

## Replacement Parts: Pad Unit (With lock ring/Without lock ring)

### How to Order Pad Unit

**ZP 10 U N X19**

• Pad dia. (mm)

02	ø2
04	ø4
06	ø6
08	ø8
10	ø10
13	ø13
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

• Lock ring

Nil	With lock ring
-X19	Without lock ring (ø10 or larger)

• 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.

• Pad type

U	Flat
C	Flat with ribs
D	Deep
B	Bellows

### How to Order Lock Ring Unit

**ZPL 1**

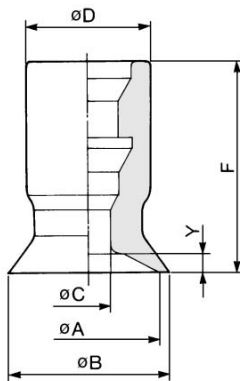
• Applicable pad dia. (mm)

1	ø10 to ø16
2	ø20 to ø32
3	ø40, ø50

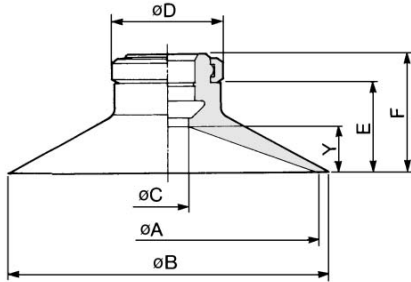
- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

#### Flat (U)

ZP02U□ to 08U□



ZP10U□ to 50U□

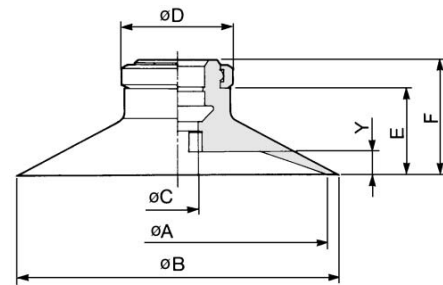


Model	Size	øA	øB	øC	øD	E	F	Y
ZP02U□	U02	2	2.6	1.2	7	—	12	0.8
ZP04U□	U04	4	4.8	1.6	7	—	12	0.8
ZP06U□	U06	6	7	2.5	7	—	12	0.8
ZP08U□	U08	8	9	2.5	7	—	12	1
ZP10U□	U10	10	12	4	13	7.7	12	3
ZP13U□	U13	13	15	4	13	7.7	12	3
ZP16U□	U16	16	18	4	13	8.2	12.5	3.5
ZP20U□	U20	20	23	4	15	9.5	14	4
ZP25U□	U25	25	28	4	15	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

\* Put in the symbol for material at the end of model no.

#### Flat with ribs (C)

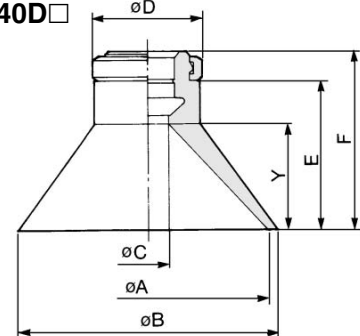
ZP10C□ to 50C□



Model	Size	øA	øB	øC	øD	E	F	Y
ZP10C□	C10	10	12	4	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	3.8

#### Deep (D)

ZP10D□ to 40D□

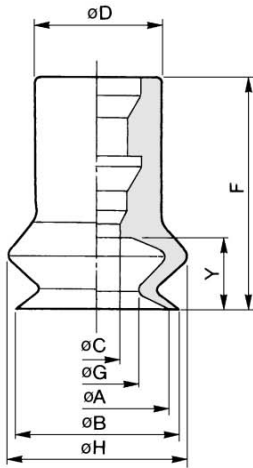


Model	Size	øA	øB	øC	øD	E	F	Y
ZP10D□	D10	10	12	4	13	10.7	15	6
ZP16D□	D16	16	18	4	13	11.7	16	7
ZP25D□	D25	25	28	4	15	15.5	20	10
ZP40D□	D40	40	43	7	18	24.2	29	17

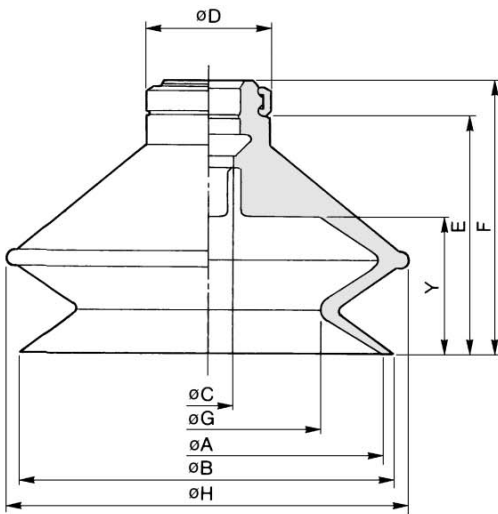
## Replacement Parts: Pad Unit (With lock ring/Without lock ring)

### Bellows (B)/With Lock Ring

Pad diameter:  $\phi 6$  to  $\phi 8$   
ZP06B□ to 08B□



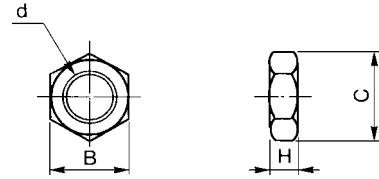
Pad diameter:  $\phi 10$  to  $\phi 50$   
ZP10B□ to 50B□



Model	Size	$\phi A$	$\phi B$	$\phi C$	$\phi D$	E	F	$\phi G$	$\phi H$	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	12.4	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

\* Put in the symbol for material at the end of model no.

### Buffer Mounting Nut



Model	d	H	B	C
NTJ-015A	M5 x 0.8	4	8	9.2
SNJ-006A	M6 x 1	3	8	9.2
SNJ-010A	M8 x 1	3	12	13.9
SNJ-015A	M10 x 1	3	14	16.2
SN-015A	M14 x 1	5	19	21.9

**Replacement Parts: Pad Unit (With lock ring/Without lock ring)**

**How to Order/Pad Unit**

Thin flat (UT), Thin flat with ribs (CT)

ZP 10 UT N

**Pad diameter**

10	ø10
13	ø13
16	ø16

**Material**

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

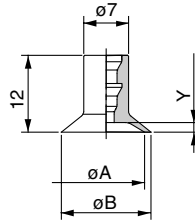
**Pad type**

UT	Thin flat
CT	Thin flat with ribs

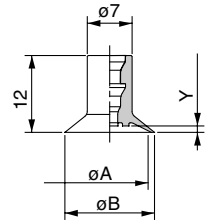
**Dimensions**

Thin flat

Thin flat with ribs



ZP□□UT□□



ZP□□CT□□

**Dimensions (mm)**

Model	A	B	Y
ZP10UT□□	10	11	1
ZP13UT□□	13	14	1.5
ZP16UT□□	16	17	1.5

**Dimensions (mm)**

Model	A	B	Y
ZP10CT□□	10	11	0.8
ZP13CT□□	13	14	1
ZP16CT□□	16	17	1

**Elliptic**

ZP 2004 U N

**Pad diameter**

2004	2 x 4 (Breadth x Length)
3507	3.5 x 7
4010	4 x 10

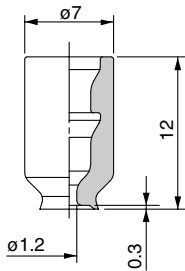
**Material**

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

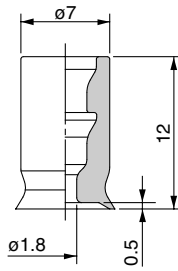
**Pad type**

U	Flat
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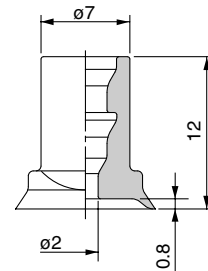
**Dimensions**



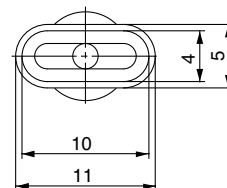
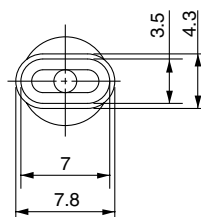
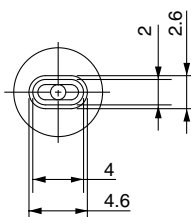
ZP2004U□□



ZP3507U□□



ZP4010U□□

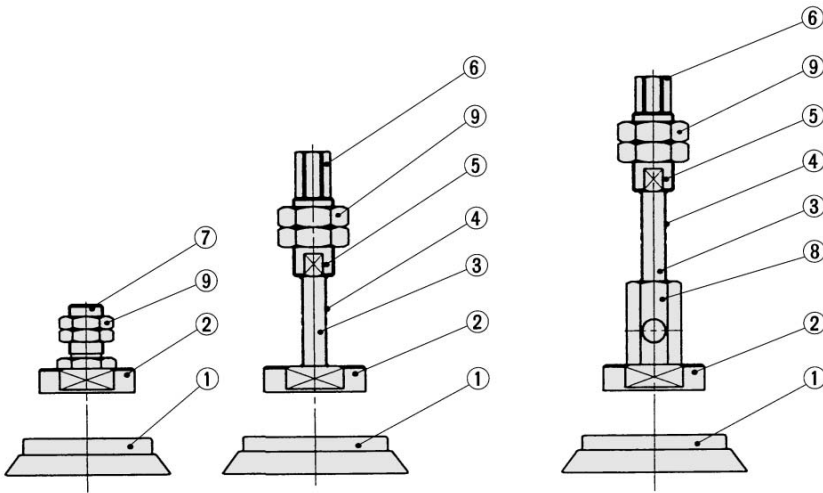


- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

## Construction

### Series ZPT

### Series ZPX



### Component Parts

No.	Description	Material	Surface treatment
①	Pad	NBR, Silicone rubber, Urethane rubber, Fluoro rubber, EPR	—
②	Adapter plate	Aluminum	—
③	Piston rod	Carbon steel	Hard chrome plated
④	Spring	Stainless steel	—
⑤	Buffer body	Aluminum	—
⑥	Buffer adaptor	Brass	Electroless nickel plated
⑦	Adaptor A	Brass	Electroless nickel plated
⑧	X type adaptor	Brass	Electroless nickel plated
⑨	Mounting nut	Rolled steel	Black zinc chromated

## Replacement Parts/Pad Unit

### How to Order Pad Unit

**ZP 40 H N**

Pad dia. (mm) | Material

40	ø40	N	NBR
50	ø50	S	Silicon rubber
63	ø63	U	Urethane rubber
80	ø80	F	Fluoro rubber
100	ø100	E	EPR
125	ø125		

Pad type: H Heavy duty

### Pad Unit Weight

(NBR)

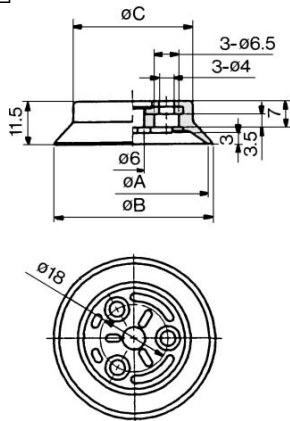
Model	Weight (g)
ZP40HN	15
ZP50HN	27
ZP63HN	57
ZP80HN	86
ZP100HN	160
ZP125HN	224

Add NBR weight to the table on the right for other materials.

Pad dia.	(g)			
	Silicon rubber	Urethane rubber	Fluoro rubber	EPR
ø40	-1	0	5	-1
ø50	-1	0	8	0
ø63	-2	0	16	0
ø80	-3	1	27	-1
ø100	-5	1	53	-1
ø125	-8	3	84	0

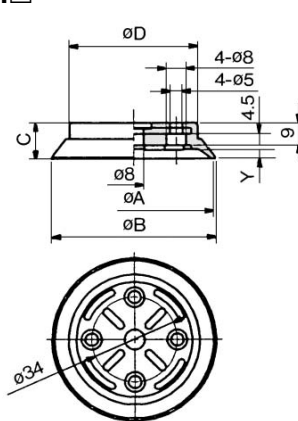
## Dimensions

### ZP<sub>50</sub><sup>40</sup>H□



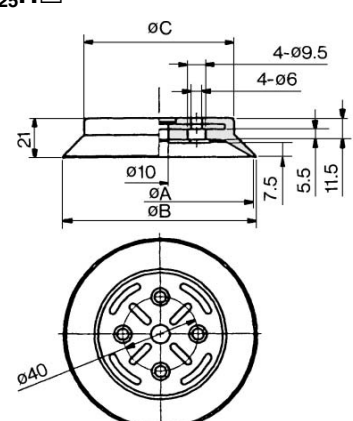
Model	øA	øB	øC
ZP40H□	40	42	32
ZP50H□	50	52	42

### ZP<sub>80</sub><sup>63</sup>H□



Model	øA	øB	C	D	Y
ZP63H□	63	65	14.5	50	3.5
ZP80H□	80	82	16.5	61	4.5

### ZP<sub>125</sub><sup>100</sup>H□



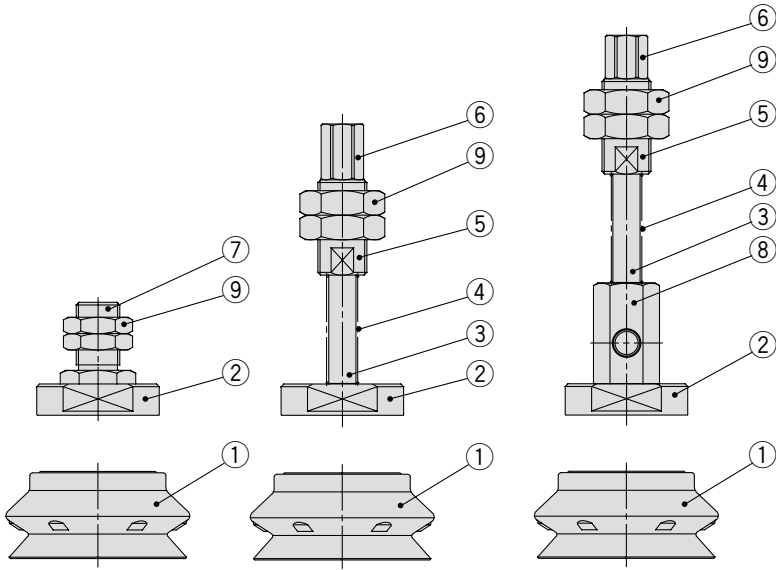
Model	øA	øB	øC
ZP100H□	100	103	80
ZP125H□	125	128	104

# Vacuum Pad: Large Size Bellows Type Vertical Vacuum Entry with Buffer Series ZPT/ZPX

## Construction

Series ZPT

Series ZPX



Component Parts

No.	Description	Material	Surface treatment
①	Pad	NBR, Silicone rubber, Urethane rubber, Fluoro rubber, EPR	—
②	Adapter plate	Aluminum	—
③	Piston rod	Carbon steel	Hard chrome plated
④	Spring	Stainless steel	—
⑤	Buffer body	Aluminum	—
⑥	Buffer adaptor	Brass	Electroless nickel plated
⑦	Adaptor A	Brass	Electroless nickel plated
⑧	X type adaptor	Brass	Electroless nickel plated
⑨	Mounting nut	Rolled steel	Black zinc chromated

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

## Replacement Parts/Pad Unit

### How to Order

**ZP 40 HB N**

Pad diameter (mm)

40	ø40
50	ø50
63	ø63
80	ø80
100	ø100
125	ø125

Material

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

Pad type  
**HB** Large bellows pad

### Weight

NBR

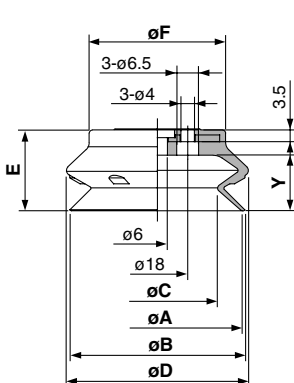
Model	Weight
ZP 40HBN	17
ZP 50HBN	33
ZP 63HBN	63
ZP 80HBN	103
ZP100HBN	206
ZP125HBN	390

Add NBR weight to below table for other materials.

Pad dia.	Silicon rubber	Urethane rubber	Fluoro rubber	EPR
ø40	-1	+1	+10	0
ø50	-2	+1	+19	0
ø63	-3	+2	+37	0
ø80	-6	+2	+61	0
ø100	-12	+4	+121	-1
ø125	-22	+7	+228	-3

## Dimensions

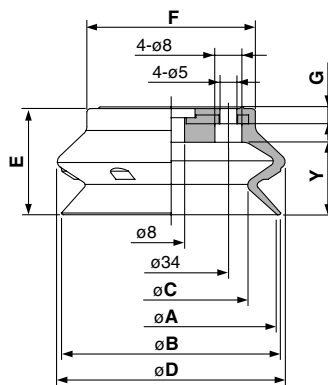
ZP<sub>50</sub><sup>40</sup>HB□



Dimensions (mm)

Model	A	B	C	D	E	F	Y
ZP40HB□	40	41.4	28.4	43.2	20.5	30	13
ZP50HB□	50	51.9	35.7	54	24	40.5	16.5

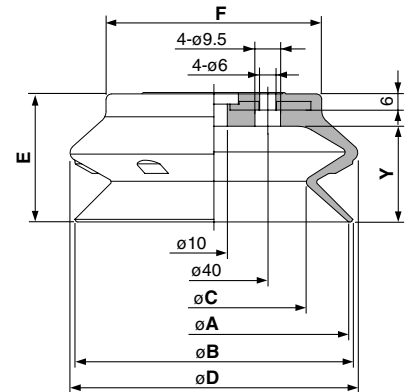
ZP<sub>80</sub><sup>63</sup>HB□



Dimensions (mm)

Model	A	B	C	D	E	F	G	Y
ZP63HB□	63	65.1	45.5	67.6	31.5	50	4.5	21.5
ZP80HB□	80	83	58.4	85.1	37	64	5	27.5

ZP<sub>125</sub><sup>100</sup>HB□



Dimensions (mm)

Model	A	B	C	D	E	F	Y
ZP100HB□	100	103.1	68.6	106.7	47.5	80	35.5
ZP125HB□	125	128.5	88.6	135	56	105	44

# Series ZPT/ZPR Replacement Parts

## Pad, Individual Unit

### How to Order

ZP 10 F GN

Pad diameter (mm)

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

Material

N	NBR
S	Silicon rubber
U	Urethane rubber
F	Fluoro rubber
GN <sup>+</sup>	Conductive NBR
GS <sup>+</sup>	Conductive silicon rubber

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

Pad type

F	Ball joint type
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## Lock Ring, Individual Unit

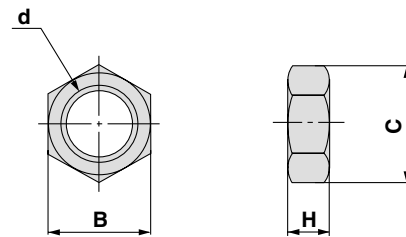
### How to Order

ZPL F

For ball joint type (ø40, ø50)

## Mounting Nut

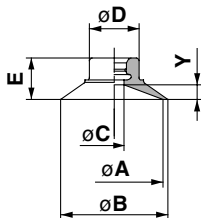
### Dimensions



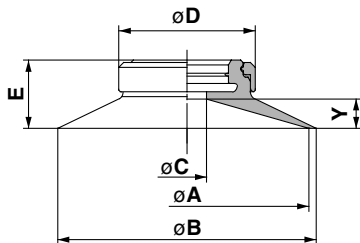
Note) Pads are exclusively ball joint type and are not interchangeable with other pads.

## Dimensions

### Ball joint type: ø10 to 32



### Ball joint type: ø40, ø50



(mm)

Model	A	B	C	D	E	Y	
ZP10F□□	10	12	3	8.2	6.5	1.5	
ZP13F□□	13	15			7	2	
ZP16F□□	16	18			8.5	3	
ZP20F□□	20	22	4	10.2	9	5	
ZP25F□□	25	28			13		
ZP32F□□	32	35	8	28	14	6	
ZP40F□□	40	43			10	13	5
ZP50F□□	50	53			8	14	6

(mm)

Model	d	H	B	C
SNJ-015A	M10 x 1	3	14	16.2
SN-015A	M14 x 1	5	19	21.9
SNJ-010A	M8 x 1	3	12	13.9

ZX

ZR

ZM

ZH

ZU

ZL

ZY

ZQ

ZF

ZP

ZCU

AMJ

Misc.

**Replacement Parts: Pad Unit (With lock ring/Without lock ring)**

**How to Order/Pad Unit**

Thin flat (UT), Thin flat with ribs (CT)

ZP 10 UT N

Pad diameter ●

10	φ10
13	φ13
16	φ16

● Material

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

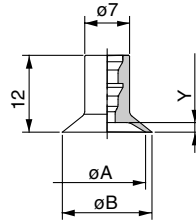
Pad type ●

UT	Thin flat
CT	Thin flat with ribs

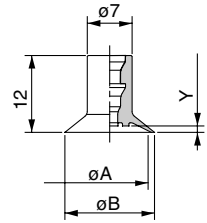
**Dimensions**

Thin flat

Thin flat with ribs



ZP□□UT□□



ZP□□CT□□

Dimensions (mm)

Model	A	B	Y
ZP10UT□□	10	11	1
ZP13UT□□	13	14	1.5
ZP16UT□□	16	17	1.5

Dimensions (mm)

Model	A	B	Y
ZP10CT□□	10	11	0.8
ZP13CT□□	13	14	1
ZP16CT□□	16	17	1

Elliptic

ZP 2004 U N

Pad diameter ●

2004	2 x 4 (Breadth x Length)
3507	3.5 x 7
4010	4 x 10

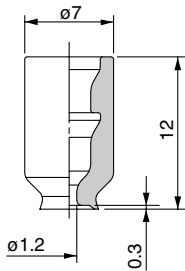
● Material

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

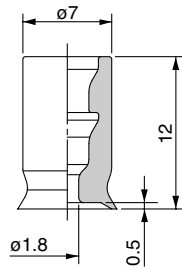
Pad type ●

U	Flat
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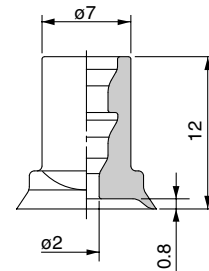
**Dimensions**



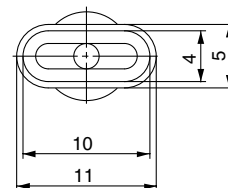
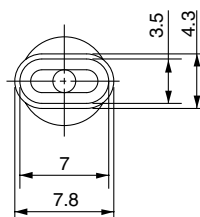
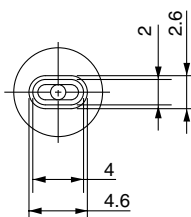
ZP2004U□□



ZP3507U□□



ZP4010U□□



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