## Photoelectric sensor - OSM42





## Description:

Laser displacement sensor, Metal housing, Key settings, 655nm Laser light source 150mm-2000mm Displacement type ranging; 940nm infrared laser 2.5m, 4mTOF type ranging. Applies to dispensing machine, pharmaceutical, packaging, automotive, AGV and other industries.

#### Features:

- High precision, accurate positioning
- Strong resistance to ambient light, compact size
- 2 switch output
- TOF type ranging with visible laser indication light source

### Type:

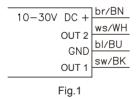
Ranging type	Туре	Distance	Beam	Output	Resolution	Connection	Wiring
Laser displacement	OSM42-KL1200C2B6	1501200mm	Red laser	2 x Push-Pull	1mm	2m cable	Fig.1
	OSM42-KL2000C2B6	1502000mm	Red laser	2 x Push-Pull	1mm	2m cable	Fig.1
Laser TOF	OSM42-K2500C2B6	502500mm	Infrared laser +Laser indication	2 x Push-Pull	5mm	2m cable	Fig.1
	OSM42-K4000C2B6	504000mm	Infrared laser +Laser indication	2 x Push-Pull	5mm	2m cable	Fig.1
	OSM42-K4000/485	502500mm	Infrared laser +Laser indication	485	5mm	2m cable	Fig.2
	OSM42-K4000/485	504000mm	Infrared laser +Laser indication	485	5mm	2m cable	Fig.2

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#### Technical Data:

Supply voltage	10-30VDC
Ripple voltage	≤10%
No-load current	≤150mA
Power	<0.8W
Switch output	2 x Push-Pull
Light source	655nm Laser light source (Laser displacement type ranging detection light source, TOF type ranging
	indicator light source); 940nmVcsel laser (TOFType ranging detection light source)
Protection circuit	Reverse polarity protection, short circuit protection, Overload protection
Response time	50Hz
Repeatability	2mm(150mm-600mm); 5mm(600mm-800mm); 10mm(800mm-1200mm); 30mm(1200mm-4000mm)
Spot diameter	2mm@600mm; 3.5mm@1200mm; 8mm@2000mm; 12*6cm@2.5m;14*7cm@4m
Housing material	Die-cast zinc
Ambient temperature	-20°C60°C
Operating temperature	-10°C50°C
Voltage resistance	1000V/AC/ 50/60Hz 60s
Insulation impedence	≥50MΩ (500VDC)
Shock resistance	Complex amplitude 1.5mm 10 50Hz (2hr X, Y,Z respectively)
Impact resistance	500m/S²(50G) 3 times X,Y,Z respectively
Dimensions	46x20x29mm

## Interface output:



10-301/	DC T	br/BN
10-30V	1951	ws/WH
	405+	bl/BU

sw/BK

Fig.2

485-

	Function	Wire color
1	Power +	BN
2	Power -	BU
3	Switch 1	BK
4	Switch 2	WH

	Function	Wire color	
1	Power +	BN	
2	Power -	BU	
3	485-	BK	
4	485+	WH	



### Indicator:



STA: status

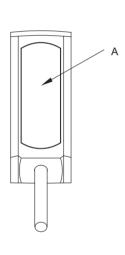
L/D: light on/dark on

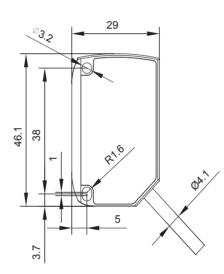
OUT1: switch 1 digital output
OUT2: switch 2 digital output

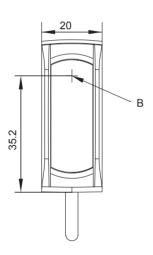
Keys instruction:

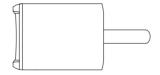
TEACH: setting

## Dimensions:









A Button B Emitter

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