# Wind Direction Transmitter - compact

- with Poti- Output - 4.3129.xx.712



## **ADOLF THIES GmbH & Co. KG**

Hauptstraße 76 Box 3536 + 3541 Phone ++551 79001-0 www.thiesclima.com 37083 Göttingen Germany 37025 Göttingen Fax ++551 79001-65 info@thiesclima.com

#### 1 Models available

Order-No.	Meas. range	Electr. Output	Operating Voltage Potentiometer	Heating	Connection
4.3129.00.712	0360°	Potentiometer: 2 kΩ	024 V DC	24V, 20W	7 pol. plug
4.3129.04.712	0360°	Potentiometer: 2 kΩ	024 V DC	24V, 20W	7 pol. plug
4.3129.10.712	0360°	Potentiometer: 2 kΩ	024 V DC	w/o heating	7 pol. plug

## 2 Application

The wind direction transmitter is designed for the acquisition of the horizontal wind direction. The measuring value is output proportionally to wind direction as analogue voltage in case the potentiometer is supplied by a constant voltage. The measuring data available are ideally adapted to the supply in display instruments, recording instruments, datalogger, as well as process control systems.

For winter time use the instrument is optionally equipped with an electronically regulated heating, in order to guarantee a smooth-running of the ball bearing, and to prevent a blocking of the gap between the external rotation parts by ice aggregation.

Power for the heating system could be provided for instance by our Power Supply Unit, Order No. 9.3388.00.000

#### 3 Installation

### Attention:

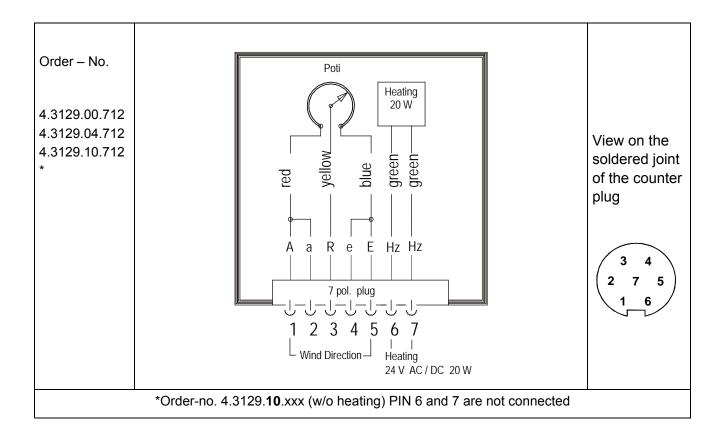
Storing, mounting and operation under weather conditions is permissible only in vertical position, as otherwise water can get into the instrument.

## 4 Connecting Diagrams

#### Attention:

When the wind vane rotates over the north point (0 / 360°) the potentiometer slider connects beginning and end of the potentiometer. Therefore, the supply voltage of the potentiometer must show a current limitation of max. 20 mA. When using power supply units temporary current peaks with the power control might lead to damages. Therefore, an additional protective resistance Is strongly recommended.

2 - 3 021434/06/06



# 5 Technical Data

Meas. range	0 360° (0 Ohm in the North point)		
Resolution	0,5°		
Accuracy	± 2°		
Measuring principle	Potentiometer		
Potentiometer output	2 KOhm		
Electrical supply for	Voltage U <sub>s</sub> : 0V DC 24 V DC,		
potentiometer	The supply must guarantee a current limiting to max. 20mA		
	– short cut at the North point!		
Operating voltage heating	24 V DC/AC, max. 20 W		
Ambient temperature *	-40°C 70°C		
Survival speed	maximally 80 m/s, 30 minutes		
Connection	7 pol. Stecker		
Dimensions	see dimensional drawing		
Montage	For ex. onto a mast tube with receptacle thread PG 21 or		
	boring ∅ 29 mm		
Protection	IP 55		
Weight	ca. 1,10 kg		

<sup>\*</sup> The ambient temperature, stated for wind direction transmitters without heating, is possible only in ice-free condition.