VAISALA

HMK15 Humidity Calibrator



In addition to laboratory use, Vaisala Humidity Calibrator HMK15 is suitable for onsite checks of humidity probes and transmitters.

Features/Benefits

- Easy and reliable calibration of humidity probes and transmitters
- Based on saturated salt solutions
- Fast temperature equilibration
- No external power required
- Suitable for laboratory use and on-site checks
- Chambers and transit covers make HMK15 easy to transport
- Pre-measured certified salts available
- Vaisala Service Centers offer accredited calibrations for humidity, temperature and barometric pressure.

No measuring instrument stays accurate by itself. It is essential that the functioning of an instrument is periodically checked against a reference. Vaisala has developed the Vaisala Humidity Calibrator HMK15 to make calibration and spot checking of humidity probes and transmitters easy and reliable.

Method Used by Leading Laboratories

The operating principle of the HMK15 is based on the fact that a saturated salt solution generates a certain relative humidity in the air above it. The reading of the humidity probe or transmitter can then be adjusted accordingly. Many leading laboratories use this generally

accepted and reliable method to calibrate humidity instruments. Usually two or three different salt solutions are used. Salts are chosen according to the application.

Certified Salts

The HMK15 can be ordered with certified and pre-measured salts. A sample calibration is made from each batch in Vaisala's Measurement Standards Laboratory (MSL).

Calibrated Thermometer

The HMK15 can be ordered with a thermometer, which is used for measuring the temperature during the calibration. It can also be used for checking the temperature measurement accuracy of the transmitter. The thermometer can contain either mercury (accuracy ± 0.3 °C (± 0.54 °F)) or red capillary fluid (accuracy ± 1.0 °C (± 1.8 °F)).

FINAS Approved Measurement Standards Laboratory

Vaisala's Measurement Standards Laboratory is a FINAS accredited calibration laboratory. FINAS is a member of the EA (the European Cooperation for Accreditation).



Technical Data

General

The standard HMK15 consists of the following parts:

Two salt chambers, chamber covers and transit covers Base plate

Choice of thermometers

mercury thermometer, Vaisala calibrated, order code 19728HM

thermometer with red capillary liquid, calibrated by manufacturer, order code $25130 \mathrm{HM}$

Measurement cup and mixing spoon

Options

Options			
Certified and ready		Order	Total
dosed salts:		code:	uncertainty*:
LiCl salt	11 %RH	19729HM	(±1.3 %RH)
MgCl ₂ salt	33 %RH	19730HM	(±1.2 %RH)
NaCl salt	75 %RH	19731HM	(±1.5 %RH)
K ₂ SO ₄ salt	97 %RH	19732HM	(±2.0 %RH)
*Uncertainties	s given at +20 °C		

Ion exchanged water	19767HM
Extra salt chambers	19766HM
Carrying bag	HM27032

