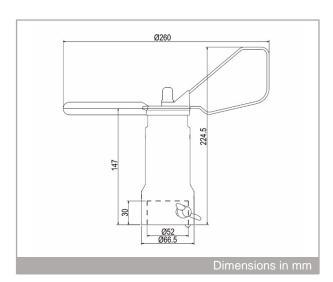
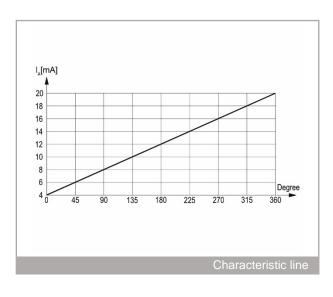


INT®30 HD Wind direction







Application

KRIWAN heavy-duty wind direction sensors 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 wind direction sensor detects the current wind direction and converts it without contact into a linear output signal. The sensor is storm and weatherproof. The evaluation is done separately via a measuring device,

Display instrument or in the connected control and monitoring technology.

Within the wind arrow there is a generously dimensioned heater that is supplied with electrical energy from the stationary sensor part without contact and with no mechanical loss. Since this heater extends to the respective ends of the wind arrow, all parts of the wind arrow are heated highly effective. At ambient temperatures, where ice can develop, the heating switches on, icing is almost impossible. The heating is temperature-controlled and switches off automatically at too high surface temperatures.

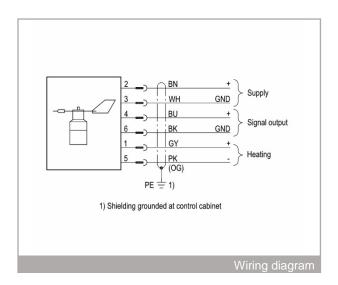
The following features characterize this KRIWAN wind direction sensor

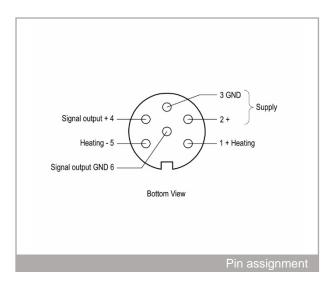
out:

- Very robust and reliable industrial design
- Low starting torques with high load capacity
- High precision
- Wear-free measured value acquisition
- Optimized power requirement through electronically controlled and temperature-controlled heating
- Contactless transfer of heating power in the moving part of the sensor
- Easy installation
- Extended temperature range for ice-free
- Specially sealed ball bearings
- Integrated overvoltage protection
- Shock and vibration proof
- Maintenance free

Order data

INT30 HD Wind direction	13 N 330 S201
Further product information	see www.kriwan.com





Spare parts

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

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 wind vane may exceed 55 $^{\circ}$ C in heating mode.

Technical data

Measuring principle	Contact-free magnetic scanning system
Measuring range	0-360°
Accuracy	+-2,5°
Resolution	144 stages (2,5°)
Start-up speed	<1,0m/s (ϑu=20°C)
Supply	DC 24V ±25%
	Max. 30mA
	Reverse polarity protection
Signal output	DC 4-20mA
Signal availabilty	Max. 2,5s
	(from voltage-free state)
Load resistance	R _{Load} ≤600Ω
=line- + load resistor	
Connection type	
- Sensor	6-pin plug(M16)
- Recommended connection cable	(4x0.25mm2 + 2x1.5mm2)
5	shielded, with cable socket
Permissible ambient temperature	-40+70°C
T _A	When heating is not connected: Snow and ice-free sensor is
	prerequisite.
Dorminaible relative humidity	
Permissible relative humidity	0-100% RH For wind speed of
Stability	100m/s (max. 30min)
Heating	100111/3 (ITIAX. 3011111)
- Type	Autonomously controlled heating
- Connection	DC 24V ±10%
	120W SELV
Protection class according to EN	IP66 if sensor is assembled in
60529	the specified manner
Mounting	Steel mast
ŭ	Max. Ø _{outer} 50mm
	Min. Ø _{inner} 37mm
Dimensions	See dimensions in mm
Housing	
- Material	Aluminium
- Corrosion resistance	Anodised
Wind vane	
- Material	Aluminium
- Corrosion resistance	Powder-coated
Weight	Approx. 750g
Check base	EN 61000-6-2, EN 61000-6-3,
	EN 61010-1