

# SPS 250

SPS process pump

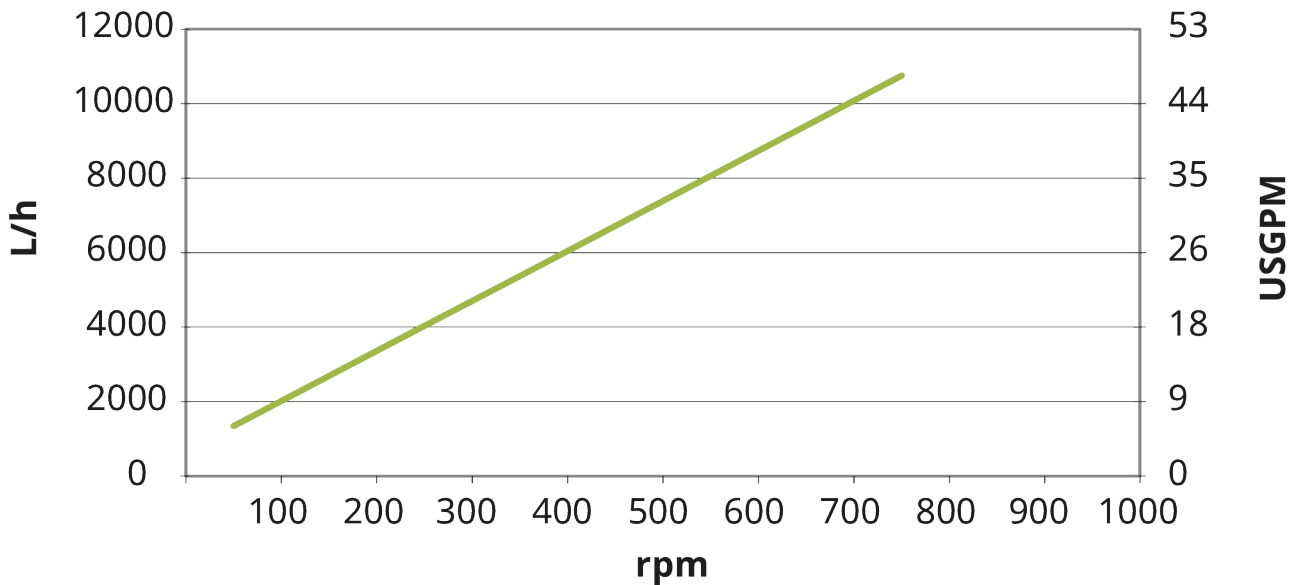
## Features and benefits

- Low shear transfer pump, with flow up to 11520 L/h at pressures up to 15 bar
- Superior viscous handling
- Consistent flow with high suction capability up to 0.85 bar
- Flexible configuration of housing, nozzle type, size orientation, drive and baseplate
- Hygienic CIP and SIP capability
- FDA and EC 1935/2004 compliance
- Operating temperatures up to 180 °C
- 20-year guarantee on front cover and pump housing



## Performance curves

These performance curves show the theoretical flow without consideration of slip



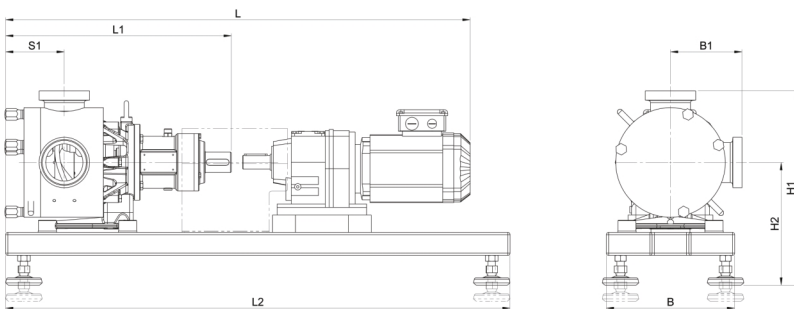
## Technical specifications

|                             | SPS 250                                   |
|-----------------------------|---|
| Max. flow rate              | 11520 L/h                                 |
| Max. flow rate              | 50.5 usgpm                                |
| Volume per revolution       | 0.24 L                                    |
| Volume per revolution       | 0.063 usg                                 |
| Max. particle size          | 22 mm                                     |
| Max. particle size          | 0.87 in                                   |
| Suction pressure            | 85% of a vacuum                           |
| Max. operating speed        | 800 rpm                                   |
| Max. operating pressure     | 15 bar                                    |
| Max. operating pressure     | 217 psi                                   |
| Operating temperature range | -20 to 180 °C                             |
| Operating temperature range | -4 to 356 °F                              |
| Standards                   | ATEX                                      |
| Certification               | EC 1935/2004, FDA                         |
| Port orientation            | Various options to meet your requirements |
| Port type                   | Flange, Milk fitting, RJT, SMS, TC        |
| Shaft diameter              | 28 mm                                     |
| Shaft Diameter              | 1.1 inch                                  |
| Shaft Height                | 5.75 inch                                 |
| Shaft Height                | 146 mm                                    |

## Materials of construction

|                 | SPS 250                                      |
|-----------------|--|
| Housing         | Stainless steel 1.4404, Stainless steel 316L |
| Bearing frame   | Stainless steel 1.4301, Stainless steel 304  |
| Rotor           | Stainless steel 1.4404, Stainless steel 316L |
| Gate and liners | Polyamide                                    |
| Seals/gaskets   | EPDM, FFKM, FKM, NBR, PTFE                   |

## SPS 250 dimensions



| Model   | L    |      |      |      | L1  |      | L2  |      | S1  |      | B   |      | B1   |      |      |      | H1   |      |      |      | H2   |      |      |      |
|---------|------|------|------|------|-----|------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
|         | min. |      | max. |      |     |      |     |      |     |      |     |      | min. |      | max. |      | min. |      | max. |      | min. |      | max. |      |
|         | mm   | inch | mm   | inch | mm  | inch | mm  | inch | mm  | inch | mm  | inch | mm   | inch | mm   | inch | mm   | inch | mm   | inch | mm   | inch | mm   | inch |
| SPS 250 | 872  | 34.3 | 1091 | 43   | 428 | 16.9 | 800 | 31.5 | 114 | 4.5  | 210 | 8.3  | 126  | 4.96 | 156  | 6.14 | 375  | 14.8 | 445  | 17.5 | 250  | 9.84 | 290  | 11.4 |

Disclaimer: All flow rates shown were obtained pumping water at 20 °C (68 °F) with zero suction and delivery heads. Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. Watson-Marlow, MasoSine, Qdos, ReNu, LoadSure, Bioprene, Pumpsil and Marprene are trademarks of Watson-Marlow Limited. STA-PURE PFL® and STA-PURE PCS® are registered trademarks of W.L Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

[wmfts.com/global](http://wmfts.com/global)



31 May 2023