

## 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<br>(-22...+176 °F) |
| LF20-3P65-5M | NTC 20k                                  | 65        | 307 mm (12.07)            |                                 |
| PF20-65-2M   | NTC 20k                                  | 65        | 2-m cable                 | -30...+70 °C<br>(-22...+158 °F) |
| PF20-65-5M   | NTC 20k                                  | 65        | 5-m cable                 |                                 |
| LF-MF        | mounting flange; bulk pack of 10 flanges |           |                           |                                 |

### SPECIFICATION

#### Nominal value

NTC 20k 20 kΩ at 25 °C (77 °F)

#### Accuracy

NTC 20k ±0.2 °C at 25 °C (77 °F)

#### Sensitivity

NTC 20k ≈ -934.5 Ω / 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

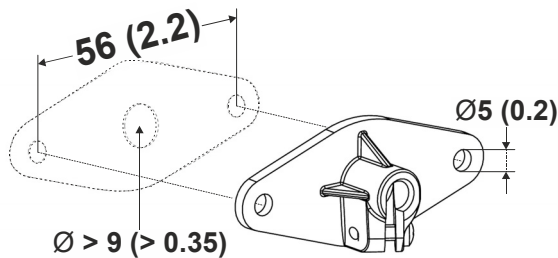


Fig. 1. Mounting flange LF-MF, dimensions in mm (inches)

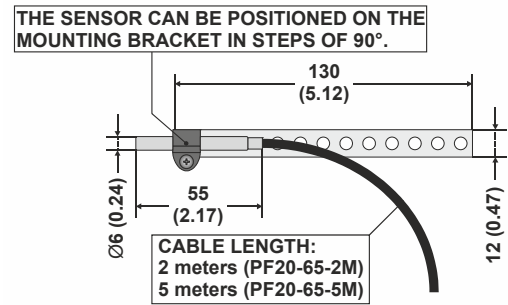


Fig. 2. Dimensions of the PF20 duct sensor in mm (inches)

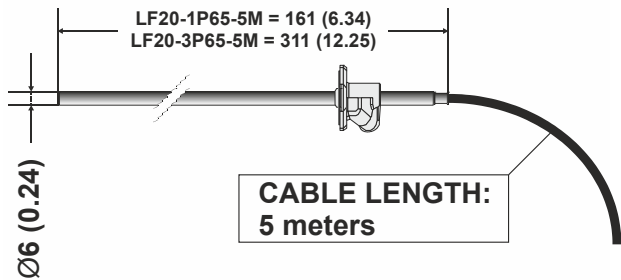


Fig. 3. Dimensions of the LF20-xP65-5M duct sensor in mm (inches)

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.



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>