

## Industrial built-in duct sensor IKF1M (design B)

with active output (measuring transducer 0 – 10 V or 4 – 20 mA)



| Technical data   | Application   |
|--|---|
| <b>Measuring range:</b> –50 ... +50°C IKF1M / 1 ...<br>0 ... +100°C IKF1M / 2 ...<br>other measuring ranges available on request | For the measuring of temperatures in liquids and gases that flow in pipes, conduits, air ducts, reservoirs, tanks or containers used in the machine-, apparatus and plant engineering sphere. The temperature-dependant resistance of the sensor is, in a temperature-linear manner, being transduced to a current signal of 4 to 20 mA or to a voltage signal of 0 to 10 V. The measuring transducer is delivered tuned to the following measuring ranges: –50 ... +50° C or 0 ... +100° C. If provided for the application in air ducts, the use of a special installation flange is required. If provided for use in liquids, nickel-plated dip sleeves need to be applied. In aggressive media, the use of dip sleeves of stainless steel (V4A) is recommended. The dip sleeves or the installation flange are not included in the scope of the delivery and <b>need to ordered seperately</b> as an accessory. |
| <b>Sensor:</b> PT 100, DIN EN 60751, class B, 3 conductors   |   |
| <b>Outputs:</b> 0 ... 10 V or 4 ... 20 mA  |   |
| <b>Electrical connections:</b> 0.14 up to 1.5 mm <sup>2</sup>  |   |
| <b>Operating voltage:</b> 24 V DC  |   |
| <b>Ambient temperature:</b> max. +70°C   |   |
| <b>Dimensioned drawing:</b> aluminium, design B  |   |
| <b>Degree of protection:</b> IP 43   |   |
| <b>Sensor tube:</b> V2A 1.4301 / 6 mm Ø<br>regarding length, see table below   |   |
| <b>Dip sleeves:</b> nickel-plated brass or V4A<br>for overview / lengths, see page 157   |   |
| <b>Installation flange:</b> page 157   |   |

| Sensor tube                       | Measuring range: –50 ... +50°C           |  | Measuring range: 0 ... +100°C            |  | PG |
|-----------------------------------|--|--|--|--|----|
|                                   | Output 0 ... 10 V                        | Output 4 ... 20 mA                       | Output 0 ... 10 V                        | Output 4 ... 20 mA                       |    |
| 65 mm<br>(for 50 mm dip sleeve)   | Type: IKF1M/1/0-10/50<br>Item: G9150660  | Type: IKF1M/1/4-20/50<br>Item: G9150670  | Type: IKF1M/2/0-10/50<br>Item: G9150760  | Type: IKF1M/2/4-20/50<br>Item: G9150770  | S  |
| 115 mm<br>(for 100 mm dip sleeve) | Type: IKF1M/1/0-10/100<br>Item: G9150680 | Type: IKF1M/1/4-20/100<br>Item: G9150690 | Type: IKF1M/2/0-10/100<br>Item: G9150780 | Type: IKF1M/2/4-20/100<br>Item: G9150790 | S  |
| 165 mm<br>(for 150 mm dip sleeve) | Type: IKF1M/1/0-10/150<br>Item: G9150700 | Type: IKF1M/1/4-20/150<br>Item: G9150710 | Type: IKF1M/2/0-10/150<br>Item: G9150800 | Type: IKF1M/2/4-20/150<br>Item: G9150810 | S  |
| 215 mm<br>(for 200 mm dip sleeve) | Type: IKF1M/1/0-10/200<br>Item: G9150720 | Type: IKF1M/1/4-20/200<br>Item: G9150730 | Type: IKF1M/2/0-10/200<br>Item: G9150820 | Type: IKF1M/2/4-20/200<br>Item: G9150830 | S  |
| 265 mm<br>(for 250 mm dip sleeve) | Type: IKF1M/1/0-10/250<br>Item: G9150740 | Type: IKF1M/1/4-20/250<br>Item: G9150750 | Type: IKF1M/2/0-10/250<br>Item: G9150840 | Type: IKF1M/2/4-20/250<br>Item: G9150850 | S  |
| 315 mm<br>(for 300 mm dip sleeve) | Type: IKF1M/1/0-10/300<br>Item: G9151880 | Type: IKF1M/1/4-20/300<br>Item: G9151890 | Type: IKF1M/2/0-10/300<br>Item: G9151900 | Type: IKF1M/2/4-20/300<br>Item: G9151910 | S  |

| Options   | PG |
|---|----|
| Other installation lengths: 50 mm each, max. 1.000 mm | S  |
| Temperature-proof up to 260°C                         | S  |
| Temperature-proof up to 400°C (PT 100 / PT 1000 only) | S  |
| Temperature-proof up to 600°C (PT 100 / PT 1000 only) | S  |

| Accessory              | PG |
|------------------------|----|
| Installation flange MF | S  |