



Z3K-ZN---SERIES----Contrast Sensor

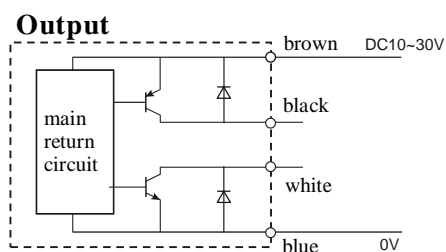
Z3K-ZN series contrast sensor has built in PIC chip, the background and mark can be identified intelligently. The sensor chooses appropriate light according to the color difference of background and mark. In addition, compared with traditional Z3N and Z3S color mark sensor, Z3K-ZN is highly competitive and convenient due to its high precision and high response time



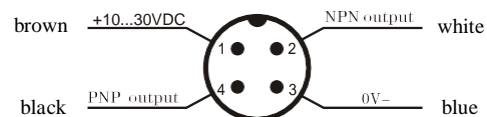
■ Key Technical Parameters

Power supply	DC10-30V
Ripple	2Vpp max
Output	1 NPN output 1 PNP output
Output current	100mA max
Output saturation voltage	≤2V
Response time	33 μ s
Switching frequency	15kHz
Indicators	OUT LED(yellow)/READY LED(green)
DARK/LIGHT selection	Automatic
Temperature	operating:-10~5℃ storage:-20~70℃
Operating distance	9mm+/-1mm
Emission type	RED(630nm)/GREEN(520nm)/BLUE(465nm) with automatic selection
Housing Material	Metal
Mechanical protection	Ip67
Connection	M12 4 core protection shielding cable
weight	280g

■ Output



■ Cable Connection Interface



Zhejiang Longyou JL Electronic CO.,LTD

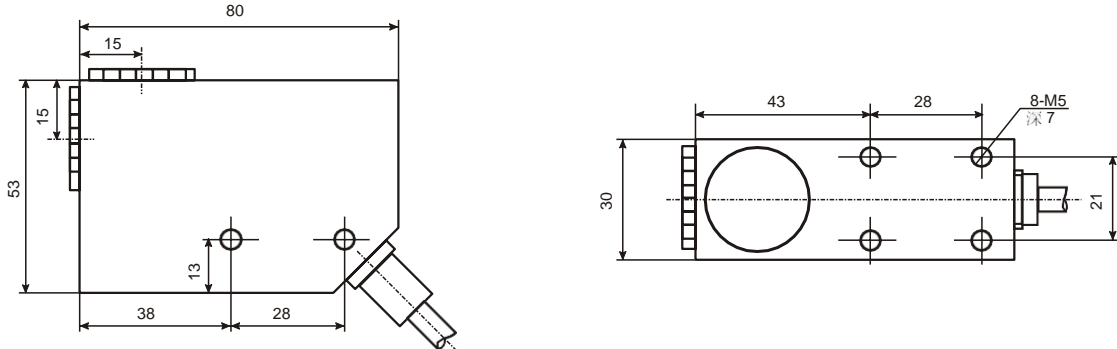
Add: 465 Renmin South road, Lingjiang industrial Zone, Longyou county, Zhejiang Province, P.R.China

Tel: +86(0)570 -7251076 Fax: +86(0)570 -7251079

Mail: ljyardz@126.com

Internet://www.JL-sensor.com

■ Shell size



■ Installation

The sensor can be positioned using threaded M5*6 holes

Do not apply excessive torque when adjusting(max 2.2Nm).

The operating distance is measured starting from the front surface of the sensor optics


Mark detection on a reflective surface is improved adjusting the beam direction to 5-20° from surface axis.

■ DETECTION

1 Position mark in front of the sensor light spot and press  button until the READY LED(green) turns OFF.

The sensor detects the mark alternating the red, green and blue emissions.

Avoid mark movements during this phase.

2 Position the background in front of the sensor light spot and press  button; the sensor detects the mark alternating the red, green and blue emissions. Avoid background movements during this phase.

The DARK/LIGHT operating mode is automatically selected by the sensor.

Dark mark - light background = Dark mode.

Light mark - dark background = Light mode.

If the READY LED (green) is permanently ON, the detection is successful.

If the LED blinks slowly, the detection has failed due to insufficient contrast.

The sensor returns to the previous setting by pressing one of the two push-buttons

