

Therm-O-Flow®

Bulk Melt Systems with NXT™ Technology



Therm-O-Flow. Any Material. Any Time.

222

The most advanced technology on the market

With melt rates that are at least 60 percent higher than the leading competitor, Therm-O-Flow® bulk melt systems from Graco® outperform the competition time after time. In fact, Therm-O-Flow solutions are the best performing industrial bulk melt systems on the market.

Therm-O-Flow's advanced temperature control virtually eliminates overshoot of temperature, resulting in better adhesive quality and reduced rework due to damaged material.

Graco offers a complete line of Therm-O-Flow bulk melt systems – each configured to fit your specific application.

Applications:

- · Insulating glass
- · Automotive interiors
- RV lamination
- · Window manufacturing
- · Cable manufacturing
- Furniture assembly
- Door lamination
- Bookbinding
- · Tape and label manufacturing

Materials:

- Butyl Rubber
- · Ethylene Vinyl Acetate (EVA)
- Polyamide
- Polyurethane Reactive (PUR)
- Pressure Sensitive Adhesives (PSA)
- Polyisobutylene (PIB)
- Warm Melt Sealers

Ethernet Connection

Provides remote reporting capabilities

Maintenance Call Button

Maximizes productivity by signaling maintenance crew

EasyKey™ Controls

Easy-to-use, eye-level controls improve setup and operation, speeding up production

Integrated Drum Air Blow Off

Reduces downtime with quick, easy drum changes

Precision Temperature **Control**

Ensures consistent processes with accurate temperature control of up to 12 zones

Easy Access Air Controls

Lets you control motor, ram and blow-off air independently from front panel

Light Tower

Lets operator know the unloader status from a distance, indicating readiness, alarms and warnings to reduce downtime

NXT™ Air Motor

Provides quieter operation, better performance and improved efficiency

Large Ram Cylinders

Increases pump loading and flow rate capability

Severe-Duty Check-Mate® Pump

For trouble-free long life and reliable material movement with minimal pressure drop

Heated Platen

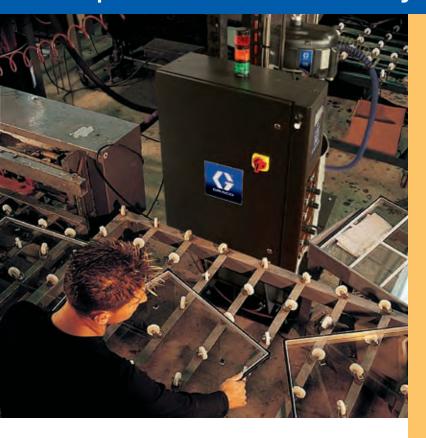
Provides industry-leading melt rates and easy cleanup



Therm-0-Flow 200

THERM-O-FLOW

Improve Your Productivity and Throughput





Therm-0-Flow 20

Improve process efficiency

- Automatic electric crossover eliminates downtime with tandem units
- Drum low and empty sensors signal when drum changes are needed
- Quick-change pump packings provide faster, easier maintenance
- New, extended-life packing cartridges are available for abrasive materials
- Heated platens have cast-in heaters which never need to be replaced – and carry a lifetime warranty
- Material totalizers simplify preventive maintenance scheduling
- Pump throat seals and plate seals are the only wear components on Therm-O-Flow and can be changed in less than one hour
- Self-diagnostics allow for predictive and preventive maintenance strategies – improving process availability

Improve production capacity

- Patented Mega-Flo™ Platen offers industry-leading melt rates and reduces material waste
- 7-Day timer provides automatic daily startup Therm-0-Flow is ready when the shift starts
- Preventive maintenance warnings reduce unplanned downtime

Reduce energy costs

- Temperature setback conserves energy during production breaks and prevents material charring
- Inactivity shutoff saves energy costs and prevents material charring

Support environmental initiatives

- Built-in runaway control automatically shuts down supply system in event of component failure
- The quiet, low-noise NXT Air Motor operates around 87 decibels, while other comparable motors operate up to 103 decibels

Advanced Controls

Intuitive and easy to use

EasyKey™ Controls

- · Displays both actual and set point temperatures for up to eight zones at a time
- Large single temperature zone display can be read and monitored from up to 25 feet (7.6 meters) away
- Material totalizer for preventative maintenance scheduling
- Resettable material totalizer for job or daily material dispense totaling
- · Languages supported: English, Spanish, German, French, Chinese and Japanese

Designed for easy service

- · Integrated self-diagnostics and serviceable design make service quick and easy
- · Easy-to-read alarms include high and low temperature, drum low and drum empty, runaway, and more

Automates process information integration

- · Remote reporting through Ethernet connection includes material totalizers, setup replication, system alarm log, and temperature and volume recording
- Discrete I/O feature provides remote control inputs and outputs for automation and integration with other automated equipment





Test Drive Therm-0-Flow's EasyKey Controls at www.graco.com!



Mega-Flo™ offers industryleading melt rates for greater production capacity

The patented Mega-Flo platen for 55 gallon (200 liter) units provides the highest output per watt of power in the industry. No matter what the material, Mega-Flo assures smooth melting with the least amount of material degradation.

- · Convex plate design wastes less material and saves money
- Non-stick PTFE-coated ram plates for easy maintenance
- Improved wiper seals protect moisturesensitive material
- · Melts through the thickest material with ease

Smooth platens

- · Even surface heats less material for maximum efficiency
- · Ideal for higher-cost materials with low flow rates





5 gal (20 l)

Finned platens

· Provide highest melt rate for high flow and hard-to-melt materials





55 gal (200 l)

A Complete Line of Therm-O-Flow Systems

No matter what the application, Graco has a bulk melt solution



Therm-0-Flow 200

- The ultimate hot melt bulk system
- Highest melt rate in the industry[†]
- Six to eight zones standard, up to 12 heat zones with an optional four-zone expansion box
- Main unit easily integrated with a second Therm-0-Flow 200 or Therm-0-Flow 20 for tandem operation



Therm-0-Flow 20/NXT

- Perfect for 5 gallon (20 liter) applications where high performance is still needed
- · Double the power for high melt rate needs
- Allows accurate temperature control of six zones (standard). Up to 10 heat zones with an optional four-zone expansion box
- Main unit easily integrated with a second Therm-0-Flow 200 or Therm-0-Flow 20 for tandem operation



Therm-0-Flow 20/Mini-5

- Ideal for low to medium viscosity materials
- Double the power for high melt rate needs
- Allows accurate temperature control of four zones (standard). Up to eight heat zones with an optional four-zone expansion box
- Tandem capabilities with other Therm-0-Flow Mini-5's

Better performance, higher melt rates

Advanced NXT Air Motor technology, a powerful piston pump and patented platen design result in Therm-O-Flow melt rates being at least 60 percent higher than the competition.

MODEL	PUMP STYLE	CONTAINER SIZE	MAXIMUM Melt rate	MAXIMUM Flow Rate	VISCOSITY
Therm-0-Flow 20	Mini-5 2-ball	5 gal (20 l)	1.3 lb/min* (0.6 kg/min)	9 lb/min* (4 kg/min)	Low to medium
Therm-0-Flow 20	Check-Mate Priming Piston	5 gal (20 l)	1.5 lb/min* (0.7 kg/min)	12 lb/min* (5.4 kg/min)	Low to ultra high
Therm-0-Flow 200 w/Mega-Flo plate**	Check-Mate Priming Piston	55 gal (200 l)	11 lb/min* (5 kg/min)	12 lb/min* (5.4 kg/min)	Low to ultra high

[†]Tested and compared to the leading competitor, using PSA and butyl

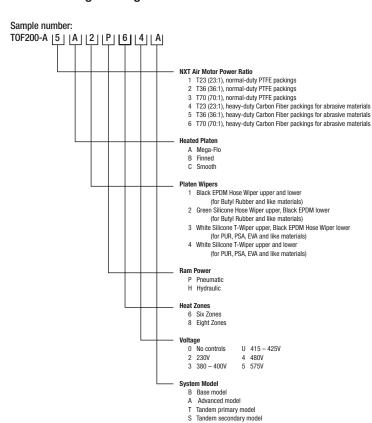
Therm-O-Flow Selection Guide

Therm-0-Flow 200 Features and Options

FEATURE	BASE Model	ADVANCED Model	TANDEM PRIMARY	TANDEM SECONDARY
EasyKey Interface	•	•	•	*
7-Day Timer	•	•	•	•
Material Totalizer	•	•	•	•
Temperature Standby	•	•	•	•
Inactivity Shut-off	•	•	•	•
Pump Runaway Control	•	•	•	•
Adjustable Heat Soak Timers	•	•	•	•
Integrated Self-Diagnostics	•	•	•	•
Drum Low & Empty Sensors & Alarm	Optional	•	•	•
Light Tower	Optional	•	•	*
Maintenance Call Button	Optional	•	•	*
Remote Control I/O	Optional	•	•	*
Remote Reporting	Optional	•	•	*
Drum Ram Post Saddle Clamps	Optional	Optional	Optional	Optional
Heavy Duty Drum Band Clamp	Optional	Optional	Optional	Optional
Fiber Drum Reinforcement Shell	Optional	Optional	Optional	Optional
Vent Hood Kit	Optional	Optional	Optional	Optional

^{*} Included in Tandem Primary

Custom design configuration for Therm-0-Flow 200





Select the specific air motor, platen, heat zone controls, hose/gun kits and accessories you need for your specific bulk melt application.

Many other options are available

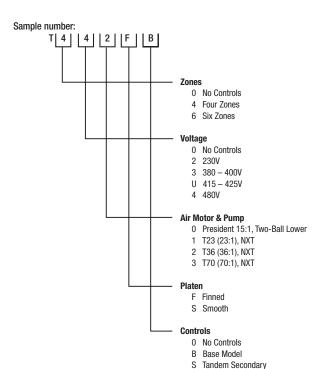
See your distributor for more detailed ordering information.

Therm-0-Flow 20 Features and Options

FEATURE	TOF20 MINI-5	T0F20	TOF20 TANDEM PRIMARY	TOF20 TANDEM SECONDARY
Air Motor / Ratio	President® / 15:1	NXT / 23:1, 36:1, 70:1	15:1 / 23:1, 36:1, 70:1	15:1 / 23:1, 36:1, 70:1
Heat Zones	4	6	4 or 6	4 or 6
EasyKey Interface	•	•	•	-
7-Day Timer	•	•	•	•
Material Totalizer	•	•	•	•
Temperature Standby	•	•	•	•
Inactivity Shut-off	-	•	•	•
Pump Runaway Control	-	•	•	•
Adjustable Heat Soak Timers	•	•	•	•
Integrated Self-Diagnostics	•	•	•	•
Drum Low & Empty Sensors & Alarm	Optional	Optional	Required *	Required *
Light Tower	Optional	Optional	Optional	-
Maintenance Call Button	Optional	Optional	Optional	-
Remote Control I/O	Optional	Optional	Optional	-
Remote Reporting	Optional	Optional	Optional	-
Vent Hood Kit	Optional	Optional	Optional	Optional

^{*} Drum Low & Empty Sensor Kit is required for tandem system operation.

Custom design configuration for Therm-0-Flow 20





Therm-0-Flow 20 with NXT air motor



Therm-O-Flow 20/Mini-5

Select the specific air motor, platen, heat zone controls, hose/gun kits and accessories you need for your specific bulk melt application.

Many other options are available

See your distributor for more detailed ordering information.

Advantages of Therm-O-Flow Technology

Improves process efficiency with tandem operation

Configure your Therm-0-Flow Systems to operate in tandem for better productivity and improved uptime.

- Automatic electric crossover eliminates downtime you get double the material volume before you need to change drums or pails
- · No stopping production to change a drum or pail
- · Only one interface needed for two systems
- Many tandem combinations are available including:
 - Two Therm-0-Flow 200 units
 - One Therm-O-Flow 200 operating with one Therm-O-Flow 20
 - Two Therm-0-Flow 20 units
 - Two Therm-O-Flow 20/Mini-5 units

High output for improved production capacity

High melt rate, combined with the large number of heat zones and high pressure result in greater productivity and performance.

- · Allows use of multiple hoses and applicators
- · Long hose and drop lengths
- High flow rates even with high-viscosity materials

Supports predictive diagnostics

 Self-diagnostics allow for advanced predictive and preventive maintenance strategies, letting you plan for maintenance around your production schedule

Durable, long-lasting NXT Technology

- The NXT air motor is proven to last 10 times longer than its predecessor, the Graco® King
- NXT air motor is the highest technology air motor on the market
- · Rugged body armor won't rust or dent
- Modular design for easy maintenance

Easy to use

- Large graphic interface is intuitive and simple to use, resulting in reduced training and better equipment utilization
- · One-sided control and access
- · Easy maintenance
 - Separate pneumatic and electric controls
 - Quick electrical connections



Integrated drum air blow off valve reduces downtime with quick drum changes



Finned platens offer the highest melt rates and are ideal for high flow or hard-to-melt materials

Technical Specifications

	Therm-0-Flow 200	Therm-0-Flow 20	Therm-0-Flow 20/Mini-5
Displacement pump effective area	$\ldots \ldots \qquad 1.24 \ in^2 \ (8 \ cm^2) \ldots \ldots \ldots$	$\ldots \qquad 1.24 \ in^2 \ (8 \ cm^2) \ \ldots .$	$\ldots \ldots 0.884 \ in^2 \ (5.7 \ cm^2)$
Volume per cycle	11.7 in³ (192 cm³)	11.7 in³ (192 cm³)	$\ldots \ldots 3.5 \ in^{\scriptscriptstyle 3} \ (57.4 \ cm^{\scriptscriptstyle 3})$
Pump cycles per 1 gal (3.8 l)			
Fluid flow at 60 cpm	2.8 U.S. gpm (10.6 lpm)	2.8 U.S. gpm (10.6 lpm)	0.9 U.S. gpm (3.41 lpm)
Max. fluid working pressure			
T15			1800 psi (124 bar, 12.4 MPa)
T23	2300 psi (159 bar, 15.9 MPa)	2300 psi (159 bar, 15.9 MPa)	
T36	3000 psi (207 bar, 20.7 MPa)	3000 psi (207 bar, 20.7 MPa)	
T70	3000 psi (207 bar, 20.7 MPa)	3000 psi (207 bar, 20.7 MPa)	
Max. air input pressure	, ,	, , , ,	
T15			100 psi (7 bar, 0.7 MPa)
T23	100 psi (7 bar. 0.7 MPa)	100 psi (7 bar. 0.7 MPa)	, , , ,
T36	, ,	, , ,	
T70			
Max. pump operating temperature.		• • • • •	400°F (204°C)
Air motor piston effective area			
T15			14 in² (90 cm²)
T23	$\dots \qquad 28.5 \; \text{in}^{_2} \; (183.9 \; \text{cm}^{_2}) \; \dots \dots \dots \dots$	28.5 in² (183.9 cm²)	
T36	$\ldots \qquad 44.6 \ in^2 \ (287.7 \ cm^2) \ldots \ldots \ldots$	44.6 in ² (287.7 cm ²)	
T70	86.8 in² (560 cm²)	86.8 in ² (560 cm ²)	
Stroke length	4.75 in (120 mm)	4.75 in (120 mm)	4 in (102 mm)
Air inlet size	1/2 npsm(f)	1/2 npsm(f)	1/2 npsm(f)
Pump fluid outlet size	1 npt(f)	1 npt(f)	1/2 npt(f)
Wetted parts Carbon steel; brass ch	rome; zinc; and nickel-plating;	Same as TOF 200	Carbon steel; chrome
304, 316, 44	10, and 17-4 PH grades of SST;		over SST; PTFE
, ,	alloy steel; ductile iron; PTFE		,
Weight		750 lb (340 kg)	650 lb (295 kg)
Displacement pump weight	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,
Instruction manuals	(2.1.3)		
Therm-0-Flow 200	311208		
Therm-0-Flow 20 Mini-5		311976	
Therm-0-Flow 20 15:1			312094
Therm-0-Flow NXT Air Motor			
President Air Motor.			308982
Mini-5 pump			
Check-Mate 800 Displacement Pump			
Hot Melt Manual Dispense Gun			311200
Therm-0-Flow Automatic Dispense Valves			
Endure Automatic Dispense Valves			
		309370	310000
Power requirements	OF FO sefm tunical	OF FO poten tunical	OF FO soft tunical
Compressed air	••	25-50 scfm typical	
Electricity voltage (as selected)	•	·	·
	380/400 3-phase & 50/60 Hz	·	·
	415/425 3-phase & 50/60 Hz	•	·
		470/490 3-phase & 50/60 Hz	470/490 3-phase & 50/60 Hz
	470/490 3-phase & 50/60 Hz	17 07 100 0 pilado a 007 00 112 1 1 1 1	•
	470/490 3-phase & 50/60 Hz		·
Peak consumption*	·		·
Peak consumption* With Mega-Flo melt grid	575 3-phase & 50/60 Hz		·
•	575 3-phase & 50/60 Hz	8.7 KVa	6.4 KVa

Therm-O-Flow machines and complete configured packages carry the CE mark.

* Includes drum melt grid, pump and a 5KVa transformer for the 230 volt hoses and accessories.

Ordering Information

Therm-0-Flow 20 Mini-5

Accessories

288543 Therm-0-Flow 20 and Therm-0-Flow Mini-5 Hose Support Kit

Used for second hose exiting the pump.

255224 EasyKey Replacement Kit

Repair Kits

918439 Ram Repair Kit

Kit contains O-rings, retaining rings, piston and bumper for 5 gal (20 l),

3 in (76 mm) dual post ram.

C31065 Wiper Seal Replacement Kit

Contains silicone coated round wiper seal with internal spring for 5

gal (20 I) ram plate.

918424 Pump Repair Kit

For heated President 15:1 pump.

Therm-0-Flow 20

Accessories

255233 Drum Low and Empty Sensor Kit

288543 Therm-0-Flow 20 and Therm-0-Flow Mini-5 Hose Support Kit

Used for second hose exiting the pump.

253147 EasyKey Replacement Kit

289356 Vent Hood Kit

Repair Kits

918439 Ram Repair Kit

Kit contains O-rings, retaining rings, piston and bumper for 5 gal

(20 l), 3 in (76 mm) dual post ram.

C31065 Wiper Seal Replacement Kit

Contains silicone coated round wiper seal with internal spring for

5 gal (20 l) ram plate.

241782 Pump Repair Kit

For Check-Mate pump.
288511 Finned Platen assembly

288512 Smooth Platen assembly

Therm-0-Flow 200

Accessories

253559 Drum Low and Drum Empty Sensor Kit Signals when drum changes are needed.

233559 Vent Hood Kit

Exhaust material vapors with vent hood and facility ventilation system.

253147 EasyKey Replacement Kit

918397 Drum Clam Shell

Used to reinforce fiber drums.

918395 Heavy Duty Drum Clamp

Centers, supports, and holds drum during ram removal.

C32463 Saddle Clamp

Centers drum on base for raising and lowering of rams.

115694 Drip Tray Shield

253283

Used to retain any material drips from heated plates while changing drums.

234966 Hose Support Spring Kit

Mounts to cross bar on ram.

Hose Hanger Spring Kit

Mounted by customer to hang hose overhead without kinking.

15H367 Shield, Accessory, TOF 200

Accessories for all Therm-0-Flow units

Therm-O-Flow System Accessories

255372 4-zone Expansion Box

Adds 4 heated zones to a Therm-0-Flow 20 or 200 system.

253547 Light Tower Ki

Indicates alarms and drum low/drum empty sensors to reduce downtime.

253548 Maintenance Call Button Kit

Signals maintenance crew to maximize productivity.

253567 Discrete I/O Kit

Discrete I/O feature provides remote control inputs and outputs for automation.

253566 Ethernet Connection Kit

Remote reporting through Ethernet connection includes material totalizers, setup

replication, system alarm log, and custom language capability.

Applicators & Dispense Valves

249515	Manual Gun, Top Feed, 240V
249514	Manual Gun, Bottom Feed, 240V
249513	Manual Gun, Top Feed, Electric Switch, 240V
249512	Manual Gun, Bottom Feed, Electric Switch, 240V
297273	Manual Gun, Top Feed, Swirl, 0.030 Orifice, 240V
297274	Manual Gun, Bottom Feed, Swirl, 0.030 Orifice, 240\

Air-Operated Heated Dispense Valve

297266	Automatic Snuff-Back Swirl Dispense Valve, 0.030 Orifice, 240V
243694	Automatic Dispense Valve, 240V. Air Operated Heated Dispense Valve
297261	Automatic Endure Swirl Dispense Valve, 0.030 Orifice, 240V
244951	Automatic Endure Dispense Valve, 240V. Air Operated High Flow Heated Dispense Valve
244909	Automatic Endure Dispense Valve, 240V. Air Operated Snuff-Back Heated Dispense Valve
243701	45 in (114 cm) Distribution Header With Valve, 240V

Flow Control & Manifolds

243700	Heated Air Operated Mastic Pressure Regulator, 240V
243656	23:1 Heated Pressure Compensator Valve, 240V
243657	51:1 Heated Pressure Compensator Valve, 240V
243697	Heated Distribution Manifold, 240V Includes (2) 3/4 npt(f) inlet check valves, 1 npt 4-ported manifold, (2) 1 in npt(f) outlet gate valves, mounting bracket, 400w 230 VAC heaters, RTD sensor and 8 pin connector box.
289208	Compact Heated Regulator

Accessory Controllers and Cables

•	
243698	2-zone Accessory Control Box
243699	4-zone Accessory Control Box
120409	8 ft (2.4m) cable, 16 pin to 16 pin extension cable. Runs between controller and heated hose.
196313	15 ft (4.6m) cable, 16 pin to 16 pin extension cable. Runs between controller and heated hose.
196314	25 ft (7.6m) cable, 16 pin to 16 pin extension cable. Runs between controller and heated hose.
196315	15 ft (4.6m) cable, 16 pin to 8 pin extension cable. Runs between controller and heated accessory.
196316	25 ft (7.6m) cable, 16 pin to 8 pin extension cable. Runs between controller and heated accessory.
196317	15 ft (4.6m) cable, 16 pin to (2) 8 pin extension cable Runs between controller and heated devices.
196318	25 ft (7.6m) cable, 16 pin to (2) 8 pin extension cable Runs between controller and heated devices.



Heated Hoses

Heated hoses provide an added measure of temperature control when dispensing adhesives and sealants.

- Specifically designed for optimal Therm-0-Flow electrical compatibility (temperature sensors and heating elements)
- High-pressure rating to 3000 psi (207 bar, 20.7MPa) for maximum flow rates and delivery of high-viscosity materials
- Double silicone wrap under and over heater element provides superior abrasion protection
- Safe operation via thick aramid insulating layers abrasion-resistant plus dedicated internal ground wire for shock protection

A wide variety of heated hoses are available.

See Therm-O-Flow Configurator Form (684055) for available hoses.

See Therm-0-Flow Configurator Form (684055) or SAE Buyer's Guide (303254) for additional ordering information.

Miscellaneous Accessories

C58942 120 volt AC solenoid kit for heated double-acting air-operated valves.
Includes solenoid, high-temp air tubes, fittings and muffler.

C59038 24 volt DC solenoid kit for heated double-acting air-operated valves. Includes solenoid, high-temp air tubes, fittings and muffler.

243703 240 volt AC solenoid kit for heated double-acting air-operated valves. Includes solenoid, high-temp air tubes, fittings and muffler.



HOSE DIAMETER	- 8 (3/4 in -16 JIC)	- 10 (7/8 in -14 JIC)	- 12 (1-1/16 in -12 JIC)	- 16 (1-5/16 in -12 JIC)	- 20 (1-5/8 in -12 JIC)
	2 (6, 1 iii 10 0.0)	10 (1/0 iii 1 1 0:0)	12 (1 1/10 111 12 010)	10 (1 0 10 11 12 00)	20 (1 6/6 iii 12 6/6)
HOSE LENGTH	Na.	445075	No.	445004	N.
6 ft (1.8 m)	None	115875	None	115884	None
10 ft (3 m)	115873	115876	115880	115885	117821
15 ft (4.6 m)	115874	115877	115881	115886	117822
20 ft (6 m)	None	115878	115882	115887	None
25 ft (7.6 m)	None	115879	115883	115888	None
PUMP AND HOSE FITTINGS					
Pump/Hose Fitting (Qty: 1 hose)	253267	253268	120260	120261	120262
Pump/Hose Fitting (Qty: 2 hoses)	120263 + (2) 253267	120263 + (2) 253268	120263 + (2) 120260	120263 + (2) 120261	120263 + (2) 120262
Pump/Hose Fitting (Mini-5 pump)	C20678	C20679	C38006	None	None
Hose/Hose Fitting	120241	120243	120247	120249	120250
FITTINGS					
243656 (23:1 Compensator) Inlet: 1 in npt Outlet: 1 in npt	253267	253268	120260	120261	120262
243657 (51:1 Compensator) Inlet: 1 in npt Outlet: 1 in npt	253267	253268	120260	120261	120262
243697 (Distribution Manifold) Inlet: 3/4 in npt Outlet: 1 in npt	Inlet: 120256 Outlet: 253267	Inlet: 120257 Outlet: 253268	Inlet: 120258 Outlet: 120260	Inlet: 120259 Outlet: 120261	Inlet: 253276 Outlet: 120262
289208 (Compact Heated Regulator) Inlet: 3/8 in Outlet: 3/8 in	C20585	None	None	None	None
243700 (Mastic Regulator) Inlet: 3/4 in npt Outlet: 3/4 in npt	120256	120257	120258	120259	253276
249515 (Top Feed Gun) Inlet: 7/8 in -14 JIC	120264	None	120265	None	None
249513 (Top Feed Gun w/ switch)	120264	None	120265	None	None
249514 (Btm Feed Gun)	120264	None	120265	None	None
249512 (Btm Feed Gun w/ switch)	120264	None	120265	None	None
243694 (Dispense Valve) Inlet: 1/2 in npt	120253	120255	120254	253269	253270
244951 (High Flow Dispense Valve) Inlet: 1/2 in npt	120253	120255	120254	253269	253270
244909 (Snuff-back Dispense Valve) Inlet: 1/2 in npt	120253	120255	120254	253269	253270
243701 (Distribution Header) Inlet: 1/2 in	120253	120255	120254	253269	253270





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, 3083 Victoria Australia Tel: 61 3 94678558

Fax: 61 3 94678559

CHINA

Graco Hong Kong Ltd.
Shanghai 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

INDIA

Graco Hong Kong Ltd.
India Liaison Office
Room 103, Level 4, Augusta Point
Golf Course Road
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

KORFA

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

Tel: 82(Korea) 31 476 9400 Fax: 82(Korea) 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.

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

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