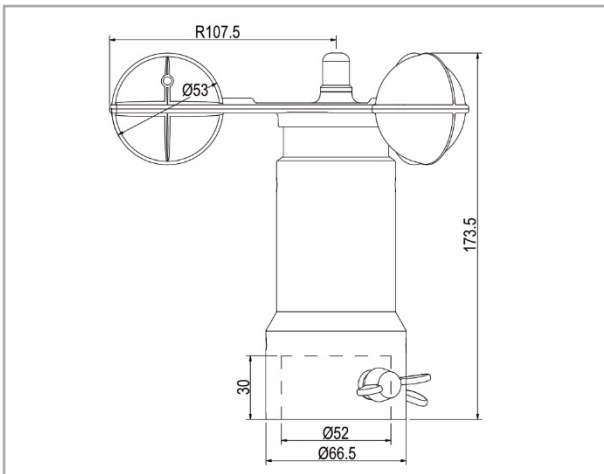


# INT<sup>®</sup>10 HD Anemometer

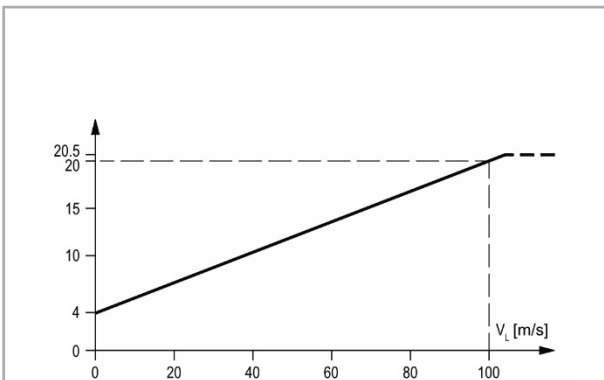


INT10 HD

Illustration similar. Scope of delivery may deviate.



Dimensions in mm



Characteristic line

## Application

KRIWAN heavy duty 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. Due to specially sealed bearings suitable for use in dusty environments.

This requirement applies in particular to:

- For monitoring ski lifts and cable cars
- For wind turbines for energy optimization

## Functional description

The KRIWAN anemometer of the Heavy Duty series is used wherever, in addition to the sophisticated detection, the KRIWAN anemometer detects the current wind speed and converts it into a linear output signal without contact. The sensor is storm and weatherproof.

The evaluation is done separately via a measuring device, a display instrument, or in the connected control and monitoring system.

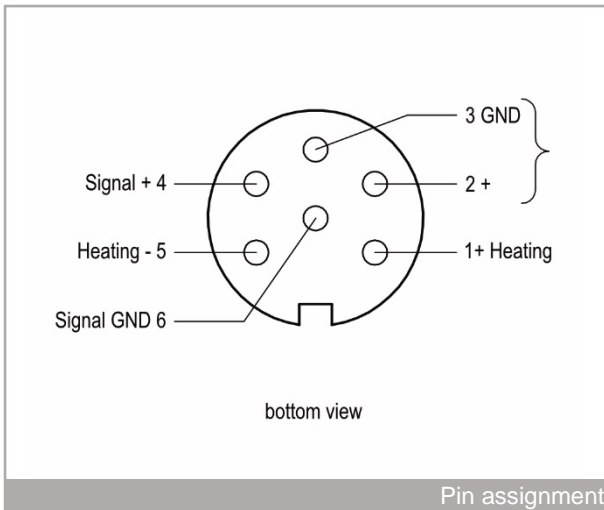
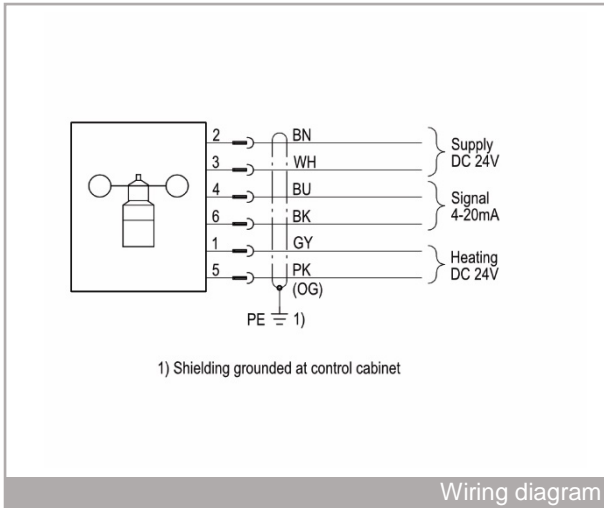
Within the cup anemometer is a generous dimensioned heating, which is supplied without contact and mechanically lossless from the stationary sensor part with electrical energy. As this heater extends to the ends of the cup anemometer, all parts of the cup anemometer are heated highly efficiently. At ambient temperatures at which ice may form, switch on the heater, icing with connected heating and within the permitted ambient temperature is almost impossible. The heating is temperature-controlled and switches off automatically at too high surface temperatures.

The following features distinguish this KRIWAN anemometer:

- Very sturdy and reliable industrial design
- Low starting torques with high load capacity
- High accuracy
- Extended measuring range
- Wear-free measurement
- Optimised power requirement through electronically regulated and temperature-monitored heating
- Contactless transmission of the heat in movable part of the sensor
- Easy installation
- Extended temperature range for ice-free conditions
- Specially sealed ball bearings
- Integrated overvoltage protection
- Impact and shake resistant
- Maintenance-free

## Order data

INT10 HD Anemometer	13 N 310 S201
Further product information	see <a href="http://www.kriwan.com">www.kriwan.com</a>



### Spare parts

VA-wing screws, M8x16mm	<b>HS08016600</b>
Connection cable M16 6 pin, 12m	<b>FK14000010</b>
Cable socket M16 6 pin	<b>FA04120</b>

### Safety instructions



The electrical connection must be carried out by a qualified electrician. The valid European and country-specific standards for the connection of electrical equipment must be observed. In order to avoid consequential damage or operational failures due to direct or indirect coupling in the event of lightning strikes, we recommend a separate lightning protection device on site.



The surface of the cup anemometer can exceed 55°C in heating mode.

### Technical data

Measuring principle	Contact-free magnetic scanning system
Measuring range	0-100m/s
Accuracy	±0.5m/s ( $V_L \leq 35$ m/s); 3% of measuring value ( $V_L > 35$ m/s)
Resolution	<0.1m/s
Start-up speed	<1.0m/s ( $\vartheta_u = 20^\circ\text{C}$ )
Supply	DC 24V -25...+50% Max. 30mA 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	$R_{Load} \leq 600\Omega$
Connection type - Sensor - Recommended connection cable	6-pin plug (M16) (4x0.25mm <sup>2</sup> + 2x1.5mm <sup>2</sup> ) shielded, with cable socket
Permissible ambient temperature $T_a$	-40°C ≤ $T_a$ ≤ +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 100m/s (max. 30min)
Heating - Type - Connection	Autonomously controlled heating DC 24V ±10% 120W SELV
Protection class according to EN 60529	IP66 if sensor is assembled in the specified manner
Mounting	Steel mast Max. $\varnothing_{outer}$ 50mm Min. $\varnothing_{inner}$ 37mm
Dimensions	See dimensions in mm
Housing - Material - Corrosion resistance	Aluminium Anodised
Cup anemometer - Material - Corrosion resistance	Aluminium Powder-coated
Weight	Approx. 750g
Check base	EN 61000-6-2, EN 61000-6-3, EN 61010-1