

Solartron

Entrained Gas Liquid Densitometer

Data sheet
B1018

Features

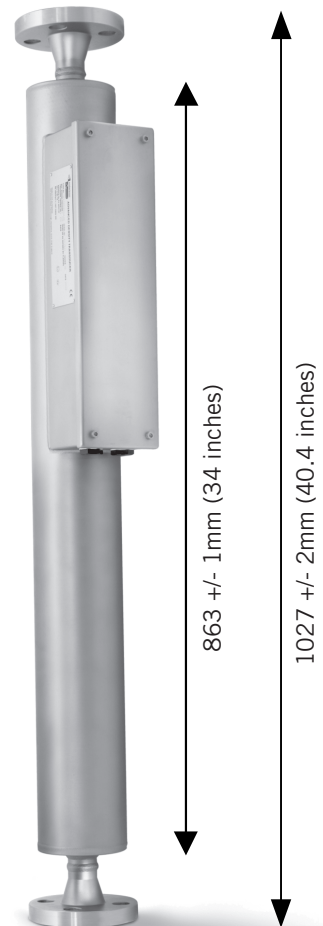
Designed to provide accurate density measurements in liquids containing up to 100% entrained gas, these versions of Solartron Mobrey's proven range of single tube liquid densitometers can also be supplied with advanced electronics for direct analog and digital outputs and connection to a local display.

Specification

Parameter	Type 7845	Type 7847
% entrained gas	0 to 100%	0 to 100%
Density range	0 to 3.0 g/cc	0 to 3.0 g/cc
Stability	0.001 g/cc	0.001 g/cc
Density accuracy	0.005 g/cc	0.005 g/cc
Maximum operating pressure	100 bar (1450psi) or flange limit	20 bar (290psi)
Test pressure	150 bar (2175psi) or 1.5 flange rating	30 bar (435psi)
Operating temperature	-50°C to +160°C (-50°F to +320°F)	-50°C to +160°C (-58°F to +320°F)
Mechanical Features		
Wetted parts	Stainless steel 316L	Stainless steel 316L Hygienic bellows
Case finish	Stainless steel 316L	Stainless steel 316L
Applications	General process	Hygienic
Flange materials	Stainless steel 316L	Stainless steel 316L
Weight	22kg (48lb)	22kg (48lb)
Electrical Features		
Power supply	Frequency, 2 wire,	Frequency, 2 wire,
Output signal	(2V across 66 ohms)	(2V across 66 ohms)

- Measurement of liquids with up to 100% entrained gas.
- Continuous measurement.
- Straight-through flow path.
- 3A approval for hygienic applications.
- Pipeline quality - all welded construction.
- IP65 weatherproof.
- Insensitive to mounting position, plant vibration, flow rate and pressure.
- Zero maintenance.
- Supported by signal converters.

Dimensions



Signal Converters

795x series Signal Converters are easy-to-use units designed to process signals from Solartron density or viscosity transducers and live temperature and pressure inputs. They are supported by a PC-based utility for configuration, data logging and archiving, and are simple to interface with your process and plant systems. Built-in calculations include transducer correction, calculation of line or referred density, °API, °Baume, °Brix, calorific value, Wobbe Index etc

Model	7950	7951	Option
Mounting:	Wall	Panel	
Inputs	Density*	1	
	Temperature (PRT, 4-wire)	4	
	Analogue (0/4-20mA)	4	+4/+6
	Digital/status	8	8/18
	<i>*Some software versions support more than one density/viscosity input</i>		
Outputs	Analogue (0/4-20mA)	4	+4
	Digital status	8	6/16
Comms:	RS232/RS485	3	+2 HART
Calculations	Line and Base density (ASPI or Matrix referral)		
	Derived parameters (%volume, %mass, °Brix, °API, S.G., S.S.U.)		

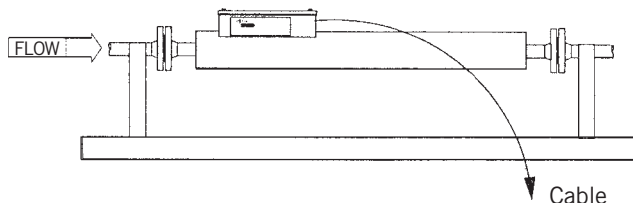
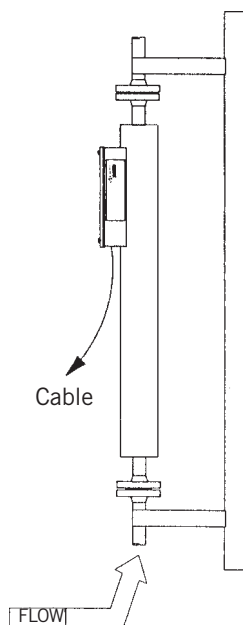
For more details, see 795x Signal Converter datasheet B1251.

Installation Drawing

Preferred installation is vertical with flow upwards. For slurries flowrate should be reversed.

Typical flowrates are 4000ltr/hr.
Maximum flowrate is 15000ltr/hr.

Flow rate should be kept high to prevent gas bubbles and sediment from forming on the resonant tube.
For best performance rigidly install
0.5g vibration max.



Ordering Information

Standard Unit

7845KE	1" ANSI 600 RF
7845CE	1" ANSI 300 RF
7845HE	25mm DIN 2635 RF DN25/PN40
7845JE	25mm DIN 2635/2512 GVD DN25/PN40

Hygienic Unit

7847AE	1" Ladish Triclamp
7847CE	25mm ISO 2853 ISS (IDF)
7847EE	25mm DIN 11851
7847JE	1" ANSI 300 RF
7847KE	25mm DIN 2635 RF DN25/PN40

Contact Solartron Mobrey for full Part Number.

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