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# SF5810-05 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.
- Keyed shaft connection; flange with round holes for easy installation.

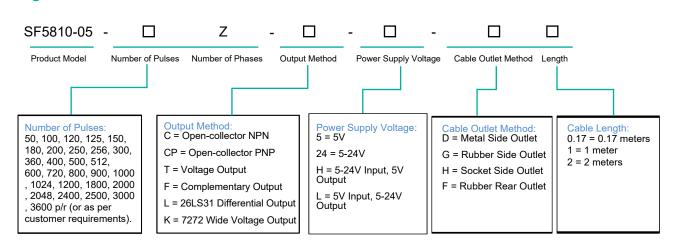
#### **Cable Definition**

Signal Output Meth od of the Circuit	Signal	+V	0V	Α	В	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	-	1	-	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 5~30V	Maximum Mechanical Rotation Speed	6000r/min	
Output Voltage	High Level 3.4V, Low Level 0.4V	Vibration Resistance	49m/s², 10~200Hz, 2 hours in each XYZ direction	
Current Consumption	≤160mA	Shock Resistance	980m/s², 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	0°C ~ +85°C	
Starting Torque	2*10 <sup>-2</sup> N.m ( +25°C )	Storage Temperature	-30°C ~ +85°C	
Moment of Inertia	1*10 <sup>-5</sup> kg.m <sup>2</sup>	Operating Humidity	30 ~ 85%(No Condensation)	
Maximum Shaft Load	Radial: 85N, Axial: 50N	Weight	Approximately 0.9kg (excluding cable)	

## **Model Definition**



### **Installation Dimensions**

