




'INTELLIGENT' TEMPERATURE TRANSMITTER

PT-100

'TT-2000'



- MICROPROCESSOR BASED
- **EASY ADJUSTABLE** BY 3 PUSHBUTTONS AND A DISPLAY
- ALL STAINLESS HOUSING
- ACCURACY 0,1%
- 4-20 MA AND HART® PROTOCOL
- INCL. LOCAL DISPLAY
- ADJUSTABLE DAMPING
- VARIOUS PROCESSCONNECTIONS
- INTRINSIC SAFE
ATEX  II 1 G/D EEx ia IIC T4



Description

The TT-2000 is a **All Stainless** "Intelligent" PT-100 temperature transmitter based on the successful series 2000 Pressure and Leveltransmitters.

As standard, the TT-2000 will be supplied with a local indicator and 3 pushbuttons for **Easy calibration**.

Various processconnections are available, like: G $\frac{1}{2}$ ", G1", DIN Milkcoupling, Tri-clamp and Flanges. The insertionlength and diameter of the sensor can be ordered in customer specific dimensions. The standard PT-100 element used is class $\frac{1}{3}$ **DIN** which, in combination with the microprocessor based electronics, creates a very stable and accurate output signal.

HART® is a registered trademark of the HART Communication Foundation



*Display with 3 pushbuttons
(Standard)*

Manufacturer:

KLAY-INSTRUMENTS B.V.

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General information TT-2000

Calibration

As standard the TT-2000 is always equipped with a display and 3 pushbuttons for easy calibration. Both the measured and calibrated value can be read locally.

A full calibration can be completed using the three pushbuttons or with a Handheld terminal or by PC with special software from Klay Instruments.

For all adjustable points see table right.



Adjustable points

P101	Zero adjustment (4 mA)
P102	Span adjustment (20 mA)
P104	0 = CELC °C *
	1 = FAHR °F
	2 = KELV K
P105	4 – 20 mA *
	20 – 4 mA (reverse output)
P 106	Damping adjustment (0-25 sec)
P 107	Indication of Ambient temperature
P 108	Read out on display:
	0 = current (4 – 20 mA)
	1 = Process temperature *
	2 = percentage %
P 109	Current simulation (4 – 20 mA)
P 110	Write protection

* = factory setting

Specifications

Accuracy	: 0.1%
Range	: -50° to + 200°C
Lowest span	: 0 - 20°C
Pt-100 element	: 1/3 DIN
Output	: 4-20 mA / 2-wire
	HART Protocol (option)
Adjustment	: by 3 pushbuttons, H.H.T or PC
Supply	: 13 – 40 Vdc
Protection	: IP 66
Ambiant Temperature	: -30° to + 80°C
Electronic housing	: AISI 304
Wetted parts	: AISI 316
Process connections	: see orderingcode

Technical specifications can change without notice.

Orderingcode 'TT-2000'

TT-2000 - G_(v) - L100 x D9 - H (Orderingexample)

Process conections:

- G(v) - G'/' fixed nipple
- G(o) - G'/' turning nipple
- F - Flange (Specify size)
- M - Milkcoupling DN 25, 40 or 50
- L - Tri-clamp (Specify size)
- X - Other connections (specify)

Insertion length sensor:

- Specify in mm
- Lengte (L.....)

Diameter sensor:

- D6 - 6 mm (straight)
- D8 - 8 mm (straight)
- D9 - 9 mm (straight)
- D9/6- 9 mm, with reduced tip 6 mm
- D.. - other diameter (specify)

Options:

- H - HART® Protocol
- Ex - Intrinsic Safe
- ATEX II 1G/D



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