

Setting screw

Model	TN-PK2-30-M10	Mass	14.4 g
Applicable suction cups			
PK2-30-T			
PK2-50-T			

Model	TN-PK2-40-M10	Mass	15.3 g
Applicable suction cups			
PK2-40-T			

Model	TN-PK2L-M8	Mass	5.7g
Applicable suction cups			
TN-PK2L-100x40-T			

Model	TN-PK2-40-M6	Mass	14.2 g
Applicable suction cups			
PK2-40-T			

Model	TN-PK2L-M6	Mass	4.5g
Applicable suction cups			
PK2L-60X20-T			
PK2L-80X30-T			

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No. 8Z28

High durability ecology cup
(Flat type, Bellows type, Oval type)

CONVUM

PK2 PK2B
PK2L
series



NEW

High durability

Follows to curved surface

Anti-slip Pattern

ECO Light weight

Narrow workpieces

Sakura Cup

RoHS

NEW High durability ecology cup
Flat type

PK2 series

Sakura
Cup



The TPU material of these cups provides high durability which reduces man-hours and costs spent replacing suction cups in the field

TPU physical characteristics comparison

Type	NBR	TPU
Hardness(A/s)	55	85
Tensile strength TB(MPa)	13.5	46
Tear strength TR(N/mm)	34.8	95
Growth EB(%)	630	570
※1 Taber abrasion loss	241	24
※2 Wear resistant	△~○	◎
※2 Aging resistance	○	○
※2 Ozone resistance	×	◎
※2 Oil resistance	○	◎

※1.JIS K7311---wear ring :H-22, load 9.8N, rotational speed:1000 rotation
※2.It's a specifications excerpt of each company, not comparison of NBR and TPU.

Wear resistant 10 times longer than conventional material (※10 times less than NBR on the list of *1 Taper abrasion loss)

Oil resistance Excellent resistance against mineral oil, vegetable oil

Weather resistance Excellent resistance against ozone, long life circle

NEW High durability ecology cup
Bellows type

PK2B series



More flexible lip to follow curved surface than flat type

Suitable for handling a wide range of workpiece shapes



Flat type

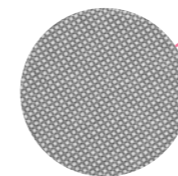


Bellows type

Follows to curved surface

Mesh filter to avoid getting foreign objects can be selected

Level is marked on the suction cup.



Mesh filter



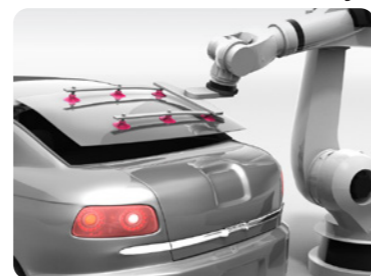
It instructs the height of suction cups as a guide

Filter to prevent foreign objects

The flexible lip of the PK2 series can follow a wide array of curved surfaces and objects

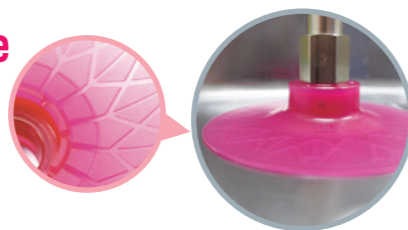


Application automotive industry



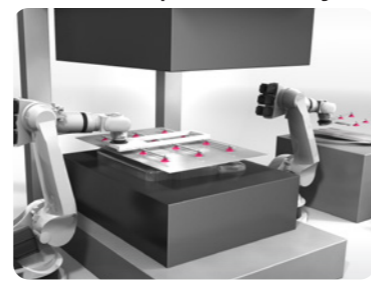
Due to high durability, less replacement and running cost.

Patterned cup surface prevents sideslip on workpieces with an oily surface



- Sheet metal and other work pieces with the oily surface can be picked up and transported.
- Bellows type and oval type can be installed!

Application press industry



NEW High durability ecology cup
Oval type

PK2L series



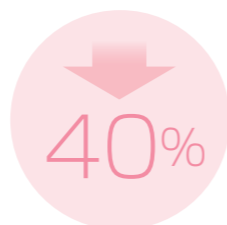
Suitable for handling long and narrow workpiece shapes (Flame • Pipe, etc.)



Narrow workpieces

40% lighter compared to PKMG series (NBR).

- Compatible with PKMG series.
- No need to separate rubbish as the cup is without metal shaft. →Eco - friendly



High durability

Follows to curved surface

Anti-slip Pattern

ECO Light weight

PK2

High durability ecology cup
Flat type

How to order

PK2 - 15 - T

①

① Cup diameter (mm)

Symbol	Cup diameter	Symbol	Cup diameter
10	φ10	50	φ50
15	φ15	60	φ60
20	φ20	80	φ80
25	φ25	100	φ100
30	φ30	120	φ120
40	φ40	150	φ150

Cup material
TPU



Cup material standard specifications

Symbol	Material	Hardness (A/s)	Ambient temperature (°C)	Color
T	TPU	85	-10 ~ 70	Semi-transparent pink

※ Material of insert for more than φ60 cup diameters is PA

Cup standard specifications

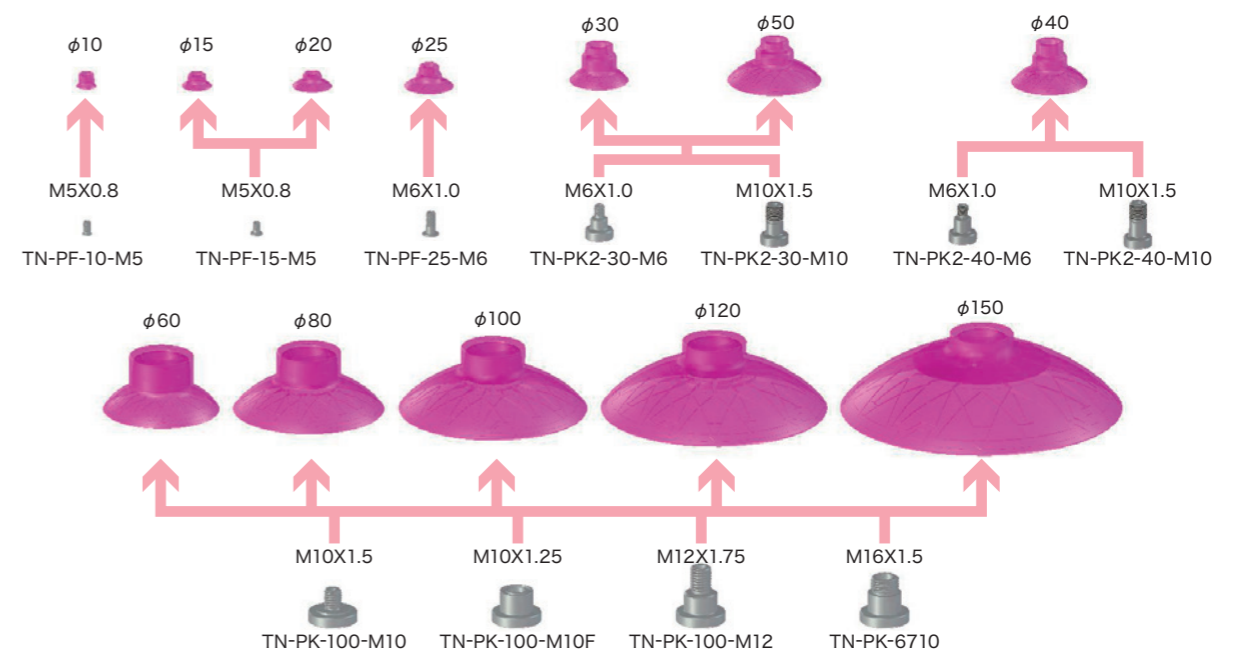
Model	Mass (g)	Minimum radius of curvature of workpieces (mm)	Maximum expansion amount of cup diameter (mm)
PK2-10-T	0.2	8	10.9
PK2-15-T	0.3	12.5	16.6
PK2-20-T	0.5	15	21.7
PK2-25-T	1.2	20	26.8
PK2-30-T	3.2	16	37
PK2-40-T	5.1	20	47.8
PK2-50-T	6.8	25	58.5
PK2-60-T	18	31	70.9
PK2-80-T	25	35	91
PK2-100-T	37.2	45	112.5
PK2-120-T	57.7	55	136.1
PK2-150-T	100	75	169.8

Applicable setting screws list·screw specifications

Setting screw model	Specifications	Tightening torque (N·m)	Material	Applicable cup diameter (φ mm)														
				10	15	20	25	30	40	50	60	80	100	120	150			
TN-PF-10-M5	M5X0.8 Male screw	-	Brass	○														
TN-PF-15-M5		-			○	○												
TN-PF-25-M6		-					○											
TN-PK2-30-M6	M6X1.0 Male screw	5	Stainless steel					○		○								
TN-PK2-40-M6								○										
TN-PK2-30-M10									○		○							
TN-PK2-40-M10	M10X1.5 Male screw	12.5	Stainless steel							○								
TN-PK-100-M10												○	○	○	○	○	○	○
TN-PK-100-M10F				M10X1.25 Female screw	-	Carbon steel												
TN-PK-100-M12	M12X1.75 Male screw	21																
TN-PK-6710	M16X1.5 Male screw	38.5																

※ Myotoku standard fitting set is mountable. Please refer to the details in the list below.

Assembly picture for suction cup·setting screw



Applicable fitting set list (Please screw the suction cup directly to the fittings.)

PK2 model	Setting screw	Applicable fitting set			Recommended torque (N·m)
		Fixed fitting	Spring fitting	Spring fitting with non-rotation	
PK2-10-T	TN-PF-10-M5		NAPCOS-10-3-K (-T/O)	NAPCOH-10-3-K (-T/O)	-
PK2-15-T	TN-PF-15-M5	PFOK-15-K	NAPCOS-10-10-K (-T/O)	NAPCOH-10-10-K (-T/O)	
PK2-20-T			NAPCOS-10-15-K (-T/O)	NAPCOH-10-15-K (-T/O)	
PK2-30-T	TN-PK2-30-M6		NAPFOS-20B-6-K (-T/O)	NAPFOH-20B-6-K (-T/O)	5
PK2-40-T	TN-PK2-40-M6	PFOK-25-K	NAPFOS-20B-15-K (-T/O)	NAPFOH-20B-15-K (-T/O)	
PK2-50-T	TN-PK2-30-M6		NAPFOS-20B-30-K (-T/O)	NAPFOH-20B-30-K (-T/O)	
PK2-60-T					12.5
PK2-80-T					
PK2-100-T	TN-PK-100-M10F	PFOK-60-K	NAPFOS-60-10-K	None	
PK2-120-T			NAPFOS-60-30-K		
PK2-150-T			NAPFOS-60-50-K		

※ ○ indicates the vacuum port type. (T=top port, Y=side port)

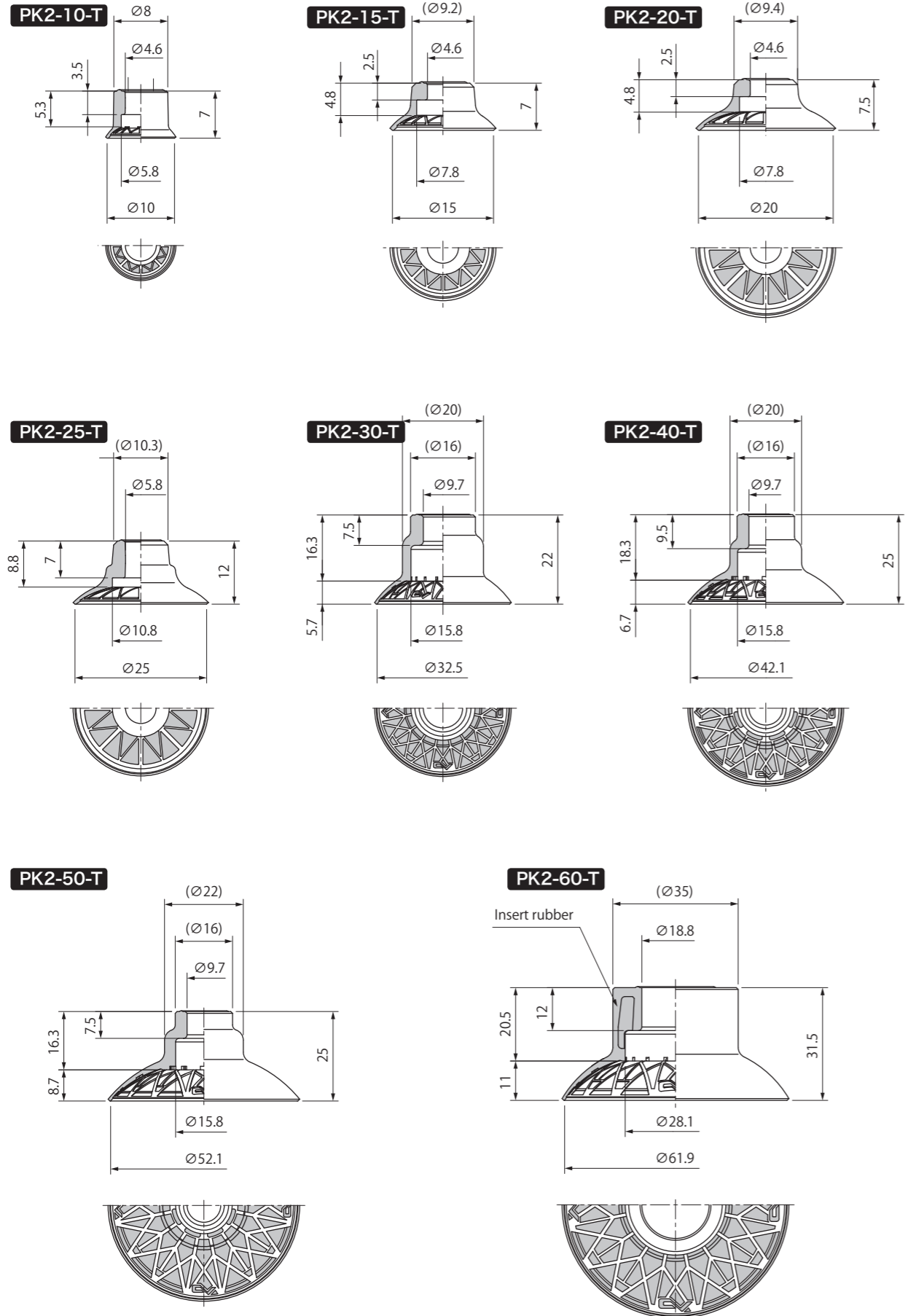
※ The recommended torque is only for metal-to-metal tightening.



Assembly with fitting

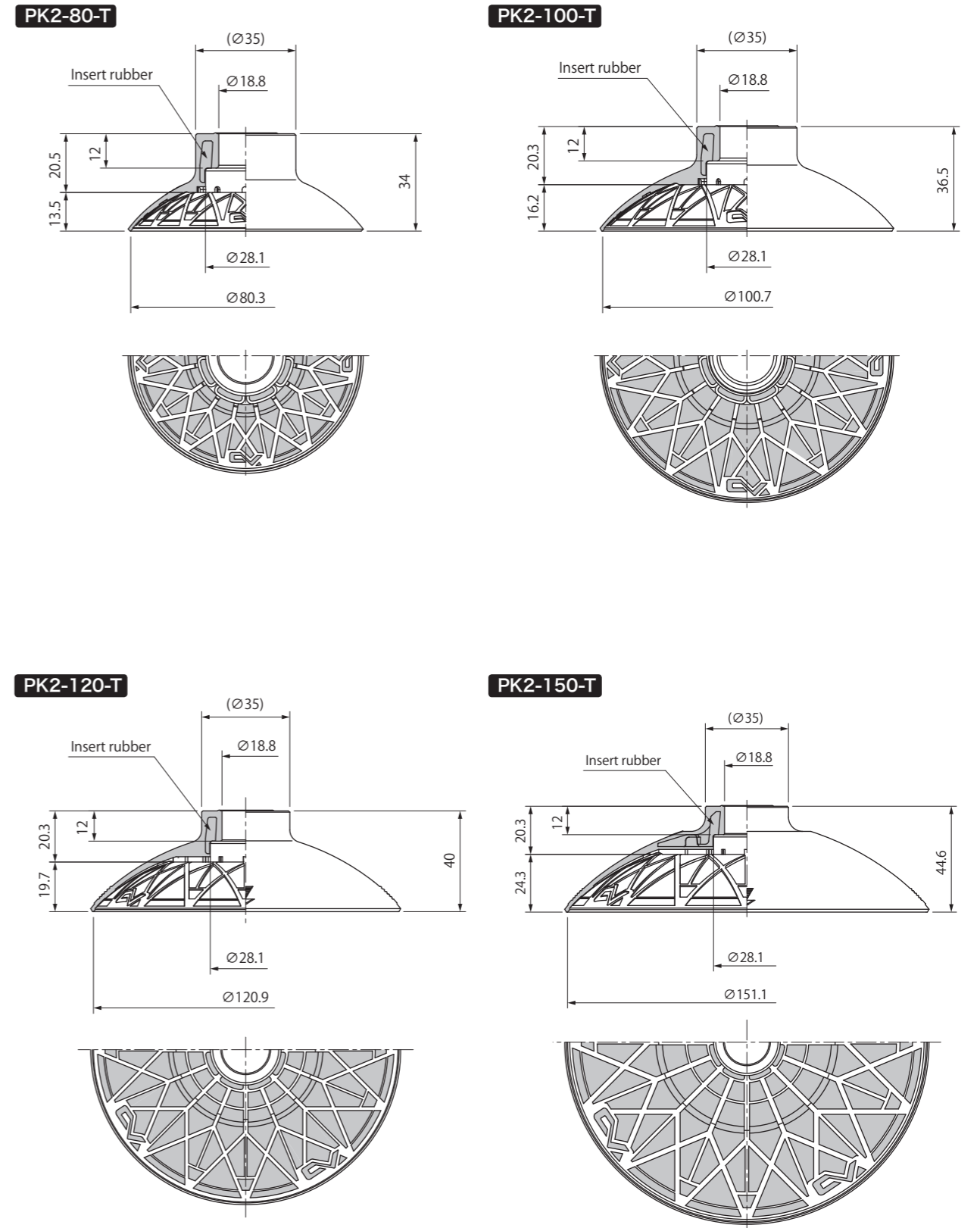
Dimensions

(mm)



Dimensions

(mm)



PK2B

High durability ecology cup
Bellows type



How to order

PK2B — 60 — T — M10 — F

① Cup diameter (mm)

Symbol	Cup diameter
10	φ 10
20	φ 20
30	φ 30
40	φ 40
60	φ 60
80	φ 80
100	φ 100
120	φ 120
150	φ 150

Cup material
TPU

② Screw specifications

Symbol	Size	Applicable suction cup list
M5	M5X0.8 Male screw	φ 10
M6	M6X1.0 Male screw	φ 20,30,40
M10	M10X1.5 Male screw	φ 40,60,80,100,120,150
M12	M12X1.75 Male screw	φ 40,60,80,100,120,150
M16	M16X1.5 Male screw	φ 40,60,80,100,120,150
G1	G1/8 Male screw	φ 20,30
G2	G1/4 Male screw	φ 40,60,80
M10F	M10X1.25 Female screw	φ 60,80,100,120,150

③ Filter

Blank	Without
F	With

※ φ 10, 20, 30 is without filter (Blank) only

Note 1) PK2B is assembly of screw and suction cup.
Note 2) The screw and suction cup is fixed with glue and cannot be taken off.
Note 3) We don't sell the filter only.

Suction cup material standard specifications

Symbol	Material	Hardness (A/s)	Ambient temperature (°C)	Color
T	TPU	85	-10 ~ 70	Semi-transparent pink

※Insert material is aluminum.

Fitting specifications

Cup diameter	φ 10		φ 20,30		φ 40, 60, 80, 100, 120, 150				
	M5X0.8 Male screw	M6X1.0 Male screw	G1/8 Male screw	M6X1.0 Male screw Note1	M10X1.5 Male screw	M12X1.75 Male screw	M16X1.5 Male screw	G1/4 Male screw Note2	M10X1.25 Female screw Note3
Tightening torque(N·m)	1.5	2.6	9.1	5	12.5	21	38.5	24.2	12.5
Material	Aluminum			Carbon steel					Aluminum
Filter	Without			SUS (MESH60) Note4					
Washer				NBR					Without

Note 1) It's used for φ 40 only.
Note 2) It's used for φ 40, φ 60, φ 80 only.
Note 3) It's used for φ 60, φ 80, φ 100, φ 120, φ 150 only.
Note 4) When selecting with filter.

Applicable fitting set list (Please screw the suction cup directly to the fittings.)

PK2 model	Applicable fitting set			Recommended torque (N·m)
	Fixed fitting	Spring fitting	Spring fitting with non-rotation	
PK2B-10-T-M5	PFOK-15-K	NAPCOS-10-3-K (-T/O)	NAPCOH-10-3-K (-T/O)	1.5
		NAPCOS-10-10-K (-T/O)	NAPCOH-10-10-K (-T/O)	
		NAPCOS-10-15-K (-T/O)	NAPCOH-10-15-K (-T/O)	
PK2B-20-T-M6	PFOK-25-K	NAPFOS-20B-6-K (-T/O) NAPFOS-20B-15-K (-T/O) NAPFOS-20B-30-K (-T/O)	NAPFOH-20B-6-K (-T/O) NAPFOH-20B-15-K (-T/O) NAPFOH-20B-30-K (-T/O)	2.6
PK2B-30-T-M6				
PK2B-40-T-M6				
PK2B-60-T-M10F	PFOK-60-K	NAPFOS-60-10-K NAPFOS-60-30-K NAPFOS-60-50-K	None	12.5
PK2B-80-T-M10F				
PK2B-100-T-M10F				
PK2B-120-T-M10F				
PK2B-150-T-M10F				

※○ indicates the vacuum port type.(T=top port, Y=side port)
※The recommended torque is only for metal-to-metal tightening.

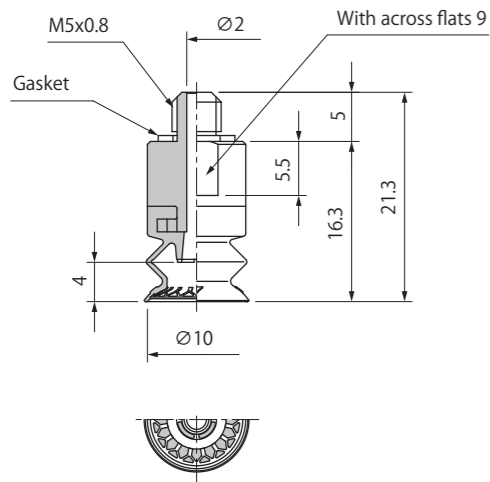


Assembly with fitting

Dimensions

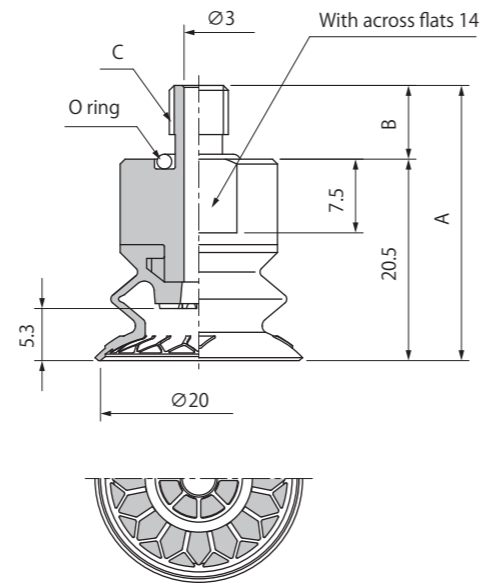
(mm)

PK2B-10



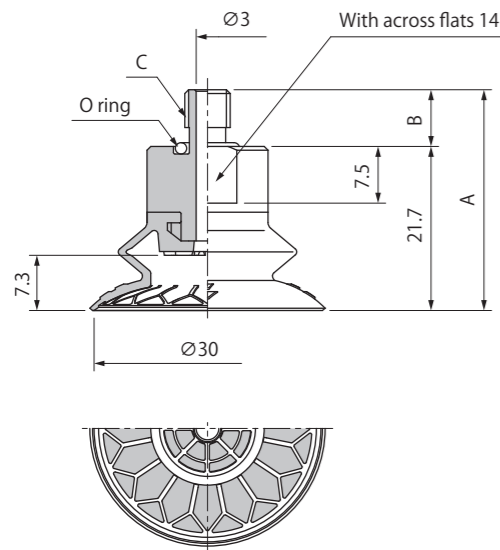
Model	Mass(g)
PK2B-10-T-M5	2.1

PK2B-20



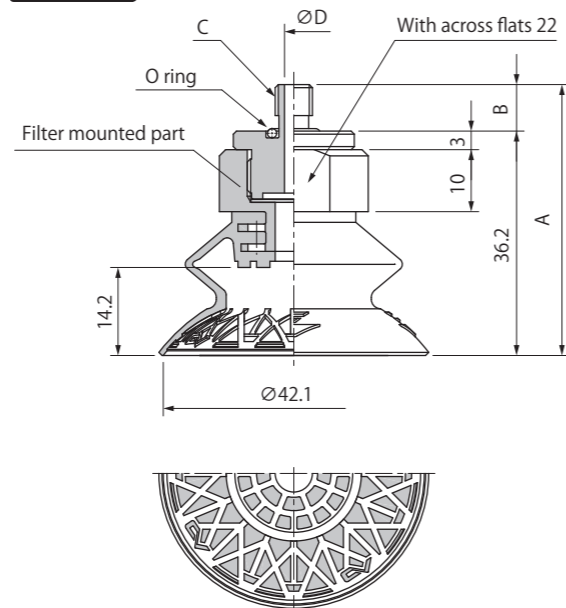
Model	A	B	C	Mass(g)
PK2B-20-T-M6	28	7.5	M6x1.0	6.4
PK2B-20-T-G1	28.5	8	G1/8	7.2

PK2B-30



Model	A	B	C	Mass(g)
PK2B-30-T-M6	29.2	7.5	M6x1.0	7.3
PK2B-30-T-G1	29.7	8	G1/8	8.2

PK2B-40



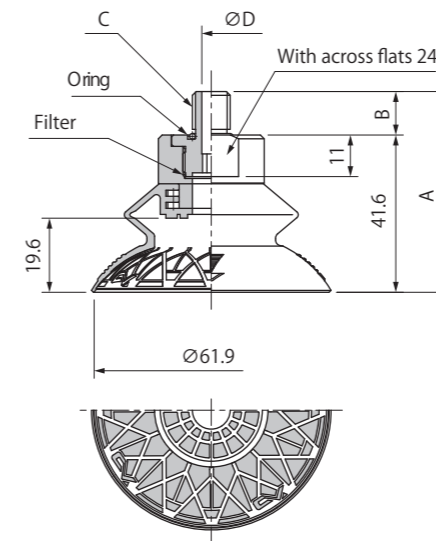
Model	A	B	C	D	Mass(g)
PK2B-40-T-M6(-F)	43.7	7.5	M6x1.0	3	32.1
PK2B-40-T-M10(-F)	47.7	11.5	M10x1.5	5	34.2
PK2B-40-T-M12(-F)	51.2	15	M12x1.75	6	35.3
PK2B-40-T-M16(-F)	46.2	10	M16x1.5	10	33
PK2B-40-T-G2(-F)	45.2	9	G1/4	6	34.2

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

Dimensions

(mm)

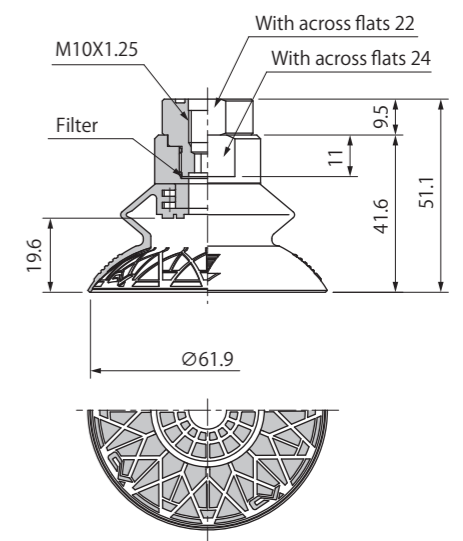
PK2B-60 Male screw



Model	A	B	C	D	Mass(g)
PK2B-60-T-M10(-F)	53.1	11.5	M10x1.5	5	48.9
PK2B-60-T-M12(-F)	56.6	15	M12x1.75	6	50.0
PK2B-60-T-M16(-F)	51.6	10	M16x1.5	10	47.6
PK2B-60-T-G2(-F)	50.6	9	G1/4	6	48.9

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

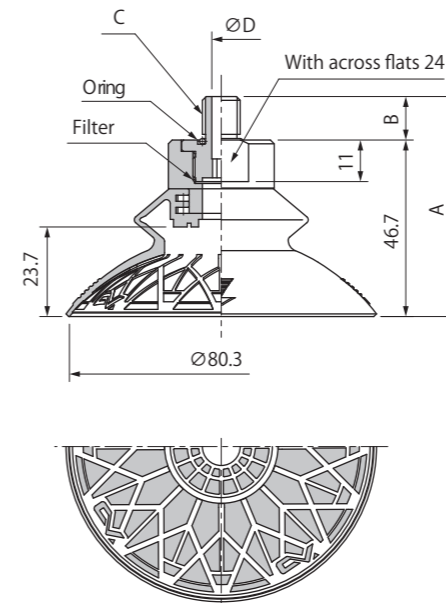
PK2B-60 Female screw



Model	Mass(g)
PK2B-60-T-M10F(-F)	44.5

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

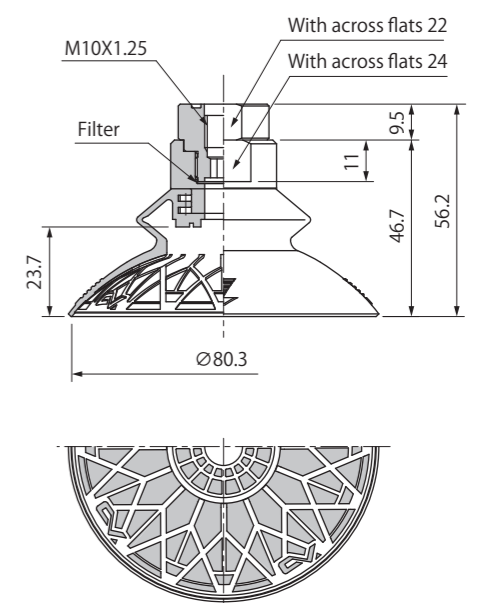
PK2B-80 Male screw



Model	A	B	C	D	Mass(g)
PK2B-80-T-M10(-F)	58.2	11.5	M10x1.5	5	56.5
PK2B-80-T-M12(-F)	61.7	15	M12x1.75	6	57.6
PK2B-80-T-M16(-F)	56.7	10	M16x1.5	10	55.2
PK2B-80-T-G2(-F)	55.7	9	G1/4	6	56.4

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

PK2B-80 Female screw

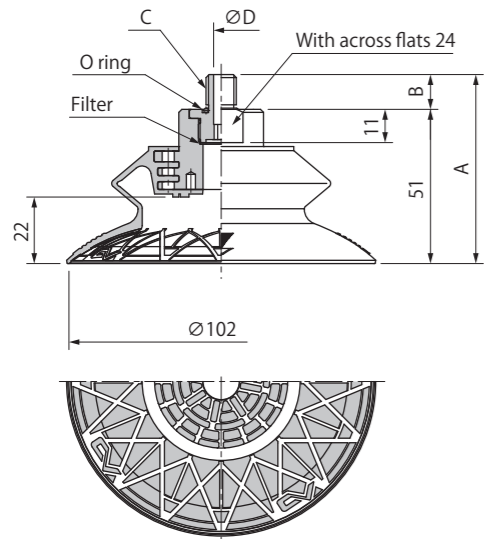


Model	Mass(g)
PK2B-80-T-M10F(-F)	52

Dimensions

(mm)

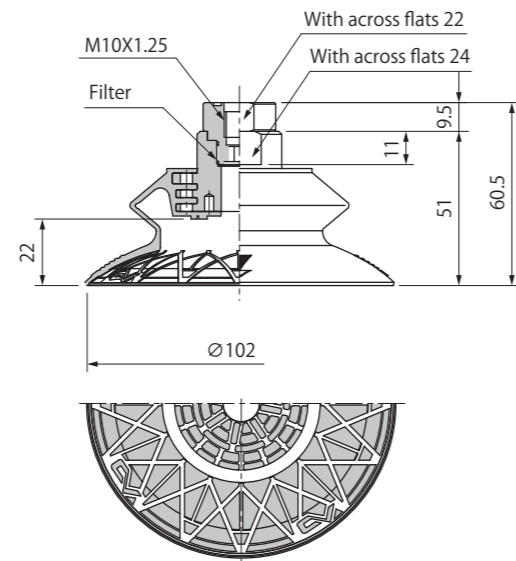
PK2B-100 Male screw



Model	A	B	C	D	Mass(g)
PK2B-100-T-M10(-F)	62.5	11.5	M10×1.5	5	120.7
PK2B-100-T-M12(-F)	66	15	M12×1.75	6	121.9
PK2B-100-T-M16(-F)	61	10	M16×1.5	10	119.5

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

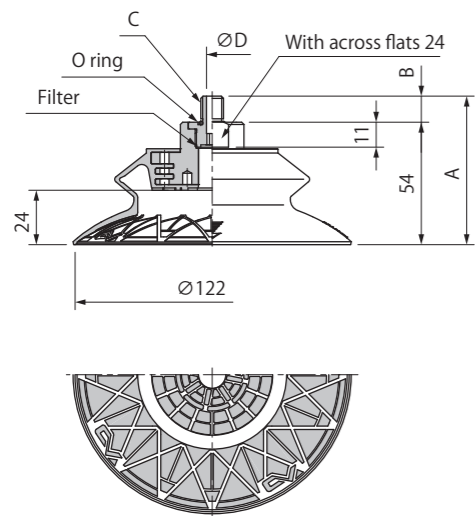
PK2B-100 Female screw



Model	Mass(g)
PK2B-100-T-M10F(-F)	116.2

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

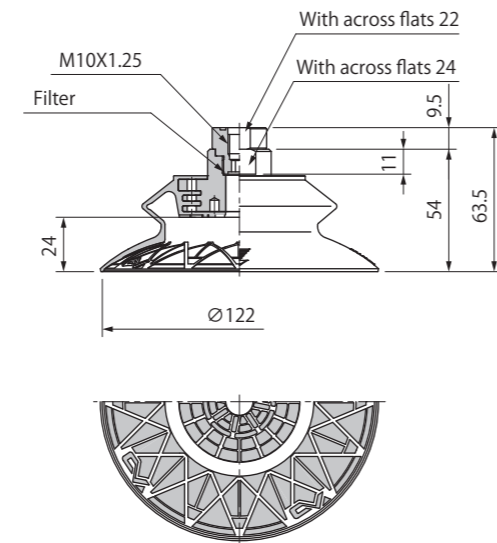
PK2B-120 Male screw



Model	A	B	C	D	Mass(g)
PK2B-120-T-M10(-F)	65.5	11.5	M10×1.5	5	168.7
PK2B-120-T-M12(-F)	69	15	M12×1.75	6	169.9
PK2B-120-T-M16(-F)	64	10	M16×1.5	10	167.5

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

PK2B-120 Female screw



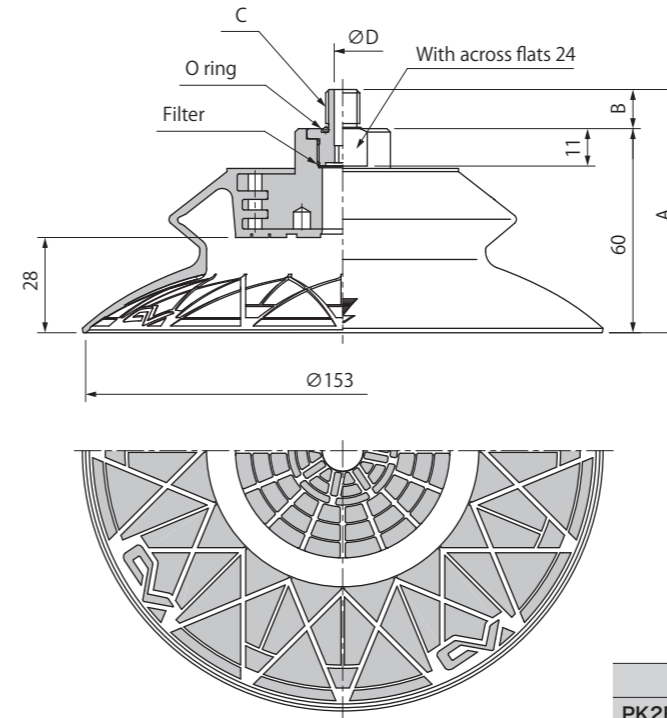
Model	Mass(g)
PK2B-120-T-M10F(-F)	164.2

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

Dimensions

(mm)

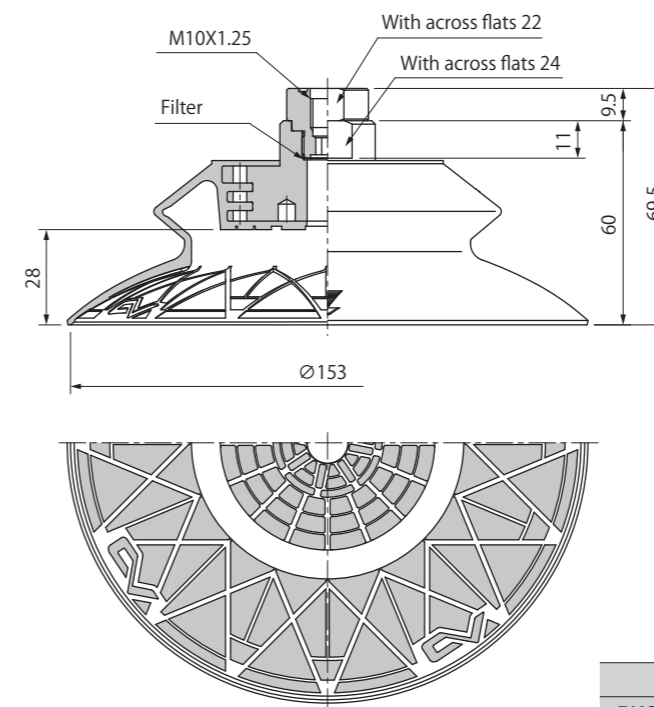
PK2B-150 Male screw



Model	A	B	C	D	Mass(g)
PK2B-150-T-M10(-F)	71.5	11.5	M10×1.5	5	244.7
PK2B-150-T-M12(-F)	75	15	M12×1.75	6	245.9
PK2B-150-T-M16(-F)	70	10	M16×1.5	10	243.5

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

PK2B-150 Female screw



Model	Mass(g)
PK2B-150-T-M10F(-F)	238.9

※Mass indicates the value of PK2B without filter (F).
 ※The mass of filter is 0.1g.

PK2L

High durability ecology cup
Oval type



How to order

• Suction cup only

PK2L - 60X20 - T

① Cup diameter
(Long diameter x Short diameter)mm

Cup material
TPU

Symbol	Cup diameter
60X20	60X20
80X30	80X30
100X40	100X40

• Fixed fitting

PK2L - 60X20 - T - M10

① Cup diameter
(Long diameter x Short diameter)mm

Cup material
TPU

② Screw specifications

Symbol	Cup diameter
60X20	60X20
80X30	80X30
100X40	100X40

Symbol	Screw specification
M10	M10X1.5 Male screw
M12	M12X1.75 Male screw
M16	M16X1.5 Male screw
G2F	G1/4 Female screw

• Fitting set

PK2L - 60X20 - K - M10

① Applicable suction cup(mm)

Metal fitting

② Screw specifications

Symbol	Applicable cup size
60X20	60X20/80X30
100X40	100X40

Symbol	Screw specification
M10	M10X1.5 Male screw
M12	M12X1.75 Male screw
M16	M16X1.5 Male screw
G2F	G1/4 Female screw

• Setting screw

TN - PK2L - M6

Screw specification

Symbol	Screw specification	Applicable cup size
M6	M6X1.0	60X20/80X30
M8	M8X1.25	100X40

Suction cup material standard specifications

Symbol	Material	Hardness(A/s)	Ambient temperature(°C)	Color
T	TPU	85	-10 ~ 70	Semi-transparent pink

※The material of insert is PA(Polyamide).

Fitting specifications

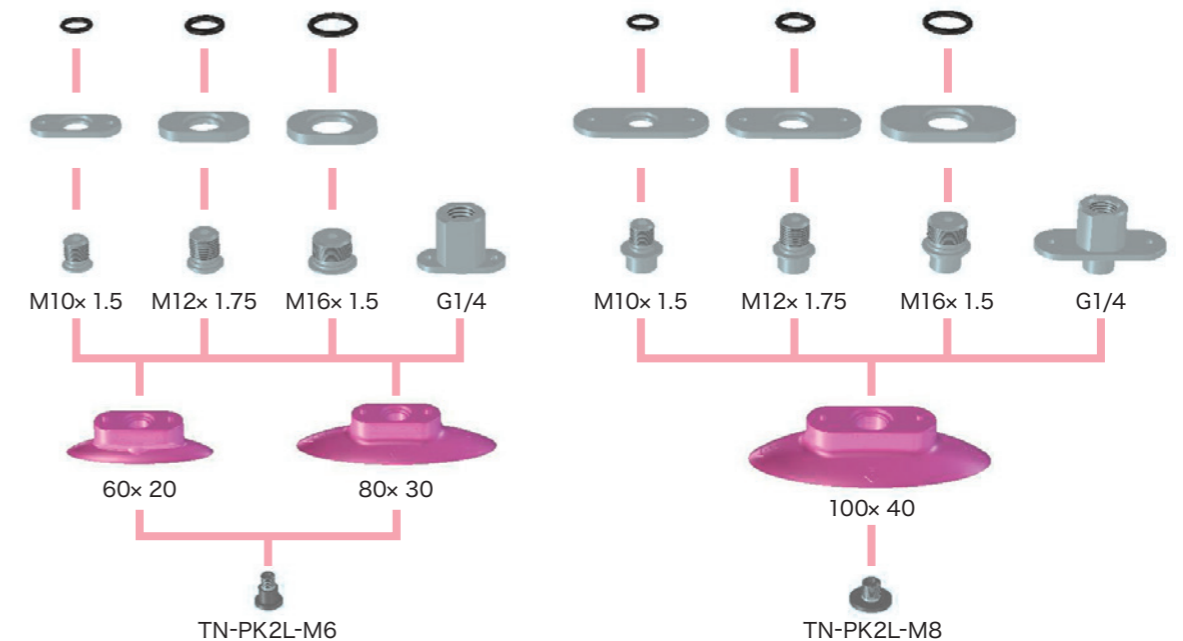
Cup diameter		60X20 / 80X30 / 100X40			
Screw specifications		M10X1.5 Male screw	M12X1.75 Male screw	M16X1.5 Male screw	G1/4 Female screw
Material	Mounted screw	Steel			Aluminum
	Fixed plate	Aluminum			
	Setting screw	Stainless steel			
	Washer	NBR			None

Assembly list

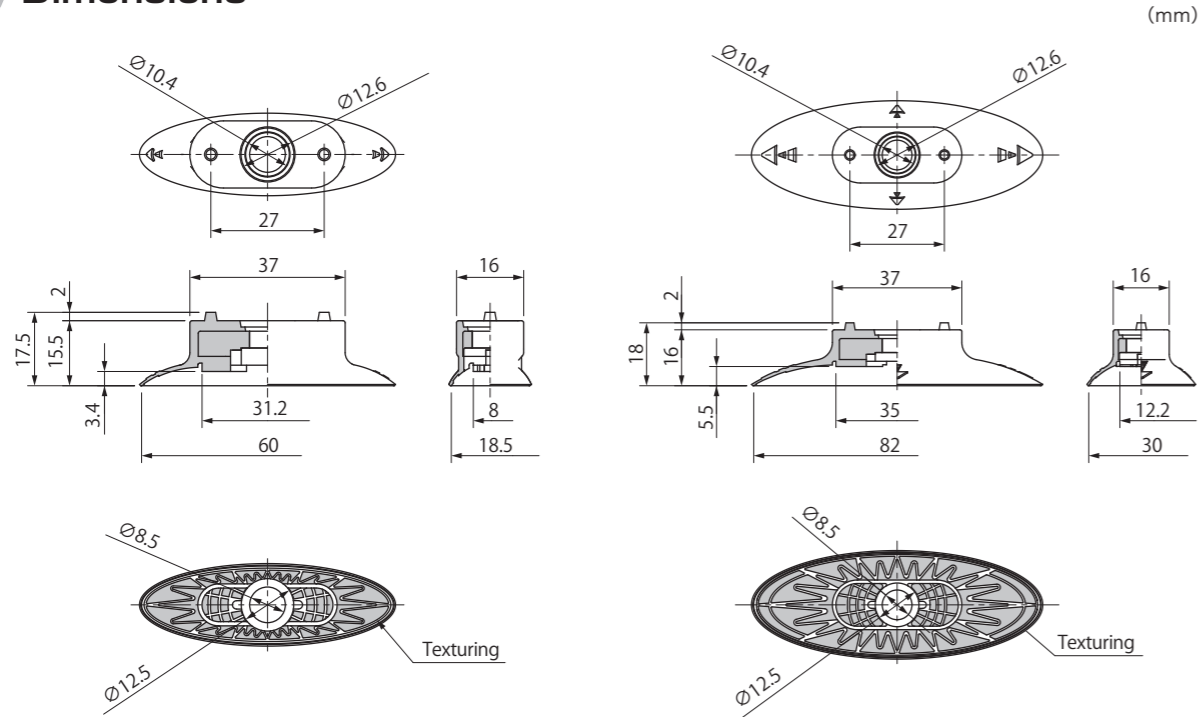
Model	Suction cup	Setting screw	Fitting set	Specification for piping part	Recommended tightening torque (N · m)
PK2L-60X20-T-M10	PK2L-60X20-T	TN-PK2L-M6	PK2L-60X20-K-M10	M10 X 1.5 Male screw	5
PK2L-80X30-T-M10	PK2L-80X30-T				10
PK2L-100X40-T-M10	PK2L-100X40-T	TN-PK2L-M8	PK2L-100X40-K-M10	M12 X 1.75 Male screw	5
PK2L-60X20-T-M12	PK2L-60X20-T	TN-PK2L-M6	PK2L-60X20-K-M12		10
PK2L-80X30-T-M12	PK2L-80X30-T			TN-PK2L-M8	PK2L-100X40-K-M12
PK2L-100X40-T-M12	PK2L-100X40-T	TN-PK2L-M6	PK2L-60X20-K-M16		
PK2L-60X20-T-M16	PK2L-60X20-T			TN-PK2L-M8	PK2L-100X40-K-M16
PK2L-80X30-T-M16	PK2L-80X30-T	TN-PK2L-M6	PK2L-60X20-K-G2F		
PK2L-100X40-T-M16	PK2L-100X40-T			TN-PK2L-M8	PK2L-100X40-K-G2F
PK2L-60X20-T-G2F	PK2L-60X20-T	TN-PK2L-M6	PK2L-60X20-K-G2F		
PK2L-80X30-T-G2F	PK2L-80X30-T			TN-PK2L-M8	PK2L-100X40-K-G2F
PK2L-100X40-T-G2F	PK2L-100X40-T	TN-PK2L-M6	PK2L-60X20-K-M10		
				TN-PK2L-M8	PK2L-80X30-K-M10
		TN-PK2L-M8	PK2L-100X40-K-M10		

※The recommended torque is only for metal-to-metal tightening.

Assembly picture of suction cup setting screw

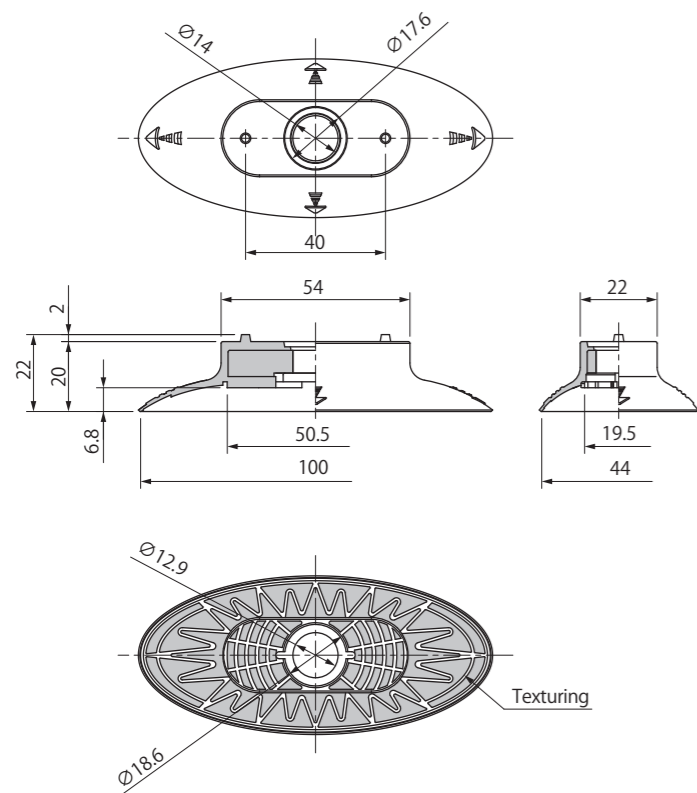


Dimensions



Model	Mass(g)
PK2L-60X20-T	6.3

Model	Mass(g)
PK2L-80X30-T	7.4

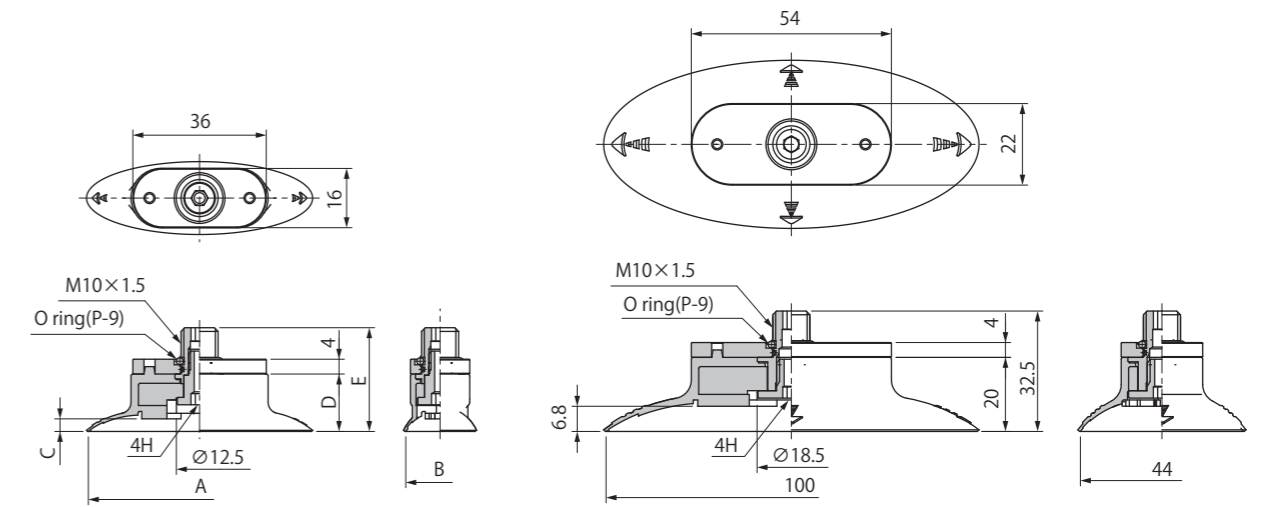


Model	Mass(g)
PK2L-100X40-T	18.8

Fitting with suction cup

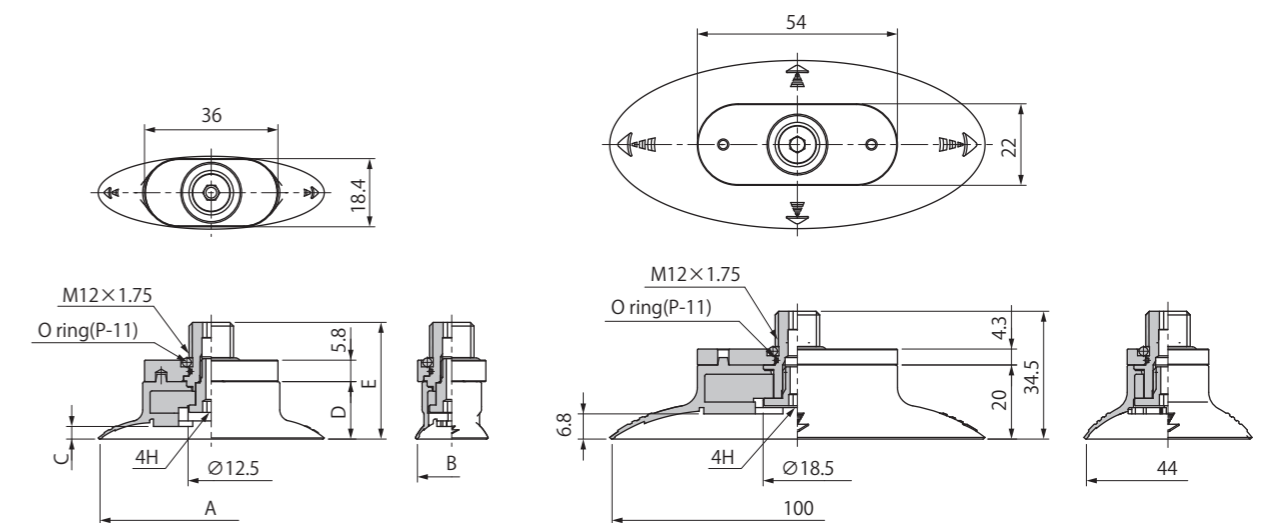
(mm)

M10 type



Model	A	B	C	D	E	Mass(g)
PK2L-60X20-T-M10	60	18.5	3.4	15.5	28	20.2
PK2L-80X30-T-M10	82	30	5.5	16	28.5	21.3
PK2L-100X40-T-M10	-	-	-	-	-	45.9

M12 type



Model	A	B	C	D	E	Mass(g)
PK2L-60X20-T-M12	60	18.5	3.4	15.5	31.5	28.2
PK2L-80X30-T-M12	82	30	5.5	16	32	29.3
PK2L-100X40-T-M12	-	-	-	-	-	50.1

