

Compact Long Range Proximity Sensors Series VL42

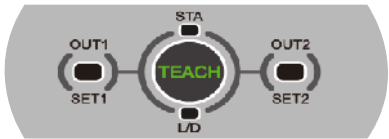
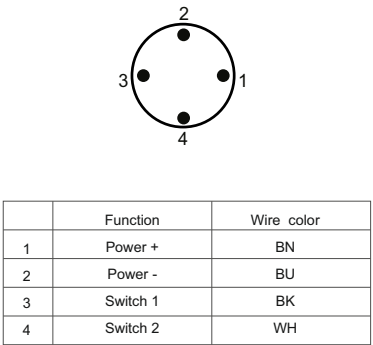


Highlights

Laser Distance measurement sensor, 655nm laser source, metal housing, suitable for logistics, packaging, automobiles, customized equipment. etc.

- High quality compact Laser Distance sensors series
- Up to 2000mm sensing distance
- High precision, accurate positioning
- Strong resistance to ambient light, compact size
- 2 switch outputs
- Teach button for sensor calibration

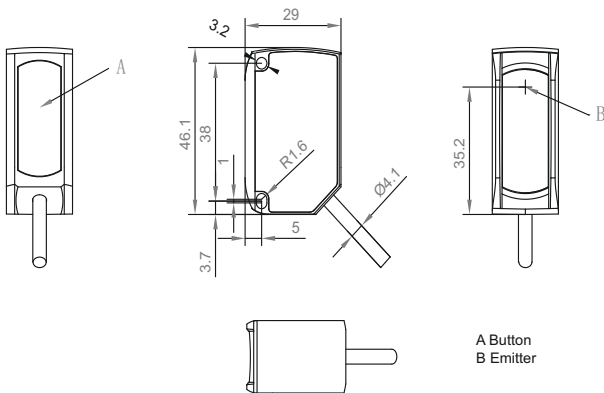
Input/Output circuit



STA: status
L/D: light on/dark on
OUT1: switch 1 digital output
OUT2: switch 2 digital output

Keys instruction:
TEACH: setting

Dimension



Product parameters

Supply voltage	10-30VDC	
Ripple voltage	≤10%	
No-load current	≤150mA	
Power	0.8W	
Analog output	N/A	
Switch output	<div><NPN output type> NPN open collector transistor Maximum sink current: 200mA Applied voltage: 24V DC or less (between output and 0V) Residual voltage: 1.5V or less</div>	<div><PNP output type> PNP open collector transistor Maximum sink current: 200mA External voltage: 24V DC or less (between output and +V) Residual voltage: 1.5V or less</div>
Communication type	N/A	
Light source	655nm laser source	
Operation indicator	Yellow LED indicator (lights up when the output is ON), through type on the receiver	Yellow LED indicator (lights up when the output is ON)
Power indicator	Green LED (lights up when power is applied)	
Environmental resistance	Population degree	3 (Industrial environment)
	Protection	IP67 (IEC)
	Temp.	-25 ~ +55°C (Becareful not to condense or freeze), when stored: -40 ~ +70°C
	Humidity	50%RH (70°C)
	Light intensity	Incandescent lamp: the illuminance of the light-receiving surface is below 5000lx
	EMC	EN 60947-5-2
	Voltage reverse protection	500V AC for one min. between all supply terminals connected together and enclosure
Shock resistance	Vibration resistance	10~55Hz frequency,0.5mm amplitude in X,Y and Z directions for 1.5 hours each
	Shock resistance	10~55Hz frequency,0.5mm amplitude in X,Y and Z directions for 1.5 hours each
Repeatability	2mm(150mm~600mm) 5mm(600mm~800mm) 10mm(800mm~1200mm) 2mm@600mm 3.5mm@1200mm	
Material	Enclosure: Stainless steel Lens: PMMA	
Response time	1.5ms / 5ms / 10ms switchable	
Dimensions	46*20*29mm	

Type	Distance	Light source	Output	Resolution	Connection	Wiring
VL42-DL-R-1.2M-PLD-2MC	150...1200mm	Red laser	NPN/PNP	1mm	2m cable	Fig.1
VL42-DL-R-2M-PLD-2MC	95...2000mm	Red laser	NPN/PNP	1mm	2m cable	Fig.1