### **CZAKI THERMO-PRODUCT**

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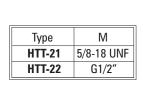
czaki@czaki.pl

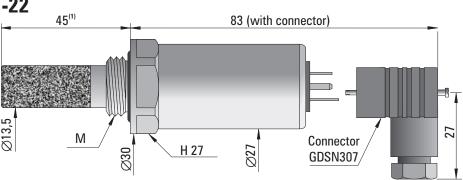
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THERMO-PRODUCT

# **HUMIDITY SENSOR WITH TRANSMITTER**

type HTT-21, type HTT-22





## **TECHNICAL DATA**

# Sensor

Application measurement of temperature and relative humidity of gas, such as air in tanks and pipelines.

process connection with male thread

 $\begin{array}{ll} \mbox{Measuring range} & -40^{\circ}\mbox{C...} + 80^{\circ}\mbox{C}^{\mbox{\tiny (1)}}, \mbox{0...} 100\%\mbox{RH} \\ \mbox{Filter material} & 5~\mu\mbox{m sintered acid-resistant steel} \end{array}$ 

Housing material stainless steel 1.4305

Weight approx. 150 g

Maximal gas pressure 3MPa

Operating temperature  $-40^{\circ}\text{C...} + 60^{\circ}\text{C}$ 

### **Transmitter**

Processing ranges:

temperature programmable, max.  $-40^{\circ}$ C ...  $+120^{\circ}$ C (upper-lower value  $\geq 10^{\circ}$ C) relative humidity programmable, max. 0% ... 100% (upper-lower value  $\geq 10\%$ )

dew point temperature programmable, max. -40°Cdp ... 80°Cdp (upper-lower value ≥ 10°Cdp)

Dew point is calculated based on relative humidity and temperature

Temperature processing error max.  $0.5^{\circ}$ C for  $0^{\circ}$ C  $\leq$  T  $\leq$  60°C and up to  $1.5^{\circ}$ C beyond this range max. 3% for  $20\% \leq$  RH  $\leq$  80% and up to 5% beyond this range

Output signals 2 x 4-20 mA (common plus supply)

Power supply 8 ... 36 V DC / 50 mA (via current loop of humidity signal output)

Accessories (ordered separately): DPT-IF2013U - programming interface, includes 1 cable with GDSN307 connector

**DPT-SB** - sampling block with two 1/8NPT threaded holes

# ORDERING CODE (1) (2) (3) (4) (5) (6) HTT — / / / / / / / /

(1) Process connection

5/8-18 UNF (21), G1/2" (22)

(2) Lower end of the temperature processing range

value in [°C], default -40

(3) Upper end of the temperature processing range

value in [ $^{\circ}$ C], default +80

(4) Lower end of the humidity processing range

value in [%RH] or [°Cdp], default 0

(5) Upper end of the humidity processing range

value in [%RH] or [°Cdp], default 100

(6) Humidity unit **Ordering example**:

%RH or °Cdp, default %RH

HTT-21 denotes sensor with a 5/8-18 UNF thread, temperature and humidity transmitter with ranges:

40...+80°C, 0...100%RH for 4-20mA current signals

HTT-22/-20/50/-30/40/°Cdp denotes sensor with a G1/2" thread, temperature and humidity transmitter

with ranges: -20...+50°C i -30...40°Cdp for 4-20mA current signals

<sup>&</sup>lt;sup>(1)</sup> Product can be made with a spacer tube of any length. Suitable length allows measurements of temperatures up to 120°C