

# GEMINI™ II SERIES

Double Diaphragm Pumps

**BINKS®**



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## Up to 38% More Fluid Delivery Per Stroke

Longer equipment life and lower maintenance costs

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## Short Stroke Pump Specifically Designed for Spraying Applications

Pulsation reduction is greater than competition

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## Customized Pump Packages

Design a pump package for a specific application

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## Pump Outfits with Trophy Guns

Trophy guns available with a new lightweight and ergonomic design

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## 5-Year Limited Product Warranty

The finishing industry's best warranty

Binks Gemini II Diaphragm Pumps are the premier pumps for spraying, transferring, or circulating a variety of coatings. The pump design provides consistent spray patterns for high quality finish applications. The Gemini II pumps are rugged and designed to provide longer pump life.

### Applications

The Binks Gemini II Diaphragm Pumps are ideal for a variety of materials and viscosities. Gemini II pumps can be used in applications including Wood, General Metal Fabrication, and Adhesives.



**BINKS**

# GEMINI II™

## Double Diaphragm Pumps

Binks new Gemini II Diaphragm Pump Series builds on the proven and successful product line for circulating, transferring and spraying a variety of coatings. On average, the new and improved units deliver more fluid per stroke than previous models, up to\*:

**33%  
More**  
[ ½" pumps ]

**38%  
More**  
[ 1" pumps ]

**28%  
More**  
[ 1 ½" pumps ]

### ADVANTAGES OF THE GEMINI II

#### Pumps Shear-Sensitive Materials

Low internal velocities and gentle pumping action does not shear coatings

#### Pumps High to Low Viscosity Materials

#### Seal-Less

No mechanical seals or packing to leak

#### Runs Dry Without Damage or Heat Build-up

No internal damage

#### Variable Flow and Pressure

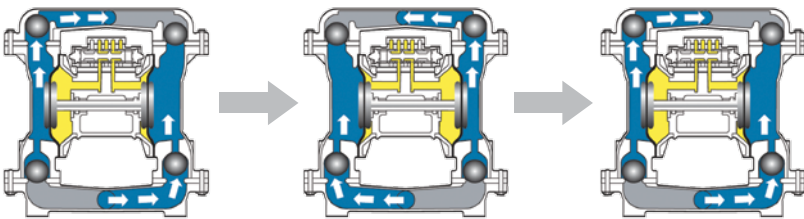
Regulate the inlet air supply to adjust the pump flow from zero to maximum rated capacity

#### Fully Groundable

CE and ATEX Certified

## GEMINI II PUMPS FEATURE A DOUBLE DIAPHRAGM DESIGN,

PROVIDING A 1:1 FLUID RATIO TO COMPRESSED AIR SUPPLY.



## 5 MODELS

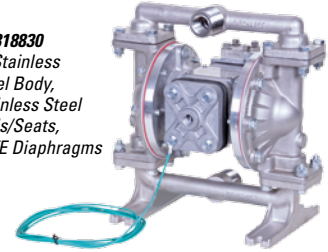
**41-818836**

½" Conductive Acetal Body, Stainless Steel Balls/Seats, PTFE Diaphragms



**41-818830**

½" Stainless Steel Body, Stainless Steel Balls/Seats, PTFE Diaphragms



**41-818820**

1" Aluminum Body, Stainless Steel Balls/Seats, PTFE Diaphragms



**41-818822**

1" Stainless Steel Body, Stainless Steel Balls/Seats, PTFE Diaphragms



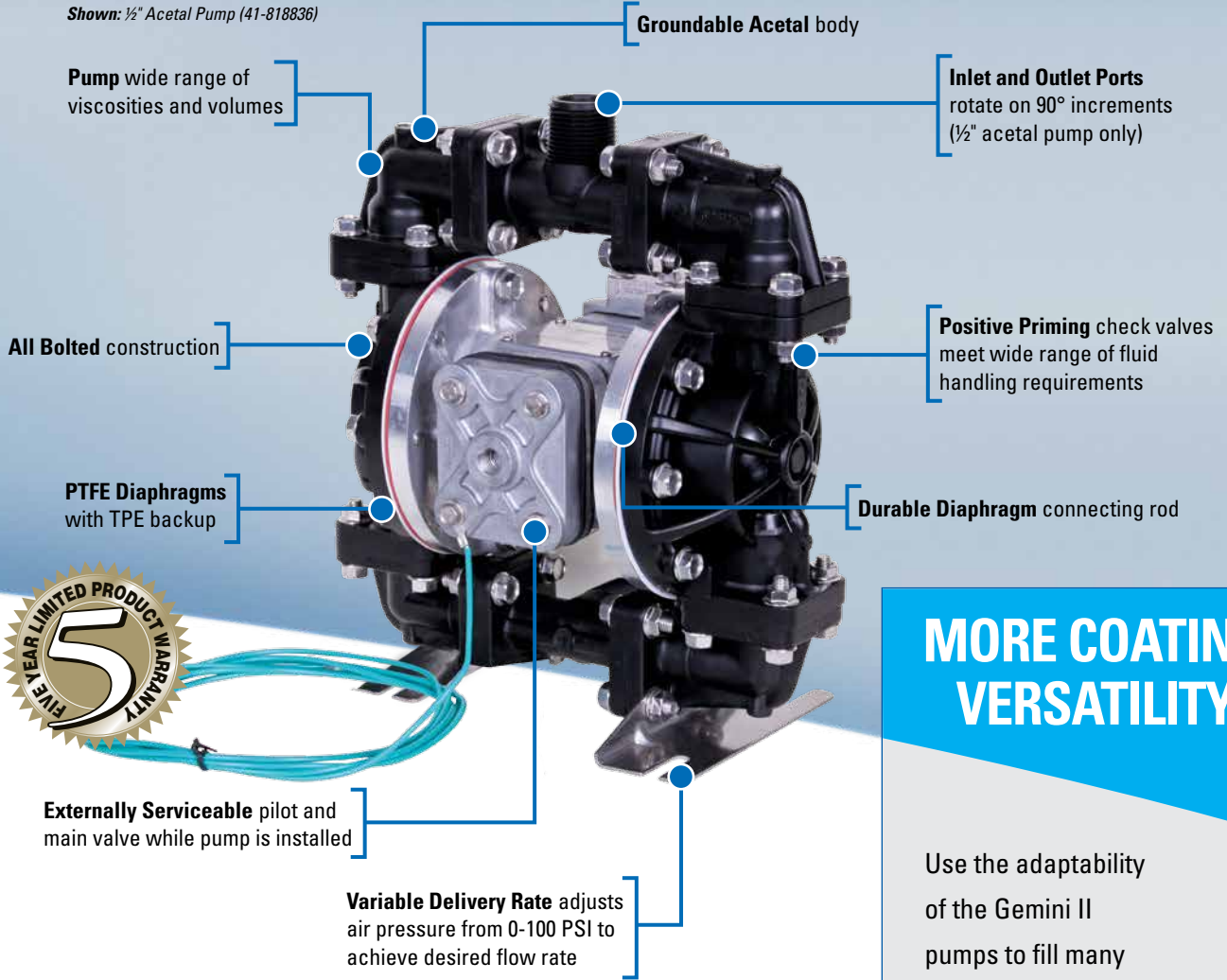
**41-818810**

1 ½" Stainless Steel Body, Stainless Steel Balls/Seats, PTFE Diaphragms



\*Average percent flow rate difference when compared to Binks Gemini I at 100 PSI air inlet

Shown: 1/2" Acetal Pump (41-818836)

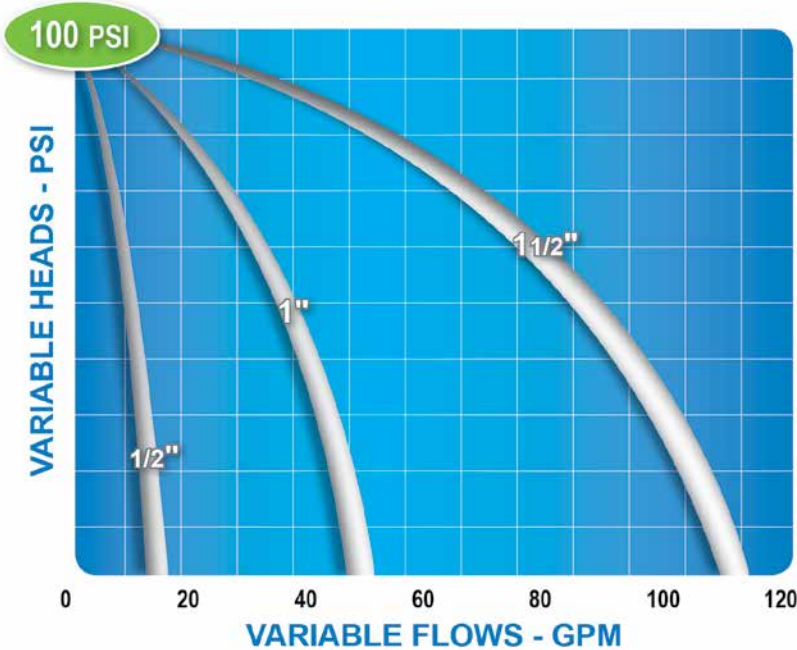


## MORE COATING VERSATILITY

Use the adaptability of the Gemini II pumps to fill many of your fluid handling requirements including:

- Adhesives
- Catalyzed Varnish
- Special Coatings
- Paints
- Resins
- Stains
- Solvents

## INCREASED FLOW RATE





**BINKS**

# LOW PULSE

New

Gemini™ II  
Short Stroke Pump

**27% More Fluid  
Per Stroke**

*than Gemini I pump series*



**Shown:**  
41-818831  
½" Conductive Acetal Body

Binks has added a Low Pulse Double Diaphragm pump model to the Gemini II series. The new Short Stroke pump has an optimized diaphragm design and reduction in stroke length to provide efficient pump changeover.

- Consistent spray pattern for high quality finish applications
- Pulsation reduction is greater than the competition and the Gemini I pump series
- Bonded diaphragm has increased durability

## MULTIPLE MOUNTING CONFIGURATIONS:

WALL • PAIL • DRUM

- Options to customize for your specific applications



**Wall Mount**  
GEM2-W2D0080



**Pail Mount**  
GEM2-P2D1D60



**Drum Mount**  
GEM2-D2D0D50

Gemini™ II

# PUMP PACKAGES

Customize a Pump Package for Your Specific Application

## Ordering Information

Select your mounting option. Then select the desired attributes from the chart below ("A" through "F" option) and build the Binks Gemini II system number that meets your particular production needs (½" pumps only).

### Select Your Mounting Options

- P = Pail
- W = Wall
- D = Drum

	A	B	C	D	E	F
<b>GEM2-P</b>	2	D	1	D	6	1

<b>A</b>	<b>PUMP</b>
1	= ½" Acetal 41-818836
2	= ½" <b>Acetal Short Stroke 41-818831</b>
3	= ½" Stainless Steel 41-818830
<b>B</b>	<b>AIR CONTROL</b>
0	= None
S	= Single Air Control 41-718805
D	= <b>Dual Air Control 41-718806</b>
<b>C</b>	<b>BYPASS</b>
0	= None
1	= <b>Bypass Filter/Pulse Assembly Pail or Drum Mount 41-718812-1</b>
2	= Bypass Filter/Pulse Assembly 5 Gallon Wall Mount 41-718812-2
3	= Bypass Filter/Pulse Assembly 55 Gallon Wall Mount 41-718812-3
<b>D</b>	<b>AGITATOR</b>
0	= None
D	= <b>Stainless Steel Direct Drive 41-3312-S</b>
G	= Stainless Steel Gear Reduced Drive (Drum Mount Only) 31-400
<b>E</b>	<b>SIPHON</b>
0	= None
1	= Polypropylene Siphon Tube, Drum Mount 41-718813-33
2	= Polypropylene Siphon Tube, Pail Mount 41-718813-12
3	= Polypropylene Suction Hose Assembly Wall Mount 5 Gallon 41-718818-5
4	= Polypropylene Suction Hose Assembly Wall Mount 55 Gallon 41-718818-55
5	= Stainless Steel Siphon Tube, Drum Mount 41-718817-33
6	= <b>Stainless Steel Siphon Tube, Pail Mount 41-718817-12</b>
7	= Stainless Steel Suction Hose Assembly Wall Mount 5 Gallon 41-718819-5
8	= Stainless Steel Suction Hose Assembly Wall Mount 55 Gallon 41-718819-55
<b>F</b>	<b>FLUID REGULATOR</b>
0	= None
1	= <b>Stainless Steel Fluid Regulator 84-320</b>

## 1" GEMINI II DIAPHRAGM PUMP PACKAGES

41-818120 Package Contains	Part #
1" Aluminum Gemini II Pump	41-818820
Wall Mount	41-718800
Dual Air Control	41-718808
Fluid Regulator	84-320
41-818121 Package Contains	Part #
1" Stainless Steel Gemini II Pump	41-818822
Wall Mount	41-718800
Dual Air Control	41-718808
Fluid Regulator	84-320

## WHICH GEMINI IS RIGHT FOR YOU?

Don't know which Gemini is best for your operation?

Answer these questions, then contact your distributor or call us at 800-992-4657 to help you select your pump.

1. What is your **desired flow rate?**
2. What are the **characteristics of the fluid?**
3. What is your **application?**



# Gemini™ II OUTFITS

All outfits have 25' Ergoflex air hose and 25' fluid hose  
2101 guns include complete gun set up



### Pail Mount Outfit with Agitator GEM2-P2D1D60 Includes

½" Acetal Short Stroke Pump, Dual Air Control, Bypass Filter/Pulse Assembly, Agitator

Gemini II Outfit #	Spray Gun Part #	Spray Gun Description	Pump Package Part #
98-3200	2465-14HV-32S0	Trophy HVLP 1.4 mm, SS Needle	GEM2-P2D1D60
98-3201	2101-3100-0	Model 2101, CONV, 1.4 mm	GEM2-P2D1D60
98-3202	2465-14lv-23S0	Trophy LVMP 1.4 mm, SS Needle	GEM2-P2D1D60
98-3203	2465-12HV-32S0	Trophy HVLP 1.2 mm, SS Needle	GEM2-P2D1D60
98-3204	2101-0000-0	Model 2101, CONV, 1.0 mm	GEM2-P2D1D60

### Pail Mount Outfit GEM2-P2D1060 Includes

½" Acetal Short Stroke Pump, Dual Air Control, Bypass Filter/Pulse Assembly

Gemini II Outfit #	Spray Gun Part #	Spray Gun Description	Pump Package Part #
98-3205	2465-14HV-32S0	Trophy HVLP 1.4 mm, SS Needle	GEM2-P2D1060
98-3206	2101-3100-0	Model 2101, CONV, 1.4 mm	GEM2-P2D1060
98-3207	2465-14lv-23S0	Trophy LVMP 1.4 mm, SS Needle	GEM2-P2D1060
98-3208	2465-12HV-32S0	Trophy HVLP 1.2 mm, SS Needle	GEM2-P2D1060
98-3209	2101-0000-0	Model 2101, CONV, 1.0 mm	GEM2-P2D1060



### Wall Mount Outfit GEM2-W2D2070 Includes

½" Acetal Short Stroke Pump, Dual Air Control, Bypass Filter/Pulse Assembly, 5-Gal Siphon

Gemini II Outfit #	Spray Gun Part #	Spray Gun Description	Pump Package Part #
98-3210	2465-14HV-32S0	Trophy HVLP 1.4 mm, SS Needle	GEM2-W2D2070
98-3211	2101-3100-0	Model 2101, CONV, 1.4 mm	GEM2-W2D2070
98-3212	2465-14lv-23S0	Trophy LVMP 1.4 mm, SS Needle	GEM2-W2D2070
98-3213	2465-12HV-32S0	Trophy HVLP 1.2 mm, SS Needle	GEM2-W2D2070
98-3214	2101-0000-0	Model 2101, CONV, 1.0 mm	GEM2-W2D2070

### Wall Mount Outfit GEM2-W2D3080 Includes

½" Acetal Short Stroke Pump, Dual Air Control, Bypass Filter/Pulse Assembly, 55-Gal Siphon

Gemini II Outfit #	Spray Gun Part #	Spray Gun Description	Pump Package Part #
98-3215	2465-14HV-32S0	Trophy HVLP 1.4 mm, SS Needle	GEM2-W2D3080
98-3216	2101-3100-0	Model 2101, CONV, 1.4 mm	GEM2-W2D3080
98-3217	2465-14lv-23S0	Trophy LVMP 1.4 mm, SS Needle	GEM2-W2D3080
98-3218	2465-12HV-32S0	Trophy HVLP 1.2 mm, SS Needle	GEM2-W2D3080
98-3219	2101-0000-0	Model 2101, CONV, 1.0 mm	GEM2-W2D3080

# Add a **TROPHY** New

## to Your Gemini™ II Pump

The new Binks Trophy Series line of spray guns offer unparalleled robustness for industrial coating and finishing requirements.

### Anatomy of a Champion

**AIR CAP**

- HVLP, LVMP, Conventional
- Three spray technologies can be used on the same gun platform

**Balanced and uniform pressure and distribution inside the air cap produces uniform particle distribution**

**Atomization passages have been designed for efficient and uniform air flow**

**One stainless steel needle for all fluid nozzles reduces inventory**

**Tuff Tip hardened fluid nozzles last longer**

**Optional Air cap pin available for air cap positioning**

**Easy-grip air cap ring for easy removal and installation**

**Stainless steel fluid passages for wide variety of materials**

**Self adjusting long-life needle packing**

**Stabilizer trigger for light and smooth operation**

**Optional cheater valve available**

**Spring pad for quiet spring operation. Optional heavy duty spring available.**

**No kick back during triggering**

**Large air passages provide better air flow**

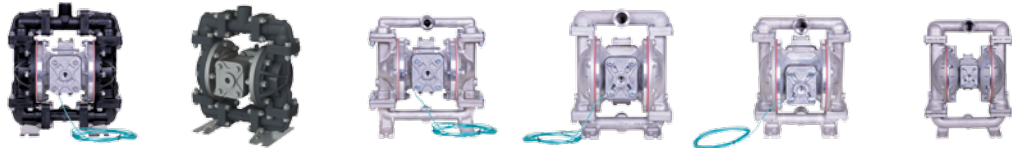
**Trophy series is available in multiple configurations to meet your application needs**

**HVLP**   **LVMP**   **CONVENTIONAL**

**PRESSURE FEED**   **GRAVITY FEED**   **SIPHON FEED**

Combined with our comprehensive and compatible fluid nozzle and needles – including our hardened stainless steel Tuff Tip, plastic needle tips, and tungsten carbide – Trophy series spray equipment is fully capable of spraying the widest range of materials and viscosities.





## Specifications

Gemini II Pumps	41-818836 ½" Acetal	41-818831 ½" Acetal Short Stroke	41-818830 ½" Stainless	41-818820 1" Aluminum	41-818822 41-818823(BSP) 1" Stainless	41-818810 1 ½" Stainless
Air Inlet Pressure Range	0-100 PSI	0-100 PSI	0-125 PSI	0-125 PSI	0-125 PSI	0-125 PSI
Air Inlet Size	¼" NPT	¼" NPT	¼" NPT	½" NPT	½" NPT	¾" NPT
Max Fluid Pressure	100 PSI (6.9 bar)	100 PSI (6.9 bar)	125 PSI (8.6 bar)	125 PSI (8.6 bar)	125 PSI (8.6 bar)	125 PSI (8.6 bar)
Fluid Inlet/Outlet	½" NPT	½" NPT	½" NPT	1" NPT	1" NPT	1 ½" NPT
Max Flow Rate	14 gpm (52 lpm)	7.5 gpm (28 lpm)	14 gpm (52 lpm)	45 gpm (170 lpm)	45 gpm (170 lpm)	106 gpm (401 lpm)
Maximum Suction Lift	13 ft (3.9 m)	8 ft (2.4 m)	12 ft (3.6 m)	17 ft (5.1 m)	17 ft (5.1 m)	22 ft (6.7 m)
Max Particle Size	.125" (3 mm)	0.125" (3 mm)	.125" (3 mm)	.25" (6 mm)	.25" (6 mm)	.25" (6 mm)
Max Temperature Limits	180 F (82 C)	180 F (82 C)	220 F (104 C)	220 F (104 C)	220 F (104 C)	220 F (104 C)
Flow @ 60 Cycles/Min	3.12 gal (11 liters)	1.68 gal (6 liters)	3.12 gal (11 liters)	13.2 gal (50 liters)	13.2 gal (50 liters)	49.2 gal (186 liters)
Cycles Per Gallon	19.2	35.7	19.2	4.5	4.5	1.2
Displacement Per Cycle	.052 gpm (.196 lpm)	0.028 (.105 lpm)	.052 gpm (.196 lpm)	.22 gpm (.84 lpm)	.22 gpm (.84 lpm)	.82 gpm (3.0 lpm)
Noise Level With Muffler	84 dBA Max	92 dBA Max	86 dBA Max	92 dBA Max	92 dBA Max	95 dBA Max
Weights	14 lbs (6.4 kg)	14 lbs (6.4 kg)	21 lbs (9.5 kg)	28 lbs (12.7 kg)	43 lbs (19.5 kg)	95 lbs (43.0 kg)
<b>Repair Kits:</b>						
Air End Seal Kit	41-718850	41-718850	41-718850	41-718855	41-718855	41-718858
Diaphragm Kit	41-718853	41-718861	41-718851	41-718856	41-718856	41-718860
Ball & Seal Kit	41-718854	41-718854	41-718852	41-718857	41-718857	41-718859
Operation Manual	77-2998	77-2995	77-2997	77-2994	77-2994	77-2993

Part #	Accessories
41-9000	Drum Elevator
41-718805	Single Regulator Air Control (½" pumps)
41-718806	Dual Regulator Air Control (½" pumps)
41-718807	Single Regulator Air Control (1" pumps)
41-718808	Dual Regulator Air Control (1" pumps)
41-718809	Single Regulator Air Control (1 ½" pumps)
41-718810	Pail Cover Stainless Steel (for ½" and 1" pumps)
41-718800	Wall Bracket (for ½" and 1" pumps)
41-718815	Drum Cover 55 gal. Stainless Steel (for ½" and 1" pumps)
41-718812-1	Bypass Filter/Pulse Assembly Pail or Drum Mount
41-718812-2	Bypass Filter/Pulse Assembly Wall Mount 5 gal. Containers

Part #	Accessories
41-718812-3	Bypass Filter/Pulse Assembly Wall Mount 55 gal. Containers
0114-011798	Replacement Grounding Kit
84-320	S.S. Fluid Regulator ¾" NPT (m) x ¾" NPS (m) 1 GPM 5 - 55 PSI Outlet Pressure, Includes Riser Tube and 83-2571 0-100 PSI Gauge (for ½" pumps)
HFRL-508	Centrifugal Filter/Regulator Assembly
71-31101	25' Ergoflex Air Hose ¼" ID with ¼" NPS (f) Swivel Connections
71-3303	25' Fluidall Hose ¾" ID with ¾" NPS (f) Swivel Connections
41-2296	5 gal. Alum/Steel Siphon Kit for 1" Pump
41-10467	55 gal. Galvanized Siphon Kit for 1" Pump

### Sales and Service through our Global Network of Industrial Distributors

#### Binks International Offices

Americas: **USA** ▪ **Mexico** ▪ **Brazil**

Europe/Asia/Africa: **United Kingdom** ▪ **France** ▪ **Germany**

Pacific Rim: **China** ▪ **Japan** ▪ **Australia**



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