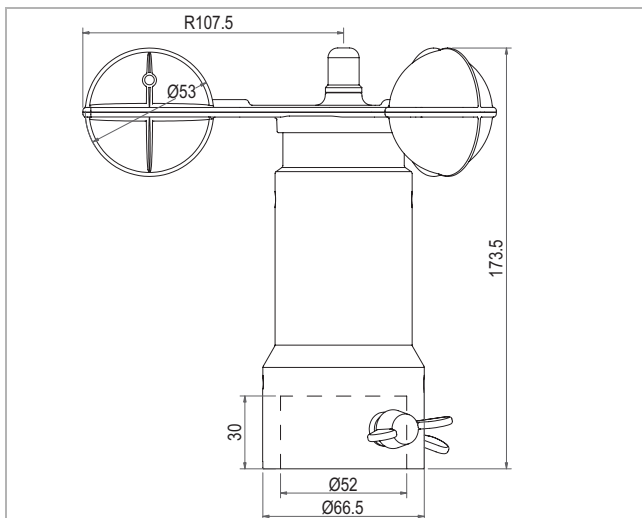


INT10 IF[®] Anemometer

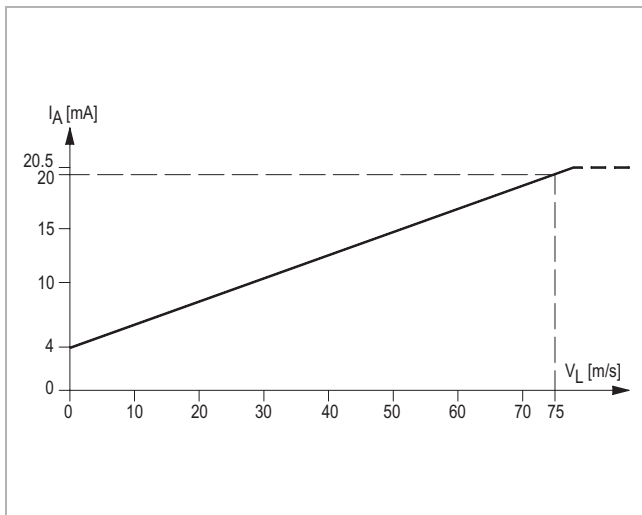
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Dimensions in mm



Characteristic line

Application

KRIWAN ICEfight series anemometers are used in any situation where besides high quality wind speed measurement, error-free operation under the most challenging environmental conditions also needs to be safe-guarded. This is especially true in cases where there is a serious risk of icing at very low temperatures.

This requirement applies in particular to:

- Monitoring ski lifts and cable cars
- For energy optimisation in wind farms

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 evaluation is then conducted separately using a measuring device, a display instrument, or the connected control and monitoring system.

Generously dimensioned heating is located inside the cup anemometer. This is supplied with electrical energy from the fixed sensor part without contact or mechanical loss. Because the heating reaches to the end of the cup anemometer, all its parts are heated very effectively. During ambient temperatures that can cause ice, the heating switches on. When the heating is connected, the possibility of icing is mostly eliminated inside the permissible ambient temperatures. The heating has temperature monitoring and switches off automatically when the surface temperatures are too high.

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 and temperature-monitored heating
- Contact-free transmission of heat in movable part of sensor
- Easy installation
- Extended temperature range for ice-free conditions
- Integrated overvoltage protection
- Impact and shake resistant
- UL_{US} - certified
- Maintenance-free



The unit must be connected by trained electrical personnel. All valid European and national standards for connecting electrical equipment must be observed. To avoid any consequential damage or operational failure, through direct or indirect excitation in the event of lightning strikes, we recommend that a separate lightning protection device be fitted by the customer.



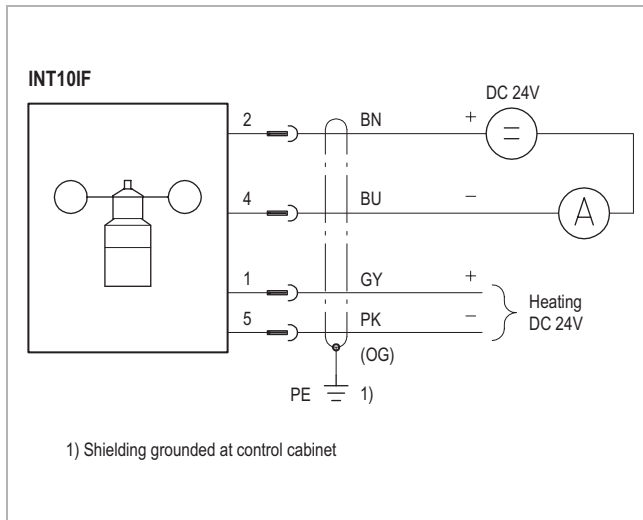
The surface of the cup anemometer can exceed 55°C during heating operation.

See back side for further specifications

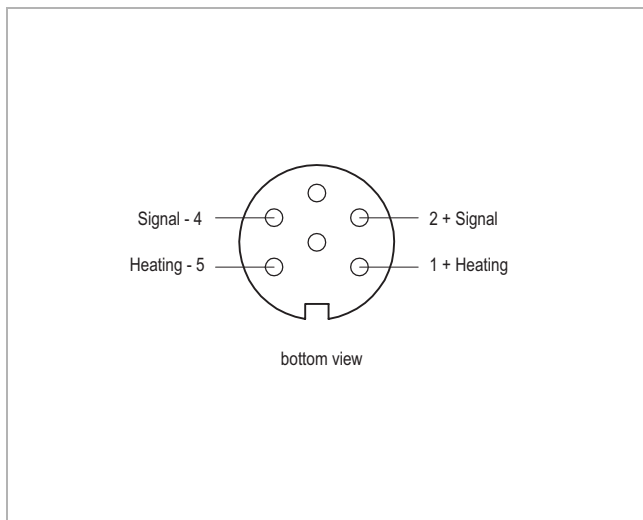
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INT10 IF[®] Anemometer

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Wiring diagram



Pin assignment

Order data

INT10 IF Anemometer	13 N 310 S22
Accessories and application information	see www.kriwan.com

Spare parts

VA-wing screws, M8x16mm	HS08016600
Connection cable M16 6-pin	FK14000010

Technical specifications

Measuring principle	Contact-free magnetic scanning system
Measuring range	0-75m/s
Accuracy	±0.5m/s ($V_L \leq 35\text{m/s}$); 3% of measuring value ($V_L > 35\text{m/s}$)
Resolution	<0.1m/s
Start-up speed	<1.0m/s ($\vartheta_a = 20^\circ\text{C}$)
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	$R_{\text{Load}} \leq (U_{\text{min}} - 9) / 0,02 [\Omega]$ $U_{\text{min.}} = \text{min. supply voltage}$
Connection type	- Sensor: 6-pin plug (M16) - Recommended connecting cable: (4x0.25mm ² + 2x1.5mm ²) shielded, with cable socket
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	- Type: Autonomously controlled heating - Connection: DC 24V ±10% 120W SELV
Protection class according to EN 60529	IP66 if sensor is assembled in the specified manner
Mounting	Steel mast Max. $\varnothing_{\text{outer}}$ 50mm Min. $\varnothing_{\text{inner}}$ 37mm
Dimensions	See dimensions in mm
Housing	- Material: Aluminium - Corrosion resistance: Anodised
Cup anemometer	- Material: Aluminium - Corrosion resistance: Powder-coated
Weight	- Sensor: Approx. 750 g - Cable: Approx. 1.8kg
Check base	EN 61000-6-2, EN 61000-6-3, EN 61010-1
Approval	UL file no. E240032

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