BINKS®
B Series Pumps
A41-85R 3/00

"B" Series Extreme Duty Pumps & Equipment

BINKS

Binks. Over 100 years of leadership and innovation.

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Since 1890 when Binks introduced the first cold water airless paint spraying machine, the company has provided the world with superior spray finishing technology. Today, you can find Bink's spray finishing technology at work in virtually every industry around the world. Binks extensive product line includes air and airless spray painting outfits, pressure tanks, paint circulating systems, high and low pressure material handling pumps, and much more.

Pump technology has come a long way since its inception. We're proud of the fact that our team of engineers and scientists have been responsible for a number of the technical advances today's pump users have come to rely on for maximum productivity.

As your partner, we ask questions, we listen, and we work hard to provide practical solutions to today's spray finishing challenges. In addition, we work closely with coatings manufacturers to make sure that our application technology delivers today's coatings without sacrificing the quality and production demands of our customers.

Our technical centers and labs are dedicated facilities where we design and test fluid delivery product prototypes. Once we're satisfied with our initial design, we run extensive tests in the field, make design and performance modifications, retest, and then finalize in our constant effort to bring you the best technology available in the marketplace. Our team of experts – engineers, designers, technicians, and customer service professionals – are constantly working to bring you the quality, efficiency, performance, and value you expect from one of the world's most recognized spray finishing brands.

Training

The best finishing operation and equipment in the world can't perform to its fullest potential unless used properly. We offer a number of training opportunities to help your finishing professionals achieve maximum performance from our products. Classes, workshops, and seminars are customized to target your specific educational needs and include both classroom and hands-on sessions on: surface preparation, equipment types, evaluation/quality control, compliance issues, and specific spray applications associated with your industrial finishing operation.

From our nationally renowned Finishing Workshop, to on-site training, to NESHAP required education, our training opportunities are designed specifically for individuals involved with industrial, contractor, and maintenance spray finishing applications. For further information about classwork, hands-on training, and course materials, please contact your Binks Industrial Finishing Specialist.

Environmentally Responsible

Binks has long been concerned about protecting the planet for future generations. In fact, we strive to make our products as environmentally friendly as possible and actively support a number of ecology-minded groups.

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Pump Basics for Smooth Operation

Your finishing pumps will be influenced by many factors. Keep in mind that the pump bears the ultimate burdens of drawing the material into the pump and moving the volume of material at a particular pressure to the application device, elevation changes, and frictional losses in the lines and valves. Consider the following details when selecting any pump.

Air Supply/ Adequate Volume

The power source of a pneumatically driven pump can affect its ability to maintain adequate fluid pressure and volume of the material being pumped. Problems are caused by an inadequate air supply. Do not place pumps at the end of long, small diameter air lines. A good rule of thumb for most pumps is that they require a minimum 30 PSI air pressure (measured while the pump is cycling) for operation. Binks pumps will operate as low as 10, in many applications.

Air Treatment for Pump Operation

Over pneumatic pressurization can result in excessive strain on the pump as the air motor cycles. This can contribute to premature pump failure. Use a regulator that keeps air pressure within specific parameters. Use a water separator and filter in the supply line to the pump. These will keep your pump in reliable working condition. Use air line lubricants only in heavy duty cycles that have proven the need for lubrication.

Use only Binks air line lubricant and lubricators with Binks pumps.

Flow Rates/Pressure

Oversize flow rate by 50 – 100% to increase longevity. The pump will last longer and consume less air if you operate the pump at the recommended continuous duty cycle rating, for non-abrasive materials. As a general guide, you want your pump to deliver 30% more fluid pressure than required by each application. When sizing a pump, do not exceed 60% of the rated working pressure of the pump.

Resistance to Flow - Back Pressure

Resistance to flow is least when using large diameter pipe or tubing, configuring long runs without turns, or using constant tubing or pipe size with long elbows. Avoid short, small turning radiuses, as found in a street elbow, and dramatic changes in internal diameter in short distances. A good rule of thumb is that fluid will flow smoothly at a distance of 7 x the pipe diameter after leaving an elbow or valve. Try to spread out devices that cause turbulence. Adding all pressure drops this will give you the back pressure seen by the pump.

Be aware that some materials require high fluid velocity to keep pigment in suspension.

Agitators

Agitate slowly, but efficiently and only when necessary. Position mixers 1″ from the bottom with a 5-gallon pail, 6″ from the bottom with a 55-gallon drum, and 90˚ to each other with multiple paddles. Use gear reduced drives for viscous materials. Provide lubricated and regulated air for heavy duty agitation of materials. Use stainless steel shafts and paddles made of materials compatible with water-borne coatings.

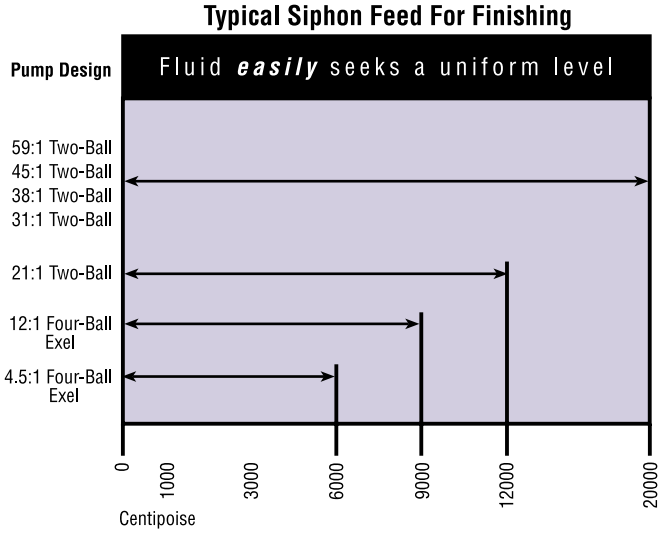
Pump Location

Position the pump inlet as close to the fluid source as possible. The ideal elevation of the pump inlet should be no greater than the height of the fluid source. Optimal fluid inlet positioning allows the coating to be gravity fed from the storage vessel or day tank.

Viscosity Control

Heaters can be used to maintain constant viscosity when the ambient temperature varies. Heat is used to reduce viscosity for consistent application of hard-to-atomize materials.

Typical Siphon Feed For Finishing



Pump Basics for Smooth Operation

Fluid Characteristics

Corrosive fluids chemically react with materials they contact. Failure to account for a fluid's corrosive characteristics can result in premature pump failure. Corrosiveness is measured in terms of its pH factor. In general, materials with a pH factor between six and eight are compatible with carbon steel components. Materials with pH factors below six or above eight are considered corrosive and require stainless steel components.

Abrasiveness refers to the material's ability to wear the surface it contacts. The abrasive qualities of a fluid are determined by the amount, size, and kind of solid particles contained in the fluid. The harder these particles are, the more abrasive the material will be. Small and similar sized particles can produce a lapping or polishing effect inside the pump. Although this will cause the pump to wear faster than non-abrasive materials, daily performance should not be affected. Materials with large, inconsistent, abrasive particles will cause rapid wear of internal pump components such as packings and piston rods. Pumps should be run at 1/3 of the maximum continuous duty cycle rating to achieve better pump life, when using abrasive materials.

For selecting a material filter size a good rule of thumb is to select a particle retention rating slightly below the nozzle orifice size. Example: For a .013 orifice, select a 50 mesh with a retention rating of .011. Excessive filtration increases element cleaning and is unnecessary if particles will pass through nozzle orifices (see chart on page 17 for proper filter selection).

Stability refers to a material's ability to hold its solids in suspension. High solid coatings can settle and separate. Use an agitator or recirculate the fluid through the system and back to the original container to prevent this settling. A good rule of thumb is to "turn" a 55 gallon drum one time per hour, in a circulating system.

Solvent Evaporation Rate affects how quickly a fluid dries. Some materials will form a solid layer, or skin, on the surface as their solvent evaporates. This skin can be pulled into the pump inlet and cause spray tips, filters, and other components to clog. Use a drum cover or agitator to reduce this problem. Most dirt comes from dried paint. Always recommend fluid outlet filters on the pump.

Tackiness (adhesion) is the ability of a material to adhere while wet. Use higher ratio pumps to provide the additional fluid pressure needed to transfer and atomize viscous fluids.

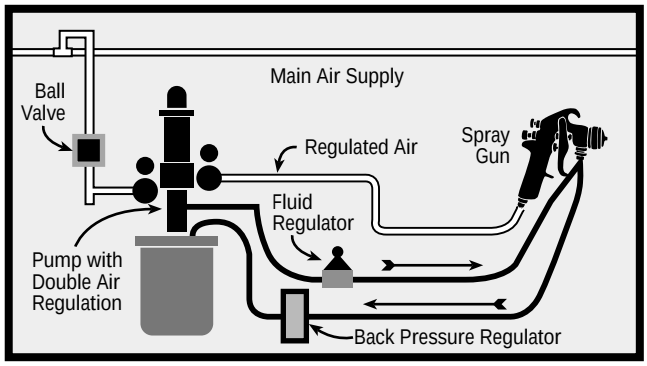
Metallic Pumps

Stainless Steel Pumps offer protection from corrosion when pumping today's preferred waterborne coatings. In addition, they offer the greatest future versatility for new coatings formulated due to regulation changes or enhanced production requirements. These pumps are available in regular and extreme duty. Extreme duty pump has hard chrome plating.

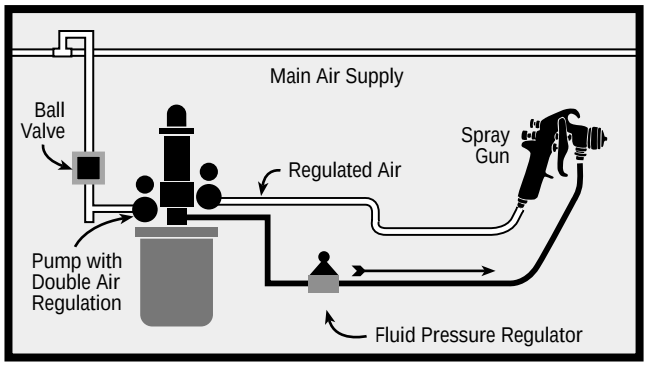
- *Hard Chrome Plating* – a proven performer for the full spectrum of non-abrasive to abrasive coatings. The plating is good for abrasive coatings in piston pumps with sliding components.

Pump Basics for Smooth Operation

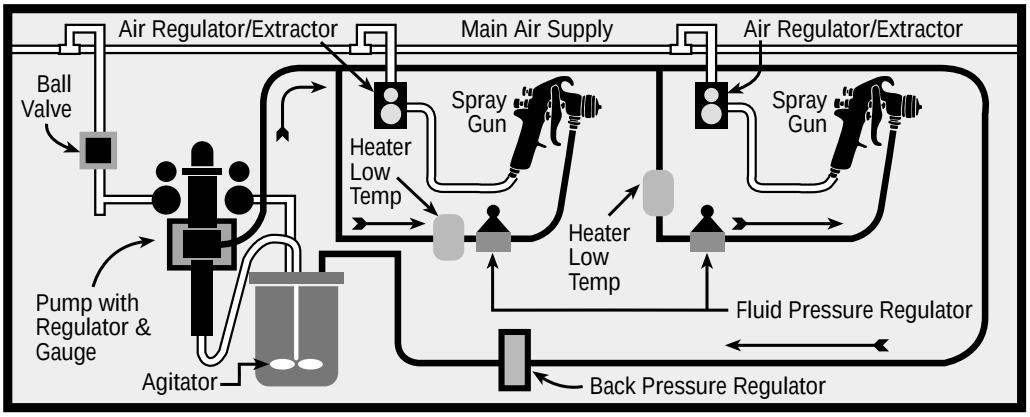
Double Air Regulation & Circulation Supply to Spray Gun



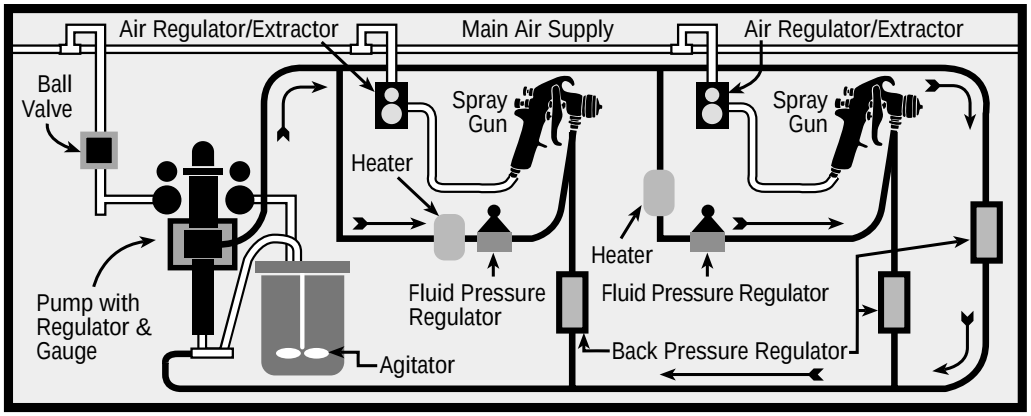
Double Air Regulation Dead End Supply to Spray Gun



Basic Circulating Loop with Dead End Supply to Spray Guns with Low Fluid Temperature



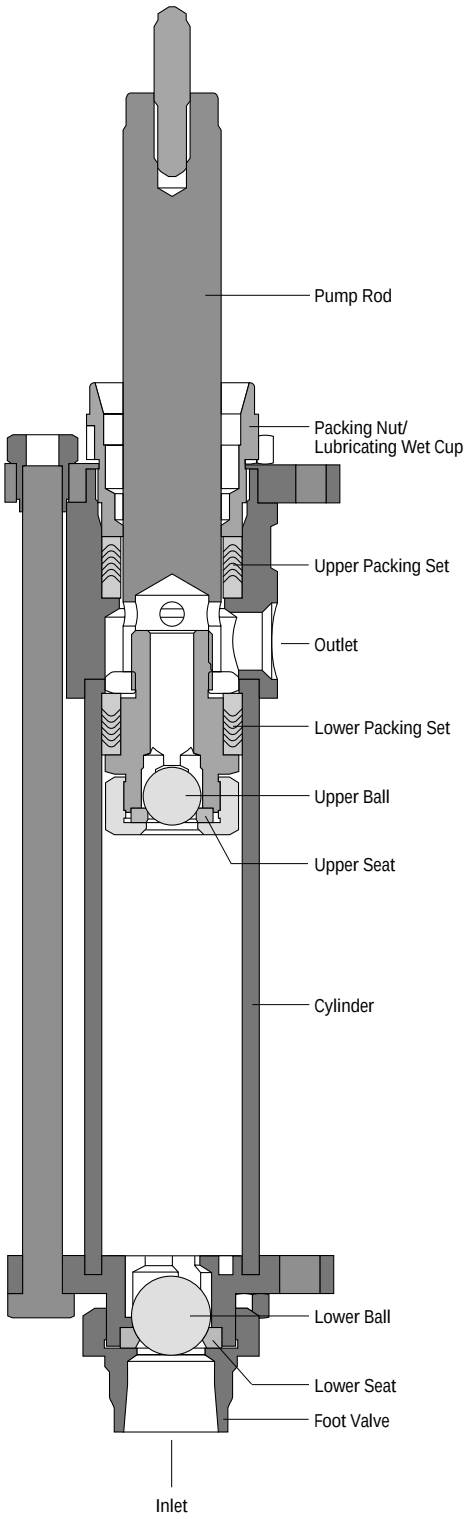
Basic Circulating Loop with Circulating Supply through the Spray Guns



Types of Pumps

What are the Advantages of each type?

Lower Pump Section



2-Ball Pumps

- Most common style in finishing
- 1-gun to multiple-gun application pumps
- Uses 2 balls as opposing check valves in one sequence or stroke. On the up stroke one ball allows material to flow into an unpressurized chamber, while the second ball blocks the path of the fluid to create a pressurized area and move fluid from chamber to chamber.

"B" Series 2-Ball Pumps

Our "B" Series Extreme Duty pumps live up to their name by providing maximum uptime in your finishing operation. The unique design of the "B" Series offers unprecedented access to packings for easy maintenance. "B" Series Extreme Duty pumps are used in processes where materials are aggressive, corrosive, and abrasive . . . waterbornes, UV-cure, acid-cure, and catalyzed coatings, anything that's caustic. "B" Series Extreme Duty pumps are a great value!

- All-stainless steel wetted components for waterborne compatibility
- Fluid section has heavy, hard chrome plate piston rod and cylinder for extra long life – even with abrasive materials
- Tungsten-carbide reversible seats provide superior abrasion resistance and service life
- Integrated mufflers on air motors for quiet operation
- Modular fluid section design for quick replacement
- UHMW Polyethylene and Teflon® Fluid Seals and packings
- Easy-access lower ball valve check. Just loosen and remove the foot valve.
- Air motor which can be remotely exhausted
- Pressure ratios include 4.5:1 through 59:1.

B10-D Extreme Duty Pump

Pump # 41-15029 Ratio 59:1

Performance

Air inlet Pressure ..... 30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range..... 200-4900 PSI (13.4-328.9 BAR)
Max. Cycles Per Minute 60
Max. Rec'd Cycles Per Minute..... 20
Displacement In3 Per Cycle ... 11.7 (192.3 cm3)
Cycles Per Gallon (Liter) 19.7 (5.2)
Flow @ 60 Cycles/Minute... 3.4 GPM (12.9 lpm)
Flow @ Rec'd Cycles/Min.... 1.1 GPM (4.3 lpm)
Noise Level @ 60 PSI ..... 92 db (A)

Specifications and Construction

Fluid Section Material..... 303 SS
Ball Material ..... Hardened SS
Seat Material..... Tungsten Carbide
Pump Rod Material
Heavy Hard Chrome Plated..... 303 SS
Cylinder Material
Heavy Hard Chrome Plated..... 304 SS
Packing Set..... UHMW Polyethylene/Teflon
Weight..... 73.2 lbs. (33.2 kgs.)
Inlet Size ..... 1" NPT(f)
Outlet Size ..... 1/2" NPT(f)
Reference Inlet Air Motor Size ..... 3/4" NPT(f)
Air Motor Part Sheet Ref 2214
Fluid Section Part Sheet Ref 2750

Pump Mount

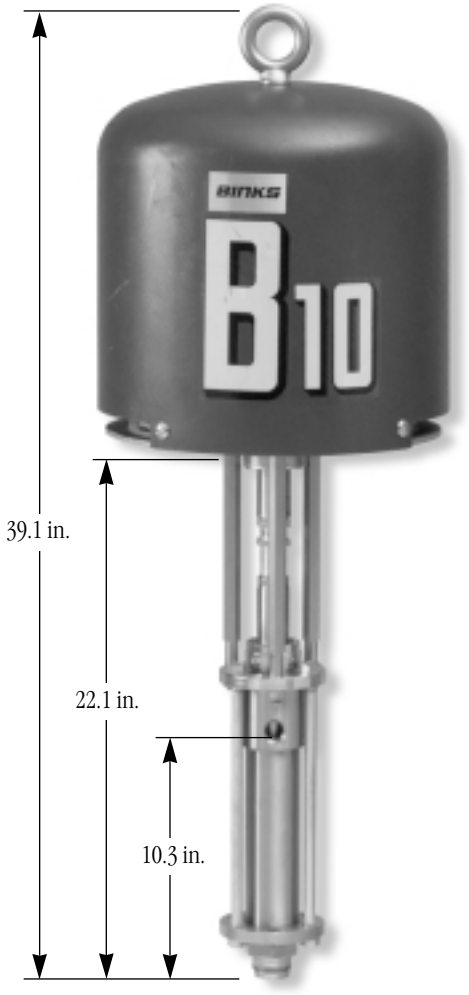
Wall Mount 41-10735
Weight ..... 107 lbs. (48.5 kgs.)
Includes:
41-12432..... Wall mount tray
41-11460..... Air control

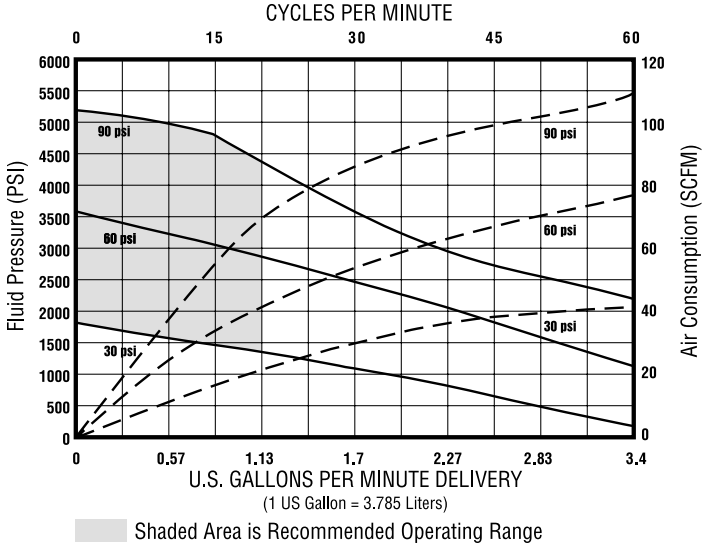
Cart Mount..... 41-10736
Weight..... 158 lbs. (71.7 kgs)
Includes:
41-12465..... Cart assembly
41-11460..... Air control

Part Numbers

Bare Pump..... 41-15029
Air Motor..... 41-12304
Fluid Section..... 41-11470
Air Motor Repair Kit..... 41-13126
Fluid Section Soft Seal Kits
(Balls & Seats Not Included)
Teflon/UHMW 41-11450
Teflon/Leather..... 41-11451

See End of Catalog for Optional Accessories.



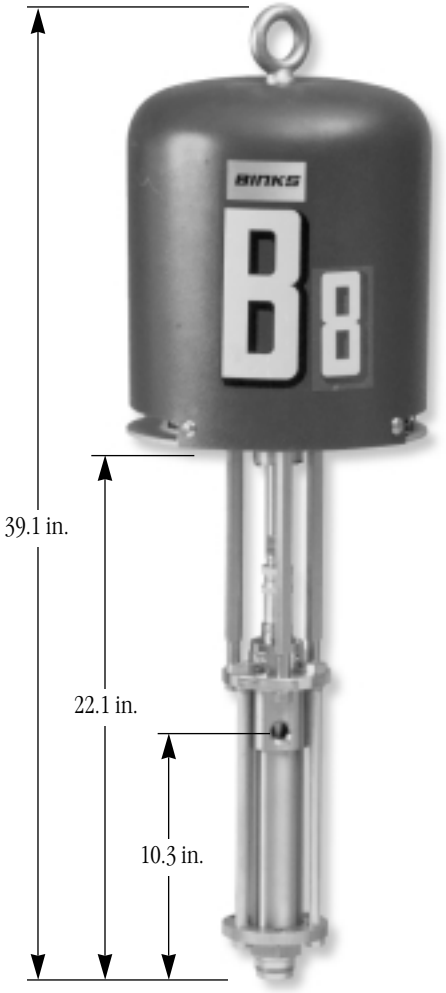


Graph Information

——— @ 60 PSI @ 3.4 GPM ≅ (60 CPM)
- - - - @ 60 PSI @ 3.4 GPM ≅ (76 CFM)

B8-D Extreme Duty Pump

Pump # 41-15015 Ratio 38:1



Performance

Air inlet Pressure	30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range	1140-3420 PSI (78.6-236 BAR)
Max. Cycles Per Minute	60
Max. Rec'd Cycles Per Minute	20
Displacement In3 Per Cycle	13.1 (215 cm3)
Cycles Per Gallon (Liter)	17.4 (4.7)
Flow @ 60 Cycles/Minute	3.4 GPM (12.9 lpm)
Flow @ Rec'd Cycles/Min	1.1 GPM (4.3 lpm)
Noise Level @ 60 PSI	92 db (A)

Specifications and Construction

Fluid Section Material	303 SS
Ball Material	Hardened SS
Seat Material	Tungsten Carbide
Pump Rod Material	
Heavy Hard Chrome Plated	303 SS
Cylinder Material	
Heavy Hard Chrome Plated	304 SS
Packing Set	UHMW Polyethylene/Teflon
Weight	55.7 lbs. (25.3 kgs.)
Inlet Size	1″ NPT(f)
Outlet Size	1/2″ NPT(f)
Reference Inlet Air Motor Size	3/4″ NPT(f)
Air Motor Part Sheet Ref	2213
Fluid Section Part Sheet Ref	2750

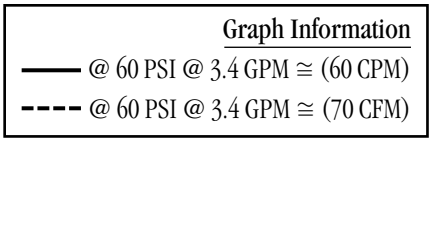
Pump Mount

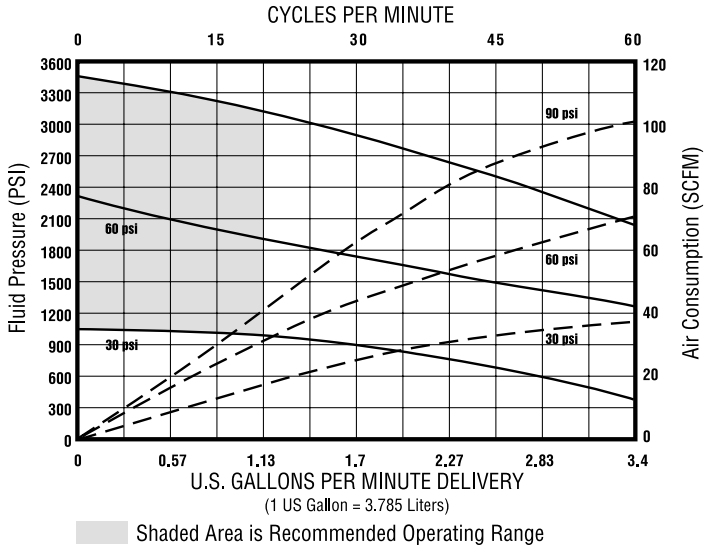
Wall Mount	41-10733
Weight	90 lbs. (40.9 kgs.)
Includes:	
41-12432	Wall mount tray
41-11460	Air control
Cart Mount	41-10734
Weight	141 lbs. (64 kgs.)
Includes:	
41-12465	Cart assembly
41-11460	Air control

Part Numbers

Bare Pump	41-15015
Air Motor	41-12303
Fluid Section	41-11470
Air Motor Repair Kit	41-13128
Fluid Section Soft Seal Kit	
(Balls & Seats Not Included)	
Teflon/UHMW	41-11450
Teflon/Leather	41-11451

See End of Catalog for Optional Accessories.





B6-D Extreme Duty Pump

Pump # 41-15014 Ratio 21:1

Performance

Air inlet Pressure ..... 30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range.. 630-1890 PSI (43.4-130.3 BAR)
Max. Cycles Per Minute 60
Max. Rec'd Cycles Per Minute..... 20
Displacement In3 Per Cycle..... 13.1 (215 cm3)
Cycles Per Gallon (Liter) 17.6 (4.7)
Flow @ 60 Cycles/Minute... 3.4 GPM (12.9 lpm)
Flow @ Rec'd Cycles/Min.... 1.1 GPM (4.3 lpm)
Noise Level @ 60 PSI ..... 93 db (A)

Specifications and Construction

Fluid Section Material..... 303 SS
Ball material ..... Hardened SS
Seat Material..... Tungsten Carbide
Pump Rod Material
Heavy Hard Chrome Plated..... 303 SS
Cylinder Material
Heavy Hard Chrome Plated..... 304 SS
Packing Set..... UHMW Polyethylene/Teflon
Weight..... 47.0 lbs. (21.3 kgs.)
Inlet Size ..... 1″ NPT(f)
Outlet Size ..... 1/2″ NPT(f)
Reference Inlet Air Motor Size ..... 3/4″ NPT(f)
Air Motor Part Sheet Ref 2228
Fluid Section Part Sheet Ref 2750

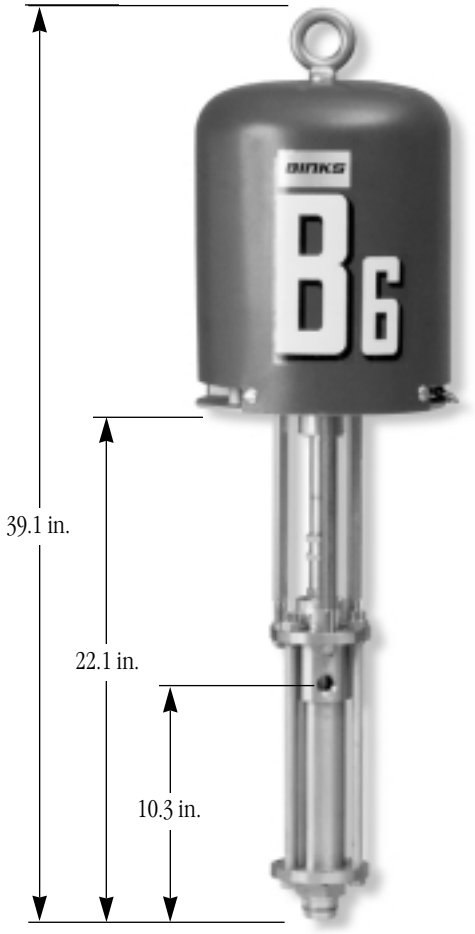
Pump Mount

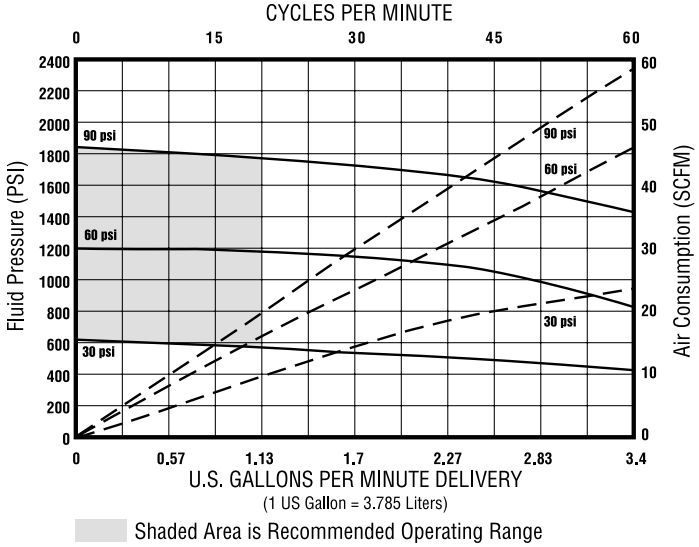
Wall Mount 41-10731
Weight ..... 76 lbs. (34.5 kgs.)
Includes:
41-12432..... Wall mount tray
41-11459..... Air control
Cart Mount..... 41-10732
Weight ..... 137 lbs. (62.6 kgs.)
Includes:
41-12465..... Cart assembly
41-11459..... Air control

Part Numbers

Bare Pump..... 41-15014
Air Motor..... 41-12302
Fluid Section..... 41-11470
Air Motor Repair Kit..... 41-13127
Fluid Section Soft Seal Kit
(Balls & Seats Not Included)
Teflon/UHMW..... 41-11450
Teflon/Leather 41-11451

See End of Catalog for Optional Accessories.



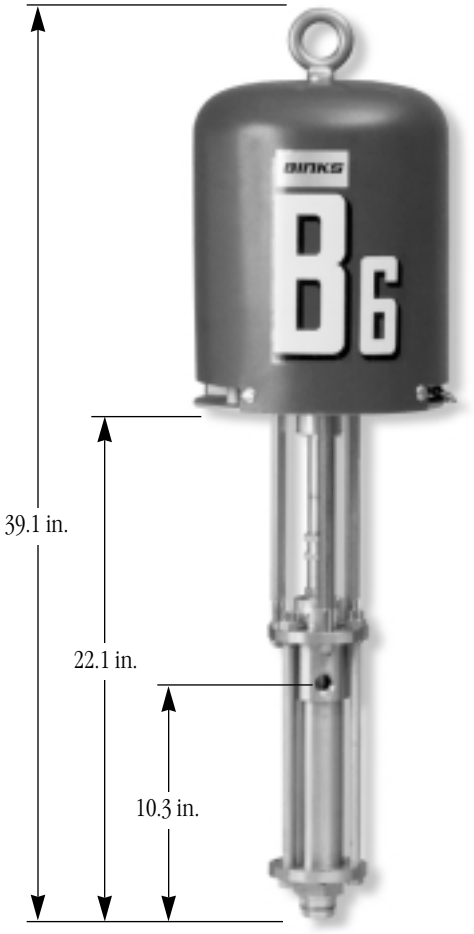


Graph Information

——— @ 60 PSI @ 3.4 GPM ≅ (60 CPM)
- - - - @ 60 PSI @ 3.4 GPM ≅ (46 CFM)

B6-C Extreme Duty Pump

Pump # 41-15013 Ratio 45:1



Performance

Air inlet Pressure	30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range	1350-4050 PSI (93.1-279.2 BAR)
Max. Cycles Per Minute	60
Max. Rec'd Cycles Per Minute	20
Displacement In3 Per Cycle	6.2 (101cm3)
Cycles Per Gallon (Liter)	37.5 (9.9)
Flow @ 60 Cycles/Minute	1.6 GPM (6.1 lpm)
Flow @ Rec'd Cycles/Min	0.5 GPM (2.0 lpm)
Noise Level @ 60 PSI	92 db (A)

Specifications and Construction

Fluid Section Material	303 SS
Ball Material	Hardened SS
Seat Material	Tungsten Carbide
Pump Rod Material Heavy Hard Chrome Plated	303 SS
Cylinder Material Heavy Hard Chrome Plated	304 SS
Packing Set	UHMW Polyethylene/Teflon
Weight	44 lbs. (20 kgs.)
Inlet Size	1″ NPT(f)
Outlet Size	1/2″ NPT(f)
Reference Inlet Air Motor Size	3/4″ NPT(f)
Air Motor Part Sheet Ref	2228
Fluid Section Part Sheet Ref	2751

Pump Mount

Wall Mount	41-15054
Weight	78 lbs. (35.4 kgs.)
Includes:	
41-12432	Wall Mount tray
41-11460	Air control
Cart Mount	41-15043
Weight	130 lbs. (59 kgs.)
Includes:	
41-12465	Cart assembly
41-11459	Air control

Part Numbers

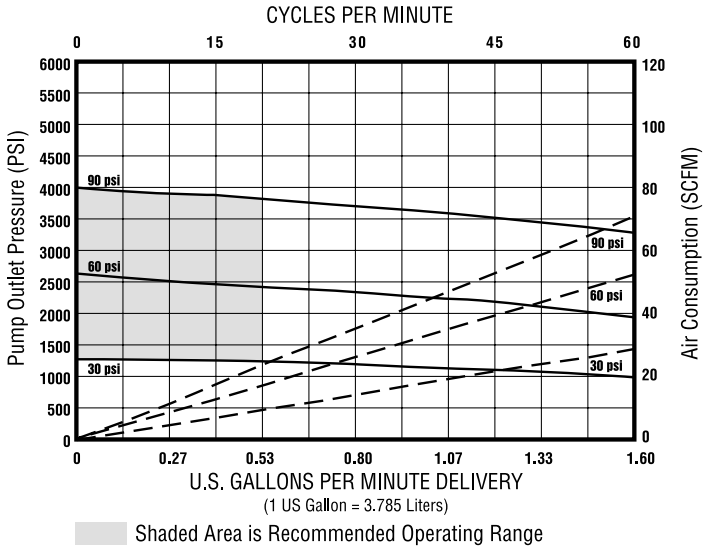
Bare Pump	41-15013
Air Motor	41-12301
Fluid Pump	41-11461
Air Motor Repair Kit	41-13127
Fluid Section Soft Seal Kit (Balls & Seats Not Included)	
Teflon/UHMW	41-11453
Teflon/Leather	41-11454

See End of Catalog for Optional Accessories.

Graph Information

—— @ 60 PSI @ 1.6 GPM ≅ (60 CPM)

- - - - @ 60 PSI @ 1.6 GPM ≅ (52 CFM)



B5-C Extreme Duty Pump

Pump # 41-15012 Ratio 31:1

Performance

Air inlet Pressure ..... 30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range .. 930-2790 PSI (64.1-192.4 BAR)
Max. Cycles Per Minute 60
Max. Rec'd Cycles Per Minute..... 20
Displacement In3 Per Cycle 6.2 (101cm3)
Cycles Per Gallon (Liter) 37.5 (9.9)
Flow @ 60 Cycles/Minute .... 1.6 GPM (6.1lpm)
Flow @ Rec'd Cycles/Min.... 0.5 GPM (2.0 lpm)
Noise Level @ 60 PSI ..... 86 db (A)

Specifications and Construction

Fluid Section Material..... 303 SS
Ball Material ..... Hardened SS
Seat Material..... Tungsten Carbide
Pump Rod Material
Heavy Hard Chrome Plated..... 303 SS
Cylinder Material
Heavy Hard Chrome Plated..... 304 SS
Packing Set..... UHMW Polyethylene/Teflon
Weight..... 41.4 lbs. (18.8 kgs.)
Inlet Size ..... 1″ NPT(f)
Outlet Size..... 1/2″ NPT(f)
Reference Inlet Air Motor Size ..... 3/4″ NPT(f)
Air Motor Part Sheet Ref 2227
Fluid Section Part Sheet Ref 2751

Pump Mount

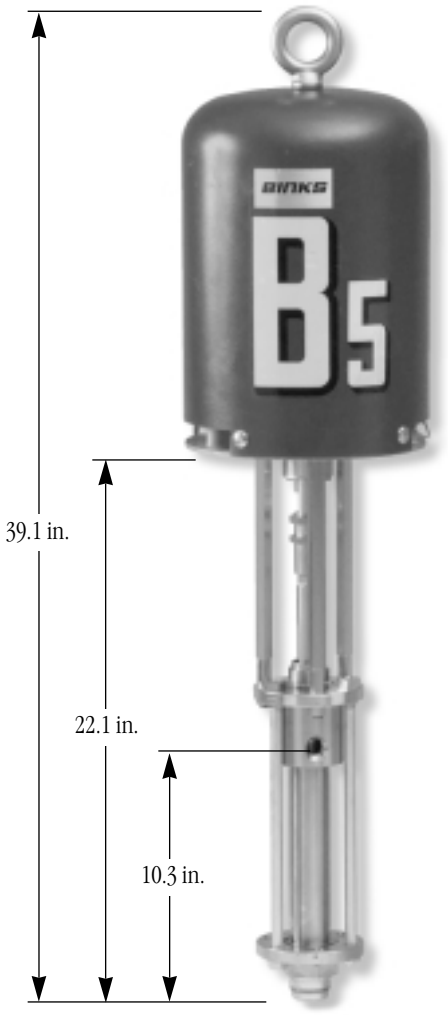
Wall Mount 41-15053
Weight ..... 76 lbs. (34.5 kgs.)
Includes:
41-12432..... Wall Mount tray
41-11459..... Air control

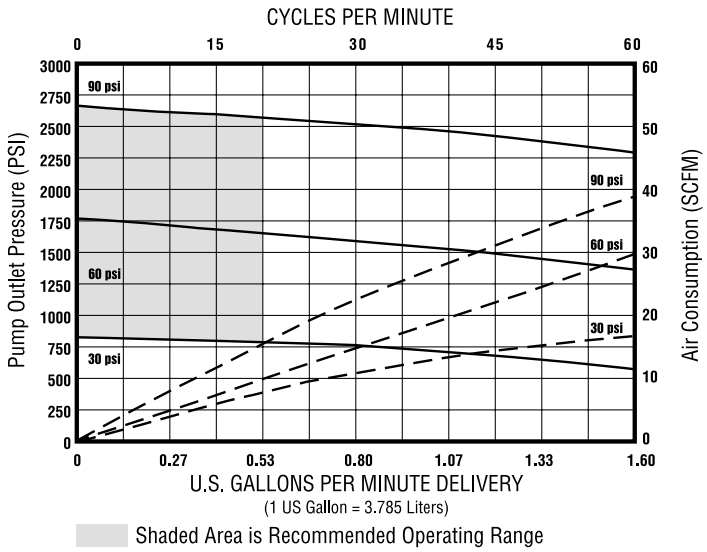
Cart Mount..... 41-15042
Weight ..... 128 lbs. (58.1 kgs.)
Includes:
41-12465..... Cart assembly
41-11459..... Air control

Part Numbers

Bare Pump..... 41-15012
Air Motor..... 41-12301
Fluid Section..... 41-11461
Air Motor Repair Kit..... 41-12482
Fluid Section Soft Seal Kits
(Balls & Seats Not Included)
Teflon/UHMW..... 41-11453
Teflon/Leather 41-11454

See End of Catalog for Optional Accessories.





Graph Information

——— @ 60 PSI @ 1.6 GPM ≅ (60 CPM)
- - - - @ 60 PSI @ 1.6 GPM ≅ (29 CFM)

Circulating Pumps

Low Ice B5-15
Standpipe
Model 41-11448
Ratio 3.3:1

Low Ice B5-15
Wall-Mount
Model 41-15850
Ratio 3.3:1

Low Ice B5-15 Standpipe Performance

Air inlet Pressure ..... 30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range.. 100-300 PSI (6.9-20.7 BAR)
Max. Cycles Per Minute 40
Max. Rec'd Cycles Per Minute..... 20
Displacement In3 Per Cycle ... 57.7 (946.3 cm3)
Cycles Per Gallon (Liter) 4 (1.1)
Flow @ 60 Cycles/Min..... 15 GPM (56.8 lpm)
Flow @ Rec'd Cycles/Min .... 5 GPM (18.9 lpm)
Noise Level @ 60 PSI ..... 100 db (A)
Weight ..... 165 lbs

Low Ice B5-15 Wall-Mount Performance

Air inlet Pressure ..... 30-90 PSI (2.1-6.2 BAR)
Fluid Pressure Range.. 100-300 PSI (6.9-20.7 BAR)
Max. Cycles Per Minute 40
Max. Rec'd Cycles Per Minute..... 20
Displacement In3 Per Cycle .... 57.7(946.3cm3)
Cycles Per Gallon (Liter) 4 (1.1)
Flow @ 60 Cycles/Min..... 15 GPM (56.8 lpm)
Flow @ Rec'd Cycles/Min .... 5 GPM (18.9 lpm)
Noise Level @ 60 PSI ..... 100 db (A)
Weight ..... 150 lbs

Specifications and Construction

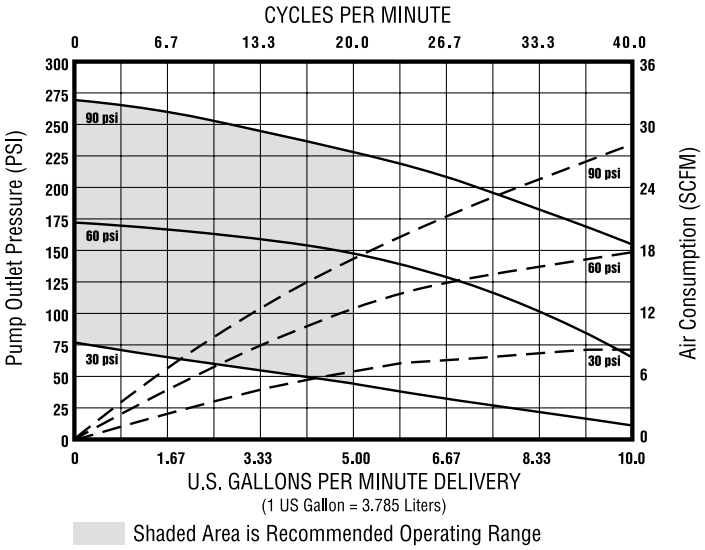
Fluid Section Material..... 303/304 SS
Ball Material ..... Hardened SS
Seat Material..... Tungsten Carbide
Pump Rod Material
Heavy Hard Chrome Plated..... 303 SS
Cylinder Material
Heavy Hard Chrome Plated..... 304 SS
Packing Set
.... Proprietary Filled UHMW Polyethylene U-Cup
Inlet Size ..... 1″ NPT(f)
Outlet Size..... 1″ NPT(f)
Reference Inlet Air Motor Size ..... 3/4″ NPT(f)
Fluid Section Part Sheet Ref 2172

Part Numbers

B5 Low Ice Air Motor..... 10 68 52
15 GPM fluid Section... 41-13400 For Wall Mount
15 GPM fluid Section
..... 41-13450 For Stand Pipe Mount

Available Accessories

B5 Low Ice Air Motor Repair Kit..... 25 04 55
Fluid Section Repair Kit (U-Cup) 41-13466
Wall Bracket 41-12432



Graph Information

——— @ 60 PSI @ 1 GPM ≅ (60 CPM)
- - - - @ 60 PSI @ 1 GPM ≅ (18 CFM)

Extreme Duty Exel Pumps

Pump # 41-17045 Ratio 4.5:1 Performance

Air inlet Pressure ..... 10-125 PSI (.69-8.6 BAR)
Fluid Pressure Range . 45-562 PSI (3.1-38.8 BAR)
Max. Rec'd Cycles PerMinute 60
Cycles Per Gallon (Liter) 8.75 (2.31)
Displacement in 3 PerCycle 26.4
Flow @ 60 Cycles Per Minute..... 6.85 GPM
Noise Level @ 60 PSI ..... 92 db (A)

Specifications and Construction

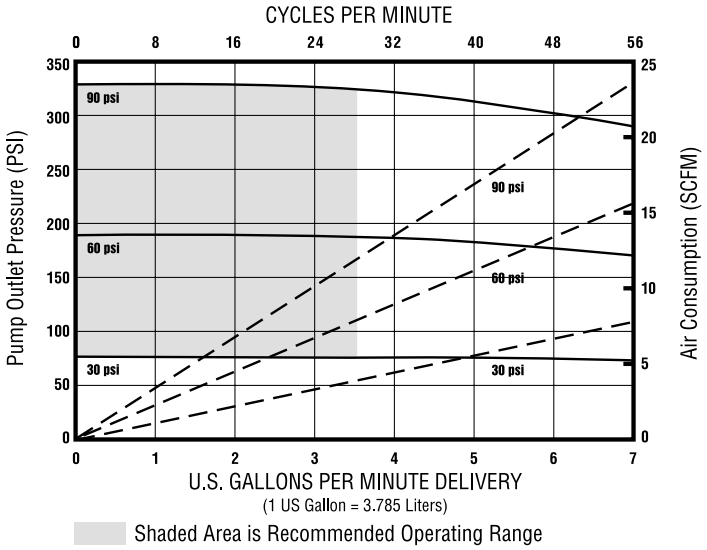
Pump Material..... Stainless Steel
Weight..... 65 lbs. (29.483 kgs.)
Air Motor ..... 71/4"
Inlet Size..... 1" NPS(f)
Outlet Size..... 1" NPT(f)
Reference Inlet Air Motor Size ..... 1/2" NPT(f)

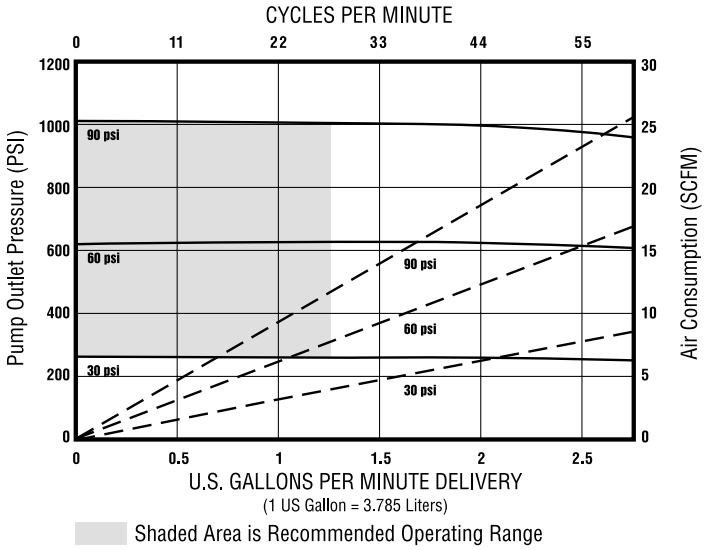
Pump # 41-17120 Ratio 12:1 Performance

Air inlet Pressure ..... 10-125 PSI (.69-8.6 BAR)
Fluid Pressure Range.... 120-1500 PSI (27.6-103.4 BAR)
Max. Rec'd Cycles Per Minute..... 60
Cycles Per Gallon (Liter) 23.35 (6.2)
Displacement in3 Per Cycle..... 9.9
Flow @ 60 Cycles Per Minute..... 2.57 GPM
Noise Level @ 60 PSI ..... 92 db (A)

Specifications and Construction

Pump Material..... Stainless Steel
Weight..... 65 lbs. (29.483 kgs.)
Air Motor ..... 71/4"
Inlet Size..... 1" NPS(f)
Outlet Size..... 1" NPT(f)
Reference Inlet Air Motor Size ..... 1/2" NPT(f)





Binks 98-3011 B8-D (38:1) Pump Outfit

Pump Outfit Includes:

41-15015	B8-D PUMP ASSEMBLY
41-13141	LARGE TRAY KIT
101-1765	FILTER WITH PULSE CHAMBER
41-11460	AIR CONTROL ASSEMBLY
41-10467	SIPHON KIT
71-8705	50′ X 1/4 I.D. H.P. AIRLESS HOSE
71-1206	50′ X 5/16 AIR HOSE
703000000	MACH 3SL AIR ASSIST AIRLESS SPRAY GUN*

** Spray tip not included. User must specify.*

Typical Applications:

The Binks B8-D Pump is used in medium to high pressure systems. The coatings are light to medium viscosity. Can supply air assist Airless and Airless applications. This pump can also be used in a circulating system or a dead end system.

Binks 98-3007 B6-D (21:1) Pump Outfit

Pump Outfit Includes:

41-15014	B6-D PUMP ASSEMBLY
41-13141	LARGE TRAY KIT
101-1765	FILTER WITH PULSE CHAMBER
41-11459	AIR CONTROL ASSEMBLY
41-10467	SIPHON KIT
71-7705	50′ X 1/4 I.D. H.P. AIRLESS HOSE
71-1206	50′ X 5/16 AIR HOSE
703000000	MACH 3SL AIR ASSIST AIRLESS SPRAY GUN*

** Spray tip not included. User must specify.*

Typical Applications:

This pump is used in low to medium to high pressure systems with light to medium viscosity coatings. Can supply air assist Airless and low pressure Airless operations. This pump can also be used in a circulating system or a dead end system.

Optional Pump Accessories

Pump Protectors

For use with all B-Series Pumps. The Binks Pump Protector is an air flow limiting valve which prevents damage to air operated pumps due to excessive speeds caused by empty fluid containers, worn packing and broken siphon or pressure lines. The pump protector automatically will shut the pump off when any of these occur.

41-11150 Pump Protector

41-11260 Pump Protector

MODEL PART NO.	MAX. ADJUSTABLE CFM	PRESSURE RANGE	PART SHEET REF.
41-11150	150	20-125	2257
41-11260	4.5	25-100	2416

Pump Packing Lubricant

Model 42-175

For all dry-mounted pumps. Add to pump packing take-up nut to improve sealing, extend packing life, and protect exposed length of pump shaft. Bottle capacity: 1 quart.

Air Controls

MODEL PART NO.	DESCRIPTION STYLE	CFM REQUIREMENT
41-11459	Small	Use with 6 in. and smaller air motors
41-11460	Large	Use with 8 & 10 in. air motors

41-11459 Small Air Control

41-11460 Large Air Control

Heaters

MODEL PART NO.	HEATER STYLE	VAC	FOR HEATER KIT MODEL	PART SHEET REFERENCE	MATERIAL	WETTED PARTS	PRESSURES (PSI)
42-6520	Single	220	42-5102	2597	Aluminum	SS	3000
42-6510	Single	115	42-5124	2597	Aluminum	SS	3000
42-6524	Double	220	42-5125	2597	Aluminum	SS	3000

For replacement in heater kits.
2250 watts (4500 watts total with double 220 VAC Model).
19 amps at 115 VAC.
10 amps at 220 VAC (single only).
20 amps with (double) 220 VAC Model.
Factory mutual approved.
Meets NEC Class 1 Standards.

42-6520 Heater

Heater Kits

Heater kits include heater, wall mounting bracket and hardware.

MODEL PART NO.	HEATER STYLE	VAC
42-5102	SINGLE	220
42-5124	SINGLE	115
42-5125	DOUBLE	220

Drum Covers and Agitators

Drum Covers

5 Gal. Pail Cover

55 Gal. Drum Cover

Drum Covers

PART NO.	CONTAINER SIZE (GAL.)	DESCRIPTION	SHIPPING WT. (LBS.)
41-2182*	5	Carbon Steel Pail Cover for Comet 3C, & 4B	5
41-2414**	55	Carbon Steel Drum Cover for Comet 3C & 4B, Hi-Vol	23
41-3205	5	Carbon Steel Pail Cover for 5 Gal. Agitator & Siphon Tube Only	6
31-124	55	Carbon Steel Drum Cover for 55 Gal. Agitator & Siphon Tube Only	24

** With Mounting holes for: Pump, Air Control, Agitator, and Filter.*
*** For use with Hi-Vol. 41-11499 adapter required*

Direct Drive Agitator w/Cover
Part 31-129

Direct Drive Agitator w/Cover
Part 31-133

Gear Reduced Drive Agitator w/Cover
Part 31-131

41-9000

Elevator

Part # 41-9000

For lifting 55 gallon cover-mounted pump units.

Shipping Wt. ..... 68 lbs.
Part Sheet Ref 1392

Direct Drive Agitator

Direct Drive Agitator (only) ... Part # 41-3304
Direct Drive Agitator w/Cover .. Part # 31-129
Includes: 31-124 Cover & 41-3304 Agitator
Container Size ..... 55 Gallon

Motor Specifications
Air Motor Model ..... Direct
H.P 1/4
CFM ..... 4 – 8

Shaft Specifications
Material ..... Stainless Steel
Mount ..... Flange
Diameter in. (mm) ..... 5/8″ (15.88 mm)
Max. Speed ..... 1000 RPM

Propeller Specifications
Number of Propellers 2
Diameter in. (mm) ..... 5 1/8″ (130 mm)
Material ..... Stainless Steel
Cover Material ..... Carbon Steel
Part Sheet Ref 1390

Direct Drive Agitator

Direct Drive Agitator (only) ... Part # 41-3312
Direct Drive Agitator w/Cover .. Part # 31-133
Includes: 41-3205 Cover & 41-3312 Agitator
Container Size ..... 5 Gallon

Motor Specifications
Air Motor Model ..... Direct
H.P. 1/4
CFM ..... 4 – 8

Shaft Specifications
Material ..... Stainless Steel
Mount ..... Flange
Diameter in. (mm) ..... 3/8″ (9.53 mm)
Max. Speed ..... 1000 RPM

Propeller Specifications
Number of Propellers 1
Diameter in. (mm) ..... 3″ (76 mm)
Material ..... Stainless Steel
Cover Material ..... Carbon Steel
Part Sheet Ref 1474

Gear Reduced Drive Agitator

Agitator (only) ..... Part # 41-3311
Agitator w/Cover ..... Part # 31-131
Includes: 31-124 Cover & 41-3311 Agitator
Container Size ..... 55 Gallon

Motor Specifications
Air Motor Model ..... Gear
Gear Ratio ..... 20:1 Reduction
H.P 1/4
CFM ..... 4 – 8

Shaft Specifications
Material ..... Stainless Steel
Mount ..... Flange
Diameter in. (mm) ..... 7/8″ (22.23 mm)
Speed Range ..... 15-90 RPM

Propeller Specifications
Number of Propellers 2
Diameter in. (mm) ..... 14 1/2″ (368 mm)
Material ..... Stainless Steel
Cover Material ..... Carbon Steel
Part Sheet Ref 1657

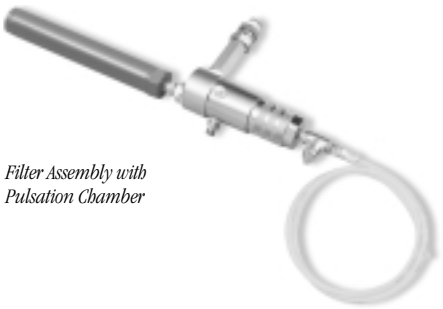
Fluid Filters

Filter Assembly

Filter Assembly

FILTER ASSEMBLY PART NO.	INLET	OUTLET	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL	WORKING PRESS. (PSI)	NOTE:
41-12650	3/4″ NPT(f)	(3) 3/8″ NPT(f)	50	.012	Carbon Steel	6000	Not for pail
103-1585	3/4″ NPT(f)	(1) 3/4″ NPT(f)	50	.012	Stainless Steel	6000	or cover
41-12639*	3/4″ NPT(f)	(3) 3/8″ NPT(f)	50	.012	Carbon Steel	6000	

** For pail and 55 gallon cover mounts only. Not available with pulse chamber.*



Filter Assembly with Pulsation Chamber

Filter Assembly with Pulsation Chamber (Not for pail or cover mount)

FILTER ASSEMBLY PART NO.	INLET	OUTLET	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL	WORKING PRESS. (PSI)
101-1765	3/4″ NPT(f)	(3) 3/8″ NPT(f)	50	.012	Carbon Steel	6000
41-11425	3/4″ NPT(f)	(1) 3/4″ NPT(f)	50	.012	Stainless Steel	6000

Replacement Filter Elements

For In-line Filters

MODEL PART NO.	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL
54-2220	100	.005	SS
54-2211	50	.012	SS

Replacement Filter Screens

For 41-12639, 41-12650, and 103-1585 Filter Assemblies

MODEL PART NO.	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL
107-1527	20	.034	SS
41-2633	30	.020	SS
41-2630	40	.015	SS
41-2629	50	.012	SS
41-2628	60	.009	SS
41-2627	100	.006	SS
107-1497	200	.003	SS

For 103-1241 Filter

MODEL PART NO.	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL
83-1256	100	.006	SS
83-2089	40	.015	SS

In-line Filter

MODEL PART NO.	MATERIAL	SCREEN SIZE (INCHES)	PART SHEET REF.	INLET SIZE	PRESSURE (PSI)
41-1708	Brass	.012	1874	1/4″ NPS(f)	3000
41-1415	SS	.012	1874	1/4″ NPT(f)	3000

Equivalent Screen Size

SCREEN SIZE (INCHES)	.034	.020	.015	.012	.009	.006	.003
SCREEN SIZE (MESH)	20	30	40	50	60	100	200

Fluid Regulators

Downstream Medium Flow Fluid Pressure Regulator

MODEL PART NO.	WETTED PARTS	REGULATED PRESSURE RANGE (PSI)	WORKING PRESSURE W/GAUGE	MAX. INLET PRESSURE (PSI)	INLET & OUTLET	MAX. CAP. GPM	PART SHEET REFERENCE
84-420	SS	300-2000	3000	3500	1/4″ NPT(f)	1	1908
84-520	SS	100-900	1000	3500	1/4″ NPT(f)	1	1908

Downstream Medium Flow Regulator 84-420 Fluid Pressure Regulator (Shown With 101-3069 Gauge - not included)

Back Pressure Regulators

MODEL PART NO.	BODY MATERIAL	REGULATED PRESSURE RANGE (PSI)	WORKING PRESSURE W/GAUGE	MAX. INLET PRESSURE (PSI)	INLET & OUTLET	MAX. CAP. GPM	PART SHEET REFERENCE
84-421	SS	100-2000	3000	3500	1/4″ NPT(f)	1	1909
84-521	SS	100-900	1000	3500	1/4″ NPT(f)	1	1909
84-404	SS	10-140	150	150	3/4″ NPT(f)	11	1889
84-601	SS	0-200	200	200	1/2″ NPT(f)	1	2629

Gauges for Pressure Regulators

MODEL PART NO.	MATERIAL	REGULATED PRESSURE RANGE (PSI)	DESCRIPTION
101-3069*	SS	0-3000	For use with 84-420 & 84-421 only
84-491*	SS	0-1000	For use with 84-520 & 84-521 only
84-246*	SS	0-200	For use with 84-404 only
83-2744**	SS	0-200	For use with 84-601 only

** Includes Fluid Dampener.*
*** Included With 84-601 Back Pressure Regulator.*

84-404 Back Pressure Regulator

Fluid Regulators

84-409 Fluid Pressure Regulator

Fluid Pressure Regulators with Dial Gauge and Standpipe

MODEL PART NO.	MATERIAL (BODY)/ FITTINGS/GAUGE & STANDPIPE	INLET/OUTLET PORTS	MAXIMUM INLET PRESS. (PSI)	REGULATION RANGE (PSI)	MAX. REC'D FLOW (OZ./MIN.)	PART SHEET REFERENCE
84-346	Zinc/Br./Br.	3/8″ NPT(m)	100	1-12	12	1758
84-410	SS/SS./SS	3/8″ NPT(m)	100	1-12	12	1921
84-320	SS/SS/SS	3/8″ NPT(m)	200	5-55	128	1486
84-345	Zinc/Br./Br.	3/8″ NPT(m)	200	5-55	128	1632
84-409	SS/SS/SS	3/8″ NPT(m)	200	5-100	128	1915
84-412	Zinc/Br./Br.	3/8″ NPT(m)	200	5-100	128	1632
84-414	SS/SS./SS	3/8″ NPT(m)	200	5-100	128	2128

84-525 Fluid Pressure Regulator

Spray Gun Mounted Fluid Pressure Regulators and Stems

MODEL PART NO.	STYLE	CONNECTION	PART SHEET REF.	MATERIAL WETTED PARTS	MAX INLET PRESSURE (PSI)	WEIGHT (OX.)	REGULATED PRESSURE RANGE (PSI)
84-525	Regulator w/ Swivel Nut	3/8″ NPS(f) Swivel x (2) 1/4″ NPS (m)	2594	SS	250	6.7	0-50
72-364	Bayonet Type Quick-Detachable Stem	3/8″ NPS(f) Swivel Nut	1269	SS	3000	6	N/A
72-887	Ball Lock Type Quick-Detachable Stem	3/8″ NPS(f) Swivel Nut	1759	SS	3000	6	N/A

Siphon & Pump Outlet Hoses

Siphon Hoses

PART NO.	DESCRIPTION	MESH	CONSTRUCTION FITTINGS	5 GALLON	55 GALLON
41-2294	3/4″ NPT siphon hose	30	Carbon Steel	X	
41-2296	1″ NPT siphon hose	30	Carbon Steel	X	
41-2616	3/4″ NPT siphon hose	30	Carbon Steel		X
41-10467	1″ NPT siphon hose	30	Carbon Steel		X
44-105	1″ NPT siphon hose	16	Stainless Steel	X	
44-155	1″ NPT siphon hose	16	Stainless Steel		X
44-350	3/4″ NPT siphon hose	16	Stainless Steel	X	
44-355	3/4″ NPT siphon hose	16	Stainless Steel		X

Strainers

(for all wet fluid section foot valves)

PART NO.	MESH	MATERIAL
41-2468	8	Stainless Steel
41-2469	100	Stainless Steel
41-2288	50	Stainless Steel

Strainers

(for siphon kits)

PART NO.	CONNECTION	MESH	MATERIAL
41-2662	3/4″ NPT	30	Stainless Steel
41-2663	1″ NPT	30	Stainless Steel
41-10094	3/4″ NPT	16	Stainless Steel
41-10590	1″ NPT	16	Stainless Steel

41-2228

Bunghole Adapters

PART NO.	DESCRIPTION	MATERIAL
41-2701	Bunghole adapter for 1″ NPT siphon tube size	Stainless Steel
41-2228	Bunghole adapter for 3/4″ NPT siphon tube size	Stainless Steel
41-11420	Bunghole adapter for 1/2″ NPT siphon tube size	Stainless Steel

How To Select an Airless Pump

Choose quality-built Binks Airless Pumps for a unit that is sure to meet your particular spraying requirements. The type of material you are spraying, the size of your job, and the capacity of compressed air available in your plant or at your job site will govern the selection of an airless pump that is best suited to your needs. In selecting your airless pump unit, answer the following questions and proceed as described below.

1. What type of material are you going to spray?

Low viscosity materials such as stains and lacquers can be sprayed with small orifice spray tips (.007 to .018).

Heavier viscosity materials require larger orifice spray tips and higher pump ratios. Refer to the Airless Spray Tip Flow Chart below and select the spray tip range which is best suited for your material.

2. At what flow rate of material application are you going to spray?

Note: 1 GPM = 128 oz./min.

1 fl. oz. = 29.57 cc

Refer to the Airless Spray Tip Flow Chart below and determine the fluid pressure and the quantity of spray tips of a particular size that are required to meet your flow rate.

Next, refer to the Pump Capacity Chart below and select the pump which meets your pressure flow rate requirements.

3. What is the available air volume and pressure capacity in your plant or at your job site?

(Allowance should be made for air operated accessories such as agitators, etc.)

The air pressure requirement for your rate of material flow is determined by relating spray tip fluid pressure to the pump ratio.

The air volume requirement of the pump is given by the Airless Spray Tip Flow Chart below. The chart data is given "per spray tip" and must be adjusted for the quantity of spray tips determined in 2. above.

Airless Spray Tip – Fluid Flow Rate vs. Air Volume Requirement

FLOW RATE OF FLUID MATERIAL THROUGH SPRAY TIP, OZ./MIN. AIR VOLUME REQUIREMENT OF PUMP PER SPRAY TIP, CFM. (MAXIMUM)

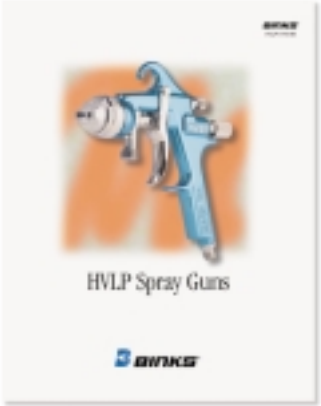
ORIFICE SIZE (INCHES)	FLUID MATERIAL PRESSURE AT SPRAY TIP									
	500 PSI		1000 PSI		1500 PSI		2000 PSI		2500 PSI	
	OZ./MIN.	CFM	OZ./MIN.	CFM	OZ./MIN.	CFM	OZ./MIN.	CFM	OZ./MIN.	CFM
	VERY THIN – WASH PRIMERS, DYES, STAINS, SOLVENTS, WATER, INKS									
.007	4.0	0.5	6.0	0.7	6.0	0.8	6.7	1.4	7.0	1.7
.009	4.5	0.6	5.7	0.8	6.8	0.9	8.4	1.8	10.0	2.7
.011	6.5	0.8	8.5	1.1	12.0	2.0	14.0	2.9	15.0	3.8
	THIN – SEALERS, LACQUERS, PRIMERS, INK, ZINC CHROMATE, ACRYLICS, LUBRICANTS									
.013	12.0	0.8	15.0	1.1	19.0	3.0	22.0	4.5	26.0	6.4
.015	13.0	1.1	19.0	2.5	24.0	4.0	27.0	5.7	32.0	8.0
.016	14.0	1.3	22.0	2.9	29.0	4.8	34.0	7.0	39.0	9.7
	MEDIUM – LACQUERS, SYNTHETIC ENAMELS, VARNISHES, SHELLACS, FILLERS									
.018	12.0	1.0	19.0	2.5	26.0	4.2	35.0	7.4	44.0	10.0
.021	14.0	1.2	24.0	3.5	32.0	5.3	46.0	9.5	56.0	13.0
	HEAVY – HOUSE PAINTS, WALL PAINTS, BLOCK SEALERS, BLOCK PAINTS, MILL WHITES, VINYLS									
.026			21.0	2.7	34.0	5.7	51.0	11.0	65.0	16.0
.031			26.0	3.3	48.0	7.4	65.0	14.0	85.0	21.0
.036			32.0	4.2	68.0	11.0	95.0	20.0	126.0	31.0
	VERY HEAVY – UNAGGREGATED BLOCK FILLERS, TEXTURE COATINGS, FIRE RETARDANTS, BITUMASTICS									
.043			31.0	4.0	61.0	10.0	105.0	22.0	143.0	36.0
.072			72.0	9.5	112.0	18.0	151.0	32.0	190.0	47.0

Note: *Above data are furnished as a guide only. Although based on laboratory tests and use experience, they cannot account for various on-site conditions, all fluid characteristics, equipment variables, or wear.*

Notes

Product Literature For Easy Reference

To learn more about our products, contact your Binks Finishing Specialist for complete product literature, or contact us directly at 1-800-992-4657. For online product and application information, please visit our web site – www.binks.com.



Binks HVLP Spray Guns
HVLP1-R

Binks Conventional Spray Guns
A54-19R-15

Binks Gemini Finishing Pumps & Equipment
A135-3

Binks Comet Finishing Pumps & Equipment
A81-84

Binks PT Series Pressure Tanks
A83-10

AirOne Air Control Equipment
A86-12

Binks Pressure Tanks
A83-9

Vecter Spray Finishing Outfit
A98-137

Binks Gun Washer 2000
A40-16-R3

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