Vacuum Pad

Series ZP

<table>
<thead>
<tr>
<th>Type</th>
<th>Without buffer</th>
<th>With buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.1120 to P.1145 Series ZPT</td>
<td>Vertical vacuum entry</td>
<td>Rotating, Non-rotating ø2 to ø8: Stroke 6, 10, 15, 25 mm ø10 to ø32: Stroke 10, 20, 30, 40, 50 mm ø40, ø50: Stroke 10, 20, 30, 50 mm</td>
</tr>
<tr>
<td>P.1146 to P.1161 Series ZPR</td>
<td>Lateral vacuum entry with One-touch fitting</td>
<td></td>
</tr>
<tr>
<td>P.1162 to P.1177 Series ZPY</td>
<td>Lateral vacuum entry with Barb fitting</td>
<td></td>
</tr>
</tbody>
</table>

**Pad form** (Compatible with all models)

- Flat (U)
- Flat with ribs (C)
- Deep (D)
- Bellows (B)
- Thin flat (UT)
- Thin flat with ribs (CT)

**Pad diameter** (ø2 to ø125)

<table>
<thead>
<tr>
<th>Pad material</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBR (Black), Silicon rubber (White), Urethane rubber (Brown), Fluoro rubber (Black with green mark), Conductive NBR (Black with one silver mark), Conductive silicon rubber (Black with two silver marks)</td>
</tr>
</tbody>
</table>

**Pad selection**

Refer to the vacuum equipment model selection on pages 828 to 834 for the calculation of lift force and response time.

**Pad Material and Characteristics**

- Little or no influence
- Can be used depending on conditions
- Not suitable

| Material | Characteristics | Durometer HS (±5°) | Operating temperature range (°C) | Oil resistance gasoline | Oil resistance benzol | Base resistance | Acid resistance | Weatherability | Ozone resistance | Abrasion resistance | Waterproof | Solvent resistance (Resistance (

| NBR | 50° | 0 to 120 | x | o | x | x | x | x | x | x | o | o | x |
| Silicon rubber | 40° | 0 to 60 | x | x | x | x | x | x | x | x | x | x | x |
| Urethane rubber | 60° | 0 to 250 | x | x | x | x | x | x | x | x | x | x | x |
| Fluoro rubber | 50° | 10 to 100 | x | x | x | x | x | x | x | x | x | x | x |
| Conductive NBR | 50° | 0 to 100 | x | x | x | x | x | x | x | x | x | x | x |
| Conductive silicon rubber | 50° | 0 to 100 | x | x | x | x | x | x | x | x | x | x | x |

* The above table covers only general characteristics of subject rubber materials. Pad materials used by SMC pass the JIS standards; however the actual performance depends on operating conditions.

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Series ZP

Vacuum Pad/Components

Refer to pages 1182 to 1187 for part numbers of ① to ⑥.

Construction

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Material</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pad</td>
<td>Conductive NBR, Conductive silicon rubber, NBR, Silicon rubber, Urethane rubber, Fluoro rubber</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lock ring</td>
<td>Brass</td>
<td>Electroless nickel plated</td>
</tr>
<tr>
<td>3</td>
<td>Adapter</td>
<td>Brass</td>
<td>Electroless nickel plated</td>
</tr>
<tr>
<td>4</td>
<td>Buffer</td>
<td>Brass</td>
<td>Electroless nickel plated</td>
</tr>
<tr>
<td>5</td>
<td>Adapter (with one-touch fitting)</td>
<td>Brass, PBT</td>
<td>Electroless nickel plated</td>
</tr>
<tr>
<td>6</td>
<td>Adapter (with barb fitting)</td>
<td>Brass</td>
<td>Electroless nickel plated</td>
</tr>
</tbody>
</table>

Maintenance of Pad

Since pads are essentially rubber, deterioration is unavoidable. The rate of deterioration depends upon factors such as conditions of use, environment and temperature. Regular maintenance should be performed. If any damage, splitting, cracking or abrasion has occurred in a pad which appears to be harmful, replace it immediately. Also, take care not to damage the outside surface of the pad.

How to Replace

1. Pull the lock ring upward, and after lifting it to the adapter, remove the old pad by pulling it downward.
2. While holding the lock ring in the raised position, place a new pad onto the adapter.
3. Confirm that the pad is securely in place, and then return the lock ring to its original position.
Vacuum Pad Series ZP

How to Order Pad Unit

<table>
<thead>
<tr>
<th>Pad dia. (mm)</th>
<th>ZP02</th>
<th>ZP04</th>
<th>ZP06</th>
<th>ZP08</th>
<th>ZP10</th>
<th>ZP13</th>
<th>ZP16</th>
<th>ZP20</th>
<th>ZP25</th>
<th>ZP32</th>
<th>ZP40</th>
<th>ZP50</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>2</td>
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<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Pad type:
- U: Flat
- C: Flat with ribs
- D: Deep
- B: Bellows

Lock ring:
- Nil
- With lock ring

Material:
- N: NBR
- S: Silicon rubber
- U: Urethane rubber
- F: Fluororubber
- GN: Conductive NBR
- GS: Conductive silicon rubber

Flat (U) refer to page 1181 for the Elliptic.

How to Order Lock Ring Unit

<table>
<thead>
<tr>
<th>Applicable pad dia. (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

Material:
- SP
- ZCUK
- AMJ
- AMV
- AEP
- HEP

Related Equipment

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

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

Bellows (B)/With Lock Ring

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>A (max)</th>
<th>B (max)</th>
<th>C (max)</th>
<th>D (max)</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZP06B</td>
<td>B06</td>
<td>6</td>
<td>7</td>
<td>2.5</td>
<td>7 —</td>
<td>13</td>
<td>3.3</td>
<td>9</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZP08B</td>
<td>B08</td>
<td>8</td>
<td>9</td>
<td>2.5</td>
<td>7 —</td>
<td>13</td>
<td>4.7</td>
<td>10</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>ZP10B</td>
<td>B10</td>
<td>10</td>
<td>12</td>
<td>4</td>
<td>13</td>
<td>11.7</td>
<td>16</td>
<td>6</td>
<td>14</td>
<td>5.5</td>
</tr>
<tr>
<td>ZP13B</td>
<td>B13</td>
<td>13</td>
<td>15</td>
<td>4</td>
<td>13</td>
<td>14.2</td>
<td>18.5</td>
<td>9</td>
<td>19</td>
<td>7.5</td>
</tr>
<tr>
<td>ZP16B</td>
<td>B16</td>
<td>16</td>
<td>18</td>
<td>4</td>
<td>13</td>
<td>15.7</td>
<td>20</td>
<td>10</td>
<td>21</td>
<td>8.5</td>
</tr>
<tr>
<td>ZP20B</td>
<td>B20</td>
<td>20</td>
<td>22</td>
<td>4</td>
<td>15</td>
<td>19</td>
<td>23.5</td>
<td>12</td>
<td>25</td>
<td>10.5</td>
</tr>
<tr>
<td>ZP32B</td>
<td>B32</td>
<td>32</td>
<td>34</td>
<td>4</td>
<td>15</td>
<td>24.5</td>
<td>29</td>
<td>19</td>
<td>37</td>
<td>14.5</td>
</tr>
<tr>
<td>ZP40B</td>
<td>B40</td>
<td>40</td>
<td>43</td>
<td>7</td>
<td>18</td>
<td>29.2</td>
<td>34</td>
<td>24</td>
<td>48</td>
<td>16</td>
</tr>
<tr>
<td>ZP50B</td>
<td>B50</td>
<td>50</td>
<td>53</td>
<td>7</td>
<td>18</td>
<td>33.2</td>
<td>38</td>
<td>32</td>
<td>57</td>
<td>19</td>
</tr>
</tbody>
</table>

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

Buffer Mounting Nut

<table>
<thead>
<tr>
<th>Model</th>
<th>d</th>
<th>H</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPNA-M5</td>
<td>M5 x 0.8</td>
<td>4</td>
<td>8</td>
<td>9.2</td>
</tr>
<tr>
<td>ZPNA-M6</td>
<td>M6 x 1</td>
<td>3</td>
<td>8</td>
<td>9.2</td>
</tr>
<tr>
<td>ZPNA-M8</td>
<td>M8 x 1</td>
<td>3</td>
<td>12</td>
<td>13.9</td>
</tr>
<tr>
<td>ZPNA-M10</td>
<td>M10 x 1</td>
<td>3</td>
<td>14</td>
<td>16.2</td>
</tr>
<tr>
<td>ZPNA-M14</td>
<td>M14 x 1</td>
<td>5</td>
<td>19</td>
<td>21.9</td>
</tr>
</tbody>
</table>
Vacuum Pad Series ZP

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

How to Order/Pad Unit

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

**Pad Unit**

**ZP** 10 UT N

- **Pad diameter**
  - 10: 10
  - 13: 13
  - 16: 16

- **Pad type**
  - UT: Thin flat
  - CT: Thin flat with ribs

**Material**

- N: NBR
- S: Silicon rubber
- U: Urethane rubber
- F: Fluororubber
- GN: Conductive NBR
- GS: Conductive silicon rubber

Dimensions

**Thin flat**

ZP 10 UT

- **Dimensions (mm)**
  - Model: ZP10UT
  - A: 10
  - B: 11
  - Y: 1

**Thin flat with ribs**

ZP 10 CT

- **Dimensions (mm)**
  - Model: ZP10CT
  - A: 10
  - B: 11
  - Y: 0.8

Elliptic

**Pad Unit**

**ZP** 2004 U N

- **Pad diameter**
  - 2004: 2 x 4
  - 3507: 3.5 x 7
  - 4010: 4 x 10

- **Pad type**
  - U: Flat

**Material**

- N: NBR
- S: Silicon rubber
- U: Urethane rubber
- F: Fluororubber
- GN: Conductive NBR
- GS: Conductive silicon rubber

Dimensions

**ZP2004U**

- **Dimensions (mm)**

**ZP3507U**

- **Dimensions (mm)**

**ZP4010U**

- **Dimensions (mm)**

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Series ZP

Replacement Parts: Adapter/Buffer (Series ZPT)

Appropriate adaptor or buffer can be selected for the currently used pad model.

- Without buffer

[Pad model no.]

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPT-------A5</td>
<td>ZPT1-A5</td>
</tr>
<tr>
<td>ZPT-------A6</td>
<td>ZPT1-A6</td>
</tr>
<tr>
<td>ZPT-------B4</td>
<td>ZPT1-B4</td>
</tr>
<tr>
<td>ZPT-------B5</td>
<td>ZPT1-B5</td>
</tr>
</tbody>
</table>

Symbol: Pad dia.
- 1: 02 to 08
- 2: 10 to 16
- 3: 20 to 32
- 4: 40, 50

Construction

Applicable pad diameter: \( \phi 2 \) to \( \phi 8 \)
2 \( \times \) 4, 3.5 \( \times \) 7, 4 \( \times \) 10
\( \phi 10 \) to \( \phi 16 \) (Thin section series)

Applicable pad diameter: \( \phi 10 \) to \( \phi 16 \)

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPT-------A5</td>
<td>ZPT2-A5</td>
</tr>
<tr>
<td>ZPT-------A6</td>
<td>ZPT2-A6</td>
</tr>
<tr>
<td>ZPT-------B5</td>
<td>ZPT2-B5</td>
</tr>
<tr>
<td>ZPT-------B6</td>
<td>ZPT2-B6</td>
</tr>
<tr>
<td>ZPT-------B01</td>
<td>ZPT2-B01</td>
</tr>
<tr>
<td>ZPT-------N01</td>
<td>ZPT2-N01</td>
</tr>
<tr>
<td>ZPT-------T01</td>
<td>ZPT2-T01</td>
</tr>
</tbody>
</table>

Applicable pad diameter: \( \phi 20 \) to \( \phi 32 \)

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPT-------A6</td>
<td>ZPT3-A6</td>
</tr>
<tr>
<td>ZPT-------A8</td>
<td>ZPT3-A8</td>
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<tr>
<td>ZPT-------B5</td>
<td>ZPT3-B5</td>
</tr>
<tr>
<td>ZPT-------B6</td>
<td>ZPT3-B6</td>
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<tr>
<td>ZPT-------B8</td>
<td>ZPT3-B8</td>
</tr>
<tr>
<td>ZPT-------B01</td>
<td>ZPT3-B01</td>
</tr>
<tr>
<td>ZPT-------N01</td>
<td>ZPT3-N01</td>
</tr>
<tr>
<td>ZPT-------T01</td>
<td>ZPT3-T01</td>
</tr>
</tbody>
</table>

Applicable pad diameter: \( \phi 40, \phi 50 \)

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPT-------A6</td>
<td>ZPT4-A6</td>
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<tr>
<td>ZPT-------A8</td>
<td>ZPT4-A8</td>
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<tr>
<td>ZPT-------B6</td>
<td>ZPT4-B6</td>
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<tr>
<td>ZPT-------B8</td>
<td>ZPT4-B8</td>
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<td>ZPT-------B01</td>
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<td>ZPT4-N01</td>
</tr>
<tr>
<td>ZPT-------T01</td>
<td>ZPT4-T01</td>
</tr>
</tbody>
</table>

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Replacement Parts: Adapter/Buffer (Series ZPT)

- With buffer

[Pad model no.]

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
<th>② Buffer only</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPT(T)(J)</td>
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<td>ZPT(T)(J)</td>
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</tr>
</tbody>
</table>

Note) Applicable buffer stroke ( ): 6, 10, 15, 25 mm

Applicable pad diameter: ø2 to ø8

2 x 4, 3.5 x 7, 4 x 10
ø10 to ø16 (Thin section series)

Applicable pad diameter: ø20 to ø32

Model | ① Adapter | ② Buffer
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |

Note) Applicable buffer stroke ( ): 10, 20, 30, 40, 50 mm

Applicable pad diameter: ø40, ø50

Model | ① Adapter | ② Buffer
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |
ZPT(T)(J)   |            |                |

Note) Applicable buffer stroke ( ): 10, 20, 30, 50 mm
**Series ZP**

**Replacement Parts: Adapter/Buffer (Series ZPR)**

- **Without buffer**

  ![Diagram](image.png)

  - **Symbol**
    - Pad dia.
    - Adapter connection thread
    - 1: 02 to 08
    - 2: 10 to 16
    - 3: 20 to 32
    - 4: 40, 50

- **Applicable pad diameter:**
  - ø2 to ø8
  - 2 x 4, 3.5 x 7, 4 x 10
  - ø10 to ø16 (Thin section series)

  **Model**
  - ZPR-☆☆☆-☆☆-A5
  - ZPR-☆☆☆-☆☆-A6
  - ZPR-☆☆☆-☆☆-B4
  - ZPR-☆☆☆-☆☆-B5
  - ZPR-☆☆☆-☆☆-B6

  **Type T adapter**
  - ZPT-☆☆-B5
  - ZPT-☆☆-B8
  - ZPT-☆☆-B6
  - ZPT-☆☆-B8

  **Type R adapter**
  - ZPRS-☆☆-A5
  - ZPRS-☆☆-A6
  - ZPRS-☆☆-B5
  - ZPRS-☆☆-B6

  **Note** Vacuum entry (☆☆): 04, 06

- **Applicable pad diameter:**
  - ø20 to ø32

  **Model**
  - ZPR-☆☆☆-☆☆-A6
  - ZPR-☆☆☆-☆☆-A8
  - ZPR-☆☆☆-☆☆-B5
  - ZPR-☆☆☆-☆☆-B8

  **Type T adapter**
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8

  **Type R adapter**
  - ZPRS-☆☆-☆☆-A6
  - ZPRS-☆☆-☆☆-A8
  - ZPRS-☆☆-☆☆-B6
  - ZPRS-☆☆-☆☆-B8

  **Note** Vacuum entry (☆☆): 04, 06, 08

- **Applicable pad diameter:**
  - ø40, ø50

  **Model**
  - ZPR-☆☆☆-☆☆-A6
  - ZPR-☆☆☆-☆☆-A8
  - ZPR-☆☆☆-☆☆-B6
  - ZPR-☆☆☆-☆☆-B8

  **Type T adapter**
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8
  - ZPT-☆☆-B8

  **Type R adapter**
  - ZPRS-☆☆-☆☆-A6
  - ZPRS-☆☆-☆☆-A8
  - ZPRS-☆☆-☆☆-B6
  - ZPRS-☆☆-☆☆-B8

  **Note** Vacuum entry (☆☆): 06, 08

---

**Construction**

- Adapter
- Type R adapter
- Lock ring
- Pad

**Applicable pad diameter:**
- ø2 to ø8
- 2 x 4, 3.5 x 7, 4 x 10
- ø10 to ø16 (Thin section series)

**Model**
- ZPR-☆☆☆-☆☆-A5
- ZPR-☆☆☆-☆☆-A6
- ZPR-☆☆☆-☆☆-B4
- ZPR-☆☆☆-☆☆-B5
- ZPR-☆☆☆-☆☆-B6

**Type T adapter**
- ZPT-☆☆-B5
- ZPT-☆☆-B8
- ZPT-☆☆-B6
- ZPT-☆☆-B8

**Type R adapter**
- ZPRS-☆☆-A5
- ZPRS-☆☆-A6
- ZPRS-☆☆-B5
- ZPRS-☆☆-B6

**Note** Vacuum entry (☆☆): 04, 06

---

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
Replacement Parts: Adapter/Buffer (Series ZPR)

With buffer

[Pad model no.]

**[Adapter]**

**[Type R adapter]**

[Buffer]

* Refer to ø2 to ø8 for Thin flat, Thin flat with ribs, and Elliptic.

---

**Construction**

---

**Applicable pad diameter:** ø2 to ø8

2 x 4, 3.5 x 7, 4 x 10

---

**Applicable pad diameter:** ø10 to ø16 (Thin section series)

<table>
<thead>
<tr>
<th>Model</th>
<th>Type T adapter</th>
<th>Type R adapter</th>
<th>Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZP1T-B5</td>
<td>ZP1R-B5</td>
<td>ZPB1(J-K)</td>
<td></td>
</tr>
</tbody>
</table>

Note 1) Applicable buffer stroke (mm): 6, 10, 15, 25
Note 2) Vacuum entry (mm): 04, 06

---

**Applicable pad diameter:** ø20 to ø32

2 x 4, 3.5 x 7, 4 x 10

---

**Applicable pad diameter:** ø40, ø50

---

**Related Equipment**

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Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
Series ZP

Replacement Parts: Adapter/Buffer (Series ZPY)

- Without buffer
- The same symbol
- Replacement of the symbol

[Pad model no.]

ZP Y 50 UN - N6 - A8

Applicable pad diameter: ø2 to ø8
2 x 4, 3.5 x 7, 4 x 10
ø10 to ø16 (Thin section series)

<table>
<thead>
<tr>
<th>Model</th>
<th>1 Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY</td>
<td>Y - A5</td>
</tr>
<tr>
<td>ZPY</td>
<td>Y - A6</td>
</tr>
<tr>
<td>ZPY</td>
<td>Y - B4</td>
</tr>
<tr>
<td>ZPY</td>
<td>Y - B5</td>
</tr>
</tbody>
</table>

Note) Vacuum entry (●): N4, N6, U4, U6

Applicable pad diameter: ø10 to ø16

<table>
<thead>
<tr>
<th>Model</th>
<th>1 Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY1</td>
<td>A5</td>
</tr>
<tr>
<td>ZPY1</td>
<td>A6</td>
</tr>
<tr>
<td>ZPY1</td>
<td>B4</td>
</tr>
<tr>
<td>ZPY1</td>
<td>B5</td>
</tr>
</tbody>
</table>

Applicable pad diameter: ø20 to ø32

<table>
<thead>
<tr>
<th>Model</th>
<th>1 Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY3</td>
<td>A6</td>
</tr>
<tr>
<td>ZPY3</td>
<td>A8</td>
</tr>
<tr>
<td>ZPY3</td>
<td>B5</td>
</tr>
<tr>
<td>ZPY3</td>
<td>B6</td>
</tr>
<tr>
<td>ZPY3</td>
<td>B8</td>
</tr>
</tbody>
</table>

Note) Vacuum entry (●): N4, N6, U4, U6

Applicable pad diameter: ø40, ø50

<table>
<thead>
<tr>
<th>Model</th>
<th>1 Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY4</td>
<td>A6</td>
</tr>
<tr>
<td>ZPY4</td>
<td>A8</td>
</tr>
<tr>
<td>ZPY4</td>
<td>B6</td>
</tr>
<tr>
<td>ZPY4</td>
<td>B8</td>
</tr>
</tbody>
</table>

Note) Vacuum entry (●): N6, U6

Model

ZPY/L50132/L50132/L50132/L50132
- A5
- A6
- B4
- B5

ZPY1/L50132/L50132/L50132/L50132
- A5
- A6
- B4
- B5

ZPY2/L50132/L50132/L50132/L50132
- A5
- A6
- B5
- B6

ZPY3/L50132/L50132/L50132/L50132
- A5
- A6
- B6
- B8

ZPY4/L50132/L50132/L50132/L50132
- A5
- A6
- B8

Note) Vacuum entry (●): N4, N6, U4, U6

Note) Vacuum entry (●): N4, N6, U4, U6
**Replacement Parts: Adapter/Buffer (Series ZPY)**

- With buffer

[Pad model no.]

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Pad dia.</th>
<th>Buffer connection thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ø2 to ø8</td>
<td>B5</td>
</tr>
<tr>
<td>2</td>
<td>10 to 16</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20 to 32</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>40, 50</td>
<td>B8</td>
</tr>
</tbody>
</table>

**Construction**

- The same symbol
- Replacement of the symbol

* Refer to ø2 to ø8 for Thin flat, Thin flat with ribs, and Elliptic.

**Applicable pad diameter: ø2 to ø8**

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
<th>② Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY-50</td>
<td>ZPY1-B5</td>
<td>ZPB1(J-K)</td>
</tr>
</tbody>
</table>

Note 1) Applicable buffer stroke (★★): 6, 10, 15, 25 mm
Note 2) Vacuum entry (★★): N4, N6, U4, U6

**Applicable pad diameter: ø10 to ø16 (Thin section series)**

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
<th>② Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY-10</td>
<td>ZPY2-B5</td>
<td>ZPB2(J-K)</td>
</tr>
</tbody>
</table>

Note 1) Applicable buffer stroke (★★): 10, 20, 30, 40, 50 mm
Note 2) Vacuum entry (★★): N4, N6, U4, U6

**Applicable pad diameter: ø20 to ø32**

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
<th>② Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY3-30</td>
<td>ZPY3-B5</td>
<td>ZPB2(J-K)</td>
</tr>
</tbody>
</table>

Note 1) Applicable buffer stroke (★★): 10, 20, 30, 40, 50 mm
Note 2) Vacuum entry (★★): N4, N6, U4, U6

**Applicable pad diameter: ø40, ø50**

<table>
<thead>
<tr>
<th>Model</th>
<th>① Adapter</th>
<th>② Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPY4-50</td>
<td>ZPY4-B8</td>
<td>ZPB3(J-K)</td>
</tr>
</tbody>
</table>

Note 1) Applicable buffer stroke (★★): 10, 20, 30, 40, 50 mm
Note 2) Vacuum entry (★★): N4, N6, U4, U6