

Digital Laboratory/Industrial Pump Drive



Series MPD 55D For your high precision

needs, Series MPD 55D variable speed drives from Micropump are a perfect fit. Designed to fit a wide variety of Micropump's magnetically driven gear pumps, they feature built-in calibration, simple installation, and an RS 232 interface, as well as adjustable flow rates and programmable

dosing. With rugged construction, IP55 protection,

and a digital electronic controller, these drives meet your needs with precision and quality.

Variable Speed

The drive speed can be easily controlled and set manually using a touch-sensitive keyboard with the speed of the drive shown on an LED display. In addition to manual control, an external analog or digital signal can easily control the drive speed. The direction of rotation and start/stop can also be controlled remotely using either of these signals. The speed range is from 100 rpm to 3000 rpm.

Digital Electronic Control

The drive features a sophisticated digital controller that is pre-programmed with the volumetric displacement of all available pumpheads. This allows flows to be directly set in ml/min. In addition, the drive uses an optical encoder to ensure the set speed remains constant over varying pump loads. This allows a steady and constant output from the pump. The control accuracy of the drive is +/- 0.5%.

Volumetric Dosing

The drive can be programmed to dose a set volume. The set volume can be called up as often as you like with the start/stop button, or with a pulse from the analog or digital interface.

Built-In Calibration

The drive has a built-in calibration program that allows individual pumps to be calibrated. This allows the flow rate to be accurately set for an individual pumphead, for either flow or volumetric dosing, at the required operating parameter.

RS 232 Interface

With the RS 232 Interface it is possible to control the drive from a computer via a serial interface.

Reverse Operation

The drive can be set to run in the reverse direction, reversing the flow direction of the pump. This feature can only be used with the 120 cavity style pump.

Simple Pump Installation

The drive interface allows a wide range of Micropump magnetically driven gear pumps to be simply fitted to the drive with two fixing screws. The drive is factory fitted with a driving hub that magnetically couples with the leak-free pump. This allows the pump to be changed in a matter of seconds with no special tooling.

Wide Pump Range Available

The drive will fit 120, 180, and 200 series gear pumps offering a flow range from 1.7 to 3500 ml/min (0.0004 to 0.92 GPM) and outlet pressures up to 8.7 Bar (125 psi) depending on pump model. An extensive range of wetted pump material options assures compatibility with a wide range of chemicals.



SERIES MPD 55D

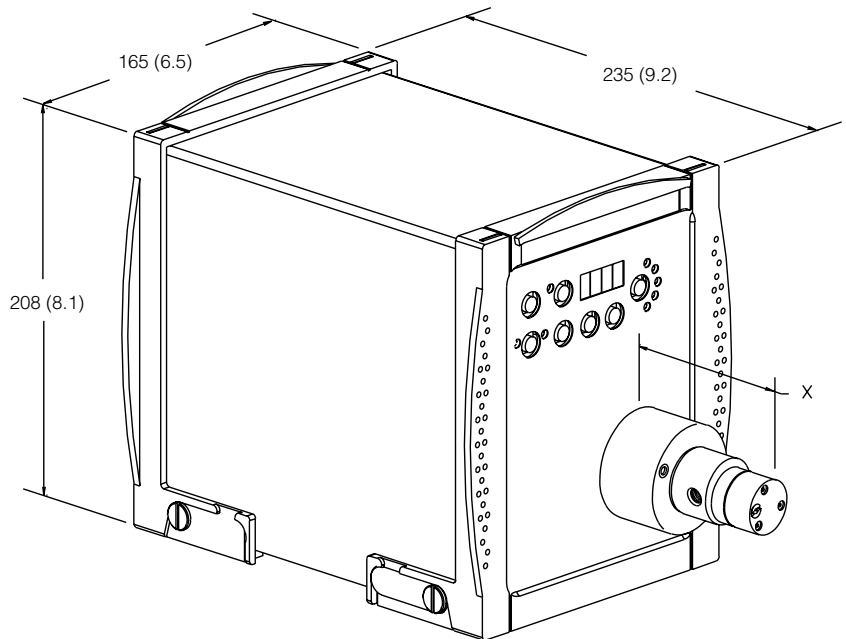
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Drive Specifications

Power Supply	
115 VAC/60 Hz	230 VAC/50 Hz
Maximum Speed	Speed Accuracy
3000 rpm	+/- 0.5%
Speed Control	
Digital controller with feedback	
Speed Setting	
Digital with 4-digit display	
Direction of Rotation	
Reversible	
Motor Rating	
81W	
Electrical Interface—Analog	
Analog for speed (0-10V or 4-20mA)	
Direction of rotation and start/stop (TTL)	
Electrical Interface—Digital	
RS232	
Weight	
excluding pumphead	
8.0 kg	17.6 lbs.
Protection Class	
IP55	
Permissible Ambient Conditions	
at 80% relative air humidity	
0 - 40° C	32 - 104° F
Dimensions	
(W x D x H)	
165 x 235 x 208 mm	6.5 x 9.2 x 8.1 in.

Dimensions



Dimension X

Series 180 = 63.5 (2.5)
Series 200 = 77.0 (3.03)
Series 120 = 94.4 (3.72) maximum

Units: mm(in). Nominal dimensions shown.

Available Pumpheads



Series 180

Flow rates to: 0.28 L/min (0.07 GPM)
Pressures to: 5.2 Bar (75 psi)
Displacement: 0.017 / 0.042 / 0.084 / 0.092 ml/rev



Series 200

Flow rates to: 3.5 L/min (1.1 GPM)
Pressures to: 8.7 Bar (125 psi)
Displacement: 0.26 / 0.58 / 1.17 ml/rev



Series 120

Flow rates to: 2.7 L/min (0.71 GPM)
Pressures to: 5.6 Bar (80 psi)
Displacement: 0.316 / 0.64 / 0.91 ml/rev

Flow rates based on maximum drive speed of 3000 rpm.

Contact your Authorized Micropump Distributor for more detailed information on individual pumpheads.

ACTUAL PERFORMANCE MAY VARY

Specifications are subject to change without notice.

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