

TEMPERATURE-MEASURING TRANSDUCER 4 ... 20 MA, PT100, 2- / 3- OR 4-WIRE

FOR HEAD AND RAIL CASE MOUNTING



HIGHLIGHTS:

- low-price and robust (complete sealed - no pots, therefore vibration resistant and long time stable)
- selectable probe connection as 2- / 3- or 4-wire
- high accuracy (0.1 %)
- large ambient temperature range (-40 ... +85 °C)
- error message in case of sensor damage or sensor short-circuit
- functional warranty 5 years

RT420-00/WE

Head transmitter, set by our works

RT420-SG/WE

Set by our works and mounted in snap-on rail housing

Specifications:	
Measuring range:	-200 ... +850 °C
Measuring span:	25 ... 1050 K
Zero shift:	-200 ... +825 °C
Resolution:	14 bit
Sensor connection:	2-, 3- or 4-wire connection
Measuring current:	<0.3 mA
Permitted resistance of connection cable:	max. 20 Ohm / wire
Compensation for cable error:	±0.02 K / Ohm (at 3-wire)
Sensor monitoring:	monitoring for sensor damage and short-circuit
Measuring cycle:	<700 ms
Linearisation:	linear to temperature acc. to IEC/DIN/EN 60 751-2
Accuracy:	±0.25 °C or ±0.1 % of measuring span
Temperature effect:	<±0.01 % / 1 K
Analog output:	4 ... 20 mA, 2-wire technology
Accuracy output:	<0.1 % of signal span
Auxiliary energy: U_B	8 ... 35 V DC (max. ripple factor: 3 V _{ss} @ 50 / 60 Hz)
Permitted burden R_A	R _A ≤ (U _B - 8 V) / 0.023 A [R _A in Ohm, U _B in V]
Effect of auxiliary energy:	±0.01 % / V
Power-on time:	10 s
Damping:	adjustable from 0 ... 30 s
Output limits:	3.5 mA, 23 mA
Signal for sensor damage:	3.5 mA or 23 mA
Operating temperature:	-40 ... +85 °C
Relative humidity:	0 ... 98 % RH (non condensing)
Storage temperature:	-55 ... +90 °C
Housing:	housing suitable for head mounting
Dimensions:	Ø 44 mm x 19 mm
Protection rating:	Housing: IP40, connection terminals: IP10
Electric connection:	via screw-type terminals
Weight:	approx. 35 g

Accessories and spare parts:

Hutschienenadapter

Art. no. 603659

Hat rail adapter for snap-on the RT420 to top-hat rail

RT420 - 1 - 2 - 3 - 4

Greisinger		
1. Version		
00/WE	Head transmitter	
SG/WE	Head transmitter in snap-on housing	
2. Sensor connection		
P2	Pt100 (2-wire)	
P3	Pt100 (3-wire)	
P4	Pt100 (4-wire)	
3. Measuring range		
	-200 ... +850 °C	
MBS	0 ... 25 °C	
MBS	0 ... 40 °C	
MBS	10 ... 42 °C	
MBS	0 ... +50 °C	
MBS	-50 ... +50 °C	
MBS	-200 ... +50 °C	
MBS	-50 ... +100 °C	
MBS	0 ... 100 °C	
MBS	-30 ... +100 °C	
MBS	0 ... 120 °C	
MBS	0 ... 150 °C	
MBS	-50 ... +150 °C	
MBS	0 ... 160 °C	
MBS	0 ... 170 °C	
MBS	0 ... 180 °C	
MBS	-50 ... +200 °C	
MBS	-50 ... +230 °C	
MBS	-50 ... +400 °C	
MBS	0 ... 200 °C	
MBS	0 ... 300 °C	
4. Probe break signal		
FBU	3.5 mA	
FBO	> 23 mA	