

Cup Anemometer PVC Housing, Rotor of black painted Stainless Steel Type DWS-V-AGP

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- Anemometer with opto-electronic detection
- Measuring range: 2 to 50 m/s
- Output: 4-20 mA
- 18 to 28 VDC supply voltage
- All inputs and outputs are protected against reverse polarity and transients
- High ESD protection
- Built-in heater
- Dust sealing

Product Description

DWS-V-AGP is a cup anemometer designed for measuring air speed in a wide variety of applications, including wind turbines, buildings, cranes, weather stations, green-houses, etc. The product contain 4-20 mA output proportionally to the air speed.

A built-in self-regulated heater reduces the risk of glazing. The heater is supplied separately, which makes it possible to control the heating.

The DWS-V-AGP is equipped with a specially designed protection mechanism, which protects the bearings and the electronic parts against dirt and humidity.

The body of the sensor is made of black PVC, and the rotor is produced in stainless steel.

Ordering Key

DWS-V-AGP

Type _____
Air velocity _____
Analog output _____
Current _____
Plug Version _____

Specifications

Rated operational voltage	U_B	20 to 24 VDC
	U_C	18 to 28 VDC
Supply current (without heater)	Approx. 20 mA (all outputs off)	
Measuring range	2 to 50 m/s	
Operating range	≤ 75 m/s	
Accuracy	≤ 3 m/s: ±0.5 m/s	
	≥ 3 m/s: ±10%	

Output Specifications

Output	4-20 mA, Limited to 21 mA
	0 m/s 4 mA
	50 m/s 20 mA
Load	≤ 500Ω @ supply 18 V ≤ 600Ω @ supply ≥ 20 V

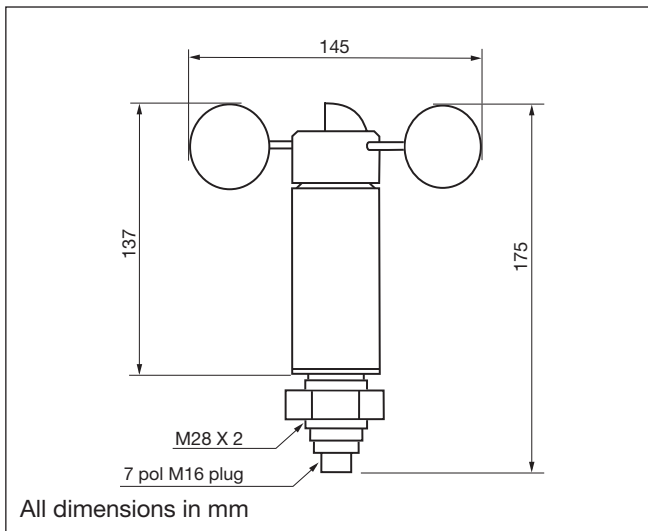
General Specifications

Dimensions	Rotor diameter	145 mm
	Thread	External thread: M28 x 2 with one nut
Materials	Body	Black PVC
	Rotor	Stainless steel (AISI 303), black painted
	Bearings	Instrument ball bearings, stainless steel
Plug	7-pole M16, male (07 pins-a)	
Rotor/housing tightening	Dust labyrinth	
Environment	Degree of protection	IP54
	Ambient humidity	0 to 100% RH
	Climatic protection	Against high humidity, salt and dust
Ambient temperature	Operating temperature	-20 to 60°C (-4 to +140°F)
	Storage temperature	-20 to 60°C (-4 to +140°F)
Heating system	> -20°C (> -4°F)	
	Heater	PTC-element
	Supply voltage	12 to 24 VAC/DC

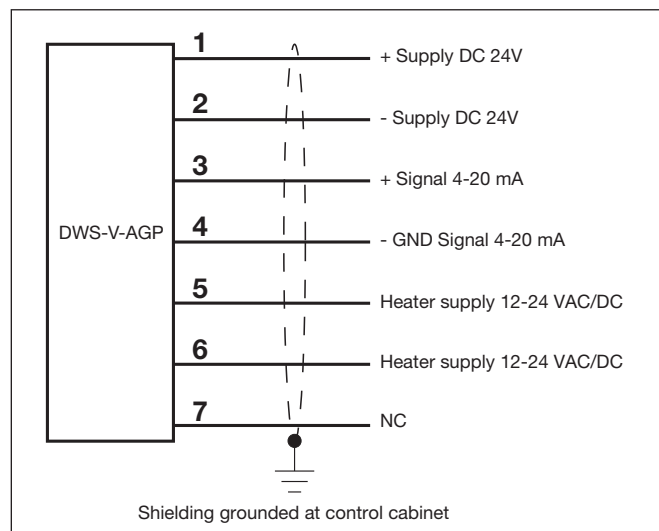
General Specifications (cont.)

Inrush current	1.5 A	IEC 61000-4-5 Surge 1.2/50 μ s Power port, $R_i = 2 \Omega$ Signal port, $R_i = 47 \Omega$	500 V 2000 V
Power consumption	@ -20°C (-4°F): app. 10 W @ +20°C (+68°F): app. 5 W @ +60°C (+140°F): app. 1.5 W		
EMC			
IEC 61000-4-2 Contact discharge	± 4 kV	IEC 61000-4-6 Conducted disturbances induced by radio-frequency fields	12 V _{rms}
Air discharge	± 8 kV		
IEC 61000-4-3 Radiated radio-frequency Electromagnetic fields	15 V/m	Mounting position	Vertical with M28 thread
IEC 61000-4-4 Fast transients/burst		Weight	430 g
Power port, performance B	± 2 kV		
Signal port, performance B	± 1 kV		

Dimensions



Wiring Diagram



PV output versus wind speed

