

Deviation correction sensor - Inductor



Description:

The OSMT60 series needs to be used with the OSC1 controller with a push-button teaching function. A variety of working modes are available, and there are multiple output types at the same time. Applicable to pharmaceuticals, packages installation, lithium battery, photovoltaic, non-standard equipment, etc.

Features:

- High precision, split inductor
- Use it with a controller to adapt to more scenarios and output more modes

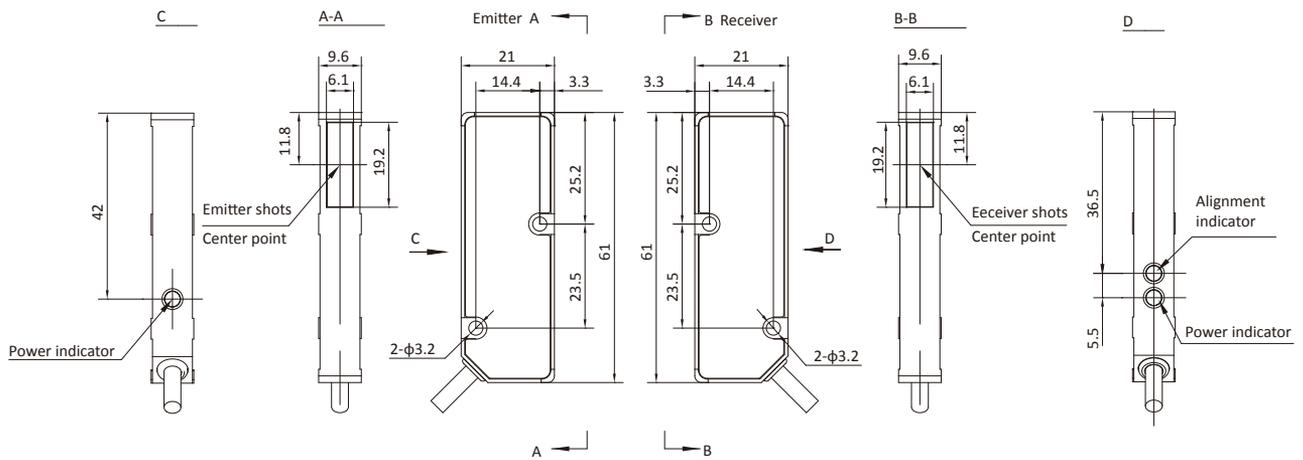
Type:

Detection mode	Type	Distance	Light source	Repeatability	Connection
Opposed	OSMT60-S3006-0.3-Q8 (Emitter)	300mm	Laser	±5μm	M8 connector, 4-pin
	OSMT60-E3006-0.3-Q8 (Receiver)	300mm	— —	±5μm	M8 connector, 4-pin
	OSMT60-T300 (Emitter+Receiver)	300mm	Laser	±5μm	M8 connector, 4-pin

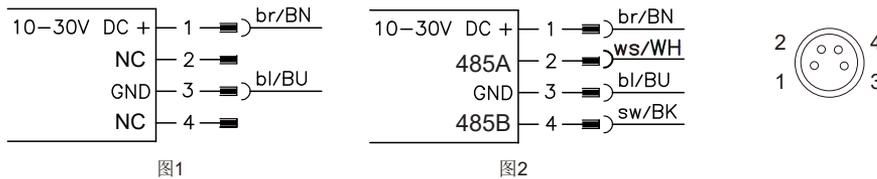
Technical Data:

Light source	Red semiconductor laser
Operating voltage	DC12~24V
Ripple voltage	≤10%
Supply current	Emitter: < 20mA, Receiver: < 80mA(DC12V)
Connection	0.3m cable + M8 connector, 4-pin
linearity	Installation distance 100mm: +0.4%FS(40um)
Temperature characteristic	±0.02% F.S./ °C
Response time	500us
Spot size	3x14mm
Measuring range	Measuring width 10mm
Indicator	Transmitter Power Indicator: Green; Receiver indicator: the upper offset red light flashes, the lower offset green light flashes, and the transmitted light is not received at the same time
Protective circuit	Reverse polarity protection, short circuit protection, overload protection
Ambient temperature	-10...+50 °C/35~85%RH(No condensation · freezing)
Storage temperature	-20...+60 °C/35~85%RH(No condensation · freezing)
Shock resistance	Complex amplitude 1.5 mm 10 ... 50Hz (2hr X, Y, Z respectively)
Impact resistance	500m/S ² (50G) 3 times X, Y, Z respectively
Protection class	IP50
Housing material	Housing: aluminum alloy, transmitting and receiving lens: glass

Dimensions: (Opposed)



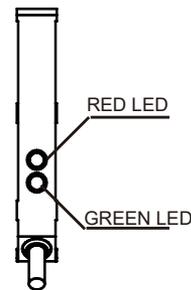
Wiring diagram



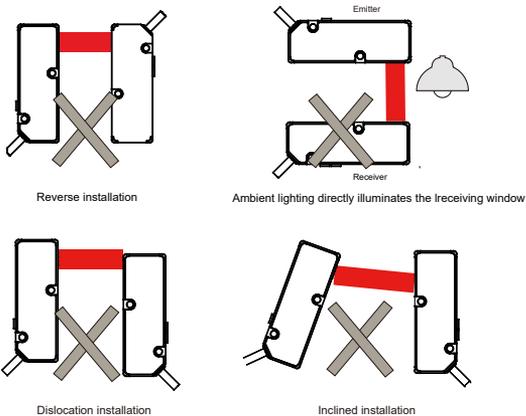
Installation instructions

- 1.1 Before installation, please confirm that the serial numbers of the receiver and the emitter are the same. The serial number is engraved under the indicator .
- 1.2 Please keep the measured object in the middle between the receiver and the emitter.
- 1.3 Optical axis calibration and indicator description
 - (1) If the optical axis has been calibrated , all the LED of receiver are keep on.
 - (2) If the receiver deviates upward, the red LED flashes;
If the receiver deviates downward, the green LED flashes;
If the receiver does not receive the emitted light, the red LED and the green LED will flash together.

Please adjust the optical axis according to the indicator LED.



- 1.4 Please keep the windows of the emitter and receiver clean.If there is dirt,wipe with lens paper or a soft cloth that will not leave lint.
- 1.5 Please note the following incorrect installation methods



• If the above installation method appears, it may lead to the decline of measurement accuracy.

Cautions

- The OSMT60 sensor should be used in combination with OSC1 controller.
If combination with other controllers, it may cause product failure.
- Use M3 screws(obtain separately)to mount the product,tighten to a torque of 0.5M·m or less.
- Please warm up the products for 30 minutes before use.
- Please turn off the power supply when the cable is routed or disconnect.
otherwise it may cause product failure.
- Please don't connect it in parallel with the high-voltage line or power cord, otherwise the product may malfunction or be damaged due to electromagnetic induction.
- Please do not bend the cable at freezing temperature to avoid damaging the product.
- Please do not strongly impact the product or fall from a height to avoid damaging the product.
- When wiring this product with the controller, please follow this instructions or the controller instructions.
Incorrect wiring may lead to misoperation or failure of the product or controller.
- When the connector is exposed, do not touch the pins in the connector port, and foreign objects are prohibited from entering the interior.
- Please separate high-voltage equipment, power supply equipment, machines that generate large switching current, welding motors, welding machines and other equipment that generate interference.
- When connecting or disconnecting the cable, please apply force to the connector part, and do not apply excessive force to the cable.
- Please do not touch the product and cable with wet hands to avoid damaging the product.
- Please use the product and controller within the rated output power range.
- Please wait 3s after changing the operation settings, and then cut off the power supply.

Laser Cautions

- The product emits visible laser beams, which is equivalent to class 1 of IEC 60825-1.
- If this product is exported to the United States, it must subject to the laser standard of FDA(Food and Drug Administration).
- When this product is installed in the customer's equipment, please follow the laws of the country or region.
- Be careful not to reflect the laser beam directly or through a mirror, etc,
otherwise it will cause temporary visual impairment.
- Please warm up the products for 30 minutes before use.
- Please do not disassemble or modify the product without authorization.

Deviation correction sensor - Controller



Description:

The OSC1 series controller is used in conjunction with the guiding sensor head with a presskey teach-in function. Multiple operating modes are selectable and multiple output types are available. Suitable for pharmaceutical, packaging, lithium battery, photovoltaic, non-standard equipment, etc.

Features:

- The high-precision sensor controller is installed separately
- It supports multiple detection modes and multi-scenario applications
- Equipped with an organic EL display, available in Chinese and English

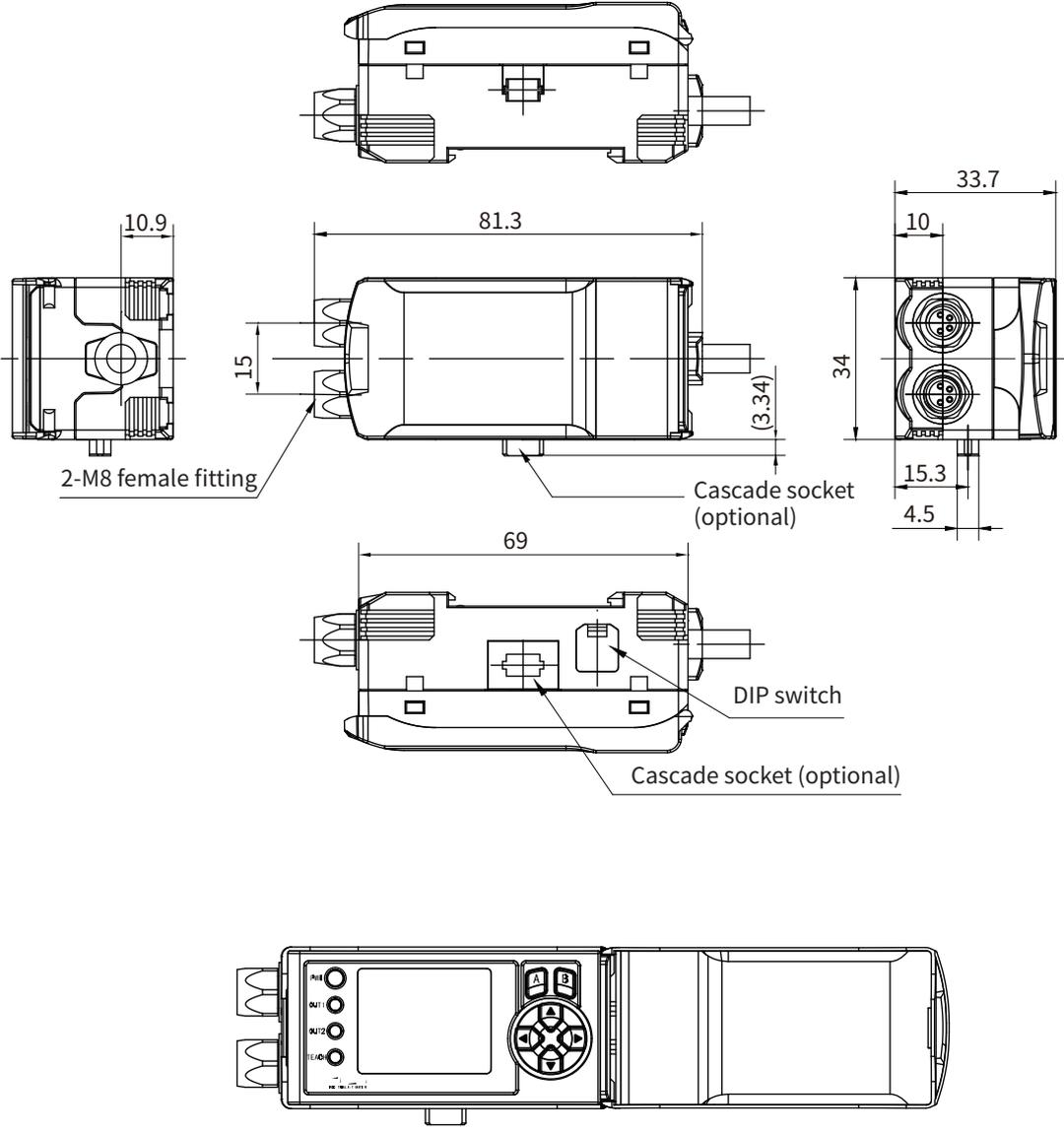
Type:

Type	Output	Sensor connection	Sensor communication	Number of induction head connections	Connection
OSC1-UC2B6-Q8/485	NPN/PNP+485	M8 connector, 4-pin	RS-485	MAX.2	2m cable
OSC1-TC2B6-Q8/485	NPN/PNP+485	M8 connector, 4-pin	RS-485	MAX.2	2m cable
OSC1-TC2BLIU6-Q8	NPN/PNP+Analog mA/V	M8 connector, 4-pin	RS-485	MAX.2	2m cable

Technical Data:

Operating voltage	DC12~24V
Ripple voltage	≤10%
Supply current	< 120mA(DC12V)
Sensor connection	Max.2, M8 connector, 4-pin
Sensor communication	RS485
Output type	2 PNP/NPN optional, Max.100mA/DC24V, RS485 2 output analog current/voltage can be switched, current :4~20mA, voltage :0~10V
Protective circuit	Reverse polarity protection, short circuit protection, overload protection
Sensitivity	Button settings
Display features	Dot-matrix display Chinese/English optional
Indicator	Power indicator: green, output indicator: orange
Ambient temperature	-20...+50°C/35~85%RH (No condensation · freezing)
Storage temperature	-20...+60°C/35~85%RH (No condensation · freezing)
Shock resistance	Complex amplitude 1.5 mm 10 ... 50Hz (2hr X, Y,Z respectively)
Impact resistance	500m/S ² (50G) 3 times X, Y, Z respectively
Protection class	IP50
Housing material	PC

Dimensions:



Panel view

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