

# 85 Pump Series description

## Single Head Fixed Output



## Single Head Adjustable Output



Output Range  
 0.3–85 gpd at 25 psi  
 0.3–40 gpd at 100 psi

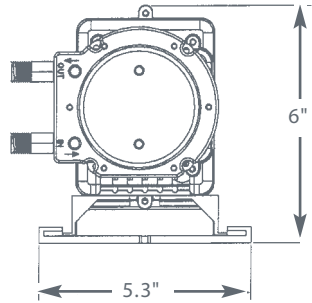
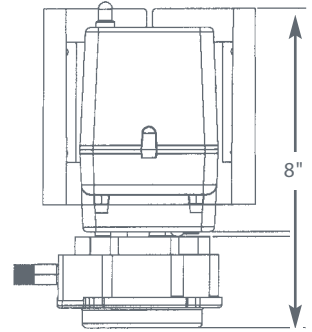
- 44 rpm gear motor
- Mechanical dial ring allows outputs adjustable in 2.5% increments
- 6 interchangeable tubes

FEATURES	BENEFITS
Peristaltic design	Self-priming, won't lose prime Can run dry without damage Chemicals are metered without exposure to air Pumps gaseous solutions
Pump tubes	Accept a variety of chemicals
Pump head	Universal with all Stenner pumps
Snap fit modular subassemblies	Quick serviceability without tools
Interchangeable pump tubes and subassemblies	Convert one Classic model to another
Mechanical feed rate control	Reproducibility within 2% of outputs
Manufactured since 1957	Time tested

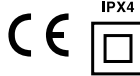
# 85 Pump Series dimensions

Output Range  
 0.3–85 gpd at 25 psi  
 0.3–40 gpd at 100 psi

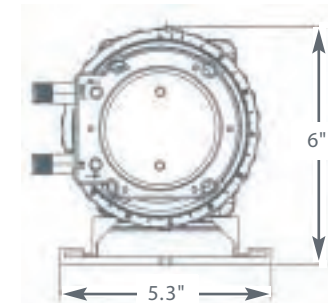
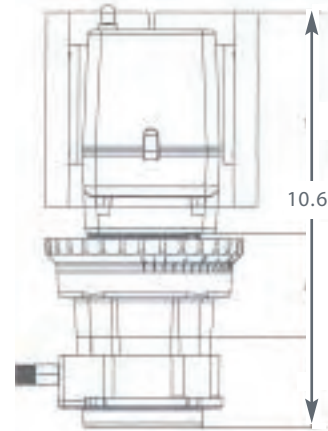
## Single Head Fixed Output



THIS PRODUCT HAS BEEN TESTED AND CERTIFIED BY THE WATER QUALITY ASSOCIATION ACCORDING TO NSF/ANSI 61 FOR MATERIALS SAFETY ONLY.



## Single Head Adjustable Output



SANITATION LISTED  
**CONFORMS TO STD. NSF-50**  
 CIRCULATION SYSTEM COMPONENTS FOR SWIMMING POOLS, SPAS, OR HOT TUBS



THIS PRODUCT HAS BEEN TESTED AND CERTIFIED BY THE WATER QUALITY ASSOCIATION ACCORDING TO NSF/ANSI 61 FOR MATERIALS SAFETY ONLY.



NOTE: Not all products have agency approval. Please call factory for more information.

# 85 Pump Series materials of construction

All Housings\* . . . . . Lexan® Polycarbonate Plastic

Peristaltic Tube\*\* . . . . . Santoprene® FDA Approved  
Check Valve Duckbill

Peristaltic Tube† . . . . . Tygothane® FDA Approved

Check Valve Duckbill†† . . . . . Pellathane®

Suction/Discharge Tubing . . . . . LDPE Polyethylene-NSF/FDA Approved  
Ferrules (1/4" & 6 mm)

Tube Fittings . . . . . Type 1 Rigid PVC-NSF Listed  
Connecting Nuts  
Check Valve Fittings  
Weighted Suction Line Strainer

All Fasteners . . . . . Stainless Steel

\*Lexan® is a registered trademark of General Electric. Consult General Electric for chemical resistance of Lexan®.

\*\*Santoprene® is a registered trademark of Advanced Elastomer System. Refer to the chemical resistance guide in this catalog for pump tube material compatibility.

†Tygothane® is a registered trademark of Saint-Gobain Performance Plastics. Refer to the chemical resistance guide in this catalog for pump tube material compatibility.

††Pellathane® is a registered trademark of The Dow Company.

## Accessory Kit Contents

- 3 Connecting Nuts 1/4" or 3/8"
- 3 Ferrules 1/4" & 6 mm Europe OR 2 Ferrules 3/8"
- 1 Injection Check Valve 100 psi OR 1 Injection Fitting 25 psi
- 1 Weighted Suction Line Strainer 1/4" or 3/8", 6 mm Europe
- 1 20' Roll of Suction/Discharge Tubing 1/4" or 3/8" White or UV Black  
OR 6 mm White Europe
- 1 Spare Pump Tube
- 1 Mounting Bracket
- 1 Installation and Maintenance Manual

# 85 Pump Series outputs



## Single Head Fixed Output

Model	Max. Pressure	Pump Tube Number	Approximate Output @ 60Hz						Approximate Output @ 50Hz		
			Gallons Per Day	Liters Per Day	Gallons Per Hour	Liters Per Hour	Ounces Per minute	Milliliters Per minute	Liters Per Day	Liters Per Hour	Milliliters Per Minute
85MHP5*	100 psi (6.9 bar)	# 1	5	18.9	0.21	0.79	0.44	13.13	15.1	0.63	10.49
85MHP17*	100 psi (6.9 bar)	# 2	17	64.4	0.71	2.68	1.51	44.65	51.5	2.15	35.76
85MHP40*	100 psi (6.9 bar)	# 7	40	151.4	1.67	6.31	3.55	105.14	121.1	5.05	84.1
85MP1	25 psi (1.7 bar)	# 1	5	18.9	0.21	0.79	0.44	13.13	15.1	0.63	10.49
85MP2	25 psi (1.7 bar)	# 2	17	64.4	0.71	2.68	1.51	44.65	51.5	2.15	35.76
85MP3	25 psi (1.7 bar)	# 3	40	151.4	1.67	6.31	3.55	105.14	121.1	5.05	84.1
85MP4	25 psi (1.7 bar)	# 4	60	227.1	2.5	9.46	5.33	157.71	181.7	7.57	126.18
85MP5	25 psi (1.7 bar)	# 5	85	321.8	3.54	13.4	7.55	223.4	257.4	10.73	178.75

\*Pump supplied with injection check valve for 26-100 psi (1.7-6.9 bar) applications



## Single Head Adjustable Output

Model	Max. Pressure	Pump Tube No.	Approximate Output @ 60Hz						Approximate Output @ 50Hz		
			Gallons Per day	Liters Per Day	Gallons Per hour	Liters Per hour	Ounces Per Minute	Milliliters Per Minute	Liters Per day	liters Per Hour	Milliliters Per Minute
85MHP5*	100 psi (6.9 bar)	# 1	0.3 to 5	1.1 to 18.9	0.01 to 0.21	0.05 to 0.79	0.03 to 0.44	0.76 to 13.13	0.9 to 15.1	0.04 to 0.63	0.52 to 10.49
85MHP17*	100 psi (6.9 bar)	# 2	0.8 to 17.0	3 to 64.4	0.03 to 0.71	0.13 to 2.68	0.07 to 1.51	2.08 to 44.65	2.4 to 51.5	0.1 to 2.15	1.67 to 35.76
85MHP40*	100 psi (6.9 bar)	# 7	2.0 to 40	7.6 to 151.4	0.08 to 1.67	0.32 to 6.31	0.18 to 3.55	5.27 to 105.14	6.1 to 121.1	0.25 to 5.05	4.24 to 84.1
85M1	25 psi (1.7 bar)	# 1	0.3 to 5	1.1 to 18.9	0.01 to 0.21	0.05 to 0.79	0.03 to 0.44	0.76 to 13.13	0.9 to 15.1	0.04 to 0.63	0.52 to 10.49
85M2	25 psi (1.7 bar)	# 2	0.8 to 17	3 to 64.4	0.03 to 0.71	0.13 to 2.68	0.07 to 1.51	2.08 to 44.65	2.4 to 51.5	0.1 to 2.15	1.67 to 35.76
85M3	25 psi (1.7 bar)	# 3	2 to 40	7.6 to 151.4	0.08 to 1.67	0.32 to 6.31	0.18 to 3.55	5.27 to 105.14	6.1 to 121.1	0.25 to 5.05	4.24 to 84.1
85M4	25 psi (1.7 bar)	# 4	3 to 60	11.4 to 227.1	0.13 to 2.5	0.48 to 9.46	0.27 to 5.33	7.92 to 157.71	9.1 to 181.7	0.38 to 7.57	6.32 to 126.18
85M5	25 psi (1.7 bar)	# 5	4.3 to 85	16.3 to 321.8	0.18 to 3.54	0.68 to 13.4	0.38 to 7.55	11.32 to 223.4	13 to 257.4	0.54 to 10.73	9.03 to 178.75

\*Pump supplied with injection check valve for 26-100 psi (1.7-6.9 bar) applications

**NOTICE:** The information within this chart is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. Stenner Pump Company recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.

# 85 Pump Series specifications

Output Control for Adjustable Pumps Only . . .	Manual with external dial ring from 5-100%
Turndown Ratio . . . . .	20:1
Suction/Discharge Polyethylene Tubing . . . . .	1/4" , 3/8" , 6 mm Europe
Motor rpm . . . . .	44
Motor HP . . . . .	1/30
Voltage . . . . .	120V, 220V 60Hz 230V, 250V 50Hz International
Amp Draw @ Maximum Load . . . . .	1.7 @ 120V 0.9 @ 220V, 230V, 250V
Maximum Operating Temperature . . . . .	125° F (52° C)
Maximum Viscosity . . . . .	10,000 cPs*
Suction Lift . . . . .	25 ft (7.6 m)
Dimensions (l x w x h) . . . . .	Fixed output 8.0 x 5.3 x 6.0 in; 20.3 x 13.4 x 15.2 cm Adjustable output 10.6 x 5.3 x 6.0 in; 26.9 x 13.4 x 15.2 cm
Shipping Weight . . . . .	Fixed output 8 lbs (3.6 kg) Adjustable output 9 lbs (4 kg)

\*10,000 centipoise – 5 ft suction lift, high viscosity fluids decrease suction lift capability and pump displacement.

# 85 Pump Series output chart

**85MP Fixed Output Single Head: 0 to 25 psi (1.72 bar) Maximum Discharge Pressure**

Model	Tube	gpd	lpd
85MP1	# 1	5	15.1
85MP2	# 2	17	51.5
85MP3	# 3	40	121.1
85MP4	# 4	60	181.7
85MP5	# 5	85	257.4

Outputs per day in U.S. Gallons @ 60Hz & Liters @ 50Hz

**85MPHP Fixed Output Single Head: 26 to 100 psi (6.9 bar) Maximum Discharge Pressure**

Model	Tube	gpd	lpd
85MPHP5	# 1	5	15.1
85MPHP17	# 2	17	51.5
85MPHP40	# 7	40	121.1

Outputs per day in U.S. Gallons @ 60Hz & Liters @ 50Hz

**85M Adjustable Output Single Head: 0 to 25 psi (1.72 bar) Maximum Discharge Pressure**

FEED RATE CONTROL SETTING

		L		1		2		3		4		5		6		7		8		9		10	
Model	Tube	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd
85M1	# 1	0.3	0.9	0.5	1.5	1	3	1.5	4.5	2	6.1	2.5	7.6	3	9.1	3.5	10.6	4	12.1	4.5	13.6	5	15.1
85M2	# 2	0.8	2.4	1.7	5.1	3.4	10.3	5.1	15.4	6.8	20.6	8.5	25.7	10.2	30.9	11.9	36	13.6	41.2	15.3	46.3	17	51.5
85M3	# 3	2	6.1	4	12.1	8	24.2	12	36.3	16	48.5	20	60.6	24	76.7	28	84.8	32	96.9	36	109	40	121.1
85M4	# 4	3	9.1	6	18.2	12	36.3	18	54.5	24	76.7	30	90.8	36	109	42.0	127.2	48	145.3	54	163.5	60	181.7
85M5	# 5	4.3	13.0	8.5	25.7	17	51.5	25.5	77.2	34	103	42.5	128.7	51	154.4	59.5	180	68	205.9	76.5	231.6	85	257.4

Outputs per day in U.S. Gallons @ 60Hz & Liters @ 50Hz

**85MHP Adjustable Output Single Head: 26 to 100 psi (6.9 bar) Maximum Discharge Pressure**

FEED RATE CONTROL SETTING

		L		1		2		3		4		5		6		7		8		9		10	
Model	Tube	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd	gpd	lpd
85MHP5 # 1	# 1	0.3	0.9	0.5	1.5	1	3	1.5	4.5	2	6.1	2.5	7.6	3	9.1	3.5	10.6	4	12.1	4.5	13.6	5	15.1
85MHP17# 2	# 2	0.8	2.4	1.7	5.1	3.4	10.3	5.1	15.4	6.8	20.6	8.5	25.7	10.2	30.9	11.9	36	13.6	41.2	15.3	46.3	17	51.5
85MHP40# 7	# 7	2	6.1	4	12.1	8	24.2	12	36.3	16.0	48.5	20	60.6	24	76.7	28.0	84.8	32	96.9	36	109	40	121.1

Outputs per day in U.S. Gallons @ 60Hz & Liters @ 50Hz

# 85 Pump Series build item number

Item number is required for placing orders. To build item number, select code based on application requirements.

<b>8</b>	<b>5</b>	<b>M</b>							Factory Use Only
Single Head			Control	Pressure Rating	Pump Tube	Voltage & Hertz	Suction Discharge Tubing	Pump Tube Material	

CODE

Control	F Fixed J Adjustable																																																		
Pressure Rating	L 0-25 psi (0-1.7 bar) H 26-100 psi (1.7-6.9 bar)																																																		
Pump Tube	<p>Outputs @ 60Hz, for 50Hz refer to output page in this catalog.</p> <p>25 psi (1.7 bar)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>gpd</th> <th>lpd</th> <th>Fixed</th> <th>Adjustable</th> </tr> </thead> <tbody> <tr><td>1</td><td>5</td><td>19</td><td>85MP1</td><td>85M1</td></tr> <tr><td>2</td><td>17</td><td>64</td><td>85MP2</td><td>85M2</td></tr> <tr><td>3</td><td>40</td><td>151</td><td>85MP3</td><td>85M3</td></tr> <tr><td>4</td><td>60</td><td>227</td><td>85MP4</td><td>85M4</td></tr> <tr><td>5</td><td>85</td><td>321</td><td>85MP5</td><td>85M5</td></tr> </tbody> </table> <p>100 psi (6.9 bar)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>gpd</th> <th>lpd</th> <th>Fixed</th> <th>Adjustable</th> </tr> </thead> <tbody> <tr><td>1</td><td>5</td><td>19</td><td>85MPHP5</td><td>85MHP5</td></tr> <tr><td>2</td><td>17</td><td>64</td><td>85MPHP17</td><td>85MHP17</td></tr> <tr><td>7</td><td>40</td><td>151</td><td>85MPHP40</td><td>85MHP40</td></tr> </tbody> </table>		gpd	lpd	Fixed	Adjustable	1	5	19	85MP1	85M1	2	17	64	85MP2	85M2	3	40	151	85MP3	85M3	4	60	227	85MP4	85M4	5	85	321	85MP5	85M5		gpd	lpd	Fixed	Adjustable	1	5	19	85MPHP5	85MHP5	2	17	64	85MPHP17	85MHP17	7	40	151	85MPHP40	85MHP40
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Voltage & Hertz	A 120V 60Hz B 220V 60Hz C 230V 50Hz, CEE7 cord International D 250V 50Hz, CEE7 cord International  Contact the factory for additional voltage and cord options.																																																		
Suction Discharge Tubing	O.D.; does not affect output 1 1/4" White 2 1/4" UV Black 3 3/8" White 4 3/8" UV Black 5 6 mm White Europe																																																		
Pump Tube Material	Application specific, refer to chemical resistance guide for chemical compatibility. S Santoprene® T Tygothane® (available in #2 and #5 size only, see Pump Tube)																																																		

# Notes