

APPLICATION: DETERMINATION OF WATER CONTENT IN BEEF TALLOW

Excess water in biofuel feedstock has been shown to reduce yield from the transesterification process and is of particular concern in regards to beef tallow. Recommended maximum levels are as low as 0.06%. Therefore, an accurate method of in-line measurement for tallow feedstocks is needed for the biodiesel refining process. The KAM® LRW™ Low Range Watercut meter successfully measures water in beef tallow up to 5% with a high degree of accuracy. The unit offers multiple installation options depending on line size, but all models include all requisite electronics on the probe itself. The LRW™ also offers AnyDensity™ density compensation to maintain the highest accuracy possible in applications where a live density input is available. It also compensates for the affect of temperature.

MODELS



Flow through spool model:
2", 3" or 4" flanged flow through spool
Includes static mixer and manual draw-off valve
Standard spool length is 32" (812 mm)
Minimum spool length is 21" (533 mm)



Fixed insertion model:
1.25" NPT or
2", 3", or 4" flange connection
For pipelines 3" or greater

Also available: **Insertable/retractable model with 2" MNPT;**
2", 3", or 4" flanged seal housing

KEY FEATURES

- Patented microwave resonance technology
- AnyDensity™ density compensation
- Automatic temperature correction
- 100 ppm minimum detection
- Spool and insertable models available for maximum installation flexibility
- Designed for the particular concerns of petroleum industry applications
- All parts and assembly made in the USA



KAM Controls is committed to applying a legacy of measurement excellence to the future of our industry with the research and development of high-quality measurement solutions for sustainable fuels.

APPLICATION ACCURACY

Water Content Range (%)	Accuracy
0.0 to 0.3	+/- 0.060
0.3 to 0.5	+/- 0.150
0.5 to 1.0	+/- 0.250
1.0 to 3.0	+/- 0.360
3.0 to 5.0	+/- 0.450



HAZARDOUS AREA

PTB 08 ATEX 2016
IECEX PTB 19.0048
Ex db IIB T6 Gb



SPECIFICATIONS

Media:	Beef tallow
Wetted parts:	316 SS, hastelloy, & PEEK (Other materials available)
Fluid temp:	To 176° F (80° C)
Electronics temp:	-40° F to 158° F (-40° C to +70° C)
Power requirements:	24 VDC
Power consumption:	12 watts
Range:	0-5%
Repeatability:	+/- 0.01 %
Resolution:	+/- 0.01 %
Minimum water detection:	100 ppm
Outputs/serial ports:	4-20 mA Alarm relay RS232 ASCII RS485 Modbus
Density Correction:	AnyDensity [™] compensates for changes in fluid density across entire API gravity range (requires density input)
Temperature Correction:	Automatic
Pressure ratings:	ANSI 150, 300, 600, 900
Flow conditions:	Well mixed in accordance with API MPMS Chapter 8.2

FOR MORE INFORMATION ON KAM PRODUCTS

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