete Line of Solutions

HFR Metering System

ExactaBlend® AGP
Advanced Glazing Proportioner

Therm-O-Flow® 200
Hot Melt System

D200
Ambient Supply System

Window Glazing or Back Bedding

- Adheres glass onto the sash for a weathertight seal
- *Use a Therm-O-Flow, Graco Supply System, ExactaBlend AGP or HFR Metering System*

Desiccant Application

- Spacer is filled with desiccant to prevent condensation and improve insulating performance
- *Use a Therm-O-Flow or Graco Supply System*

Primary Seal

- Requires fast-bonding hot-melt, fast-set sealant
- *Use a Therm-O-Flow 200 or Therm-O-Flow 20*

Secondary Seal

- Adds structural stability and provides moisture barrier
- Common materials are two-component or reactive hot melt
- *Use an ExactaBlend AGP or HFR Metering System*

Applications

- Window glazing
- Curtain wall
- Insulating glass processes such as primary and secondary sealing
- Desiccant applications
- Corner key sealing / corner joint bonding
- Roll coat applications
- Profile wrapping

Materials

- Silicones
- Butyls
- Polysulfides
- Polyurethanes
- Desiccants
- Urethanes
- Epoxies
- Reactive hot melt adhesives
- Warm melt sealers
- Specialty resins
- Polyvinyl chloride (PVC)

ExactaBlend AGP

Variable Ratio Advanced Glazing Proportioner

Technical Specifications - ExactaBlend AGP

Typical ratios by weight	6:1 to 20:1**
Flow rates	Continuous flow - 500 to 4000 grams/min*
Max. working pressure:	
UL6000 valve	4000 psi (276 bar, 27.6 MPa)
MD2 Valve	3000 psi (207 bar, 20.7 MPa)
Fluid outlet base	1/2 npt (f)
Fluid outlet catalyst	1/4 npt (f)
Air inlet	3/4 npt (f)
Boom height	108 in (274 cm)
Ram height (raised)	102 in (259 cm)
Weight	865 lb (390 kg)
Width x depth (base)	40 x 42 in (101 x 107 cm)
Electrical requirements	90-264 VAC, 50/60 Hz, 1-ph, 4 amps max
Air pressure requirements	80 to 100 psi (6.0 to 7.0 bar/0.6 to 0.7 MPa)
Air flow requirements	35 scfm (1.0m³/min) at 4000 g/min in polysulfide
Manual	3A2894

**Flow rate is based on Polysulfide at room temperature. ** Weight ratios are dependent upon specific gravities.*

Superior mixing and ratio assurance made easy

The ExactaBlend™ Advanced Glazing Proportioner handles two-component sealants and adhesives – providing accurate, on-ratio mixing and a consistent flow rate, even during pump changeover. It also:

- Provides automatic shut-down if off-ratio conditions occur
- Cuts material waste and reduces rework for a healthier bottom line
- Ultimately reduces the chance of seal failure on insulating glass, resulting in better quality end products

Advanced technology at an affordable price

- Easy to use – electronic controls take the guesswork out of setting or changing the ratio
- Optional data download provides reports on ratio, flow rate, material usage and alarm events

Reduces wasted material

When the ExactaBlend AGP is coupled with the MD2 Valve, the catalyst and base materials are blended together in the mixer – apart from the applicator. This reduces the amount of base purge material needed to clean the mixer.

Materials

- Two-part sealants and adhesives
- Two-part structural adhesives

Applications

- Manual adhesive and sealant applications
- Insulating glass sealant
- Structural glazing for curtainwall
- Window glazing or back bedding
- Structural adhesive
- Cartridge fill

HFR Metering System

Hydraulic Fixed Ratio Metering System for Sealants and Adhesives

Improve your throughput with advanced dispensing technology

The Graco HFR™ Metering System is a meter, mix and dispense system that processes multiple sealant and adhesive materials.

Accurate, on-ratio dispense means less waste, more profits

This hydraulic, fixed-ratio metering system consistently achieves accurate ratios and volumes. As the system dispenses material, it automatically fine-tunes and adjusts material flows and pressures to achieve a consistent bead. As a result, you waste less material, reducing scrap and rework.

More technology for less capital investment

The Graco HFR offers advanced technology and functionality – at a lower price than basic shot meters or gear pumps. In addition, the system's horizontal pumps can be rebuilt at your facility, eliminating costly rebuilds, the need for backup pumps and ultimately reducing your total cost of ownership.

Materials

- Urethanes
- Polysulfides
- Epoxies
- Acrylics
- Methyl Methacrylate Adhesive (MMA)
- Silicones
- Filled and unfilled materials

Applications

- Automated sealant and adhesive applications
- Window glazing or back bedding
- Secondary sealing

Technical Specifications - HFR Metering System

Maximum Fluid Working Pressure	3000 psi (207 bar, 20.7 MPa)
Maximum Fluid Temperature	190°F (88°C)
Fluid Inlets	Component A (Red): 1/2 npt(f) Component B (Blue): 3/4 npt(f)
Fluid Outlets	Component A (Red): #8 (1/2 in.) JIC (3/4-16 unf), with #5 (5/16 in.) JIC adapter Component B (Blue): #10 (5/8 in.) JIC (7/8-14 unf), with #6 (3/8 in.) JIC adapter
Weight	Units with 12 kW Heaters: 868 lb (394 kg) Units without heaters: 634 lb (288 kg)
Manual	313997

Therm-O-Flow

Bulk Melt Systems

The most advanced technology on the market

With throughput capability 200% better than the leading competitor, Therm-O-Flow® bulk hot melt systems from Graco provide the best performing industrial bulk melt systems on the market.

Improved process efficiency

- Automatic electric crossover eliminates downtime with tandem units
- Sensors signal when drums are low or empty
- New packing and pump rod designs extend maintenance cycle seven times

Improved production capability

- Patented Mega-Flo™ Platen offers greater throughput and less material waste
- No lengthy oven melting – melt resins on demand, only what you need
- Automatic daily startup without delay

Materials

- Butyls
- Polyurethane Reactive (PUR)
- Other hot melt materials at virtually any viscosity

Applications

- Glazing and back bedding
- Primary and secondary seal
- Desiccant

Technical Specifications - Therm-O-Flow

	Therm-O-Flow 200	Therm-O-Flow 20	Therm-O-Flow 20 (15:1)
Fluid flow at 60 cpm	2.8 US gpm (10.6 lpm)	2.8 US gpm (10.6 lpm)	0.9 US gpm (3.4 lpm)
Max. pump operating temp.	400°F (204°C)	400°F (204°C)	400°F (204°C)
Weight	1630 lb (739 kg)	840 lb (381 kg)	840 lb (381 kg)
Air inlet size	3/4 npt (f)	3/4 npsm (f)	3/4 npsm (f)
Pump fluid outlet size*	1 npt (f)	1 npt (f)	1/2 npt (f)
Power consumption: **Compressed air**	25-50 scfm typical	25-50 scfm typical	25-50 scfm typical
Peak consumption with: **Mega-Flo melt grid** **Standard/finned melt grid** **Smooth melt grid**	 30.2 KVa 27.1 KVa 27.1 KVa	 NA 13.1 KVa 13.1 KVa	 NA 9.1 KVa 9.1 KVa
Manuals	334130	334129	334129

**Therm-O-Flow models 200 and 20 use Merkur or NXT air motors. Model 20 (15:1) uses a Graco President air motor.*

Graco Supply Systems

Sealant & Adhesive Supply Systems with NXT Technology

The next generation of technology and performance

Designed with features that minimize maintenance and streamline everyday operations, Graco Supply Systems help reduce your cost of ownership.

Built with high-quality parts for longer life

- Seal design offers less maintenance and lasts two to three times longer than the competition
- Better durability means increased uptime

NXT – the next generation of Graco air motors

- NXT Air Motor is the new standard in air motor durability, lasting ten times longer than the King

Advanced controls – intuitive and easy to use

- Tracks and displays material usage
- Provides pump diagnostics for better maintenance
- Provides pump runaway protection
- Tandem Display Module provides automatic electric crossover that switches over to the second ram when material reaches a certain level

Materials

- Silicones
- Butyl
- Polysulfides
- Desiccants
- Urethanes
- Acrylics
- Epoxies
- PVC
- Specialty resins
- Latex

Applications

- Insulating glass manufacturing
- Glazing and back bedding
- Desiccant applications

Technical Specifications - Graco Supply Systems

Pump	Pump Ratio	Air Motor	gpm @ 60 cpm (lpm)	psi (bar, MPa)	Available in Stainless Steel
C40	40:1 100cc	NXT2200	1.7 (6.4)	4000 (276, 27.6)	No
C63	63:1 100cc	NXT3400	1.7 (6.4)	6300 (434, 43.4)	No
C23	23:1 200cc	NXT2200	3.0 (11.4)	2300 (159, 15.9)	Yes
C36	36:1 200cc	NXT3400	3.0 (11.4)	3600 (248, 24.8)	Yes
C68	68:1 200cc	NXT6500	3.0 (11.4)	6200 (427, 42.7)	Yes
C29	29:1 250cc	NXT3400	3.8 (14.4)	2900 (200, 20.0)	Yes
C55	55:1 250cc	NXT6500	3.8 (14.4)	5500 (379, 37.9)	Yes
C82	82:1 250cc	Premier	3.8 (14.4)	6200 (427, 42.7)	Yes
C14	14:1 500cc	NXT3400	8.0 (30.3)	1400 (97, 9.7)	Yes
C26	26:1 500cc	NXT6500	8.0 (30.3)	2600 (179, 17.9)	Yes
C39	39:1 500cc	Premier	8.0 (30.3)	3900 (269, 26.9)	Yes

Manual 312371