

Vacuum Pad: Ball Joint Type

Vertical Vacuum Entry

With Buffer

Series ZPT

How to Order

ZPT 10 F GN J 20 04 A10

Pad diameter (mm)

10	ø10
13	ø13
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

Pad type

F	Ball joint type
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Material

N	NBR
S	Silicon rubber
U	Urethane rubber
F	Fluoro rubber
GN*	Conductive NBR
GS*	Conductive silicon rubber

* ø20 and larger are manufactured upon a receipt of order.

Buffer type

J	Rotating
K	Non-rotating

Mounting thread diameter/Male thread
(Refer to "Table (1)" for applications.)

Vacuum entry port
(Refer to "Table (1)" for applications.)

Table (1) Vacuum Entry/Mounting Thread Diameter

Pad dia. (mm)			Mounting thread diameter (Male thread)		
			ø10 to ø16	ø20 to ø50	
Connection	Thread dia./Port size	Symbol	M10 x 1	M14 x 1	
			A10	A14	
Vacuum entry	Female thread	M5 x 0.8	B5	●	—
		Rc 1/8	B01	—	●
Vacuum entry	One-touch fitting	ø4 tube	04	●	—
		ø6 tube	06	●	●
		ø8 tube	08	—	●

Buffer stroke

Symbol	Stroke	Pad dia. (mm)	
		ø10 to ø16	ø20 to ø50
10	10 mm	●	●
20	20 mm	●	●
30	30 mm	●	●
40	40 mm	●	—
50	50 mm	●	●

Buffer Spring Reactive Force

Pad dia. (mm)	0 stroke	Stroke end
ø10 to ø16	1.0 N	3.0 N
ø20 to ø50	2.0 N	5.0 N

Note) Pads are exclusively ball joint type and are not interchangeable with other pads.

Pad Type

Pad form	Ball joint type					
Pad dia. (mm)	ø10, ø13, ø16, ø20, ø25, ø32, ø40, ø50					
Material	NBR	Silicon rubber	Urethane rubber	Fluoro rubber	Conductive NBR	Conductive silicon rubber
Color	Black	White	Brown	Black with green mark	Black with 1 white mark	Black with 2 white mark
Durometer	50°	40°	60°	60°	50°	50°

Vacuum Pad: Ball Joint Type Vertical Vacuum Entry with Buffer **Series ZPT**



Specifications

Vacuum entry direction		Vertical		
Connection		Mounting	Vacuum entry port	
		Buffer male thread	Female thread	One-touch fitting
Pad dia. (mm)	ø10 to ø16	M10 x 1	M5 x 0.8	ø4 tube ø6 tube
	ø20 to ø50	M14 x 1	Rc 1/8	ø6 tube ø8 tube
Ball joint rotation		±15°		

Buffer Type

Pad dia. (mm)	ø10 to ø16		ø20 to ø50	
Mounting	M10 x 1		M14 x 1	
Stroke (mm)	10, 20, 30, 40, 50		10, 20, 30, 50	
Spring reactive force	0 stroke	1.0 N	0 stroke	2.0 N
	Stroke end	3.0 N	Stroke end	5.0 N
Non-rotating specification	With no non-rotating (J), With non-rotating (K)			

Weight

Pad dia. (mm)	(g)				
	Vacuum entry port				
	Female thread		One-touch fitting		
	M5 x 0.8	Rc 1/8	ø4 tube	ø6 tube	ø8 tube
ø10 to ø16	30	—	32	33	—
ø20 to ø32	—	128	—	133	139
ø40, ø50	—	158	—	159	167

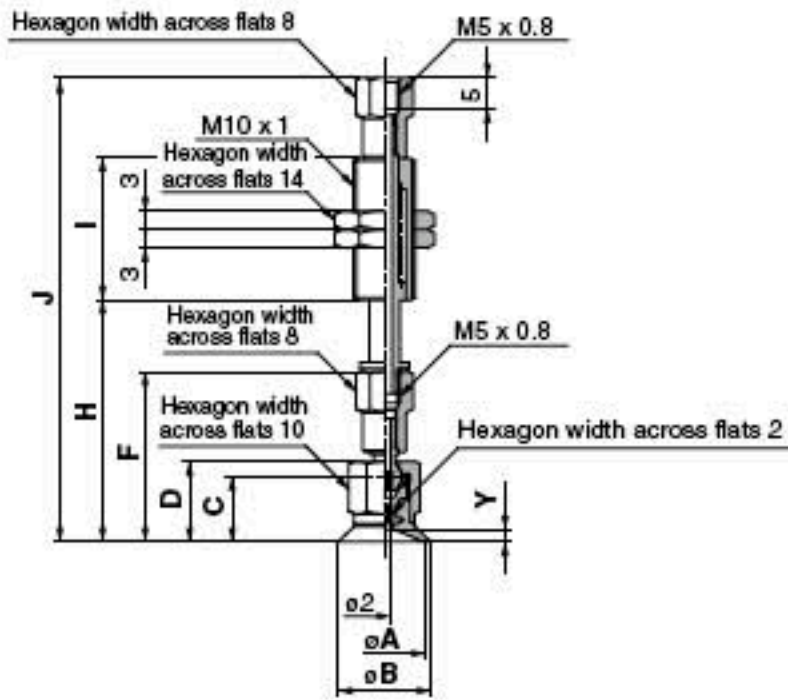
Weight by Stroke

Pad dia. (mm)	(g)			
	Stroke (mm)			
	20	30	40	50
ø10 to ø16	+10.5	+12.5	+22.5	+24
ø20 to ø50	+37.5	+40	—	+66.5

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

Series ZPT

ZPT¹⁰₁₃₁₆F□□K10-B5-A10 (With buffer/Female thread)



Dimensions: 10 mm Stroke

(mm)

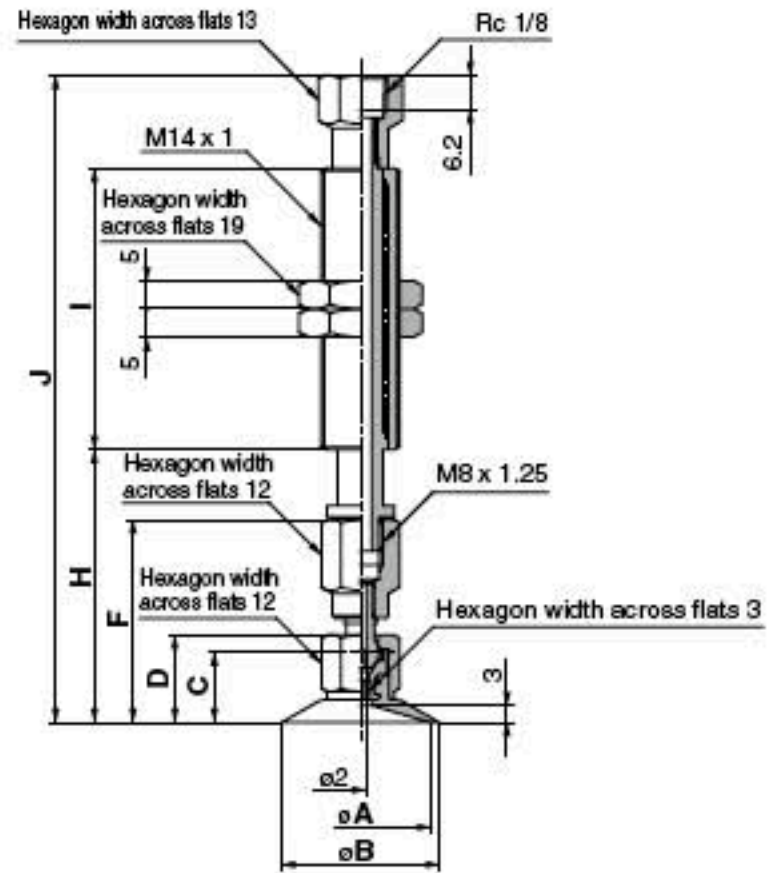
Model	A	B	C	D	F	H	I	J	Y
ZPT10F□□□10-B5-A10	10	12	10	12.5	27	38.5	23	74.5	1.5
ZPT13F□□□10-B5-A10	13	15	10.5	13	27.5	39		75	2
ZPT16F□□□10-B5-A10	16	18						75	2

Additional Dimensions by Stroke

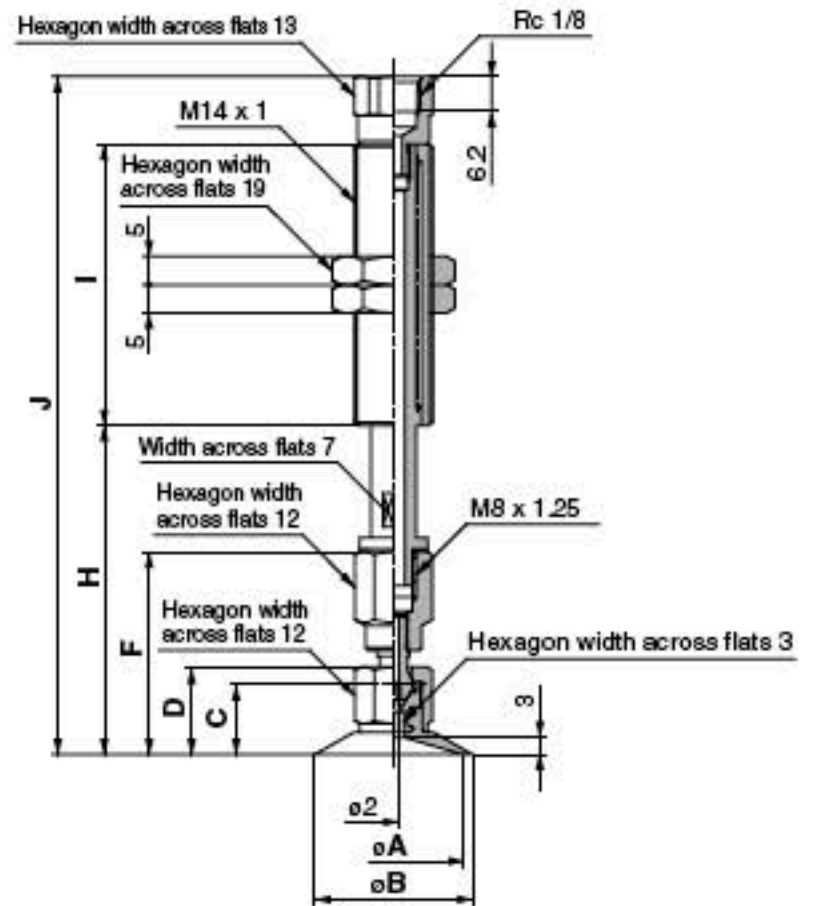
(mm)

Stroke	H	I	J
20	+10	+28	+38
30	+20		+48
40	+30	+54	+84
50	+40		+94

ZPT²⁰₂₅₃₂F□□K10-B01-A14 (With buffer/Female thread)



With a stroke of 10 mm



Stroke 20 to 50 mm

Dimensions: 10 mm Stroke

(mm)

Model	A	B	C	D	F	H	I	J
ZPT20F□□□10-B01-A14	20	22	12.5	15.5	36	48.5	50	115
ZPT25F□□□10-B01-A14	25	28						
ZPT32F□□□10-B01-A14	32	35	13	16	36.5	49		115.5

Additional Dimensions by Stroke

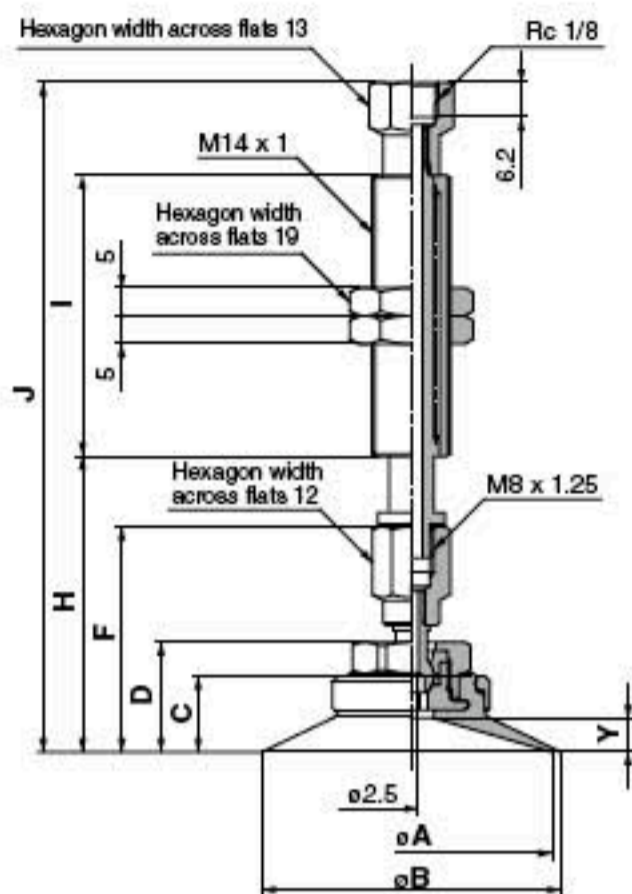
(mm)

Stroke	H	I	J
20	+10	±0	+5.5
30	+20		+15.5
50	+40	+25	+60.5

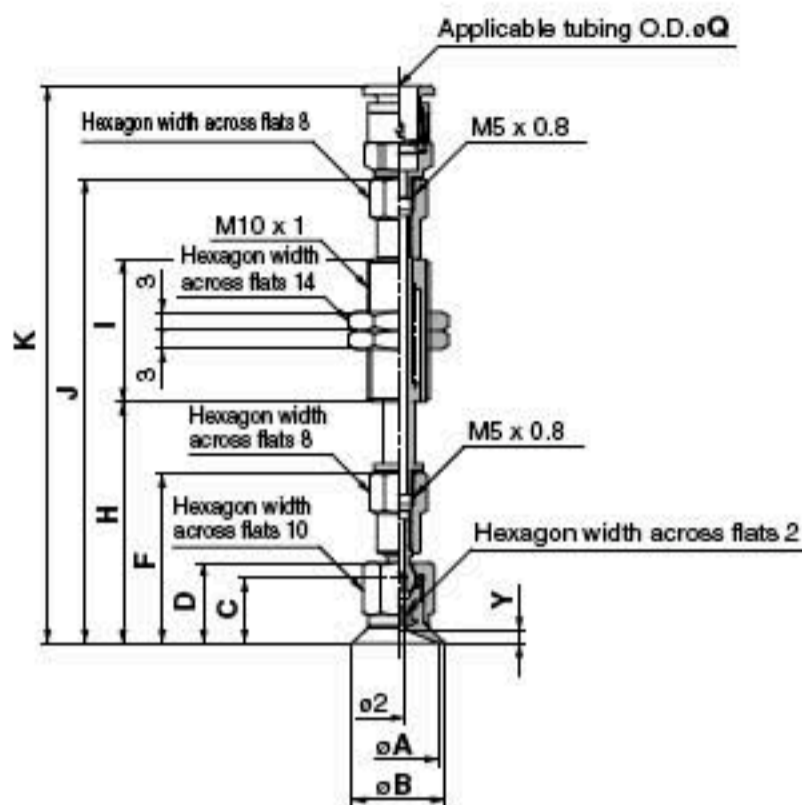
Vacuum Pad: Ball Joint Type Vertical Vacuum Entry with Buffer Series ZPT

ZPT⁴⁰/₅₀F□□^J/_K10-B01-A14 (With buffer/Female thread)

ZPT¹⁰/₁₃/₁₆F□□^J/_K10-0□-A10 (With buffer/One-touch fitting)



With a stroke of 10 mm



Dimensions: 10 mm Stroke

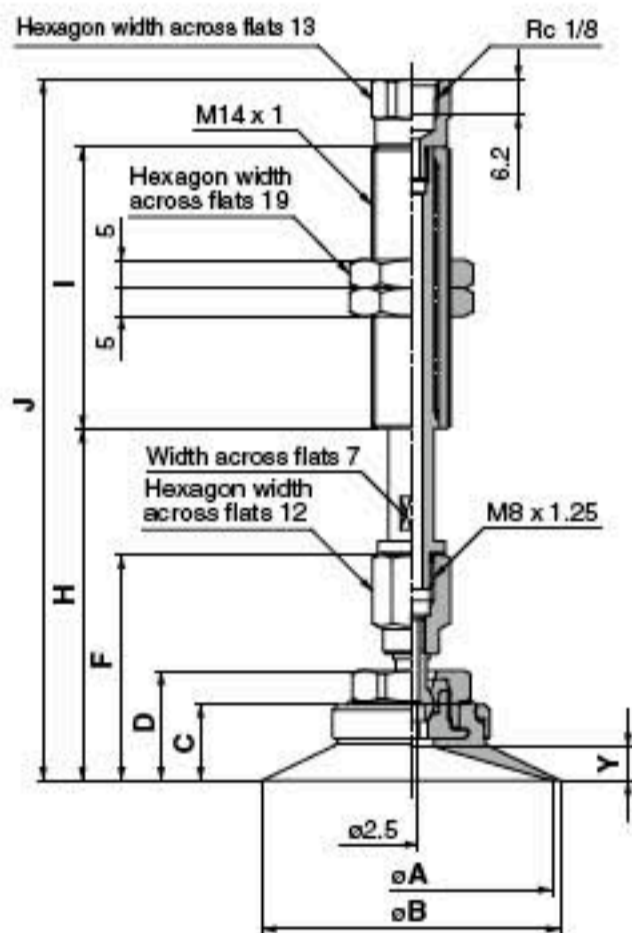
(mm)

Model	A	B	C	D	F	H	I	J	Q: 4		Y
									K	K	
ZPT10F□□□10-0□-A10	10	12	10	12.5	27	38.5		74.5	88.5	89.5	1.5
ZPT13F□□□10-0□-A10	13	15	10.5	13	27.5	39	23	75	89	90	2
ZPT16F□□□10-0□-A10	16	18									

Additional Dimensions by Stroke

(mm)

Stroke	H	I	J	K
20	+10		+38	
30	+20	+28	+48	
40	+30	+54	+84	
50	+40		+94	



Stroke 20 to 50 mm

Dimensions: 10 mm Stroke

(mm)

Model	A	B	C	D	F	H	I	J	Y
ZPT40F□□□10-B01-A14	40	43	12.5	18.5	39	51.5		118	5
ZPT50F□□□10-B01-A14	50	53	13.5	19.5	40	52.5	50	119	6

Additional Dimensions by Stroke

(mm)

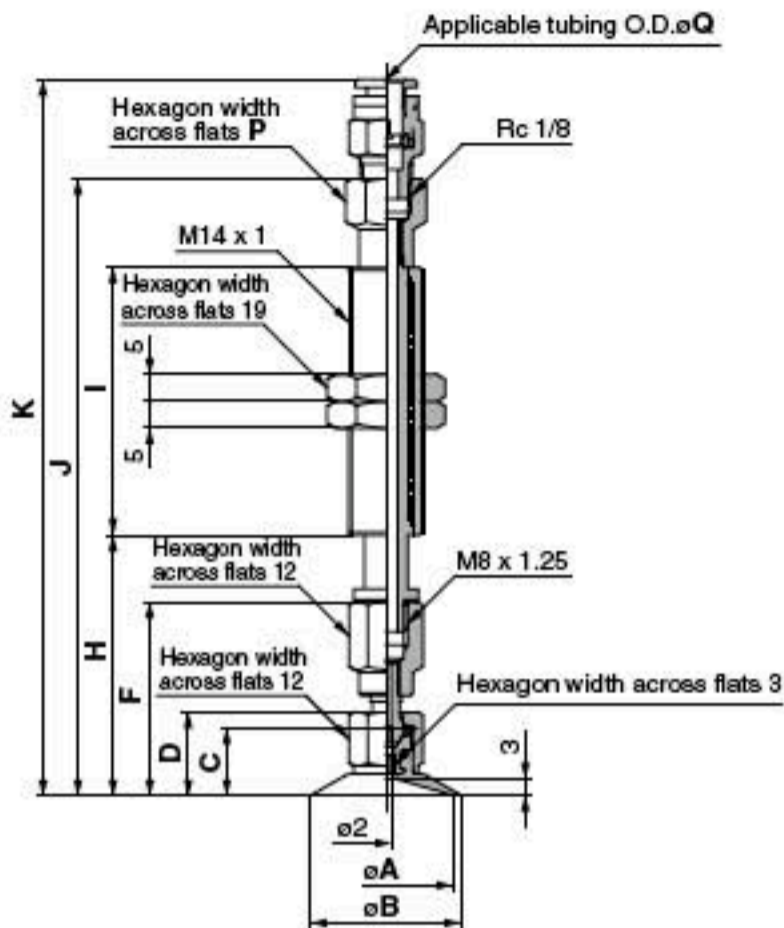
Stroke	H	I	J
20	+10		+5.5
30	+20	±0	+15.5
50	+40	+25	+60.5

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

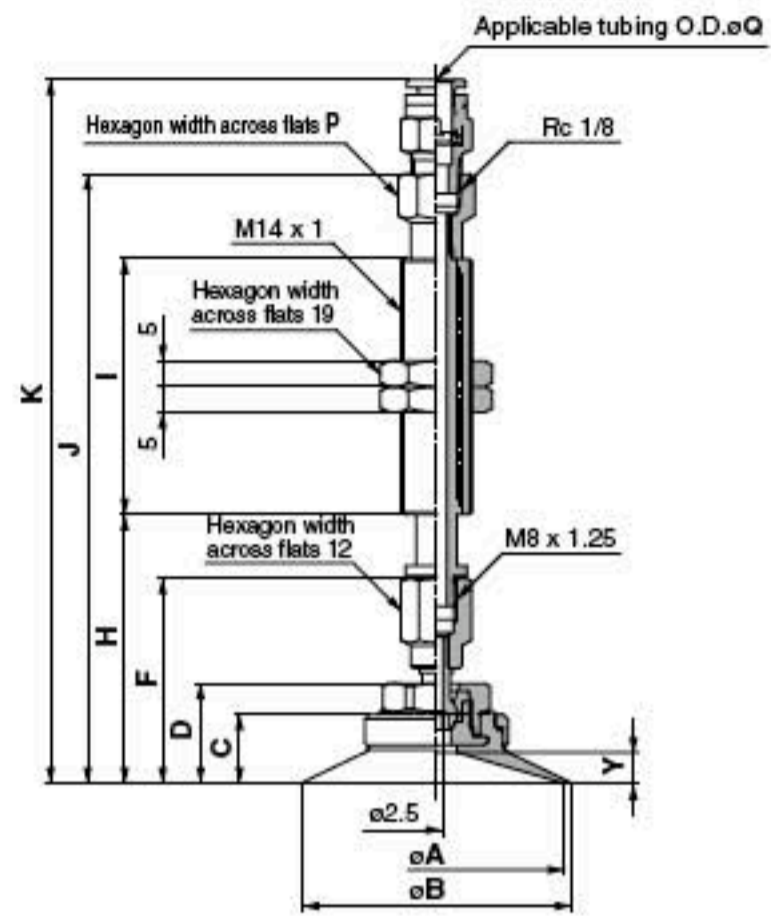
Series ZPT

ZPT²⁰₂₅₃₂F□□^JK10-0□-A14 (With buffer/One-touch fitting)

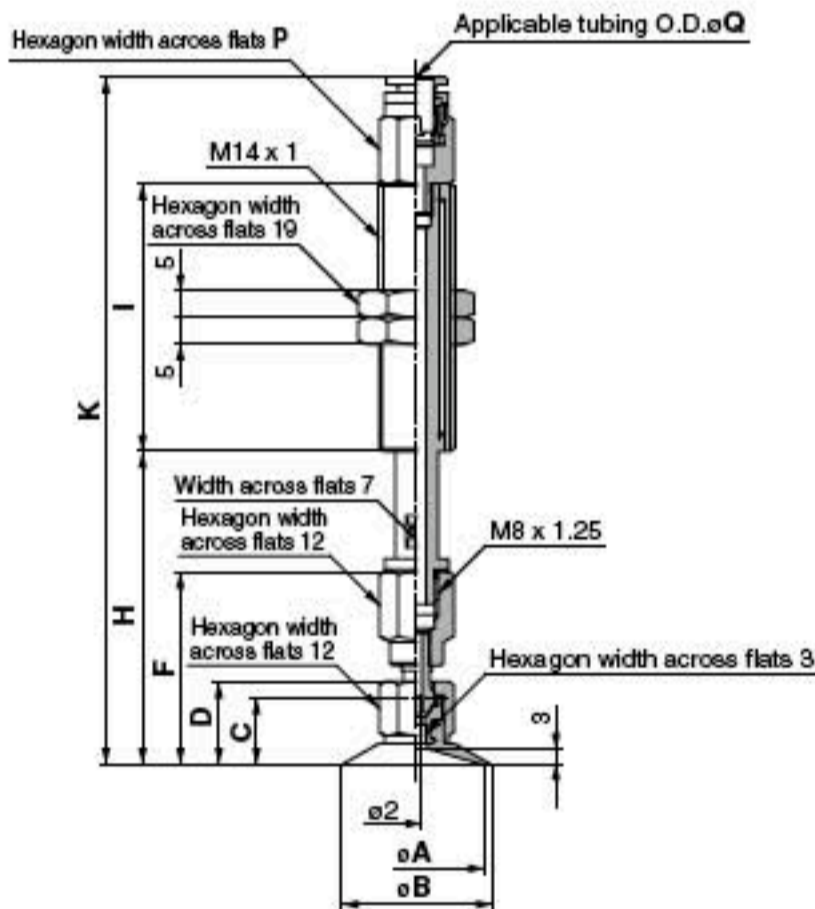
ZPT⁴⁰₅₀F□□^JK10-0□-A14 (With buffer/One-touch fitting)



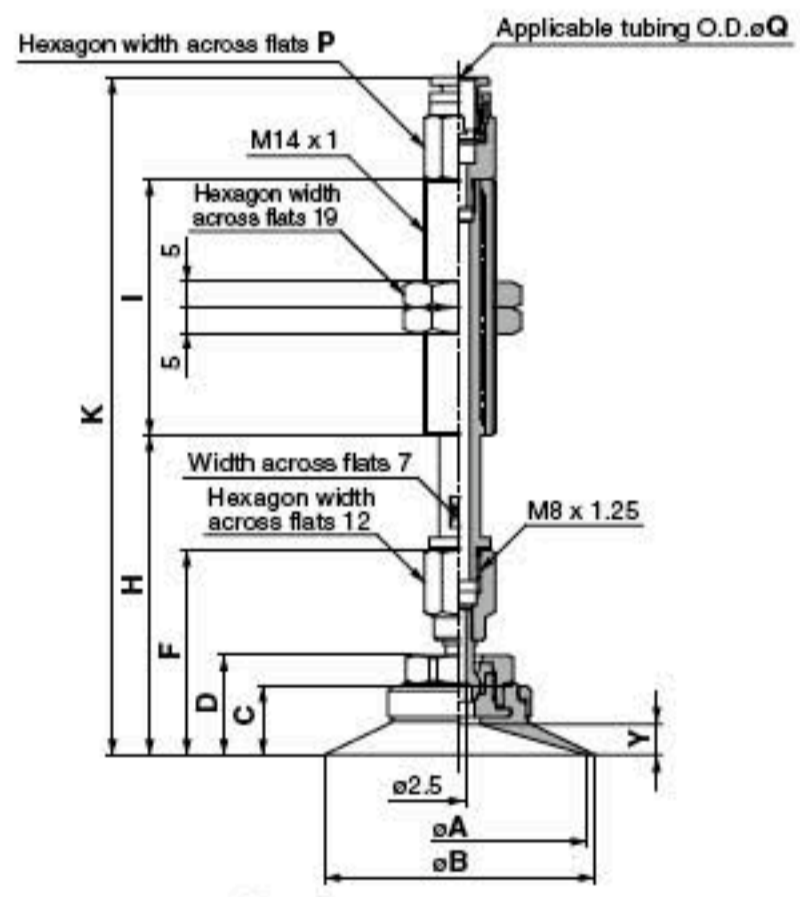
With a stroke of 10 mm



With a stroke of 10 mm



Stroke 20 to 50 mm



Stroke 20 to 50 mm

Dimensions: 10 mm Stroke

(mm)

Model	A	B	C	D	F	H	I	J	Q: 6		Q: 8	
									K	P	K	P
ZPT20F□□□10-0□-A14	20	22	12.5	15.5	36	48.5	50	115	133.5	13	137	13
ZPT25F□□□10-0□-A14	25	28										
ZPT32F□□□10-0□-A14	32	35	13	16	36.5	49		115.5	134		135.5	

Additional Dimensions by Stroke

(mm)

Stroke	H	I	Q: 6		Q: 8	
			K	P	K	P
20	+10	±0	-5.1		-3.6	
30	+20		+4.9	-1	+6.4	+1
50	+40	+25	+49.9		+51.4	

Dimensions: 10 mm Stroke

(mm)

Model	A	B	C	D	F	H	I	J	Q: 6		Q: 8		Y
									K	P	K	P	
ZPT40F□□□10-0□-A14	40	43	12.5	18.5	39	51.5	50	118	136.5	13	140	13	5
ZPT50F□□□10-0□-A14	50	53	13.5	19.5	40	52.5		119	137.5		141		6

Additional Dimensions by Stroke

(mm)

Stroke	H	I	Q: 6		Q: 8	
			K	P	K	P
20	+10	±0	-5.1		-3.6	
30	+20		+4.9	-1	+6.4	+1
50	+40	+25	+9.9		+51.4	