Parts

# Instructions – Parts List

## AIR OPERATED, BALL SEAT
## 1/4” NPT(F) INLET PORT
# Compact Applicators

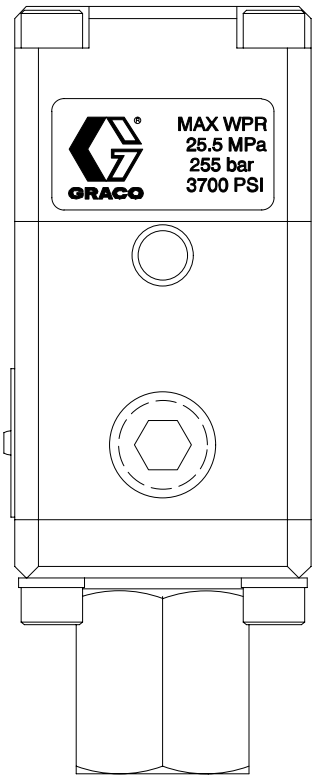
310557 Rev.D

3700 *psi (25.5 MPa, 255 bar) Maximum Fluid Working Pressure*

The compact applicators control material flow of adhesives, sealants, and other materials that are compatible with the wetted parts of the applicator.

**Part No. 918623, Series A**
1/4 NPT(f) outlet port nozzle.

**Part No. 918625, Series A**
7/8–14 UNF(m) outlet port for reverse–a–clean nozzle.

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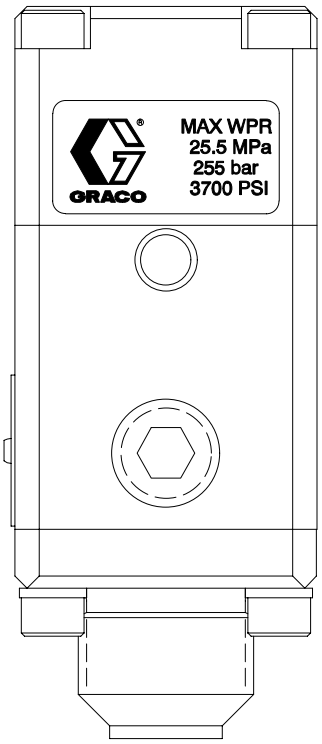
***918623***

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***918625***

**Read warnings and instructions.**
See page 2 for Table of Contents

PROVEN QUALITY. LEADING TECHNOLOGY.

**GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440–1441**

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# Warnings

**Warning Symbol**

**⚠ WARNING**

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

**Caution Symbol**

**⚠ CAUTION**

This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

## ⚠ WARNING

**INSTRUCTIONS**

### EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, warnings, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about usage, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check the equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum fluid working pressure of 25.5 MPa (255 bar, 3700 psi) to the applicator or manifold.
- Never exceed the recommended working pressure or the maximum air inlet pressure stated on your pump or in the **Technical Data** on page 15.
- Be sure that all spray/dispensing equipment and accessories are rated to withstand the maximum working pressure of the pump. Do not exceed the maximum working pressure of any component or accessory used in the system.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not expose Graco standard hoses to temperatures above 180°F (82°C) or below –40°F (–40°C).
- Do not use the hoses to pull the equipment.
- Use only fluids and solvents that are compatible with the equipment wetted parts. See the **Technical Data** sections of all the equipment manuals. Read the fluid manufacturer's warnings.
- Always wear protective eyewear, gloves, clothing, and respirator as recommended by the fluid and solvent manufacturers.
- Wear hearing protection when operating this equipment.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.

# ⚠ WARNING

## FIRE, EXPLOSION, AND ELECTRIC SHOCK HAZARD

Improper grounding, poor air ventilation, open flames, or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

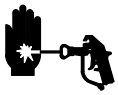
- Ground the equipment and the object being sprayed, and all other electrically conductive objects in the dispense area. Proper grounding dissipates static electricity generated in the equipment. See **Grounding the System** on page 7.
- Do not use this equipment with flammable liquids.
- Keep the dispense area free of debris, including solvent, rags, and gasoline.
- If there is any static sparking or you feel an electric shock while using the equipment, **stop dispensing immediately**. Do not use the equipment until you have identified and corrected the problem.
- Before operating the equipment, extinguish all open flames or pilot lights in the dispense area.
- Do not smoke in the dispensing area.
- Keep liquids away from the electrical components.
- Disconnect electrical power at the main switch before servicing the equipment.

## TOXIC FLUID HAZARD

Hazardous fluids or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, swallowed, or inhaled.

- Provide fresh air ventilation to avoid the buildup of vapors from the fluid being dispensed.
- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Always wear protective eyewear, gloves, clothing and respirator as recommended by the fluid and solvent manufacturer.
- Avoid exposure to heated material fumes.

# ⚠ WARNING



## INJECTION HAZARD

Spray from the valve assembly, hose leaks, or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate medical attention.**
- Do not point the valve assembly at anyone or at any part of the body.
- Do not put hand or fingers over the front of the valve assembly.
- Do not stop or deflect fluid leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** on page 8 whenever you are instructed to: relieve pressure; stop dispensing; clean, check, or service the equipment; or install or clean a tip or nozzle.
- Tighten all the fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn, damaged, or loose parts immediately. Permanently coupled hoses cannot be repaired; replace the entire hose.
- Always wear eye protection and protective clothing when installing, operating, or servicing this dispensing equipment.
- Do not remove or modify any part of the valve assembly; this can cause a malfunction and result in serious bodily injury.
- Use extreme caution when cleaning or changing tips. If the tip clogs while applying material, Always follow the **Pressure Relief Procedure** on page 8, then remove the tip to clean it.
- Never wipe off build-up around the tip or air cap until pressure is fully relieved.

# Notes

# Setup

## Ground the System

**⚠ WARNING**

**FIRE AND EXPLOSION HAZARD**
To reduce the risk of a fire, explosion, and serious injury, proper electrical grounding of every part of your system is essential. Read the warning section, **FIRE AND EXPLOSION HAZARD**, on page 4 and follow the grounding instructions below.

The following grounding instructions are minimum requirements for a basic dispensing system. Your system may include other equipment or objects which must be grounded. Check your local electrical code for detailed grounding instructions for your area and type of equipment. Your system must be connected to a true earth ground.

1. *Pump:* connect a ground wire and clamp to a true earth ground as shown in separate pump manual.
2. *Applicator assembly:* ground the applicator assembly by connecting it to a properly grounded fluid hose and pump.
3. *Fluid and air hoses:* use only electrically conductive material and air hoses.
4. *Dispense gun:* obtain grounding through the connection of the hose, or cable.
5. *Air compressor:* follow the manufacturer's recommendations.
6. *Object being sprayed:* according to local code.
7. *Fluid supply container:* according to local code.

## Installation

**NOTE:** Read this manual thoroughly before installing the compact applicator.

The compact applicator has two untapped through mounting holes, making it ideal for use in robotic equipment or multiple manifold high production operations.

Refer to the **Parts** information on page 11 while performing the following procedure to install the compact applicator.

1. Inspect the compact applicator for shipping damage. If damage is found, notify the carrier immediately.

2. The 0.2510" diameter x 0.31 depth locating holes (two places) and the 0.21" diameter through holes (two places) are used for mounting the applicator.

**⚠ CAUTION**

Only use air fittings that are rated at a temperature equal to or higher than the operating temperature of your fluid dispensing system. Lower rated air fittings could melt and cause damage to the compact applicator.

3. Connect air supply lines to the 1/8 NPT (f) inlet air ports (two places) on the compact applicator.

4. Connect fluid line to 1/4 NPT(f) fluid inlet in the applicator fluid body.

5. Check each fitting for firmness to avoid pressure leakage from the applicator.

# Operation

## Pressure Relief Procedure

**⚠ WARNING**

**MATERIAL FLUID HAZARD**
To reduce risk of injury, wear eye protection, gloves and protective clothing when installing, operating, or servicing this dispensing system.

**INJECTION HAZARD**
The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure
- stop spraying/dispensing
- install or clean the nozzle
- check or service any of the system equipment

**PRESSURIZED FLUID HAZARD**
High pressures can cause serious personal injury**.** Be sure to **open the valve during system start-up** to alleviate pressure which might occur in the system due to material expansion.

This procedure describes how to relieve pressure from the compact applicator. See your supply unit or system documentation for instructions on relieving pressure for the entire system. Use this procedure whenever you shut off the compact applicator and before checking or adjusting any part of the system, to reduce the risk of serious injury.

1. Shut off the material supply.
2. Shut off the conditioning unit to the automatic dispense valve. See the conditioning-unit's documentation for more information.
3. Close all air bleed valves to shut off the air supply to the applicator.
4. Actuate the applicator repeatedly until no fluid flows. Have a container ready to catch the drainage from the applicator.
5. If the compact applicator nozzle or fluid hose is completely clogged or if pressure has not been fully relieved after following the preceding steps, very slowly loosen the hose coupling and relieve pressure gradually, then loosen completely. Now clear the nozzle or hose. Refer to page 11 for **Parts** information.

## How the Compact Applicator Operates

The compact applicator uses the air-opened, air-closed mode of operation. The two 1/8 NPT air ports control the movement of the air-operated, applicator needle assembly inside the applicator. The applicator piston, which is either lifted or pushed down when air is applied, controls material flow to the removable 1/4 NPT nozzle adapter on the compact applicator.

A spring inside the applicator forces the applicator piston down and stops material flow in the event there is a loss of controlling air pressure.

## Adjusting the Compact Applicator

There are no adjustment controls on the compact applicator. If fluid begins to discharge, drip, string, or weep irregularly from the fluid outlet port, or from the 0.25 diameter weep holes in the applicator body, the compact applicator may require cleaning, servicing, or replacement.

## Applicator Inspection Frequency

Inspect the applicator, material, and air hoses at least once every two weeks specifically for leakage and other visible damage.

## Nozzle Considerations

Nozzles installed at the outlet port of the compact applicators may be used to accurately place, spread, or otherwise shape the application of fluid material.

Without a nozzle, compact applicator 918623 may be used as a general purpose fluid control valve, within its operating limits. See **Technical Data** on page 15 for more information.

Compact applicator 918625 is intended for use with airless spray Reverse-A-Clean (RAC) nozzles or other spray nozzles which can be mounted on the 7/8–14 UNF nozzle adapter/needle seat. RAC nozzles provide easy cleaning of nozzle clogs and permit wide pattern application of thinner adhesive and sealant fluid materials.

For specific nozzle information or nozzle selection advice, contact your Graco distributor or call Graco Technical Service.

# Troubleshooting

Some solutions require disassembling the applicator. Always relieve system pressure before performing these procedures.

## ⚠ WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** (page 8).

Refer to the **Parts** information on page 11 for the parts that require service or replacement.

| Problem | Cause(s) | Solution(s) |
|---|---|---|
| Applicator assembly fails to open or close as required. | Actuating air line leaking, or is improperly connected. | Check air line connections and air valve operation. |
| | Material or debris in compact applicator is blocking needle movement. | Check needle seat for materials or debris impeding needle movement. Remove impeding material. |
| Air leaks from compact applicator | Loose air connections. | Check air connections. |
| | Worn o-rings. | Replace o-rings in applicator body. |
| Material leaks from compact applicator body | Needle seal not installed correctly. | Check needle assembly and seal. Replace if necessary. |
| | Needle seal is worn. | |
| | Needle assembly is worn. | |

# Service

### Preparing to Service the Compact Applicator

Some fluid material in the applicator may thicken or cure when cooled to room temperature, or when exposed to air. If you are working with such a fluid material, service the applicator while the material is uncured or at a temperature where it is soft enough to work with.

Perform this procedure before servicing the compact applicator.

1. **Relieve the system pressure**.

## ⚠ WARNING

To reduce the risk of serious injury, whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** (page 8).

2. Be sure material flow has been shut off.
3. Be sure system air has been shut off.
4. Refer to the **Parts** information on page 11 while performing the procedures to disassemble and reassemble the compact applicator.

# Service: 918623

## Disassembly Part No. 918623

Disassemble the compact applicator as follows:

1. Remove and keep warning tag (20, not shown) for reattachment.
2. Unscrew and remove nozzle adapter (22) from seat assembly (9).
3. Separate gasket (21) from nozzle adapter (22).
4. Unscrew and remove four cap screws (17) and lockwashers (18) from fluid body (13).
5. Separate o-ring (8) from seat assembly (9).

**⚠ WARNING**

To reduce the risk of serious injury, exercise caution when removing the compact applicator cylinder, which is spring–loaded and could project forcefully through the air if not removed properly.

6. Unscrew four cap screws (10) evenly to loosen cylinder (11) and relieve tension in spring (1).
7. Remove cap screws (10) and cylinder (11) from fluid body (13) and piston (2). Remove spring (1).
8. Push piston (2) down enough to gain access to the wrench flats on needle assembly (7).
9. Unscrew and remove piston (2) from needle assembly (7).
10. Separate o-ring (3) from piston (2).
11. Push the needle assembly (7) through needle seal (6) and remove it from fluid body (13).
12. Push needle bearing (5) and seal (6) out of fluid body (13).
13. Separate o-rings (3 and 4) from fluid body (13).

## Assembly – Part No. 918623

Reassemble the compact applicator as follows:

**NOTE:** Repair Kit 918624, listed on page 11, contains the replacement parts to service the applicator. For best results, replace the original parts with the new parts in the repair kit.

Prior to installation, lubricate all seals and o-rings with PARKER-O-LUBE™ or an equivalent lubricant. Check with the material supplier for a compatible lubricant.

1. Be sure all parts are free of solid material residue.
2. Install needle bearing (5) and needle seal (6) in fluid body (13).
3. Install o-rings (3 and 4) in the fluid body (13).
4. Install o-ring (3) onto piston (2).
5. Push needle assembly (7) carefully through needle seal (6) and needle bearing (5).
6. Apply Loctite® sealant (19) or an equivalent to threads of needle assembly (7).
7. Assemble piston (2) to needle assembly (7).
8. Position spring (1) on top of piston (2).
9. Install cylinder (11) over piston (2) and spring (1). Note the position of the 1/8 NPT air-to-close port.

**⚠ WARNING**

To reduce the risk of serious injury, exercise caution when installing the compact applicator cylinder, which is spring-loaded and could project forcefully through the air if not installed properly.

10. Assemble cylinder (11) to fluid body (13) with four cap screws (10), tightening the screws evenly to control compression of spring (1).
11. Position o-ring (8) in groove on seat assembly (9) and assemble the seat assembly to fluid body (13) with four cap screws (17) and lockwashers (18).
12. Install gasket (21) in nozzle adapter (22).
13. Screw nozzle adapter (22) onto seat assembly (9).
14. Reattach warning tag (20, not shown).
15. Reinstall applicator on its mounting.

# Parts: 918623

## Part No. 918623, Compact Applicator

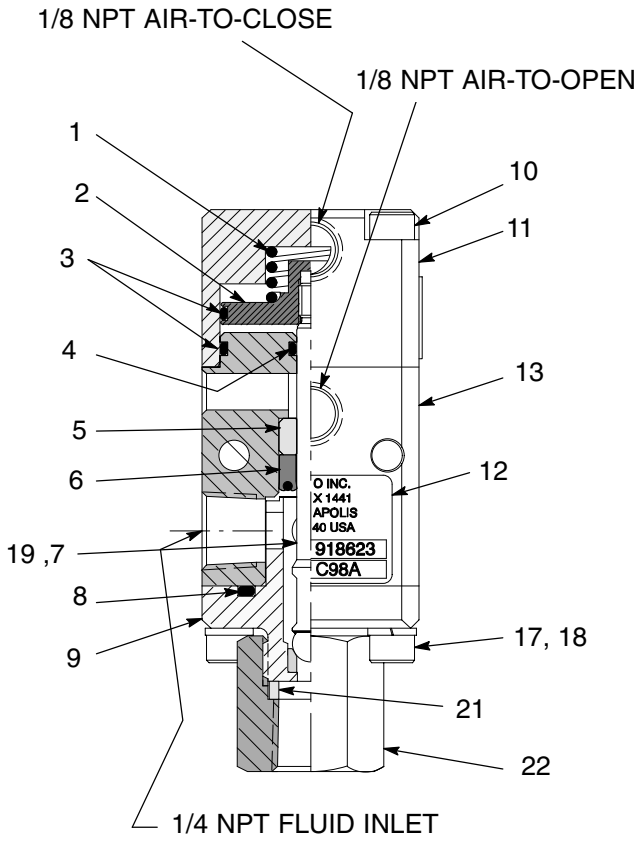
| Ref No. | Part No. | Description | Qty. |
|---|---|---|---|
| 1 | 617683 | SPRING | 1 |
| 2 | 617840 | PISTON, compact applicator | 1 |
| 3✓ | C20237 | O-RING, –024 Viton® | 2 |
| 4✓ | 168110 | O-RING, –008 Viton | 1 |
| 5✓ | 617841 | BEARING, needle, 0.188 inside diameter | 1 |
| 6✓ | 617842 | SEAL, needle, 0.188 inside diameter | 1 |
| 7✓ | 617843 | NEEDLE ASSEMBLY, compact appl. | 1 |
| 8✓ | C20108 | O-RING, –117 Viton | 1 |
| 9 | 617849 | SEAT ASSEMBLY, compact appl. | 1 |
| 10 | C19984 | SCREW, SHC, #10-24 x 1.25 | 4 |
| 11 | 617845 | CYLINDER, compact applicator | 1 |
| 12 | 552069 | LABEL, 3700 psi wpr, 2” x 3” | 1 |
| 13† | | BODY, fluid, compact applicator | 1 |
| 16 | C19264 | PLUG, flush, 1/4 npt | 1 |
| 17 | C19982 | SCREW, SHC, #10-24 x 0.74 | 4 |
| 18 | C19204 | WASHER, lock, split, 1/4 | 4 |
| 19 | 070269 | SEALANT, anaerobic | A/R |
| 20*▲ | 172479 | TAG, warning/instruction | 1 |
| 21✓ | 617844 | GASKET, nozzle adapter | 1 |
| 22 | 617850 | ADAPTER, nozzle, 1/4 npt | 1 |

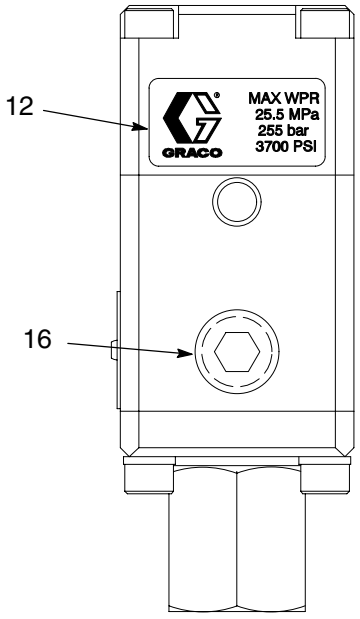
✓ *These parts are included in Repair Kit 918624, which may be purchased separately.*

† *This part is not offered for sale.*

▲ *Replacement Danger and Warning labels, tags and cards are available at no cost.*

* *These items are not shown on the parts illustration.*

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# Service: 918625

## Disassembly Part No. 918625

Disassemble the compact applicator as follows:

1. Remove and keep warning tag (20, not shown) for reattachment.
2. Unscrew and remove four cap screws (17) and lockwashers (18) from fluid body (13).
3. Separate o-ring (8) from seat assembly (9).

**⚠ WARNING**

To reduce the risk of serious injury, exercise caution when removing the compact applicator cylinder, which is spring–loaded and could project forcefully through the air if not removed properly.

4. Unscrew four cap screws (10) evenly to loosen cylinder (11) and relieve tension in spring (1).
5. Remove cap screws (10) and cylinder (11) from fluid body (13) and piston (2). Remove spring (1).
6. Push piston (2) down enough to gain access to the wrench flats on needle assembly (7).
7. Unscrew and remove piston (2) from needle assembly (7).
8. Separate o-ring (3) from piston (2).
9. Push the needle assembly (7) through needle seal (6) and remove it from fluid body (13).
10. Separate o-rings (3 and 4) from fluid body (13).

## Assembly – Part No. 918625

Reassemble the compact applicator as follows:

**NOTE:** Repair Kit 918626, listed on page 13, contains the replacement parts to service the applicator. For best results, replace the original parts with the new parts in the repair kit.

Prior to installation, lubricate all seals and o-rings with PARKER-O-LUBE™ or an equivalent lubricant. Check with the material supplier for a compatible lubricant.

1. Be sure all parts are free of solid material residue.
2. Install needle bearing (5) and needle seal (6) in fluid body (13).
3. Install o-rings (3 and 4) on the fluid body (13).
4. Install o-ring (3) onto piston (2).
5. Push needle assembly (7) carefully through needle seal (6) and needle bearing (5).
6. Apply Loctite® sealant (19) or an equivalent to threads of needle assembly (7).
7. Assemble piston (2) to needle assembly (7).
8. Position spring (1) on top of piston (2).
9. Install cylinder (11) over piston (2) and spring (1). Note the position of the 1/8 NPT air-to-close port.

**⚠ WARNING**

To reduce the risk of serious injury, exercise caution when installing the compact applicator cylinder, which is spring-loaded and could project forcefully through the air if not installed properly.

10. Assemble cylinder (11) to fluid body (13) with four cap screws (10), tightening the screws evenly to control compression of spring (1).
11. Position o-ring (8) in groove on seat assembly (9) and assemble the seat assembly to fluid body (13) with four cap screws (17) and lockwashers (18).
12. Reattach warning tag (20, not shown).
13. Reinstall applicator on its mounting.

# Parts: 918625

## Part No. 918625, Compact Applicator

| Ref No. | Part No. | Description | Qty. |
|---|---|---|---|
| 1 | 617683 | SPRING | 1 |
| 2 | 617840 | PISTON, compact applicator | 1 |
| 3✓ | C20237 | O-RING, –024 Viton® | 2 |
| 4✓ | 168110 | O-RING, –008 Viton | 1 |
| 5✓ | 617841 | BEARING, needle, 0.188 inside diameter | 1 |
| 6✓ | 617842 | SEAL, needle, 0.188 inside diameter | 1 |
| 7✓ | 617851 | NEEDLE ASSEMBLY, compact RAC appl. | 1 |
| 8✓ | C20108 | O-RING, –117 Viton | 1 |
| 9†† | 617852 | SEAT ASSEMBLY, compact RAC appl. | 1 |
| 10 | C19984 | SCREW, SHC, #10-24 x 1.25 | 4 |
| 11 | 617845 | CYLINDER, compact applicator | 1 |
| 12 | 552069 | LABEL, 3700 psi wpr, 2” x 3” | 1 |
| 13† | | BODY, fluid, compact applicator | 1 |
| 16 | C19264 | PLUG, flush, 1/4 npt | 1 |
| 17 | C19982 | SCREW, SHC, #10-24 x 0.75 | 4 |
| 18 | C19204 | WASHER, lock, split, 1/4 | 4 |
| 19 | 070269 | SEALANT, anaerobic | A/R |
| 20*▲ | 172479 | TAG, warning/instruction | 1 |

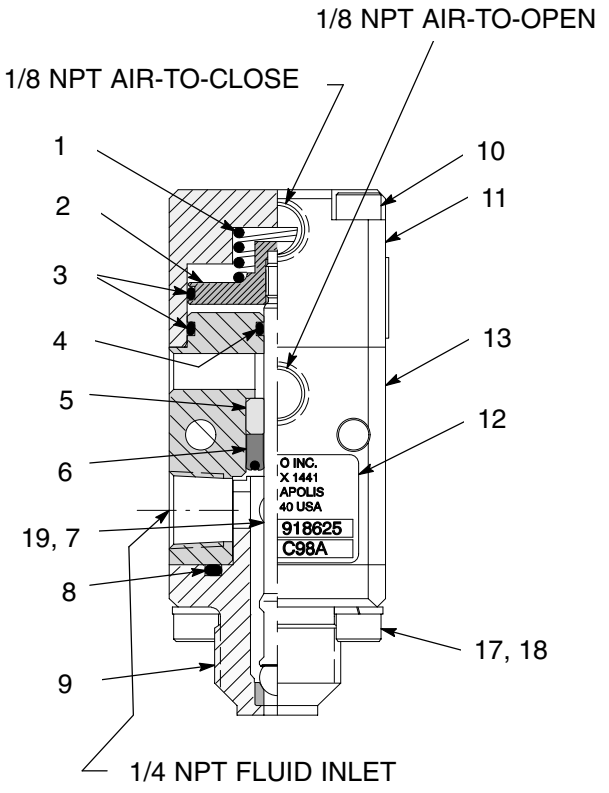
✓ *These parts are included in Repair Kit 918626, which may be purchased separately.*

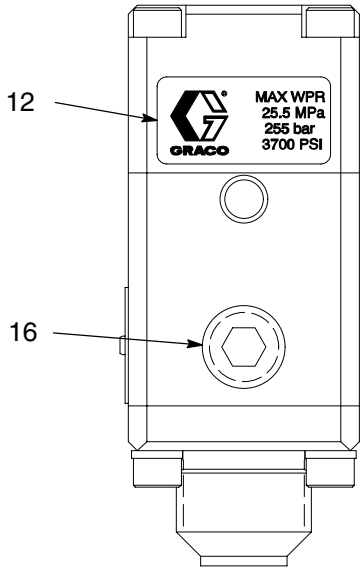
† *This part is not offered for sale.*

▲ *Replacement Danger and Warning labels, tags and cards are available at no cost.*

* *These items are not shown on the parts illustration.*

†† **Optional stainless steel seat assembly 234908** *is available. It can be interchanged with 617852 for use with more corrosive materials.*

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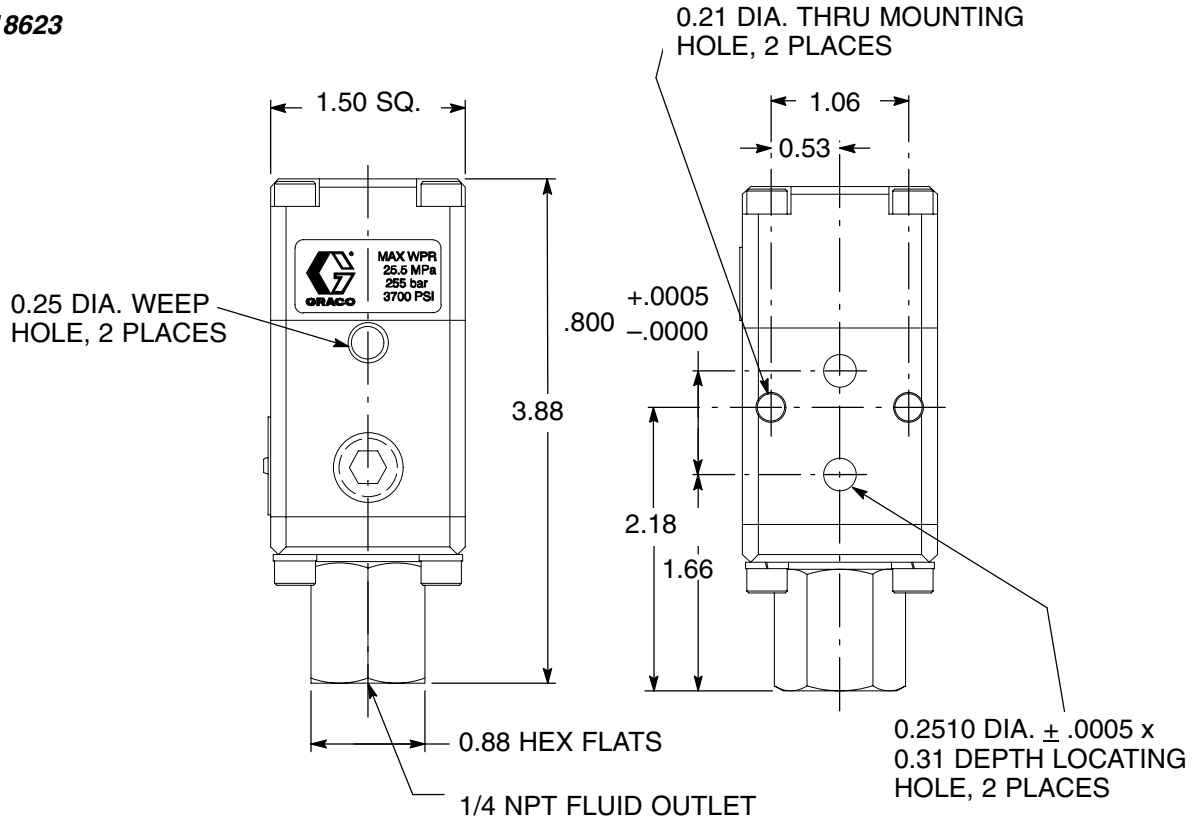
# Dimensions

***918623***

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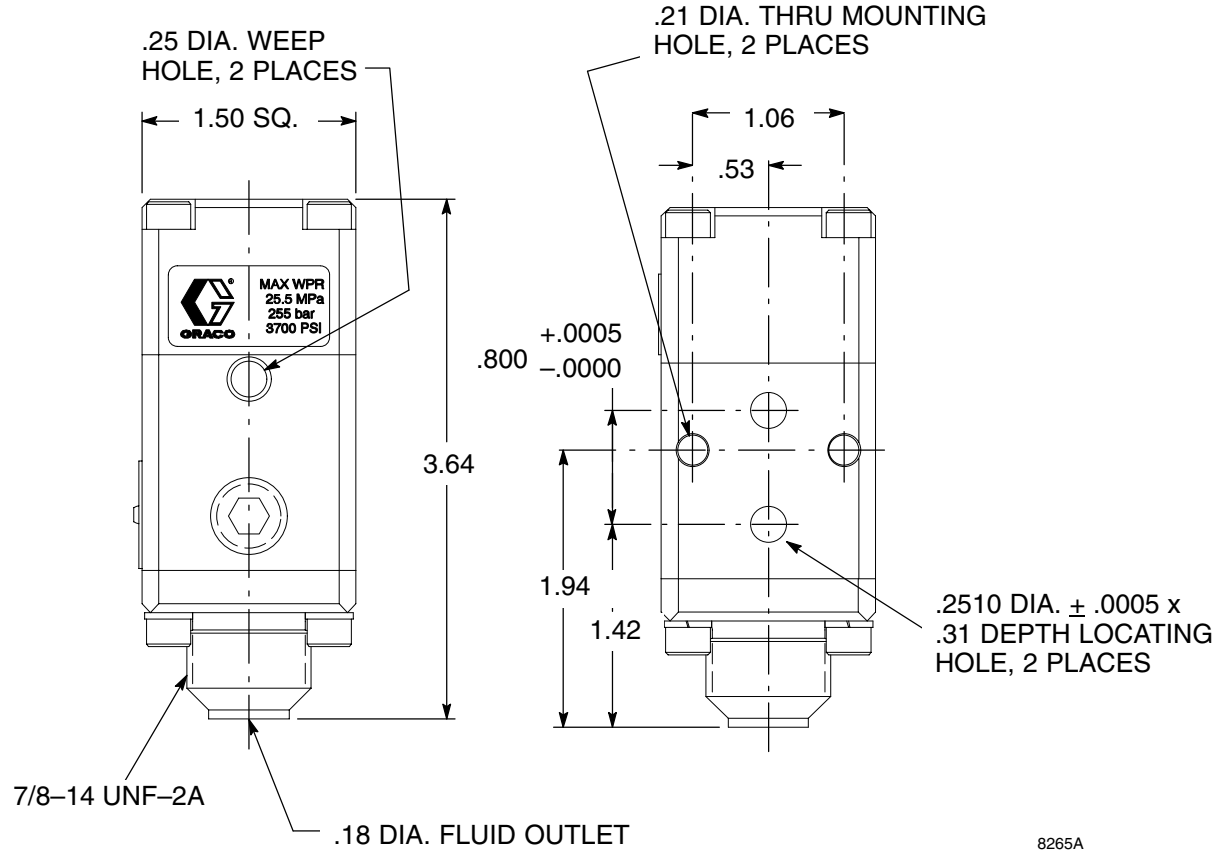

# Technical Data

| Unit | Description | Specification |
|---|---|---|
| 918623 | Maximum operating air pressure | 150 psi (10.3 bar, 1.03 MPa) |
| | Maximum fluid working pressure | 3700 psi (255 bar, 25.5 MPa) |
| | Maximum operating temperature | 275°F (135°C) |
| | Fluid inlet | 1/4 NPT(f) |
| | Fluid outlet | 1/4 NPT(f) |
| | Air inlet | 2 ports, 1/8 NPT(f) |
| | Wetted components | Aluminum, carbon steel, tungsten carbide, chrome plate, Viton rubber, thermoplastic polyester |
| | Weight | 0.92 lbs. (.42 kg) approx. |
| 918625 | Maximum operating air pressure | 150 psi (10.3 bar, 1.03 MPa) |
| | Maximum fluid working pressure | 3700 psi (255 bar, 25.5 MPa) |
| | Maximum operating temperature | 275°F (135°C) |
| | Fluid inlet | 1/4 NPT(f) |
| | Fluid outlet | .18 diameter |
| | Air inlet | 2 ports, 1/8 NPT(f) |
| | Wetted components | Aluminum, carbon steel, tungsten carbide, chrome plate, Viton rubber, thermoplastic polyester |
| | Weight | 0.87 lbs. (.39 kg) approx. |

# 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 sera 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 les procedures concernées.

# Graco Information

***TO PLACE AN ORDER***, contact your Graco distributor, or call one of the following numbers to identify the distributor closest to you:

**1–800–328–0211 Toll Free**
**612–623–6921**
**612–378–3505 Fax**

*All written and visual data 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.*

**Graco Headquarters:** Minneapolis
**International Offices:** Belgium, China, Japan, Korea

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