

High Durability Cup/Flat Type



Made with TPU (Thermoplastic polyurethane) material having high durability.

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 oil

Weather resistance Excellent resistance against ozone, long life circle

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(mg) _(Reference value)	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.

Wide range of cup sizes.

- φ10
- φ15
- φ20
- φ25
- φ30
- φ40
- φ50
- φ60
- φ80
- φ100
- φ120
- φ150

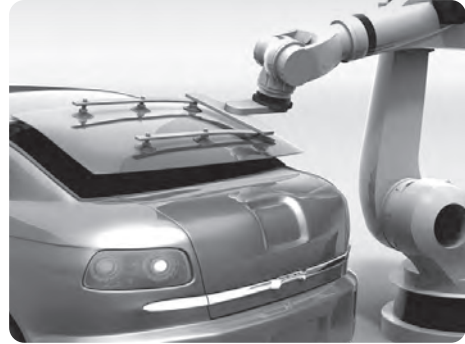
Suction Cup

<p>PK2</p> 	<p>Cup size (mm) φ10 ~ 150</p>	<p>P.369</p>
--	------------------------------------	--------------

Flexible lip to follow curved surface, for various object shape



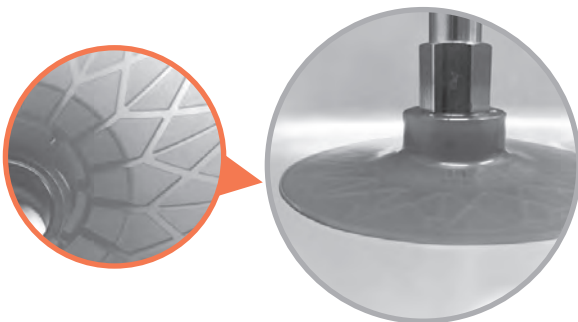
Application Automotive industry



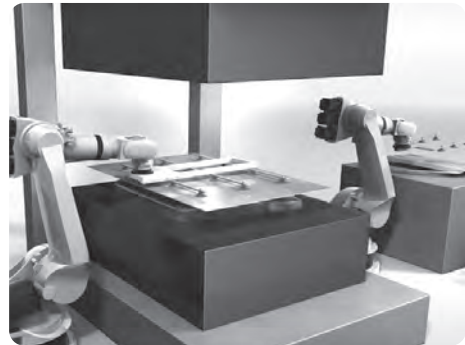
Due to high durability, less replacement and running cost.

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!



Application Press industry



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 !

PK2 High Durability Cup/Flat Type

Suction Cup
High Durability Cup/Flat Type

How to Order

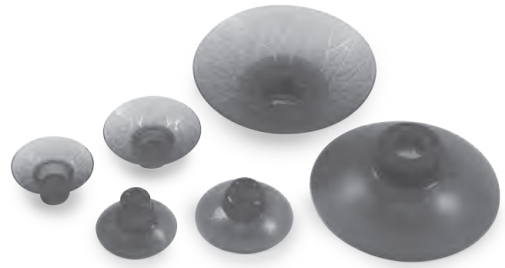
PK2 - 15 - T

①

① Cup Size (mm)

Symbol	Cup size	Symbol	Cup size
10	φ 10	50	φ 50
15	φ 15	60	φ 60
20	φ 20	80	φ 80
25	φ 25	100	φ 100
30	φ 30	120	φ 120
40	φ 40	150	φ 150

Cup Rubber Material
TPU



Cup Rubber Material Standard Specifications

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

※ The insert material of φ60 or more are PA (Polyamide).

Cup Standard Specifications

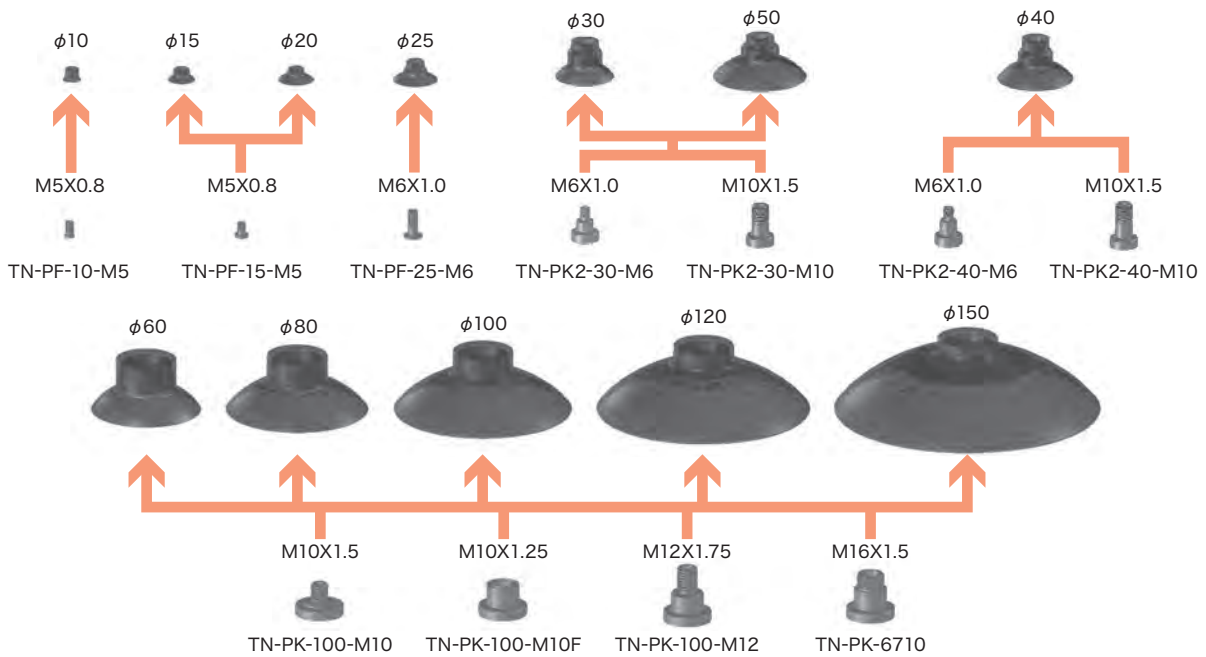
Model number	Weight (g)	The minimum radius of curvature of workpiece R (mm)	Maximum expansion amount of cup diameter (mm)
PK2-10-T	0.2	8	10.9
PK2-15-T	0.3	12.5	16.6
PK2-20-T	0.5	15	21.7
PK2-25-T	1.2	20	26.8
PK2-30-T	3.2	16	37
PK2-40-T	5.1	20	47.8
PK2-50-T	6.8	25	58.5
PK2-60-T	18	31	70.9
PK2-80-T	25	35	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 Screw Table · Setting Screw Specifications

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

※Can be mounted to our standard fitting. Refer to below table.
 ※Refer to P.503 for setting screw detailed specifications.

Cup · Setting Screw Combination Image



Applicable Fitting Set List (Please screw the suction cup directly to the fitting.)

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	PFOK-15-K	NAPCOS-10-3-K (-T/O)	NAPCOH-10-3-K (-T/O)	-
PK2-15-T	TN-PF-15-M5		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)	
PK2-25-T	TN-PF-25-M6	PFOK-25-K	NAPFOS-20B-6-K (-T/O)	NAPFOH-20B-6-K (-T/O)	5
PK2-30-T	TN-PK2-30-M6		NAPFOS-20B-15-K (-T/O)	NAPFOH-20B-15-K (-T/O)	
PK2-40-T	TN-PK2-40-M6		NAPFOS-20B-30-K (-T/O)	NAPFOH-20B-30-K (-T/O)	
PK2-50-T	TN-PK2-30-M6				
PK2-60-T		PFOK-60-K	NAPFOS-60-10-K	Without	12.5
PK2-80-T			NAPFOS-60-30-K		
PK2-100-T	TN-PK-100-M10F		NAPFOS-60-50-K		
PK2-120-T					
PK2-150-T					



Standard fitting with cup

※○in the table indicates the vacuum port (T or Y).
 ※The recommended torque is only for metal-to-metal tightening.

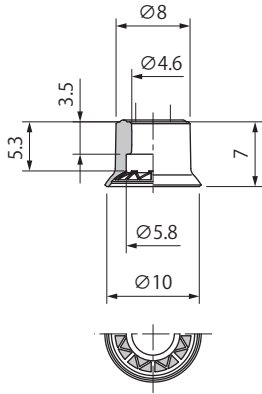
- PA
- PB
- PC
- PCD
- PD
- PF
- PFO
- PH
- PJ
- CORE
- PK2**
- PK2B
- PK2L
- PL
- PN
- PN-B
- PP
- PQ
- PR
- PU
- PW
- RA
- SM
- TN

PK2 High Durability Cup/Flat Type

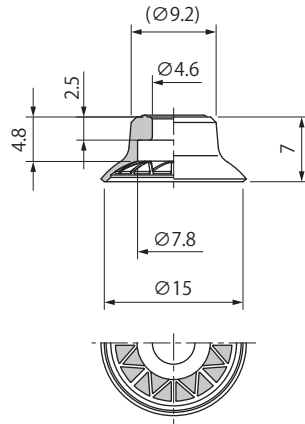
Dimensions

(mm)

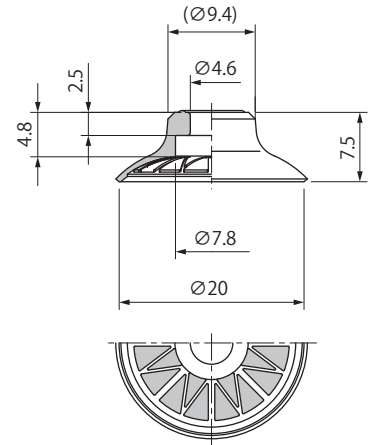
PK2-10-T



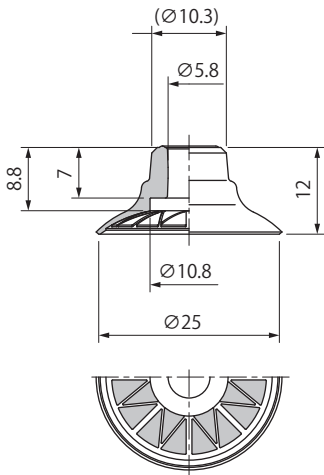
PK2-15-T



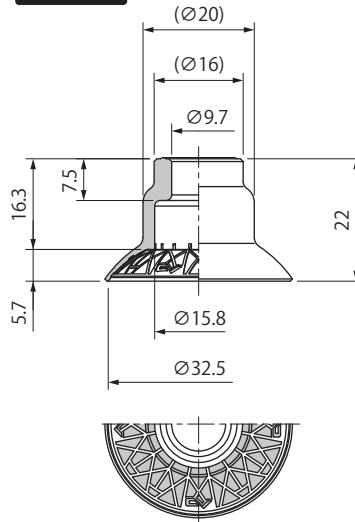
PK2-20-T



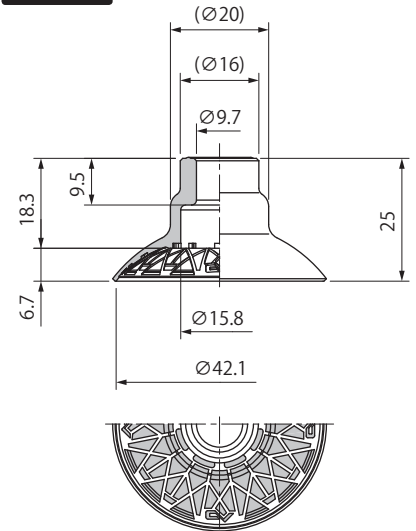
PK2-25-T



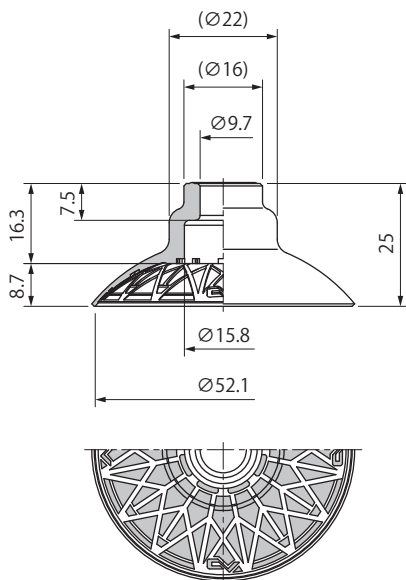
PK2-30-T



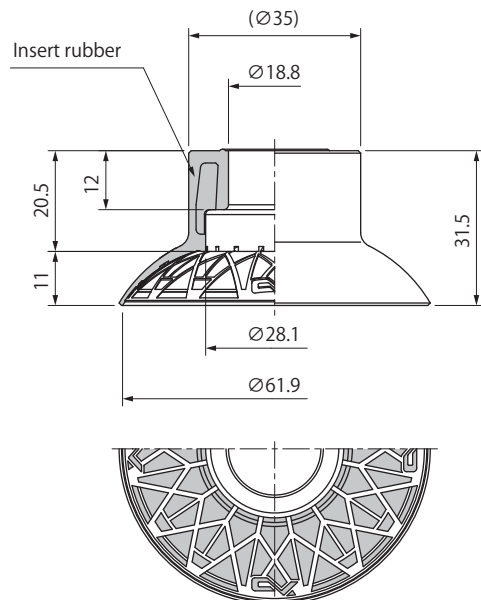
PK2-40-T



PK2-50-T



PK2-60-T



Suction Cup High Durability Cup/Flat Type

02

Suction Cup

PA

PB

PC

PCD

PD

PF

PFO

PH

PJ

CORE

PK2

PK2B

PK2L

PL

PN

PN-B

PP

PQ

PR

PU

PW

RA

SM

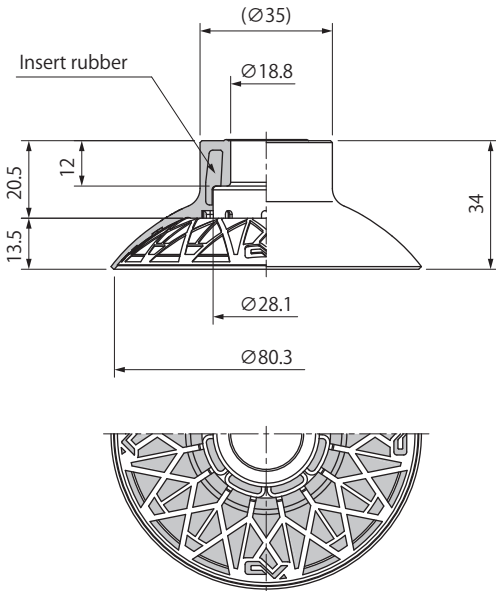
TN

- PA
- PB
- PC
- PCD
- PD
- PF
- PFO
- PH
- PJ
- CORE
- PK2**
- PK2B
- PK2L
- PL
- PN
- PN-B
- PP
- PQ
- PR
- PU
- PW
- RA
- SM
- TN

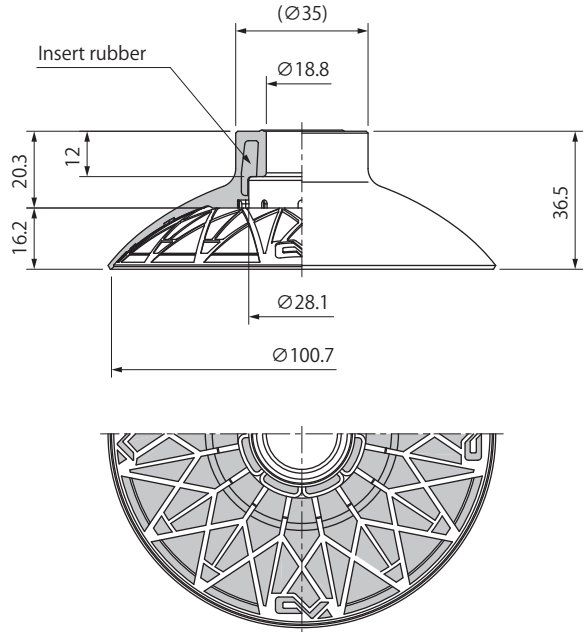
Dimensions

(mm)

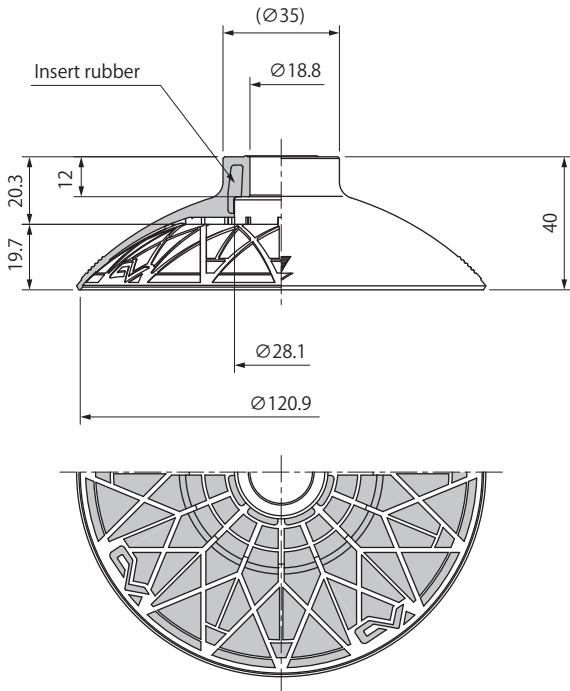
PK2-80-T



PK2-100-T



PK2-120-T



PK2-150-T

