

## Type No. 410-101-011



MEGA-Line  
RACING ELECTRONIC GmbH  
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Germany

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### Description / features

The MEGA-Line Double Potentiometer is a contactless magnetic angle position sensor for accurate angular measurement over a full turn of 360°. The absolute angle measurement provides a resolution of  $0.022^\circ = 16386$  positions per revolution. The angular output is provided as an analog signal (0 - 5V). Two completely independent redundant circuits for each output provide best reliability.

### Technical specifications

#### Electronic data:

Operating voltage 5 V  
Operating current (per circuit) <15 mA

#### Mechanical data:

Dimensions L x W x H approx. 48 x 28 x 36  
Weight (with cable and connector) approx. 50g

#### Temperature range:

Operating temperature 0 .. +125°C

#### Characteristic:

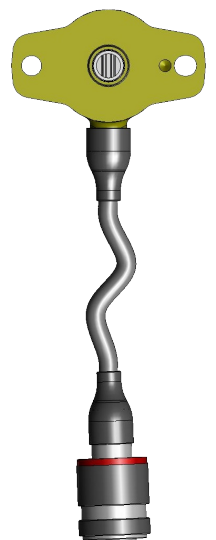
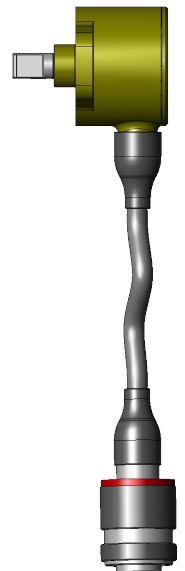
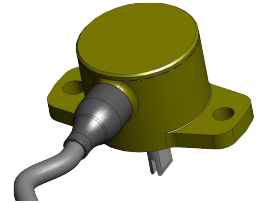
Output Voltage Scaling 13.75 mV/°  
Integral non-linearity @ 25°C typ.  $\pm 1.5^\circ$   
Integral non-linearity 0 .. +125 °C typ.  $\pm 2.0^\circ$   
Power-up time 10 ms  
System propagation delay 100  $\mu$ s

#### Connectors and Cables:

Connector AS608-35PN-HE  
Connector Loom AS003-35SN-HE / AS103-35SN-HE  
Various military and automotive connectors on request.  
Cable Size AWG 26  
Cable Length 25 cm  
Other cable length on request.

#### Ordering information:

Article no. 410-101-011  
Order no. 8257



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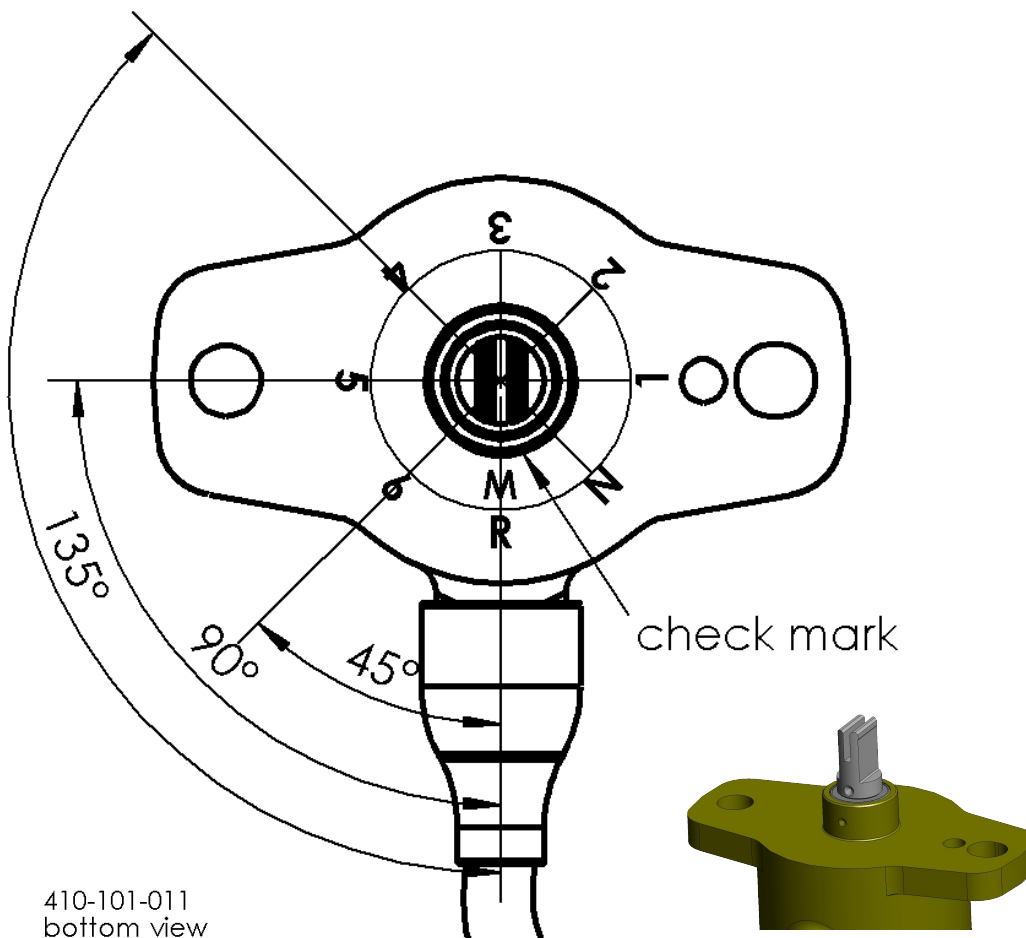
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## gear / angle / voltage positions (electrically)

| Gear | Angle [°] | Voltage [mV] |
|------|-----------|--------------|
| R    | 0 / 360   | 325          |
| N    | 315       | 944          |
| 1    | 270       | 1563         |
| 2    | 225       | 2181         |
| 3    | 180       | 2800         |
| 4    | 135       | 3418         |
| 5    | 90        | 4037         |
| 6    | 45        | 4656         |

## gear / angle positions mechanically



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### Pin assignment (electric)

| Pin | Function      | Dia [AWG] | Type   |
|-----|---------------|-----------|--------|
| 1   | +5V poti 1    | 26        | pwr    |
| 2   | ground poti 1 | 26        | pwr    |
| 3   | signal poti 1 | 26        | signal |
| 4   | +5V poti 2    | 26        | pwr    |
| 5   | ground poti2  | 26        | pwr    |
| 6   | signal poti 2 | 26        | signal |

### Mechanical dimensions

