

## Quick Facts

### FIXED

- 40.0 to 150.0 gpd, pressures to 25 psi
- 5.0 to 60.0 gpd, pressures to 100 psi

### VARIABLE

- 2.0 to 150.0 gpd, pressures to 25 psi
- 0.3 to 60.0 gpd, pressures to 100 psi
- Backup pump capability
- Tube leak detector
- Totally enclosed housing, NEMA 4X
- Tube replacement without tools

## Function

The Fixed and Variable pumps are both activated by mains power or by a Standby input.

### FIXED

Operates at one speed when power is applied, or the standby input is removed. Does not have an on/off switch.


### VARIABLE

Operates at the customer set speed when power is applied, or the standby input is removed (unless potentiometer is set to )

## Features

- Advantages of Stenner peristaltic pumps on page 1
- LED Indicators
- Dedicated Relays
- NSF 61 & 372
- cULus for indoor/outdoor use
- CE IP65
- NSF 50 (specific models)

## 4 LED Indicators

<b>POWER</b>	Solid green when mains power is connected.
<b>LEAK</b>	Blinking red when solution is present in the pump head.
<b>RUN/FAULT</b>	Solid green when pump is operating. Blinking red when pump has a drive fault.
<b>STANDBY</b>	<b>FIXED</b> Solid red, pump is in Standby when contact closure is on the Standby inputs.
<b>STANDBY/OFF</b>	<b>VARIABLE</b> Solid red, pump is in Standby when a contact closure is on the Standby inputs. Blinking red when potentiometer is set to  .

## 3 Dedicated Relays

### LEAK DETECT

- Detects when solution is present in the pump head
- Red LED blinks
- Sends relay to indicate leak is detected
- Option to allow pump to continue to run

### RUN

- Solid Green LED
- Sends relay to indicate pump is operating

### TRANSFER

Sends relay from primary pump to transfer operation to a backup pump, if there is loss of power, a drive fault or a leak is detected.

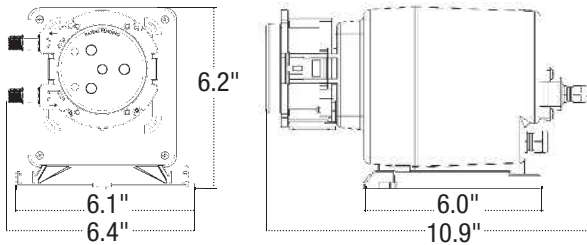
# S FIXED and VARIABLE SERIES

## Weights and Dimensions

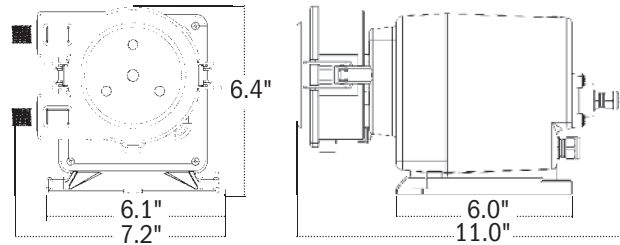
**Shipping Weight** 9 lbs (3.7 kg)

**Box Dimensions** 14 x 9 x 10 in. (35 x 32 x 24 cm)

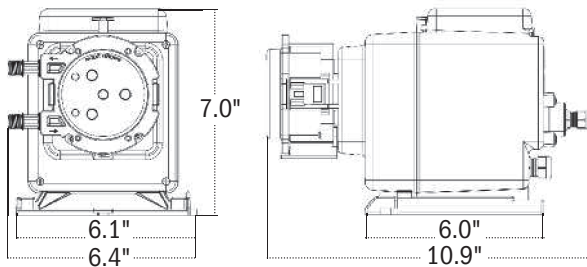
### S3F Product Dimensions



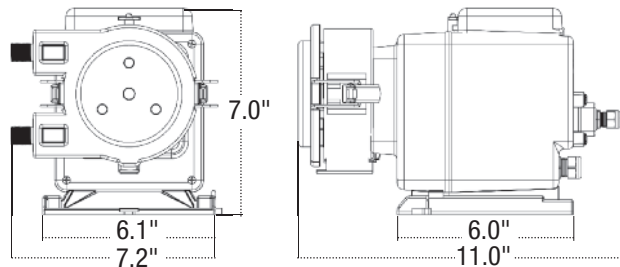
### S4F Product Dimensions



### S3V Product Dimensions



### S4V Product Dimensions



## Accessories Shipped with Each Pump

### S3F & S3V

- 3 Connecting nuts 1/4" or 3/8"
- 3 Ferrules 1/4" or 6 mm *Europe*
- 1 Duckbill check valve 100 psi (6.9 bar) max. or Injection fitting 25 psi (1.7 bar) max.
- 1 Weighted suction line strainer 1/4", 3/8" or 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 Additional pump tube
- 2 Additional latches
- 1 Mounting bracket
- 1 Manual

### S4F & S4V

- 3 Connecting nuts 3/8"
- 1 Ball check valve
- 1 Weighted suction line strainer 3/8"
- 1 20' Roll of suction/discharge tubing 3/8", white or UV black
- 1 Additional pump tube
- 1 Mounting bracket
- 1 Manual

# S FIXED and VARIABLE SERIES

## FIXED MODELS



S3F



S4F

## VARIABLE MODELS



S3V



S4V

### Specifications

#### Flow Rate Output Control

**S3F, S4F** Fixed Rate

**S3V, S4V** Potentiometer

#### Reproducibility $\pm 2\%$

#### Maximum Working Pressure

25 psi (1.7 bar), 100 psi (6.9 bar)

#### Maximum Operating Temperature

104°F (40°C)

#### Maximum Altitude 6562 ft. (2000 m)

#### Maximum Suction Lift

25 ft (7.6 m) vertical lift, based on water

#### Motor Type Brushless DC motor

#### Shaft rpm (average maximum) 45

#### Duty Cycle Continuous

#### Maximum Viscosity 1500 Centipoise

#### Motor Voltage (Amp Draw)

120V 60Hz 1PH (0.6), 230V 60Hz 1PH (0.3),  
230V 50Hz 1PH (0.3)

#### Power Cord Type

120V 60Hz SJTOWA, 230V 60Hz SJTOWA,  
230V 50Hz H05RN-F

#### Power Cord Plug End

120V 60Hz 5-15P, 230V 60Hz 6-15P,  
230V 50Hz CEE7/7

#### Power Cord Length 6 ft (1.8 m)

#### Classification Indoor/Outdoor

### Materials of Construction

#### All Housings Polycarbonate

#### Pump Tube

- Santoprene® (FDA approved) **OR**
- Versilon® (excl. S4F, S4V)

#### Check Valve Duckbill **S3F, S3V**

Santoprene® (FDA approved) or Pellethane®

#### Ball Check Valve Components **S4F, S4V**

- Ceramic ball (FDA approved); tantalum spring;  
FKM seat & O-ring **OR**
- Ceramic ball (FDA approved); stainless steel spring;  
EPDM seat; Santoprene® O-ring

#### Pump Head Rollers Polyethylene

#### Roller Bushings Oil impregnated bronze

#### Suction/Discharge Tubing, Ferrules

Polyethylene (FDA approved)

#### Tube Fittings & Injection Fittings

PVC or Polypropylene (both NSF listed)

#### Connecting Nuts

PVC or Polypropylene (both NSF listed)

#### 3/8" Adapter **S3F, S3V**

PVC or Polypropylene (both NSF listed)

#### Suction Line Strainer and Cap

PVC or Polypropylene (both NSF listed);  
ceramic weight

#### All Fasteners Stainless steel

#### Pump Head Latches

**S3F, S3V** Polypropylene

**S4F, S4V** Stainless steel

#### Leak Detect Components Hastelloy®

NOTE: Refer to the chemical guide for material compatibility.

### Agency Listings

#### S3F, S3V

- NEMA 4X
- IAPMO Listed, conforms to standard NSF/ANSI 61 & 372 (excludes any model with a Versilon® tube).
- INTERTEK/ETL Sanitation Listed, conforms to standard NSF/ANSI 50 (excludes any model with a Versilon® tube).



THIS PUMP IS TESTED AND CERTIFIED BY IAPMO ACCORDING TO ANSI/NSF 61 FOR CONTACT WITH SODIUM HYPOCHLORITE AND WATER ONLY AND NSF/ANSI 372.



Intertek 94247

CONFORMS TO ANSI/NSF STD. 50 Equipment for swimming pools, spas, hot tubs and other recreational water facilities.

#### S4F, S4V

- NEMA 4X
- IAPMO Listed, conforms to standard NSF/ANSI 61 & 372.
- INTERTEK/ETL Sanitation Listed, conforms to standard NSF/ANSI 50 (excludes any model with a 7X tube or a ball check valve with stainless steel spring).



THIS PUMP IS TESTED AND CERTIFIED BY IAPMO ACCORDING TO ANSI/NSF 61 FOR CONTACT WITH SODIUM HYPOCHLORITE AND WATER ONLY AND NSF/ANSI 372.



Intertek 94247

CONFORMS TO ANSI/NSF STD. 50 Equipment for swimming pools, spas, hot tubs and other recreational water facilities.

# S FIXED and VARIABLE SERIES

## FIXED SERIES

### S3F Models 25 psi (1.7 bar) max. Flow Rate Outputs

Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S3F03</b>	3	40.0	1.67	213.0	3.56	151.0	6.31	6309.0	105.0
<b>S3F04</b>	4	60.0	2.50	320.0	5.33	227.0	9.46	9464.0	158.0
<b>S3F05</b>	5	85.0	3.54	453.0	7.56	322.0	13.41	13407.0	223.0

Approximate Output @ 50/60Hz

### S3F Models 100 psi (6.9 bar) max. Flow Rate Outputs

Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S3F01</b>	1	5.0	0.21	27.0	0.44	19.0	0.79	789.0	13.0
<b>S3F02</b>	2	17.0	0.71	91.0	1.51	64.0	2.68	2681.0	45.0
<b>S3F07</b>	7	40.0	1.67	213.0	3.56	151.0	6.31	6309.0	105.0

Approximate Output @ 50/60Hz



#### To Order, Build Pump Item Number

Insert item number prefix and code for each specification.

code Voltage & Hertz  
**AA** 120V 60Hz  
**BA** 230V 60Hz  
**DC** 230V 50Hz *International*  
 Contact the factory for additional voltage and plug options.

code Suction & Discharge Tubing  
**10** 1/4" White  
**20** 1/4" UV Black  
**30** 3/8" White  
**40** 3/8" UV Black  
**50** 6 mm White *Europe*  
 O.D does not affect output.

code Tube Material  
**1** Santoprene®  
**2** Versilon® (#7 not available)  
 Refer to the chemical guide for material compatibility.

### S4F Models 25 psi (1.7 bar) max. Flow Rate Outputs Santoprene® tube only

Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S4F5X</b>	5X	150.0	6.25	800.0	13.33	568.0	23.66	23659.0	394.0

Approximate Output @ 50/60Hz

### S4F Models 100 psi (6.9 bar) max. Flow Rate Outputs Santoprene® tube only

Item Number Prefix	Pump Tube	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S4F7X</b>	7X	60.0	2.50	320.0	5.33	227.0	9.46	9464.0	158.0

Approximate Output @ 50/60Hz



#### To Order, Build Pump Item Number

Insert item number prefix and code for each specification.

code Voltage & Hertz  
**AA** 120V 60Hz  
**BA** 230V 60Hz  
**DC** 230V 50Hz *International*  
 Contact the factory for additional voltage and plug options.

code Suction & Discharge Tubing  
**30** 3/8" White  
**40** 3/8" UV Black  
 O.D does not affect output.

code Ball Check Valve Spring, Seat & O-ring  
**1** Tantalum spring, FKM seat & O-ring  
**2** Stainless steel spring, EPDM seat, Santoprene® O-ring  
 Refer to the chemical guide for material compatibility.

**NOTICE:** The information within these charts 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.

## VARIABLE SERIES

### S3V Models 25 psi (1.7 bar) max. Flow Rate Outputs

Item Number Prefix	Pump Tube	Turndown Ratio	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S3V03</b>	3	20:1	2.0-40.0	0.08-1.67	10.7-213.0	0.18-3.56	7.6-151.0	0.32-6.31	315.5-6309.0	5.3-105.0
<b>S3V04</b>	4	20:1	3.0-60.0	0.13-2.50	16.0-320.0	0.27-5.33	11.4-227.0	0.47-9.46	473.2-9464.0	7.9-158.0
<b>S3V05</b>	5	20:1	4.3-85.0	0.18-3.54	22.7-453.0	0.38-7.56	16.1-322.0	0.67-13.41	670.3-13407.0	11.2-223.0

Approximate Output @ 50/60Hz

### S3V Models 100 psi (6.9 bar) max. Flow Rate Outputs

Item Number Prefix	Pump Tube	Turndown Ratio	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S3V01</b>	1	20:1	0.3-5.0	0.01-0.21	1.3-27.0	0.02-0.44	1.0-19.0	0.04-0.79	39.4-789.0	0.7-13.0
<b>S3V02</b>	2	20:1	0.8-17.0	0.03-0.71	4.5-91.0	0.07-1.51	3.2-64.0	0.13-2.68	134.1-2681.0	2.2-45.0
<b>S3V07</b>	7	20:1	2.0-40.0	0.08-1.67	10.7-213.0	0.18-3.56	7.6-151.0	0.32-6.31	315.5-6309.0	5.3-105.0

Approximate Output @ 50/60Hz



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Insert item number prefix and code for each specification.

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**AA** 120V 60Hz

**BA** 230V 60Hz

**DC** 230V 50Hz *International*

Contact the factory for additional voltage and plug options.

code Suction & Discharge Tubing

**10** 1/4" White

**20** 1/4" UV Black

**30** 3/8" White

**40** 3/8" UV Black

**50** 6 mm White *Europe*

O.D does not affect output.

code Tube Material

**1** Santoprene®

**2** Versilon® (#7 not available)

Refer to the chemical guide for material compatibility.

### S4V Models 25 psi (1.7 bar) max. Flow Rate Outputs Santoprene® tube only

Item Number Prefix	Pump Tube	Turndown Ratio	Gallons per Day	Gallons per Hour	Ounces per Hour	Ounces per Minute	Liters per Day	Liters per Hour	Milliliters per Hour	Milliliters per Minute
<b>S4V5X</b>	5X	20:1	7.5-150.0	0.31-6.25	40.0-800.0	0.67-13.33	28.4-568.0	1.18-23.66	1182.9-23659.0	19.7-394.0

Approximate Output @ 50/60Hz

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<b>S4V7X</b>	7X	20:1	3.0-60.0	0.13-2.50	16.0-320.0	0.27-5.33	11.4-227.0	0.47-9.46	473.2-9464.0	7.9-158.0

Approximate Output @ 50/60Hz



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Insert item number prefix and code for each specification.

code Voltage & Hertz

**AA** 120V 60Hz

**BA** 230V 60Hz

**DC** 230V 50Hz *International*

Contact the factory for additional voltage and plug options.

code Suction & Discharge Tubing

**30** 3/8" White

**40** 3/8" UV Black

O.D does not affect output.

code Ball Check Valve Spring, Seat & O-ring

**1** Tantalum spring, FKM seat & O-ring

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