

FLOW METERS & AUTOMATION

SURAT · GUJARAT · INDIA

ELECTROMAGNETIC · VORTEX · TURBINE · ULTRASONIC · IOT



FIG. 01 — THE ARROWMECH PRODUCT FAMILY

AEFM · AVFM · ATFM · AUFM · AIOT

MODELS	SIZE COVERAGE	INDUSTRIES SERVED	CERTIFICATION	ORIGIN
6	DN 15 – DN 2000	10+	ISO 9001 · CE	Made in India

PRECISION FLOW INSTRUMENTATION · SINCE 2016

ARROWMECH INSTRUMENTS & AUTOMATION

The View On Reliability

WWW.ARROWMECH.COM · SALES@ARROWMECH.COM

01 ABOUT ARROWMECH

Arrowmech Instruments & Automation is a manufacturer of precision flow instrumentation, founded in 2016 in Surat, Gujarat. From our factory at Udhna we design, build and calibrate a complete line of industrial flow meters — electromagnetic, vortex, turbine and ultrasonic — together with the AIOT-100 cloud gateway that brings every meter's data to the web and to mobile. Each instrument is calibrated in-house before dispatch, and our engineering team supports customers from selection and sizing through installation and after-sales service. We are an ISO 9001 certified company; our products carry the CE mark and are proudly made in India.

02 WHY ARROWMECH

PRECISION, PROVEN

Every meter is calibrated in-house against traceable references before it ships, with a calibration certificate in the box.

BUILT TO LAST

Rugged housings, quality wetted materials and conservative electronics deliver long service life with minimal maintenance.

MADE TO MEASURE

Linings, electrodes, outputs, temperature ratings and mountings are configured per order through clear ordering codes.

RESPONSIVE SUPPORT

Selection help, installation guidance and responsive after-sales service — from the engineers who built your instrument.

03 INDUSTRIES WE SERVE

EFFLUENT TREATMENT

WATER SUPPLY SCHEMES

TEXTILE & DYEING

CHEMICAL & FERTILIZER

PHARMACEUTICAL

FOOD & DRUG

DAIRY

SUGAR

PETROCHEMICAL

METALLURGY

04 TRUSTED BY

Google



Abbott



Siyaram's

colourtex®
The Dyestuff Company

œrlikon
balzers



ROCHEM
A Concord Enviro Company



RAYZON
SOLAR

A SELECTION FROM OUR CLIENT LIST · LOGOS ARE PROPERTY OF THEIR RESPECTIVE OWNERS

05 ELECTROMAGNETIC FLOW METER



MODEL AEFM-100

FULL-BORE · MICROCONTROLLER-BASED

SIZE RANGE	ACCURACY	PROT.	OUTPUT
DN 15 – DN 500	±0.5% of MV	IP 67	4–20 mA · RS 485 · Pulse

- Obstruction-free measurement of conductive liquids and slurries — no moving parts, no pressure drop.
- Wetted materials configured per medium: PTFE and rubber linings; SS 316L, Hastelloy C, Titanium, Tantalum or Platinum electrodes.
- Integral and remote-display versions; empty-pipe detection and bidirectional measurement as standard.

FULL SPECIFICATIONS: DATASHEET AEFM-100-DS

06 VORTEX FLOW METER

MODEL AVFM-100

VORTEX SHEDDING · PIEZOELECTRIC

SIZE RANGE	ACCURACY	MEDIUM	MAX TEMP.
DN 25 – DN 200	±1% – ±1.5%	Gas · Liquid · Vapor	330 °C

- One meter for steam, gas and low-viscosity liquids — multi-fluid measurement with no moving parts.
- Handles demanding services: process temperatures to 330 °C and nominal pressure options to 40 kg/cm².
- Optional temperature + pressure compensation for direct mass-flow measurement.

FULL SPECIFICATIONS: DATASHEET AVFM-100-DS



07 TURBINE FLOW METER



MODEL ATFM-100

TURBINE ROTOR · MAGNETIC PICKUP

SIZE RANGE	ACCURACY	PROT.	OUTPUT
DN 15 – DN 150	±1% of reading	IP 65	4–20 mA · RS 485 · Pulse

- Fast, repeatable volumetric measurement for clean, low-viscosity fluids — water, fuels, light oils and solvents.
- Stainless steel body for corrosive and high-pressure service, with low pressure drop.
- Modular design allows quick cleaning and part replacement in the field.

FULL SPECIFICATIONS: DATASHEET ATFM-100-DS

08 ULTRASONIC FLOW METER — CLAMP-ON

MODEL AUFM-100

TRANSIT TIME · NON-INVASIVE

PIPE RANGE	ACCURACY	PROTECTION	SENSOR SIZES
DN 25 – DN 2000	±1% – ±2%	IP 67 / IP 68	3

- Clamp-on sensors measure from outside the pipe — no cutting, no shutdown, no pressure drop.
- Measures low-conductivity liquids that electromagnetic meters cannot: boiler feed, condensate, DM water.
- Three sensor pairs cover DN 25 to DN 2000; standard and high-temperature versions to 160 °C.

FULL SPECIFICATIONS: DATASHEET AUFM-100-DS



09 PORTABLE ULTRASONIC FLOW METER



MODEL APUFM-100

BATTERY OPERATED · HANDHELD

PIPE RANGE	ACCURACY	PROTECTION	OPERATION
DN 25 – DN 2000	±1% – ±2%	IP 67 / IP 68	Battery

- The clamp-on measurement of the AUFM-100 in a handheld, battery-operated kit that sets up in minutes.
- Built for flow surveys, energy audits, pump performance checks and temporary metering.
- Verify installed flow meters on site without breaking into the line.

FULL SPECIFICATIONS: DATASHEET APUFM-100-DS

10 IOT MODULE

MODEL AIOT-100

CLOUD GATEWAY · WIFI + 4G LTE

INPUT	CONNECTIVITY	MOUNTING	MONITORING
RS-485	WiFi + 4G LTE	DIN rail	Web · iOS · Android

- Connects any Arrowmech flow meter with RS-485 output to the cloud — one module per meter.
- WiFi and 4G/VoLTE built into a single model; web-based configuration; LAN optional.
- Live readings and full-date, shift-wise and custom-duration reports in the Arrowmech Flow Meter app.

FULL SPECIFICATIONS: DATASHEET AIOT-100-DS



11 CALIBRATION SERVICES

Every Arrowmech flow meter is calibrated in-house before dispatch and ships with its calibration certificate. The same facility is available as a service: periodic recalibration of Arrowmech instruments, with documented before/after results, keeps your measurement traceable and your quality audits clean.

12 CUSTOM INDUSTRIAL AUTOMATION

Beyond instruments, our engineering team delivers turnkey PLC-based automation — panel design, programming, instrumentation and commissioning — built around your process.

CASE STUDY — JET DYEING AUTOMATION

PLC automation of jet dyeing machines for a textile processing house: recipe-driven temperature and dosing control with repeatable batch quality and reduced cycle times.

CASE STUDY — WATER SUPPLY AUTOMATION

PLC-based control and monitoring for a water supply scheme: automated pumping and distribution with flow measurement at key nodes, and operating data available to the operator.

13 ARROWMECH FLOW METER APP

Pair any meter with the AIOT-100 gateway and its data is in your pocket: live readings, full-date reports, shift-wise reports and custom-duration reports — on the web, iOS and Android. Scan to download.



SCAN TO DOWNLOAD
GOOGLE PLAY



SCAN TO DOWNLOAD
APP STORE (IOS)

14 TECHNICAL DOCUMENTATION

Each product in this brochure is covered by a full technical datasheet — complete specification tables, flow rate charts, dimensions, installation requirements and ordering codes for specification and procurement. Request any of the following from sales@arrowmech.com:

DOCUMENT	PRODUCT	CONTENTS
AEFM-100-DS	Electromagnetic Flow Meter	Specs · flow chart · dimensions · ordering code · installation
AVFM-100-DS	Vortex Flow Meter	Specs · flow chart · installation guidelines · ordering code
ATFM-100-DS	Turbine Flow Meter	Specs · flow chart · installation · ordering code
AUFM-100-DS	Ultrasonic Flow Meter (Clamp-On)	Specs · sensor selection · V-method mounting · ordering code
APUFM-100-DS	Portable Ultrasonic Flow Meter	Specs · sensor selection · kit contents · ordering code
AIOT-100-DS	IoT Module	Specs · system architecture · app · configuration

15 SELECTION GUIDE — WHICH METER FITS YOUR PROCESS?

MODEL	TECHNOLOGY	BEST SUITED FOR	SIZE RANGE	ACCURACY
AEFM-100	Electromagnetic	Conductive liquids & slurries	DN 15 – DN 500	±0.5% of MV
AVFM-100	Vortex shedding	Steam, gas & low-viscosity liquids	DN 25 – DN 200	±1% – ±1.5%
ATFM-100	Turbine	Clean, low-viscosity fluids	DN 15 – DN 150	±1% of rdg.
AUFM-100	Ultrasonic, clamp-on	Retrofit & low-conductivity liquids	DN 25 – DN 2000	±1% – ±2%
APUFM-100	Ultrasonic, portable	Surveys, audits & verification	DN 25 – DN 2000	±1% – ±2%
AIOT-100	IoT gateway	Cloud monitoring of RS-485 meters	—	—

16 HOW TO ORDER

1 — SELECT

Use the selection guide above to match the technology to your medium and pipe size.

2 — SPECIFY

Build the exact configuration with the ordering code in the product datasheet — size, materials, outputs, options.

3 — QUOTE

Send the code (or just your application details) to sales@arrowmech.com; our engineers will confirm sizing and quote.

4 — SHIPPED CALIBRATED

Your instrument is manufactured, calibrated in-house and dispatched with its calibration certificate.



FLOW MEASUREMENT & AUTOMATION

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ISO 9001 CERTIFIED · CE · MADE IN INDIA

The View On Reliability