



## S2804 Series Solid Shaft



### Features

- Internal photoelectric data reading, ultra-parallel light components, and direct reading of code disc signals.
- High reliability, long service life, and strong anti-interference capability.
- Equipped with A, B, and Z three-channel signal output, compatible with standard line drivers (26LS31) RS422, and capable of providing 6 output signals, compatible with TTL. Additional options include open-collector, voltage-type output, and complementary output interface circuits.
- Compact size, lightweight, and easy installation.

### Cable Definition

Signal Output Method of the Circuit	Signal	+V	0V	A	B	Z	A/	B/	Z/	NC.
	Wire Color	Red	Black	Green	White	Yellow	Brown	Gray	Orange	Shield
Open-collector, Voltage, Complementary	7-pin Socket Number	1	4	3	5	2	-	-	-	6
Driver	9-pin Socket Number	1	4	5	3	2	7	6	8	9

## Technical Parameters

Supply Voltage (VCC)	DC 5V±0.25V or 5~30V	Maximum Mechanical Rotation Speed	6000r/min
Output Voltage	High Level 3.4V, Low Level 0.4V	Vibration Resistance	49m/s <sup>2</sup> , 10~200Hz, 2 hours in each XYZ direction
Current Consumption	≤160mA	Shock Resistance	980m/s <sup>2</sup> , 6ms, 3 times in each XYZ direction
Response Frequency	0~80KHz (or as per customer requirements)	Protection	Waterproof, Oil-proof, Dustproof (IP54)
Output Waveform	Square Wave	Operating Life	MTBF 50000h(+25°C,2000rpm)
Duty Cycle	0.5T±0.1T	Operating Temperature	-20°C ~ +80°C
Starting Torque	1.5*10 <sup>-3</sup> N.m ( +25°C )	Storage Temperature	-30°C ~ +85°C
Moment of Inertia	3.5*10 <sup>-6</sup> kg.m <sup>2</sup>	Operating Humidity	30 ~ 85%(No Condensation)
Maximum Shaft Load	Radial: 15N, Axial: 10N	Weight	Approximately 0.1kg (excluding cable)

## Model Definition

S2804 - □ Z - □ - □ - □ □  
 Product Model    Number of Pulses    Number of Phases    Output Method    Power Supply Voltage    Cable Outlet Method    Length

**Number of Pulses:**  
 50, 100, 120, 125, 150,  
 180, 200, 250, 256, 300,  
 360, 400, 500, 512,  
 600, 720, 800, 900, 1000  
 , 1024, 1200, 1800, 2000  
 , 2048, 2400, 2500, 3000  
 , 3600 p/r (or as per  
 customer requirements).

**Output Method:**  
 C = Open-collector NPN  
 CP = Open-collector PNP  
 T = Voltage Output  
 F = Complementary Output  
 L = 26LS31 Differential Output  
 K = 7272 Wide Voltage Output

**Power Supply Voltage:**  
 5 = 5V  
 24 = 5-24V  
 H = 5-24V Input, 5V  
 Output  
 L = 5V Input, 5-24V  
 Output

**Cable Outlet Method:**  
 D = Metal Side Outlet  
 G = Rubber Side Outlet  
 H = Socket Side Outlet  
 F = Rubber Rear Outlet

**Cable Length:**  
 0.17 = 0.17 meters  
 1 = 1 meter  
 2 = 2 meters

## Installation Dimensions

