

# Water Flow Regulators

## You can't buy better water flow regulators!

EMI's water flow regulators provide precise settings of cooling water flow rates with balancing adjustments, so you get consistent part shrinkage, optimum molding quality and consistency and instant indication of a blocked circuit. Individual circuit regulation valves eliminate flow fluctuations and zone thermometers show "from process" water temperatures. 100% leak tested before shipping. Easy to clean. Adjustable, external sight glass tube rings show deviation, allow fast flow settings when restarting molds.

**Series 110** Flow Rate 0–2.6 GPM (10 LPM) per circuit. The essential device for your plastics processing machines for open and closed cooling circuits. Flow volume is indicated in accordance with the float measuring principle: a cone is lifted by the water flowing in the return of the mold circuit. See page 150.

**Series 310** Flow Rate 0–8 GPM (30 LPM) per circuit. The optimum flow regulator for large injection molding and blow molding machines. Its low pressure drop makes it suitable for highest flow volumes. Due to the special design of the regulating valves, excellent regulation and accurate reproduction of cooling water volume and temperature in the different mold circuits can also be achieved for low flow volumes. See page 151.

**Series 401 (Mini)** Flow Rate 0–2.1 GPM (8 LPM) per circuit. The ideal unit specially designed for the smaller range of injection molding machines up to approx. 80 tons clamping force. See page 148.

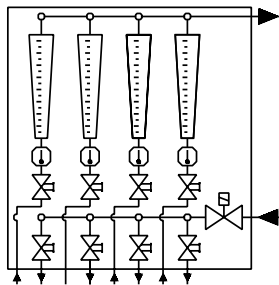
**Series 200 (Brass)** Flow Rate 0–2.6 GPM (10 LPM) per circuit. See page 156.

**Series 230 (Brass)** Flow Rate 0–8 GPM (30 LPM) per circuit. The upper and lower blocks as well as the manifolds are made of brass for high temperatures and pressures. See page 156.

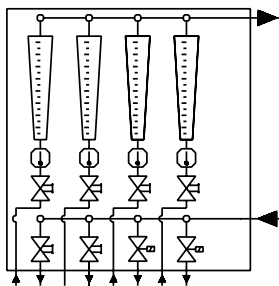
**These Options are special order and require a Quote. Contact: [Sales@EMlcorp.com](mailto:Sales@EMlcorp.com)**

### Optional Valves Enhance Your Regulator's Performance (for 110 & 310 series only)

**Z-Valve** option allows several zones to be shut off if molding is interrupted. Saves water. Prevents unnecessary cool-down. 24 v. connection and water filter included. Default location is Zone 1, unless otherwise specified.



**E-Valve** automatically shuts off flow to a specific zone to avoid over-cooling sensitive circuits. Must specify Zone for valve.



**The Dry-Out Valve** option allows complete clean-out of the Regulator and mold channels by compressed air. Special manifold block provided. Default location is last Zone, unless otherwise specified.

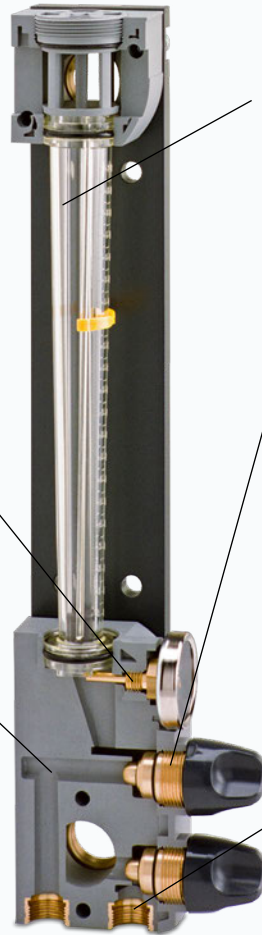


## Water Flow Regulators

### Here's what our competitors don't want you to know:

Thermometer is directly in the water flow giving a more precise reading and a quicker reaction to changes. Competitors' thermometers are not in water flow path.

Enlarged water passages minimize flow restrictions, deliver increased flow volume through the mold and enhance heat transfer performance. In fact, pressure drop from these EMI regulators is about half that of competitive units. That's an important difference if plant water pressure is low.



Our sight tube is polyamide 12 which is superior, compared to competitors' polycarbonate, when higher temperature water is used.

Competitors' regulators include a large diameter valve for the main seat which means regulation is not precise. With a very small movement of the handwheel, the valve is opened almost completely. Our units have a smaller diameter seat which allows better adjustment of flow.

EMI flow regulators include  $\frac{3}{8}$ " precision, threaded brass inserts for your water hose connections, unlike poorly designed regulators which use leak-prone molded threads which can strip easily.



**Quality, precision engineering and rugged construction are evident in EMI Flow Regulators:** housings molded of reinforced polyphenylene oxide for tough industrial use; sight glasses molded of polyamide 12 to stand up to high water temperatures; reference marks are molded in, not painted on; EPDM o-ring seals are heat and water resistant; all brass valve construction prevents leaks; large water passages minimize pressure drop and increase flow volumes. All brass models are available for applications above 180°F, see page 156.

### Easy to clean sight glasses

By simply unscrewing a plug, located at the top of the housing, and inserting the specially designed brush, the glass can be easily brushed clean . . . without having to be removed from the housing.

### Sight glasses and o-rings can be replaced without taking the unit apart

Sight glasses and / or o-rings can be easily withdrawn through the upper housing, with no need to disassemble the entire unit. Because the main body of the unit remains intact, the chance of leaks developing has been almost eliminated.

# Mini Water Flow Regulators Series 401

2.1 GPM (8 LPM) per zone maximum

¾" NPT supply

**Features:**

- Individual circuit regulation valves to eliminate flow fluctuations.
- Reference marks are molded into, not painted on the sight glasses.
- Internal composite floats along with external, adjustable sight glass tube rings.
- 100% leak tested before shipping.
- Mold connections with 12mm brass socket for ½" I.D. hose with clamp.



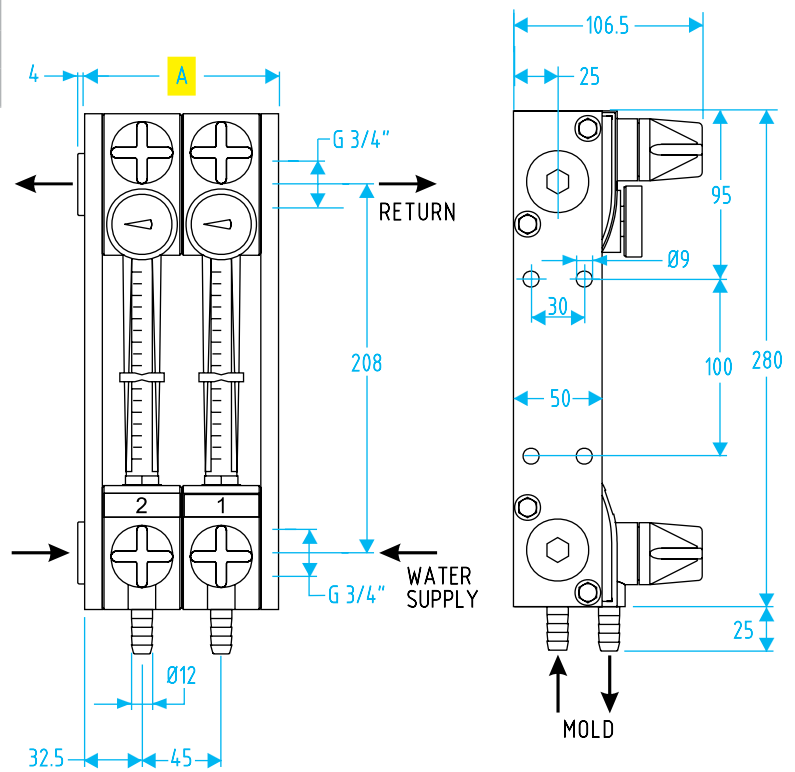
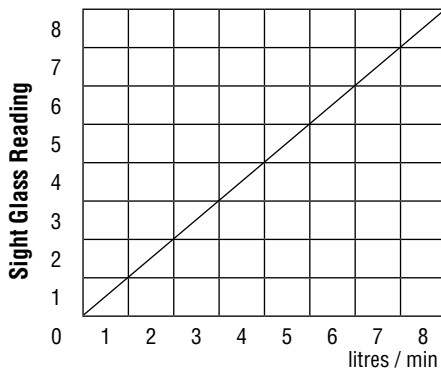
**Water Flow Regulators Series 401**

Quick#	Part#	# of Zones	A (mm)	Price
W073	WFR2M-2	2	110	\$321.00
W074	WFR2M-4	4	200	\$467.00
W075	WFR2M-6	6	290	\$633.00
W076	WFR2M-8	8	380	\$799.00

**Specifications**

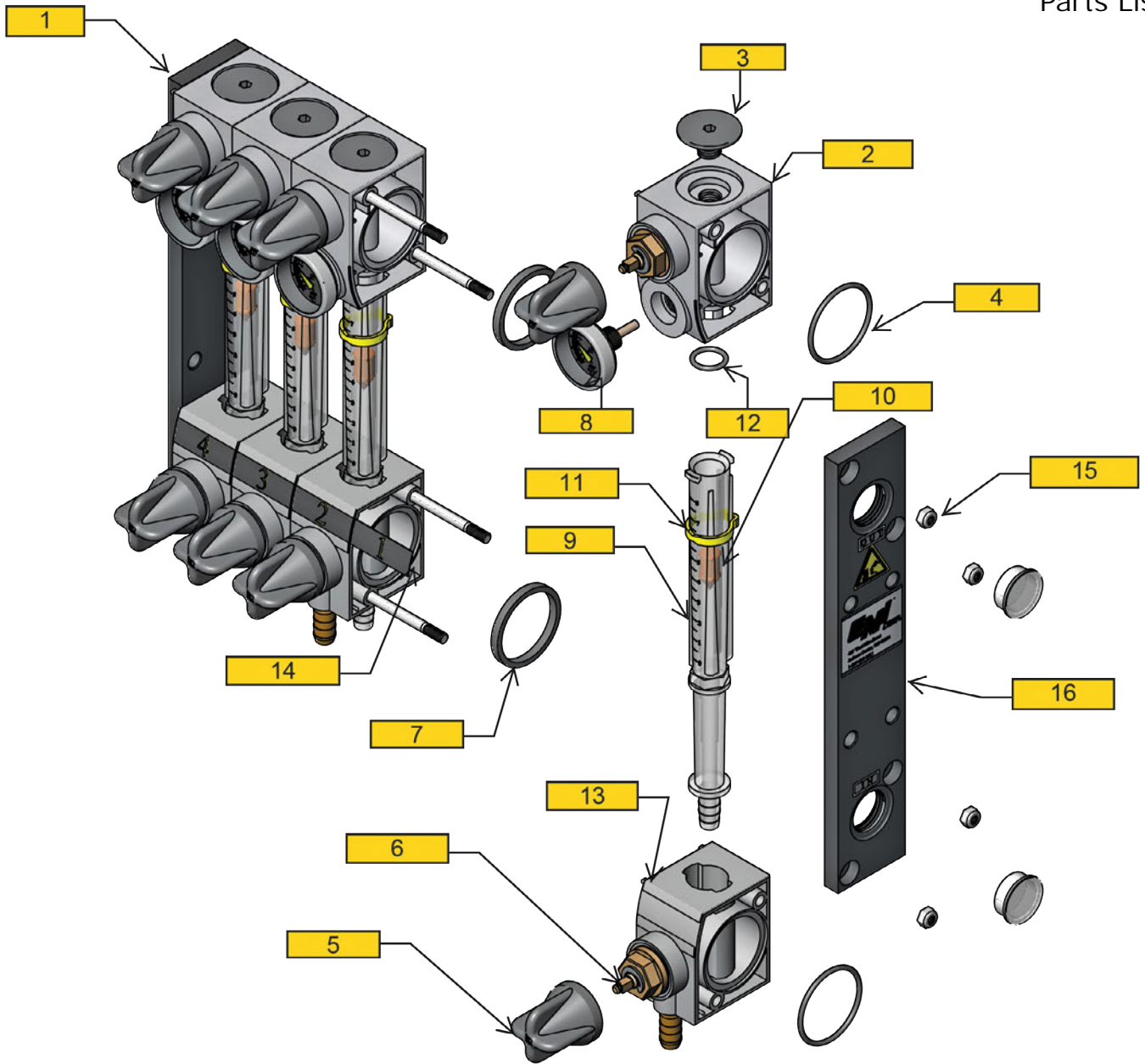
Maximum Pressure	Maximum Temperature
145 psi (10 bar)	104°F (40°C)
116 psi (8 bar)	140°F (60°C)
87 psi (6 bar)	176°F (80°C)
58 psi (4 bar)	212°F (100°C)

**Flow Chart for WFR2M**



# Mini Water Flow Regulators Series 401

## Parts List



Item	Quick#	Part#	Description
1	WP201	D900000633	Left Side End Plate- No Port
2	WP203	D900000737	Upper Manifold-w/ Plug, Valve & Thermometer
3	WP204	D900000502	Plug w/O-ring
4	WP205	MD00000004	O-ring-42mmX2.5mm
5	WP206	D700000682	Adjustment Knob
6	WP207	D800000009	Control Valve w/ O-rings
7	WP208	D700000021	Joint O-ring-47mmX40mmX4.8mm
8	WP209	D700000726	Thermometer
9	WP210	D900000282	Sight Glass Assembly

Item	Quick#	Part#	Description
10	WP211	D700000075	Brass Float
11	WP212	D700000016	Indicator Ring
12	WP213	MD000000007	O-ring-26.65mmX2.62mm
13	WP214	D900000730	Lower Manifold-w/Valve
14	WP215	D800000941	Label Set-1-8
15	-	Call EMI	Nut & Screw, Specify Zones
16	WP216	D900000822	Right Side End Plate 3/4" NPT
17	WP217	D700000125	Cleaning Brush (not shown)

**Note:** Cleaning brush comes standard with 101 and 301 series Water Flow Regulators. Purchase separately, Quick# WP217,