

## HEAD MOUNTING TRANSMITTER

## R/T82000

### 2-wire head mounting transmitter

#### R/T82000

- Analogue transmitter
- Pt100 (RTD) or T/C input
- Free scalable
- High accuracy (Typical 0.1%)
- Fast response time
- Rugged epoxy coated housing
- ATEX approval available
- 5 Year warranty



## Specifications

V <sub>nom</sub>	24 VDC
T <sub>amb</sub>	25°C
Span nom.	RTD = 100°C T/C = 250°C
<b>General specifications</b>	
Output	4 – 20 mA
Power supply	12 – 36 VDC (ATEX certified units 12 – 30 VDC)
Zero drift	± 0.02%/°C
Span drift	± 0.02%/°C
Supply voltage effect	± 0.002%/V
Sensor burn out	Upscale > 23mA, limited 40 mA
Load capability	(V[bat] – 12 V) / 20mA
Ambient Operating Temp.	-20...+70°C
Storage Temperature	-20...+100°C
Ingress Protection	IP30
Housing Material	Zinc Alloy (ZAMAK 5) epoxy coated
Housing Dimension Dia. x H	43 mm x 27 mm (1.70" x 1.06")
ATEX certification	Ex II 1G EEx ia IIC T4..T6
<b>Pt100 (alpha = 0.00385)</b>	<b>Model R82000</b>
Zero adjustment	Between -50 and +50°C
Span adjustment	50 to +800°C
Sensor lead resistance effect	0.01°C/Ohm
Max. sensor line resistance	500 Ohm
Linearization	0.1%
<b>Thermocouple</b>	<b>Model T82000</b>
Zero adjustment	Between -50 and +50°C
Span adjustment	T/C K: 150 to 1200°C T/C J: 150 to 600°C
Cold junction drift	0.03°C/°C
Max. sensor line resistance	10,000 Ohm
Output	Voltage linear

(Continued)

<b>Potentiometer</b>	<b>Model P82000-FR</b>
Minimum potentiometer	1k Ohm
Maximum potentiometer	50k Ohm
Range	0 – 100% = 4 – 20 mA (fixed range)
<b>Variable resistor</b>	<b>Model P82000</b>
Range	Factory set; specify resistor

## Order information and options

### Specify model:

R82000	Input Pt100
T82000-K	Input T/C K
T82000-J	Input T/C J
P82000-FR	Input potentiometer
P82000	Input variable resistor

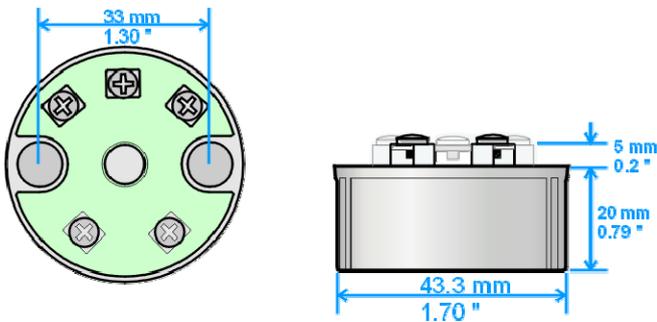
### Example:

Model T82000-K-HF-Ex

### Options:

- HF = RFI Immunity
- Ex = Intrinsically safe version (ATEX Ex II 1G EEx ia IIC T4..T6)

## Dimensions



## Sensor ranges

Sensor type	Temp. Min. °C	Temp. Max. °C	Span Min. °C	Span Max. °C
Pt100 IEC751	-50	850	50	800
K (NiCr-Ni)	-50	1200	150	1200
J (Fe-CuNi)	-50	600	150	600