Order guide

J (Major category) GD (Category) F (Series) - L3 (1 Light source type) - L120 (2 Detection distance) - N (3 Output function)

Please refer to the series code to select the type and parameters for ordering.

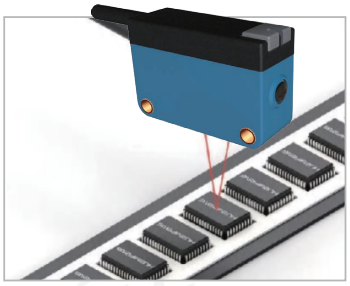
Model	Detection method	Shape	Detection distance mm ②	Light source type ①	Output function ③
JGDF-L3-120[N/P]	Distance detection type		120	Laser	NPN Output PNP Output
JGDF-L1-100[N/P]			100	Red light	
JGDF-L1-300[N/P]			300		

- Anti-interference
  - Inverter fluorescent lamps can also be countered according to a unique external interference light avoidance algorithm.
- High precision
  - The small distance between movements allows detection of small segmental differences.
- Protective structure
  - The IP65 protection structure, which prevents mutual interference function, is in accordance with the EN specification standard.
- Perfect application of BGS functions
  - Black and white workpieces can be inspected at almost the same distance. There is no need to adjust the inspection distance even when changing production on a line where different-colored workpieces are flowing.
  - Unaffected by changes in the color of the object to be detected, both black and white can be detected at almost the same distance.
- When there is no background
  - When the workpiece is separated from the background object
  - It is also unaffected if the background color is changed or if someone passes by.

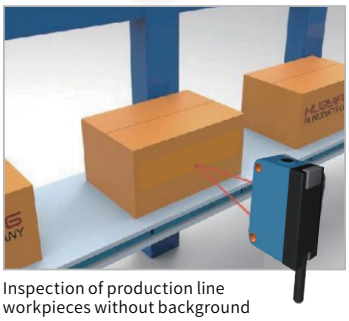
Technical parameters

Category		Outlet type		
Item	NPN Output	Laser spot 2mm	Minimum spot 1mm	Spot diameter approx. 8mm
Detection distance		10-120mm	5-100mm	10-600mm(BG function within 250mm)
Output mode		NPN/PNP open integrated electrode,≤100mA/30V DC		
Switching mode		L.on(light-in action)/D.on(light-darkening action) can be switched.		
Indicator light		Operating indicator: green, output indicator: Orange		
Response time		< 2ms		
Sensitivity adjustment		Multi-turn Potentiometers		
Light source		Red LED (660nm)		
operating voltage		10~30V DC+10%		
Current consumption		≤30mA		
Ambient light		Daylight: below 10,000LX Incandescent: below 3,000LX		
Environmental temperature		-25°C~+55°C		
Environmental humidity		-35%-85% ice-free		
Protection level		IP65		
Material		ABS(Housing) ;PC(Lens)		

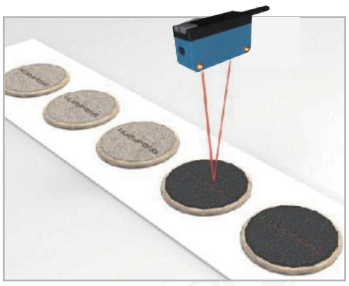
Application examples



Testing of production ICs



Inspection of production line workpieces without background



Inspection of different color cookie production line