

### Humidity - temperature sensors

#### Features :

- WL series for wall mounting, the KL series for duct installation and the PL series with a cable for suspension from any location;
- The KL and PL series are equipped with gauze filters as standard, other filters on request;
- Use of capacitive humidity sensor elements is a guarantee of high long-term stability, resistance to dew formation, small hysteresis and good dynamic performance;



#### Technical specifications :

##### Humidity:

Range: 0 ÷ 100% RH;  
 Sensor: capacitive FE09/4;  
 Accuracy: 40 ÷ 60% → ± 3% RH;  
 otherwise → ± 5% RH;  
 Working range: 15 ÷ 90% RH;  
 Temperature effect: < 0.25% RH per °C/F;  
 Air speed : ≥ 1m/sec;  
 Calibration : 1 point;  
 Measuring medium: air, pressure less, non-corrosive, non-condensing

Output: 0 ÷ 10V or 4 ÷ 20mA;  
 Power supply : Current output KL, PL : 12 ÷ 24Vdc;  
 Current output WL : 15 ÷ 30Vdc;  
 Voltage output WL, PL : 24Vac/dc;  
 Voltage output KL : 15 ÷ 30Vdc/ 24Vac;  
 Operating temperature: KL, PL : -20 ÷ 80°C;  
 WL : -20 ÷ 60°C;  
 EMC : Emitted interference: EN 55011 cl. B;  
 Noise immunity : EN 50082-2;  
 Sensor tube : Ø 20mm (Ø79mm) aluminum;  
 Case : ABS light grey;  
 Protection : WL, PL : IP 20;  
 KL : case → IP 54, sensor → IP 20;  
 Load resistance : > 10KΩ only voltage output;

##### Temperature

Range: -30 ÷ 70°C;  
 Sensor: Pt100;  
 Accuracy : 0 ÷ 10V → ± 0.2K;  
 4 ÷ 20mA → ± 0.3K;  
 Calibration : 1 point at 23°C;

Current output KL, PL :  $R_L \max. = \frac{Vdc - 10Vdc}{0.02A} \pm 50\Omega$

Current output WL :  $R_L \max. = \frac{Vdc - 14Vdc}{0.02A}$

#### Available models :

Measured variable	Output	Series WL	Series KL	Series PL
F / RH	0÷10V	FWL2/5	FWL3/5	FPL2/5
	4÷20mA	KWL2/5	KWL3/5	FPL3/5
K / RH	2 x 0÷10V	TWL2/5	TWL3/5	KPL2/5
	2 x 4÷20mA	TWL5/5	CWL2/5-X	KPL3/5
T Temperature	0÷10V	CWL3/5-X	FKL2/5	TPL2/5
	4÷20mA	FKL3/5	KKL2/5	TPL3/5
	PT 100	KKL3/5	TKL2/5	TPL5/5
C RH + T	0÷10V + T	TKL3/5	TKL5/5	CPL2/5-X
	4÷20mA + T	CKL2/5-X	CKL3/5-X	CPL3/5-X
Weight		~ 80g	~ 330g	~ 120g

#### Dimension (mm):

