



Designed for Demanding Applications

The S Series is a peristaltic metering pump built to NEMA 4X for demanding applications. Select from multiple operational modes and performance indicators that can interface with process control systems utilizing a 4-20mA output signal and three relay outputs. Program the pump for your application with the control panel with OLED display.

Quick Facts

- 0.05 to 60.0 gpd, pressures to 100 psi maximum
- 0.40 to 150.0 gpd, pressures to 25 psi maximum
- Digital keypad with OLED display
- Tube leak detector
- Tube life timer
- Password protection
- Connect primary to back-up S Series

Features

- Advantages of Stenner peristaltic pumps on page 1
- Fast tube replacement without tools with patented QuickPro® pump head
- Brushless DC motor with ball bearing support
- Switch mode power supply
- Totally enclosed housing
- Modbus capable
- NEMA 4X
- NSF 61 & 372
- cULus for indoor/outdoor use
- CE IP65
- NSF 50 (specific models)

Performance Indicators Activated by Pump Conditions

| Pump Conditions | Communication | | Modes of Operation |
|-----------------|--------------------------------|---|---|
| | Display Alarm on control panel | Three Output Relays to pump, system or device | |
| Tube Change | ✓ | ✓ | All Modes of Operation |
| Tube Leak | ✓ | ✓ | |
| Standby | ✓ | ✓ | |
| Drive Fault | ✓ | ✓ | |
| Off | ✓ | ✓ | |
| Run | — | ✓ | |
| Mode Change | — | ✓ | |
| Transfer** | — | ✓ | |
| Repeat Pulse | — | ✓ | Manual, 4-20mA*, 0-10VDC*, Pulse, 7 Day Timer, Cycle Timer, PPM Feed: Flow switch |
| High Signal | ✓ | ✓ | 4-20mA* or 0-10VDC* |
| Low Signal | ✓ | ✓ | 4-20mA* or 0-10VDC* |
| High Flow | ✓ | ✓ | Hall Effect or PPM Feed: Hall Effect |
| Low Flow | ✓ | ✓ | Hall Effect |
| Signal Overrun | ✓ | ✓ | Pulse |

* Scalable, invertible

** Transfer operation from a primary pump to a backup pump via a relay.

Modes of Operation

- Manual
- 4-20mA (scalable & invertible)
- 0-10VDC (scalable & invertible)
- Pulse
- Hall Effect
- 7 Day Timer
- PPM Feed: Flow Switch or Hall Effect
- Cycle Timer

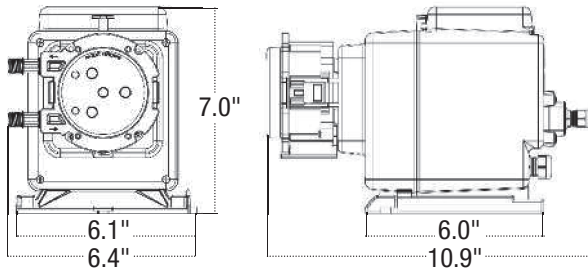
S SERIES S30 Models

S30 Models Weights and Dimensions

Shipping Weight 9 lbs (3.7 kg)

Box Dimensions 14 x 9 x 10 in. (35 x 23 x 24 cm)

Product Dimensions



S30 Models Accessories Shipped with Each Pump

- 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 Quick Start Guide

Download complete S Series Manual www.stenner.com

S30 Models

Specifications

Flow Rate Output Control

Varies per control mode; digital keypad

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 50Hz 1PH (0.3)

Hall Effect Max. Input Frequency

100 KHz

Pulse Duration Required

10 milliseconds
Minimum duration required for pump to read signal.

Power Cord Type

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

Power Cord Plug End

120V 60Hz 5-15P, 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®

Check Valve Duckbill

Santoprene® (FDA approved) or Pellethane®

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 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 Polypropylene

Leak Detect Components Hastelloy®

NOTE: Refer to the chemical guide for material compatibility.

Agency Listings

- 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 ANS/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.

S30 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 |
|--------------------|-----------|----------------|-----------------|------------------|-----------------|-------------------|----------------|-----------------|----------------------|------------------------|
| S3003 | 3 | 100:1 | 0.40 to 40.0 | 0.017 to 1.67 | 2.13 to 213.0 | 0.036 to 3.56 | 1.51 to 151.0 | 0.063 to 6.31 | 63.09 to 6309.0 | 1.05 to 105.0 |
| S3004 | 4 | 100:1 | 0.60 to 60.0 | 0.025 to 2.50 | 3.20 to 320.0 | 0.053 to 5.33 | 2.27 to 227.0 | 0.095 to 9.46 | 94.64 to 9464.0 | 1.58 to 158.0 |
| S3005 | 5 | 100:1 | 0.85 to 85.0 | 0.035 to 3.54 | 4.53 to 453.0 | 0.076 to 7.56 | 3.22 to 322.0 | 0.134 to 13.41 | 134.07 to 13407.0 | 2.23 to 223.0 |

Approximate Output @ 50/60Hz

S30 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 |
|--------------------|-----------|----------------|-----------------|------------------|-----------------|-------------------|----------------|-----------------|----------------------|------------------------|
| S3001 | 1 | 100:1 | 0.05 to 5.0 | 0.002 to 0.21 | 0.27 to 27.0 | 0.004 to 0.44 | 0.19 to 19.0 | 0.008 to 0.79 | 7.89 to 789.0 | 0.13 to 13.0 |
| S3002 | 2 | 100:1 | 0.17 to 17.0 | 0.007 to 0.71 | 0.91 to 91.0 | 0.015 to 1.51 | 0.64 to 64.0 | 0.027 to 2.68 | 26.81 to 2681.0 | 0.45 to 45.0 |
| S3007 | 7 | 100:1 | 0.40 to 40.0 | 0.017 to 1.67 | 2.13 to 213.0 | 0.036 to 3.56 | 1.51 to 151.0 | 0.063 to 6.31 | 63.09 to 6309.0 | 1.05 to 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
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.

NOTE: Duckbill check valve included with pumps rated 100 psi (6.9 bar) maximum.

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.

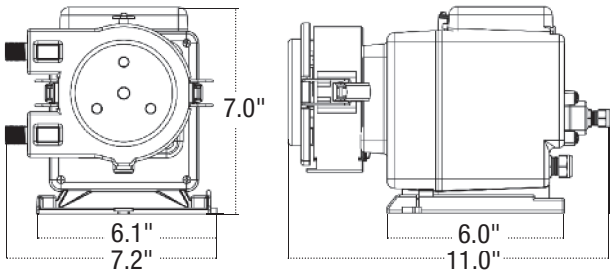
S SERIES S40 Models

S40 Models Weights and Dimensions

Shipping Weight 9 lbs (3.7 kg)

Box Dimensions 14 x 9 x 10 in. (35 x 23 x 24 cm)

Product Dimensions



S40 Models Accessories Shipped with Each Pump

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

Download complete S Series Manual www.stenner.com

S40 Models

Specifications

Flow Rate Output Control

Varies per control mode; digital keypad

Reproducibility ±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 50Hz 1PH (0.3)

Hall Effect Max. Input Frequency

100 KHz

Pulse Duration Required

10 milliseconds
Minimum duration required for pump to read signal.

Power Cord Type

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

Power Cord Plug End

120V 60Hz 5-15P, 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)

Ball Check Valve Components

- 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

Polyethylene (FDA approved)

Tube Fittings, Injection Fittings

PVC or Polypropylene (both NSF listed)

Connecting Nuts

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 Stainless steel

Leak Detect Components Hastelloy®

NOTE: Refer to the chemical guide for material compatibility.

Agency Listings

- 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 7X tube or a ball check valve with stainless steel spring).



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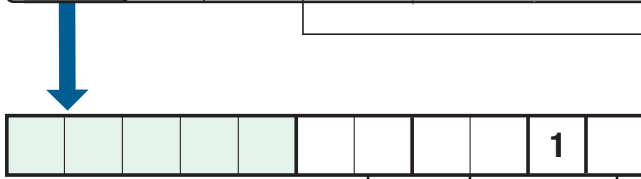
Intertek
94247
CONFORMS TO
ANSI/NSF STD. 50
Equipment for swimming pools, spas, hot tubs and other recreational water facilities.

S40 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 |
|------------------------------|-----------|----------------|-----------------|------------------|-----------------|-------------------|----------------|-----------------|----------------------|------------------------|
| S405X | 5X | 100:1 | 1.5 to 150.0 | 0.06 to 6.25 | 8.0 to 800.0 | 0.13 to 13.33 | 5.7 to 567.0 | 0.24 to 23.66 | 236.59 to 23659.0 | 3.94 to 394.0 |
| Approximate Output @ 50/60Hz | | | | | | | | | | |

S40 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 |
|------------------------------|-----------|----------------|-----------------|------------------|-----------------|-------------------|----------------|-----------------|----------------------|------------------------|
| S407X | 7X | 100:1 | 0.6 to 60.0 | 0.03 to 2.50 | 3.2 to 320.0 | 0.053 to 5.34 | 2.3 to 227.0 | 0.09 to 9.46 | 94.64 to 9464.0 | 1.58 to 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
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.

NOTE: Ball check valve included with S Series S40 models.

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.