
















	Thermal Flow Meter		Coriolis Flow Meter		Vortex Flow meters	DP Meters
<b>Mass Flow</b>	👍	👍	👍	👍	👍	👍
<b>Air/Gases</b>	👍	👍	-	-	👍	👍
<b>Steam</b>	-	-	-	-	👍	👍
<b>Liquids</b>	-	-	👍	👍	👍	👍
<b>Model/Series</b>	ATMF8000IL	ATMF8000IS	ALCMMB	ALCMTD & UT	ALVT	Acone
<b>Line Size Compatibility</b>	¼"~4" (6.3~100 mm)	≥ 2" (50mm)	½" ~ 8" (15mm~200mm)	½" ~ 8" (15mm~200mm)	½" ~ 24" (15 ~ 700 mm)	½" ~120" (15-3000mm)
<b>Key Feature</b>	<ul style="list-style-type: none"> <li>• Directly mass flow measurement of gases</li> <li>• In-Situ calibration check</li> <li>• Available for any gas</li> <li>• No moving parts</li> <li>• Graphic display</li> <li>• High contrast photo-emissive OLED display</li> </ul>	<ul style="list-style-type: none"> <li>• Directly mass flow measurement of gases</li> <li>• In-Situ calibration check</li> <li>• Available for any gas</li> <li>• No moving parts</li> <li>• Graphic display</li> <li>• High contrast photo-emissive OLED display</li> </ul>	<ul style="list-style-type: none"> <li>• Directly mass flow measurement of liquids</li> <li>• Suitable for aggressive and contaminated media</li> <li>• Water-cut, density and temperature measurement</li> <li>• Individual 8-point NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>• Directly mass flow measurement of liquids</li> <li>• Suitable for aggressive and contaminated media</li> <li>• Water-cut, density and temperature measurement</li> <li>• Individual 8-point NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>• Integral mass flow</li> <li>• Ideal for steam application</li> <li>• Simplified setup and diagnostic functions.</li> <li>• 4-20 mA and pulse outputs; user selectable.</li> <li>• NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>• Dirty gas application</li> <li>• Up stream requirements only 3 diameters</li> <li>• For liquids, gas &amp; steam</li> <li>• Lowest Pressure drop than any DP in the market</li> <li>• With Mass Flow Computer</li> </ul>
<b>Measurement</b>						
Flow Rate	◆	◆	◆	◆	◆	◆
Total Flow	◆	◆	◆	◆	◆	◆
Temperature	◆	◆	◆	◆	◆	◆
Density	-	-	◆	◆	◆	◆
<b>Flow Element</b>						
Flow Range	0 ~ 1500 SCFM (2500 NCMH)	0 ~ 670 f/s (203 m/s)	10 ~2,600,000 Lb./hr. (4.5~80,000 kg/hr.)	10 ~2,600,000 Lb./hr. (4.5~80,000 kg/hr.)	Steam - 600K Lb./hr.(267K Kg/h) Gas- 110K SCFM (180K M³/hr.) Liquid - 210 CFM (5900 LPM)	Based on Re > 8000 1:20
Turndown Ratio	Over 100:1	Over 100:1	±0.15% of Reading	±0.15% of Reading	Liquid +/- 0.7% Rdg gas/steam +/- 1.0% Rdg	+/- 0.5% of reading -320 ~1600° F -196 to 850° C
Accuracy	±1% of Reading ± 0.2% of Full Scale	±1% of Reading ± 0.2% of Full Scale	0 ~ +670 °F (+300°C)	0 ~ +670 °F (+300°C)	wafer, flange or insertion up to +570° F (300 °C)	up to 6000 PSIA (420 Mpa)
Process Temperature	0 ~ +390 °F (200 °C)	0 ~ +570 °F (300 °C)	930 psig (6.8MPa)	930 psig (6.8MPa)	Up to 990 PSIG (68 Kg/cm²)	NPT, Flange, Wafer, Butt weld
Operating Pressure	580 PSIG (40 barg)	580 PSIG (40 barg)	npt, flanges,diary,tri-clamp	npt, flanges,diary,tri-clamp	JIS , DIN and ANSI available	304L/SS, 306L,CPVC,PTFE Brass,A106B,A335-P11,etc
Connection	Threaded, Flanged	Threaded, Flanged, Ball Valve	SS as per DIN 1.4571	SS as per DIN 1.4571	Stainless Steel 304 or 316	
Flow element wetted materials	316SS as per DIN 1.4571 (AISI 316 Ti)	316SS as per DIN 1.4571 (AISI 316 Ti)	(AISI 316 Ti)	(AISI 316 Ti)		
<b>Transmitter</b>						
outputs ( standard )	0-5 VDC & 4-20 mA, Pulse	0-5 VDC & 4-20 mA, Pulse	0-5 VDC & 4-20 mA, Pulse	0-5 VDC & 4-20 mA, Pulse	4-20 mA (2 wire)	Smart measurement s
outputs ( optional )	RS232, RS485, Hart, Modbus	RS232, RS485, Hart, Modbus	Integral/Remote	Integral/Remote	RS485, HART, MODBUS	ALDP 3051 or ALDPT MV
Integral or Remote Mounting	Integral/Remote	Integral/Remote	◆(std)	◆(std)	Integral/Remote	Any third party DP Transmitter
Digital Display Option	◆(std)	◆(std)				
Enclosure Protection/Ratings	NEMA 4, Class 1, Div 1, Groups B, C, & D	NEMA 4, Class 1, Div 1, Groups B, C, & D	IP 65-68 NEMA 4X,	IP 65-68 NEMA 4X,	NEMA 4X (IP 65)	
Power Supply	115 VAC, 230 VAC, 24 VDC	115 VAC, 230 VAC, 24 VDC	24 VDC, 15%	24 VDC, 15%	11 ~ 36 VDC(2 wire 4-20 mA)	
<b>Agency Approvals</b>	II 2GD EExd IIC T6 CSA Ex Ce	II 2GD EExd IIC T6 CSA Ex Ce	II 2GD EExd IIC T2 or T3 or Ex Ce	II 2GD EExd IIC T2 or T3 or T4 Ce Ex	Exd IIB T4 Intrinsically Safe, Exib IIC T4	II 2 G EEx ia IIC T4, BVS 03 ATEX E 205 Ex
<b>Industries &amp; Applications</b>	Biogas (waste water) Exotic gases (semiconductor ) Chemical processing gases Pharmaceutical gases Natural gas/Fuel gases Refinery gases Automotive industries Compressed air	Biogas (waste water) combustion Controls Chemical processing gases Stack gases Natural gas/Fuel gases Refinery gases Automotive industries Compressed air	Automotive Fuel consumption Hydraulics Petrochemicals Polyurethane Food industry Pharmaceutical Industries Custody Transfer liquids	Automotive Fuel consumption Hydraulics Petrochemicals Polyurethane Food industry Pharmaceutical Industries Custody Transfer liquids	Dirty gas application Wet gas application Liquids Saturated steam Superheated steam	Dirty gas application Wet gas application Liquids Saturated steam Superheated steam No straight run applications Low pressure drop

					
	<b>Magnetic Meters</b>	<b>Ultrasonic Meters</b>	<b>PD Meter &amp; Batch Control</b>	<b>Turbine Flow Meter</b>	<b>Variable Area Flow Meter</b>
<b>Mass Flow</b>	-	-	-	-	-
<b>Air/Gases</b>	-	-	-	👍	👍
<b>Steam</b>	-	-	-	-	👍
<b>Liquids</b>	👍	👍	👍	👍	👍
<b>Model/Series</b>	<b>ALMAG</b>	<b>ALSONIC</b>	<b>ALBRPD,ALGPD &amp; ALHPD</b>	<b>ALTM</b>	<b>ALVAMT</b>
<b>Line Size Compatibility</b>	¼ ~ 80" (6 ~ 2000 mm)	½ ~ 240" (15 ~ 6000 mm)	¼ ~ 16" (6 ~ 400 mm)	½" ~ 10" (15 ~ 250 mm)	¼ ~ 8" (6 ~ 200 mm)
<b>Key Feature</b>	<ul style="list-style-type: none"> <li>For conductive liquids</li> <li>Many type of liners</li> <li>Many type of electrodes</li> <li>All ceramic, insertion, high-pressure, BTU, battery, etc..</li> <li>OLED display</li> <li>NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>Portable, fixed, spool psc</li> <li>DSP technology can measure &lt; 30% particles</li> <li>Excellent for BTU and energy measurement</li> <li>Excellent for wastewater</li> <li>NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>High pressure flows</li> <li>Easy to clean</li> <li>Reverse flows</li> <li>Low operating noise</li> <li>Constant K-factor</li> <li>Low pressure drop</li> <li>NIST certificate</li> </ul>	<ul style="list-style-type: none"> <li>Easily cleaned</li> <li>Temperature range up to 800° F (350°C)</li> <li>Fast response time</li> <li>Low flows designed with sapphire bearings</li> <li>Pressures 5000PSIG(320 barg)</li> </ul>	<ul style="list-style-type: none"> <li>Pressure drop 1 PSIG</li> <li>Liquids, gases or steam application</li> <li>Ni-MH Battery(3 years)</li> <li>Consistent overall length</li> <li>Heating jacket design</li> <li>NIST certificate</li> </ul>
<b>Measurement</b>					
Flow Rate	◆	◆	◆	◆	◆
Total Flow	◆	◆	◆	◆	◆
Temperature	-	BTU, temp available	Batch control, filters and air eliminators available	-	-
Density	-	-	-	-	-
<b>Flow Element</b>					
Flow Range	0.03 ~ ±39 f/s ( 12 m/s)	0.03 ~ ±39 f/s ( 12 m/s)	0.0018 ~95 CFM ( 5 ~ 2700 LPM)	0.0011 ~ 18 CFM ( 0.03 ~ 500 LPM)	Liquids 120 CFM (3,333 LPM) Gases 2400 CFM ( 4000 M³/Hr.)
Turndown Ratio					20:01
Accuracy	± 0.2% ,± 0.5% Reading	±0.5% of reading	±0.10%	±0.15%	+/- 1% of reading
Viscosity			5 ~ 1,000,000 cSt	0 ~ 60 cSt	< 30 CP
Process Temperature	360°F (180°C)	up to 320°F (160°C)	0 ~ + 480° F (250° C)	800° F (350° C)	up to 390° F (200° C)
Operating Pressure	350 Bar	Any	up to (23000PSIG (1600 Barg)	5000PSIG (320barg)	580 PSI (40 bar)
Connection	PTFE, FEP, Polyurethane, Neoprene	Clam-On sensors	threads, flanges, etc.... bores for SAE flanges ¼ SS per DIN 1.4305/AISI 303 1.4571/AISI 316 Ti	BASF flanges,(ANSI and DIN), tri-clamp, ermeto threads, NPT	JIS , DIN and ANSI available
Wetted materials	Liner - 316 SS, Has and B/C, Ti, Ta, Platinum	No wetted material needed		Body: 1.4305, (316 Ti) Wheel: 1.4122,(1.4460)	
<b>Transmitter</b>					
outputs ( standard )	4-20 mA & Scale pulse	4-20 mA or 0-20 mA	8-30 <sub>VDC</sub> & 4-20 mA, Pulse	8-30 <sub>VDC</sub> & 4-20 mA, Pulse	4-20 mA and Scale pulse
outputs ( optional )	Hart, Modbus, RS485	Pulse RS485, MODBUS	RS485/232, MODBUS	Integral/Remote	Key pad for setup
Integral or Remote Mounting	Integral/Remote	Integral/Remote	Integral/Remote	Integral/Remote	Integral
Digital Display Option	◆	◆	◆	◆	◆
Enclosure Protection/Ratings	NEMA 4X IP67	NEMA 4X IP67	IP 65, aluminum AlMgSiPb	IP 65, aluminum AlMgSiPb	IP 65 aluminum
Power Supply	24 <sub>VDC</sub> , 90-260 <sub>VAC</sub>	24 <sub>VDC</sub> , 90-260 <sub>VAC</sub>	14-30 <sub>VDC</sub>	14-30 <sub>VDC</sub>	11 ~ 36 <sub>VDC</sub> (2 wire 4-20 mA)
<b>Agency Approvals</b>	 CSA 	 CSA 	 CSA 	 CSA 	 CSA 
<b>Industries and Applications</b>	Liquid Slurries Water & Wastewater Corrosive Liquids Chemical Processing Cellulose/cosmetics Food & Beverage Cement, lime Pharmaceuticals Fertilizer	Portable flow monitoring Food and beverage Water and wastewater Refined and Crude oils Bi-directional flow Ultra pure fluid Alcohol / acid Oil Derivatives Batch control	Polyurethane & polymers Isocyanate Sealing materials Petrochemical products Fats Light, heavy or crude oils Glues, Paints Abrasive fluids Coating wax	Fuel oil Solvents Di water Pharmaceuticals Liquefied gas Food Industry Automotive Refineries Cryogenics	Leak Detection Pump Seal Automotive Sampling Systems Analyzers Refrigeration Blanketing Systems Temperature Controls Water Filtration