

I1B0B10A

Current Pulse Sensor

Properties

- Small housing
- Measurement range up to ± 1500 A
- Precise folding mechanism

Application

- General test and measurement
- Fatigue life tests
- Vehicle crash

Measurement specification

- Hall effect

Options

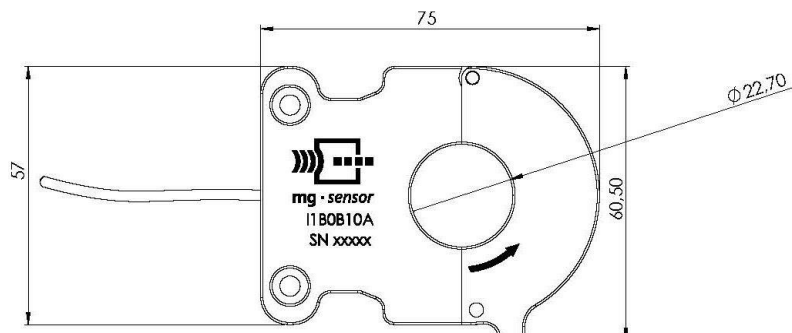
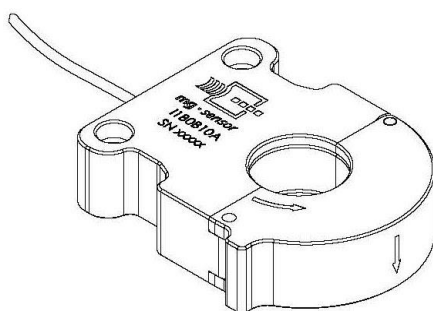
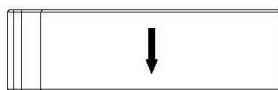
- ID-Module integrated in sensor



Technical description

If a current flows through a Hall sensor and is brought into a magnetic field perpendicular to this, the sensor provides an output voltage that is proportional to the product of magnetic field strength and current. The Hall sensor also provides a signal when the magnetic field is constant. As a result, direct currents can also be measured. The measured output signal of the Hall sensor is directly proportional to the current that flows through the conductor. In order to meet the tough requirements in the test, the mechanical construction has been designed as folding mechanism. The design has been optimized by letting the sensor open easily; however, it remains firmly closed in the closed state.

Dimensions



Technical Data Sheet



I1B0B10A

Technical specification

	Unit	Value	Comment
Nominal measuring range	A	±1.500	
Calibration	A	±1.500	Standard
Sensitivity ¹⁾	mV/A	1.2	±0.2
Output signal ^{1), 2)}	mV	1800	
Zero signal ¹⁾	mV	≤ 20	
Amplitude non-linearity ⁴⁾	%	≤ 1.5	
Current consumption	mA	< 25	
Supply voltage	V	5–10	
Response time/10% ³⁾	µs	3,5	
Response time/90% ³⁾	µs	7.5	
Bandwidth (–3dB)	kHz	DC...10	
Insulation resistance	MΩ	> 100	
For cable diameter	mm	< 22	
Temperature range	°C	-30...+70	
Weight (approximate)	g	160	

All values measured at 10 V sensor supply voltage and 23 °C.

¹⁾ Typical value

²⁾ At nominal load

³⁾ Relative nominal range

⁴⁾ Relative calibration range ±1.500 A