

# PLASTIC CENTRIFUGAL PUMP

**MODEL 144**

**PIPE SIZE: 3/8 HOSE CONNECTION IN  
3/8 HOSE CONNECTION OUT  
1/8 AIR VENT HOSE CONNECTION**



**MODEL 144-01A46 SHOWN**

## PUMP & MOTOR FEATURES

- .. Chemical resistant construction
  - Body and Adapter made of non-metallic glass reinforced Nylon 6/6
  - Impeller made of non-metallic glass reinforced PPS
- .. Mechanical Seal - carbon / ceramic faces, silicone rubber elastomer
  - Tolerates intermittent dry running
- .. Barbed -Hose Connections
- .. Static Buna O-Ring body/adapter seal
- .. Integrated Air Vent - prevents loss of prime
- .. Compact and Lightweight
- .. Installation/Mounting Versatility - port orientation
- .. Universal - Open Drip Proof Motors with internal fan cooling, UL, listed
  - No 18 Wire leads - 25" long
  - Low amperage
  - 120VAC, 240VAC (Optional: double insulation) and 12VDC versions.

## GENERAL

These compact high speed centrifugal pumps are suited for a variety of applications including condensate removal. They are particularly well suited for handling soap solutions in extraction type carpet cleaning equipment.

The design's symmetry provides a wide range of configuration possibilities allowing ready customization of discharge port position and optional air vent orientation relative to the motor base. (see below)

## INSTALLATION

Maximum fluid temperature is 180° F (82.2° C). Fluids must be compatible with silicone rubber seal elastomer. To promote long product life, assure that ambient air can circulate around the unit to prevent over-heating.

Ground metal frame motors. There is a #6-32 tapped hole ground connection provided on the end of metal framed motors.

Prevent air trapping in plumbing lines by avoiding loops. Use air vent fitting connection to purge air. Though capable of pulling slight vacuum, the pump performs best under flooded suction conditions when located for gravity feed.

## AC Motors (10,000 RPM)

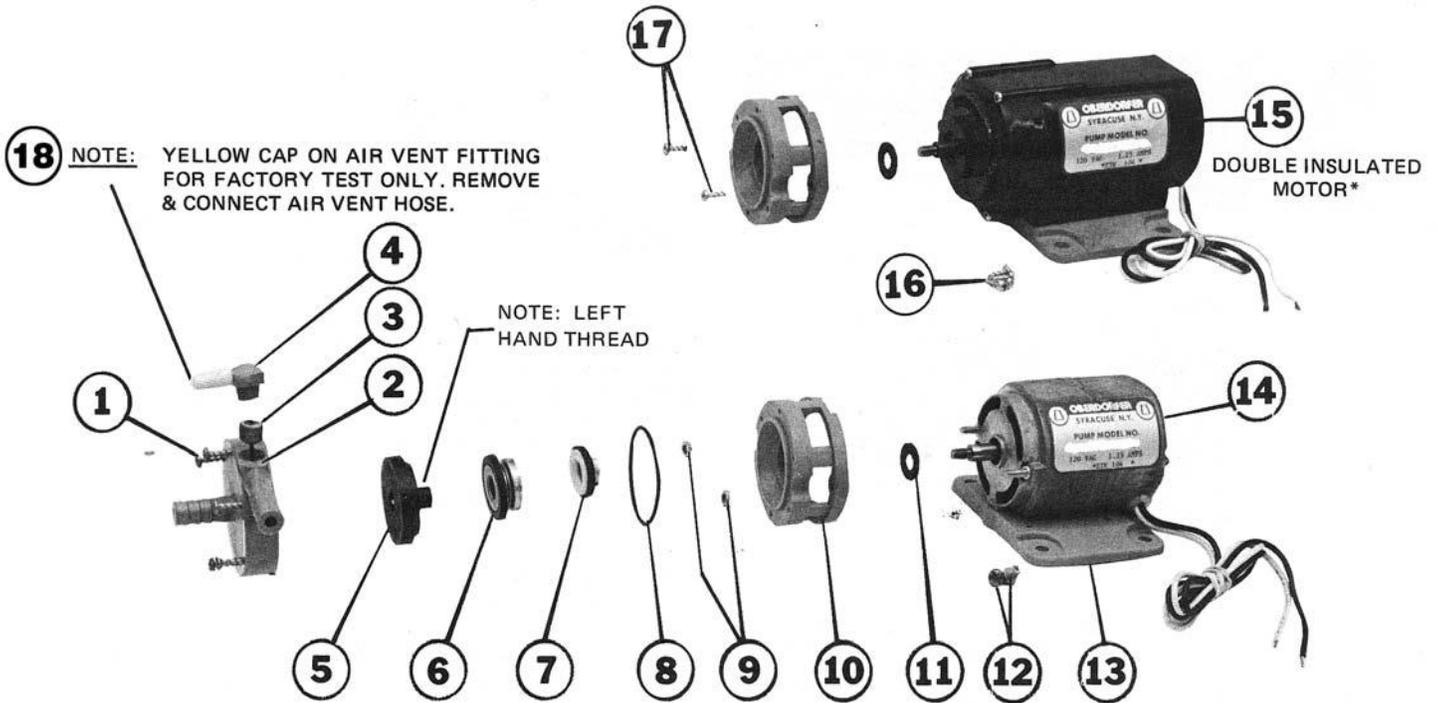
							Optimum Efficiency Range				
HEAD	PSI		0	5	10	15	20	25	30	35	40
	FT.HD.		0	11.5	23	34.6	46.2	57.7	69.3	80.8	92.4
FLOW	GPM	Plugged Vent	2.2	2.1	1.9	1.7	1.4	1.1	0.7	0.4	0.1
	GPM	With Bypass thru Vent	2.0	2.0	1.7	1.5	1.2	1.0	0.6	0.2	-
CURRENT	AMPS	@ 120V	1.35	1.34	1.33	1.31	1.29	1.26	1.23	1.20	1.18
	AMPS	@ 240V	0.70	0.69	0.68	0.67	0.65	0.64	0.62	0.58	0.59

## 12 VDC Motor (7,000 RPM)

HEAD	PSI		0	5	10	15	20
	FT.HD.		0	11.5	23	34.6	46.2
FLOW	GPM	Plugged Vent	1.9	1.7	1.4	1.1	0.5
CURRENT	AMPS	@ 12V	1.35	1.34	1.33	1.31	1.29

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## EXPLODED VIEW AND PARTS LIST



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
SCREW	BODY	PLUG	VENT FITTING	IMPELLER	SEAL HEAD	SEAL SEAT	O-RING	NUT	ADAPTER	SLINGER	SCREW	BASE	MOTOR	MOTOR	SCREW	SCREW	VENT CAP
6 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	2 Req'd	1 Req'd	1 Req'd	2 Req'd	1 Req'd	1 Req'd	1 Req'd	4 Req'd	2 Req'd	1 Req'd

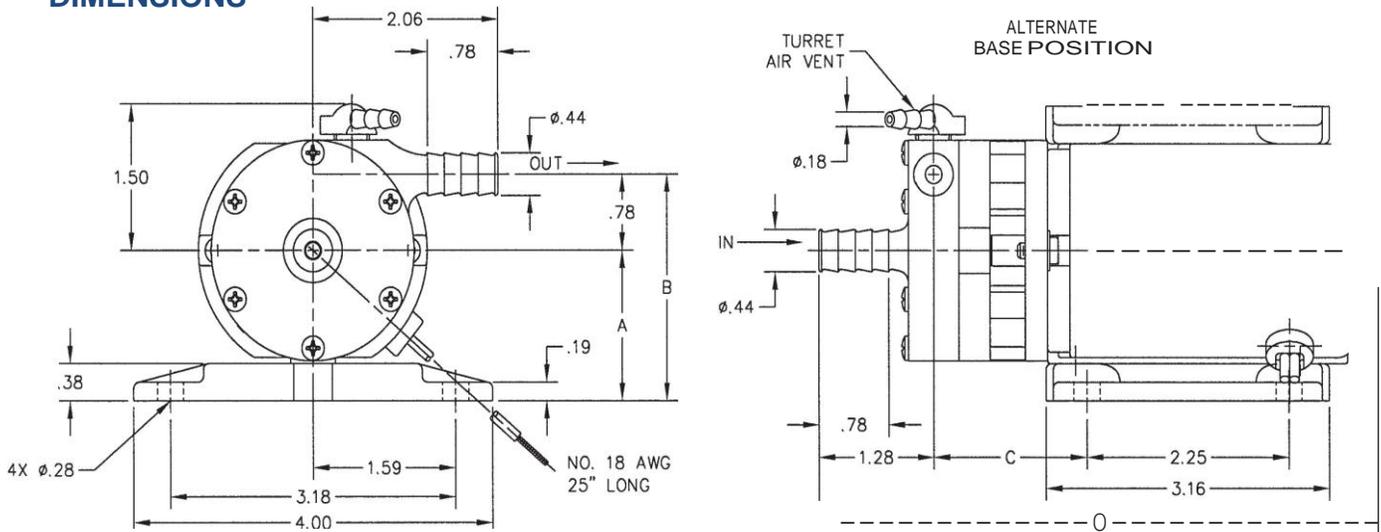
Pump	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
144- 22	7819	7752	7835	--	8900	8421	3109/5863	7818		8455	6651		8367					--
144- 01																		
144- 02																		
144- 04	7819	7752	--	7799	8900	8421	3109/5863	7818		8455	6651		8367					7879
144- 05																		
144- 11																		
144- 21																		
144- 10	7819	7752	--	7799	8900	8421	3109/5863	7818		8455	6651		--					7879
144- 20																		

Motor	9	10	11	12	13	14	15	16	17	18
A44	7823			7821	8370	--	--	--		
A46	--			--	--	8516	8450	9200		
A47	--			--	--	8517	8450	9200		
A91	--			--	--	2057	8450	9200		

Repair Kits:	Kit #		
Complete Pump Repair Kit (less motor)	11336	includes items	1,2,3,4,5,6,7,8,9,10,11,17,18
Body Kit	11337	includes items	1,2,3,4,8,18
Adapter Kit	11338	includes items	1,7,8,9,10,11,17
Impeller Kit	11339	includes items	5,6,8

# PLASTIC CENTRIFUGAL PUMP

## DIMENSIONS



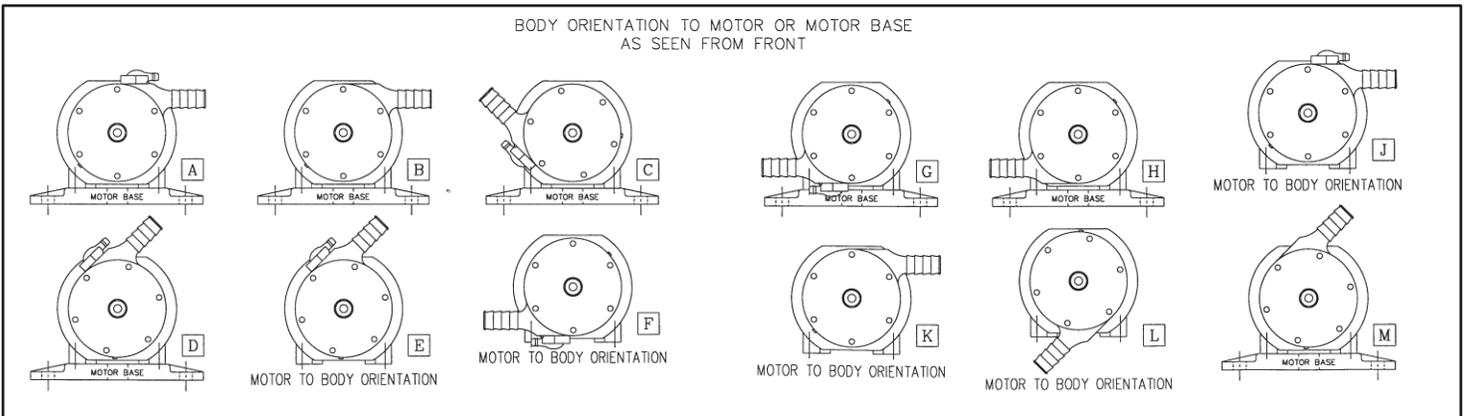
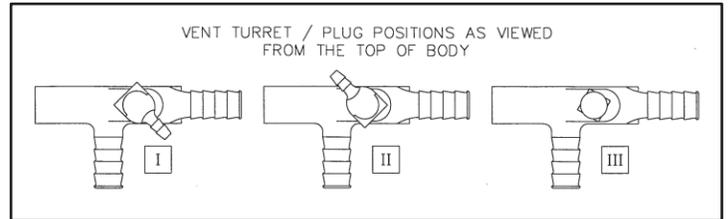
PUMP	DIMENSIONS			
	A	$\phi$	C	D
144-01A44	1.54	2.32	1.71	6.25
144-01A46	1.67	2.45	2.74	7.16
144-01A47	1.67	2.45	2.74	7.16
144-01A91	1.67	2.45	2.74	7.16

Specifications are subject to change without notice. All motor dimensions are subject to variations among motor manufacturers.

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## AIR VENT FITTING

The optional air vent fitting prevents loss of prime that can occur due to entrapped air. It is factory installed with a disposable vent cap. Entrapped air can be encountered in applications where the liquid in the supply tank is completely exhausted. Air can be introduced to the system before the next tank filling. For best results, configure and install pump with air vent near the top.



Pump No	Wet End Features		Motor Features				
	Vent Turret or Plug Position	Body Orientation to Motor or Motor Base	Insulation	Ground	Nominal Speed	Voltage	Part #
144- A44	III	B		External	10,000	120V AC	8370
144- 01 A44	I	A		External	10,000	120V AC	8370
144- 02 A44	I	G		External	10,000	120V AC	8370
144- 04 A44	I	D		External	10,000	120V AC	8370
144- 10 A44	I	J		External	10,000	120V AC	8370
144- 20 A44	I	F		External	10,000	120V AC	8370
144- 23 A44	III	M		External	10,000	120V AC	8370
144- 01 A46	I	A	Double		10,000	120V AC	8516
144- 02 A46	I	G	Double		10,000	120V AC	8516
144- 04 A46	I	D	Double		10,000	120V AC	8516
144- 05 A46	I	C	Double		10,000	120V AC	8516
144- 10 A46	I	J	Double		10,000	120V AC	8516
144- 11 A46 *	I	A	Double		10,000	120V AC	8516
144- 20 A46	I	F	Double		10,000	120V AC	8516
144- 21 A46	I	G	Double		10,000	120V AC	8516
144- 22 A46	III	B	Double		10,000	120V AC	8516
144- 23 A46	III	M	Double		10,000	120V AC	8516
144- 01 A47	I	A	Double		10,000	240V AC	8517
144- 02 A47	I	G	Double		10,000	240V AC	8517
144- 10 A47	I	J	Double		10,000	240V AC	8517
144- 20 A47	I	F	Double		10,000	240V AC	8517
144- 21 A47	I	G	Double		10,000	240V AC	8517
144- A91	I	A			7,000	12V DC	2057

Notes: \*indicates motor base is mounted in forward position