










Automation • Controls • Process

# ***Suction Cups***





# Cup Variations



## Vacuum Pad ZP Series

Pad Form			Symbol	Pad Diameter [mm]													
				ø1.5	ø2	ø3.5	ø4	ø6	ø8	ø10	ø13	ø16	ø20	ø25	ø32	ø40	ø50
Flat		—	U		●		●	●	●	●	●	●	●	●	●	●	●
		With Ribs	C							●	●	●	●	●	●	●	●
		Ball Joint	F							●	●	●	●	●	●	●	●
Bellows		—	B				●	●	●	●	●	●	●	●	●	●	●
Thin Flat		—	UT						●	●	●						
		With Ribs	CT						●	●	●						
Deep		—	D						●		●		●			●	































## Vacuum Pad/Compact Type ZP3 Series

Pad Form				Symbol	Pad Diameter [mm]													
					ø1.5	ø2	ø3.5	ø4	ø6	ø8	ø10	ø13	ø16	ø20	ø25	ø32	ø40	ø50
Flat		—	U	●	●	●												
		With Groove	UM				●	●	●	●	●	●						
Bellows		—	B				●	●	●									
		With Ribs	B							●	●	●						




















## Oval Pad ZP/ZP2 Series

Pad Form			Symbol	Pad Diameter [mm]													
				ø1.5	ø2	ø3.5	ø4	ø6	ø8	ø10	ø13	ø16	ø20	ø25	ø32	ø40	ø50
Oval		ZP	U	●	●	●											
		ZP2	W		●	●	●	●	●	●	●	●	●	●	●	●	

## High Rigidity Pad ZP3E Series






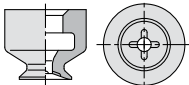




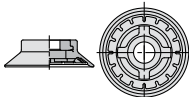

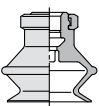


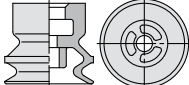

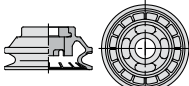

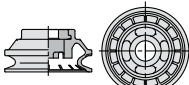







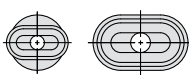


Pad Form			Symbol	Pad Diameter [mm]						
				ø1.5	ø3.5	ø6	ø10	ø16	ø25	ø40
Flat		With Groove	UM							
		Ball Joint, with Groove	F, UM							
Bellows		With Ribs and Groove	BM							
		Ball Joint, with Ribs & Groove	F, BM							

## Pads for Special Applications

Pad Form				Series	Symbol	Pad Diameter [mm]									
Mark-free Pad	Flat		—	ZP2	U, CL	ø4	ø6	ø8	ø10	ø16	ø25	ø32	ø40	ø50	
			With Ribs	ZP2	H, CL/NT/FT	ø40	ø50	ø63	ø80	ø100	ø125				
			With Groove	ZP3E	UM, CL	ø32	ø40	ø50	ø63	ø80	ø100	ø125			
			With Groove, Ball Joint Type	ZP3E	G, UM, CL	ø32	ø40	ø50	ø63	ø80	ø100	ø125			
	Bellows		With Ribs and Groove	ZP3E	BM, CL	ø32	ø40	ø50	ø63	ø80	ø100	ø125			
			With Groove, Ball Joint Type	ZP3E	F, BM, CL	ø32	ø40	ø50	ø63	ø80	ø100	ø125			
	Resin Attachment		—	ZP2	K	ø6	ø8	ø10	ø13	ø16	ø20	ø25	ø32		
For Film Adsorption		With Groove	ZP3P	PT	ø20	ø25	ø35	ø50							
Multistage		4.5 Stage	ZP2	ZJ	ø15	ø20	ø30	ø40	ø46						
		2.5 Stage 3.5 Stage	ZP2	J	ø6	ø9	ø10	ø14	ø15	ø16	ø25	ø30			
Flat Pad		With Groove	ZP2	MT	ø10	ø15	ø20	ø25	ø30						
Nozzle Type		—	ZP2	AN	ø0.8	ø1.1									
Sponge		—	ZP2	S	ø4	ø6	ø8	ø10	ø15						
For Disk Adsorption		—	ZP2	Z1											
For Panel Holding		—	ZP2	Z											
With Ball Spline Buffer		Flat Type	ZP2	U, S	ø2	ø3	ø6	ø8							
Vacuum Saving Valve		ZP2V													
Non-contact Gripper		XT661													
Magnet Gripper		MHM													

# Select from Cup Form



				Basic	Compact	High Rigidity	Oval	
				ZP	ZP3	ZP3E	ZP	ZP2
Flat	Flat Type		<ul style="list-style-type: none"> <li>For the adsorption of general workpieces</li> <li>For the adsorption of workpieces with flat and non-deformed surfaces</li> </ul>					
	Flat Type with Ribs		<ul style="list-style-type: none"> <li>For workpieces which are likely to become deformed</li> <li>For the reliable release of workpieces</li> </ul>					
	Flat Type with Groove		<ul style="list-style-type: none"> <li>For workpieces which are likely to become deformed</li> <li>For the reliable release of workpieces</li> </ul>					
	Ball Joint, Flat Type		<ul style="list-style-type: none"> <li>For the adsorption of workpieces with inclined or curved surfaces</li> </ul>					
	Ball Joint, Flat Type with Groove		<ul style="list-style-type: none"> <li>For adsorption of workpieces with inclined or curved surfaces</li> <li>For workpieces which are likely to become deformed</li> <li>For the reliable release of workpieces</li> </ul>					
Bellows	Bellows Type		<ul style="list-style-type: none"> <li>For the adsorption of workpieces with inclined surface</li> <li>For workpieces of varying heights</li> </ul>					
	Bellows Type with Ribs		<ul style="list-style-type: none"> <li>For adsorption of workpieces with inclined surfaces</li> <li>For workpieces of varying heights</li> <li>For the reliable release of workpieces</li> </ul>					
	Bellows Type with Ribs and Groove		<ul style="list-style-type: none"> <li>To be used when adsorption surface of the workpieces is slanted</li> <li>For the reliable release of workpieces</li> </ul>					
	Ball Joint, Bellows Type with Ribs and Groove		<ul style="list-style-type: none"> <li>For the adsorption of workpieces with inclined or curved surfaces</li> <li>For the reliable release of workpieces</li> </ul>					
Thin Flat	Thin Flat Type		<ul style="list-style-type: none"> <li>For workpieces which are likely to become deformed</li> </ul>					
	Thin Flat Type with Ribs		<ul style="list-style-type: none"> <li>For workpieces which are likely to become deformed</li> <li>For the reliable release of workpieces</li> </ul>					
Deep	Deep Type		<ul style="list-style-type: none"> <li>For workpieces with curved surfaces</li> </ul>					
Oval	Oval Flat Type		<ul style="list-style-type: none"> <li>For workpieces with adsorption surface limitations</li> <li>For use when a large adsorption area is required for long and narrow workpieces</li> </ul>					

## Basic Pad ZP Series

<b>Pad Diameter</b>	ø2, ø4, ø6, ø8, ø10, ø13, ø16, ø20, ø25, ø32, ø40, ø50
<b>Pad Form</b>	Flat Type, Flat Type with Ribs, Bellows Type, Thin Flat Type, Thin Flat Type with Ribs, Deep Type
<b>Mounting</b>	Male Thread, Female Thread
<b>Vacuum Inlet Direction</b>	Vertical, Lateral
<b>Vacuum Inlet</b>	Male Thread, Female Thread, One-touch Fitting, Barb Fitting
<b>Buffer</b>	Without, With [Buffer Stroke[mm]: 6, 10, 15, 20, 25, 30, 40, 50]
<b>Ball Joint</b>	Without, With (Flat Type)

12 sizes, 6 types of pad forms

The mounting bracket can be selected according to the application.



## Compact Type ZP3 Series

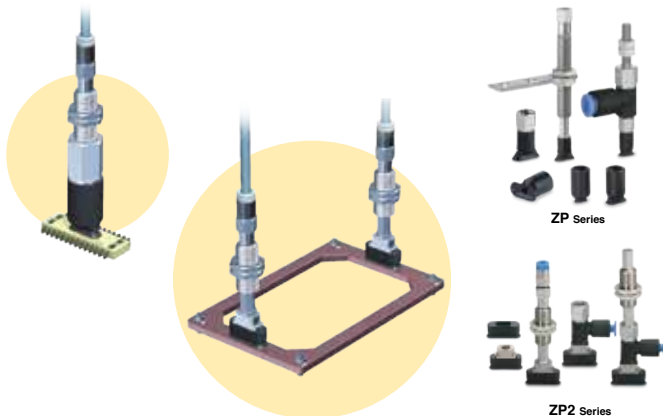
<b>Pad Diameter</b>	ø2, ø4, ø6, ø8, ø10, ø13, ø16, ø20, ø25, ø32, ø40, ø50
<b>Pad Form</b>	Flat Type, Flat Type with Groove, Bellows type, Bellows Type with Ribs
<b>Mounting</b>	Male Thread, Female Thread
<b>Vacuum Inlet Direction</b>	Vertical, Lateral
<b>Vacuum Inlet</b>	Male Thread, Female Thread, One-touch Fitting, Barb Fitting
<b>Buffer</b>	Without, With [Buffer Stroke[mm]: 3, 6, 10, 15, 20]



## Oval Pad ZP/ZP2 Series

<b>Pad Diameter</b>	2x4, 3.5x7, 4x10, 4x20, 4x30, 5x10, 5x20, 5x30, 6x10, 6x20, 6x30, 8x20, 8x30
<b>Pad Form</b>	Oval Flat Type
<b>Mounting</b>	Male Thread, Female Thread
<b>Vacuum Inlet Direction</b>	Vertical, Lateral
<b>Vacuum Inlet</b>	Male Thread, Female Thread, One-touch Fitting, Barb Fitting
<b>Buffer</b>	Without, With [Buffer Stroke[mm] ZP: 6, 10, 15, 20 / ZP2: 10, 20, 30, 40, 50]

For rectangular, vertically long, and horizontally long workpieces



## High Rigidity Pad ZP3E Series

<b>Pad Diameter</b>	ø32, ø40, ø50, ø63, ø80, ø100, ø125
<b>Pad Form</b>	Flat Type with Groove, Bellows Type with Ribs and Groove
<b>Mounting</b>	Male thread, Female thread
<b>Vacuum Inlet Direction</b>	Vertical, Lateral
<b>Vacuum Inlet</b>	Male Thread, Female Thread
<b>Buffer</b>	Without, With [Buffer Stroke[mm]: 10, 30, 50]
<b>Ball Joint</b>	Without, With

Stable suction position, Improved ease of removal

### Stable suction position

Groove and rib formed to adsorb with entire surface

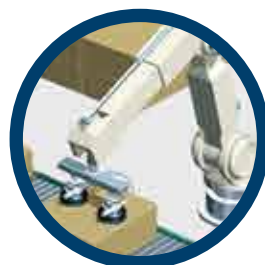
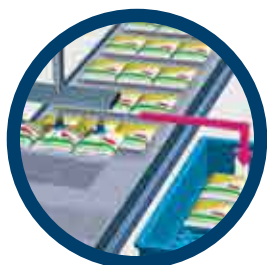
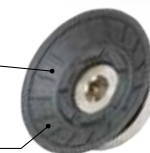


### Improved ease of removal With groove

The dents and bumps on the adsorption surface prevent workpieces from sticking to the pad. This facilitates easy removal.

### Shot-blasted

Micro-dents and bumps are formed on the adsorption surface. Workpieces can be removed easily.





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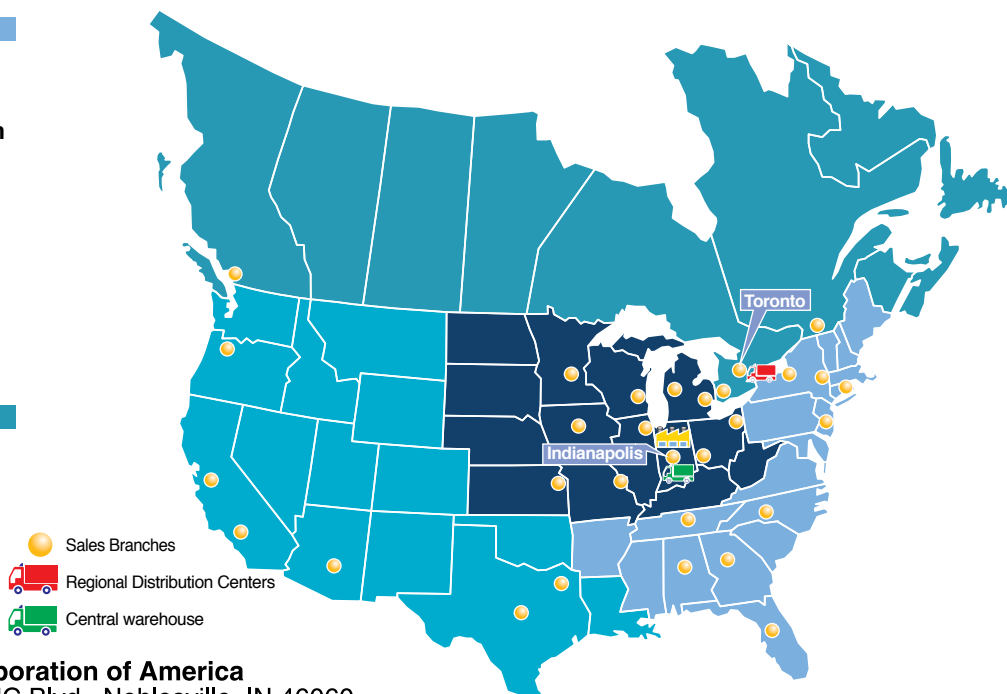
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