

# **Red Alert Filter**

3A4936F

ΞN

For filtration of common industrial paints and coatings in finishing applications. For professional use only.

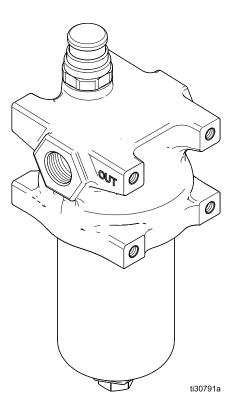
Model: 25M212

3000 psi (21.0 MPa, 210 bar) Maximum Working Pressure



#### **Important Safety Instructions**

Read all warnings and instructions in this manual. Save these instructions.



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## 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.

# **WARNING**



#### SKIN INJECTION HAZARD

High-pressure fluid from dispensing device, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. **Get immediate surgical treatment.** 



- Do not put your hand over the fluid outlet.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** when you stop dispensing and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses and couplings daily. Replace worn or damaged parts immediately.

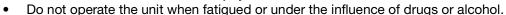


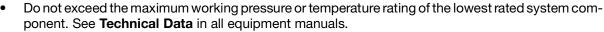




#### **EQUIPMENT MISUSE HAZARD**

Misuse can cause death or serious injury.







- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Data** in all
  equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information
  about your material, request Safety Data Sheet (SDS) from distributor or retailer.
- Do not leave the work area while equipment is energized or under pressure.
- Turn off all equipment and follow the **Pressure Relief Procedure** when equipment is not in use.
- 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.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

# **⚠ WARNING**



#### **TOXIC FLUID OR FUMES HAZARD**

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

- Read Safety Data Sheet (SDS) to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

### Installation

### Grounding









The equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape for the electric current.

**Filter:** Grounded through system installation connections in Fig. 1.

Fluid lines: Use only electrically conductive lines.

#### Fluid Drain Valve Installation











Fluids in the system will be under pressure. To reduce the risk of serious injury, including skin injection and splashing in the eyes or on the skin. Depressurize the system prior to installing the fluid drain valve.

- 1. Follow Pressure Relief Procedure, page 7.
- 2. Remove the plug (8) from the bottom of the filter bowl (2). See **Parts** on page 10.
- 3. Install a high-pressure adapter (D) and drain valve (B). See Fig. 1.

### **Dual Filter System Installation**

A dual filter system allows you to redirect the fluid to another filter while one filter is cleaned or serviced.

- 1. Install two filters (A), as shown in Fig. 1.
- 2. Install four suitable shutoff valves (C), one at each filter's inlet and outlet, to redirect the fluid and isolate the filter not in use.

### **Filter Bypass Installation**

A filter bypass system allows you to redirect the fluid through pipes that bypass the filter while is cleaned or serviced.

- Install the filter (A) and bypass pipes, as shown in Fig. 1.
- Install four suitable shutoff valves (C); one each at the filter inlet, filter outlet, bypass inlet, and bypass outlet. These valves redirect the fluid and isolate the filter while cleaning and servicing.

### Flush Before Using Equipment

The equipment was tested with lightweight oil, which is left in the fluid passages to protect parts. To avoid contaminating your fluid with oil, flush the equipment with a compatible solvent before using the equipment.

## **Typical Installations**

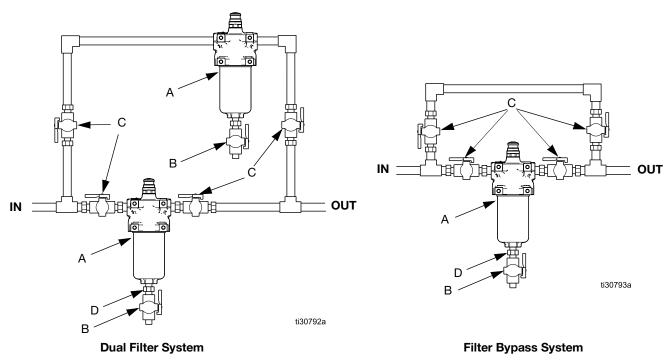


Fig. 1: Typical Installations

#### Key:

- A Red Alert Filter Allow 3 in. (76 mm) minimum clearance below the filter for easy removal of the bowl (2). (Supplied by Graco.) (See **Parts** on page 10.)
- B Fluid Drain Valve (3/4-16 UNF) (Graco part, 248271) (Supplied by customer, optional)
- C Fluid Shutoff Valve (3/4-14 NPT) (Supplied by customer.)
- D High-Pressure Adapter (Graco part, 15M861) (Supplied by customer, optional)

## **Operation**

#### **Pressure Relief Procedure**



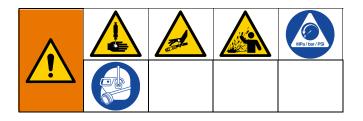
Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved from the system. To help prevent serious injury from pressurized fluid, such as skin injection and splashing fluid, follow the **Pressure Relief Procedure** for your system when you stop spraying and before cleaning, checking, or servicing the equipment.

- 1. Follow the **Pressure Relief Procedure** for your supply system.
- 2. Slowly open the fluid drain valve (B), if used, or the filter plug (8, see **Parts**, page 10) located at the bottom of the filter (A). See Fig. 1.

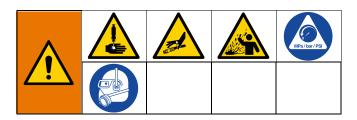
## **Troubleshooting**



- 1. Follow **Pressure Relief Procedure**, page 7, before checking or repairing filter.
- 2. Check all possible problems and causes before disassembling bowl.

Problem	Cause	Solution
Leaking around bowl, indicator, or drain plug	Loose fitting	Tighten to recommended in-lbs. See <b>Parts</b> , page 10.
	Broken seal	Replace with seal kit.
Indicator stuck in Alert position	Clogged filter	Replace filter. See Filter Element Replacement, page 9.
	Broken inicator	Replace indicator.

### Repair



#### NOTICE

If the filter will not be used for awhile, thoroughly clean all parts in solvent and blow them dry before the paint dries and clogs the filter. To help prevent damaging the parts, do not clean them with a wire brush or sharp object.

### Filter Element Replacement

The indicator (3) provides gradual warning of a dirty filter element (9). See **Parts** on page 10. The filter element (9) needs to be cleaned or replaced when the indicator (3) is 3/4 red.

- 1. To reduce downtime, have a spare bowl (2), element (9), and spring (7) on hand.
- 2. Follow **Pressure Relief Procedure**, page 7.
- 3. Open the fluid drain valve (B, see Fig. 1), if used, or remove the filter plug (8); have a container ready to catch the drainage.
- 4. Remove the bowl (2), element (9), and spring (7).
- Replace immediately with the spare bowl (2), element (9), and spring (7) to keep the paint from drying on the housing (1) and other parts.
  - a. Install the element (9) with the dome end up.
  - b. Lubricate the threads of the bowl (2) with grease before screwing it to the housing (1).
     Tighten securely.
- 6. Clean the bowl (2), element (9), and spring (7) you removed with a compatible solvent before the paint dries. Store until needed.

**NOTE:** Clean the element (9) with a small paint brush. Blow out lodged particles with air, and inspect for damage. Replace if ruptured, damaged, or too dirty to clean.

### Filter O-Ring Replacement

The filter o-rings (5 and 6) seal the bowl (2) to the housing (1). See **Parts** on page 10. Replace the o-ring (5) and o-ring backup (6) if material leaks around the bowl (2).

- 1. Follow **Pressure Relief Procedure**, page 7.
- 2. Open the drain valve (B) and have a container ready to catch the drainage. See Fig. 1.
- 3. Remove the bowl (2) and o-rings (5 and 6).
- 4. Clean the parts in a compatible solvent. Be careful not to damage the o-rings (5 and 6) or the sealing surfaces of the bowl (2) and housing (1).
- Lubricate the parts with No. 2 grease.
- 6. Replace the o-ring (5) and verify the o-ring backup (6) is installed with the groove facing up.

### **Indicator Replacement**

Replace the indicator assembly (3) if the indicator is not working properly; for example, if it is always red or never red.

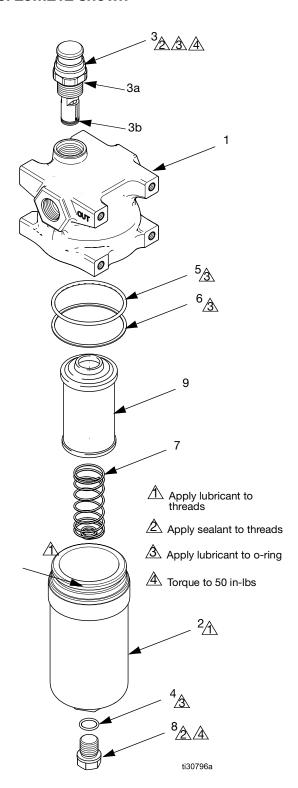
#### Indicator O-Ring Replacement

The indicator o-rings (3a and 3b) seal the indicator assembly (3) to the housing (1). See **Parts** on page 10. Replace the o-rings (3a and 3b) if material leaks around the indicator (3).

- 1. Follow Pressure Relief Procedure, page 7.
- 2. Open the drain valve (B) and have a container ready to catch the drainage. See Fig. 1.
- 3. Remove the indicator (3) and o-rings (3a and 3b).
- 4. Clean the parts in a compatible solvent. Be careful not to damage the o-rings (3a and 3b) or the sealing surfaces of the indicator (3) and housing (1).
- 5. Lubricate the parts with No. 2 grease.

## **Parts**

### Model 25M212 shown



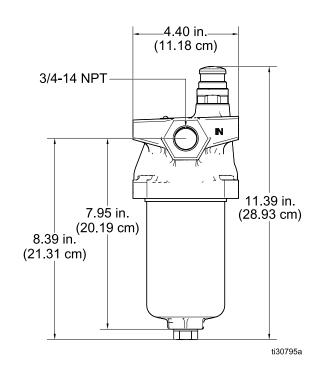
### Part No./Description

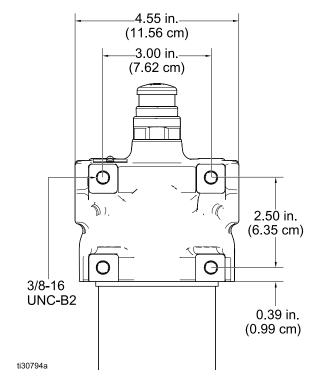
Re	ef	Part	Description	Qty
1		17L906	Filter housing	1
2		17L907	Bowl	1
3		25M213	Indicator, PTFE	1
	За	C20111	O-ring, size 119, Viton	1
	3b	109576	O-ring, size 016, Viton	1
4		104444	O-ring, size 908, Viton	1
5		104445	O-ring, size 233, Viton	1
6		104443	O-ring, backup, Viton (#233)	1
7		17L928	Filter compression spring	1
8		17L927	Filter plug, 3/4-16 UNF	1
9			Filter element (not included, see <b>Kits</b> and <b>Accessories</b> )	1

### **Kits and Accessories**

Part No.	Description	
210090	Filter housing with 60 mesh element	
210091	Filter housing with 100 mesh element	
210092	Filter housing with 200 mesh element	
17S338	Kit, O-ring, Red Alert, Viton (Complete)	
17S339	Kit, O-ring, Red Alert, PTFE	
17S340	7S340 Kit, O-ring, Indicator, PTFE	
108116	116 60 mesh (250 micron) element only	
108117	100 mesh (149 micron) element only	
108118	200 mesh (74 micron) element only	

## **Dimensions**





**Overall Dimensions** 

**Mounting Dimensions** 

Dimensions		

## **Technical Data**

Red Alert Filter, model 25M212			
	US	Metric	
Maximum working pressure	3000 psi	21.0 MPa, 210 bar	
Flow capacity	10 gpm	38 liters/min	
Filter Element			
Filter area	36 sq. in.	232 cm <sup>2</sup>	
Filtration			
108116	60 mesh (	250 micron)	
108117	100 mesh	(149 micron)	
108118	200 mesh	200 mesh (74 micron)	
104435	no filte	r element	
Wetted Parts			
Filter Assembly	Viton, Stainless Steel		
Indicator	UMHW, Stainless Steel		
Weight			
All models	14 lbs. 8 oz.	6.6 kg	

## **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.

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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.

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

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

**Toll Free Phone Number: 1-800-328-0211** 

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Original instructions. This manual contains English. MM 3A4936

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