



# S5810 Series Solid Shaft



## Features

- Internally equipped with an ASIC phase array chip, ultra-parallel optical 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.
- Strong shaft load capacity and long service life; aviation plug output, customizable according to customer requirements.

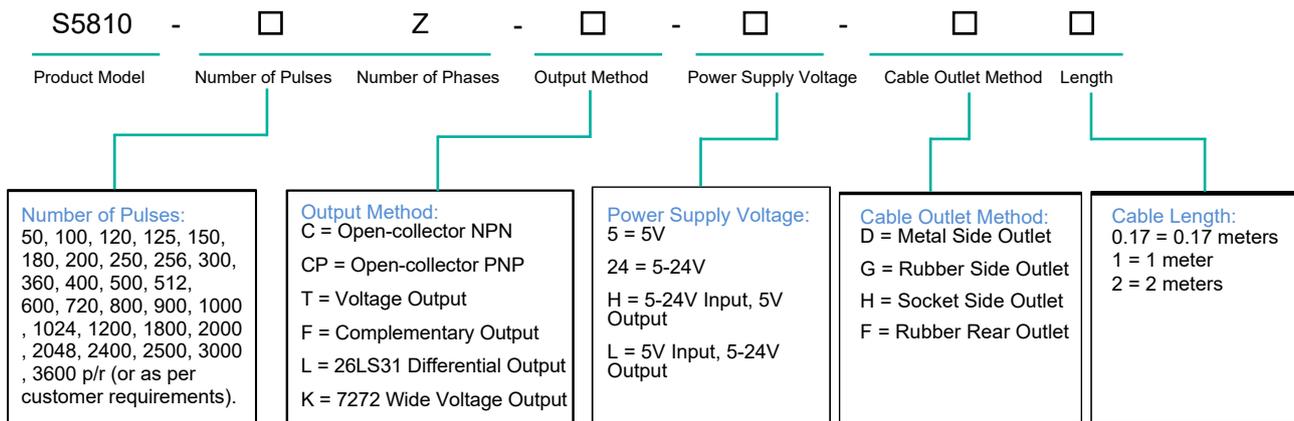
## Cable Definition

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
Open-collector, Voltage, Complementary	Computer Socket Number (15-pin)	7	5	4	2	9	-	-	-	8
Driver	Computer Socket Number (15-pin)	6	5	4	2	9	3	1	10	8

## Technical Parameters

Supply Voltage (VCC)	DC 5V±0.25V or 5~26V	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	0~500KHz (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	-30°C ~ +85°C
Starting Torque	6*10 <sup>-3</sup> N.m ( +25°C )	Storage Temperature	-40°C ~ +95°C
Moment of Inertia	8.5*10 <sup>-6</sup> kg.m <sup>2</sup>	Operating Humidity	30 ~ 85%(No Condensation)
Maximum Shaft Load	Radial: 40N, Axial: 30N	Weight	Approximately 0.30kg (excluding cable)

## Model Definition



## Installation Dimensions

