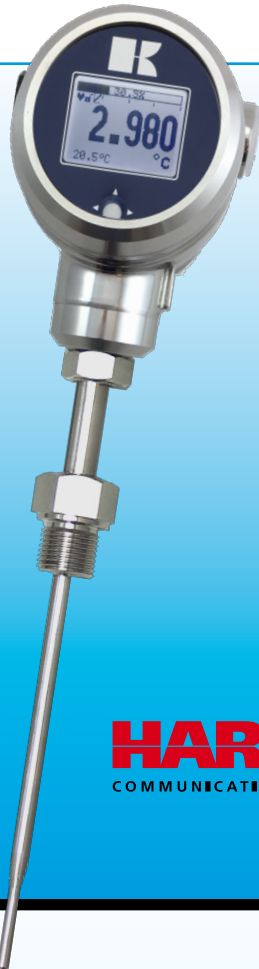




'INTELLIGENT' TEMPERATURE TRANSMITTER



PT-100

TT-4000



HART
COMMUNICATION PROTOCOL

PROFI
BUS

- MICROPROCESSOR BASED
- UNIQUE CONTROL BUTTON AND DISPLAY
- ALL STAINLESS HOUSING
- ACCURACY 0,1 %
- 4-20 mA, HART AND PROFIBUS PA Output
- GRAPHIC DISPLAY WITH BARGRAPH AND BACKLIGHT
- ADJUSTABLE DAMPING
- VARIOUS PROCESS CONNECTIONS
- INTRINSIC SAFE:  
ATEX/IECEx II 1 G Ex ia IIC T4 Ga
(T5/T6 as an option)

Description

The TT-4000 is a **All Stainless** "Intelligent" PT-100 temperature transmitter based on the successful series 4000 Pressure and Leveltransmitters.

As standard, the TT-4000 will be supplied with a local indicator and pushbutton 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



Unique control button and display (standard)

Manufacturer:

KLAY-INSTRUMENTS B.V.

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The Netherlands
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General information TT-4000

Calibration

As standard the TT-4000 is always equipped with a display and pushbutton 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	Free adjustment
P 108	Configuration
P 109	Read out on display:
	0 = current (4 – 20 mA)
	1 = Process temperature *
	2 = percentage %
P 110	Current simulation (4 – 20 mA)

Specifications

Accuracy	: 0.1 % (Optional 0.075 %)
Range	: -50° to + 200°C
Lowest span	: 0 - 20°C
Pt-100 element	: 1/3 DIN
Output	: 4-20 mA / 2-wire
	HART Protocol or PROFIBUS PA
Adjustment	: by pushbutton, H.H.T or PC
Supply	: 12 – 36 Vdc
Protection	: IP 66
Ambient Temperature	: -20° to + 80°C
Electronic housing	: AISI 304
Wetted parts	: AISI 316
Process connections	: see orderingcode

Technical specifications can change without notice.

* = factory setting

Orderingcode 'TT-4000'

TT-4000 - G(v) - L100 x D9 - H (Orderingexample)

Process connections:

- 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
- P - PROFIBUS PA



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