Proximity photoelectric sensor VL18 series

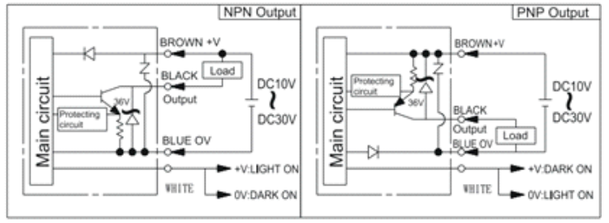
Highlights

- Economical solution for numerous applications ;
- Sensing distance defuse type up to 800 mm, adjustable via potentiometer , retro reflective type up to 3m and trough beam type up to 10m ;
- Red or infrared light source ;
- Variants with angled light exit ;
- Robust metal housings (IP 67) ;
- Simple adjustment via potentiometer ;
- 2 through holes as additional mounting possibility

Product parameters

Type		Diffuse	Retro reflective	Trough beam
Model	NPN	See part number in detailed product brochure		See part number in detailed product brochure
	PNP	See part number in detailed product brochure		See part number in detailed product brochure
Products shape				
Sensing range		Defuse type 2-800mm (white paper 100mm) Defuse type 2-280mm (black paper 100mm)	Retro reflective 2-3000mm (Regular type model) Retro reflective 2-1500mm (Regular and transperent type model)	Trough beam type 2-10000mm (Regular type model)
Black and white error		3%(distance 160mm)		
Hysisteresis		Less than 3% of rated detection distance		
Output type switching		N.O./N.C. via control white wire to power		
Current consumption		Max. 100mA		
Light source		Red light source 630nm	Infrared light source 850nm	
		JIS/IEC CLASS1,FDA CLASSI max. 4.5mW		
Control output		The load power supply voltage is max. DC26.4V, the load current is max. 100mA, the leakage current is less than 10 μ, and the collector is open circuit output		
Output residual voltage		Residual voltage below 1V (load current max. 10mA) residual voltage below 2V (load current max. 10 ~ 100mA)		
Power voltage		DC 12~24V±10% ripple (P-P) max.10%		
Response time		max. 0.5ms		
Ambient temperature		Working :-25 ... +55 °C \ Storage -40°C ~+70°C		
Ambient humidity		Working:35~85%RH \ Storage -35~95%RH		
Protection		Power reverse protection / load short circuit protection / mutual interference prevention function / output reverse connection protection		
Ip level		IEC60529: IP67		
Material	shell	Polybutylene terephthalate \ Brass Nickel Plated		
	display unit	Polyester rubber		
	lens	Polyester rubber		

Input/Output circuit



Dimension