MXTM

THERMAL MASS FLOW METER

Measured Success™

High performance thermal mass flow meter with customized transmitter for oil and gas and other utility applications.

Standard reference accuracy of 1% of rate. High Repeatability Accuracy (0.2%)

Output: Modbus RS-485, HART, 4-20 mA output available as secondary, 2 Relay Outputs

Simplified configuration and installation

MICROWAVE PRECISION INSTRUMENTS

16203 Park Row, Suite 125, Houston, TX 77084
info@microwave-precision.com | www.microwave-precision.com

MEASURING PRINCIPLE	Thermal Mass
PRODUCT HEADLINE	Thermal mass flow meters follow King's Law, and use the principle of convective heat transfer to directly measure mass flow. The MXTM Thermal Mass meter is designed to handle a wide ranges of flow ranges and gas compositions.
SENSOR FEATURES	Insertion Style Thermal Mass Flow Meters include a sensor & probe assembly that is inserted into the process gas flow conduit to allow the process gas to flow across the flow sensing element. Our insertion style flow meters are available with 1/2", 3/4", or 1" OD probes. Optional mounting items- Tube fittings, flange, ball valve retractor.
TRANSMITTER FEATURES	Full access to process and diagnostic information – Modbus, and HART buses. Secondary 4-20 mA Output. 2x Relay Outputs. Easy setup and full functional LOI
NOMINAL DIAMETER RANGE	DN 15 to 600 (½" to 60")
WETTED MATERIALS	316L Stainless Steel (Optional Hastelloy C276)
MEASURED VARIABLES	Volume flow, mass flow rate, Totalized milliwatts, Temperature, Diagnostic Events
MAX. MEASURED ERROR	Volume flow: ±1 %
MEASURING RANGE	0.4.....100,000 SCFM
MAX. PROCESS PRESSURE	580 PSI (320 °F)
MEDIUM TEMPERATURE RANGE	-40 to +200 °C (-40 to +392 °F)
AMBIENT TEMPERATURE RANGE	-10 to +70 °C (+14 to +158 °F)
SENSOR TURNDOWN	100:1; 10 SFPM (0.05 NMPS) Minimum Reading
HOUSING MATERIAL	AlSi10Mg, coated; stainless steel ; 1.4409 (CF3M) similar to 316L
DEGREE OF PROTECTION	Standard: IP66/67, Type 4X enclosure ;IP69

DISPLAY/OPERATION	Multi-line backlit display with touch control Configuration via local display and operating tools possible Remote display available
OUTPUTS	3 outputs: Modbus 4-20 mA (active/passive) 2x Relays
DIGITAL COMMUNICATION	HART, Modbus RS485
POWER SUPPLY	DC 24 V AC 100 to 230 V
HAZARDOUS AREA APPROVALS	ATEX, IECEX, CCSAUS, KOSHA
PRODUCT SAFETY	CE, C-tick, EAC marking
FUNCTIONAL SAFETY	Functional safety according to IEC 61508, applicable in safety relevant applications in accordance with IEC 61511
METROLOGICAL APPROVALS AND CERTIFICATES	Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025) NIST Traceable
MATERIAL CERTIFICATES	3.1 material