

15V534 Gun Flush Box Interface Kit

313212B

ENG

Interfaces a Graco Gun Flush Box with a ProMix[®] 2KS Electronic Proportioner using a RoboMix Fluid Station. For professional use only.

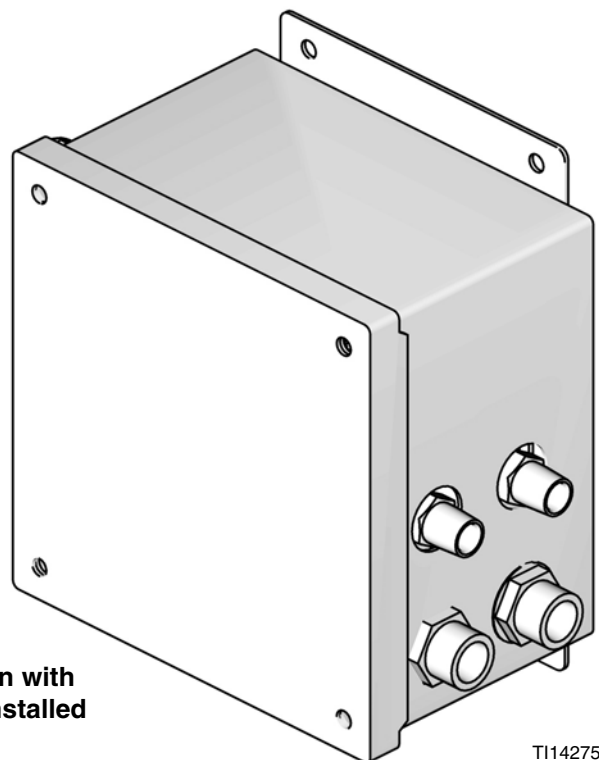
Approved for use in explosive atmospheres only when used in conjunction with ProMix 2KS Electronic Proportioners.

100 psi (0.7 MPa, 7 bar) Maximum Air Input Pressure



Important Safety Instructions

Read all warnings and instructions in this manual. For complete warnings and instructions see your proportioning system manual and gun flush box manual 312784. Hazard symbols refer to specific procedure risks. Save all instructions.



**GFB Interface Kit shown with
two air flow switches installed**

T114275a



Contents

- Related Manuals** 2
- Overview** 2
- Installation** 3
 - Location 3
 - Mount the Enclosure 3
 - Install the Cable 4
 - Install the Air Flow Switch 5
 - Install the Pressure Switch 6
 - Install the Solenoid 7
 - Connect the Cable to the RoboMix Control Board 8
 - Connect the Gun Flush Box 9
 - Connect Air Supply to Module 9
 - Replace the Cover 9
 - Ground the Enclosure 9
- Parts** 11
- Connect a Booth Control to the RoboMix
(to operate as a manual system)** 12
- Dimensions** 13
- Technical Data** 13
- Graco Standard Warranty** 14
- Graco Information** 14

Related Manuals

See the following manuals for additional information on the ProMix 2KS and Gun Flush Box Kits.

| Manual | Description |
|--------|--|
| 312778 | ProMix 2KS Automatic System Installation |
| 312779 | ProMix 2KS Automatic System Operation |
| 312780 | ProMix 2KS Automatic System Repair-Parts |
| 312784 | Gun Flush Box Kits |

Overview

Gun Flush Box Interface Kit 15V534 provides electrical and air connections to enable a ProMix 2KS RoboMix proportioner to operate one or two gun flush boxes. See FIG. 1 for the identification label.

Order Gun Flush Box Kit 15V826 separately (see manual 312784). Each 15V826 Kit includes one gun flush box and related parts. The pressure switch, air flow switch, and solenoid valve included in Gun Flush Box Kit 15V826 will be installed in this interface module.

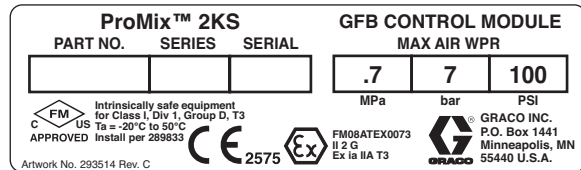











FIG. 1. GFB Interface Module Identification Label

Installation

| | | | | | | |
|---|---|---|---|--|--|--|
|  |  |  |  | | | |
| <ul style="list-style-type: none"> To avoid electric shock, ground all equipment. Turn off equipment power and shut off power at main circuit breaker before installing. All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations. Do not substitute system components as this may impair intrinsic safety. | | | | | | |

| | | | | | | |
|---|---|---|---|---|--|--|
|  |  |  |  |  | | |
| <p>To reduce the risk of serious injury, including fluid injection, splashing, pinching or injury from moving parts, relieve pressure before installing the kit. Follow the Pressure Relief Procedure in the ProMix 2KS Operation or Service manual.</p> | | | | | | |

Location

Install the gun flush box module enclosure (1) within 15 ft (4.5 m) of the RoboMix, to ensure that the cable (23) will reach the RoboMix. The module is approved for use in a hazardous location. See FIG. 1.

Mount the Enclosure

1. See **Dimensions**, page 13.
2. Ensure that the wall and mounting hardware are strong enough to support the weight of the equipment, fluid, hoses, and stress caused during operation.
3. Using the equipment as a template, mark the mounting holes on the wall at a convenient height for the operator and so equipment is easily accessible for maintenance.
4. Drill mounting holes in the wall. Install anchors as needed.
5. Bolt equipment securely.

Install the Cable

1. Loosen the captive screws and remove the front cover from the enclosure.
2. The cable (23) has bare wires at both ends. Thread the shortest end (4 in. [102 mm]) into the enclosure through the strain relief bushing (7). See Fig. 2.

3. Connect the cable wires to the left side of the terminal strip (12), as indicated by the label (20). See Fig. 2 and Table 1.

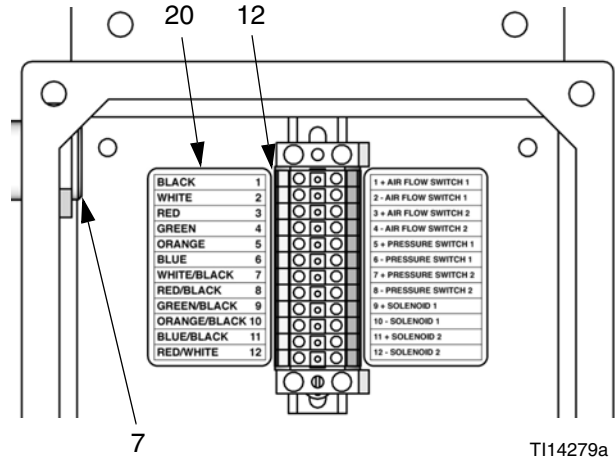


FIG. 2. Connect Cable to Terminal Strip

4. Connect the other end of the cable (5 in. [127 mm]) to pins 1-4 and 7-10 of the 10 position connector (24) and pins 1-4 of the 6 position connector, as shown in the **Cable (23) Wire Harness Detail** on page 11.


Table 1: Terminal Strip Wire Connections

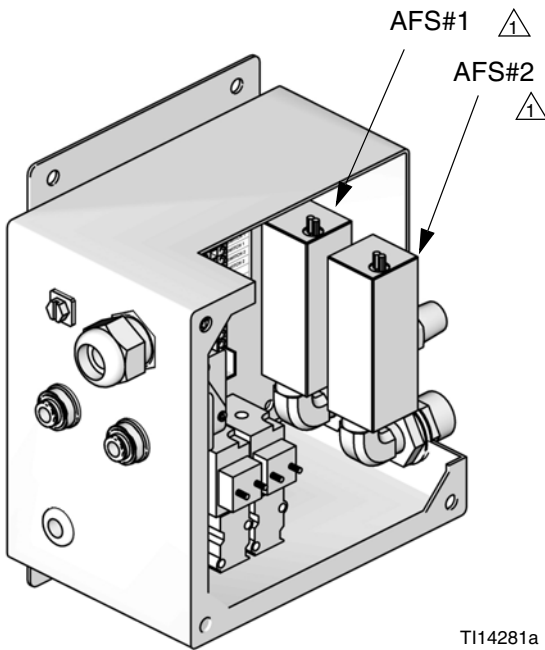
| Pin No. | Cable Wire Colors | Pin No. | Switch Wires |
|---------|-------------------|---------|----------------------------|
| 1 | Black | 1 | Air Flow Switch 1 + |
| 2 | White | 2 | Air Flow Switch 1 - |
| 3 | Red | 3 | Air Flow Switch 2 + |
| 4 | Green | 4 | Air Flow Switch 2 - |
| 5 | Orange | 5 | Pressure Switch 1 + |
| 6 | Blue | 6 | Pressure Switch 1 - |
| 7 | White/Black | 7 | Pressure Switch 2 + |
| 8 | Red/Black | 8 | Pressure Switch 2 - |
| 9 | Green/Black | 9 | Solenoid 1, + (12V), Red |
| 10 | Orange/Black | 10 | Solenoid 1, - (COM), Black |
| 11 | Blue/Black | 11 | Solenoid 2, + (12V), Red |
| 12 | Red/White | 12 | Solenoid 2, - (COM), Black |

Install the Air Flow Switch

NOTE: The GFB Interface Module Kit does not include an air flow switch (AFS). The AFS is supplied with the gun flush box kit. Install the AFS in the interface module as follows.

1. Each gun flush box kit includes one air flow switch (AFS). The GFB interface module can accommodate 1 or 2 air flow switches. Install the switch(es) in the right side of the enclosure. See FIG. 3.

 AFS is part of gun flush box kit; not included with GFB Interface Kit.



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FIG. 3. Install Air Flow Switch (two shown)

2. Connect the wires from AFS#1 to the right side of the terminal strip (12) pins 1 (+) & 2 (-), as indicated by the label (21). See FIG. 4 and Table 1.

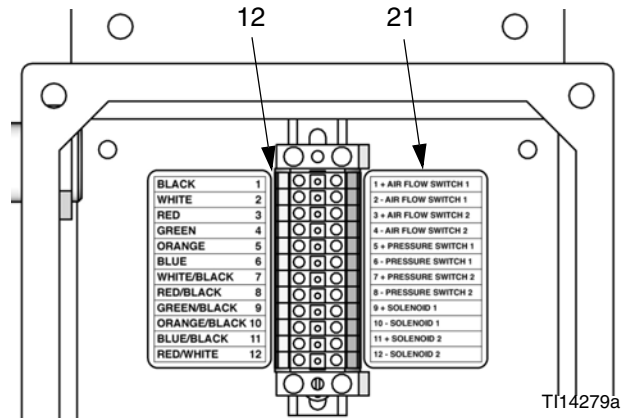


FIG. 4. Connect Air Flow Switch to Terminal Strip

3. If using a second gun flush box, connect the wires from AFS#2 to the right side of the terminal strip (12) pins 3 (+) & 4 (-), as indicated by the label (21). See FIG. 4 and Table 1.

Install the Solenoid

NOTE: The GFB Interface Module Kit does not include a solenoid (SO). The solenoid is supplied with the gun flush box kit. Install the solenoid in the interface module as follows.

1. Each gun flush box kit includes one solenoid (SO). The GFB interface module can accommodate 1 or 2 solenoids. Install the solenoid(s) on the manifold at the bottom rear of the enclosure. See Fig. 7.

NOTE: See **Parts** on page 11. If you are using two gun flush boxes, remove the two sealing screws (4) from the solenoid manifold (8) before installing SO#2. Also remove the plug (5) from the connector (15).

 Solenoid is part of gun flush box kit; not included with GFB Interface Kit.

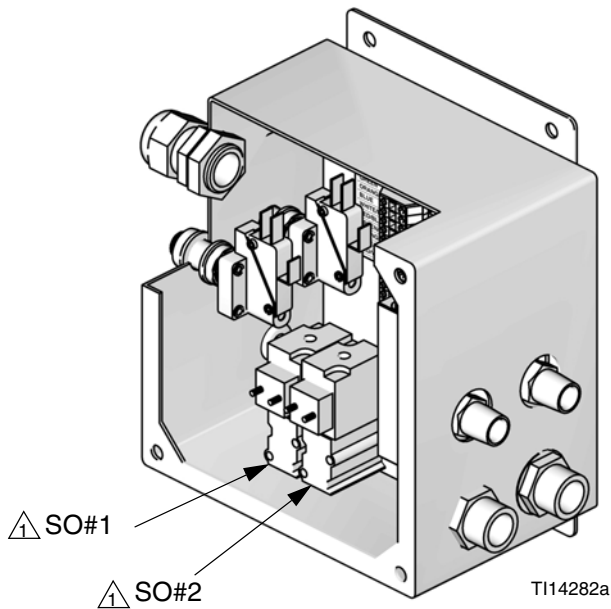


Fig. 7. Install Solenoid (two shown)

2. Connect the wires from SO#1 to the right side of the terminal strip (12), as indicated by the label (21); red (+12V) to pin 9, black (COM) to pin 10. See Fig. 8 and Table 1.

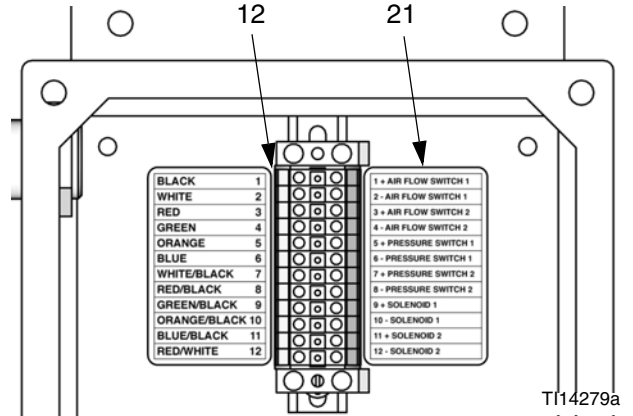


Fig. 8. Connect Solenoid to Terminal Strip

3. If using a second gun flush box, connect the wires from SO#2 to the right side of the terminal strip (12), as indicated by the label (21); red (+12V) to pin 11, black (COM) to pin 12. See Fig. 8 and Table 1.

Connect the Cable to the RoboMix Control Board

NOTICE

To avoid damaging circuit board when servicing, wear grounding strap on wrist and ground appropriately.

1. See the ProMix 2KS Repair-Parts manual. Open the RoboMix to access the control board.
2. Connect the 10 position connector (24) to J1 on the control board. See FIG. 9.

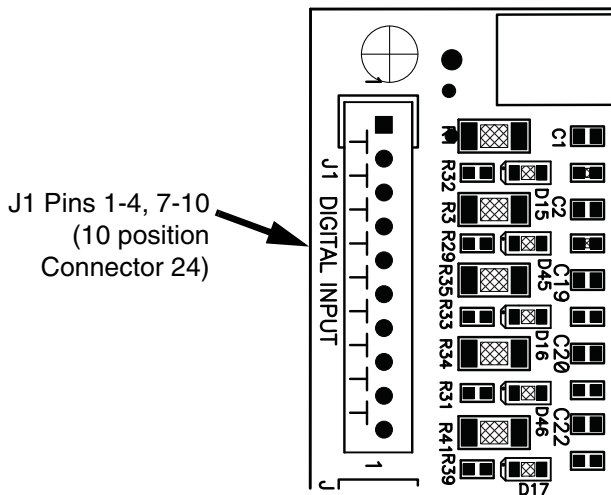


FIG. 9: RoboMix Control Board J1 Connections

3. Connect the 6 position connector (25) to J8 on the control board. See FIG. 10

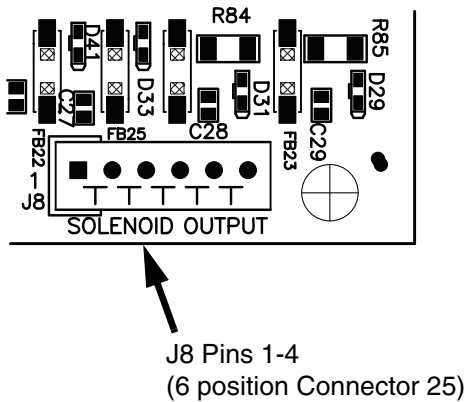


FIG. 10: RoboMix Control Board J8 Connections

Connect the Gun Flush Box

NOTE: Use 5/32 in. (4 mm) OD tubing to connect the gun flush box air ports to the interface module air ports, as follows. See FIG. 12.

1. From the **P** port to the air supply.
2. From the **A** port to the pressure switch air input.
3. From the **C** port to the gun flush box solenoid output.
4. From the **S** port to the atomizing air safety shutoff valve pilot port. See the gun flush box manual for details on the safety shutoff valve.
5. From the AFS to the atomizing air safety shutoff valve IN port. See the gun flush box manual for details on the safety shutoff valve.

Connect Air Supply to Module

Connect a 1/4 in. (6 mm) OD tube between a clean, dry air supply (filtered to 10 microns) and the module air inlet fitting (13). See **Parts** on page 11.

Replace the Cover

Reinstall the cover on the enclosure and secure with the four captive screws.

Ground the Enclosure

Connect a ground wire (Y) from the enclosure's ground screw (6) to a true earth ground. See FIG. 11.

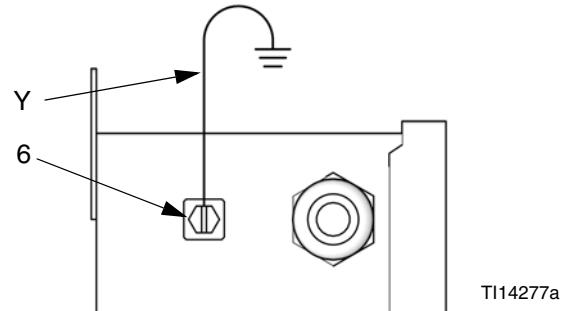


FIG. 11. Ground the Enclosure

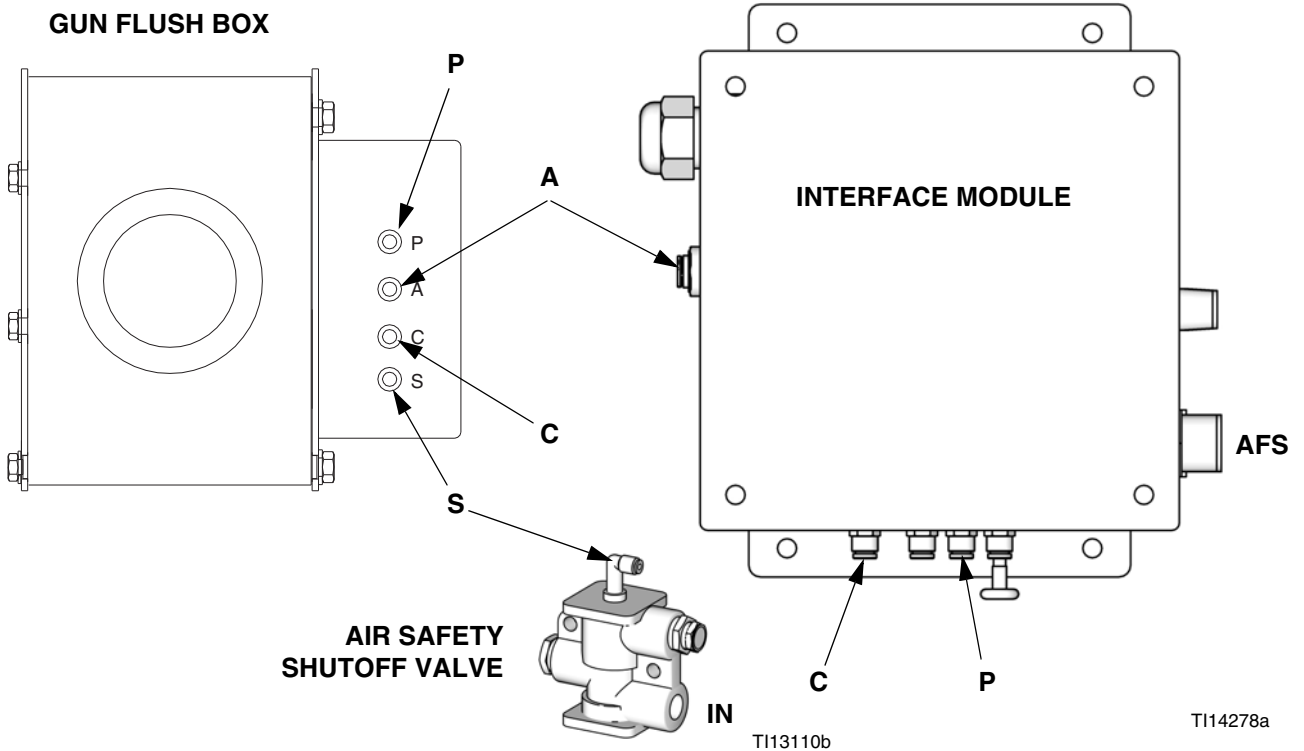
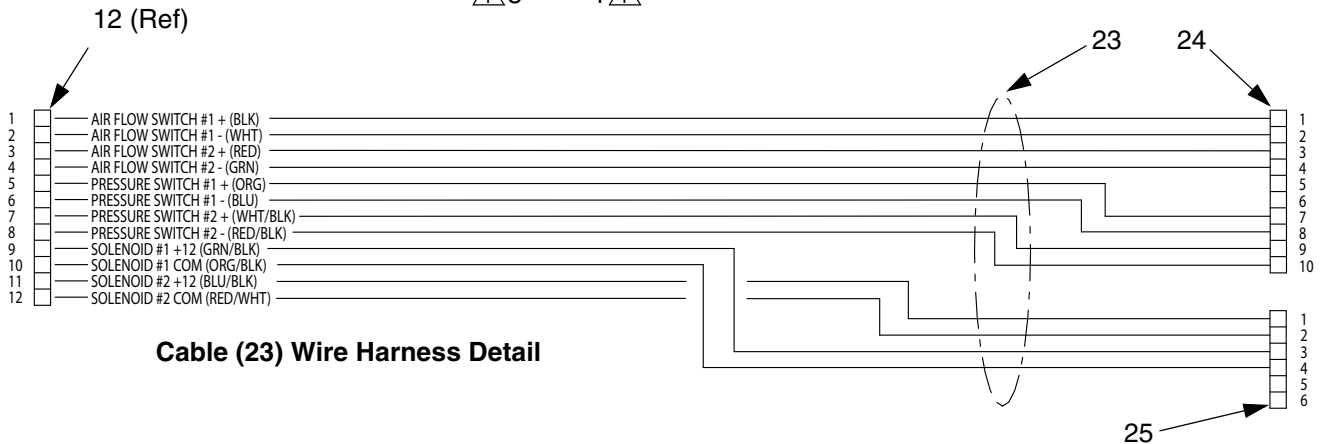
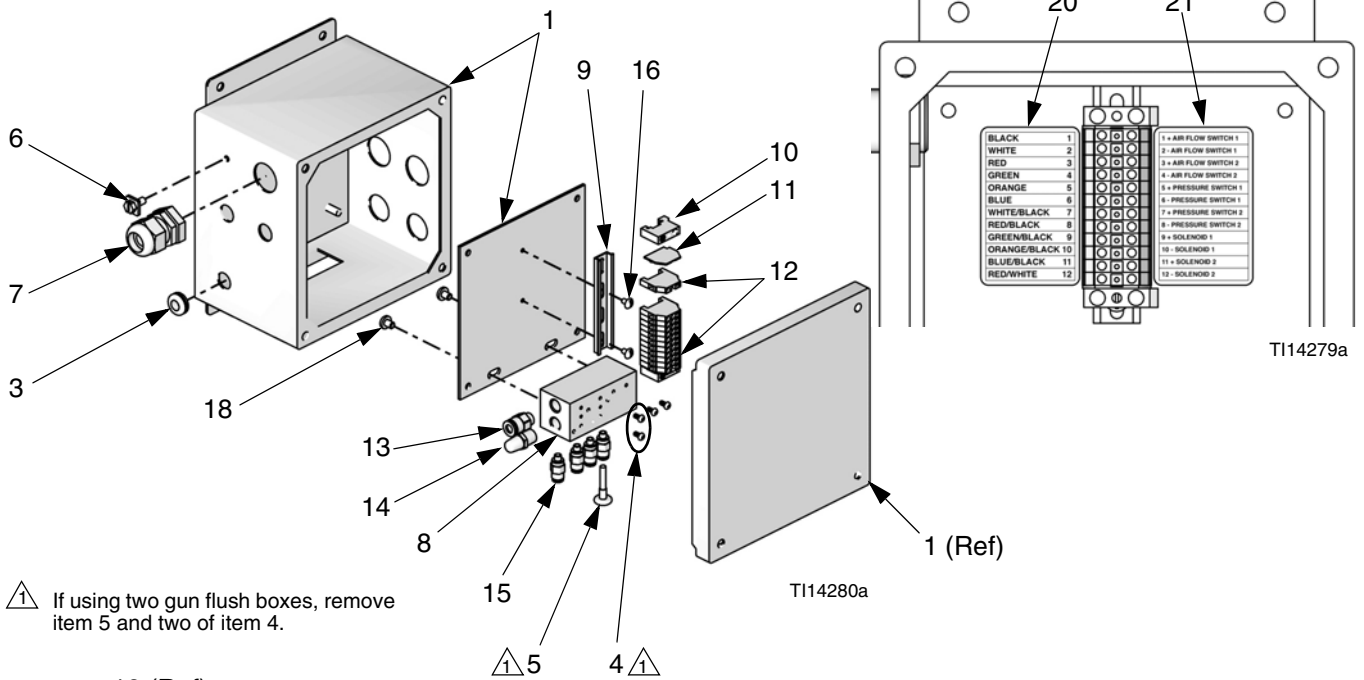


FIG. 12: Gun Flush Box to Interface Module Air Connections

Parts



| Ref. No. | Part No. | Description | Qty |
|----------|----------|------------------------|-----|
| 1 | 15V531 | ENCLOSURE, GFB module | 1 |
| 3 | 118435 | GROMMET | 1 |
| 4 | 121628 | SCREW, self-sealing | 4 |
| 5 | 113279 | PLUG, fitting, tube | 1 |
| 6 | 116343 | SCREW, ground | 1 |
| 7 | 114421 | BUSHING, strain relief | 1 |
| 8 | 15V533 | MANIFOLD, GFB solenoid | 1 |
| 9 | 116457 | RAIL; 3 in. (76 mm) | 1 |
| 10 | 116804 | BLOCK, end, terminal | 2 |
| 11 | 116459 | COVER, end, terminal | 2 |
| 12 | 116458 | TERMINAL, rail mount | 12 |

| Ref. No. | Part No. | Description | Qty |
|----------|----------|--------------------------------|-----|
| 13 | 115671 | CONNECTOR, tube; 1/4 in. OD | 1 |
| 14 | C06061 | MUFFLER | 1 |
| 15 | 111328 | CONNECTOR, tube; 5/32 in. OD | 4 |
| 16 | 113045 | SCREW, machine, truss-hd | 2 |
| 18 | 103832 | SCREW, machine | 2 |
| 19 | n/a | TUBE, nylon; 1.2 in. (30 mm) | 1 |
| 20 | 293494 | LABEL, cable wire connections | 1 |
| 21 | 293495 | LABEL, switch wire connections | 1 |
| 23 | 15V819 | CABLE, GFB interface | 1 |
| 24 | 15V409 | CONNECTOR, 10 position | 1 |
| 25 | 15G795 | CONNECTOR, 6 position | 1 |

Connect a Booth Control to the RoboMix (to operate as a manual system)

To use the RoboMix as a manual system, order the 15V350 Booth Control Kit and connect as follows. The kit includes a booth control module, wall bracket, and 50 ft (15.25 m) cable.

NOTICE

To avoid damaging circuit board when servicing, wear grounding strap on wrist and ground appropriately.

1. See FIG. 13. Mount the booth control in a convenient location near the RoboMix. Bring the cable to the RoboMix and thread it through the cable path at the back.
2. See the ProMix 2KS Repair-Parts manual. Open the RoboMix to access the control board.
3. Connect the cable to J7 on the control board. Close up the RoboMix and return to operation.

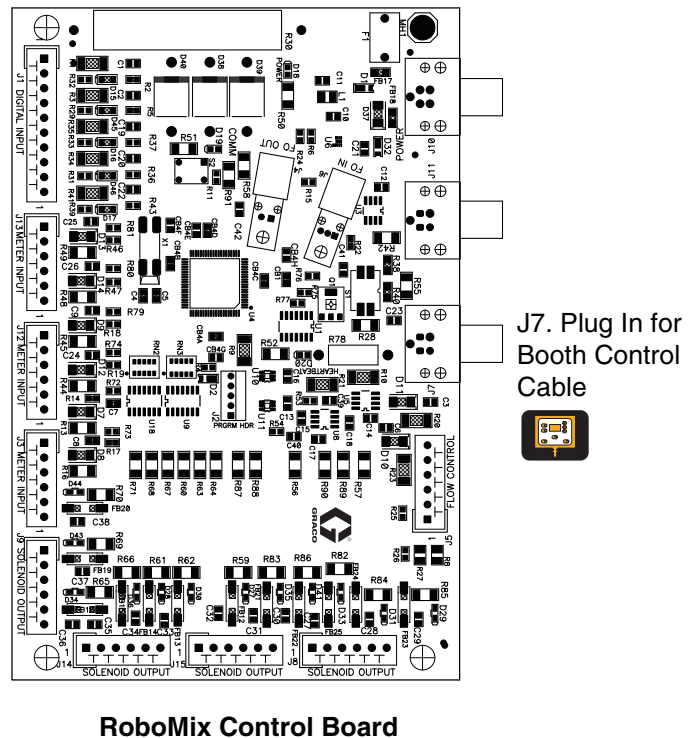
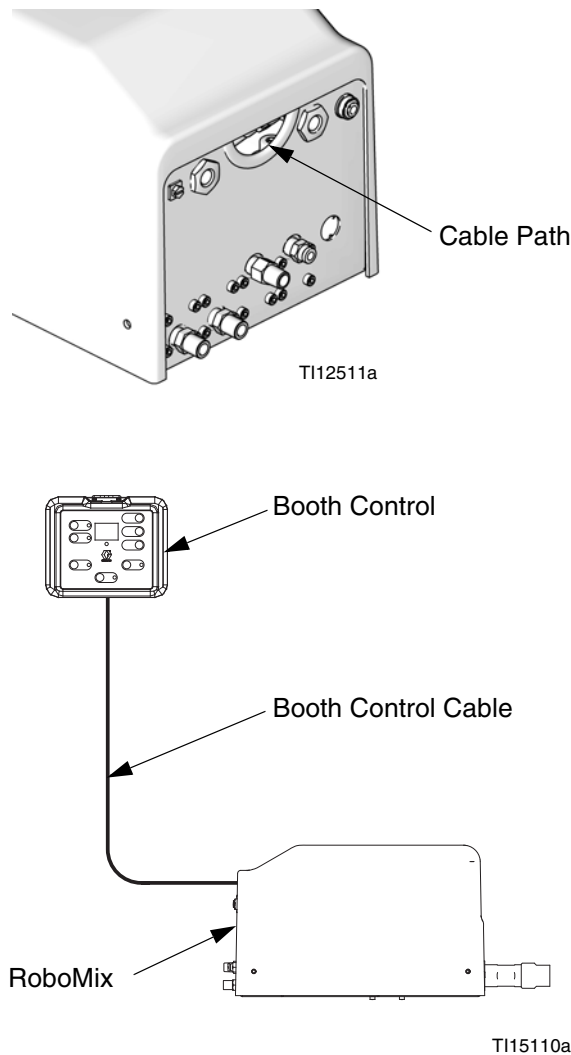
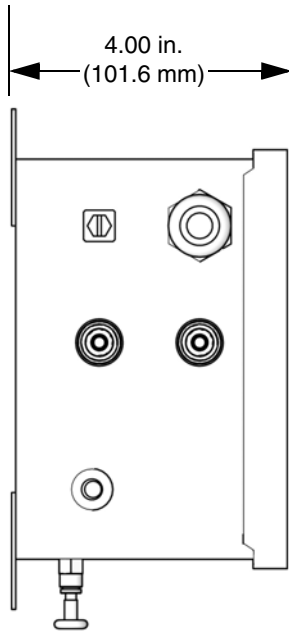
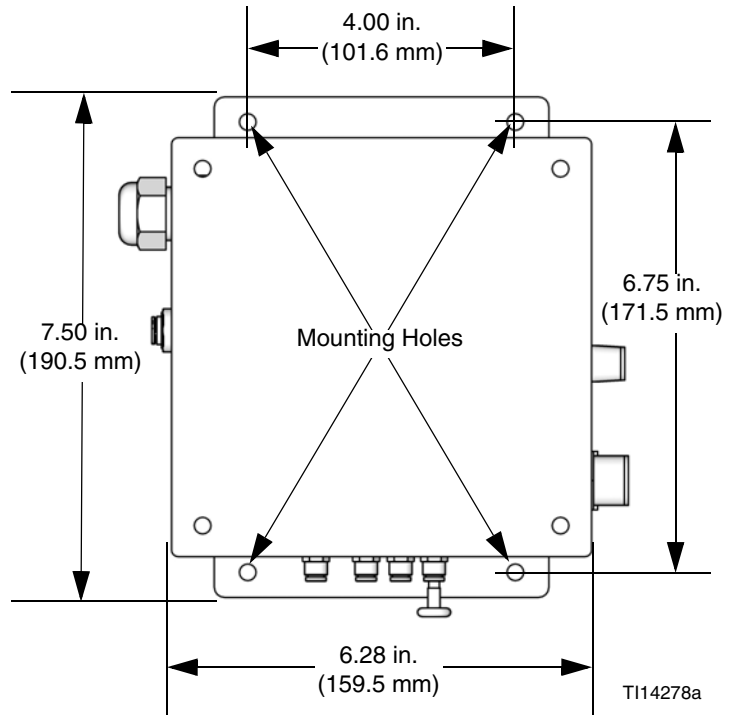


FIG. 13. Connect a Booth Control to the RoboMix

Dimensions



T114276a



T114278a

Technical Data

| | |
|----------------------------------|------------------------------------|
| Maximum Air Input Pressure | 100 psi (0.7 MPa, 7 bar) |
| Air Inlet Size | 1/4 in. (6 mm) OD tube connector |
| Air Outlet Size | 5/32 in. (4 mm) OD tube connectors |
| Weight | 6.69 lb (3.03 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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