

GH-3 Heated Hose

3B1033A

EN

***For spraying polyurethane foam. For use with Gusmer GH-3 proportioners only.
For professional use only.
Not approved for use in explosive atmospheres or hazardous (classified) locations.***

**Model: See page 4 for model information
and approvals**

130 psi (0.9 MPa, 9 bar) Maximum Working Air Pressure

*3,500 psi (24.1 MPa, 241 bar) Maximum Working Fluid
Pressure*

180° F (82° C) Maximum Hose Operating Temperature



Important Safety Instructions

Read all warnings and instructions in this manual and all related manuals before using the equipment. Be familiar with the proper control and usage of the equipment. Save these instructions.

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Related Manuals

Find English manuals and any available translations at www.graco.com.


English Manual Number	Description
3B0072	Gusmer® GH-3 Hydraulic Proportioner Manual

Overview


The heated hose maintains set fluid temperature while spraying. Fluid hoses are marked with red tape for ISO/hardener/minor volume side (A-side) and blue tape for RES/resin/major volume side (B-side). Hoses are 50 ft. long. The whip hose is 9 ft. long.

Hose Part Numbers

Whip Hose

Part number	Maximum working psi (MPa, bar)	Length, ft. (m)	Inner Diameter in. (mm)	Heat Type	Hose Fittings		Approvals
					“A” inlet (female) / outlet (male)	“B” inlet (female) / outlet (male)	
2003627	3,500 (24.1, 241)	9.84 (3)	1/4 (6.35)	External	-05 JIC	-06 JIC	

Gusmer GH-3 Main Hose*

Part number	Maximum working psi (MPa, bar)	Length, ft. (m)	Inner Diameter in. (mm)	Heat Type	Hose Fittings		Approvals
					“A” inlet (female) / outlet (male)	“B” inlet (female) / outlet (male)	
2003625	3,500 (24.1, 241)	49.21 (15)	3/8 (9.53)	External	-05 JIC	-06 JIC	

* Gusmer GH-3 Main Hoses include a Fluid Temperature Sensor kit, which contains an FTS sensor.

Fluid Temperature Sensor (FTS) Kits








Part number	“A” Side			“B” Side		
	Inlet	Outlet	FTS Probe	Inlet	Outlet	FTS Probe
261669	-5 JIC	-5 JIC	X	-6 JIC	-6 JIC	

FTS Kit Contains:

- FTS sensor
- FTS coupler fitting for equal length on other line
- Adapter fittings as necessary
- Foam tube insulation to cover fittings and FTS
- 3.74 in. (95.25 mm) air line jumper hose

Safety Symbols

The following safety symbols appear throughout this manual and on warning labels. Read the table below to understand what each symbol means.

Symbol	Meaning
	Burn Hazard
	Equipment Misuse Hazard
	Fire and Explosion Hazard
	Skin Injection Hazard
	Splatter Hazard
	Toxic Fluid or Fumes Hazard
	Eliminate Ignition Sources

Symbol	Meaning
	Do Not Stop Leaks with Hand, Body, Glove or Rag
	Ground Equipment
	Read Manual
	Read Safety Data Sheet
	Follow Pressure Relief Procedure
	Ventilate Work Area
	Wear Personal Protective Equipment









Safety Alert Symbol

This symbol indicates: Attention! Become Alert! Look for this symbol throughout the manual to indicate important safety messages.

General Warnings

The following warnings apply throughout this manual. Read, understand, and follow the warnings before using this equipment. Failure to follow these warnings can result in serious injury.

 <h2 style="margin: 0;">WARNING</h2>	
  	<p>SKIN INJECTION HAZARD</p> <p>High-pressure fluid from 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.</p> <ul style="list-style-type: none"> • Inspect hose before each use for cuts, bulges, kinks or any other damage. • Replace damaged hose immediately. • Replace hoses proactively at regular intervals based on your operating conditions. • Tighten all fluid connections before operating the equipment. • Keep clear of leaks. • Do not stop or deflect leaks with your hand, body, glove, or rag. • Never exceed hose Maximum Pressure or Temperature ratings. • Only use chemicals that are compatible with hose materials. See Technical Specifications in this manual. Read Safety Data Sheets (SDSs) and fluid and solvent manufacturer’s recommendations. • Follow the Pressure Relief Procedure when you stop spraying/dispersing and before cleaning, checking, or servicing equipment.
	<p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled or swallowed.</p> <ul style="list-style-type: none"> • Read Safety Data Sheets (SDSs) for handling instructions and to know the specific hazards of the fluids you are using, including the effects of long-term exposure. • When spraying, servicing equipment, or when in the work area, always keep work area well-ventilated and always wear appropriate personal protective equipment. See Personal Protective Equipment warnings in this manual. • Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:</p> <ul style="list-style-type: none"> • Do not touch hot fluid or equipment.

WARNING



FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:



- Use equipment only in well-ventilated area.
- Eliminate all ignition sources, such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking).
- Ground all equipment in the work area. See **Grounding** instructions.
- Never spray or flush solvent at high pressure.
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.



EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.



- 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 all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Specifications** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) 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.







PRESSURIZED ALUMINUM PARTS HAZARD

Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.

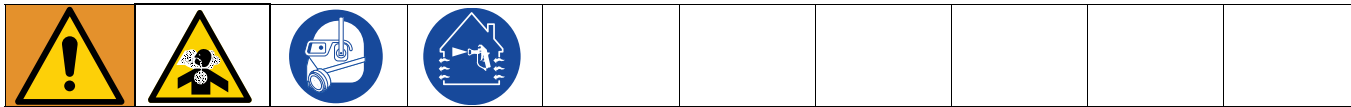
WARNING

  	<p>THERMAL EXPANSION HAZARD</p> <p>Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury.</p> <ul style="list-style-type: none"> • Open a valve to relieve the fluid expansion during heating. • Replace hoses proactively at regular intervals based on your operating conditions.
	<p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>Always wear appropriate personal protective equipment and cover all skin when spraying, servicing equipment, or when in the work area. Protective equipment helps prevent serious injury, including long-term exposure; inhalation of toxic fumes, mists or vapors; allergic reaction; burns; eye injury and hearing loss. This protective equipment includes but is not limited to:</p> <ul style="list-style-type: none"> • A properly fitting respirator, which may include a supplied-air respirator, chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority. • Protective eyewear and hearing protection.

Important Isocyanate (ISO) Information

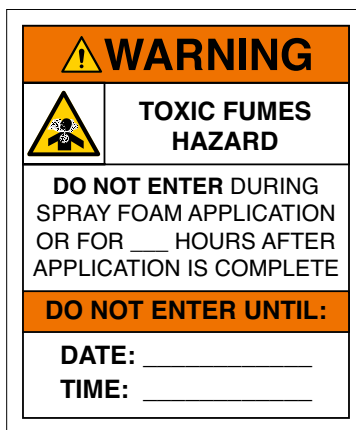
Isocyanates (ISO) are catalysts used in two component materials.

Isocyanate Conditions



Spraying or dispensing fluids that contain isocyanates creates potentially harmful mists, vapors, and atomized particulates.

- Read and understand the fluid manufacturer’s warnings and Safety Data Sheets (SDSs) to know specific hazards and precautions related to isocyanates.
- Use of isocyanates involves potentially hazardous procedures. Do not spray with this equipment unless you are trained, qualified, and have read and understood the information in this manual and in the fluid manufacturer’s application instructions and SDSs.
- Use of incorrectly maintained or mis-adjusted equipment may result in improperly cured material, which could cause off gassing and offensive odors. Equipment must be carefully maintained and adjusted according to instructions in the manual.
- To prevent inhalation of isocyanate mists, vapors and atomized particulates, everyone in the work area must wear appropriate respiratory protection. Always wear a properly fitting respirator, which may include a supplied-air respirator. Ventilate the work area according to instructions in the fluid manufacturer’s SDSs.
- Avoid all skin contact with isocyanates. Everyone in the work area must wear chemically impermeable gloves, protective clothing and foot coverings as recommended by the fluid manufacturer and local regulatory authority. Follow all fluid manufacturer recommendations, including those regarding handling of contaminated clothing. After spraying, wash hands and face before eating or drinking.
- Hazard from exposure to isocyanates continues after spraying. Anyone without appropriate personal protective equipment must stay out of the work area during application and after application for the time period specified by the fluid manufacturer. Generally this time period is at least 24 hours.
- Warn others who may enter work area of hazard from exposure to isocyanates. Follow the recommendations of the fluid manufacturer and local regulatory authority. Posting a placard such as the following outside the work area is recommended:



Material Self-Ignition



Some materials may become self-igniting if applied too thick. Read material manufacturer's warnings and material Safety Data Sheets (SDSs).

Keep Components A and B Separate



Cross-contamination can result in cured material in fluid lines which could cause serious injury or damage equipment. To prevent cross-contamination:

- **Never** interchange component A and component B wetted parts.
- Never use solvent on one side if it has been contaminated from the other side.

Moisture Sensitivity of Isocyanates

Exposure to moisture (such as humidity) will cause ISO to partially cure, forming small, hard, abrasive crystal that become suspended in the fluid. Eventually a film will form on the surface and the ISO will begin to gel, increasing in viscosity.

NOTICE

Partially cured ISO will reduce performance and the life of all wetted parts.

- Always use a sealed container with a desiccant dryer in the vent, or a nitrogen atmosphere. **Never** store ISO in an open container.
- Keep the ISO pump wet cup or reservoir (if installed) filled with appropriate lubricant. The lubricant creates a barrier between the ISO and the atmosphere.
- Use only moisture-proof hoses compatible with ISO.
- Never use reclaimed solvents, which may contain moisture. Always keep solvent containers closed when not in use.
- Always lubricate threaded parts with an appropriate lubricant when reassembling.

NOTE: The amount of film formation and rate of crystallization varies depending on the blend of ISO, the humidity, and the temperature.

Changing Materials

NOTICE

Changing the material types used in your equipment requires special attention to avoid equipment damage and downtime.

- When changing materials, flush the equipment multiple times to ensure it is thoroughly clean.
- Always clean the fluid inlet strainers after flushing.
- Check with your material manufacturer for chemical compatibility.
- When changing between epoxies and urethanes or polyureas, disassemble and clean all fluid components and change hoses. Epoxies often have amines on the B (hardener) side. Polyureas often have amines on the B (resin) side.

Foam Resins with 245 fa Blowing Agents

Some foam blowing agents will froth at temperatures above 90 °F (33 °C) when not under pressure, especially if agitated. To reduce frothing, minimize preheating in a circulation system.

Installation

Description



This hose must be grounded through the FTS cable and ground wire to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode.

The heated hose maintains proper fluid temperature while spraying.

Fluid hoses are marked with red tape for ISO/hardener/minor volume side, blue tape for RES/resin/major volume side. Fittings have different sized threads to prevent incorrect connection, which can cause fluid crossover and permanently damage the hose.

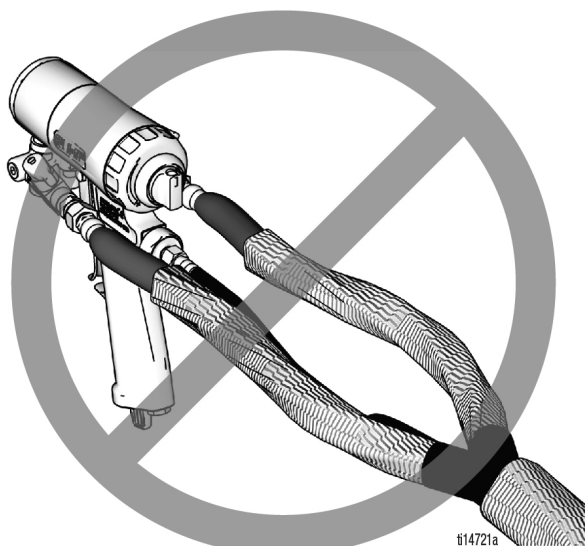
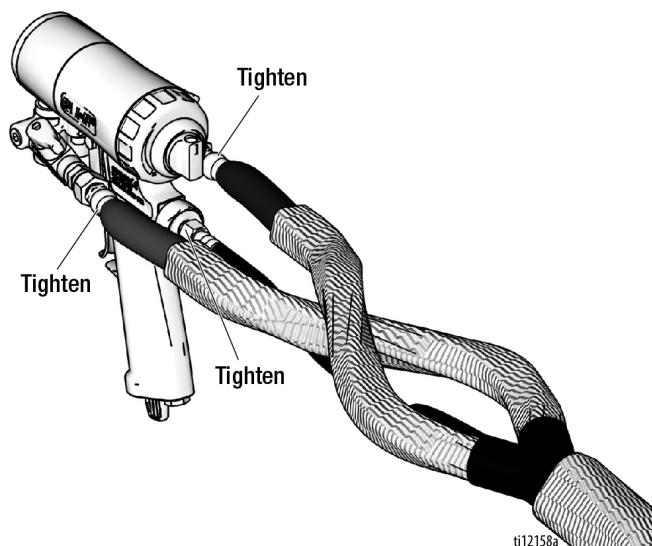
Hoses are 49.21 ft. (15 m) long. The whip hose is 9.84 ft. (3 m) long or less.

Connect Whip Hose to Gun or Gun Manifold

NOTE: Install hose in a helix configuration for:

- Easy gun movement
- Large spraying motion
- Ability to spray in tight areas and odd angles
- Reduced operator fatigue
- Maximum hose life

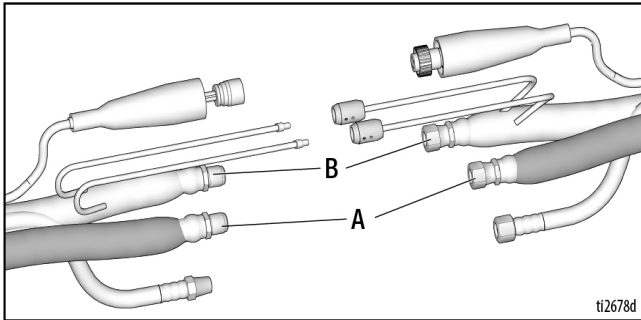
1. Overlap A and B component hoses and assemble to gun or gun manifold fittings as shown below.
2. Tighten fittings to A and B component hoses. Ensure hose remains flat after fittings are tightened. Loosen and re-tighten fittings as necessary to eliminate any torque on hoses.



Connect Heated Hoses



1. Follow the Pressure Relief and Shutdown procedures in your proportioner manual.
2. Lay heated hoses end to end, matching the color coding. Red for component A (ISO), blue for component B (RES).



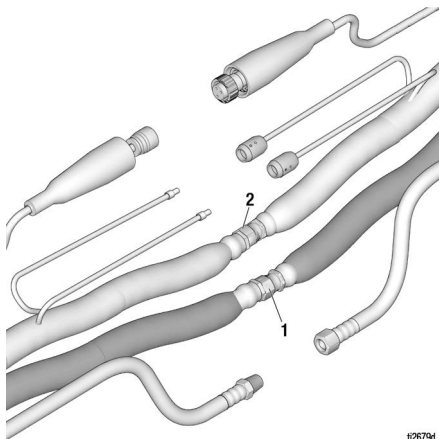
3. Connect fluid hoses (1, 2) and tighten. See maximum torque specifications below. Do not over-torque.

Torque 1/4 in. (6.4 mm) and 3/8 in. (9.5 mm) ID hoses to:

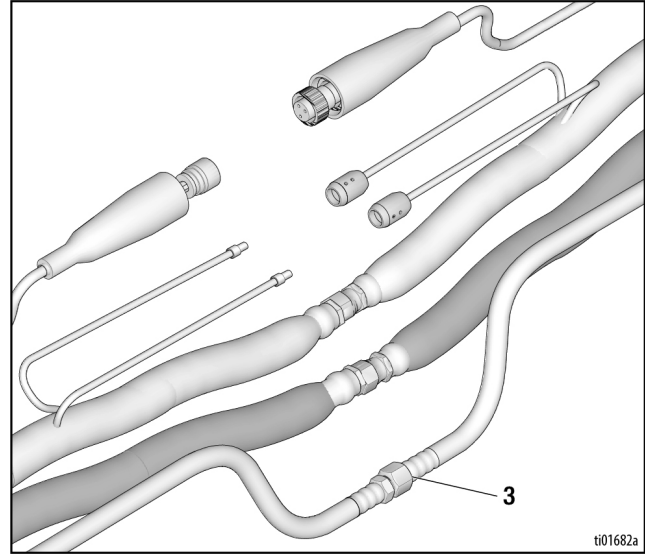
- A side to 14 ft-lb. (19 N•m)
- B side to 20 ft-lb. (27 N•m)

Torque 1/2 in. (13 mm) ID hoses to:

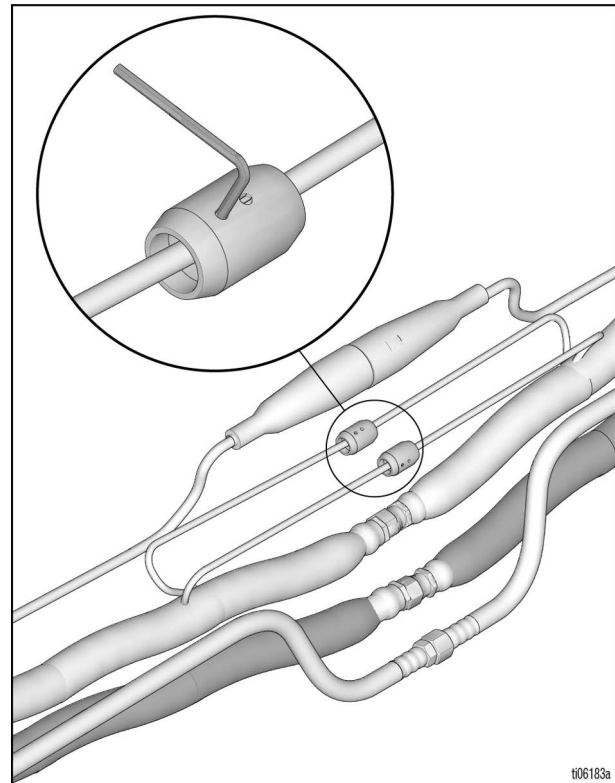
- A side to 43 ft-lb. (58 N•m)
- B side to 55 ft-lb. (74 N•m)



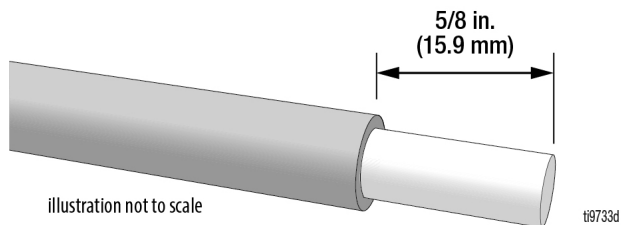
4. Connect air hoses (3).



5. Connect electrical wires.



- a. Ensure electrical wire ends are 5/8 in. (15.9 mm) long. If they are not, use a sharp scissors to strip all four wire ends to the correct length. See image below for correct length.



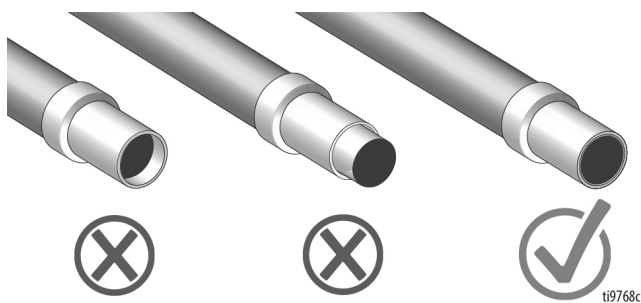
NOTE: Be careful not to cut or nick copper strands. If more than five strands are cut or nicked, trim wire and re-strip.

NOTE: New hoses are pre-stripped at correct length; remove insulation to expose bare wire.

- b. Ensure strip length is correct by fitting ferrule over exposed wire. Ferrule should be flush with wire end. See step c.

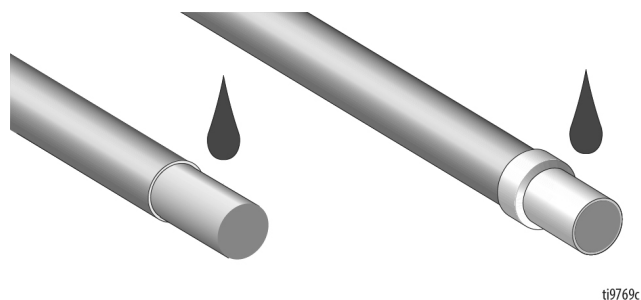
NOTE: On some older heated hoses wire insulation will not fit inside ferrule insulator. In these cases, use scissors to split and remove ferrule insulator.

- c. If wire is too short for ferrule end, adjust strip lengths accordingly. If bare wire is protruding from ferrule, trim flush to ferrule end. See image below.



- d. Remove ferrule and apply oxide inhibitor to bare wire, see step e.

- e. Reinsert wire in ferrule and apply more oxide inhibitor to ferrule and wire end.

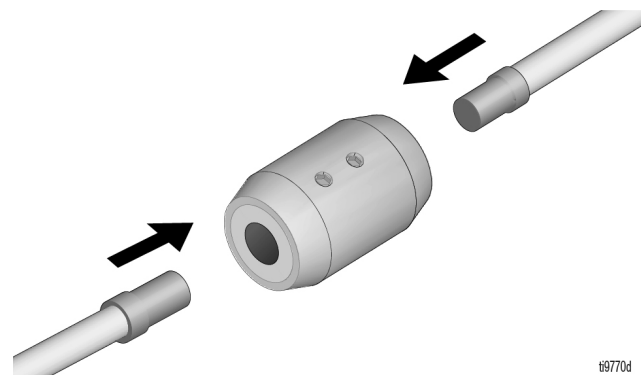


- 6. Connect the hoses to each other. Pair electrical wires as follows: A-Hose to A-Hose; B-Hose to B-Hose.

NOTE: When connecting first hose section to proportioner, wire pairing does not make a difference.

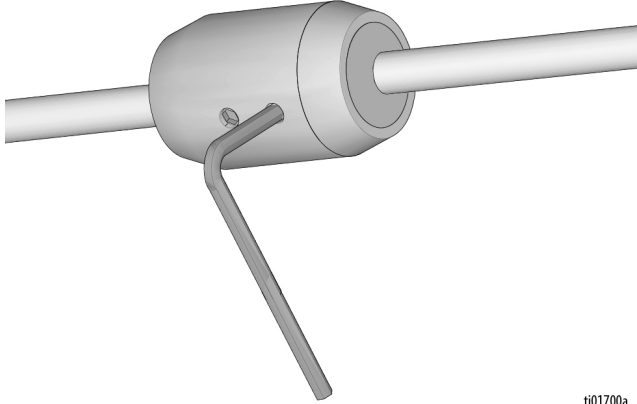
NOTE: When connecting hose to the proportioner, always check the hoses for leaks (see **Check Hoses for Leaks**, page 18).

- a. Insert one wire from heated hose into connector. Ensure that ferrule is mating with connector insert, see image below.



Installation

- b. Thread in both the nylon and metal setscrews and use hex wrench to torque setscrew to 60 in-lbs. (6.78 N•m).



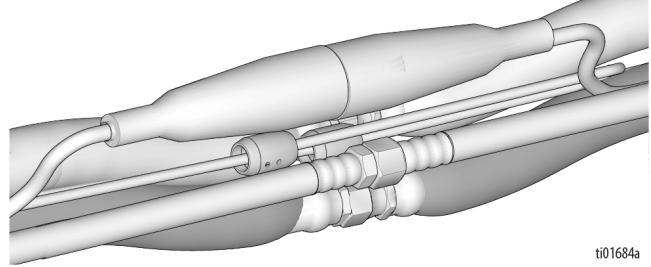
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- c. Insert remaining wire from pair into connector; ensure proper insertion depth. Thread setscrew and torque to 60 in-lbs. (6.78 N•m); see
- d. Repeat sub-steps A through C for remaining wire pair.
- e. Re-torque all four setscrews to 60 in-lbs (6.78 N•m).

NOTE: When torqued to 60 in-lbs. (6.78 N•m) setscrews will be approximately flush with connector.

- f. Wrap connector and wire on each side of connector in black electrical tape to help seal out moisture. Ensure 1 in. (25.4 mm) of wire on each side of connector is wrapped.

7. Connect thermocouple cables (4). Slide insulator sleeves (S) over connection. Leave slack in cables as stress relief to prevent cable failure.



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8. Repeat for additional hoses.
9. See **Connect FTS to Whip Hose Without Heat**, page 16, for details on how to properly connect FTS to hose.

Connect FTS and Heated Whip Hose

NOTICE

To avoid any potential performance issues, Graco recommends using only Graco brand whip hoses.

NOTICE

To prevent damage to probe, do not kink or excessively bend hose. Do not coil hose tighter than the minimum bend radius of 1.5 ft. (0.5 m). Do not subject hose to excessive weight, impact, or other abuse.

1. Assemble JIC swivel fitting (5e) in female end of temperature sensor (5a). Do not bend or kink probe. Torque connector to 14 ft-lbs. (19 N•m). Do not over-torque. Assemble JIC swivel fitting (5d) into female end of B hose coupler (5b). Torque to a maximum of 20 ft-lbs. (27 N•m). Do not over-torque.
2. Carefully inset FTS probe into the A hose (1) section from proportioner. Do not bend or kink probe. Connect to A side whip (6a). Torque fitting connections to 14 ft-lbs (19 N•m). Do not over-torque.

NOTICE

To avoid damage to FTS sensor cable, rotate FTS body so the cable lays between both fluid hoses to protect it from abrasive damage during use.

3. Connect the B hose couple to the B hose section (2) and the B side whip (6b). Torque fitting

connections to 20 ft-lbs. (27 N•m). Do not over-torque.

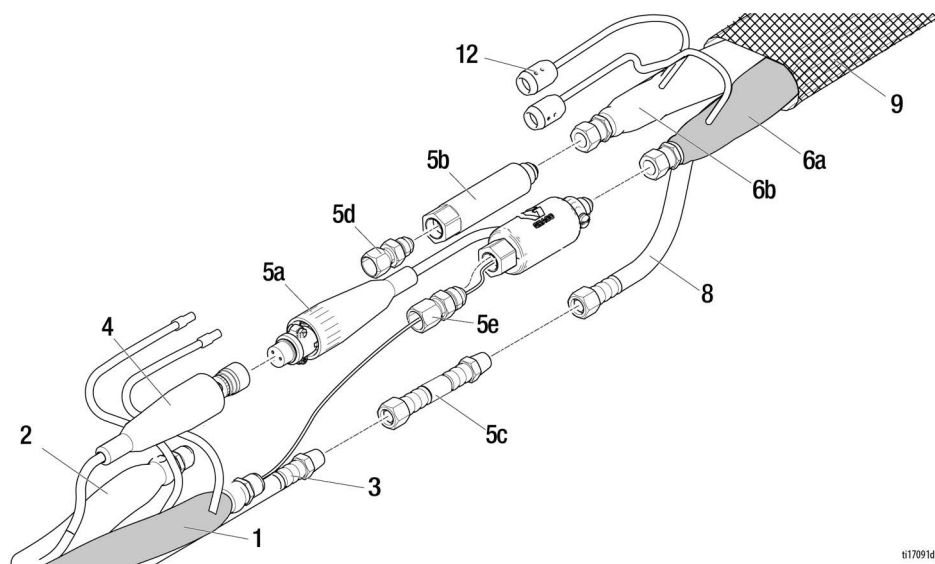
4. To properly ground the whip hose connect FTS fittings to whip hose fittings. Grounding capability is built into the hose.



The hose must be grounded through the FTS cable and antistatic air hose to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode.

NOTE: Antistatic air hose (8) must be connected to the main hose and in order to drain the static from the gun.

5. Connect the FTS air line coupler (5c) between air hoses (3 and 8).
6. Connect the sensor cable of the hose (4) to the sensor cable of the FTS (5a). For non-RTD hoses, slide the insulator sleeves (S) over the connection. Leave slack in the cables to provide stress relief and to prevent cable failure or errors.
7. Follow the steps in **Connect Hoses to Proportioner**, page 17.
8. Cover the FTS and spacer with split foam (provided) and tape closed.



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Connect FTS to Whip Hose Without Heat

NOTICE

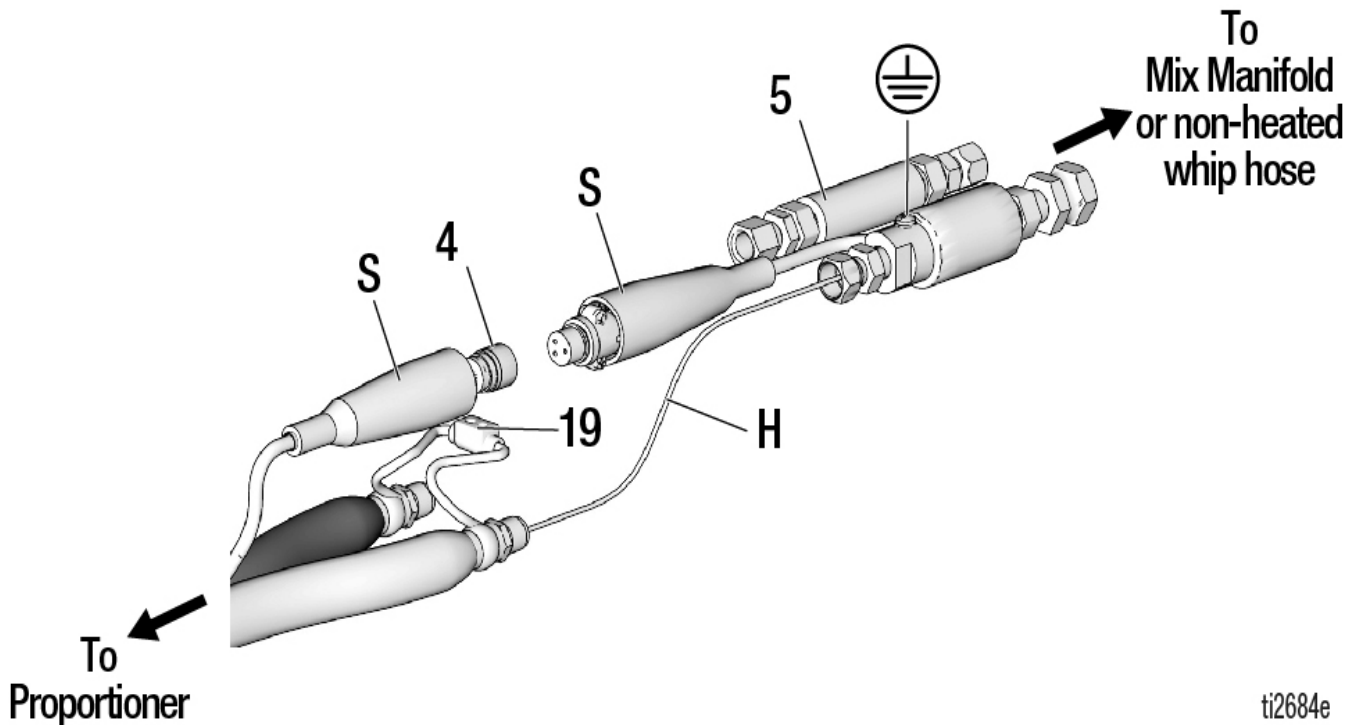
To avoid any potential performance issues, Graco recommends using only Graco brand whip hoses.

NOTICE

To prevent damage to probe, do not kink or excessively bend hose. Do not coil hose tighter than the minimum bend radius of 1.5 ft. (0.5 m). Do not subject hose to excessive weight, impact, or other abuse.

1. If it is necessary to bypass the heated whip hose for any reason, carefully extend FTS probe (H) into the hose section from the proportioner. Do not bend or kink probe.

2. Connect FTS (5) to mating assembly.
3. Connect fluid hoses to FTS.
4. Install one connector (12) between wires. Refer to **Connect Heated Hoses**, page 12.
5. Connect sensor cable (4) to FTS cable (part of 5). Slide insulator sleeves (S) over connection. Leave slack in cables as stress relief to prevent cable failure.
6. Connect antistatic air hose (8), see step 4 of **Connect FTS and Heated Whip Hose**, page 15.
7. Follow the steps in **Connect Hoses to Proportioner**, page 17.



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Connect Hoses to Proportioner

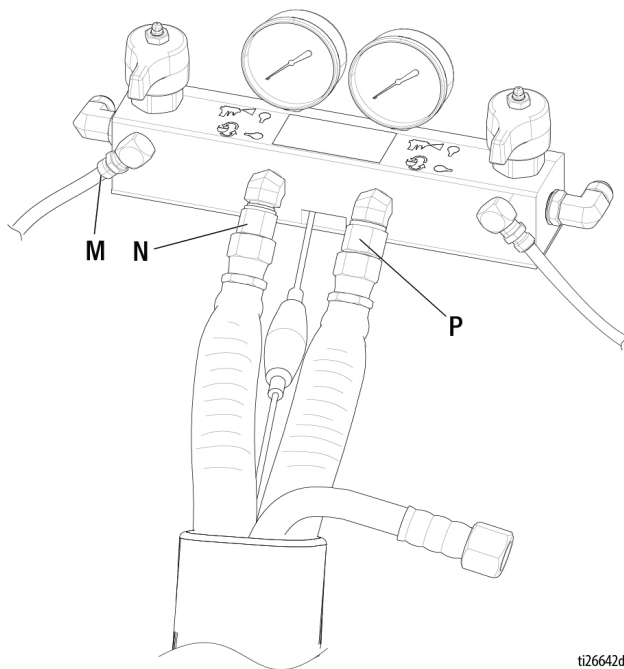
- Grease with Fusion® grease and connect fluid hoses to proportioner fluid manifold (M). Red for hardener (ISO), blue for resin (RES).

NOTE: The manifold hose adapters (N, P) allow use of 1/4 in. (6.4 mm) and 3/8 in. (9.5 mm) ID fluid hoses. To check adapter tightness, torque 1/4 in. and 3/8 in. ID hoses to:

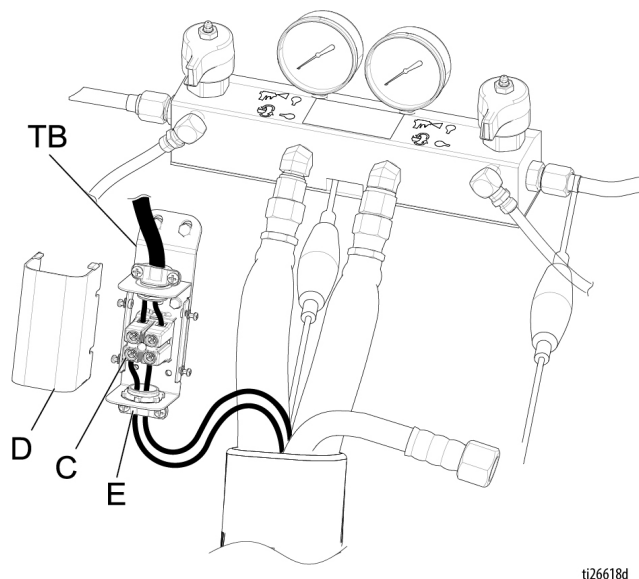
- A side (N) to 14 ft-lbs. (19 N•m)
- B side (P) to 20 ft-lbs. (27 N•m)

To use 1/2 in. (13 mm) ID fluid hoses, remove the adapters (N, P) from the proportioner fluid manifold and install them in the FTS or 3/8 in. ID hose inlets. Torque 1/2 in. ID hoses to:

- A side (N) to 43 ft-lbs. (58 N•m)
- B side (P) to 55 ft-lbs. (74 N•m)



- Connect hose power wires to terminal block (C) on terminator box (TB). Remove box cover (D) and loosen lower strain relief (E). Route wires through strain relief and fully insert into terminal block (A and B hose wire positions are not important). Torque terminal connector screws (C) to 35-50 in-lbs. (4.0-5.6 N•m). Fully tighten strain relief screws and replace cover.



- Connect FTS cable connectors. Fully tighten connectors and slide connector covers over the joint.
- Check that all equipment is properly grounded. See proportioner manual.

Fluid Temperature Sensor (FTS) Calibration

NOTE: Calibrate the FTS ONLY at initial startup (the first time the unit is operated) and any time the hose length changes.

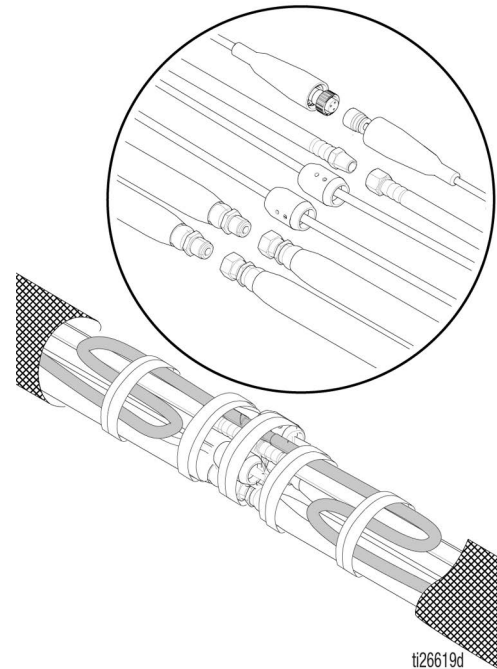
1. Before turning on the unit, ensure all hoses and cables are properly connected. To ensure that the FTS in the hose is at the same temperature as the heaters, keep heat off and store the hose FTS near the machine for several minutes.
2. While holding down the temperature unit button (Fahrenheit - "F_ or Celsius - "C") turn the proportioner main power ON.
3. Hold the temperature unit button until temperature is shown on the display. The fluid temperature sensor is now correctly calibrated.

Check Hoses for Leaks

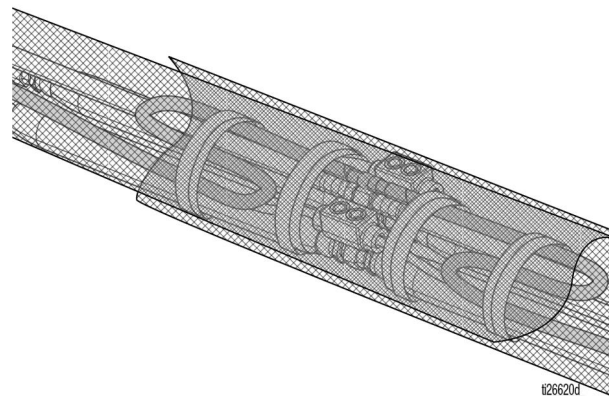
1. Pressure check hose. See proportioner manual for priming instructions.
2. After all lines are free of air, check for leaks. If there are leaks, follow the Pressure Relief Procedure in your proportioner manual.
3. Tighten connections, then pressurize again to ensure leaks have stopped. Relieve pressure.

Protective Covering

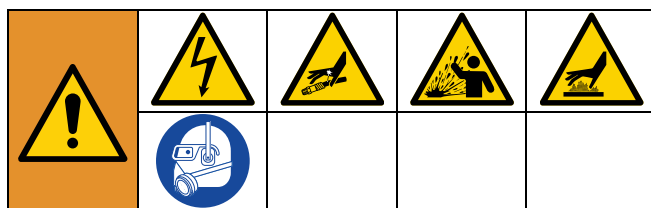
1. Wrap all fluid hose connections with electrical tape.
2. Fold FTS cable wire back on hose to ensure adequate strain relief. Wrap all electrical connections and cable connections with electrical tape to protect them from pulling apart and abrasion.



3. Unroll excess cover over hose and electrical connections. Tape securely.



Operation



Do not operate a coiled hose. A coiled hose creates uneven heat buildup which can result in hose rupture and cause serious injury, including fluid injection.

Maximum hose operating temperature is 180°F (82°C). If using hose without an FTS, measure hose temperature to ensure it does not exceed 180°F (82°C).

Hose must be properly supported to avoid excessive strain due to weight, bending, sharp edges, or stress caused by running over a rough edge.

Fluids subjected to heat in confined spaces, including hoses, can create a rapid rise in pressure due to the thermal expansion. Over-pressurization can result in equipment rupture and serious injury.

- Open a valve to relieve the fluid expansion during heating.
- Replace hoses proactively at regular intervals based on your operating conditions.

1. Connect air hose (3) to main air supply, if equipped.
2. Connect to spray gun.

NOTE: For best handling of gun, see **Connect Heated Hoses**, page 12, for proper hose connection.

3. Connect whip air hose to gun air inlet if equipped. See gun manual.
4. Follow setup, startup, and operation procedures in proportioner manual.

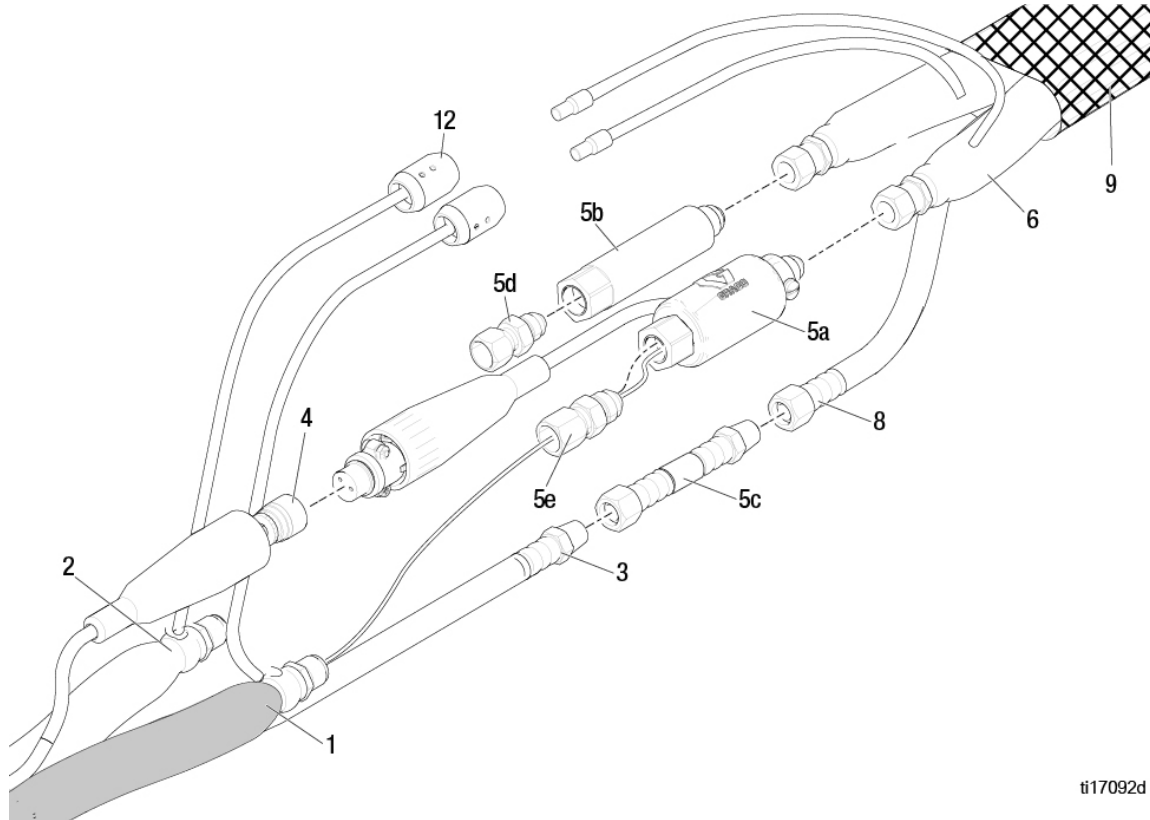
Maintenance



1. Before disconnecting or repairing hoses, follow the Pressure Relief Procedure and Shutdown procedure in your proportioner operation manual.
2. Be sure fluid is cool before disconnecting hoses.

Parts

261669 Fluid Temperature Sensor (JIC to JIC Fittings)



ti17092d

Heated Fluid Hose

Ref.	Part	Description	Qty	Ref.	Part	Description	Qty
1		HOSE, component A (ISO); see tables starting on page	1	5e	127597	FITTING, swivel, -5 JIC x -5 JIC, mxf	1
2		HOSE, component B (RES); see tables starting on page	1	6		HOSE, whip, see	1
3	15B295	HOSE, air, 50 ft. (15.2 m)	1	8	15B280	HOSE, whip, air 10 ft. (3 m)	1
4	24J523	CABLE, FTS, 50 ft. (15.2 m)	1	9		SCUFF GUARD, included on some hoses, see	1
5	261669	KIT, FTS, coupler	1	12	261821	CONNECTOR, electrical, on main hose sections	1
5a		SENSOR, fluid temperature, -5 JIC	1	13▲	15B679	LABEL, safety, English, not shown	1
5b		FITTING, FTS, coupler, -6 JIC	1	▲	16M219	LABEL, safety, Spanish/French, not shown	1
5c	24V454	HOSE, air, 4.75 in. (120.65 mm)	1				
5d	127596	FITTING, swivel, -6 JIC x -6 JIC, mxf	1				

▲ Replacement safety labels, tags, and cards are available at no cost.

Accessories

Scuff Guard / Protective Cover

Use to keep hose clean and protect it from damage.


Part	Description
246077	7 ft. (2.1 m) braided polyester mesh. For whip hose. Fold back over itself for easy installation.
246078	50 ft. (15.2 m) braided polyester mesh. Fold back over itself for easy installation.

Technical Specifications

Heated Hose		
	US	Metric
Maximum air hose working pressure	130 psi	0.9 MPa, 9bar
Maximum fluid operating temperature	180°F	82°C
Total Heating Load		
3/8 in. diameter	10 watts/foot	32 watts/meter
Whip Hose Maximum Fluid Working Pressure		
2003627	3500 psi	24 MPa, 241 bar
Gusmer GH-3 Hose Maximum Fluid Working Pressure		
2003625	3500 psi	24 MPa, 241 bar
FTS Maximum Fluid Working Pressure		
261669	5000 psi	35 MPa, 345 bar
Inlet/Outlet Sizes		
Air inlet size		1/4 in. npt(f)
A hose inlet		-05 JIC (m)
B hose inlet		-06 JIC (m)
Materials of Construction		
Wetted parts	Nylon, zinc-plated carbon steel, 303 stainless steel, PTFE	
Notes		
All trademarks or registered trademarks are the property of their respective owners.		

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.

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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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Original instructions. This manual contains English. MM 3B0133

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA
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