**L/S® DIGITAL PROCESS DRIVE**

**Features/Benefits**
- Flow rates: 0.006 to 3400 mL/min (0.001 to 54 GPH) with L/S tubing
- Cartridge flow rate: 0.0005 to 1700 mL/min per channel
- Washdown process drive is IP66, NEMA 4X rated
- Electropolished 316L stainless steel housing withstands common cleaning and sanitizing solutions
- Four-line graphical LCD display shows four operating modes: continuous run, volume dispense, time dispense, and copy dispense—interface permits precise setting of desired flow rate or volume without over- or undershoot
- Menu-driven interface lets you select one of seven languages for programming and operation
- Set time interval (delay) between dispense cycles for hands-free dispensing
- Batch count lets you set the desired number of batches and displays number of batches completed
- Cumulative volume function (totalizer) tracks total volume dispensed/pumped
- User-selectable metric or English flow/volume units
- PWM speed control with tachometer feedback for precise, efficient control; ±0.1% speed control accuracy
- Reversible, maintenance-free brushless motor
- Drive stores one calibration value per tubing size, even when turned off
- Universal voltage, 30 to 200 VAC autoselect, 50/60 Hz
- Compatible with all L/S pump heads

**Drive Controls**
- Protected power switch located on back of drive
- Lighted display indicates power is on
- Simple programming and operation of the following via sealed membrane keypad:
  - Tubing size
  - Flow rate
  - Flow direction
  - Flow units (metric or English)
  - Motor speed (rpm)
  - Total volume
  - Dispense (volume/copy/time)
  - Batch count
  - On/off timer
  - Control mode (remote/internal)
  - Prime
  - Start/stop
  - Calibration

**Setup**
1. Mount pump head(s) and load tubing.
2. Turn drive power on and select language.
3. Select manual (internal) or remote control.
4. Select motor direction.
5. Prime and calibrate pump if required.
6. Set flow rate through keypad.
7. Press START key to begin pumping.

**Speed Control/Circuitry**
- Regulate motor through keypad and menus, 4 to 20 mA, or 0 to 10 V signal
- Soft start for starts without power surges
- Speed not affected by variations in power line voltage (VAC) and frequency (Hz)
- Line filters reduce outside interferences
- Meets UL 61010-1, CSA C22.2, No. 61010-1; For CE mark: EN61010-1 (EU low voltage) and EN61326-1 (EU EMC)

**Remote Control**
- Speed control input: 0 to 20 mA, 4 to 20 mA, and 0 to 10 V (measurable/invertible)
- Speed signal output: 0 to 20 mA, 4 to 20 mA, and 0 to 10 V (measurable/invertible)
- START/STOP, CW/CCW, PRIME via contact closure
- Tech output: open collector
- Motor running indicator
- 31-pin circular waterproof connection
- Handheld remote and foot switch options: order separately under "Accessories"

**Ordering Information**

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Flow rate (mL/min)</th>
<th>Power (50/60 Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RX 07575-10</td>
<td>0.1 to 600</td>
<td>50 to 260 VAC</td>
</tr>
</tbody>
</table>

**L/S PUMP TUBING FLOW RATE INFORMATION (mL/min)**

Order Masterflex L/S pump tubing separately on pages 64-69

<table>
<thead>
<tr>
<th>Tubing cross section</th>
<th>L/S Precision pump tubing</th>
<th>L/S High-performance Precision pump tubing</th>
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<tbody>
<tr>
<td>L/S 13</td>
<td>0.006 to 36</td>
<td>0.17 to 1000</td>
</tr>
<tr>
<td>L/S 14</td>
<td>0.02 to 130</td>
<td>0.20 to 1700</td>
</tr>
<tr>
<td>L/S 16</td>
<td>0.08 to 400</td>
<td>0.30 to 2300</td>
</tr>
<tr>
<td>L/S 23</td>
<td>0.17 to 1000</td>
<td>0.17 to 1000 (0.18 to 1000)</td>
</tr>
<tr>
<td>L/S 17</td>
<td>0.20 to 1700</td>
<td>0.28 to 1700 (0.30 to 1600)</td>
</tr>
<tr>
<td>L/S 18</td>
<td>0.30 to 2300</td>
<td>0.38 to 2300 (0.43 to 2600)</td>
</tr>
<tr>
<td>L/S 15</td>
<td>0.17 to 1000</td>
<td>0.48 to 2900 (0.57 to 3400)</td>
</tr>
<tr>
<td>L/S 24</td>
<td>0.28 to 1700</td>
<td></td>
</tr>
<tr>
<td>L/S 35</td>
<td>0.38 to 2300</td>
<td></td>
</tr>
<tr>
<td>L/S 36</td>
<td>0.48 to 2900</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Flow rates in parentheses can be obtained only with the High Performance pump head.*
**Specifications** for L/S Digital Process Drive

**Performance Specifications**
- Flow capacity: 0.006 to 3400 mL/min (0.0001 to 54 U/H)
- rpm: 0.1 to 600
- Number of heads accepted: 2
- Maximum torque:
  - Starting: 39 kg-cm (540 oz-in)
  - Running: 13 kg-cm (180 oz-in)
- Reversible: Yes
- External control input: 0 to 20 mA, 1 to 20 mA, 0 to 10 V; Start/Stop, CW/CDW, Prime
- External control output: 0 to 20 mA, 4 to 20 mA, 0 to 10 V, TTL, “drive running” contact

**Electrical Specifications**
- Voltage/Frequency: VAC (50/60 Hz)
  - 60 to 260, universal-voltage, autoselecting
- Current: 2.2 A at 115 V, 1.1 A at 230 V
- Fuse rating: 3.15 A
- Motor type: Continuous-duty, brushless DC
- Motor size: 76 W (1/4 hp)
- Display: Four-line graphical LCD
- Motor/SPEED control type: PWM with microprocessor
- Speed regulation (repeatability): ±0.1%
- Soft start/Electronic brake: You/You

**Physical Specifications**
- Housing materials: 316 stainless steel, electropolished
- IP rating: IP66 (NEMA 9X)
- Agency Listings: ETL, CUL
- Operating temperature: 0 to 40°C (32 to 104°F)
- Storage temperature: −34° to 60°C (−33° to 140°F)
- Dimensions: (L x W x H): 30.5 x 22.9 x 23.6 cm (12" x 9" x 9.3")
- Shipping weight: 11.8 kg (26 lb)

**Keypad Lock/Unlock Feature**
- Lock keypad and protect settings by highlighting the lock icon and pressing ENTER
- Select LOCK and press ENTER to exit menu
- Repeat above steps to unlock keypad

**Calibration**
1. Select TUBING CAL through the Main or Setup menu.
2. Set flow direction, tubing size, and flow rate
3. Prime the tubing.
4. Highlight S1AH1 and press ENTER, drive will run based on default volume.
5. Press ENTER and adjust CAL VOLUME to the actual measured volume.
6. Press ENTER to SAVE setting and EXIT.

**Note:** Digital signal processor retains one calibration value for each tubing size, even when power is turned off.

**Accessories**
- RX-07575-82 Handheld remote controller; momentary start/stop, prime, dispense start; 1.8-m (6-10) cable.
- RX-07575-84 Washdown foot switch, momentary start/stop; 1.8-m (6-4) cable.
- RX-07575-80 Remote control cable; wire to controller/PLC; 3-m (10-1) length.
- RX-07575-01 Replacement seal kit includes shaft seal, hardware, and gasket.