

Thermophil[®] INFRA R330

- Contact-free temperature measurement in industrial applications
- Robust and leak-proof aluminium casing IP 64
- Assembly without screws
- Optimised air purge



Functions

The stationary pyrometer of the type **R330** is particularly suited for contact-free temperature measurement in different procedural processes in industrial applications (e.g. tumble driers).

The adapters are equipped with an air supply connection to protect the optics. The click connection between adapter and sensor makes possible a rapid inspection of the optics. The flat construction type ensures an optimal integration.

Features

- **Measurement range: 0 ... 200 °C**
- **Maximum ambient temperature: 70 °C**
- **Measuring signal 4 - 20 mA linear**
- **HART interface**
- **Vibration-proof, no mechanically moved parts**

Technical data

Device-specific data

Scope of measuring range	Max. 0 ... + 400 °C; default value 0 ... 200
Spectral sensitivity	8 bis 14 µm
Emission factor	$\epsilon = 0,1 \dots 1$; default value $\epsilon = 0,95$
Measuring accuracy	$\leq 1 \%$ of measuring range (at 23 °C and $\epsilon = 1$)
Measurement field	Depending on measurement distance (see ill. "distance ratio")
Response time	$t_{0,9} = 0.2 \text{ s}$ (without damping)
Permissible load	$\leq 500 \Omega$ for standard type/ $U_H = 24 \text{ V}$
Temperature influence	$\leq 0.03 \%$ /C °
Functions (configurable via HART® interface)	Lower and upper measurement range limit, emission factor, transmission factor, ambient temperature alarm, damping, maximum and minimum value mode, error current, HART®-address

Electrical data

Auxiliary power	$U_H = \text{DC } 12 \dots 30 \text{ V}$, max. 25 mA, max. residual ripple $\leq 150 \text{ mV eff.}$
Connection type	Pluggable, 4 pole, M8 x 0,5, IEC 60947-5-2 (IP 68)
Output signal	4 - 20 mA, linear
Protocol	HART® protocol (FSK BELL 202, 1.2 kb/s)

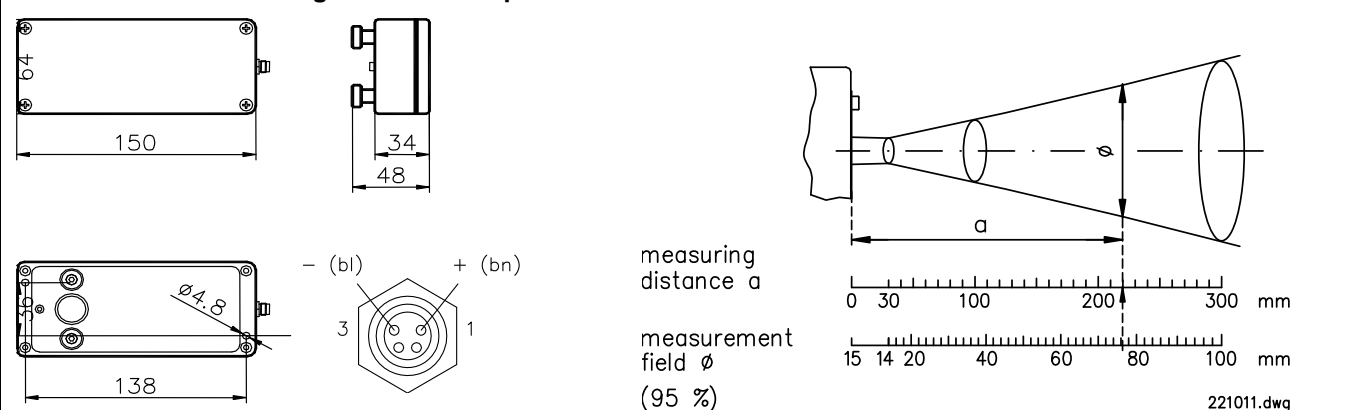
Ambient conditions

Permissible operating temperature	Measurement amplifier: 0 ... + 70 °C,
Permissible storage temperature	Measurement amplifier: - 20 ... + 70 °C
Climatic classification	KPA in accordance with DIN 40040

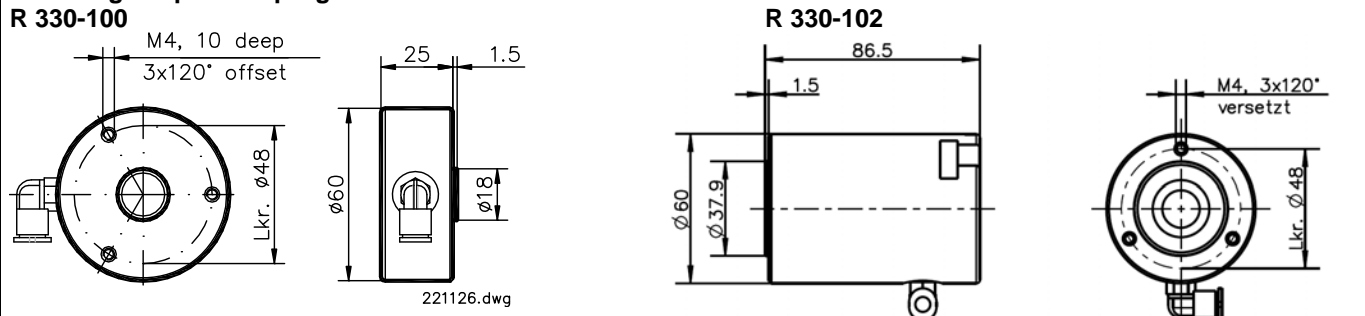
Mechanical data

Design	Aluminium casing
Protection type	IP 65
Weight	Approx. 0,5 kg

Dimensions and mounting bores Thermophil® INFRA R330 Distance ratio



Mounting adapter /air purge R 330-100



Ordering details

Designation	Order no.
Thermophil® INFRA R330	221 011
Mounting adapter/ air purge R330-100 (accessory)	221 126
Mounting adapter/air purge R330-102 (accessory)	239 623
Cable socket M8 4 pole, cable length 5 m	235 612