

Compact Pad ZP3 Series

ø1.5, ø2, ø3.5, ø4, ø6, ø8, ø10, ø13, ø16

Basic Performance

○ : Little or no influence △ : Can be used depending on conditions X : Not suitable

Pad type	Pad diameter (mm)	Application	Typical workpiece surfaces and shapes					
			Flat	Waved	Oblique	Different heights	Convex	Oily
								
Compact Pad	Flat (U) 	ø1.5~ø3.5 For adsorption of work pieces with flat and not deformed surface	○	X	X	X	X	X
	Flat with groove(UM) 	For a workpiece which is likely to deform	○	X	X	X	X	△
	Bellows (B) 	For adsorption of work pieces with inclined surface	○	△	○	X	△	X

Pad Material and Characteristics

○ : Little or no influence △ : Can be used depending on conditions X : Not suitable

Characteristics	Symbol	Durometer HS (±5°)	Color of rubber	Operating temperature range (°C)	Oil resistance gasoline	Oil resistance benzol	Base resistance	Acid resistance	Weatherability	Ozone resistance	Abrasion resistance	Waterproof	Solvent resistance (Benzene, toluene)	Application
NBR	N	50	Black	0 ~ 120	○	X	△	△	X	X	○	△	X	Transfer of general work, Corrugated board, Veneer plate, Iron plate and others
Silicone rubber	S	45 ~ 50	White	-30 ~ 200	X	X	△	X	○	○	X	△	X	Semiconductor, Removing from die-casting, Thin work, Food processor
Urethane rubber	U	50 ~ 60	Brown	0 ~ 60	○	X	X	X	△	○	○	X	X	Corrugated board, Iron plate, Veneer plate
FKM	F	60		0 ~ 250	○	○	X	○	○	○	△	○	○	Chemical work
Conductive NBR	GN	50 ~ 65	Black	0 ~ 100	△	X	△	X	△	X	△	△	X	General work of semiconductor (Static electricity resistance)
Conductive silicone rubber	GS	50 ~ 60		-10 ~ 200	X	X	△	X	○	○	X	△	X	Semiconductor (Static electricity)

The above table covers only general characteristics of subject rubber materials. Green symbol is customized models.

Adapter Specifications

Vacuum Inlet Direction **Vertical** T Type/ZP3-T

Connection		Male thread						Female thread	
Pad diameter/dimensions		ø1.5~ø3.5		ø4~ø8		ø10~ø16		ø1.5~ø3.5	ø4~ø16
Connection thread		M3x0.5 M4x0.7	M6x0.75	M4x0.7 M5x0.8	M10x1	M4x0.7 M5x0.8	M12x1	M3x0.5	M4x0.7 M5x0.8
Vacuum Inlet	Female thread	Use the connection thread	M3x0.5	Use the connection thread	M5x0.8	Use the connection thread	M5x0.8	Use the connection thread	
	One-touch fitting		ø4		ø4		ø4, ø6		
	Barb fitting		ø2, ø4		ø2, ø4		ø2, ø4, ø6		

Vacuum Inlet Direction **Lateral** Y Type/ZP3-Y

Connection		Female thread		
Pad diameter/dimensions		ø1.5~ø3.5	ø4~ø8	ø10~ø16
Connection thread		M3x0.5	M5x0.8	M5x0.8
Vacuum Inlet	Female thread	M3x0.5	M5x0.8	M5x0.8
	One-touch fitting	ø4	ø4	ø4, ø6
	Barb fitting	ø2, ø4	ø2, ø4	ø2, ø4, ø6

Buffer Specifications

With Lock ring		ø1.5~ø3.5		ø4~ø16			
Pad diameter/dimensions		J: Rotating	K: Non-rotating	J: Rotating	JB: Rotating (with bushing)	D: Rotating (Low-friction)	K: Non-rotating
Non-rotating specification							
Stroke [mm]		3,6		3,6,10	15,20	3,6,10,15	3,6,10,15,20
Connection thread		M6 x 0.75	M8 x 0.75	M8 x 0.75		M10 x 1	M8 x 0.75
Tightening torque [N·m]		1.5 ~ 1.8	2.0 ~ 2.5	2.0 ~ 2.5		2.5 ~ 3.5	2.0 ~ 2.5
Spring reactive force [N]	At 0 stroke	0.2	0.2	0.2		1.0	0.2
	At full stroke	0.4	0.5	0.5		1.4 ~ 1.9	0.5

Flat U(ø1.5 ~ ø3.5) ZP3 Series

How to Order



Pad unit	ZP3	—	① Vacuum inlet direction	② Pad diameter	③ Pad type	④ Material	⑦ Connection thread	⑧ Vacuum inlet
With adapter	ZP3	—	T	02	U	N	—	B3
With stainless steel 304 adapter	ZP3S	—	T	02	U	N	—	B3
With Buffer	ZP3	—	T	02	U	N	J 3	B3

① Vacuum inlet direction		⑦ Connection thread	⑧ Vacuum inlet
T	Vertical		A3 A4
			B3
			B3 04
			U2 U4
Y	Lateral		B3 04
			U2 U4
			B3 04
			U2 U4

② Pad diameter (mm)	
015	ø1.5
02	ø2
035	ø3.5

③ Pad type	
U	Flat

④ Material	
N	NBR
S	Silicone rubber
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

Green symbol is customized models.

⑤ Buffer specification	
J	Rotating
K	Non-rotating

⑥ Buffer stroke	
3	3 mm
6	6 mm

⑦ Connection thread	
A6	M6x0.75 (Male thread)
B3	M3x0.5 (Female thread)

⑧ Vacuum inlet	
A3	M3x0.5 (Male thread)
A4	M4x0.7 (Male thread)
B3	M3x0.5 (Female thread)
04	ø4 (One-touch fitting)
U2	ø2 (Barb fitting)
U4	ø4 (Barb fitting)

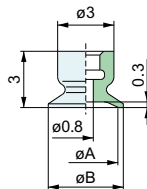
Spring reactiveforce

Pad type	Buffer specification	Buffer stroke (mm)	Connection thread	Tightening torque ± 5% [N·m]	Spring reactiveforce [N]	
					At 0 stroke	At full stroke
ø1.5~ø3.5	J	3, 6	M6 x 0.75	1.5-1.8	0.2	0.4
	K		M8 x 0.75	2.0-2.5		0.5

Dimensions

Green symbol is customized models. (mm)

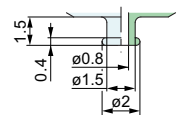
U Flat



Model	② Pad dia.	③ Pad type	④ Pad Material	øA	øB
ZP3	015	U	N	1.5	2
	02		S	2	2.5
	035		GN	3.5	4

Model for refer: ZP3-015UGN

Adapter Mounting Dimensions



ZP3 Series

Flat U(ø1.5~ø3.5)

With Adapter

Dimensions

Green symbol is customized models. (mm)

ZP3-T Vertical Male Thread

A3

A4

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet	Adapter
ZP3 ZP3S	T	015 02 035	U	N S U F G N G S	A3	ZP3A-T1-A3 ZP3SA-T1-A3

Model for refer: ZP3-T02US-A3

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet	Adapter
ZP3	T	015 02 035	U	N S U F G N G S	A4	ZP3A-T1-A4

Model for refer: ZP3-T02US-A4

ZP3-T Vertical Female Thread

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet	Adapter
ZP3 ZP3S	T	015 02 035	U	N S U F G N G S	B3	ZP3A-T1-B3 ZP3SA-T1-B3

Model for refer: ZP3-T02US-B3

ZP3-T Vertical Male Thread

B3

04

U2,U4

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	Adapter	⑦ Connection thread	⑧ Vacuum inlet
ZP3 ZP3S	T	015 02 035	U	N S U F G N G S	A6	B3	ZP3A-T1 ZP3SA-T1	A6	B3

Model for refer: ZP3-T02UN-A6-B3 Adapter for refer: ZP3A-T1-A6-B3

Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	A	B	Min. hole size	Fitting	Adapter	⑦ Connection thread	⑧ Vacuum inlet
ZP3	T	015 02 035	U	N S U F G N G S	A6	B3	04	—	—	ø1.2	KJH04-M3	ZP3A-T1	04
							U2	6.5	4.5	ø0.9	M-3AU-2		U2
							U4	7.4	5	ø1.2	M-3AU-4		U4

Model for refer: ZP3-T02UN-A6-04 Adapter for refer: ZP3A-T1-A6-04

ZP3-Y Lateral Female Thread

B3

04

U2,U4

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	Adapter
ZP3 ZP3S	Y	015 02 035	U	N S U F G N G S	B3	B3	ZP3A-Y1-B3 ZP3SA-Y1-B3

Model for refer: ZP3-Y02UN-B3-B3 Adapter for refer: ZP3A-Y1-B3

Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	A	B	Min. hole size	Fitting	Adapter	⑦ Connection thread	⑧ Vacuum inlet
ZP3	Y	015 02 035	U	N S U F G N G S	B3	B3	04	—	—	ø1.2	KJH04-M3	ZP3A-Y1	04
							U2	6.5	4.5	ø0.9	M-3AU-2		U2
							U4	7.4	5	ø1.2	M-3AU-4		U4

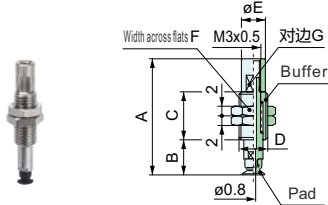
Model for refer: ZP3-Y02UN-B3-04 Adapter for refer: ZP3A-Y1-B3-04

Dimensions

Green symbol is customized models. (mm)

ZP3-T Vertical Vacuum Entry

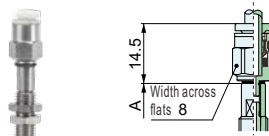
B3



Model	①	②	③	④	⑤	⑥	⑧	A	B	C	D	øE	F	G	Buffer	⑨	⑩	⑪
	Vacuum inlet direction	Pad dia.	Pad type	Pad Material	Buffer spec.	Buffer stroke	Vacuum inlet									Buffer spec.	Buffer stroke	Vacuum inlet
ZP3	T	015 02 035	U	N S U F G N G S	J	3	B3	24	7	10	M6x0.75	5	8	4	ZP3B-T1	J	3	B3
						6		31	10	14							6	
					K	3		26.5	8	11	M8x0.75	7	10	6		K	3	
						6		33	11	14.5							6	

Model for refer: ZP3-T02UNK3-B3 Buffer for refer: ZP3B-T1K3-B3

04

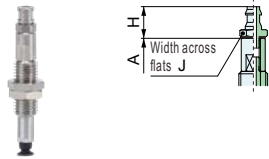


Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	H	J	Min. hole size	Fitting	Buffer	⑨ Buffer spec.	⑩ Buffer stroke	⑪ Vacuum inlet
ZP3	T	015 02 035	U	N S U F G N G S	J K	3 6	04	—	—	ø1.2	KJH04-M3	ZP3B-T1	J K	3 6	04
							U2	6.5	4.5	ø0.9	M-3AU-2				U2
							U4	7.4	5	ø1.2	M-3AU-4				U4

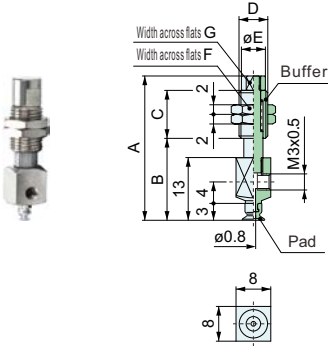
Model for refer: ZP3-T02UNK3-U2 Buffer for refer: ZP3B-T1K3-U2

U2,U4



ZP3-Y Lateral Vacuum Entry

B3



Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	A	B	C	D	øE	F	G	Buffer	⑨ Buffer spec.	⑩ Buffer stroke	⑪ Vacuum inlet
ZP3	Y	015 02 035	U	N S U F G N G S	J	3	B3	30	17	10	M6x0.75	5	8	4	ZP3B-Y1	J	3	B3
					6	37		20	14	K						6	3	
					3	34		17	11	M8x0.75	7	10	6			3		
					6	40.5		20	14.5							6		

Model for refer: ZP3-Y02UNK3-B3 Buffer for refer: ZP3B-Y1K3-B3

04



Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	H	J	Min. hole size	Fitting	Buffer	⑨ Buffer spec.	⑩ Buffer stroke	⑪ Vacuum inlet
ZP3	Y	015 02 035	U	N S U F G N G S	J K	3 6	04	—	—	ø1.2	KJH04-M3	ZP3B-Y1	J K	3 6	04
							U2	6.5	4.5	ø0.9	M-3AU-2				U2
							U4	7.4	5	ø1.2	M-3AU-4				U4

Model for refer: ZP3-Y02UNK3-U2 Buffer for refer: ZP3B-Y1K3-U2

U2,U4



Flat With Groove UM, Bellows B(ø4 ~ ø16)

ZP3 Series

How to Order



Pad unit	ZP3	—	① Vacuum inlet direction	② Pad diameter	③ Pad type	④ Material	⑤ Buffer specification	⑥ Buffer stroke	⑦ Vacuum inlet	⑧ Connection thread
With adapter	ZP3	—	T	04	B	N	—	—	—	B5
With stainless steel 304 adapter	ZP3S	—	T	04	B	N	—	—	—	B5
With Buffer	ZP3	—	T	04	B	N	J	3	—	B5

Adapter Mounting Dimensions	
Pad diameter: ø4 ~ ø8	
Pad diameter: ø10 ~ ø16	

① Vacuum inlet direction	⑦ Connection thread	⑧ Vacuum inlet
T Vertical		—
		—
		A10 A12
		—
Y Lateral		—
		—
		—
		—

② Pad diameter (mm)	
04	ø4
06	ø6
08	ø8
10	ø10
13	ø13
16	ø16

③ Pad type	
UM	Flat with groove
B	Bellows

④ Material	
N	NBR
S	Silicone rubber
U	Urethane rubber
F	FKM
GN	Conductive NBR
GS	Conductive silicone rubber

⑤ Buffer specification	⑥ Buffer stroke (mm)	3	6	10	15	20
J Rotating		●	●	●	—	—
JB Rotating(With Bushing)		—	—	—	●	●
K Non-rotating		●	●	●	●	●

⑦ Connection thread	⑧ Vacuum inlet
A10 M10x1 (Male thread)	A4 M4x0.7 (Male thread)
A12 M12x1 (Male thread)	A5 M5x0.8 (Male thread)
B5 M5x0.8 (Female thread)	H5 M5x0.8 (Male thread)
	B4 M4x0.7 (Female thread)
	B5 M5x0.8 (Female thread)
	04 ø4 (One-touch fitting)
	06 ø6 (One-touch fitting)
	U2 ø2 (Barb fitting)
	U4 ø4 (Barb fitting)
	U6 ø6 (Barb fitting)

Green symbol is customized models.

Dimensions

Green symbol is customized models. (mm)

UM Flat with groove

Model	② Pad dia.	③ Pad type	④ Pad Material	øA	øB	øC	øD	E	Y		
ZP3	04	UM	N S U F GN GS	4	4.5	1.2	7	6	0.5		
	06			6	6.5	2			0.8		
	08			8	8.5						
	10			10	11	2	9	7	1		
	13			13	14				1.2		
	16			16	17						

Model for refer: ZP3-04UMGN

B Bellows

Model	② Pad dia.	③ Pad type	④ Pad Material	øA	øB	øC	øD	øE	F	Y
ZP3	04	B	N S U F GN GS	4	4.5	1.8	1.8	7	8	2.2
	06			6	7	2	3.4			3
	08			8	9		5.2			
	10			10	11	2	6	9	10	2
	13			13	14	3	8.4			
	16			16	17		11.4			

Model for refer: ZP3-04UMGN

Model for refer: ZP3-04UMGN

Model for refer: ZP3-04UMGN

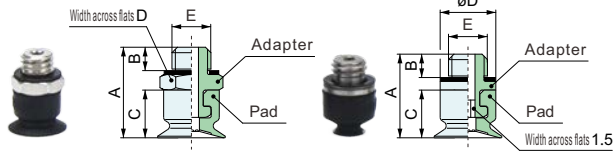
Dimensions

Green symbol is customized models. (mm)

ZP3-T Vertical Male Thread

A4,A5

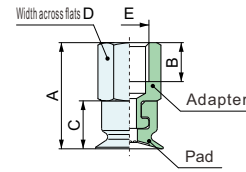
H5



Model						A	B	C	D	E	Adapter	⑧ Vacuum inlet
	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet							
ZP3 ZP3S	T	04 06 08	UM	N S U F G N S	A4	10.2	2.7	6	7	M4x0.7	ZP3A-T2 ZP3SA-T2	A4
					A5	11.5	3			M5x0.8		A5
					H5	10.5						H5
		10 13 16			A4	11.2	2.7	7	10	M4x0.7	ZP3A-T3 ZP3SA-T3	A4
					A5	12.5	3			M5x0.8		A5
					H5	11.5				8		H5

Model for refer: ZP3-T04UMN-H5 Adapter for refer: ZP3A-T2-H5

ZP3-T Vertical Female Thread



Model	①	②	③	④	⑤	A	B	C	D	E	Adapter	⑧
	Vacuum direction	Pad dia.	Pad type	Pad Material	Vacuum inlet							Vacuum inlet
ZP3 ZP3S	T	04 06 08	UM	N S U F G N S	B4	12	4	6	7	M4x0.7	ZP3A-T2 ZP3SA-T2	B4
					B5	13.5	5			M5x0.8		B5
		10 13 16			B4	13	4	7	10	M4x0.7	ZP3A-T3 ZP3SA-T3	B4
					B5	14.5	5			M5x0.8		B5

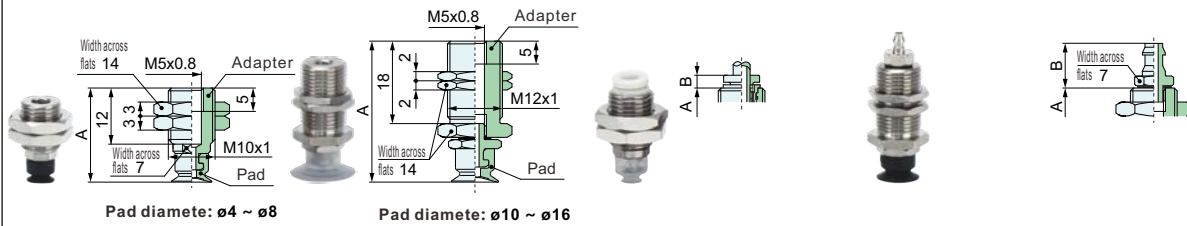
Model for refer: ZP3-T06UMN-B5 Adapter for refer: ZP3A-T2-B5

ZP3-T Vertical Male Thread

B5

04,06

U2,U4,U6



Pad diameter: ø4 ~ ø8

Pad diameter: ø10 ~ ø16

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connetion thread	⑧ Vacuum inlet	A	B	Adapter	⑦ Connetion thread	⑧ Vacuum inlet
ZP3 ZP3S	T	04 06 08	UM	N S U F G N S	A10	B5	20	—	ZP3A-T2 ZP3SA-T2	A10	B5
					04	3		04			
		10 13 16			B5	30	—	ZP3A-T3 ZP3SA-T3	A12	B5	
					A12		04			3	04
							06			3.2	06

Model for refer: ZP3-T08UMN-A10-B5 Adapter for refer: ZP3A-T2-A10-B5

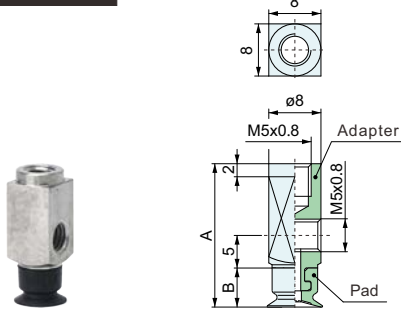
Dimensions Per Vacuum Inlet: Barb Fitting

Model							B	Barb Fitting	Adapter					
	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet				⑦ Connection thread	⑧ Vacuum inlet			
ZP3	T	04 06 08	UM	N S U F G N S	A10	U2	6.5	M-5AU-2	ZP3A-T2	A10	U2			
						U4	8.5	M-5AU-4			U4			
		10 13 16				A12	U2	6.5	M-5AU-2	ZP3A-T3	A12	U2		
							U4	8.5	M-5AU-4			U4		
							U6	10.5	M-5AU-6			U6		

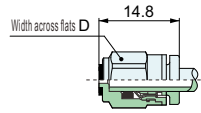
Model for refer: ZP3-T08UMN-A10-U2 Adapter for refer: ZP3A-T2-A10-U2

ZP3-Y Lateral Female Thread

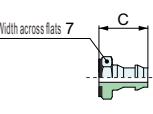
B5



04,06



U2,U4,U6



Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	A	B	Adapter
ZP3 ZP3S	Y	04 06 08 10 13 16	UM	N S U F G N S	B5	B5	22	6	ZP3A-Y2-B5 ZP3SA-Y2-B5
							23	7	ZP3A-Y3-B5 ZP3SA-Y3-B5

Model for refer: ZP3-Y06UMN-B5-B5 Adapter for refer: ZP3A-Y2-B5

Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	C	D	Fitting	Adapter	⑦ Connection thread	⑧ Vacuum inlet
ZP3	Y	04 06 08 10 13 16	UM	N S U F G N S	B5	B5	04	—	8	KJH04-M5	ZP3A-Y2	04
							06	—	10	KJH06-M5		06
							U2	6.5	—	M-5AU-2		U2
							U4	8.5	—	M-5AU-4	ZP3A-Y3	U4
							U6	10.5	—	M-5AU-6		U6

Model for refer: ZP3-Y06UMN-B5-04 Adapter for refer: ZP3A-Y2-B5-04

ZP3 Series

Flat With Groove UM($\phi 4 \sim \phi 16$)

With Buffer

Dimensions

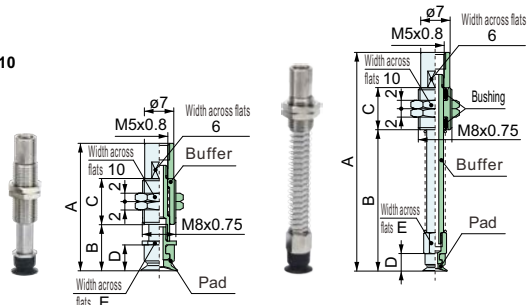
Green symbol is customized models. (mm)

ZP3-T Vertical Vacuum Entry

B5

15,20

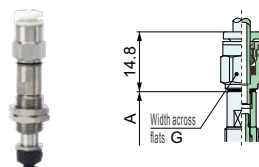
3,6,10



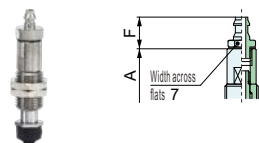
Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	A	B	C	D	E	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	
ZP3	T	04 06 08	UM	N S U F G N S	J K	3	B5	30.5	11	11	6	7	ZP3B-T2A	J K	3	B5	
						6		37	13	14.5					6		
						10		47	18	20.5					10		
						15		55	36.5	44					15		
						20		62.5	44	10					20		
						3		31.5	12	11					3		
		10 13 16	UM		J K	6		38	14	14.5	7	10	ZP3B-T2B	J K	6		
						10		48	19	20.5					10		
						15		56	37.5	10					15		
						20		63.5	45	10					20		
						3		31.5	12	11					3		
						6		38	14	14.5					6		

Model for refer: ZP3-T06UMNK3-B5 Buffer for refer: ZP3B-T2AK3-B5

04,06



U2,U4,U6



Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	F	G	Fitting	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet			
ZP3	T	04 06 08	UM	N S U F G N S	J K	3	04	—	8	KJH04-M5	ZP3B-T2A	J K	3	04			
						6	06	—	10	KJH06-M5					U2		
						10	U2	6.5	—	M-5AU-2				U4			
						15	U4	8.5	—	M-5AU-4						U6	
						20	U6	10.5	—	M-5AU-6				ZP3B-T2B			J B K
						3	04	—	8	KJH04-M5					06		
		6	06		—	10	KJH06-M5	U2									
		10	U2		6.5	—	M-5AU-2		U4								
		15	U4		8.5	—	M-5AU-4			U6							
		20	U6		10.5	—	M-5AU-6		U2								
		3	04		—	8	M-5AU-6	U4									
		6	06		—	10	M-5AU-6		U6								

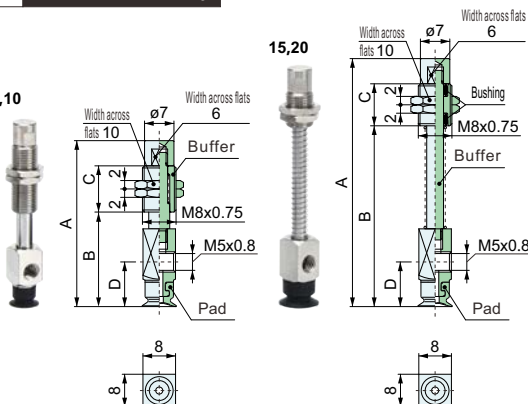
Model for refer: ZP3-T06UMNK3-U4 Buffer for refer: ZP3B-T2AK3-U4

ZP3-Y Lateral Vacuum Entry

B5

15,20

3,6,10



Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	A	B	C	D	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet		
ZP3	Y	04 06 08	UM	N S U F G N S	J K	3	B5	40	22.5	11	11	ZP3B-Y2A	J K	3	B5		
						6		46	25	14.5				6			
						10		56	29	20.5				10			
						15		59	42.5	10				15			
						20		66.5	50	20				20			
						3		41	23.5	11				3			
		10 13 16	UM		J K	6		47	26	14.5	12	ZP3B-Y2B	J K	6		10	
						10		57	30	20.5				10			
						15		60	43.5	10				15			
						20		67.5	51	20				20			
						3		41	23.5	11				3			
						6		47	26	14.5				6			

Model for refer: ZP3-Y16UMNJB15-B5 Buffer for refer: ZP3B-Y2B15-B5

04,06



U2,U4,U6



Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	F	G	Fitting	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	
ZP3	Y	04 06 08	UM	N S U F G N S	J K	3	04	—	8	KJH04-M5	ZP3B-Y2A	J K	3	04	
						6	06	—	10	KJH06-M5					06
						10	U2	6.5	—	M-5AU-2				U2	
						15	U4	8.5	—	M-5AU-4				U4	
						20	U6	10.5	—	M-5AU-6				U6	
						15	04	—	8	KJH04-M5				04	
		10 13 16	UM		J K	6	06	—	10	KJH06-M5	ZP3B-Y2B	J K	15	06	
						10	U2	6.5	—	M-5AU-2				U2	
						15	U4	8.5	—	M-5AU-4				U4	
						20	U6	10.5	—	M-5AU-6				U6	
						3	04	—	8	04					
						6	06	—	10	06					

Model for refer: ZP3-Y16UMNJB15-U4 Buffer for refer: ZP3B-Y2B15-U4

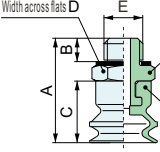
Bellows B(ø4 ~ ø16) With Adapter **ZP3 Series**

Dimensions

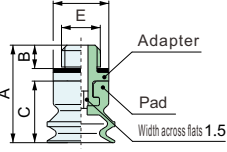
Green symbol is customized models. (mm)

ZP3-T Vertical Male Thread

A4,A5

H5

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet	A	B	C	D	E	Adapter	⑥ Vacuum inlet
ZP3 ZP3S	T	04 06 08	B	N S U F G N S	A4	12.2	2.7	8	7	M4x0.7	ZP3A-T2 ZP3SA-T2	A4
					A5	13.5	3			M5x0.8		A5
					H5	12.5	10	10	8	M4x0.7 M5x0.8	ZP3A-T3 ZP3SA-T3	H5
		A4			14.2	A4						
		A5			15.5	A5						
		H5			14.5	3	H5					

Model for refer: ZP3-T04BN-H5 Adapter for refer: ZP3A-T2-H5

ZP3-T Vertical Female Thread

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Vacuum inlet	A	B	C	D	E	Adapter			
											⑧ Vacuum inlet	⑥ Vacuum inlet		
ZP3 ZP3S	T	04 06 08	B	N S U F G N S	B4	14	4	8	7	M4x0.7	ZP3A-T2 ZP3SA-T2	B4		
					B5	15.5	5			M5x0.8		B5		
		10 13 16			B4	16	4	10	10	M4x0.7	ZP3A-T3 ZP3SA-T3	B4		
					B5	17.5	5			M5x0.8		B5		

Model for refer: ZP3-T06BN-B5 Adapter for refer: ZP3A-T2-B5

ZP3-T Vertical Male Thread

B5 **04,06** **U2,U4,U6**

Pad diameter: ø4 ~ ø8 Pad diameter: ø10 ~ ø16

Model							A	B	Adapter			
	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet				⑦ Connection thread	⑧ Vacuum inlet	
ZP3 ZP3S	T	04 06 08	B	N S U F G N S	A10	B5	22	—	ZP3A-T2 ZP3SA-T2	A10	B5	
						04		3			04	
		10 13 16			A12	B5	33	—	ZP3A-T3 ZP3SA-T3	A12	B5	
						04		3			04	
								06			3.2	06

Model for refer: ZP3-T08BN-A10-B5 Adapter for refer: ZP3A-T2-A10-B5

Dimensions Per Vacuum Inlet: Barb Fitting

Model							B	Barb Fitting	Adapter				
	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet				⑦ Connection thread	⑧ Vacuum inlet		
ZP3	T	04 06 08	B	N S U F G N S	A10	U2	6.5	M-5AU-2	ZP3A-T2	A10	U2		
						U4	8.5	M-5AU-4			U4		
		10 13 16			A12	U2	6.5	M-5AU-2	ZP3A-T3	A12	U2		
						U4	8.5	M-5AU-4			U4		
						U6	10.5	M-5AU-6					U6

Model for refer: ZP3-T08BN-A10-U2 Adapter for refer: ZP3A-T2-A10-U2

ZP3-Y Lateral Female Thread

B5 **04,06** **U2,U4,U6**

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connection thread	⑧ Vacuum inlet	A	B	Adapter
ZP3 ZP3S	Y	04 06 08	B	N S U F G N S	B5	B5	24	8	ZP3A-Y2-B5 ZP3SA-Y2-B5
		10 13 16					26	10	ZP3A-Y3-B5 ZP3SA-Y3-B5

Model for refer: ZP3-Y06BN-B5-B5 Adapter for refer: ZP3A-Y2-B5

Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑦ Connetion thread	⑧ Vacuum inlet	C			Adapter	⑦ Connetion thread	⑧ Vacuum inlet
							C	D	Fitting			
ZP3	Y	04 06 08 10 13 16	B	N S U F G N S	B5	04	—	8	KJH04-M5	ZP3A-Y2	B5	04
						06	—	10	KJH06-M5			06
						U2	6.5	—	M-5AU-2	ZP3A-Y3		U2
						U4	8.5	—	M-5AU-4			U4
						U6	10.5	—	M-5AU-6			U6

Model for refer: ZP3-Y06BN-B5-04 Adapter for refer: ZP3A-Y2-B5-04

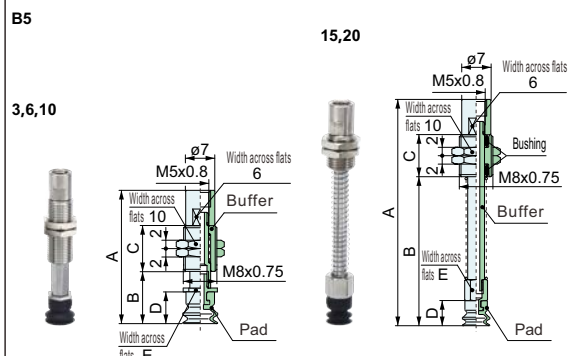
ZP3 Series

Bellows B(ø4 ~ ø16)
With Buffer

Dimensions

Green symbol is customized models. (mm)

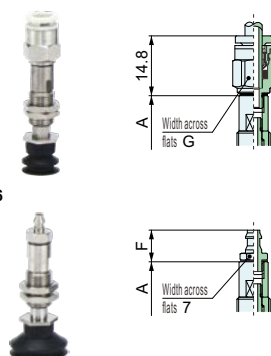
ZP3-T Vertical Vacuum Entry



Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	A	B	C	D	E	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet
ZP3	T	04 06 08	B	N S U F G N G S	J K	3	B5	32.5	13	11	8	7	ZP3B-T2A	J K	3	B5
						6		39	15	14.5					6	
						10		49	20	20.5					10	
						15		57	38.5	10					15	
						20		64.5	46						20	
						3		34.5	15	11					10	
		6			41	17		14.5	6							
		10			51	22		20.5	10							
		15			59	40.5		10	15							
		20			66.5	48			20							

Model for refer: ZP3-T06BNK3-B5 Buffer for refer: ZP3B-T2AK3-B5

04,06

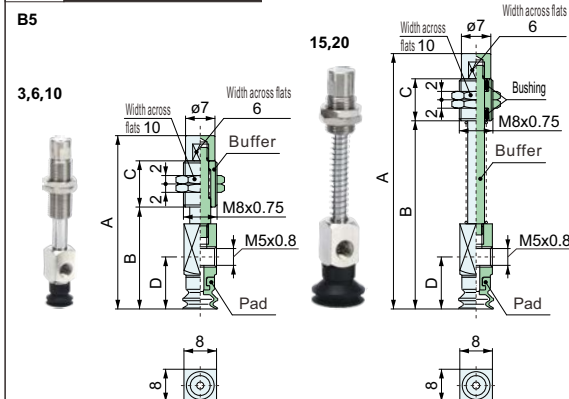


Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	①	②	③	④	⑤	⑥	⑧	F	G	Fitting	Buffer	⑤	⑥	⑧
	Vacuum inlet direction	Pad dia.	Pad type	Pad Material	Buffer spec.	Buffer stroke	Vacuum inlet					Buffer spec.	Buffer stroke	Vacuum inlet
ZP3	T	04 06 08	B	N S U F G N G S	J K	3 6 10	04	—	8	KJH04-M5	ZP3B-T2A	J K	3 6 10	04
							06	—	10	KJH06-M5				06
							U2	6.5	—	M-5AU-2				U2
							U4	8.5		M-5AU-4				U4
							U6	10.5		M-5AU-6				U6
							04	—	8	KJH04-M5				ZP3B-T2B
		06			—		10	KJH06-M5	06					
		U2			6.5		M-5AU-2	U2						
		U4			8.5		M-5AU-4	U4						
		U6			10.5		M-5AU-6	U6						

Model for refer: ZP3-T06BNK3-U4 Buffer for refer: ZP3B-T2AK3-U4

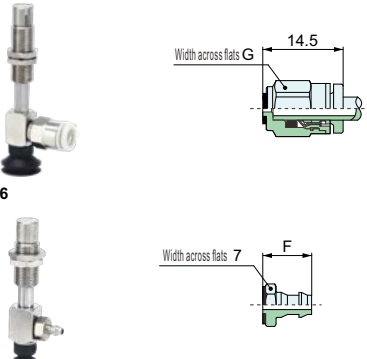
ZP3-Y Lateral Vacuum Entry



Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	A	B	C	D	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet		
ZP3	Y	04 06 08	B	N S U F G N G S	J K	3	B5	42	24.5	11	13	ZP3B-Y2A	J K	3	B5		
						6		48	27	14.5				6			
						10		58	31	20.5				10			
						15		61	44.5	10				15			
						20		68.5	52					20			
						3		44	26.5	11				3			
		10 13 16			J K	6		50	29	14.5	15	ZP3B-Y2B	J K	6			
						10		60	33	20.5				10			
						15		63	46.5	10				15			
						20		70.5	54					20			

Model for refer: ZP3-Y16BNJB15-B5 Buffer for refer: ZP3B-Y2BJB15-B5

04,06



Dimensions Per Vacuum Inlet: One-touch Fitting / Barb Fitting

Model	① Vacuum inlet direction	② Pad dia.	③ Pad type	④ Pad Material	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet	F	G	Fitting	Buffer	⑤ Buffer spec.	⑥ Buffer stroke	⑧ Vacuum inlet
ZP3	Y	04 06 08	B	N S U F G N G S	J K	3 6 10	04	—	8	KJH04-M5	ZP3B-Y2A	J K	3 6 10	04
							06	—	10	KJH06-M5				06
							U2	6.5	—	M-5AU-2				U2
							U4	8.5	—	M-5AU-4				U4
							U6	10.5	—	M-5AU-6				U6
							04	—	8	KJH04-M5				04
		10 13 16			J B K	15 20	06	—	10	KJH06-M5	06			
							U2	6.5	—	M-5AU-2	U2			
							U4	8.5	—	M-5AU-4	U4			
							U6	10.5	—	M-5AU-6	U6			

Model for refer: ZP3-Y16BNJB15-U4 Buffer for refer: ZP3B-Y2BJB15-U4