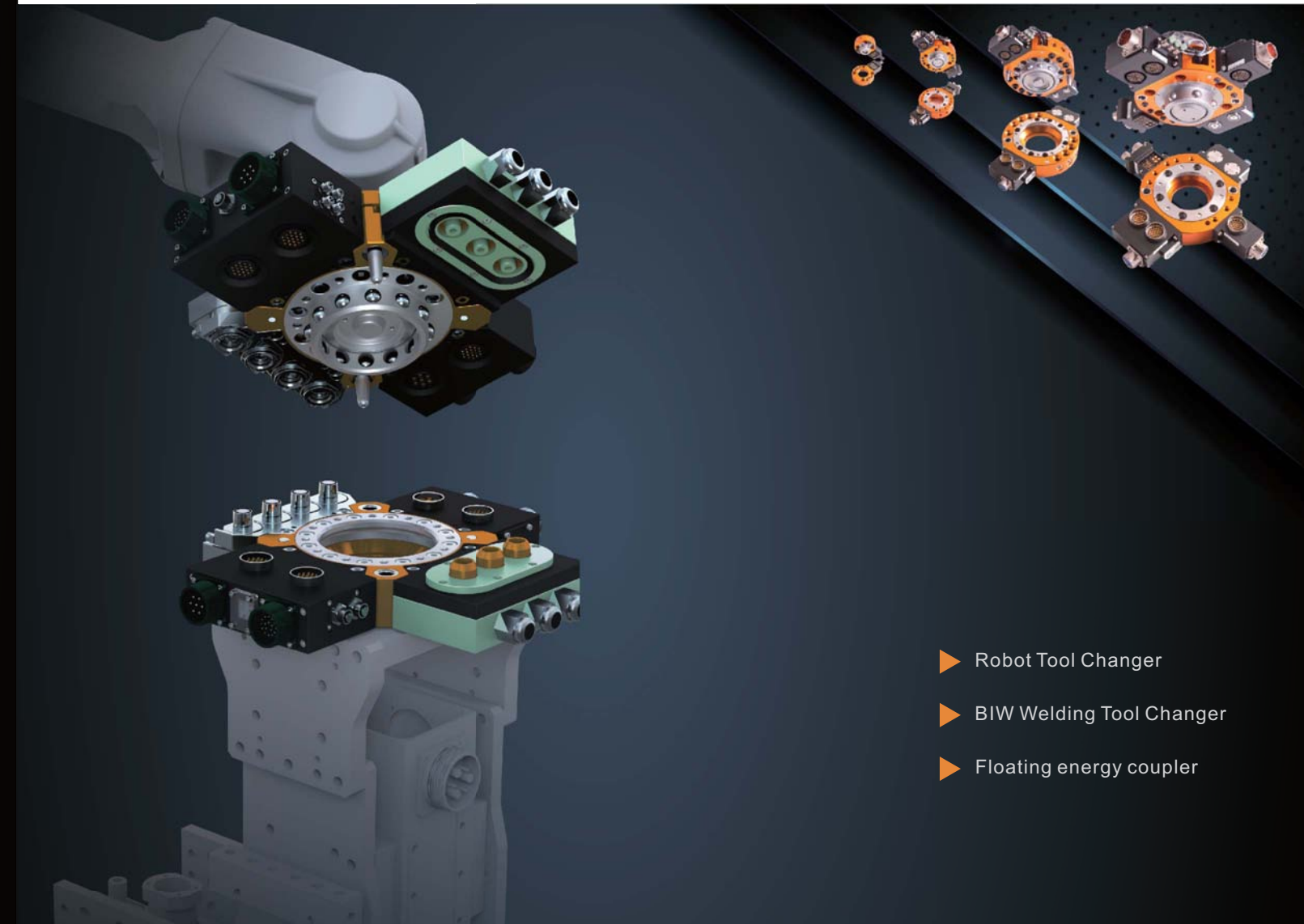




END OF ARM TOOLS

领航·机器人末端

Strive for excellence&Consistency



- ▶ Robot Tool Changer
- ▶ BIW Welding Tool Changer
- ▶ Floating energy coupler

Brochure 2021

Robot Tool Changer

Zhengzhou Linghang Robot Co.,Ltd.

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ZHENGZHOU LINGHANG ROBOT CO., LTD



END OF ARM TOOLS

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Zhengzhou Linghang Robot Co.,Ltd

national high-tech enterprise, Zhengzhou science and technology enterprises

AAA credit enterprise

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Content

04

About LT

06

System structure

08

LT tool changers

44

Locking mechanism

45

Floating energy coupler

46

Applications

51

Sales net

About LT

Linghang Robot specializes in production and sales of tool changing devices, flexible end clamps, automatic connection technology, and related products for worldwide market. We provide excellent productionsolutions for all manufacturers, to make them achieve high capacity, lower costs, more stable quality and automatic. Assist manufacturers to develop their business better.

Our customers are mainly from the automobile industry, and widely used in the fields of electronics, home appliances, construction, plastics, food, beverages, fibers, and household industries. Our products make the production of manufacturers more automatic,flexible and cost less.



High tech enterprise



ISO9001



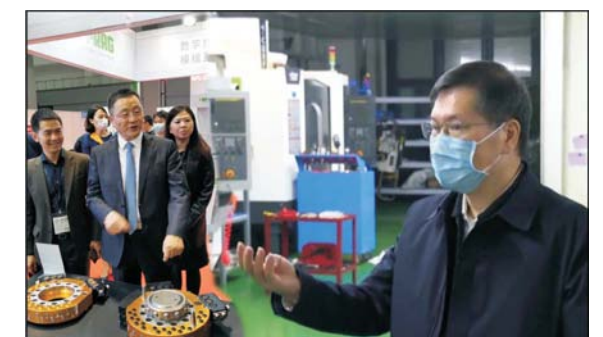
CE



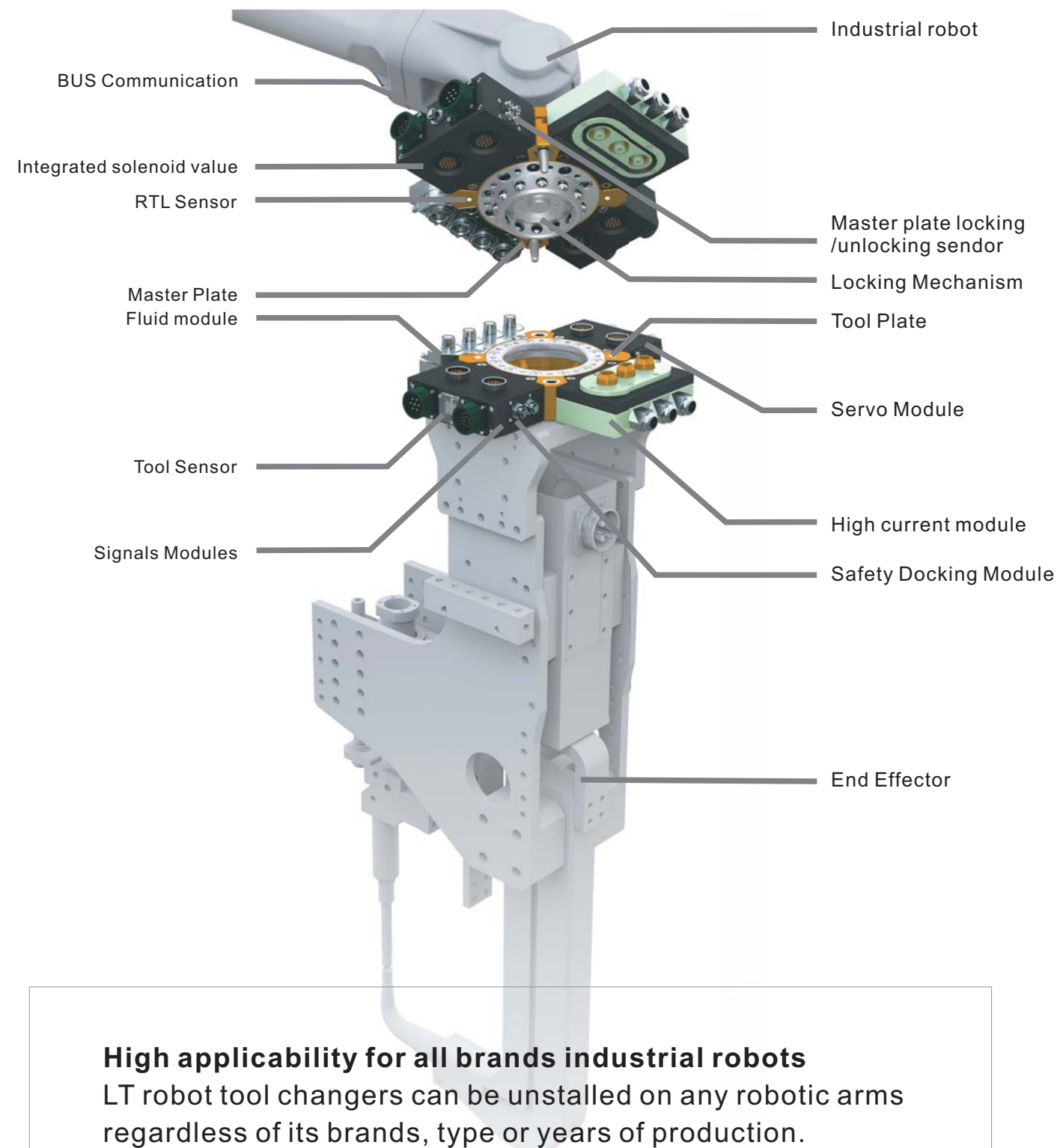
50 Patent certification

...

As the top manufacturer in China for Robot tool changer, we always give top priority to product quality, through technology and product innovation, we committed to providing customers with better solutions. Now ourproducts have been widely used in palletizing, transportation, vacuum, polishing, welding, laser, stamping, gluing, Ethernet, data acquisition and other industries.



System Structure:



High applicability for all brands industrial robots
LT robot tool changers can be uninstalled on any robotic arms regardless of its brands, type or years of production.

LT Tool Changers make the connections more safer!

LT Tool Changer adopts patent high strength alloy steel locking to ensure connection accuracy and safety; Rd connection technology makes power transmission more stable; Excellent welding tongs cooling water module ensures 1 million leak free connections.



Model : LTC-0005A

- Payload up to 5kg
- Locking force: 770N Allowable moment: 13.2nm (static)
Allowable torque: 18NM (static)
- 4*M5 Pneumatic port connections 1 module expansion mounting surface
- Suitable for Assembly, handling, etc
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not spearted

Parameter

Model	Master plate	LTC-0005AM
	Tool plate	LTC-0005AT
Load	Payload capacity	5kg
	Locking force	770N
	Allowable static moment	13.2N·m
	Allowable static torque	18N·m
Size and precision	Dimension	Φ46mm
	Combined thickness	30mm
	Position repeatability	±0.015mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60°C
	Humidity	0-95%
Weight	Master side	0.11kg
	Tool side	0.04kg
Air connector	Pneumatic port	4 x M5
	Max pressure	0.8Mpa

Optional modules



LMO-S08A
8pins signal module



LMO-S12A
12pins signal module

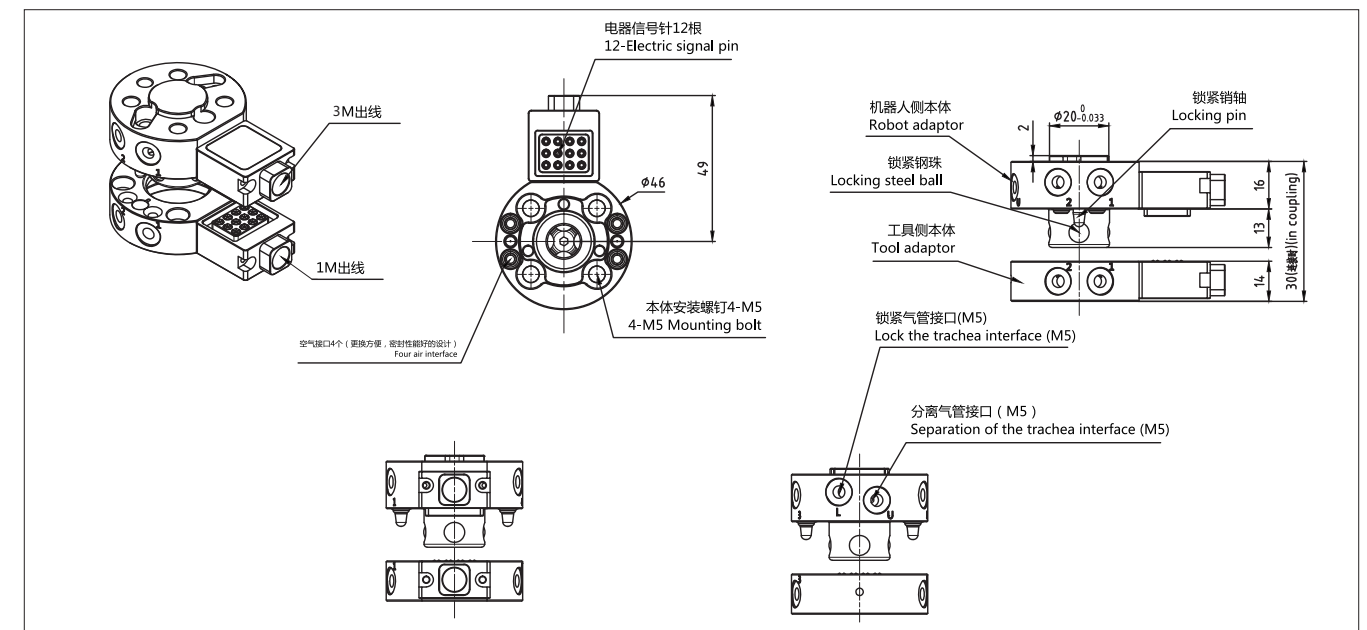


LMO-S12A*2
24pins signal module

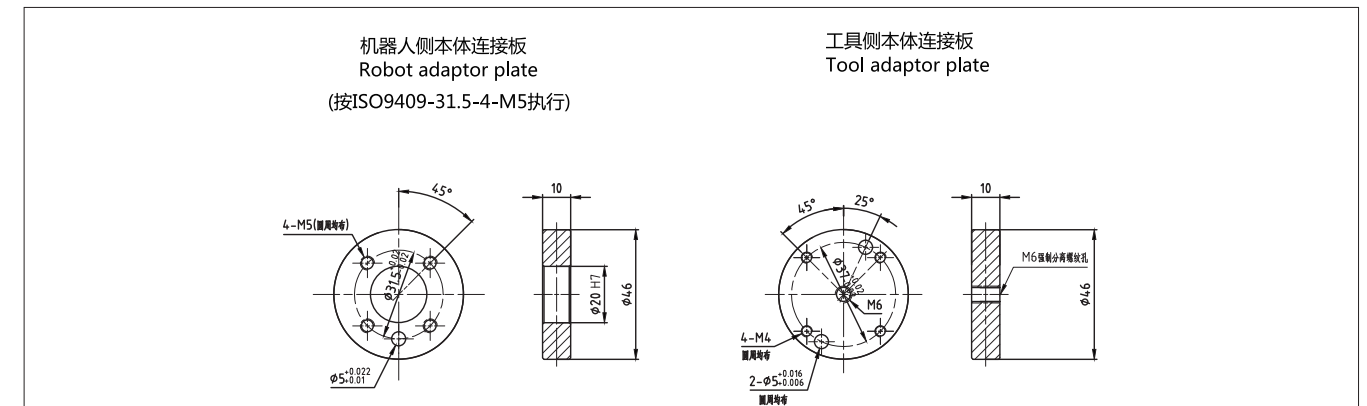
Call us for more
information



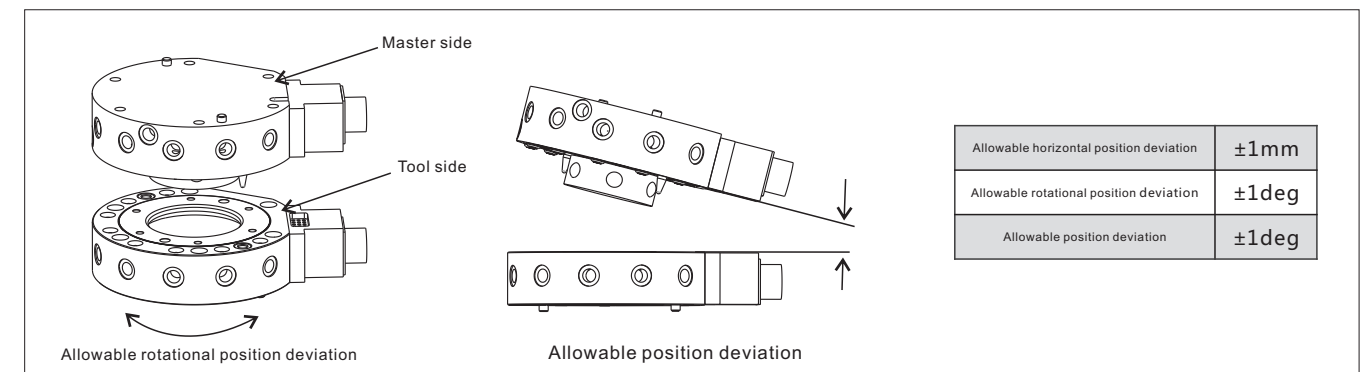
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending & torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0010E

- Payload up to 10kg
- Locking force: 1193N allowable Moment: 26.5Nm (static)
allowable torque: 35.7Nm (static)
- 4* M5 Pneumatic port and 2 module expansion mounting surface
- Suitable for Assembly, handling, etc
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0010EM
	Tool plate	LTC-0010ET
Load	Payload capacity	10kg
	Locking force	1193N
	Allowable static moment	26.5N·m
	Allowable static torque	35.7N·m
Size and precision	Dimension	Φ60mm
	Combined thickness	55mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	0.33kg
	Tool side	0.09kg
Air connector	Pneumatic port	4 x M5
	Max pressure	0.8Mpa

Optional modules



LMO-S08B
8pins signal module



LMO-S15C
15pins signal module



LMO-E04-S13
Electrical+signal module



LMO-SM20A
Servo Module



LMO-U02C
Single high frequency module



LMO-U04A
Double high frequency module



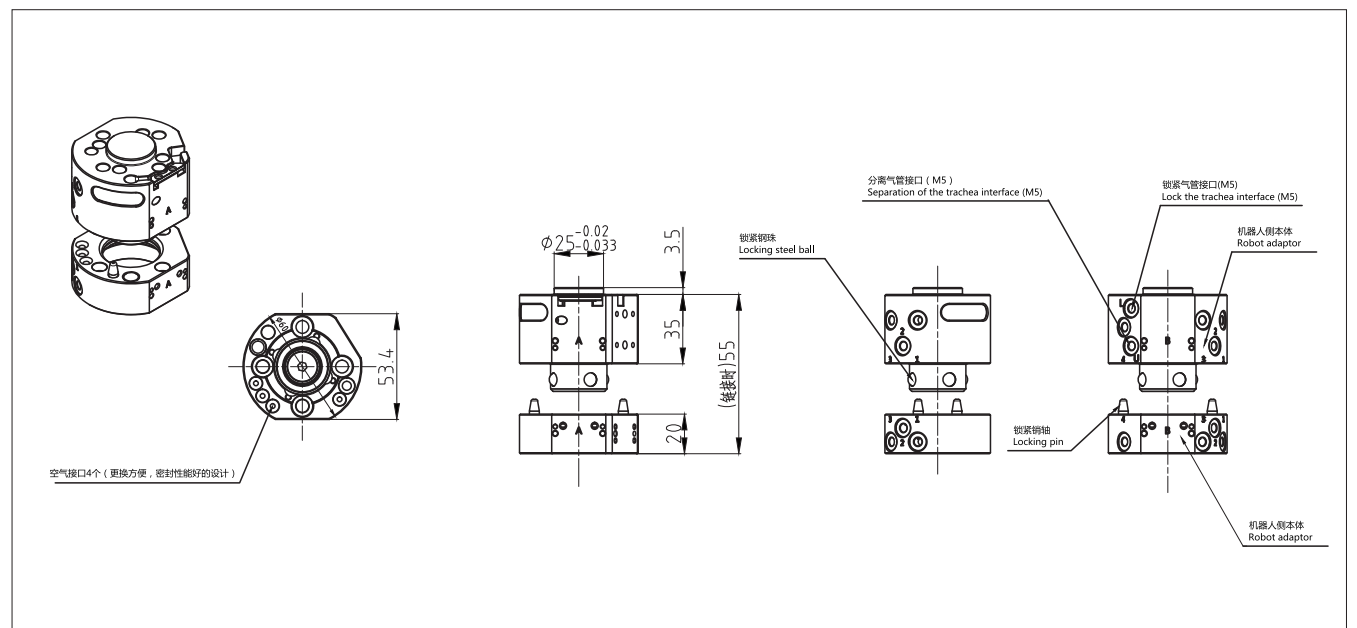
LMO-GC02B
2ways air supply modules



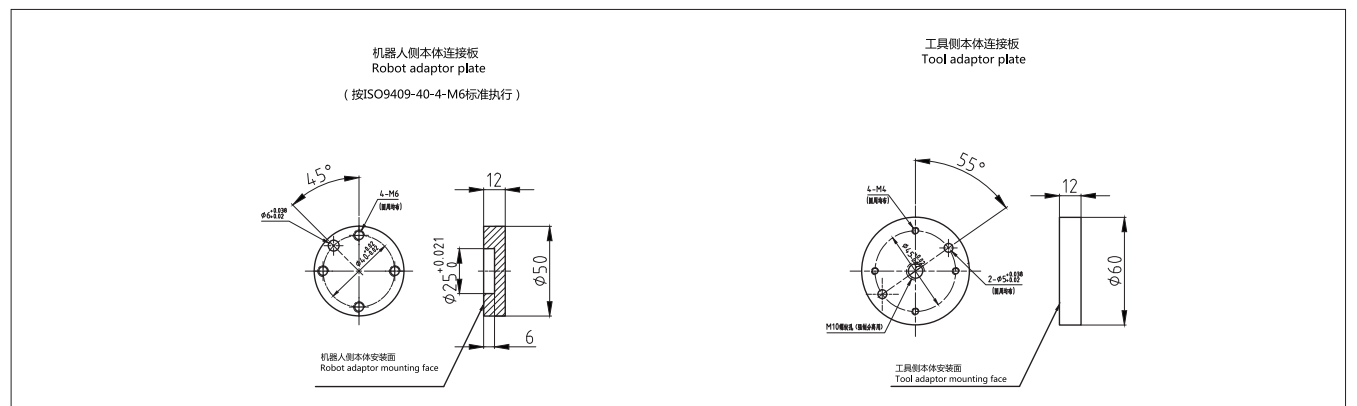
LMO-GC04B
4ways air supply modules

Call us for more information

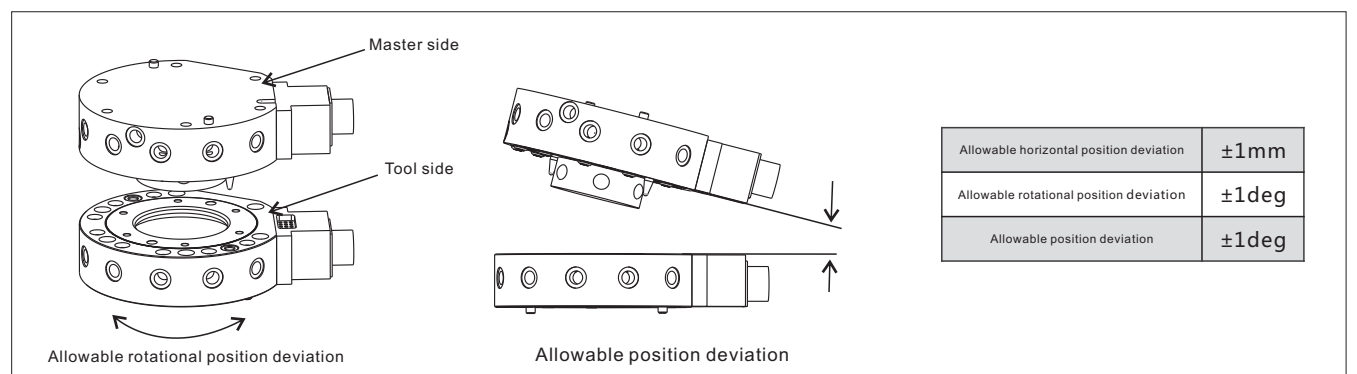
Outline drawing



Mounting drawing



Allowable deviations



Warning



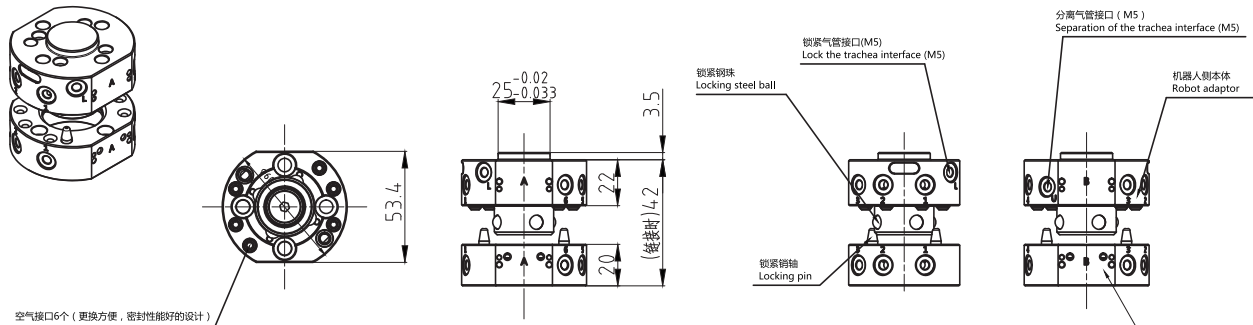
1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0010F

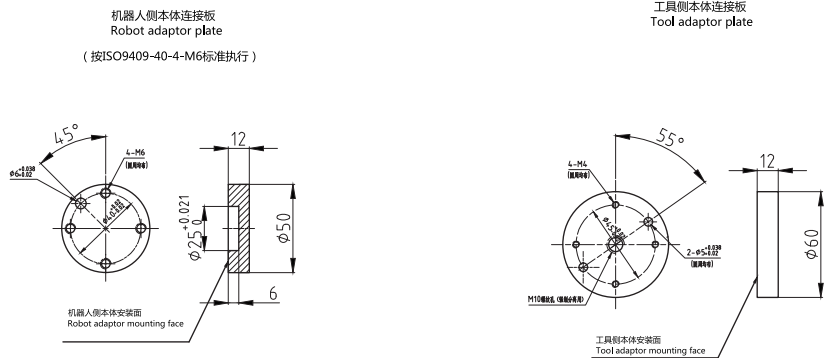
- Payload up to 10kg
- Locking force: 1193N allowable Moment: 26.5Nm (static) allowable torque: 35.7Nm (static)
- 6* M5 Pneumatic port and 2 module expansion mounting surface
- Suitable for Assembly, handling, etc
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated



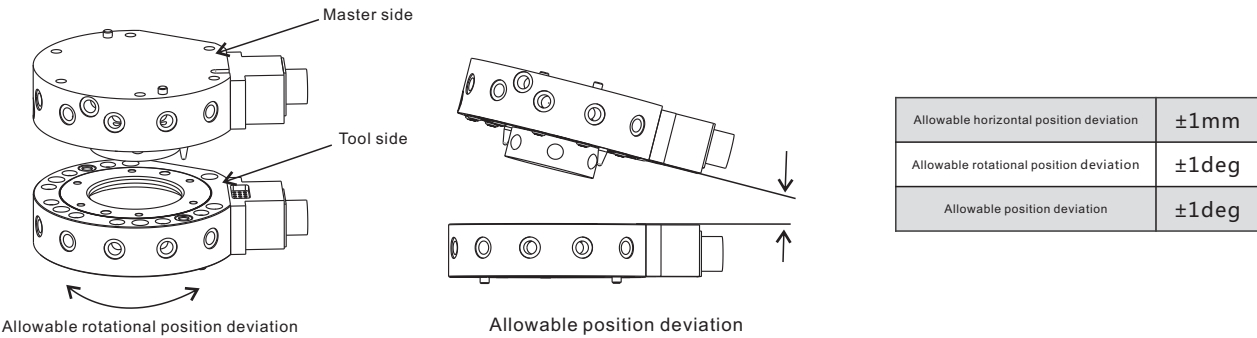
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Parameter

Model	Master plate	LTC-0010FM
	Tool plate	LTC-0010FT
Load	Payload capacity	10kg
	Locking force	1193N
	Allowable static moment	26.5N·m
	Allowable static torque	35.7N·m
Size and precision	Dimension	Φ60mm
	Combined thickness	42mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	0.24kg
	Tool side	0.09kg
Air connector	Pneumatic port	6 x M5
	Max pressure	0.8Mpa

Optional modules



LMO-S08B
8pins signal module



LMO-S15C
15pins signal module



LMO-E04-S13
Electrical+signal module



LMO-SM20A
Servo Module



LMO-U02C
Single high frequency module



LMO-U04A
Double high frequency module



LMO-GC02B
2ways air supply modules



LMO-GC04B
4ways air supply modules

Call us for more information

Model : LTC-0020D

- Payload up to 20kg
- Locking force: 2514N allowable Moment: 58.6Nm (static)
allowable torque: 80Nm (static)
- 12* M5 Pneumatic port and 4 module expansion mounting surface
- Used to Assembly, handling, Ultrasonic welding,etc
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0020DM
	Tool plate	LTC-0020DT
Load	Payload capacity	20kg
	Locking force	2514N
	Allowable static moment	58.6N·m
	Allowable static torque	80N·m
Size and precision	Dimension	Φ85mm
	Combined thickness	57mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60°C
	Humidity	0-95%
Weight	Master side	0.53kg
	Tool side	0.30kg
Air connector	Pneumatic port	12 x M5
	Max pressure	0.8Mpa

Optional modules



LMO-S08B
8pins signal module



LMO-S15C
15pins signal module



LMO-E04-S13
Electrical+signal module



LMO-SM20A
Servo Module



LMO-U02C
Single high frequency module



LMO-U04A
Double high frequency module



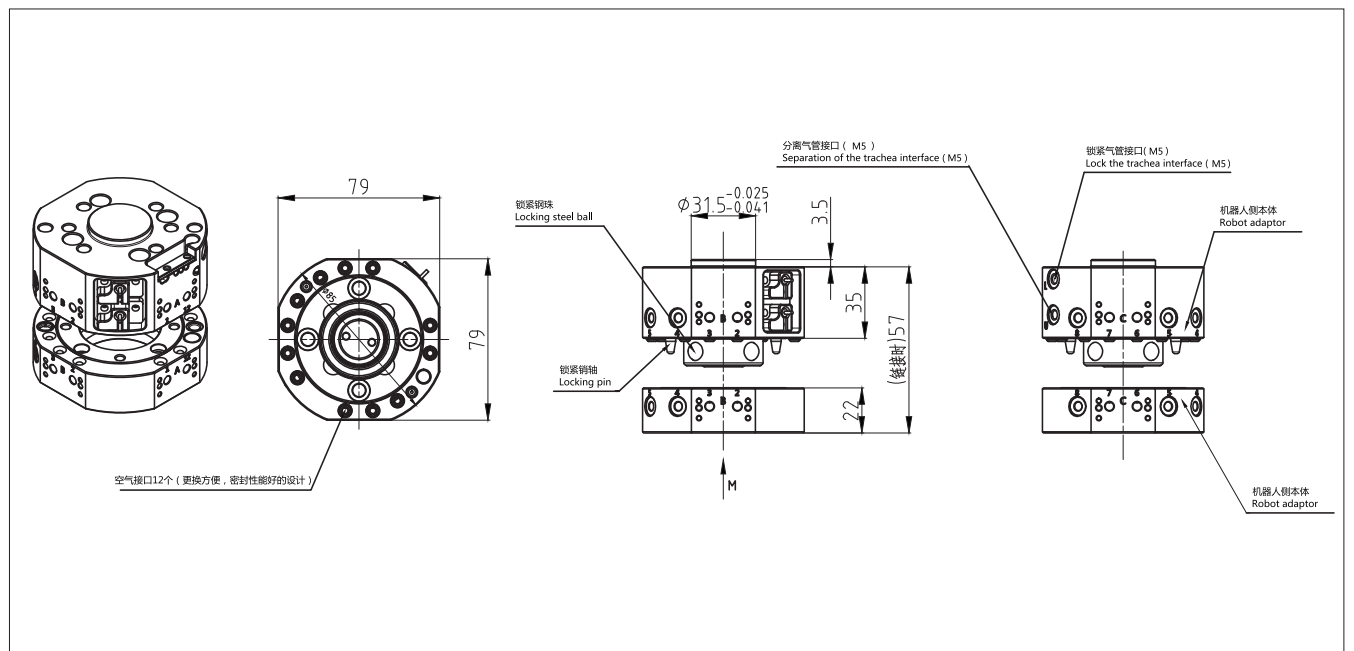
LMO-GC02B
2ways air supply modules



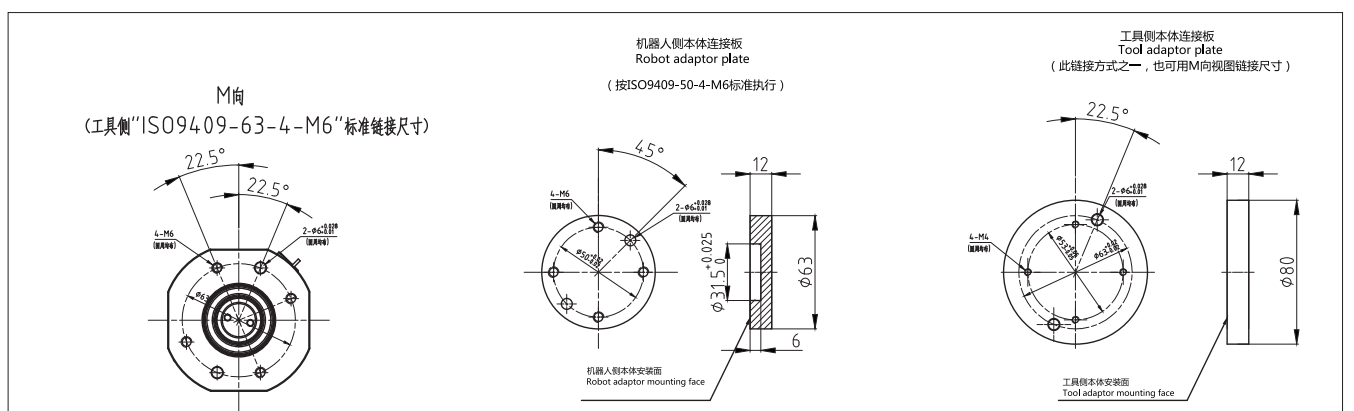
LMO-GC04B
4ways air supply modules

Call us for more
information

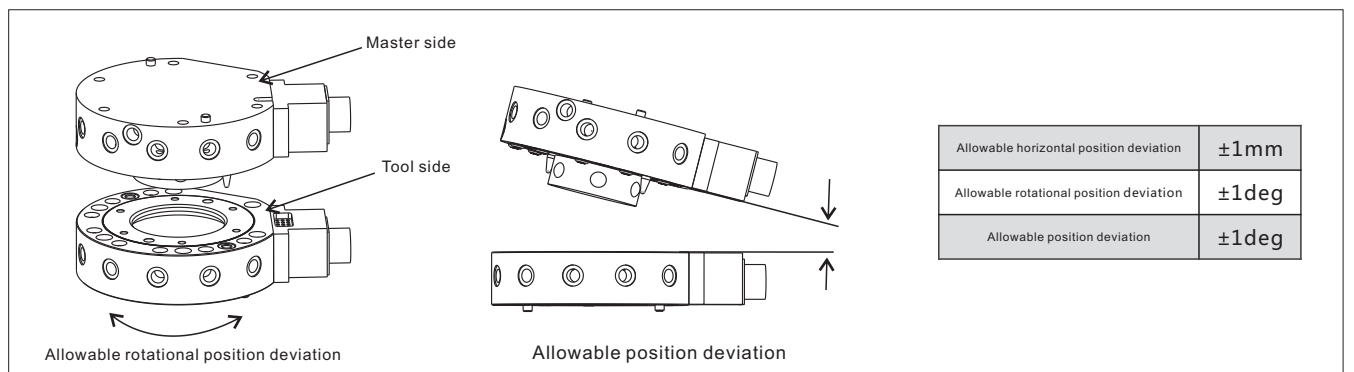
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0020E

- Payload up to 20kg
- Locking force: 2514N allowable Moment: 58.6Nm (static) allowable torque: 80Nm (static)
- 12* M5 Pneumatic port and 4 module expansion mounting surface
- Used to Assembly, handling, Ultrasonic welding,etc
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated



Parameter

Model	Master plate	LTC-0020EM
	Tool plate	LTC-0020ET
Load	Payload capacity	20kg
	Locking force	2514N
	Allowable static moment	58.6N·m
	Allowable static torque	80N·m
Size and precision	Dimension	Φ85mm
	Combined thickness	50.5mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60°C
	Humidity	0-95%
Weight	Master side	0.53kg
	Tool side	0.30kg
Air connector	Pneumatic port	12 x M5
	Max pressure	0.8Mpa

Optional modules



LMO-S08B
8pins signal module



LMO-S15C
15pins signal module



LMO-E04-S13
Electrical+signal module



LMO-SM20A
Servo Module



LMO-U02C
Single high frequency module



LMO-U04A
Double high frequency module



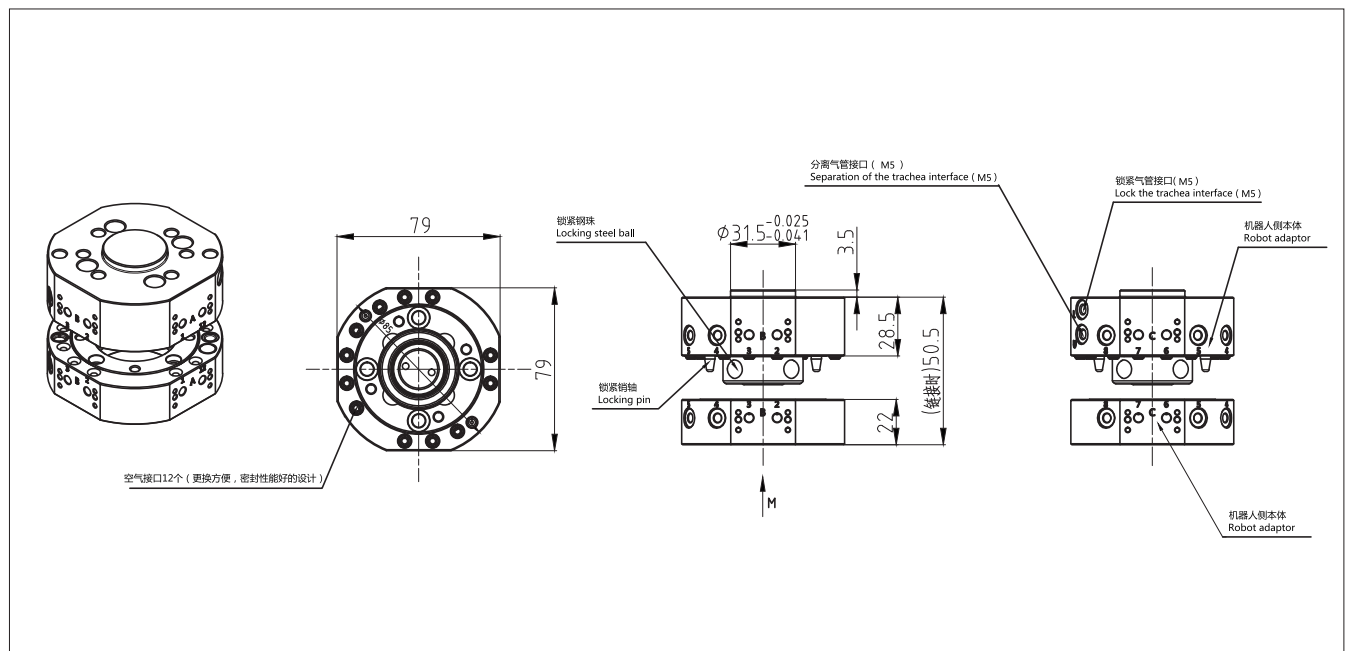
LMO-GC02B
2ways air supply modules



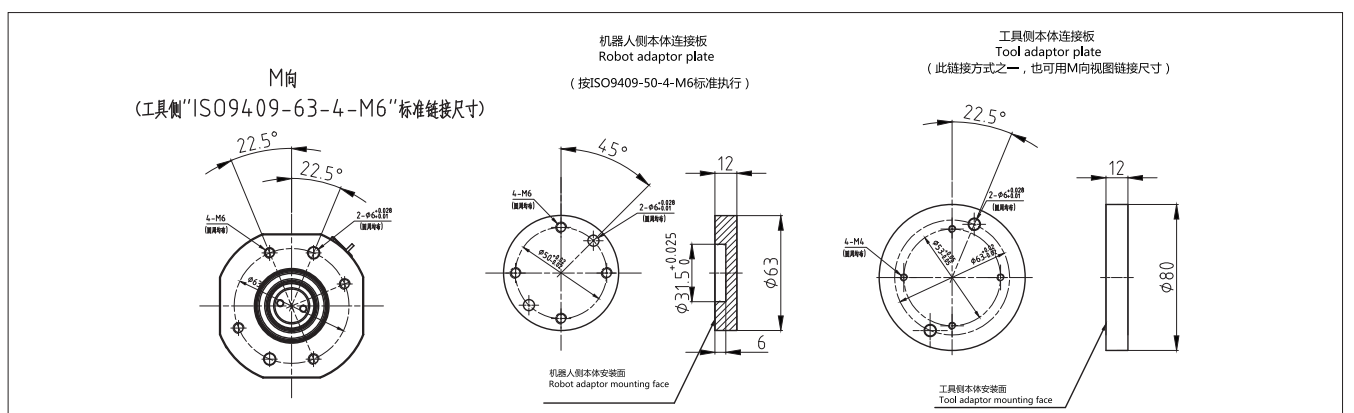
LMO-GC04B
4ways air supply modules

Call us for more information

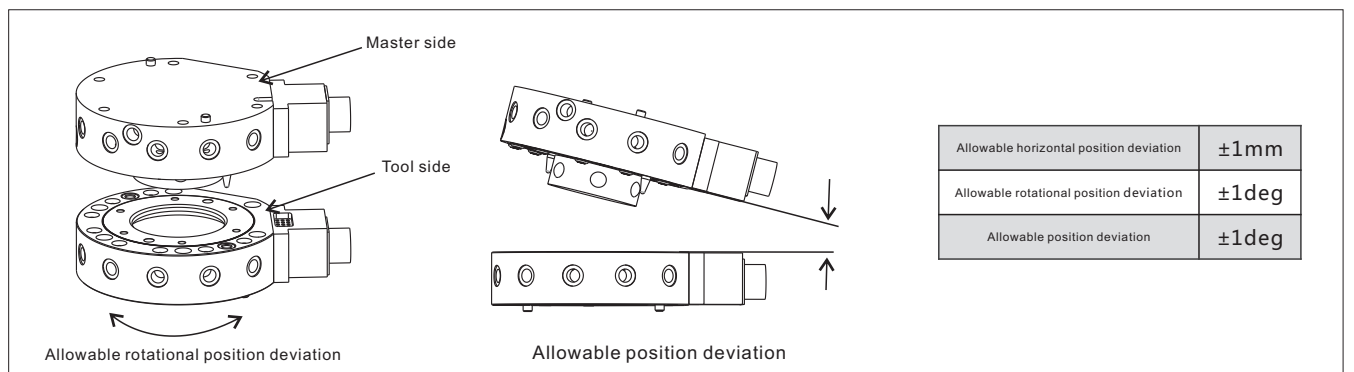
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0040A

- Payload up to 40kg
- Locking force: 7497N allowable Moment: 216Nm (static)
allowable torque:228Nm (static)
- 8*PT1/8 pneumatic port and 2 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separatedStandard
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0040AM
	Tool plate	LTC-0040AT
Load	Payload capacity	40kg
	Locking force	7497N
	Allowable static moment	216N·m
	Allowable static torque	228N·m
Size and precision	Dimension	Φ115mm
	Combined thickness	73mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	1.28kg
	Tool side	0.8kg
Air connector	Pneumatic port	8 x PT1/8
	Max pressure	0.8Mpa

Optional modules



LMO-E16-MS07-AF01
7pins signal module



LMO-E16-S15-AF01
15pins signal module



LMO-E12-E06A
6pins Electrical module



LMO-E11-S07-BI01-AF01
Ethernet BUS communication module



LMO-E13-SM10B
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GS01A
1way air supply module
(self-sealing)



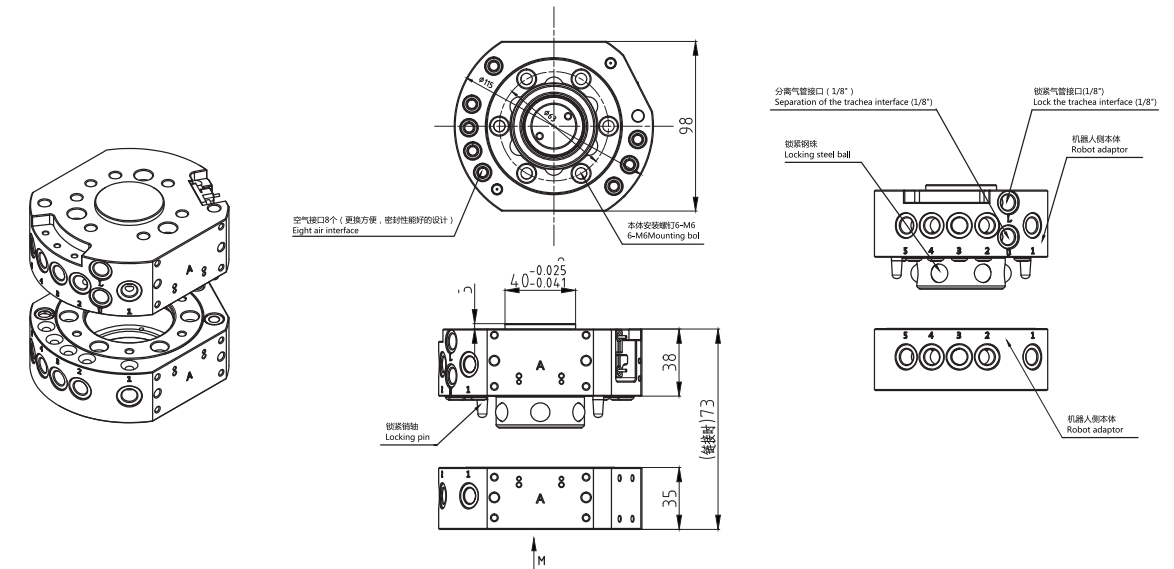
LMO-GC02A
2way air supply module



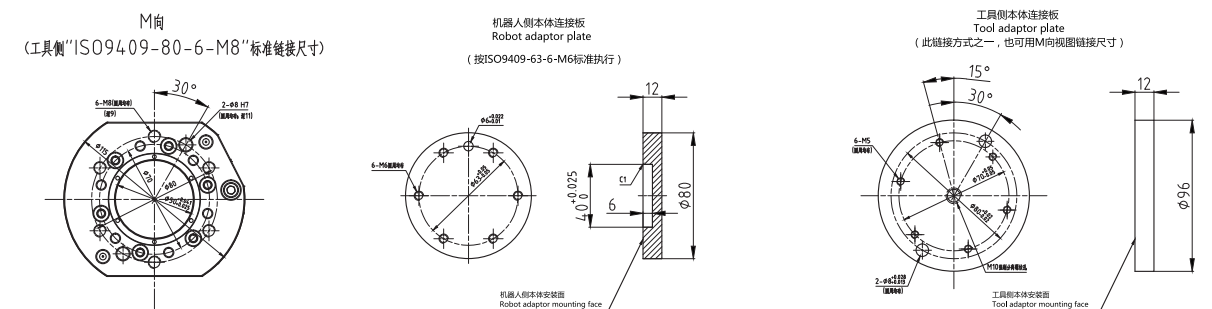
LMO-L01B
1way Fluid module

Call us for more
information

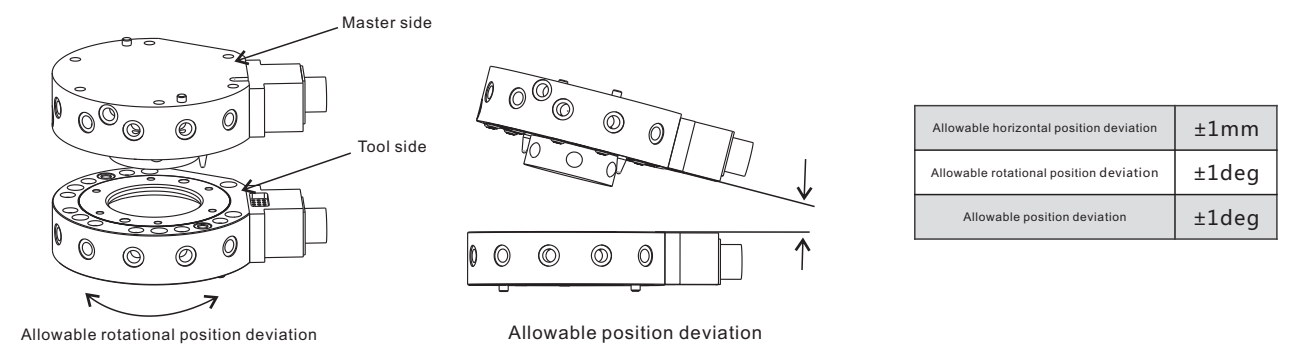
Outline drawing



Mounting drawing



Allowable deviations



Warning



- | |
|--|
| 1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer |
| 2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration. |
| 3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot. |

Model : LTC-0070A

- Payload up to 70kg
- Locking force: 9973N allowable Moment: 328.5Nm (static) allowable torque:451Nm (static)
- 8*PT1/8 pneumatic port and 2 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separatedStandard
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0070AM
	Tool plate	LTC-0070AT
Load	Payload capacity	70kg
	Locking force	9973N
	Allowable static moment	328.5N·m
	Allowable static torque	451N·m
Size and precision	Dimension	Φ138mm
	Combined thickness	74mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	1.83kg
	Tool side	1.14kg
Air connector	Pneumatic port	8 x PT1/8
	Max pressure	0.8Mpa

Optional modules



LMO-E16-MS07-AF01
7pins signal module



LMO-E16-S15-AF01
15pins signal module



LMO-E12-E06A
6pins Electrical module



LMO-E11-S07-BI01-AF01
Ethernet BUS communication module



LMO-E13-SM10B
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GS01A
1way air supply module (self-sealing)



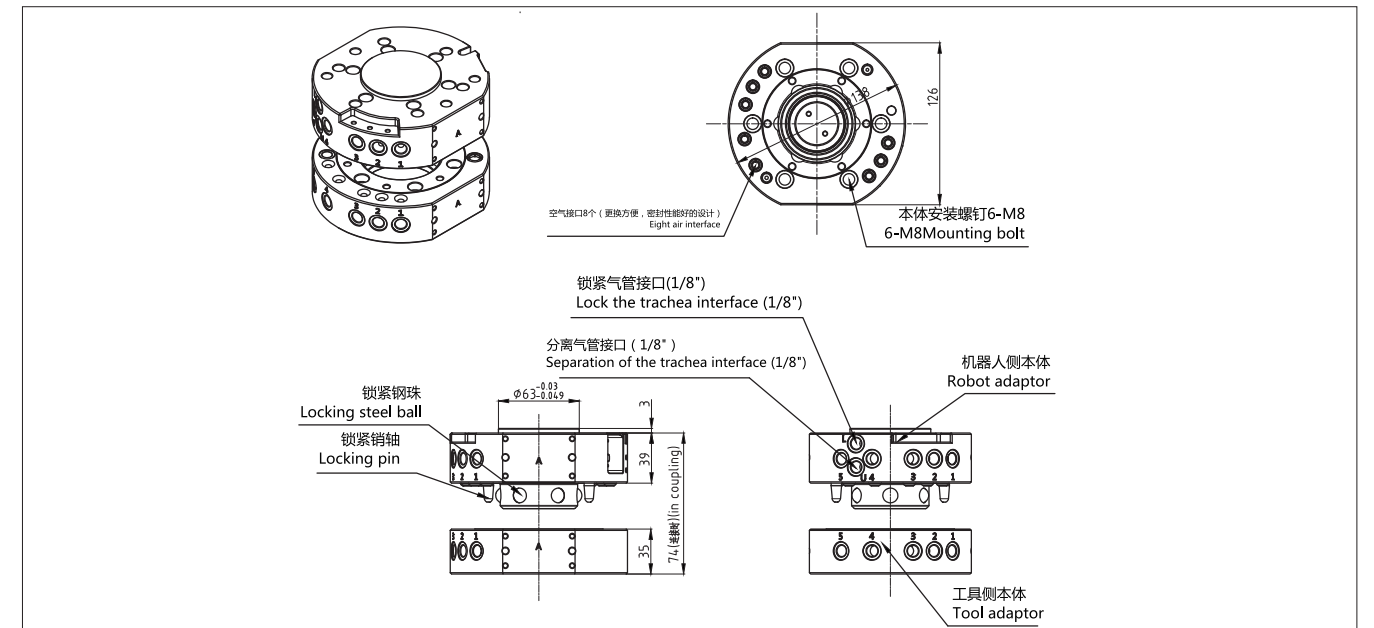
LMO-GC02A
2way air supply module



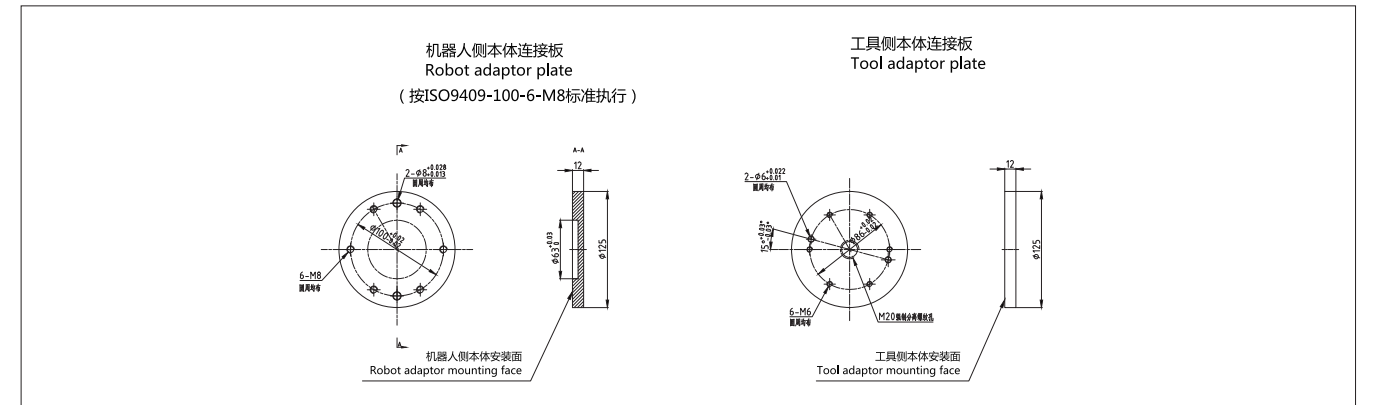
LMO-L01B
1way Fluid module

Call us for more information

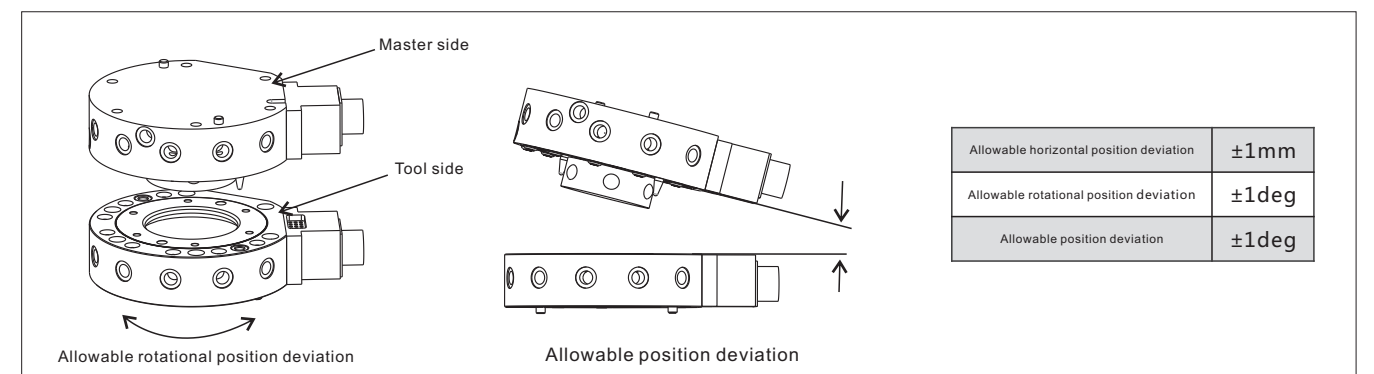
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0070B

- Payload up to 70kg
- Locking force: 9973N allowable Moment: 328.5Nm (static)
allowable torque:451Nm (static)
- 6*PT1/8 pneumatic port and 4 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separatedStandard
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0070BM
	Tool plate	LTC-0070BT
Load	Payload capacity	70kg
	Locking force	9973N
	Allowable static moment	328.5N·m
	Allowable static torque	451N·m
Size and precision	Dimension	Φ138mm
	Combined thickness	74mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	1.83kg
	Tool side	1.14kg
Air connector	Pneumatic port	6 x PT1/8
	Max pressure	0.8Mpa

Optional modules



LMO-E16-MS07-AF01
7pins signal module



LMO-E16-S15-AF01
15pins signal module



LMO-E12-E06A
6pins Electrical module



LMO-E11-S07-BI01-AF01
Ethernet BUS communication module



LMO-E13-SM10B
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GS01A
1way air supply module
(self-sealing)



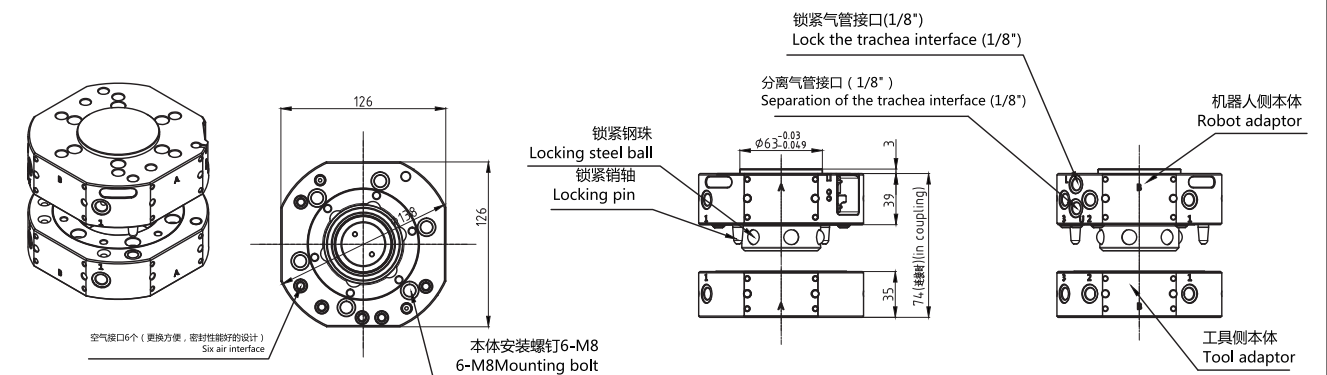
LMO-GC02A
2way air supply module



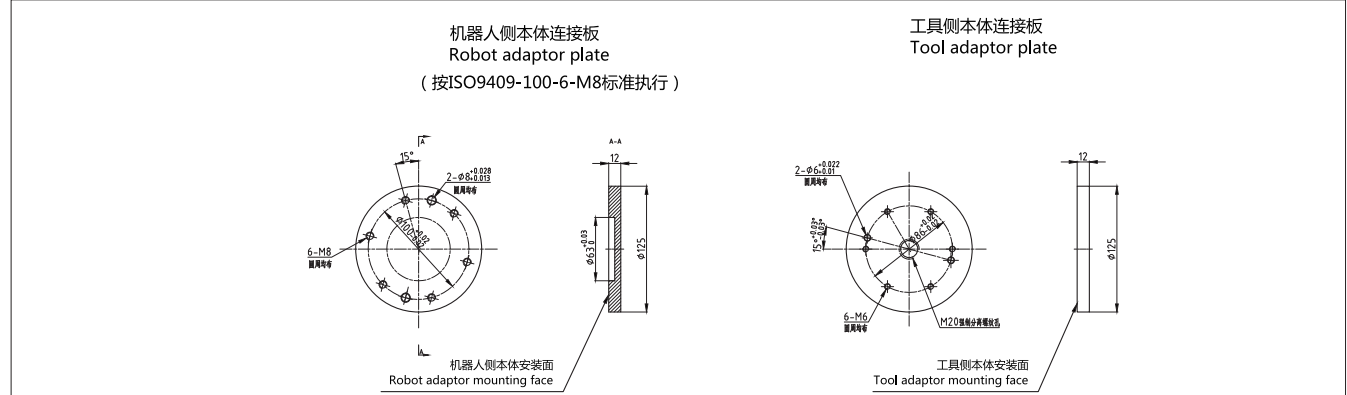
LMO-L01B
1way Fluid module

Call us for more information

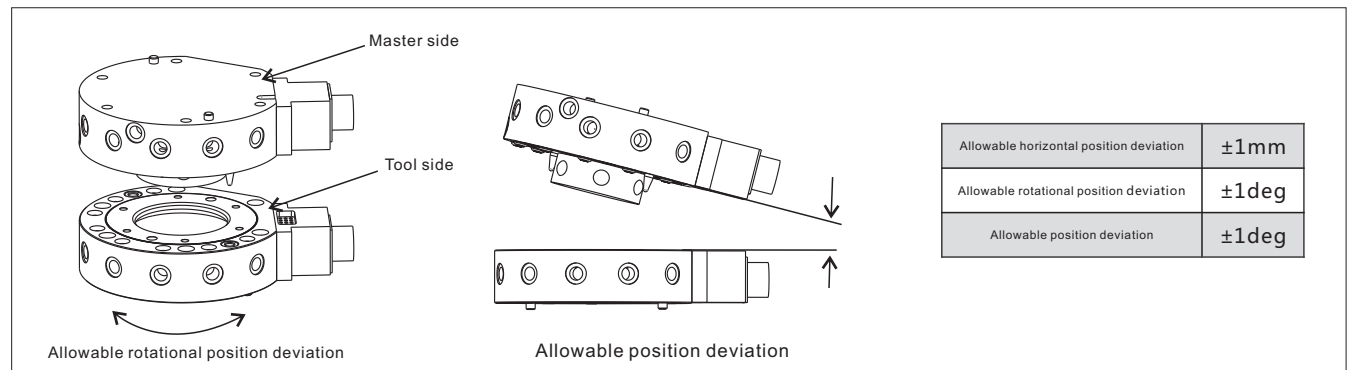
Outline drawing



Mounting drawing



Allowable deviations



Warning

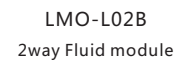
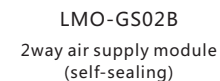
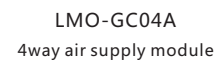
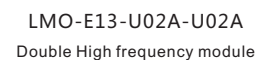
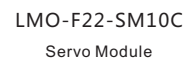
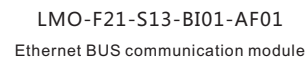
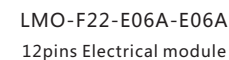
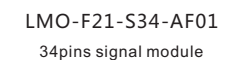
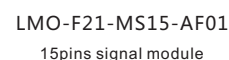


- | |
|--|
| 1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer |
| 2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration. |
| 3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot. |

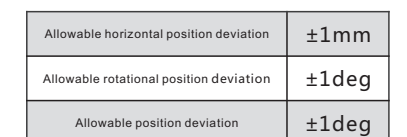
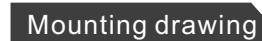
The image displays two views of a custom-machined metal component, possibly a valve or actuator assembly. The top view shows the internal structure, including a central shaft, a valve seat, and various internal components. The bottom view shows the external structure, featuring a flange with multiple bolt holes and a central opening. The component is primarily orange and silver in color.

- Parameter

Optional modules



Outline drawing



Warning



- | |
|--|
| 1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer |
| 2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration. |
| 3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot. |

Model : LTC-0120D

- Payload up to 120kg
- Locking force: 15407N allowable Moment: 842Nm (static) allowable torque: 1200Nm (static)
- 8* PT1/8 pneumatic port and 4 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0120DM
	Tool plate	LTC-0120DT
Load	Payload capacity	120kg
	Locking force	15407N
	Allowable static moment	842N·m
	Allowable static torque	1200N·m
Size and precision	Dimension	Φ168mm
	Combined thickness	83mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60°C
	Humidity	0-95%
Weight	Master side	2.28kg
	Tool side	1.58kg
Air connector	Pneumatic port	8 x PT1/8
	Max pressure	0.8Mpa

Optional modules



LMO-F21-MS15-AF01
15pins signal module



LMO-F21-S34-AF01
34pins signal module



LMO-F22-E06A-E06A
12pins Electrical module



LMO-F21-S13-BI01-AF01
Ethernet BUS communication module



LMO-F22-SM10C
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GC04A
4way air supply module



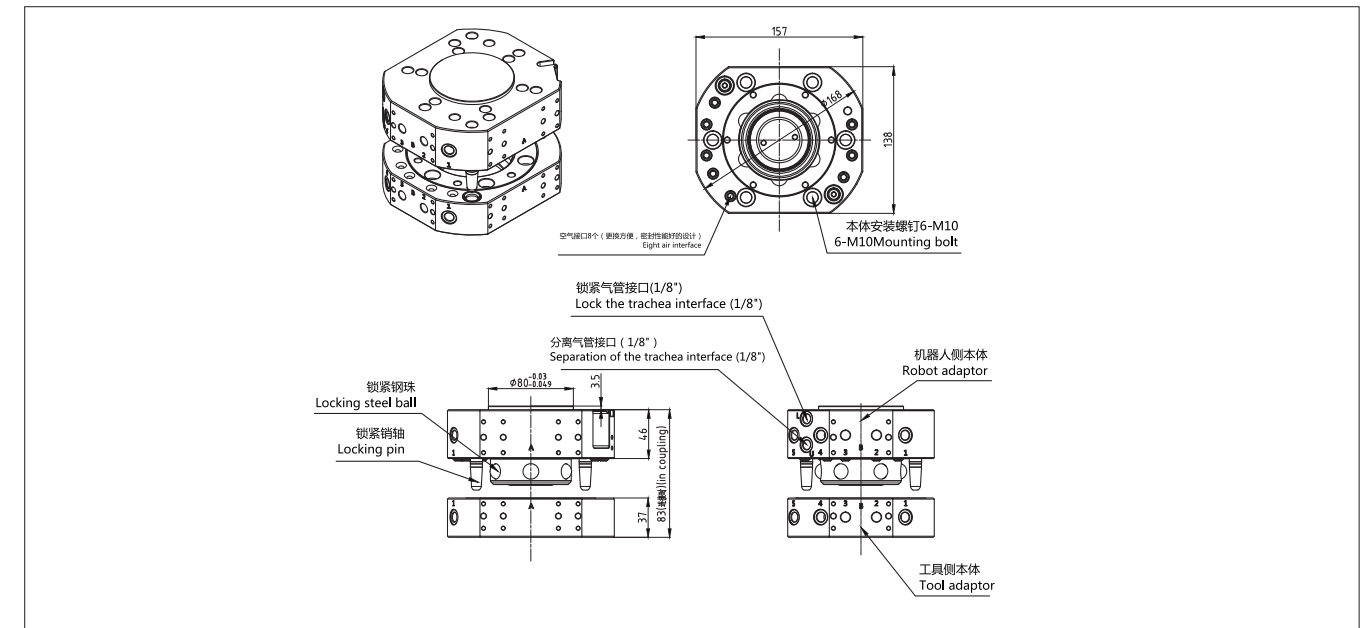
LMO-GS02B
2way air supply module (self-sealing)



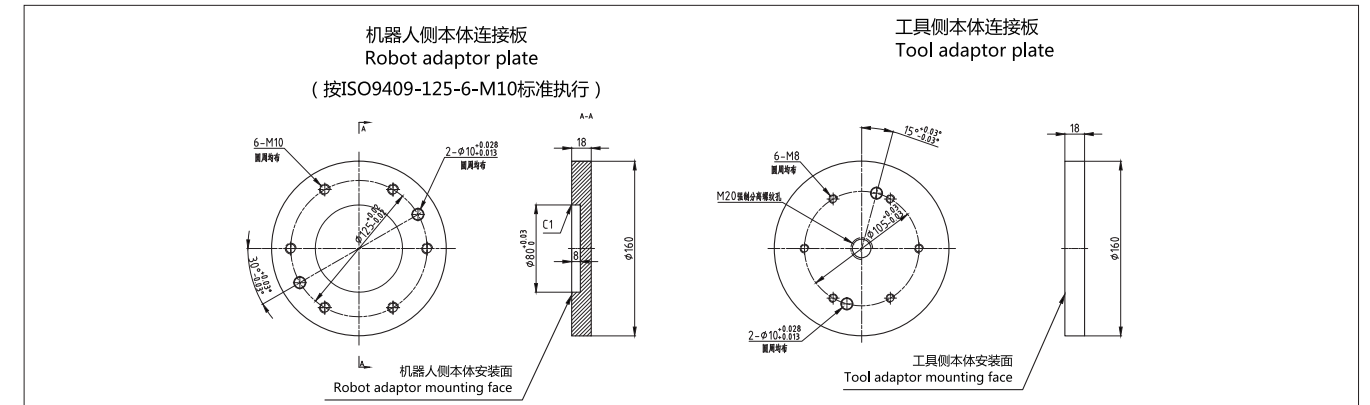
LMO-L02B
2way Fluid module

Call us for more information

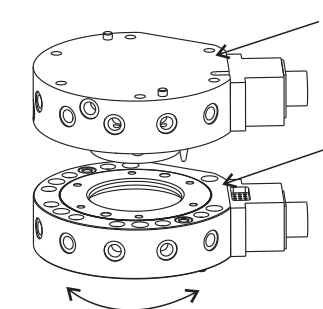
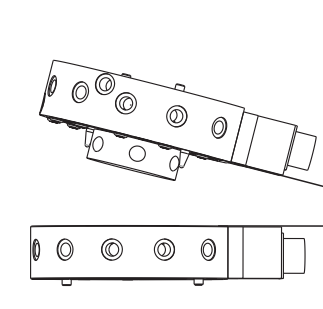
Outline drawing



Mounting drawing



Allowable deviations

Allowable horizontal position deviation	±1mm
Allowable rotational position deviation	±1deg
Allowable position deviation	±1deg

Labels: Master side, Tool side, Allowable rotational position deviation, Allowable position deviation.

Warning



1. When selecting models, please make sure both the bending & torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0200D

- Payload up to 230kg
- Locking force: 31458N allowable Moment: 2260Nm (static) allowable torque: 2245Nm (static)
- 9° PT3/8 pneumatic port and 2 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0200DM
	Tool plate	LTC-0200DT
Load	Payload capacity	230kg
	Locking force	31458N
	Allowable static moment	2260N·m
	Allowable static torque	2245N·m
Size and precision	Dimension	Φ198mm
	Combined thickness	103mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60°C
	Humidity	0-95%
Weight	Master side	5.9kg
	Tool side	2.97kg
Air connector	Pneumatic port	9 x PT3/8
	Max pressure	0.8Mpa

Optional modules



LMO-F21-MS15-AF01
15pins signal module



LMO-F21-S34-AF01
34pins signal module



LMO-F22-E06A-E06A
12pins Electrical module



LMO-F21-S13-BI01-AF01
Ethernet BUS communication module



LMO-F22-SM10C
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GC04A
4way air supply module



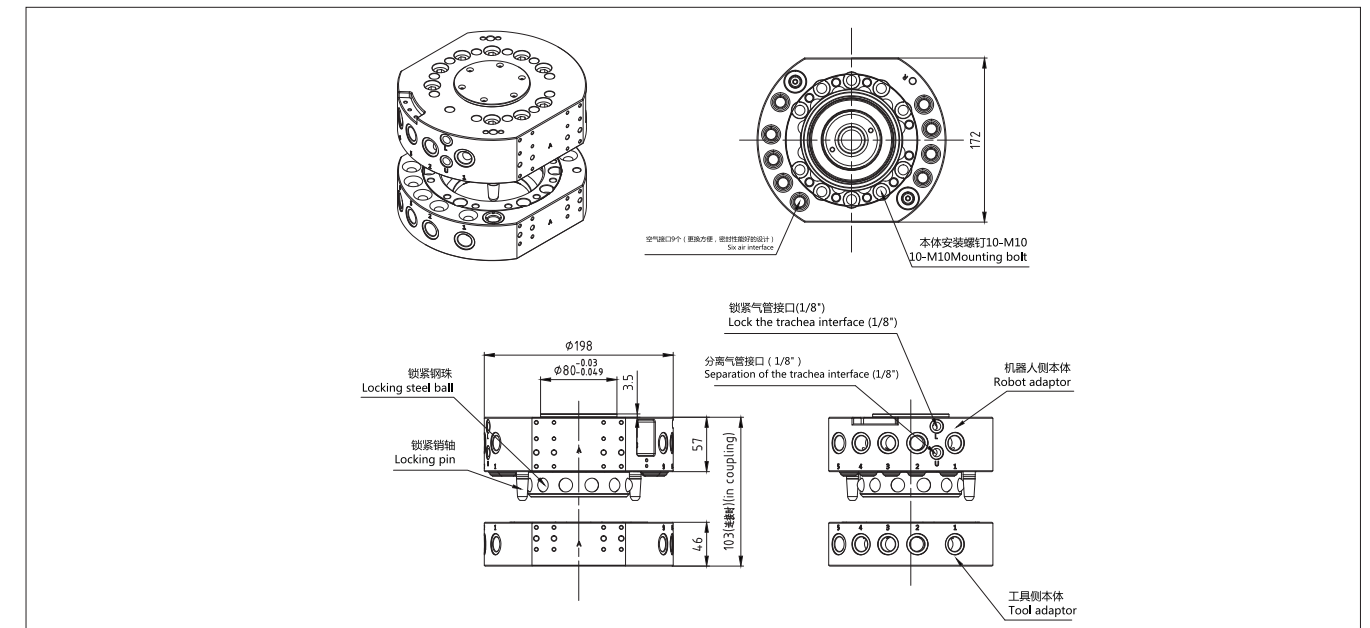
LMO-GS02B
2way air supply module (self-sealing)



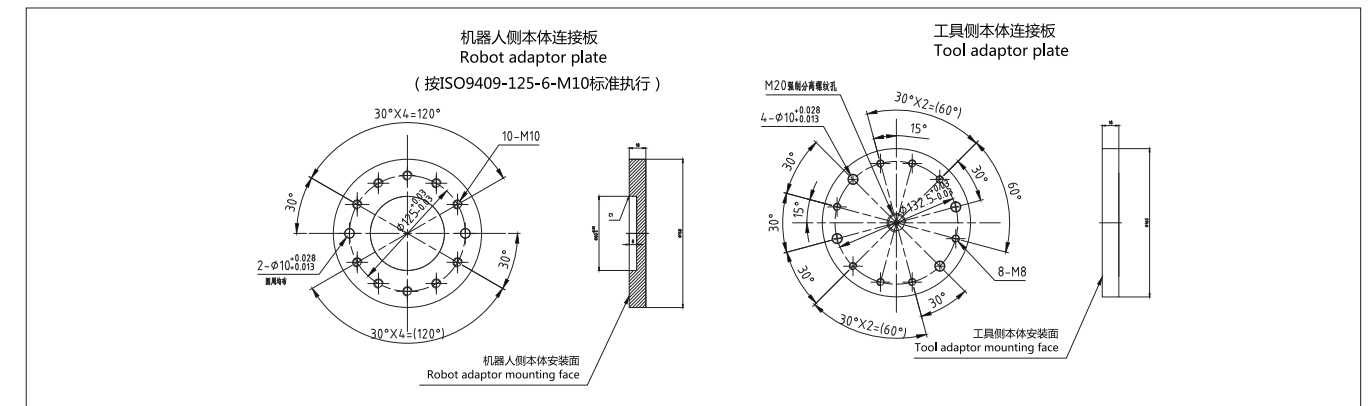
LMO-L02B
2way Fluid module

Call us for more information

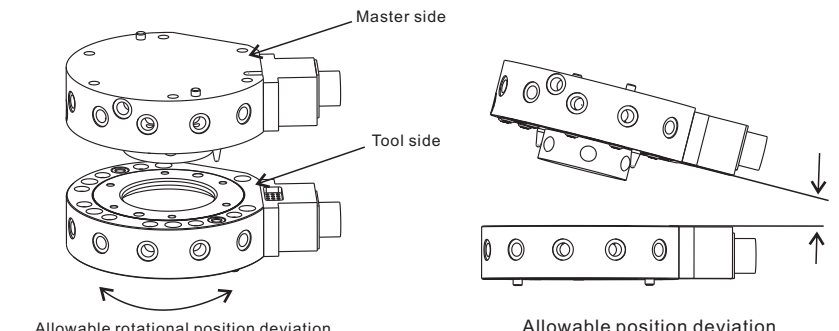
Outline drawing



Mounting drawing



Allowable deviations



Allowable horizontal position deviation	±1mm
Allowable rotational position deviation	±1deg
Allowable position deviation	±1deg

Warning

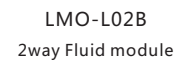
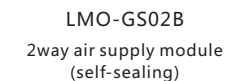
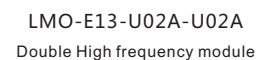
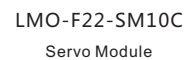
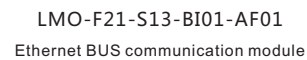
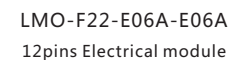
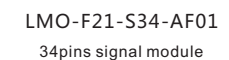
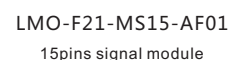


1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

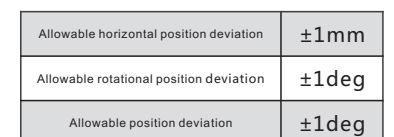
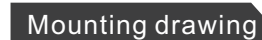
Two views of a custom-machined metal part, likely a flange or bracket. The top view shows the internal structure with a central circular feature and several mounting points. The bottom view shows the external structure with a large central hole and various mounting points. The part is primarily orange-colored with black and silver components.

- Parameter

Optional modules



Outline drawing



Warning



- | |
|--|
| 1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer |
| 2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration. |
| 3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot. |

Model : LTC-0200F

- Payload up to 230kg
- Locking force: 31458N allowable Moment: 2260Nm (static) allowable torque: 2245Nm (static)
- 6* PT1/8 pneumatic port ,2* PT3/8 pneumatic port and 4 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0200FM
	Tool plate	LTC-0200FT
Load	Payload capacity	230kg
	Locking force	31458N
	Allowable static moment	2260N·m
	Allowable static torque	2245N·m
Size and precision	Dimension	Φ198mm
	Combined thickness	103mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	5.9kg
	Tool side	2.97kg
Air connector	Pneumatic port	6 x PT1/8 2 x PT3/8
	Max pressure	0.8Mpa

Optional modules



LMO-F21-MS15-AF01
15pins signal module



LMO-F21-S34-AF01
34pins signal module



LMO-F22-E06A-E06A
12pins Electrical module



LMO-F21-S13-BI01-AF01
Ethernet BUS communication module



LMO-F22-SM10C
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GC04A
4way air supply module



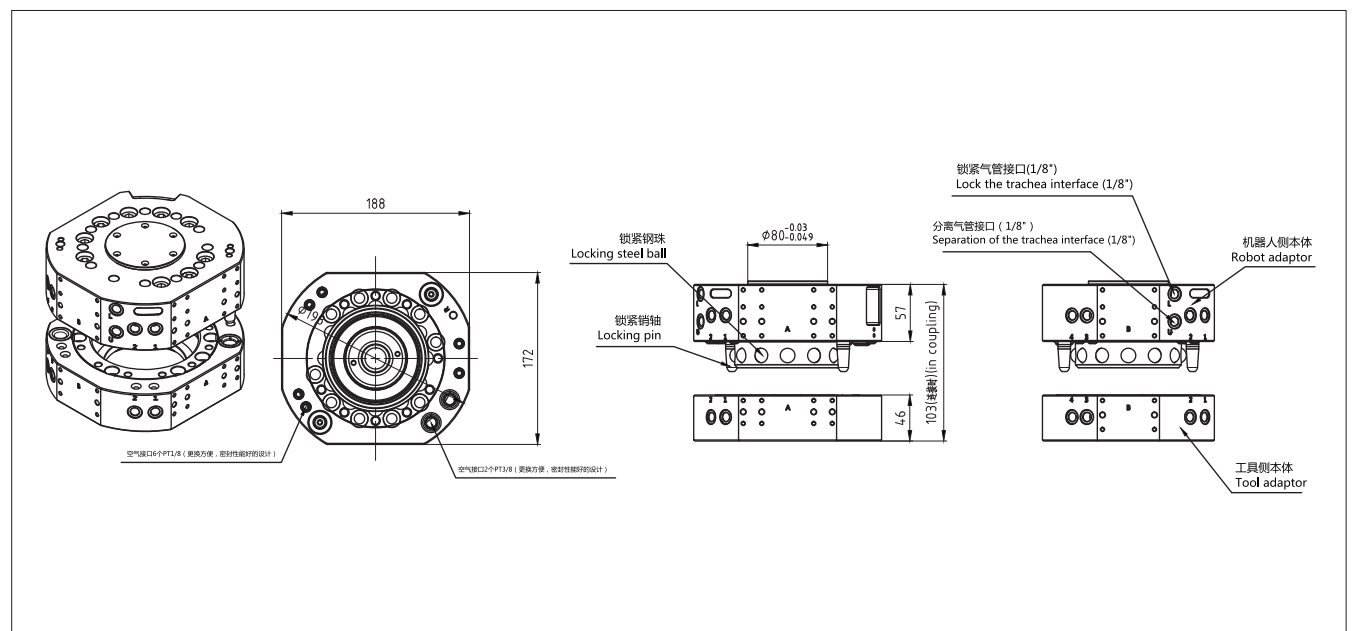
LMO-GS02B
2way air supply module
(self-sealing)



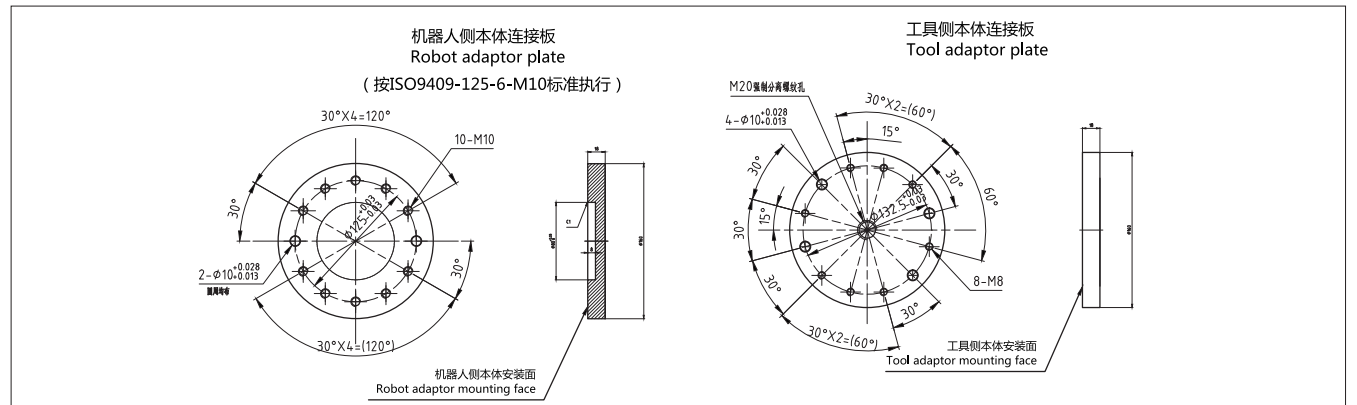
LMO-L02B
2way Fluid module

Call us for more information

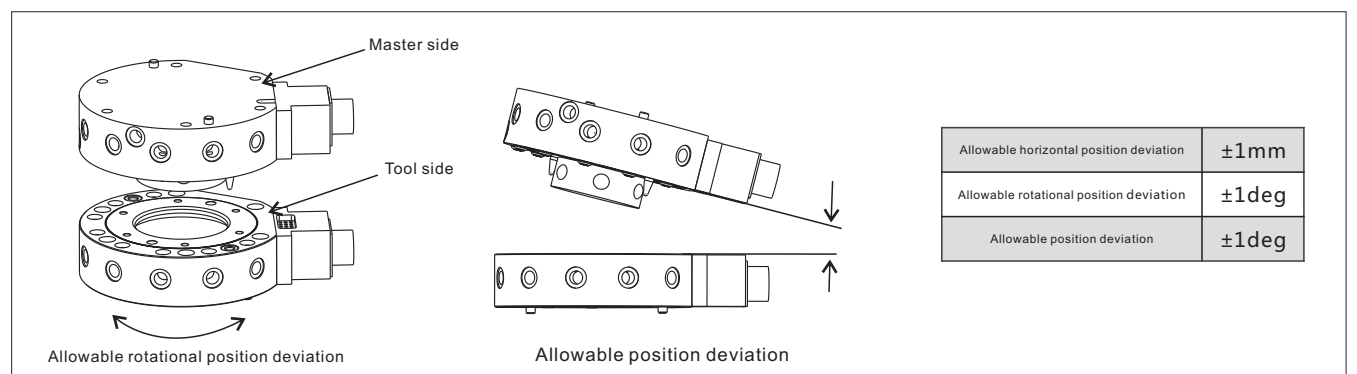
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0300G

- Payload up to 300kg
- Locking force: 35421N allowable Moment: 2767Nm (static) allowable torque: 2526Nm (static)
- 10* PT3/8 pneumatic port and 2 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0300GM
	Tool plate	LTC-0300GT
Load	Payload capacity	300kg
	Locking force	35421N
	Allowable static moment	2767N-m
	Allowable static torque	2526N-m
Size and precision	Dimension	Φ208mm
	Combined thickness	103mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	6.17kg
	Tool side	2.77kg
Air connector	Pneumatic port	10 x PT3/8
	Max pressure	0.8Mpa

Optional modules



LMO-F21-MS15-AF01
15pins signal module



LMO-F21-S34-AF01
34pins signal module



LMO-F22-E06A-E06A
12pins Electrical module



LMO-F21-S13-BI01-AF01
Ethernet BUS communication module



LMO-F22-SM10C
Servo Module



LMO-E13-U02A-U02A
Double High frequency module



LMO-GC04A
4way air supply module



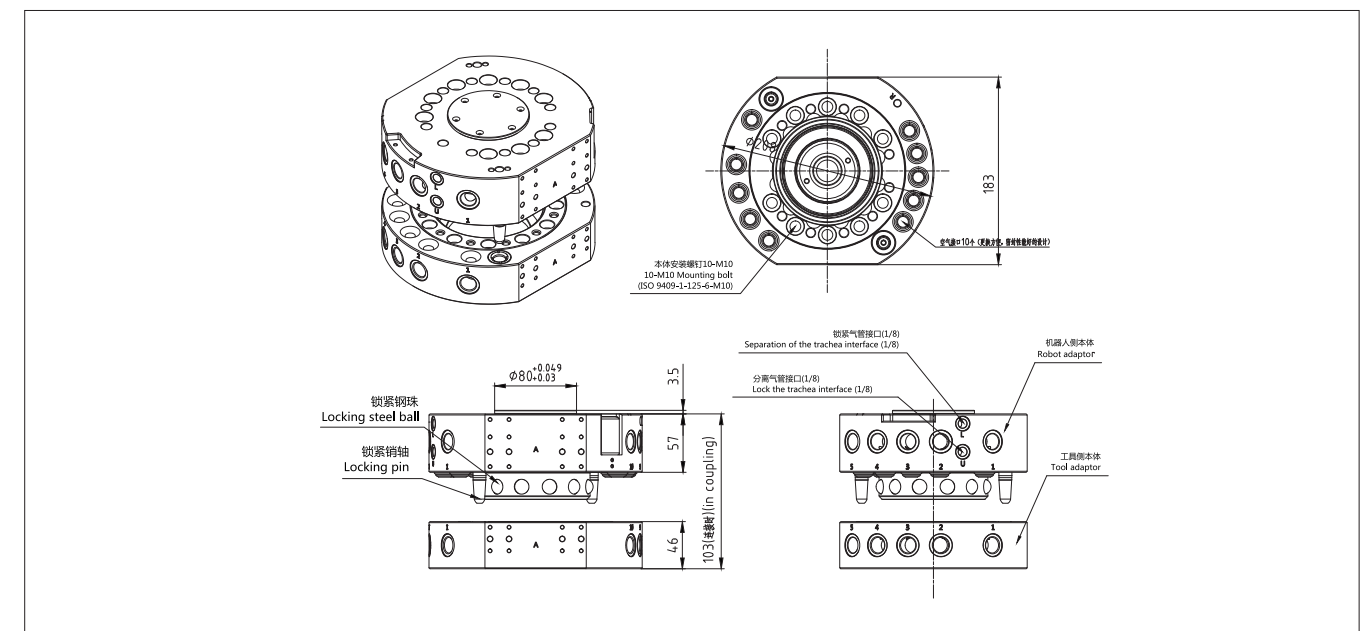
LMO-GS02B
2way air supply module
(self-sealing)



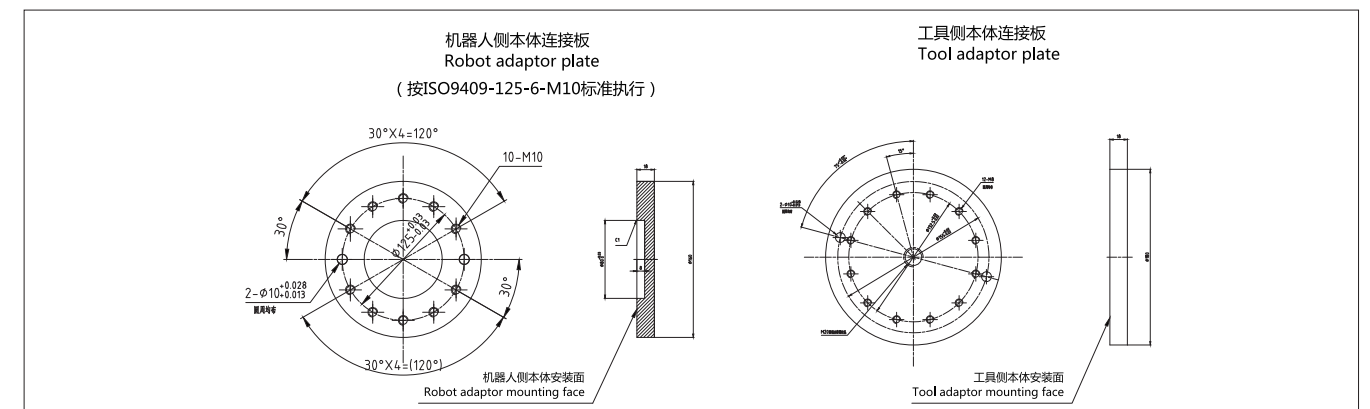
LMO-L02B
2way Fluid module

Call us for more information

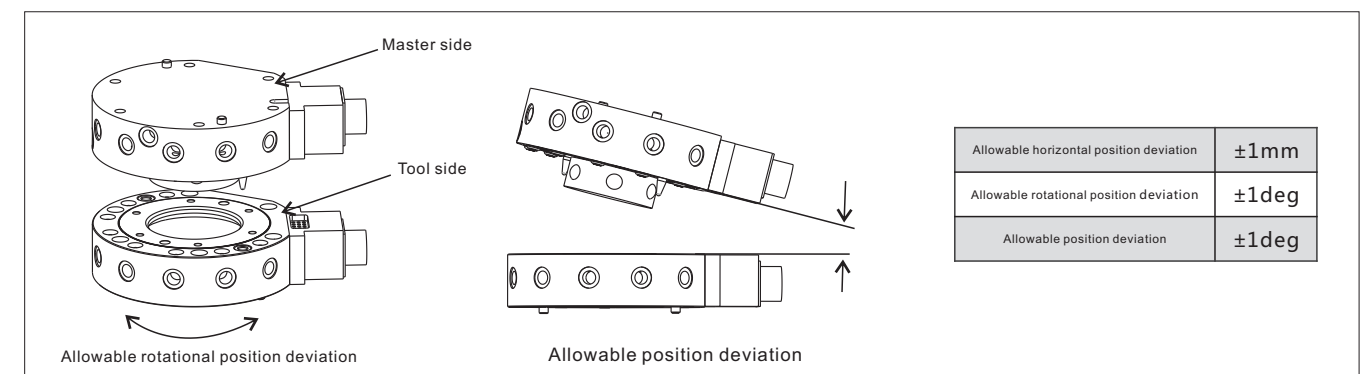
Outline drawing



Mounting drawing



Allowable deviations



Warning



1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0300F

- Payload up to 300kg
- Locking force: 35421N allowable Moment: 2767Nm (static) allowable torque: 2526Nm (static)
- 8* PT3/8 pneumatic port and 2 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter		
Model	Master plate	LTC-0300FM
	Tool plate	LTC-0300FT
Load	Payload capacity	300kg
	Locking force	35421N
	Allowable static moment	2767N·m
	Allowable static torque	2526N·m
Size and precision	Dimension	Φ208mm
	Combined thickness	103mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	6.17kg
	Tool side	2.77kg
Air connector	Pneumatic port	8 x PT3/8
	Max pressure	0.8Mpa

Optional modules



LMO-C32-S54-AF01
54pins Electrical module



LMO-E03A
3pins Electrical module



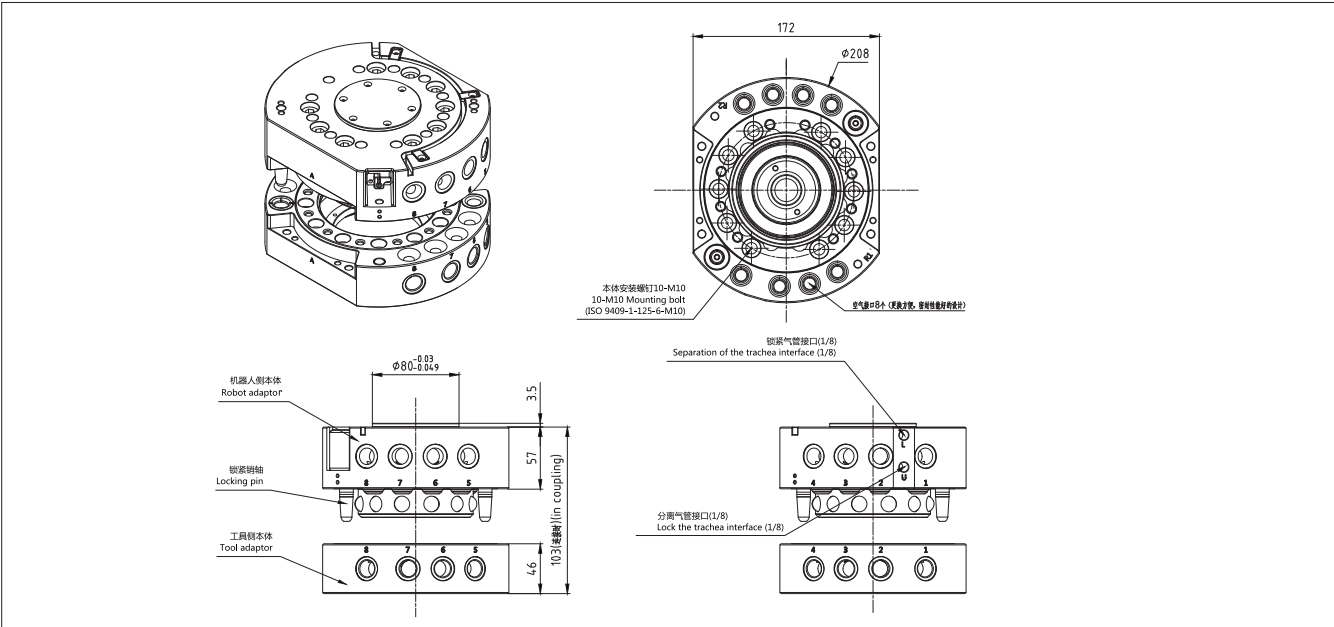
LMO-C21-SM03C
Servo Module



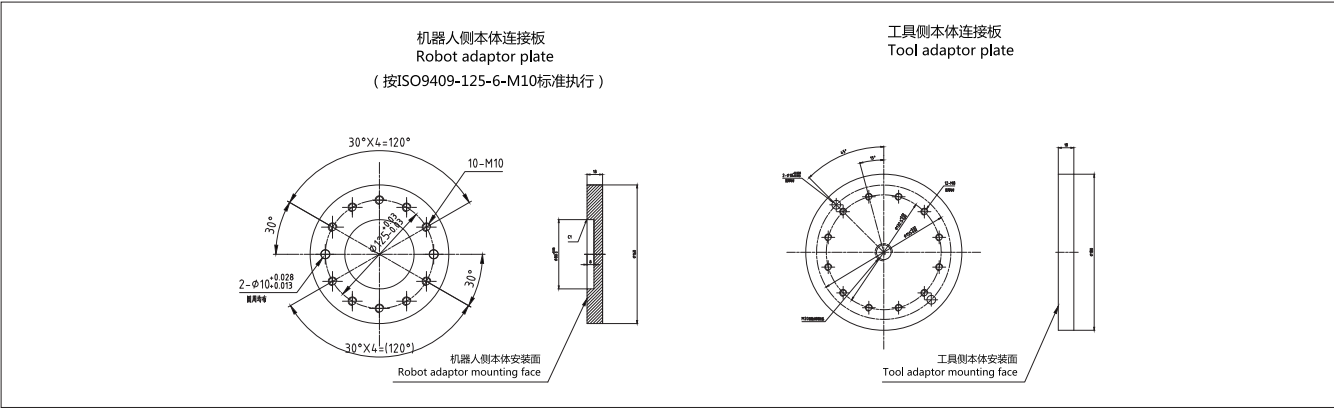
LMO-L04A
4way Fluid module

Call us for more information

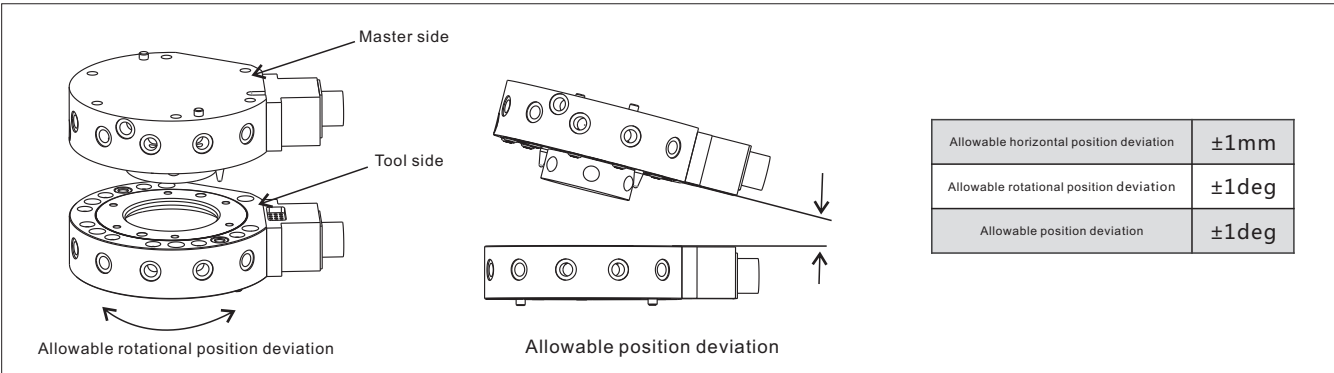
Outline drawing



Mounting drawing



Allowable deviations



Warning	
	1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
	2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
	3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Model : LTC-0300E

- Payload up to 300kg
- Locking force: 35421N allowable Moment: 2767Nm (static) allowable torque: 2526Nm (static)
- 4 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter

Model	Master plate	LTC-0300EM
	Tool plate	LTC-0300ET
Load	Payload capacity	300kg
	Locking force	35421N
	Allowable static moment	2767N-m
	Allowable static torque	2526N-m
Size and precision	Dimension	168mm*168mm
	Combined thickness	103mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	6.17kg
	Tool side	2.77kg

Optional modules



LMO-C32-S54-AF01
54pins Electrical module



LMO-E03A
3pins Electrical module



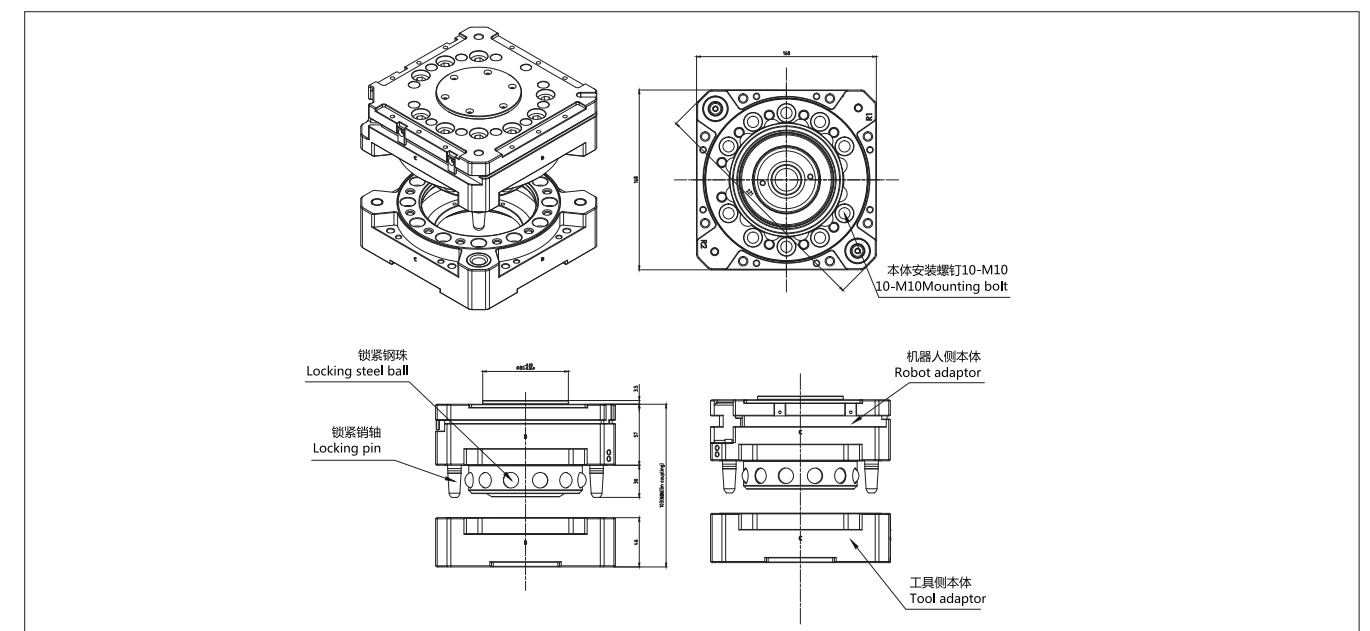
LMO-C21-SM03C
Servo Module



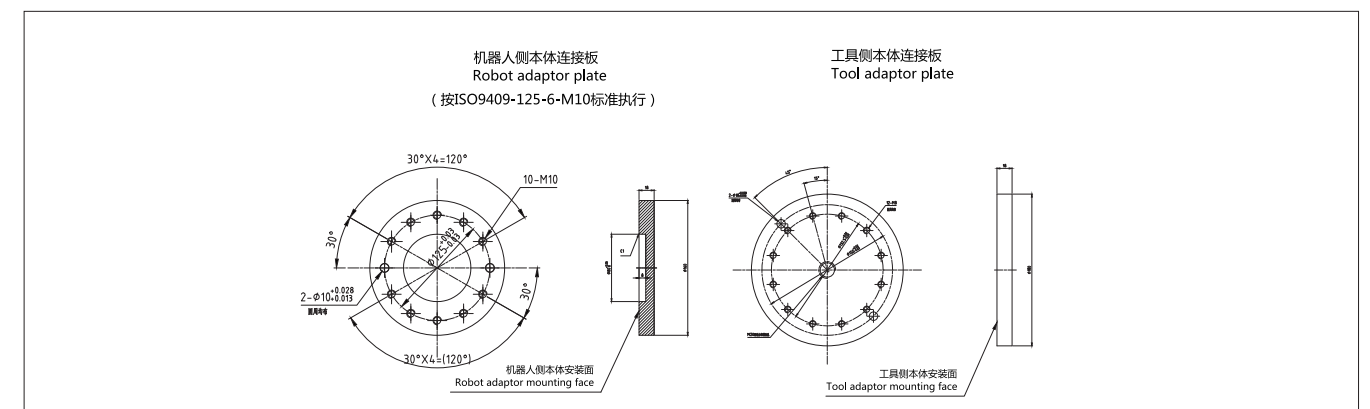
LMO-L04A
4way Fluid module

Call us for more information

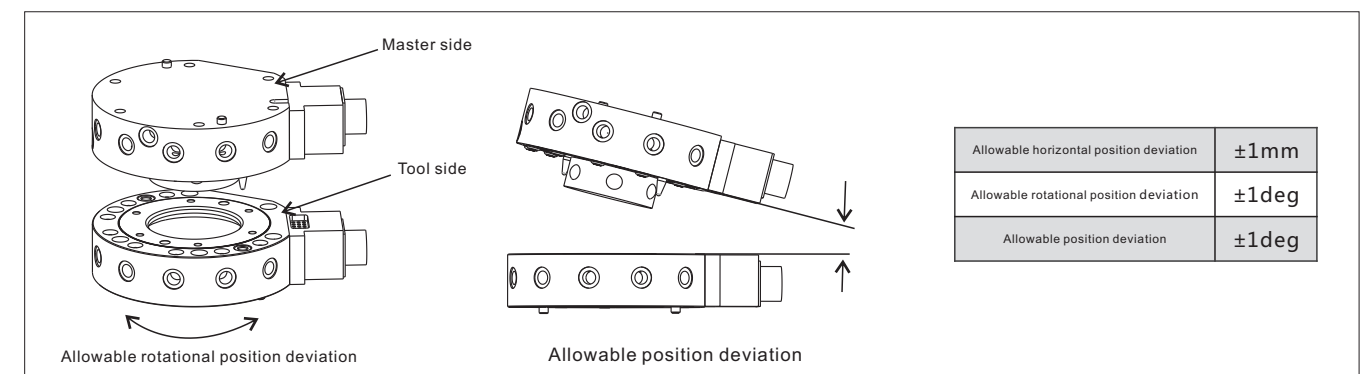
Outline drawing



Mounting drawing



Allowable deviations



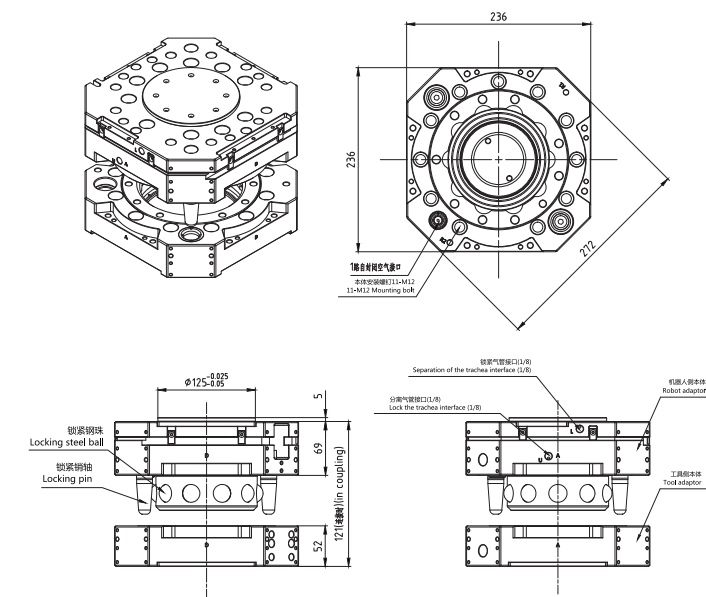
Warning



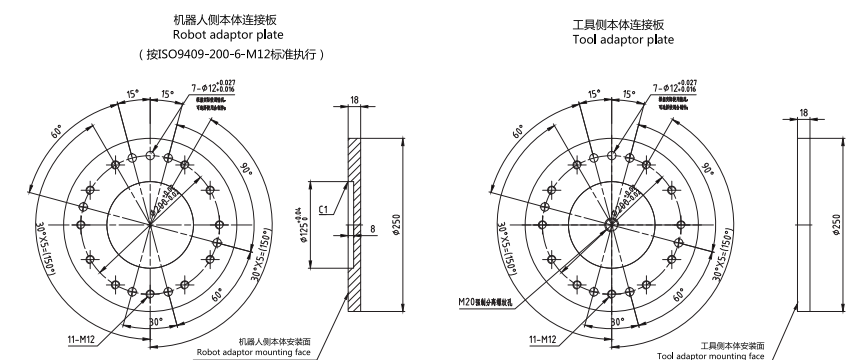
1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

- Parameter

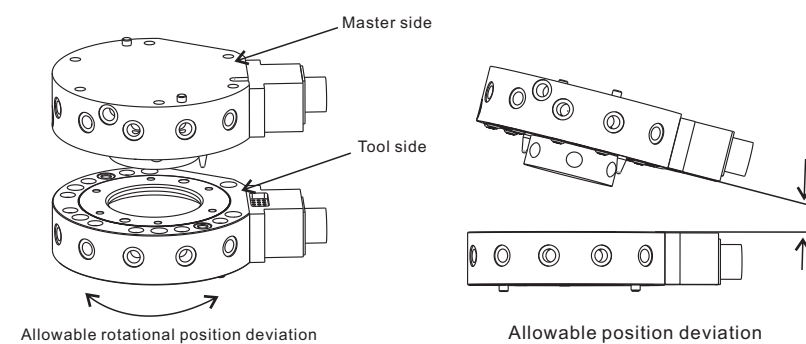
Outline drawing



Mounting drawing



Allowable deviations



Allowable horizontal position deviation	$\pm 1\text{mm}$
Allowable rotational position deviation	$\pm 1\text{deg}$
Allowable position deviation	$\pm 1\text{deg}$

Optional modules



Call us for more information

Warning

- | |
|--|
| 1. When selecting models, please make sure both the bending & torsional moment during working process are less than designed payload capacity of the tool changer |
| 2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration. |
| 3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot. |

Model :

LTC-0700B

- Payload up to 700kg
- Locking force: 68000N allowable Moment: 5060Nm (static) allowable torque: 5000Nm (static)
- 1* PT3/8 pneumatic port (self-sealing) and 8 modules expansion mounting surface
- Suitable for handling, palletizing, welding, grinding, deburring and other applications
- With air pressure loss self-locking function, even if the master plate cut off accidentally, Mater plate and tool plate will not separated.
- Standard configuration: Master plate lock/release sensor, tool plate in position detection sensor



Parameter		
Model	Master plate	LTC-0700BM
	Tool plate	LTC-0700BT
Load	Payload capacity	700kg
	Locking force	68000N
	Allowable static moment	5060N·m
	Allowable static torque	5000N·m
Size and precision	Dimension	272mm*272mm
	Combined thickness	147mm
	Position repeatability	±0.02mm
Air pressure for working		0.4~0.7Mpa
Locking mechanism		Locking steel ball
Material	Main body	Aluminum alloy
	Locking mechanism	Alloy steel
Work environment	Temperature	0-60℃
	Humidity	0-95%
Weight	Master side	25.4kg
	Tool side	9.3kg
Air connector	Pneumatic port	1 x PT3/8 (self-sealing)
	Max pressure	0.8Mpa

Optional modules



LMO-C32-S54-AF01

54pins Electrical module



LMO-E03A

3pins Electrical module



LMO-C21-SM03C

Servo Module

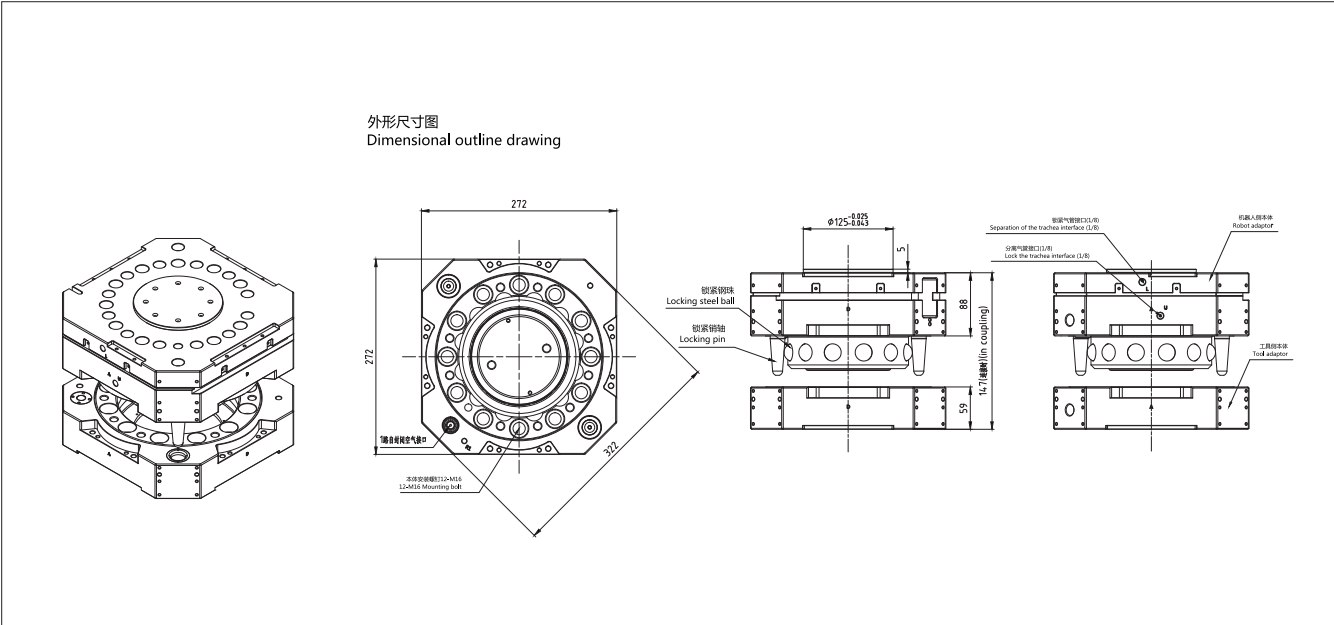


LMO-L04A

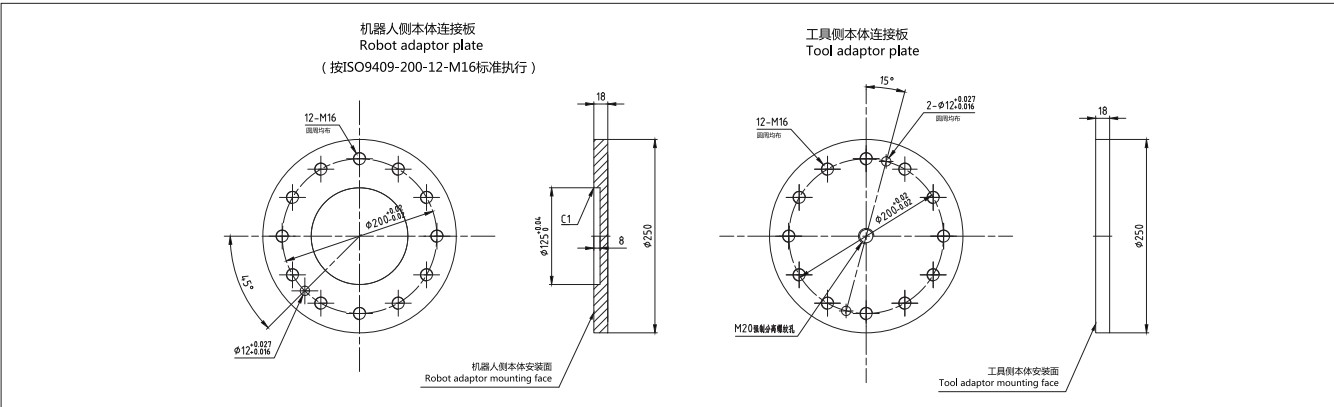
4way Fluid module

Call us for more information

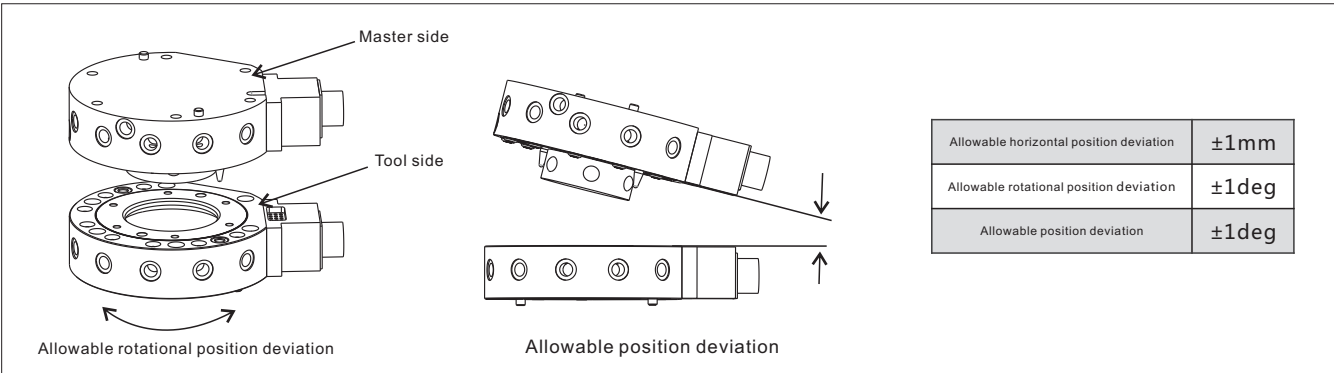
Outline drawing



Mounting drawing



Allowable deviations

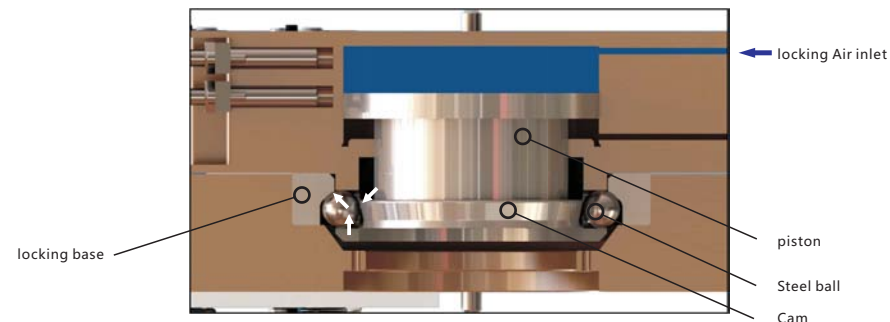


Warning	
	1. When selecting models, please make sure both the bending&torsional moment during working process are less than designed payload capacity of the tool changer
	2. Please pay attention that robots may produce moments two to three times higher than static moment due to their potentially high acceleration.
	3. The locking mechanism enables our tool changers lock the Master Plate to the Tool Plate and remains locked even if pressure is accidentally removed during debugging and application period of the robot.

Locking Mechanism principle :

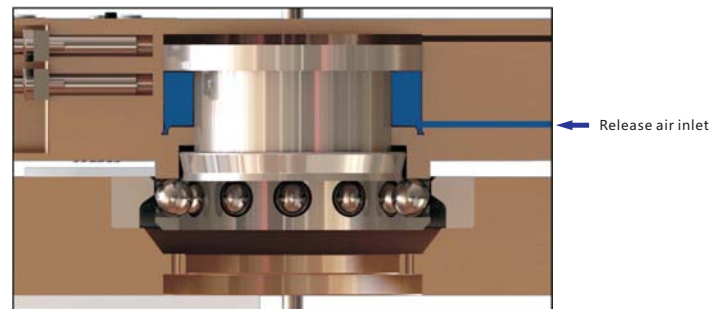
Locking state

The air enters into the tool changer through locking port to push the piston and push out steel balls to clamp the locking seat.



Unlocking state

The air enters into the tool changer through unlocking air port to push the piston and steel balls back.

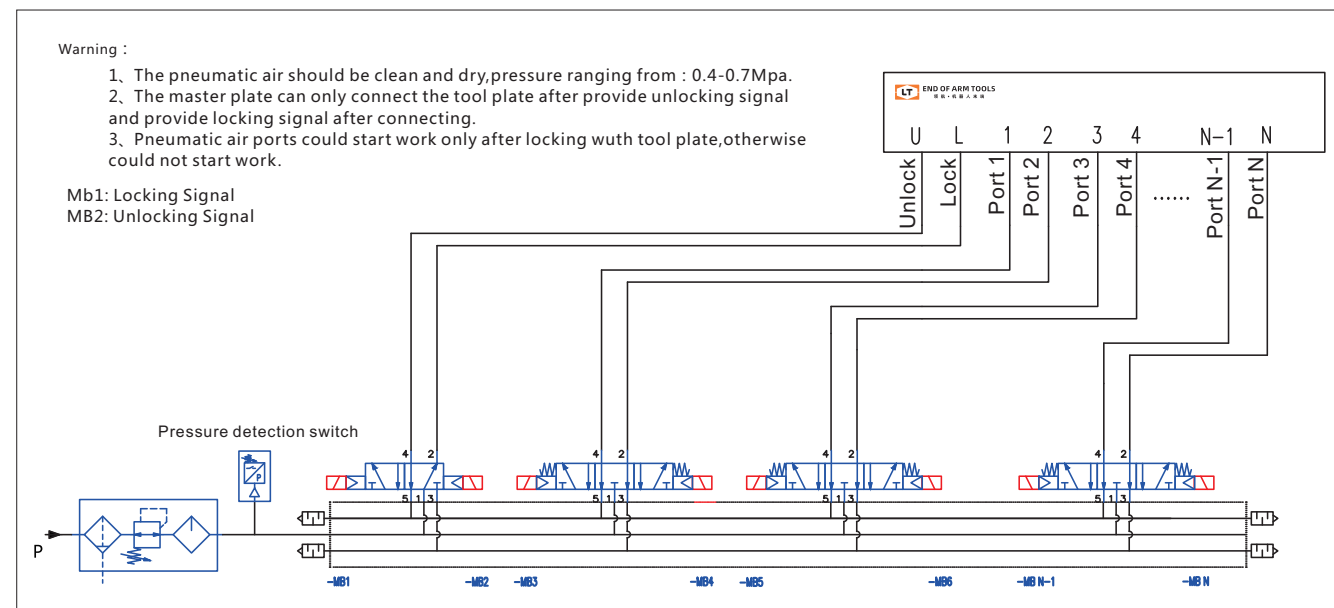


Fail safe locking mechanism

In case of accidental air pressure cut-off, the steel balls would move from the locking platform to insurance platform, with the spring's thrust, which would ensure the tool side wouldn't separate.

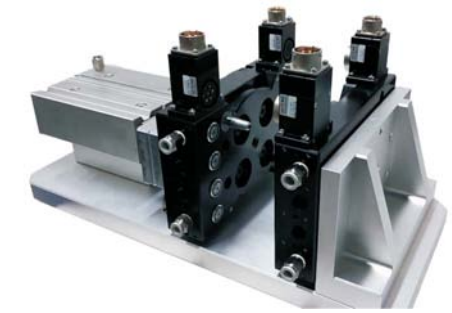


Pneumatic port Connection drawing



Floating energy coupler

It can realize fast docking, and through power sources, such as electric current, air, liquid, etc. The fixed end has a unique flexible mechanical device, which can compensate the positioning error, mechanical error and other errors in the docking process.



Model : LT-F08



- Installation surface is same with tool changers installation surface, modules are common use.
- Tool in position sensor included.
- Optional driven by servo motor or cylinder.
- The extent of compensation available:
X&Y-axis : $\pm 4\text{mm}$
Z-axis : 2mm
Angle compensation : $\pm 3^\circ$
Binding force : $\geq 2500\text{N}$.

Model : LT-F31

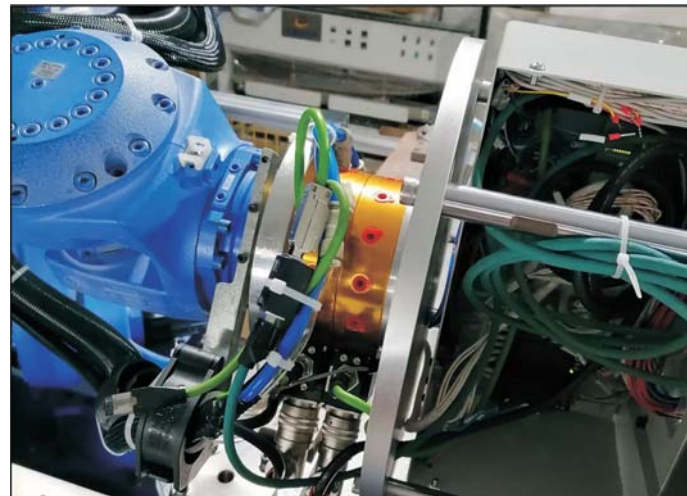


- 2 x PT3/8 self-sealing air ports included.
- Tool in position sensor included.
- Optional driven by servo motor or cylinder.
- The extent of compensation available:
X&Y-axis : $\pm 4\text{mm}$
Z-axis : 2mm
Angle compensation : $\pm 3^\circ$
Binding force : $\geq 1526\text{N}$.

Auto Industry



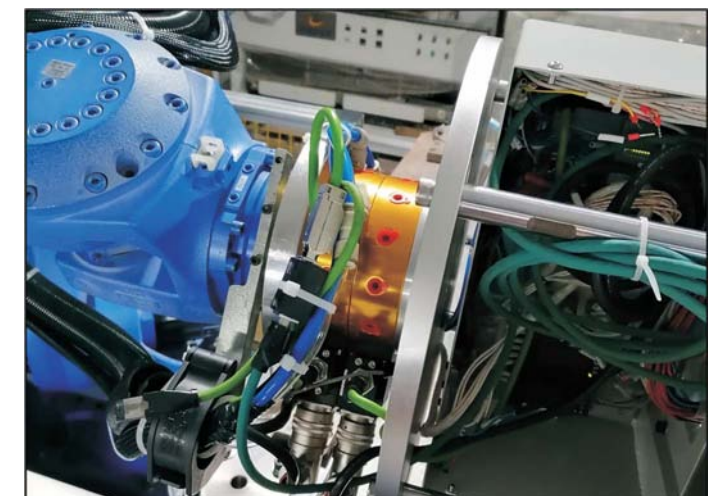
► Hybrid engine assembly line



► Glue loading and unloading



► Panoramic roof assembly line



► Glue loading and unloading



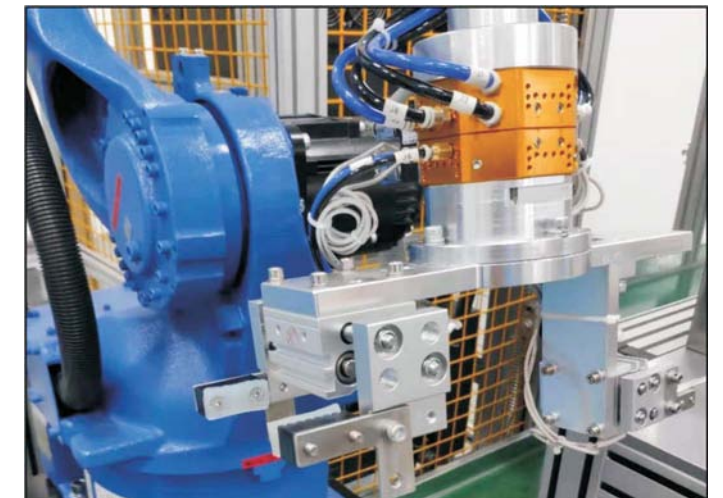
► Welding of automobile exhaust pipe



► Handling of BIW Welding Line



► Loading and unloading of auto parts



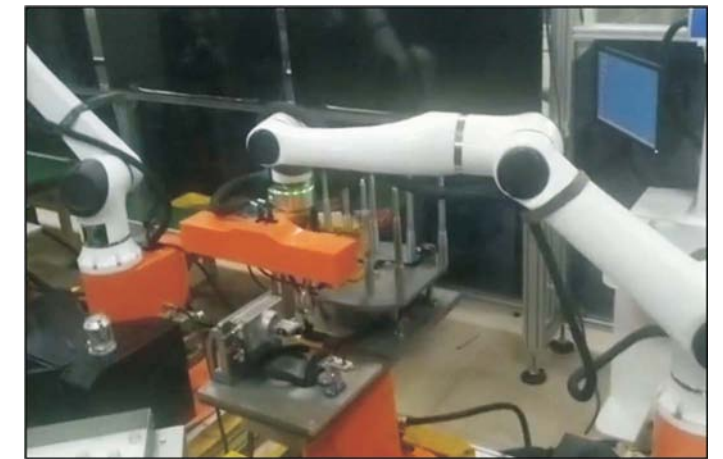
► Production grab of headlamp ellipsoid



► Automobile welding

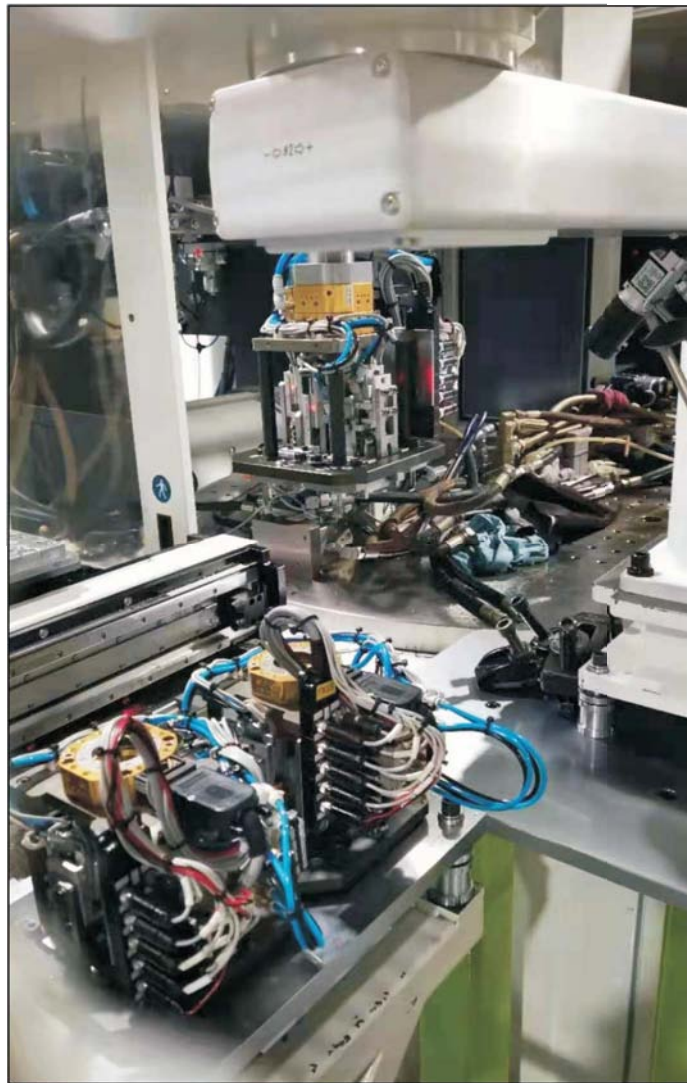


► Bumper production and processing

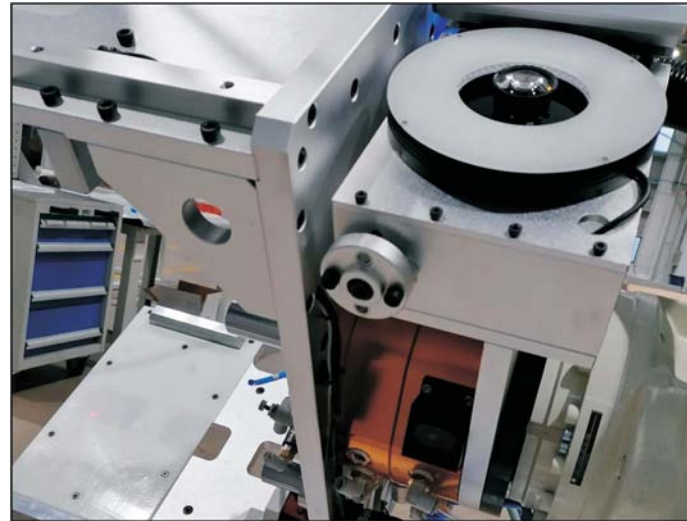


► Demonstration project of engine oil gas separator

3C Industry



▶ Loading and unloading of production process



▶ Palletizing in semiconductor industry



▶ Glass vase production line



▶ Application of grinding and deburring

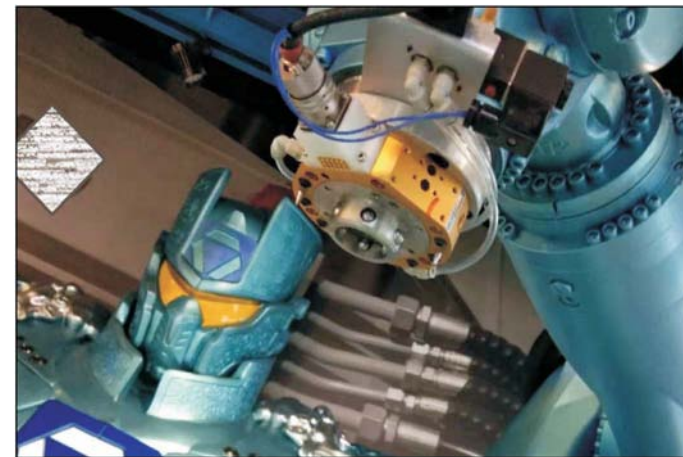
Heavy Industry



▶ Assembly line of concrete pump truck



▶ Loading and unloading of mineral equipment



▶ Welding handling in heavy industry



▶ loading and unloading of petroleum industry parts

Education



▶ Industrial camera capture training project



▶ End tool replacement training project

Other Industries



► Grinding and deburring of wood furniture



► Grinding project workstation



► white spirit handling project



► Assembly project



► Bolt inspection workstation



► Mechanical industry parts capture

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