

# Single-Turn Absolute Rotary Encoder

Housing Dia.:38,50,58mm; Solid Shaft Dia.:6,8,10mm;

Interface: Parallel; Resolution: Max.16bits

**GSA-P Series**



- ▶ Housing Diameter:38,50,58mm;
- ▶ Solid/hollow Shaft Diameter:6,8,10mm;
- ▶ Interface: Parallel;
- ▶ Resolution: Single turn max.16bits;
- ▶ Supply Voltage:5v,8-29v;
- ▶ Output Code: Binary, Gray, Gray Excess, BCD;
- ▶ Widely used in various fields of automatic control and measurement system,such as machinery manufacturing, shipping, textile, printing, aviation, military industry Testing machine, elevator, etc.
- ▶ Vibration-resistant, corrosion-resistant, pollution-resistant;



## Product characteristics

Housing Dia.:	38,50,58mm
Solid Shaft Dia.:	6,8,10mm

## Electrical Data

Resolution:	Single turn max.16bits			
Interface:	Parallel/NPN/PNP open collector, Push pull, Line Driver;			
Output Code:	Binary, Gray, Gray Excess, BCD			
Supply Voltage:	8-29V			
Max. Frequency Response	300Khz			

	Open Collector	Voltage Output	Line Driver	Push Pull
Consumption current	≤80mA;	≤80mA;	≤150mA;	≤80mA;
Load current	40mA;	40mA;	60mA;	40mA;
VOH	Min.Vcc x 70%;	Min.Vcc - 2.5v	Min.3.4v	Min.Vcc - 1.5v
VOL	Max.0.4v	Max.0.4v	Max.0.4v	Max.0.8v

## Mechanical Data

Start Torque	$4 \times 10^{-3} \text{ N}\cdot\text{M}$
Max. Shaft Loading	Axial: 29.4N, Radial:19,6N;
Max. Rotary Speed	3000rpm
Weight	160-200g

## Environment Data

Working Temp.	-30~80°C
Storage Temp.	-40~80°C
Protection Grade	IP54

## Connection Leading:

Signal	Vcc	GND	D0	D1	D2	D3	D4	D5	D6	D7	D8	D9
Colour	Brown	White	Red/Blue	Gray/Purple	Blue	Green	Pink	Purple	White	Gray	Yellow	Brown

