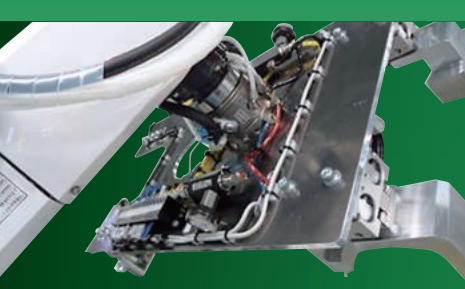
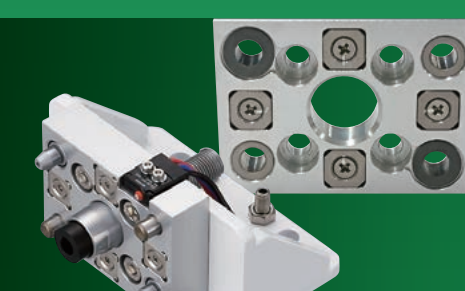


Quick Chuck (Hand) Change



Quick Chuck Change Manual •••• 1-2

- ▶ OA-SSL / OA-SSI / OA1-SA / OA1-SAI 1-3
- ▶ OA2-LA / OA-LAI / Chuck Spacer (Plastic) 1-4
- ▶ OA-SSL (SUS) / OA-SSI (SUS) / OC-LA / OC-LAI 1-5



Quick Chuck Change Manual (OM Type) ••• 1-6

- ▶ OM Type 1-6



Tool Changer •••••••••••••••• 1-8

- ▶ B / BN Type 1-11
- ▶ Long Center Guide 1-16
- ▶ Additional Air Expansion for A / B / BN Type 1-17
- ▶ Accessories for A / B / BN Type 1-18
- ▶ Option & Replacement Parts 1-20
- ▶ For Articulated Robots 1-24
- ▶ Accessories for Articulated Robots 1-30
- ▶ Option & Replacement Parts 1-36



Automated Chuck Exchange System •••• 1-40

- ▶ Auto Quick Chuck Change Hanger / Hanger Tool 1-41
- ▶ Magnet Chuck Hanger 1-42

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Base Cylinder / Pad / Base Materials

By Industry

Logistics / Palletizing / Steel Metal Clamping / Metal Fabrication

Assembling Tools

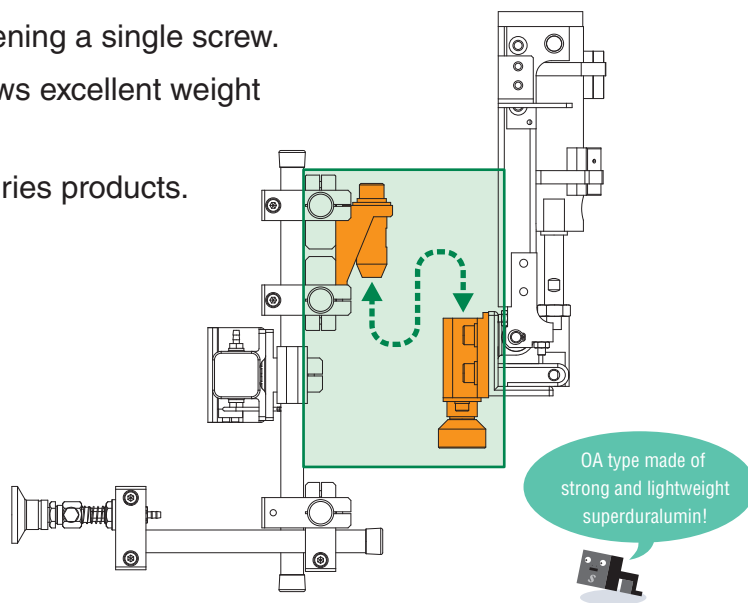
Tool / Jig

Information

Various Products Information



- ▶ Switch Robot hands merely by tightening a single screw.
- ▶ Using super duralumin material allows excellent weight reduction and superior strength.
- ▶ Interchangeable with existing OC series products.

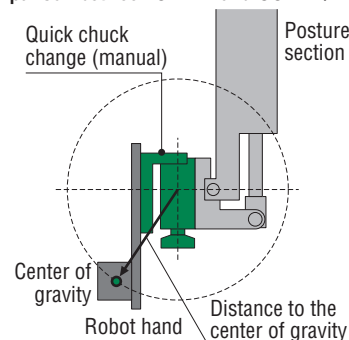
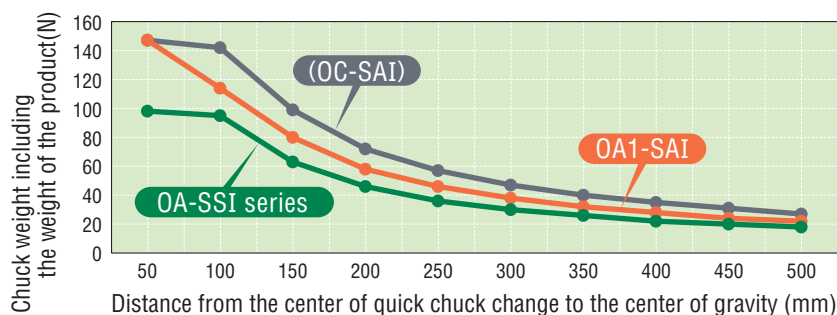


Specification

Product name		Order code No.	Weight (g)	Weight capacity (kg)	Injection press range (ton)	Page of details	
▶ Superduralumin							
Quick chuck change Manual		140219	166	~ 10	40 ~ 650	1-3	
		OA-SSL					
		140151	97				
		OA-SSI					
		140290	190	~ 15			
		OA1-SA					
		140257	228				
		OA1-SAI					
▶ Stainless steel (SUS)							
Quick chuck change Manual		140271	370	~ 10	40 ~ 650	1-5	
		OA-SSL (SUS)					
		140272	265				
		OA-SSI (SUS)					

Product name		Order code No. TYPE	Weight (g)	Weight capacity (kg)	Injection press range (ton)	Page of details
▶ Superduralumin						
Quick chuck change Manual		140291	547	~ 35	650 } 1,600	1-4
		OA2-LA				
		140155	548			
		OA-LAI				
▶ Made of steel						
Quick Chuck Attachment		140042	1,283	~ 35	650 } 1,600	1-5
		OC-LA				
		140043	1,000			
		OC-LAI				
▶ Plastic						
Spacer		041645	35	—	—	1-4
		ECP-031				

Allowable-load curve of OA-SSI, OA1-SAI (OC-SAI) (see [1-4](#) for comparison between OA-LAI and OC-LAI)





Quick Chuck Change Manual (Super Duralumin)

Switch chucks merely by tightening a single screw.

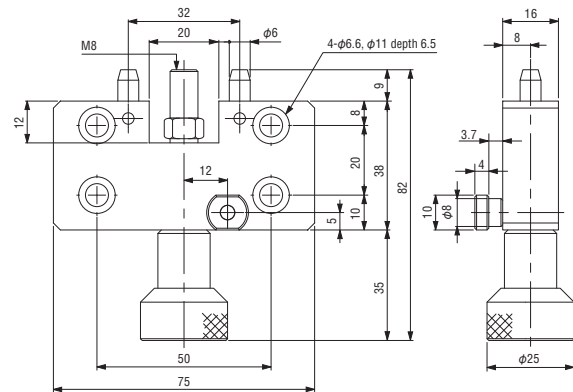
► Mounting bolt for OA-SS was extended.



Robot Side

Order code No.	140219
TYPE	OA-SSL

- Superduralumin
- Weight: 166g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Thickness after connection: 24mm



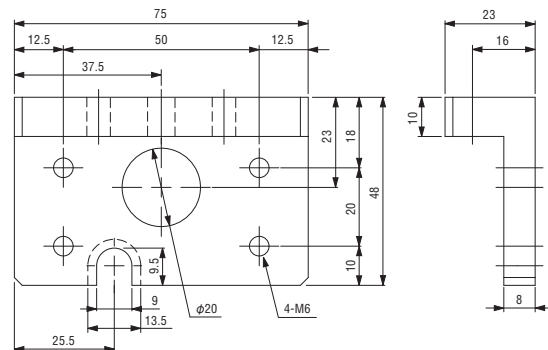
► Compatible with OC type QCC for robot side.



Tool Side

Order code No.	140151
TYPE	OA-SSI

- Superduralumin
- Weight: 97g
- Mounting position: tool side
- Weight capacity: ~ 10kg
- Thickness after connection: 24mm



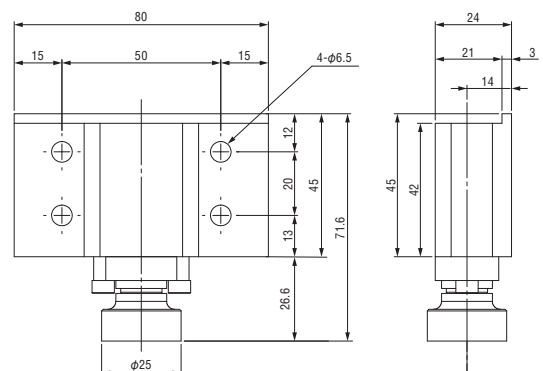
► Because it is made of super duralumin, it's lightweight and has excellent rigidity.



Robot Side

Order code No.	140290
TYPE	OA1-SA

- Superduralumin
- Weight: 190g
- Mounting position: robot side
- Weight capacity: ~ 15kg
- Thickness after connection: 33mm



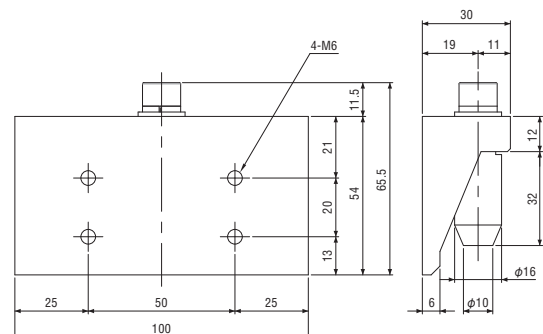
► Compatible with OC type QCC for robot side.



Tool Side

Order code No.	140257
TYPE	OA1-SAI

- Superduralumin
- Weight: 228g
- Mounting position: tool side
- Weight capacity: ~ 15kg
- Thickness after connection: 33mm



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



Quick Chuck Change Manual (Super Duralumin) / Chuck Spacer

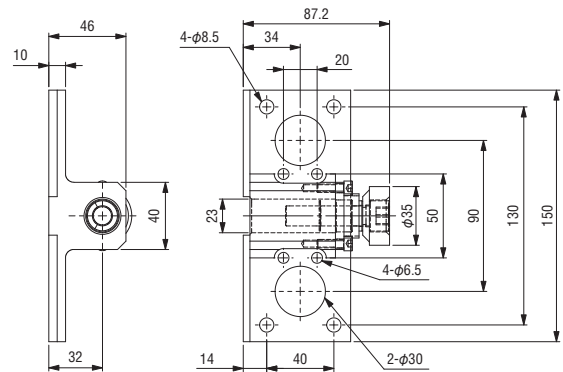
Switch robot hands merely by tightening a single screw.

- ▶ Because it is made of super duralumin, it's lightweight and has excellent rigidity. suitable for medium-sized robots.



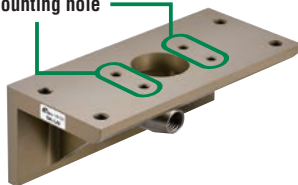
Robot Side	
Order code No.	140291
TYPE	OA2-LA

- Superduralumin
- Weight: 547g
- Mounting position: robot side
- Weight capacity: ~ 35kg
- Thickness after connection: 61mm



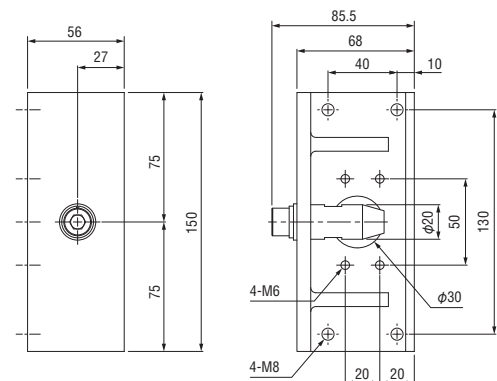
- ▶ Compatible with OC type for robot side.

Attachable to medium-size robots. Mounting hole



Tool Side	
Order code No.	140155
TYPE	OA-LAI

- Superduralumin
- Weight: 548g
- Mounting position: tool side
- Weight capacity: ~ 35kg
- Thickness after connection: 61mm



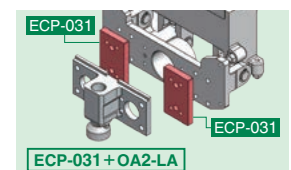
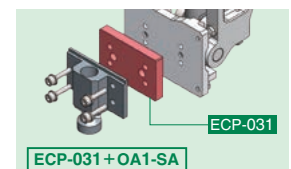
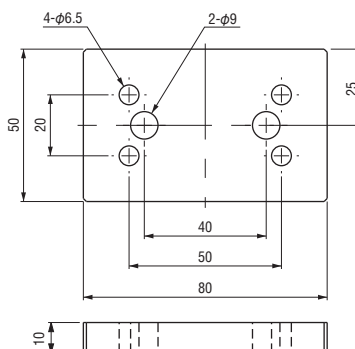
- ▶ Mounting spacer Use it when changing the height.



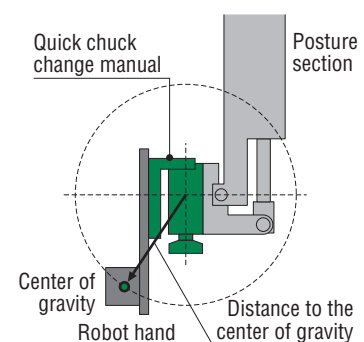
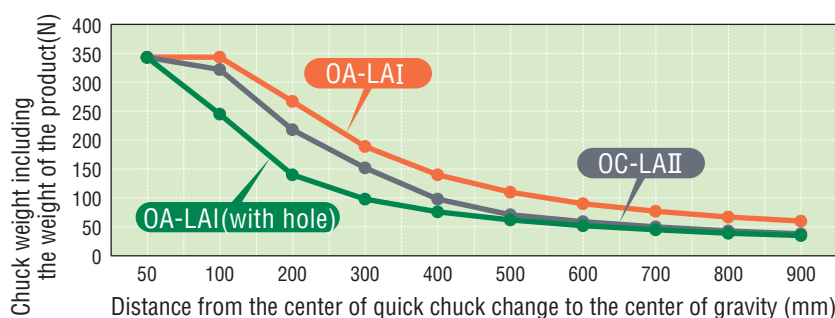
Chuck Spacer • Plastic • for chuck

Order code No.	041645
TYPE	ECP-031

- Plastic (polypropylene)
- Weight: 35g



Allowable-load Curve of OA-LAI(with hole), OA-LAI, and OC-LAI



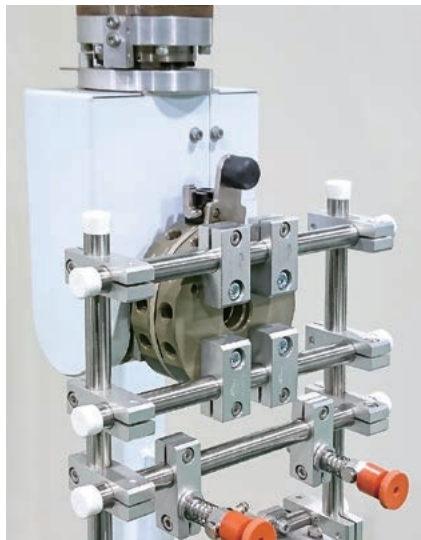


Quick Chuck Change	Quick Chuck Change Manual	Quick Chuck Change Manual (OM Type)	Tool Changer	Automated Hand Exchange System
Grip				
Mini Cylinder				
Accessories for Mini Cylinder				
Container Cylinders				
Accessories for Container Cylinder				
Grippers				
Rubber Material / Grip Pad				
Suction				
Suction Cups				
Suction Stems				
Pad in Pad				
Vacuum Gripper				
Air Ejector / Filter / Check Valve				
Ultra Small Part Take Out				
Vacuum Generator Unit				
Cut				
Air Nipper (Small-Medium)				
Air Nipper (Large)				
Frame / Module				
Jungle Gym				
Let's Joint				
Rectangular Tube				
Base Aluminum Material				
Sliding Chuck				
Pneumatic Components / Sensors				
Pneumatic Components				
Sensors / Multi AND Board				
PCID Communication Unit				
Lightweight Parts Series				
Frame / Suction / Resin Cylinders / Pads / Resin Manifolds				
By Industry				
Logistics - Palletizing / Sheet Metal-Stamping- Metal Fabrication				
Assembling Tools				
Tool / Jig				
Information				
Various Products Information				



Please check the performance table on the web site.

- ▶ The qcc can be replaced by rotating the locking bolt on the robot side chuck.
- ▶ Qcc can help eliminate air connection mistakes.

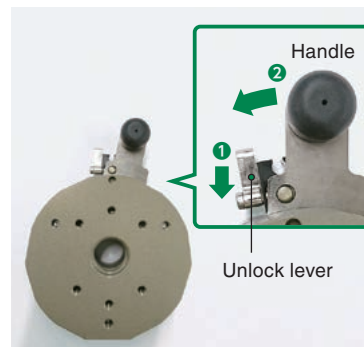


Mounting method



Attach the tool side qcc to the robot qcc by rotating the locking bolt on robot side qcc. Make sure the tool is secure and not loose.

Unlock method



To disengage the lock pin, press the release lever located adjacent to the handle with your finger, and then rotate the handle to the left.

Specification

Product name	Order code No.	TYPE	Weight (g)	Weight capacity (kg)	Connection pipe	Lever rotation angle	Fixed rotation torque	Unlock rotation torque	Electric contact Connector shape	Fixed pin number	Repeatability and Accuracy
NEW Quick Chuck Change Manual (OM Type)	140382	OM-50	105	~ 5	4pins (M5)	20°	30N·m	15N·m	9 pin 2A DC24V Max Connector sold separately	3	± 0.02
	140383	OM-50I	65						11 pin 2A DC24V Max Connector sold separately		
	140384	OM-90	328	~ 20	6pins (PT1/8)	20°	180N·m	100N·m	16 pin 2A DC24V Max Connector sold separately	3	± 0.02
	140385	OM-90I	212						16 pin 2A DC24V Max Connector sold separately		

※Check the web site for allowable static load curves. (above the QR code)

Quick Chuck Attachment

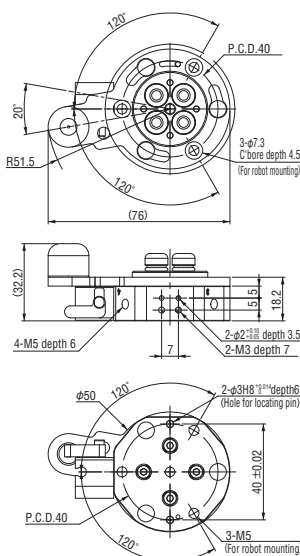
NEW



Robot Side

Order code No.	140382
TYPE	OM-50

- Superduralumin
- Weight: 105g
- Mounting position : robot side
- Weight capacity : 5kg
- Thickness after connection : 32.7mm
- Connection pipe : 4 circuits (M5)



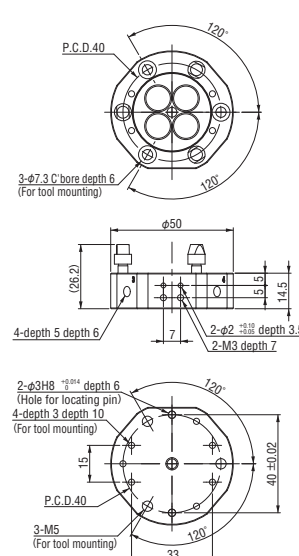
NEW

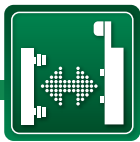


Tool Side

Order code No.	140383
TYPE	OM-50I

- Superduralumin
- Weight: 65g
- Mounting position : tool side
- Weight capacity : 5kg
- Thickness after connection : 32.7mm
- Connection pipe : 4 circuits (M5)





Quick Chuck Change Manual (OM Type)

It can be replaced by simply rotating the locking bolt on the robot chuck.

Quick Chuck Change Manual (OM Type)



You can see moving images of products by using QR code reader of your smartphone.

Quick Chuck Attachment

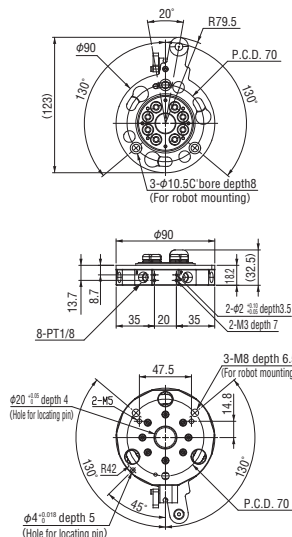
NEW



Robot Side

Order code No.	140384
TYPE	OM-90

- Superduralumin
- Weight: 328g
- Mounting position: robot side
- Weight capacity: 20kg
- Thickness after connection: 32.7mm
- Connection pipe: 8 circuits (PT1/8)



Connector drawing → See 1-33.

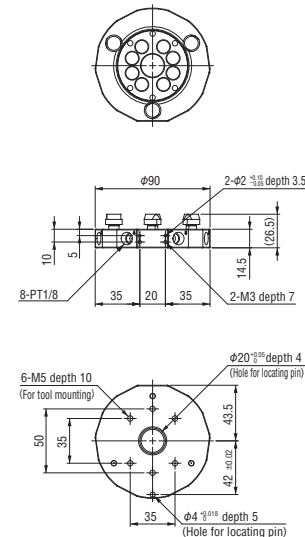
NEW



Tool Side

Order code No.	140385
TYPE	OM-90I

- Superduralumin
- Weight: 212g
- Mounting position: tool side
- Weight capacity: 20kg
- Thickness after connection: 32.7mm
- Connection pipe: 8 circuits (PT1/8)



Connector Accessories

D-sub & probe connector	Robot side	Tool Side
	Order code No. 140190	140192
TYPE	OXR-DPS09	OXR-DPS09-I
Weight	25g	
Wiring Specification	AWG22	
Electric contact	9 pin (2A)	
Attached screw	Flat head screw with cross recess M4×10 [123515]	

● Connector drawing → See (1-33)

Probe connector (solder)	Robot side	Tool Side
	Order code No. 140264	140265
TYPE	OXR-PS16	OXR-PS16-I
Weight	8g	11g
Wiring Specification	AWG22	
Electric contact	16 pin (2A)	
Attached screw	Flat head screw with cross recess M4×10 [123515]	

● Connector drawing → See (1-33)

Probe connector	Robot side	Tool Side
	Order code No. 140362	140363
TYPE	OXR-PSH11	OXR-PSH11-I
Weight	53g	
Wiring Specification	Solder-fix type (AWG23) 500mm	
Electric contact	11 pin (2A)	
Attached screw	Flat head screw with cross recess M4×10 [123515]	

● Connector drawing → See (1-33)

NEW

Probe connector bracket	Order code No.	140388
	TYPE	OMR-CBX20
	Weight	10g

● Accessories : positioning pin, mounting bolt

● It is necessary when attaching the electrical contact connector. (Drawing → (1-33))

Cable Accessories

D-SUB cable •for OX(for OX-B type)	Robot side		Tool Side	
	Order code No.	140197	140247	140202
TYPE	OX-DS09S-H	OX-DS09S-H (1.5M)	OX-DS09P-I-H	OX-DS09P-I-H (1.5M)
Weight	60g	138g	60g	140g
Cable length	0.5m	1.5m	0.5m	1.5m
Electric contact	9 pin			
Wiring Specification	Movable cable (AWG22), for UL			

● Bending radius (mm) : R46

D-SUB cable •for OX(for OX-B type)	Robot side (L)		Tool Side (L)	
	Order code No.	140203	140248	140204
TYPE	OX-DS09SL-H	OX-DS09SL-H (1.5M)	OX-DS09PL-I-H	OX-DS09PL-I-H (1.5M)
Weight	60g	138g	60g	140g
Cable length	0.5m	1.5m	0.5m	1.5m
Electric contact	9 pin			
Wiring Specification	Movable cable (AWG22), for UL			

● Bending radius (mm) : R46

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

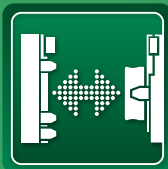
Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



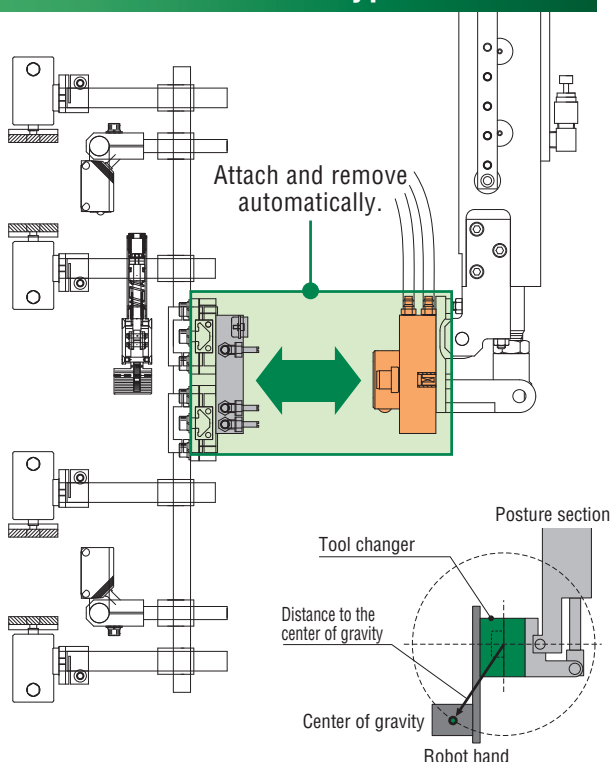
Tool Changer

"Multifunction of the robot" and "shortening the setup time" are two capabilities of the tool changer. We increase productivity and offer a range of small-quantity items.

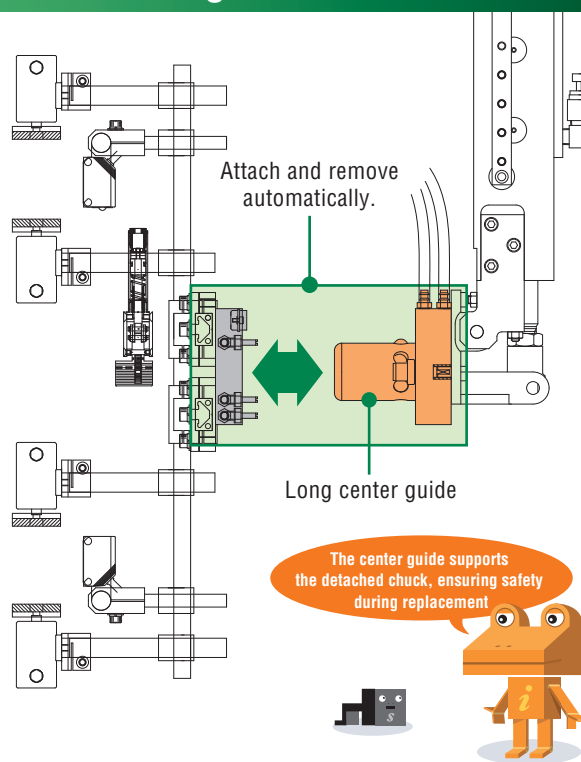
[Features]

- The connecting mechanism is the ball locking type, so it's convenient to assemble and disassemble.
- Equipped with "Pull in function" and "detachable function" when assembling and disassembling.
- With air cut-off circuit (stops air supplies when detached).
- Made of Super Duralumin-strong rigidity and long operating life.
- Safety is ensured by "fail safe mechanism (drop prevention)" when air intercepts.

A/B/BN Type



Long Center Guide



Allowable-load curve of OX-B series

OX-SSB

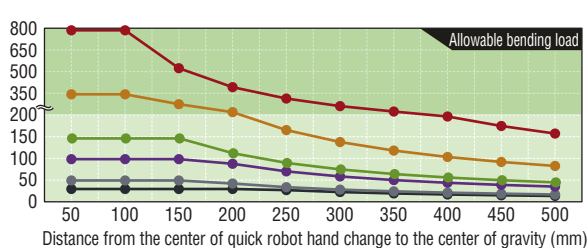
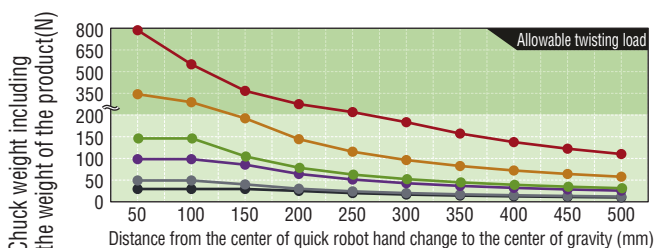
OX-SBS

OX-SB TYPE

OX-WSB

OX-LB

OX-WLB



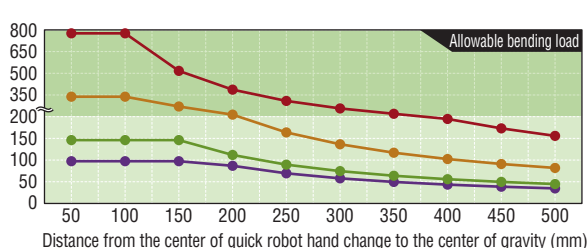
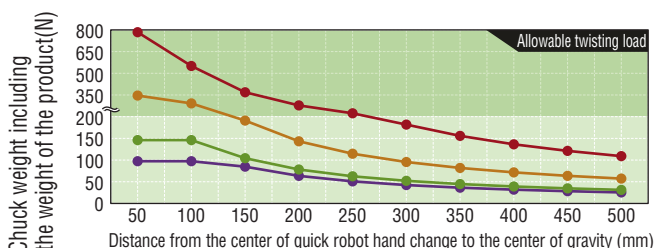
Allowable-load curve of OX-A series

OX-SA

OX-WSA

OX-LA

OX-WLA





Please check the performance
table on the web site.



You can see moving images of products by
using QR code reader of your smartphone.

Specification

Product name		Order code No.	TYPE	Weight (g)	Weight capacity (kg)	Injection press range (ton)	Allowable bending moment (Nm)	Allowable torsional moment (Nm)	Power to draw(N) Power to force(N)	Electric contact Connector shape	Piping connect	Page of detail		
Tool changer	B type (with connector)		140266	OX-SSB	330	~ 3	40 } 80	6.7	5.0	1500 / 480	7Pin×2 1A DC24V Max Prove connector Solder fixed type	4 port (M5)	1-11	
			140268	OX-SSBI	120									
			140181	OX-SB	475	~ 10	80 } 650	17.5	12.8	1700 / 550	9Pin×2 2A DC24V Max D-SUB Connector Prove connector	6 port (M5)	1-11	
			140182	OX-SBI	235									
			140299	OX-WSB	845	~ 15	200 } 650	22.5	15.7	2,000 / 700		12 port (M5)	1-12	
			140301	OX-WSBI	365									
			140183	OX-LB	1,290	~ 35	650 } 1,600	41.2	28.7	4,000 / 750		6 port (M5)	1-13	
			140186	OX-LBI	615									
			140274	OX-LBF	1,485									
			140273	OX-LBFI	760									
			140184	OX-WLB	2,720	~ 80	1,600 } 5,000	78.4	54.8	7,000 / 1,500		10 port (M5)		
			140187	OX-WLBI	1,385									
			140217	OX-SBY	475	~ 10	80 } 650	17.5	12.8	1,700 / 500		6 port (M5)	1-14	
			140218	OX-SBYI	235									
			140275	OX-SBH	440									
			140276	OX-SBHI	245									
			140233	OX-SBS	305	~ 5	80 } 300	8.4	6.0	1,000 / 280	9Pin×1 2A DC24V Max D-SUB Connector Prove connector		1-15	
			140234	OX-SBSI	122									
		B /BN type (w/o connector)		140280	OX-SSBN	318	~ 3	40 } 80	6.7	5.0	1,500 / 480	—	6 port (M5)	1-11
				140281	OX-SSBNI	108								
			140225	OX-SBN	431	~ 10	80 } 650	17.5	12.8	1,700 / 550	12 port (M5)		1-12	
			140226	OX-SBNI	197									
			140300	OX-WSBN	787	~ 15	200 } 650	22.5	15.7	2,000 / 700	6 port (M5)		1-13	
			140302	OX-WSBNI	320									
			140231	OX-LBN	1,250	~ 35	650 } 1,600	41.2	28.7	4,000 / 750			1-14	
			140232	OX-LBNI	575									
			140258	OX-LBFN	1,478									
		140259	OX-LBFNI	756										

Please use manual push button "PB1-E (152308), PBW1-E(152306)" for manual exchange (1-18 , 6-11).

Quick Chuck Change

Quick Chuck
Change
Manual

Quick Chuck
Change Manual
(OM Type)

Tool Changer

Automated
Hand Exchange
System

Grip

Mini
Cylinder

Accessories
for Mini
Cylinder

Container
Cylinders

Accessories
for Container
Cylinder

Grippers

Rubber
Material /
Grip Pad

Suction

Suction
Cups

Suction
Stems

Pad in Pad

Vacuum
Gripper

Air Ejector /
Filter /
Check Valve

Ultra
Small Part
Take Out

Vacuum
Generator
Unit

Cut

Air Nipper
(Small-Medium)

Air Nipper
(Large)

Frame / Module

Jungle
Gym

Let's Joint

Rectangular
Tube

Base
Aluminum
Material

Sliding
Chuck

Pneumatic Components / Sensors

Pneumatic
Components

Sensors /
Multi AND
Board

PCIO
Communication
Unit

Lightweight Parts Series

Frame / Section /
Resin Cylinders / Pads /
Resin Manifolds

By Industry

Logistics-Palletizing/
Sheet Metal-Stamping-
Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products
Information



Please check the performance
table on the web site.

■ Specification

Product name			Order code No.	TYPE	Weight (g)	Weight capacity (kg)	Injection press range (ton)	Allowable bending moment (Nm)	Allowable torsional moment (Nm)	Power to draw(N) Power to force(N)	Electric contact Connector shape	Piping connect	Page of details
Tool changer	B / BN type (w/o connector)		140277	OX-WLBN	2,680	~ 80	1,600 } 5,000	78.4	54.8	7,000 1,500	—	10 port (M5)	1-13
			140278	OX-WLBNI	1,345								
			140229	OX-SBYN	435	~ 10	80 } 650	17.5	12.8	1,700 550		6 port (M5)	1-14
			140230	OX-SBYNI	195								
			140260	OX-SBHN	399								
			140261	OX-SBHNI	202								
	Long center guide (with connector)		140228	OX-LB-30	1,370	~ 35	650 } 1,600	41.2	28.7	4,000 750	9Pin×2 2A DC24V Max D-SUB connector Probe connector	6 port (M5)	1-16
			140283	OX-WLB-30	2,905	~ 80	1,600 } 5,000	78.4	54.8	7,000 1,500	9Pin×2 2A DC24V Max D-SUB connector	10 port (M5)	
	Long center guide (w/o connector)		140345	OX-SBN-30	470	~ 10	80 } 650	17.5	12.8	1,700 550	—	6 port (M5)	
			140279	OX-LBN-30	1,330	~ 35	650 } 1,600	41.2	28.7	4,000 750		6 port (M5)	
			140267	OX-WLBN-30	2,865	~ 80	1,600 } 5,000	78.4	54.8	7,000 1,500		10 port (M5)	

Please use manual push button "PB1-E (152308), PBW1-E(152306)" for manual exchange (1-18 , 6-11).

■ Common specification

Positional reproduction Accuracy	Used air pressure	Drive piping	Acceptable electric wiring	Allowable temperature/humidity range
±0.02mm*1	0.5~0.7MPa	Clean air, piping of $\phi 6$ ($\phi 4^{*2}$), double action type	AWG20 Max.	0°C -55°C, 0% -95% (w/o condensation)

*1 Based on our measurement

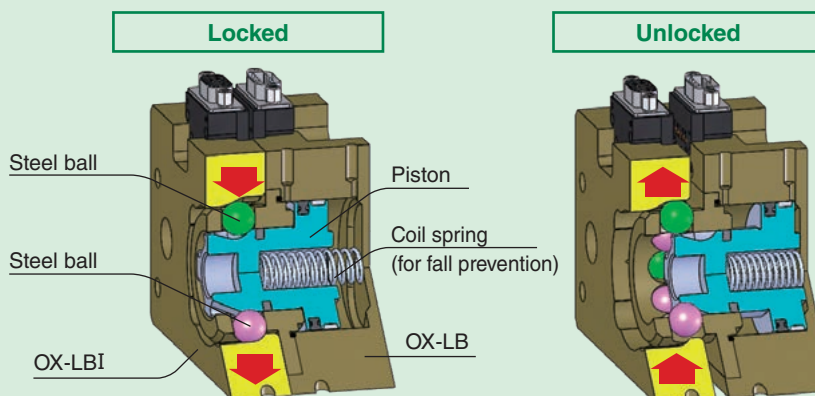
*2 $\phi 4$: OX-SB series (SSB, SB, SBY, SBH, SBS, SBN, SBYN, SBHN)

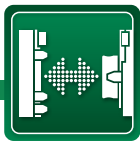
Features

- Original detachable mechanism
(The U.S. US: 7,559,265
Europe: EP 1 970 170)
- Fail-safe mechanism
(Prevention of falling off)
- Air check valve

Merits

- Reduction of setup change time
- Reproducibility of mounting position
- Prevention of different piping/
wiring connection

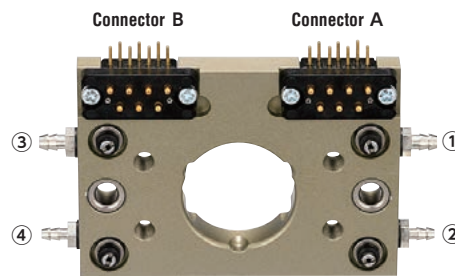
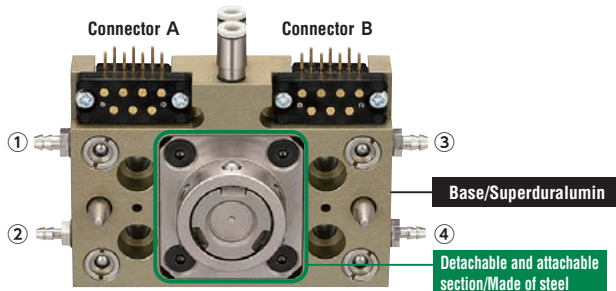




B/BN Type

The chuck on the robot and carrier loader can be easily replaced in a short time.

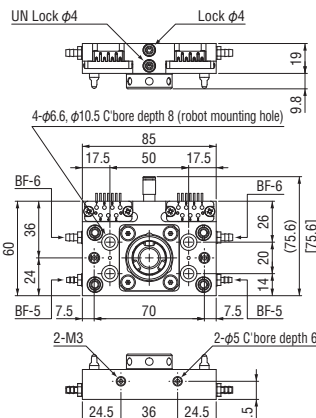
► Weight capacity 3kg Type



Robot Side

Order code No.	140266
TYPE	OX-SSB

- Weight: 330g
- Weight capacity: ~3kg
- Mounting position: robot side
- Thickness after connection: 29mm



* The value in [] shows the type w/o connector.

W/o connector

Order code No.	140280
TYPE	OX-SSBN

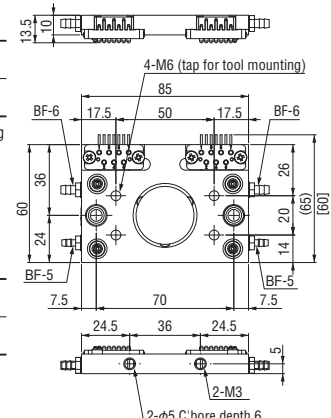


- Weight: 318g
- Mounting position: robot side
- Weight capacity: ~3kg
- Thickness after connection: 29mm

Tool Side

Order code No.	140268
TYPE	OX-SSBI

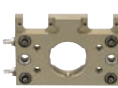
- Superduralumin
- Weight: 120g
- Mounting position: tool side
- Weight capacity: ~3kg
- Thickness after connection: 29mm



* The value in [] shows the type w/o connector.

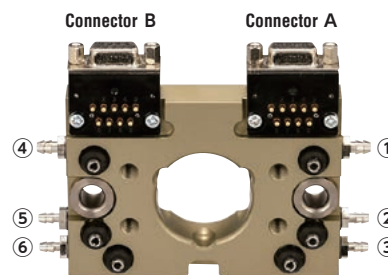
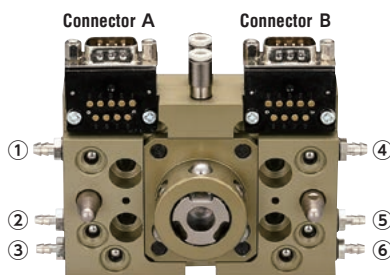
W/o connector

Order code No.	140281
TYPE	OX-SSBNI



- Superduralumin
- Weight: 108g
- Mounting position: tool side
- Weight capacity: ~3kg
- Thickness after connection: 29mm

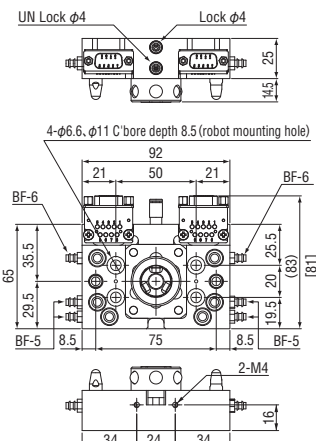
► Weight capacity 10kg Type



Robot Side

Order code No.	140181
TYPE	OX-SB

- Superduralumin
- Weight: 475g
- Mounting position: robot side
- Weight capacity: ~10kg
- Thickness after connection: 40mm



* The value in [] shows the type w/o connector.

W/o connector

Order code No.	140225
TYPE	OX-SBN

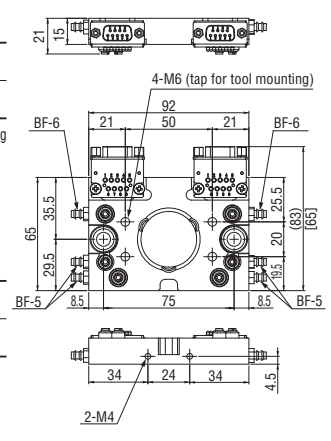


- Superduralumin
- Weight: 431g
- Mounting position: robot side
- Weight capacity: ~10kg
- Thickness after connection: 40mm

Tool Side

Order code No.	140182
TYPE	OX-SBI

- Superduralumin
- Weight: 235g
- Mounting position: tool side
- Weight capacity: ~10kg
- Thickness after connection: 40mm
- Can be installed on OX-SBY



* The value in [] shows the type w/o connector.

W/o connector

Order code No.	140226
TYPE	OX-SBNI



- Superduralumin
- Weight: 197g
- Mounting position: tool side
- Weight capacity: ~10kg
- Thickness after connection: 40mm
- Can be installed on OX-SBY

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

Order code No.	140299
TYPE	OX-WSB

- | | |
|----------------|---------|
| Order code No. | 140300 |
| TYPE | OX-WSBN |

-

Order code No.	140301
TYPE	OX-WSBI

- | | |
|----------------|----------|
| Order code No. | 140302 |
| TYPE | OX-WSBNI |

- [illegible]

Front view of the 1000 Series Hydraulic Valve. The valve is a compact, rectangular unit with a central circular port. It features two solenoid coils labeled "Connector A" and "Connector B" at the top. Six numbered callouts (1-6) point to specific ports: 1 (top left), 2 (middle left), 3 (bottom left), 4 (top right), 5 (middle right), and 6 (bottom right).

Order code No.	140183
TYPE	OX-LB

- | | |
|----------------|--------|
| Order code No. | 140231 |
| TYPE | OX-LBN |

-
- UN Lock $\phi 6$ Lock $\phi 6$
- 38
- 59.5
- 4- $\phi 9$, $\phi 14$ C'bore depth 18 (robot mounting hole)
- BF-6
- 22
- 106
- 22
- BF-6
- 80
- 44
- 36
- BF-5
- 10
- 130
- 150
- 10
- BF-5
- 15
- 40
- 25
- 106
- 2-M6
- 41
- 68
- 41
- 26.5

Order code No.	140186
TYPE	OX-LBI

- | | |
|----------------|---------|
| Order code No. | 140232 |
| TYPE | OX-LBNI |

-
- Technical drawing of the BFM-6000 tool head, showing top and side views with dimensions and labels.
- Top View Dimensions:**
- Overall width: 150
 - Overall height: 80
 - Distance between tool mounting holes: 106
 - Distance from center to tool mounting holes: 22
 - Distance from center to BF-6 holes: 22
 - Distance from center to BF-5 holes: 10
 - Distance between BF-6 holes: 44
 - Distance between BF-5 holes: 36
 - Distance from center to BF-5 holes: 10
 - Distance from center to BF-6 holes: 25
 - Distance from center to BF-5 holes: 15
 - Distance from center to BF-6 holes: 15
- Side View Dimensions:**
- Overall width: 150
 - Overall height: 13.5
 - Distance between tool mounting holes: 70
 - Distance from center to tool mounting holes: 40
 - Distance from center to BF-6 holes: 40
 - Distance from center to BF-5 holes: 10
- Labels:**
- BF-6
 - BF-5
 - 4-M8 (tap for tool mounting)
 - 2-M6

1-12

Description of type

OX-LB

N

I

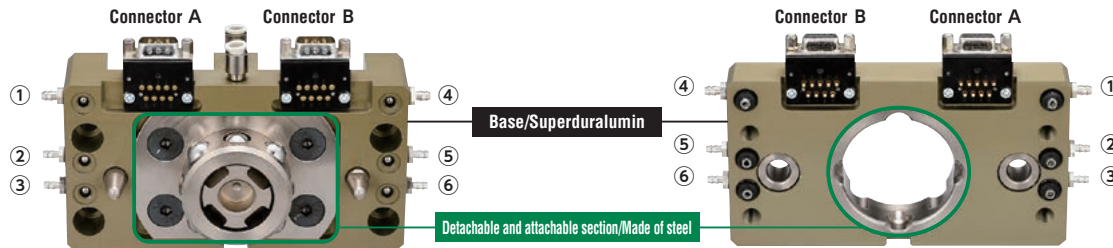
Installation side
None (ROBOT SIDE)
I (TOOL SIDE)

Type (size)

Connector
N (NONE)
No (w / connector)

► Weight capacity 35kg Type

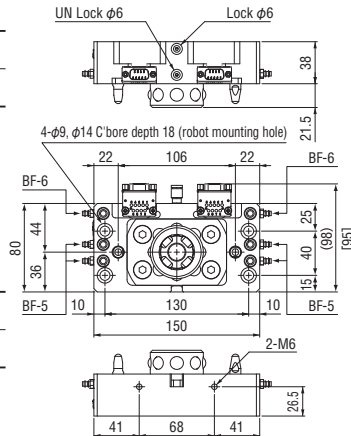
► Super duralumin-made frame. Improved durability: steel hybrid structure of detachable and attachable section.



Robot Side

Order code No.	140274
TYPE	OX-LBF

- Weight: 1,485g
- Mounting position: robot side
- Weight capacity: ~ 35kg
- Thickness after connection: 60mm

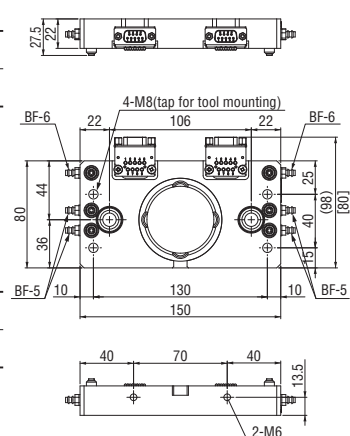


* The value in [] shows the type w/o connector.

Tool Side

Order code No.	140273
TYPE	OX-LBFI

- Weight: 760g
- Mounting position: tool side
- Weight capacity: ~ 35kg
- Thickness after connection: 60mm

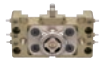


* The value in [] shows the type w/o connector.

W/o connector

Order code No.	140258
TYPE	OX-LBFN

- Weight: 1,478g
- Mounting position: robot side
- Weight capacity: ~ 35kg
- Thickness after connection: 60mm



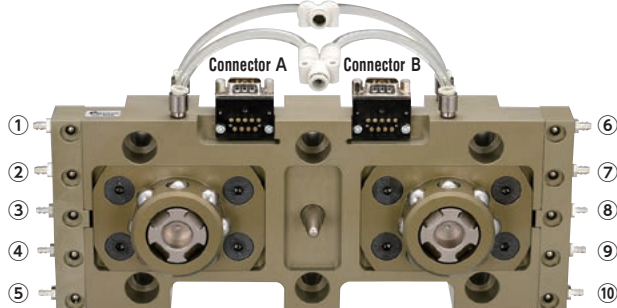
W/o connector

Order code No.	140259
TYPE	OX-LBFNI

- Weight: 756g
- Mounting position: tool side
- Weight capacity: ~ 35kg
- Thickness after connection: 60mm



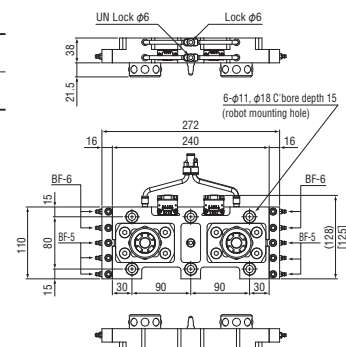
► Weight capacity 80kg Type



Robot Side

Order code No.	140184
TYPE	OX-WLB

- Superduralumin
- Weight: 2,720g
- Mounting position: robot side
- Weight capacity: ~ 80kg
- Thickness after connection: 60mm

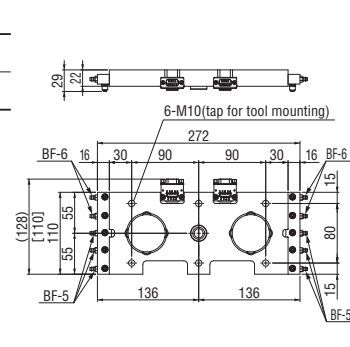


* The value in [] shows the type w/o connector.

Tool Side

Order code No.	140187
TYPE	OX-WLBI

- Superduralumin
- Weight: 1,385g
- Mounting position: tool side
- Weight capacity: ~ 80kg
- Thickness after connection: 60mm

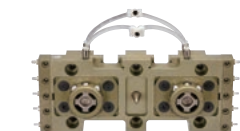


* The value in [] shows the type w/o connector.

W/o connector

Order code No.	140277
TYPE	OX-WLBN

- Superduralumin
- Weight: 2,680g
- Mounting position: robot side
- Weight capacity: ~ 80kg
- Thickness after connection: 60mm



W/o connector

Order code No.	140278
TYPE	OX-WLBNI

- Superduralumin
- Weight: 1,345g
- Mounting position: tool side
- Weight capacity: ~ 80kg
- Thickness after connection: 60mm



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

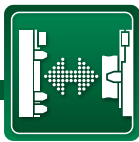
Logistics-Palletizing / Sheet Metal-Stamping- Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

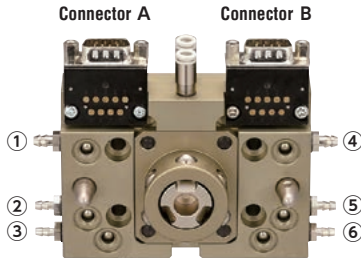


B/BN Type

Also compatible with the mounting pattern of cartesian robots made by many other manufacturers.

► Weight capacity 10kg Type

Mounting pitch
27×50



Robot Side

Order code No.	140217
TYPE	OX-SBY

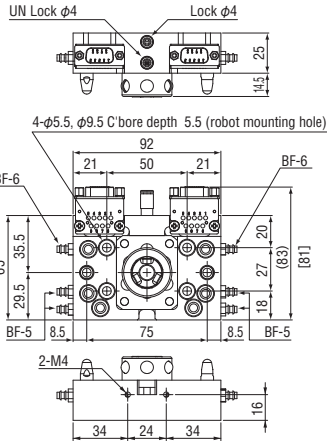
- Superduralumin
- Weight: 475g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm

W/o connector

Order code No.	140229
TYPE	OX-SBYN

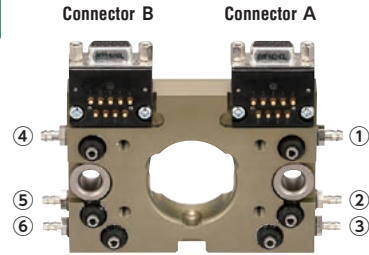


- Superduralumin
- Weight: 435g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm



* The value in [] shows the type w/o connector.

Mounting pitch
27×50



Tool Side

Order code No.	140218
TYPE	OX-SBYI

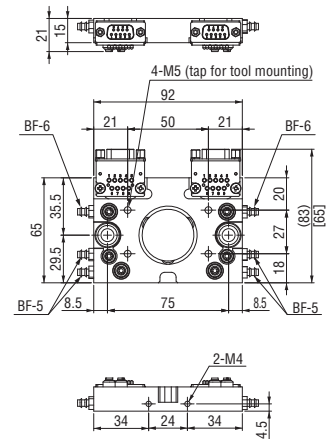
- Superduralumin
- Weight: 235g
- Mounting position: tool side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm
- Can be Installable on OX-SB

W/o connector

Order code No.	140230
TYPE	OX-SBYNI



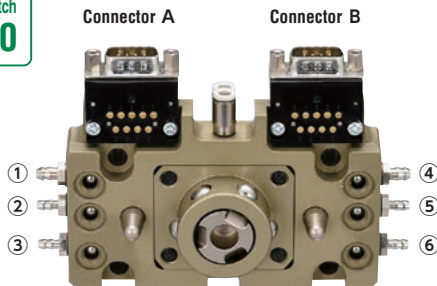
- Superduralumin
- Weight: 195g
- Mounting position: tool side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm
- Can be Installable on OX-SB



* The value in [] shows the type w/o connector.

► Weight capacity 10kg Type

Mounting pitch
40×70



Robot Side

Order code No.	140275
TYPE	OX-SBH

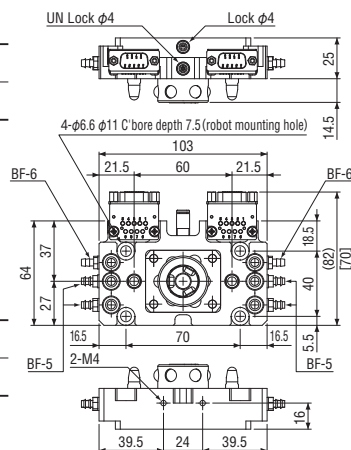
- Superduralumin
- Weight: 440g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm

W/o connector

Order code No.	140260
TYPE	OX-SBHN

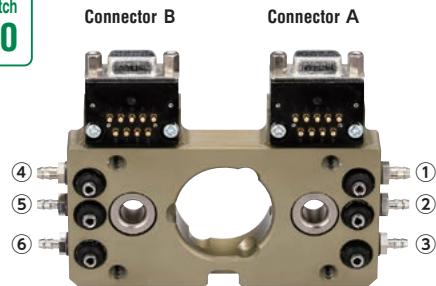


- Superduralumin
- Weight: 399g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm



* The value in [] shows the type w/o connector.

Mounting pitch
40×70



Tool Side

Order code No.	140276
TYPE	OX-SBHI

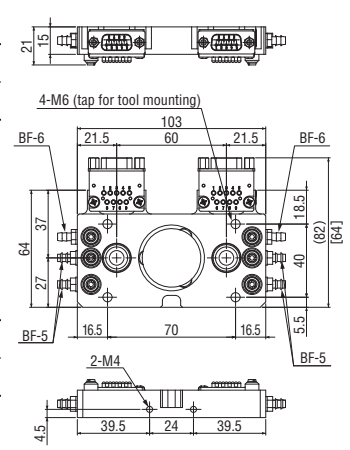
- Superduralumin
- Weight: 245g
- Mounting position: tool side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm

W/o connector

Order code No.	140261
TYPE	OX-SBHNI



- Superduralumin
- Weight: 202g
- Mounting position: tool side
- Weight capacity: ~ 10kg
- Thickness after connection: 40mm



* The value in [] shows the type w/o connector.

Description of type

OX-

SBY

N

I

Installation side
None (ROBOT SIDE)
I (TOOL SIDE)

Type (size)

Connector
N (NONE)
No (w / connector)

Weight capacity 5kg Type

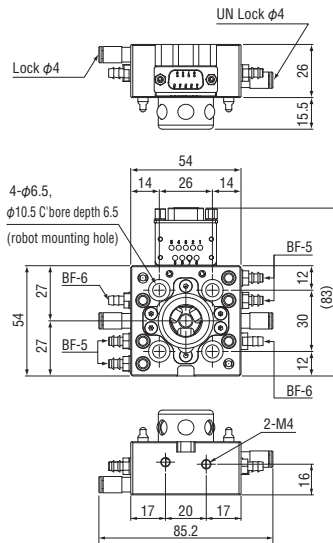
Mounting pitch
30×26



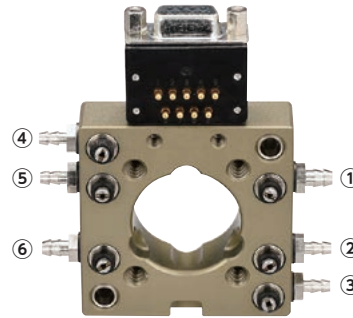
Robot Side

Order code No.	140233
TYPE	OX-SBS

- Superduralumin
 - Weight: 305g
 - Mounting position: robot side
 - Weight capacity: ~ 5kg
 - Thickness after connection: 42mm
 - The connector used is OXR for articulation
- ➔ See **(1-31)**



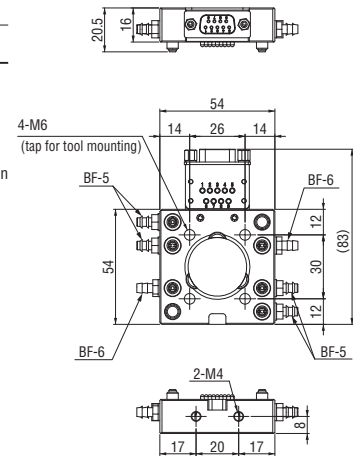
Mounting pitch
30×26



Tool Side

Order code No.	140234
TYPE	OX-SBSI

- Superduralumin
 - Weight: 122g
 - Mounting position: tool side
 - Weight capacity: ~ 5kg
 - Thickness after connection: 42mm
 - The connector used is OXR for articulation
- ➔ See **(1-31)**



Quick Chuck Change

Quick Chuck Change Manual

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

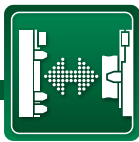
Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



Long Center Guide

Easy exchange of heavy chuck plate with long center guide.

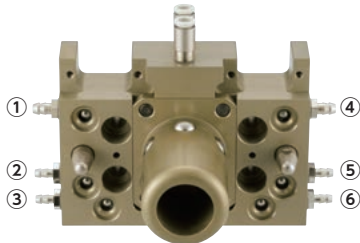
Tool changer
(Long center guide)



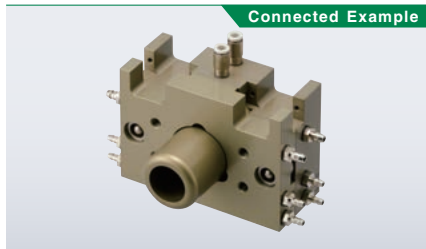
You can see moving images of products by using QR code reader of your smartphone.

- Since the center guide comes out of the tool mounting surface about 30 mm in combination, When assembled, the center guide protrudes about 30mm from the tool mounting surface, so it is necessary to be careful about EOAT/Chuck robot hand design.

Weight capacity 10kg Type



Connected Example

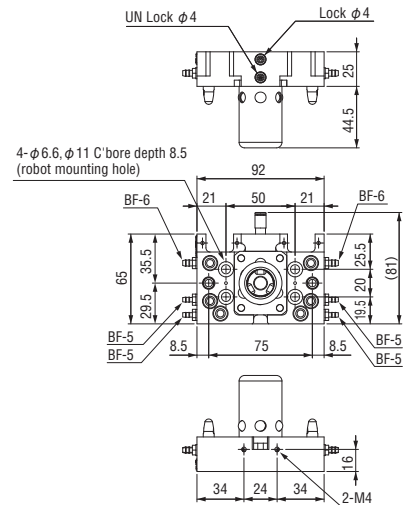


Robot Side

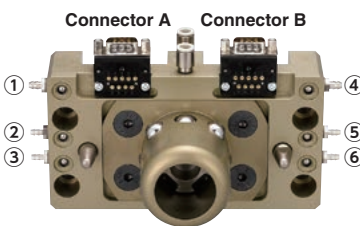
W/o connector

Order code No.	140345
TYPE	OX-SBN-30

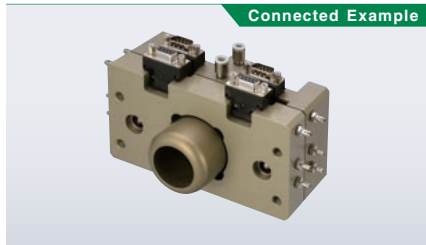
- Superduralumin
- Weight: 470g
- Mounting position: robot side
- Weight capacity: ~ 10kg
- Tools: OX-SBN I, OX-SBYNI



Weight capacity 35kg Type



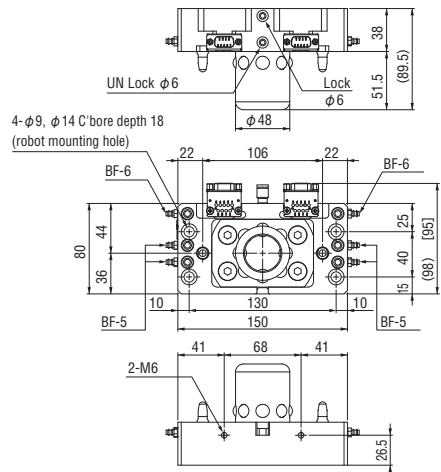
Connected Example



Robot Side

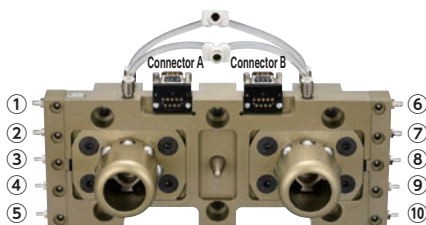
Order code No.	140228
TYPE	OX-LB-30

- Superduralumin
- Weight: 1,370g
- Mounting position: robot side
- Weight capacity: ~ 35kg
- Tools: OX-LB I

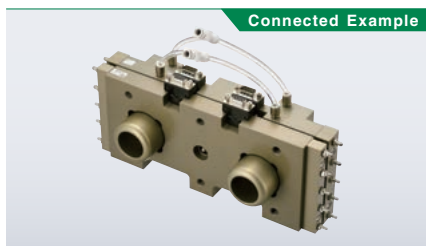


* The value in [] shows the type w/o connector.

Weight capacity 80kg Type



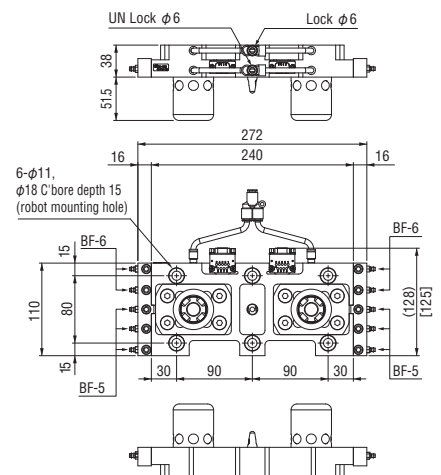
Connected Example



Robot Side

Order code No.	140283
TYPE	OX-WLB-30

- Superduralumin
- Weight: 2,905g
- Mounting position: robot side
- Weight capacity: ~ 80kg
- Tools: OX-WLB I

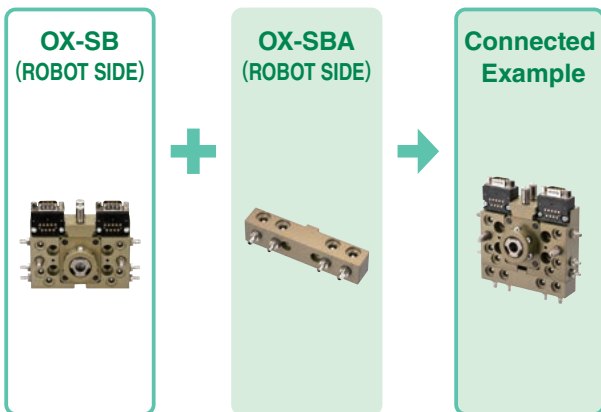


* The value in [] shows the type w/o connector.



Additional Air Expansion

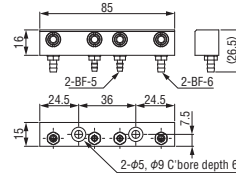
A Type / B Type / BN Type



FOR OX-SSB (Robot Side)

Order code No.	140294
TYPE	OX-SSBA

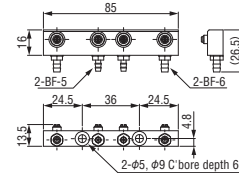
- Weight: 56g
- Attachments: mounting bolt (M3) × 2
- Air port: M5 hole × 4
- 8 ports in total including the air port of robot side body



FOR OX-SSBI (Tool Side)

Order code No.	140295
TYPE	OX-SSBIA

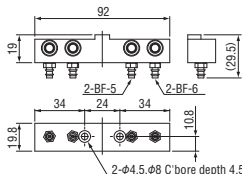
- Weight: 33g
- Attachments: mounting bolt (M3) × 2
- Air port: M5 hole × 4
- 8 ports in total including the air port of tool side body



FOR OX-SA/OX-SB (Robot Side)

Order code No.	140193
TYPE	OX-SBA

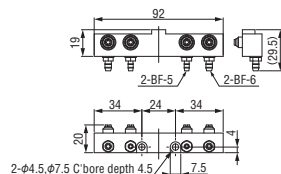
- Weight: 90g
- Attachments: mounting bolt (M4) × 2
- Air port: M5 hole × 4
- 10 ports in total including the air port of robot side body



FOR OX-SAI/OX-SBI (Tool Side)

Order code No.	140194
TYPE	OX-SBIA

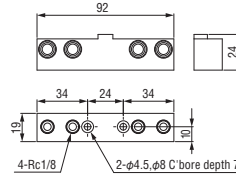
- Weight: 70g
- Attachments: mounting bolt (M4) × 2
- Air port: M5 hole × 4
- 10 ports in total including the air port of tool side body



FOR OX-SA/OX-SB (Robot Side)

Order code No.	140251
TYPE	OX-SBA1

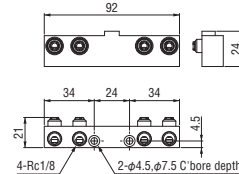
- Weight: 91g
- Attachments: mounting bolt (M4) × 2
- Air port: 1/8 hole × 4, w/o check valve
- 10 ports in total including the air port of robot side body



FOR OX-SAI/OX-SBI (Tool Side)

Order code No.	140252
TYPE	OX-SBIA1

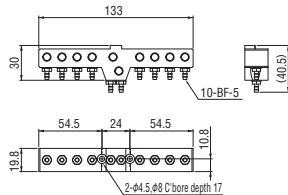
- Weight: 72g
- Attachments: mounting bolt (M4) × 2
- Air port: 1/8 hole × 4
- 10 ports in total including the air port of tool side body



NEW FOR OX-SB (Robot Side)

Order code No.	140391
TYPE	OX-SCA-10

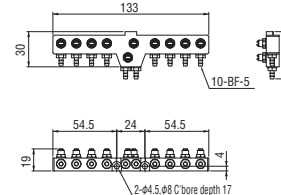
- Weight: 144g
- Attachments: mounting bolt (M4) × 2
- Air port: M5 hole × 10
- 16 ports in total including the air port of robot side body



NEW FOR OX-SBI (Tool Side)

Order code No.	140392
TYPE	OX-SCIA-10

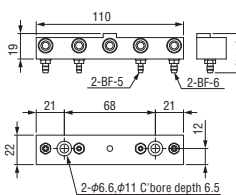
- Weight: 90.7g
- Attachments: mounting bolt (M4) × 2
- Air port: M5 hole × 10
- 16 ports in total including the air port of tool side body



FOR X-LA/OX-LB (Robot Side)

Order code No.	140195
TYPE	OX-LBA

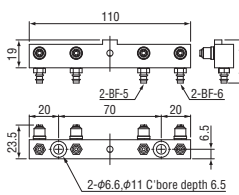
- Weight: 115g
- Attachments: mounting bolt (M6) × 2
- Air port: M5 hole × 4
- 10 ports in total including the air port of robot side body



FOR OX-LAI/OX-LBI (Tool Side)

Order code No.	140196
TYPE	OX-LBIA

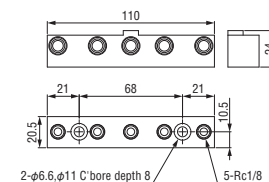
- Weight: 82g
- Attachments: mounting bolt (M6) × 2
- Air port: M5 hole × 4
- 10 ports in total including the air port of tool side body



FOR OX-LA/OX-LB (Robot Side)

Order code No.	140253
TYPE	OX-LBA1

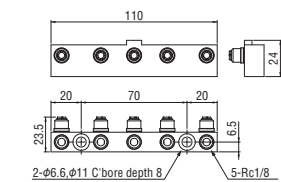
- Weight: 113g
- Attachments: mounting bolt (M6) × 2
- Air port: 1/8 hole × 5, w/o check valve
- 11 ports in total including the air port of robot side body



FOR OX-LAI/OX-LBI (Tool Side)

Order code No.	140254
TYPE	OX-LBIA1

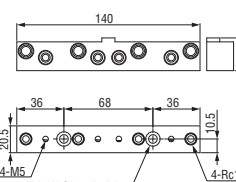
- Weight: 77g
- Attachments: mounting bolt (M6) × 2
- Air port: 1/8 hole × 5
- 11 ports in total including the air port of tool side body



FOR OX-LA/OX-LB (Robot Side)

Order code No.	140287
TYPE	OX-LBA3

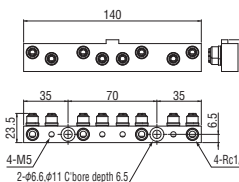
- Weight: 160g
- Attachments: mounting bolt (M6) × 2
- Air port: 1/8 hole × 5, w/o check valve, hole (M5) × 4
- 14 ports in total including the air port of robot side body



FOR OX-LAI/OX-LBI (Tool Side)

Order code No.	140288
TYPE	OX-LBIA3

- Weight: 112g
- Attachments: mounting bolt (M6) × 2
- Air port: 1/8 hole × 5, hole (M5) × 4
- 14 ports in total including the air port of tool side body



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing / Sheet Metal-Stamping / Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



Accessories

A Type / B Type / BN Type

► Remote valve for manual tool change actuation

Manual air valve push button (Return Type)



Order code No.	152308
TYPE	PB1-E
Weight	65g

Manual air valve push slide button (Retention Type)



Order code No.	152306
TYPE	PBW1-E
Weight	75g

► Replacement Parts

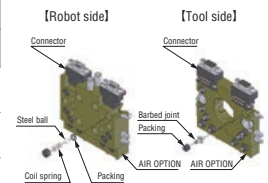
Barbed joint	Tool side			
	For OX-*A/*B	For OX-SSB	new For OX-SBS	For WSBI
Order code No.	110623	230116	230117	110722
TYPE	LX0004-101	XL0054-106A	XL0054-206A	LX0181-203
Weight	2g	1g	1g	1g



Steel ball *Material:SUS304	Robot side	
	For OX-*A/*B	For OX-SSB/SBS
Order code No.	323000	310607
TYPE	φ 6.35	φ 5.5
Weight	1g	1g



Coil spring	Robot side			
	For OX-SB/SBY/LA	For OX-LB	OX-WLB/SBH/SA/WSA/ Additional air expansion	For OX-SSB/SBS
Order code No.	110649	185221	110619	200223
TYPE	L00999-420	SAWANE5115	L00999-316	UR5-10
Weight	0.2g	0.4g	0.1g	0.1g



Packing *Material: CR (chloroprene rubber)		For OX-*A/*B		For OX-SSB/SBS	
		Tool side	Robot side	Tool side	Robot side
 L00999-313 XL0054-204	 S6 1ASS-5	Order code No.	110551	184474	230077
		TYPE	L00999-313	S6 (C00503-A00X8)	XL0054-204
		Weight	0.2g	0.05g	0.1g

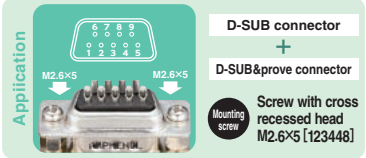
► Cable Accessories

D-SUB cable (OX-*A type)		Robot side	Tool side	Robot side	Tool side
 ● Bending radius (mm): R46	Order code No.	140168	140167	140170	140169
	TYPE	OX-DS09-H	OX-DS09-I-H	OX-DS15-H	OX-DS15-I-H
	Weight	40g			
	Cable length	0.5m			
	Electric contact	9Pin		15Pin	
	Electrical wiring	Movable cable (AWG22), for UL			

D-SUB cable for OX (OX-*B type)		Robot side	Robot side	Tool side	Tool side
 Straight type ● Bending radius (mm): R46	Order code No.	140197	140247	140202	140364
	TYPE	OX-DS09S-H	OX-DS09S-H (1.5M)	OX-DS09P-I-H	OX-DS09P-I-H (1.5M)
	Weight	60g	138g	60g	140g
	Cable length	0.5m	1.5m	0.5m	1.5m
	Electric contact	9Pin			
	Electrical wiring	Movable cable (AWG22), for UL			

D-SUB cable for OX (OX-*B type)		Robot side (L)	Robot side (L)	Tool side (L)	Tool side (L)
 L type ● Bending radius (mm): R46	Order code No.	140203	140248	140204	140365
	TYPE	OX-DS09SL-H	OX-DS09SL-H (1.5M)	OX-DS09PL-I-H	OX-DS09PL-I-H (1.5M)
	Weight	60g	138g	60g	140g
	Cable length	0.5m	1.5m	0.5m	1.5m
	Electric contact	9Pin			
	Electrical wiring	Movable cable (AWG22), for UL			

Connector Accessories

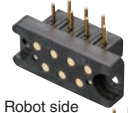
D-SUB connector (OX-A type)		Robot side	Tool side	Robot side	Tool side
 Robot side  Tool side *Screws are not included.	Order code No.	140172	140171	140174	140173
	TYPE	OX-DS09	OX-DS09-I	OX-DS15	OX-DS15-I
	Weight	4g			
	Electrical wiring	AWG22			
	Electric contact	9Pin (2A DC24V MAX)		15Pin (2A DC24V MAX)	
 Application D-SUB connector + D-SUB&probe connector Screw with cross recessed head M2.6×5 [123448] Mounting screw	Mounting screw size	OX-A TYPE OX-B TYPE D-SUB& probe connector		Screw with cross recessed head M3×16 (NUT 4PCS) [123449] M3 NUT [123301] Screw with cross recessed head M3×10 [123447]	
		Screw with cross recessed head M3×6 [123446] Screw with cross recessed head M2.6×5 [123448]			

*D-SUB connector can be mounted on cable wiring.

D-SUB connector (for WSB)		Robot side	Tool side
 Robot side  Tool side	Order code No.	140304	140305
	TYPE	OX-DS15-WS	OX-DS15-I-WS
	Weight	21g	13g
	Electrical wiring	AWG22	
	Electric contact	15Pin (2A)	
	Attached screw	Bolt with Hexagon Socket M3×8	

D-SUB & probe connector (for OX-A/B)		Robot side	Tool side
 Robot side  Tool side	Order code No.	140324	140325
	TYPE	OX-DPS09A	OX-DPS09A-I
	Weight	24g	
	Electrical wiring	AWG22	
	Electric contact	9Pin (2A)	
	Attached screw	Screw with cross recessed head M3×6 [123446]	

• Connector drawing → See (1-33)

Probe connector (OX-SSB/A/B type) solder-fix type		Robot side	Tool side
 Robot side  Tool side	Order code No.	140286	140285
	TYPE	OX-PLA-07	OX-PLA-07-I
	Weight	6g	
	Electrical wiring	AWG22	
	Electric contact	7Pin (1A)	
	Attached screw	Screw with cross recessed head M3×6 [123446]	

• Connector drawing → See (1-33)

Wireless connector

Can be used for the place with moisture and dust with contactless design

Wireless connector		FOR SB ROBOT SIDE	FOR SB TOOL SIDE	FOR LB ROBOT SIDE	FOR LB TOOL SIDE
 Robot side  Tool side  Robot side  Tool side	Order code No.	140306	140307	140308	140378
	TYPE	OX-RS04R-SB	OX-RS04T-SBI	OX-RS12R-LB	OX-RS12T1-LBI
	Weight	195g	140g	417g	290g
	Drive voltage	12V ± 1.5VDC	—	12V ± 1.5VDC	—
	Input and output points	4 points + 1 point	4 points	12 points + 1 point	12 points
	Attached screw	Screw with cross recessed head M3×8	Screw with cross recessed head M3×8	Screw with cross recessed head M3×8	Screw with cross recessed head M3×8

*Check the specification and precautions concerning handling. → (1-38)

*Check the drawing. → (1-35)

*OX-RS12 is basically for the tool changer with load capacity 35kg or more.

*The output type is NPN type. *Power supply voltage DC24V *Cable Length: robot side 2m tool side 1m

*To avoid interference between wireless connectors, no more than 1 wireless connector should be installed per tool changer.

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics / Palletizing / Sheet Metal / Stamping / Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

				Tool changer															
				Order code No.	Order code No. for connectorless type is shown in ()	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side
				Order code No.	TYPE	OX-SSB (N)	OX-SSB (N) I	OX-SB (N)	OX-SB (N) I	OX-WSB (N)	OX-WSB (N) I	OX-LB (N)	OX-LB (N) I	OX-LBF (N)	OX-LBF (N) I	OX-WLB (N)	OX-WLB (N) I	OX-SBY (N)	OX-SBY (N) I
				Order code No.	TYPE	OX-SSB (N)	OX-SSB (N) I	OX-SB (N)	OX-SB (N) I	OX-WSB (N)	OX-WSB (N) I	OX-LB (N)	OX-LB (N) I	OX-LBF (N)	OX-LBF (N) I	OX-WLB (N)	OX-WLB (N) I	OX-SBY (N)	OX-SBY (N) I
Air option	Robot side		140294	OX-SSBA	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tool side		140295	OX-SSBIA	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
	Robot side		140193	OX-SBA	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
	Tool side		140194	OX-SBIA	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—
	Robot side		140251	OX-SBA1	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
	Tool side		140252	OX-SBIA1	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—
	Robot side		140391	OX-SCA-10	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
	Tool side		140392	OX-SCIA-10	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—
	Robot side		140195	OX-LBA	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
	Tool side		140196	OX-LBIA	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
	Robot side		140253	OX-LBA1	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
	Tool side		140254	OX-LBIA1	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
Maintenance parts	Robot side		140287	OX-LBA3	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
	Tool side		140288	OX-LBIA3	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—
	Barbed joint		110623	LX0004-101	—	—	—	○	—	—	—	—	○	—	○	—	—	—	—
			230116	XL0054-106A	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
			230117	XL0054-206A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			110722	LX0181-203	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—
	Steel ball		323000	φ6.35	—	—	○	—	—	—	—	○	—	○	—	—	—	○	○
			310607	φ5.5	○	—	—	—	—	—	—	—	—	—	—	—	○	—	—
	Coil spring		110649	L00999-420	—	—	○	—	—	○	—	—	—	—	—	—	—	○	—
			185221	SAWANE5115	—	—	—	—	—	—	—	○	—	○	—	—	—	—	○
			110619	L00999-316	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○
			200223	UR5-10	○	—	—	—	—	—	—	—	—	—	—	—	○	—	—
Cable Accessories	Packing (Robot side)		184474	S6(C00503-A00X8)	—	—	○	—	—	○	—	○	—	○	—	○	—	○	○
			271742	1ASS-5	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Packing (Tool side)		110551	L00999-313	—	—	—	○	—	—	○	—	○	—	○	—	○	—	—
			230077	XL0054-204	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
	Robot side		140168	OX-DS09-H	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1
	Tool side		140167	OX-DS09-I-H	—	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—
	Robot side		140197	OX-DS09S-H	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1
			140247	OX-DS09S-H(1.5M)	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1
	Tool side		140202	OX-DS09P-I-H	—	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—
			140364	OX-DS09P-I-H(1.5M)	—	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—
	Robot side		140203	OX-DS09SL-H	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1
			140248	OX-DS09SL-H(1.5M)	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1
Connector Accessories	Tool side		140204	OX-DS09PL-I-H	—	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—
			140365	OX-DS09PL-I-H(1.5M)	—	—	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—	○※1	—
	Robot side		140172	OX-DS09	—	—	○※2	—	○※2	—	○※2	—	○※2	—	○※2	—	○※2	—	○※2
	Tool side		140171	OX-DS09-I	—	—	—	○※2	—	○※2	—	○※2	—	○※2	—	○※2	—	○※2	—
	Robot side		140174	OX-DS15	—	—	—	—	○※3	—	—	—	—	—	—	—	—	—	—
	Tool side		140173	OX-DS15-I	—	—	—	—	—	○※3	—	—	—	—	—	—	—	—	—
	Robot side		140304	OX-DS15-WS	—	—	—	—	—	—	○※3	—	—	—	—	—	—	—	—
	Tool side		140305	OX-DS15-I-WS	—	—	—	—	—	—	—	○※3	—	—	—	—	—	—	—
	Connector plate		140289	OX-DS09CNP	—	—	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2	○※2
			140303	OX-DPS09WCNP	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—
	Robot side		140324	OX-DPS09A	—	—	○	—	○※4	—	○	—	○	—	○	—	○	—	○
	Tool side		140325	OX-DPS09A-I	—	—	—	○	—	○※4	—	○	—	○	—	○	—	○	—
Wireless connector	Robot side		140361	OX-PS15	—	—	○	—	○※4	—	○	—	○	—	○	—	○	—	○
	Tool side		140360	OX-PS15-I	—	—	—	○	—	○※4	—	○	—	○	—	○	—	○	—
	Robot side		140286	OX-PLA-07	○	—	○	—	○※4	—	○	—	○	—	○	—	○	—	○
	Tool side		140285	OX-PLA-07-I	—	○	—	○	—	○※4	—	○	—	○	—	○	—	○	—
	Robot side		140190	OXR-DPS09	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
	Tool side		140192	OXR-DPS09-I	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
	Robot side		140306	OX-RS04R-SB	—	—	○	—	—	—	—	○	—	—	—	○	—	—	—
	Tool side		140307	OX-RS04T-SBI	—	—	—	○	—	—	—	—	○	—	—	—	—	—	—
Wireless connector	Robot side		140321	OXR-RS04R-10I	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—
	Tool side		140323	OXR-RS04T-10I	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—
	Robot side		140308	OX-RS12R-LB	—	—	—	—	—	—	○※5	—	○※5	—	○※5	—	—	—	○※5
	Tool side		140378	OX-RS12T1-LBI	—	—	—	—	—	—	—	○※5	—	○※5	—	—	—	—	—

* 1 If you use a cable accessory with no connector, you will need the proper D-sub & probe connectors(★ mark).

* 2 To install the D-SUB connector (140172, 140171), use the connector plate (140289) OX-DS09CNP as a set.

* 3 The D-SUB connectors (140304) OX-DS15WS, (140305) OX-DS15-I-WS, (140174) OX-DS15, and (140173) OX-DS15-I are dedicated to the OX-WSB・WSB I type.

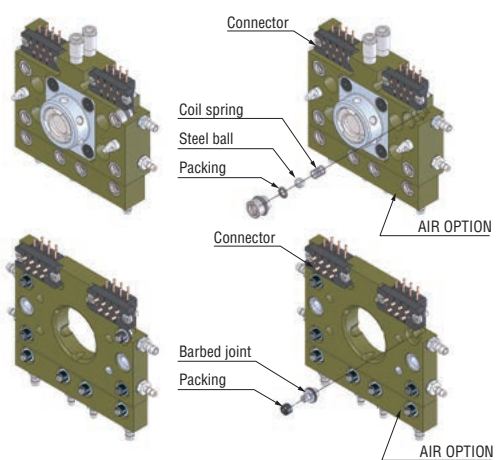
* 4 The connector plate (140303) OX-DPS09WCNP is required for mounting on the type without a connector.

* 5 Because of the thickness of the wireless connector, it will come out or same as the mounting surface of the tool changer, please confirm the size.

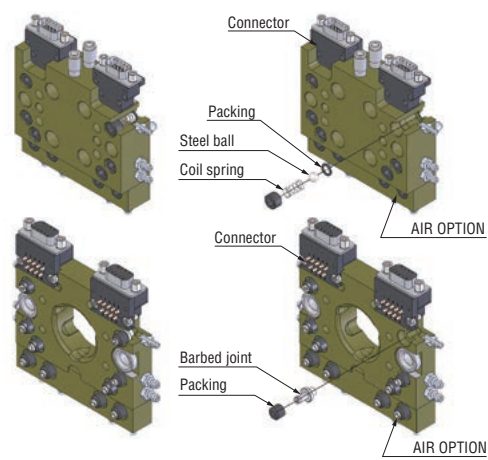
			Air option													
			Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side
			Order code No.	140294	140295	140193	140194	140251	140252	140195	140196	140253	140254	140287	140288	
Maintenance parts	Barbed joint		Order code No.	TYPE	OX-SSBA	OX-SSBIA	OX-SBA	OX-SBIA	OX-SBA1	OX-SBIA1	OX-LBA	OX-LBIA	OX-LBA1	OX-LBIA1	OX-LBA3	OX-LBIA3 ※
			110623	LX0004-101	—	—	—	○	—	—	—	○	—	—	—	○
	Steel ball		230116	XL0054-106A	—	○	—	—	—	—	—	—	—	—	—	—
			110686	LX0120-202	—	—	—	—	—	○	—	—	—	○	—	○
			323000	φ6.35	—	—	○	—	—	—	○	—	—	—	○	—
	Coil spring		310607	φ5.5	○	—	—	—	—	—	—	—	—	—	—	—
			110649	L00999-420	—	—	—	—	—	—	—	—	—	—	—	—
			185221	SAWANE5115	○	—	—	—	—	—	—	—	—	—	—	—
			110619	L00999-316	—	—	○	—	—	—	○	—	—	—	○	—
	Packing (Robot side)		200223	UR5-10	○	—	—	—	—	—	—	—	—	—	—	—
			184474	S6 (C00503-A00X8)	—	—	○	—	—	—	○	—	—	—	○	—
Packing (Tool side)			271742	1ASS-5	○	—	—	—	—	—	—	—	—	—	—	—
			110551	L00999-313	—	—	—	○	—	—	—	○	—	—	—	○
			230077	XL0054-204	—	○	—	—	—	—	—	—	—	—	—	—
			110687	LX0120-203	—	—	—	—	—	○	—	—	○	—	—	○

※ (140288) OX-LB I A3 [for M5 port: (110623) LX0004-101+(110551) L00999-313, for M6 port: (110686) LX0120-202+(110687) LX0120-203]

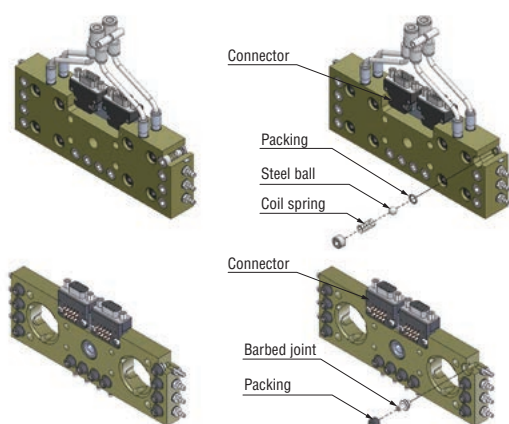
OX-SSB/SSBI



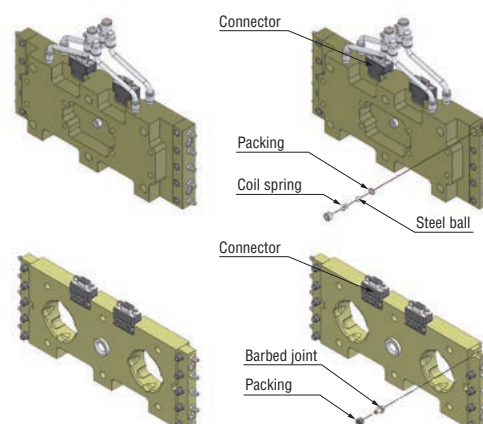
OX-SB/SBI



OX-WSB/WSBI



OX-WLB/WLBI



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

Substitute Product of Tool Changer (A type)

Repairing parts of tool changer (A type)

*For more information, please contact our sales office nearest you.

Piston	For OX-SA
	
Order code No.	140249
TYPE	OX-SAP
Weight	94g
Attachments PARTS	Piston set, Spring, Steel ball, Steel ball holder

Piston	For OX-LA
	
Order code No.	140250
TYPE	OX-LAP
Weight	336g
Attachments PARTS	Piston set, Spring, Steel ball, Steel ball holder

Substitute product of tool changerr (A type)

*For more information, please contact our sales office nearest you.

Production stopped	
Order code No.	TYPE
140156	OX-SA
140157	OX-SAI
140158	OX-LA
140159	OX-LAI
140162	OX-WSA
140163	OX-WSAI
140160	OX-WLA
140161	OX-WLAI
140164	OX-SA-30
140165	OX-LA-30
140166	OX-WLA-30



Substitute		
Order code No.	TYPE	Thickness (mm)
140225	OX-SBN	+5
140226	OX-SBNI	0
140231	OX-LBN	+9
140232	OX-LBNI	0
140300	OX-WSBN	+4.5
140302	OX-WSBNI	0
140277	OX-WLBN	+8
140278	OX-WLBNI	0
140345	OX-SBN-30	+5
140279	OX-LBN-30	+8
140267	OX-WLBN-30	+7.5

Subroutine product of additional air expansion for A type

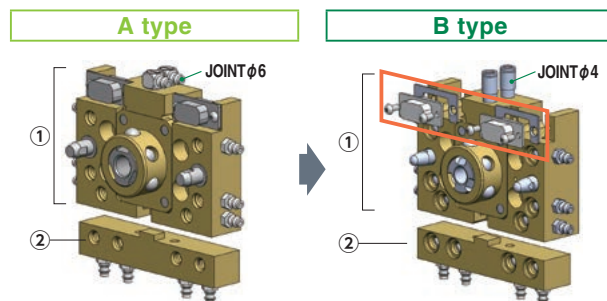
*For more information, please contact our sales office nearest you.

Production stopped	
Order code No.	TYPE
110547	L00999-306 SET
110548	L00999-207 SET
110545	L00999-406 SET
110546	L00999-407 SET



Substitute	
Order code No.	TYPE
140193	OX-SBA
140194	OX-SBIA
140195	OX-LBA
140196	OX-LBIA

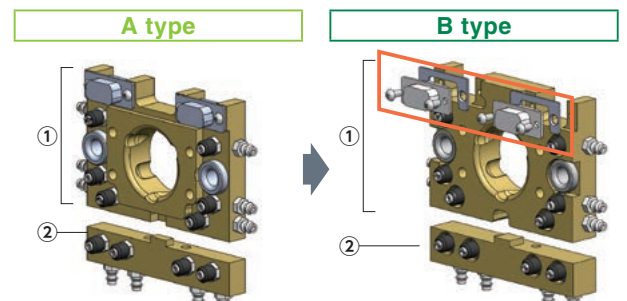
OX-SA (ROBOT SIDE)



	Order code No.	TYPE	Remarks	Qty
	140225	OX-SBN	Tool changer	1
①	140289	OX-DS09CNP	Connector plate	2
	140172	OX-DS09	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4
②	140193	OX-SBA	Additional air expansion	1

* ② : If not used, purchase order is not required.

OX-SAI (TOOL SIDE)



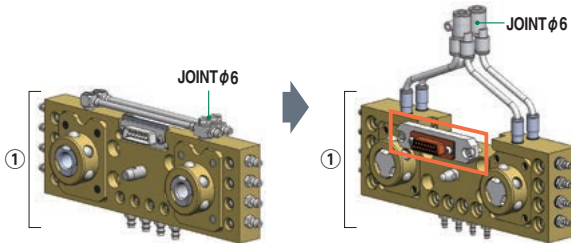
	Order code No.	TYPE	Remarks	Qty
	140226	OX-SBNI	Tool changer	1
①	140289	OX-DS09CNP	Connector plate	2
	140171	OX-DS09-I	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4
②	140194	OX-SBIA	Additional air expansion	1

* ② : If not used, purchase order is not required.

OX-WSA (ROBOT SIDE)

A type

B type

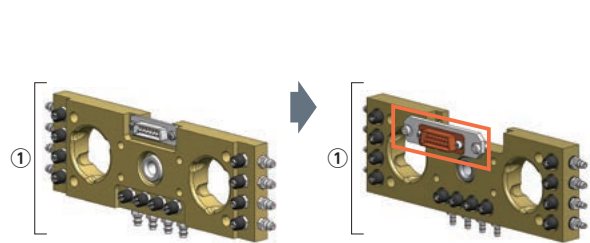


	Order code No.	TYPE	Remarks	Qty
①	140300	OX-WSBN	Tool changer	1
	140304	OX-DS15-WS	D-SUB connector	1

OX-WSAI (TOOL SIDE)

A type

B type

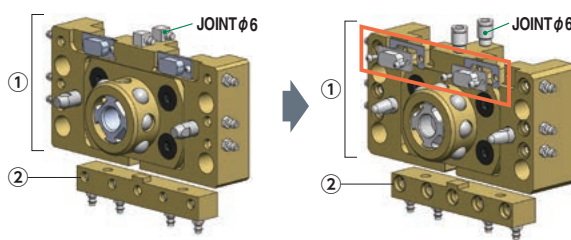


	Order code No.	TYPE	Remarks	Qty
①	140302	OX-WSBNI	Tool changer	1
	140305	OX-DS15-I-WS	D-SUB connector	1

OX-LA (ROBOT SIDE)

A type

B type



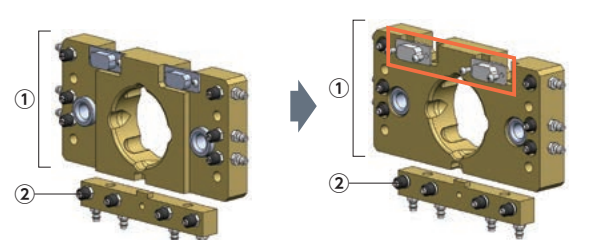
	Order code No.	TYPE	Remarks	Qty
①	140231	OX-LBN	Tool changer	1
	140289	OX-DS09CNP	Connector plate	2
	140172	OX-DS09	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4
②	140195	OX-LBA	Additional air expansion	1

* ② : If not used, purchase order is not required.

OX-LAI (TOOL SIDE)

A type

B type



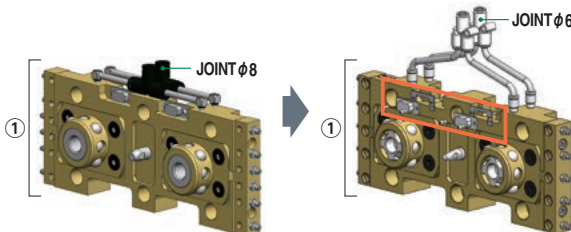
	Order code No.	TYPE	Remarks	Qty
①	140232	OX-LBNI	Tool changer	1
	140171	OX-DS09-I	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4
	140196	OX-LBIA	Additional air expansion	1

* ② : If not used, purchase order is not required.

OX-WLA (ROBOT SIDE)

A type

B type

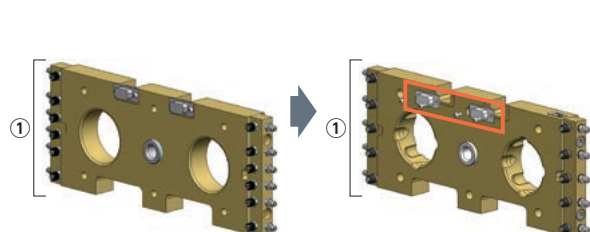


	Order code No.	TYPE	Remarks	Qty
①	140277	OX-WLBN	Tool changer	1
	140289	OX-DS09CNP	Connector plate	2
	140172	OX-DS09	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4

OX-WLAI (TOOL SIDE)

A type

B type



	Order code No.	TYPE	Remarks	Qty
①	140278	OX-WLBNI	Tool changer	1
	140171	OX-DS09-I	D-SUB connector	2
	123446	BKJ 3-6 (M3*6)	Screw with cross recessed head	4

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

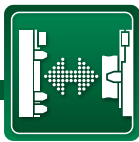
Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



For Articulated Robots

Essential tool for high performance of robot.



Please check the performance table on the web site.

Tool changer
(for articulated robots)



You can see moving images of products by using QR code reader of your smartphone.

Specification

Product name		Order code No.	TYPE	Weight (g)	Weight capacity (kg)	Power to draw (N) Power to force (N)	Allowable bending moment (Nm)	Allowable torsional moment (Nm)	Electric contact Connector shape	Piping connect	Page of details	
Tool changer		140310	OX-005A	38	~ 0.5	60 50	1.7	0.9	6Pin 2A DC24V Max Connector(option)	2port (M3)	1-25	
		140315	OX-005AI	17								
		140235	OX-03A	125	~ 3	600 160	5.2	1.0	9Pin 2A DC24V Max Connector(option)	6port (M5)		1-26
		140236	OX-03AI	45								
		140237	OX-05A	250	~ 5		6.5	1.2				
		140238	OX-05AI	115								
		140262	OX-10B	199	~ 10	1,350 400	17.5	12.8				
		140263	OX-10BI	115								
		140292	OX-20B	507	~ 20	2,200 420	28.0	20.0				
		140293	OX-20BI	226								
		140398	OX-35B	1225	~ 35	4,000 750	91.8	55.5	9Pin 2A DC24V Max Connector(option)	6port (Rc1/8)	1-27	
		140316	OX-35AI	545								
		140313	OX-60A ^{※1}	1440	~ 60	6,000 (180) ^{※2}	185.0	225.0	11Pin 2A DC24V Max Connector(option)	8port (Rc1/8)		
		140318	OX-60AI	734								
		140373	OX-120A	3671	~ 120	14,000 (2,350)	750.0	750.0	16Pin 2A DC24V Max Connector(option)	8port (PT1/4)	1-28	
		140374	OX-120AI	1770								
		140314	OX-230A	6240	~ 230	20,000 (3,500)	15,000	15,000	8Pin 5A AC/DC200V Max Connector(option)	10port (Rc3/8)		
		140319	OX-230AI	3360								
		140399	OX-35BT	1445	~ 35	4,000 750	91.8	55.5	4Pin 13A AC/DC200V Max Connector(option)	6port (Rc1/8)	1-29	
	140317	OX-35ATI	535									

※Please use manual push button "PB1-E(152308), PBW1-E(152306)" for manual exchange. → (1-30) (6-11)
 ※1 There is no detachable mechanism for the OX-60A. ※2 The power to force (n) is the reaction value of the packing.

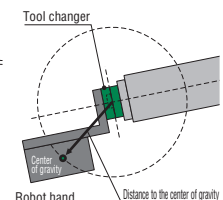
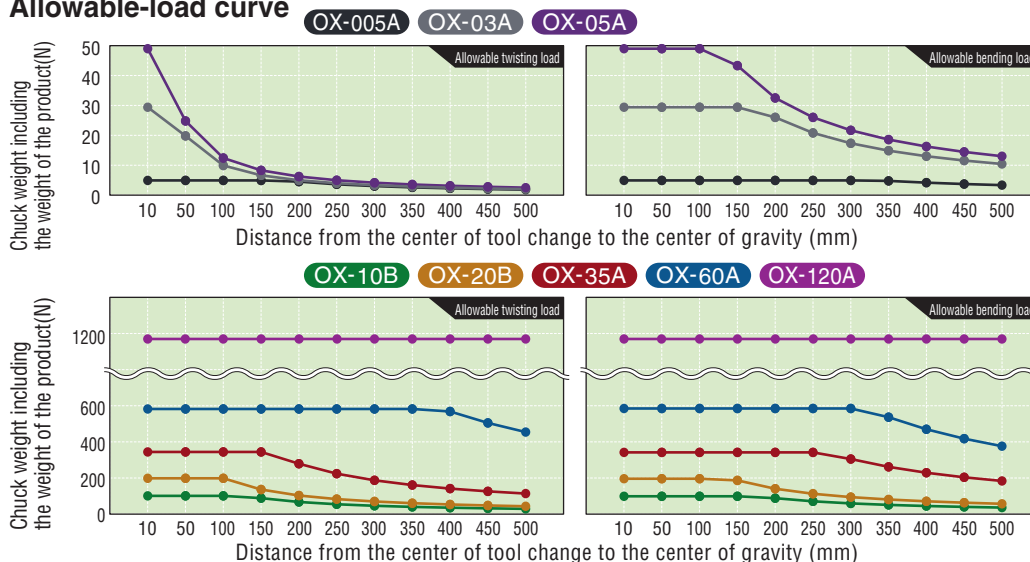
Common specification

Positional reproduction Accuracy	Used Air pressure	Drive piping	Acceptable electric wiring	Allowable temperature/humidity range
±0.02mm ^{*1}	0.5~0.7MPa	Clean air, piping of φ6(φ4 ^{*2}), double action type	AWG20 Max.	0°C~55°C, 0%~95% (w/o condensation)

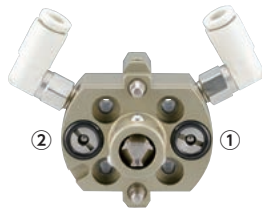
*1 Based on our measurement

*2 φ6 : OX-35A, OX-35AT, OX-60A, OX-120A, OX-230A

Allowable-load curve



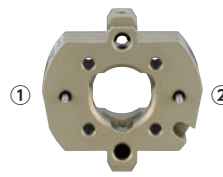
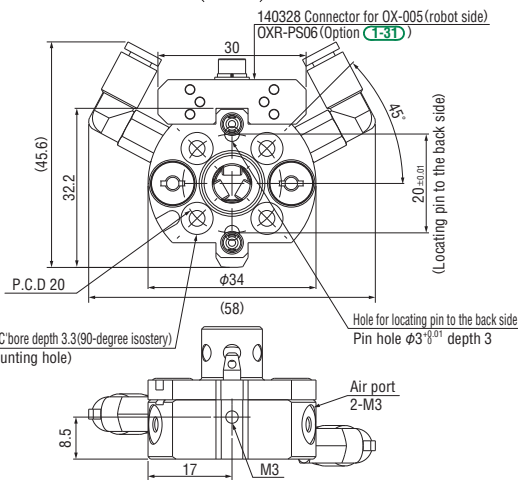
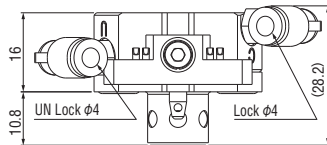
► Supports high-speed operation of parallel link robots. (Weight capacity 500g)



Robot Side

Order code No.	140310
TYPE	OX-005A

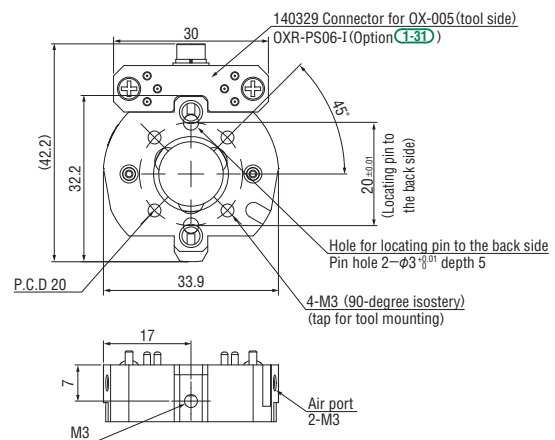
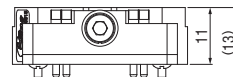
- Superduralumin
- Weight : 38g
- Mounting position : robot side
- Weight capacity : ~ 500g
- Thickness after connection : 27mm



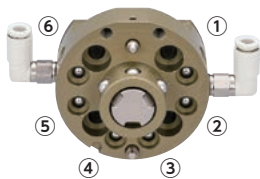
Tool Side

Order code No.	140315
TYPE	OX-005AI

- Superduralumin
- Weight : 17g
- Mounting position : tool side
- Weight capacity : ~ 500g
- Thickness after connection : 27mm



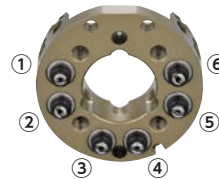
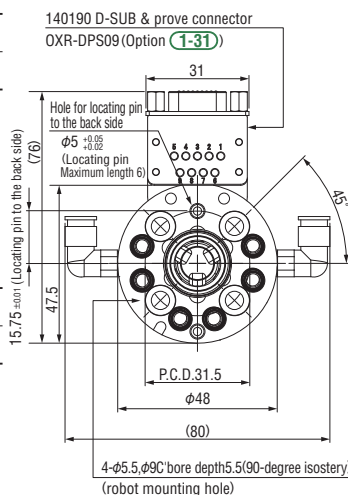
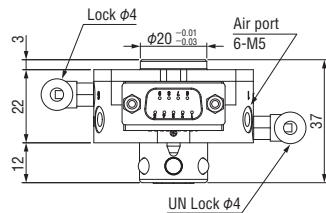
► For small-size robots. (Weight capacity 3kg, 5kg)



Robot Side

Order code No.	140235
TYPE	OX-03A

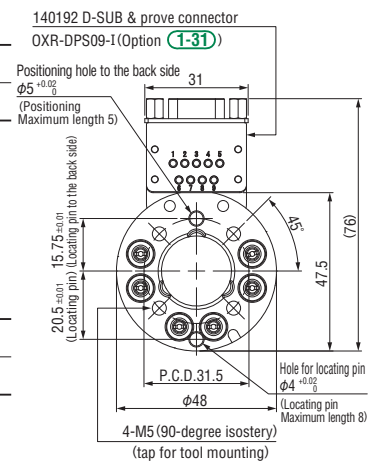
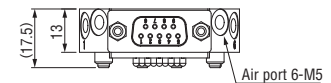
- Superduralumin
- Weight : 125g
- Mounting position : robot side
- Weight capacity : ~ 3kg
- Thickness after connection : 38mm



Tool Side

Order code No.	140236
TYPE	OX-03AI

- Superduralumin
- Weight : 45g
- Mounting position : tool side
- Weight capacity : ~ 3kg
- Thickness after connection : 38mm



Robot Side

Order code No.	140237
TYPE	OX-05A

- Steel
- Weight : 250g
- Mounting position : robot side
- Weight capacity : ~ 5kg
- Thickness after connection : 38mm

Tool Side

Order code No.	140238
TYPE	OX-05AI

- Steel
- Weight : 115g
- Mounting position : tool side
- Weight capacity : ~ 5kg
- Thickness after connection : 38mm

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

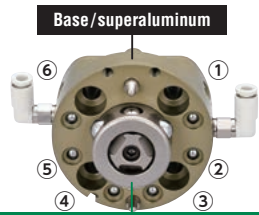
Tool / Jig

Information

Various Products Information

For Articulated Robots

► For small-size robots. (Weight capacity 10kg)



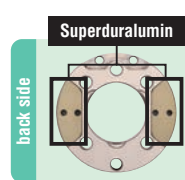
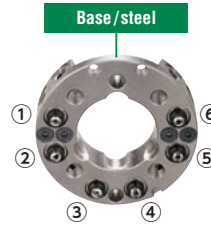
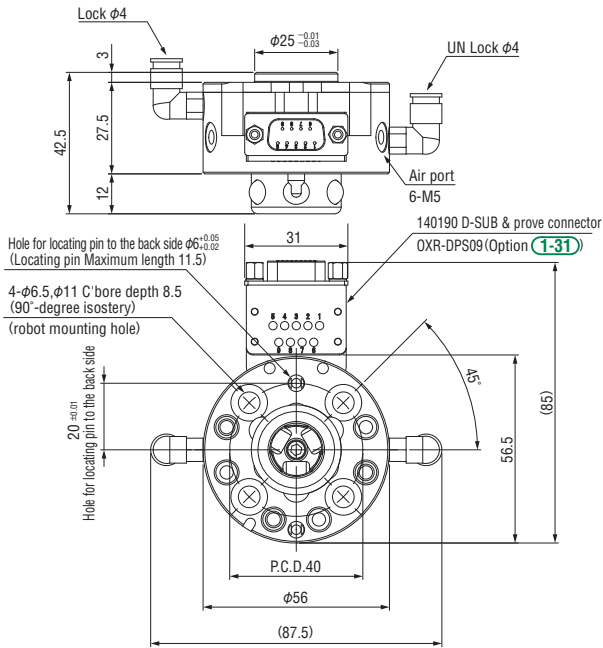
Detachable and attachable section/Made of steel

Robot Side

Order code No. **140262**

TYPE **OX-10B**

- Weight : 199g
- Mounting position : robot side
- Weight capacity : ~ 10kg
- Thickness after connection : 43mm

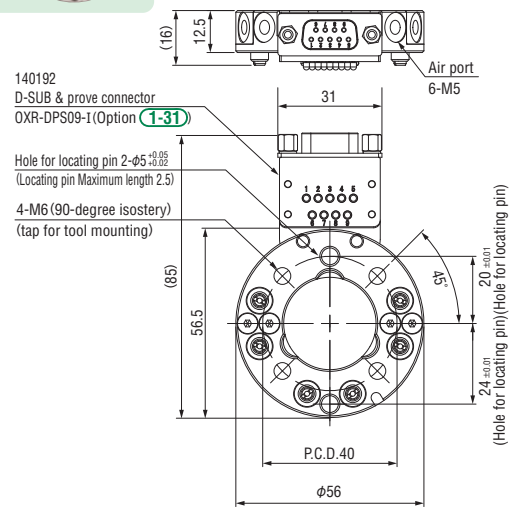


Tool Side

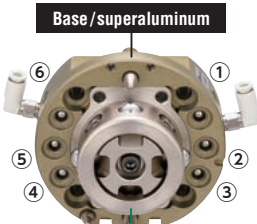
Order code No. **140263**

TYPE **OX-10BI**

- Weight : 115g
- Mounting position : tool side
- Weight capacity : ~ 10kg
- Thickness after connection : 43mm



► For small-size robots. (Weight capacity 20kg)



Detachable and attachable section/Made of steel

Robot Side

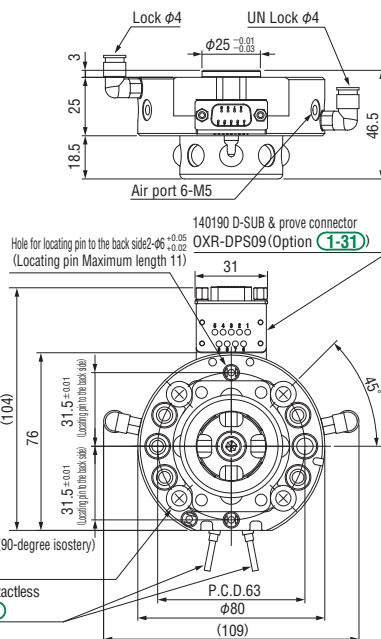
Order code No. **140292**

TYPE **OX-20B**

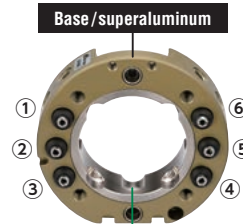
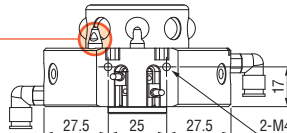
- Weight : 507g
- Mounting position : robot side
- Weight capacity : ~ 20kg
- Thickness after connection : 47mm
- Compatibility with A type
- Confirmation sensor of piston operation can be attached (OP).

4-φ6.5, φ11 C bore depth 6.5 (90-degree isostery) (robot mounting hole)

030500 Auto switch-contactless D-F8N (Option 1-31)



Positioning pin should be removed to connect with 20AL.



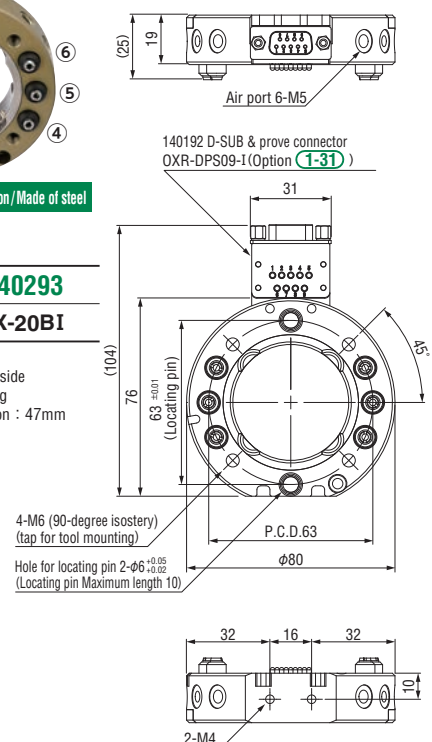
Detachable and attachable section/Made of steel

Tool Side

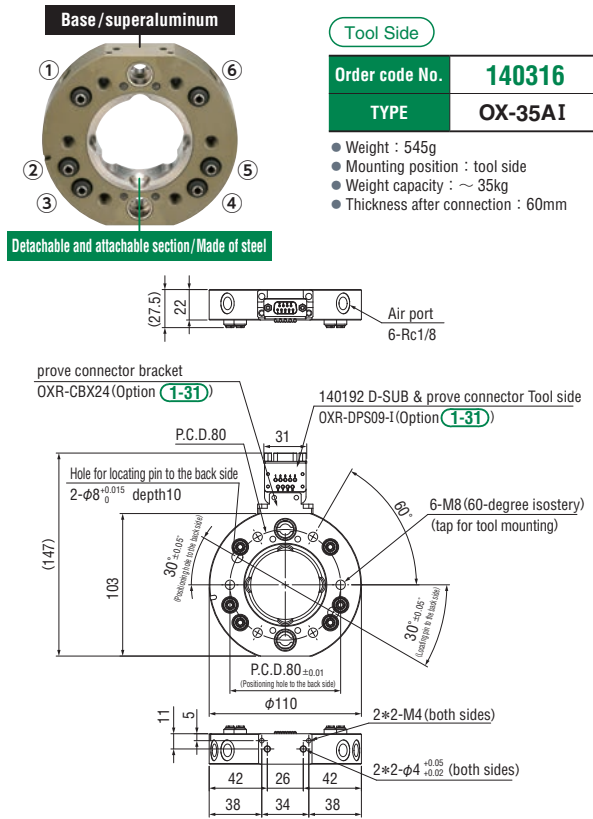
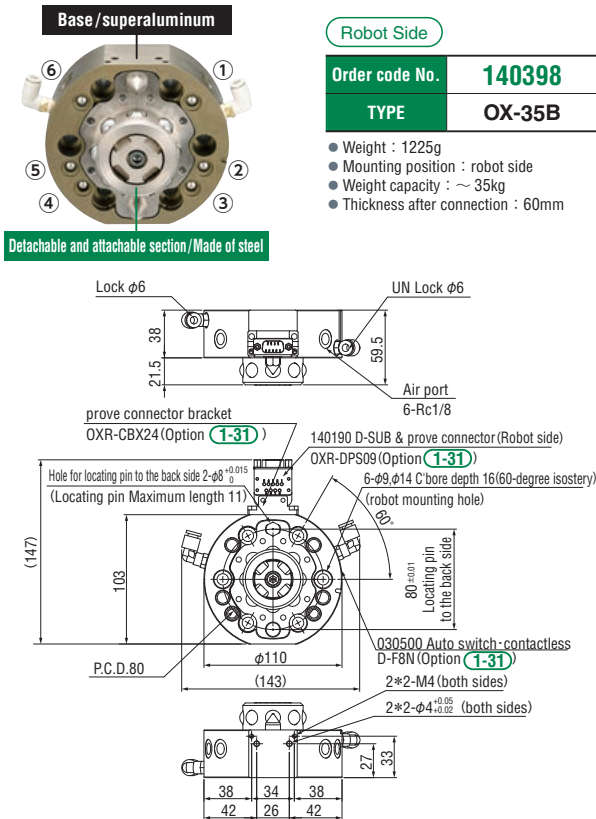
Order code No. **140293**

TYPE **OX-20BI**

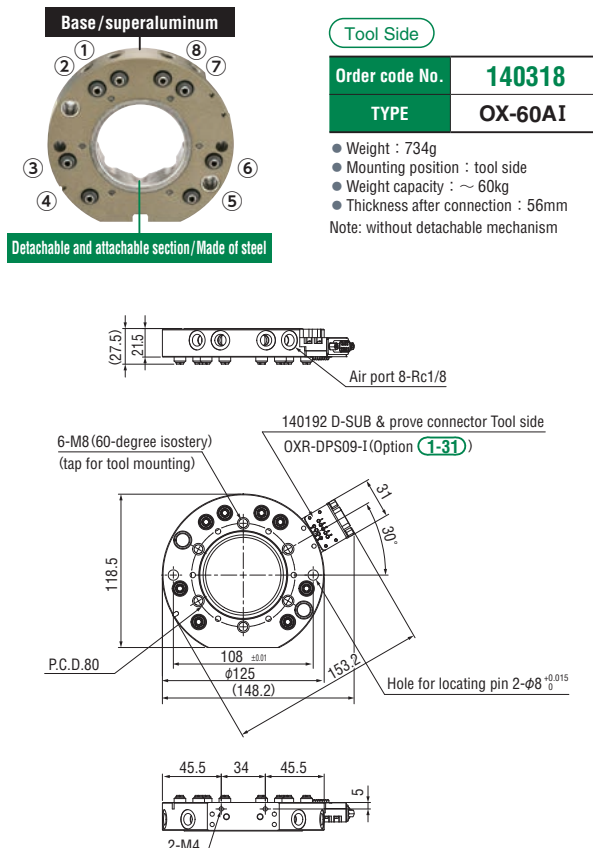
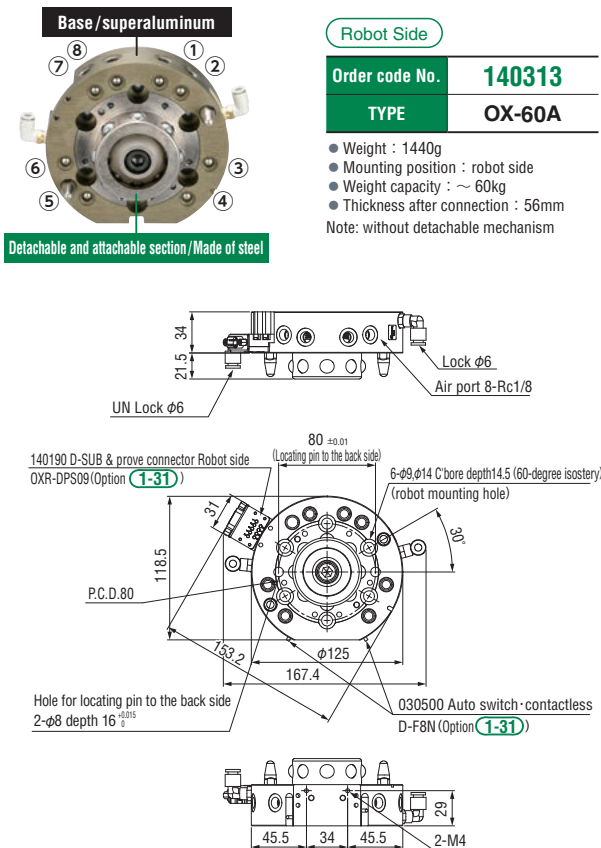
- Weight : 226g
- Mounting position : tool side
- Weight capacity : ~ 20kg
- Thickness after connection : 47mm
- Compatibility with A type



► For middle-size robot. (Weight capacity 35kg)



► For middle-size robot. (Weight capacity 60kg)

Quick Chuck
ChangeQuick Chuck
Change ManualQuick Chuck
Change Manual
(OM Type)Tool
ChangerAutomated
Hand Exchange
System

Grip

Mini
CylinderAccessories
for Mini
CylinderContainer
CylindersAccessories
for Container
Cylinder

Grippers

Rubber
Material /
Grip Pad

Suction

Suction
CupsSuction
Stems

Pad in Pad

Vacuum
GripperAir Ejector /
Filter /
Check ValveUltra
Small Part
Take OutVacuum
Generator
Unit

Cut

Air Nipper
(Small-Medium)Air Nipper
(Large)

Frame / Module

Jungle
Gym

Let's Joint

Rectangular
TubeBase
Aluminum
MaterialSliding
Chuck

Pneumatic Components / Sensors

Pneumatic
ComponentsSensors /
Multi AND
BoardPCIO
Communication
Unit

Lightweight Parts Series

Frame / Section /
Resin Cylinders / Pads /
Resin Manifolds

By Industry

Logistics-Palletizing/
Sheet Metal-Stamping/
Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products
Information

Quick Chuck Change Automatic for Articulated Robots

► For large robot. (Weight capacity 120kg)

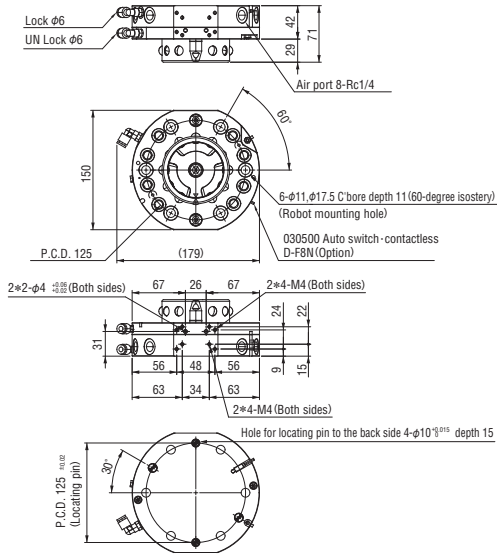
NEW Base/superaluminum

Robot Side

Order code No.	140373
TYPE	OX-120A

- Weight : 3,671g
- Mounting position : robot side
- Weight capacity : ~ 120kg
- Thickness after connection : 75mm

Detachable and attachable section/Made of steel



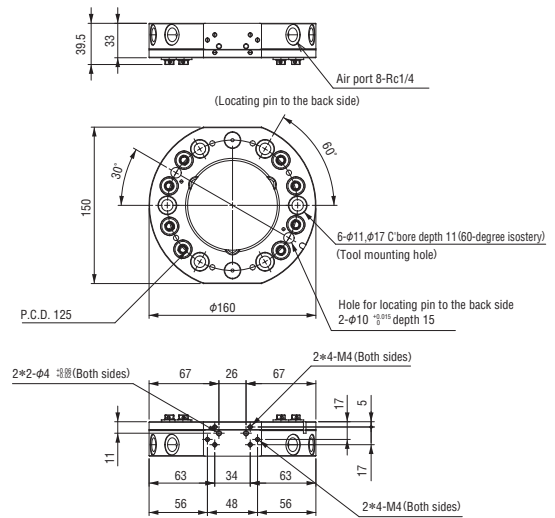
NEW Base/superaluminum

Tool Side

Order code No.	140374
TYPE	OX-120AI

- Weight : 1,770g
- Mounting position : tool side
- Weight capacity : ~ 120kg
- Thickness after connection : 75mm

Detachable and attachable section/Made of steel



► For large robot. (Weight capacity 230kg)

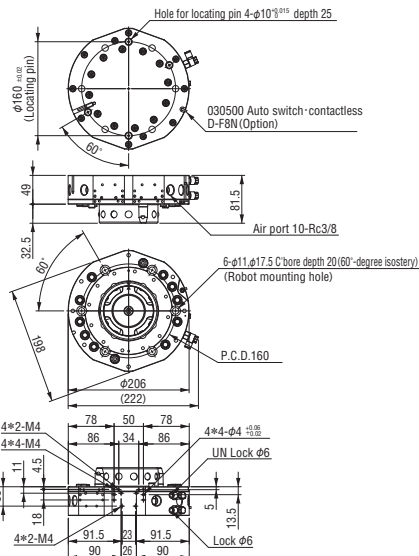
NEW Base/superaluminum

Robot Side

Order code No.	140314
TYPE	OX-230A

- Weight : 6,240g
- Mounting position : robot side
- Weight capacity : ~ 230kg
- Thickness after connection : 83mm

Detachable and attachable section/Made of steel



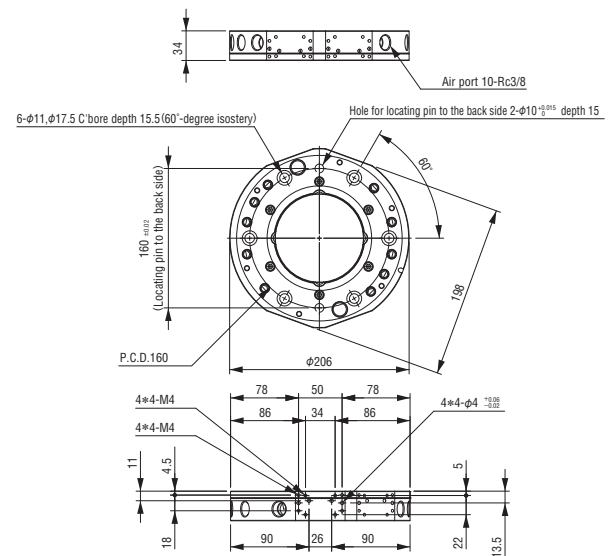
NEW Base/superaluminum

Tool Side

Order code No.	140319
TYPE	OX-230AI

- Weight : 3,360g
- Mounting position : tool side
- Weight capacity : ~ 230kg
- Thickness after connection : 83mm

Detachable and attachable section/Made of steel



Will be on sale soon. Please contact us about the availability of the product.



► **Remote valve for manual tool change actuation**

Manual air valve push slide button (Retention Type)



► Air port Accessories

Additional air expansion

Diagram illustrating the correct orientation of the connector. The connector is shown with two sides: the "Tool side" (top) and the "Robot side" (bottom). The "Tool side" has a single pin, while the "Robot side" has two pins. The connector is shown in a perspective view, with the "Tool side" facing up and the "Robot side" facing down.

■ For OX-20B

Tool side

Robot side

■ For OX-35A, 60A

Tool side

- Attachments : mounting bolt (M4×25) ×2pic

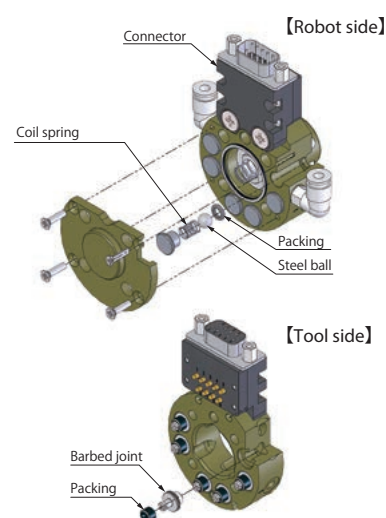
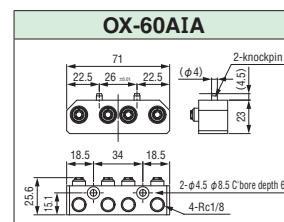
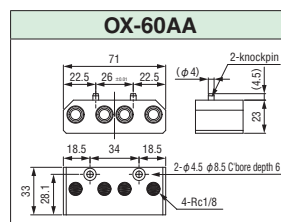
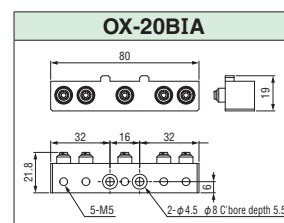
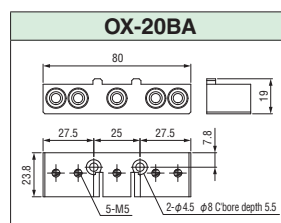
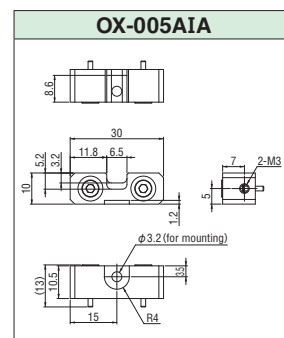
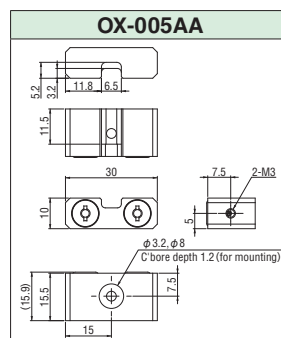
► Replacement Parts

Steel ball	*Material:SUS304	Robot side				
		For OX-005	For OX-03/05/10	For OX-20	For OX-35/60	NEW For OX-120AI
	Order code No.	382583	310607	323000	152561	152755
	TYPE	φ3	φ5.5	φ6.35	φ10	φ11
	Weight	1g	1g	1g	3g	5.5g

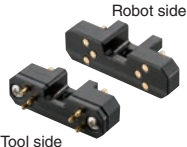
Packing		For OX-005		For OX-03/05/10		For OX-20		For OX-35/60		NEW For OX-120A		
		Robot side (piping)	Robot side (check valve)	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	
Tool side  XL0054-204 L00999-313 LX0120-203	Robot side  S6 1ASS-5 P5, SS3 P8	Order code No.	152547	186738	230077	271742	110551	184474	110687	152689	221487	131773
		TYPE	P5 (C000002-S7)	SS3 (C03700-A0)	XL0054-204	1ASS-5	L00999-313	S6 (C00503-A00X8)	LX0120-203	P8 NBR-70	WRBC15-8-3	NPB10
		Weight	1g	1g	0.1g	0.05g	0.2g	0.05g	1g	0.06g	1g	0.1g



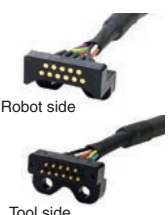
Manual air valve push slide button (Retention Type)



► Connector Accessories

Connector for OX-005		Robot side	Tool side
	Order code No.	140328	140329
	TYPE	OXR-PS06	OXR-PS06-I
	Weight	3g	
	Electric contact	6Pin (2A)	

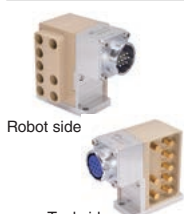
● Connector drawing ➔ (1-33)

Probe connector		Robot side	Tool side
	Order code No.	140362	140363
	TYPE	OXR-PSH11	OXR-PSH11-I
	Weight	53g	
	Wiring specification	solder-fix type (AWG23) 500mm	
	Electric contact	11Pin (2A)	
	Attached screw	Flat head screw with cross recessed M4×10 [123515]	

● Connector drawing ➔ (1-33)

D-SUB connector (OX-A type)		Robot side	Tool side
	Order code No.	140172	140171
	TYPE	OX-DS09	OX-DS09-I
	Weight	4g	
	Wiring specification	AWG22	
	Electric contact	9Pin	

● Screws are not included.

NEW Probe connector 05A		Robot side	Tool side
	Order code No.	140393	140395
	TYPE	OXR-MPS0508	OXR-MPS0508-I
	Weight	225g	195g
	Electric contact	8Pin (5A)	
	Electrical connector	NJC-2410-RM	NJC-2410-RF
	Subject	OX-35 or higher	

● Connector drawings and aviation connector standards in cable side ➔ Please refer to (1-34)

NEW Probe connector mounting spacer		Order code No.	140397
	TYPE	OXR-PCS	
	Weight	35g	
	Subject	OX-35	

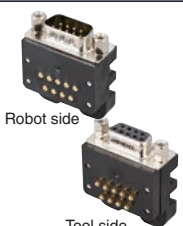
● Connector drawing ➔ (1-34)

Required when attaching the probe connectors 05A, 13A to the OX-35B, OX-35AI.

► Auto switch · contactless

Auto switch		Order code No.	030500
	TYPE	D-F8N	
	Weight	7g	

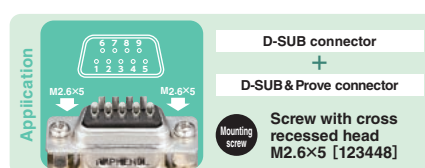
● Applied load : relay PLC ● Load voltage : DC24V
 ● Load electric current : 5 ~ 40mA ● Wiring : ➔ (6-20)
 ● W/ indicator lamp
 ● Cable Length : 0.5m

D-SUB & Probe connector		Robot side	Tool side
	Order code No.	140190	140192
	TYPE	OXR-DPS09	OXR-DPS09-I
	Weight	25g	
	Wiring specification	AWG22	
	Electric contact	9Pin (2A)	
	Attached screw	Flat head screw with cross recessed M4×10 [123515]	

● Connector drawing ➔ (1-33)

Probe connector (solder)		Robot side	Tool side
	Order code No.	140264	140265
	TYPE	OXR-PS16	OXR-PS16-I
	Weight	8g	11g
	Wiring specification	AWG22	
	Electric contact	16Pin (2A)	
	Attached screw	Flat head screw with cross recessed M4×10 [123515]	

● Connector drawing ➔ (1-33)



*D-SUB connector can be mounted on cable wiring.

NEW Probe connector 13A		Robot side	Tool side
	Order code No.	140394	140396
	TYPE	OXR-MPS1304	OXR-MPS1304-I
	Weight	240g	215g
	Electric contact	4Pin (13A)	
	Electrical connector	D/MS3102A-18-10-P	D/MS3102A-18-10-S
	Subject	OX-35 or higher	

● Connector drawings and aviation connector standards in cable side ➔ Please refer to (1-34)

Probe connector mounting bracket		Order code No.	140344
	TYPE	OXR-CBX24	
	Weight	33g	

● Accessories : positioning pin, mounting bolt ● Connector drawing ➔ (1-33)

Required when attaching D-sub & probe connector to the OX-35B, OX-35AI, OX-35BT, OX-35ATI, OX-120A and OX-120AI.

Quick Chuck Change

Quick Chuck Change Manual
 Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing / Sheet Metal-Stamping / Metal Fabrication

Assembling Tools

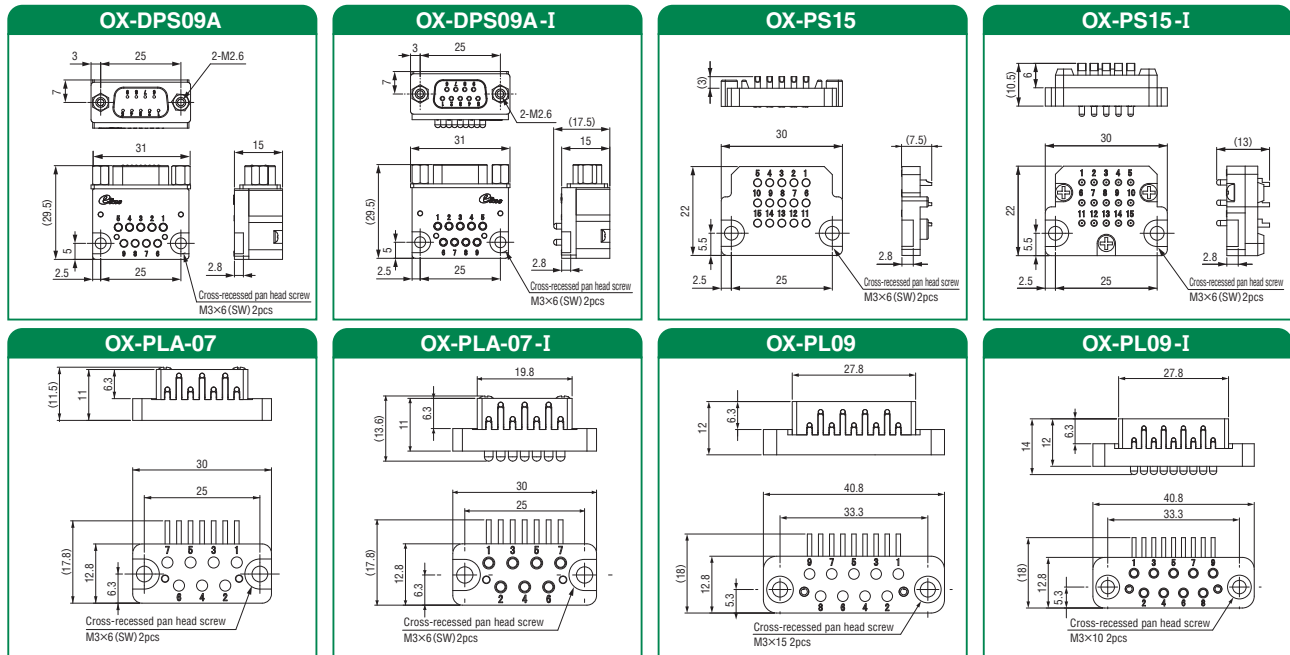
Tool / Jig

Information

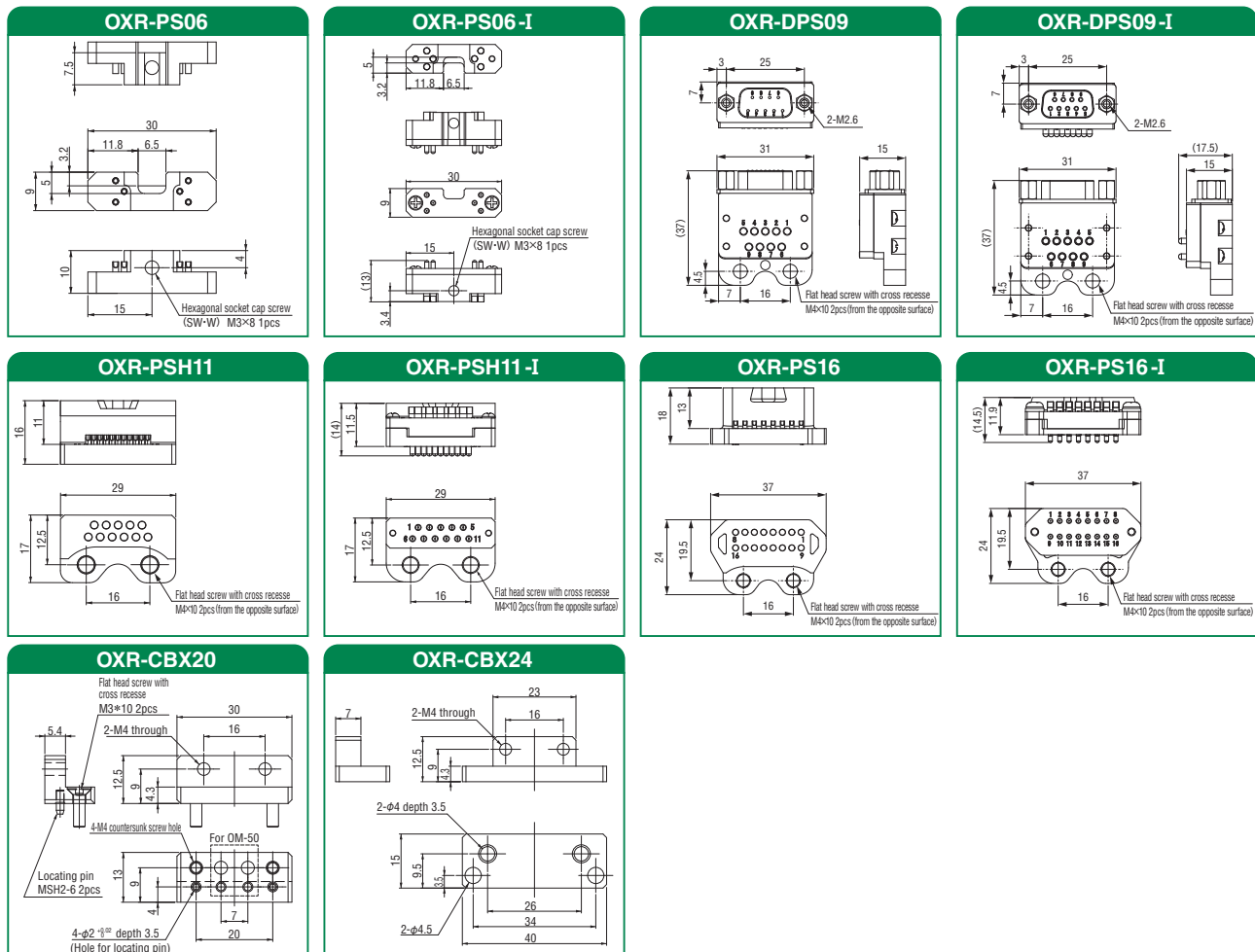
Various Products Information

Drawing of Probe connector

► A Type / B Type / BN Type (Take-out Robot) ► 1-19



► Quick Chuck Change Manual (OM Type) ► 1-7 / For Articulated Robots ► 1-31



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing/Sheet Metal-Stamping-Metal Fabrication

Assembling Tools

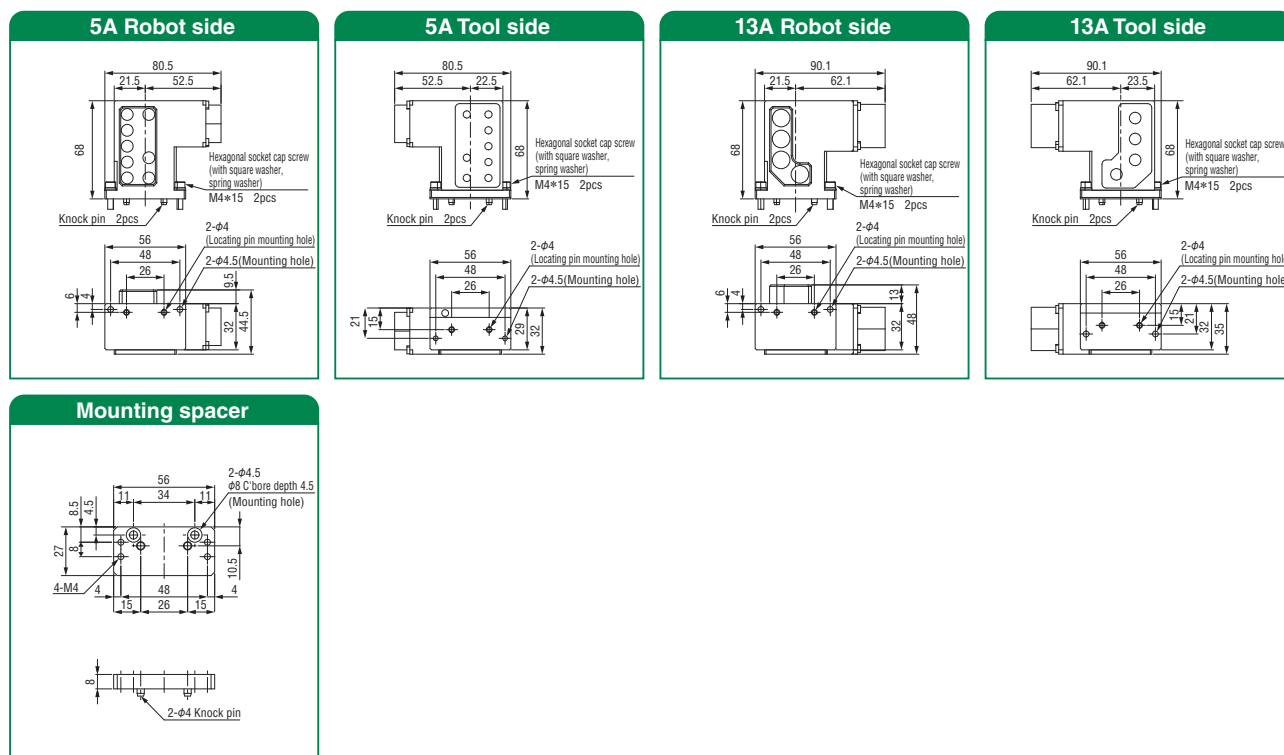
Tool / Jig

Information

Various Products Information

Drawing of Probe connector

► For Articulated Robots ▶ 1-31



List of high capacity connectors

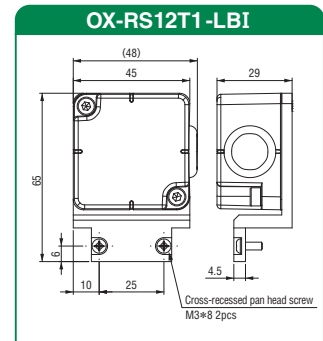
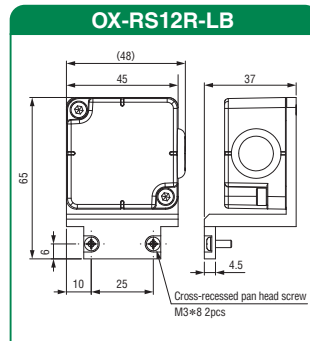
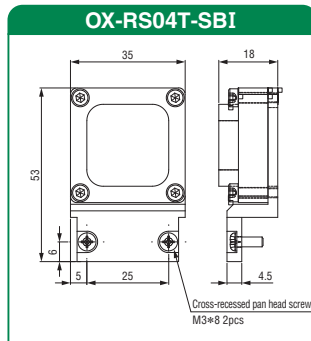
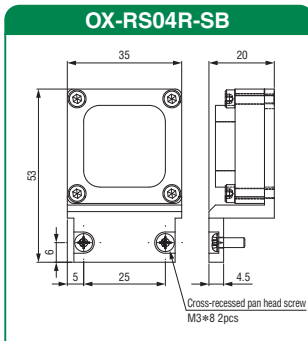
Order code No.	140393	140395	140394	140396
TYPE	OXR-MPS0508	OXR-MPS0508-I	OXR-MPS1304	OXR-MPS1304-I
Rating	5A AC200V/DC200V		13A AC200V/DC200V	
Electric contact	8Pin		4Pin	
Wiring specifications ※ 1	AWG19		AWG15	
Connector shape	Elecectrical connector NJC-2410-RM (NANABOSHI)	Elecectrical connector NJC-2410-RM (NANABOSHI)	Elecectrical connector D/MS3102A-18-10-P (DDK)	Elecectrical connector D/MS3102A-18-10-S (DDK)
Recommended electrical connecor on cable side	NJC-2410-PM (NANABOSHI)	NJC-2410-PF (NANABOSHI)	D/MS3106A-18-10-S (DDK)	D/MS3106A-18-10-P (DDK)
Wiring precautions (check the pin number from combined surface)				
	The electrical connector is 10 pin, but the 9,10 pin are blank, and the power won't be on even if connected.			
Subject tool changer ※ 2	OX-35B (with OXR-PCS) OX-60A OX-120A	OX-35AI (with OXR-PCS) OX-60AI OX-120AI	OX-35B (with OXR-PCS) OX-60A OX-120A	OX-35AI (with OXR-PCS) OX-60AI OX-120AI
Maintenance	Repeated use causes wear powder on the contact surface of the probe pin. The wear powder will cause the temperature rise, so please clean the surface regularly.			

※1 Wiring information in connectors

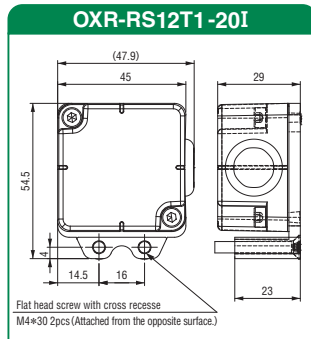
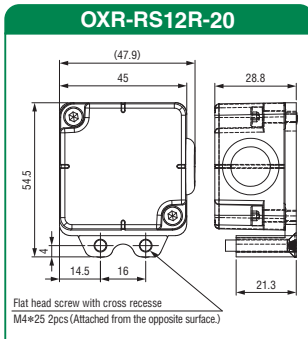
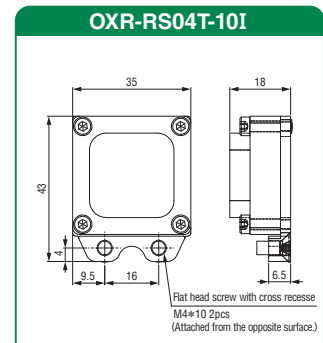
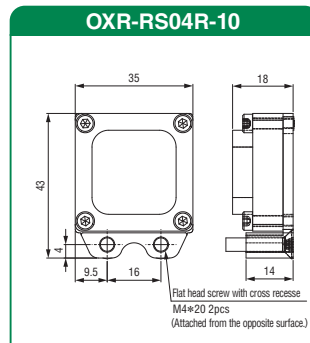
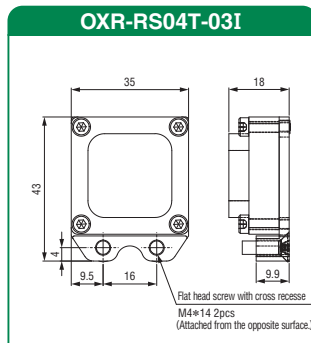
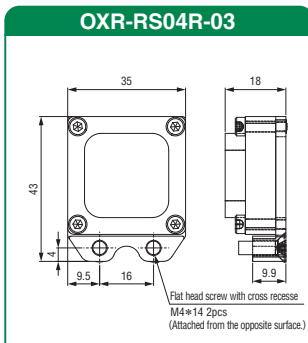
※2 OXR-PCS(140397) is needed when using large capacity connectors on OX-35B, 35AI.

Drawing of Wireless connector

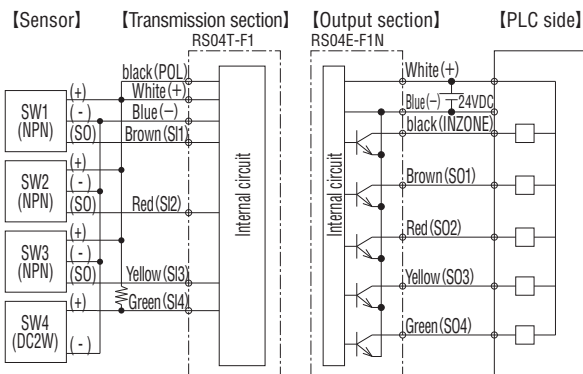
► A Type / B Type / BN Type (Take-out Robot) → 1-19



► For Articulated Robots → 1-32

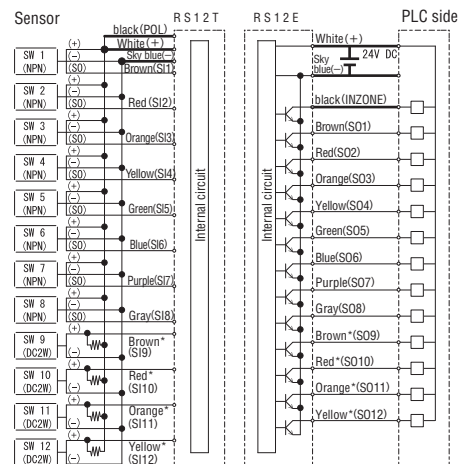


■ OXR-RS04 series Wiring diagram (NPN)



* SW4 in the above figure is a wiring example of a DC 2-wire sensor (wire a resistor of about 1 to 2 KΩ).
A DC 3-wire sensor can also be used.

■ OXR-RS12 series Wiring diagram (NPN)



* SW9 to 12 in the above figure are wiring examples of the DC 2-wire sensor (wire the resistance to about 1 to 2 KΩ).
* The green*, blue*, and purple* cables of RS12E and RS12T are unused

Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics / Palletizing / Sheet Metal / Stamping / Metal Fabrication

Assembling Tools

Tool / Jig

Information

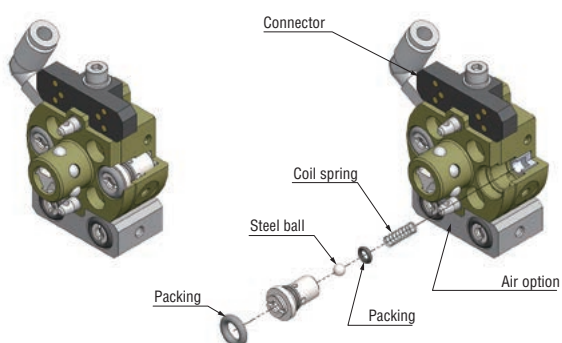
Various Products Information

Tool Changer for Articulated Robots Option & Replacement Parts

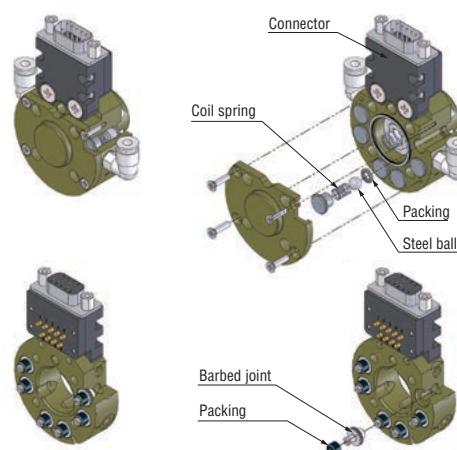
				Tool changer																				
				Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side	Robot side	Tool side			
				140310	140315	140235	140236	140237	140238	140262	140263	140292	140293	140398	140316	140313	140318	140399	140317	140373	140374	140314	140319	
		Order code No.	TYPE	OX-005A	OX-005A1	OX-03A	OX-03A1	OX-05A	OX-05A1	OX-10B	OX-10B1	OX-20B	OX-20B1	OX-35B	OX-35A1	OX-60A	OX-60A1	OX-35BT	OX-35AT1	OX-120A	OX-120A1	OX-230A	OX-230A1	
Air Option	Robot side		140326	OX-005AA	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Tool side		140327	OX-005A1A	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Robot side		140296	OX-20BA	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	
	Tool side		140297	OX-20B1A	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	
	Robot side		140342	OX-60AA	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—	
	Tool side		140343	OX-60A1A	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—
Maintenance parts	Barbed joint		230116	XL0054-106A	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—	
			230117	XL0054-206A	—	—	—	○	—	○	—	—	—	—	—	—	—	—	—	○	—	—	—	—
			110623	LX0004-101	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—
			110686	LX0120-202	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—
			110739	LX0219-203	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
	Steel ball		382583	φ3	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			310607	φ5.5	—	—	○	—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
			323000	φ6.35	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—
			152561	φ10	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	—	—	—	—	—
			152755	φ11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
	Coil spring		230115	XL0060-106-2	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			200223	UR5-10	—	—	○	—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
			110649	L00999-420	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—
			200257	UR8-15	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—
	Packing (Robot side)		200320	UR10-10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—	—
			152547	P5 (C000002-S7)	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			186738	SS3 (C03700-A0)	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			271742	1ASS-5	—	—	○	—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—
	Packing (Tool side)		184474	S6 (C00503-A00X8)	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—
			152689	P8 NBR-70	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—
			131773	NPB10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—
			230077	XL0054-204	—	—	—	○	—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—
	Packing (Tool side)		110551	L00999-313	—	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—
			110687	LX0120-203	—	—	—	—	—	—	—	—	—	—	—	○	—	○	—	○	—	—	—	—
221487			WRBC15-8-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—	—	
Cable Accessories	Robot side		140168	OX-DS09-H	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
	Tool side		140167	OX-DS09-I-H	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
	Robot side		140197	OX-DS09S-H	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
	Tool side		140247	OX-DS09S-H (1.5m)	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
	Robot side		140202	OX-DS09P-I-H	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
	Tool side		140364	OX-DS09P-I-H (1.5m)	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
	Robot side		140203	OX-DS09SL-H	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
	Tool side		140248	OX-DS09SL-H (1.5m)	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
Connector Accessories	Robot side		140204	OX-DS09PL-I-H	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
	Tool side		140365	OX-DS09PL-I-H (1.5m)	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
	Robot side		140328	OXR-PS06	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Tool side		140329	OXR-PS06-I	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	Robot side		140190	OXR-DPS09	—	—	○	—	○	—	○	—	○	—	○*2	—	○	—	○*2	—	○*2	—	○*2	
	Tool side		140192	OXR-DPS09-I	—	—	—	○	—	○	—	○	—	○	—	○	—	○	—	○*2	—	○*2	—	
	Robot side		140264	OXR-PS16	—	—	○	—	○	—	○	—	○	—	○*2	—	○	—	○*2	—	○*2	—	○*2	
	Tool side		140265	OXR-PS16-I	—	—	—	○	—	○	—	○	—	○	—	—	○*2	—	○	—	○*2	—	○*2	
	Robot side		140362	OXR-PSH11	—	—	○	—	○	—	○	—	○	—	○*2	—	○	—	○*2	—	○*2	—	○*2	
	Tool side		140363	OXR-PSH11-I	—	—	—	○	—	○	—	○	—	○	—	—	○*2	—	○	—	○*2	—	○*2	
High capacity connectors	Probe connector mounting bracket		140344	OXR-CBX24	—	—	—	—	—	—	—	—	—	—	○	○	—	—	○	○	○	○	○	
	Robot side		140172	OX-DS09	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	
	Tool side		140171	OX-DS09-I	—	—	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	○*1	—	
Wireless connector	Auto switch		030500	D-F8N	—	—	—	—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	
	Robot side		140320	OXR-RS04R-03	—	—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Tool side		140322	OXR-RS04T-03I	—	—	—	○*3	—	○*3	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Robot side		140321	OXR-RS04R-10	—	—	—	—	—	—	○	—	○	—	○*2	—	○	—	○*2	—	—	—	—	
	Tool side		140323	OXR-RS04T-10I	—	—	—	—	—	—	—	○	—	○	—	—	○	—	—	○*2	—	—	—	
	Robot side		140330	OXR-RS12R-20	—	—	—	—	—	—	—	—	—	○*3	—	○*2	—	○	—	○*2	—	—	—	
Tool side	140331		OXR-RS12T1-20I	—																				

				Air option					
				Robot side	Robot side	Tool side	Robot side	Tool side	
				Order code No.	140326	140296	140297	140342	140343
Maintenance parts	Barbed joint		Order code No.	TYPE	OX-005AA	OX-20BA	OX-20BIA	OX-60AA	OX-60AIA
			110623	LX0004-101	—	—	○	—	—
	110686	LX0120-202	—	—	—	—	○		
	Steel ball		382583	φ3	○	—	—	—	—
			323000	φ6.35	—	○	—	—	—
			152561	φ10	—	—	—	○	—
	Coil spring		230115	XL0060-106-2	○	—	—	—	—
			110649	L00999-420	—	○	—	—	—
			200257	UR8-15	—	—	—	○	—
	Packing (Robot side)		152547	P5 (C000002-S7)	○	—	—	—	—
			186738	SS3 (C03700-A0)	○	—	—	—	—
			184474	S6 (C00503-A00X8)	—	○	—	—	—
			152689	P8 NBR-70	—	—	—	○	—
	Packing (Tool side)		110551	L00999-313	—	—	○	—	—
110687			LX0120-203	—	—	—	—	○	

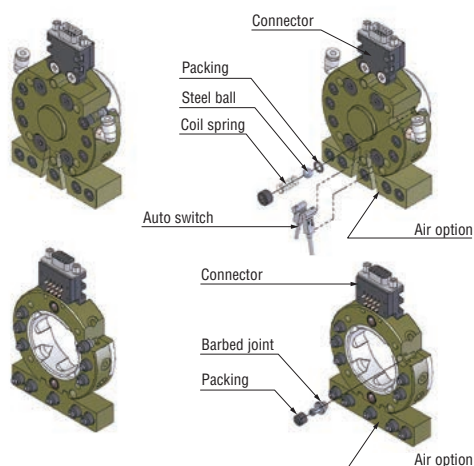
OX-005A/005A I



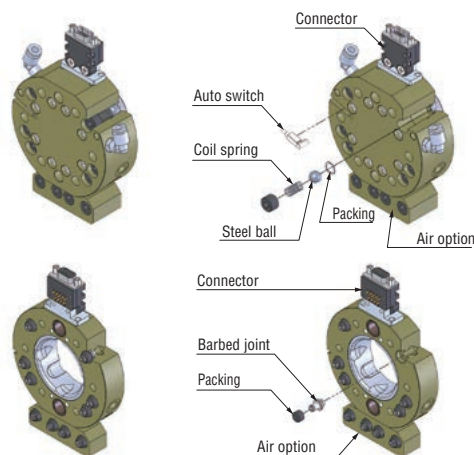
OX-03A (05A, 10B) /03A (05A, 10B) I



OX-20B/20B I



OX-35B (60A) /35A (60A) I



Quick Chuck Change

Quick Chuck Change Manual
Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing / Sheet Metal-Stamping / Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

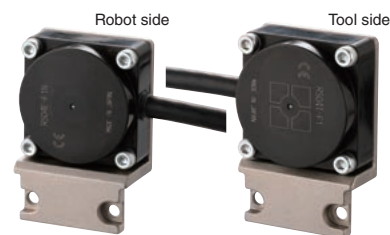
Wireless connector specification and precautions concerning handling

● See (1-19) and (1-32) for more information about wireless connector.

► Cautions in installation (Please be sure to read before use.)

Please read this manual well to gain a thorough understanding of the contents to make safe and proper operation.

- Make installation / maintenance / measures at the failure after you turn off the power.
- Please use constant voltage power supply such as switching power supply.
(Malfunction may occur if you use the power with ripple of more than the rated value such as full wave rectifying power.)
- Carry out wiring of each unit properly according to the wiring diagram.
- Carry out wiring of cable well away from power line and high voltage apparatus to prevent malfunction caused by induction noise.
- Be careful not splash organic solvent and such liquid on case and transmission face if they are made of resin (ABS or ABS + PBT).
- Be careful not splash water and cutting water on the cable end (wiring section).
(Liquid penetration from cable core to the main body may cause problems such as short circuit and corrosion.)
- Install the output section not always faced with metal. Metal section may be overheated or internal element may be damaged.
- To avoid interference between wireless connectors, no more than 1 wireless connector should be installed per tool changer.



► 4 contact specification

■ Specification

TYPE	Tool side OXR-RS04T-__ _I	
Sensor	Direct current three-wire sensor	
Drive voltage	12V ± 1.5V DC	
No. of input signals	4 points	
Drive voltage	≤ 30mA	≤ 60mA
Transmission distance	0...3mm	0...2mm
Allowable axis misalignment	± 2mm	± 1mm
Ambient temperature	0...+50°C	
Protection structure	IP67	
Connection cable	PUR φ 6.3 7x0.259mm ²	
Material	ABS	
Weight	Main body 25g + Cable 60g/m	

TYPE	NPN output	Robot side OXR-RS04R-__ _
Power supply voltage	24V DC ± 10% (ripple included)	
Current consumption	≤ 200mA	
No. of input signals	4 points + 1 point	
Load electric current	≤ 50mA/1 Output	
LED display	Status (green), in-zone (orange)	
Circuit protection	Short-circuit protection, reverse connection protection surge protection	
Ambient temperature	0...+50°C	
Protection structure	IP67	
Connection cable	PUR φ 6.3 7x0.259mm ²	
Material	ABS	
Weight	Main body 25g + Cable 60g/m	

*Total current consumption value of each sensor should be less than the drive current value to use two or more sensors for detection.

*Decrease the number of connected sensors if the actual value exceeds the drive current value.

► 12 contact specification

■ Specification

TYPE	Tool side OXR-RS12T-__ _I	
Sensor	Direct current three-wire sensor	
Drive voltage	12V ± 1.5V DC	
No. of input signals	12 points	
Drive voltage	≤ 230mA	
Transmission distance	2...5mm	
Allowable axis misalignment	± 3mm	
Ambient temperature	0...+50°C	
Protection structure	IP67	
Connection cable	PUR φ 8.6 2×0.5mm ² + 13×0.18mm ²	
Material	ABS	
Weight	Main body 75g + Cable 105g/m	

TYPE	NPN output	Robot side OXR-RS12R-__ _
Power supply voltage	24V DC ± 10% (ripple included)	
Current consumption	≤ 600mA	
No. of output signals	12+1(status)	
Load electric current	≤ 50mA/1 出力	
LED display	Status (green), Output (orange)	
Allowable axis misalignment	Short-circuit protection, reverse connection protection surge protection	
Ambient temperature	0...+50°C	
Protection structure	IP67	
Connection cable	PUR φ 8.6 2×0.5mm ² + 13×0.18mm ²	
Material	ABS	
Weight	Main body 80g + Cable 105g/m	

*Total current consumption value of each sensor should be less than the drive current value to use two or more sensors for detection.

*Decrease the number of connected sensors if the actual value exceeds the drive current value.

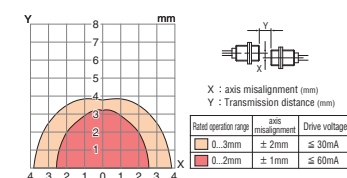
■ Allowed sensors

Power supply voltage	12V DC
Total consumption current	≤ 60mA
Residual voltage	≤ 3.5V
Load electric current	—

Use the sensor properly operates under the condition of above list.

■ Transmission area drawing (Example : power supply voltage 24V/metal not imbedded)

OXR-RS04R-__ _ / OXR-RS04T-__ _I



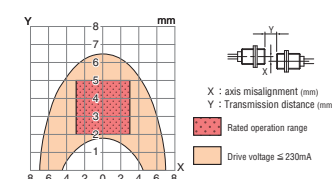
■ Allowed sensors

Power supply voltage	12V DC
Total consumption current	≤ 230mA
Residual voltage	≤ 3.5V
Load electric current	—

Use the sensor properly operates under the condition of above list.

■ Transmission area drawing (Example : power supply voltage 24V/metal not imbedded)

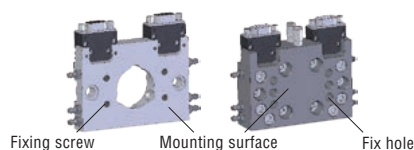
OXR-RS12R-__ _ / OXR-RS12T-__ _I



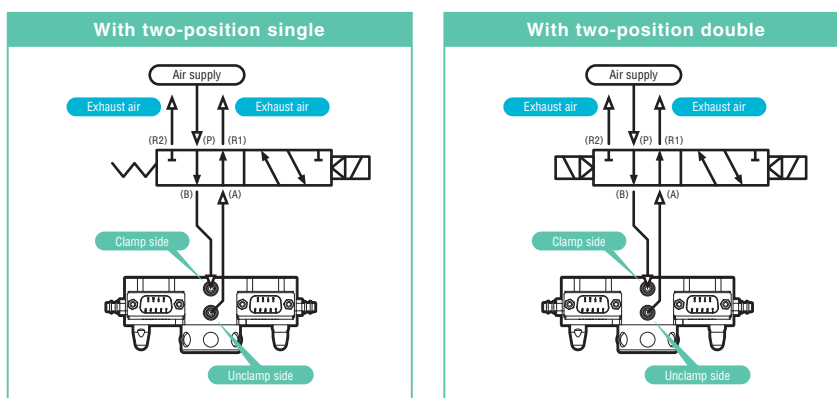


Cautions when using tool changer

- Tool clamp / unclamp will cause tool pull and push. Please watch out for pinch point fingers / hands.
- To prevent equipment troubles, use clean air that has been dried through a dryer or mist separator and is free of oil. For the compressor, replace the hydraulic oil specified by each manufacturer at specified intervals. Inappropriate hydraulic oil may damage air equipment such as packing due to oil mixed in the air.
- Do not use the clamp / unclamp of tool changer rather than air supply of 0.5 to 0.7 MPa. There is a risk of damaging the tool changer mechanism and surrounding devices.
- When not using for prolong periods, please remove tool from robot.
- When restarting from the state that the air is not supplied, please make sure that the air is supplied to the clamp side, then start confirm air supply port.
- When assembling the tool changer to the robot or the hand, please fasten the surface so that there is no gap between the mounting surfaces where there are fixing holes and screw.
- We do not take any responsibility for any faults arising in the combination with improper product.
- If the robot side piston is repeatedly clamped / unclamped with the tool side of the tool changer disconnected, it may interfere with the clamping with the tool side, so please stop. If the piston is misaligned, align the $\triangle$ mark.
- When using the air port for vacuum line, please remove the check valve on the robot side.
- If you would like restore the air port that is used for vacuum line, please assemble with the check valve parts coil spring, stainless ball and packing
- Please note that if the plug is tightened too much, it cannot be clamped normally and may come off.
- Before you start the operation of the assembled equipment, please do the safety-check to confirm the bolts and other parts are not loosen. Do not exceed the allowable value (moment torque) load of the product when using It may not only affects the function and life span of the product, but also causes an unexpected accident. Not only does it affect the function and life of the product, it can also cause unexpected accidents.
- As to the installment of the additional air option, please adjust the concave part of the main body and the convex part of the additional air option, and make it parallel to the connecting surface with the other side.
- If the electrical connector is installed, please make sure the electrical power is OFF during the tool changer clamp / unclamp process. If it is operated with power is on, the front of the probe pin will erode, and poor contact or melt may happen.
- Never connect the electrical power tool changer itself. It might cause electrical shock which lead to the product damage. There is a risk of electric shock and the product may be damaged due to a short circuit.
- It shall not be used in any of the following locations
 - Locations with ambient temperature lower than 0°C or higher than 55°C
 - Locations with liquid, dripping water, water vapor
 - Locations with humidity is more than 95% or condensation
 - Locations with corrosive gases
 - Locations with metal, carbon or spatter conductive dust
 - Locations with a strong electric field magnetic field



Reference Piping connection diagram



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics-Palletizing / Sheet Metal-Stamping / Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



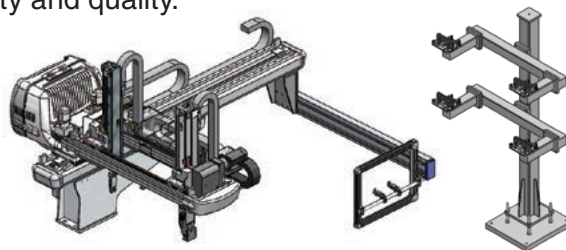
Automated Chuck Exchange System

'Shorten the setup time', 'Reduce the burden of the worker', 'Reduce the connection mistake' by automated robot exchange, will improve the productivity and quality.

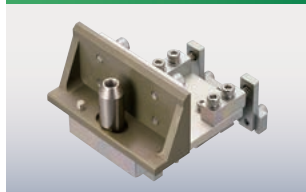
► Example of tool station

Tool station types : floorstanding tree type, NT type (attached to traverse rail). Stations are created according to the number of setup changes and facility spaces.

* Please contact our sales office nearest your office or Eins.



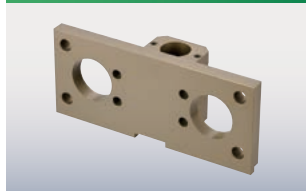
Auto Quick Chuck Change Hanger



Hanger unit attached to tool station. (Station Side)

1-41

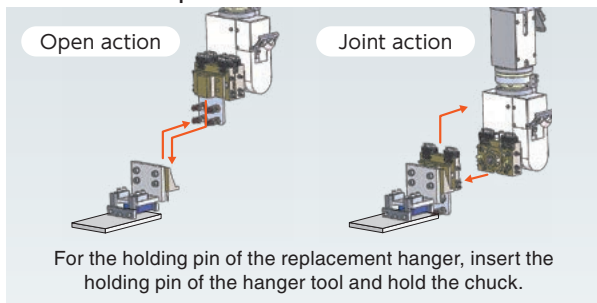
Hanger Tool



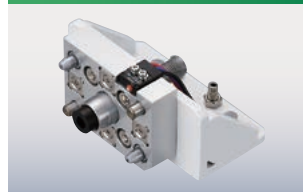
Hold unit attached to the tool side.

1-41

Action example



Magnet Chuck Hanger (Fix Side)



Hanger unit to use and hold the magnet power of Neodymium. (Station Side)

1-42

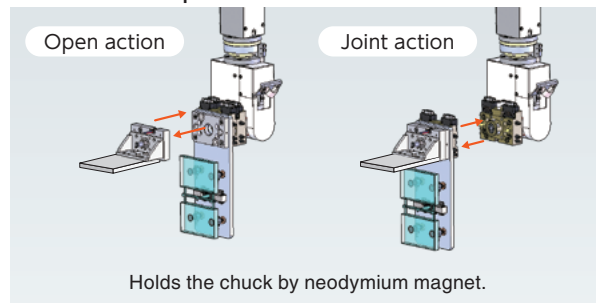
Magnet Chuck Hanger (Tool Side)



Hold unit attached to the tool side.

1-42

Action example



■ Specification

Product name		Order code No.	Weight (g)	Weight capacity (kg)	Page of details
TYPE					
Auto Quick Robot hand Change Hanger		072600	182	～ 3	1-41
		HSL			
		072601	1,300	～ 10	
		HSAL			
		072602	2,800	～ 35	
		HLAL			
Hanger tool		196532	43	～ 3	1-41
		TS			
		196533	99	～ 10	
		TSA			
		196656	356	～ 35	
		TLA1			

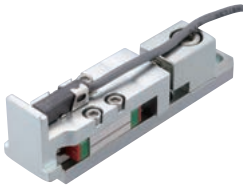
	Product name	Order code No.	Weight (g)	Weight capacity (kg)	Page of details
		TYPE			
Magnet chuck Hanger (fix side)		072732	540	~ 1 (9.8N)	1-42
		HNE-48			1-43
		072733	680		
		HNE-S			
		072811	632		
		HNE-SL			
Magnet chuck Hanger (tool side)		196636	70	~ 1 (9.8N)	1-42
		TNE-48I			1-43
		196637	140		
		TNE-SI			
		196727	115		
		TNE-SLI			



Auto quick chuck
change hanger
(Hook Specification)



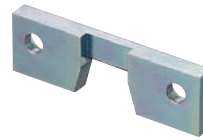
► Station side



Order code No.	072600
TYPE	HSL

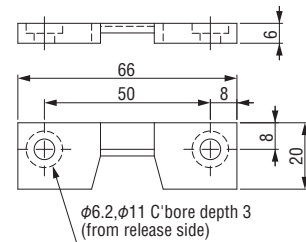
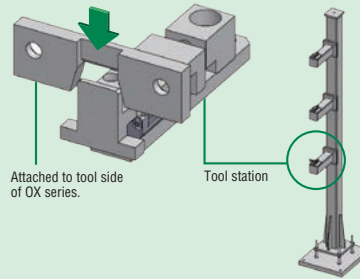
-
- Technical drawing of a mechanical assembly showing a top view and a side view.
- Top View Dimensions:**
- Total width: 93
 - Distance from left edge to center of hole: 30
 - Hole diameter: $\phi 6.5$
- Side View Dimensions:**
- Total height: 32
 - Top flange thickness: 3.1
 - Bottom flange thickness: 2.5
 - Bottom flange width: 16
- Notes:**
- $\phi 6.5 \times 12.6$ C° bore depth 3 C° sink 90 degrees

► Tool side



Order code No.	196532
TYPE	TS

- ### Example of combination: HSL and TS



► Station side



Order code No.	072601
TYPE	HSAL

-
- Technical drawings of the 100mm x 100mm x 12.5mm plate. The top view shows a square plate with a central 50mm x 50mm square hole and four 6mm diameter holes at the corners. The side view shows the 12.5mm thickness and the 100mm width. The bottom view shows the 100mm width and the 60mm distance from the bottom edge to the center of the square hole. The 2-φ4.5, φ7.5 C' bore depth 5.3 is indicated.

► Tool side



Order code No.	196533
TYPE	TSA

-
- Technical drawing of a mechanical part showing three views: front, top, and side.
- Front View:** Shows a base with a central circular feature. The width of the base is 36. The height of the base is 13. The height of the central feature is 20.
- Top View:** Shows a rectangular plate with dimensions 80 (width) and 45 (height). There are four holes, labeled 4-φ6.5, arranged in a 2x2 grid. The distance between the centers of the holes is 50 (horizontal) and 15 (vertical). The distance from the right edge of the plate to the center of the rightmost holes is 13.
- Side View:** Shows a profile with dimensions 24 (width), 42 (height), and 3 (thickness).

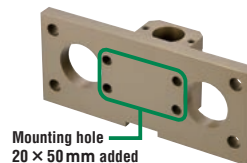
► Station side



Order code No.	072602
TYPE	HLAL

-

► Tool side



Order code No.	196656
TYPE	TLA1

-
- Technical drawing of a mechanical part showing top, front, and side views with dimensions.
- Top View Dimensions:**
- Overall width: 150
 - Overall height: 64
 - Distance from top edge to first hole center: 40
 - Distance between first and second hole centers: 90
 - Distance from second hole center to right edge: 50
 - Distance from top edge to third hole center: 20
 - Distance from second hole center to third hole center: 130
- Front View Dimensions:**
- Overall height: 46
 - Distance from base to top of part: 32
- Side View Dimensions:**
- Overall height: 46
- Feature Callouts:**
- 2- $\phi 30$ (Two holes, 30 mm diameter)
 - 4- $\phi 6.5$ (Four holes, 6.5 mm diameter)
 - 4- $\phi 8.5$ (Four holes, 8.5 mm diameter)

Various Products Information



Magnet Chuck Hanger

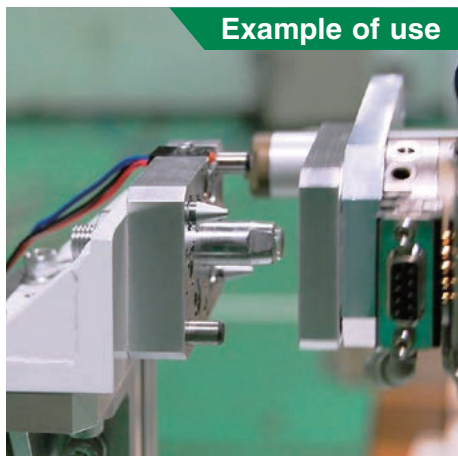
Perfect hanger unit for hand holding.

Auto quick chuck
change hanger
(Neodymium specification)



You can see moving images of products by
using QR code reader of your smartphone.

Magnet chuck hanger doesn't use electricity or air, and holds the hand with neodymium magnet.



Example of use

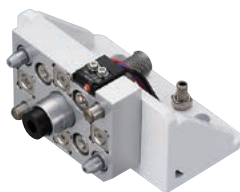
Chuck open

- Using the detachment mechanism of the tool changer, push the tool to the magnetic chuck hanger (fixed side), hold the chuck with the neodymium magnet.

Chuck connection

- With the clamp operation of tool changer, pull the chuck from magnet hanger.

▶ Station side

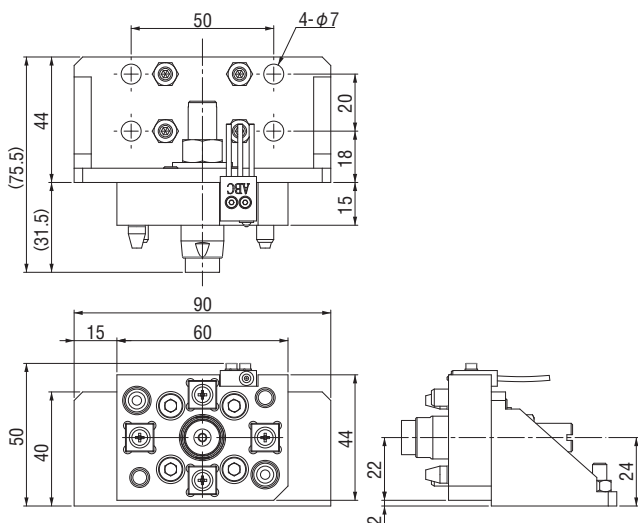


Magnet chuck hanger (fixed side)

Order code No. **072732**

TYPE **HNE-48**

- Weight: 540g
- Weight capacity: ~ 1kg (9.8N)
- The chuck has a residual sensor (030317 D2JW-011-MD)
- Wiring: black (COM) blue (NO) red (NC)



▶ Tool side

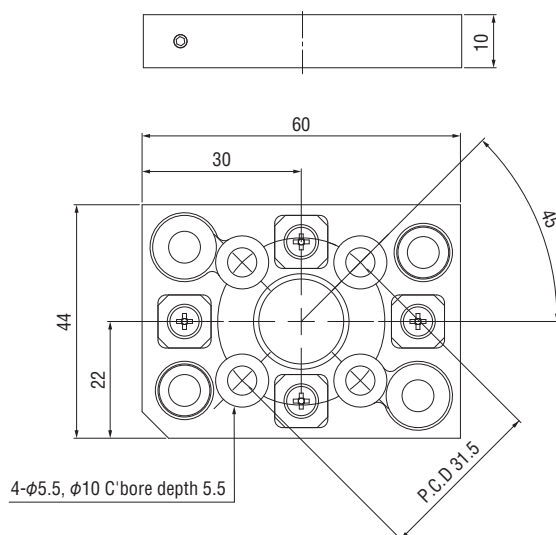


Magnet chuck hanger (tool side)

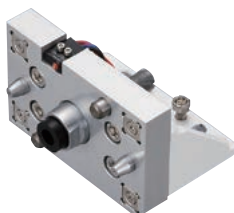
Order code No. **196636**

TYPE **TNE-48I**

- Weight: 70g
- Weight capacity: ~ 1kg (9.8N)



► Station side

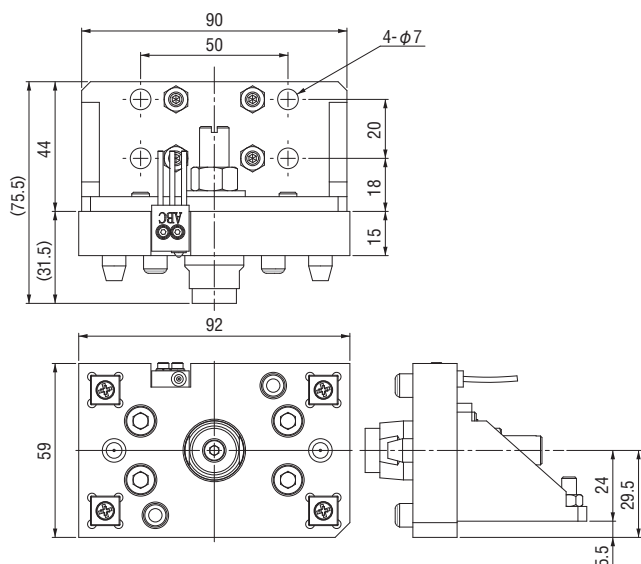


Magnet chuck hanger (fix side)

Order code No. **072733**

TYPE **HNE-S**

- Weight: 680g ● Weight capacity: ~ 1kg (9.8N)
- The chuck has a residual sensor (030317 D2JW-011-MD)
- Wiring: black (COM) blue (NO) red (NC)



► Tool side

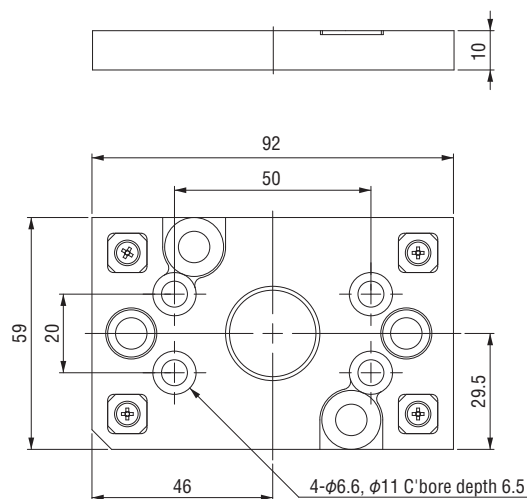


Magnet chuck hanger (tool side)

Order code No. **196637**

TYPE **TNE-SI**

- Weight: 140g ● Weight capacity: ~ 1kg (9.8N)



► Station side

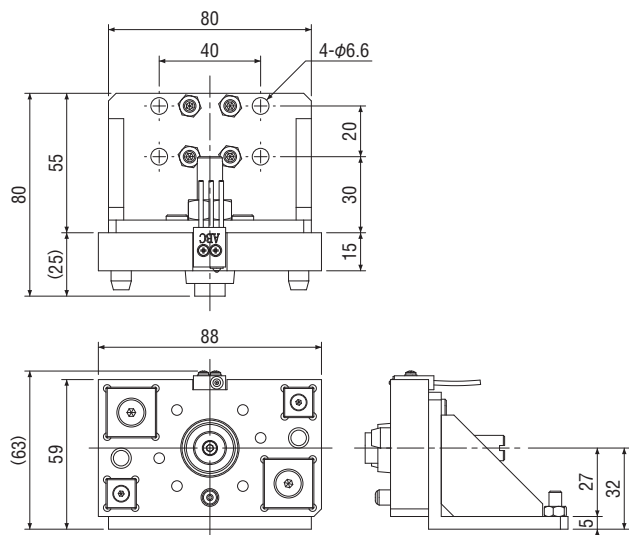


Magnet chuck hanger (fix side)

Order code No. **072811**

TYPE **HNE-SL**

- Weight: 632g ● Weight capacity: ~ 1kg (9.8N)
- The chuck has a residual sensor (030317 D2JW-011-MD)
- Wiring: black (COM) blue (NO) red (NC)



► Tool side

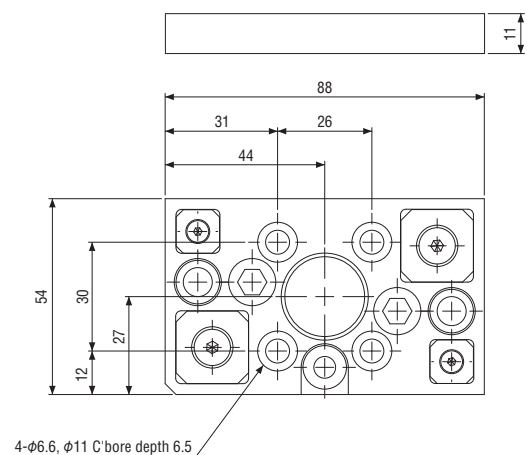


Magnet chuck hanger (tool side)

Order code No. **196727**

TYPE **TNE-SLI**

- Weight: 115g ● Weight capacity: ~ 1kg (9.8N)



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (OM Type)

Tool Changer

Automated Hand Exchange System

Grip

Mini Cylinder

Accessories for Mini Cylinder

Container Cylinders

Accessories for Container Cylinder

Grippers

Rubber Material / Grip Pad

Suction

Suction Cups

Suction Stems

Pad in Pad

Vacuum Gripper

Air Ejector / Filter / Check Valve

Ultra Small Part Take Out

Vacuum Generator Unit

Cut

Air Nipper (Small-Medium)

Air Nipper (Large)

Frame / Module

Jungle Gym

Let's Joint

Rectangular Tube

Base Aluminum Material

Sliding Chuck

Pneumatic Components / Sensors

Pneumatic Components

Sensors / Multi AND Board

PCIO Communication Unit

Lightweight Parts Series

Frame / Section / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics - Palletizing / Sheet Metal - Stamping - Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information

Handwriting practice area with 20 sets of dashed lines for tracing on a lined background.