ART



Flowmeter Catalogue

Hangzhou ART Intelligent Equipment Co., Ltd.

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Бариаул (3852)73-04-60 Балговещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивоеток (423)249-28-31 Владикавказ (8672)249-28-31 Владикавказ (8672)249-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Нваново (4932)77-34-06 Нжевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Красноарс (801)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Пегрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47

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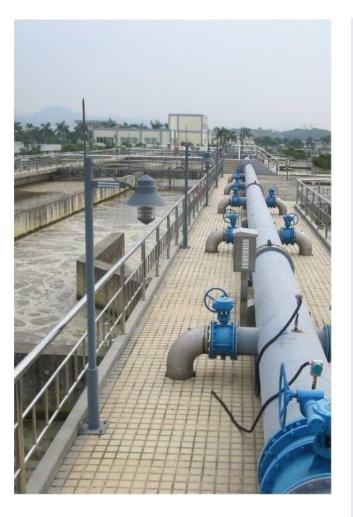
Hangzhou ART—— Service provider for industrial process automation

Hangzhou ART Intelligent Equipment Co., Ltd. is a technology-based enterprise that provides customers with instruments for the automation industry..Hangzhou ART concentrates on independent R&D and self- innovation. The tenet of the company is R&D, Quality First, Excellent Service. We strive to provide customers with one-stop measurement solution for the process automation industry.These services include technical consultation, product application, parameter calibration and personnel training, etc.ART is very concerned about customer's requirements and insisting on technological innovation and quality first, makes continuous efforts in the fields of R&D, manufacturing, technical service, etc. We are continuously enhancing the comprehensive strength of the company.The company's products include flow measurement ,level measurement ,water quality analysis, pressure measurement and other series,which are widely used in chemical industry, electric power, environmental protection, metallurgy, food, life sciences and other industries. ART has made outstanding contributions to improving the level of intelligent manufacturing in various industries.

Our company has invested heavily in the construction of several sets of verification and calibration equipment.Each set of equipment has passed the verification and certification of the official institutions including liquid flow verification equipment,gas flow verification equipment, level measurement calibration equipment and water analysis verification equipment.

Hangzhou ART focuses on scientific R&D, strictly controls product qualityand provides customers with professional, stable and high-precision measuring instruments. To expand the global market, ART continues to promote the internationalization strategy.ART has obtained the ISO9001 quality management system certification. ISO14001 environmental management system certification. Type approval certificate of measuring instruments.Instrument explosion proof certification and other product certifications. The instruments of Hangzhou ART have been exported to more than 100 countries and regions.ART has obtained high market share and brand reputation.In the United States, Europe, Southeast Asia, Africa and other overseas markets.

Hangzhou ART takes technology research and development as the core value.We create value through continuous hard work and technological innovation. We will creat a brilliant future with our customers, employees and other company partners.



Flow measurement technology

Hangzhou ART will wholeheartedly provide effective suggestions for your flow measurement, and provide you with the best performance flow measurement solution.

The application of our multiple flow meters covers all industrial fields, including water/sewage, chemical and petrochemical industries, pharmaceutical and food industries, and power energy industries, etc.

Catalogue

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Electromagnetic Flowmeter







Sensor	Aimag A	AimagC	Aimag H	
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Application	Water/Sewage	Chemical process	Food/Medicine	
Diameter	DN6 ~DN3000	DN15-DN600	DN6-DN150	
Electrode material	Stainless steel, Hastelloy, Titanium.	Stainless steel,Stainless steelHastelloy,Hastelloy,Titanium.Titanium.platinumplatinum		
Liner material and process temperature	Chloroprene: 0 ~ 80 °C polyurethane:-20 ~ 65 °C PTFE:-40 ~ 130 °C(compact) PTFE:-40~180°C (remote).	PTFE:-40 ~ 130 °C(compact) PTFE:-40 ~ 180 °C(remote) PFA:-20 ~ 130°C(compact) PFA:-20 ~ 180 °C(remote).	PFA:-20 ~ 150°C (compact) PFA:-20 ~ 180 °C (remote).	
Process connection	Flange:GB,ANSI,DIN,JIS	Flange:GB, ANSI, DIN, JIS	Clamp, welding, Flange	
Process pressure	PN10 ~ 40CL 150/300JIS10K/20K	PN16-40Cl. 150/300JIS10K/20K	PN16-40CL 150/300JIS10K/20K	
Accuracy class	$\pm 0.5\%/0.2\%$	±0.5%/0.2%	±0.5%/0.2%	
Output signal	4~20mA Frequency/Pulse	4~20mA Frequency/Pulse	4~20mA Frequency/Pulse	
Communication	HART, Modbus RS485, PROFIBUSDP	HART, Modbus RS485, PROFIBUSDP	HART, Modbus RS485, PROFIBUSDP	
Explosion-proof certification	CQEx	CQEx	CQEx	
Protection calsss	IP67 (IP68 optional)	IP67 (IP68 optional)	IP67 (IP68 optional)	

Electromagnetic Flowmeter







Sensor	Aimag D	AimagS	Aimag E
Application	Water/Sewage	Metallurgy/Mining/Process	Battery powered
Diameter	DN6 ~DN2000	DN15-DN600	DN6-DN2000
Electrode material	Stainless steel, Hastelloy, Titanium.	Stainless steel Hastelloy Titanium platinum	Stainless steel Hastelloy Titanium. platinum
Liner material and process temperature	Chloroprene: 0 ~ 80 °C Polyurethane:-20 ~ 65 °C PTFE:-40 ~ 130 °C(compact) PTFE: -40~180°C (remote).	PTFE:-40 ~ 130 °C (compact) PTFE:-40 ~ 180 °C (remote) PFA:-20 ~ 130 C (compact) PFA:-20 ~ 180 C (remote).	PFA:-20 ~ 150 °C (compact) PFA:-20 ~ 180 C (remote).
Process connection	Clamp-on	Flange:GB, ANSI, DIN, JIS	Clamp, Welding, Flange
Process pressure	PN10∽40 CL 150/300 JIS10K/20K	PN16-40 Cl. 150/300 JIS10K/20K	PN16-40 CL 150/300 JIS10K/20K
Accuracy class	±0.5%/0.2%	±0.5%/0.2%	±0.5%/0.2%
Output signal	4~20mA Frequency/Pulse	4~20mA Frequency/Pulse	4~20mA Frequency/Pulse
Communication	HART, Modbus RS485, PROFIBUSDP	HART, Modbus RS485, PROFIBUSDP	GSM/GPRS, Modbus RS485
Explosion-proof certification	CQEx	CQEx	CQEx
Protection calsss	IP67 (IP68 optional)	IP67 (IP68 optional)	IP67 (IP68 optional)

Vortex flow meter







Sensor	Aitex D Aitex E		Aitex F	
Application	Gas, liquid, steam	Gas, liquid, steam	Gas, liquid, steam	
Diameter	Diameter DN15 ~ DN400 DN15-DN200		HT:DN15-DN400 LT:DN15-DN300	
Nominal pressure	PN40	PN40	PN250	
Process temperature	-40~260°C	-40~260°C	HT:-20~400°C LT:-200~100°C	
Process connection	Clamp-type	Flange:GB,ANSI,DIN,JIS	Flange:GB,ANSI,DIN,JIS	
Output signal	4~20mA Frequency/Pulse/Switch output			
Communication	HART, Modbus RS485, PROFIBUSDP			
Current input	4-20mA			
Protection calsss	IP67/ IP68			
Precision	Volume (liquid): ±0.75% Volume (steam, gas): ±1% Mass (liquid): ±0.85% Mass (steam, gas): ±1.5%.			

Thermal gas mass flow meter





Sensor	Aither I	Aither D	
Application	Gas,	Gas	
Diameter	DN65 ~DN4000	DN15-DN2000	
Nominal pressure	PN25	PN40	
Process temperature	-40~220°C		
Process connection	Flange:GB,ANSI,DIN,JIS,Thread	Flange:GB,ANSI,DIN,JIS	
Output signal	4~20mA Frequency/Pulse/Switch output		
Communication	HART, Modbus RS485, PROFIBUSDP		
Current input	4-20mA		
Protection calsss	IP67/ IP68		
Precision	Volume (liquid): 0.75% Volume (steam, gas): 1%Mass (liquid): 0.85% Mass (steam, gas): 1.5%.		

Water/Sewage flow measurement

Aimag A/D electromagnetic flowmeter is a product researched and developed on the basis of water/sewage industry, which is suitable for various basic applications in water, sewage and other industries and handover activities of measurement means, and is widely used for flow measurement of raw water, drinking water, process water and sewage, etc.

Aimag AType

- Water/sewage industry standard application products
- Nominal diameter: DN15~DN3000
- Sensor protection level can reach IP68
- Suitable for thousands of buried or diving occasions
- HG, ANSI, JIS and other flanges Standard
- Integral type / split type optional

Aimag D Type

- For application scenarios with limited installation space
- Flangeless ,compact clamping design
- Small Clamping distance and light weight
- Integral type / split type optional









Monitoring of water



Desalination of seawater and reclaimed water



Treatment of industrial wastewater

Features



Treatment of drinking water



Government sewage treatment in urban areas



Network of water supply pipes

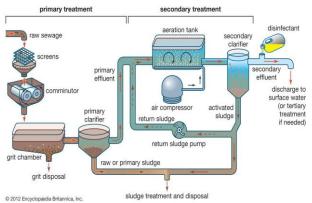
- The measurement is not affected by pressure, density and temperature
- The sensor adopts the overall welding process, which is strong and durable
- No moving parts, maintenance-free
- Water/sewage industry standard application instrument
- Rich variety of linings and electrodes



Typical application-sewage treatment work

Flow rate is the main basis for analyzing economic benefits of sewage treatment plants, and it is also an important detection index in the process of sewage treatment.





Aimag A/D electromagnetic flowmeter can fully meet the requirements of various application scenarios of sewage treatment in standard working conditions, harsh working conditions and narrow installation spaces. conditions and narrow

- Inlet water flow detection
- Outlet flow detection
- Detection of mud volume from primary settling tank to mud storage tank
- Residual sludge flow detection in sludge pump room
- Detection of return sludge flow in sludge pump room
- Water flow detection of the distribution well of the Secondary sedimentation tank.
- Digestion tank inlet mud detection
- Digestion tank mud output detection
- Detection of reagent intake in flocculation tank





Aimag C electromagnetic flowmeter is dedicated to the measurement of high pressure, high temperature process conditions and corrosive media, and is widely used in harsh industries such as chemical industry. The matching high-pressure electromagnetic flow sensor is suitable for high-pressure flow measurement scenarios such as injection flooding (water, polymer) in the Qian Oilfield system.





Features

- Provide a variety of wetted parts materials ,wide applicability
- No moving parts, maintenance-free
- Integral type or split type optional
- Withstand pressure up to 26MPa
- Meet GB3836 explosion-proof standard



Oil extraction

Chemical production



Typical application - Oilfield injection and flooding

In the process of oilfield development, in order to improve oil recovery, flooding techniques such as water injection and polymer injection are commonly used. Injected material flow is an important.



The accuracy of Aimag C electromagnetic flowmeter can be as high as 0.2, which can effectively ensure the accuracy of the measurement process, and the pressure resistance is as high as 26MPa, which is especially suitable for the application scenarios of high-pressure water injection and polymer injection in oilfield development.







Aimag H electromagnetic flowmeter adopts hygienic process connection design and anti-corrosion lining, which is especially suitable for food-grade hygienic occasions and meets the process requirements in the food, beverage and pharmaceutical industries.



Features

- PFA/PTFE lining
- The material of wetted parts is resistant to CIP and SIP cleaning
- Maintenance-free: no moving parts
- Flexible installation: provide a variety of sanitary process connections



Beverage production

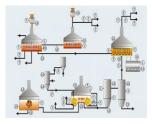
Pharmaceutical Industry

Typical application-beer brewing

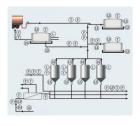


Aimag H electromagnetic flowmeter is mainly used in the saccharification, fermentation, filtration and CIP process of Qianbeer brewing. Flexible and diverse sanitary connections and reliable electromagnetic flow measurement technology provide accurate data for process optimization and control of the entire beer production process to optimize raw material utilization, save energy, and improve brewing efficiency, helping users to achieve this in an efficient manner brewing of high-quality beer.









CIP

Saccharification

Ferment

Filter

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Flow measurement of solid liquid



Aimag S electromagnetic flowmeter is specially designed for media containing solid particles and corrosive fluids. The sensor adopts a wear-resistant lining optimized for the industry. It is sturdy and durable, and can reliably measure the volume flow of pulp, mechanical pulp, mud (including microparticles) and other slurries. It is suitable for thousands of pulp and paper, basic raw materials and metallurgy, sewage treatment and other industries.



Features

- Unique signal processing, super signal stability
- High safety factor-industry-optimized measuring electrodes and linings
- Energy-saving flow measurement-the cross section is consistent with the pipeline without pressure loss
- Automatic data recovery, easy to maintain

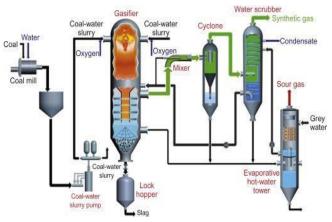


Sludge micro-particle treatment.

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Typical application-coal water slurry





The accurate measurement of the flow rate of coal-water slurry is directly related to the safe production of the gasifier, and is one of the most important monitoring indicators for coal-water slurry gasification. As a special fluid medium,coal water slurry contains about 65% of extremely fine. Coal solid particles also contain other auxiliary additives, and the physical properties of the liquid and solid mixing make it very difficult to measure the flow rate.

Aimag S electromagnetic flowmeter adopts unique high frequency excitation technology It can effectively reduce the flow noise, and realize stable measurement through unique signal processing and noise suppression algorithms. It is especially suitable for solid liquids or Inhomogeneous liquid medium.

Steam delivery flow measurement

Aitex E/F/D vortex flowmeter is a product developed based on the needs of liquid, steam, and gas measurement. It is suitable for power, chemical, food and other industries. Vortex flowmeters are widely used in the metering transfer of a thousand steam, as well as the meteor measurement of non conductive liquids and gases.



Aitex E

- Higher equipment stability, strong and durable sensor, high long-term stability
- Excellent resistance to vibration, temperature shock and water hammer
- HG, ANSI, JIS and other flange standards are optional
- The instrument is calibrated on a certified calibration device, and the measurement results are fully traceable

Aitex F

- Excellent performance of pressure and temperature sensors, which can work normally even under severe conditions
- Friendly man-machine interface, easy to operate
- Multi-variable measurement, saving time and economic cost
- Widely used in steam transmission and distribution pipelines







Typical application-steam flow measurement

Different process sections in the factory require steam with different pressure and temperature parameters. The accurate calculation of steam flow is very important to the cost calculation and management control of the factory.





Vortex flowmeter can accurately measure saturated steam and superheated steam in steam transmission and distribution pipeline. For superheated steam. Aitex F provides accurate pressure and temperature measurements as compensation, which can directly output steam mass flow and save time and economic cost.

1	Instrument Name			
2	Medium Name			
3	Density			
4	Conductivity			
5	Velocity	Max	Nor	Min
6	Flow	Max	Nor	Min
7	Pipe Size			
8	Pipe Material			
9	Pro.Connetction	Max	Nor	Min
10	Pro.Pressure	Max	Nor	Min
11	Pro.Temp			
12	Accuracy			
13	Electrode Material			
14	Lining Material			
15	Compact/Remote			
16	Display Operation			
17	Output Signal			
18	Power Supply			
19	Explosion Proof			
20	Protection Class			

Flowmeter selection working condition table

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