



More flexible lip to follow curved surface than flat type!

○ Suitable for handling a wide range of workpiece shapes.



Flat type



Bellows 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) <small>(Reference value)</small> | 241 | 24 |
| ※2 Wear resistant | △~○ | ◎ |
| ※2 Aging resistance | ○ | ○ |
| ※2 Ozone resistance | x | ◎ |
| ※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.

- 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

Fitting

| Type | Applicable cup size (mm) | Stroke (mm) | Vacuum port | Piping · Connector | Page |
|---|--|-------------|-------------|--------------------|-------|
|  Cup with fixed fitting | ϕ 10, 20, 30, 40, 60, 80, 100, 120, 150 | N/A | Top | Male screw | P.375 |
|  Cup with fixed fitting | ϕ 60, 80, 100, 120, 150 | N/A | Top | Female screw | P.375 |

Patterned cup surface prevents sideslip on workpieces with an oily surface.

- Sheet metal and other workpieces with the oily surface can be picked up and transported!

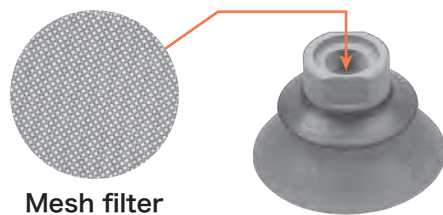
Sideslip



Wide range of cup sizes.

- ϕ 10
- ϕ 20
- ϕ 30
- ϕ 40
- ϕ 60
- ϕ 80
- ϕ 100
- ϕ 120
- ϕ 150

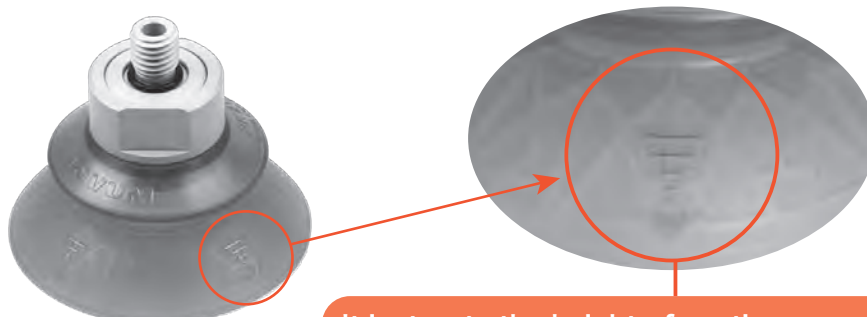
Mesh filter to avoid getting foreign objects can be selected.



※ ϕ 40 or more

Mesh filter

With teaching mark!



It instructs the height of suction cups as a guide

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PK2B High Durability Cup/2 Bellows Type

How to Order

PK2B - 60 - T - M10 - F

① Cup Size (mm)

| Symbol | Cup size |
|--------|----------|
| 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 Rubber Material TPU

② Screws Specifications

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

③ Filter

| | |
|-------|------|
| Blank | N/A |
| F | With |

※ φ10, 20, 30 is without filter only

※PK2B is assembly of screw and suction cup.

※The screw and suction cup is fixed by glue and cannot be taken off.

※We don't sell the filter only.

Cup Rubber Material Standard Specifications

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

※Insert material is aluminum.

Fitting Specifications

| Cup size | φ 10 | | φ 20,30 | | φ 40, 60, 80, 100, 120, 150 | | | | |
|-------------------------|----------------------|-------------|-------------|-------------------------------|------------------------------|--------------|---------------|--------------|----------------------------|
| | Screw specifications | M5X0.8 Male | M6X1.0 Male | G1/8 Male | M6X1.0 Male ^{Note1} | M10X1.5 Male | M12X1.75 Male | M16X1.5 Male | G1/4 Male ^{Note2} |
| 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 | N/A | | | SUS (MESH60) ^{Note4} | | | | | |
| Packing | NBR | | | | | | | | N/A |

Note1) φ 40 only.

Note2) φ 40, 60, 80 only.

Note3) φ 60, 80, 100, 120, 150 only.

Note4) When selecting with filter.

Applicable Fitting Set List (Screw the fitting directly to the cup)

| PK2B model | Applicable fitting set | | | Recommended torque (N · m) |
|-----------------|------------------------|---|---|----------------------------|
| | Fixed fitting | Spring fitting | Non-rotation spring fitting | |
| 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 | N/A | 12.5 |
| PK2B-80-T-M10F | | | | |
| PK2B-100-T-M10F | | | | |
| PK2B-120-T-M10F | | | | |
| PK2B-150-T-M10F | | | | |

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



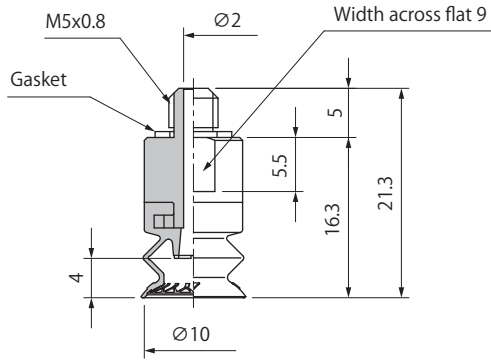
Standard fitting with cup

PK2B High Durability Cup/2 Bellows Type

Dimensions

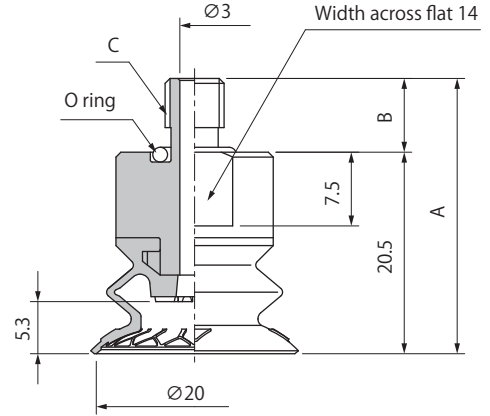
(mm)

PK2B-10



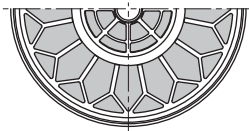
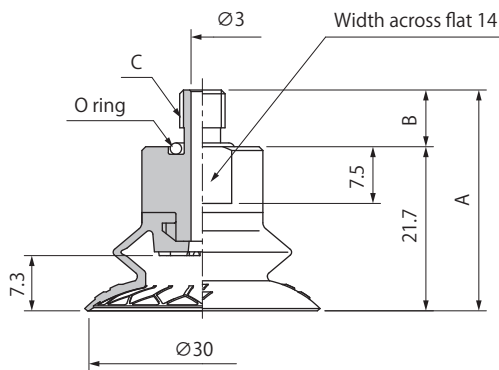
| Model number | Weight (g) |
|--------------|------------|
| PK2B-10-T-M5 | 2.1 |

PK2B-20



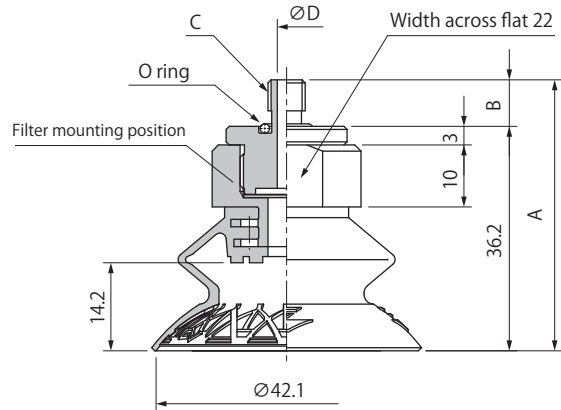
| Model number | A | B | C | Weight (g) |
|--------------|------|-----|--------|------------|
| PK2B-20-T-M6 | 28 | 7.5 | M6×1.0 | 6.4 |
| PK2B-20-T-G1 | 28.5 | 8 | G1/8 | 7.2 |

PK2B-30



| Model number | A | B | C | Weight (g) |
|--------------|------|-----|--------|------------|
| PK2B-30-T-M6 | 29.2 | 7.5 | M6×1.0 | 7.3 |
| PK2B-30-T-G1 | 29.7 | 8 | G1/8 | 8.2 |

PK2B-40



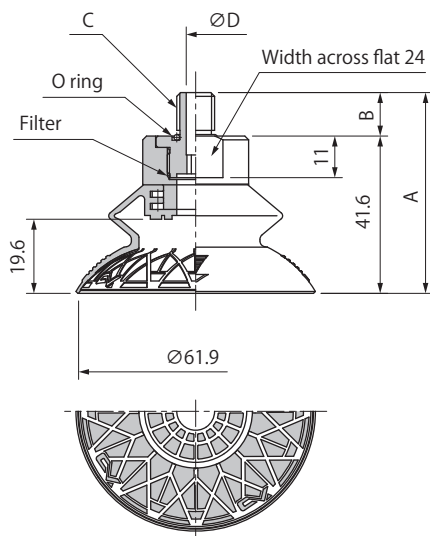
| Model number | A | B | C | D | Weight (g) |
|-------------------|------|------|----------|----|------------|
| PK2B-40-T-M6(-F) | 43.7 | 7.5 | M6×1.0 | 3 | 32.1 |
| PK2B-40-T-M10(-F) | 47.7 | 11.5 | M10×1.5 | 5 | 34.2 |
| PK2B-40-T-M12(-F) | 51.2 | 15 | M12×1.75 | 6 | 35.3 |
| PK2B-40-T-M16(-F) | 46.2 | 10 | M16×1.5 | 10 | 33 |
| PK2B-40-T-G2(-F) | 45.2 | 9 | G1/4 | 6 | 34.2 |

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

Dimensions

(mm)

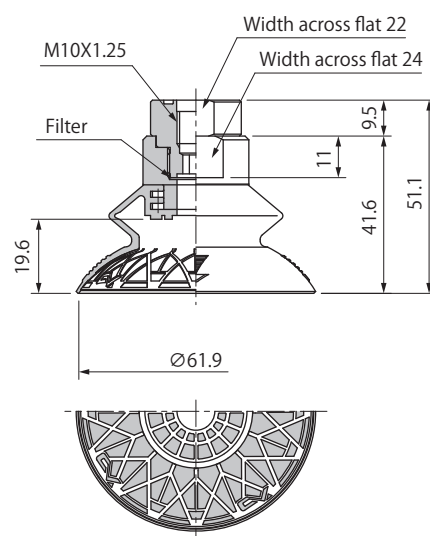
PK2B-60 Male screw



| Model number | A | B | C | D | Weight (g) |
|-------------------|------|------|----------|----|------------|
| PK2B-60-T-M10(-F) | 53.1 | 11.5 | M10×1.5 | 5 | 48.9 |
| PK2B-60-T-M12(-F) | 56.6 | 15 | M12×1.75 | 6 | 50.0 |
| PK2B-60-T-M16(-F) | 51.6 | 10 | M16×1.5 | 10 | 47.6 |
| PK2B-60-T-G2(-F) | 50.6 | 9 | G1/4 | 6 | 48.9 |

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

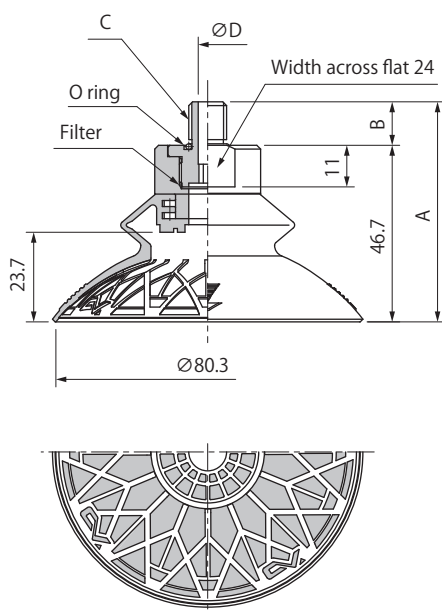
PK2B-60 Female screw



| Model number | Weight (g) |
|--------------------|------------|
| PK2B-60-T-M10F(-F) | 44.5 |

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

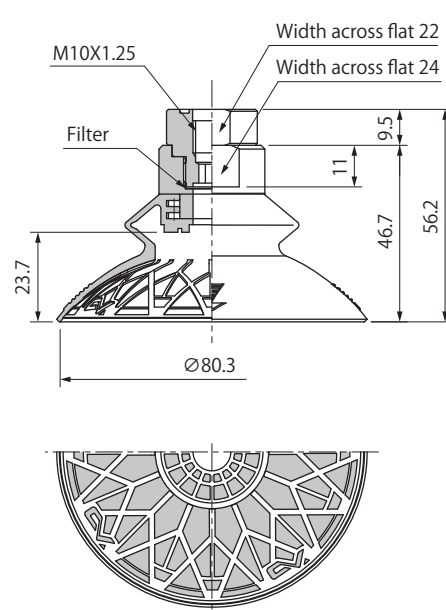
PK2B-80 Male screw



| Model number | A | B | C | D | Weight (g) |
|-------------------|------|------|----------|----|------------|
| PK2B-80-T-M10(-F) | 58.2 | 11.5 | M10×1.5 | 5 | 56.5 |
| PK2B-80-T-M12(-F) | 61.7 | 15 | M12×1.75 | 6 | 57.6 |
| PK2B-80-T-M16(-F) | 56.7 | 10 | M16×1.5 | 10 | 55.2 |
| PK2B-80-T-G2(-F) | 55.7 | 9 | G1/4 | 6 | 56.4 |

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

PK2B-80 Female screw



| Model number | Weight (g) |
|--------------------|------------|
| PK2B-80-T-M10F(-F) | 52 |

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

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

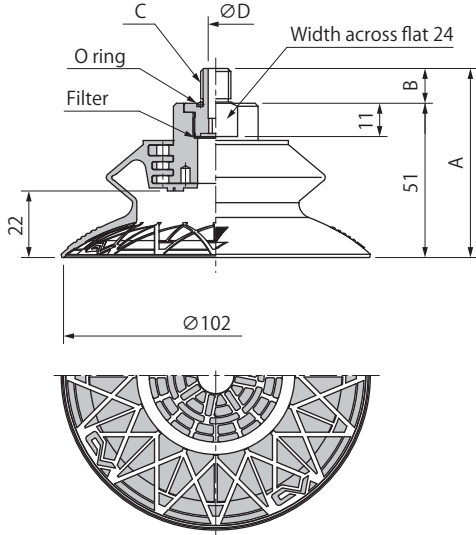
TN

PK2B High Durability Cup/2 Bellows Type

Dimensions

(mm)

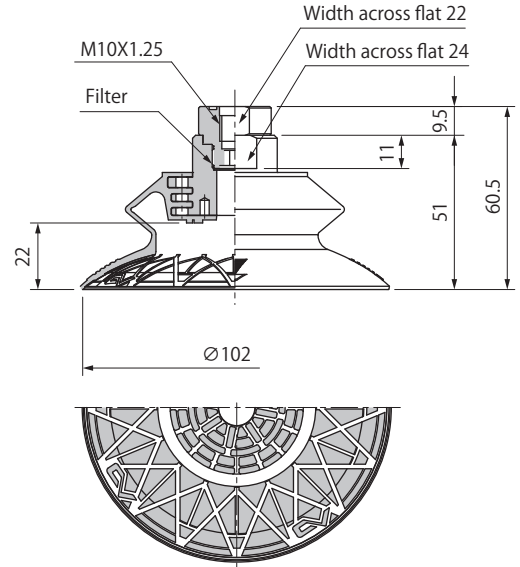
PK2B-100 Male screw



| Model number | A | B | C | D | Weight (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 |

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

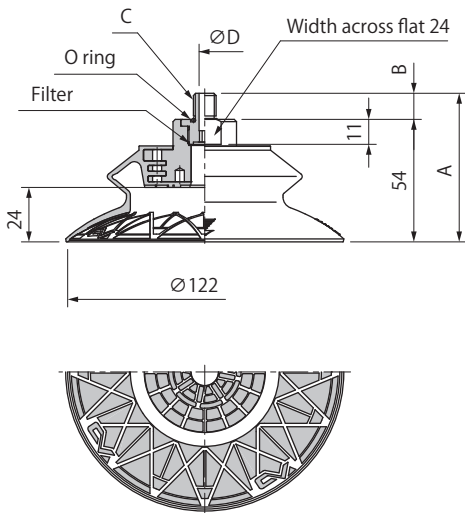
PK2B-100 Female screw



| Model number | Weight (g) |
|---------------------|------------|
| PK2B-100-T-M10F(-F) | 116.2 |

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

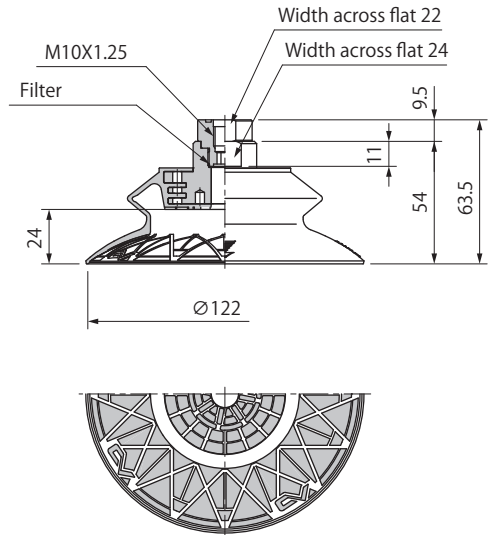
PK2B-120 Male screw



| Model number | A | B | C | D | Weight (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 |

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

PK2B-120 Female screw



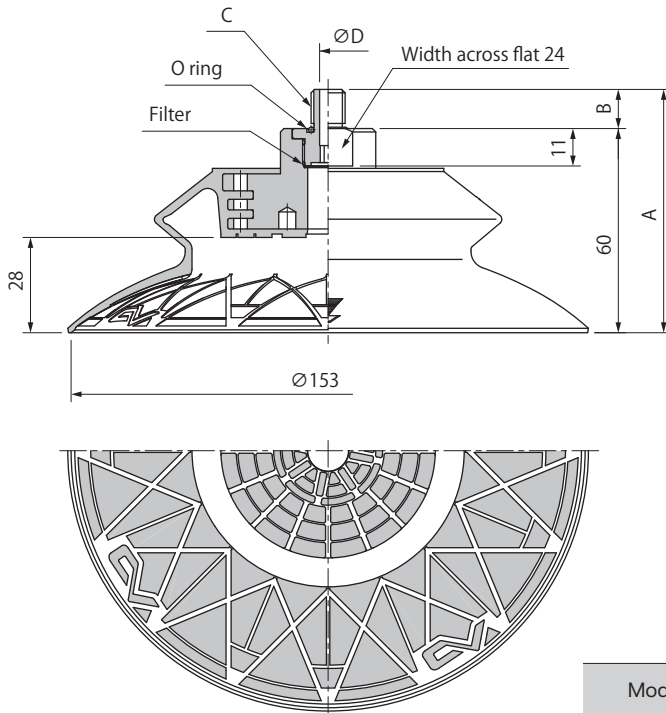
| Model number | Weight (g) |
|---------------------|------------|
| PK2B-120-T-M10F(-F) | 164.2 |

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

Dimensions

(mm)

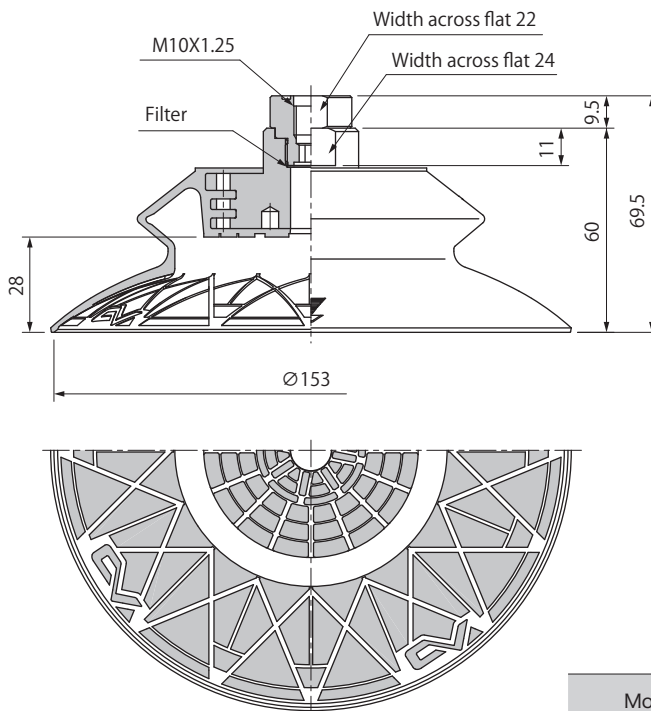
PK2B-150 Male screw



| Model number | A | B | C | D | Weight (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 |

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

PK2B-150 Female screw



| Model number | Weight (g) |
|---------------------|------------|
| PK2B-150-T-M10F(-F) | 238.9 |

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

02

Suction Cup

PA

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