

Lightweight Parts Series



Frame 7-2

- ▶ CFRP Pipe (ϕ 12 / ϕ 20) 7-2
- ▶ Pipe End Cap 7-2
- ▶ Tie Wrap Base 7-2



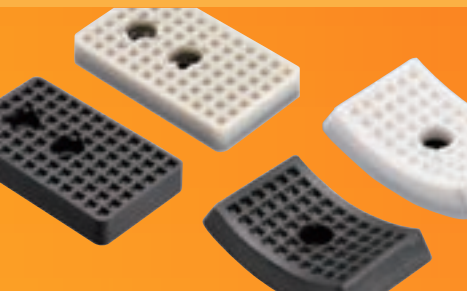
Suction 7-3

- ▶ Resin Suction Stem (Mini) 7-3
- ▶ Resin Suction Stem (Small) 7-4



Resin Cylinders / Pads / Resin Manifolds 7-5

- ▶ Resin Cylinders 7-5
- ▶ Pads (Rectangle / Curved) 7-5
- ▶ Resin Manifolds 7-5



Quick Chuck Change

Quick Chuck Change Manual

Quick Chuck Change Manual (QM 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 / Suction / Resin Cylinders / Pads / Resin Manifolds

By Industry

Logistics - Palletizing
Steel Metal - Stamping
Metal Fabrication

Assembling Tools

Tool / Jig

Information

Various Products Information



Frame

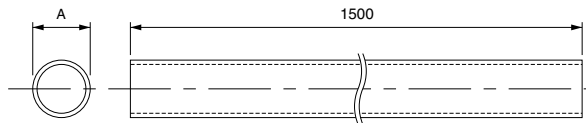
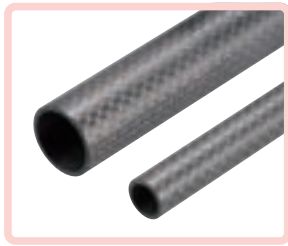
More lightweight parts line up. The combination of the lightweight parts series makes the EOAT lighter and reduces the load on the Robot.

Pipe	250g	➔	121g	51.6% DOWN
Bracket	16.3g	➔	7g	57.1% DOWN
Bracket	21g	➔	16g	23.8% DOWN
Cylinder	65g	➔	40g	38.5% DOWN
Pads	43g	➔	22g	48.8% DOWN

Total weight of hand **738g**

It is **32%** lighter when compared with the SUS pipe or aluminum products.

※ Resin attach bracket and resin cross connector are coming soon.



Jungle gym CFRP pipe $\phi 12 \cdot \phi 20$

Order code No.	023361	023362
TYPE	CFRP 12*1.5*1500	CFRP 20*1.5*1500

● Weight : $\phi 12/121g$, $\phi 20/200g$

Specification

Product name	A	Thickness	Material	Outside diameter tolerance
Jungle gym CFRP pipe $\phi 12$	$\phi 12$	1.5mm	CFRP	-0.05 ~
Jungle gym CFRP pipe $\phi 20$	$\phi 20$			-0.15

*The tolerance of outside diameter is a rough standard.
*When cutting pipes, burrs may occur on the cut surface.

Pipe end cap $\phi 12 \cdot \phi 20$

Order code No.	171339	171340
TYPE	R-CAP-12	R-CAP-20

● Weight : $\phi 12/0.4g$, $\phi 20/3.0g$

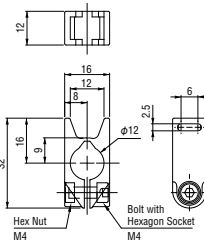
Lightweight Parts Series



Resin Fixture $\phi 12$ (Cable ties)

Order code No.	171210
TYPE	RCA12

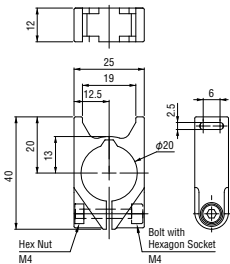
● Weight : 5g



Resin Fixture $\phi 20$ (Cable ties)

Order code No.	171211
TYPE	RCA20

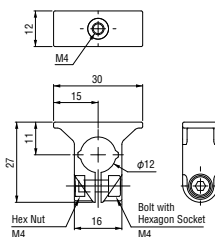
● Weight : 7g



Resin Fixture $\phi 12$ (M4)

Order code No.	171212
TYPE	RCB12

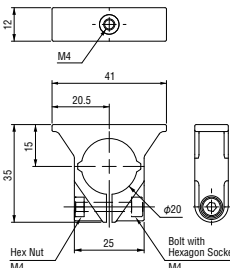
● Weight : 6g



Resin Fixture $\phi 20$ (M4)

Order code No.	171213
TYPE	RCB20

● Weight : 9g









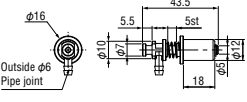
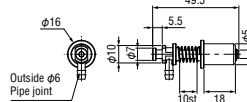
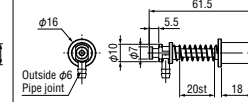
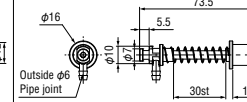
Resin Suction Stem(Mini)





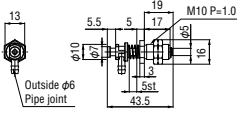
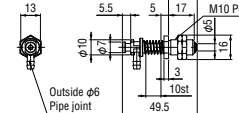
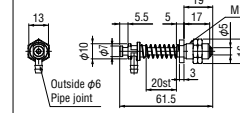
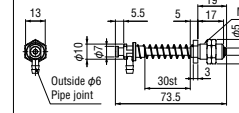






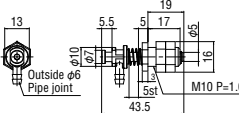
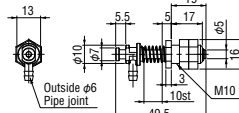
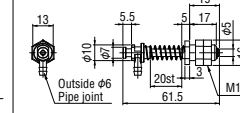
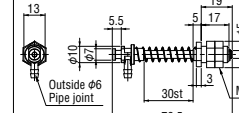
Direct connection on jungle gym series parts is possible.

To achieve the lightweight products, the body is made of resin.

● The suction cup is sold separately. ● Cup fixing system : embedded

Resin Suction Stems (Mini)	 * 1	 * 1	 * 1	 * 1
Resin Pipe Holder				
Drawing				
Order code No.	211105	211106	211107	211108
TYPE	VFILP-SS-5-P12	VFILP-SS-10-P12	VFILP-SS-20-P12	VFILP-SS-30-P12
Weight	4g	4g	6g	7g
Piping/Mounting	$\phi 6 / \phi 12$			
Applicable cup size	$\phi 4 \sim 14$			

Resin Suction Stems (Mini)				
Aluminum Nut				
Drawing				
Order code No.	211109	211110	211111	211112
TYPE	VFILP-SS-5	VFILP-SS-10	VFILP-SS-20	VFILP-SS-30
Weight	9g	9g	10g	11g
Piping/Mounting	$\phi 6 / M10 P=1.0$			
Applicable cup size	$\phi 4 \sim 14$			

Resin Suction Stems (Mini)	 * 2	 * 2	 * 2	 * 2
Resin Nut				
Drawing				
Order code No.	211144	211145	211146	211147
TYPE	VFILPL-SS-5	VFILPL-SS-10	VFILPL-SS-20	VFILPL-SS-30
Weight	4.8g	5.1g	5.85g	6.4g
Piping/Mounting	$\phi 6 / M10 P=1.0$			
Applicable cup size	$\phi 4 \sim 14$			

*1 Please press through the bottom when fixing. OR When attaching, please be sure to push it all the way to the bottom.
 *2 Please do not overtighten. (Recommended torque: 0.8-1.0 N · m)

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Quick Chuck Change Manual (OM Type)

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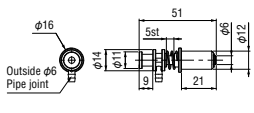
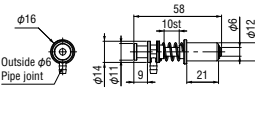
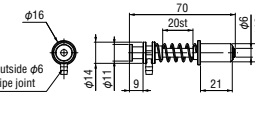
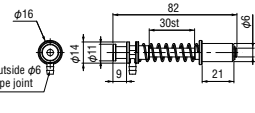
Resin Suction Stem(Small)





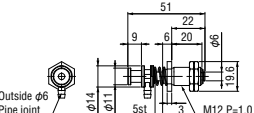
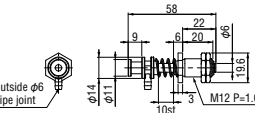
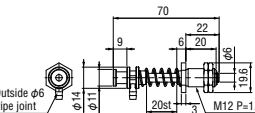
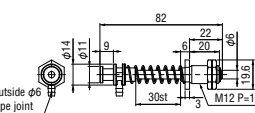






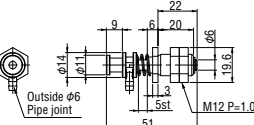
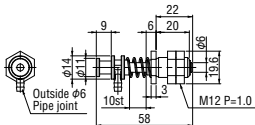
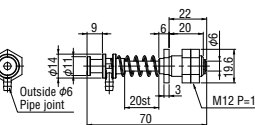
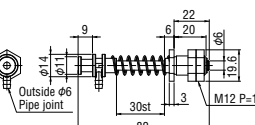
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● The Suction Cups Are Sold. ● Cup Fixing System

Resin Suction Stems (Mini)	 * 1	 * 1	 * 1	 * 1
Resin Pipe Holder				
Drawing				
Order code No.	211092	211093	211094	211095
TYPE	VFILP-S-5-P12	VFILP-S-10-P12	VFILP-S-20-P12	VFILP-S-30-P12
Weight	7g	7g	8g	9g
Piping/Mounting	φ6 / φ12			
Applicable cup size	φ15 ~ 45			

Resin Suction Stems (Mini)				
Aluminum Nut				
Drawing				
Order code No.	211097	211098	211099	211100
TYPE	VFILP-S-5	VFILP-S-10	VFILP-S-20	VFILP-S-30
Weight	16g	16g	17g	18g
Piping/Mounting	φ6 / M12 P=1.0			
Applicable cup size	φ15 ~ 45			

Resin Suction Stems (Mini)	 * 2	 * 2	 * 2	 * 2
Resin Nut				
Drawing				
Order code No.	211148	211149	211150	211151
TYPE	VFILPL-S-5	VFILPL-S-10	VFILPL-S-20	VFILPL-S-30
Weight	8.35g	8.85g	9.7g	10.5g
Piping/Mounting	φ6 / M12 P=1.0			
Applicable cup size	φ15 ~ 45			

*1 Please press through the bottom when fixing. OR When attaching, please be sure to push it all the way to the bottom.
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Resin Cylinders / Pads / Resin Manifolds

Achieved the further lightweight parts. Optimal item for make lightweight hand.

Product name	Resin Cylinder · MCDR	
Drawing		
Order code No.	123691	123692
TYPE	MCDR-10	MCDR-20
Weight	40g	48g

● Stroke: 10mm ● Joint pipe fitting BF-5 included ● Include mounting washers. ● Stroke: 20mm ● Joint pipe fitting BF-5 included ● Include mounting washers.

Product name	Pad · rectangle · black 2 holes · for mini cylinder	Pad · rectangle · white 2 holes · for mini cylinder	Pad · curved · black · for mini cylinder	Pad · curved · white · for mini cylinder
Drawing				
Order code No.	023336	023337	023359	023360
TYPE	CPL-060	CPL-061	CPL-018	CPL-072
Weight	22g	22g	19g	19g
Material	Chloroprene rubber	Silicone	Chloroprene rubber	Silicone
Cylinder	MCD1, MCDR, MCDP, MCE, MCP1-20 series			

Product name	Light weight plastic manifold BF5	Cap for resin manifold · BF5	Light weight plastic manifold BF6	Cap for resin manifold · BF6
Drawing				
Order code No.	123195	010585	123196	010586
TYPE	MP-10P-BF5	BF5-CAP	MP-10P-BF6	BF6-CAP
Weight	5g	1g	5g	1g

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Quick Chuck Change Manual (OM Type)

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