UFC 030

UFC 030 ULTRASONIC FLOW CONVERTER

The converter has a backlit local dispaly with three push buttons. All operation can be done by using the push buttons or with the aid of a hand-held bar magnet, without opening the converter housing. The compact converter (UFC 030 K) is mounted directly on the flow sensor, while the separate version (UFC 030 F) is supplied with a bracket for wall or pipe mounting.

The converter is fully digitised. Measured values are obtained by use of DSP (Digital Signal Processing) ensuring stable readings, even under severe conditions. The converter has standard HART® communication and is optionally available with Profibus.

Ultrasonic Flow Converter UFC 030 # Standard * Optional

General:

The converter has a backlit local display with three push buttons. All operation can be done by push button or using a hand-held bar magnet, without opening the converter housing.

Applied Materials

Converter housing: # Die-cast aluminum

* Stainless steel 316 L(1.4404)

Finish: # Polyurethane coated

* Offshore paint system, silver

Protection category

to IEC 529 # IP 67 eq. NEMA 6

Overall functionality/

Measurements available # Continuous measurement of actual volume flow rate

and actual volume total

HART® communication

Flow direction (forward or reverse)

Velocity of Sound (VOS)

Signal strength # Self diagnostics

Simple single stage batching

* Corrected or standardized volume flow rate to API

2540 or customer specified

* Customer specified mass flow (requires customer

data)

*Profibus PA

* Thermal energy measurement

Local display

Operation: With cover removed, all display operations incl.

changing settings and parameters can be done using the push buttons. With cover in place the measured values and (error) messages can be viewed. Error resetting is still possible; in this case only with the aid of a hand-held bar magnet.

3-field LCD:

The converter has a backlit local display with 3 push buttons.

1st line 8 character 7 segment alphanumeric display and symbols for key acknowledgement. 2nd line 10 character, 14 segment text display. 3rd line 5 markers to identify display in measuring mode.

Parameters:

Actual volume flow rate in m³, barrels, liters, US gallons or user defined volume unit (positive, negative, and sum totals), minimum 1 year overflow time.

Actual volume total in m³, barrels, lites, US gallons or user defined volume unit (positive, negative, and sum totals), minimum 1 year overflow time.

- * Velocity of sound in m/s or ft/s
- * Errors (flashing display and error code)
- * Signal strength (in dB)

Corrected standard volume flow rate in m³, barrels, liters, US Gallons or user defined volume unit per hour, minute, second or user-defined time unit.

- * Calculated mass flow rate in user defined mass unit.
- * Corrected standard volume total in m³, barrels, liters, US Gallons or user defined corrected volume unit, minimum 1 year overflow time.
- * Calculated mass total in suer defined unit, minimum 1 year overflow time.
- * Analog input in °C, °F bar or psig.
- * Thermal power
- * Thermal energy totalized