



## Electronic Temperature Transmitter HTT 8000

### Description:

The HTT 8000 series of temperature transmitters was specifically developed for OEM applications e.g. in mobile applications. It is based on a silicon semiconductor device with corresponding evaluation electronics. All parts in contact with the medium are in stainless steel, and are welded together.

For integration into modern controls, standard analog output signals are available, e.g. 4 .. 20 mA, 0 .. 5 V, 1 .. 6 V or 0 .. 10 V.

Ratiometric output signals are also available.

For the electrical connection, various built-in connections are available.

The pressure resistance up to 8700 psi and excellent EMC characteristics make the HTT 8000 ideal for use in harsh conditions.

### Special features:

- Accuracy  $\leq \pm 1.5$  % FS B.F.S.L.
- Small, compact design
- Excellent EMC characteristics
- Long-term stability

### Technical data:

Input data	
Measuring principle	Silicon semiconductor device
Measuring range <sup>1)</sup>	-13 .. +257 °F
Probe length	16 mm
Pressure resistance	8700 psi
Mechanical connection <sup>2)</sup> (Torque value)	SAE 6, 9/16-18 UNF 2A (15 lb-ft; 20 Nm) G1/4 A DIN 3852 (15 lb-ft; 20 Nm)
Parts in contact with medium	Mech. conn.: Stainless steel Seal: FPM
Output data	
Output signal	e.g.: 4 .. 20 mA, 0 .. 5 V, 1 .. 6 V, 0 .. 10 V, ratiometric: 0.5 .. 4.5 V for $U_B = 5$ V DC (10 .. 90 % $U_B \pm 5$ %), etc.
Accuracy (at room temperature)	$\leq \pm 1.0$ % FS typ. $\leq \pm 2.0$ % FS max.
Temperature drift (environment)	$\leq \pm 0.012$ % FS / °F
Rise time to DIN EN 60751	$t_{50} : \sim 4$ s $t_{90} : \sim 8$ s
Environmental conditions	
Ambient temperature range <sup>3)</sup>	-40 .. +185 °F / -13 .. +185 °F
Storage temperature range	-40 .. +212 °F
Fluid temperature range <sup>3)</sup>	-40 .. +257 °F / -13 .. +157 °F
CE mark	EN 61000-6-1 / 2 / 3 / 4
UL mark <sup>4)</sup>	Certificate No. E318391
Vibration resistance to DIN EN 60068-2-6 at 10 .. 500 Hz	$\leq 25$ g
Shock resistance to DIN EN 60068-2-27	100 g / 6 ms / half sine 500 g / 1 ms / half sine
Protection class to IEC 60529	IP 67
Other data	
Electrical connection	M12x1, 4 pole AMP DIN 72585 code 1, 3 pole Packard Metri Pack Series 150, 3 pole Deutsch DT 04, 3 pole AMP Superseal, 3 pole AMP Junior Power Timer, 3 pole Flying leads, 1 m cable length EN175301-803 (DIN 43650), 3 pole. + PE
Supply voltage	8 .. 30 V DC 12 .. 30 V DC for 0 .. 10 V, 5 V DC $\pm 5$ % (ratiometric)
for use acc. to UL spec.	- limited energy - according to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950
Current consumption	$\leq 25$ mA
Residual ripple of supply voltage	$\leq 5$ %
Weight	$\sim 145$ g

Note: Reverse polarity protection of the supply voltage, excess voltage, override, short circuit protection are provided.

**FS (Full Scale)** = relative to the complete measuring range

<sup>1)</sup> Other measuring ranges on request

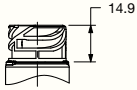
<sup>2)</sup> Other mechanical connections on request

<sup>3)</sup> -13 °F with FPM seal, -40 °F on request

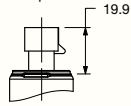
<sup>4)</sup> Environmental conditions according to 1.4.2 UL 61010-1; C22.2 No 61010-1

## Dimensions:

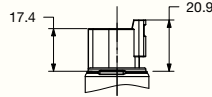
Male connection  
DIN 72585  
3 pole



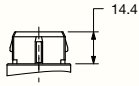
Male connection  
Metri-Pack  
series 150  
3 pole



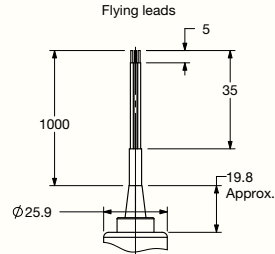
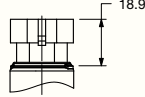
Male connection  
Deutsch DT04  
3 pole



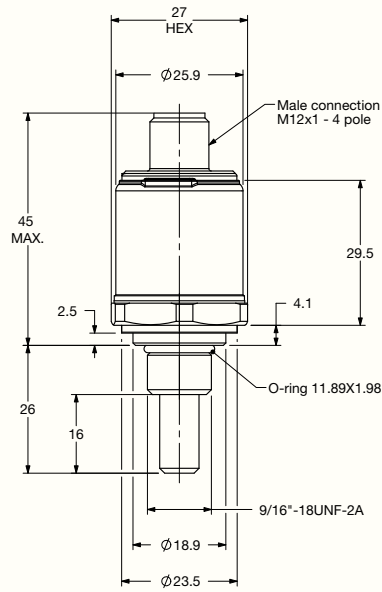
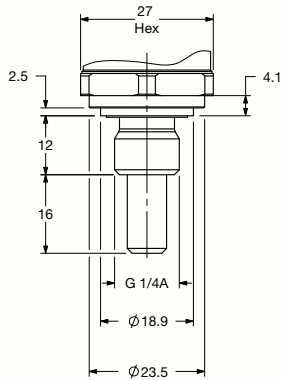
Male connection  
Junior Power Timer  
3 pole



Male connection  
Superseal  
series 1.5  
3 pole



Male connection  
EN175301-803 (DIN 43650)  
3 pole



## Note:

The information in this brochure relates to the operating conditions and applications described. For applications and operating conditions not described, please contact the relevant technical department. Subject to technical modifications.

## Order details:

For precise specifications, please contact the Sales Department of HYDAC ELECTRONIC.

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