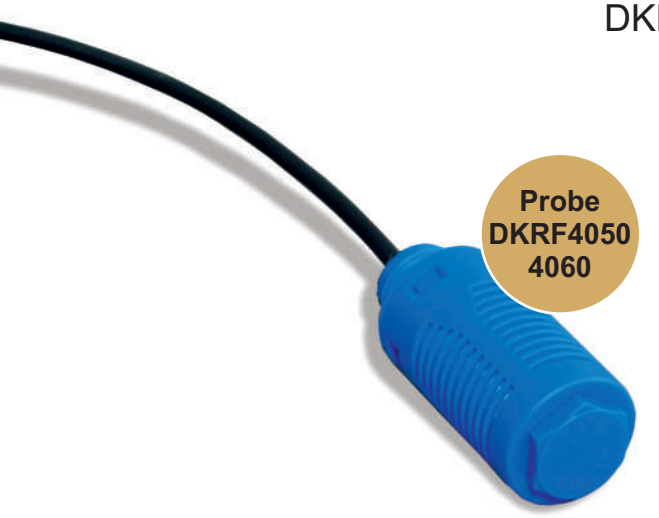
LowCost- Humidity-/Temperature Probe

DKRF4050/DKRF4060



Features

- Capacitive humidity probe with excellent accuracy
- Analog output signals 0...1 V /5 V /10 V (4050)
- Digital CMOS-UART interface (4060)
- Designed for low-cost integration
- Drift-free and long-term stable sensor

Inexpensive and Compact

With the DKRF4050 and DKRF4060 Driesen+Kern GmbH you have an inexpensive solution for humidity and temperature measurement. With its G3/8" connection thread the compact cable probe (d = 24.5 mm, l = 46 mm) can easily be installed in plants and facilities.
Alternatively, an extension for the probe is available with which the probe can be attached to a compression fitting.

Two models are available:
The DKRF4050 with 2 linear analog outputs 0...1 V,0...5 V or 0...10 V and the DKRF4060 with a CMOS-UART interface. As standard, the probes give readings for relative humidity and temperature. Output of other calculated variables such as dew point, absolute humidity or wet-bulb temperature can also be configured.

Specifications

Dimensions	d=24.5 mm , l=46 mm
Probe tube (optional)	d=23.5 mm, l=200 mm
Connection cable	4 wire, PUR, (2 m,5 m)

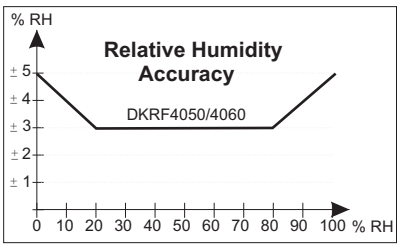
DKRF4050 Analogue Probe

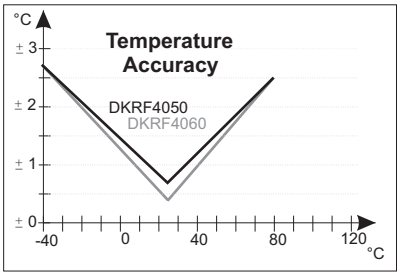
Measuring range Humidity	0...100%RH, not condersing
Measuring range Temperature	-20…+80°C
Analog output	0...1 V, 0...5 V, 0...10 V
Supply (0...1 V):	3.0...30 VDC, 3 mA
Supply (0...5 V):	6.0...30 VDC, 3.5 mA
Supply (0...10 V):	12...30 VDC, 4 mA
DAC resolution	0.04% RH / 0.04°C

DKRF4060 Digital Probe

Measuring range Humidity	0...100% RH, noncondensing
Measuring range Temp.	-20…+80°C
Supply	5.0...30 VDC, 400 µA
Logic level	0 = 0 V, 1 = 2.5 V
Communication:	9600 baud, 8 bits, no parity, 1 stopbit, no flux control
Reset	independent after power on

Accuracy





Order Code

Order Code: DKRF40X0-A-KL

X =	5= Analog output 6= RS232-CMOS-UART
A =	01 = 0... 1 VDC 05 = 0... 5 VDC 10 = 0...10 VDC 00 = CMOS-UART
KL =	2000 = 2 meter 5000 = 5 meter

Subject technical changes / DKRF4050_DKRF4060-DB-EN-V1.1 08/2022

Driesen+Kern GmbH
Am Hasselt 25
D-24576 Bad Bramstedt

www.driesen-kern.de
www.driesen-kern.com

Tel. +49 (0) 4192 8170-0
Fax +49 (0) 4192 8170-99
info@driesen-kern.de