INT10 M® Anemometer

KRIWAN









Application

KRIWAN anemometers are used in challenging wind speed measurement applications, e.g.

- For monitoring cranes, ski lifts and cable cars
- For energy optimisation in wind farms
- For blinds protection in building technology
- In hydrology and meteorology
- As weather station components for building and greenhouse control

Functional description

The KRIWAN anemometer measures the current wind speed and converts it into a linear output signal without contact. The sensor is storm-proof and weather-proof. The autonomously controlled heating enables use at temperatures as low as -40°C.

The evaluation is then conducted separately using a measuring device, a display instrument, or the connected control and monitoring system. The following features characterise this KRIWAN anemometer:

- Sturdy and reliable industrial design
- Low starting torque, high strength
- High accuracy
- Wear-free measurement
- Optimised power requirement through electronically regulated heating

The unit must be connected by trained electrical personnel. The applicable European and national standards for connecting electrical equipment must be observed. We recommend that

separate on-site lightning protection be installed to prevent consequential damage or operational failures caused by direct

- Easy installation
- Extended temperature range
- Integrated overvoltage protection
- · Impact and shake resistant
- cUR_{us} certified (if available or applied for)

or indirect exposure to lightning strikes.

See back side for further specifications

Maintenance-free

Technical changes reserved

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INT10 M[®]

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Pin assignme

Spare parts

Spare parts package cup anemometer (cup anemometer, cap nut, serrated washer)	02 Z 160
VA-wing screws, M8x16mm	HS08016600
Self-locking cap nut M4	HM04009400
Serrated washer J4.3	HX04305600
Cable socket (M12) 5-pin	FA04106

Technical specifications

Measuring principle	Contact-free magnetic scanning system
Measuring range	0-75m/s
Accuracy	±0.5m/s (V _L ≤50m/s); 3% FS (V _L >50m/s)
Resolution	<0.1m/s
Start-up speed	<0.4m/s (ð _u =20°C)
Supply	DC 24V -25+50% Max. 21mA Reverse polarity protection
Signal output	DC 4-20mA Limited to 20.5mA
Signal availability	Max. 2.5s (from voltage-free state)
Load resistance = line + load resistor	$\begin{split} R_{\text{Load}} &\leq (U_{\text{min.}}\text{-9})/0,02 \; [\Omega] \\ U_{\text{min.}} &= \text{min. supply voltage} \end{split}$
Connection type	
- Sensor	5-pin plug (M12)
- Recommended connecting ca- ble	4x0.75mm ²
Permissible ambient temperature T_{A}	-40+70°C When heating is not connected: Snow and ice-free sensor is prerequisite.
Permissible relative humidity	0-100% RH
Stability	For wind speed of 80m/s (max. 30min)
Heating	
- Туре	Autonomously controlled heating
- Connection	AC/DC 24V ±20% Max. 20VA SELV
Protection class according to EN 60529	IP64 if sensor is assembled in the specified manner
Mounting	Steel mast Max. Ø _{outer} 50 mm Min. Ø _{inner} 37 mm
Dimensions	See dimensions in mm
Housing	
- Material	Aluminium
- Corrosion resistance	Anodised
Cup anemometer	
- Material	Aluminium
- Corrosion resistance	Powder-coated
Weight	Approx. 400 g
Test basis	EN 61000-6-2, EN 61000-6-3, EN 61010-1
Approval	UL file no. E240032
Order data	
INT10 M Anemometer	13 N 290 S22
Accessories and application information	see www.kriwan.com

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