

### Cole-Parmer® Flowmeters and Controllers for Water

### Accurate, ultrafast volumetric measurement and control

- Technology allows for installation without typical inlet/outlet straight-run requirements
- Units provide data on multiple fluid parameters: flow, pressure and temperature
- All functions are user-programmable through an integrated keypad

These meters measure flow via pressure drop across a laminar flow element (LFE). Because the flow element makes the flow stream laminar, placement in the process does not require straight pipe runs upstream or downstream of the meter, greatly simplifying installation. The LFEs also provide an outstanding turndown ratio of 50:1 giving the meter a very broad and accurate measuring range. The design provides an ultrafast response at start-up or input change—often within 100 milliseconds. The 0 to 5 VDC output allows transmission of the flow value to a remote display, recorder, or controller regulating a valve or pump.

For the flow controllers, an integrated PID controller directs the unit's response to process changes. Set the P and D parameters to tailor the unit's response. Flow setpoint is established with the optional set point control module, a 0 to 5 V signal, or an RS-232 input signal. For portable flow metering (not controlling) applications, order the battery pack listed below. Units can be mounted via threaded taps in the meter body.

Meters and controllers feature dynamic display that simultaneously shows flow rate, line pressure, fluid temperature, and (for controllers) the set point. For the units shown, both power and input/output signals are transmitted through a single multi-pin connector.

**What's included:** integrated sensor, display, and transmitter; controllers add the valve assembly. All models include a 120 VAC power adapter; 220 VAC European adapters may be ordered separately below. Also included: NIST-traceable calibration report supplied by the manufacturer.



Flow controller  
32907-45

Flowmeter  
32908-40



#### Specifications

- Max particulate size:** Up to 50 mL/min: 20 µm  
100 mL/min to 10 LPM: 50 µm
- Accuracy:** ±2% full-scale
- Repeatability:** ±2% of full-scale
- Response time:** Flowmeters: 20 msec  
Flow controllers: 100 msec
- Turndown ratio:** 50:1
- Operating temp:** 50 to 122°F (10 to 50°C)
- Max system pressure:** 100 psig (6.9 bar)
- Pressure drop:** 0.8 psig (flowmeter element)
- Wetted materials:**  
Flowmeters: 303 SS (stainless steel), Viton®, silicone RTV, polyetherimide  
Flow controllers: 302 SS, 303 SS, Viton, silicone RTV, polyetherimide, and brass

- Input power:**  
Flowmeters: 7 to 30 VDC, 30 mA  
Flow controllers: 12 to 30 VDC, 250 mA
- Electrical connection:** 8-pin circular mini DIN
- Display type:** four-digit, seven-line LCD; ¼" H flow display
- Output signal:** 0 to 5 VDC, 0 to 10 VDC RS-232
- Input signal:** 0 to 5 VDC, 0 to 10 VDC RS-232 (controllers only)
- Connections:** 1 mL/min: 10-32 UNF  
5 mL/min to 10 LPM: ½" NPT(F)

#### Accessories

- GH-32916-57 Power adapter**, 220 VAC, for all flowmeters or controllers 10 LPM or less, Euro plug included
- GH-32916-58 Power adapter**, 220 VAC, for controllers 50 LPM and greater, Euro plug included
- GH-32929-50 Battery pack**, for portable flow/mass measurement
- GH-32929-89 Connection cable**, 8-DIN to stripped ends
- GH-17080-12 NIST-traceable recalibration** with data

Flow rate	Flowmeters		Flow controllers	
	Catalog number	Price	Catalog number	Price
0 to 1 mL/min	<a href="#">GH-32908-40</a>	—	—	—
0 to 5 mL/min	<a href="#">GH-32908-41</a>	—	—	—
0 to 10 mL/min	<a href="#">GH-32908-42</a>	—	—	—
0 to 50 mL/min	<a href="#">GH-32908-43</a>	—	<a href="#">GH-32907-43</a>	—
0 to 100 mL/min	<a href="#">GH-32908-44</a>	—	<a href="#">GH-32907-44</a>	—
0 to 200 mL/min	<a href="#">GH-32908-45</a>	—	<a href="#">GH-32907-45</a>	—
0 to 500 mL/min	<a href="#">GH-32908-46</a>	—	<a href="#">GH-32907-46</a>	—
0 to 1 LPM	<a href="#">GH-32908-47</a>	—	—	—
0 to 5 LPM	<a href="#">GH-32908-48</a>	—	—	—
0 to 10 LPM	<a href="#">GH-32908-49</a>	—	—	—



### Need Help Selecting?

Trust our **expert** Application Specialists to help you find the right product.

Kim, 12 years of experience

Call: **800-323-4340** E-mail: [sales@coleparmer.com](mailto:sales@coleparmer.com)