

BINKS®
COMET PUMPS
A41-84R-1 11/01



Comet Finishing Pumps/ Fluid Handling 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.



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 air 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.

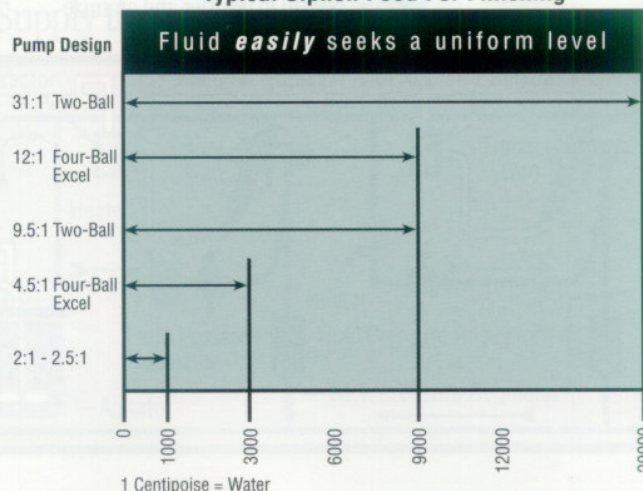
Pump Location

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 18 for proper filter selection).

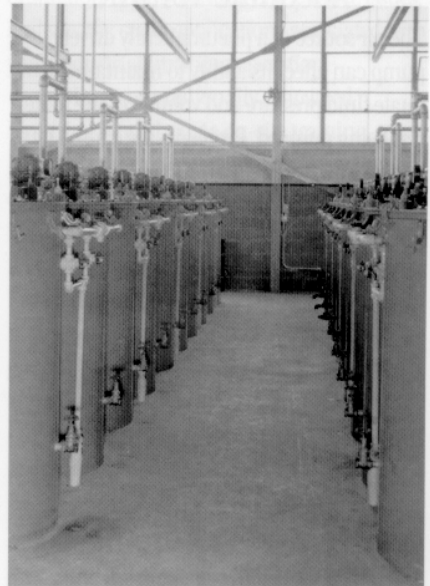
Stability refers to a material's ability to hold its solids in suspension. High solid coatings can settle and separate. Use an agitator or recirculate the fluid through the system and back to the original container to prevent this settling. A good rule of thumb is to "turn" a 55 gallon drum one time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

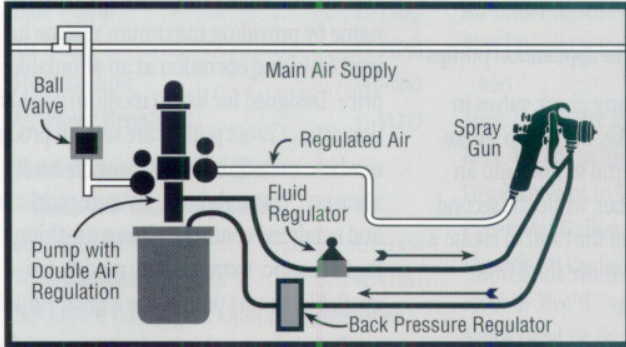
Stainless Steel Pumps offer protection from corrosion when pumping today's preferred waterborne coatings. In addition, they offer the greatest future versatility for new coatings formulated due to regulation changes or enhanced production requirements. These pumps are available in regular and extreme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



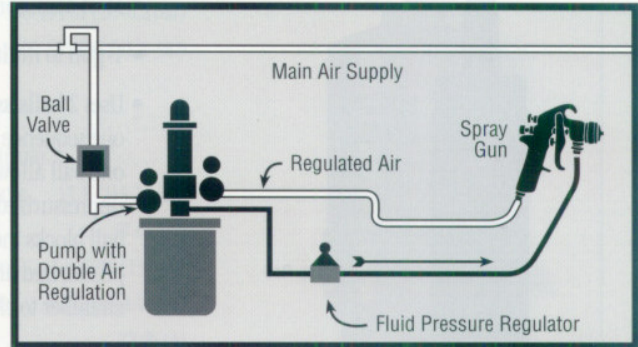
Binks offers a complete range of pumps for all types of applications – from basic fluid transfer needs to large pump house installations like the one shown above.

Pump Basics for Smooth Operation

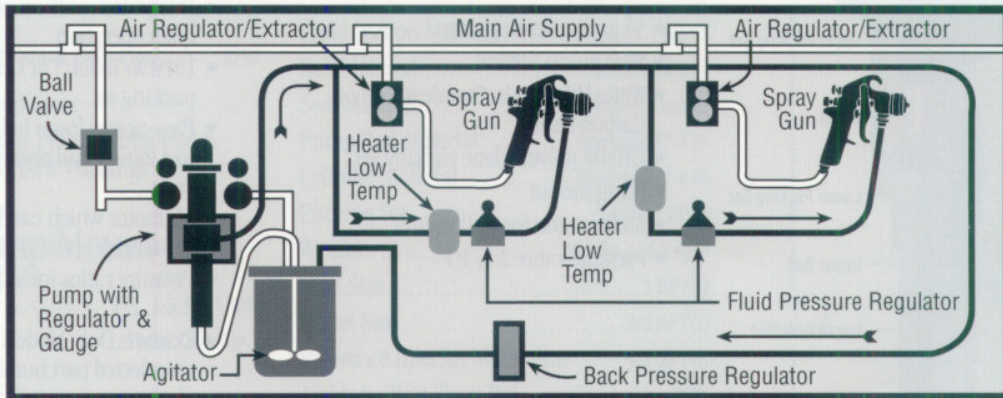
Double Air Regulation & Circulation Supply to Spray Gun



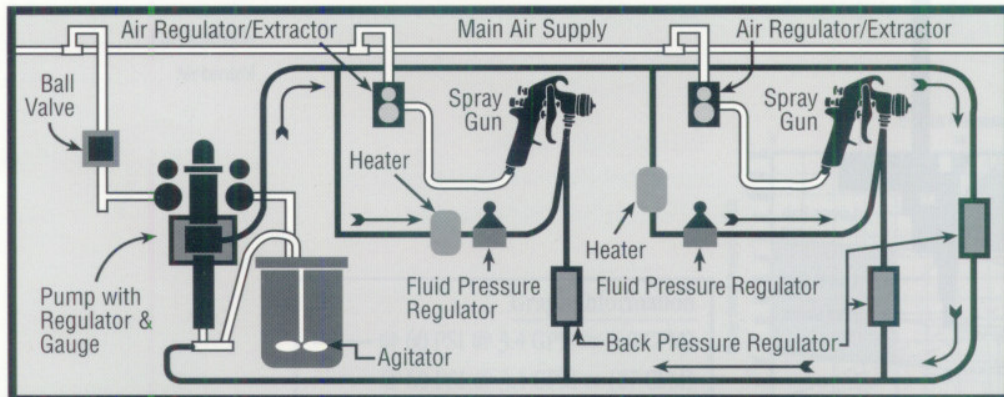
Double Air Regulation Dead End Supply to Spray Gun



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



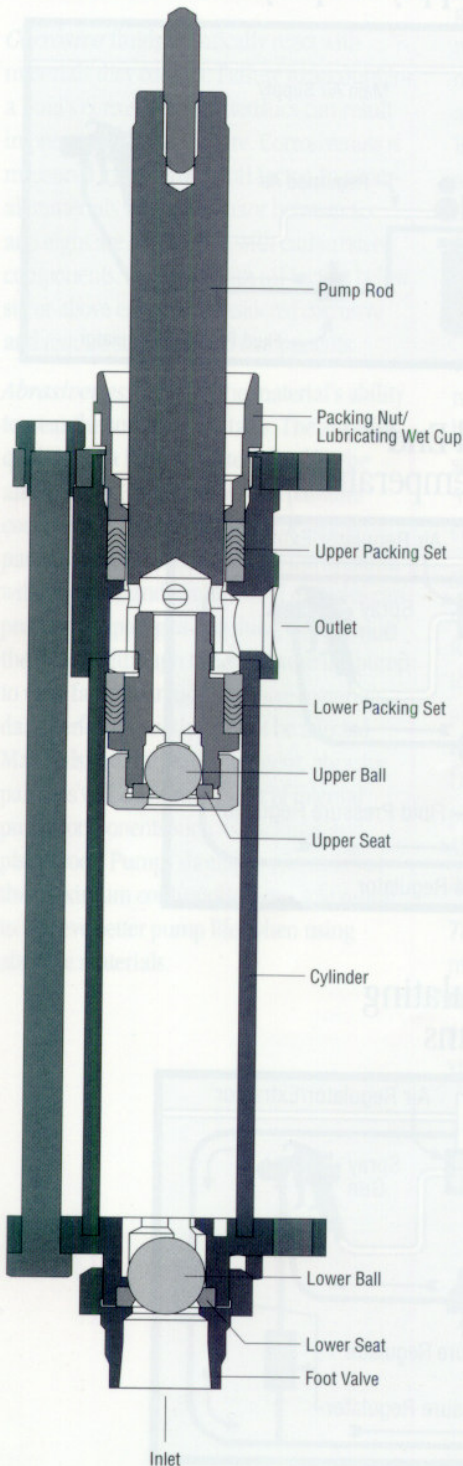
Basic Circulating Loop with Circulating Supply through the Spray Guns



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.

“Pogo” Pump

“Pogo” – Binks’ original drum transfer pump.

- 55 gallon drum pump
- Stub pump version
- Wetted Materials: Stainless steel or Carbon steel
- UHMW polyethylene packing set
- Bung mount
- Stub version for wall mount
- Pressure ratio: 2:1, 1:1

Comet Series 2-Ball

Our Comet Series pumps live up to their name by providing maximum uptime in your finishing operation at an affordable price. Designed for low to medium production rates, Comet pumps are used in processes where materials are corrosive, but not abrasive... waterbornes, UV-cure, acid-cure, and catalyzed coatings, almost anything that’s caustic. Extreme duty models are available. Comet pumps are a great value!

- All-stainless steel wetted components for waterborne compatibility
- Tungsten-carbide reversible seats provide superior abrasion resistance and service life
- Integrated mufflers on air motors for quiet operation
- UHMW/Teflon® or Leather/Teflon® packing set
- Easy-access lower ball valve check. Just loosen and remove the foot valve body.
- Air motor which can be remotely exhausted
- Pressure ratios include 31:1, 12:1, 9.5:1, 2.5:1, 2:1
- Extreme Duty Models are also available on selected part numbers with hard chrome wear parts.

Comet 4-D Pump

Pump # 41-11485 Ratio 9.5:1

Part Numbers

Bare Pump.....	41-11485
Air Motor.....	41-11044
Fluid Section.....	41-4243
Air Motor Repair Kit.....	41-11277

Fluid Section Soft Seal Kits

(Balls & Seats Not Included)

Teflon/UHMW.....	41-11450
Teflon/Leather.....	41-11451

See End of Catalog for Optional Accessories.

Comet 4D Also available as Extreme Duty

Fluid Section.....	41-11470
Bare Pump.....	41-11488
Wall Mount.....	41-11489
Cart Mount.....	41-11490
Fluid Section Part Sheet Ref.....	2750

Extreme Duty Includes:

Heavy Hard Chrome Plated Pump Rod & Cylinder Teflon/UHMW Packings

Pump Mount

Wall Mount.....	41-11486
Weight.....	59 lbs. (26.8 kgs.)

Includes:

41-10705.....	Wall mount tray
41-11459.....	Air control
Cart Mount.....	41-11487
Weight.....	75 lbs. (34.1 kgs.)

Includes:

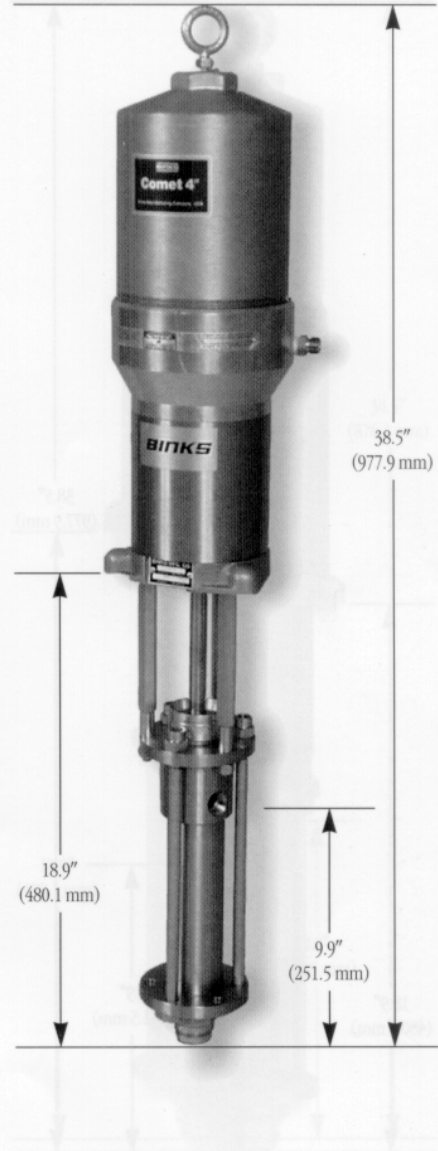
41-2200.....	Cart assembly
41-11459.....	Air control

Performance

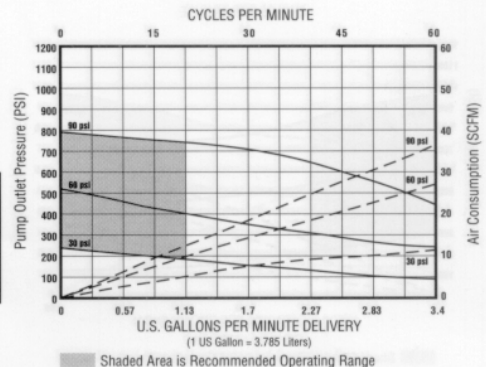
Air inlet Pressure.....	30-90 PSI (2.1-6.2 bar)
Fluid Pressure Range.....	600-855 PSI (41.4-58.9 bar)
Max. Cycles Per Minute.....	60
Max. Rec'd Cycles Per Minute.....	20
Displacement In ³ Per Cycle.....	13.1 (215.7 cm ³)
Cycles Per Gallon (Liter).....	17.6 (4.7)
Flow @ 60 Cycles/Minute.....	3.4 GPM (13 lpm)
Flow @ Rec'd Cycles/Min.....	1.1 GPM (4.4 lpm)
Noise Level @ 60 PSI.....	82 db (A)

Specifications and Construction

Fluid Section Material.....	303 SS
Ball Material.....	Hardened SS
Seat Material.....	Tungsten Carbide
Pump Rod Material.....	Hardened 17-4 SS
Cylinder Material.....	Hardened 17-4 SS
Packing Set.....	Leather/Teflon
Weight.....	36.0 lbs. (16.3 kgs.)
Inlet Size.....	1 NPT(f)
Outlet Size.....	1/2 NPT(f)
Reference Inlet Air Motor Size.....	3/8 NPT(f)
Air Motor Part Sheet Ref.....	2336
Fluid Section Part Sheet Ref.....	1970

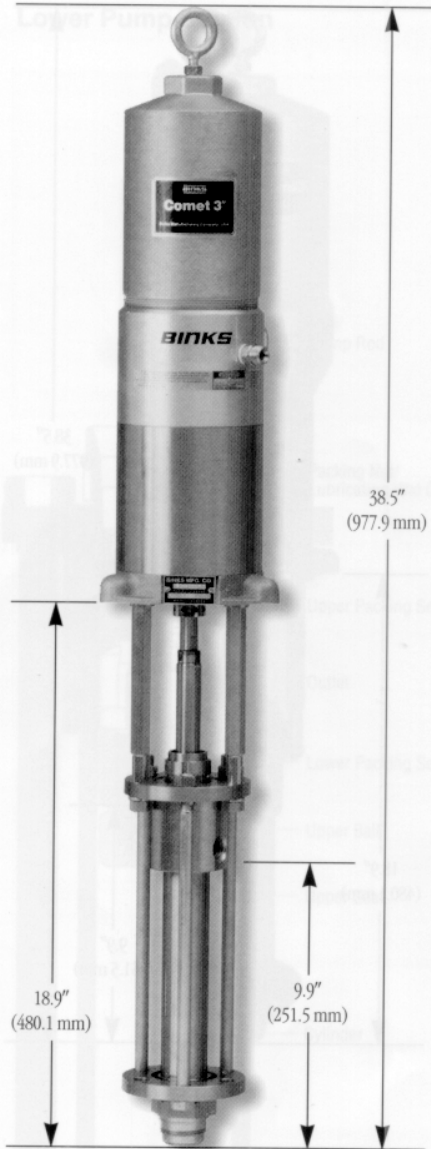


Graph Information	
—	@ 60 PSI @ 3.4 GPM ≈ (60 CPM)
- - -	@ 60 PSI @ 3.4 GPM ≈ (27 CFM)



Comet 3-C Pump

Pump # 41-11384 Ratio 12:1



Performance

Air inlet Pressure 30-90 PSI (2.1-6.2 bar)
 Fluid Pressure
 Range 360-1080 PSI (24.8-74.5 bar)
 Max. Cycles Per Minute 60
 Max. Rec'd Cycles Per Minute 20
 Displacement In3 Per Cycle 6.2 (101 cm3)
 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 82 db (A)

Specifications and Construction

Fluid Section Material 303 SS
 Ball Material Hardened SS
 Seat Material Tungsten Carbide
 Pump Rod Material Hardened 17-4 SS
 Cylinder Material Hardened 17-4 SS
 Packing Set Leather/Teflon
 Weight 29.6 lbs. (13.4 kgs.)
 Inlet Size 1 NPT(f)
 Outlet Size 1/2 NPT(f)
 Reference Inlet Air Motor Size 3/8 NPT(f)
 Air Motor Part Sheet Ref 2319
 Fluid Section Part Sheet Ref 1969 R4

Comet 3C Also available as Extreme Duty
 Fluid Section 41-11461
 Bare Pump 41-11482
 Wall Mount 41-11483
 Cart Mount 41-11484
 Fluid Section Part Sheet Ref 2751

Extreme Duty Includes:
 Heavy Hard Chrome Plated Pump Rod &
 Cylinder Teflon/UHMW Packings

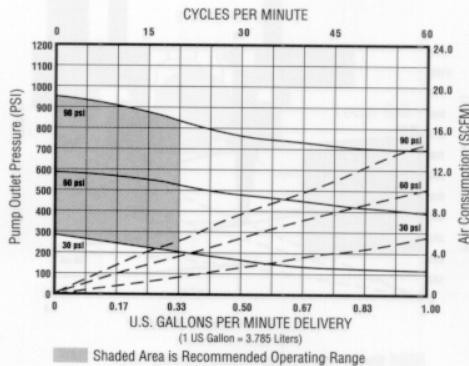
Part Numbers

Bare Pump 41-11384
 Air Motor 41-11043
 Fluid Section 41-4242
 Air Motor Repair Kit 41-11276

Fluid Section Soft Seal Kits
 (Balls & Seats Not Included)
 Teflon/UHMW 41-11453
 Teflon/Leather 41-11454
 55 Gal. Cover Kit 41-11480
 Includes:
 55 Gal. Filter Assembly
 Gal. Air Control
 Inlet Siphon Kit
 55 Gal. Cover
 See End of Catalog for Optional Accessories.

Pump Mount

Wall Mount 41-4318
 Weight 50 lbs. (22.7 kgs.)
 Includes:
 41-10705 Wall mount tray
 41-11459 Air control
 Cart Mount 41-4319
 Weight 66 lbs. (30 kgs.)
 Includes:
 41-2208 Cart assembly
 41-11459 Air control



Graph Information	
—	@ 60 PSI @ 1 GPM \cong (60 CPM)
- - -	@ 60 PSI @ 1 GPM \cong (10 CFM)

Comet 3-C Pail Mount Pump

Pump # 41-11382 Ratio 12:1

Part Numbers

Bare Pump	41-11382
Air Motor	41-11293
Fluid Section	41-4242
Air Motor Repair Kit	41-11276

Fluid Section Soft Seal Kits

(Balls & Seats Not Included)

Teflon/UHMW	41-11453
Teflon/Leather	41-11454

See End of Catalog for Optional Accessories.

Comet 3C Also available as Extreme Duty

Fluid Section	41-11461
Bare Pump	41-11479
5 Gal. Mount Pail Assembly	41-11478
Fluid Section Part Sheet Ref	2751

Extreme Duty Includes:

Heavy Hard Chrome Plated Pump Rod & Cylinder Teflon/UHMW Packings

Pump Mount

5 Gal Pail Mount	41-4316
Weight	49.5 lbs. (22.5 kgs.)

Includes:

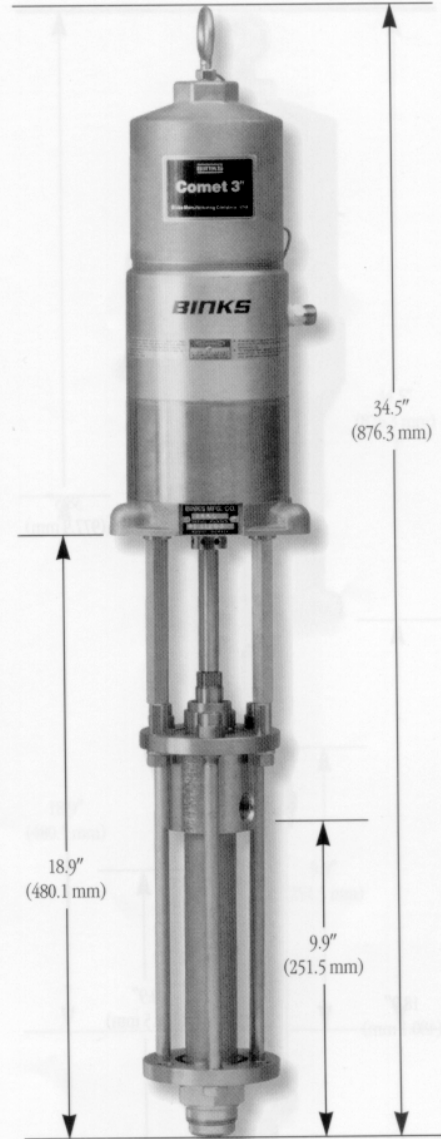
41-11459	Air control
41-12639	CS Filter
41-2288	SS 50 mesh strainer
41-662	CS 5 Gal pail
41-2182	5 Gal CS cover

Performance

Air inlet Pressure	30-90 PSI (2.1-6.2 bar)
Fluid Pressure Range	360-1080 PSI (24.8-74.5 bar)
Max. Cycles Per Minute	60
Max. Rec'd Cycles Per Minute	20
Displacement In ³ Per Cycle	3.9 (63.1 cm ³)
Cycles Per Gallon (Liter)	60 (15.9)
Flow @ 60 Cycles/Minute	1 GPM (3.8 lpm)
Flow @ Rec'd Cycles/Min.	0.3 GPM (1.3 lpm)
Noise Level @ 60 PSI	82 db (A)

Specifications and Construction

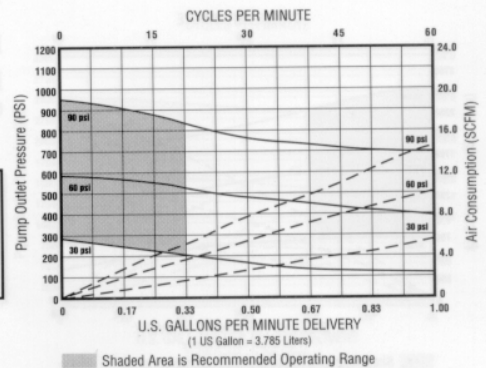
Fluid Section Material	303 SS
Ball Material	Hardened SS
Seat Material	Tungsten Carbide
Pump Rod Material	Hardened 17-4 SS
Cylinder Material	Hardened 17-4 SS
Packing Set	Leather/Teflon
Weight	28.0 lbs. (12.7 kgs.)
Inlet Size	1 NPT(f)
Outlet Size	1/2 NPT(f)
Reference Inlet Air Motor Size	3/8 NPT(f)
Air Motor Part Sheet Ref	2392
Fluid Section Part Sheet Ref	1969 R4



Graph Information

— @ 60 PSI @ 1 GPM \cong (60 CPM)

- - - @ 60 PSI @ 1 GPM \cong (10 SCFM)



Comet 4-B Pump

Pump # 103-1399 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	3.9 (63.1 cm ³)
Cycles Per Gallon (Liter)	60 (15.9)
Flow @ 60 Cycles/Minute	1 GPM (3.8 lpm)
Flow @ Rec'd Cycles/Min	0.3 GPM (1.3 lpm)
Noise Level @ 60 PSI	82 db (A)

Specifications and Construction

Fluid Section Material	303 SS
Ball Material	Hardened SS
Seat Material	Tungsten Carbide
Pump Rod Material	Hardened 17-4 SS
Cylinder Material	Hardened 17-4 SS
Packing Set	Leather/Teflon
Weight	28.1 lbs. (12.8 kgs.)
Inlet Size	3/4 NPT(f)
Outlet Size	3/8 NPT(f)
Reference Inlet Air Motor Size	3/8 NPT(f)
Air Motor Part Sheet Ref	2336
Fluid Section Part Sheet Ref	1968 R6

Comet 4B Also available as Extreme Duty

Section	41-4307
Bare Pump	41-11495
Wall Mount	41-11496
Cart Mount	41-11497
Fluid Section Part Sheet Ref	2752

Extreme Duty Includes:
 Heavy Hard Chrome Plated Pump Rod &
 Cylinder teflon/UHMW Packings.

Part Numbers

Bare Pump	103-1399
Air Motor	41-11044
Fluid Section	41-4241
Air Motor Repair Kit	41-11277

Fluid Section Soft Seal Kits

(Balls & Seats Not Included)

Teflon/UHMW	41-11456
Teflon/Leather	41-11459
55 Gal. Cover Kit	41-11493

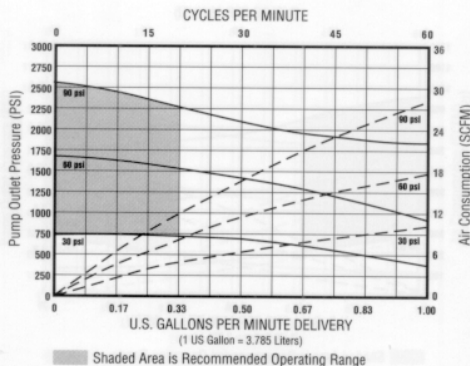
Includes:
 55 Gal. Filter Assembly
 55 Gal. Air Control
 Inlet Siphon Kit
 55 Gal. Cover
 See End of Catalog for Optional Accessories.

Pump Mount

Wall Mount	41-11475
Weight	48 lbs. (21.8 kgs.)

Includes:
 41-10705 Wall mount tray
 41-11459 Air control
 Cart Mount 41-11476
 Weight 65 lbs. (29.5 kgs.)

Includes:
 41-2208 Cart assembly
 41-11459 Air control



Graph Information	
—	@ 60 PSI @ 1 GPM \cong (60 CPM)
- - -	@ 60 PSI @ 1 GPM \cong (60 CFM)

Comet 4-B Pail Mount Pump

Pump # 41-4340 Ratio 31:1

Part Numbers

Bare Pump.....	41-4340
Air Motor.....	41-11294
Fluid Section.....	41-4241
Air Motor Repair Kit.....	41-11277
Fluid Section Soft Seal Kits	
(Balls & Seats Not Included)	
Teflon/UHMW.....	41-11456
Teflon/Leather.....	41-11457
See End of Catalog for Optional Accessories.	

Comet 4B Also available as Extreme Duty

Fluid Section.....	41-4307
Bare Pump.....	41-11491
5 Gal Pail Mount.....	41-11492
Fluid Section Part Sheet Ref.....	2752

Extreme Duty Includes:

Heavy Hard Chrome Plated Pump Rod & Cylinder Teflon/UHMW Packings

Pump Mount

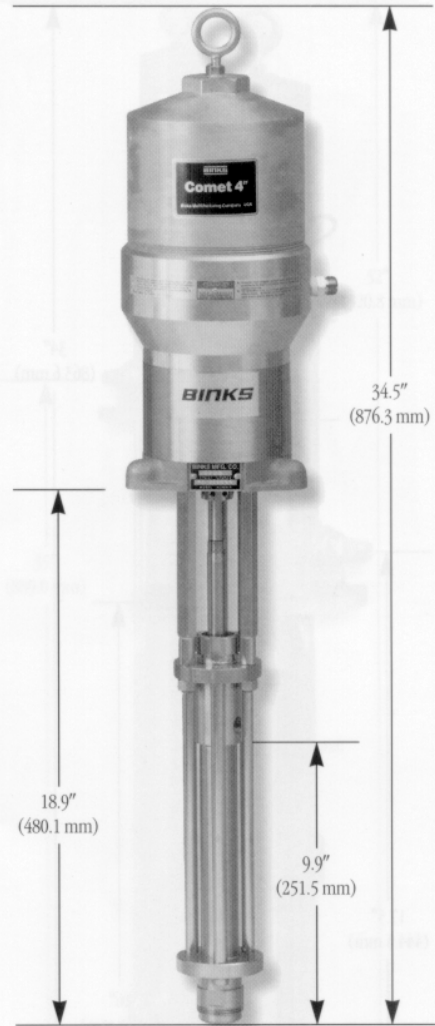
5 Gal Mount.....	41-4336
Weight.....	47.5 lbs. (21.6 kgs.)
Includes:	
41-2182.....	5 Gal CS cover
41-11459.....	Air Control
41-12639.....	CS filter
41-662.....	CS 5 Gal pail
41-2288.....	SS 50 mesh strainer

Performance

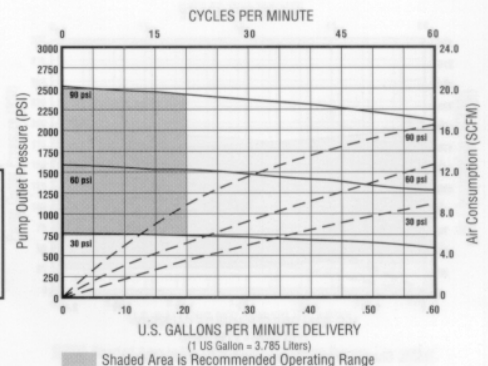
Air inlet Pressure.....	30-90 PSI (2.1-6.2 bar)
Fluid Pressure Range ..	930-2790 PSI (64.1-192.4 bar)
Max. Cycles Per Minute.....	60
Max. Rec'd Cycles Per Minute.....	20
Displacement In ³ Per Cycle.....	2.3 (37.9 cm ³)
Cycles Per Gallon (Liter).....	100 (26.1)
Flow @ 60 Cycles/Minute....	0.6 GPM (2.3 lpm)
Flow @ Rec'd Cycles/Min....	0.2 GPM (0.8 lpm)
Noise Level @ 60 PSI.....	82 db (A)

Specifications and Construction

Fluid Section Material.....	303 SS
Ball Material.....	Hardened SS
Seat Material.....	Tungsten Carbide
Pump Rod Material.....	Hardened 17-4 SS
Cylinder Material.....	Hardened 17-4 SS
Packing Set.....	Leather/Teflon
Weight.....	26.1 lbs. (11.9 kgs.)
Inlet Size.....	3/4 NPT(f)
Outlet Size.....	3/8 NPT(f)
Reference Inlet Air Motor Size.....	3/8 NPT(f)
Air Motor Part Sheet Ref.....	2370
Fluid Section Part Sheet Ref.....	1968

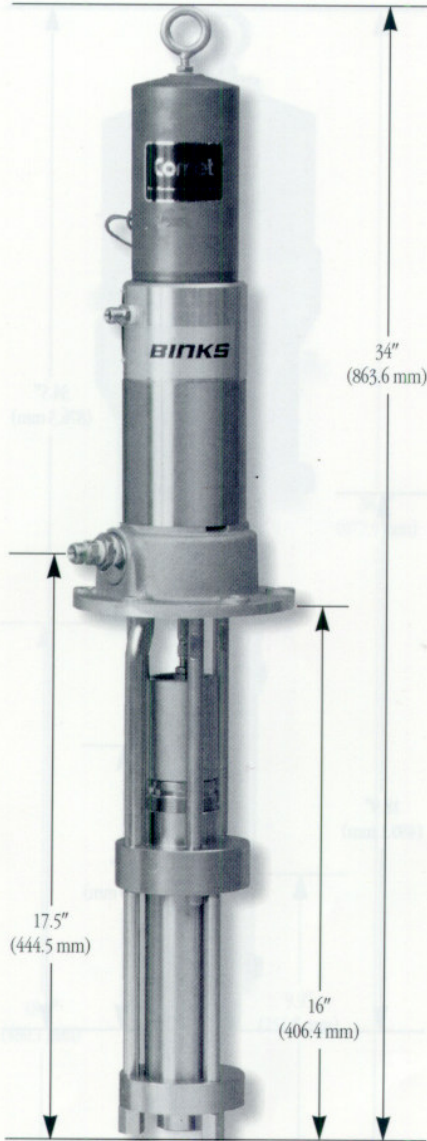


Graph Information
 — @ 60 PSI @ .60 GPM ≈ (60 CPM)
 - - - @ 60 PSI @ .60 GPM ≈ (12.5 CFM)



Comet HI-VOL Pump

Pump # 41-5025 Ratio 2.5:1



Performance

Air inlet Pressure 30-90 PSI (2.1-6.2 bar)
 Fluid Pressure Range .. 75-225 PSI (5.2-15.5 bar)
 Max. Cycles Per Minute 100
 Max. Rec'd Cycles Per Minute 60
 Displacement In³ Per Cycle 9.2(151.4 cm³)
 Cycles Per Gallon (Liter) 25 (6.6)
 Flow @ 100 Cycles/Minute ... 4 GPM (15.1 lpm)
 Flow @ Rec'd Cycles/Min.... 2.4 GPM (9.1 lpm)
 Noise Level @ 60 PSI 81 db (A)

Part Numbers

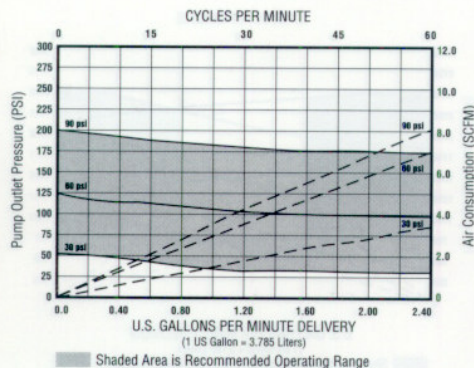
Bare Pump 41-5025
 Air Motor 41-15877
 Fluid Section 41-15876
 Air Motor Repair Kit 41-11463
 Fluid Section Repair Kit 41-11464
 See End of Catalog for Optional Accessories.

Specifications and Construction

Fluid Section Material 303 SS
 Ball Material Hardened SS
 Seat Material Tungsten Carbide
 Pump Rod Material Hardened SS
 Cylinder Material Hardened SS
 Packing Set Teflon/Glass Filled Teflon
 Weight 27 lbs. (12.2 kgs.)
 Inlet Size 3/4 NPT(f)
 Outlet Size 3/8 NPS(m)
 Reference Inlet Air Motor Size 1/4 NPT(f)
 Part Sheet Ref 1809

Pump Mount

Wall Mount 41-5027
 Weight 40 lbs. (18.2 kgs.)
 Includes:
 41-1905 Wall mount tray
 41-11459 Air control



Graph Information
 — @ 60 PSI @ 2.4 GPM ≈ (60 CPM)
 - - - @ 60 PSI @ 2.4 GPM ≈ (7.0 CFM)

Comet HI-VOL 55 Gal Pump

Pump # 41-5024 Ratio 2.5:1

Part Numbers

Bare Pump	41-5024
Air Motor	41-15878
Fluid Section	41-15876
Air Motor Repair Kit	41-11463
Fluid Section Repair Kit	41-11464
See End of Catalog for Optional Accessories.	

Pump Mount

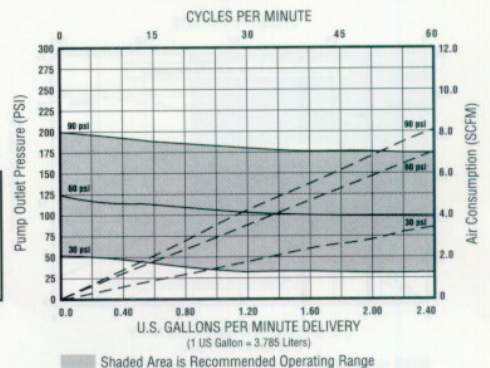
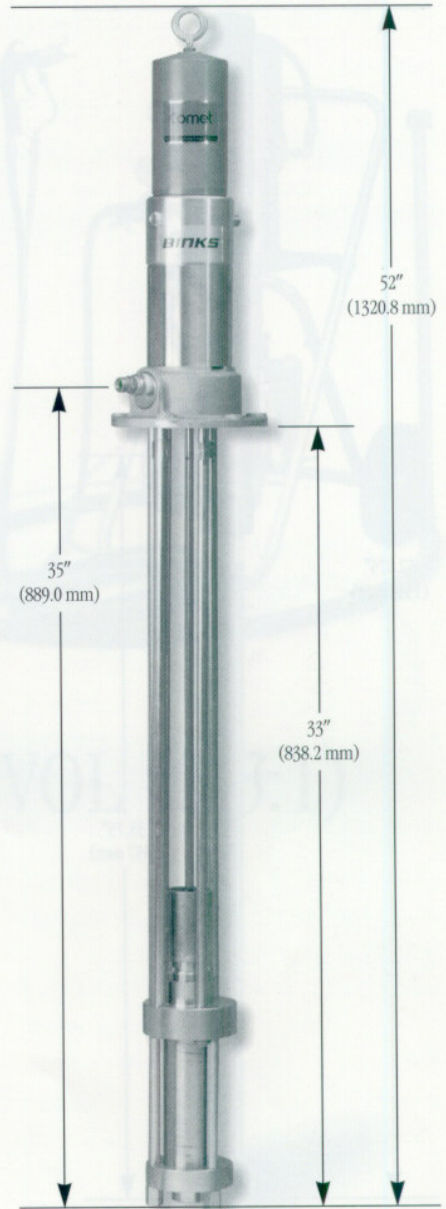
Gal. Mount	41-5028
Weight	69.5 lbs. (31.6kgs.)
Includes:	
41-2414	55 Gal CS cover
41-11459	Air control

Performance

Air inlet Pressure	30-90 PSI (2.1-6.2 bar)
Fluid Pressure Range	75-225 PSI (5.2-15.5 bar)
Max. Cycles Per Minute	100
Max. Rec'd Cycles Per Minute	60
Displacement In ³ Per Cycle	9.2 (151.4 cm ³)
Cycles Per Gallon (Liter)	25 (6.6)
Flow @ 100 Cycles/Minute	4 GPM (15.1 lpm)
Flow @ Rec'd Cycles/Min	2.4 GPM (9.1 lpm)
Noise Level @ 60 PSI	81 db (A)

Specifications and Construction

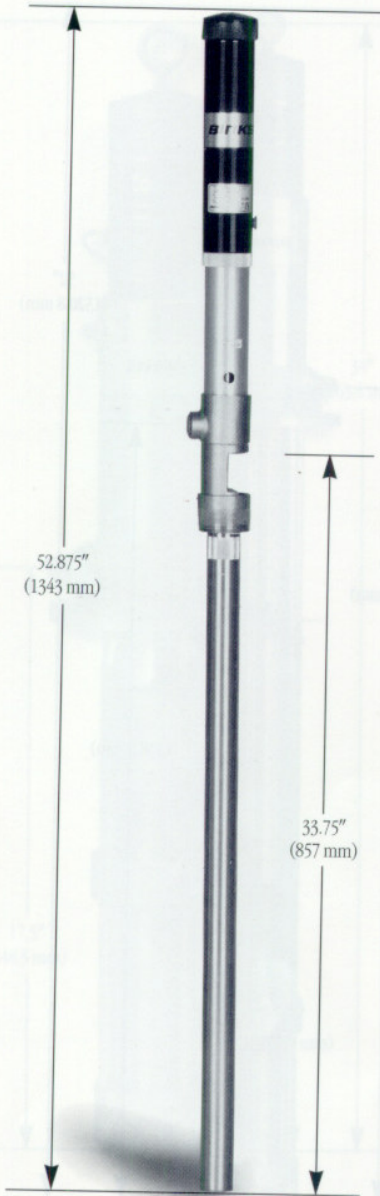
Fluid Section Material	303 SS
Ball Material	Hardened SS
Seat Material	Tungsten Carbide
Pump Rod Material	Hardened SS
Cylinder Material	Hardened SS
Packing Set	Teflon/Glass Filled Teflon
Weight	32.5 lbs. (14.7 kgs.)
Inlet Size	3/4 NPT(f)
Outlet Size	3/8 NPS(m)
Reference Inlet Air Motor Size	1/4 NPT(f)
Part Sheet Ref.	2114



Graph Information
 — @ 60 PSI @ 2.4 GPM ≈ (60 CPM)
 - - - @ 60 PSI @ 2.4 GPM ≈ (7.0 CFM)

"Pogo" Pump

812300 Stainless Steel Ratio 2:1 & 812304 Stainless Steel Stub Ratio 2:1



Performance

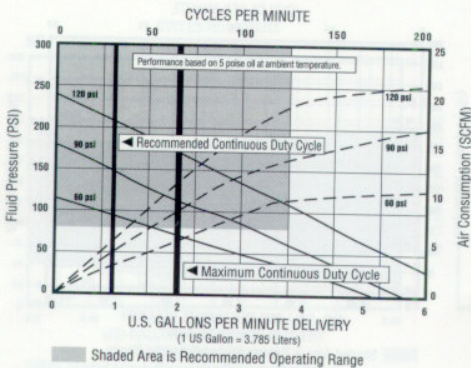
Air inlet Pressure	..... 30-150 PSI (2-10.2 bar)
Fluid Pressure Range	..... 60-300PSI (4-20 bar)
Max. Rec'd Cycles Per Minute	..... 120
Displacement In ³ Per Cycle	..... 7.2 (117.9 cm ³)
Cycles Per Gallon (Liter)	..... 32 (8.4)
Flow @ 120 Cycles/Minute	... 4 GPM (15.1 lpm)
Noise Level @ 60 PSI	..... 77.8 db (A)

Part Numbers

Air Control	..... 849303
Bare Pump	..... 812300
Air Motor	..... 873008
Air Motor Repair Kit	..... 861034
Fluid Section	..... 873200
Stub Fluid Section	..... 873009
Fluid Section Repair Kit	..... 861037
Stub Bare Pump	..... 812304

Specifications and Construction

Lower Pump Material	..... 316 SS
Pump Rod Material	..... 316 SS
Cylinder Material	..... Stainless Steel
Packing Material	..... UHMW/Polyethylene
Motor Diameter	..... 2"
Stroke	..... 6"
Air Inlet	..... 1/4" NPT(F)
Material Inlet	..... Immersed (No Threads)
Material Outlet	..... 1/2" NPT(F)
Weight	..... 19 lbs. (8.6 kgs.)
Weight (Stub)	..... 16 lbs. (7.3 kgs.)



Graph Information	
—	@ 60 PSI @ 1 GPM \cong (16 CPM)
- - -	@ 60 PSI @ 1 GPM \cong (7 CFM)

Binks 98-914 (31:1) Pump Outfit

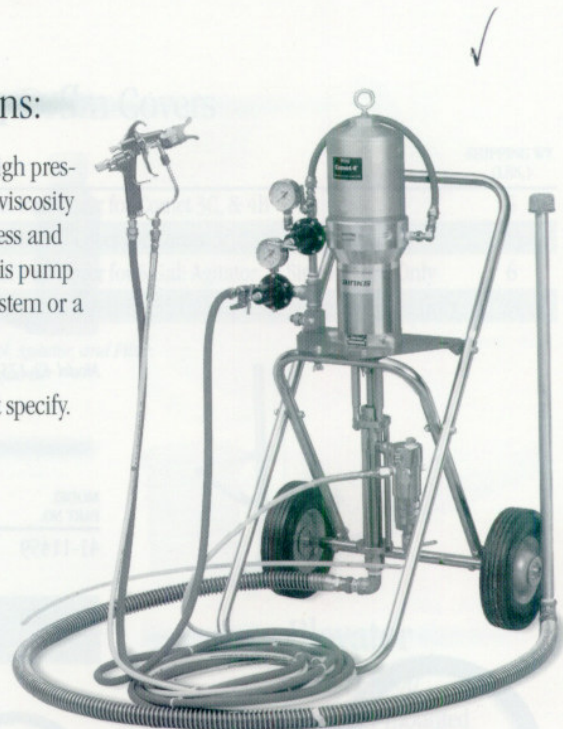
Pump Outfit Includes:

- 103-1399 COMET 4-B PUMP
- 41-2208 PUMP CART
- 41-12650 FILTER ASSEMBLY
- 41-11459 AIR CONTROL ASSEMBLY
- 41-2616 SIPHON KIT
- 71-8088 25' X 3/16 I.D. H.P. AIRLESS HOSE
- 71-1205 25' X 5/16 AIR HOSE
- 703000000 MACH 3SL AIR ASSIST AIRLESS SPRAY GUN*

Typical Applications:

This pump is used in 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.

* Spray tip not included. User must specify.



Binks 41-11498 Comet HI-VOL (2.5:1) Pump Unit

Pump Outfit Includes:

- 41-3311 GEAR DRIVE AGITATOR
- 41-11459 AIR CONTROL
- 41-2414 DRUM COVER ASSEMBLY
- 41-5024 COMET HI-VOL PUMP

Typical Applications:

This complete package is designed for open top 55 gallon drums to be used on a multi gun re-circulating system. For short distances, add fluid hose, fluid regulator, and spray gun. For long systems, add the appropriate "drops", fluid regulators, and spray guns.

Optional Pump Accessories

812300 Stainless Steel Ratio 2:1 & 812304 Stainless Steel Stub Ratio 2:1

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.

Pump Protectors

For use with all Comet and Pogo 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.

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



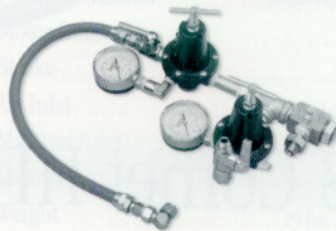
41-11150 Pump Protector

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



41-11460 Large Air Control



41-11459 Small Air Control

Drum Covers and Agitators

Drum Covers



5 Gal. Pail Cover



55 Gal. Drum Cover



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

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



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 with Pulsation Chamber

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
103-1241	1/4" NPT(f)	1/4" NPT(f)	100	.006	Stainless Steel	6000	mount
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 (Not for pail or cover mount)

FILTER ASSEMBLY PART NO.	INLET	OUTLET	SCREEN SIZE (MESH)	SCREEN SIZE (INCHES)	MATERIAL	WORKING PRESS. (PSI)
107-1765	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 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

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



Part No. 103-1241 Filter Assembly

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

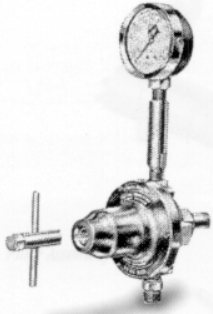
* Includes Fluid Dampener.

° 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

Filter assembly with
Regulator Connector



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 Nut 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

In-line Filter

MODEL PART NO.	MATERIAL	SCREEN SIZE (MESH)	PART SHEET REF.	INLET SIZE	OUTLET SIZE
41-1749	Brass	012	1874	1/4" NPT(m)	3/8"

Equivalent Screen Size

SCREEN SIZE (MESH)	034	020	015	012	009	006	005
Equivalent Screen Size							

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



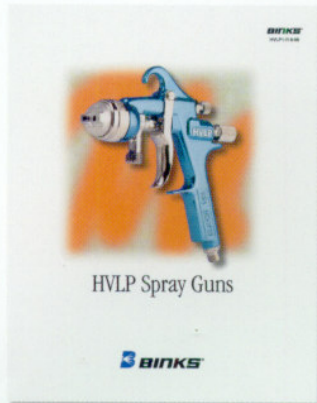
41-2228

Bunghole Adapters

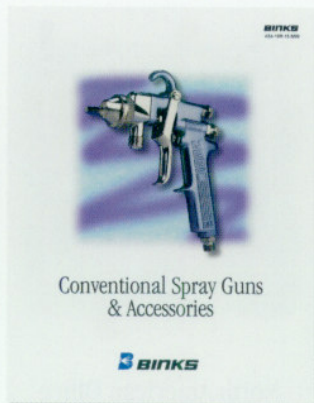
PART NO.	DESCRIPTION	MATERIAL
41-2701	Bunghole adapter for 1" NPT siphon tube size	Stainless Steel
41-2228	Bunghole adapter for 3/4" NPT siphon tube size	Stainless Steel
41-11420	Bunghole adapter for 1/2" NPT siphon tube size	Stainless Steel

Product Literature For Easy Reference

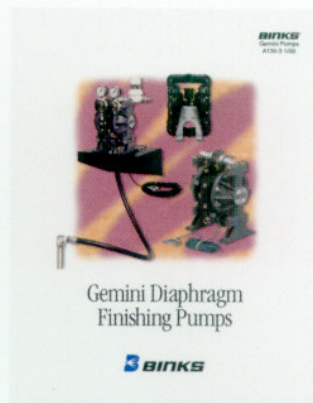
To learn more about our products, contact your Binks Finishing Specialist for complete product literature, or contact us directly at 1-800-992-4657. For online product and application information, please visit our web site – www.binks.com.



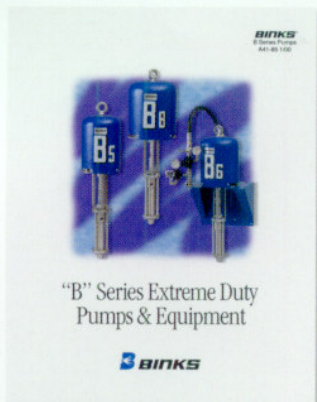
Binks HVL Spray Guns
HVL1-R



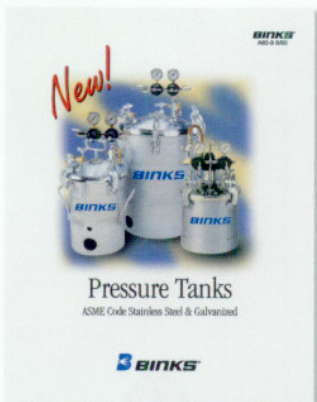
Binks Conventional Spray Guns
A54-19R-15



Binks Gemini Finishing Pumps & Equipment
A135-3



Binks "B" Series Extreme Duty Pumps & Equipment
A41-85



Binks Pressure Tanks
A83-9



Vector Spray Finishing Outfit
A98-137

Product literature for easy reference

Sales and Service
Through a Nationwide Network of Industrial Distributors



North American Office

ITW Industrial Finishing
Binks
195 Internationale Blvd.
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