

Collimated light

NV-PF series



Collimated light NV-PF series

Parallel light source is made up of parallel light source and bilateral remote lens, and the precise optical lens design can eliminate the boundary halo produced by backlight scattering, improve the measurement accuracy of product shape and the detection of fine defects on smooth surface.



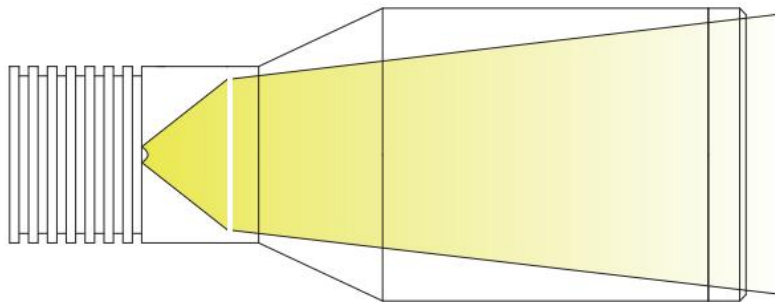
Features

- ◇ High intensity, large LED particles
- ◇ Detect the fine defects on smooth surface
- ◇ Multiple color optional, customizable
- ◇ Optical design precision, compact shape design

Application Areas

- ◇ Product surface minor defect detection
- ◇ High tightness element profile detection
- ◇ High precision appearance, dimension detection

Illumination constructure



Selection Guide

NV	PF	##	R/G/B/W
New vision	Collimated light	Spot Diameter	Color

Technical Index

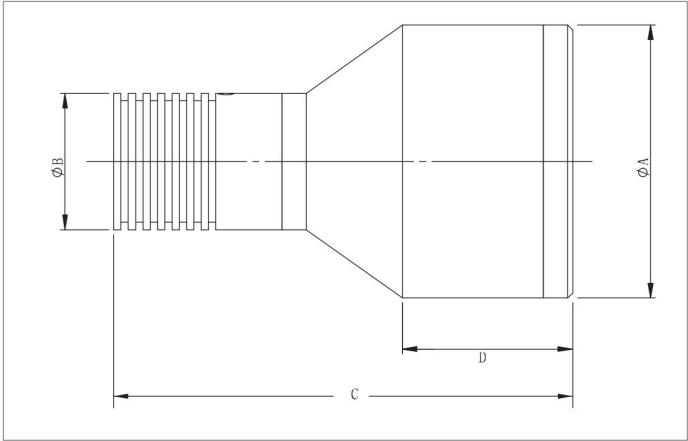
Color (Wavelength)	Red:620-630nm	Green:525-530nm	Blue:465-470nm
	White color temperature 6600-7000K	UV:365-395nm	IR:850/940nm
Operating environment	Temperature:0 to 50°C,Humidity:20% to 85% RH		
Life time	100,000hrs theoretical service time(Depends on the operating environment, not a guarantee.)		
Compatible Controller	Analog Controller, Digital Controller, Constant Current Controller		
Optional Accessory	1.Lights source and lens adaptor.		
	2.Diffusion plate,Polarizing plate. (Opational transmittance:60%,70%,80%,90%)		
	3.Extension cable:1m/2m/5m/10m/15m(2 kinds of materials of the shell of wire:PVC of hardness; silicone of softness.)		
Warranty	One year warranty,Free samples and technical support(buyers pay for the freight)		
Lights customization	Provide design and development service according to individual needs of customers.To reach the best image effects.		

Light parameters(voltage is 24V)

Mold	Model	Color (R/G/B/W)	Power(W)		Dimentions				Pic. No.
			R	GBW	A	B	C	D	
Collimated Light	NV-PF20-		3W	3W	32	28	82	41	1
	NV-PF50-		3W	3W	56	28	104	35	
	NV-PF70-		3W	3W	74	35	152	56	
	NV-PF90-		5W	5W	102	35	204	56	
	NV-PF120-		5W	5W	130	36	311	70	
	NV-PF200-		5W	5W	205.8	36	417	75	

Note: in high-precision measurement, it is suggested to use green parallel light source, and make the parallel light source and the telecentric lens in the same horizontal line, so as to get the highest telecentric degree and the minimum optical distortion, and at the same time, get the image with the highest resolution.

Installation diagram



Applications

- ◇ Coin surface detection
- ◇ Model: NV-PF50-W
- ◇ The texture and scratch defects on the surface of the coin are illuminated by a parallel light source. The flat part is bright and the defective part is easy to see the scratch and bump surface, so the effect is naturally better.

