# LF20, PF20

# **DUCT TEMPERATURE SENSORS**

# **PRODUCT DATA**



## **GENERAL**

The LF20 and PF20 Duct Temperature Sensors are used in ventilating and air conditioning systems to measure discharge, return, or outside air temperature. They are designed for duct mounting.

The sensors are suitable for use in systems using NTC 20k temperature sensing elements.

## **FEATURES**

- · NTC 20k temperature sensing element
- Wide sensing range
- High accuracy

#### **Models**

OS no.	sensor type	IP rating	probe length, in mm (in.)	sensing range
LF20-1P65-5M	NTC 20k	65	157 (6.18)	-30+80 °C
LF20-3P65-5M	NTC 20k	65	307 mm (12.07)	(-22+176 °F)
PF20-65-2M	NTC 20k	65	2-m cable	-30+70 °C
PF20-65-5M	NTC 20k	65	5-m cable	(-22+158 °F)
LF-MF	mounting flange; bulk pack of 10 flanges			

## **SPECIFICATION**

#### Nominal value

NTC 20k 20 kΩ at 25 °C (77 °F)

Accuracy

NTC 20k  $\pm 0.2\,$  C at 25 °C (77 °F)

Sensitivity

NTC 20k  $\approx$  -934.5  $\Omega$  / K at 25 °C (non-

linear)

Time constant < 30 s

Sensor sleeve material stainless steel (1.4571)

Cable sheath material PVC

**Electrical connection** 2-m or 5-m cable, 2x0.22 mm<sup>2</sup>

Ambient Limits (wiring box)

Storage temperature -30...+70 °C (-22...+158 °F)
Humidity 5...95% rh, non-condensing

Protection class IP54 / IP65 as per EN 60529

**Dimensions** See below.

## **DIMENSIONS**

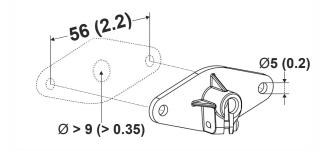


Fig. 1. Mounting flange LF-MF, dimensions in mm (inches)

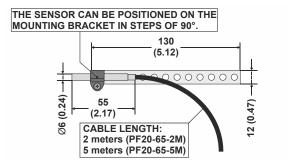


Fig. 2. Dimensions of the PF20 duct sensor in mm (inches)

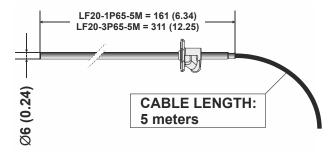


Fig. 3. Dimensions of the LF20-xP65-5M duct sensor in mm (inches)

## **WIRING**

wiring run	max. length	
sensor to controller	200 m (660 ft)	

NOTE: Use shielded wiring in areas with high EMI. Keep 15 cm (5.9") minimum distance between sensor lines and 230 Vac power lines.

Honeywell

Manufactured for and on behalf of the Connected Building Division of Honeywell Technologies Sàrl, Rolle, Z.A. La Pièce 16, Switzerland by its Authorized Representative:

#### **Home and Building Technologies**

Honeywell GmbH Böblinger Strasse 17 71101 Schönaich, Germany Phone +49 (0) 7031 637 01 Fax +49 (0) 7031 637 740 http://ecc.emea.honeywell.com