



# TECHNICAL DATA SHEET

## CORIOLIS MASS FLOW SENSOR

No. SPECS-DRL-063

Rev. 0

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**TITLE:** CORIOLIS MASS FLOW SENSOR

**DEPARTMENT:** TECHNICAL SUPPORT

**DESCRIPTION:**

The Mass Flow sensor uses Coriolis Flow Technology, The sensor is located close to the flowline in its own mounting ensuring the sensor is filled while circulating. The sensor provides accurate measurement of process Flow, Density and temperature. These are combined to form a calculated Mass Flow. This sensor is used in conjunction with ICMS for kick detection, monitoring of displacement of different fluids and pore pressure detection systems.



**A. Specifications.**

GENERIC DESCRIPTION:	Mass Flow Sensor
BRAND (Sensor):	Micro - Motion
MODEL (Sensor):	D600
MODEL (Barrier):	KFD2-STC4-EX2
SENSOR TYPE:	Coriolis Flow
INSTALLATION LOCATION:	Inserted into enclosed flowline.
MEASURING RANGES:	Volume : 0-2900 gpm, 0 – 680,400 l/hr Mass : 0-25000 lb/min, 0-680,400 kg/hr
TRANSMITTER ACCURACY:	0.15% +/- ((zero stability / flow rate) x100)% of rate with liquids.
ZERO STABILITY:	Volume : 0.3 gpm, 66.0 l/h. Mass : 2.5 lb/min, 66.0 Kg/hr.
PRESSURE RATINGS:	625 psi, 43 bar.
POWER RATINGS:	85-250 VAC, 50/60 Hz.

**DENSITY SPECIFICATIONS:**

ACCURACY	+/- 0.0005 g/cc, +/- 0.5 Kg/m
REPEATABILITY	+/- 0.0002 g/cc, +/- 0.2 kg/m
RANGE	0-5 g/cc, 0-5000 Kg/m



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**TEMPERATURE SPECIFICATIONS**

ACCURACY: +/- 1° C +/- 0.5% of reading in Deg C

REPEATABILITY: +/- 0.2° C

PROCESS FLUID RANGE: -22 to 212°F (-30 to 100°C)

AMBIENT RANGE: -40 to 140°F (-40 to 60°C)

APPROVALS/CERTIFICATION: CSA,: Intrinsically Safe Class I, Div. 1, Groups C, and D, Class I, Div 2, groups A, B, C and D, Class II Div I, groups E, F, and G hazardous location

BAS, CEN: EExib IIB T1..T6, TFluid = 87°C - 12°C  
OUTPUT: Chart Recorder, DLS System, all digital monitors.

**APPROVAL:**

Dept. Supervisor : VICTOR SAET Date: 8<sup>th</sup> July 2003

Technical Committee : ALAN MORRISON Date: 8<sup>th</sup> July 2003