



AIR OPERATED PUMPS ... Transfer of abrasive, viscous, fibrous, or solid filled fluids

with Riser Tube and Pulsation Chamber

All models listed include riser tube and pulsation chamber. Pumps are divorced and include booster valve assisted air motor with mufflers. Most models feature long stroke for maximum fluid delivery and performance. All drum length models require No. 8355A drum bracket for use in open-top 55-gallon

drums. Stubby models include threaded foot-valve with both 1½" NPTF and 2" NPTM connection for siphon hose or pipe plumbing. Stubby models may be mounted on a portable dolly, wall bracket, or vertically plumbed directly into storage tank or mixing vat outlets.

4:1 PUMPS • 3" AIR MOTOR • 2" STEM

PUMP NO. 532TS (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or BunaN.

PUMP NO. 532TSD (STUBBY) same as above except shortened stem with 1½" NPTF and 2" NPTM threaded foot-valve.

7:1 PUMPS • 4" AIR MOTOR • 2" STEM

PUMP NO. 942TS (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or BunaN.

PUMP NO. 942TSD (STUBBY) same as above except shortened stem with 1½" NPTF and 2" NPTM threaded foot-valve.

11:1 PUMPS • 5" AIR MOTOR • 2" STEM

PUMP NO. 952TS (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or BunaN.

PUMP NO. 952TS-2 (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or Buna N. Pump has cone nut construction for pumping cementitious or fibrous materials.

PUMP NO. 952TSD (STUBBY) same as 952TS except shortened stem with 1½" NPTF and 2" NPTM threaded foot-valve.

11:1 PUMPS • 7" AIR MOTOR • 3" STEM

PUMP NO. 973TS (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or BunaN.

PUMP NO. 973TSD (STUBBY) same as above except shortened stem with 1½" NPTF and 2" NPTM threaded foot-valve.

14:1 PUMPS • 8" AIR MOTOR • 3" STEM

PUMP NO. 983TS (DRUM LENGTH) shipped as pump only with riser tube and pulsation chamber. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or BunaN.

PUMP NO. 983TSD (STUBBY) same as above except shortened stem with 1½" NPTF and 2" NPTM threaded foot-valve.



952TSD

PUMP PERFORMANCE AND SPECIFICATIONS

PUMP SERIES NUMBER	STEM DIA.	AIR MOTOR DIAMETER	FLUID RATIO	CYCLES PER GALLON	AIR REQUIRED (CFM) FOR EACH GAL. DELIVERED			STROKE	FLUID OUTLET (SWIVEL)	OPTIONAL AIR REG. AND GAUGE	MAX. CONT. FLUID DEL.	OPTIONAL WALL BRACKET	BOOSTER VALVES	OPTIONAL DRUM BRACKET
					60 PSI	80 PSI	100 PSI							
532TS	2"	3"	4:1	22	3.4	4.0	5.0	4½"	½"F	368C	3	8345	2	8355A
942TS	2"	4"	7:1	9	5.0	6.0	7.0	7"	¾"F	368C	7	8345	2	8355A
952TS	2"	5"	11:1	9	8.0	9.0	11.0	7"	¾"F	368C	7	8345	2	8355A
973TS	3"	7"	11:1	5	8.0	10.0	12.0	7"	1"F	368C	12	7945B	4	8355A
983TS	3"	8"	14:1	5	10.0	13.0	16.0	7"	1"F	368C	12	7945B	4	8355A

AIR OPERATED PUMPS ... Transfer of abrasive, viscous, fibrous, or solid filled fluids



SPECIAL APPLICATION PUMPS

PUMP NO. 984TSD (STUBBY) 9:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or Buna N.

PUMP NO. 984P (STUBBY) 9:1 ratio pump same as above but includes cone nut construction for pumping cementitious and fibrous materials.

PUMP NO. 973TSD-2 (STUBBY) 11:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders. Specify cups leather or Buna N. Pump has cone nut construction for pumping cementitious or fibrous materials.

PUMP NO. 552TSA (DRUM LENGTH) 11:1 ratio pump shipped as pump only. Primarily used for grout materials. Short (4½") stroke air motor. Wetted parts carbon steel with stainless steel cylinders, leather cups.

PUMP NO. 552TSA-2 (DRUM LENGTH) same as 552TSA except pump has cone nut construction.

PUMP NO. 574TSA (DRUM LENGTH) 7:1 ratio pump shipped as pump only. Primarily used for grout materials. Short (4½") stroke air motor. Wetted parts carbon steel with stainless steel cylinders, leather cups.

PUMP NO. 986TD (STUBBY) 4:1 ratio pump shipped as pump only. Wetted parts carbon steel. Specify cups leather or Buna N. High volume pump.

PUMP NO. 986TTD (STUBBY) 4:1 ratio pump shipped as pump only. Wetted parts carbon steel and Teflon. High volume pump.

NOTE: Above pump air motors include mufflers for quiet operation.

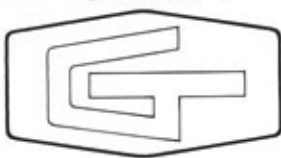


984P

PUMP PERFORMANCE AND SPECIFICATIONS

PUMP MODEL NUMBER	STEM DIA.	AIR MOTOR DIAMETER	FLUID RATIO	CYCLES PER GALLON	AIR REQUIRED (CFM) FOR EA. GAL. DELIVERED			STROKE	FLUID INLET	FLUID OUTLET	AIR INLET	OPTIONAL AIR REG. AND GAUGE	MAX. CONT. FLUID DEL.	OPTIONAL WALL BRACKET	BOOSTER VALVES	OPTIONAL DRUM BRACKET
					60 PSI	80 PSI	100 PSI									
984TSD	4"	8"	9:1	3	6.0	7.8	9.6	7"	2"NPT(M)	1½"M	½"NPT(M)	368C	20	7945C	4	N/A
984P	4"	8"	9:1	3	6.0	7.8	9.6	7"	2"NPT(M)	1½"M	½"NPT(M)	368C	20	7945C	4	N/A
973TSD-2	3"	7"	11:1	5	8.0	10.0	12.0	7"	2"NPT(M)	1"F	½"NPT(M)	368C	12	7945B	4	8355A
552TSA	2"	5"	11:1	14	8.0	9.0	11.0	4½"	2"NPT(M)	¾"F	½"NPT(M)	368C	3	8345	2	8355A
574TSA	4"	7"	7:1	5	5.0	6.3	7.7	4½"	2"NPT(M)	1½"M	½"NPT(M)	368C	8	7945C	4	N/A
986T	6"	8"	4:1	1½"	3.0	3.9	4.8	7"	3"NPT(F)	2"M	½"NPT(M)	368C	40*	N/A	4	N/A

*986T series pumps capable of 50 GPM intermittent duty operation.

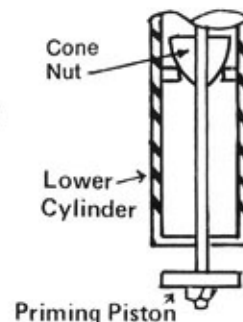


AIR OPERATED PUMPS ... Viscous Materials sealants adhesives caulking materials

Transfer and Extrusion Priming Piston Pumps

GROVER PRIMING PISTON PUMPS WITH WET-CUP

Grover priming piston pumps are designed for use in transferring or applying highly viscous seam sealers, adhesives and caulking materials. Priming piston pump intake assembly assures pump priming with heavy materials. Pumps may be used with accessory powered elevators and follower plates. Air motors include mufflers for quiet operation.



PUMP NO. 5907A (STUBBY) 11:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders, Teflon cups.

PUMP NO. 5913A (DRUM LENGTH) 11:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders, Teflon cups.

PUMP NO. 5912A (STUBBY) 25:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders, Teflon cups.

PUMP NO. 5914A (DRUM LENGTH) 25:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders, Teflon cups.

PUMP NO. 5983P (STUBBY) 14:1 ratio pump shipped as pump only. Wetted parts carbon steel with stainless steel cylinders, Teflon cups.



5912A

See Section 5 For
More Priming Piston
Pump Information.

PRIMING PISTON PUMP PERFORMANCE

PUMP MODEL	CYCLES PER GALLON	AIR REQUIRED (CFM) FOR EACH GAL. DEL.			MAXIMUM MATERIAL DELIVERED (GPM)
		60 PSI	80 PSI	100 PSI	
5907A 5913A	20	8	9	11	3
5912A 5914A	20	15	19	23	3
5983P	10	10	13	16	6

PRIMING PISTON PUMP SELECTION

PRIMING PISTON PUMP MODEL	RATIO	AIR MOTOR DIA.	STEM DIA.	STROKE	OVER-ALL LENGTH	AIR INLET PIPE SIZE	MATERIAL OUTLET PIPE SIZE	OPTIONAL AIR REGULATOR AND GAUGE	TYPE FOOT ASSEMBLY MOUNTING	OPTIONAL DRUM BRACKET	OPTIONAL WALL BRACKET
5907A	11:1		2"	3¼"	47½"	½"NPT(M)	1"F	368P	TANK - OR FITS FOLLOWER PLATES	N/A	8345
5913A	11:1	5"	2"	3¼"	58"	½"NPT(M)	1"F	368P	DRUM - FITS 55-GALLON DRUMS	8355A	8345
5912A	25:1	7"	2"	3¼"	47½"	½"NPT(M)	1"F	368P	TANK - OR FITS FOLLOWER PLATES	N/A	7945B
5914A	25:1	7"	2"	3¼"	58"	½"NPT(M)	1"F	368P	DRUM - FITS 55-GALLON DRUMS	8355A	7945B
5983P	14:1	8"	3"	3¼"	60"	½"NPT(M)	1½"F	368P	TANK - OR FITS FOLLOWER PLATES	N/A	N/A



AIR OPERATED PUMPS

In-Line Models For Lubricant Type Fluids

In-line supply pumps for supply of gear lube, oils and other non-corrosive, non-abrasive products. All pumps are carbon steel, aluminum and have Buna N cups. All pumps are double action.

"Rocket" pumps are fitted with an adjustable bung adapter and a $\frac{3}{4}$ " telescoping suction tube that will automatically adjust to a 15, 30 or 55-gallon drum. The telescoping tube can be replaced with a rigid $\frac{3}{4}$ " drop tube to fit bulk tanks of various depths. "Royal" pumps have a 1" high volume extension tube. A simple foot valve replacement changes a drum pump to a stubby pump. All pumps include air motor muffler.

"ROCKET" PUMPS

7990 ROCKET OIL PUMP 3:1 ratio, Double Action, 2½" Air Motor with Muffler, 2" Stem, 1983A Surge Chamber, $\frac{3}{4}$ " Telescoping Suction Tube, Bung Adapter, 918 Air Coupler and 60D Air Adapter. Flow: 7-8 qt./min.

8350 ROCKET OIL PUMP 4:1 ratio, Double Action, 3" Air Motor with Muffler, 2" Stem, 1983A Surge Chamber, $\frac{3}{4}$ " Telescoping Suction Tube, Bung Adapter, 918 Air Coupler and 60D Air Adapter. Flow: 11 qt./min.

7993 ROCKET STUB PUMP 3:1 ratio Double Action, 2½" Air Motor with Muffler, 2" Stem, 1983A Surge Chamber, 2" NPT (m) foot valve, 918 Air Coupler, 60D Air Adapter. Flow: 7-8 qt./min.

8353 ROCKET STUB PUMP 4:1 ratio Double Action, 3" Air Motor with Muffler, 2" Stem, 1983A Surge Chamber, 2" NPT (m) foot valve, 918 Air Coupler, 60D Air Adapter. Flow: 11 qt./min.

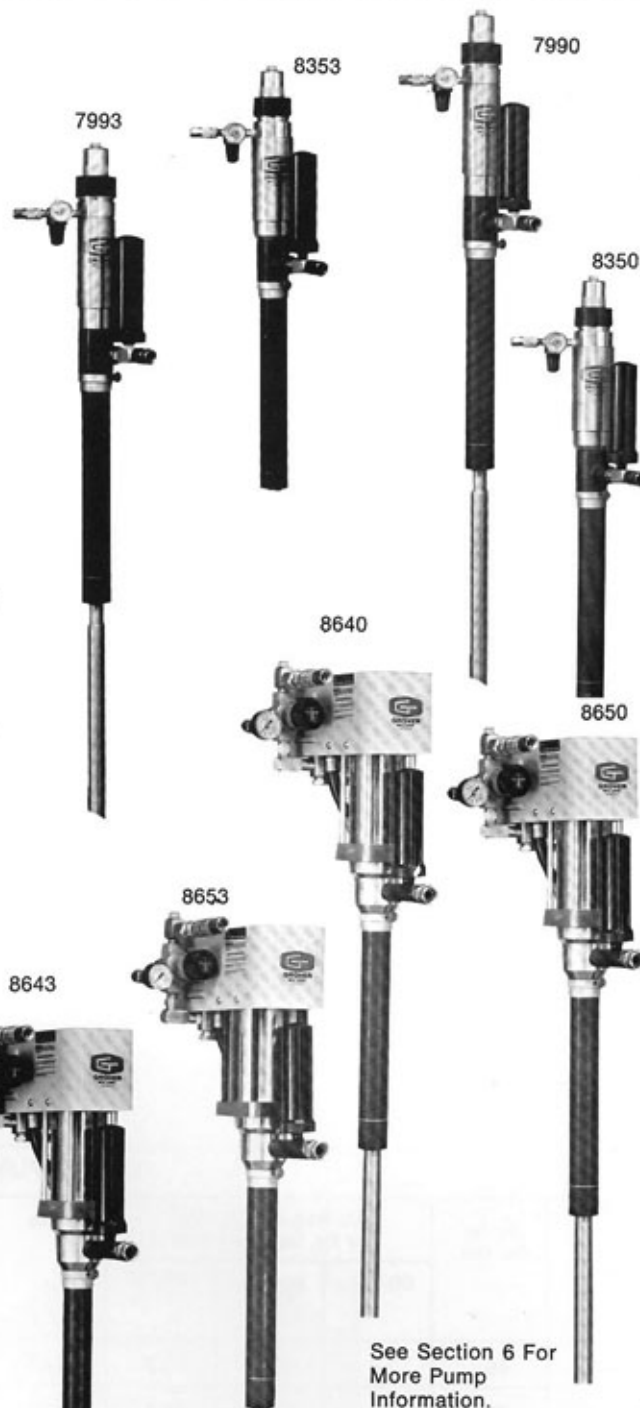
HEAVY DUTY "ROYAL" PUMPS

8640 HEAVY DUTY OIL PUMP 7:1 ratio Double Action, 4" Industrial Air Motor with Booster Valves and Dual Mufflers, 2" Stem, 1983A Surge Chamber, 1" Extension Tube, Bung Adapter, 5000 Air Coupler, 54H Air Adapter, 368P Air Regulator and Gauge. Flow: 21 qt./min.

8650 HEAVY DUTY OIL PUMP 12:1 ratio Double Action, 5" Industrial Air Motor with Booster Valves and Dual Mufflers, 2" Stem, 1983A Surge Chamber, 1" Extension Tube, Bung Adapter, 5000 Air Coupler, 54H Air Adapter, 368P Air Regulator and Gauge. Flow: 20 pt./min.

8643 HEAVY DUTY STUB PUMP 7:1 ratio Double Action, 4" Industrial Air Motor with Booster Valves and Dual Mufflers, 2" Stem, 1983A Surge Chamber, 2" NPT (m) foot valve, 5000 Air Coupler, 54H Air Adapter, 368P Air Regulator and Gauge. Flow: 21 qt./min.

8653 HEAVY DUTY STUB PUMP 12:1 ratio Double Action, 5" Industrial Air Motor with Booster Valves and Dual Mufflers, 1983A Surge Chamber, 2" NPT (m) foot valve, 5000 Air Coupler, 54H Air Adapter, 368P Air Regulator and Gauge. Flow: 20 pt./min.



See Section 6 For
More Pump
Information.

PUMP MODEL NO.	OPTIONAL WALL BRACKET	OPTIONAL DRUM BRACKET
7990	8140A	8354A
8350	8140A	8354A
7993	8140A	8354A
8353	8140A	8354A
8640	8345A	8344A
8650	8345A	8344A
8643	8345A	8344A
8653	8345A	8344A



AIR OPERATED AIRLESS PUMPS

Airless Pump Numbering System

Air Motor Diameter

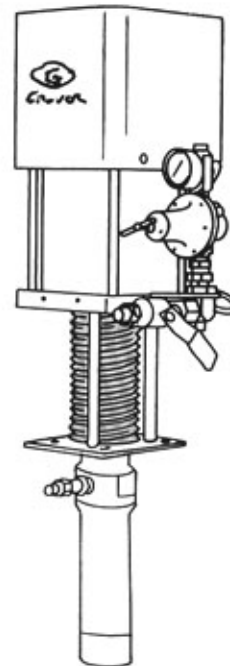
R33	Royal 3" diameter 3/4" Stroke
R30	Royal 3" diameter 4 1/2" Stroke
R40	Royal 4" diameter 4 1/2" Stroke
R50	Royal 5" diameter 4 1/2" Stroke
R70	Royal 7" diameter 4 1/2" Stroke
R80	Royal 8" diameter 4 1/2" Stroke

Pump Fluid Section*

A1	0.5 GPM @ 85 CPM
A2	1.22 GPM @ 60 CPM
A3	2.4 GPM @ 60 CPM
A4	3.5 GPM @ 60 CPM

*Hard chromed steel piston and cylinder, tungsten carbide seats, stainless steel balls, Teflon and leather "V" packings

R80-A4



(regulator and gauge optional).

R80-A3

See Grover airless catalog Form 1-286 for airless outfits and accessories.

Models	Ratio	GPM	Cycle Rate
R30-A2	11:1	1.22	60
R50-A3	17:1	2.4	60
R40-A2	21:1	1.22	60
R70-A4	23:1	3.5	60
R33-A1	30:1	.50	85
R50-A2	33:1	1.22	60
R80-A4	33:1	3.5	60
R70-A3	38:1	2.4	60
R80-A3	48:1	2.4	60

AIRLESS PUMP SPECIFICATIONS

Pump Model	Cycles Per Gal.	Air Required (CFM) For Ea. Gal. Delivered			Stroke	Maximum Fluid Delivery in GPM		Air Inlet	Fluid Inlet	Fluid Outlet
		60 PSI	80 PSI	100 PSI		Intermittent	Circulating System			
R30-A2	49	7.6	9.0	11.2	4 1/2"	1.22	0.49	1/2" NPT(M)	3/8" NPT(F)	1/2" NPT(F)
R50-A3	25	11.1	12.5	15.3	4 1/2"	2.40	0.96	1/2" NPT(M)	3/8" NPT(F)	1/2" NPT(F)
R40-A2	49	13.6	16.3	19.1	4 1/2"	1.25	0.50	1/2" NPT(M)	3/8" NPT(F)	1/2" NPT(F)
R70-A4	17	14.1	18.0	21.7	4 1/2"	3.50	1.40	3/8" NPT(F)	1" NPT(F)	3/8" NPT(F)
R33-A1	170	19.1	22.5	27.9	3/4"	0.50	N/A	3/8" NPT(F)	1/2" NPT(M)	3/8" NPT(F)
R50-A2	49	21.8	24.5	29.9	4 1/2"	1.22	0.49	1/2" NPT(F)	3/8" NPT(F)	1/2" NPT(F)
R80-A4	17	21.4	27.9	34.3	4 1/2"	3.50	1.40	3/8" NPT(F)	1" NPT(F)	3/8" NPT(F)
R70-A3	25	20.8	26.4	31.9	4 1/2"	2.40	0.96	3/8" NPT(F)	3/8" NPT(F)	1/2" NPT(F)
R80-A3	25	35.7	46.4	57.1	4 1/2"	2.40	0.96	3/8" NPT(F)	3/8" NPT(F)	1/2" NPT(F)