

Filter Regulator Combination

3A8155A

EN

For ensuring consistent air pressure and separation of dust, dirt, moisture, and other contaminants in compressed air systems. For professional use only.

Part No.:

133215: 1/4 in. Filter Regulator, Size Mini
133216: 1/4 in. Filter Regulator, Size Intermediate
133217: 3/8 in. Filter Regulator, Size Intermediate

140 psi (0.97 MPa, 9.7 bar) Maximum Working Pressure






Important Safety Instructions

Read all warnings and instructions in this manual before using the equipment. Save these instructions.



Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 <h2 style="margin: 0;">WARNING</h2>	
	<p>EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Specifications in your equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Specifications, page 5 in this manual, containing information on the Wetted Components. Read fluid and solvent manufacturer’s warnings. For complete information about your material, request Safety Data Sheets (SDSs) from distributor or retailer. • Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer’s replacement parts only. • Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. • Make sure all equipment is rated and approved for the environment in which you are using it. • Use equipment only for its intended purpose. Call your distributor for information. • Keep children and animals away from work area. • Comply with all applicable safety regulations.
	<p>PERSONAL PROTECTIVE EQUIPMENT Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:</p> <ul style="list-style-type: none"> • Protective eyewear, and hearing protection. • Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Installation

Component Identification

Series Miniature 133215
Intermediate 133216, 133217

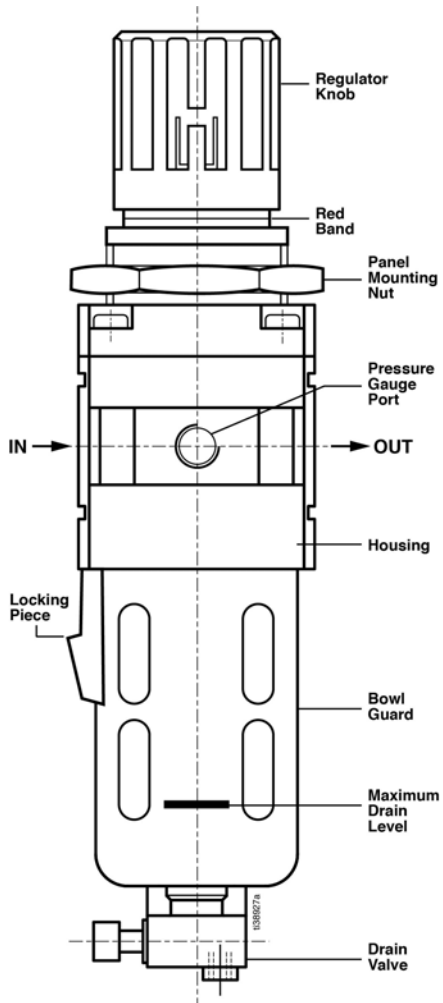


FIG. 1: Component Identification




Installation Instructions

1. Before installation of any air line components, blow out the air inlet lines to remove scale and other debris.
2. Choose a location for the filter regulator as close as possible to the pump or tool that it is providing air.
3. Install the pressure gauge into one of the two pressure gauge port plugs on the filter regulator by removing the port plug and installing the pressure gauge. Apply thread tape or sealant to the male thread on the gauge before installing.
4. Install the filter regulator into the air lines leading to the pump or tool, following the arrows indicated on the filter regulator, applying pipe tape or sealant sparingly to the male threads.

NOTE: Mounting brackets can be used. Mini bracket size Part 133274, and Intermediate bracket size Part 133275 can be purchased separately.

Where to Install Filter Regulator Combination

Install the filter regulator as far away from the compressor as possible to allow the air to cool and the moisture to condense. It must be installed before the lubricator and as close to tools and equipment as possible. The arrows should point in the direction of the air flow (towards tool and equipment).

				
BOWL RUPTURE HAZARD				
Polycarbonate bowls may be damaged, and possibly fail, if exposed to synthetic oils, thinner, solvents, trichloroethylene, kerosene, or other aromatic hydrocarbons.				
Clean the bowl with soap and water or neutral detergent.				

Selection Guide

Compressor		Filter and Regulator Combination
HP	cfm	
1	Up to 4	Miniature
2	Up to 9	Miniature
3	Up to 13	Miniature 1/4 in.
5	Up to 22	Miniature 1/4 in., Intermediate 1/4 in.
7.5	Up to 33	Intermediate 1/4 in.
10	Up to 45	Intermediate 1/4 in. or 3/8 in.
15	Up to 67	Intermediate 3/8 in.

Specifications

Series Miniature and Intermediate

Part No.	Description	Port Size	Flow Rate (Max)**		Pressure Gauge Port Size	Bowl Size		Bowl Capacity (Max)		Height (h)		Width (w)	
			cfm	lpm		oz.	ml	oz.	ml	in.	mm	in.	mm
133215	Miniature	1/4 in.	20	550	1/8 in.	1.3	37	0.3	9	6.69	170	1.57	40
133216	Intermediate	1/4 in.	63	1800	1/8 in.	2.9	83	1.08	32	8.66	220	2.17	55
133217	Intermediate	3/8 in.	77	2200	1/8 in.	2.9	83	1.08	32	8.66	220	2.17	55

**Inlet Pressure 105 psi (7 bar), Set Pressure 90 psi (6 bar), Pressure Drop 17 psi (1 bar)

For All Models	US	Metric
Maximum Working Pressure	140 psi	0.97 MPa, 9.65 bar
Pressure Adjustment Range	7 - 140 psi	0.05 MPa, 0.48 bar
Operating Temperature Range	32° - 140° F	0° - 60°C
Wetted Components	Aluminum, Bronze, Brass, Steel, Acetal, Polycarbonate, Stainless steel, Nitrile	

Operation

Adjust the Pressure

1. Pull the knob out to set or adjust the pressure.
2. Turn the knob clockwise to increase the pressure.
3. Turn the knob counterclockwise to decrease the pressure.
4. Press the knob in when the desired pressure is indicated, to lock the pressure setting.

Maintenance

				
<p>COMPRESSED AIR HAZARD</p> <p>To help prevent serious injury from flying air line debris and from moving parts, relieve pressure on both the inlet and outlet sides of the regulator before servicing. Wear appropriate personal protective equipment, including protective eyewear.</p>				

Before dismantling the unit for maintenance:

- Check for any flow restrictions
- Check that the drain is working properly
- Check if the set pressure has changed
- Completely exhaust the air in the line

Clean and Service the Filter

1. Relieve pressure on both the inlet and the outlet sides of the regulator.
2. Clean the filter element and the bowl:
 - a. Lift up the bowl guard and pull down the locking piece.
 - b. Turn the bowl guard 45° and pull down.
 - c. Dismantle the components
 - d. Clean the filter element in kerosene, then blow out with compressed air.
 - e. Clean the bowl with soap and water or neutral detergent.
 - f. Check the o-rings for damage. Clean the o-ring, or replace if damaged.
 - g. Check the sealing areas in the valve cone, seating area of the housing, etc. for damage. Clean the areas, or replace if damaged.

3. Apply silicon grease to:
 - the o-rings;
 - surface of the housing, where the o-ring enters;
 - cylindrical surface of the valve cones; and
 - threads of the adjusting screw.
4. Reassemble the components.
5. Align the top flange lug portion of the bowl guard to the corresponding slots in the Intermediate Housing.
6. Push the bowl guard into the housing and turn 45° so that the locking piece enters into the housing slot.

Clean and Service the Regulator

1. Relieve pressure on both the inlet and the outlet sides of the regulator.
2. Dismantle the components.
 - a. Clean the components in kerosene, then blow out with compressed air.
 - b. Check the o-rings for damage. Clean the o-ring, or replace if damaged.
 - c. Check the sealing areas in the valve cone, seating area of the housing, etc. for damage. Clean the areas, or replace if damaged.
3. Apply recommended grease to:
 - the o-rings;
 - cylindrical surface of the valve cones; and
 - threads of the adjusting screw.
4. Reassemble the components.

NOTE:

The mini regulator requires relieving air pressure before draining. It can be drained by pushing the drain valve (see FIG. 1).

The intermediate regulator is equipped with an automatic drain and once the fluid level reaches maximum drain level, it automatically drains. There is no manual drain valve.

Recycling and Disposal

End of Product Life

At the end of a product's useful life, dismantle and recycle it in a responsible manner.

- Drain and dispose of any fluids according to applicable regulations. Please refer to the material manufacturer's Safety Data Sheet.
- Deliver the remaining product to a recycling facility.

Troubleshooting

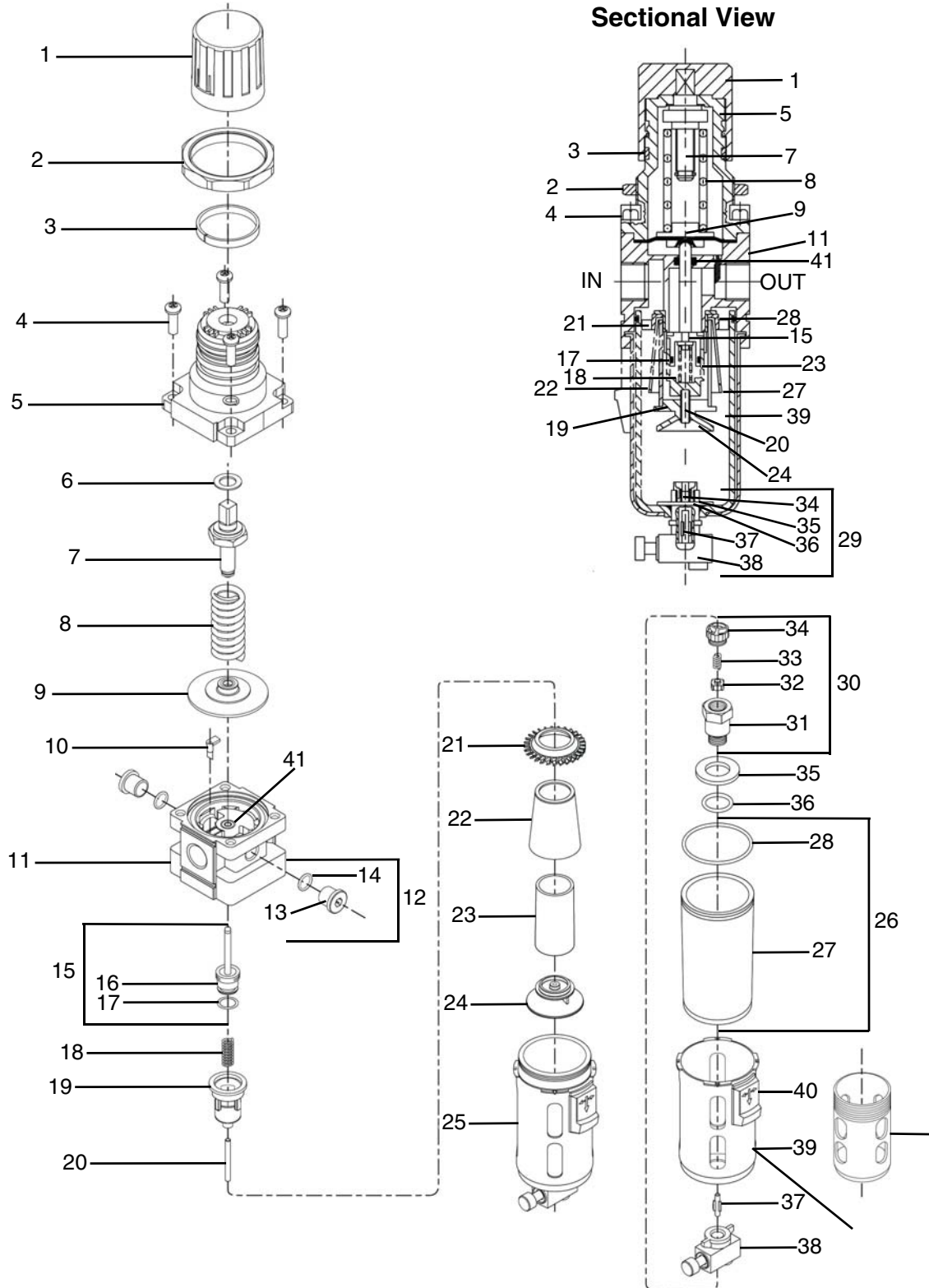
				
<p>COMPRESSED AIR HAZARD</p> <p>To help prevent serious injury from flying air line debris and from moving parts, relieve pressure on both the inlet and outlet sides of the regulator before servicing. Wear appropriate personal protective equipment, including protective eyewear.</p>				

Follow **Maintenance**, page 7, before checking or repairing the system.

Problem	Cause	Solution
Continuous flow/leak through the knob.	Diaphragm is damaged	Replace the unit.
	Relieving spherical seating of the valve cone damaged.	Replace the unit.
	Dirt between the seating and the valve cone.	Clean and reassemble the seating area.
Setting pressure increases slowly.	Relieving spherical sear of the valve cone damaged.	Replace the unit.
	Dirt between the seating and the valve cone.	Clean and reassemble the seating area.
Cannot make pressure setting using the Adjustment Knob.	Adjustment Screw is worn,	Replace the unit.
Cannot make the pressure setting for the supply pressure directly connected to the outlet port.	Valve cone assembly is not moving.	Dismantle the valve cone assembly. Clean using kerosene. then blow out with compressed air. Apply general purpose grease on the o-ring and cone cylindrical portion, then reassemble.
Restricted air flow	The filter element is clogged.	Clean, or replace, the filter element.
Water level not visible.	Dirt n the inner surface of the bowl.	Clean the bowl.
Air is leaking from the Intermediate Housing and the Bowl guard.	Damaged o-rings.	Replace the o-rings.
Air is leaking from the bottom of the Bowl guard.	Damaged o-ring.	Replace the o-ring.
Air is leaking continuously through the Drain valve.	The valve seat is damaged	Replace the unit.
	Dust is on the valve seat.	Clean the valve seat and reassemble.
The knob of the drain valve does not return.	Valve components are not moving.	Pull the knob and operate. Replace the unit if the problem persists,
<p>NOTE: In a salty atmosphere, aluminum oxide can form inside of the housing. It is also possible that the valve cone could clog up. If this happens, dismantle the components and clean using kerosene then blow out with compressed air. During reassembly, apply general purpose grease on all of the inside surfaces of the housing to prevent corrosion. Also apply grease to the o-rings and cylindrical portion of the valve cone.</p>		

Parts

133215, 133216, 133217



Parts

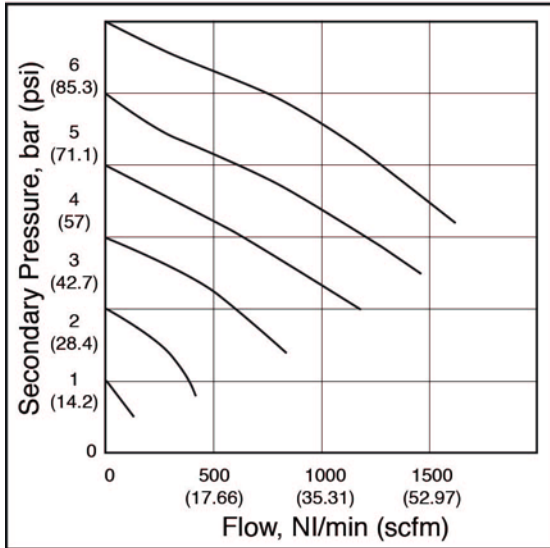
133215, 133216, 133217

Ref.	Part	Description	Qty.
1		KNOB	
2		NUT, panel mounting	
3		RING, indicator	
4		SCREW, Philip head	
5		BONNET	
6		WASHER	
7		ADJUSTING SCREW assembly	
8		SPRING	
9		DIAPHRAGM, assembly	
10		TUBE	
11		HOUSING	
12		PORT PLUG assembly	
13		PORT PLUG	
14		O-RING	
15		VALVE CONE assembly	
16		VALVE CONE	
17		O-RING	
18		SPRING, bottom	
19		SPRING, seat	
20		STUD	
21		SEPARATOR	
22		SHIELD	
23	133270	FILTER ELEMENT (fits 133215)	
	133271	FILTER ELEMENT (fits 133216, 133217)	
		40 MICRON, filter element	
24		FILTER HOLDER	
25		BOWL AND BOWL GUARD, assembly	
26		BOWL, assembly	
27	133272	BOWL (fits 133215)	
	133273	BOWL (fits 133216, 133217)	
28		O-RING	
29		DRAIN VALVE, assembly	

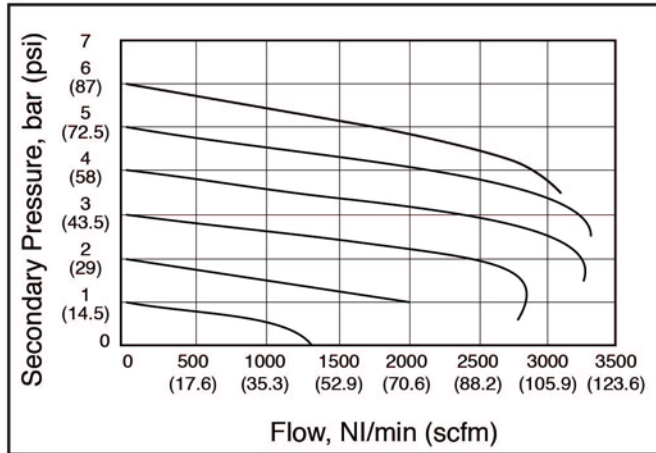
Ref.	Part	Description	Qty.
30		GLAND, assembly	
31		GLAND	
32		VALVE SEAT	
33		SPRING	
34		NUT, spring guide	
35		WASHER, sealing	
36		O-RING	
37		ACTUATOR	
38		STEM HOUSING, assembly	
39		GUARD, bowl	
40		LOCKING PIECE	
41		O-RING	

Performance Charts

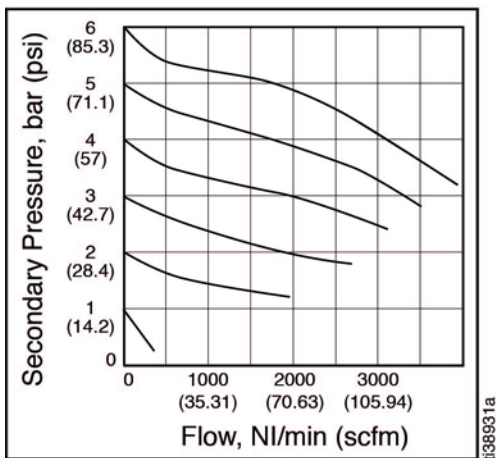
1/4" MINIATURE 133215



1/4" INTERMEDIATE 133216



3/8" INTERMEDIATE 133217



California Proposition 65

CALIFORNIA RESIDENTS

⚠ WARNING: Cancer and reproductive harm – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sear en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite DE ou en rapport, directement ou indirectement, avec els procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6928 or **Toll Free:** 1-800-533-9655, **Fax:** 612-378-3590

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

Original instructions. This manual contains English. MM 3A8155

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA
Copyright 2021, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com
Revision A, April 2021