

# MAPLE™ SERIES

**Low Pressure and Medium Pressure Horizontal Piston Pumps** 

## **FLUID HANDLING**



### MAPLE SERIES

**Low Pressure and Medium Pressure Horizontal Piston Pumps** 

Binks Maple series are horizontal piston pumps used for circulation and spray gun feed applications. The pumps combine an energy efficient air motor with a low shear fluid section technology.

The patented air valve design includes a magnetic detent that reduces stall conditions. Binks Maple pump design has equal thrust on each piston stroke and quick pump change over reduces pressure fluctuations to a minimum.



### **COATING TYPES AND APPLICATIONS**

- Waterborne
- High Solids
- High Abrasives
- CARC
- UV Cured
- Solvent Borne
- Catalyst



BINKS MAPLE SERIES BENEFITS AND FEATURES

## **Handles Troublesome and Difficult Coatings**

- High solids to CARC to UV.
- Moisture sensitive to shear sensitive.
- Both sides of fluid seal are flooded with fresh material.

### **Reliable Operation**

- Backup seal means no need to shut down entire facility if a bellow seal fails. Keep on pumping until the next shift.
- Quick exhaust valve enables rapid switchover and smooth flow.
- Quick exhaust valve herds cooling/icing away from the air logic for the industry's most reliable motor.
- Tough Construction pumps are made from hardened and chemically resistant materials including tungsten carbide, ceramic coated stainless steel, stainless steel, and fluoroplastic.

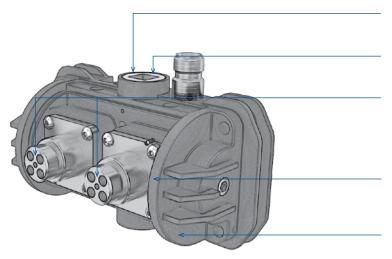
### Simple to Maintain

- Inspection hose indicates when it's time to replace bellows.
- Backup seal ensures material doesn't enter air motor if bellows seal fails.
- No "upper seal" to keep lubricated or adjusted.

### **Hydraulically Efficient**

 Piston seals are always engaged. If the air motor is consuming air, you're moving fluid, unlike some competitive designs.

### THE FINISHING INDUSTRY'S BEST AIR MOTOR



**Magnetic Detent Air Logic** requires less force to switch over. The result is smoother flow and lower minimum operating pressure.

Lube Free Air Logic. Lubrication + Water + Dirt = Mud. The Maple pump uses no lubricant in the air logic and requires no external lubrication.

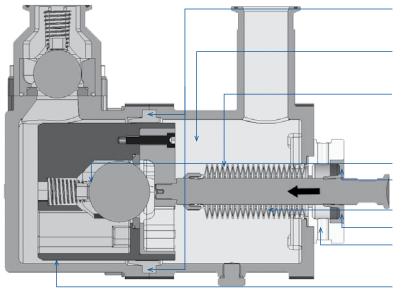
## Quick Exhaust Valve and Poppet Actuated Air Logic Gives You Two Benefits:

- If icing occurs, it is away from the air logic, virtually eliminating "stalling".
- Extremely quick switchover performance for smoother flow.

**Low Ice Air Motor.** The Maple pump controls where any icing happens: away from the air logic. The result is the industry's most reliable air motor even with moist air.

Easy to Maintain. Repair air valve in 5 minutes.

### THE FINISHING INDUSTRY'S BEST FLUID SECTION



**Seal is Always Engaged** so you're always moving fluid. You'll consume significantly less air than you would if using a competitive design.

### Both Sides of Seal are Flooded with Fresh Material.

Troublesome materials such as UV, waterborne, moisture sensitive or shear sensitive coatings simply aren't a problem.

### Binks Maple Pump "Run to Failure" Bellows System:

- Has more convolutions than competition to minimize stresses and increase life.
- Is made of fluoroplastic with chemical resistance properties similar to PTFE.

Lower Ball Check in fluid piston.

**Back Up U-Cup Seal.** When the bellows wear out, you won't contaminate the air motor!

### **Bellows**

### **Backup Seal**

**Visual Inspection Hose** attaches here. When you see material here, it's time to change the bellows. But you can keep on pumping until the next shift!

**Ceramic Pistons and Tungsten Carbide Seats** give you the industry's best maintenance cycle.

### MAPLE SERIES

### **Low Pressure and Medium Pressure Horizontal Piston Pumps**















Maple 15

Maple 30

Maple 60

Maple 20 AFP

Maple 7/15

Maple 8/25

### PUMP SPECIFICATIONS MAPLE 30 MAPLE 60 MAPLE 20 AFP\* **MAPLE 7/15 MAPLE 8/25** MAPLE 15 Part # 104009-N 104010-N 104020 104016 104041-N 104042-N Weight 46 lbs (21 kg) 66 lbs (30 kg) 145 lbs (66 kg) 77 lbs (35 kg) 57 lbs (26 kg) 88 lbs (40 kg) Ratio 3.1 3:1 3:1 4.2:1 15:1 25:1 Flow @ 60 Cycles/Min 6 gal (23 liters) 12 gal (45 liters) 24 gal (91 liters) 6.8 gal (26 liters) 2.6 gal (10 liters) 3.2 gal (12 liters) 166 cc/0.044 gal Displacement/Cycle 375 cc/0.1 gal 750 cc/0.2 gal 1,500 cc/0.4 gal 475 cc/0.125 gal 200 cc/.053 gal 1" Sanitary Inlet Fluid Connection 1" Sanitary 11/2" Sanitary 11/2" Sanitary 1" Sanitary 1" Sanitary **Outlet Fluid Connection** 1" Sanitary 11/2" Sanitary 11/2" Sanitary 3/4" Sanitary 1/2" NPT Female 1/2" NPT Female Air Connection Wetted 3/8 nps (m)/ Materials bsp (m) bsp (m) bsp (m) bsp (m) bsp (m) bsp (m) Max Fluid Pressure 300 psi (21 bar) 420 psi (29 bar) 300 psi (21 bar) 300 psi (21 bar) 1.575 psi (109 bar) 2.625 psi (181 bar) Air Consumption @ 45 psi 0.17 scfm/cycle 0.33 scfm/cycle 0.75 scfm/cycle 0.33 scfm/cycle 0.33 scfm/cycle 0.7 scfm/cycle Max Air Inlet Pressure 100 psi (6.9 bar) Max Recommended 20 cpm 20 cpm 20 cpm 20 cpm 20 cpm 20 cpm Continuous Cycle Rate

<sup>\*</sup>For use with piggable systems with push and solvent air chop.

PART #	ACCESSORIES
FILTERS	
41-28283	100 Mesh Filter Kit Top Mount
41-28284	100 Mesh Filter Kit Rear Mount
SURGE CHAMBERS	
104050P-B-B	2" Sanitary Active Surge Eliminator
104050P-C-C	11/2" Sanitary Active Surge Eliminator
104050P-D-D	11/2" npt (Female) Active Surge Eliminator
104050P-L-L	1" Sanitary Active Surge Eliminator
104053-C-C	11/2" Sanitary Surge Chamber
104053-D-D	1 1/2" npt (Female) Surge Chamber
104053-L-L	1" Sanitary Surge Chamber

PART #	ACCESSORIES
107757	Low Shear Back Pressure Regulator, 3/4" Ports, Stainless Steel, No Gauge
CONNECTION KITS FOR PUMPS:	
502716	11/2" Sanitary x 1" npt (F) (2 Sets of Parts)
502717	1" Sanitary x 3/4" npt (F) (2 Sets of Parts)
502744	1" Sanitary x 3/4" npt (F) (1 Set of Parts)
502745	11/2" Sanitary x 1" npt (F) (1 Set of Parts)
41-28282	1" Sanitary x 1" npt (F) (1 Set of Parts)



### **BINKS MAPLE SERIES 5-YEAR WARRANTY**

Binks warrants to the original end-use purchaser that the Binks branded products "MAPLE" shall not fail under normal use and service due to a defect in material or workmanship within five (5) years from the date of shipment from Binks. Does not include normal wear and tear parts.

For further technical information please refer to the Binks Maple Service Bulletin.



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