HD54.3 technical specifications

HD54.3	MECHANICAL CUP ANEMOMETER
Tupe of sensor	3-cup anemometer
Applications	Meteorological studies, Environmental monitoring, Building Automation
Measuring range	1…65 m/s
Output signal	Low level AC sine wave, frequency lineary proportional to wind speed
Output voltage at threshold	80 mV (peak to peak) minimum
Output voltage at 60 Hz	12 V (peak to peak) typical (amplitude not proportional to wind speed)
Calibration	Each anemometer individually calibrated
Output signal range	0…90 Hz
Distance constant (63% recovery)	2.55 m @ 5 m/s - 2.56 m @ 10 m/s (ASTM D 5096-02)
Swept diameter for rotor	190 mm
Mounting	On a 13 mm diameter mast with cotter pin and set screw
Operating temperature range	-40…60 °C
Operating humidity range	0…100% RH
Weight	0.14 kg
Dimensions	3 cups of conical cross-section, diameter 51 mm. Overall assembly height 81 mm
Materials	
Cups	One piece injection-molded black polycarbonate
Body	Black ABS plastic
Shaft	Beryllium copper, fully hardened
Bearing	Modified Teflon, self-lubricating
Magnet	Indox diameter Ø1.25 mm, 13 mm long, 4 poles
Coil	Single coil, bobbin wound, 4100 turns of #40 wire, shielded for ESD protection
Boot	Protective PVC sensor terminal boot included
Terminals	Brass

CUP ANEMOMETERS

HD 54.3

HD 55.3

New

Cup anemometer. Measuring range: 1...65 m/s. Operating temperature: -40...+60 °C. Installation on a mast. Height 81 mm once assembled. With cable CPM12AA4.5.

Aluminium cup anemometer. Measuring range: 1...50 m/s. Operating temperature: -40...+70 °C. Installation on a mast. Height 130 mm. Power supply 6...10 Vdc. Current consumption ≤ 3 mA. Output signal 0...2.5 Vdc.

WIND DIRECTION VANE PROBES

HD 54.D

HD 55.D

New

Wind direction vane probe. Measuring range: 0…360°. Deadband: typical 4°, maximum 8°. Threshold: 1m/s. Working temperature/humidity: -40…+60 °C / 0…100% RH. Installation on a mast. Dimensions: 210 x 120 mm. With cable CPM12AA4.5.

Aluminium wind direction vane probe. Measuring range: 0…360°. Threshold lower than 0.4 m/s. Working temperature/humidity: -40…+70 °C / 0…100% RH. Installation on a mast. Dimensions: 338 x 193,5 mm. Power supply 6...10 Vdc. Current consumption ≤ 3 mA. Output signal 0...2.5 Vdc.

ACCESSORIES FOR HD54.3 AND HD54.D

HD 54.9K

Crossbar pole kit including: cross bar ∅ 40 mm and L=1500 mm, two extension bars ∅ 40 mm and accessories.