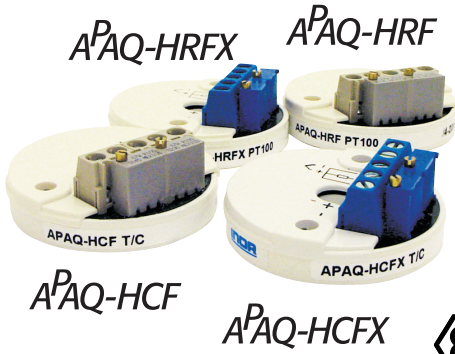


# APAQ-H

## 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.

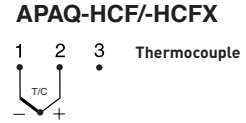
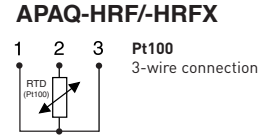
- Rangeable with solderpads and potentiometers
- Temperature linear output for Pt100 (APAQ-HRF/-HRFX)
- mV linear output for T/C (APAQ-HCF/-HCFX)
- Consistent sensor break function
- Easy wiring, large center hole
- Moulded electronics for high protection

### Specifications:

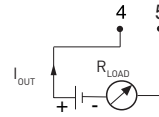
	APAQ-HRF/-HRFX	APAQ-HCF/-HCFX
<b>Input</b>	Pt100 <sup>1)</sup> , 3-wire connection	T/C J, L, T, K, N
<b>Adjustments</b>		
Span	50/100/150/200/300/400/500 °C 100/200/300/400/600/800/1000 °F	10 to 50 mV continuously Temperature ranges acc to datasheet
Fine adjustment	±10 %	±10 %
Zero	-50 to +50 °C -60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

<sup>1)</sup>IEC 60751,  $\alpha=0.00385$

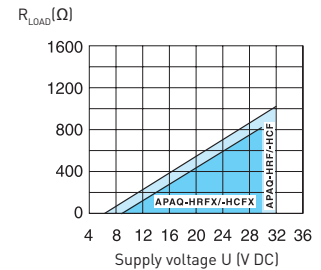
### Input connections



### Output connections



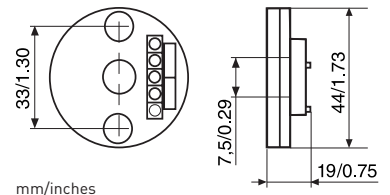
### Output load diagram



$$R_{LOAD} = (U - 6.5) / 0.025 \text{ (APAQ-HRF/-HCF)}$$

$$R_{LOAD} = (U - 8.5) / 0.025 \text{ (APAQ-HRFX/-HCFX)}$$

### Dimensions



### Ordering information

APAQ-HRF	70APHRF001
APAQ-HRFX (ATEX)	70APHRFX01
APAQ-HRFX (FM, CSA)	70APHRFX11
APAQ-HCF	70APHCF001
APAQ-HCFX (ATEX)	70APHCFX01
APAQ-HCFX (FM, CSA)	70APHCFX11
Configuration	70CAL0001