

■ Company Introduction

The YUMO is specialized in developing and manufacturing of various kinds of photo-electrical switches, marking sensors, photo-electrical samplers and relative automation devices and components. Our products are widely used in testing machines in wide industry fields like Packing, Bag Making, Printing and Electrical Meters, etc. Our products have as good features as and can be used to replace imported products.

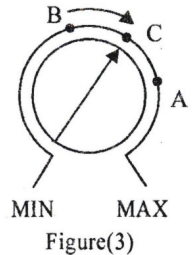
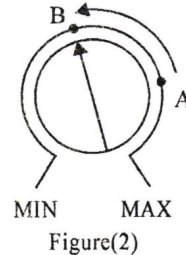
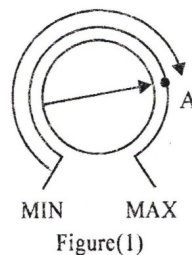
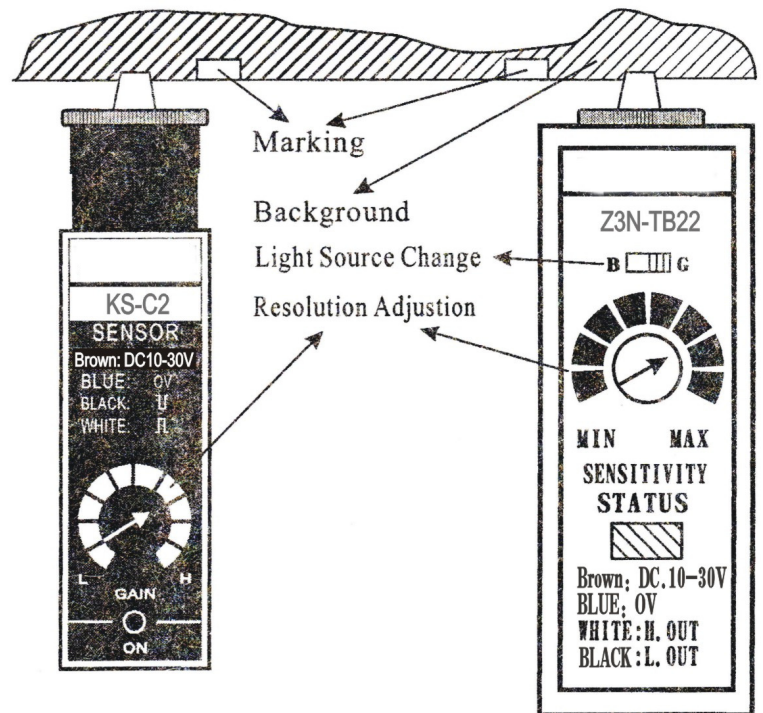
■ Operation Procedures

Fix the Photo-electrical switch with appropriate test distance. According to the packing card you are using, referring to instruction below, choose the light source color (for example green). Then choose the output method (bright flush or dim flush) according to your machine. Finally adjust resolution following 3 steps Below. Below steps are based on Bright Flush, Shallow Marking Color and Deep Background Color.

(1) Move packing paper, position the light spot behind marking in the background area. Turn resolution knob to min position, then turn it clockwise slowly till the indication just lights up. Remember and marking this position as A (refer to Figure1) . If the marking does not light up even till the knob turns to Max position, this Max position is Position A.

(2) Move packing paper, position the light spot in the center of marking area. The indication light should be bright at this position. Then turn resolution knob counter clock wise till the indication light just turns out. Remember and mark this position as B (refer to figure 2) .

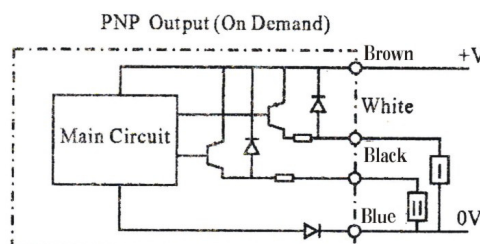
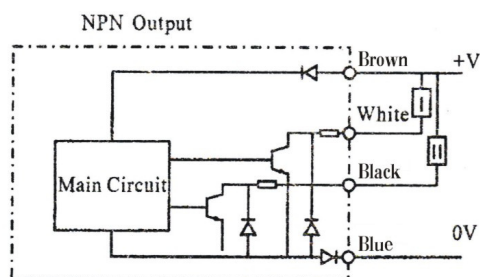
(3) After finish above two steps, turn resolution knob in between position A and B, for example position C (refer to Figure 3) . The longer distance between A and B, the higher differential of color, then the more stable the test will be carrend. If the distance between A and B is below one step of turning, the test will not be stable.



■ Main Technical Parameters

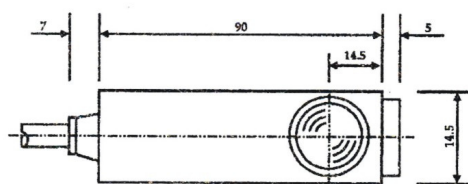
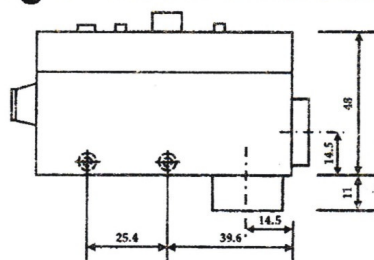
Model Parameters	Z3N Series KS Series	Z3J Series
Test Method	Co-axle Reflexion Method	Reflexion Method or Conventin Method
Test Distance	10mm ± 2mm	0-3m Adjustable
Supply Voltage Vs	DC10-30V ± 10% Undulation < 10%	DC10-30V ± 10% Undulation < 10%
Cunsumption Current	45mA (Below 45mA)	45mA (Below 45mA)
Light Source Color	Red Green Blue	Infrared
Light Spot	φ 0.5- φ 1.5 or Square Bar	
Test Angle	Light Perpendlenlar to Object Surface, Tolerance ±15°	Light Perpendicular to Object Surface, Tolerance ±15°
Response Time	0.1-1ms	2ms
Output Method	Bright Flush or Dim Flush optional	Bright Flush or Dim Flush optional
Output Indicatin	Red LED	Red LED
Output Voltage	High VsVs- (≤1.5) Low Vs (≤1.2V)	High Vs- (≤1.5) Low Vs (≤1.2V)
Current (with load)	200mA (max)	200mA (max)
Anti Environment Light	Lamp < 3000Lx Sunlight ≤ 10000Lx	Lamp < 3000Lx Sunlight ≤ 10000Lx
Protection Class	IP67 (Anti Moisture. Anti Dust)	IP67 (Anti Moisture. Anti Dust)
Environment Temp	Operation -15°C - 65°C Maintaning -25°C - 80°C	Operation -15°C - 65°C Maintaning -25°C - 80°C
Lead Line	φ 5.4VC, 4- Core Screened Calble Standard 2M	φ 5.4VC, 4- Core Screened Calble Standard 2M

■ Output Circuit

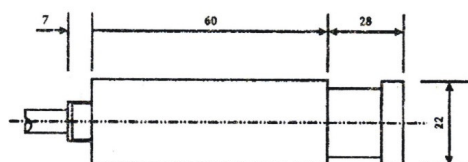
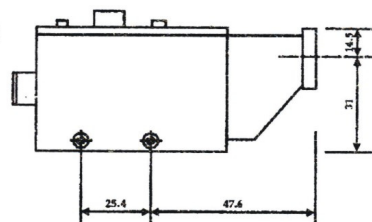


■ Outer Configuration Dimension

Z3N Series



KS Series



Z3J Series

