



Weather and radiation protection AC1002

Precision meteorology probes for relative humidity and temperature – MP100A

Professional meteorology probes for reliable measurements under extremely rough conditions.

ROTRONIC – Your SCS calibration
Laboratory accredited for Relative Humidity by EAM under Reg. N° 065



Possible applications

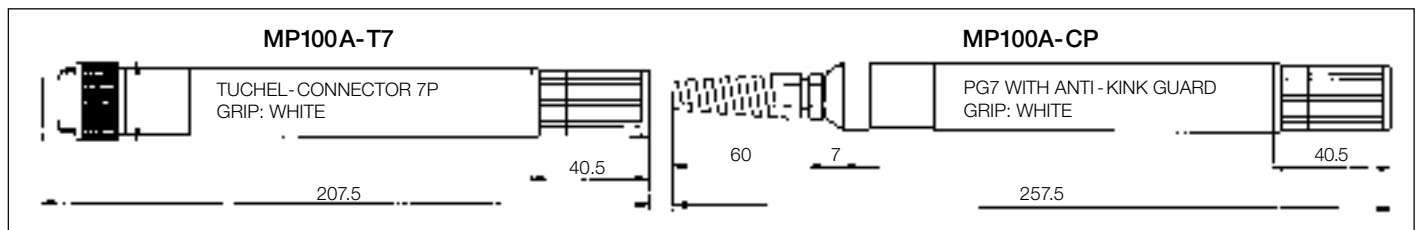
- Meteorology
- Agriculture
- Ice warning systems
- Snow-making systems

Convincing features

- Maintenance-free humidity and temperature measurement
- Cable length compensation up to 100 m
- HYGROMER® C94 humidity sensor extremely resistant to pollutants
- High long-term stability
- Short response time
- Linear voltage outputs for humidity and temperature
- Operating ranges
Relative humidity: 0...100% relative humidity
Temperature: –40...+60 °C
- Various connectors available

Technical data of the MP100A probes

Humidity/temperature probes	HYGROMER® MP100A
Humidity sensor	ROTRONIC HYGROMER®-C94
Temperature sensor	Pt 100 1/3 DIN
Relative humidity operating range	0...100 % relative humidity
Temperature operating range	-40...+60 °C
Temperature compensation (HYGROCOMPER®)	
Output signals (linear)	
Humidity	0...1VDC = 0...100 % relative humidity
Temperature	-40...+60 °C = -0.4...+0,6 VDC -30...+70 °C = 0...1 VDC / -40...+60 °C = 0...1 VDC
Load per output	min 1000 Ω
Calibration accuracy, humidity (at 22 °C)	± 1 % with respect to ROTRONIC Standard
Calibration accuracy, temperature	± 0,3 °C with respect to ROTRONIC Standard
Reproducibility	0.5 % relative humidity/0,1 °C
Typical long-term stability	better than 1 % relative humidity over one year
Response time (without filter)	20s (% relative humidity), 10s (°C)
Calibration points, humidity	95 % relative humidity
Adjustment points (potentiometer)-humidity	35 %, 80 %, min.
Adjustment points (potentiometer)-temperature	Tmin. und Tmax.
Supply voltage (min./max.)	4.8...26.5 VDC (option: 3.6...12 VDC)
Max. current consumption	6 mA
Sensor protection	wire filter SP -W 25
Weight	70 g



Ordering information for MP100A probes

Item	Output signal of temperature	Connection options	Remarks
MP 101A-T7-W4W*	-40...+60 °C = -0,4...+0,6 VDC	TUCHEL, 7 - pin	
MP 101A-T4-W4W	-40...+60 °C = -0,4...+0,6 VDC	TUCHEL, 4 - pin	on request
MP 101A-CG02C4-W4W*	-40...+60 °C = -0,4...+0,6 VDC	2 m PVC cable with CANNON 4 - pin	on request
MP 102A-T7-W4W*	-30...+70 °C = 0...1,0 VDC	TUCHEL, 7 - pin	
MP 102A-T4-W4W	-30...+70 °C = 0...1,0 VDC	TUCHEL, 4 - pin	on request
MP 102A-CG02C4-W4W*	-30...+70 °C = 0...1,0 VDC	2 m PVC cable with CANNON 4 - pin	on request
MP 103A-T7-W4W*	-40...+60 °C = 0...1,0 VDC	TUCHEL, 7 - pin	on request
MP 103A-T4-W4W	-40...+60 °C = 0...1,0 VDC	TUCHEL, 4 - pin	on request
MP 103A-CG02C4-W4W	-40...+60 °C = 0...1,0 VDC	2 m PVC cable with CANNON 4 - pin	on request
ET-234*		Mating connector TUCHEL, 7 - pin	
ET-230*		Mating connector TUCHEL, 4 - pin	
AC 1002*		Weather and radiation protection	

* Types in stock