



# Electro Optical Components, Inc.

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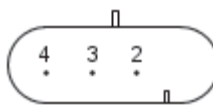


## Inclination Transducer 30° NG 2166

NG2166 is a capacitive inclination sensor for fast data acquisition with integrated signal conditioning.

Type	NG2166
Measuring Range	±15 °
Resistance against Shock	>1000 g
Frequency Range <sup>*1)</sup>	0...20 Hz
Resolution	0,1 °
Operation Temperature	-40...+85 °C
Sensitivity Error <sup>*2)</sup>	<±2 %
Hysteresis <sup>*2)</sup>	nicht messbar
Linearität <sup>*2)</sup>	<±2% v.E.
Operation Voltage	4,5...5,5 VDC
Power Consumption	ca. 7 mA
Output Signal <sup>*2)</sup>	Spannung 0,5...4,5 V
Signal at 90° <sup>*2)</sup>	2,5 V
Resolution	133 mV/°
Enclosure	IP67

v.E. of Final Value  
January 2011– subject to change



Connections:

Pin 2 Output  
Pin 3 GND  
Pin 4 Operating Voltage

$$\alpha = 75^\circ + 7,5^\circ * (U_{out} - 0,5V)^{(*2)}$$

$\alpha$  : Angle in °  
Uout: Output Voltage

Housing is resistant against <sup>\*)</sup>:

- Fuels
- Oils
- Salts
- a lot of Chemicals

<sup>\*)</sup> see Appnote 62/01

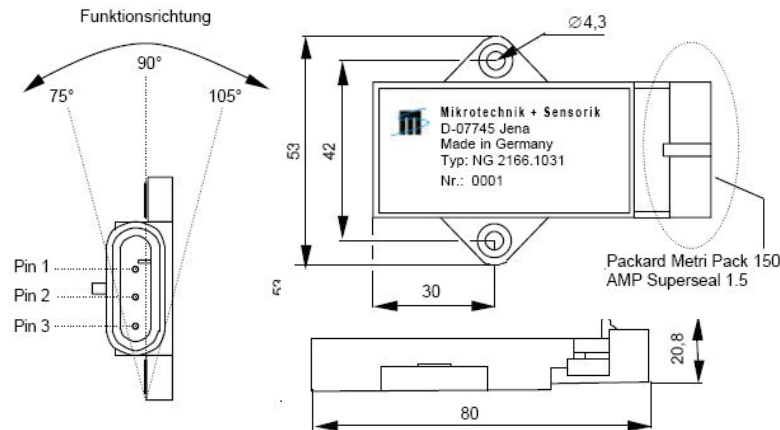
<sup>\*1)</sup> at max. 3dB Tolerance near of limit frequency

<sup>\*2)</sup> at Ub = 5V und 25°C

### Order Information:

NG2166

Art.-No. 6212.05-5.01



### Additional:

cable set 3-pol. 1m

Art.-No. 6503.01-5.01

cable set 3-pol. 1m with tension relief

Art.-No. 6503.01-5.11