

## APAQ C130<sup>TC</sup>

### Basic Programmable 2-wire Transmitter for Thermocouple



The APAQ C130<sup>TC</sup> is a modern transmitter with high reliability and great performance. External influences such as ambient temperature, vibration, moisture and EMC interference have minimal influence on the measurement result, thanks to the robust design.

- Type: Digital
- Input: TC
- Output: 4-20 mA
- Isolation: Unisolated
- Measuring channels: 1 channel

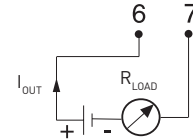
#### Specifications:

| Input                                         |                                                              |
|-----------------------------------------------|--------------------------------------------------------------|
| TC type B - Pt30Rh-Pt6Rh (IEC 60584)          | 0...+1820 °C / +32...+3308 °F                                |
| TC type E - NiCr-CuNi (IEC 60584)             | -270...+1000 °C / -454...+1832 °F                            |
| TC type J - Fe-CuNi (IEC 60584)               | -210...+1200 °C / -346...+2192 °F                            |
| TC type K - NiCr-NiAl (IEC 60584)             | -270...+1300 °C / -454...+2372 °F                            |
| TC type N - NiCrSi-NiSi (IEC 60584)           | -270...+1300 °C / -454...+2372 °F                            |
| TC type R - Pt13Rh-Pt (IEC 60584)             | -50...+1750 °C / -58...+3182 °F                              |
| TC type S - Pt10Rh-Pt (IEC 60584)             | -50...+1750 °C / -58...+3182 °F                              |
| TC type T - Cu-CuNi (IEC 60584)               | -270...+400 °C / -454...+752 °F                              |
| Adjustments                                   |                                                              |
| Minimum span                                  |                                                              |
| TC type B                                     | 700 °C / 1260 °F                                             |
| TC type R, S,                                 | 300 °C / 540 °F                                              |
| TC type E, J, K, T                            | 50 °C / 90 °F                                                |
| TC type N                                     | 100 °C / 180 °F                                              |
| Zero adjustments                              | Any value within range limits                                |
| Output                                        |                                                              |
|                                               | 4-20 mA, temperature linear                                  |
| Sensor failure indication                     |                                                              |
|                                               | Upscale (≥21.0 mA) or downscale (≤3.6 mA)                    |
| NAMUR compliance                              |                                                              |
|                                               | Current limitations and failure currents acc. to NAMUR NE 43 |
| Response time                                 |                                                              |
|                                               | 0.4 to 26 s, adjustable filtering level                      |
| Ambient temperature                           |                                                              |
| Storage and operation                         | -40 to +85 °C / -40 to +185 °F                               |
| Galvanic isolation                            |                                                              |
|                                               | None                                                         |
| Power supply                                  |                                                              |
|                                               | 6 to 32 VDC                                                  |
| Typical accuracy                              |                                                              |
|                                               | Max. of [CJC not included]                                   |
| TC type R, S, T                               | ±2.0 °C or ±0.2 % of span / ±3.6 °F or ±0.2 % of span        |
| TC type B (<100 °C / <212 °F)                 | not specified                                                |
| TC type B (100 °C...400 °C / 212 °F...752 °F) | ± 10 °C / ± 18 °F                                            |
| TC type B (>400 °C / >752 °F)                 | ±2.0 °C or ±0.2 % of span / ±3.6 °F or ±0.2 % of span        |
| TC type E, J, K                               | ±1 °C or ±0.2 % of span / ±1.8 °F or ±0.2 % of span          |
| TC type N [-100...+1300 °C]                   | ±1 °C or ±0.2 % of span / ±1.8 °F or ±0.2 % of span          |
| TC type N [-270...-100 °C]                    | ±2.0 °C / ±3.6 °F                                            |
| Mounting                                      |                                                              |
|                                               | DIN B head or larger, DIN-rail (with adapter)                |
| Vibration                                     |                                                              |
|                                               | Acc. to IEC 60068-2-6, test Fc, 10...2000 Hz, 10 g           |
| EMC                                           |                                                              |
|                                               | EN 61326-1 and EN 61326-2-3                                  |
| Configuration                                 |                                                              |
|                                               | App Inor Connect via NFC                                     |

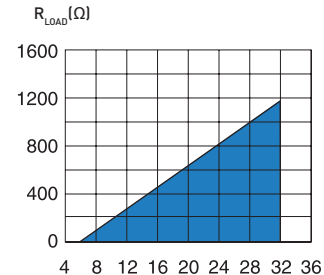
#### Input connections



#### Output connections



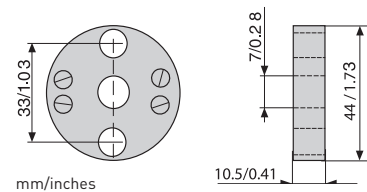
#### Output load diagram



Supply voltage U [V DC]

$$R_{LOAD} = (U - 6) / 0.022$$

#### Dimensions



#### Ordering information

|                                   |            |
|-----------------------------------|------------|
| APAQ C130 <sup>TC</sup>           | 70C1300211 |
| Head mounting kit                 | 70ADA00017 |
| DIN-rail Adapter + Screw (10 pcs) | 70ADA00027 |