G800-B: CURRENT OUTPUT ANGLE SENSOR (ABSOLUTE VALUE ENCODER, ANGULAR DISPLACEMENT SENSOR)

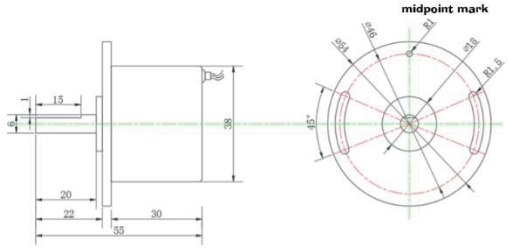
PRODUCT DESCRIPTION

G800-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 ~ 360°. 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	G800-B-90	G800-B-180	G800-B-270	G800-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	°/℃
Resolution[3]		0.02	0.02	0.02	0.02	°
Accuracy[4]	-40 ~ 85℃	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]	Rload=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	2500g, 0.5ms, 3 times/axis					
Anti-Vibration	10grms、2 ~ 2000Hz					
Operating temperature	-40 ~ 85℃					
Waterproof level	IP66 (can be customized IP67)					
Cable	Standard 1.5 meter length, wear-resistant, oil-proof, wide temperature, shielded cable 3*0.3mm2					
Weight	120g (excluding packaging box)					

PRODUCT DIMENSION



PRODUCT APPLICATION

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