

APAQ-H



Analog Adjustable 2-wire Transmitters









APAQ-H is a family of multirange 2-wire temperature transmitters for Pt100 or Thermocouple input. Designed for highest reliability and excellent industrial performance. The "low profile" housing is extremely durable and facilitates easy connections and adjustments.

- Rangeable with solderpads and potentiometers
- Temperature linear output for Pt100 (APAQ-HRF/-HRFX)
- mV linear output for T/C (APAQ-HCF/-HCFX)
- · Consistent sensor break function
- · Easy wiring, large center hole
- Moulded electronics for high protection

Specifications:

| | APAQ-HRF/-HRFX | APAQ-HCF/-HCFX |
|-----------------------|--------------------------------|-------------------------------------|
| Input | Pt100 1), 3-wire connection | T/C J, L, T, K, N |
| Adjustments | | |
| Span | 50/100/150/200/300/400/500°C | 10 to 50 mV continuously |
| | 100/200/300/400/600/800/1000°F | Temperature ranges acc to datasheet |
| Fine adjustment | ±10% | ±10% |
| Zero | -50 to + 50°C | ±10% of span |
| | -60 to + 120°F | |
| Output | 4-20 mA | 4-20 mA |
| Linearization | Temperature linear output | mV linear output |
| Galvanic isolation | No | No |
| Power supply | | |
| APAQ-HRF/-HCF | 6.5 to 32 VDC | 6.5 to 32 VDC |
| APAQ-HRFX/-HCFX | 8.5 to 30 VDC | 8.5 to 30 VDC |
| Sensor failure | Upscale, Downscale | Upscale, Downscale |
| Intrinsic safety | | |
| APAQ-HRFX/-HCFX ATEX: | II 1 G EEx ia IIB T4-T6 | II 1 G EEx ia IIB T4-T6 |
| APAQ-HRFX/-HCFX FM: | Class I, Div. 1, Gr.A-D | Class I, Div. 1, Gr.A-D |
| Operating Temperature | -40 to 85°C/-40 to + 185°F | -40 to 85°C/-40 to + 185°F |
| Typical accuracy | ±0.15% of temperature span | ±0.5% to ±1.0% of temperature span |
| Connection head | DIN B or larger | DIN B or larger |
| | | |
| | | |
| | | |
| | | |
| | | |

Input connections

APAQ-HRF/-HRFX



3-wire connection

APAQ-HCF/-HCFX

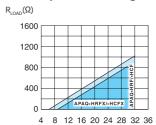


Thermocouple

Output connections



Output load diagram



Supply voltage U (V DC)
R_{LOAD}=(U-6.5)/0.025 (APAQ-HRF/-HCF)
R_{LOAD}=(U-8.5)/0.025 (APAQ-HRFX/-HCFX)

Dimensions





Ordering information

| _ | |
|------------------|------------|
| APAQ-HRF | 70APHRF001 |
| APAQ-HRFX (ATEX) | 70APHRFX01 |
| APAQ-HRFX (FM) | 70APHRFX11 |
| APAQ-HCF | 70APHCF001 |
| APAQ-HCFX (ATEX) | 70APHCFX01 |
| APAQ-HCFX (FM) | 70APHCFX11 |
| Configuration | 70CAL00001 |

¹⁾IEC 60751, α=0.00385