



## Meter, Mix and Dispense System



### Advanced Two-Component Dispensing at an Affordable Price

- Proven ratio accuracy to  $\pm 1\%$
- Exceptional performance with material ratios from 1:1 to 12:1
- Versatile – ideal for applications using up to 70 cc shot sizes
- Improved pump design for increased seal life and less maintenance
- Intuitive user interface

PROVEN QUALITY. LEADING TECHNOLOGY.

# PR70 ... Technology You Can Count On

## Industry-Proven Accuracy. Intuitive Design.

The PR70 fixed ratio system accurately meters, mixes and dispenses two-component medium-to-low viscosity materials

for potting, gasketing, sealing, encapsulation and syringe filling. All the features you need, in a compact, modular design.

### Long-Life Design

Optimized pump support, seal design, and Chromex™ rods provide twice the life of existing systems.



### Control Architecture Fluid Control Board (FCB)

FCB module offers a simplified wiring system and board-level diagnostics. Modular approach is easier to operate, easier to maintain.



### Multiple Feed Systems

A wide variety of supply systems including PE, SST and off-board tanks.

### MD2 Valve

High-pressure accuracy with multiple seat styles and adjustable snuffback for clean, precise dispensing.

### Compact Benchtop Unit

Stable, strong machine base for secure installation and a small footprint.

### Intuitive User Interface

Digital shot size entry, machine monitoring and feedback for total control.

### Proven Ratio Accuracy

Multiple tube sizes to pinpoint specific target ratios and deliver ratio accuracy to  $\pm 1\%$ .



# Performance You Can Trust



## Reliability and durability to maximize system performance

- Cast pump bodies for improved seal alignment
- Chromex shafts and Severe Duty™ cylinders combined with stainless steel fittings provide long pump life with no corrosion
- Shaft seals designed for extended life and easy replacement
- Preventative maintenance counter to plan system rebuilds around your production schedule
- Linear thrust bearings eliminate side loading to maximize seal life and performance

## Quick system training and lower mean time to repairs

- Standard electronic controls allow for digital shot entry in grams
- Built-in, easy to set up purge timer keeps system up and production running
- Graco Control Architecture modules, with built-in diagnostics, allow for quick troubleshooting
- Modular design eliminates point-to-point wiring — a quick board change-out gets your system up and running

## Performance and accuracy to handle the toughest materials

- Stainless steel design reduces the chance of a material incompatibility
- Positive displacement pumps deliver  $\pm 1\%$  ratio accuracy
- Linear transducer monitors piston velocity to provide ratio assurance and reduce scrap and re-work
- Shot size ranges from 2 to 70 cc's
- Ratio range from 1:1 to 12:1

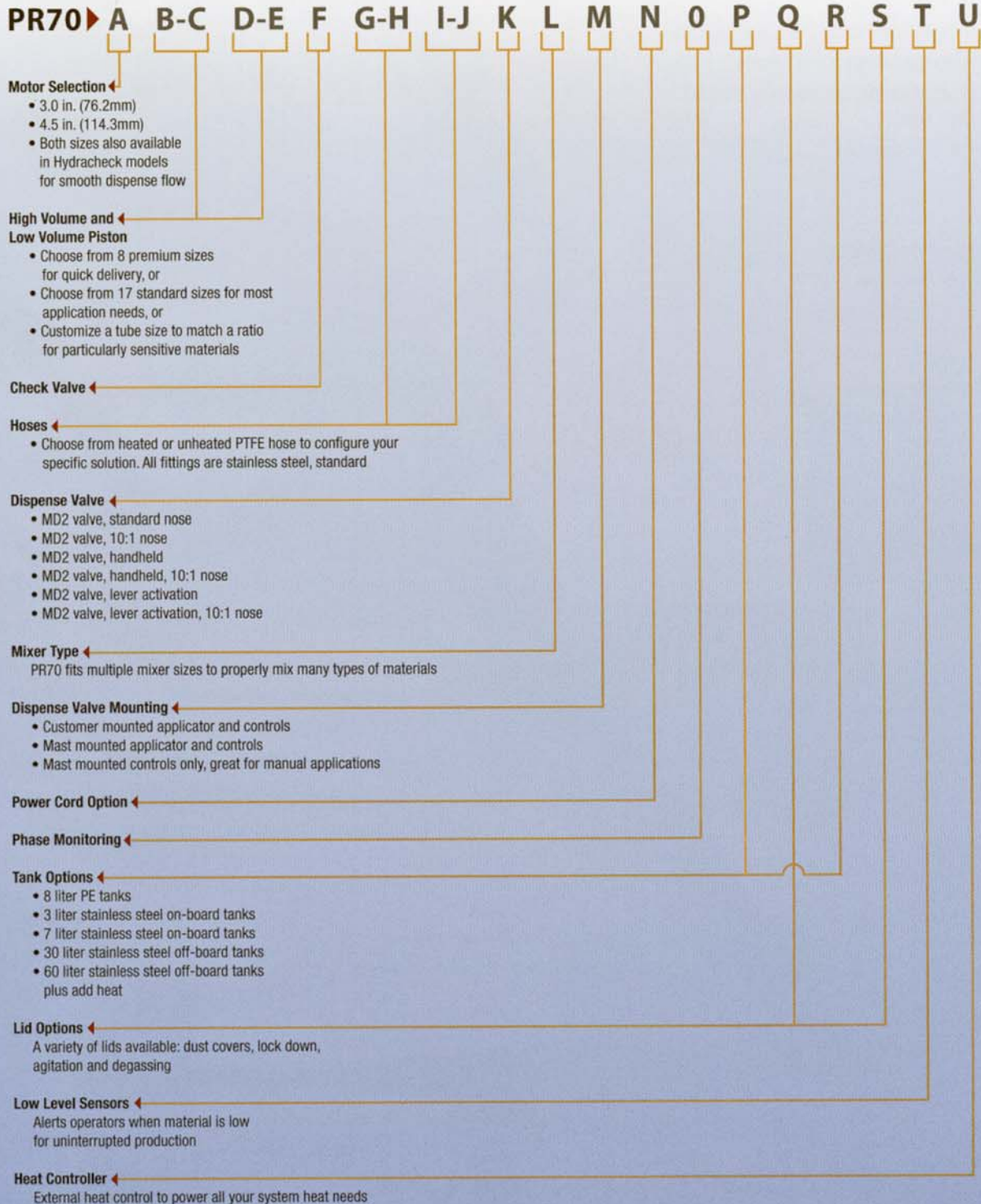
## PR70 Key Industries and Applications

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|--|---|
| <input checked="" type="checkbox"/> Automotive Electronics | <input checked="" type="checkbox"/> Automotive Components |
| <input checked="" type="checkbox"/> Consumer Electronics   | <input checked="" type="checkbox"/> Appliance             |
| <input checked="" type="checkbox"/> Medical                | <input checked="" type="checkbox"/> Product Assembly      |
| <input checked="" type="checkbox"/> Sporting Goods         | <input checked="" type="checkbox"/> And More!             |

# PR70 Configurator

## Building the Perfect PR70 is Easy!

Customize the PR70 with the features you need.



# MD2: Part of a Complete System

## Micro Dispensing ... We've Got You Covered!

- Handles a range of materials
- Minimizes maintenance time and costs while maximizing dispense time
- Designed with fewer parts and is easy to clean
- Streamlines maintenance and service
- Complete modular design adapts to different installation needs
- No unique tools required

### *Independent Air Cylinder*

Improves mean time to repair (MTTR)

### *All-SST Wetted Section*

Maximizes material compatibility

### *Two Nose Options*

Customizes material mixing

### *Grease Isolation Chamber*

- Ideal for moisture-sensitive materials
- Accessible grease fittings for easy maintenance

### *Adjustable Inlet Position*

- Flexibility during system installation
- Minimizes dead spaces in fluid path

### *Adjustable Snuff-back Control*

Dispenses material only where you need it

### *Chromex Shafts*

Extends shaft life to better handle abrasive materials



*Manual Dispense Gun Option*

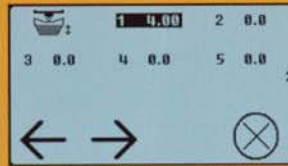
# Easy-to-Use Interface



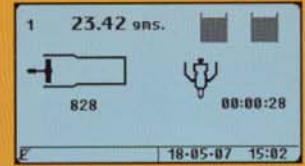
Control Architecture Display

## Intuitive Operator Controls

- Simple system electronic controls with diagnostics and job data reporting
- LCD graphical user interface saves time by enabling accurate shot size programming
- Automatic alarms notify you when pumps need attention
- Schedule preventative maintenance at your convenience for less downtime



Shot size entry screen – enter up to five different shot sizes



Operation screen displays current shot, material availability and pump ready indicators

## A range of feed package options available for agitation, heat and degassing applications

Standard tank sizes simplify your system options. Choose from:

- 3.0 and 7.5 liter stainless steel direct-mount tanks
- 8 liter direct-mount polyethylene (PE) tanks
- 7.5 and 15 gallon stainless steel off-board tanks
- Material conditioning options – multiple covers available for agitation, degassing or dessicant packs. Dust covers also available.



Stainless Steel (SST) Tanks



Polyethylene (PE) Tanks



Off-board tanks for high volume applications and fewer material refills



# Technical Specifications & Ordering Information

Metering Pump Effective Area .....	0.124 – 1.49 in <sup>2</sup> (80 – 960 mm <sup>2</sup> ) per side
Small Air Cylinder Effective Area .....	7.07 in <sup>2</sup> (4560 mm <sup>2</sup> )
Large Air Cylinder Effective Area .....	15.9 in <sup>2</sup> (10260 mm <sup>2</sup> )
Maximum Stroke Length .....	1.50 in (38.1 mm)
Minimum Stroke Length .....	0.23 in (5.8 mm)
Volume per Cycle .....	0.12 – 4.3 in <sup>3</sup> (2 – 70 cc)
Pump Cycles per 1L (.26 gal) .....	500 – 14.3
Ratios (fixed) .....	1:1 to 12:1 depending on cylinders selected
Maximum Fluid Working Pressure .....	207 bar, 20.7 MPa, 3000 psi
Maximum Air Input Pressure .....	7 bar, 0.7 MPa, 100 psi
Maximum Cycle Rate .....	30 cpm
Maximum Operating Temperature .....	70 C (160 F) nylon pistons 50 C (120 F) UHMWPE pistons or PE tanks
Air Inlet Size .....	1/4 NPT(f)
Pump Fluid Outlet Size .....	-03, -04, -06, -08 or -12 JIC fittings for 3/16 in (4.8 mm), 1/4 in (6.4 mm), 3/8 in (9.5 mm), 1/2 in (12.7 mm), 3/4 in (19.1 mm) hoses
Wetted Parts .....	303/304, 17-4 PH, hard chrome, Chromex™, carbide, Chemical Resistant o-rings, PTFE, nylon, UHMWPE
Weight .....	120 Lbs (55 kg) typical with two 7.5 L tanks 330 Lbs (150 kg) typical with two 60 L tanks
Compressed Air .....	< 10 scfm typical (varies with cycle time)
Electrical Power .....	100-240V 50/60Hz 1 phase for machine – 80 watts 208-240V 50/60Hz 1 phase for heat – 11 kW max 120 or 240V 50/60Hz 1 phase for on-board agitators
Instruction Manuals	
PR70 Operational & Maintenance .....	312393
PR70 Tank/Feed System .....	312394
MD2 .....	312185

PR70 machines and complete configured packages carry the CE mark.



## PR70 Accessories

### Mixer and Shroud Options

LC0057	Mixer, 1/4 (6.5mm) x 24, 10 mixers with shroud	LC0081	Mixer, 3/8 (9.8mm) Combo, 50 mixers
LC0058	Mixer, 3/8 (9.8mm) x 24, 10 mixers with shroud	LC0082	Mixer, 3/16 (4.8mm) x 32 Luer Lock, 50 mixers
LC0059	Mixer, 3/8 (9.8mm) x 36, 10 mixers with shroud	LC0083	Mixer, 1/4 (6.5mm) x 24 Luer Lock, 50 mixers
LC0063	Mixer, 3/16 (4.8mm) x 22, 10 mixers with shroud	LC0084	Mixer, 3/16 (4.8mm) x 32, 250 mixers
LC0060	Mixer, 3/8 (9.8mm) Combo, 10 mixers with shroud	LC0085	Mixer, 1/4 (6.5mm) x 24, 250 mixers
LC0061	Mixer, 3/16 (4.8mm) x 32 Luer Lock, 10 mixers with shroud	LC0086	Mixer, 3/8 (9.8mm) x 24, 250 mixers
LC0062	Mixer, 1/4 (6.5mm) x 24 Luer Lock, 10 mixers with shroud	LC0087	Mixer, 3/8 (9.8mm) x 36, 250 mixers
LC0077	Mixer, 3/16 (4.8mm) x 32, 50 mixers	LC0088	Mixer, 3/8 (9.8mm) Combo, 250 mixers
LC0078	Mixer, 1/4 (6.5mm) x 24, 50 mixers	LC0089	Mixer, 3/16 (4.8mm) x 32 Luer Lock, 250 mixers
LC0079	Mixer, 3/8 (9.8mm) x 24, 50 mixers	LC0090	Mixer, 1/4 (6.5mm) x 24 Luer Lock, 250 mixers
LC0080	Mixer, 3/8 (9.8mm) x 36, 50 mixers		

### MD2 Valve Kits

255220	MD2, Convert Soft Seat nose to hard seat (Hard Seat rebuild), needle and nose	255218	MD2, kit rebuild, back-end of wet section (no needle or seat)
255219	MD2, Soft Seat rebuild, needle and nose	255217	MD2, Kit rebuild, air cylinder

### Other Accessories

LC0097	Desiccant Dryer, 3/8 in. NPT with adapter and cartridge	LC0091	3.0 in. Air Cylinder Rebuild Kit
LC0098	Desiccant Dryer Refill Cartridge	LC0092	4.5 in. Air Cylinder Rebuild Kit
LC0095	Nitrogen Kit for 30L and 60L tank, 1 tank	LC0093	Check Valve Rebuild Kit
LC0096	Nitrogen Kit for 30L and 60L tank, 2 tanks	LC0094	Rear Pump Seal Rebuild Kit
LC0008	Cord, I/O interface with footswitch port	LCC-XXX	Replacement Cylinder (XXX is area of Cylinder, marked on OD)
LC0099	Vacuum Transfer Pump, 120V, down to 25 Torr	LCF-XXX	Nylon Piston Rebuild Kit (XXX is area of Cylinder, marked on OD)
LC0100	Vacuum Transfer Pump, 240V, down to 25 Torr	LCE-XXX	UHMWPE Piston Rebuild Kit (XXX is area of Cylinder, marked on OD)