TECHNICAL DATA SHEET

SAFETY LOCKING DEVICE
OX-W2 series

For Illustration purposes only

Contents

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Orbital Mekatronik Systems Pvt. Ltd.
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Product Features

- The safety door switch with locking function can ensure that the safety protection device door and other protective covers remain in a safe state even if the dangerous state is not eliminated.

OX-W2 series

Metal head

4 sets of gold plated contacts

14 contact combinations

Locking force 1300N

Indicator light+emergency unlocking

Optional back unlocking function

Adapted to 7 types of operation keys

Suitable for monitoring safety doors and windows

High strength wear-resistant engineering plastic with built-in 304 stainless steel components

Forced mechanical interlocking self detection structure with extremely high reliability

Product application

Used for monitoring places such as safety doors and windows, in accordance with EN14119 and GB/T18831.

- **Automated production line**
- **Robot production line**
- **Hazard testing area**
- **Isolation places, etc**

Technical data

Electrical parameters		
Rated voltage	24VDC	
Rated current	1mA	
Light source color	green	
Rated working voltage	DC24V±10%	
Rated current	200mA (initial value)	
Rated power	4.8W	
Rated insulation voltage (Ui)	300V	
Rated impulse withstand voltage (Uimp)	2.5kV	
Rated open thermal current (Ith)	10A	
Rated limited short-circuit current	1000A	
Use category	AC-15	DC-13
Rated working voltage (Ue)	240V	30V
Rated operating current (Ie)	3A	2.3A

Mechanical parameters	
Dimensions (w*h*l)	39*39.4*183mm
Insulation class	Class B (130℃)
Shell material	PA66 flame retardant
Contact material	Gold Plated Silver Alloy
Protection level	IP67 (EN60947-5-1, except key operation hole)
Service life	Mechanical more than 1 million times Electric appliances more than 150,000 times
Tensile strength when locked	1300N
Forced disengagement force	≥80N
Forced breakaway distance	≥10mm
Allowable operating speed	0.05-0.5m/s
Allowable operating frequency	Up to 20 operations/min

Environmental data	
Ambient temperature	-20 ℃~60 ℃, without freezing
Environment humidity	Below 85% RH

Electrical wiring

1.Function and purpose

The use of safety door locks to monitor the status of safety doors can ensure reliable shutdown of equipment.

2.Connection example

The safety door lock can be connected to the safety relay to form a high-level safety circuit.
Used to control reliable stopping and starting f equipment.

Model Selection

OX-W2 | CO | / | CO | - | G | C | J

- J: Metal head; S: Plastic head
- C: Mechanical locking and electromagnetic unlocking;
  D: Electromagnetic locking, power outage unlocking
- G: M20
  X: Comes with a connecting cable (default cable is 1.5m,
  other lengths can be customized by contacting customer service)
- Lock status monitoring output: CO: (1NC+1NO); 2C: (2NC) (default 1 is empty)
- Insert ey monitoring output: CO: (1NC+1NO); 2C: (2NC) (default 1 is empty)
- Product model: OX-W2

● The following wiring diagram shows inser ing the operation key and being in the lock state

Model	Contact type		Wiring diagram		Contact action
	Door monitoring+lock monitoring		Door monitoring	Lock monitoring	■ : ON □ : OFF
				E2 (+) E1 (-)	Operating the key Fully inserted → Trip → Operating the key Pulling out
OX-W2-CO/CO-GD-J OX-W2-CO/CO-GC-J	1NC+1NO	1NC+1NO	11-12, 43-44	21-22, 33-34	Locked position 11--12 21--22 33--34 43--44
OX-W2-CO/2C-GD-J OX-W2-CO/2C-GC-J	1NC+1NO	2NC	11-12, 33-34	21-22, 41-42	Locked position 11--12 21--22 33--34 41--42
OX-W2-2C/CO-GD-J OX-W2-2C/CO-GC-J	2NC	1NC+1NO	11-12, 31-32	21-22, 43-44	Locked position 11--12 21--22 31--32 43--44
OX-W2-2C/2C-GD-J OX-W2-2C/2C-GC-J	2NC	2NC	11-12, 31-32	21-22, 41-42	Locked position 11--12 21--22 31--32 41--42
OX-W2-C/2OC-GD-J OX-W2-C2O/C-GC-J	1NC+2NO	1NC	11-12, 33-34, 43-44	21-22	Locked position 11--12 21--22 33--34 43--44
OX-W2-3C/C-GD-J OX-W2-3C/C-GC-J	3NC	1NC	11-12, 31-32, 41-42	21-22	Locked position 11--12 21--22 31--32 41--42
OX-W2-2C/OC-GD-J OX-W2-2CO/C-GC-J	2NC+1NO	1NC	11-12, 33-34, 41-42	21-22	Locked position 11--12 21--22 33--34 41--42
OX-W2-C/3C-GD-J OX-W2-C/3C-GC-J	1NC	3NC	11-12	21-22, 31-32, 41-42	Locked position 11--12 21--22 31--32 41--42
OX-W2-C/C2O-GD-J OX-W2-C/C2O-GC-J	1NC	1NC+2NO	11-12	21-22, 33-34, 43-44	Locked position 11--12 21--22 33--34 43--44
OX-W2-C/2CO-GD-J OX-W2-C/2CO-GC-J	1NC	2NC+1NO	11-12	21-22, 33-34, 41-42	Locked position 11--12 21--22 33--34 41--42
OX-W2-O/3C-GD-J OX-W2-O/3C-GC-J	1NO	3NC	33-34	11-12, 21-22, 41-42	Locked position 11--12 21--22 33--34 41--42
OX-W2-O/2CO-GD-J OX-W2-O/2CO-GC-J	1NO	2NC+1NO	33-34	11-12, 21-22, 43-44	Locked position 11--12 21--22 33--34 43--44
OX-W2-2C/2O-GD-J OX-W2-2C/2O-GC-J	2NC	2NO	11-12, 31-32	23-24, 43-44	Locked position 11--12 23--24 31--32 43--44
OX-W2-2O/2C-GD-J OX-W2-2O/2C-GC-J	2NO	2NC	33-34, 43-44	11-12, 21-22	Locked position 11--12 21--22 33--34 43--44

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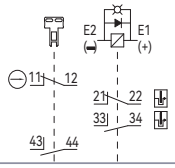
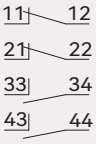
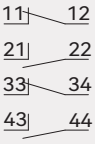
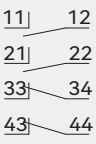
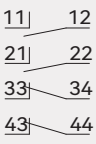
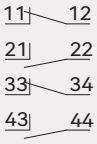
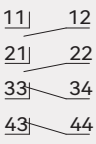
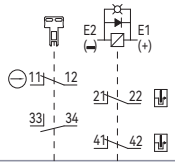
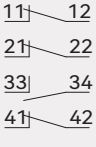
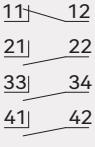
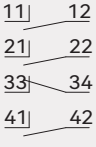
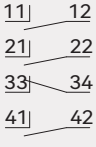
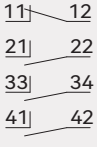
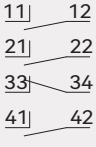
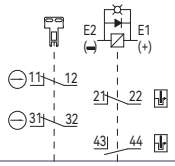
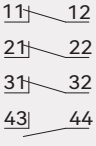
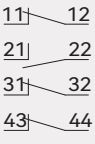
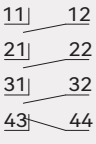
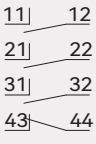
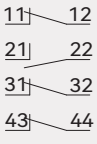
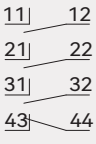
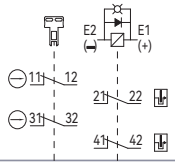
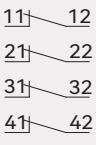
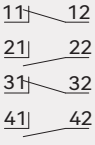
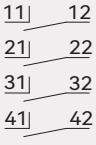
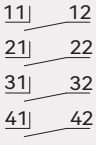
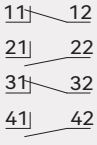
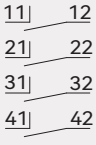
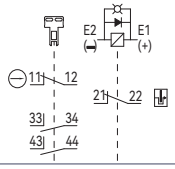
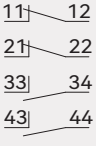
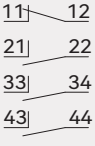
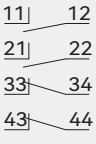
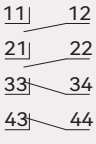
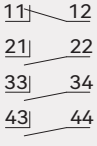
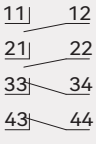
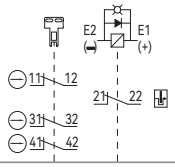
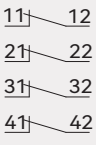
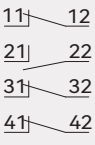
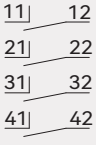
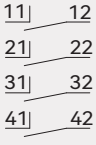
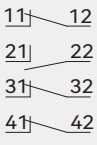
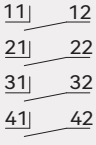
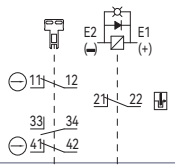
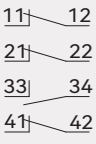
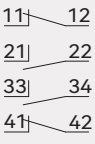
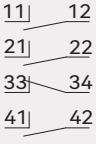
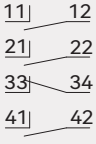
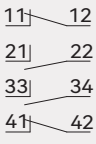
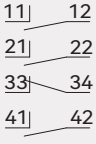
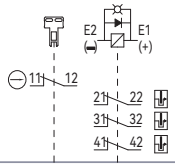
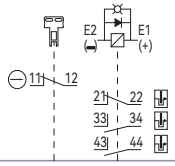
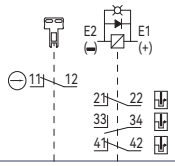
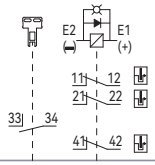
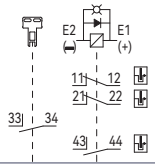
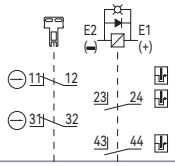
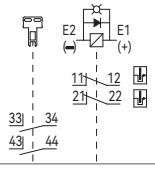
● Electromagnetic locking type

Safety door action status	State 1	State 2	State 3	State 4	When manually unlocking	
	OFF	OFF	ON	ON	OFF	ON
Electromagnet power supply	ON	OFF	ON	OFF	 or	
OX-W2-CO/CO-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-CO/2C-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-2C/CO-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-2C/2C-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-C/2OC-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-3C/C-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 
OX-W2-2C/OC-GD-J 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 	CIRCUIT DIAGRAM 

Note: After manual unlocking, the safety door is open, and do not apply voltage to the electromagnet for a long time.

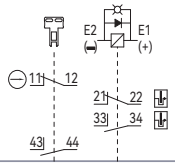
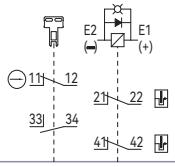
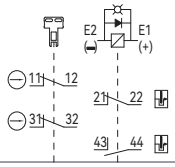
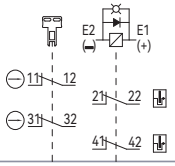
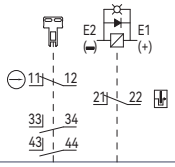
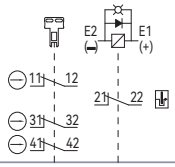
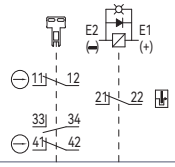
● Electromagnetic locking type

Safety door action status	State 1	State 2	State 3	State 4	When manually unlocking	
	OFF	OFF	ON	ON	OFF	ON
Electromagnet power supply	ON	OFF	ON	OFF	 or	
OX-W2-C/3C-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42
OX-W2-C/C2O-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-C/2CO-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42
OX-W2-O/3C-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42
OX-W2-O/2CO-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-2C/2O-GD-J 	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44
OX-W2-2O/2C-GD-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44

Note: After manual unlocking, the safety door is open, and do not apply voltage to the electromagnet for a long time.

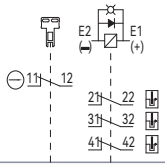
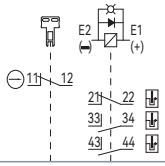
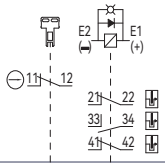
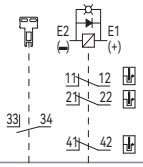
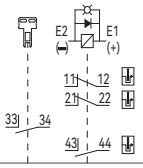
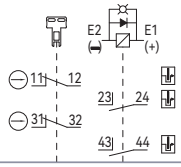
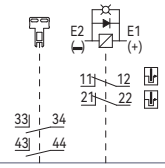
Orbital Mekatronik Systems Pvt. Ltd.
Unit No. 134 & 132, Building C7, Bhumi world, Mumbai Nashik highway, Pimplas, Bhiwandi-421302, Maharashtra, INDIA
● Tel:+91 2522 672359 ● Email: marketing@orbitalmekatronik.com ● Website: www.orbitalmekatronik.com

● Mechanical locking type

Safety door action status	State 1	State 2	State 3	State 4	When manually unlocking	
	OFF	OFF	ON	ON	OFF	ON
Electromagnet power supply	ON	OFF	ON	OFF	 or 	
OX-W2-CO/CO-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-CO/2C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42
OX-W2-2C/CO-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 43-44
OX-W2-2C/2C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42
OX-W2-C2O/C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-3C/C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42
OX-W2-2CO/C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42

Note: In case of emergency situations such as power outage and door action status before wiring and power on, the lock of the operating key can be manually released.

● Mechanical locking type

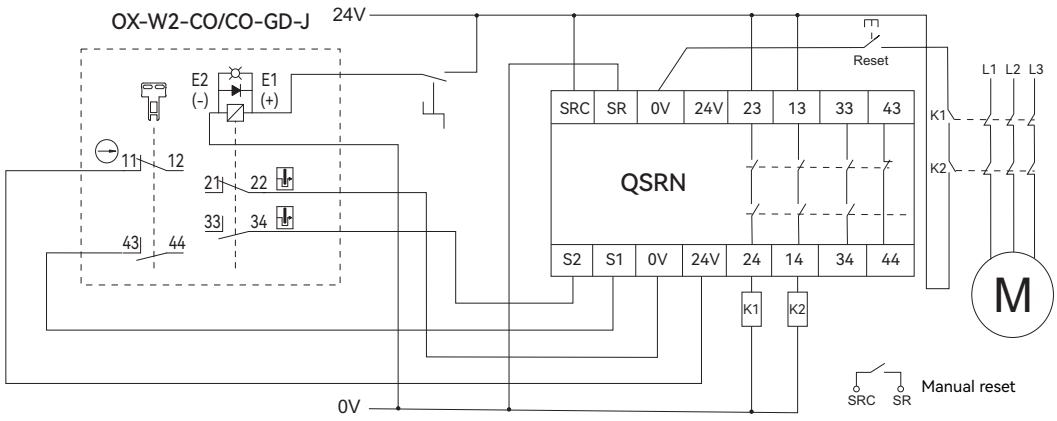
Safety door action status	State 1	State 2	State 3	State 4	When manually unlocking	
	OFF	OFF	ON	ON	OFF	ON
Electromagnet power supply	ON	OFF	ON	OFF	 or 	
OX-W2-C/3C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 31-32, 41-42
OX-W2-C/C2O-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-C/2CO-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42
OX-W2-O/3C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 41-42
OX-W2-O/2CO-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44
OX-W2-2C/2O-GC-J 	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44	CIRCUIT DIAGRAM 11-12, 23-24, 31-32, 43-44
OX-W2-2O/2C-GC-J 	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44	CIRCUIT DIAGRAM 11-12, 21-22, 33-34, 43-44

Note: In case of emergency situations such as power outage and door action status before wiring and power on, the lock of the operating key can be manually released.

● Selection of safety locking device connected to safety relay

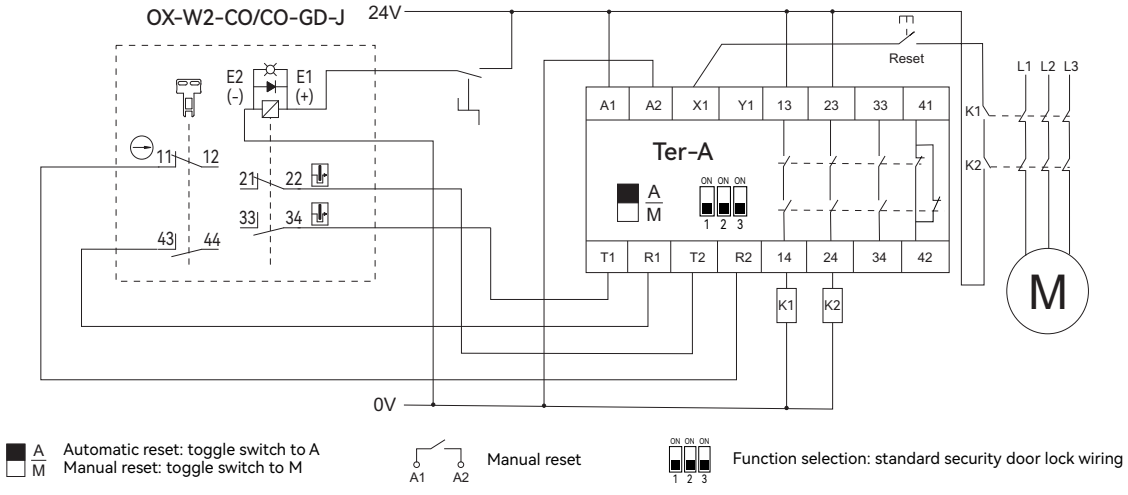
Name	Order separately	Model	Descriptions
Safety relay		QSRN	QSRN safety relays have three groups of NO and one group of NC, with strong control capabilities. They are suitable for various signal monitoring in industrial places with high safety requirements, including emergency stop signals, safety door opening and closing signals, safety light curtain signals, and two-handed button signals.
Safety relay	 Multifunctional switching switch	Ter-A	Equipped with a mode switch, it can be used for most safety components, such as light curtains, safety switches, carpet contacts, two handed switches, etc.Automatic/manual reset paddles for quick configuration.Dual channel monitoring circuit, safe and reliable.

1.An example of the wiring diagram between the safety door lock and QSRN is as follows:



This is an example wiring diagram of OX-W2-CO/CO-GD-J.

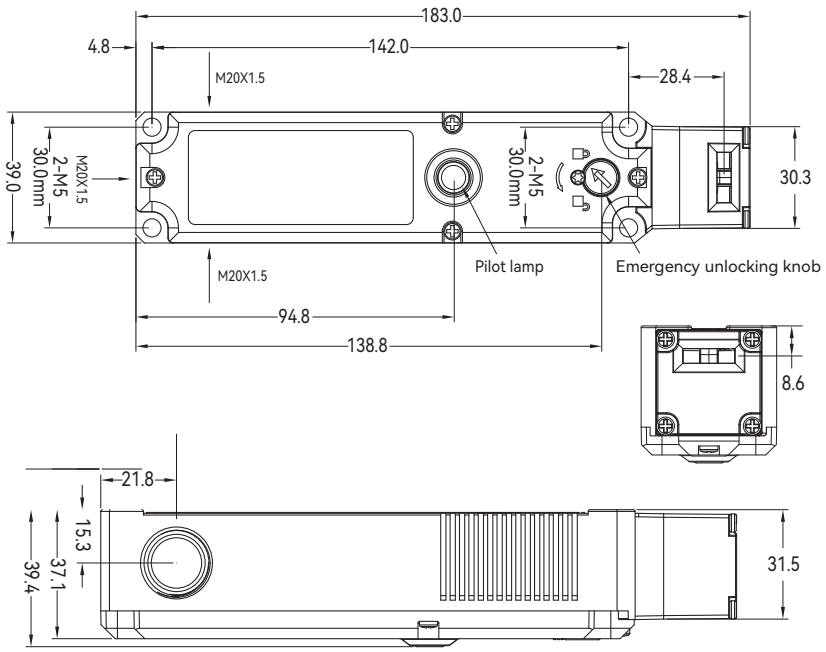
2.An example of the wiring diagram between the safety door lock and Ter-A is as follows:



This is an example wiring diagram of OX-W2-CO/CO-GD-J.

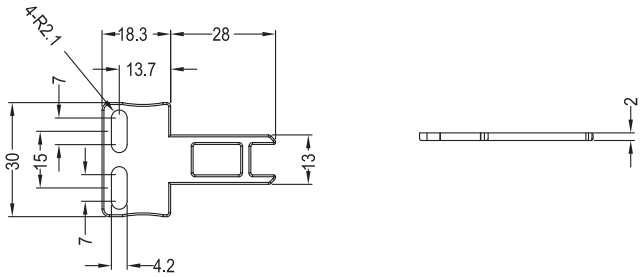
● Overall dimensions

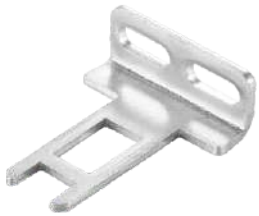
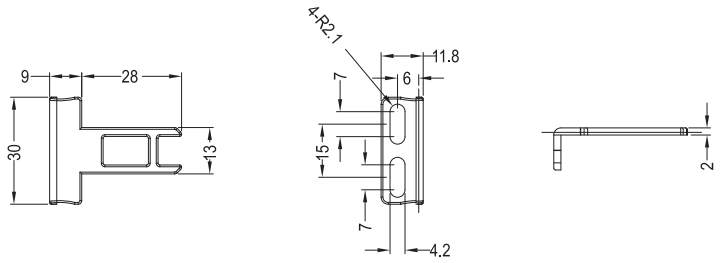
OX-W2 Series Lock Body Dimensional Drawing

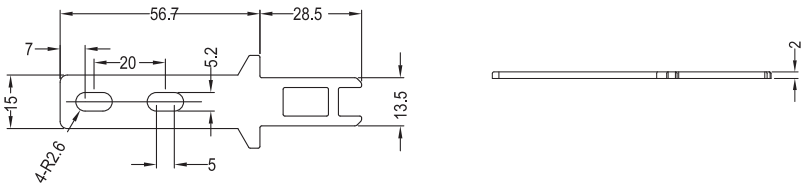


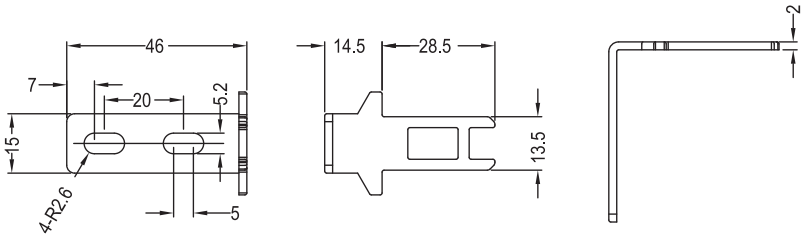
Unit: mm

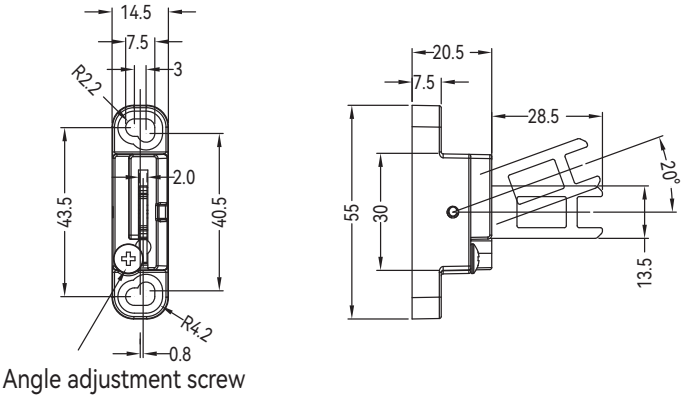
Accessories

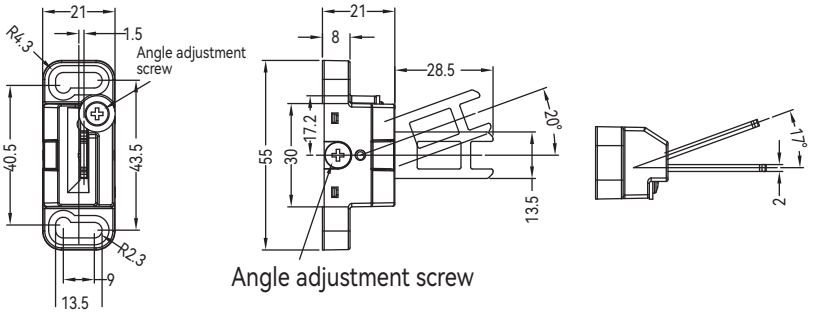
T-shaped operation key	OX-K1 operating key size diagram
 (Original accessories)	 Unit: mm

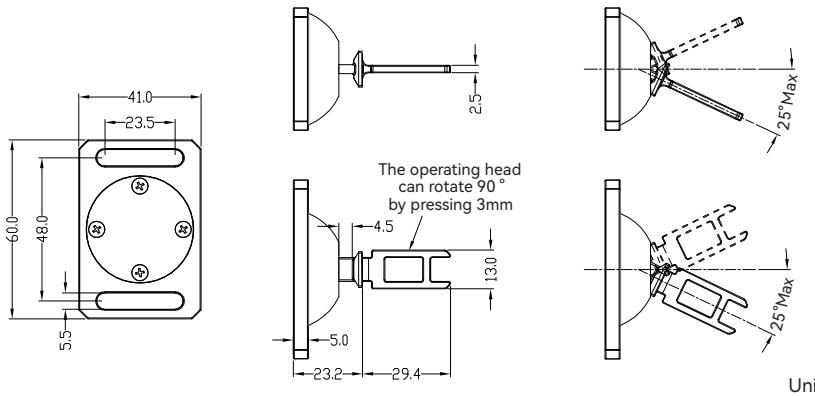
L-shaped operation key	OX-K2 operating key size diagram
 (Original accessories)	 Unit: mm

Long T-shaped operating key	OX-K3 operating key size diagram
 (Optional accessories)	 Unit: mm

Long L-shaped operating key	OX-K4 operating key size diagram
 (Optional accessories)	 Unit: mm

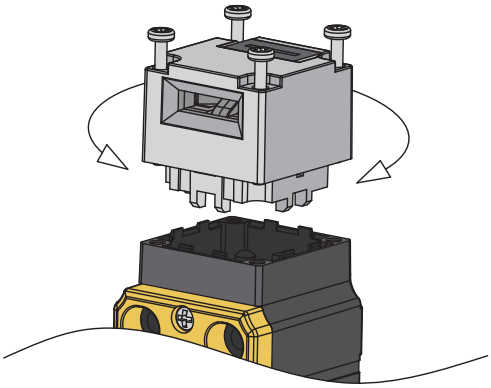
Horizontal adjustable operating key	OX-K5 operating key size diagram
 (Optional accessories)	 Unit: mm

Horizontal/vertical adjustable opeation key	OX-K6 operating key size diagram
 (Optional accessories)	 Unit: mm

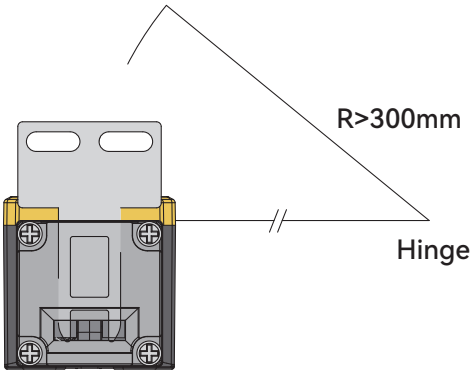
Horizontal/vertical adjustable opeation key	OX-K7 operating key size diagram
 (Optional accessories)	 Unit: mm

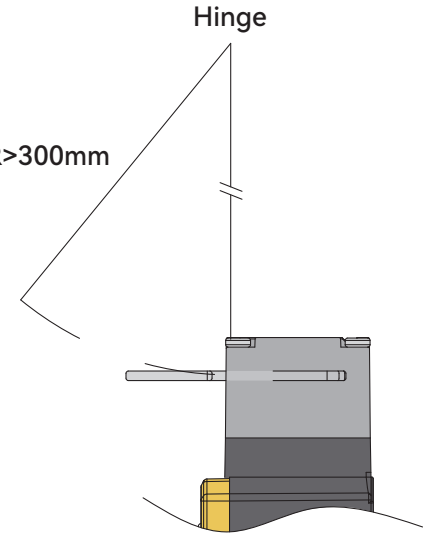
Installation diagram of OX-W2 operation key

- Loosen the four screws at the top of the head, rotate the head direction to select the appropriate operating keyhole position, and then proceed with installation.



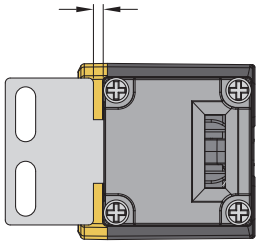
- When installed on a side hung door, it must be greater than the minimum radius.



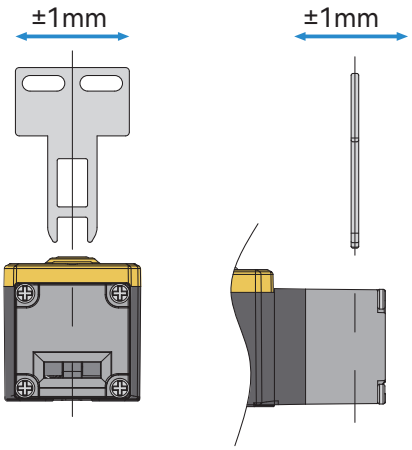


- Please install switches and operating keys within the prepared position range (1-3.5mm).

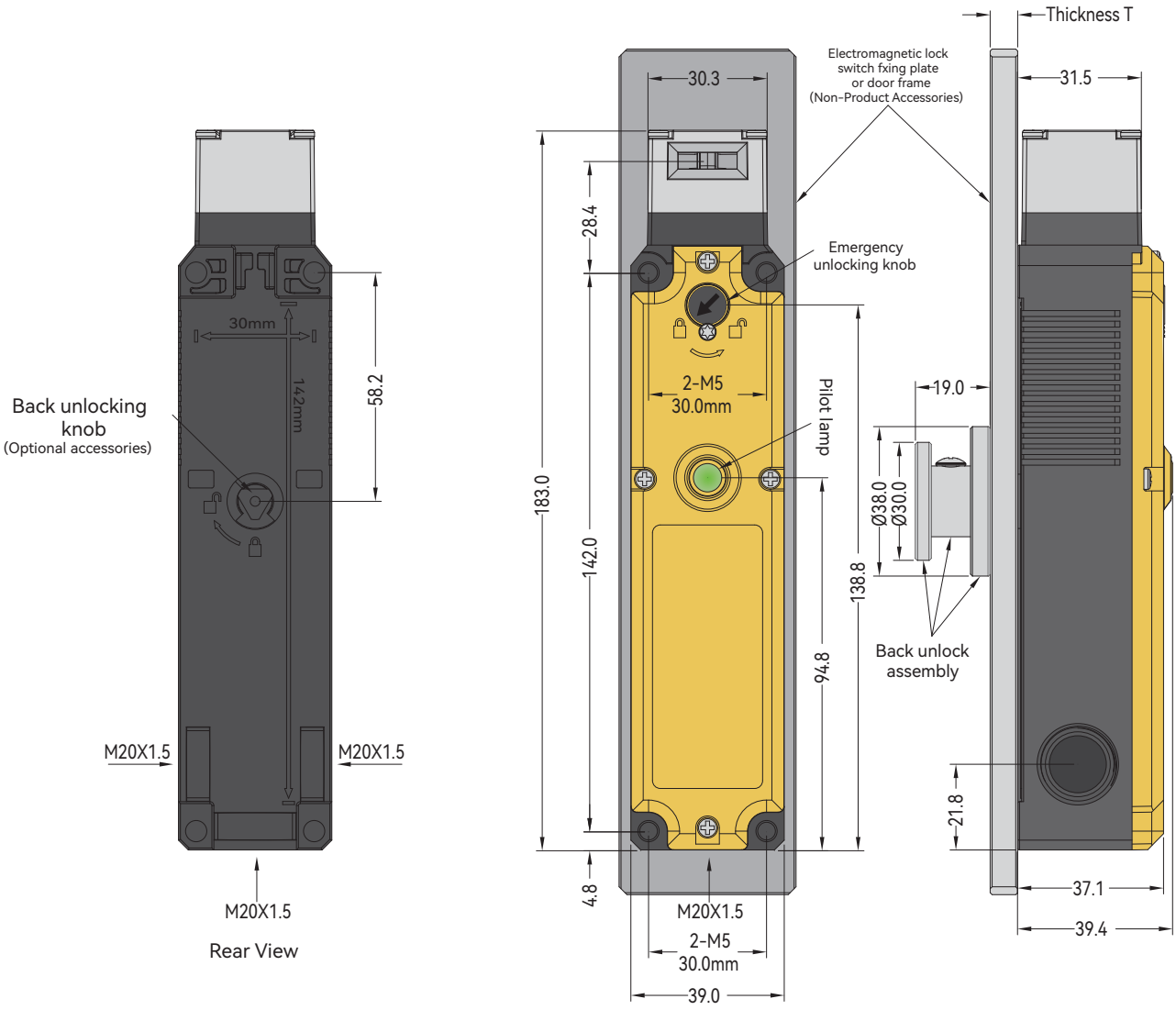
Ready position: 1.0~3.5mm

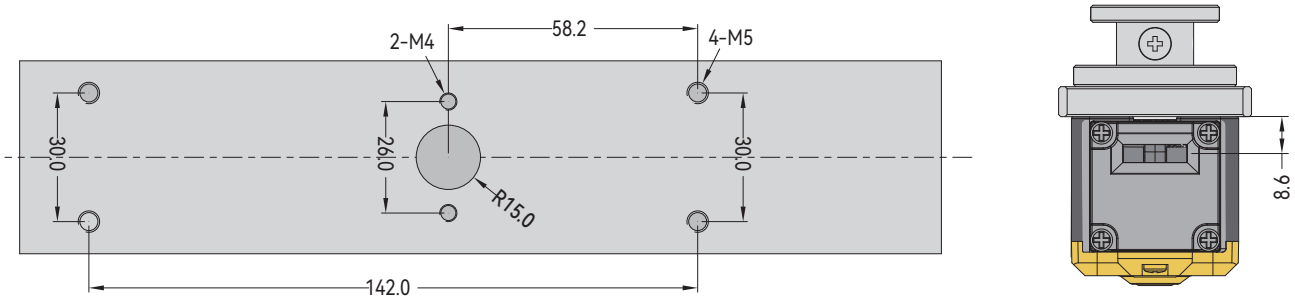


- The allowable error for the installation of the operating key is within ± 1mm of the center of the operating key inser ion hole.



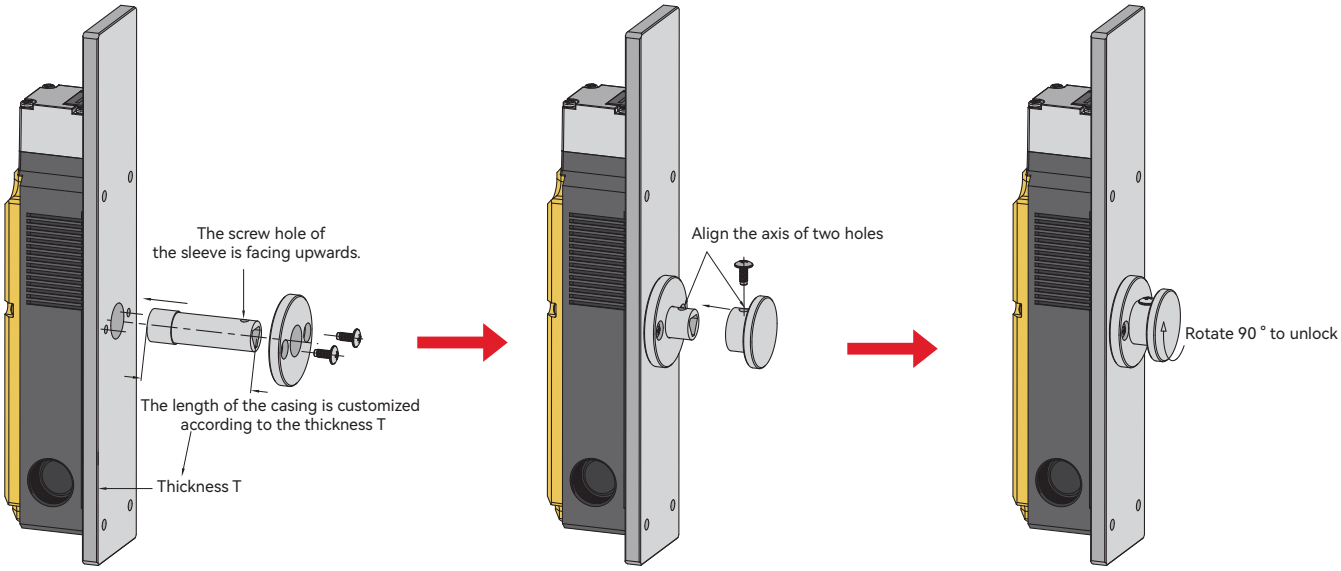
OX-W2 Installation diagram of back unlocking components





Opening Drawing of Switch Fixing Plate or Door Frame

Unit: mm



Step 1:

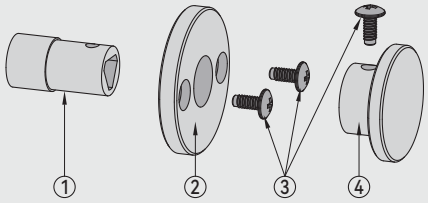
1. Install the electromagnetic lock switch onto the switch fixing plate or door frame first;
2. Thread the sleeve as shown in the figure through the switch fixing plate or door frame and insert it into the unlocking knob on the back of the electromagnetic lock switch;
3. Use M4 machine wire to install the sleeve limit plate onto the switch fixing plate or door frame.

Step 2:

1. Insert the metal knob into the sleeve and align it with the two hole axes;
2. Tighten with M4 screws.

Step 3:

1. The installation is completed as shown in the figure.
2. The metal knob can only be rotated clockwise by 90 °.



Back unlocking accessories

①Sleeve (length customized according to the thickness of the switch fixing plae or door frame)

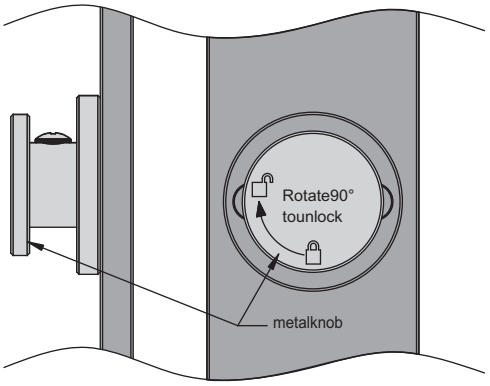
②Sleeve limit plate

③M4 machine thread (3 pieces)

④Metal knob

● Back unlocking knob

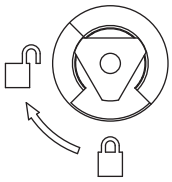
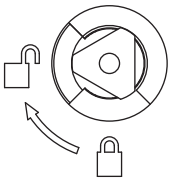
- The back unlocking knob is a safety measure for emergency evacuation when operators are accidentally trapped in a safety barrier (dangerous area).
- Rotate the 90 ° metal knob clockwise to release the lock and the door can be opened.
- If you need to restore the locked state, please turn the metal knob counterclockwise by 90 °. When the metal knob is in the unlocked position, even if the door is closed, the door cannot be locked.



● Precautions for unlocking the knob on the back:

- Please make sure to install the back unlocking knob in a safe barrier (hazardous area) where it can be operated.
- Please do not use tools or other tools to operate the back unlocking knob, or apply excessive force or force in a direction other than the operating direction, as well as beyond the rotation angle range, to avoid damage to the knob components and inability to operate.

● Emergency unlocking

Unlock screw type	Normal	Manual unlocking
Front unlocking		
Straight+Hexagram or cross		
Back unlocking		
Special knob+conduit		

- When dealing with power outages or emergencies, the emergency unlocking button can be manually operated.
- Before operating the emergency unlocking key, frst raise the inner Hexagram screw, otherwise the emergency unlocking key cannot be unlocked normally and will be damaged.
- When rotating the emergency unlocking button, it is necessaryto rotate it to the bottom, otherwise there is a risk of damaging the switch or not being able to operate normally.
- Please control the torque of the emergency unlocking key to below 0.2N. m, otherwise there is a risk of damage.
- After each use of the emergency unlocking button to unlock and handle an emergency situation, reset the emergency unlocking button. Otherwise, it may afect the normal locking function of the switch and potentially cause personal injury or safety accidents.
- Only device administrators can operate the emergency unlock button.

● Usage environment

1.Do not immerse the switch in oil or water, or use the switch in a position where it is continuously splashed with oil or water.

2.Otherwise, it may cause oil or water to enter the interior of the switch.

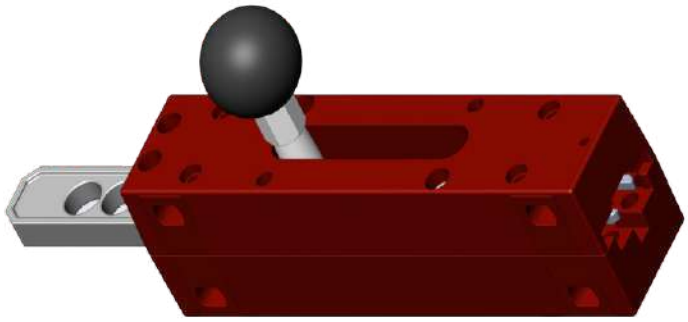
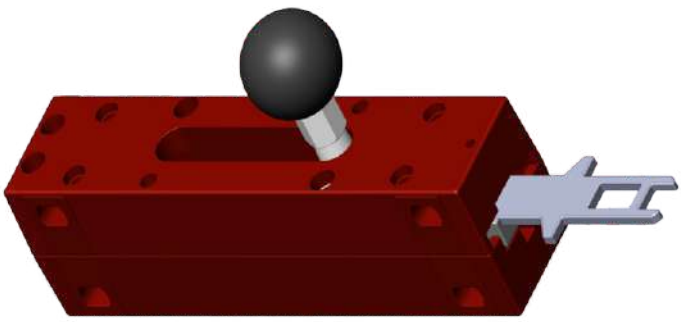
3.The IP67 protection level of the switch specifes the water innow after the switch is immersed in water for a certain period of time.

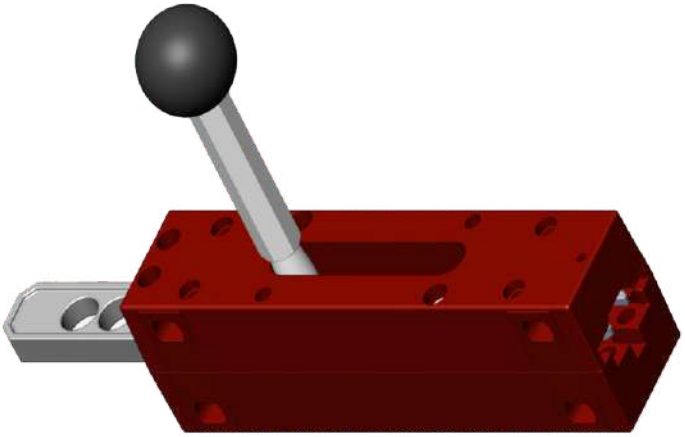
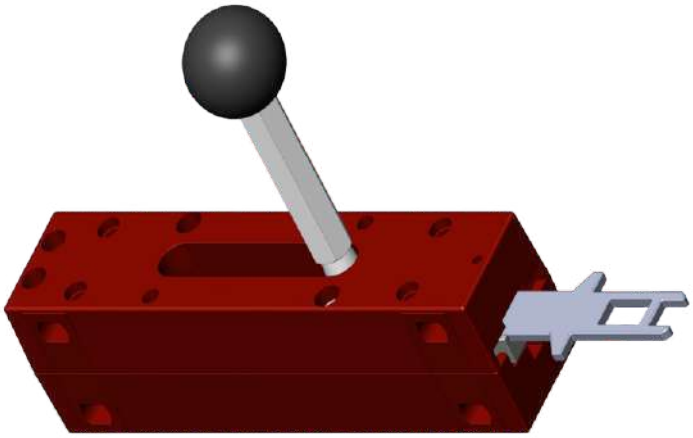
Safety door bolt

Performance data

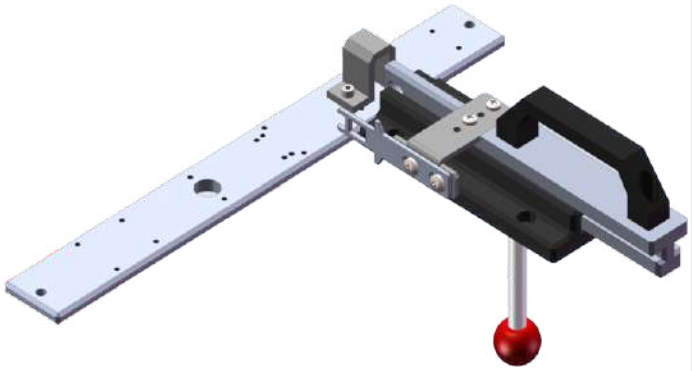
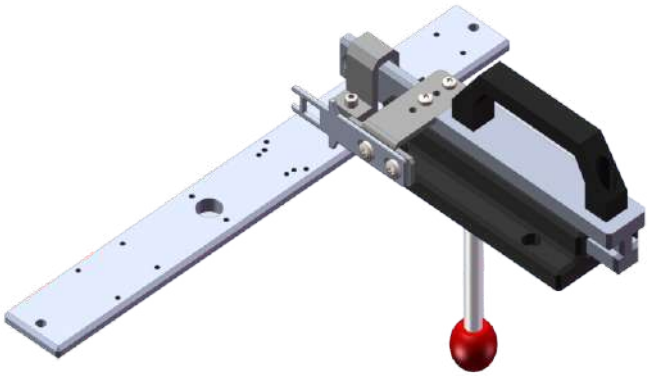
Model	OXSL-A-1	OXSL-A-2	OXSL-B-1	OXSL-B-2
Mechanical life	1 x 106 times		1 x 106 times	
Installation location	Doors or fences		Doors or fences	
Installation mode	Left or right		Left or right	
Base material	Zinc alloy		Aluminium alloy	
Slider material	Zinc alloy		Aluminium alloy	
Handle material	Stainless steel		Stainless steel	
Ball head material	Plastic		Plastic	
Weight	0.6kg		0.95kg	1.05kg

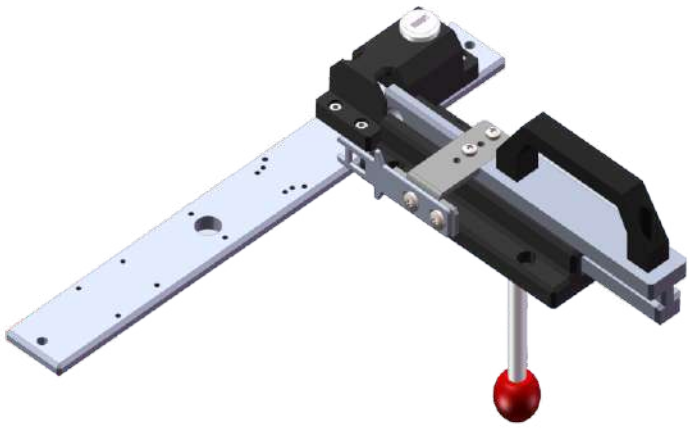
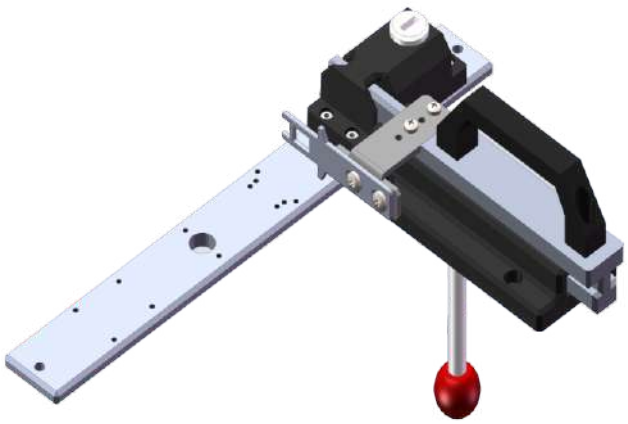
- **Appearance diagram**

OXSL-A-1	
	
(Order separately)	(Order separately)

OXSL-A-2	
	
(Order separately)	(Order separately)

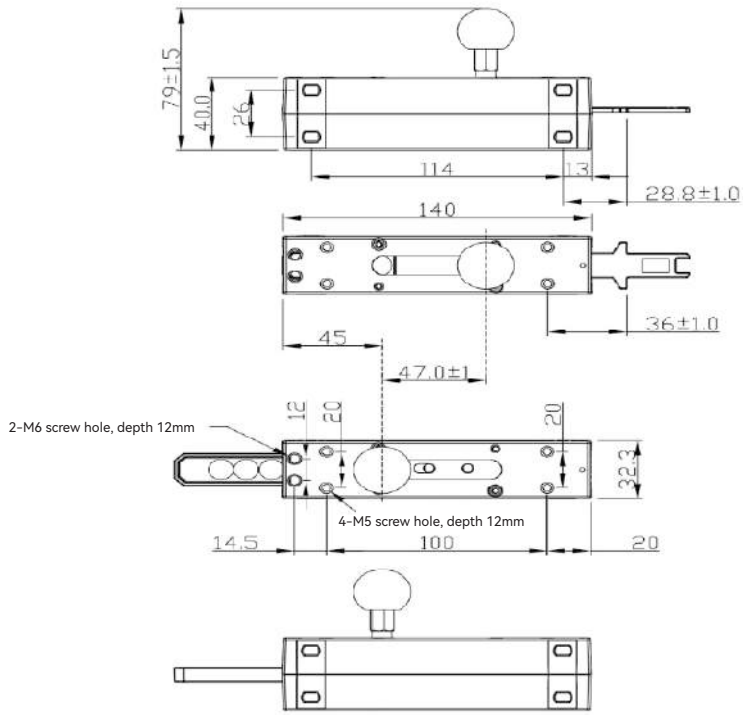
- Appearance diagram

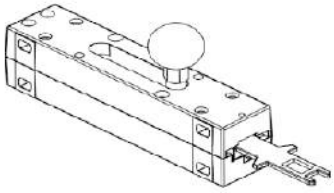
OXSL-B-1	
	
(Order separately)	(Order separately)

OXSL-B-2	
	
(Order separately)	(Order separately)

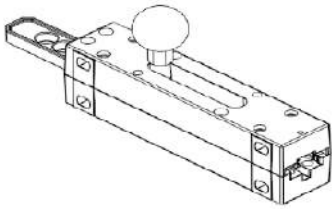
- Installation dimensions of safety door bolts

OXSL-A-1 installation dimensions





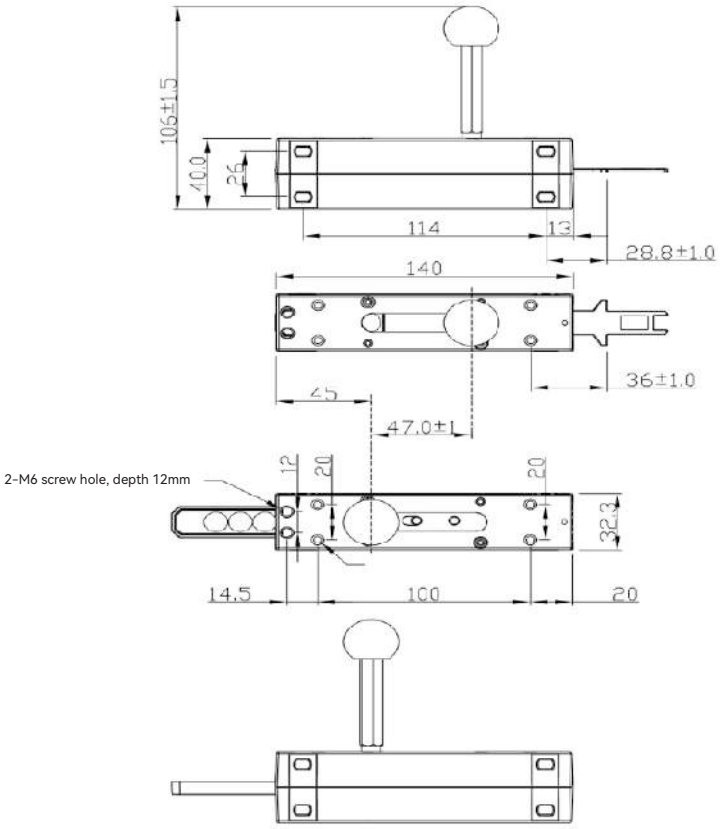
Pushing out the key

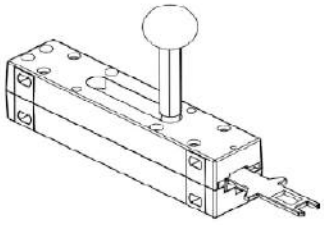


Retract key

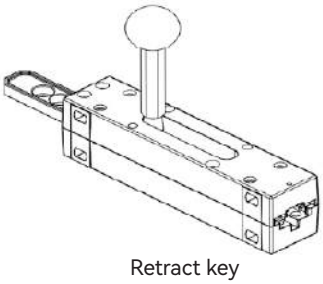
Unit: mm

OXSL-A-2 installation dimensions





Pushing out the key

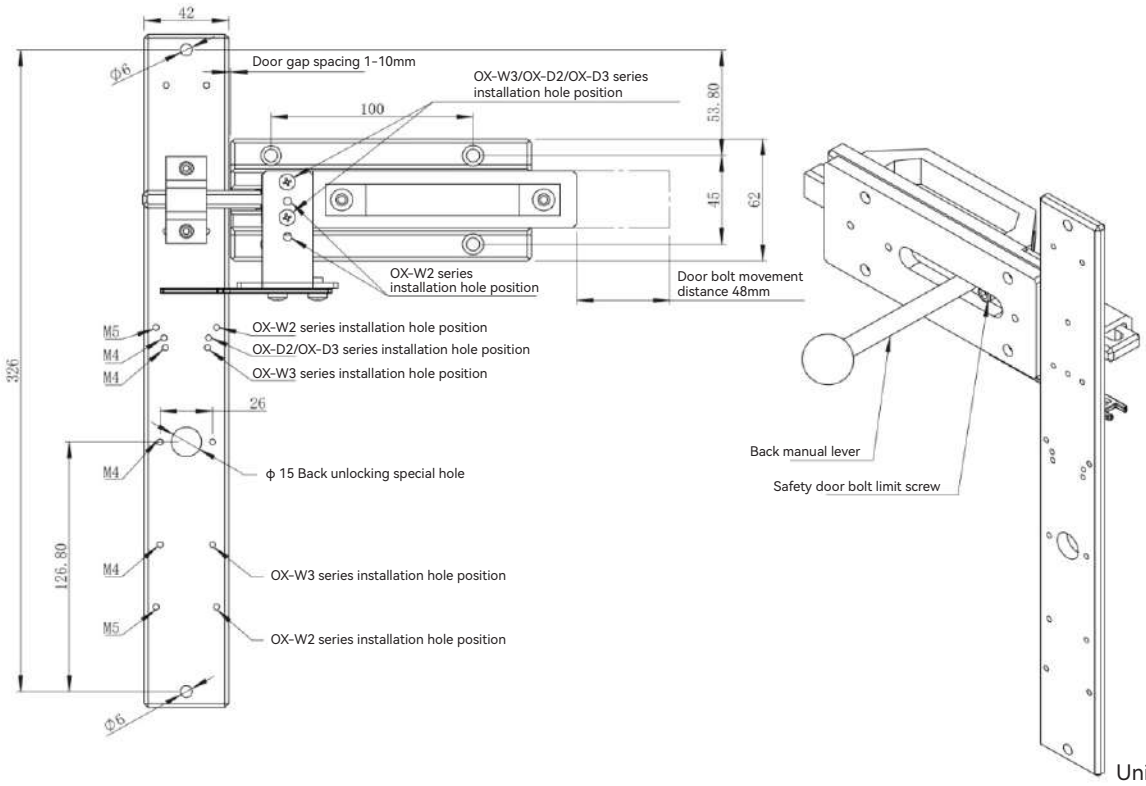


Retract key

Unit: mm

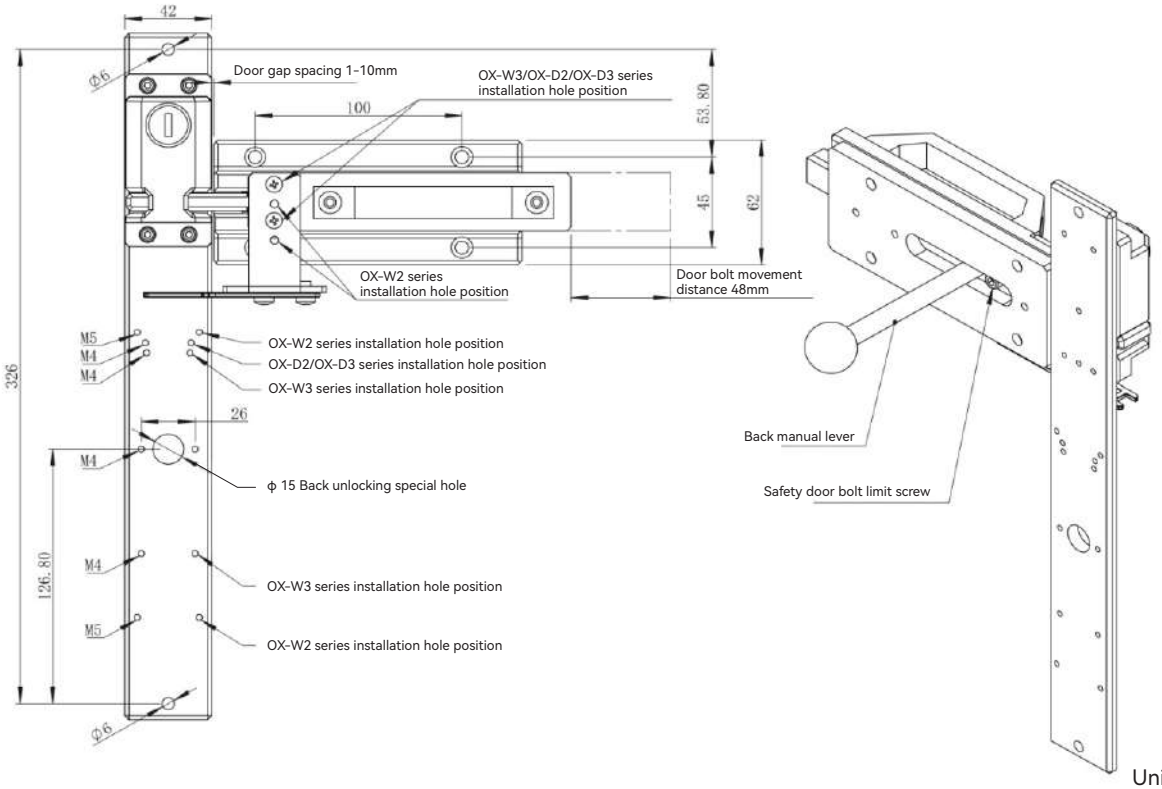
- Installation dimensions of safety door bolts

OXSL-B-1 installation dimensions



Unit: mm

OXSL-B-2 installation dimensions



Unit: mm