Digital Modular Dispensing Drives

Accurate repetitive dispensing in a convenient modular format!

- Modular design allows you to conveniently separate motor and controller by up to 15 feet (4.5 meters)
- Graphical LCD interface with four operating modes
- Precise flow regulation via easy-to-use menu-driven programming
- Antidrip function ensures dispensing accuracy
- Controllers are available in benchtop or washdown/wall-mount options
- L/S° or I/P° drives meet a wide range of flow rates
Masterflex® Digital Modular Dispensing Drives

Precision digital drives offer four dispensing modes and low-maintenance brushless motors. Modular format lets you place motor and controller where convenient—up to 15 feet (4.5 meters) apart. Motors allow you to stack pump heads for increased flow rates and multichannel applications.

The four-line graphical LCD displays all operational parameters and intuitive menu-driven programming eases setup. The ±0.1% speed control offers accurate and repeatable fluid metering and transfer. Antidrip function prevents annoying end of cycle dripping and sample loss and increases dispensing accuracy.

Benchtop and washdown/wall-mount models are designed for accurate dispensing but are reliable enough for continuous-duty process applications. For easy integration into automated processes, you can control speed, direction, start/stop, and prime remotely.

**Easy-to-Use Controller Interface**

- Reversible motor allows you to prime or purge tubing and pump fluid in either direction
- Separate speed and power (on/off) controls to maintain your speed setting while turning pump on and off
- Graphical LCD shows four operating modes:
  - Continuous run
  - Timed dispense
  - Copy dispense
  - Volume dispense
- Keypad lockout provides security
- Select keypad or remote control
- Membrane keypad and menu-driven programming for easy control of pumping parameters

**Convenient Controller Input/Output**

- Connector for multifunction remote control
- Secure cable connection between controller and drive unit
- Universal voltage and country-specific plug/cord set
- Separate power (on/off) switch to keep your settings when pump is turned off

**Remote Control Capabilities**

- Speed control input: scalable 0 to 20 mA, 4 to 20 mA, 0 to 10 V
- Pumping direction: requires open collector or contact closure
- Start/stop/purge: requires open collector or contact closure
- Tachometer output: scalable 0 to 20 mA, 4 to 20 mA, 0 to 10 V, or open collector
MODULAR DRIVES WITH BENCHTOP CONTROLLER

- Splash-resistant ABS plastic controller housing is IP33 rated; drive housing is epoxy-finished steel, IP33 rated
- Include a 6-ft (1.8-m) cable to connect drive and controller; optional 9-ft (2.7-m) extension cable is available (see "Accessories" on back page)
- Remote control capabilities via DB25 female connector on back of controller

WASHDOWN MODULAR DRIVES WITH WALL-MOUNT CONTROLLER

- Wall-mount controller housing is powder-coated aluminum, IP66 / NEMA 4X rated for washdown; powder-coated steel drive housing is IP66 / NEMA 4X rated for washdown
- Include a 6-ft (1.8-m) cable to connect drive and controller; optional 9-ft (2.7-m) extension cable is available (see “Accessories” on back page)
- Remote control capabilities via weather-resistant connection on controller
**L/S® Digital Modular Dispensing Drives**

- Ideal for laboratory or research applications. Accept all nine styles of L/S pump heads

**Flow rates in mL/min** (Flow rates in parentheses can only be obtained with the High-Performance pump head)

<table>
<thead>
<tr>
<th>rpm</th>
<th>L/S 13</th>
<th>L/S 14</th>
<th>L/S 16</th>
<th>L/S 25</th>
<th>L/S 17</th>
<th>L/S 18</th>
<th>L/S 15</th>
<th>L/S 24</th>
<th>L/S 35</th>
<th>L/S 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 to 600</td>
<td>0.006 to 36</td>
<td>0.021 to 130</td>
<td>0.08 to 480</td>
<td>0.17 to 1000</td>
<td>0.28 to 1700</td>
<td>0.38 to 2300</td>
<td>0.18 to 1000</td>
<td>0.28 to 1700</td>
<td>0.36 to 2300</td>
<td>0.48 to 2900</td>
</tr>
</tbody>
</table>

1. The Standard pump head is not available for L/S 25.
2. Multichannel head is not available for L/S 36. Multichannel and Cartridge heads are available for microbore tubing.

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**I/P® Digital Modular Dispensing Drives**

- Ideal for higher flow rate applications such as manufacturing, industrial, or large-volume transfers

**Flow rates in LPM (GPM) per channel**

<table>
<thead>
<tr>
<th>rpm</th>
<th>I/P 26</th>
<th>I/P 73</th>
<th>I/P 82</th>
<th>I/P 70</th>
<th>I/P 88</th>
<th>I/P 89</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 to 650</td>
<td>0.0006 to 4.0 (0.0002 to 1.0)</td>
<td>0.001 to 8.0 (0.0003 to 2.1)</td>
<td>0.002 to 13.0 (0.0005 to 3.5)</td>
<td>0.001 to 8.0 (0.0003 to 2.1)</td>
<td>0.002 to 17.0 (0.0005 to 4.5)</td>
<td>0.0025 to 19.0 (0.0007 to 5.0)</td>
</tr>
</tbody>
</table>

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**Accessories for benchtop models**

**MK-07523-97** Handheld remote controller; control start/stop, direction, and prime; route tubing through handle for dispensing and filling applications; 6-ft (1.8-m) cable. For 77301-40 only

**MK-07523-92** Foot switch, momentary start/stop; 6-ft (1.8-m) cable

**MK-07523-95** Cable assembly, DB25 male connector and 25-ft (7.9-m) cable with stripped wire ends for remote control

**MK-77301-82** Extension cable, 9 ft (2.7 m); extends distance between motor and controller

**MK-07523-94** DB25 male connector, use to create your own cable

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**Accessories for washdown models**

**MK-07575-84** Washdown foot switch, momentary start/stop; 6-ft (1.8-m) cable

**MK-77301-82** Extension cable, 9 ft (2.7 m); extends distance between motor and controller

**MK-07575-80** Cable assembly, 31-pin round connector and 25-ft (7.9-m) cable with stripped wire ends for remote control