

# ADMAG AXF™

## The Solution For All Your Magmeter Applications



The AXF series is based on decades of Yokogawa experience with magmeters. The AXF series continues the tradition of high quality and reliability that is synonymous with the Yokogawa name and has innovative functions and technologies such as dual frequency excitation that deliver high level performance.

Retaining all the features and functions of the ADMAG series, AXF flowmeters have a number of optional features such as enhanced dual frequency excitation, as well as electrode adhesion diagnostics and replaceable electrodes for particularly difficult applications. Users benefit as the result of greater reliability and lower total cost of ownership.

### Advanced technology

#### Dual frequency excitation method

Unique to Yokogawa, dual frequency excitation provides the best of AC and pulsed DC excitation. Yokogawa is capable of measuring tough slurries, like an AC meter, and having at the same time the zero stability and accuracy of a pulsed DC meter. Low frequency excitation ensures zero stability, while high frequency excitation achieves slurry noise reduction and fast 0.1 second response times necessary for batching applications. Other benefits are low power consumption and the ability to perform measurements with positive displacement pumps.

#### Enhanced dual frequency excitation method

Enhanced dual frequency excitation with a high frequency of 160 Hz is also available as an optional feature. This ensures highly stable measurements in difficult applications such as high concentration slurries and low conductivity water. High-speed pulse output pulse rates up to 10,000 Hz are now supported for high speed applications such as short batch processes.

### High accuracy calibration option

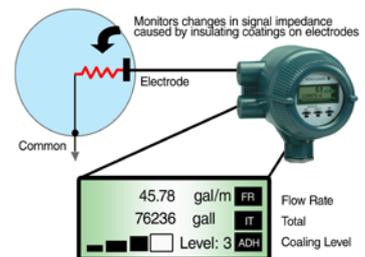
The standard accuracy is 0.35% of reading. Also available as an optional feature is high accuracy calibration rated at 0.2% of reading.

### Improved minimum conductivity

The AXF converter can measure fluids with conductivity as low as 1  $\mu$ S/cm.

### Advanced adhesion diagnostics

The adhesion diagnosis function is provided as a standard feature on all AXF magmeters. With this function, the impedance of the wetted portion of the electrode is monitored. A four level bar graph on the AXF converter's LCD display indicates the coating level. When the impedance reaches the third level a warning is displayed; when the impedance reaches the fourth level, an alarm can be triggered and displayed.



## Reliable design

Yokogawa has always focused on quality, durability, and reliability of its primary measuring elements and the AXF is no exception. The AXF is constructed from a welded stainless steel body with a reinforced neck, injection molded PFA liners with metal retaining plate for superior chemical resistance, high purity ceramics liner for abrasive resistance or various other liners for challenging applications. Along with our electrode construction, we have an electrode/liner combination that can suit any magmeter application.

## User-oriented functionality

### Clear and versatile indicator

The LCD indicator employs a large, backlit full dot-matrix that can facilitate one to three lines displays. When an alarm condition occurs, a full description of the countermeasure is indicated.

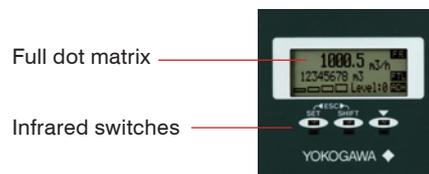
### Easy setup parameter

The most frequently used parameters are arranged

in a group at the top of the parameter menu. These menus can be accessed via the infrared switches on the display.

### Infrared switches

Infrared switches permit programming through the glass without the need to open the enclosure cover. The design of the infrared switches give them the feel of mechanical switches and provide consistent operation.



### Flexible electrical connection direction

The converter or the terminal box can be rotated arbitrarily to change the directions of electrical connection on site.

Sizes	2.5 mm to 2600 mm (0.1" to 104")
End Connections	Flange or wafer or sanitary (clamp, union, butt weld)
Electronics	Integral or remote
Measuring Range	0 to 191000 m <sup>3</sup> /h (0 to 869000 GPM - US)
Liner Material	Ceramic, EPDM, PFA, PU, Natural soft rubber
Electrode Material	Stainless steel 1.4404 / 316L, Hastelloy C276 equiv. 2.4819
	Platinum, Tantalum, Titanium, Tungsten carbide
Process Temperature Range	-40° C to +180° C (-40F to +356° F)
Pressure Range	Up to 4 MPa (290/580 psi)
Ambient Temperature	-20° C to +60° C (-4° F to + 140° F)
Accuracy*	± 0.35% (standard), ± 0.2% (optional)
Conductivity	≥ 1 μ S/cm
Indicator	3 line graphical display, multi-language
Hazardous Approvals	ATEX, FM, DSA, IEC EX, T11S, GOST
Signal Outputs/Inputs	4 to 20 mA
	Pulse/alarm output, status input
Communication	HART, BRAIN, Foundation Fieldbus, PROFIBUS
Power Supply	80 to 264 V AC, 47 to 63 Hz
	90 to 130 V DC, 20.4 to 28.8 V DC/AC
Protection Class	Protection Class IP67/8 (NEMA 4X)

Special options on request.

\* of measured value