

ZPT VACUUM PADS
VERTICAL ENTRY WITHOUT BUFFER

TECHNICAL
SPECIFICATIONS

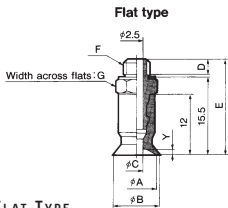
Vacuum entry	Vertical type
Mounting	Use connection for vacuum entry

Pad type	Flat type	Flat with rib	Deep type
Pad dia. (mm)	2, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16, 20, 25, 32, 40, 50	10, 16, 25, 40
Material (colour)	See "How to Order"		
Hardness (shore)	NBR (50°) Silicon (40°) Urethane-flourine (60°)		



DIMENSIONS

PAD DIAMETERS Ø2, Ø4, Ø6, Ø8

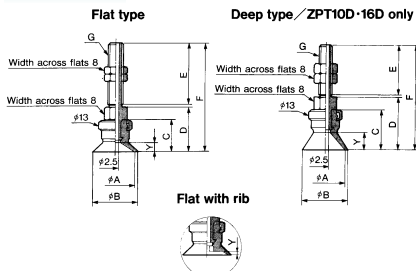


FLAT TYPE

Model	ØA	ØB	ØC	F:M5x0.8			F:M6x1			Y
				D	E	G	D	E	G	
ZPT02U	2	2.6	1.2	3	19	7	4	20	8	0.8
ZPT04U	4	4.8	1.6							
ZPT06U	6	7	2.5							
ZPT08U	8	9	2.5							

DIMENSIONS

PAD DIAMETERS Ø10, Ø13, Ø16



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	G:M5x0.8		G:M6x1		Y	
					E	F	E	F	Flat	Flat with rib
ZPT10 ½	10	12	12	17	20	38	25	43	3	1.7
ZPT13 ½	13	15	12	17	20	38	25	43	3	1.8
ZPT16 ½	16	18	12.5	17.5	20	38.5	25	43.5	3.5	1.2

DEEP TYPE

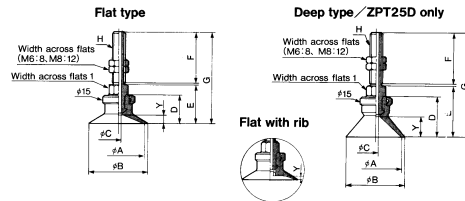
Model	ØA	ØB	C	D	G:M5x0.8		G:M6x1		Y
					E	F	E	F	
ZPT10D	10	12	15	20	20	41	25	46	6
ZPT16D	16	18	16	21	20	42	25	47	7



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E807

DIMENSIONS

PAD DIAMETERS Ø20, Ø25, Ø32



FLAT TYPE - FLAT WITH RIB

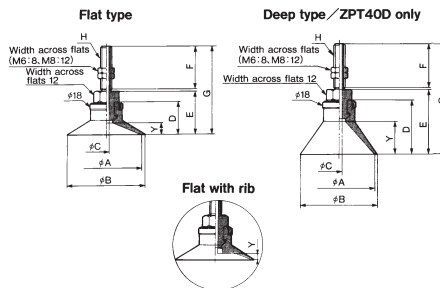
Model	ØA	ØB	D	H : M6x1					H : M8x1					Y	
				ØC	E	F	G	I	ØC	E	F	G	I	Flat	Flat with rib
ZPT20 ½	20	23	14	3	19	25	45	8	3.5	24	15	40	12	4	1.7
ZPT25 ½	25	28	14	3	19	25	45	8	3.5	24	15	40	12	4	1.8
ZPT32 ½	32	35	14.5	3	19.5	25	45	8	3.5	24.5	15	40.5	12	4.5	2.3

DEEP TYPE

Model	ØA	ØB	D	H:M6x1					H:M8x1					Y
				ØA	E	F	G	I	ØC	E	F	G	I	
ZPT25D	25	28	20	3	25.5	25	51	8	3.5	30.5	15	46	12	10

DIMENSIONS

PAD DIAMETERS Ø40, Ø50



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	D	E	H:M6x1			H:M8x1			Y	
					ØC	F	G	ØC	F	G	Flat	Flat with rib
ZPT40 ½	40	43	18.5	24.5	3	15	50.5	4.5	15	40.5	6.5	3.3
ZPT50 ½	50	53	19.5	25.5	3	15	51.5	4.5	15	41.5	7.5	3.8

DEEP TYPE

Model	ØA	ØB	D	E	H:M6x1			H:M6x1			Y
					ØC	F	G	ØC	F	G	
ZPT40D	40	43	29	35.5	3	25	61	4.5	15	51	17

HOW TO
ORDER
SEE NEXT PAGE

VACUUM PADS SERIES ZP

HOW TO ORDER

ZPT PAD VERTICAL TYPE WITHOUT BUFFER



PAD DIAMETER

- 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 MATERIAL

- NNitrile rubber black (standard)
- SSilicon rubber white
- UUrethane brown
- FFluorine rubber black + mark
- GN ...Anti-static Nitrile rubber
- GS ...Anti-static Silicon rubber

PAD TYPE

- UFlat
- CFlat with Rib (Not ø2,4,6,8)
- DDeep (ø10,16,25,40)
- BBellows (Not ø2,4)

VACUUM ENTRY (ALSO MOUNTING THREAD DIA)

	Symbol	Thread dia.	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
Male thread	A5	M5X0.8	•	•		
	A6	M6X1	•	•	•	•
	A8	M8X1			•	•

Ask SMC Regional Offices for female thread versions also available

STOCKED PRODUCTS
FOR A LIST OF STOCKED PRODUCTS, PLEASE SEE THE CURRENT SMC PRICE LIST

ZPT VACUUM PADS VERTICAL ENTRY WITH BUFFER



TECHNICAL SPECIFICATIONS

Vacuum entry	Vertical type
Buffer type	Non-rotation type (K)
Buffer stroke	For Ø2-Ø8...6mm
	For Ø10-Ø50...10mm

SPRING FORCE (N)

Pad dia. (mm)	0 stroke	Stroke end
Ø2-Ø8	0.8	1.2
Ø10-Ø32	1	3
Ø40, Ø50	2	5

Pad type	Flat type	Flat with rib	Deep type
Pad dia. (mm)	2, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16, 20, 25, 32, 40, 50	10, 16, 25, 40
Material (colour)	See "How to Order"		
Hardness (shore)	NBR (50°) Silicon (40°) Urethane-fluorine (60°)		

HOW TO ORDER

ZPT PAD VERTICAL TYPE WITH BUFFER



PAD DIAMETER

- 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

- UFlat
- CFlat with Rib (Not ø2,4,6,8)
- DDeep (ø10,16,25,40)
- BBellows (Not ø2,4)

PAD MATERIAL

- NNitrile rubber (standard)
- SSilicon rubber
- UUrethane
- FFluorine rubber
- GN ...Anti-static Nitrile rubber
- GS ...Anti-static Silicon rubber

VACUUM ENTRY-MOUNTING

	Symbol	Thread dia.	Ø2-Ø8	Ø10-Ø32	Ø40-Ø50
Male thread	A8	M8X1	•		
	A10	M10X1		•	
	A14	M14X1			•

VACUUM ENTRY

	Symbol	Port size	Ø2-Ø8	Ø10-Ø32	Ø40-Ø50
One-touch tube fitting	04	Ø4 tube	•	•	
	06	Ø6 tube	•	•	•
	08	Ø8 tube			•

Ask SMC Regional Offices for female and Barb versions

BUFFER (NON-ROTATION TYPE)

Symbol	Stroke	Ø2-Ø8	Ø10-Ø32	Ø40-Ø50
K6	6mm	•		
K10	10mm		•	•



SEE INSIDE FRONT COVER FOR DETAILS OF YOUR LOCAL SALES OFFICE



DIMENSIONS SEE NEXT PAGE

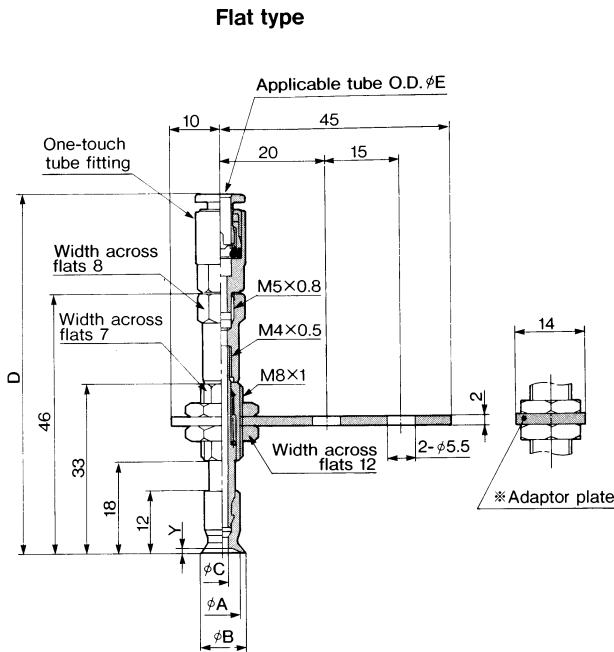
FOR FURTHER TECHNICAL DETAILS ON THIS PRODUCT REQUEST CATALOGUE REFERENCE E807

DIMENSIONS

ZPT WITH ONE TOUCH TUBE FITTING (BUFFER)

PAD DIAMETER: Ø2 • Ø4 • Ø6 • Ø8

PAD DIAMETER: Ø10 • Ø13 • Ø16

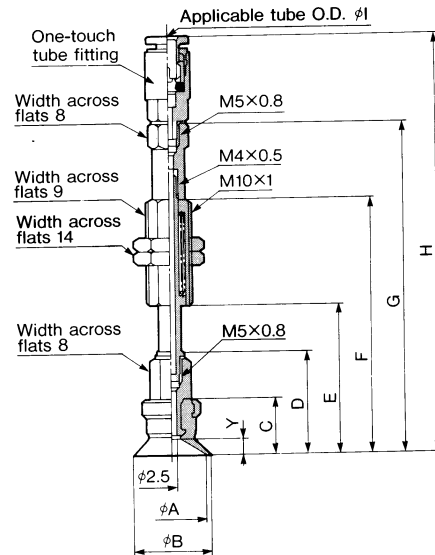


* Adaptor plate : Provided as standard

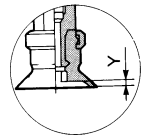
Flat type

Model	φA	φB	φC	E		Y
				4	6	
ZPT02U	2	2.6	1.2	66	66.5	0.8
ZPT04U	4	4.8	1.6	66	66.5	0.8
ZPT06U	6	7	2.5	66	66.5	0.8
ZPT08U	8	9	2.5	66	66.5	1

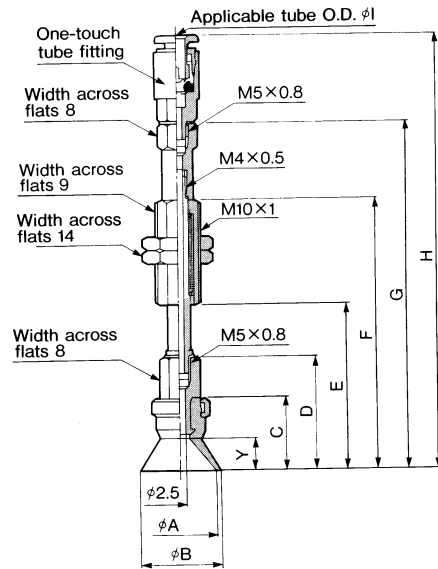
Flat type



Flat with rib



Deep type / ZPT10D · 16D only



Weight List

(gf)

Model	Flat type			Flat with rib			Deep type		
	φ4	φ6	φ8	φ4	φ6	φ8	φ4	φ6	φ8
ZPT02	29	30	—	—	—	—	—	—	—
ZPT08	—	—	—	—	—	—	—	—	—
ZPT10	—	—	—	—	—	—	30	30	—
ZPT13	30	30	—	30	30	—	—	—	—
ZPT16	—	—	—	—	—	—	30	30	—
ZPT20	—	—	—	—	—	—	—	—	—
ZPT25	32	32	—	32	32	—	33	33	—
ZPT32	33	33	—	33	33	—	—	—	—
ZPT400	—	105	110	—	105	110	—	105	110
ZPT50	—	105	115	—	105	115	—	—	—

Flat type · Flat with rib type

Model	φA	φB	C	D	E	F	G	I		Y	
								4	6	Flat	Flat with rib
ZPT10 _C	10	12	12	21	32.5	55.5	68.5	88.5	89	3	1.7
ZPT13 _C	13	15	12	21	32.5	55.5	68.5	88.5	89	3	1.8
ZPT16 _C	16	18	12.5	21.5	33	56	69	89	89.5	3.5	1.2

Deep type

Model	φA	φB	C	D	E	F	G	I		Y
								4	6	
ZPT10D	10	12	15	24	35.5	58.5	71.5	91.5	92	6
ZPT16D	16	18	16	25	36.5	59.5	72.5	92.5	93	7



FOR FURTHER TECHNICAL DETAILS ON THIS PRODUCT REQUEST CATALOGUE REFERENCE E807

Vacuum

VACUUM PADS SERIES ZP

DIMENSIONS

ZPT WITH ONE TOUCH TUBE FITTING (BUFFER)

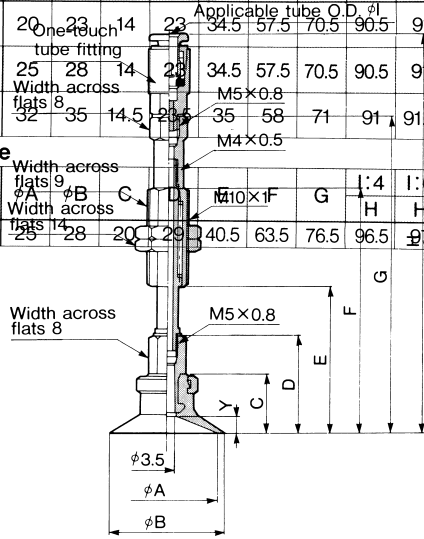
PAD DIAMETER: Ø20 • Ø25 • Ø32

PAD DIAMETER: Ø40 • Ø50

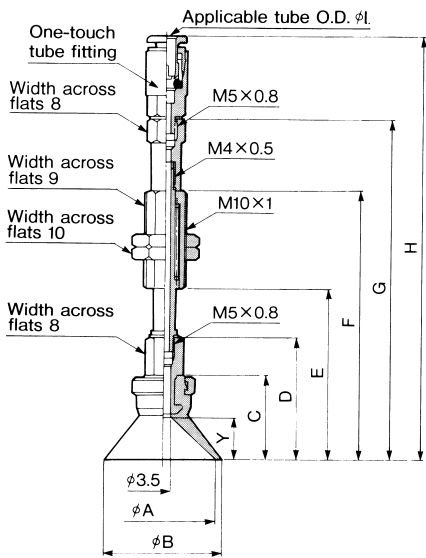
Model	φA	φB	Flat type	E	F	G	I:4		I:6		Y	
							H	H	Flat	Flat with rib		
ZPT20 ^U _C	20	23	14	23	34.5	57.5	70.5	90.5	91	4	1.7	
ZPT25 ^U _C	25	28	14	28	34.5	57.5	70.5	90.5	91	4	1.8	
ZPT32 ^U _C	32	35	14.5	29	35	58	71	91	91.5	4.5	2.3	

Deep type

Model	φA	φB	Flat type	E	F	G	I:4		I:6		Y
							H	H	Flat	Flat with rib	
ZPT25D	25	28	20	29	40.5	63.5	76.5	96.5	97	10	



Deep type / ZPT25D only

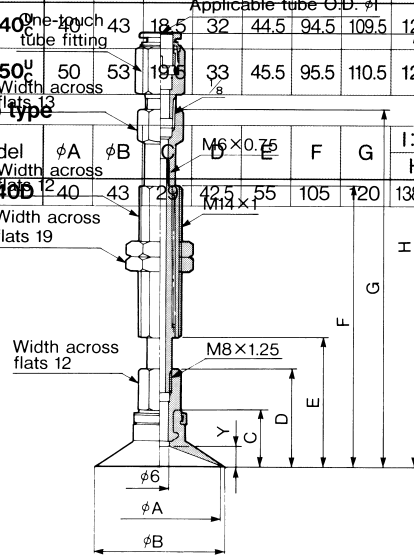


Flat type • Flat with rib

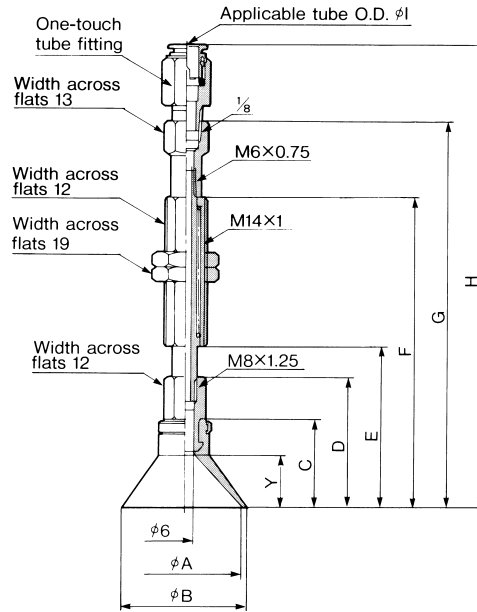
Model	φA	φB	Flat type	E	F	G	I:6		I:8		Y	
							H	H	Flat	Flat with rib		
ZPT40 ^U _C	40	43	18.5	32	44.5	94.5	109.5	128	133.5	6.5	3.3	
ZPT50 ^U _C	50	53	19.6	33	45.5	95.5	110.5	129	134.5	7.5	3.8	

Deep type

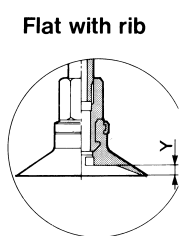
Model	φA	φB	Flat type	E	F	G	I:6		I:8		Y
							H	H	Flat	Flat with rib	
ZPT40D	40	43	29	42.5	55	105	120	138.5	144	17	



Deep type / ZPT40D only



Flat type • Flat with rib



Vacuum



SEE INSIDE FRONT COVER FOR DETAILS OF YOUR LOCAL SALES OFFICE



FOR FURTHER TECHNICAL DETAILS ON THIS PRODUCT REQUEST CATALOGUE REFERENCE E807

ZPR VACUUM PADS
HORIZONTAL TYPE VACUUM ENTRY
WITHOUT BUFFER - ONE TOUCH FITTING

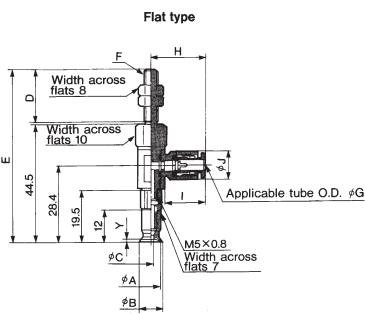
TECHNICAL
SPECIFICATIONS

Vacuum entry	Horizontal type
Connection	With one-touch tube fitting

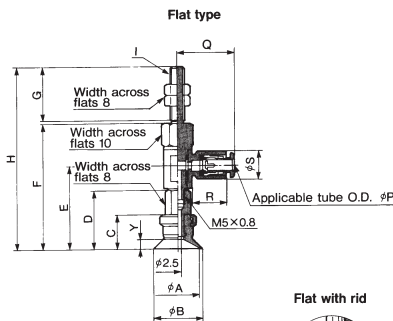
Pad type	Flat type	Flat with rib	Deep type
Pad dia. (mm)	2, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16, 20, 25, 32, 40, 50	10, 16, 25, 40
Material (colour)	See "How to Order"		
Hardness (Shore)	NBR (50°) Silicon (40°) Urethane-flourine (60°)		



DIMENSIONS
PAD DIAMETERS Ø2, Ø4, Ø6, Ø8



DIMENSIONS
PAD DIAMETERS Ø10, Ø13, Ø16



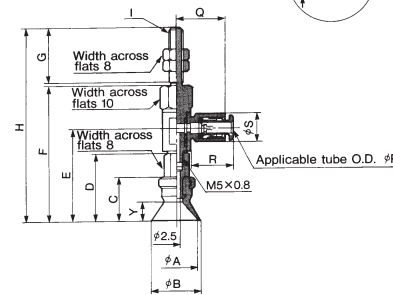
FLAT TYPE

Model	ØA	ØB	ØC	F: M5X0.8		F: M6X1		Y
				D	E	D	E	
ZPR02U	2	2.6	1.2					0.8
ZPR04U	4	4.8	1.6	20	65.5	25	70.5	0.8
ZPR06U	6	7	2.5					0.8
ZPR08U	8	9	2.5					1

APPLICABLE TUBE

Applicable Tube O.D.	ØG	H	I	ØJ
Ø4	4	20.6	15.6	10.4
Ø6	6	21.6	16.68	12.88

Deep type / ZPR10D-16D only



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	E	F	I: M5X0.8		I: M6X1		Y	
							G	H	G	H	Flat	Flat with rib
ZPR10 $\frac{1}{2}$	10	12	12	21	29.9	46	20	67	25	72	3	1.7
ZPR13 $\frac{1}{2}$	13	15	12	21	29.9	46	20	67	25	72	3	1.8
ZPR16 $\frac{1}{2}$	16	18	12.5	21.5	30.4	46.5	20	67.5	25	72	3.5	1.2

DEEP TYPE

Model	ØA	ØB	C	D	E	F	I: M5X0.8		I: M6X1		Y
							G	H	G	H	
ZPR10D	10	12	15	24	32.9	49	20	70	25	75	6
ZPR16D	16	18	16	25	33.9	50	20	71	25	76	7

APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø4	4	20.6	15.6	10.4
Ø6	6	21.6	16.6	12.8

MORE DIMENSIONS
SEE NEXT PAGE

HOW TO
ORDER
SEE NEXT PAGE

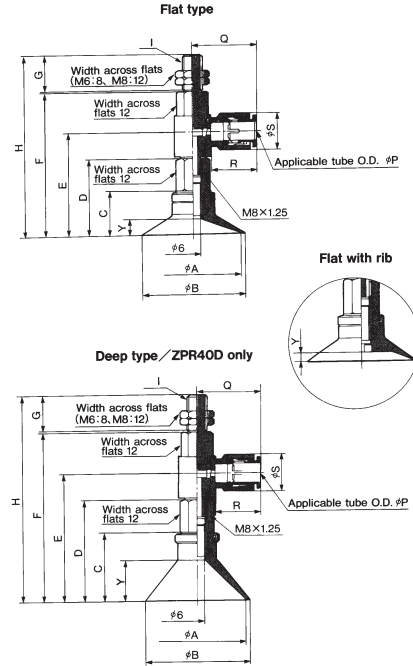
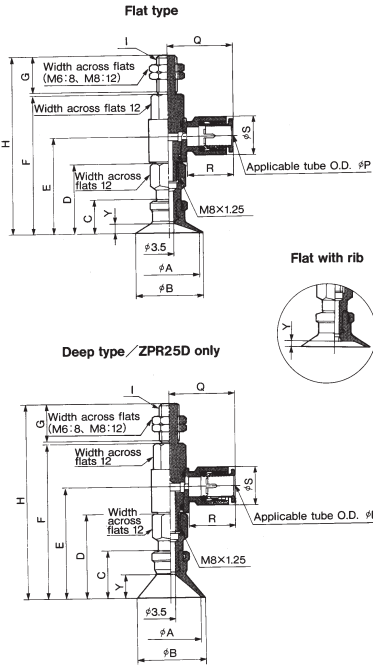
VACUUM PADS SERIES ZP

DIMENSIONS

PAD DIAMETERS Ø20, Ø25, Ø32

DIMENSIONS

PAD DIAMETERS Ø40, Ø50



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	E	F	I: M6X1		I: M8X1		Y	
							G	H	G	H	Flat	Flat with rib
ZPR20 $\frac{1}{2}$	20	23	14	29	39.8	57.6	25	83.5	15	73.5	4	1.7
ZPR25 $\frac{1}{2}$	25	28	14	29	39.8	57.6	25	83.5	15	73.5	4	1.8
ZPR32 $\frac{1}{2}$	32	35	14.5	29.5	40.3	58.1	25	84	15	74	4.5	2.3

DEEP TYPE

Model	ØA	ØB	C	D	E	F	I: M6X1		I: M8X1		Y
							G	H	G	H	
ZPR25D	25	28	20	35	48.5	63.6	25	89.5	15	79.5	10

APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø4	4	23.3	15.8	10.4
Ø6	6	24.3	16.8	12.8
Ø8	8	26.2	18.7	15.2

FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	E	F	I: M6X1		I: M8X1		Y	
							G	H	G	H	Flat	Flat with rib
ZPR40 $\frac{1}{2}$	40	43	18.5	32	42.8	60.6	25	86.5	15	76.5	6.5	3.3
ZPR50 $\frac{1}{2}$	50	53	19.5	33	43.8	61.6	25	87.5	15	77.5	7.5	3.8

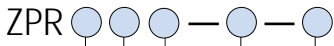
DEEP TYPE

Model	ØA	ØB	C	D	E	F	I: M6X1		I: M8X1		Y
							G	H	G	H	
ZPR40D	40	43	29	42.5	53.3	71.1	25	97	15	87	17

APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø6	6	24.3	16.8	12.8
Ø8	8	26.2	18.7	15.2

HOW TO ORDER
ZPR PAD HORIZONTAL TYPE WITHOUT BUFFER



PAD DIAMETER

- 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

- UFlat
- CFlat with Rib (Not ø2,4,6,8)
- DDeep (ø10,16,25,40)
- BBellows (Not ø2,4)

PAD MATERIAL

- NNitrile rubber -black (standard)
- SSilicon rubber -white
- UUrethane-brown
- FFluorine rubber-black+mark
- GNAnti-static Nitrile rubber
- GSAnti-static Siliconrubber

VACUUM PAD - MOUNTING

Symbol	Thread dia.	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
Male thread	A5	M5X0.8	•	•	
	A6	M6X1	•	•	•
	A8	M8X1			•

(Ask SMC Regional Offices for female thread versions also available)

VACUUM ENTRY

Symbol	Port size	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
One-touch tube fitting	Ø4	Ø4 tube	•	•	•
	Ø6	Ø6 tube	•	•	•
	Ø8	Ø8 tube			•

STOCKED PRODUCTS
FOR A LIST OF STOCKED PRODUCTS, PLEASE SEE THE CURRENT SMC PRICE LIST



SEE INSIDE FRONT COVER FOR DETAILS OF YOUR LOCAL SALES OFFICE



FOR FURTHER TECHNICAL DETAILS ON THIS PRODUCT REQUEST CATALOGUE REFERENCE E807

Vacuum

ZPR VACUUM PADS HORIZONTAL TYPE VACUUM ENTRY WITH BUFFER - ONE TOUCH FITTING



TECHNICAL SPECIFICATIONS

Vacuum entry	Horizontal type
Buffer type	Non-rotation type (K)
Buffer stroke	For Ø2-Ø8...6mm
	For Ø10-Ø50...10mm

Pad type	Flat type	Flat with rib	Deep type
Pad dia. (mm)	2, 4, 6, 8, 10, 13, 16, 20, 25, 32, 40, 50	10, 13, 16, 20, 25, 32, 40, 50	10, 16, 25, 40
Material (colour)	See * How to Order *		
Hardness (Shore)	NBR (50°) Silicon (40°) Urethane-flourine (60°)		

HOW TO ORDER

ZPR PAD HORIZONTAL TYPE ENTRY WITH BUFFER



PAD DIAMETER

- 02.....Ø2 16.....Ø16
- 04.....Ø4 20.....Ø20
- 06.....Ø6 25.....Ø25
- 08.....Ø8 32.....Ø32
- 10.....Ø10 40.....Ø40
- 13.....Ø13 50.....Ø50

PAD TYPE

- UFlat
- CFlat with Rib (Not ø2,4,6,8)
- DDeep (ø10,16,25,40)
- BBellows (Not ø2,4)

PAD MATERIAL

- NNitrile rubber - black (standard)
- SSilicon rubber - white
- UUrethane -brown
- FFluorine rubber -black+mark
- GNAnti-static Nitrile rubber
- GSAnti-static Siliconrubber

VACUUM ENTRY-MOUNTING

	Symbol	Thread dia.	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
Male thread	A8	M8X1	•			
	A10	M10X1		•	•	
	A14	M14X1				•

VACUUM ENTRY

	Symbol	Port size	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
One-touch tube fitting	04	Ø4 tube	•	•	•	
	06	Ø6 tube	•	•	•	•
	08	Ø8 tube			•	•

BUFFER

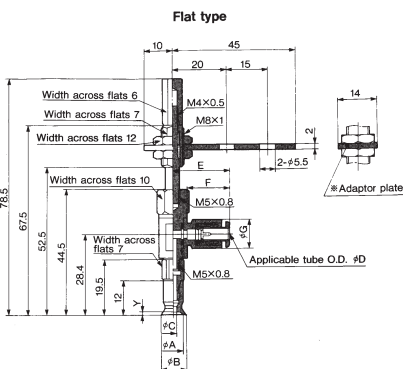
Symbol	Stroke	Ø2-Ø8	Ø10-Ø16	Ø20-Ø32	Ø40-Ø50
K6	6mm	•			
K10	10mm		•	•	•

STOCKED PRODUCTS
FOR A LIST OF STOCKED PRODUCTS,
PLEASE SEE THE CURRENT SMC PRICE LIST

Vacuum

DIMENSIONS

PAD DIAMETERS Ø2, Ø4, Ø6, Ø8



*Adaptor plate: Provided as standard

FLAT TYPE

Model	ØA	ØB	ØC	ØD:Ø4			ØD:Ø6			Y
				E	F	ØG	E	F	ØG	
ZPR02U	2	2.6	1.2							0.8
ZPR04U	4	4.8	1.6							0.8
ZPR06U	6	7	2.5	20.6	15.6	10.4	21.6	16.6	12.8	0.8
ZPR08U	8	9	2.5							1

APPLICABLE TUBE

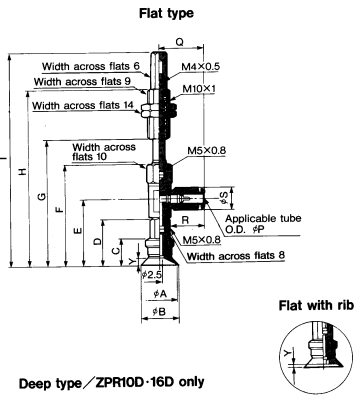
Applicable Tube O.D.	ØE
Ø4	10.4
Ø6	12.8

MORE DIMENSIONS
SEE NEXT PAGE



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E807

DIMENSIONS
PAD DIAMETERS Ø10, Ø13, Ø16



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	E	F	G	H	I	Y	
										Flat	Flat with rib
ZPR10 $\frac{1}{2}$	10	12	12	21	29.9	46	57	80	91	3	1.7
ZPR13 $\frac{1}{2}$	13	15	12	21	29.9	46	57	80	91	3	1.8
ZPR16 $\frac{1}{2}$	16	18	12.5	21.5	30.4	46.5	57.5	80.5	91.5	3.5	1.2

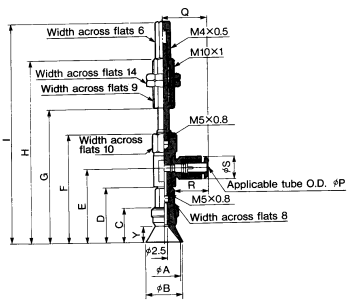
DEEP TYPE

Model	A	ØB	C	D	E	F	G	H	I	Y
ZPR10D	10	12	15	24	32.9	49	60	83	94	6
ZPR16D	16	18	16	25	33.9	50	61	84	95	7

APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø4	4	20.6	15.6	10.4
Ø6	6	21.6	16.6	12.8

Deep type / ZPR10D-16D only



FLAT TYPE - FLAT WITH RIB

Model	A	ØB	C	D	E	F	G	H	I	Y	
										Flat	Flat with Rib
ZPR20	20	23	14	29	39.8	57.6	68.6	91.5	102.6	4	1.7
ZPR25	25	28	14	29	39.8	57.6	68.6	91.5	102.6	4	1.8
ZPR32	32	35	14.5	29.5	40.3	58.1	69.1	92	103.1	4.5	2.3

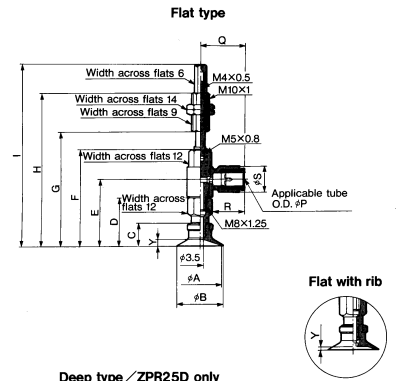
DEEP TYPE

Model	ØA	ØB	C	D	E	F	G	H	I	Y
ZPR25D	25	28	20	35	45.8	63.6	74.6	97.6	108.6	10

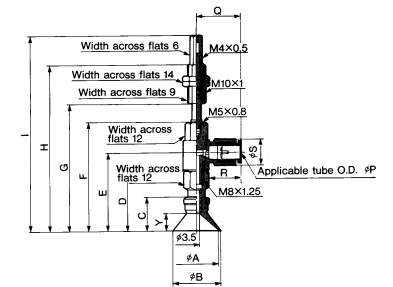
APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø4	4	23.3	15.8	10.4
Ø6	6	24.3	16.8	12.8
Ø8	8	26.2	18.7	15.2

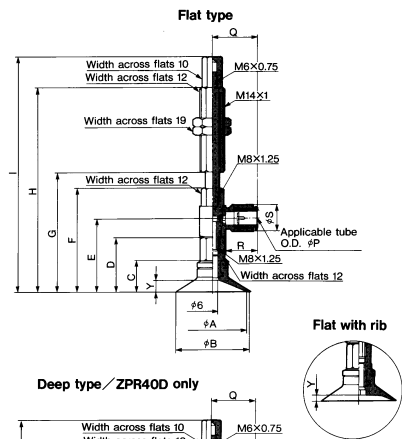
DIMENSIONS
PAD DIAMETERS Ø20, Ø25, Ø32



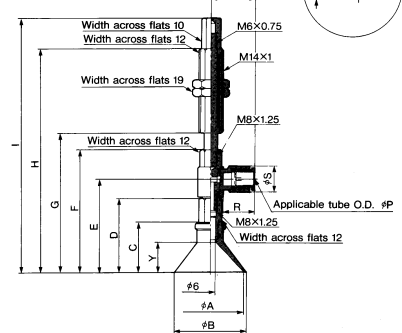
Deep type / ZPR25D only



DIMENSIONS
PAD DIAMETERS Ø40, Ø50



Deep type / ZPR40D only



FLAT TYPE - FLAT WITH RIB

Model	ØA	ØB	C	D	E	F	G	H	I	Y	
										Flat	Flat with Rib
ZPR40 $\frac{1}{2}$	40	43	18.5	32	42.8	60.6	72.6	122.6	140.6	6.5	3.3
ZPR50 $\frac{1}{2}$	50	53	19.5	33	43.8	61.6	73.6	123.6	141.6	7.5	3.8

DEEP TYPE

Model	ØA	ØB	C	D	E	F	G	H	I	Y
ZPR40D	40	43	29	42.5	53.3	71.1	81.1	133.1	151.1	17

APPLICABLE TUBE

Applicable Tube O.D.	ØP	Q	R	ØS
Ø6	6	24.3	16.8	12.8
Ø8	8	26.2	18.7	15.2



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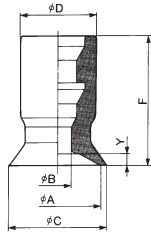
ZP SERIES VACUUM PADS

- ✓ 288 standard options
- ✓ 12 diameters
- ✓ 4 types
- ✓ 6 materials

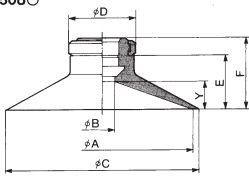


DIMENSIONS
ZP VACUUM PADS

ZP02U○~08U○



ZP10U○~50U○

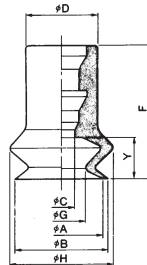


FLAT TYPE PAD

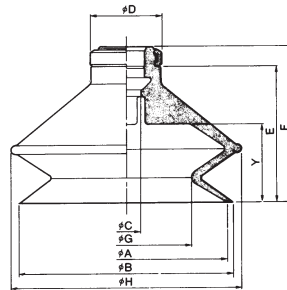
Part No.	Type	ØA	ØC	ØB	ØD	E	F	Y
ZP02U•	U02	2	2.6	1.2	7	-	12	0.8
ZP04U•	U04	4	4.8	1.6	7	-	12	0.8
ZP06U•	U06	6	7	2.5	7	-	12	0.8
ZP08U•	U08	8	9	2.5	7	-	12	1
ZP10U•	U10	10	12	4	13	7.7	12	3
ZP13U•	U13	13	15	4	13	7.7	12	3
ZP16U•	U16	16	18	4	13	8.2	12.5	3.5
ZP20U•	U20	20	23	4	15	9.5	14	4
ZP25U•	U25	25	28	4	15	9.5	14	4
ZP32U•	U32	32	35	4	15	10	14.5	4.5
ZP40U•	U40	40	43	7	18	13.7	18.5	6.5
ZP50U•	U50	50	53	7	18	14.7	19.5	7.5

DIMENSIONS
ZP VACUUM PADS

∕ $\phi 6 \sim \phi 8$
ZP06B□~08B□



∕ $\phi 10 \sim \phi 50$
ZP10B□~50B□

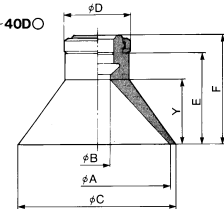


BELLOWS TYPE PAD

Part No.	Type	ØA	ØB	ØC	ØD	E	F	ØG	ØH	Y
ZP06B	B06	6	7	2.5	7	-	13	3.3	9.1	4
ZP08B	B08	8	9	2.5	7	-	13	4.7	10.1	4
ZP10B	B10	10	12	4	13	11.7	16	5.5	13.8	5.5
ZP13B	B13	13	15	4	13	14.2	18.5	8.7	19	7.5
ZP16B	B16	16	18	4	13	15.7	20	9.9	21	8.5
ZP20B	B20	20	22	4	15	19	23.5	121.4	25	10.5
ZP25B	B25	25	27	4	15	19.5	24	15.6	28	10.5
ZP32B	B32	32	34	4	15	24.5	29	18.9	37	14
ZP40B	B40	40	43	7	18	29.2	34	24.4	48	16
ZP50B	B50	50	53	7	18	33.2	38	32.4	57	19

DIMENSIONS
ZP VACUUM PADS

ZP10D○~40D○

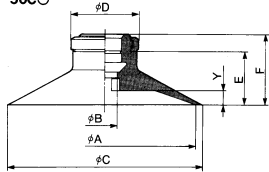


DEEP TYPE PAD

Part No.	Type	G	ØC	ØB	ØD	E	F	Y
ZP10D•	D10	10	12	4	13	10.7	15	6
ZP16D•	D16	16	18	4	13	11.7	16	7
ZP25D•	D25	25	28	4	15	15.5	20	10
ZP40D•	D40	40	43	7	18	24.2	29	17

DIMENSIONS
ZP VACUUM PADS

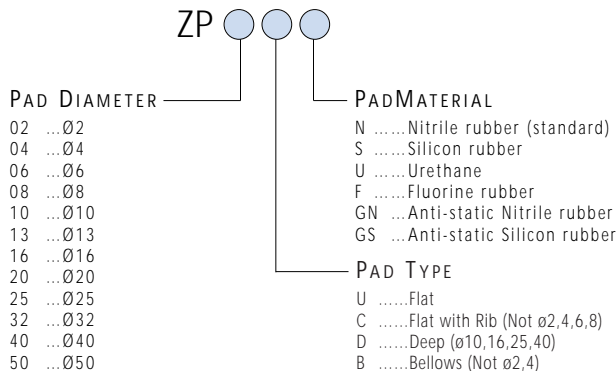
ZP10C○~50C○



FLAT TYPE PAD WITH RIB

Part No.	Type	ØA	ØC	ØB	ØD	E	F	Y
ZP10C•	C10	10	12	4.1	13	7.7	12	1.7
ZP13C•	C13	13	15	4	13	7.7	12	1.8
ZP16C•	C16	16	18	4	13	8.2	12.5	1.2
ZP20C•	C20	20	23	4	15	9.5	14	1.7
ZP25C•	C25	25	28	4	15	9.5	14	1.8
ZP32C•	C32	32	35	4	15	10	14.5	2.3
ZP40C•	C40	40	43	7	18	13.7	18.5	3.3
ZP50C•	C50	50	53	7	18	14.7	19.5	3.3

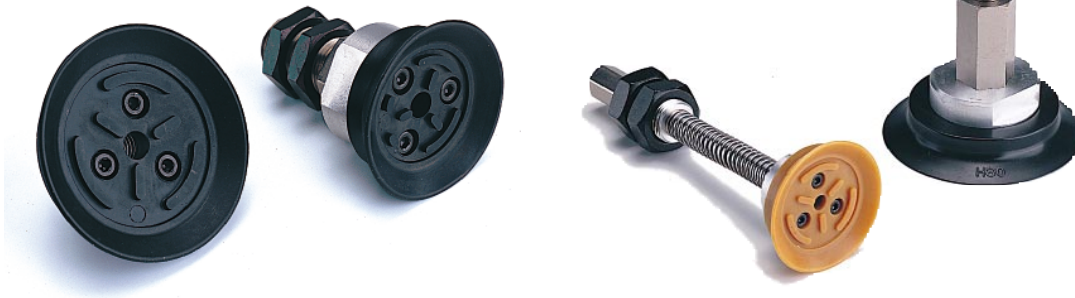
HOW TO
ORDER
ZP VACUUM PADS



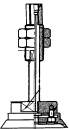
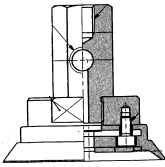
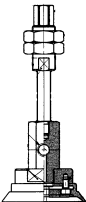


STOCKED PRODUCTS
FOR A LIST OF STOCKED PRODUCTS,
PLEASE SEE THE CURRENT SMC PRICE LIST

HEAVY DUTY VACUUM PADS SERIES ZPT/ZPX

- ✓ Wide range of materials: NBR, Silicon, Fluorine, Urethane, EPM
- ✓ Heavy duty range of sizes from Ø40 - Ø125
- ✓ Choice of mounting styles - horizontal or axial vacuum entry
- ✓ Optional spring loaded buffer
- ✓ 4 choices of buffer stroke
- ✓ Bellows option



	Standard Type (Without Buffer)		Buffer Mount Type
ZPT Axial Vacuum Entry	 Male thread Mounting, Female thread Vacuum Entry	 Common Female Vacuum Entry and Mounting	 Male thread Buffer Mounting Female thread Vacuum Entry
	 Female thread Mounting Female thread Vacuum Entry		 Male thread Buffer Mounting Female Thread Vacuum Entry

MODELS ZPT/ZPX

Buffer Stroke	Ø Pad	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
25		•	•	•	•	•	•
50		•	•	•	•	•	•
75		•	•	•	•	•	•
100		-	-	-	-	•	•

PAD MATERIALS & SPECIFICATIONS

◎: Little or no influence ○: Good performance, subject to conditions ✕: Not compatible

Material	Item	Hardness HS (±5°)	Temperature range °C	Oil resistance (Gasoline)	Oil resistance (Benzol)	Alkali resistance	Acid resistance	Weatherability	Ozone resistance	Abrasion resistance	Waterproof	Solvent resistance (benzene, toluene)
NBR		50°	0 to 120	◎	✕	○	○	✕	✕	◎	○	✕
Silicon rubber		50°	-30 to 250	✕	✕	○	✕	◎	◎	✕	○	✕
Urethane rubber		60°	0 to 60	◎	✕	✕	✕	◎	◎	◎	✕	✕
Fluoro rubber		60°	0 to 250	◎	◎	✕	◎	◎	◎	○	◎	◎
EPR		50°	-20 to 150	✕	✕	◎	○	◎	◎	○	◎	✕

The above table covers only general characteristics of subject rubber materials.

Pad materials used by SMC pass nominal JIS material standards; however, actual performance depends on operating conditions.



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VERTICAL VACUUM ENTRY: WITH BUFFER



SPECIFICATIONS

Vacuum entry	Entry		Vertical	Buffer type		Without non-rotating (J)
	Connection		Male thread	Applicable	$\varnothing 40$ to $\varnothing 80$	25mm, 50mm, 75mm
	Thread dia.	$\varnothing 40, \varnothing 50$	M18x1.5	buffer stroke	$\varnothing 100, \varnothing 125$	25mm, 50mm, 75mm, 100mm
Mounting			Rc(PT)1/8			

PAD TYPE

Pad dia. (mm)	$\varnothing 40, \varnothing 50, \varnothing 63, \varnothing 80, \varnothing 100, \varnothing 125$
Material (Color)	NBR(Black), Silicon rubber(White), Urethane rubber(Brown), Fluoro rubber(Black with mark (F)), EPR(Black with mark (E))
Hardness	NBR, Silicon rubber, EPR:50° Urethane rubber, Fluoro rubber:60°

HOW TO ORDER

ZPT **H** **J** - **B01** -

PAD DIA. (MM)

- 40 ... $\varnothing 40$
- 50 ... $\varnothing 50$
- 63 ... $\varnothing 63$
- 80 ... $\varnothing 80$
- 100 ... $\varnothing 100$
- 125 ... $\varnothing 125$

PAD TYPE

- H Heavy Duty Pad
- HB Heavy Duty Large Type Bellows Pad

MATERIAL

- N NBR
- S Silicon rubber
- U Urethane rubber
- F Fluoro rubber
- E EPR

MOUNTING THREAD

- A18 ... M18x1.5 ($\varnothing 40$ to $\varnothing 80$)
- A22 ... M22x1.5 ($\varnothing 100, \varnothing 125$)

VACUUM ENTRY

- B01 ... Rc(PT)1/8

APPLICABLE BUFFER STROKE (WITHOUT NON-ROTATING)

Stroke	$\varnothing 40$	$\varnothing 50$	$\varnothing 63$	$\varnothing 80$	$\varnothing 100$	$\varnothing 125$
25
50
75
100	-	-	-	-	.	.

Spring Force ($\varnothing 40$ to $\varnothing 80$)

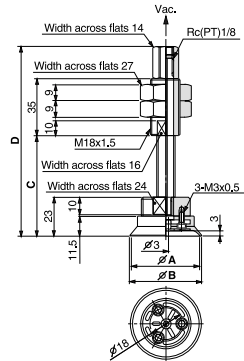
First Mounting Load	6.9N (0.70kgf)
Second Mounting Load	11.8N (1.20kgf)

Spring Force ($\varnothing 100$ to $\varnothing 125$)

First Mounting Load	10N (1kgf)
Second Mounting Load	15N (1.5kgf)

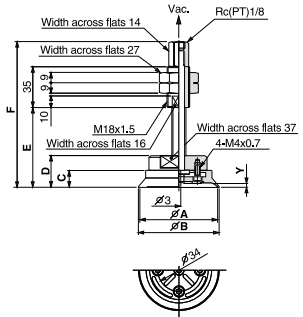
DIMENSIONS

ZPT ⁴⁰/₅₀ H J -B01-A18 (With buffer)



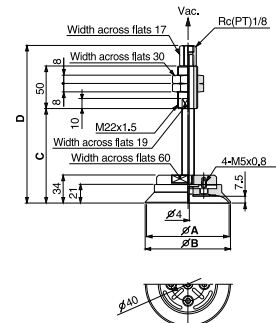
Model	$\varnothing A$	$\varnothing B$	C	D
ZPT40H J25-B01-A18	40	42	63	118.5
ZPT40H J50-B01-A18	40	42	98	153.5
ZPT40H J75-B01-A18	40	42	134	189.5
ZPT50H J25-B01-A18	50	52	63	118.5
ZPT50H J50-B01-A18	50	52	98	153.5
ZPT50H J75-B01-A18	50	52	134	189.5

ZPT ⁶³/₈₀ H J -B01-A18 (With buffer)



Model	$\varnothing A$	$\varnothing B$	C	D	E	F	Y
ZPT63H J25-B01-A18	63	65	14.5	26	66	121.5	3.5
ZPT63H J50-B01-A18	63	65	14.5	26	101	156.5	3.5
ZPT63H J75-B01-A18	63	65	14.5	26	137	192.5	3.5
ZPT80H J25-B01-A18	80	83	16.5	28	68	123.5	4.5
ZPT80H J50-B01-A18	80	83	16.5	28	103	158.5	4.5
ZPT80H J75-B01-A18	80	83	16.5	28	139	194.5	4.5

ZPT ¹⁰⁰/₁₂₅ H J -B01-A22 (With buffer)



Model	$\varnothing A$	$\varnothing B$	C	D
ZPT100H J25-B01-A22	100	103	78	152
ZPT100H J50-B01-A22	100	103	114	188
ZPT100H J75-B01-A22	100	103	154	228
ZPT100H J100-B01-A22	100	103	189	263
ZPT125H J25-B01-A22	125	128	78	152
ZPT125H J50-B01-A22	125	128	114	188
ZPT125H J75-B01-A22	125	128	154	228
ZPT125H J100-B01-A22	125	128	189	263



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E807

HORIZONTAL VACUUM ENTRY:
WITHOUT BUFFER



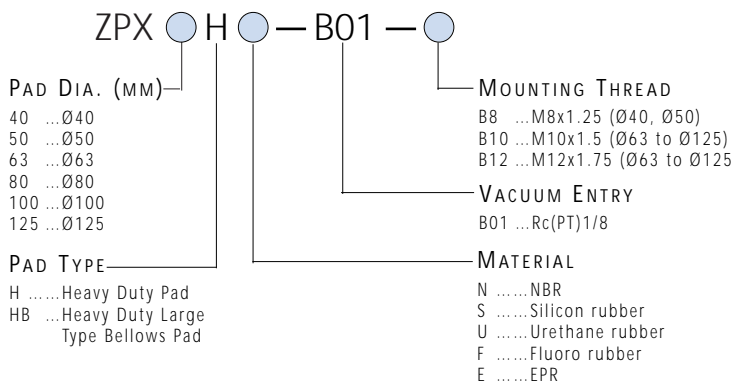
SPECIFICATIONS

Vacuum entry	Entry	Horizontal	
	Connection	Female thread	
	Thread dia.	∅40, ∅50	M8x1.25, M10x1.5
		∅63, ∅80	M10x1.5, M12x1.75
∅100, ∅125		M10x1.5, M12x1.75	
Mounting	Rc(PT)1/8		

PAD TYPES

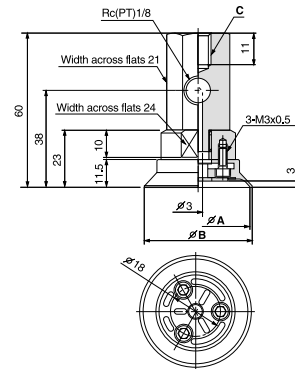
Pad dia. (mm)	∅40, ∅50, ∅63, ∅80, ∅100, ∅125
Material (Color)	NBR(Black), Silicon rubber(White), Urethane rubber(Brown), Fluoro rubber(Black with mark (F)), EPR(Black with mark (E))
Hardness	NBR, Silicon rubber, EPR:50° Urethane rubber, Fluoro rubber:60°

HOW TO ORDER



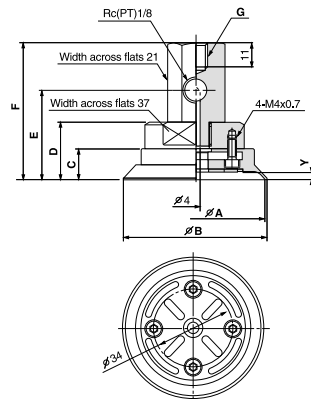
DIMENSIONS

ZPX₅₀⁴⁰H -B01-B₁₀⁶ (Female thread)



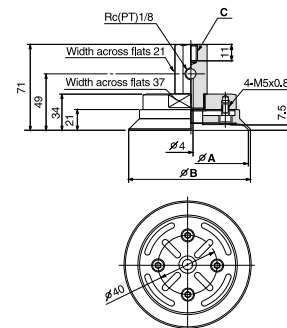
Model	∅A	∅B	C
ZPX40H -B01-B8	40	42	M8x1.25
ZPX40H -B01-B10	40	42	M10x1.5
ZPX50H -B01-B8	50	52	M8x1.25
ZPX50H -B01-B10	50	52	M10x1.5

ZPX₈₀⁶³H -B01-B₁₂¹⁰ (Female thread)



Model	∅A	∅B	C	D	E	F	Y	G
ZPX63H -B01-B10	63	65	14.5	26	41	63	3.5	M10x1.5
ZPX63H -B01-B12	63	65	14.5	26	41	63	3.5	M12x1.75
ZPX80H -B01-B10	80	82	16.5	28	43	65	4.5	M10x1.5
ZPX80H -B01-B12	80	82	16.5	28	43	65	4.5	M12x1.75

ZPX₁₂₅¹⁰⁰H -B01-B₁₂¹⁰ (Female thread)



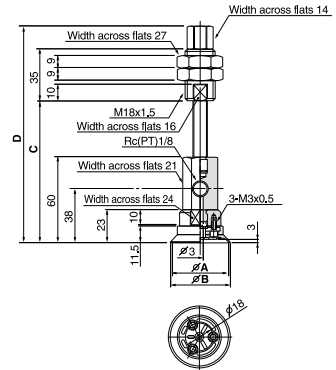
Model	∅A	∅B	C
ZPX100H -B01-B10	100	103	M10x1.5
ZPX100H -B01-B12	100	103	M12x1.75
ZPX125H -B01-B10	125	128	M10x1.5
ZPX125H -B01-B12	125	128	M12x1.75

HORIZONTAL VACUUM ENTRY: WITH BUFFER



DIMENSIONS

ZPX⁴⁰₅₀ H J -B01-A18 (With buffer)



Model	∅A	∅B	C	D
ZPX40H J25-B01-A18	40	42	100	151
ZPX40H J50-B01-A18	40	42	135	186
ZPX40H J75-B01-A18	40	42	171	222
ZPX50H J25-B01-A18	50	52	100	151
ZPX50H J50-B01-A18	50	52	135	186
ZPX50H J75-B01-A18	50	52	171	222

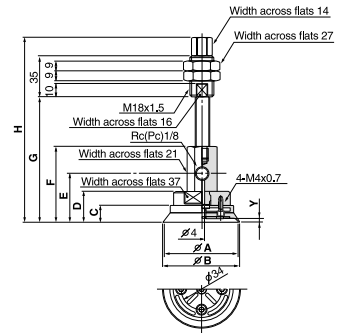
SPECIFICATIONS

Vacuum entry	Entry	Horizontal	Buffer type		Without non-rotating (J)
	Connection	Male thread		Applicable	∅40 to ∅80
Thread dia.	∅40, ∅50	M18x1.5	buffer stroke	∅100, ∅125	25mm, 50mm, 75mm, 100mm
	∅63, ∅80	M18x1.5			
	∅100, ∅125	M22x1.5			
Mounting		Rc(PT)1/8			

PAD TYPES

Pad dia. (mm)	∅40, ∅50, ∅63, ∅80, ∅100, ∅125
Material (Color)	NBR(Black), Silicon rubber(White), Urethane rubber(Brown), Fluoro rubber(Black with mark (F)), EPR(Black with mark (E))
Hardness	NBR, Silicon rubber, EPR:50° Urethane rubber, Fluoro rubber:60°

ZPX⁶³₈₀ H J -B01-A18 (With buffer)



Model	∅A	∅B	C	D	E	F	G	H	Y
ZPX63H J25-B01-A18	63	65	14.5	26	41	63	103	154	3.5
ZPX63H J50-B01-A18	63	65	14.5	26	41	63	136	189	3.5
ZPX63H J75-B01-A18	63	65	14.5	26	41	63	172	225	3.5
ZPX80H J25-B01-A18	80	82	16.5	28	43	65	105	156	4.5
ZPX80H J50-B01-A18	80	82	16.5	28	43	65	138	191	4.5
ZPX80H J75-B01-A18	80	82	16.5	28	43	65	174	227	4.5

HOW TO ORDER

ZPX ● H ● J ● - B01 - ●

PAD DIA. (MM)
 40 ...∅40
 50 ...∅50
 63 ...∅63
 80 ...∅80
 100 ...∅100
 125 ...∅125

PAD TYPE
 H Heavy Duty Pad
 HB Heavy Duty Large Type Bellows Pad

MATERIAL
 N NBR
 S Silicon rubber
 U Urethane rubber
 F Fluoro rubber
 E EPR

MOUNTING THREAD
 A18 ... M18x1.5 (∅40 to ∅80)
 A22 ... M22x1.5 (∅100, ∅125)

VACUUM ENTRY
 B01 ... Rc(PT)1/8

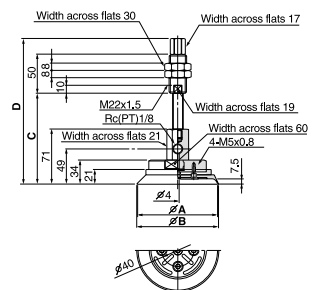
APPLICABLE BUFFER STROKE (WITHOUT NON-ROTATING)

Stroke	∅40	∅50	∅63	∅80	∅100	∅125
25	•	•	•	•	•	•
50	•	•	•	•	•	•
75	•	•	•	•	•	•
100	-	-	-	-	•	•

Spring Force (∅40 to ∅80)	
First Mounting Load	6.9N (0.70kgf)
Second Mounting Load	11.8N (1.20kgf)

Spring Force (∅100 to ∅125)	
First Mounting Load	10N (1kgf)
Second Mounting Load	15N (1.5kgf)

ZPX¹⁰⁰₁₂₅ H J -B01-A22 (With buffer)



Model	∅A	∅B	C	D
ZPX100H J25-B01-A22	100	103	115	186
ZPX100H J50-B01-A22	100	103	151	222
ZPX100H J75-B01-A22	100	103	191	262
ZPX100H J100-B01-A22	100	103	226	297
ZPX125H J25-B01-A22	125	128	115	186
ZPX125H J50-B01-A22	125	128	151	222
ZPX125H J75-B01-A22	125	128	191	262
ZPX125H J100-B01-A22	125	128	226	297



SEE INSIDE FRONT COVER FOR
DETAILS OF YOUR LOCAL SALES OFFICE

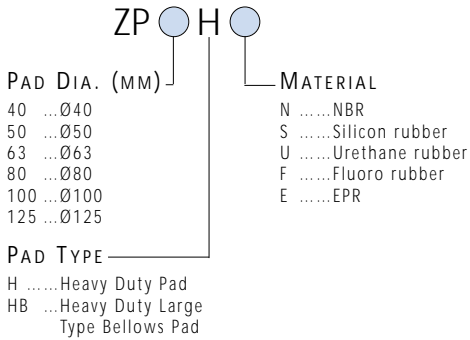


FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E807

REPLACEABLE PARTS:
PAD UNITS

TECHNICAL
SPECIFICATIONS
WEIGHT TABLE

HOW TO
ORDER



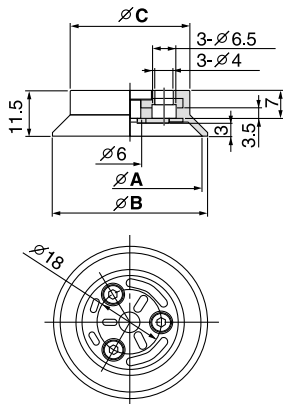
NBR		Other materials (g)				
Part number	Weight (g)	Pad dia.	Silicon	Urethan	Fluoro	EPR
ZP40HN	15	Ø40	-1	0	5	-1
ZP50HN	27	Ø50	-1	0	8	0
ZP63HN	57	Ø63	-2	0	16	0
ZP80HN	86	Ø80	-3	1	27	-1
ZP100HN	160	Ø100	-5	1	53	-1
ZP125HN	224	Ø125	-8	3	84	0

*Add NBR weight to the above table for other material.

Contact SMC Regional offices for details of Bellows Pads

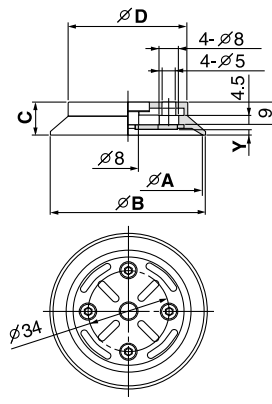
DIMENSIONS

ZP 40 H
50 H



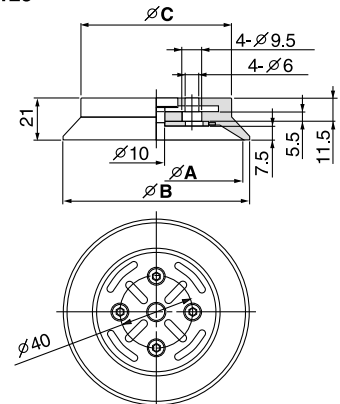
Model	ØA	ØB	ØC
ZP40H	40	42	32
ZP50H	50	52	42

ZP 63 H
80 H



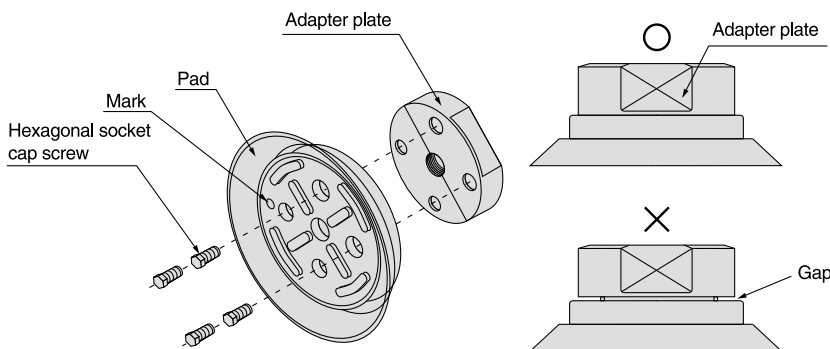
Model	ØA	ØB	C	D	Y
ZP63H	63	65	14.5	54	3.5
ZP80H	80	82	16.5	68	4.5

ZP 100 H
125 H



Model	ØA	ØB	ØC
ZP100H	100	103	80
ZP125H	125	128	104

How to Assemble/Disassemble



Remove bolts with a hex. key wrench from the pad underside.
Tighten new pad with the bolts ensuring there is no gap
between the adapter plate and the pad.

How to Distinguish Different Pad Materials

Check the mark on the pad's interior surface as shown in the figure on the left.

Material	Color	Mark
NBR	Black	—
Silicon rubber	White	—
Urethane rubber	Brown	—
Fluoro rubber	Black	ⓕ
EPR	Black	ⓔ



FOR FURTHER TECHNICAL
DETAILS ON THIS
PRODUCT REQUEST
CATALOGUE REFERENCE
E807