

Insertion Density Meter Sarasota ID900

The Sarasota ID900 density meter is designed for high accuracy measurement of gases, liquefied gases and low viscosity fluids.

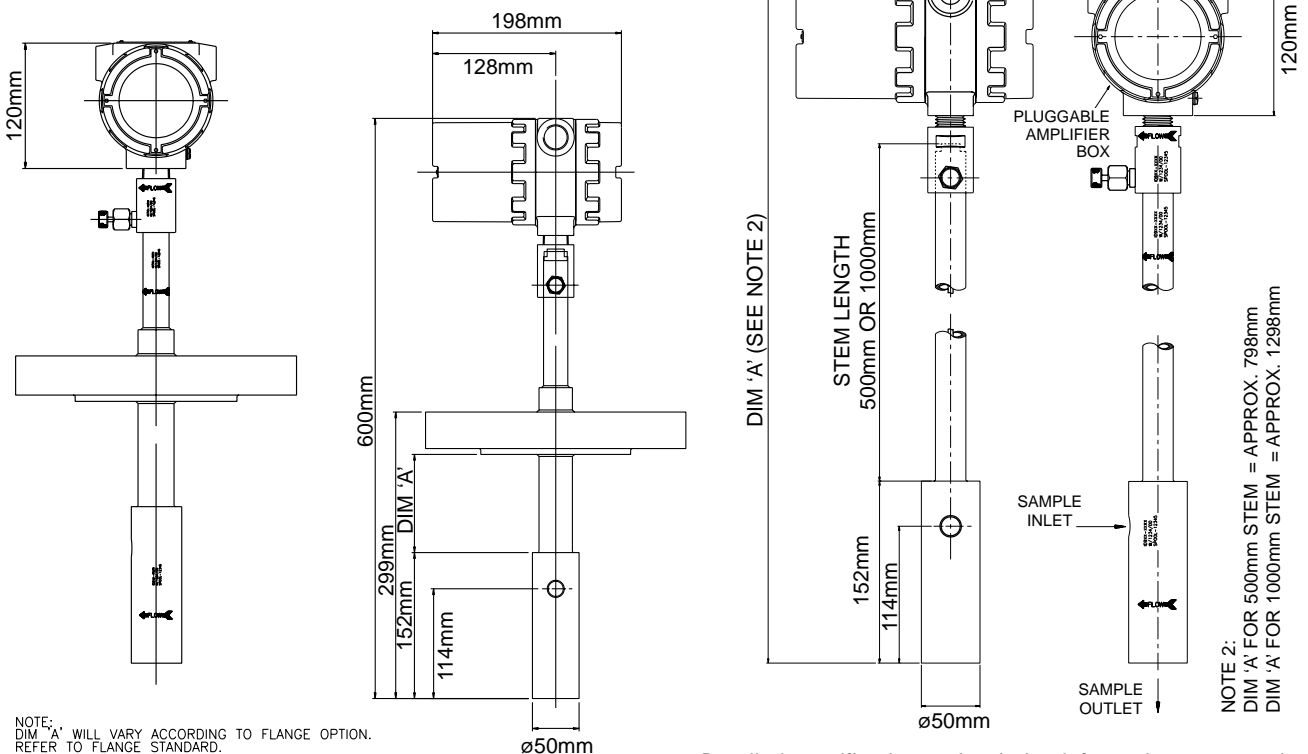
Features

- continuous on-line density measurement
- accuracy to 0.1% reading
- direct insertion into pipeline / vessel
- smart headmount electronics and local display options
- gas or liquid applications
- insensitive to plant / pipeline vibration
- measurement at true process conditions
- intrinsically safe design
- wide operating temperature span
- retractable option – no downtime on pressurised lines
- no on-site calibration required

Applications

- process control
- quality control
- product interface detection
- process monitoring

Dimensional drawing



Detailed specification and ordering information: see overleaf
Thermo reserves the right to alter specifications without notice.

Specification

Transducer:	
Range:	0 to 1.0g/cm ³ (see ordering information)
Accuracy:	±0.1% reading (±0.00002g/cm ³ from 0 to 0.002g/cm ³)
Repeatability:	±0.01% span
Temperature effect: (corrected) see Note 1	0.000001g/cm ³ /°C
Process temperature:	-200 to +200°C (see ordering information)
Operating pressure:	150 bar maximum or flange pressure/temperature rating
Materials of construction:	Spool – Ni-Span-C or FV520B Body – AISI 316L stainless steel Electronics housing – copper free aluminium grey epoxy finish
NACE MR0175 conformity:	NACE specification option
Temperature measurement:	High accuracy 1/3 DIN Integral 4 wire PT100
General:	
Environmental protection:	IP65
Hazardous area certification:	ID900F EEx ia IIC T6 ID900H EEx ia IIC T4
Weight:	Without flange: nett 5kg max Shipping 9kg max With integral flange: nett 24kg max Shipping 30kg max

Installation:	Ideally within 15° to vertical via 3" stub
Flow range:	Accuracy unaffected by flowrate
Outputs:	
F option:	Frequency related to density on 2 wire current modulated loop 6mA to 18mA 4 wire PT100
H option:	Analogue 4-20mA related to density or density derived variable HART® protocol
System:	Accuracy better than ±0.2% reading plus 0.05% of span at reference conditions Local display option
Electrical:	
Power supply:	
F option:	13-28 VDC 10mA average (peak 18mA)
H option:	2 x 13-28 VDC 25mA
Connections:	Screw terminals
Cable entry:	2 x 3/4" NPT
Operating temperature (ambient):	-20 to +70°C

Note 1 - Corrected temperature effect after applying correction coefficients

Ordering Information

Density meter model code format	
ID900	Sarasota Insertion Density Meter
Signal output	
F	Frequency output
H	Smart headmount electronics
Density range	
A	0 to 20 kg/m ³
B	15 to 80 kg/m ³
C	75 to 250 kg/m ³
D	200 to 500 kg/m ³
E	500 to 1000 kg/m ³
Temperature range	
A	-200 to +75°C
B	-20 to +75°C
C	-20 to +200°C (FV520B only)
Spool material	
Z	Ni-Span-C
Y	FV520B
Installation configuration	
C	Via flange and 1" compression fitting, (flange not supplied)
D	Via RTR900
F0	Integral flange 3"ANSI B16.5 Class 300 RF
F1	Integral flange 3"ANSI B16.5 Class 150 RF
F2	Integral flange 3"ANSI B16.5 Class 600 RF
F3	Integral flange 4"ANSI B16.5 Class 150 RF
F4	Integral flange 4"ANSI B16.5 Class 600 RF
X	Integral flange other type (see note 1)
Stem length	
S	500mm stem length
SF	300mm stem for flanged option (see note 2)
L	1000mm stem length
Certification	
S	Non hazardous / safe area application
I	Intrinsically safe EEx ia IIC T4/T6
Options	
L	Local display (with ID900H only)
M	Wetted parts material certificates (DIN 50049 BS EN 10204 3.1b)
N	NACE conformance
T	Traceable calibration certificate

Note 1: Where an X option is chosen the option must be described fully, in writing. Please contact sales office for pricing.

Note 2: "SF" code must be selected for integral flange configuration.

Example: ID900-F-A-B-Z-D-L-I

ID900 insertion density meter with frequency output, 0-20kg/m³ range, standard temperature range of -20 to 75°C, Ni-Span-C spool, installation via RTR900, 1000mm stem, intrinsically safe.

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