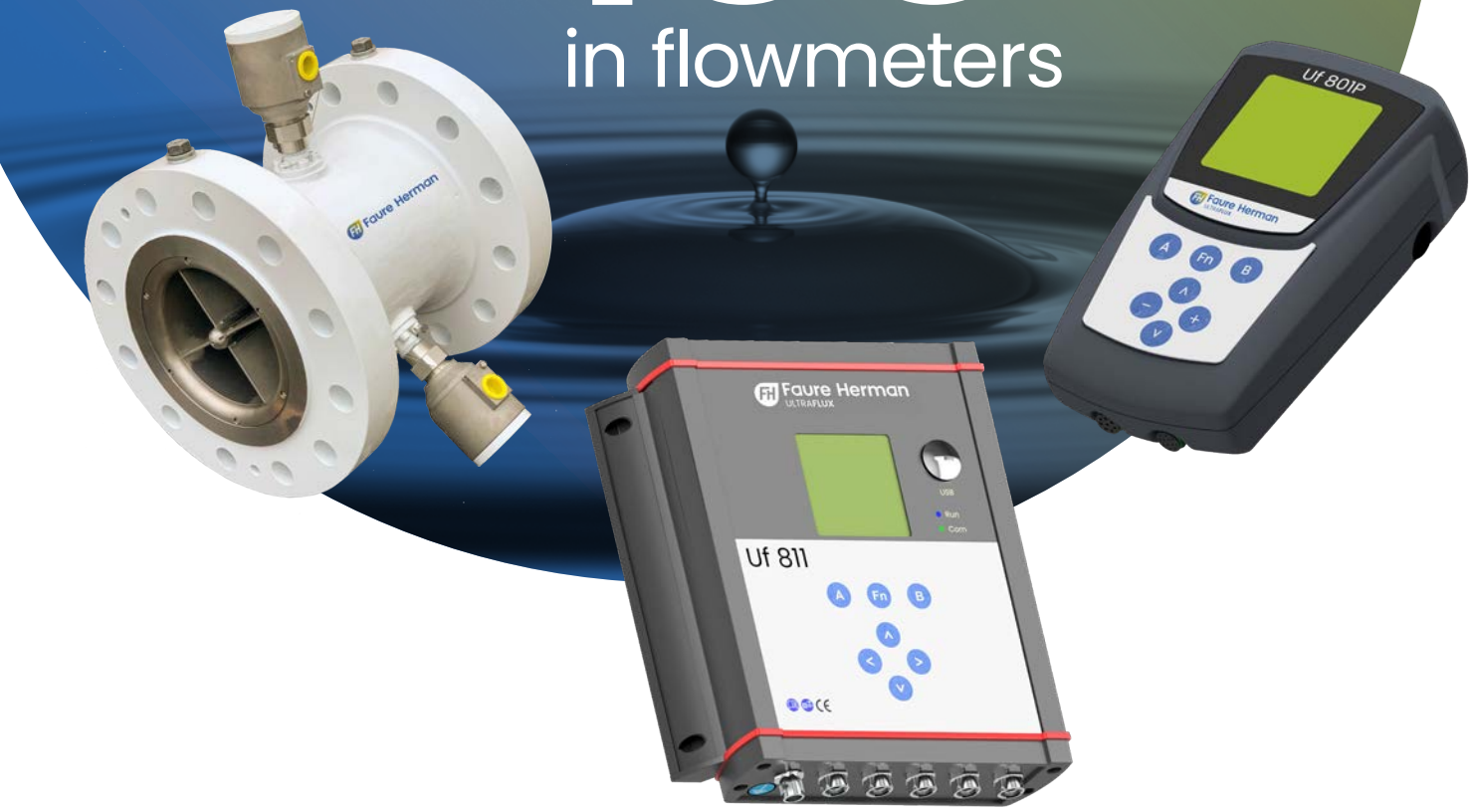
Faure Herman

Counting every drop

Pioneers for 100 years in flowmeters



Products and services overview — 2026

www.faureherman.com

Contents

Introduction

Liquid hydrocarbons & other high value liquids have always given people the power to create and develop. Today, more than ever, precise measurement of these fluids is a major economic and environmental requirement, as they are increasingly rare and precious.

At Faure Herman, we're constantly innovating to provide the most accurate flow measuring tools for all types of liquids and fluids. From the pioneers of aviation to the extreme production conditions of the Oil & Gas sector, our products and services have accompanied the greatest aeronautical and industrial feats over the last 100 years, making our brand a reference in liquids flow measurement equipment.

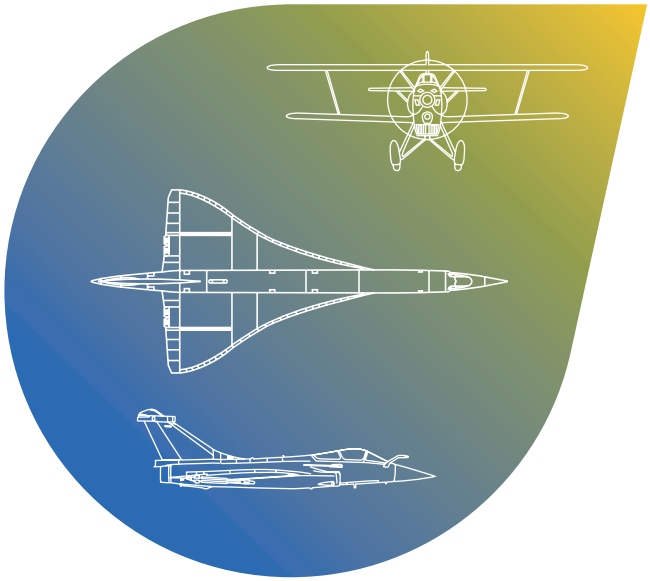
Today, our extensive innovation capabilities enable us to satisfy a wide range of liquid flow measurement needs. In direct response to the transformations taking place in your industry, we design and produce highly technical, extremely precise and highly resistant products. In this way, we support your day-to-day performance.

We also anticipate the industry's transition to less carbon-intensive production and use. From the very beginning, we have been a pioneer in developing products with a low carbon footprint. It is part of our DNA.

As an integrated company, we manage every stage from design to production and calibration of your flowmeters, as well as, installation and maintenance of your equipment. Our commitment to excellence and our international reach enable us to intervene in any field or situation guaranteeing your ultra-precise, continuous measurement.

Because every drop counts!

About the company



Our brand heritage

Faure Herman is a centuries-old company, cultivating the pioneering spirit that has characterized the brand since it was founded in 1925. From the beginnings of aviation to the legends of Concorde, we have accompanied all the aeronautical and industrial revolutions of recent decades.

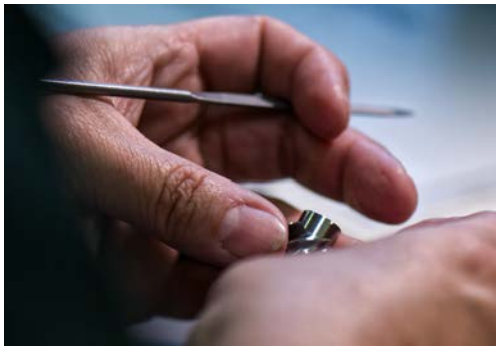
We are cultivating and updating this heritage by playing a key role in your industry's energy transition. To do this, we integrate and measure all the new fluids that contribute to the decarbonization of energy and transport.

So, because we have roots, but also wings, we can act with determination and confidence, and look to the future with peace of mind.

100 years of flowmeter excellence

Our brand vision

Anticipating and supporting the new demands of your industry. When "off-the-shelf" solutions don't exist, we invent, design and manufacture them to offer tailor-made products that can be durably integrated into the most complex and demanding engines, systems and infrastructures.
The spirit of innovation has been one of our major assets for a century, with the same spirit of innovation and reactivity we are committed to providing solutions to the problems today and tomorrow.
We invest above 10% of our revenue in R&D.



Our products

- Helical turbine flowmeters
- Ultrasonic flowmeters

Our services

- Calibration (FH Lab)
- Repair

Our offer and markets

As experts in fluid measurement, the Faure Herman brand operates in four key markets:

Aerospace **Defense** **Energy** **Water**

In all these markets, we offer some of the most accurate, reliable and durable equipment. We also offer a full range of expert services before, during and after installation of your industrial flowmeter applications. Additionally, we've created the FH Lab brand to meet the testing and calibration needs of each of these markets and beyond, on ALL available equipment and fluids.

Thanks to our high-tech calibration bench, FH Lab can calibrate 100% of your equipment, whatever its origin or manufacture, with real fuels and under actual operating conditions.

The FH Lab, high-tech calibration bench

Our brand ambition

Constantly innovating to offer the most demanding technical solutions and services best suited to the measurement needs of our customers and their markets, whether for today's fluids (water, hydrocarbons, etc.) or tomorrow's (biofuels, liquefied hydrogen, etc).

Hydrogen

Sustainable Aircraft Fuel (SAF)

Our brand advantage

Lower your total cost of ownership and your carbon footprint for custody transfer measurement

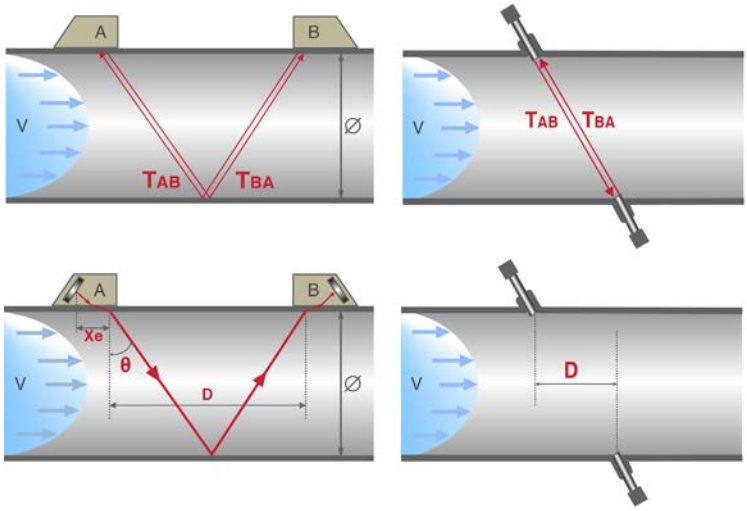
Designed, manufactured & calibrated in France

Measurement technologies

Ultrasonic

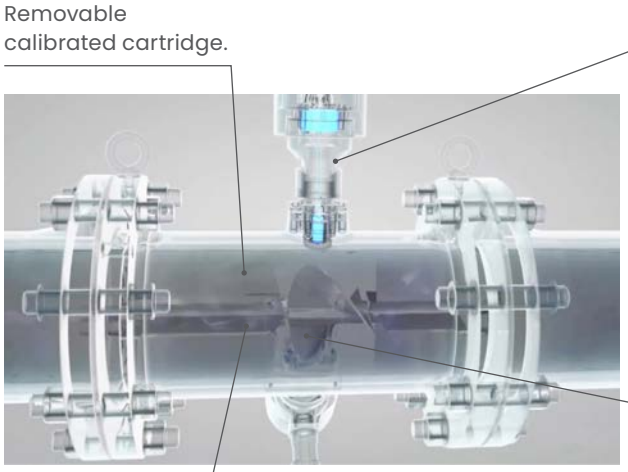
The Ultrasonic Flowmeter line can be intrusive or non-intrusive. Probes are externally mounted and use ultrasonic sound waves to measure the flowing fluid in a pipeline. The flow system operates on the principle of transit time difference.
An acoustic signal (ultrasonic) is transmitted from one sensor to another. The time (transit) that the signal requires to arrive at the receiver is then measured.

According to physical principles, the signal sent against the direction of flow requires longer to arrive than the signal in the direction of flow; therefore, the difference in the transit time is directly proportional to the velocity of flow. The transmitter converts the measured values supplied by the sensors into standardized output signals. Once installed, the sensors can be replaced without interrupting the process.



Helical turbine

Every Heliflu™ measures your product accurately. Fluid flowing through a helical turbine meter turns the rotor at a speed directly proportional to the flow. Each revolution corresponds to a precise and constant volume. Magnets mounted in the rotor induce electrical pulses in an adjacent pick-up coil. The resulting pulses are directly proportional to the volume passing through.

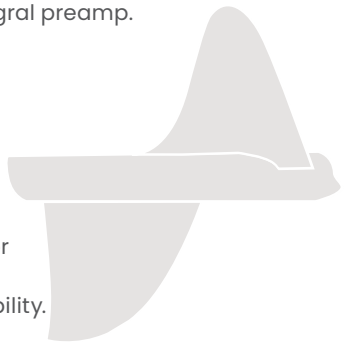


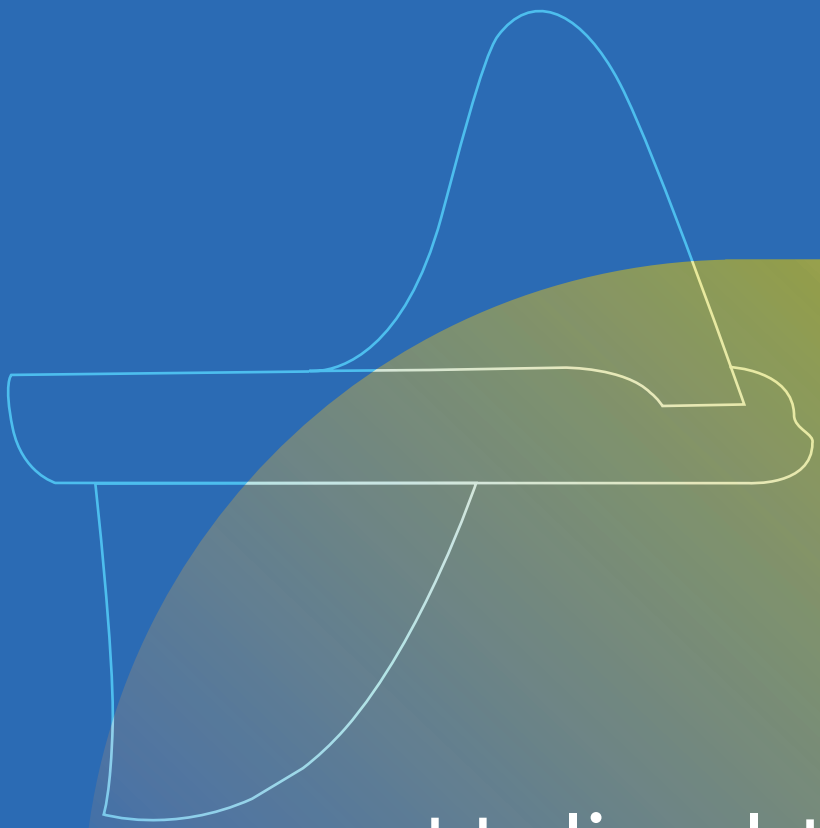
Removable calibrated cartridge.

Explosion proof or intrinsically safe pick-up coil (1, 2 or 3 depending on application) available with integral preamp.

Special helical rotor offering superior linearity / repeatability.

Robust tungsten carbide bearings or other material. Body is constructed in Carbon Steel, Stainless Steel or other as required.

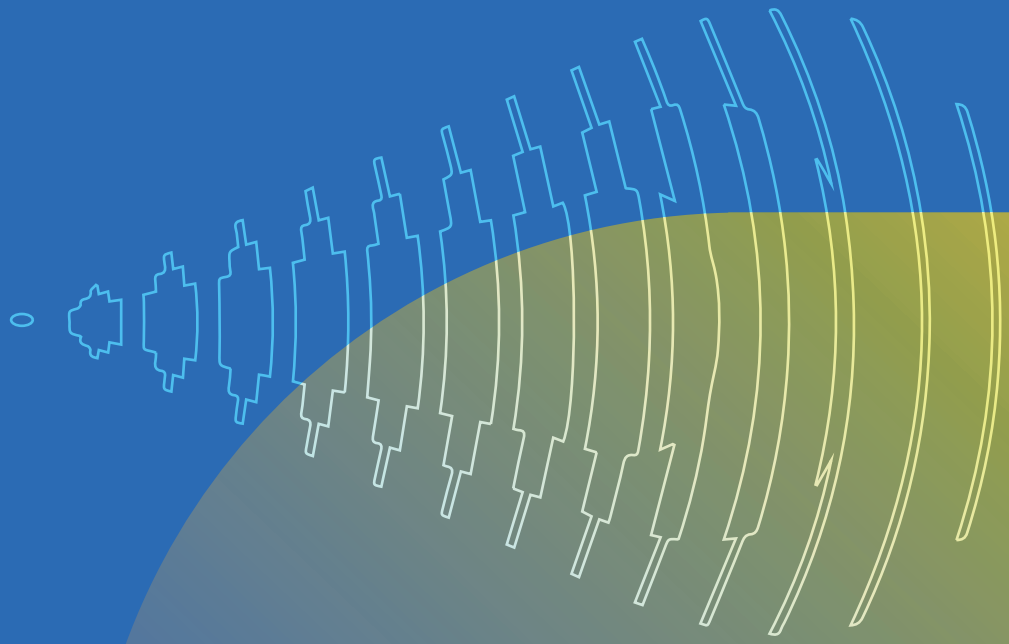




Helical turbine flowmeters

Helical turbine flowmeters for custody transfer measurement

Product name	Heliflu - TZN	Heliflu - TLM
		
	Materials of construction	
Body and Flanges	Carbon Steel or Stainless Steel Options: Low Temp Carbon Steel or Duplex (Other upon request)	Carbon Steel or Stainless Steel
Internals Cartridge	316L Stainless Steel , Titanium (optional)	316L Stainless Steel
Rotor	Titanium or Aluminum	Aluminum
Bearings	Tungsten Carbide or Graphite	
Electrical Enclosure Options	316 Stainless Steel or Aluminum / Compliance to NORSOK, NACE	
	Meter Specification	
media measured	Liquids	
Measured values	Transactional volume measurement	
Meter Size Flange Rating	1/2'' to 20'' ANSI 150 to ANSI 2500 (ASME B16.5)	3'' & 4'' ANSI 150 & ANSI 300 (ASME B16.5)
Electrical enclosure **- Sensor type** **- Preamplifier**	1 or 2 (3 available on request) Inductive pick-up coil 2 wires | 2 wires NAMUR | 3 wires Open Collector	1 Inductive pick-up coil 2 wires | 2 wires NAMUR | 3 wires Open Collector
Optional	Local totalizer with Hart analog output	
	Performance	
Linearity	±0.15% Custody Transfer Applications ±0.10% Premium applications or Master Metering	±0.15% Custody Transfer Applications (optional) ± 0.2% (single product only) ± 0.3% (for multiple products)
Repeatability	<0.04% Custody Transfer Applications <0.02% Premium applications or Master Metering	≤ 0.04%
Max flow rate	0.12 to 9,300 m^3/h | 0.75 to 58,500 bbl/h	3 to 300 m^3/h | 13 to 1,321 gallons per minute
Viscosity range	0.2 to 350 cSt (higher upon request)	< 15 cSt
	Meter temperature range	
Ambient temperature	-50°C to +80°C (-58°F to +176°F)	
Process temperature	-50°C to +180°C | (-58°F to +356°F)	-50°C to +150°C I (-58°F to +302°F)
Storage temperature	-50°C to +60°C (-58°F to +140°F)	
	Meter approvals	
Electrical	ATEX and IECEx (II2G – IIC T6) | UL/cUL (Class 1 Div 1 Group C, D)	
Protection	IP66	NEMA 4X
Pressure	PED Directive 2014/68/EU compliant	
Electromagnetic compatibility (EMC)	EMC Directive 2014/30/EU compliant	
Metrology	OIML R117-1 | MID (Class 0.3)	OIML R117-1 | MID (Class 0.5)
	Other national approvals (upon request)	



Ultrasonic flowmeters

Ultrasonic portable flowmeters

Product name	Minisonic II Portable	Uf 801 P
		
Materials of construction		
Enclosure	Molded ABS, robust and compact	
Meter Specification		
Model	1 pipe with 1 chord	Up to 2 pipes or 2 chords
Media measured	Liquids	Liquids and gases*
Measured values	Flow measurement	Flow measurement and calorimetry
Pipe diameters	up to 10 000mm	
Signal treatment	Analogic + ESC (Echo Shape Control)	Digital Signal Process + ESC (Echo Shape Control)
Performance		
Accuracy	Up to 0.5%	
Repeatability	Up to 0.1%	
Linearity	Up to 0.1%	
Electronics		
Power supply	Li-Ion internal battery Up to 20 jours in continous use, 70 hours with economy mode	NiMh internal battery Up to 14h in continuous use
Input / output	1x 4-20 mA active output 2x Logic output (counting)	• 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA Module 1 • 2 static relay outputs (50v - 10mA) usable as frequency outputs (up to 1kHz) - Module 2 • 2 isolated current inputs 4-20mA, 0-20mA, 0-24mA - Module 3 • 2 0-10V voltage inputs - Module 4 • 2 contact inputs (pulse or state) Module 6 • 2 static relay outputs (50v - 100mA) usable as frequency outputs (up to 30 Hz) - module 8 (single)
Communication	USB	RS232 (Modbus RTU)
Recorder	yes	
Meter temperature range		
Process temperature	-20 to 50°C / -4 to 122°F	-10 to 50°C / -14 to 122°F
Storage temperature	-20° to 50°C / -4 to 122°F	-20 to 35°C" / -4 to 95°F
Meter approvals		
Electrical	No ATEX	
Protection	IP68	
Electromagnetic compatibility (EMC)	EN/IEC 61326-1	
Safety	EN/IEC 61010-1	

* Minimum pressure is required

Ultrasonic flowmeters

Minisonic	
	
Materials of construction	
Enclosure	Molded Polycarbonate with 30% glass fibers, robust and compact
Meter Specification	
Model	1 pipe with 1 chord
Media measured	Liquids
Measured values	• Flow measurement (pipe) • ISD / PSD = Product change detection in pipelines (ISD) or Detection of pigs, spheres & scrapers (PSD)
Pipe diameters	Up to 10 000mm
Signal treatment	Analogic + ESC (Echo Shape Control)
Performance	
Accuracy	Up to 0.5%
Repeatability	Up to 0.1%
Linearity	Up to 0.1%
Electronics	
Power supply	110 – 230 VAC 50/60 Hz or 12 - 24 VDC (Average comsumption 6W - 10W peak)
Input / output	(1x) isolated Active 4-20 mA output (2x) isolated contact output
Communication	USB - Ethernet (Modbus TCP/IP) In option: Hart or RS485 (Modbus RTU)
Recorder	Yes
Meter temperature range	
Process temperature	-20 to 60°C / -4 to 140°F
Storage temperature	-35 to 60°C / -31 to 140°F
Meter approvals	
Electrical	No ATEX
Protection	EN/IEC 60659 IP67
Electromagnetic compatibility (EMC)	EN/IEC 61326-1
Safety	EN/IEC 61010-1

Ultrasonic flowmeters ATEX

Product name	Minisonic II Ex (Al)	Minisonic II Ex (SS)
		
Materials of construction		
Enclosure	Aluminum housing with Epoxy paint	316L Stainless Steel housing
Meter Specification		
Model	1 pipe with 1 chord	Up to 2 pipes or 2 chords
Media measured	Liquids & gases	
Measured values	• Flow measurement (pipe) • ISD / PSD = Product change detection in pipelines (ISD) or Detection of pigs, spheres & scrapers (PSD)	
Pipe diameters	up to 10 000mm	
Signal treatment	Analogic + ESC (Echo Shape Control)	
Performance		
Accuracy	Up to 0.5%	
Repeatability	Up to 0.1%	
Linearity	Up to 0.1%	
Electronics		
Power supply	110 – 230 VAC 50/60 Hz or 12 - 24 VDC (Average consumption 6W - 10W peak)	
Input / output	• (2x) isolated 4-20 mA output (active - common grounding) • (2x) isolated contact output (max 50mA - 24V) • (2x) 4-20 mA input (passive - common grounding) • (2x) PT100/1000 input (2 or 3 wires)	
Communication	USB - Ethernet (Modbus TCP/IP) In option: Hart or RS485 (Modbus RTU)	
Recorder	yes	
Meter temperature range		
Process temperature	-20 to 60°C / -4 to 140°F	
Storage temperature	-35 to 60°C / -31 to 140°F	
Meter approvals		
Electrical	ATEX area compatible (zone 1 and 2)	
Protection	EN/IEC 60659 IP67	
Electromagnetic compatibility (EMC)	EN/IEC 61326-1	
Explosion proof	Ex db IIC T6 - IECEx INE 22.0016X	Ex db IIC T6 - IECEx INE 13.0068X

Ultrasonic flowmeters

Product name	Uf-811	Uf-821	Uf-831
			
Materials of construction			
Enclosure	Metallic (aluminum with powder paint)	Fiber glass reinforced polycarbonate	Stainless steel 304, epoxy paint
Meter Specification			
Model	Up to 2 pipes or 2 chords	Up to 4 pipes or 4 chords	Up to 8 pipes or 8 chords
Media measured	Liquids & gases		Liquids
Measured values	Flow measurement and calorimetry (pipe) Flow measurement in a river/open channel		
Pipe diameters	up to 10 000mm		
Width of channel (open channel version)	RV = 500m (1640ft) / CO = 30m (98ft)		
Signal treatment	Digital Signal Process		
Performance			
Accuracy	Up to 0.5%		
Repeatability	Up to 0.1%		
Linearity	Up to 0.1%		
Electronics			
Power supply	Low voltage power supply: 10-32V DC / Peak consumption < 12W / Average consumption < 6W	DC power supply: 10-32V DC - peak consumption < 12W - average consumption < 6W AC power supply: 110-240V AC - peak consumption < 15W - average consumption < 7,5W *Note: choice between DC or AC to be done for UF831*	
Input / output	Up to 4 modules to choose from:		Up to 10 modules to choose from:
	• 1 isolated, active analogue output: current 4-20mA, 0-20mA, 0-24mA - Module 1 (single) • 2 static relay outputs (50V - 10mA) usable as frequency outputs (up to 1kHz) - Module 2 (single) • 2 isolated, passive current inputs 4-20mA, 0-20mA, 0-24mA - Module 3 (single) • 2 isolated, passive analogue 0-10V inputs: 0 to 15V voltage - Module 4 (single) • 2 Pt 100 / Pt 1000 temperature - Module 5 (dual) • 2 contact 5V inputs (pulse or state) - Module 6 (single) • 2 static relay outputs (50v - 100mA) usable as frequency outputs (up to 30 Hz) - Module 8 (single)		
Communication	USB, RS232 /RS485 (Modbus RTU). Optional: Hart or Ethernet (Modbus TCP/IP)		
Recorder	yes		
Meter temperature range			
Process temperature	-20°C to 70°C / -4 to 158°F	-20 to 60°C / -4 to 140°F	-20 to 50°C / -4 to 122°F
Storage temperature	-35 to 60°C / -31 to 140°F		
Meter approvals			
Protection	EN/IEC 60529 IP68	EN/IEC 60659 IP67	IP67 (except with Modbus TCP/IP option: IP20)
Electromagnetic compatibility (EMC)	EN/IEC 61326-1		
Safety	EN/IEC 61010-1		
ATEX area compatible (zone 1 and 2) - Uf - 841			
Enclosure 316L Stainless Steel housing			
Explosion proof		Ex db IIC T5 - IECEx INE 13.0068X	

Ultrasonic flowmeters to meet your process needs

Product name	FH83 Neo
	
Materials of construction	
Body and Flanges	Carbon Steel or Stainless Steel (Other upon request)
Meter Specification	
Media measured	Liquids
Measured values	Process volume measurement
Meter Size Flange Rating	DN 50 to DN 600 (2" to 24") (Others on request ANSI 150/300/600/900
Transducers	Removable under operating conditions
Performance	
Accuracy	FH83Neo-1 : ± 1.00% to ± 2.00% FH83Neo-2 : ± 0.50% to ± 1.00% FH83Neo-3 : ± 0.25% to ± 0.50%
Repeatability	0,20%
Minimum flow detection	0.05 m/s
Density range	400 to 1,500 kg/m3
Pressure Drop	negligible
Electronics	
Power supply	24 Vdc 8W - 230 Vac
Inputs	4 -20 mA
Output	(x2) 4-20mA (flow and/or speed of sound) (X1) or (X2) pulse with galvanic isolation Frequency 0 -10 kHz with galvanic isolation (X1) or (X2) potential free contacts (alarms)
Serial communication	Modbus RTU through RS 485 with galvanic isolation
Software	FHView configuration and analysis software
Meter temperature range	
Ambient temperature	-40 to +60°C (-40 to 140°F)
Process temperature	-50 to +100°C (-58 to 212°F)
Storage temperature	-40 to + 70° C (-40 to + 158° F)
Meter approvals	
Electrical	ATEX II 2 G (Zone 1, Division 1 Groups C&D)
Protection	IP 66 / NEMA 4X
Pressure	PED Directive 2014/68/EU compliant
Transducer classification	Ex db IIB T6 to T4 Gb / INERIS 21ATEX0035X
Housing classification	Ex db IIB T6 Gb / INERIS 21ATEX0036X
Remote control classification	Ex ib IIB T4 Gb / LCIE 03 ATEX 6240 X

Ultrasonic flowmeters for custody transfer measurement

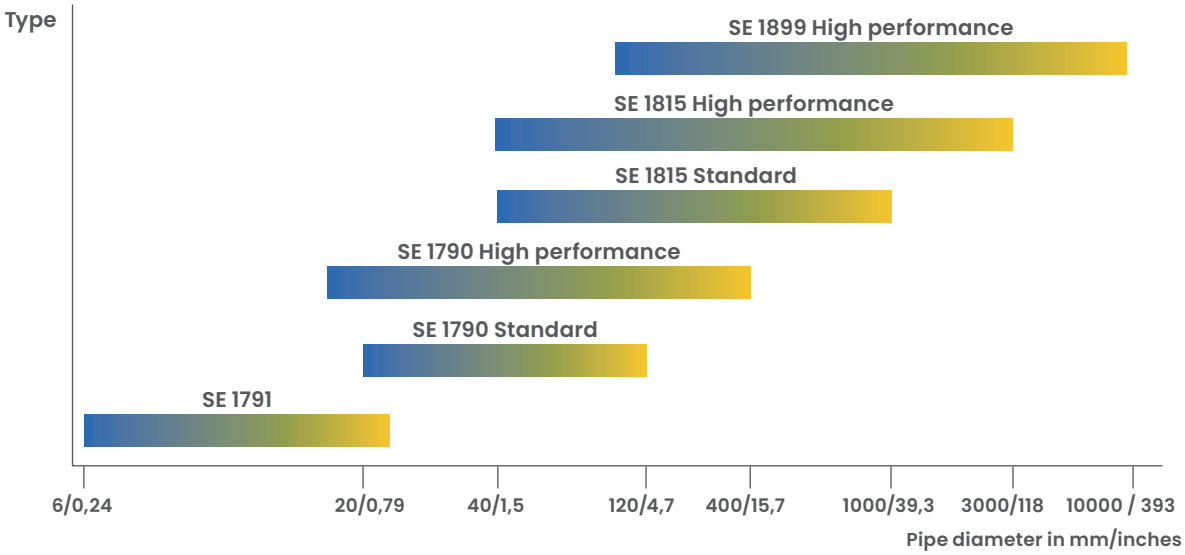
FHsonic	
	
Materials of construction	
Body and Flanges	Carbon Steel or Stainless Steel (Other upon request)
Transducers	Stainless Steel / PEEK
Meter Specification	
Model	Asymmetrical distribution of 5 chords for improved profile correction (up to 10 chords)
media measured	Liquids
Measured values	Transactional volume measurement
Meter Size Flange Rating	DN 100 to DN 600 (4" to 24") (other, upon request) ANSI 150/300/600/900"
Transducers	Removable under operating conditions
Diagnostics	Measurement quality (phase homogeneity, VOS, gas on top, solids on bottom...)
Performance	
Turndown	24:1
Linearity	± 0.15%
Repeatability	5.8 B1 API
Compact Prover Compliance	Under conditions
Custody Velocity	0.5 to 12 m/s
Viscosity	0.2 to 500 cSt
Density Range	400 to 1 500 kg/m³
Pressure Drop	Negligible
Electronics	
Power supply	24 Vdc
Inputs	4 -20 mA
Pulse Outputs	2x pulse output channels selectable as either 0-5 V or Open Collector. Each pulse represents a fixed volume function of the configured Kfactor. Duty Cycle: 50/50
Analog Outputs	2x independent and configurable analog outputs (0-20 / 4-20 mA) Analog outputs can be used for: Instantaneous flow rate, Average velocity, Average VOS ... HART (Option)
Digital Outputs	4x independent and configurable digital outputs (0-5 VDC or 0-12 VDC) Digital outputs can be used for: Flow direction, Alarms...
Serial Communication	1x RS 485 1x RS 422 1x Ethernet
Protocol	Modbus TCP, Modbus RTU (RS485)
Meter temperature range	
Ambient temperature	- 45 to + 65 °C (- 49 to + 149 °F)
Process temperature	- 50 to + 115 °C (- 58 to + 239 °F)
Storage temperature	- 50 to + 80 °C (- 58 to + 176 °F)
Meter approvals	
Electrical	ATEX II 2 G (Ex d mb IIB T4)
Protection	IP 66
Pressure	PED Directive 2014/68/EU compliant
Electromagnetic compatibility (EMC)	EMC Directive 2014/30/EU compliant
Metrology	OIML R117-1 | MID (Class 0.3) | H3/M2/E2
NEC Certification	Compatibility Class 1, Zone 1, Group IIB

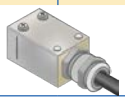
Transducers & mounting

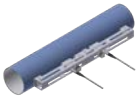
Faure Herman has its own range of transducers designed and manufactured specifically to fit our converters. Our engineers design external probes, insertion probes and wet probes.
Here are a few examples of Faure Herman probes though the list is not exhaustive.

For more information on all available models, please contact us.

External transducers - clamp on



Product name	SE 1791	SE 1790 Standard		SE 1790 High performance	
		Fixed 	Portable 	Fixed 	Portable 
Diameter of the pipe	From 6 to 25,4mm	From 20 to 120 mm		From 10 to 400 mm	
Temperature	From -20°c to +80°c	From -20°C to +140°C		From -20°C to +110°C	
Connection	Push-pull connectors	Potted cable through cable gland	Push-Pull	Potted cable through cable gland	Push-Pull
Ingress protection	EN/IEC 60529 IP54	Type IP68	Type IP67	Type IP68	Type IP67
Support type	Specific	2 probes per support - SU1790	Ruler-KE1790 (kit including probes)	2 probes per support - SU1790	Ruler-KE1790 (kit including probes)
Atex certification (Max temperature limited at 79°C)	No			No	

Product name	SE 1815 Standard		SE 1815 High performance		SE 1899 High performance	
	Fixed 	Portable 	Fixed 	Portable 	Fixed 	Portable 
Diameter of the pipe	From 40 to 1000 mm		From 40 to 3000 mm		From 100 to 10 000 mm	
Temperature	From -20°C to +140°C		From -20°C to +110°C		From -20°C to +110°C	
Connection	Potted cable through cable gland	Push-Pull	Potted cable through cable gland	Push-Pull	Potted cable through cable gland	Push-Pull
Ingress protection	Type IP68	Type IP67	Type IP68	Type IP67	Type IP68	Type IP67
Support type	1 probe per support - SU1517	Ruler-KE1815 (kit including probes)	1 probe per support - SU1517	Ruler-KE1815H (kit including probes)	1 probe per support - SU1629	Ruler-KE1899H (kit including probes)
Atex certification (Max temperature limited at 79°C)			In option		In option	

Insertion transducers

Product name	SI 1614	SI 1612	SI 1611
			
Diameter of the pipe	From 80 to 2000 mm	From 120 to 4000 mm	From 120 to 7500 mm
Temperature	From -10°C to +60°C	From -10°C to +60°C	From -10°C to +60°C
Connection	Within terminal block of probe head	Within terminal block of probe head	Within terminal block of probe head
ACS	Option		
Ingress protection	Type IP68	Type IP68	Type IP68
Atex certification	Option		

Product name	SI 1806	SI 1820
		
Diameter of the pipe	From 100 to 4000 mm	From 120 to 7500 mm
Temperature	-20 °C to +79°C	From -20°C to +79°C
Connection	Sealed through cable gland or Head mounting	Through cable gland
Ingress protection	Type IP67 with Head mounting / IP68 with cable gland	Type IP68
Atex certification	Option	Option

Open channel transducers

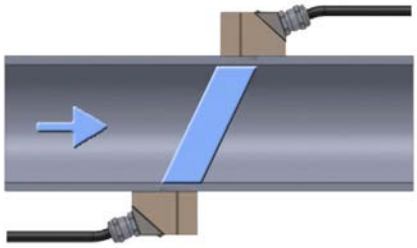
Product name	SM 1654	SM 1686	SM 1527
			
Distance between transducers	1 to 4 m	2 to 20 m	3 to 20 m
Temperature range	<60°C		
Connection	Sealed through cable gland		
Ingress protection	EN/IEC 60529 IP68	EN/IEC 60529 IP68	EN/IEC 60529 IP68
Transducer angle	45°	45°	0°
ATEX certification	-	-	-

Product name	SM 1689	SM 1690	SM 1613
			
Distance between transducers	20 to 50 m	2 to 20 m	2 to 20 m
Temperature range	<60°C		
Connection	Sealed through cable gland		
Ingress protection	EN/IEC 60529 IP68	EN/IEC 60529 IP68	EN/IEC 60529 IP68
Transducer angle	30°	35°	0°
ATEX certification	-	-	-

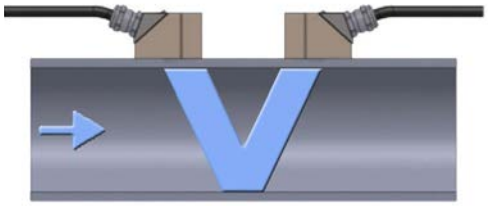
Product name	SM 1684	SM 1681	SM 1666
			
Distance between transducers	20 to 50 m	50 to 100 m	100 to 250 m
Temperature range	<60°C	<60°C	<60°C
Connection	Sealed through cable gland		
Ingress protection	EN/IEC 60529 IP68	EN/IEC 60529 IP68	EN/IEC 60529 IP68
Transducer angle	0°	0°	0°
ATEX certification	-	-	-

Mounting

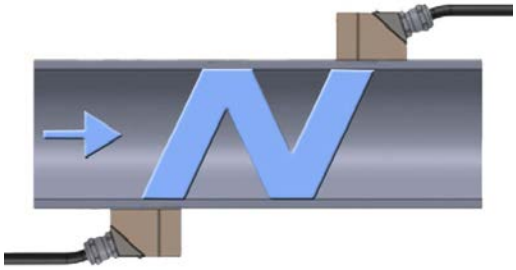
External clamp on probes



«Direct» or «/»



« Reflex » or « V »



« N »

« W »

The V arrangement is the preferred choice for most applications. It allows limited impact of transverse velocities in flow calculation.

Increased path length permits limited impact of time resolution on loss of accuracy for lower flow-rate in the case of small pipes. Use must be limited because ultrasonic echo will become weaker and more distorted with risk of loss of accuracy.

In practice, multiple-reflection modes are reserved for pipes that are smooth and from from fouling or corrosion. Measurement probes should be positioned so as to avoid areas at risk of air bubbles and sediment.

PD flowmeters

Product name	Single Case PD Flowmeters	Double Case PD Flowmeters
		
Materials of construction		
Body and Flanges	Cast Iron or Carbon Steel or Stainless Steel or Aluminum	Cast Iron or Carbon Steel or Stainless Steel or Bronze
Housing	-	Cast Iron or Stainless Steel or Bronze
Rotor	Aluminum or Cast Iron or Stainless Steel	Aluminum or Cast Iron or Stainless Steel or Bronze
Meter Specification		
Media measured	Liquids	Liquids
Measured values	transactional volume measurement	transactional volume measurement
Meter Size Flange Rating	1'' to 4'' Max. pressure 10bar	1'' & 16'' ANSI 150
Electrical enclosure - Sensor type - Preamplifier"	Explosion proof digital totalizer and flow indicator with optional pulse output and/or 4÷20 mA output.	Explosion proof digital totalizer and flow indicator with optional pulse output and/or 4÷20 mA output.
Optional	Hart transmitter with digital indicator (EEx-d or EEx-ia).	
Performance		
Linearity	±0.15% Custody Transfer Applications ±0.5% general purpose (process)	±0.10% Premium applications or Master Metering ±0.15% Custody Transfer Applications ±0.5% general purpose (process)
Repeatability	≤ 0.04%	<0.04% Custody Transfer Applications <0.02% Premium applications or Master Metering
Max flow rate	0.02 to 150 m^3/h | 0.125 to 940 bbl/h	0.02 to 2000 m^3/h | 0.125 to 12,580 bbl/h
Viscosity range	0.5 to 2000 cSt	0.5 to 2000 cSt and higher
Meter temperature range		
Ambient temperature	-50°C to +80°C (-58°F to +176°F)	
Process temperature	-50°C to +100°C | (-58°F to +212°F)	-50°C to +150°C I (-58°F to +302°F)
Storage temperature	-50°C to +60°C (-58°F to +140°F)	
Meter approvals		
Electrical	ATEX and IECEx (II2G – IIC T6) | UL/cUL (Class 1 Div 1 Group C, D)	
Protection	IP/NEMA	IP/NEMA
Pressure	PED Directive 2014/68/EU compliant	
Electromagnetic compatibility (EMC)	EMC Directive 2014/30/EU compliant	
Metrology	OIML R117	API MPMS , OIML R117-1 | MID (Class 0.3)
	Other national approvals (upon request)	

Flowmeters in defense segment

Heliflu™-CTA - Helical turbine meters

The compact helical metering solution for liquid hydrocarbon measurement

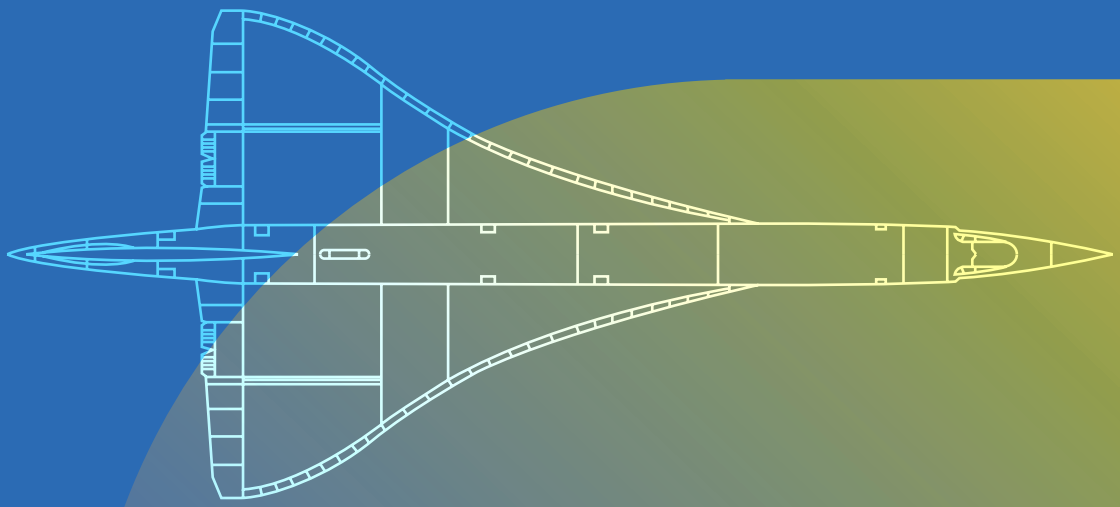
Applications

- Tank Truck Loading & Unloading through flexible hoses
- Mobile Field Refueling System
- Military Operations

NATO CODE: 6680 14517 5246

NATO CODE: 6680 14528 8218 T

CTA Meter Sizes & Flow Ranges					
Body Dimensions	**Model**	**Flow Range (m^3/h)**		**Flow Range (GPM)**	
		Qmin	**Qmax**	**Qmin**	**Qmax**
Length: 178 mm | 7.0 in Height: 94 mm | 3.7 in	CTA 20	0.6	24	2.6	106
Length: 253.5 mm | 9.3 in Height: 137 mm | 5.4 in	CTA 100	3	100	13.2	440
Environment					
Ambient temperature range	- 40 to + 60 °C | - 40 to + 140 °F				
Climatic protection	IP66				
Safety					
ATEX EEx ia IIB T4	Compatible with installation in Zones 1 & 2 Group IIA & IIB				
Mechanical					
Meter MASS	CTA 20: 1.6 kg | 3.53 lbs CTA 100: 2.5 kg | 11.46 lbs Aluminum				
Pressure	16 bar | 232 psi (maximum)				
Connections	CTA 20: Upstream 11/4" Female BSP | Downstream 11/4" Male BSP CTA 100: Upstream 21/2" Female BSP or 21/2" Female NPT Downstream 21/2" Male BSP or 21/2" Male NPT				
Performance					
Accuracy (direct/reverse)	CTA 20: ± 1 % to 10 cSt | ± 2 % to 25 cSt CTA 100: ± 0.5 % to 10 cSt | ± 1 % to 25 cSt				
Turndown ratio	10:1				
Repeatability	<0.04%				
Viscosity range	1 to 25 cSt				
Electrical					
Functionalities	Curve compensation Unit Options (L | m^3 | US Gallon | Barrel | feet3) per time @ factory setting Low battery detection				



Aerospace flowmeters

Market served

Fuel Consumption

An accurate fuel consumption measurement enables operators to safely extend their range or increase their payload.

Air to air refueling

In order to optimally fulfill missions, military planners need to know the accurate quantity of fuel transferred from one aircraft to another.

Avionics / Fuel cells / Batteries cooling

Embedded electronics, but also power generation for electrical engines, generate significant heat. Faure Herman monitors the coolant flow helping optimize the system performance.

Engine regulation

Faure Herman flowmeters are used for the precise measurement of jet fuel injection for power control on aircraft engines.

Services

Engineering

Our engineering teams is able to propose customized solutions based on your specifications.

FH Lab

Calibration and/or validation of third party flowmeters (non-Faure Herman).

- SAF (Sustainable Aviation Fuel)
- Other fluids with multiple viscosities (i.e.: Coolant)

MRO

We manage our own repair station and are able to perform all MRO tasks on Faure Herman flowmeters.

Capabilities

Flowmeter Technology

- Designed for maximum mean time before failure (MTBF)
- DO-160 or MIL-STD-810/461/464 compliant

Benefits:

- ±0.5% or even better accuracy
- Fast response

References

- Over 55,000 flowmeters installed
- More than 200 models available
- Over 50 programs spread across the world
- Installed in aircraft, helicopters and UAV, either in airframe or engine bay

Fuel consumption

Engine regulation

Avionics cooling

Air-to-Air refueling

FH Lab: our calibration services

Liquid flowmeter calibration under actual operating conditions with real world fluids

Make your measurement “beyond all doubt”

Measuring at real conditions is far from easy but calibrating using surrogates (like water or similar) can lead to significant errors in calibration and the corresponding loss of profits.

To achieve this goal, flowmeters for mass and/or volume can be calibrated at real operating conditions with actual fluids (i.e.: gasoline, jet fuel, ...) at the FH Lab calibration and test facility.

Type of flowmeters that can be calibrated

Turbine (flat blade and helical), coriolis, ultrasonic (single, multi-path and clamp-on), positive displacement (PD) and most other technologies.

Witness the calibration

Available upon request.

Availability

FH Lab operates around the clock without any temperature regulation restriction thanks to our temperature controlled flow loop.

- Time slots can be made available upon short notice.
- Please contact us for pricing, availablility or special requests.

Calibration Certificate

Worldwide recognized calibration results through the ILAC/MRA. (Mutual Recognition Agreements)

- Traceability fully established to International Standards.
- Independent Calibration Laboratory accredited by COFRAC/ILAC (ISO 17025).
- Scope available on: www.cofrac.fr/en

Available fluids

Same day multiple fluid/viscosity calibrations available.

- Water, gasoline, mineral oils, fuel oils, diesel, jet-fuel
- SAF (Sustainable Aviation Fuel)

Capability

Calibration benches uncertainty meet the most stringent requirements

- Fluid viscosities [0,5 - 1000 cSt (*)]
- Flowrates [20 l/h - 4500 m^3/h]
- Temperature range [10°C - 60°C]
- Nominal line sizes [1/2” - 20”]
- Uncertainties [0,05% prover] & [0,065% master meter]

* Higher viscosities on request

Services

New installation design and commissioning

Faure Herman can assist you in the specification, design, sizing and operation of your future metering systems. Our professional services experts are skilled in:

- General architecture (P&ID) and specifications according to targeted operations/performances
- Instrumentation and accessory specification (e.g. prover sizing)
- System integrity assessment
- Measurements traceability – Measurement uncertainty calculations
- Analysis of measurement uncertainties
- Assistance to Startup & Commissioning

Audit and Expertise of your existing installations

Faure Herman offers audit/inspection on your existing installations.
These services can include:

- Audit on customer installation, regulation and/or standards basis
- Pre-certification audit
- Troubleshooting and performance improvement

We have experts who can visit your installations anywhere in the world (geopolitical situation permitting) or can assist you remotely through a planned video session to help you analyze your issue or project.

Advanced Training

Faure Herman regularly offers on-demand training at our premises, through videoconferencing or at customer sites in the following areas:

- Practice of International Regulations, Norms, Standards and Recommendations in the field of liquid and gas measurement
- Static and dynamic measurements on fluids
- Operation of products and metering systems
- Etc

Rental

Quick response to your request:

- Check that your application is compatible with our equipment
- Daily rental available
- Delivery the day before the first rental day
- Technical assistance by telephone

Repairs & upgrades

To make Faure Herman products last longer with constant accuracy, our experts place special effort on assisting you with repair or upgrading your meters.

Faure Herman offers full assistance (troubleshooting, upgrade or repair) on Faure Herman products, either in the factory or on site. Our team of after-sale specialists welcome the opportunity to assist you with:

- Complex diagnostic guidance through telephone, email, videoconferencing or visiting your site if necessary
- Replacement of worn parts (e.g. bearings)
- Metrologic performance improvement (rotor tuning)
- Technical upgrade or reconfiguration of the device to new process conditions keeping in mind that quick turnaround time and quality of work are key requirements to meet your operational challenges.

Aerospace MRO

Faure Herman holds stocks of all components to perform top class servicing on flowmeters with its own qualified staff.

As per Aerospace products, we manage our own repair station and are able to perform all MRO tasks on Faure Herman P/N, keeping in mind that short Shop Processing Time and quality of work are key requirements to meet our customers' expectations.

Spare Parts

Faure Herman equipment is engineered for high reliability and performance.
To assure the best performance of your meter, regular maintenance is recommended.

Faure Herman offers you a wide range of bearing kits, tools and other spare parts in order to keep your business running.

Consider ordering your spare parts today! It will help reduce your downtime, maintenance time and total cost of ownership.

Quality System Certifications

Accréditations • n° 2-1210
Portée disponible sur www.cofrac.fr

Energy/Water markets

ISO 9001
EN 9100
BUREAU VERITAS Certification

NOTIFICATION D'ASSURANCE QUALITE DE PRODUCTION
PRODUCTION QUALITY ASSURANCE NOTIFICATION

IECEx Quality Assessment Report Summary
INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

DESP 2014/68/UE Module D1

Aerospace/Defense markets

EN 9100:2018
BUREAU VERITAS Certification

Quality Product Certifications

Energy/Water markets

Customers Quality Approvals

Energy/Water markets

Aramco Overseas Company B.V.

Kuwait Oil Company
شركة نفط الكويت
إحدى شركات مؤسسة البترول الكويتية
A Subsidiary of Kuwait Petroleum Corporation

TotalEnergies

Aerospace/Defense makets

BAE SYSTEMS

Pioneers for 100 years in flowmeters

Faure Herman

Counting every drop

Improving flow measurement since 1925

A leading global provider of flowmeters and services solutions for

Aerospace

Defense

Energy

Water

Notes

Faure Herman

Counting every drop

www.faureherman.com

FRANCE | Siège
2, Lieu-dit l'Archette
72400 La Ferté Bernard
FRANCE
+33 2 43 60 28 60

USA | Houston
8280 Willow Place Drive North
Suite 150
Houston, TX 77070
USA
+1 713 623 0808

04/2026 - v.2