ProMix® 2KS and 3KS
Two- and Three-Component Electronic Proportioning System
Introducing Graco’s line of electronic proportioners!

ProMix® 2KS offers precise and reliable electronic proportioning for a broad range of solventborne, waterborne, and acid catalyzed materials. From entry level to upgraded applications, the ProMix 2KS provides flexibility and increased efficiency.

New ProMix 3KS Upgrade

ProMix® 3KS offers precision mixing of three component materials. From manual or automatic operation, the ProMix 3KS provides optimized flushing sequences including a third flush option.

PROMIX 2KS FEATURES

- Manual and automatic configurations
- Intrinsically safe fluid panels allow for integration into hazardous areas*
- Single or multi-color and catalysts
- Accurate ratio assurance for superior finish quality
- Simple programming allows fast set up and efficient process control
- Advanced web interface provides consolidated system management and reporting

KEY MATERIALS

- Solventborne epoxies and polyurethanes
- Waterborne epoxies and polyurethanes
- Acid catalyzed materials

WHY ELECTRONIC PROPORTIONING?

- Offers the highest degree of ratio assurance
- Provides critical process variable feedback
- Built in system safeguards
- Effective color change solution
- Efficient material tracking and reporting

*All accessories and installations need to meet local, state and national codes
Three Systems in One

ProMix 2KS is available in a variety of system level configurations. Each one includes an EasyKey™ display along with a Smart Fluid Panel. Color and catalyst change is easily integrated with a plug-and-play control module and valves.

**USE UP TO 30 COLORS AND 4 CATALYSTS.**

1. **MANUAL WALL PANEL**
   Manual systems benefit from an additional Remote Operator Station that allows fingertip control inside the spray booth.

2. **AUTOMATIC WALL PANEL**
   Optional flow control is cleanly integrated without incorporating a mixed material line meter. Pressure and flow loops provide fast step changes with superior closed loop control.

3. **AUTOMATIC ROBOMIX PANEL**
   This fluid panel can be easily integrated near the spray gun for a shorter mixed material line, faster color changes and less waste. Also available with flow control.
Graco’s ProMix 2KS offers high-ratio assurance with easy-to-use components. The EasyKey Display and Remote Operator Station can help you achieve substantial cost and material savings.

**ONE EFFICIENT SYSTEM**

**EASYKEY DISPLAY**

Graco’s EasyKey user interface offers simple navigation, multiple language capabilities and a high degree of reliability.

The large LCD display screen is easy to read and operate during machine set up and process monitoring.

The independent touch pad keeps contaminants off the screen while the large keys allow for clear data entry.

**REMOTE OPERATOR STATION**

The remote operator station can be mounted inside the spray booth or near the operator for quicker response times.

The station offers easy-to-use controls for mixing, standby, purging, reading/clearing alarms, inputting job complete and recipe select functions.
Simplicity with Unmatched Functionality

WALL & ROBOMIX FLUID PANEL FEATURES

PRODUCTIVE PANELS
Intrinsically safe fluid panels offer increased proportioning and flushing functionality, resulting in improved process performance.

VERSATILE DOSING
Multiple sequential dose sizes allow the system to meet a broad range of applications without sacrificing performance and quality. Dynamic dosing provides additional proportioning technology to meet unique applications needs.

ON-RATIO PERFORMANCE
Volume based dosing provides exceptional ratio accuracy across varying flow rates or gun triggering conditions. On-the-fly monitoring and compensation enhance performance and finish quality.

CONSISTENT MIX QUALITY
Optimized mix chamber hardware, along with high-speed processors and dispense valves, generate precise performance and consistent, high quality mixed material.

FAST COLOR CHANGE WITH REDUCED WASTE
New fluid manifold design reduces material volume and streamlines fluid porting for cleaner flushing. Manifold dump valves allow simultaneous purging and loading – reducing color change time and providing better waste containment.

WALL PANEL
- Up to 50:1 mix ratio for a variety of applications
- Up to 4000 psi (275.6 bar) working pressure for single color and catalyst, supports all spray technologies
- Supports two manual spray guns and gun flush boxes

ROBOMIX
- Up to 50:1 mix ratio for a variety of applications
- Up to 250 psi (17.2 bar) working pressure
- Lightweight, compact design allows easier integration closer to the spray gun
- Can be interfaced with manual spray guns
Fluid Manifold

50 cc Integrator

10 cc Integrator

Dynamic Dosing

1. **Dispense Valves**
   - Remove high speed cartridge style valves without disconnecting fluid lines for easier serviceability.

2. **Manifold Flush Valves**
   - Flush mixed material without wasting premixed resin and catalyst. Add a third valve to the resin side for enhanced flushing, especially with waterborne materials.

3. **Shutoff and Sample Valves**
   - Ensure accurate volume measurements for meter calibrations and ratio checks with positive shutoff and convenient sampling.

4. **Integration Chamber**
   - (25 CC SHOWN)
   - Accommodate a wide range of hardware to support multiple dose size options. Optimizes fluid manifold for particular application needs.

5. **Fluid Porting**
   - Compact, low volume design with no material dead spots, provide faster flushing time and less waste.
**Expanded Functionality**

**COMPLETE YOUR SYSTEM!**

Today’s demanding applications require more than just precise and reliable proportioning from a ProMix 2KS. Graco offers a variety of flow meter technologies and accessories that will further enhance your finishing operation.

**FLOW METERS**
- Complete line of spur gear, helical gear, and non-intrusive Coriolis meters
- Supports a broad range of material types and physical characteristics

![G3000 meter](image1)
![Coriolis meter](image2)

**GUN FLUSH BOX**
- Automated flushing system for manual spray guns
- Eliminates manual gun triggering for more accurate flushing and filling, and less waste

![Gun Flush Box](image3)

**INTEGRATED FLOW CONTROL**
- Eliminates a long pneumatic control line and associated lag with intrinsically safe control module
- Produces quick responses and superior process control with on-board electronics and control hardware
- Provides accurate and consistent flow control for increased material savings

![Color Change Module](image4)
![Low Pressure Color Stack](image5)

**ADVANCED WEB INTERFACE**
- Perform quick and easy system configuration and recipe set up
- Offers convenient process monitoring and streamlines data gathering and reporting
- Manages operations more efficiently by networking multiple ProMix 2KS systems to a single PC

![Advanced Web Interface screen shot](image6)

**COMMUNICATION GATEWAY**
- Provides network integration for automatic systems
- Offers integration flexibility with multiple protocol capabilities
- Reduces installation time with quick plug-and-play set up
Upgrade Your System with the ProMix 3KS

**PRECISION MIXING OF THREE-COMPONENT MATERIALS**

- Manual or automatic operation
- Up to 25 colors, 4 catalysts, and 4 reducers in modular color change system
- Intrinsically safe fluid panel for operation in hazardous areas*
- Optimized flushing sequences including third flush option

*All accessories and installations need to meet local, state and national codes

**PROMIX 3KS EXAMPLE SYSTEM**

**Step 1: Identify**
Specify your base system.

**Step 2: Upgrade!**
Choose the ProMix 3KS Module to fit your system.

```
T K X X 0 0
  Three Component Meter Color Valves
```

<table>
<thead>
<tr>
<th>T</th>
<th>K</th>
<th>Meter</th>
<th>Color Valves</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>K</td>
<td>0 = No Meter</td>
<td>0 = No Valves (single color)</td>
</tr>
<tr>
<td>1</td>
<td>G3000</td>
<td>1 = 2 Color LP</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>G3000 HR</td>
<td>2 = 4 Color LP</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1/8&quot; Coriolis</td>
<td>3 = 2 Color HP</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>S3000</td>
<td>4 = 4 Color HP</td>
<td></td>
</tr>
</tbody>
</table>

**PROMIX 3KS TECHNICAL SPECIFICATIONS**

- Mix Ratio Range:
  - Sequential Dosing: 1st stage: 0.1:1 to 50:1
  - Dynamic Dosing: 1st stage: 0.1:1 to 30:1
- Ratio Accuracy: up to + 1% minimum (user selectable)
- External Power Supply Requirements: 85-250Vac, 50/60 Hz. 2 amps max draw, 15 amp circuit breaker required, 8 to 14 AWG power supply wire gauge
- Operating Temperature Range: 41 to 122°F (5 to 50°C)
- Noise Level:
  - Sound pressure level: below 70 dBA
  - Sound power level: below 85 dBA
- Wetted Parts: 303 SST, 17-4 SST, PTFE, perfluoroelastomer, tungsten carbide with nickel binder
- Weight:
  - 3KS Wall fluid panel: 32.6 lb (14.8 kg)
  - Power/Barrier Assy: 15.2 lb (6.9 kg)

*Ratio ranges are dependent on flow rate, dose size and meter resolution

**PROMIX 3KS ACCESSORIES**

- Cables:
  - 123277... 6 ft Yellow Color Change/Booth Control
  - 123280... 50 ft Yellow Color Change/Booth Control
  - 123273... 10 ft Green CAN Cable
  - 123274... 25 ft Green CAN Cable
  - 123271... 50 ft Red Power Cable
  - 123272... 100 ft Red Power Cable
- Miscellaneous Kits:
  - 16A732... 3K Floor Stand Extension
    Extends 15V950 2KS floor stand for 3KS use
ProMix 2KS Technical Specifications

- **Maximum working air pressure**: 100 psig (7 bar)
- **Air supply**: 75 to 100 psig (5 to 7 bar)
- **Air filtration**
  - Air logic (Graco supplied): 5 micron
  - Air purge (user supplied): 30 micron clean/dry
  - Air for atomizing (user supplied): minimum of 30 micron clean/dry

- **Mix ratio range**
  - Sequential dosing: 0.1:1 to 50:1
  - Dynamic dosing: 0.1:1 to 30:1

- **Ratio accuracy**: up to ±1% minimum (user selectable)

- **Fluids handled**: one or two component: solvent and waterborne paints; polyurethanes; epoxies; acid catalyzed varnishes; moisture sensitive isocyanates

- **Fluid filtration**: 100 mesh min

<table>
<thead>
<tr>
<th>METER</th>
<th>TYPE</th>
<th>MAX PRESSURE</th>
<th>FLOW RANGE</th>
<th>VISCOSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>G250</td>
<td>Spur Gear</td>
<td>250 psi (17.2 bar)</td>
<td>75-3800 cc/min</td>
<td>20-3000 cps</td>
</tr>
<tr>
<td>G250HR</td>
<td>Spur Gear</td>
<td>250 psi (17.2 bar)</td>
<td>38-1900 cc/min</td>
<td>20-3000 cps</td>
</tr>
<tr>
<td>G3000</td>
<td>Spur Gear</td>
<td>4000 psi (275 bar)</td>
<td>75-3800 cc/min</td>
<td>20-3000 cps</td>
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<tr>
<td>G3000HR</td>
<td>Spur Gear</td>
<td>4000 psi (275 bar)</td>
<td>38-1900 cc/min</td>
<td>20-3000 cps</td>
</tr>
<tr>
<td>HG6000</td>
<td>Helical Gear</td>
<td>6000 psi (413 bar)</td>
<td>50-7500 cc/min</td>
<td>30-100,000 cps</td>
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<tr>
<td>1/8” Coriolis Single Tube</td>
<td>2300 psi (158 bar)</td>
<td>20-3800 cc/min*</td>
<td>0.1-3000 cps</td>
<td></td>
</tr>
<tr>
<td>3/8” Coriolis Single Tube</td>
<td>2300 psi (158 bar)</td>
<td>50-3800 cc/min*</td>
<td>0.1-3000 cps</td>
<td></td>
</tr>
<tr>
<td>S3000 (Solvent Meter)</td>
<td>Spur Gear</td>
<td>3000 psi (206 bar)</td>
<td>50-2000 cc/min</td>
<td>0.5-1000 cps**</td>
</tr>
</tbody>
</table>

*Ratio and K-factor dependent

- **Component working pressure**
  - Wall fluid panel (no meters): 4000 psig (275 bar)
  - RoboMix fluid panel (G250 meters included): 250 psig (17.2 bar)
  - Flow control regulator: 200 psig (13 bar)
  - Low pressure color change valves: 300 psig (20.6 bar)
  - High pressure color change valves: 3000 psig (206.7 bar)

- **External power supply requirements**: 85-250 Vac, 50/60 Hz. 2 amps maximum draw, 15 amp maximum circuit breaker required, 8 to 14 AWG power supply wire gauge

- **Operating temperature range**: 41 to 122°F (5 to 50°C)

- **Noise level**
  - Sound pressure level: below 70 dBA
  - Sound power level: below 85 dBA

- **Wetted parts**: 303 SST, 17-4 SST, PTFE, perfluoroelastomer, tungsten carbide with nickel binder

- **Weight**
  - EasyKey display: 21.75 lb (9.8 kg)
  - Remote operator station: 0.95 lb (0.43 kg)
  - Wall fluid panel (no meters): 50 lb (22.7 kg)
  - RoboMix fluid panel (G250 meters included): 31.6 lb (14.3 kg)
  - Flow control regulator: 4 lb (1.8 kg)

- **Approved for hazardous locations**: US and Canada - class 1 Div 1 Group D T3
  - Europe - Zone 0 Ex ia IIA T3/ATEX II2G T3

- **Environmental condition rating**: indoor use, pollution degree (2), installation category II
# ProMix 2KS Ordering Information

## MANUAL WALL PANEL

<table>
<thead>
<tr>
<th>Interface</th>
<th>A &amp; B Meter</th>
<th>Color Valves*</th>
<th>Catalyst Valves</th>
<th>Applicator Handling</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>D = EasyKey with LCD Display</td>
<td>0 = No Meter</td>
<td>0 = No Valves (Single Color)</td>
<td>1 = 1 AFS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = G3000 A &amp; B</td>
<td>1 = 2 Colors LP</td>
<td>2 = 2 AFS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = G3000HR A &amp; B</td>
<td>2 = 4 Colors LP</td>
<td>3 = 1 AFS with 1 GFB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = 1/8&quot; Coriolis A &amp; G3000 B</td>
<td>3 = 7 Colors LP</td>
<td>4 = 2 AFS with 2 GFB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = G3000 A &amp; 1/8&quot; Coriolis B</td>
<td>4 = 12 Colors LP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 = 1/8&quot; Coriolis A &amp; G3000HR B</td>
<td>5 = 2 Colors HP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 = G3000HR A &amp; 1/8&quot; Coriolis B</td>
<td>6 = 4 Colors HP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 = 1/8&quot; Coriolis A &amp; 1/8&quot; Coriolis B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Order additional low pressure valves or other high pressure valve configurations as kits (see accessories)

## AUTOMATIC WALL PANEL

<table>
<thead>
<tr>
<th>Interface</th>
<th>A &amp; B Meter</th>
<th>Color Valves*</th>
<th>Catalyst Valves</th>
<th>Flow Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>D = EasyKey with LCD Display</td>
<td>0 = No Meter</td>
<td>0 = No Valves (Single Color)</td>
<td>N = No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = G3000 A &amp; B</td>
<td>1 = 2 Colors LP</td>
<td>Y = Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = G3000HR A &amp; B</td>
<td>2 = 4 Colors LP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = 1/8&quot; Coriolis A &amp; G3000 B</td>
<td>3 = 7 Colors LP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = G3000 A &amp; 1/8&quot; Coriolis B</td>
<td>4 = 12 Colors LP</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5 = 1/8&quot; Coriolis A &amp; G3000HR B</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 = G3000HR A &amp; 1/8&quot; Coriolis B</td>
<td></td>
<td></td>
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<tr>
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<td></td>
<td>7 = 1/8&quot; Coriolis A &amp; 1/8&quot; Coriolis B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Order additional low pressure valves or other high pressure valve configurations as kits (see accessories)

## AUTOMATIC ROBOMIX PANEL

<table>
<thead>
<tr>
<th>Interface</th>
<th>A &amp; B Meter</th>
<th>Color Valves*</th>
<th>Catalyst Valves</th>
<th>Flow Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>D = EasyKey with LCD Display</td>
<td>0 = No Meter</td>
<td>0 = No Valves (Single Color)</td>
<td>N = No</td>
</tr>
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<td></td>
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<td>1 = G250 A &amp; B</td>
<td>1 = 2 Colors LP</td>
<td>Y = Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = G250HR A &amp; B</td>
<td>2 = 4 Colors LP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = 7 Colors LP</td>
<td>3 = 7 Colors LP</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>4 = 12 Colors LP</td>
<td>4 = 12 Colors LP</td>
<td></td>
</tr>
</tbody>
</table>

*Order additional low pressure valves as kits (see accessories)

LP = low pressure; HP = high pressure; AFS = air flow switch; GFB = gun flush box
**ProMix 2KS Accessories**

### Meter Kits
- Contains one flow meter, cable and hardware
  - 15V804 G3000 Flow Meter
  - 15V827 G3000HR Flow Meter
  - 15V820 HG6000 Flow Meter
  - 15V806 1/8” Coriolis Flow Meter
  - 258151 3/8” Coriolis Flow Meter
  - 16D329 S3000 (Solvent) Flow Meter

### Low Pressure Color Change Kits
- Contains color valves and solenoid control module.
  - Order pump valves and dump valves separately.
  - 256581 2 Color
  - 256582 4 Color
  - 256583 7 Color
  - 256584 12 Color
  - 256585 2 Color and 2 Catalyst
  - 256586 4 Color and 2 Catalyst
  - 256587 4 Color and 4 Catalyst
  - 256588 7 Color and 2 Catalyst
  - 256589 7 Color and 4 Catalyst
  - 256590 12 Color and 2 Catalyst
  - 256591 12 Color and 4 Catalyst
  - 256592 13-18 Colors
  - 256593 13-24 Colors
  - 256594 13-30 Colors
  - 256595 0 Colors and 2 Catalysts

### High Pressure Color Change Kits
- Contains color valves and solenoid control module.
  - Order pump valves and dump valves separately.
  - 256596 2 Color
  - 256597 4 Color
  - 256598 7 Color
  - 256599 12 Color
  - 256600 2 Color and 2 Catalyst
  - 256601 4 Color and 2 Catalyst
  - 256602 4 Color and 4 Catalyst
  - 256603 7 Color and 2 Catalyst
  - 256604 7 Color and 4 Catalyst
  - 256605 12 Color and 2 Catalyst
  - 256606 12 Color and 4 Catalyst
  - 256607 13-18 Colors
  - 256608 13-24 Colors
  - 256609 13-30 Colors
  - 256610 0 Colors and 2 Catalysts

### Dosing Kits
- Contains fluid manifold hardware
  - 15V034 10 cc Sequential Dosing
  - 15V033 25 cc Sequential Dosing
  - 15V021 50 cc Sequential Dosing
  - 24B618 100 cc Sequential Dosing
  - 15U955 0 cc Dynamic Dosing

### RoboMix Panel Kits
- Used to interface up to two air flow switches and two gun flush boxes to a RoboMix Panel. Order air flow switch or gun flush box kits separately.
  - 15V267 RoboMix Panel Ratio Check Kit
  - 15V534 Manual Gun Interface Kit

### Communication Kits
- 15V825 Discrete I/O Integration Board
  - Contains inputs and outputs for controlling automatic integration and special output functionality
  - 15V331 Ethernet IP Gateway Assembly
  - 15V963 DeviceNet Gateway Assembly

### Cables
- 15V213 100 ft Power Cable
- 15G710 100 ft Fiber Optic Cable
- 15U977 40 ft Flow Control Extension Cable
- 15U532 3 ft CAN Cable
  - 15V205 6 ft CAN Cable
  - 15V206 10 ft CAN Cable
  - 15V207 15 ft CAN Cable
  - 15V208 25 ft CAN Cable
  - 15U533 50 ft CAN Cable

### Miscellaneous Kits
- 15V826 Gun Flush Box Kit
  - Contains guns flush box and control hardware
  - 570123 Gun Flush Box Wall Mount Kit
  - 15V823 Gun Air Shutoff Kit
  - Used to automatically shut off gun atomizing air during flush and fill sequences without a gun flush box

### Gun Flush Box Gun Holders
- 198787 Graco Pro Xs2
- 198405 Graco Pro Xs3, Pro Xs4
- 196768 Graco PRO 3500, 3500hc, 4500
- 15T646 Graco AirPro Air Spray
- 196769 Graco Delta Air Spray
- 196770 Graco Alpha
- 196771 Graco Alpha Plus, Alpha Plus RAC
- 15G093 Graco G15
- 15G346 Graco G40, G40 RAC
- 196770 Graco Alpha
- 150933 Graco G15
- 155346 Graco G40, G40 RAC

### ProMix 2KS Accessories
Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company’s success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco’s ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

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