

# Transmitter DULCOMETER DMTa

The compact 2-wire transmitter – the link to the PLC and DULCOMETER.

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The transmitter DULCOMETER DMTa converts the sensor signals for pH, ORP value, chlorine concentration and conductivity into an interference-insensitive 4-20 mA analogue signal. Flexible, safe and always the optimum resolution of measured value.

## Technical Details

- Measured variables: pH, ORP, chlorine, temperature and conductivity
- Precision: 0.5 % of the measuring range limit value
- Correction variable: Temperature via Pt 100/Pt 1000 (pH, chlorine, conductivity)
- Communication interface: PROFIBUS DP (wall-mounted only)
- Degree of protection: IP 65 (wall-mounted, pipe-mounted), IP 54 (installation in a control cabinet)
- Display: Graphic display



Technical changes reserved. Printed in Germany, 4-4-2023.

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## Technical Data

Measuring range	pH - 1.00 ... 15.00 -1200 ... +1200 mV redox potential 0.01 ... 50.0 mg/l Chlorine -20 ... +150 °C 1 µS/cm ... 200 mS/cm (auto-ranging), depending on the cell constant
Cell constant	0.006 ... 12.0/cm for conductivity
Resolution	0.01 pH 1 mV 0.1 % of measuring range for chlorine 0.1 °C Conductivity 1/1000 of display value (min. 0.001 µS/cm)
Accuracy	0.5% from measurement range
Measurement input	mV terminal (pH, ORP); input resistance > 5 x 10 <sup>11</sup> Ω Chlorine terminal (DMT chlorine sensors) Pt 100/1000 terminal Conductivity terminal (2 or 4-line connection)
Correction variable	Temperature via Pt 100/1000 (pH, chlorine, conductivity)
Correction range temp.	Chlorine: 5 ... 45 °C, pH: 0 ... 100 °C, conductivity: 0 ... 100 °C
Min. current loop	4 mA
Max. current loop	20 mA
Fault current	23 mA
Feed voltage	2-wire transmitter, 16... 35 V DC, nominal 24 V PROFIBUS DP design, 16... 30 V DC, 24 V nominal
Communication interface	PROFIBUS DP (wall-mounted only)
Min. ambient temperature	0 °C
Max. ambient temperature	55 °C
Climate	Relative humidity up to 95% (non-condensing)
Enclosure rating	IP 65 (wall-mounted, pipe-mounted) IP 54 (installation in a control cabinet)
Display	graphical display
Housing material	PPE
Dim. H	135 mm
Dim. B	125 mm
D dimension	75 mm
Weight	0.45 kg

# Identity code: **DULCOMETER® DMTa Transmitters**

Series:  
DMTA DULCOMETER TRANSMITTERS  
version A

W S	Installation: Wall mounted (also column mounted) Control panel installation
0	Labeling: Standard with logo
9 5	Electrical Connection: Terminals for 4-20 output, 16-30 VDC loop power supply required Terminals for 4-20 output, 16-30 VDC loop power supply required (for Profibus DP)
0 4	Communication Interface: None Profibus DP (wall-mounted version only)
L P R T C	Measured Variable 1: See sensor section for cables. Conductivity pH Redox Temperature Chlorine
1 0	Measured Variable 2 (Connection Variable): Temperature Pt 1000/Pt 100 None (for measured variable T)
0	Enclosure Rating: Standard
E D F S I	Language: English German French Spanish Italian

The final 4 digits in the identity code give the software presets, e.g. cell constant at conductivity.

0 = Standard settings

Presettings options available on request.



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