HF73A



BENEFITS

- Measures relative humidity, temperature and dew point
- Absolute repeatability guaranteed
- Freely programmable and scalable analog outputs
- Robust industrial housing for harsh conditions

APPLICATIONS

- Industrial and outdoor environments with harsh conditions
- Food and pharmaceutical production
- Drying processes







Power supply

• 15...40 VDC/12...28 VAC

Proven housing

- Robust, industrial aluminium housing
- Duct mounting



Outputs

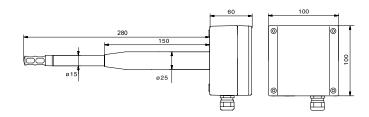
- The 2 analog outputs are freely selectable and scalable
- 3 wire version with dew point / frost point calculation



FIXED PROBE FOR HYGROFLEX HF73A

INDUSTRIAL FIX PROBE WITH DIFFERENT EXTENSIONS

- Range of application: 0...100 %rH, 100...200 $^{\circ}\text{C}^{1}$
- Accuracy: ± 1.0 %rH / 0.2 K @ 23 °C
- Humidity sensor: HYGROMER® HT-1
- Materials: PPS, stainless steel 1.4301



Extension order code	Probe diameter	Probe length	Housing transmitter
S		280 mm	
1	Ø 25 / 15 mm	430 mm	100 x 100 mm
2		580 mm	



Delivery package: With filter carrier (SPA-SS), without filter. Filters must be purchased additionally.

FILTERS FOR HF73A

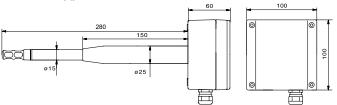
Order code	Filter carrier	Filter element	Pore size	Application range
SPA-PCB-PE		Polyethylene, white	40-50 μm	
SPA-PCB-PTFE	Polycarbonate, black	PTFE, white	10 μm	
SPA-PCB-WM		Wire mesh 1.4401		
SPA-PCW-PE		Polyethylene, white	40-50 μm	-50100°C
SPA-PCW-PTFE	Polycarbonate, white	PTFE, white	10 μm	
SPA-PCW-WM		Wire mesh 1.4401		
SPA-PE		Polyethylene	40-50 μm	
SPA-PTFE	No filter carrier, only filter	PTFE, white	10 μm	100, 200,00
SPA-WM		M:		
SPA-SS-WM	1,4301	Wire mesh 1.4401		
SPA-SSS	Sintered steel, 1.4404 (carrier and filter)		25 μm	-100200 °C
SPA-SS-PFTE		Teflon	10 μm	
SPA-SS		No filter	-	

Standard: SPA-SSS

TECHNICAL INFORMATION

HF73A series

Duct version (Q)



	HF73A 3 wire		
Humidity sensor	ROTRONIC HYGROMER® HT-1		
Temperature sensor	PT100 1/3 Class B		
Accuracy at 23 °C	± 1.0 %rh / 0.2 K		
Resolution AirChip3000	<0.02 %rh / 0.01 K		
Long-term stability humidity sensor	<1 %rh / year		
Measurement range	-100200 °C¹ / 0100 %rh (non-condensing)		
Electronics operating range	-4085 °C / 0100 %rh		
Output signals	Yes		
Output signals (analog)	Freely scalable by user 01 V, 05 V, 010 V, 0(4)20 mA		
Calculation	Dew point or frost point, freely scalable		
Power supply	15 40 VDC / 1228 VAC		
Circuit type	3 wire		
Load per analog output	V-signal: ≥1 kΩ/V mA-signal: ≤500 Ω		
Load compensation	Yes		
Firmware upgradable	Yes, via HW4 software		
Sensor diagnostics (drift, state)	Programmable. Default: Off		
Humidity adjustment	1-point or multi-point humidity adjustment / calibration		
Temperature adjustment	1-point or 2-point temperature adjustment / calibration		
External memory function for logging	Yes, 2000 data point memory		
PC interface, UART	Yes, HW4-compatible		
Housing material	Aluminum		
Cable connections	1 x M16 x 1.5, to terminals		
Standards	CE conformity 2014/30/EU		
Audit trail, electronic records	Conforms to FDA 21 CFR Part 11 and GAMP		
IP protection & fire protection class	IP65 / Corresponds to UL94-HB		

 $^{^{\}rm 1}$ Peak load: For 100 hours between 190 °C and 200 °C. Maximal permissible continuous load: 190 °C.