

# PRECISION DOSE™

## Dispense System



*Model shown  
PDOS-D-P-S-15M-230*

**The most complete system for dispensing sealants that use booster paste to speed cure of structural sealants.**

### FEATURES

- Meters booster paste into 1K structural adhesives
- 1-3% injection is accomplished by firing 1/10 cc shots into the mixer with a Severe Duty™ Precision Dose valve
- King® 65:1 Check-Mate™ Severe Duty adhesive pump with encoder to monitor pump flow
- PLC that controls and monitors system
- A variety of system configurations meet the needs of most operations

### BENEFITS

- Faster cure rates for increased productivity
- Accurate control of booster addition
- Durable pump design for long life, even with higher viscosity sealants
- Warnings for low-level materials, high and low pressures and high dosing rates
- Works with both urethane and Silyl Modified Polymers

INDUSTRIAL

PROVEN QUALITY. LEADING TECHNOLOGY.

# Precision Dose System Components

## **User Interface Pendant (not shown)**

Allows users to set parameters that work best with sealant in use

## **Control Box**

Controls firing of Booster Valve, monitors adhesive and booster levels and overall performance

## **Material Feed Module**

23 liter (5 gal) or 200 liter (55 gal) pump options available

## **Booster Paste Hose**

Durable PTFE core with a stainless steel braid cover

## **2K Ultra-Lite Dispense Valve**

Disposable, air-operated mixer-type valve that does not require flushing

## **Severe-Duty Piston Pump**

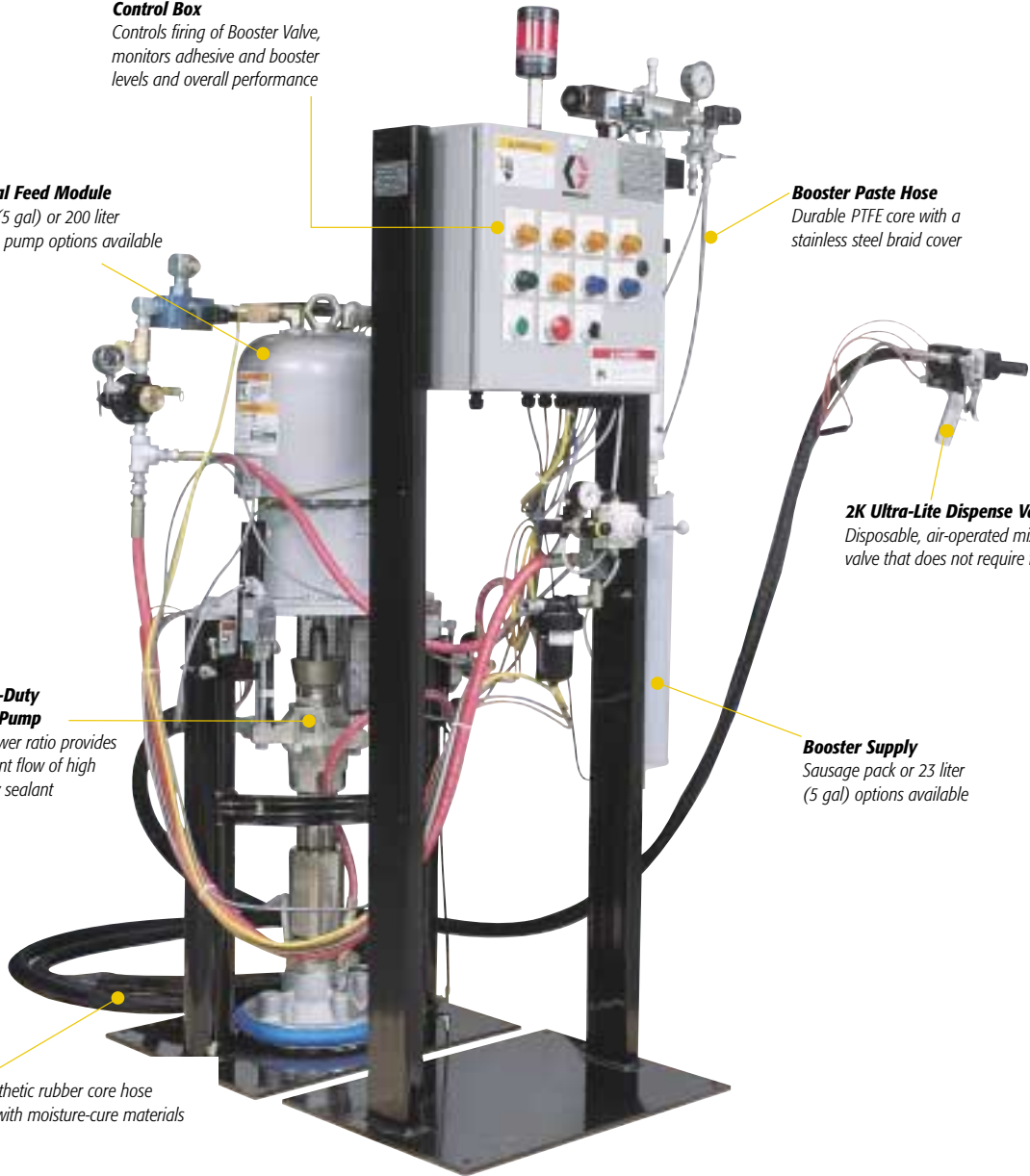
65:1 power ratio provides consistent flow of high viscosity sealant

## **Booster Supply**

Sausage pack or 23 liter (5 gal) options available

## **Adhesive Hose**

High-pressure synthetic rubber core hose designed for use with moisture-cure materials



## **TYPICAL APPLICATIONS**

- Assembly of trucks, buses, pleasure craft trailers, RVs and prefabricated homes
- Other glass/metal
- Other glass/fiber-reinforced plastic
- Marine, rail and bus assembly

## **TYPICAL FLUIDS HANDLED**

- Urethanes
- Silyl Modified Polymers

# A Complete Dispense System from Graco

## Improve Productivity

Graco's Precision Dose Dispense System pumps, meters, mixes and dispenses a variety of boosted sealant and adhesive products. It is designed to inject small amounts (1-3%) of booster paste into sealants and adhesives based on urethane or modified silane (MS) chemistry. Boosting these materials speeds cure time, therefore improving factory productivity and saving valuable floor space.

## How Precision Dose Works

The mixed sealant or adhesive is pumped from a pail or drum to Graco's 2K Ultra-Lite™ gun, which is specifically designed to handle wide volume ratio mixtures. The booster paste is injected into the center of a disposable mixer on the gun outlet. Each time the gun's trigger is engaged an electric switch closes, activating the air-operated gun and positive-displacement adhesive pump. This pump sends pulses to the control box processor, which fires a severe-duty precision-dosing valve that injects metered shots of booster into the disposable mixer. When the trigger is released, the motor stops and the gun valve closes.

Precision Dose offers a complete dispense system with high durability, ease of use and broad material compatibility. Call your Graco representative today to learn how Precision Dose can benefit your assembly operation.

## System Components

A complete system is assembled by selecting three equipment modules. Each system includes the following components:

- Material feed  
Choose from 200 liter (55 gallon) drums or 23 liter (5 gallon) pails
- Booster feed  
Choose from 23 liter (5 gallon) pail or 600 ml (20 fl. oz.) sausage pack
- Dispense hose  
Includes 2 hoses, air lines and gun switch cable (length depends on application requirements)
- 2K Ultra-Lite Dispense Valve  
Choose from hand-held or machine mount

Different modules will be selected depending on the chemistry of the materials being used. Consult your Graco Sealant and Adhesive Equipment Sales Specialist for assistance in designing the right Precision Dose System for your needs.

## Ordering Information

For a Precision Dose configured order form and instructions, order Graco form 684039.

# PRECISION DOSE

For further information, contact your local Graco Distributor.

## Technical Specifications

### Urethane Supply Module

Approximate weight

23 L pail supply	600 lbs (273 kg)
55 gal (200 L) drum supply	800 lbs (363 kg)

Dimensions, ram down

23 L pail supply	24 in W x 18 in D x 57.2 in H (61 cm W x 45 cm D x 214 cm H)
55 gal (200 L) drum supply	59 in W x 29 in D x 68.2 in H (150 cm W x 74 cm D x 173 cm H)

Dimensions, up

23 L pail supply	61 cm W x 45 cm D x 252 cm H (24 in W x 18 in D x 72.2 in H)
55 gal (200 L) drum supply	59 in W x 29 in D x 108.2 in H (150 cm W x 74 cm D x 275 cm H)

Max. working air pressure 90 psi (0.62 MPa, 6.2 bar)

Air inlet connection 3/4 npt (f)

Max. working fluid pressure 5850 psi (4.03 MPa, 403 bar)

Fluid outlet connection 3/4 npt (f)

Floor mount dimensions

23 L pail supply	22 in W x 16 in D (55.9 cm W x 40.6 cm D)
55 gal (200 L) drum supply	42 in W x 25 in D (106.7 cm W x 63.5 cm D)

### Booster Stand and Control Panel

Electrical power requirements 120 VAC, or WOVAC 1 phase, 50-60 Hz, 2 A;  
 230v 50-60 Hz 1 phase

Ambient temperature range 40-120° F (5-50°C)

Dimensions 31 in W x 18 in D x 72 in H  
 (79 cm W x 46 cm D x 183 cm H)

Weight\* 150 lbs (68 kg)

Floor mount dimensions\* 22 in W x 16 in D (55.9 cm W x 40.6 cm D)

### Booster Supply Module

Approximate weight

20 fl oz (600 ml) sausage pack feed:	included in booster & stand
23 L pail pump feed	125 lbs (57 kg)

Dimensions, ram down

23 L pail pump feed	18 in W x 18 in D x 42 in H (46 cm W x 46 cm D x 107 cm H)
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Dimensions, ram up

23 L pail pump feed	18 in W x 18 in D x 61 in H (46 cm W x 46 cm D x 155 cm H)
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Max. working air pressure 90 psi (0.62 MPa, 6.2 bar)

Max. working fluid pressure 500 psi (3.4 MPa, 34 bar)

Floor mount dimensions

23 L pail pump feed	18 in W x 18 in D x 42 in H (46 cm W x 46 cm D x 155 cm H)
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### Hose/Applicator Module Dispense Valve

Approximate weight 1.43 lbs (650 g)

Air open inlet connection 1/8 npt (f)

Air close inlet connection 1/8 npt (f)

Fluid inlet connections 1/4 npt (f)

Fluid outlet connections G-1/2 (f)

Max. fluid pressure 3000 psi (20.4 MPa, 204 bar)

Max. air pressure 120 psi (0.08 MPa, 8 bar)

\* Note: dimensions and weight are without mounting hardware, cables, hoses, etc.

All written and visual data contained in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Call today for product information or to request a demonstration.

**1.877.84GRACO** (1-877-844-7226) or visit us at [www.graco.com](http://www.graco.com).

