



Vacuum Pad: Lateral Vacuum Entry with One-touch Fitting With Buffer

Series ZPR



Specifications

Vacuum entry	Direction		Lateral
	Connection		Air suction filter
Applicable tube dia.	2 x 4, 3.5 x 7, 4 x 10 Thin section series (ø10 to ø16) ø2 to ø8		ø4, ø6 tube
	ø10 to ø16		ø4, ø6 tube
	ø20 to ø32		ø4, ø6, ø8 tube
	ø40, ø50		ø6, ø8 tube
Mounting	2 x 4, 3.5 x 7, 4 x 10 Thin section series (ø10 to ø16) ø2 to ø8		M8 x 1 Male thread
	ø10 to ø16		M10 x 1 Male thread
	ø20 to ø32		M10 x 1 Male thread
	ø40, ø50		M14 x 1 Male thread
Buffer type			Rotating (J)/Non-rotating (K)
Buffer stroke			For ø2 to ø8 — 6, 10, 15, 25 mm
			For ø10 to ø32 — 10, 20, 30, 40, 50 mm
			For ø40, ø50 — 10, 20, 30, 50 mm

Pad Type

Pad form	Flat	Flat with ribs	Deep	Bellows	Thin flat/Thin flat with ribs
Pad dia. (mm)	2, 4, 6, 8, 2 x 4, 3.5 x 7, 4 x 10, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16, 20, 25, 32, 40, 50	10, 16, 25, 40	6, 8, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16
Material (Color)	NBR (Black), Silicon rubber (White), Urethane rubber (Brown), Fluoro rubber (Black with green mark) Conductive NBR (Black with one white mark), Conductive silicon rubber (Black with two white marks)				
Durometer	NBR (50°), Silicon rubber (40°), Urethane rubber/Fluoro rubber (60°) Conductive NBR (50°), Conductive silicon rubber (50°)				

Spring Reactive Force

Dia. (mm)	0 stroke	Stroke end
ø2 to ø8	0.8 N	1.2 N
ø10 to ø32	1.0 N	3.0 N
ø40, ø50	2.0 N	5.0 N

* Refer to ø2 to ø8 for Thin flat, Thin flat with ribs and Elipse type.

Weight

(g)

Stroke (mm)	Pad form Vacuum entry port	Flat/Flat with ribs			Deep			Bellows		
		04	06	08	04	06	08	04	06	08
6	Model 2004, 3507, 4010 ZPR02 to 08 Thin section flat series (10 to 16)	38	39	—	—	—	—	38	39	—
10	ZPR10 to 16	39	40	—	39	40	—	40	41	—
10	ZPR ²⁰ ₂₅	54	55	56	55	56	57	57	58	59
	ZPR32	56	57	58	—	—	—	61	62	63
10	ZPR40	—	126	127	—	128	129	—	138	139
	ZPR50	—	132	133	—	—	—	—	145	146

Weight by Stroke

(g)

Model	Stroke (mm)						
	10	15	20	25	30	40	50
ZPR02 to 08	+7	+8	—	+9	—	—	—
ZPR10 to 25	—	—	+12	—	+14	+26	+28
ZPR40 to 50	—	—	—	—	—	—	+30



P. 13-11-65 to 13-11-68

Vacuum Pad: Lateral Vacuum Entry with One-touch Fitting with Buffer **Series ZPR**

How to Order

**Series ZPR
With buffer**

ZPR 16 U GS K 20 06 A10

Pad diameter (mm)

2004	2 x 4
3507	3.5 x 7
4010	4 x 10
02	ø2
04	ø4
06	ø6
08	ø8
10	ø10
13	ø13
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50



Pad type
(Refer to "Table (1)" for applications.)

U	Flat
C	Flat with ribs
D	Deep
B	Bellows
UT	Thin flat
CT	Thin flat with ribs

Buffer type

J	Rotating
K	Non-rotating

Material

N	NBR
S	Silicon rubber
U	Urethane rubber
F	Fluoro rubber
GN *	Conductive NBR (ø2 to ø16)
GS *	Conductive silicon rubber (ø2 to ø16)

* ø20 or large are manufactured upon receipt of order.

Mounting thread

(Refer to "Table (3)" for applications.)

Vacuum entry port

(Refer to "Table (3)" for applications.)

Buffer stroke

(Refer to "Table (2)" for applications.)

Table (1) Pad Diameter/Pad Type

Type	Dia. (mm)														
	2 x 4	3.5 x 7	4 x 10	2	4	6	8	10	13	16	20	25	32	40	50
Flat	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Flat with ribs	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●
Deep	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●
Bellows	—	—	—	—	—	●	●	●	●	●	●	●	●	●	●
Thin flat	—	—	—	—	—	—	—	●	●	●	—	—	—	—	—
Thin flat with ribs	—	—	—	—	—	—	—	●	●	●	—	—	—	—	—

Table (2) Pad Diameter/Stroke

Stroke(mm)	Dia. (mm)																	
	2 x 4	3.5 x 7	4 x 10	2	4	6	8	Thin flat/ Thin flat with ribs			10	13	16	20	25	32	40	50
								10	13	16								
6	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
10	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
15	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●
25	●	●	●	●	●	●	●	●	●	●	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●
40	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	—	—	—
50	—	—	—	—	—	—	—	—	—	—	●	●	●	●	●	●	●	●

Table (3) Vacuum Entry/Mounting Thread Diameter

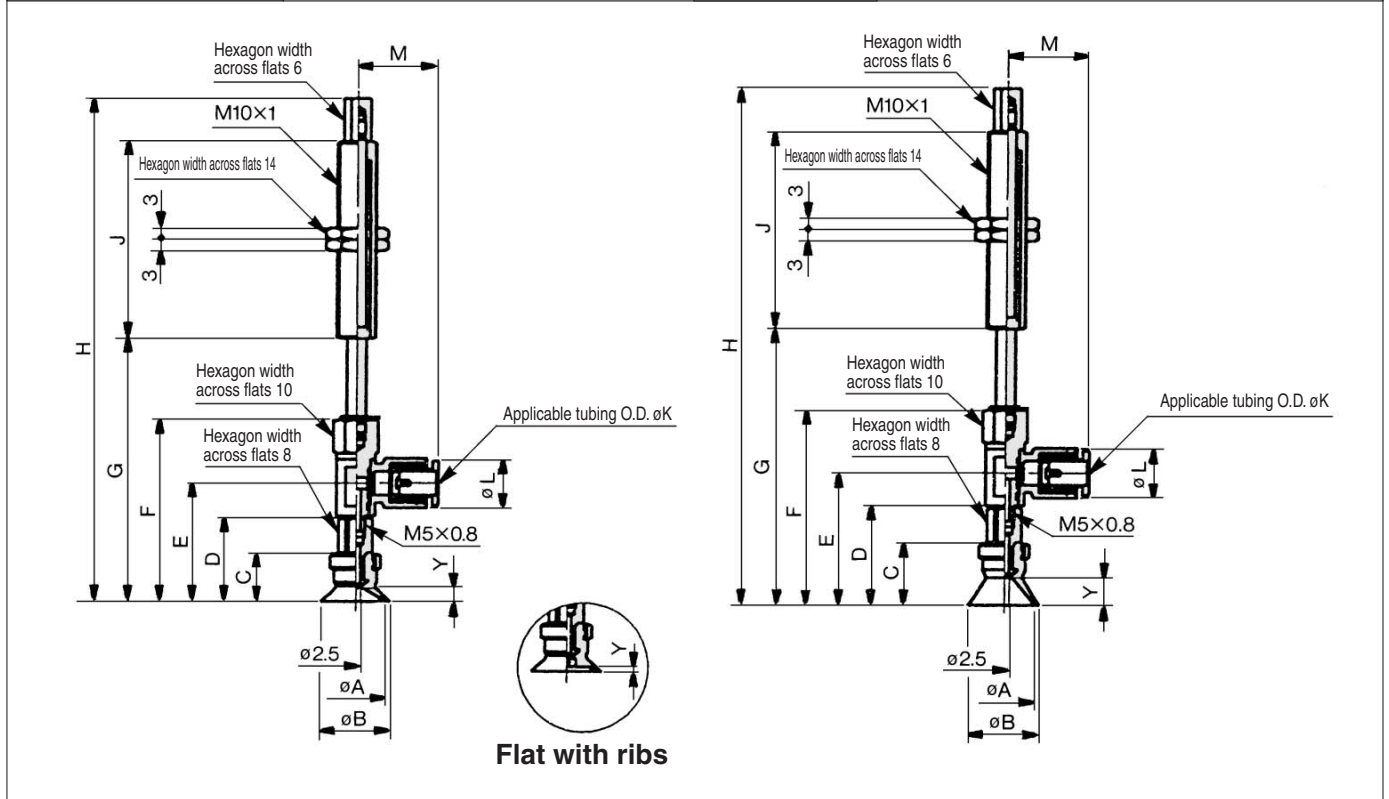
	Symbol	Thread dia./ Port size	ø2 to ø8 2 x 4, 3.5 x 7.4 x 10 ø10 to ø16 (This section series)			
			ø10 to ø16	ø20 to ø32	ø40, ø50	
Vacuum entry One-touch fitting	04	ø4 tube	●	●	●	—
	06	ø6 tube	●	●	●	●
	08	ø8 tube	—	—	●	●
Mounting Male thread	A8	M8 x 1	●	—	—	—
	A10	M10 x 1	—	●	●	—
	A14	M14 x 1	—	—	—	●

- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Vacuum Pad: Lateral Vacuum Entry with One-touch Fitting with Buffer **Series ZPR**

Connection	One-touch fitting	Pad Form	Flat/Flat with ribs/Deep
Vacuum Entry Port	Lateral	Mounting	Male thread

Flat/Flat with ribs	ø10, ø13, ø16	Deep	ø10, ø16
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ZX

ZR

ZM

ZH

ZU

ZL

ZY

ZQ

ZF

ZP

ZCU

AMJ

Misc.

Flat/Flat with Ribs

Model	A	B	C	D	E	F	Y	
							Flat	Flat with ribs
ZPR10 $\frac{U}{C}$ □□□□□-0□-A10	10	12	12	21	29.9	46	3	1.7
ZPR13 $\frac{U}{C}$ □□□□□-0□-A10	13	15	12	21	29.9	46	3	1.8
ZPR16 $\frac{U}{C}$ □□□□□-0□-A10	16	18	12.5	21.5	30.4	46.5	3.5	1.2

Dimensions by Stroke

Model	ø10, ø13		ø16		J
	G	H	G	H	
ZPR□□ $\frac{U}{C}$ □□□□10-0□-A10	57	91	57.5	91.5	23
ZPR□□ $\frac{U}{C}$ □□□□20-0□-A10	67	129	67.5	129.5	51
ZPR□□ $\frac{U}{C}$ □□□□30-0□-A10	77	139	77.5	139.5	
ZPR□□ $\frac{U}{C}$ □□□□40-0□-A10	87	175	87.5	175.5	77
ZPR□□ $\frac{U}{C}$ □□□□50-0□-A10	97	185	97.5	185.5	

Deep

Model	A	B	C	D	E	F	Y
ZPR10D□□□□□-0□-A10	10	12	15	24	32.9	49	6
ZPR16D□□□□□-0□-A10	16	18	16	25	33.9	50	7

Dimensions by Stroke

Model	ø10		ø16		J
	G	H	G	H	
ZPR□□D□□□□10-0□-A10	60	83	61	84	23
ZPR□□D□□□□20-0□-A10	70	132	71	133	51
ZPR□□D□□□□30-0□-A10	80	142	81	143	
ZPR□□D□□□□40-0□-A10	90	178	91	179	77
ZPR□□D□□□□50-0□-A10	100	188	101	189	

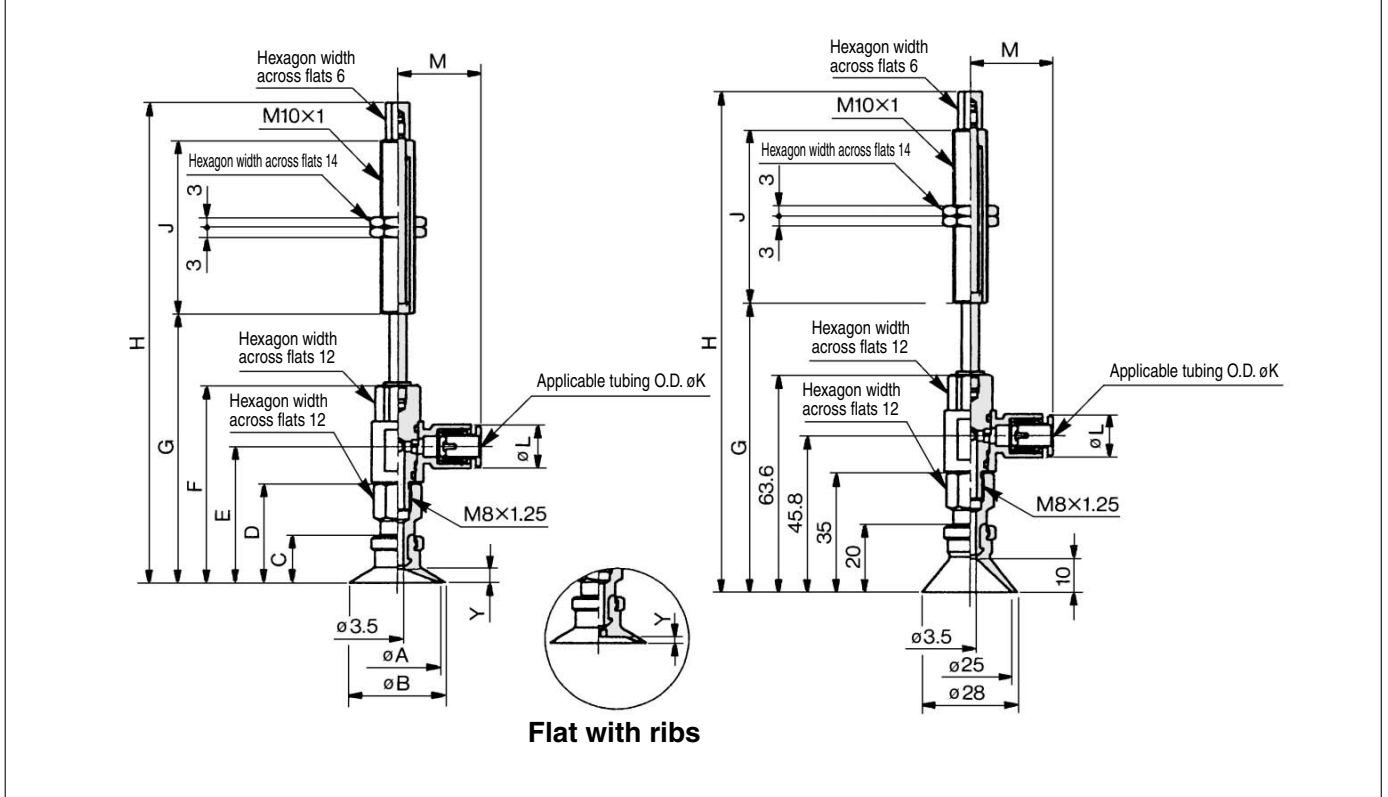
One-touch Fitting

Model	K	L	M
ZPR□□□□□□□□-04-A10	4	10.4	20.6
ZPR□□□□□□□□-06-A10	6	12.8	21.6

Series ZPR

Connection	One-touch fitting	Pad Form	Flat/Flat with ribs/Deep
Vacuum Entry Port	Lateral	Mounting	Male thread

Flat/Flat with ribs	ø20, ø25, ø32	Deep	ø25
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Flat/Flat with Ribs

Model	A	B	C	D	E	F	Y	
							Flat	Flat with ribs
ZPR20 ^U _C □□□□□-0□-A10	20	23	14	29	39.8	57.6	4	1.7
ZPR25 ^U _C □□□□□-0□-A10	25	28						1.8
ZPR32 ^U _C □□□□□-0□-A10	32	35	14.5	29.5	40.3	58.1	4.5	2.3

Dimensions by Stroke

Model	ø20, ø25		ø32		J
	G	H	G	H	
ZPR ^U _C □□□□□10-0□-A10	68.6	102.6	69.1	103.1	23
ZPR ^U _C □□□□□20-0□-A10	78.6	140.6	79.1	141.1	51
ZPR ^U _C □□□□□30-0□-A10	88.6	150.6	89.1	151.1	
ZPR ^U _C □□□□□40-0□-A10	98.6	186.6	99.1	187.1	77
ZPR ^U _C □□□□□50-0□-A10	108.6	196.6	109.6	197.1	

Deep

Model	G	H	J
ZPR25D□□□□10-0□-A10	74.6	108.6	23
ZPR25D□□□□20-0□-A10	84.6	146.6	51
ZPR25D□□□□30-0□-A10	94.6	156.6	
ZPR25D□□□□40-0□-A10	104.6	192.6	77
ZPR25D□□□□50-0□-A10	114.6	202.6	

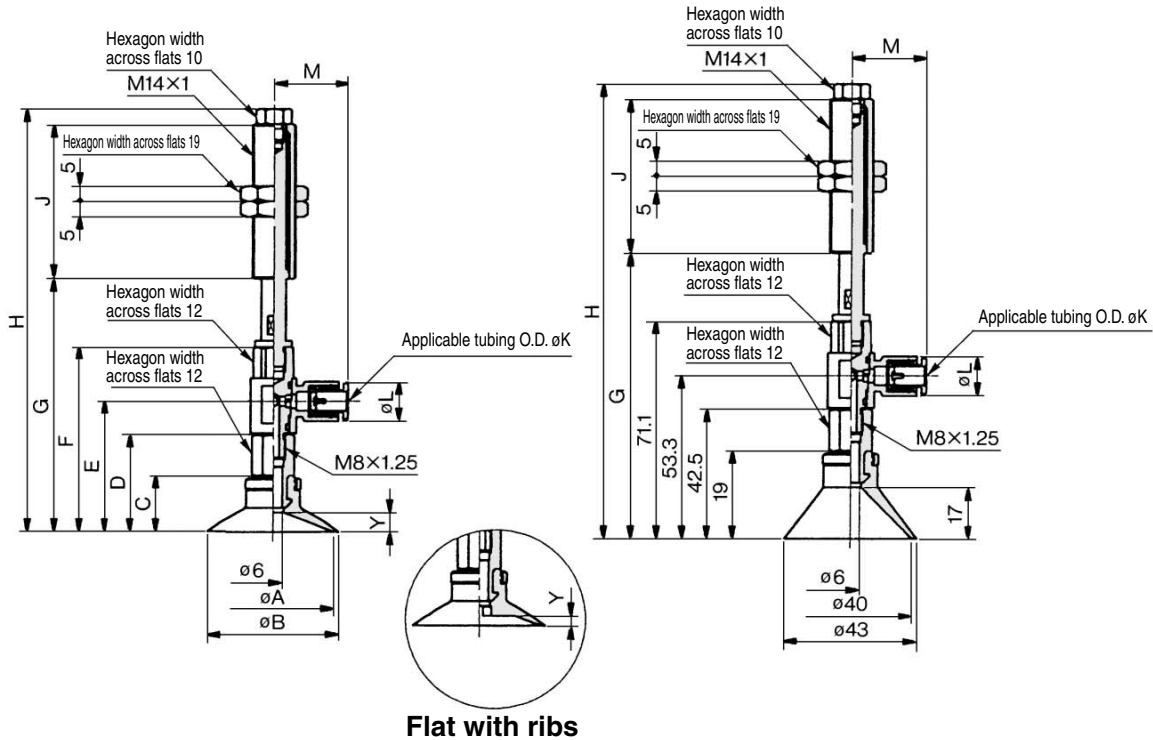
One-touch Fitting

Model	K	L	M
ZPR□□□□□□□□□□04-A10	4	10.4	23.3
ZPR□□□□□□□□□□06-A10	6	12.8	24.3
ZPR□□□□□□□□□□08-A10	8	15.2	26.2

Vacuum Pad: Lateral Vacuum Entry with One-touch Fitting with Buffer **Series ZPR**

Connection	One-touch fitting	Pad Form	Flat/Flat with ribs/Deep
Vacuum Entry Port	Lateral	Mounting	Male thread

Flat/Flat with ribs $\phi 40, \phi 50$	Deep $\phi 40$
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- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP**
- ZCU
- AMJ
- Misc.

Flat/Flat with Ribs

Model	A	B	C	D	E	F	Y	
							Flat	Flat with ribs
ZPR40□□□□□□□□-0□-A14	40	43	18.5	32	42.8	60.6	6.5	3.3
ZPR50□□□□□□□□-0□-A14	50	53	19.5	33	43.8	61.6	7.5	3.8

Dimensions by Stroke

Model	$\phi 40$		$\phi 50$		J
	G	H	G	H	
ZPR□□□□□□□□□□□□-10-0□-A14	72.6	140.6	73.6	141.6	50
ZPR□□□□□□□□□□□□-20-0□-A14	82.6	137.6	83.6	138.6	
ZPR□□□□□□□□□□□□-30-0□-A14	92.6	147.6	93.6	148.6	
ZPR□□□□□□□□□□□□-50-0□-A14	112.6	192.6	113.6	193.6	

Deep

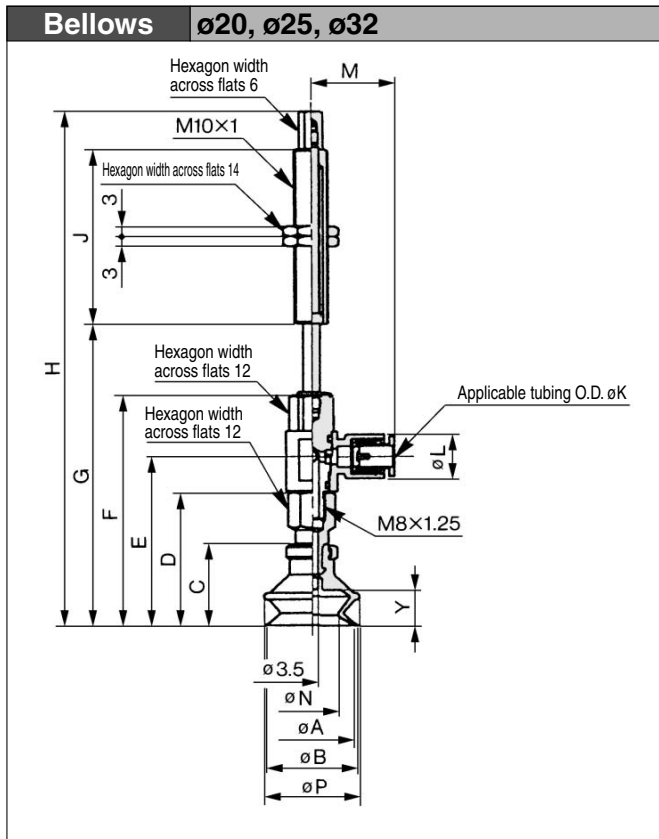
Model	G	H	J
ZPR40D□□□□□□□□-10-0□-A14	83.1	151.1	50
ZPR40D□□□□□□□□-20-0□-A14	93.1	148.1	
ZPR40D□□□□□□□□-30-0□-A14	103.1	158.1	
ZPR40D□□□□□□□□-50-0□-A14	123.1	203.1	

One-touch Fitting

Model	K	L	M
ZPR□□□□□□□□□□□□-06-A14	6	12.8	24.3
ZPR□□□□□□□□□□□□-08-A14	8	15.2	26.2

Vacuum Pad: Lateral Vacuum Entry with One-touch Fitting with Buffer **Series ZPR**

Connection	One-touch fitting	Pad Form	Bellows
Vacuum Entry Port	Lateral	Mounting	Male thread

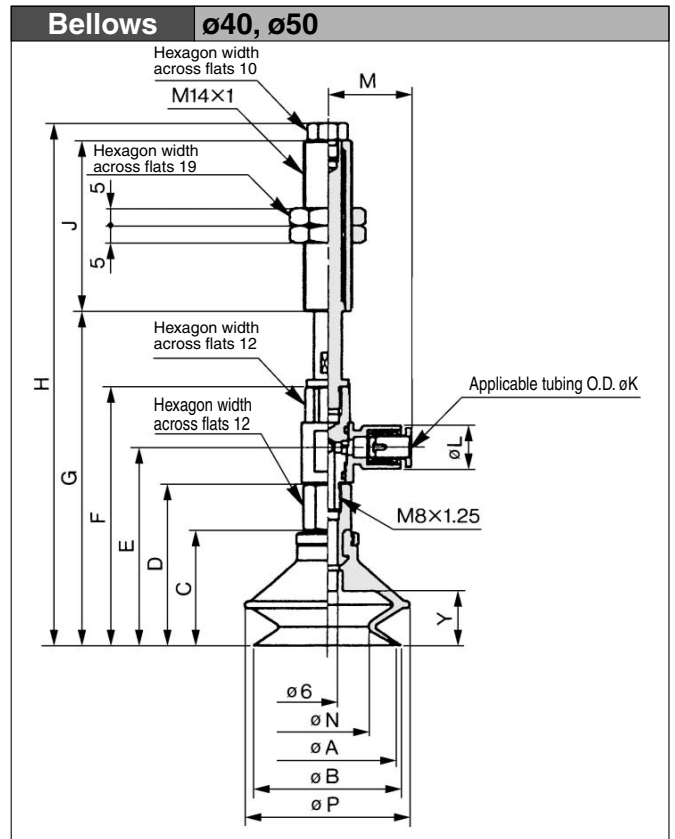


Bellows

Model	A	B	C	D	E	F	N	P	Y
ZPR20B□□□□□-0□-A10	20	22	23.5	38.5	49.3	67.1	12.4	25	10.5
ZPR25B□□□□□-0□-A10	25	27	24	39	49.8	67.6	15.6	28	
ZPR32B□□□□□-0□-A10	32	34	29	44	54.8	72.6	18.9	37	14

Dimensions by Stroke

Model	ø20		ø25		ø32		J	K: ø4		K: ø6		K: ø8	
	G	H	G	H	G	H		L	M	L	M	L	M
	ZPR□□B□□□□10-0□-A10	78.1	112.1	78.6	112.6	83.6		117.6	23				
ZPR□□B□□□□20-0□-A10	88.1	150.1	88.6	150.6	93.6	155.6	51						
ZPR□□B□□□□30-0□-A10	98.1	160.1	98.6	160.6	103.6	165.6	77	10.4	23.3	12.8	24.3	15.2	26.2
ZPR□□B□□□□40-0□-A10	108.1	196.1	108.6	196.6	113.6	201.6							
ZPR□□B□□□□50-0□-A10	118.1	206.1	118.6	206.6	123.6	211.6							



Bellows

Model	A	B	C	D	E	F	N	P	Y
ZPR40B□□□□□-0□-A14	40	43	34	47.5	58.3	76.1	24.4	48	16
ZPR50B□□□□□-0□-A14	50	53	38	51.5	62.3	80.1	32.4	57	19

Dimensions by Stroke

Model	ø40		ø50		J	K: ø6		K: ø8	
	G	H	G	H		L	M	L	M
	ZPR□□B□□□□10-0□-A14	88.1	156.1	92.1		160.1	50		
ZPR□□B□□□□20-0□-A14	98.1	153.1	102.1	157.1	50	12.8	24.3	15.2	26.2
ZPR□□B□□□□30-0□-A14	108.1	163.1	112.1	167.1	75				
ZPR□□B□□□□50-0□-A14	128.1	208.1	132.1	212.1	75				

- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP**
- ZCU
- AMJ
- Misc.