

G801-B: CURRENT OUTPUT ANGLE SENSOR (ABSOLUTE VALUE ENCODER, ANGULAR DISPLACEMENT SENSOR)



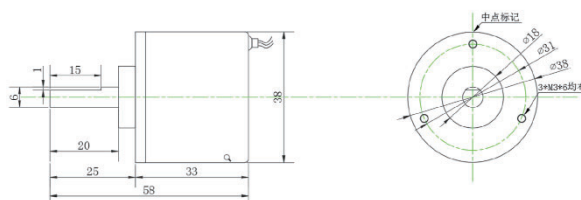
■ PRODUCT DESCRIPTION

The G801-B series angle sensor adopts MEMS technology and magnetoelectric induction technology. It uses differential array magnetic sensitive elements and non-contact measurement of the rotating shaft. It senses the parallel magnetic field intensity of the permanent magnet installed at one end of the rotating shaft and performs linearity correction through MCU processing, temperature compensation, output signal standardized digital filtering, zero point setting, programmable intelligent control of multiple different slope settings, to achieve the absolute angular position of the output sensor within the range of $0 \sim 360^\circ$. Accuracy 0.2° , output RS232, RS485, CAN, 0-5V/0.5-4.5V/0-10V, 4-20mA/0-20mA optional.

■ PRODUCT MAIN SPECIFICATION

Parameter	Conditions	G801-B-90	G801-B-180	G801-B-270	G801-B-360	Unit
Measuring range ⁽¹⁾		0~90	0~180	0~270	0~360	°
Measuring axis		X, Y	X, Y	X, Y	X, Y	
Zero temperature drift ⁽²⁾	-40 ~ 85°	±0.003	±0.003	±0.003	±0.003	°/°C
Resolution ⁽³⁾		0.02	0.02	0.02	0.02	°
Accuracy ⁽⁴⁾	-40 ~ 85°C	0.2	0.3	0.4	0.6	°
Linearity		0.15	0.15	0.15	0.15	%FS
Power-on start time		0.2				s
Response time	Slow/Fast	500/200μs				
Output signal ⁽⁵⁾⁽⁶⁾	R _{load} =240 Ω	0~20mA, 4~20mA optional				
Noise		3mV				
Midpoint offset	midpoint output (Approach left and right)	4-20mA output 12mA 0-20mA output 10mA				
Average working hours		≥55000 hours/time				
Impact resistance		20000g, 0.5ms, 3 times/axis				
Anti-Vibration		10grms、2 ~ 2000Hz				
Operating temperature		-40 ~ 85°C				
Waterproof level		IP66 (can be customized IP67)				
Cable		Standard 1.5 meter length, wear-resistant, oil-proof, wide temperature, shielded cable 3*0.3mm ²				
Weight		120g (excluding packaging box)				

■ PRODUCT DIMENSION



■ PRODUCT APPLICATION

- Measurement of inclination platform
- Instrument calibration and calibration
- Geological equipment inclination monitoring
- Wireless base station attitude monitoring
- Monitoring of bridges and dams
- Angle control of various construction machinery
- Based on tilt detection