AkroFlow 9301 Portable Flow Meter



AKRON AkroFlow 9301 Portable Flow Meter for Hydraulic Testing and Inspection

The **AKRON AkroFlow 9301 portable flow meter** is a measuring device designed to accurately monitor water flow rates in firefighting equipment. Used for handheld nozzles testing, demonstrations, hydraulic training, or performance testing of a fire main, it allows the operator to determine both the **instantaneous flow rate** and the **cumulative water volume** during a measurement sequence.

Thanks to its electromagnetic technology, the AkroFlow measures water flow without any moving parts in the flow path. This full-bore design minimizes hydraulic disturbances and provides a reliable flow reading, with a specified accuracy of **±1%.** It offers a measurement range of **38 to 2,270 L/min**, with a maximum operating pressure of **13.8 bar**.

Measuring Instantaneous Flow Rate and Cumulative Water Volume

The AkroFlow 9301 does more than just display flow rate. Its LCD screen shows two key pieces of information for hydraulic testing:

- **the instantaneous flow rate**, displayed in L/min or L/s depending on the selected setting;
- **the cumulative water volume**, which is useful for determining the actual amount of water that has passed through the line during a test or measurement sequence.

The volume for the current session can be reset to zero, while still allowing the total recorded volume to be displayed. This feature is particularly useful for comparing multiple tests, measuring water consumption during an operation, or monitoring the volume delivered during a “ handheld nozzle ” test.

A useful tool for firefighting professionals

The AkroFlow flowmeter is designed for trained professionals who need concrete, actionable measurements in the field. In particular, it allows users to:

- **verify the actual flow rate of a fire handheld nozzle** or spray equipment;
- **monitor the performance of a pump** or a discharge line;
- **train crews on hydraulic principles** using a direct flow rate reading;
- **compare different configurations** of hoses, nozzles, or pressures;
- **document tests** with a cumulative water volume recorded during the measurement.

The AkroFlow is a device that provides a better understanding of the actual flow rate in a line, for testing, training, or inspection purposes. The model works with 1.5”, 1.75”, and 2.5” pipes, but the highest accuracy is achieved with a 2.5” line at both the inlet and outlet.

Robust design and easy-to-read display

The flowmeter body is made of glass-filled polypropylene, with hard-anodized aluminum inlet and outlet fittings, 316 stainless steel electrodes, and 300 series stainless steel clamps. Its hinged polyethylene cover protects the display from dust and UV rays, while allowing access to the optical controls. These controls are not mechanical buttons: they are activated by holding a finger in front of the optical cells for 2 to 4 seconds.

Power is supplied by **6 replaceable AA lithium batteries, providing**approximately 1 year of battery life when the device is in use, and up to 3 years when not in use, with a low-battery indicator. The product is rated **IP64** and NEMA 4X for storage.

Usage Guidelines

To maintain measurement accuracy and prevent damage to the device, the AkroFlow must be placed on the ground, between two lengths of pipe. **Do not connect the flow meter directly to a discharge outlet or a rigid suction line**: the weight of a pipe filled with water and possible movements under flow conditions can exert significant stress on the housing and fittings.

For optimal measurement, it is recommended to maintain a 2.5” straight section of hose before and after the flowmeter. The device is **not designed for explosive environments**. It must be used with fresh water: it is not recommended for pure foam concentrates, saltwater, petroleum products, or CAFS applications.

Rinsing with clean water after use, periodic cleaning of the electrodes, and annual battery replacement are the minimum maintenance requirements.

Technical Specifications

	AKRON AkroFlow 9301
	Electromagnetic flowmeter
	Instantaneous flow rate and cumulative water volume with totalizer
	38 to 2,270 L/min
	±1%
	13.8 bar

Pressure drop	0.28 bar at 2,270 L/min
Water passage	2” full-bore, or 50.8 mm
Connections	2.5” swivel female inlet and 2.5” male outlet
Available threads	NH, BSP, or NPSH depending on version
Dimensions	273 x 111 x 152 mm
Weight	2.4 kg
Materials	Body made of glass-filled polypropylene, hard-anodized aluminum fittings, 316 stainless steel electrodes
Power supply	6 replaceable AA lithium batteries
Protection rating	IP64
Operating limits	Not ATEX-certified; not recommended for saltwater, pure foam concentrate, petroleum products, or CAFS applications

MMF advice, maintenance, and support

At **MMF Protection et Sécurité**, a French distributor and authorized repair center for the **Akron Brass** brand, we assist professionals in selecting and using their fire protection equipment. For a flow meter such as the AkroFlow 9301, our role is also to help you verify the correctness of your installation: fitting type, pipe diameter, flow direction, operating pressure, and test conditions.

Our team can also advise you on available replacement parts, maintenance kits, and best practices for upkeep.