



Check-Mate® 2100 CS & SST Priming Piston Fluid Pumps

High volume, pressure-balanced pump for moving large volumes of high viscosity materials

- Available in Severe Duty Carbon Steel and Stainless Steel models.
- 7.5 gpm (28.5 lpm) flow rate of 60 cycles per minute.
- 55 gal. (200 liters) Ram Systems available in Bulldog 12:1, King 24:1 and Premier 39:1 fluid power ratios.
- High flow rates and high fluid pressures increase production rates.
- High output per cycle reduces wear for longer life and lower repair costs.
- Exclusive air valve design decreases changeover time and minimizes icing.
- Floating piston seal and priming plate improve pump loading of high viscosity materials.

Typical Fluids Handled

- Acrylics
- Adhesives
- Butyl
- Caulking compounds
- Epoxy
- Inks
- Lubricants
- PVC sealers
- Sealants
- Silicones
- Urethanes



Premier 39:1 shown (918-303)

High Performance Pump for Viscous Fluids

The Check-Mate 2100 pump is designed to transfer high viscosity fluids from 55 gal. (200 liter) drums in high volumes to one or more locations. The internal design moves fluid from the inlet to the outlet port with the lowest pressure drop available. The metal wear parts are treated with the finest wear-resistant coatings to achieve the Graco Severe Duty™ mark of excellence for long life. Three power ratios (12:1, 24:1 and 39:1) provide different levels of pressure up to 3900 psi (269 bar) and flow rates up to 7.5 gpm (28.5 l/min.) to increase production capability and capacity.

Typical Applications

- Transferring sealants or adhesives to multiple operator dispensing stations
- Transferring viscous chemicals in the formulation of high viscosity materials
- Feeding high volume applicators or multiple meters or proportioners
- Packaging drums, pails, caulking tubes or chubs

COMPONENTS

About Graco Premier™ and King™ Check-Mate Pumps

Powerful Air Motors

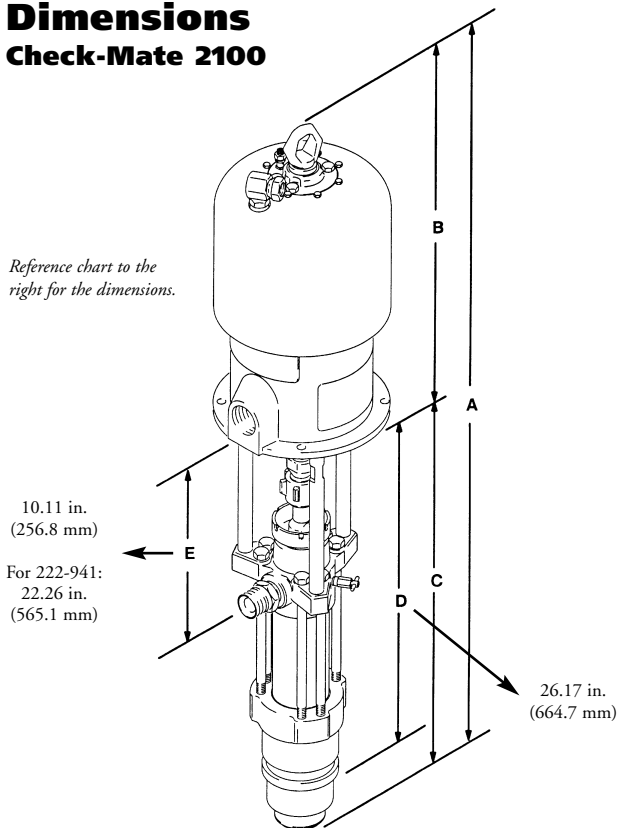
The unique, patented Premier air motor minimizes performance fall-off or stoppage due to ice build-up. The built-in air pump moves warm air across the four-way valve to reduce ice build-up. The reliable and durable four-way slide valve provides continuous operation even when working with dirty, non-lubricated air. The King and Bulldog air motors are also utilized with the Check-Mate 2100 pump lower to provide a full line of high performance pumps for your application.

Check-Mate Pump Lower

Check-Mate 2100 Lower Displacement Pumps are pressure balanced designed and have reduced internal pressure drop to provide the same fluid output on both the up and the down stroke. Improved pump efficiency produces greater pressure for pumping high viscosity fluids or supplying long fluid pipe runs or lines.

- Severe Duty™ rod and cylinder for long life and durability
- Large internal porting balances fluid pressures
- Simplified pump lower minimizes repair costs

Dimensions Check-Mate 2100



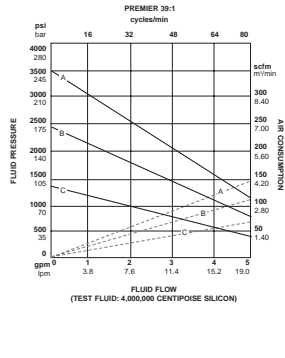
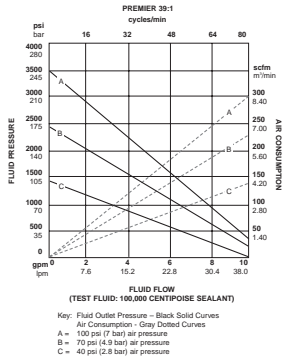
Technical Specifications

Maximum air inlet pressure	100 psi (7 bar)
Air inlet	3/4 npsm(f)
Fluid outlet	1-1/2 npt(m)
Packings	
Throat and intake	UHMWPE and Teflon®
Piston	UHMWPE
Wetted parts	
CS lower	CS, zinc, nickel, SST, iron, Delrin®, Teflon, UHMWPE
SST lower	SST, Delrin, Teflon, UHMWPE
Maximum flow at 60 cpm	7.5 gpm (28.4 l/min.)
Air motor piston diameter	12.64 in. (321mm)
Weight	
Premier CM 2100	.248 lbs (113 kg)
King CM 2100	.160 lbs (73 kg)
Bulldog CM 2100	.142 lbs (65 kg)
Instruction manuals	
For Premier 39:1 CM 2100 CS (229-940)	308-149
For Premier 39:1 CM 2100 SST (229-941)	308-150
For King 24:1 CM 2100 CS (222-835)	308-149
For King 24:1 CM 2100 SST (222-836)	308-150
For Bulldog 12:1 CM 2100 CS (222-828)	308-149
For Bulldog 12:1 CM 2100 SST (222-904)	308-150
For Viscount Hyd. CM 2100 CS (222-902)	308-149
For Viscount Hyd. CM 2100 SST (222-906)	308-150

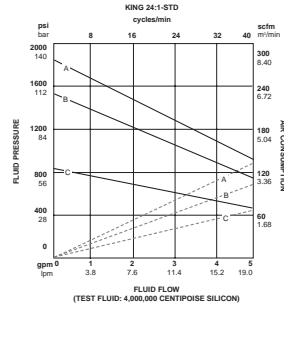
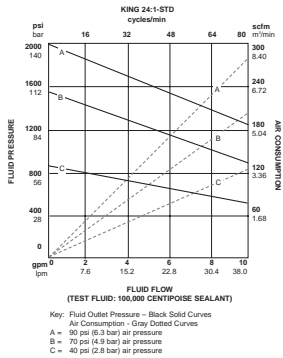
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Model	A	B	C
222-904	52.5 in. (1333.6 mm)	21.28 in. (540.5 mm)	31.22 in. (793.1 mm)
222-903	53.11 in. (1349.1 mm)	21.89 in. (556 mm)	31.22 in. (793.1 mm)
222-836	54.18 in. (1376.1 mm)	22.95 in. (583 mm)	31.22 in. (793.1 mm)
222-905	54.55 in. (1385.6 mm)	23.33 in. (592.5 mm)	31.22 in. (793.1 mm)
222-941	60.31 in. (1530.7 mm)	16.89 in. (428.8 mm)	43.41 in. (1101.9 mm)
222-906	55.72 in. (1415.3 mm)	24.5 in. (622.2 mm)	31.22 in. (793.1 mm)

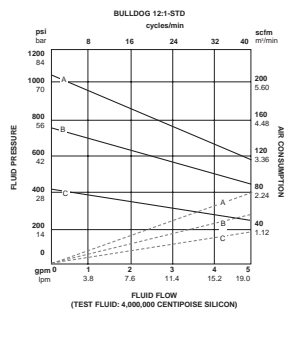
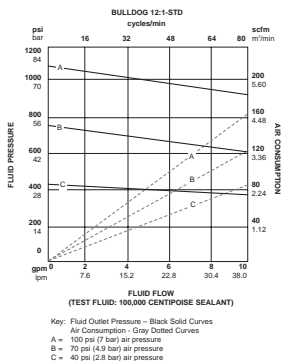
Premier 39:1 Check-Mate 2100 Pump Performance



King 24:1 Check-Mate 2100 Pump Performance



Bulldog 12:1 Check-Mate 2100 Pump Performance



Accessories

C34-220 Hose Support Kit

C32-468 Drum Stop Kit

222-780 Floor Stand

Includes mounting kit. 3 npt(f) inlet

222-970 Air Pressure Regulator Kit

222-955 Anti-Seize Thread Lubricant for SST Lowers

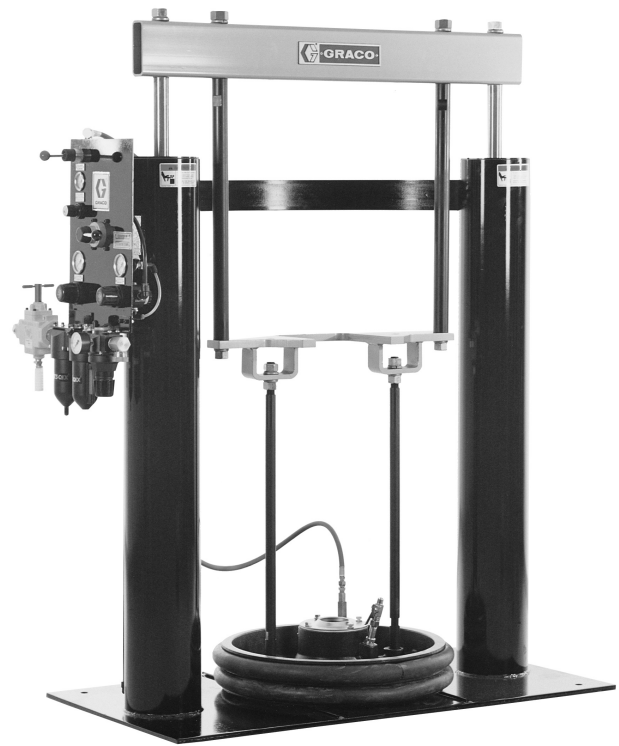
Throat Seal Liquid

Non-evaporating lubricant for wet cup.

206-995 Quart (.95 liter)

206-996 Gallon (3.8 liter)

COMPONENTS



Ram with Four-Regulator Air Control shown.

Pump Package Ordering Information

- 222-904 Bulldog 12:1 Check-Mate Pump, SST
- 222-903 Bulldog 12:1 Check-Mate Pump, SST/RIQ
- 222-836 King 24:1 Check-Mate Pump, SST
- 222-905 King 24:1 Check-Mate Pump, SST/RIQ
- 222-940 Premier 39:1 Check-Mate Pump, CS
- 222-941 Premier 39:1 Check-Mate Pump, SST

Repair Kits

- 222-860 Polyethylene and Teflon Pump Packing Kit
- 222-861 Teflon Pump Packing Kit
(piston seal is polyethylene)
- 222-862 Leather Packing Throat and
Intake Packing Kit
- 222-840 Seal Repair Kit
- 222-974 Intake Valve Repair Kit for CS
and SST models

Pump Module Ordering Information

- 918-303 **39:1 Pump and Ram Assembly**
Includes Premier 39:1 CS Pump, 6.5 in. (165 mm)
dual post ram, ram and motor air control, 55 gal.
(200 liter) follower plate, dual PVC follower seals.
- 918-317 **39:1 Pump and Ram Assembly**
Includes Premier 39:1 CS Pump, 6.5 in. (165 mm)
dual post ram, ram and motor air control,
55 gal (200 liter) follower plate, dual EPDM
follower seals.

Ram Module Ordering Information

- 918-305 **Bare Follower Assembly**
22 in. (560 mm) O.D. Order wiper rings separately.

Follower Wiper Ring Kits

22 in. (560 mm) O.D.
Kit contains upper and lower hoses and clamp.

- C03-059 PVC
- 918-312 EPDM
- C03-228 Neoprene

Air Control Modules

Maximum working pressure range: 0-125 psig (0 - 8.8 bar)

- 918-306 **2-Regulator**
For Premier air motors.
- 918-307 **4-Regulator**
For Premier air motors.
- C32-438 **2-Regulator**
For King/Bulldog/Senator air motors.
- C32-437 **4-Regulator**
For King/Bulldog/Senator air motors.

C32-463 Drum Clamp Module, Standard

Two required per ram. Attach to ram cylinders to
center drum in place and prevent drum from
moving.

- 918-395 **Drum Clamp, Heavy Duty**
- 918-393 **Automatic Crossover Kit**
- 918-394 **Low Level Drum Kit**
- 222-776 **Plate Mounting Kit**
- C32-434 **Air Motor/Pump Mounting Kit**

Pump Mounting Kits

Used to connect the follower plate to the tie bar. Pumps mount
on the brackets.

- 918-309 **King/Bulldog/Senator Pumps**
- 918-304 **Premier with Check-Mate Pumps**
- 918-310 **Premier with Dura-Flo Pumps**