

# Thermo Scientific Microflex™

## OEM Peristaltic Pump with DIN Enclosure for Microfluidic Applications



Ideal for a wide variety of life science, medical, and industrial applications:

- Chromatography,
- Spectroscopy,
- Lab analyzers,
- Fermenter recirculation
- Reagent metering applications,
- Bio-reactor feed and chemistry control
- pH control

Instrument quality design in a small, compact package

Complete with pump, motor, and control in a 1/4 -DIN enclosure.



### Approvals and quality standards

UL, cUL and CE  
ISO 9001:2000  
ISO 13485:2003  
1 year warranty

### Pump design

Simple, fast tubing changes.

Fixed occlusion eliminates adjustment after tubing changes and assures operation against pressure up to 30 PSIG.

New tubing retention prevents tubing “creep” (pat. pending).

### High purity

Accommodates all sizes and formulations of microbore flow rated tubing.

Manufacturer recommended microbore BioPharm™ Plus silicone tubing - non-spalling and ultra-smooth performance

### Performance

Flow rates less than 3µL/min to 30 ml/min.

Pressure up to 2 bar (30 PSIG)

Accurate and repeatable flow delivery

### Mounting options

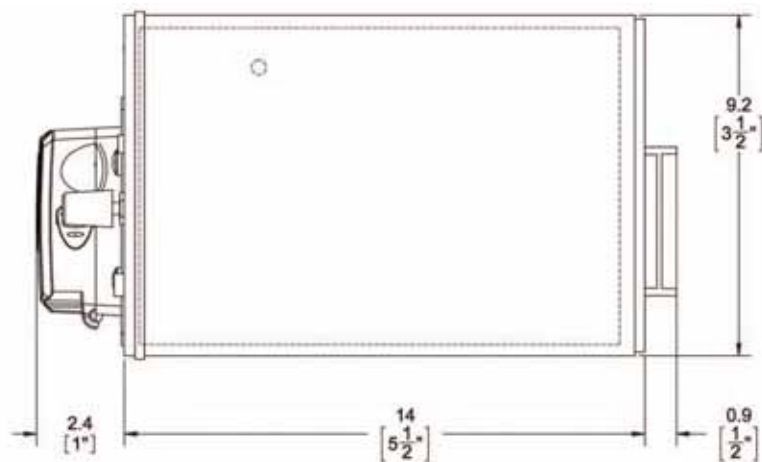
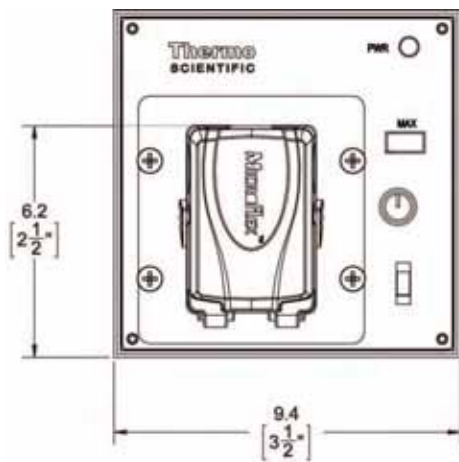
Stand-alone or enclosure mounts in standard 1/4-DIN cutout.

### Drive controls

Mounted on front panel.  
Separate single-turn speed control.

Flow direction switch with center off position.

Green LED power indicator  
“Prime” button runs pump at maximum speed to rapidly prime or flush tubing



RPM	Microbore tubing size (ID) - ml/min							
	0.19mm	0.25mm	0.51mm	0.89mm	1.14mm	1.42mm	2.06mm	2.79mm
1.7 to 10	0.002 – 0.013	0.004 – 0.022	0.015 – 0.087	0.041 – 0.25	0.064 – 0.39	0.09 – 0.57	0.18 – 1.05	0.28 – 1.65
13 to 80	0.017 – 0.10	0.03 – 0.18	0.12 – 0.70	0.33 – 2.0	0.52 – 3.1	0.75 – 4.5	1.4 – 8.5	1.8 – 11.0
50 to 300	0.06 – 0.38	0.11 – 0.67	0.43 – 2.6	1.2 – 7.4	1.9 – 11.5	2.8 – 17.0	5.3 – 32	7.2 – 43.0

Catalog number	820-2010	820-2080	920-2300
<b>Performance Specifications</b>			
Flow capacity (ml/min)	0.002 to 1.65	0.017 to 11	0.06 to 43
Rpm	1.7 to 10	13 to 80	50 to 300
Number of channels	One		
Reversible	Yes		
External control – input	Contact closure – On/Off		
<b>Electrical Specifications</b>			
Voltage VAC (50/60 Hz)	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
Current (A)	0.6	1.0	1.3
Motor size (watts)	5	10	15
Gear reduction	581.8:1	95.9"1	19.5:1
Motor Type	Permanent-Magnet D.C.		
Display	LED Power Indicator Light (Green) (Green)		
Speed regulation of set point (repeatability)	±5 %		
Soft-start/electronic brake	Yes – entire system)		
<b>Physical Specifications</b>			
Housing materials	1/4-DIN ABS Plastic		
Pump head materials	LED Power Indicator Light (Green)		
IP rating	IP22		
Agency listings	UL, cUL (Power Supply), CE (EMC – entire system)		
Operating temperature	0 to 40°C (32 to 104°F)		
Storage temperature	-45 to 65°C (-13 to 149°F)		
Dimensions (L x W x H)	17.3 cm x 8.9 x 8.9 cm (6.8 x 3.5 x 3.5 in)MC – entire system)		
Shipping weight	1.2 kg (2.6 lbs)		

[www.thermo.com/fluidhandling](http://www.thermo.com/fluidhandling)

Barrington, IL 60010  
 1-800-637-3739, Press 4 for OEM Sales  
 1-847-381-7050, Press 4 for OEM Sales  
 1-847-381-7053 fax

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