

Explosion protection

Marking ATEX	for Hygrophil F 5673-xx Ex II (1) G [Ex ia] IIC Certificate no. PTB 04 ATEX 2076
	for Humidity Sensor L166x Ex II 1/2 G Ex ia IIC T6 Ga/Gb Certificate no. PTB 04 ATEX 2075
	for Hygrophil F in flameproof enclosure Ex II 2 G Ex db IIB T4 Certificate no. TÜV 12 ATEX 091302X
Marking IECEx	Certificate no. IECEx CSA 14.0006X
	for Hygrophil F 5673-xx Ex nA [ia Ga] IIC T4
	for Humidity Sensor L166x Ex ia IIC T6 Ga/Gb
Marking CSA	Certificate no. 1826252
	for Hygrophil F 5673-xx Class I, Division 2, Groups A, B, C and D Class I, Zone 2, Group IIC
	for Humidity Sensor L166x Class I, Division 1, Groups A, B, C and D Class I, Zone 0, Group IIC
Marking CRN	Registration no. 0F10620.2
	for Humidity Sensor L166x ISA 12.27.01-2003
Marking EAC	Certificate no. TRCU C-DE.08.B.01952
	for Hygrophil F 5673-xx (Ga) [Ex ia] IIC
	for Humidity Sensor L166x Ga/Gb Ex ia IIC T6 to T3

Technical data

Principle	fiber optic Fabry-Pérot-Interferometer
Factory calibration	based on application
Evaluation unit HYGROPHIL® F 5673	
Indication	DT, FP, PPMv/PPMw, Vol %, VP, MC, TT, SP, WL
Sampling rate	20 seconds per channel
Channels	up to 3
Power supply	DC 10 to 36 V (max. 60 W) AC 100 to 240 V (max. 110 VA)
Inputs per channel	1 x Fiber optical connection (ST) 1 x Calibration data plug (DE-9 connector) 1 x Pt100 temperature input (Ex ia, galvanically isolated) 1 x Pressure sensor (4 to 20 mA, Ex ia, galvanically isolated)
Analog outputs	3 x current output (4 to 20 mA, galvanically isolated)
Interfaces	Ethernet, Modbus (TCP/RTU), PROFIBUS DB (slave), USB
Working temperature	0 °C to 50 °C, 32 °F to 122 °F
Certificates	ATEX, IECEx, CSA, EAC (TRCU)
Dimensions (W x H x D)	483 mm x 192 mm x 212 mm, 19-inch-rack mounting
Weight	approx. 8.5 kg
Moisture Sensor L166x	
Measurement range	-80 °C to 20 °C, -112 °F to 68 °F (dew point)
Accuracy	±1 K (dew point)
Working temperature	-30 °C to 60 °C, -22 °F to 140 °F
Working pressure	10 MPa (1450 psi), 20 MPa (2900 psi) with test certificate
Integrated Pt100	DIN IEC 751, 4 wire
Degree of protection	IP 65
Certificates	ATEX, IECEx, CSA, CRN, EAC (TRCU)
Wetted materials	Stainless steel 1.4571 or Alloy C-276 2.4819 sensor shaft, FFKM (Perlast® G90LT) sealing, Optical multi-layer
Sensor head	POM
Sensor length	36 mm, 100 mm, 225 mm other lengths on request
Fibre optic cable 1631-11x	
Combined cable	2 fibre optics and 6 Cu wires
max. length	800 m (875 yards)
– Working temperature	
standard	-30 °C to 70 °C, -22 °F to 158 °F
extended	-55 °C to 70 °C, -67 °F to 158 °F