Recognizing that conservation of the global environment is the top-priority challenge for the world's population, Nippon Thompson will conduct its activities with consideration of the environment as a corporate social responsibility, reduce its negative impact on the environment, and help foster a rich global environment.

ISO 9001 & 14001 Quality system registration certificate
Rely on slide rails for smooth, high-accuracy motion covering a wide range of market needs.

Our broad lineup makes the products you need available. With manufacturing technologies based on years of experience, we continue to respond to market demands including everything from railcar doors to household system kitchens. Our plentiful experience of manufacturing will solve your problems for you.

What are "slide rails"?

"Slide rails" are linear mechanism parts which "move heavy objects with minimal force." As mechanical parts, they may not be a familiar sight in your daily life, but they are commonly used in the products around you. Think of them as an invisible hand. Ball bearings are used in all products, enabling especially high accuracy and smooth motion. As well, in order to respond broadly to market needs, our die technologies include both press forming and roll forming, allowing us to use the optimal form of manufacturing for each product.

Features of "IKO slide rails"

- Diverse steel and stainless steel product lineup, from miniature to high-load
- Consistent in-house manufacturing from die on up.
- Rapid response from design through prototypes to mass production.
- Two production hubs, in Japan and Indonesia, enable appropriate pricing and stable supply.

<table>
<thead>
<tr>
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<tr>
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With technologies and production quality control, we enjoy positive evaluations from customers in various fields.

Delivery of reliable, diverse products to various industries and enterprises.

- **Miniature Type**  
  - Compact printers  
  - Receipt supply, etc.

- **Light duty Type**  
  - Compact industrial devices  
  - ATM receipt interiors, printer interiors for convenience stores  
  - Commercial coffee makers

- **Medium duty Type**  
  - Office cabinets
  - Copiers
  - For internal unit maintenance

- **Heavy duty Type**  
  - Special vehicles
  - ATMs
  - Semiconductor facilities

- **Stainless Steel Type**  
  - Medical instruments
  - Blood banks
  - Food machinery
  - Showcases, etc.
  - Kitchen equipment

**SLIDE RAIL CATALOG**

**Order made**

We offer as order-made products slide rails manufactured in accordance with customer requests, modifying standard products which do not match customer devices by changing slide length, travel, or mounting hole position or adding special mechanisms, etc.

**Stress Test**

- Running tests (10,000 times or more)
- Shock resistance tests (at client request)
- Destructive tests
- Function check
- Safety check

We provide products which meet these requirements.

**Delivery record**

IKO slide rails show their strength in a myriad of contexts.

[Compact printers] Receipt supply, etc.
[Compact industrial devices] ATM receipt interiors, printer interiors for convenience stores
[Commercial coffee makers]
[Office cabinets] [Copiers] For internal unit maintenance
[Special vehicles] [ATMs] [Semiconductor facilities]
[Large copiers] [Safes]
[Medical instruments] Blood banks
[Food machinery] Showcases, etc.
[Kitchen equipment]
**Lineup configuration of slide rails**

<table>
<thead>
<tr>
<th>Rail size (mm)</th>
<th>Miniature type</th>
<th>Light duty type</th>
<th>Medium duty type</th>
<th>Heavy duty type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity (N/set)</td>
<td>10.6 ≤</td>
<td>13.0 ≤</td>
<td>19.8 ≤</td>
<td>23.8 ≤</td>
</tr>
<tr>
<td>Model</td>
<td>U1021</td>
<td>U1031</td>
<td>UC180</td>
<td>C357</td>
</tr>
</tbody>
</table>

**Slide rail load capacity**

Load capacity and life cycle are intimately related. As well, lifetime is also significantly affected by the center of gravity of the load being the mid-point of the inner member length and in the middle of the drawer (drawer width is basically 400mm).

Our slide rails' load capacity are based on a 10,000 cycle dynamic test. This test is based on the center of gravity of the load being the mid-point of the inner member length and in the middle of the drawer (drawer width is basically 400mm).

Be careful, as the definition of load capacity varies among manufacturers.

If anything is unclear, please contact our Technology Services Group.

---

**Icon explanation**

- **SUS**: Mainly stainless steel products. (However, some parts may not be stainless steel.)
- **SPCC**: Products whose main components are SPCC (cold-rolled steel plate) with electrogalvanizing (trivalent bright chromate plating).
- **L=R**: Leftbright common products.
- **L≠R**: Leftbright non-common products.
- **T=L**: Products whose travel amount is longer than their rail length.
- **T+L**: Products whose travel amount is shorter than their rail length.
- **RoHS compliant**: Products compliant with the RoHS Directive.
- **Recommended**: Products usually in stock but available as custom orders.

---

**Cautions for slide rail mounting**

Consult the figure at left for mounting methods. Observe the following precautions when mounting slide rails.

- Mount slide rails in parallel.
- Apply an even load to slide rails.
- Do not overload in the direction in which the slide rail is pushed in.
- Do not overload in the direction in which the slide rail is drawn out.
- Do not overload in the direction in which the slide rail is pushed in.
- In addition, temporarily fasten the mounting screws when mounting and move the slide rails several times, performing final tightening of the screws where the movement is easy. Further, with three-member slide rails etc., use the inner member side as the unit (drawer) side (excluding C358).
- When using horizontal mounting, the allowable load is some 1/4 to 1/5 of that of the recommended mounting method. Further, depending on the mounting (load position etc.), each member and stopper/tab area may interfere with screw heads or other parts.
<Features>
- World smallest class slide rail, the result of press forming.
- Linear motion type: Inner member moves linearly within outer member.

<Recommended screws>
- M3 pan head screws or cross-recessed pan head screws for precision equipment
  (Cautions)
  - Inner member mounting screw length must be within mounting material thickness ± 1.8 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)

<Grease>
- Nichimoly G-03031X

For requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- World smallest class slide rail, made with press forming.
  (as of our research in September 2014)

<Recommended screws>
- M2.3 pan head screws or cross-recessed pan head screws for precision equipment
  (Caution)
  Inner member mounting screw length must be within mounting material thickness + 1.8 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)

<Grease>
- Nichimoly G-03031X

<Features>
- 14-mm width compact slide rail.
  (as of our research in August 2014)
- Linear motion type: Inner member moves linearly within outer member.

<Recommended screws>
- M2.6 Cross-recessed pan head screw for precision equipment
  (Caution)
  Inner member mounting screw length must be within mounting material thickness + 2.0 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)
  General pan head screws may contact the ball retainer and impede rail operation or cause damage.

<Grease>
- Nichimoly G-03031X

For requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- 14-mm width compact slide rail.
- Series cumulative sales of over 2.7 million.
  (as of our research in September 2014)

<Recommended screws>
- M2.6 Cross-recessed pan head screw for precision equipment
  (Caution)
  - Inner member mounting screw length must be within mounting material thickness + 2.0 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)
  - Ordinary pan head screws may contact the ball retainer and impede rail operation or cause damage.

<Grease>
- Nichimoly G-03031X

For requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- Rail thickness is just 7.5 mm. Compact overtravel type of slide rail with a focus on slimness.
- Both draw-out and closing have a cycle repair (ball creep repair) mechanism, reducing brake-stop (ball stop due to frictional resistance) at start of operation.
- Because both inner and outer members are tapped, screw processing for the rail mounting unit is not required. As well, mounting is possible using the rail hole and elongated hole.

<Recommended screws>
- M2.6 Cross-recessed pan head screw for precision equipment (tap)
- M2.3 Cross-recessed pan head screw for precision equipment (hole/elongated hole)
(Caution)
- Mounting screw length must be within mounting unit thickness + 1.0 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)
- General pan head screws may contact the ball retainer and impede rail operation or cause damage.

<Grease>
- Nichimoly G-03031X

For requests concerning special sizes or specification changes etc., contact our sales staff.
**Features**
- The 2000 Series features 20-mm width compact slide rails.
- Smallest cross section among SPCC rails.
- Linear motion type: Inner member moves linearly within outer member.

**Recommended screws**
- M3 truss head screw or binding head screw
  
  **(Caution)**
  - Inner member mounting screw length must be within mounting material thickness + 3.0 mm. (Long screws will contact the ball retainer and impede rail operation or cause damage.)

**Grease**
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

**Surface treatment**
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate)

---

**Model**

**Order**

**OK!**

**2011 - 200**

**2020 - 70**

**SPCC**

**Linear motion**

**L=R**

**T<L**

**RoHS compliant**

**Two-way travel**

**L=R**

**T<L**

**196N/pair**

**RoHS compliant**

---

**Features**
- The 2000 Series features 20-mm width compact slide rails.
- Smallest cross section among SPCC rails.
- Travel is possible at both front and rear. (Two-way travel type)
- Brake-stop type. With a sharp pull from the full-travel position, the inner member can be disconnected. (Stopper is not provided.)
  
  **(Do not insert the disconnected inner member into another rail. It may lead to poor operation.)**

**Recommended screws**
- M3 truss head screw or binding head screw

**Grease**
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

**Surface treatment**
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate)

---

**Product number (product name) composition**

**Model name** Part number

**15**

**16**

---

**For requests concerning special sizes or specification changes etc., contact our sales staff.**
**Features**
- The 2000 Series features 20-mm width compact slide rails.
- Smallest cross section among SPCC rails.

**Recommended screws**
- M3 truss head screw or binding head screw

**Grease**
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

**Surface treatment**
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate)

---

**Model**

2021 - SPCC

**Order**

OK!

**Model**

2031 - SPCC

**Order**

OK!

---

For requests concerning special sizes or specification changes etc., contact our sales staff.

---

<table>
<thead>
<tr>
<th>Part number</th>
<th>Slide length (mm)</th>
<th>Travel (mm)</th>
<th>Mounting hole (mm) ± 0.3 mm</th>
<th>Load capacity (N/pair)</th>
<th>Quantity in package (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>200</td>
<td>L=R</td>
<td>±0.3</td>
<td>145.0</td>
<td>160.0</td>
</tr>
<tr>
<td>250</td>
<td>250</td>
<td>L=R</td>
<td>±0.3</td>
<td>195.0</td>
<td>210.0</td>
</tr>
<tr>
<td>300</td>
<td>300</td>
<td>L=R</td>
<td>±0.3</td>
<td>245.0</td>
<td>260.0</td>
</tr>
<tr>
<td>350</td>
<td>350</td>
<td>L=R</td>
<td>±0.3</td>
<td>295.0</td>
<td>310.0</td>
</tr>
<tr>
<td>400</td>
<td>400</td>
<td>L=R</td>
<td>±0.3</td>
<td>345.0</td>
<td>360.0</td>
</tr>
<tr>
<td>450</td>
<td>450</td>
<td>L=R</td>
<td>±0.3</td>
<td>395.0</td>
<td>410.0</td>
</tr>
<tr>
<td>500</td>
<td>500</td>
<td>L=R</td>
<td>±0.3</td>
<td>445.0</td>
<td>460.0</td>
</tr>
<tr>
<td>550</td>
<td>550</td>
<td>L=R</td>
<td>±0.3</td>
<td>495.0</td>
<td>510.0</td>
</tr>
</tbody>
</table>

**For special sizes, contact our sales staff.**

* Changes may be made without notice for improved quality, environment, and safety, without affecting function or mounting.

---

For requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- 27-mm width slim slide rail.

<Recommended screws>
- M4 binding head screw

<Grease>
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

<Surface treatment>
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate);
  however, U2721 is stainless steel and therefore unplated.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Part name</th>
<th>Material</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Outer member</td>
<td>SPCC</td>
<td>t: 1.4</td>
</tr>
<tr>
<td>2</td>
<td>Inner member</td>
<td>SPCC</td>
<td>t: 1.5</td>
</tr>
<tr>
<td>3</td>
<td>Ball</td>
<td>SUS440C</td>
<td>3/16&quot;</td>
</tr>
<tr>
<td>4</td>
<td>Inner member</td>
<td>SPCC</td>
<td>t: 1.6</td>
</tr>
<tr>
<td>5</td>
<td>Plastic bumper for closing</td>
<td>TPO</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Lead-in guide</td>
<td>POM</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Disconnect spring</td>
<td>SUS304</td>
<td>t: 0.6</td>
</tr>
<tr>
<td>8</td>
<td>Hold-de-tent</td>
<td>SUS304</td>
<td>t: 0.5</td>
</tr>
<tr>
<td>9</td>
<td>Hollow rivet</td>
<td>SUS304</td>
<td>-</td>
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For requests concerning special sizes or specification changes etc., contact our sales staff.
### Features
- Quiet opening & closing using a plastic bumper.
- 27-mm width slim slide rail.

### Recommended screws
- M4 binding head screw

### Grease
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

### Surface treatment
- All stainless steel type.

**[Caution]**

- We do not handle equivalent steel products, but we offer the 2731M with a quiet movement function and the 2731MC with a hold-detent mechanism; please refer to these.

### Product Specifications

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<td>200A</td>
<td>200</td>
<td>200</td>
<td>-</td>
<td>145.0</td>
<td>0.30</td>
</tr>
<tr>
<td>250A</td>
<td>250</td>
<td>250</td>
<td>-</td>
<td>150.0</td>
<td>0.38</td>
</tr>
<tr>
<td>300A</td>
<td>300</td>
<td>300</td>
<td>-</td>
<td>195.0</td>
<td>0.46</td>
</tr>
<tr>
<td>350A</td>
<td>350</td>
<td>350</td>
<td>-</td>
<td>230.0</td>
<td>0.54</td>
</tr>
<tr>
<td>400A</td>
<td>400</td>
<td>400</td>
<td>-</td>
<td>265.0</td>
<td>0.62</td>
</tr>
<tr>
<td>450A</td>
<td>450</td>
<td>450</td>
<td>-</td>
<td>300.0</td>
<td>0.70</td>
</tr>
<tr>
<td>500A</td>
<td>500</td>
<td>500</td>
<td>-</td>
<td>335.0</td>
<td>0.78</td>
</tr>
</tbody>
</table>

### Remarks
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**For requests concerning special sizes or specification changes, contact our sales staff.**

---

### Features
- 27-mm width slim slide rail.

### Recommended screws
- M4 binding head screw

### Grease
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### Remarks
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- Changes may be made without notice for improved quality, environment, and safety, without affecting function or mounting.

**For requests concerning special sizes or specification changes, contact our sales staff.**
**Features**
- 27-mm width slim slide rail.
- The inner member can be disconnected through disconnect spring operation. 
  (Caution)
  - Do not insert the disconnected inner member into another rail. It may lead to poor operation.
  - A lead-in guide is attached, so that the inner member can be easily reinserted.
- The lock is automatically released at rail closing.
- The lock is released without spring operation.

**Recommended screws**
- M4 binding head screw

**Grease**
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

**Surface treatment**
- Part numbers (1) (2) (3): Electrogalvanizing (trivalent bright chromate); however, U2736 is stainless steel and therefore unplated.
- Part numbers (4) and (5): Surface treatment is SUS304 t: 0.6 and SUS440C t: 0.5.
- A silencing bumper is provided to reduce the shock and noise of closing.
- A silencing bumper is provided to reduce the shock and noise of closing.
- Standard-use 35-mm rail compact overtravel type.
- Developed by making the 3531 model (thickness 19.2 mm) more than 6 mmSlimmer.
- A silencing bumper is provided to reduce the shock and noise of closing.

**Ordering information**
- For requests concerning special sizes or specification changes etc., contact our sales staff.

**Model**
- C350

**SUS**
- Load capacity
- SPCC
- T≥L

**Part number**
- Slide length ±0.3 mm
- Travel ±3 mm
- Slide hole (mm) ±0.5 mm
- Product weight (kg/piece)

**Access hole**
- 10.1 mm
- 8.1 mm
- 4.5 mm
- 3.3 mm

**For special sizes, contact our sales staff.**
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**For requests concerning special sizes or specification changes etc., contact our sales staff.**
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**MODEL**

C351

**SPCC**

- Quiet movement
- Hold-in detent

**ORDER**

12

Product number (product name) composition

- C351 - 12

---

**MODEL**

C352

**SPCC**

Disconnect (without spring)

**ORDER**

8A

Product number (product name) composition

- C352 - 8A

---

For requests concerning special sizes or specification changes etc., contact our sales staff.

---

- Quiet movement
- Hold-in detent

**ORDER**

12

Product number (product name) composition

- C351 - 12

---

**MODEL**

C352

**SPCC**

Disconnect (without spring)

**ORDER**

8A

Product number (product name) composition

- C352 - 8A

---

For requests concerning special sizes or specification changes etc., contact our sales staff.
Selecting a disconnect spring
Stopper takes effect at draw-out, and is manually released at inner disconnect. Lock release method at closing can be selected by disconnect spring type. As well, the C3 type is offered as standard. We provide the standard product in the absence of a specific designation.

- **Type**
  - Lock release method
- **C2**
- **C3** Automatic release (release and closing without spring operation) <Standard>

<Features>
- Standard-use 35-mm rail compact overtravel type.
- A Sky original product, developed by making the 3531 model thickness 19.2 mm more than 6 mm thinner.
- The inner member can be disconnected through disconnect spring operation.

(Caution)
Do not insert the disconnected inner member into another rail. (It may lead to poor operation.)
- Two types of disconnect springs, with differing lock release methods at closing, are available. For details, confirm with the disconnect spring selection method (above the dimension figure).
- Rail with sequential mechanism. Operates smoothly at draw-out, suppressing rail wobble. Because the lock mechanism acts at closing, the drawn-out rail is locked and the inner member can be easily reinserted.

<Recommended screws>
- M4 binding head screw

<Grease>
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

<Surface treatment>
- Part numbers (1) (2) (3) (9): Electrogalvanizing (trivalent bright chromate)
- Part numbers (1) (2) (3) (5): Electrogalvanizing (trivalent bright chromate); however, U11 is stainless steel and therefore unplated.

<Recommended screws>(*) For special sizes, contact our sales staff.
- M4 truss head screw or binding head screw

<Grease>* For special sizes, contact our sales staff.
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

<Surface treatment>* For special sizes, contact our sales staff.
- Electrogalvanizing (trivalent bright chromate)
- U11 is stainless steel and therefore unplated.

For requests concerning special sizes or specification changes etc., contact our sales staff.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Load capacity</th>
<th>Product weight</th>
<th>Quantity in package</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1.6</td>
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<td>25</td>
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<tr>
<td>14</td>
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<td>25</td>
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<tr>
<td>16</td>
<td>1.6</td>
<td>0.37</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1.6</td>
<td>0.40</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1.6</td>
<td>0.44</td>
<td>25</td>
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<tr>
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<td>1.6</td>
<td>0.54</td>
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<tr>
<td>26</td>
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<td>0.59</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

For requests concerning special sizes or specification changes etc., contact our sales staff.
**Medium duty type**

**Features**
- Standard-use 35-mm sized slide rail.
- M4 truss head screw or binding head screw

**Recommended screws**
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

**Grease**
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate); however, U21 is stainless steel and therefore unplated.

**Surface treatment**
- All stainless steel type. For steel products, consult the similar specifications of the 3525 model.
- Selecting a disconnect spring

**Hold-detent (possible)**
- The inner member can be disconnected through disconnect spring operation.
- Stopper takes effect at draw-out, and is manually released at inner disconnect. Lock release method at closing can be selected by disconnect spring type.
- Type: Manual release (release and closing with minimal force, without spring operation)
- Hold-detent (possible) (release and closing without spring operation)

**Hold-detent (release and closing with minimal force, without spring operation)**
- Manual release
- Lock release method

**Disconnect (with spring)**
- Hold-detent (possible)

---

**Part number**

<table>
<thead>
<tr>
<th>Model</th>
<th>SPCC</th>
<th>U21</th>
<th>SUS</th>
<th>L=R</th>
<th>T=L</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
<td><img src="image" alt="" /></td>
</tr>
</tbody>
</table>

**Travel**

- Slide length ±0.8
- Slide hole 4.5x5.3

**Weight**

- Product number (product name) composition

**Access hole**

- 4.5x5.3
- 5.3x4.5

**Mounting hole**

- 25.4 ±0.5
- 10.1 ±0.3

**Slide length**

- 3 mm

**Load capacity**

- (N/pair)

---

For requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- Standard-use 35-mm sized slide rail.

<Recommended screws>
- M4 truss head screw or binding head screw

<Grease>
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

<Surface treatment>
- Part numbers (1) (2): Electrogalvanizing (trivalent bright chromate); however, U31 is stainless steel and therefore unplated.

<Other>
- As special order specifications, we can also manufacture the quiet movement type (3531M) and the closing/draw-out hold-detent mechanism type among others.

---

**Order**

For requests concerning special sizes or specification changes etc., contact our sales staff.

---

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SPCC</th>
<th>U31</th>
<th>SUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3531</td>
<td>32</td>
<td>L=R</td>
<td>T=R</td>
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<tr>
<td></td>
<td>OK!</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Model name</th>
<th>Part number (product name) composition</th>
<th>Slide length ±0.3 mm</th>
<th>Travel ±0.8 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3535</td>
<td>12(A)</td>
<td>111.1 ±0.3</td>
<td>4.5x5.3</td>
</tr>
<tr>
<td>3535</td>
<td>12(B)</td>
<td>25.4 ±0.3</td>
<td>7891012</td>
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<table>
<thead>
<tr>
<th>Part number</th>
<th>Size length (mm)</th>
<th>Travel (mm)</th>
<th>Mounting hole (mm) ± 0.3 mm</th>
<th>Load capacity (kg/piece)</th>
<th>Weight (kg/piece)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>254.8</td>
<td>268.9</td>
<td>350.0 311.1 301.9 461.2 0.75</td>
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<td></td>
</tr>
<tr>
<td>2</td>
<td>306.0</td>
<td>329.1</td>
<td>305.0 311.1 301.9 461.2 0.75</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>358.0</td>
<td>359.1</td>
<td>305.0 311.1 301.9 461.2 0.75</td>
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<tr>
<td>4</td>
<td>410.0</td>
<td>429.1</td>
<td>305.0 311.1 301.9 461.2 0.75</td>
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</tr>
<tr>
<td>5</td>
<td>462.0</td>
<td>481.1</td>
<td>305.0 311.1 301.9 461.2 0.75</td>
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<td></td>
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<tr>
<td>6</td>
<td>514.0</td>
<td>533.1</td>
<td>305.0 311.1 301.9 461.2 0.75</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

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* For special sizes, contact our sales staff.
* Changes may be made without notice for improved quality, environment, and safety, without affecting function or mounting.

<table>
<thead>
<tr>
<th>Number</th>
<th>Part name</th>
<th>Material (*1)</th>
<th>Remark (*2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Center member</td>
<td>SPCC t: 1.6</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Inner member</td>
<td>SPCC t: 1.6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hold-release</td>
<td>SUS304 t: 0.8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ball retainer</td>
<td>SUS304 t: 0.3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Detent holder</td>
<td>SUS304 t: 0.8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Plastic bumper for closing</td>
<td>TPO</td>
<td></td>
</tr>
</tbody>
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<td>Inner member</td>
<td>SPCC t: 1.6</td>
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<td>3</td>
<td>Hold-release</td>
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<td>SUS304 t: 0.3</td>
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<td></td>
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<td>Inner member</td>
<td>SPCC t: 1.6</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Hold-release</td>
<td>SUS304 t: 0.8</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ball retainer</td>
<td>SUS304 t: 0.3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Detent holder</td>
<td>SUS304 t: 0.8</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Plastic bumper for closing</td>
<td>TPO</td>
<td></td>
</tr>
</tbody>
</table>

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For for requests concerning special sizes or specification changes etc., contact our sales staff.
<Features>
- Dual overtravel slide rail, with reinforced load capacity performance.
- Heavy-duty slide rail with 1,000N or higher load capacity.

<Recommended screws>
- M4 truss head screw or binding head screw

<Grease>
- JX Nippon Oil and Energy EPNOG Grease AP(N) 2

<Surface treatment>
- Part numbers (1) (2) (5) (6): Electrogalvanizing (trivalent bright chromate); however, U51 is stainless steel and therefore unplated.

Heavy duty type

For requests concerning special sizes or specification changes etc., contact our sales staff.

For requests concerning special sizes or specification changes etc., contact our sales staff.
### Features
- 63 mm width heavy-duty overtravel type rail.
- Includes a simple catch mechanism at closing.
- Includes a sequential mechanism in a mechanism which extends the rail in order at draw-out, reinforcing the rail load capacity.

### Recommended screws
- M5, M6 truss head screws or binding head screws (depending on the mounting hole used).
- M6 carriage bolt can be used on the outer member side (depending on the mounting hole used).

### Grease
- JX Nippon Oil and Energy EPNOC Grease AP(N) 2

### Surface treatment
- Part numbers (1) (2) (3): Electrogalvanizing (trivalent bright chromate)

### Mounting hole (mm) ± 0.3 mm
- Load capacity 19.1 ± 0.5
- Travel 19.1 ± 0.8

### Access hole (mm)
- 19.1 ± 0.8

### Travel ±0.8
- 12.7 ± 0.8

### Under development
- 7.1 ± 0.5

### Specifications
- Product name (product name) composition
- M6 carriage bolt can be used on the outer member side.

### Development
- Plastic for sequential movement
- Buffer for sequential movement

### For requests concerning special sizes or specification changes etc., contact our sales staff.
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For requests concerning special sizes or specification changes etc., contact our sales staff.
Cautions for slide rail handling

Access hole
Some products have access holes (as in Photo 1) in the slide rail ball retainer. This access hole is necessary when mounting bolts in the outer member, etc. The hole may be sharp-edged. Take care not to touch it, in order to avoid unexpected injury.
As well, use this access hole when mounting screws. Be careful, as deformation of the ball retainer during mounting will affect the movement and function of the slide rail.

Mounting bolt
Use the recommended screws when mounting the slide rail.
Be careful, as if the slide rail is mounted with other than the recommended screws, they may interfere with the ball retainer or other parts and impede slide rail motion.

Disconnect type rail
The slide rails are checked and adjusted rail by rail. Do not combine a removed inner member with another rail.
(It may affect operation and function.)
As well, when reinserting the inner member, insert it perfectly straightly (as in Photo 2). (Depending on the model, a lead-in guide may be attached. Insert slowly following the guide component.) Be careful, as if the member is forced in while bent, it may deform the ball retainer and impede motion.

Slide rail materials

The following main materials are used for our slide rails.

Metals

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPCC</td>
<td>Cold-reduced carbon steel plates. Used in member material.</td>
</tr>
<tr>
<td>SPHC</td>
<td>Hot-rolled mild steel plates. Used in t &gt;3.0 mounting plates, etc.</td>
</tr>
<tr>
<td>SECC</td>
<td>Electrogalvanized steel plate. Chrome-free type used as our steel rail ball retainer material.</td>
</tr>
<tr>
<td>SUS304</td>
<td>One of the most popular types of stainless steel. Used in members, ball retainers, and balls.</td>
</tr>
<tr>
<td>SUS440C</td>
<td>Used as ball material in some stainless steel rails. Can achieve high hardness through heat treatment.</td>
</tr>
<tr>
<td>SUSXM-7</td>
<td>Material similar to SUS304. Used in header parts such as rivets.</td>
</tr>
<tr>
<td>SWCH</td>
<td>Carbon steel for cold heading-wire. Used as ball and hollow rivet material.</td>
</tr>
<tr>
<td>SUJ-2</td>
<td>Bearing ball (high-carbon chrome bearing steel). Used as ball material in the U1000 series.</td>
</tr>
</tbody>
</table>

Plastics

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>Polyamide. Excellent shock resistance and chemical resistance. Also strong over a wide temperature range.</td>
</tr>
<tr>
<td>POM</td>
<td>Polyacetal (polyoxymethylene). Excellent wear resistance and smoothness. Continuous operating temperature is approx. 105°C.</td>
</tr>
<tr>
<td>TPU</td>
<td>Polyurethane elastomer. Excellent wear resistance, heat resistance (approx. 100°C), oil resistance, rubber elasticity, and flexibility.</td>
</tr>
<tr>
<td>Felt</td>
<td>Wool. Mainly pasted to rail stoppers for use as quiet movement material.</td>
</tr>
</tbody>
</table>

Greases
We use industrial grease as lubricant. With typical use, there should be no need for regreasing.
The following two grease types are used with the rails in our catalog.

<table>
<thead>
<tr>
<th>Grease Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPNOC AP (N)</td>
<td>Universal industrial extreme pressure grease. Soap base uses lithium soap, providing characteristics such as water resistance and heat resistance. Possible operating temperature range as made public by the manufacturer: -20 to 125°C. <a href="http://www.noex.jx-group.co.jp/english/products/lubricants/e71_emphlu_grease.html#product_0">http://www.noex.jx-group.co.jp/english/products/lubricants/e71_emphlu_grease.html#product_0</a></td>
</tr>
<tr>
<td>G-03031X</td>
<td>Lithium soap grease with excellent low torque. Used with compact rails. Possible operating temperature range as made public by the manufacturer: -50 to 150°C.</td>
</tr>
</tbody>
</table>

Other special greases (high-temperature use, low-temperature use, vacuum use, food machinery use, or greaseless) are available as special orders upon customer request. For details, please contact our Technology Services Group.

Surface treatment
Steel product members are electrogalvanized (trivalent bright chrome plated). Our products comply with the RoHS Directive as standard, without special designation required. Special specifications such as colored chrome or nitriding treatment are also available.
### Disconnect spring operation method

There are several types of disconnect spring. Select the type which best accommodates your desired motion.

**Disconnect method**

In any case, the inner member can be disconnected by pushing the disconnect spring.

[Photo 1] Disconnect method

[Photo 2] C2 (lock type) The rail can be closed by pushing the disconnect spring.

[Photo 3] C3 (automatic release type) Closing can be done with minimal force.

[Photo 4] C4 (semi-automatic release type) Closing can be done with somewhat greater force than C3

### Tab/pocket processing

For mass-produced products using slide rails in large quantity, the assembly time can be significantly reduced by adjusting the mounting method. The applicable series are as follows.

<table>
<thead>
<tr>
<th>Model</th>
<th>Model</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500</td>
<td>12.5</td>
<td>17.8</td>
</tr>
<tr>
<td>C359</td>
<td>12.5</td>
<td>17.8</td>
</tr>
<tr>
<td>550N</td>
<td>15.1</td>
<td>18.0</td>
</tr>
</tbody>
</table>

* Please consult us for tab/pocket clearance [Figs. 1 and 2 G1, G2, K].
* Excludes C358
* Other models may also be applicable.

### C358 mounting and removal

The C358 series has been designed/developed for wooden furniture. By using the attached bracket, it absorbs irregularities. Note that the mounting direction is reversed.

[Photo 5] Cabinet side mounting

The bracket side for this product is the drawer side. Mount the inner member on the cabinet side. (Can be mounted with the rail closed)

At mounting, put the lever protrusion near the rail depression and slide the drawer inward to fix it.

[Photo 6] Bracket mounting

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**Introduction to rail functions**

**Disconnect spring operation method**

**Tab/pocket processing**

**C358 mounting and removal**

---

**Slide Rail Catalog**

**Japan Factory**

**INDONESIA Factory**

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**What are “slide rails”?**

“Slide rails” are linear mechanism parts which “move heavy objects with minimal force.” As mechanical parts, they may not be a familiar sight in your daily life, but they are commonly used in the products around you. Think of them as an invisible hand. Ball bearings are used in all products, enabling especially high accuracy and smooth motion. As well, in order to respond broadly to market needs, our die technologies include both press forming and roll forming, allowing us to use the optimal form of manufacturing for each product.