



## Technical Data

### Input

<b>Digital accuracy</b>	See „Measuring ranges“
<b>CJC-compensation {1}</b>	Local < 0.5°C Remote < 0.2°C
<b>RTD measuring current</b>	0.2 mA, continuously
<b>Cable resistance (3-/4-wire)</b>	T > 600°C: Max. 20 Ohm/wire {1} T < 600°C: Max. 30 Ohm/wire {1}
<b>Protection</b>	+/- 35 V <sub>dc</sub>
<b>Suppression</b>	50 and 60 Hz
<b>Resolution</b>	16 bit
<b>Repeatability</b>	< 0.05°C

### Output

<b>Signal span</b>	4...20 mA, 2-wire {1} 20...4 mA, 2-wire {1}
<b>Accuracy</b>	< 0.1% of signal span
<b>Supply range</b>	6.5...35 Vdc
<b>Ripple immunity</b>	3 V <sub>rms</sub>
<b>Load equation</b>	$R_L \leq (V_{cc} - 6.5)/23$ [kOhm]
<b>Up/Down scaling limits</b>	23 mA/3.5 mA {1}
<b>Damping</b>	0...30 sec. {1}
<b>Response time (t<sub>90</sub>)</b>	Pt100 1.0 sec. ; T/C 1.6 sec.
<b>Resolution</b>	12 bit

### Environmental conditions

<b>Operating temperature</b>	-40...85°C
<b>Storage temperature</b>	-55...90°C
<b>Humidity</b>	< 98% RH, condensing
<b>Vibrations</b>	Lloyds Register, test 2

### EMC data

<b>Immunity</b>	EN 61326
<b>Emission</b>	EN 61326
<b>NAMUR</b>	NE 21

### Approval (Demko) EEx ia IIC T5/T6, ATEX II 1G

<b>Supply range</b>	6.5...30 V <sub>dc</sub>
<b>Internal inductivity</b>	$L_i \leq 15 \mu\text{H}$
<b>Internal capacity</b>	$C_i \leq 5 \text{nF}$
<b>Barrier data</b>	$U \leq 30 \text{V}_{dc}$ ; $I \leq 0.1 \text{A}$ ; $P \leq 0.75 \text{W}$
<b>Temperature class</b>	T1...T5: -40 < T <sub>amb</sub> < 85°C T1...T6: -40 < T <sub>amb</sub> < 50°C

### Approval FM (Application Manual 2211-8900) (Pending)

<b>Explosion Proof</b>	Class I, Div 1, Groups A, B, C, D
<b>Non incandive</b>	Class 1, Div 2, Groups A, B, C, D
<b>Temperature class</b>	T1...T5: -40 < T <sub>amb</sub> < 85°C T1...T6: -40 < T <sub>amb</sub> < 50°C

### Mechanical data

<b>Dimensions</b>	ø44 x 26.3 mm
<b>Protection class</b>	Housing: IP 55 Terminals: IP 10

### Other data

<b>Isolation</b>	3.75 kV <sub>ac</sub>
<b>Temperature drift</b>	Typ. 0.003% per °C Max. 0.01% per °C
<b>Power-on time</b>	1.8...3.9 sec.

### Test conditions

<b>Configuration</b>	Pt100; 0...100°C
<b>Amb. temperature</b>	23°C +/- 2°C

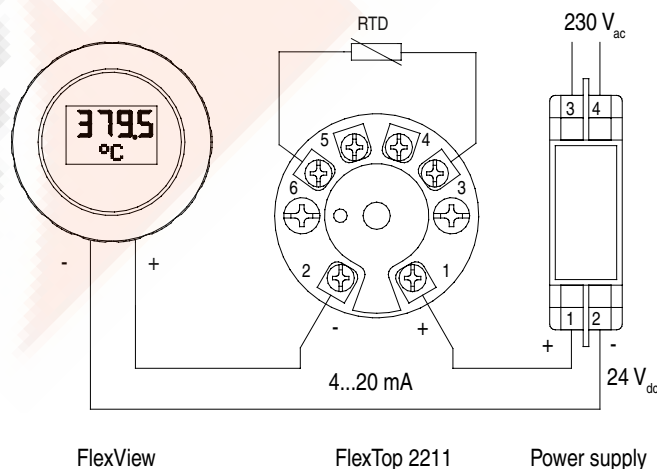
### Disposal of product and packing

According to national laws or by returning to Bourdon-Haenni

### Note

{1} Configurable

## Example of Application



## Measuring Ranges

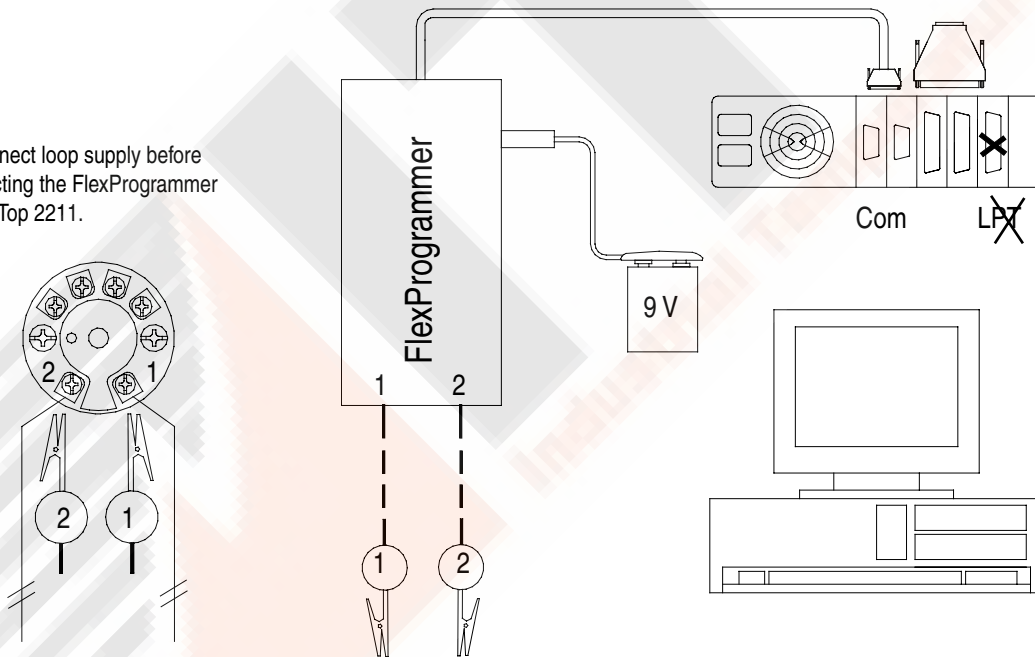
Type	Standard	Range	Min. span	Accuracy	Resolution
Pt25...Pt1000	DIN/EN/IEC 60751	-200...850°C {2}	10°C	0.1°C	0.1°C
Pt25...Pt1000	a = 0.003902	-200...850°C {2}	10°C	0.1°C	0.1°C
Pt25...Pt1000	a = 0.003916	-200...850°C {2}	10°C	0.1°C	0.1°C
Ni25...Ni1000	DIN 43760	-50...250°C {2}	10°C	0.1°C	0.1°C
Cu25...Cu1000	0.428 Ohm/°C	-50...200°C	10°C	0.1°C	0.1°C
B(PtRh30-Pt)	IEC 584	100...1820°C	50°C	2°C	0.1°C
E(NiCr-CuNi)	IEC 584	-270...900°C	50°C	1°C	0.1°C
J(Fe-CuNi)	IEC 584	-210...1200°C	50°C	1°C	0.1°C
K(NiCr-Ni)	IEC 584	-250...1370°C	50°C	1°C	0.1°C
L(Fe-CuNi)	DIN 43710	-200...900°C	50°C	1°C	0.1°C
N(NiCrSi-NiSi)	IEC 584	-200...1300°C	50°C	1°C	0.1°C
R(PtRh13-Pt)	IEC 584	-50...1750°C	100°C	2°C	0.1°C
S(PtRh10-Pt)	IEC 584	-50...1750°C	100°C	2°C	0.1°C
T(Cu-CuNi)	IEC 584	-250...400°C	40°C	1°C	0.1°C
U(Cu-CuNi)	DIN 43710	-200...600°C	50°C	1°C	0.1°C
W5-Re (Type C)	ASTM 988	0...2300°C	100°C	2°C	0.1°C
W3-Re (Type D)	ASTM 988	0...2300°C	100°C	2°C	0.1°C
Lin. voltage		-10...70 mV	2 mV	0.04 mV	0.1 mV
Lin. voltage		-0.1...1.1 V	20 mV	0.4 mV	1 mV
Lin. resistance		0...390 Ohm	5 Ohm	0.05 Ohm	0.01 Ohm
Lin. resistance		0...2200 Ohm	25 Ohm	0.25 Ohm	0.1 Ohm

{2} The max. temperature is lower for RTD-elements in the range 500...1000, i.e. Pt1000 max. 350°C.

## Configuration

Note:

Disconnect loop supply before connecting the FlexProgrammer to FlexTop 2211.



## Ordering Details - FlexTop 2211

Type	2211 000x (x)
Standard version, non-ex	5...8' digit 1
Demko EEx ia IIC T5/T6, ATEX II 1G and FM Class 1, Div 1, Groups A, B, C, D	2
Configuration	9' digit C
Configuration according to customer specifications	

