



Analogue indicator with moving-coil element

Features

- High accuracy class ensures exact display of travelling speed, rotary speed, temperature, pressure, braking force etc.
- Bright, uniform LED scale lighting for optimum reading from all angles; at any time of day even in case of direct sunlight
- Direct connection of all commonly used measuring signals (current, voltage, frequency, temperature)
- Compact and robust design in various sizes with glass fibre reinforced plastic casing for harsh ambient conditions
- Customer-specific scales (design, measuring range etc.)

The new generation of analogue indicators with a moving-coil element is our cost-effective alternative to indicators based on the stepper motor principle. Thanks to the fully mechanical design of the moving coil element, the gauge is extremely robust and can be used in harsh environments. The casing is made from glass fibre reinforced UV-stable plastic. The non-reflective float glass faceplate ensures optimum reading at any time of day and from any angle even in case of direct sunlight.

The fact that electronic components are reduced to minimum and that no additional functions are provided makes the gauges a cost-effective alternative to electronic stepper motor gauges with equivalent display quality. Scales, scale background colour, scale graduations as well as pointer colour can be adapted to customer specifications. The scale background can be individually printed on request (e.g. logo etc.).

The measuring principle

The gauge contains a mounted coil that rotates in the field of a permanent magnet. A coil spring returns the coil to the rest position. A direct current flowing through the coil generates a second magnetic field. The two magnetic fields repel, the coil turns and the pointer deflects. The magnetic force acts against the force of the coil spring. The pointer is stationary when both forces are equal.

Technical data (extract)

Design	Round or square
Sizes	Round: Ø 60 mm, Ø 80 mm, Ø 100 mm or Ø 130 mm Square: 72x72 mm, 96x96 mm, 144x144 mm
Input signals	Current: 0...20 mA; 4...20 mA; -20...+20 mA Voltage: 0...10 VDC; 2...10 VDC; -10...+10 VDC Frequency: on request Pt100/Pt1000: on request NTC thermistor: on request
Accuracy class	EN60051 and IEC51-1: better than 1.5% referred to the measuring range
Operating temperature	IEC60068-2-1/2: -25 °C ... +70 °C
Protection class	DIN EN 60529: Casing front IP66/IP67

