

## G802: LOW COST CURRENT OUTPUT ANGLE SENSOR (ABSOLUTE VALUE ENCODER, ANGULAR DISPLACEMENT SENSOR)



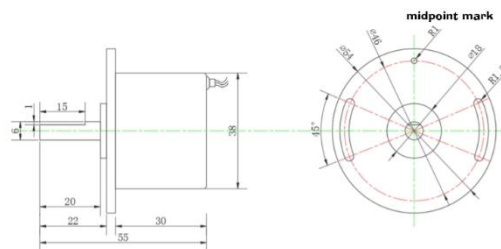
### ■ PRODUCT DESCRIPTION

G802 series magnetic angle sensor uses MEMS technology to integrate the nanomagnetic beam thin film material and the differential array magnetic sensitive element to non-contact sense changes in the magnetic field. The system integrates (microcomputer) with the current market and various protection circuits. Through DSP processing, it realizes simple intelligent control of linearity correction, temperature compensation, standardization of output signals according to the range, digital simulation, zero point setting, and multi-stage different slope settings. 0 In the 360° range, the user sets the angle to output absolute position measurement.

### ■ PRODUCT MAIN SPECIFICATION

Parameter	Condition	G802-90	G802-180	G802-270	G802-360	unit
Measuring range		0~90	0~180	0~270	0~360	°
Temperature drift	-40~85°	0.02	0.02	0.02	0.02	°/°C
Resolution		0.05	0.05	0.05	0.05	°
Accuracy	-40~85°C	0.3	0.5	0.6	1	°
Long term stability	-40~85°C	0.32	0.53	0.65	1.1	°
Response time	slow/fast	600/200 μS				
Power-on start time		0.2s				
Output signal	Rload=240Ω	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, 3rd 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 * 3 mm <sup>2</sup>				
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
- Car safety control: steering wheel