DENSITY AND CONCENTRATION METER DIMF 2.0 PVS WITH UNIVERSAL COMPUTER UR06 / ERW 700



MAIN FEATURES

Product type:

Density meter based on the oscillating U-tube principle with a flow computer: 1 or 2 density meters with different media can be combined with

a flow computer

Application:

Density and concentration measurement of liquids; in hazardous areas (Zone1) ←> universal computer, non-Ex connection via

isolating modules

Measuring accuracy:

up to $\pm 0.02 \%$ ($\pm 0.2 \text{ kg/m}^3$, $\pm 0.0002 \text{ g/cm}^3$) of

the measured value

up to $\pm 0.01 \%$ ($\pm 0.1 \text{ kg/m}^3$, $\pm 0.0001 \text{ g/cm}^3$) of the measured value (with special calibration)

Process temperature:

-40°C to 150°C (210°C on request)

Process pressure:

up to 100 bar (up to 160 bar)

Housing material:

DIMF stainless steel (1.4571),

wetted parts:

Output / display:

Stainless steel, Hastelloy, Tantalum, Inconel,

Monel (others on request)

Supply:

24 VDC (min. 14 / max. 30 VDC)

4-20 mA / LCD graphic display, permanent background lighting, plain text menu navigation

Process connection:

compression fittings or flange according to DIN or

ANSI (others on request)

Special features:

Instrument version without seals, illustration of complex or confidential media via support point

table (in preparation),

Integrated data logger, optionally with SD card



Isolating

amplifier

Zone 1

switch

Recommended Flow range	1.5 - 50 l/min
Density range	400 to 3000 kg/m³
Calibration range	400 to 1450 kg/m³
Reproducibility	±0.005 % (±0.05 kg/m³)

PROCESS CONNECTIONS

- Swagelok® for tube outer diameter 12 mm
- Flange DN 15, DN 25
- ANSI 150 (1/2", 1"), ANSI 300 (1/2", 1"), ANSI 600 (1/2", 1")
- TRI-Clamp DN 15

OUTPUT SIGNALS

2 x 4-20 mA for operating density, reference density (temperature-corrected to reference temperature 15°C or 20°C) or concentration (% mass, % volume, Brix, Bé), 3 x optocouplers, Mbus, Modbus (RS232) optional up to 6 x 4-20mA, 7 x optocouplers, Ethernet, Modbus RS485; Profibus DP

APPLICATION EXAMPLES

- · Direct operating density or reference density measurement of liquids such as acids, alkalis, hydrocarbons, liquefied gases (propane, butane), glycol, sugar solutions, salt solutions, clear juices, oil, suspensions, solvents, alcohol mixtures, etc.
- · Concentration measurement of 2-substance mixtures, product detection, quality control, control and monitoring of mixing processes, gas bubble detection, etc.

Further information and product variants are available on request.

