

Standard Guide Rails, Steel version

## Product Description

### Outstanding features

- Guide rails with hardened raceways and ground on all sides
- Corrosion-resistant guide rails in Resist CR, matte silver hard chrome plated, available in accuracy class H, accuracy classes P and SP on request

### Proven cover strip for guide rail mounting holes

- A **single** cover for all holes – saves time and money
- Stainless spring steel to EN 10088
- Easy to fit – simply clip on and secure

### Guide rails with cover strip and plastic screw-down protective end caps

- with tapped holes at the end faces

### Alternatively:

Cover strip secured with screws and washers

### Guide rails with cover strip and aluminum strip clamps

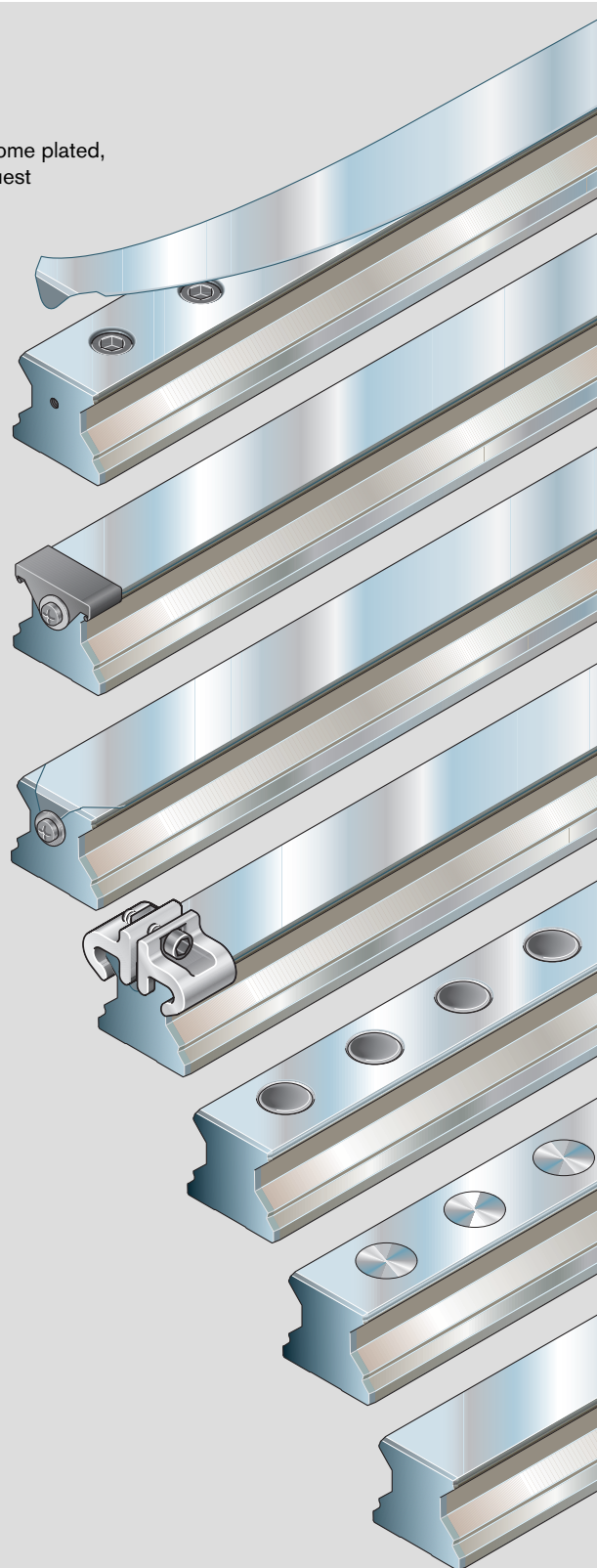
- without tapped holes at the end faces (not required)

### Guide rails with plastic mounting hole plugs

### Guide rails with steel mounting hole plugs

### Guide rails for mounting from below

- with hardened top surface



Standard Guide Rails, Steel version

# Ordering Examples

## Ordering guide rails in recommended lengths

The following examples apply to all orders for standard guide rails. Recommended rail lengths are delivered with priority.

| Size | Accuracy class | Guide rail One-piece Part number, Rail length L (mm) | Composite Part number and number of sections, Rail length L (mm) | Spacing T <sub>2</sub> mm | Recommended rail lengths Number of holes n <sub>B</sub> / Rail length L (mm) |
|------|----------------|--|--|---------------------------|--|
| 25   | H              | R1805 233 31, ...                                    | R1805 233 3, ...   | 30                        | acc. to formula L = n <sub>B</sub> · T <sub>2</sub> - 4 up to 133/3986 max.  |
|      | P              | R1805 232 31, ...                                    | R1805 232 3, ...   |                           |  |
|      | SP             | R1805 231 31, ...                                    | R1805 231 3, ...   |                           |  |
|      | UP             | R1805 239 31, ...                                    | R1805 239 3, ...   |                           |  |
| 35   | H              | R1805 333 61, ...                                    | R1805 333 6, ...   | 40                        | acc. to formula L = n <sub>B</sub> · T <sub>2</sub> - 4 up to 100/3996 max.  |
|      | P              | R1805 332 61, ...                                    | R1805 332 6, ...   |                           |  |
|      | SP             | R1805 331 61, ...                                    | R1805 331 6, ...   |                           |  |
|      | UP             | R1805 339 61, ...                                    | R1805 339 6, ...   |                           |  |
| 45   | H              | R1805 433 61, ...                                    | R1805 433 6, ...   | 52.5                      | acc. to formula L = n <sub>B</sub> · T <sub>2</sub> - 4 up to 76/3986 max.   |
|      | P              | R1805 432 61, ...                                    | R1805 432 6, ...   |                           |  |
|      | SP             | R1805 431 61, ...                                    | R1805 431 6, ...   |                           |  |
|      | UP             | R1805 439 61, ...                                    | R1805 439 6, ...   |                           |  |
| 55   | H              | R1805 533 61, ...                                    | R1805 533 6, ...   | 60                        | acc. to formula L = n <sub>B</sub> · T <sub>2</sub> - 4                      |
|      | P              | R1805 532 61, ...                                    | R1805 532 6, ...   |                           |  |

Extract from table with part numbers and recommended rail lengths for ordering example

### From the desired length to the recommended length

$$L = \frac{L_W}{T_2} \cdot T_2 - 4$$

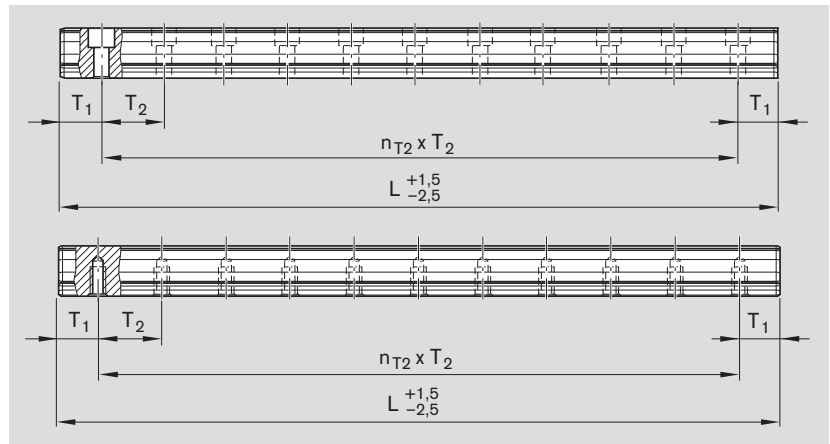
Round up the quotient L<sub>W</sub>/T<sub>2</sub> to the next whole number!

#### Example

$$L = \frac{1660 \text{ mm}}{40 \text{ mm}} \cdot 40 \text{ mm} - 4 \text{ mm}$$

$$L = 42 \cdot 40 \text{ mm} - 4 \text{ mm}$$

$$L = 1676 \text{ mm}$$



$$L = n_B \cdot T_2 - 4$$

Basis: number of holes

$$L = n_{T_2} \cdot T_2 + 2 \cdot T_{1S}$$

Basis: number of spaces

- L = recommended rail length (mm)
- L<sub>W</sub> = desired rail length (mm)
- T<sub>2</sub> = hole spacing<sup>1)</sup> (mm)
- T<sub>1S</sub> = preferred dimension<sup>1)</sup> (mm)
- n<sub>B</sub> = number of holes
- n<sub>T<sub>2</sub></sub> = number of spaces
- 1) See tables for values

### Notes on ordering examples

If the preferred dimension T<sub>1S</sub> cannot be used:

- Select an end space T<sub>1</sub> between T<sub>1S</sub> and T<sub>1 min</sub>.
  - Do not go below the minimum spacing T<sub>1 min</sub>!
- (T<sub>1</sub>, T<sub>1 min</sub>, T<sub>1S</sub> are the same at either end of the rail.)

### Ordering example 1 (up to L<sub>max</sub>)

- Standard guide rail size 35 with cover strip
- Accuracy class H
- Calculated rail length 1676 mm, (41 · T<sub>2</sub>, preferred dimension T<sub>1S</sub> = 18 mm; number of holes n<sub>B</sub> = 42)

#### Ordering data

Part number, rail length (mm)  
T<sub>1</sub> / n<sub>T<sub>2</sub></sub> · T<sub>2</sub> / T<sub>1</sub> (mm)

**R1805 333 61, 1676 mm**  
**18 / 41 · 40 / 18 mm**

### Ordering example 2 (over L<sub>max</sub>)

- Standard guide rail size 35 with cover strip
- Accuracy class H
- Calculated rail length 5036 mm, 2 sections (125 · T<sub>2</sub>, preferred dimension T<sub>1S</sub> = 18 mm; number of holes n<sub>B</sub> = 126)

#### Ordering data

Part number and number of sections, rail length (mm)  
T<sub>1</sub> / n<sub>T<sub>2</sub></sub> · T<sub>2</sub> / T<sub>1</sub> (mm)

**R1875 333 62, 5036 mm**  
**18 / 125 · 60 / 18 mm**

Rail lengths greater than L<sub>max</sub> are made up of matching rail sections mounted end to end.

Standard Guide Rails, Steel version

## Guide Rails with Cover Strip and Protective End Caps

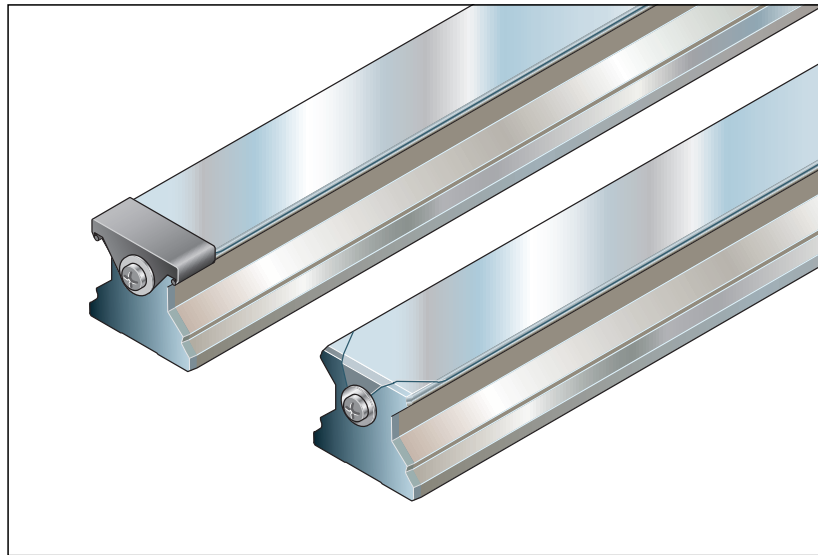
### Guide rail R1805 .6. ...

For mounting from above, with cover strip of stainless spring steel to EN 10088 and screw-down plastic protective caps

#### Notes

As an alternative, the cover strip can be secured with screws and washers. Follow the mounting instructions! Send for the publication "Mounting Instructions for the Cover Strip".

For corrosion-resistant guide rails, Resist CR, matte silver hard chrome plated, see section on "Standard Guide Rails, Resist CR", part numbers R1845 .6. ...

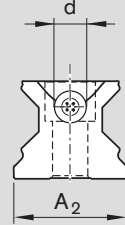
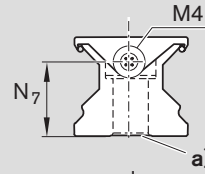


| Size | Accuracy class   | Guide rail                                      |  | Spacing T <sub>2</sub> mm | Recommended rail lengths<br>Number of holes n <sub>B</sub> / Rail length L (mm) |
|------|------------------|---|--|---------------------------|---|
|      |                  | One-piece<br>Part number,<br>Rail length L (mm) | Composite<br>Part number and number of sections,<br>Rail length L (mm) |                           |   |
| 25   | H                | R1805 263 31, ....                              | R1805 263 3., ....   | 30                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.                  |
|      | P                | R1805 262 31, ....                              | R1805 262 3., ....   |                           |   |
|      | SP               | R1805 261 31, ....                              | R1805 261 3., ....   |                           |   |
|      | GP <sup>1)</sup> | R1805 268 31, ....                              | R1805 268 3., ....   |                           |   |
|      | UP               | R1805 269 31, ....                              | R1805 269 3., ....   |                           |   |
| 35   | H                | R1805 363 61, ....                              | R1805 363 6., ....   | 40                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.                  |
|      | P                | R1805 362 61, ....                              | R1805 362 6., ....   |                           |   |
|      | SP               | R1805 361 61, ....                              | R1805 361 6., ....   |                           |   |
|      | GP <sup>1)</sup> | R1805 368 61, ....                              | R1805 368 6., ....   |                           |   |
|      | UP               | R1805 369 61, ....                              | R1805 369 6., ....   |                           |   |
| 45   | H                | R1805 463 61, ....                              | R1805 463 6., ....   | 52.5                      | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.                   |
|      | P                | R1805 462 61, ....                              | R1805 462 6., ....   |                           |   |
|      | SP               | R1805 461 61, ....                              | R1805 461 6., ....   |                           |   |
|      | GP <sup>1)</sup> | R1805 468 61, ....                              | R1805 468 6., ....   |                           |   |
|      | UP               | R1805 469 61, ....                              | R1805 469 6., ....   |                           |   |
| 55   | H                | R1805 563 61, ....                              | R1805 563 6., ....   | 60                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.                   |
|      | P                | R1805 562 61, ....                              | R1805 562 6., ....   |                           |   |
|      | SP               | R1805 561 61, ....                              | R1805 561 6., ....   |                           |   |
|      | GP <sup>1)</sup> | R1805 568 61, ....                              | R1805 568 6., ....   |                           |   |
|      | UP               | R1805 569 61, ....                              | R1805 569 6., ....   |                           |   |
| 65   | H                | R1805 663 61, ....                              | R1805 663 6., ....   | 75                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.                   |
|      | P                | R1805 662 61, ....                              | R1805 662 6., ....   |                           |   |
|      | SP               | R1805 661 61, ....                              | R1805 661 6., ....   |                           |   |
|      | GP <sup>1)</sup> | R1805 668 61, ....                              | R1805 668 6., ....   |                           |   |
|      | UP               | R1805 669 61, ....                              | R1805 669 6., ....   |                           |   |

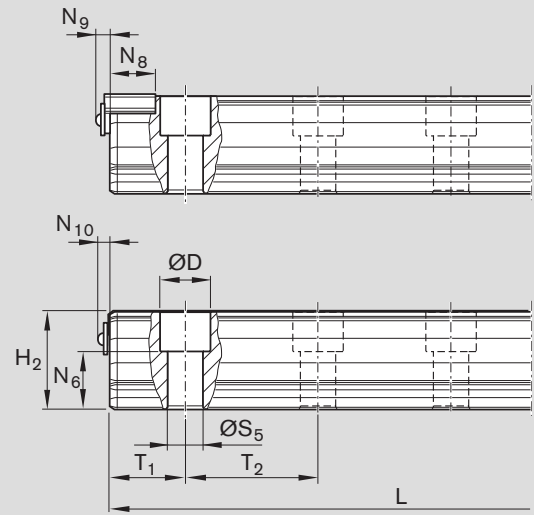
1) For accuracy class GP (guide rails sorted by height), see "Selection of Accuracy Classes".  
Guide rails in accuracy class GP in lengths of up to 4000 mm only.

## Standard guide rails R1805 .6. ..

Securing of cover strip  
with plastic screw-down protective caps  
or alternatively with screws and washers  
(included in the supply scope).



- a) Due to manufacturing reasons, guide rails  
in accuracy class H may not have a slot on  
the base.  
For mounting on mineral cast beds, guide rails  
with a flat base (without slot) are available in  
accuracy classes P and SP on request.



| Size | Dimensions (mm) |    |    |                              |                                |                                |                |                |                |                 |                |                                  |                               |                |      | Weight<br>(kg/m) |
|------|-----------------|----|----|------------------------------|--------------------------------|--------------------------------|----------------|----------------|----------------|-----------------|----------------|----------------------------------|-------------------------------|----------------|------|------------------|
|      | A <sub>2</sub>  | d  | D  | H <sub>2</sub> <sup>1)</sup> | L <sub>max</sub> <sup>2)</sup> | N <sub>6</sub> <sup>±0.5</sup> | N <sub>7</sub> | N <sub>8</sub> | N <sub>9</sub> | N <sub>10</sub> | S <sub>5</sub> | T <sub>1 min</sub> <sup>3)</sup> | T <sub>1S</sub> <sup>4)</sup> | T <sub>2</sub> |      |                  |
| 25   | 23              | 12 | 11 | 23.60                        | 4000                           | 14.3                           | 15             | 15.2           | 6.5            | 4.10            | 7              | 13                               | 13.00                         | 30.0           | 3.1  |                  |
| 35   | 34              | 15 | 15 | 31.10                        | 4000                           | 19.4                           | 22             | 18.0           | 7.0            | 4.10            | 9              | 16                               | 18.00                         | 40.0           | 6.3  |                  |
| 45   | 45              | 15 | 20 | 39.10                        | 4000                           | 22.4                           | 30             | 20.0           | 7.0            | 4.10            | 14             | 18                               | 24.25                         | 52.5           | 10.3 |                  |
| 55   | 53              | 20 | 24 | 47.85                        | 4000                           | 28.7                           | 30             | 20.0           | 7.0            | 4.35            | 16             | 20                               | 28.00                         | 60.0           | 13.1 |                  |
| 65   | 63              | 20 | 26 | 58.15                        | 4000                           | 36.5                           | 40             | 20.0           | 7.0            | 4.35            | 18             | 21                               | 35.50                         | 75.0           | 17.4 |                  |

- 1) Dimension H<sub>2</sub> with cover strip  
Size 25 with 0.2 mm cover strip  
Sizes 35 to 65 with 0.3 mm cover strip
- 2) For sizes 35 to 65 in accuracy class H and P, one-piece guide rails up to approx. 6000 mm in length can be supplied in special cases.  
For availability of accuracy class SP, please consult us. Guide rails in accuracy class GP in lengths of up to 4000 mm only.
- 3) Rails with T<sub>1</sub> smaller than T<sub>1 min</sub> have no tapped hole at the end face for securing the strip! Secure the cover strip! Please refer to the mounting instructions.
- 4) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0

Standard Guide Rails, Steel version

## Guide Rails with Cover Strip and Strip Clamps

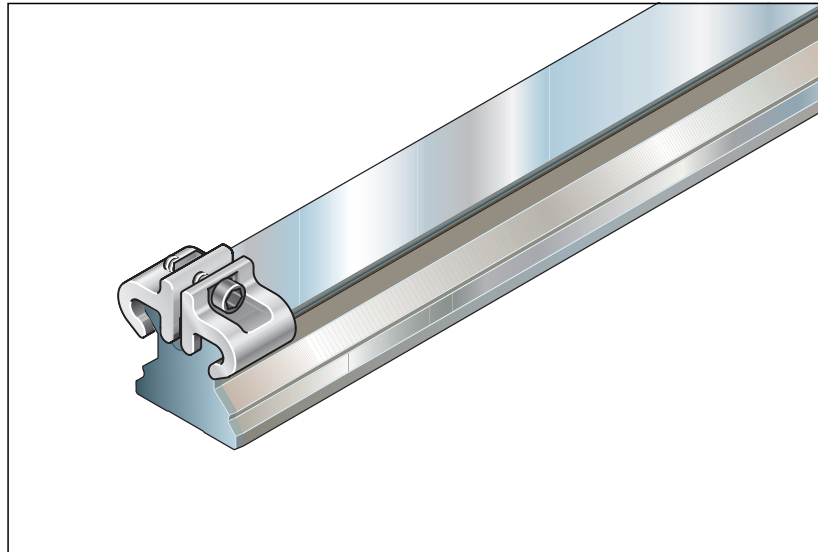
### Guide rail R1805 .3. ...

For mounting from above,  
with cover strip of stainless spring  
steel to EN 10088  
and aluminum strip clamps

**Notes**

Secure the cover strip!  
Strip clamps are included in the supply  
scope.  
Please follow the mounting instructions!  
Send for the publication "Mounting  
Instructions for the Cover Strip".

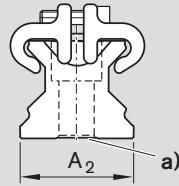
For corrosion-resistant guide rails,  
Resist CR, matte silver hard chrome  
plated, see section on "Standard  
Guide Rails, Resist CR", part numbers  
R1845 .3. ...



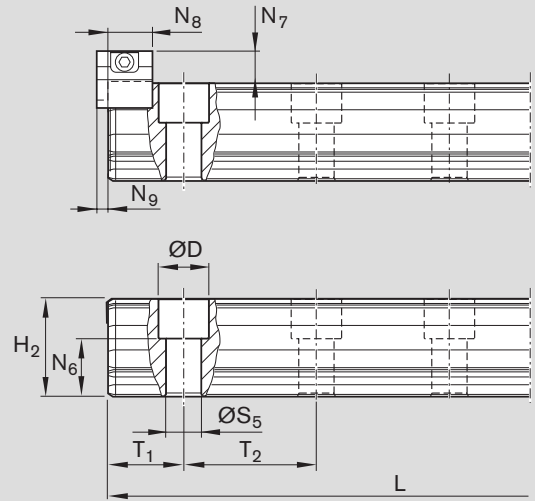
| Size | Accuracy class | Guide rail                                |  | Spacing T <sub>2</sub> mm | Recommended rail lengths<br>Number of holes n <sub>B</sub> / Rail length L (mm) |
|------|----------------|---|--|---------------------------|---|
|      |                | One-piece Part number, Rail length L (mm) | Composite Part number and number of sections, Rail length L (mm) |                           |   |
| 25   | H              | R1805 233 31, ....                        | R1805 233 3., ....   | 30                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.                  |
|      | P              | R1805 232 31, ....                        | R1805 232 3., ....   |                           |   |
|      | SP             | R1805 231 31, ....                        | R1805 231 3., ....   |                           |   |
|      | UP             | R1805 239 31, ....                        | R1805 239 3., ....   |                           |   |
| 35   | H              | R1805 333 61, ....                        | R1805 333 6., ....   | 40                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.                  |
|      | P              | R1805 332 61, ....                        | R1805 332 6., ....   |                           |   |
|      | SP             | R1805 331 61, ....                        | R1805 331 6., ....   |                           |   |
|      | UP             | R1805 339 61, ....                        | R1805 339 6., ....   |                           |   |
| 45   | H              | R1805 433 61, ....                        | R1805 433 6., ....   | 52.5                      | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.                   |
|      | P              | R1805 432 61, ....                        | R1805 432 6., ....   |                           |   |
|      | SP             | R1805 431 61, ....                        | R1805 431 6., ....   |                           |   |
|      | UP             | R1805 439 61, ....                        | R1805 439 6., ....   |                           |   |
| 55   | H              | R1805 533 61, ....                        | R1805 533 6., ....   | 60                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.                   |
|      | P              | R1805 532 61, ....                        | R1805 532 6., ....   |                           |   |
|      | SP             | R1805 531 61, ....                        | R1805 531 6., ....   |                           |   |
|      | UP             | R1805 539 61, ....                        | R1805 539 6., ....   |                           |   |
| 65   | H              | R1805 633 61, ....                        | R1805 633 6., ....   | 75                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.                   |
|      | P              | R1805 632 61, ....                        | R1805 632 6., ....   |                           |   |
|      | SP             | R1805 631 61, ....                        | R1805 631 6., ....   |                           |   |
|      | UP             | R1805 639 61, ....                        | R1805 639 6., ....   |                           |   |

**Standard guide rails R1805 .3. ..**

Guide rail with cover strip without tapped holes at the end faces (not required for strip clamps).  
Cover strip secured with strip clamps (included).



- a) Due to manufacturing reasons, guide rails in accuracy class H may not have a slot on the base.  
For mounting on mineral cast beds, guide rails with a flat base (without slot) are available in accuracy classes P and SP on request.



| Size | Dimensions (mm) |    |                              |                                |                                |                              |                |                |                |                    |                               |                | Weight<br>kg/m |
|------|-----------------|----|------------------------------|--------------------------------|--------------------------------|------------------------------|----------------|----------------|----------------|--------------------|-------------------------------|----------------|----------------|
|      | A <sub>2</sub>  | D  | H <sub>2</sub> <sup>1)</sup> | L <sub>max</sub> <sup>2)</sup> | N <sub>6</sub> <sup>±0.5</sup> | N <sub>7</sub> <sup>3)</sup> | N <sub>8</sub> | N <sub>9</sub> | S <sub>5</sub> | T <sub>1 min</sub> | T <sub>1S</sub> <sup>4)</sup> | T <sub>2</sub> |                |
| 25   | 23              | 11 | 23.60                        | 4000                           | 14.3                           | 8.2                          | 13             | 2.0            | 7              | 13                 | 13.00                         | 30.0           | 3.1            |
| 35   | 34              | 15 | 31.10                        | 4000                           | 19.4                           | 11.7                         | 16             | 2.2            | 9              | 16                 | 18.00                         | 40.0           | 6.3            |
| 45   | 45              | 20 | 39.10                        | 4000                           | 22.4                           | 12.5                         | 18             | 2.2            | 14             | 18                 | 24.25                         | 52.5           | 10.3           |
| 55   | 53              | 24 | 47.85                        | 4000                           | 28.7                           | 14.0                         | 17             | 3.2            | 16             | 20                 | 28.00                         | 60.0           | 13.1           |
| 65   | 63              | 26 | 58.15                        | 4000                           | 36.5                           | 15.0                         | 17             | 3.2            | 18             | 21                 | 35.50                         | 75.0           | 17.4           |

- 1) Dimension H<sub>2</sub> with cover strip  
Size 25 with 0.2 mm cover strip  
Sizes 35 to 65 with 0.3 mm cover strip
- 2) For sizes 35 to 65 in accuracy class H and P, one-piece guide rails up to approx. 6000 mm in length can be supplied in special cases.  
For availability of accuracy class SP, please consult us.
- 3) Dimension N<sub>7</sub> with cover strip
- 4) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0

Standard Guide Rails, Steel version

## Guide Rails for Cover Strip

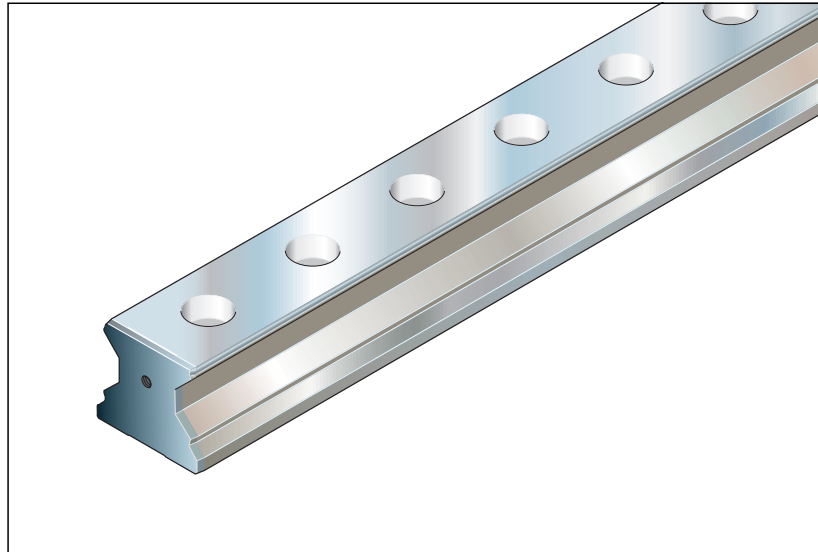
### Guide rail R1805 .2. ..

For mounting from above,  
for cover strip  
(not included)

**Notes**

The cover strip and strip clamps or protective caps must be ordered separately. For part numbers and dimensions see "Accessories".

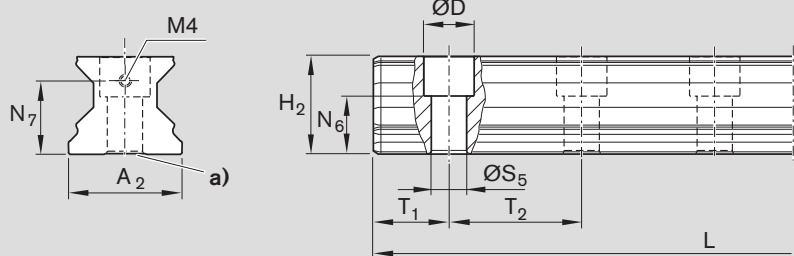
For corrosion-resistant guide rails, Resist CR, matte silver hard chrome plated, see section on "Standard Guide Rails, Resist CR", part numbers R1845 .7. ..



| Size | Accuracy class | Guide rail                                      |  | Spacing T <sub>2</sub> mm | Recommended rail lengths<br>Number of holes n <sub>B</sub> / Rail length L (mm) |
|------|----------------|---|--|---------------------------|---|
|      |                | One-piece<br>Part number,<br>Rail length L (mm) | Composite<br>Part number and number of sections,<br>Rail length L (mm) |                           |   |
| 25   | H              | R1805 223 31, ....                              | R1805 223 3., ....   | 30                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.                  |
|      | P              | R1805 222 31, ....                              | R1805 222 3., ....   |                           |   |
|      | SP             | R1805 221 31, ....                              | R1805 221 3., ....   |                           |   |
|      | UP             | R1805 229 31, ....                              | R1805 229 3., ....   |                           |   |
| 35   | H              | R1805 323 31, ....                              | R1805 323 3., ....   | 40                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.                  |
|      | P              | R1805 322 31, ....                              | R1805 322 3., ....   |                           |   |
|      | SP             | R1805 321 31, ....                              | R1805 321 3., ....   |                           |   |
|      | UP             | R1805 329 31, ....                              | R1805 329 3., ....   |                           |   |
| 45   | H              | R1805 423 31, ....                              | R1805 423 3., ....   | 52.5                      | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.                   |
|      | P              | R1805 422 31, ....                              | R1805 422 3., ....   |                           |   |
|      | SP             | R1805 421 31, ....                              | R1805 421 3., ....   |                           |   |
|      | UP             | R1805 429 31, ....                              | R1805 429 3., ....   |                           |   |
| 55   | H              | R1805 523 31, ....                              | R1805 523 3., ....   | 60                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.                   |
|      | P              | R1805 522 31, ....                              | R1805 522 3., ....   |                           |   |
|      | SP             | R1805 521 31, ....                              | R1805 521 3., ....   |                           |   |
|      | UP             | R1805 529 31, ....                              | R1805 529 3., ....   |                           |   |
| 65   | H              | R1805 623 31, ....                              | R1805 623 3., ....   | 75                        | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.                   |
|      | P              | R1805 622 31, ....                              | R1805 622 3., ....   |                           |   |
|      | SP             | R1805 621 31, ....                              | R1805 621 3., ....   |                           |   |
|      | UP             | R1805 629 31, ....                              | R1805 629 3., ....   |                           |   |

### Standard guide rails R1805 .2. ..

Guide rail with tapped holes at the end faces, without cover strip.  
(The cover strip and strip clamps or protective caps must be ordered separately.)



- a) Due to manufacturing reasons, guide rails in accuracy class H may not have a slot on the base.  
For mounting on mineral cast beds, guide rails with a flat base (without slot) are available in accuracy classes P and SP on request.

| Size | Dimensions (mm) |    |                              |                                |                                |                |                |                                  |                               |                |      | Weight<br>kg/m |
|------|-----------------|----|------------------------------|--------------------------------|--------------------------------|----------------|----------------|----------------------------------|-------------------------------|----------------|------|----------------|
|      | A <sub>2</sub>  | D  | H <sub>2</sub> <sup>1)</sup> | L <sub>max</sub> <sup>2)</sup> | N <sub>6</sub> <sup>±0.5</sup> | N <sub>7</sub> | S <sub>5</sub> | T <sub>1 min</sub> <sup>3)</sup> | T <sub>1S</sub> <sup>4)</sup> | T <sub>2</sub> |      |                |
| 25   | 23              | 11 | 23.40                        | 4000                           | 14.3                           | 15.0           | 7              | 13                               | 13.00                         | 30.0           | 3.1  |                |
| 35   | 34              | 15 | 30.80                        | 4000                           | 19.4                           | 22.0           | 9              | 16                               | 18.00                         | 40.0           | 6.3  |                |
| 45   | 45              | 20 | 38.80                        | 4000                           | 22.4                           | 30.0           | 14             | 18                               | 24.25                         | 52.5           | 10.3 |                |
| 55   | 53              | 24 | 47.55                        | 4000                           | 28.7                           | 30.0           | 16             | 20                               | 28.00                         | 60.0           | 13.1 |                |
| 65   | 63              | 26 | 57.85                        | 4000                           | 36.5                           | 40.0           | 18             | 21                               | 35.50                         | 75.0           | 17.4 |                |

- 1) Dimension H<sub>2</sub> without cover strip
- 2) For sizes 35 to 65 in accuracy class H and P, one-piece guide rails up to approx. 6000 mm in length can be supplied in special cases.  
For availability of accuracy class SP, please consult us.
- 3) Rails with T<sub>1</sub> smaller than T<sub>1 min</sub> have no tapped hole at the end face for securing the strip! Secure the cover strip! Please refer to the mounting instructions.
- 4) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0

Standard Guide Rails, Steel version

## Guide Rails with Plastic Mounting Hole Plugs

### Guide rail R1805 .5. ..

For mounting from above,  
with plastic mounting hole plugs  
(included)

#### Notes

Plastic mounting hole plugs are also available as accessories.  
For details on how to mount the plastic plugs, see "Mounting Instructions for Roller Rail Systems".

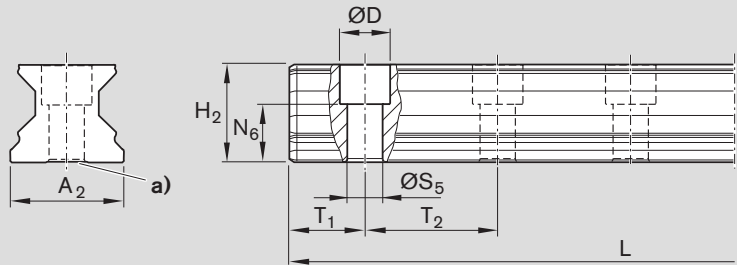
For corrosion-resistant guide rails, Resist CR, matte silver hard chrome plated, see section on "Standard Guide Rails, Resist CR", part numbers R1845 .0. ..



| Size | Accuracy class | Guide rail                                      |  | Spacing $T_2$<br>mm | Recommended rail lengths<br>Number of holes $n_B$ /<br>Rail length L (mm) |
|------|----------------|---|--|---------------------|---|
|      |                | One-piece<br>Part number,<br>Rail length L (mm) | Composite<br>Part number and number of sections,<br>Rail length L (mm) |                     |   |
| 25   | H              | R1805 253 31, ....                              | R1805 253 3., ....   | 30                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.            |
|      | P              | R1805 252 31, ....                              | R1805 252 3., ....   |                     |   |
|      | SP             | R1805 251 31, ....                              | R1805 251 3., ....   |                     |   |
|      | UP             | R1805 259 31, ....                              | R1805 259 3., ....   |                     |   |
| 35   | H              | R1805 353 31, ....                              | R1805 353 3., ....   | 40                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.            |
|      | P              | R1805 352 31, ....                              | R1805 352 3., ....   |                     |   |
|      | SP             | R1805 351 31, ....                              | R1805 351 3., ....   |                     |   |
|      | UP             | R1805 359 31, ....                              | R1805 359 3., ....   |                     |   |
| 45   | H              | R1805 453 31, ....                              | R1805 453 3., ....   | 52.5                | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.             |
|      | P              | R1805 452 31, ....                              | R1805 452 3., ....   |                     |   |
|      | SP             | R1805 451 31, ....                              | R1805 451 3., ....   |                     |   |
|      | UP             | R1805 459 31, ....                              | R1805 459 3., ....   |                     |   |
| 55   | H              | R1805 553 31, ....                              | R1805 553 3., ....   | 60                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.             |
|      | P              | R1805 552 31, ....                              | R1805 552 3., ....   |                     |   |
|      | SP             | R1805 551 31, ....                              | R1805 551 3., ....   |                     |   |
|      | UP             | R1805 559 31, ....                              | R1805 559 3., ....   |                     |   |
| 65   | H              | R1805 653 31, ....                              | R1805 653 3., ....   | 75                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.             |
|      | P              | R1805 652 31, ....                              | R1805 652 3., ....   |                     |   |
|      | SP             | R1805 651 31, ....                              | R1805 651 3., ....   |                     |   |
|      | UP             | R1805 659 31, ....                              | R1805 659 3., ....   |                     |   |

### Standard guide rails R1805 .5. ..

Plastic mounting hole plugs are supplied with the guide rails and are also available as accessories. For details on how to mount the plastic plugs, see "Mounting Instructions for Roller Rail Systems".



- a) Due to manufacturing reasons, guide rails in accuracy class H may not have a slot on the base.  
For mounting on mineral cast beds, guide rails with a flat base (without slot) are available in accuracy classes P and SP on request.

| Size | Dimensions (mm) |    |                |                                |                                |                |                    |                               |                |      | Weight<br>kg/m |
|------|-----------------|----|----------------|--------------------------------|--------------------------------|----------------|--------------------|-------------------------------|----------------|------|----------------|
|      | A <sub>2</sub>  | D  | H <sub>2</sub> | L <sub>max</sub> <sup>1)</sup> | N <sub>6</sub> <sup>±0.5</sup> | S <sub>5</sub> | T <sub>1 min</sub> | T <sub>1S</sub> <sup>2)</sup> | T <sub>2</sub> |      |                |
| 25   | 23              | 11 | 23.40          | 4000                           | 14.3                           | 7              | 10                 | 13.00                         | 30.0           | 3.1  |                |
| 35   | 34              | 15 | 30.80          | 4000                           | 19.4                           | 9              | 12                 | 18.00                         | 40.0           | 6.3  |                |
| 45   | 45              | 20 | 38.80          | 4000                           | 22.4                           | 14             | 16                 | 24.25                         | 52.5           | 10.3 |                |
| 55   | 53              | 24 | 47.55          | 4000                           | 28.7                           | 16             | 18                 | 28.00                         | 60.0           | 13.1 |                |
| 65   | 63              | 26 | 57.85          | 4000                           | 36.5                           | 18             | 20                 | 35.50                         | 75.0           | 17.4 |                |

- 1) For sizes 35 to 65 in accuracy class H and P, one-piece guide rails up to approx. 6000 mm in length can be supplied in special cases.  
For availability of accuracy class SP, please consult us.
- 2) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0

Standard Guide Rails, Steel version

## Guide Rails for Steel Mounting Hole Plugs

### Guide rail R1806 .5. ...

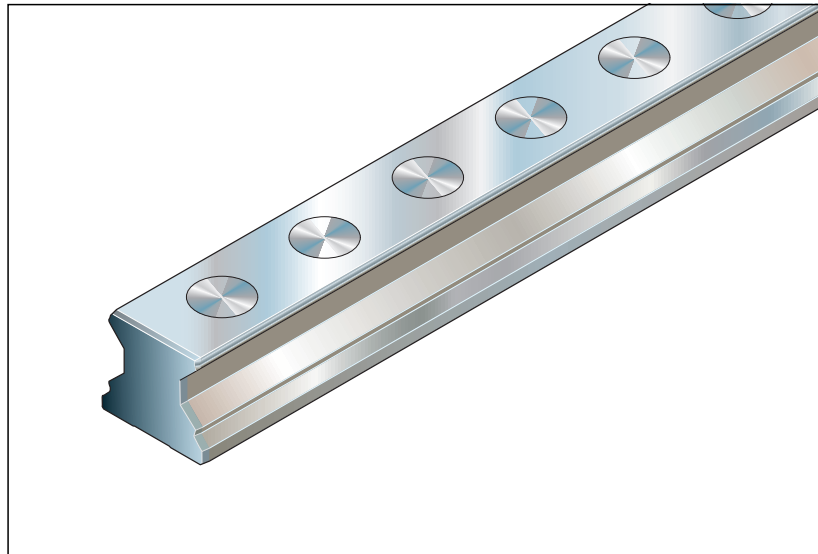
For mounting from above,  
for steel mounting hole plugs  
(not included)

#### Notes

Steel mounting hole plugs and the mounting tool must be ordered separately. For part numbers, see the following page.

Please follow the mounting instructions for Roller Rail Systems and for steel mounting hole plugs.

For corrosion-resistant guide rails, Resist CR, matte silver hard chrome plated, see section on "Standard Guide Rails, Resist CR", part numbers R1846 .0. ...

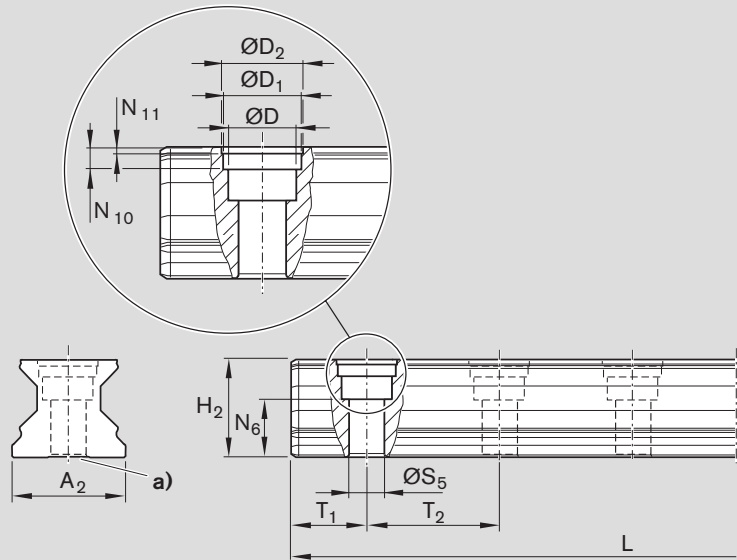


| Size | Accuracy class | Guide rail                                      |  | Spacing $T_2$<br>mm | Recommended rail lengths<br>Number of holes $n_B$ /<br>Rail length L (mm) |
|------|----------------|---|--|---------------------|---|
|      |                | One-piece<br>Part number,<br>Rail length L (mm) | Composite<br>Part number and number of sections,<br>Rail length L (mm) |                     |   |
| 25   | H              | R1806 253 31, ...                               | R1806 253 3., ...  | 30                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.            |
|      | P              | R1806 252 31, ...                               | R1806 252 3., ...  |                     |   |
|      | SP             | R1806 251 31, ...                               | R1806 251 3., ...  |                     |   |
| 35   | H              | R1806 353 31, ...                               | R1806 353 3., ...  | 40                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.            |
|      | P              | R1806 352 31, ...                               | R1806 352 3., ...  |                     |   |
|      | SP             | R1806 351 31, ...                               | R1806 351 3., ...  |                     |   |
| 45   | H              | R1806 453 31, ...                               | R1806 453 3., ...  | 52.5                | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.             |
|      | P              | R1806 452 31, ...                               | R1806 452 3., ...  |                     |   |
|      | SP             | R1806 451 31, ...                               | R1806 451 3., ...  |                     |   |
| 55   | H              | R1806 553 31, ...                               | R1806 553 3., ...  | 60                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.             |
|      | P              | R1806 552 31, ...                               | R1806 552 3., ...  |                     |   |
|      | SP             | R1806 551 31, ...                               | R1806 551 3., ...  |                     |   |
| 65   | H              | R1806 653 31, ...                               | R1806 653 3., ...  | 75                  | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.             |
|      | P              | R1806 652 31, ...                               | R1806 652 3., ...  |                     |   |
|      | SP             | R1806 651 31, ...                               | R1806 651 3., ...  |                     |   |

**Standard guide rails R1806 .5. ..**

Steel mounting hole plugs are not supplied with the guide rails. When ordering them, do not forget to order the mounting tool! For details on how to mount the steel plugs, see "Mounting Instructions for Roller Rail Systems".

- a) Due to manufacturing reasons, guide rails in accuracy class H may not have a slot on the base.  
For mounting on mineral cast beds, guide rails with a flat base (without slot) are available in accuracy classes P and SP on request.



| Size | Dimensions (mm) |    |                |                |                |                                |                                |                 |                 |                |                    |                               |                | Weight<br>kg/m |
|------|-----------------|----|----------------|----------------|----------------|--------------------------------|--------------------------------|-----------------|-----------------|----------------|--------------------|-------------------------------|----------------|----------------|
|      | A <sub>2</sub>  | D  | D <sub>1</sub> | D <sub>2</sub> | H <sub>2</sub> | L <sub>max</sub> <sup>1)</sup> | N <sub>6</sub> <sup>±0.5</sup> | N <sub>10</sub> | N <sub>11</sub> | S <sub>5</sub> | T <sub>1 min</sub> | T <sub>1S</sub> <sup>2)</sup> | T <sub>2</sub> |                |
| 25   | 23              | 11 | 12.55          | 13             | 23.40          | 4000                           | 14.3                           | 3.7             | 0.90            | 7              | 10                 | 13.00                         | 30.0           | 3.1            |
| 35   | 34              | 15 | 17.55          | 18             | 30.80          | 4000                           | 19.4                           | 3.6             | 0.90            | 9              | 12                 | 18.00                         | 40.0           | 6.3            |
| 45   | 45              | 20 | 22.55          | 23             | 38.80          | 4000                           | 22.4                           | 8.0             | 1.45            | 14             | 16                 | 24.25                         | 52.5           | 10.3           |
| 55   | 53              | 24 | 27.55          | 28             | 47.55          | 4000                           | 28.7                           | 8.0             | 1.45            | 16             | 18                 | 28.00                         | 60.0           | 13.1           |
| 65   | 63              | 26 | 29.55          | 30             | 57.85          | 4000                           | 36.5                           | 8.0             | 1.45            | 18             | 20                 | 35.50                         | 75.0           | 17.4           |

- 1) For sizes 35 to 65 in accuracy class H and P, one-piece guide rails up to approx. 6000 mm in length can be supplied in special cases.  
For availability of accuracy class SP, please consult us.
- 2) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0

**Steel mounting hole plugs**

Must be ordered separately!

| Size | Single plug made of machining steel |            |
|------|-------------------------------------|------------|
|      | Part numbers                        | Weight (g) |
| 25   | R1606 200 75                        | 2          |
| 35   | R1606 300 75                        | 3          |
| 45   | R1606 400 75                        | 6          |
| 55   | R1606 500 75                        | 8          |
| 65   | R1606 600 75                        | 9          |

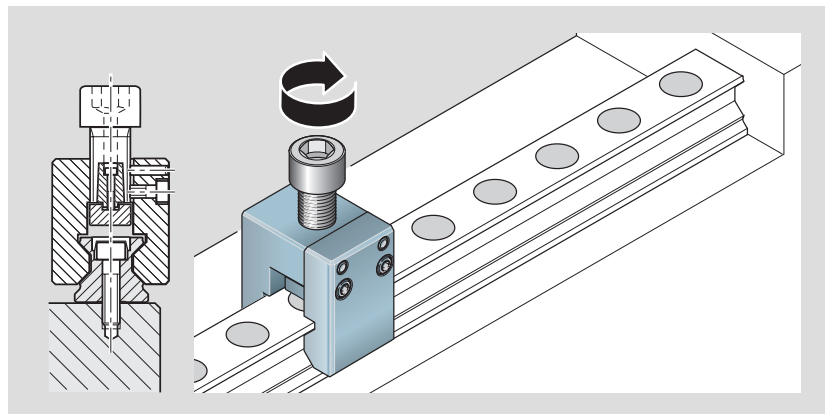
**Mounting tool for steel mounting hole plugs**

Order this tool along with the plugs!

Two-piece mounting tool for fitting plugs to a screwed down guide rail.

| Size | Part numbers               | Weight (kg) |
|------|----------------------------|-------------|
| 25   | R1619 210 20 <sup>1)</sup> | 0.37        |
| 35   | R1619 310 30               | 0.57        |
| 45   | R1619 410 30               | 0.85        |
| 55   | R1619 510 30               | 1.50        |
| 65   | R1619 610 30               | 1.85        |

- 1) One-piece; two-piece on request



Standard Guide Rails, Steel version

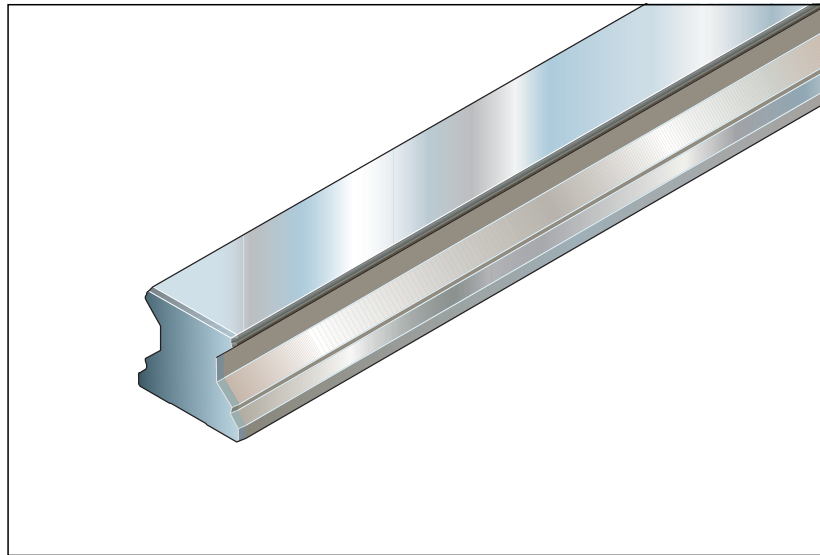
## Guide Rails for Mounting From Below

### Guide rail R1807 .0. ..

for mounting from below,  
top surface hardened

#### Note

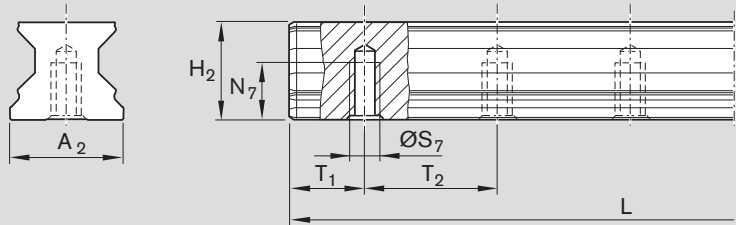
For corrosion-resistant guide rails,  
Resist CR, matte silver hard chrome  
plated, see section on "Standard  
Guide Rails, Resist CR", part numbers  
R1847 .0. ..



| Size | Accuracy class | Guide rail<br>One-piece<br>Part number,<br>Rail length L (mm) | Composite<br>Part number and number of sections,<br>Rail length L (mm) | Spacing<br>$T_2$<br>mm | Recommended rail lengths<br>Number of holes $n_B$ /<br>Rail length L (mm) |
|------|----------------|---|--|------------------------|---|
| 25   | H              | R1807 203 31, ....  | R1807 203 3., ....   | 30                     | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 133/3986 max.            |
|      | P              | R1807 202 31, ....  | R1807 202 3., ....   |                        |   |
|      | SP             | R1807 201 31, ....  | R1807 201 3., ....   |                        |   |
|      | UP             | R1807 209 31, ....  | R1807 209 3., ....   |                        |   |
| 35   | H              | R1807 303 31, ....  | R1807 303 3., ....   | 40                     | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 100/3996 max.            |
|      | P              | R1807 302 31, ....  | R1807 302 3., ....   |                        |   |
|      | SP             | R1807 301 31, ....  | R1807 301 3., ....   |                        |   |
|      | UP             | R1807 309 31, ....  | R1807 309 3., ....   |                        |   |
| 45   | H              | R1807 403 31, ....  | R1807 403 3., ....   | 52.5                   | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 76/3986 max.             |
|      | P              | R1807 402 31, ....  | R1807 402 3., ....   |                        |   |
|      | SP             | R1807 401 31, ....  | R1807 401 3., ....   |                        |   |
|      | UP             | R1807 409 31, ....  | R1807 409 3., ....   |                        |   |
| 55   | H              | R1807 503 31, ....  | R1807 503 3., ....   | 60                     | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 66/3956 max.             |
|      | P              | R1807 502 31, ....  | R1807 502 3., ....   |                        |   |
|      | SP             | R1807 501 31, ....  | R1807 501 3., ....   |                        |   |
|      | UP             | R1807 509 31, ....  | R1807 509 3., ....   |                        |   |
| 65   | H              | R1807 603 31, ....  | R1807 603 3., ....   | 75                     | acc. to formula $L = n_B \cdot T_2 - 4$<br>up to 53/3971 max.             |
|      | P              | R1807 602 31, ....  | R1807 602 3., ....   |                        |   |
|      | SP             | R1807 601 31, ....  | R1807 601 3., ....   |                        |   |
|      | UP             | R1807 609 31, ....  | R1807 609 3., ....   |                        |   |

## Standard guide rails R1807 .0. ..

Guide rails for mounting from below!



| Size | Dimensions (mm) |                |                  |                                |                |                    |                               |                | Weight<br>kg/m |
|------|-----------------|----------------|------------------|--------------------------------|----------------|--------------------|-------------------------------|----------------|----------------|
|      | A <sub>2</sub>  | H <sub>2</sub> | L <sub>max</sub> | N <sub>7</sub> <sup>±0.5</sup> | S <sub>7</sub> | T <sub>1 min</sub> | T <sub>1S</sub> <sup>1)</sup> | T <sub>2</sub> |                |
| 25   | 23              | 23.40          | 4000             | 12                             | M6             | 10                 | 13.00                         | 30.0           | 3.1            |
| 35   | 34              | 30.80          | 4000             | 15                             | M8             | 12                 | 18.00                         | 40.0           | 6.3            |
| 45   | 45              | 38.80          | 4000             | 19                             | M12            | 16                 | 24.25                         | 52.5           | 10.3           |
| 55   | 53              | 47.55          | 4000             | 22                             | M14            | 18                 | 28.00                         | 60.0           | 13.1           |
| 65   | 63              | 57.85          | 4000             | 25                             | M16            | 20                 | 35.50                         | 75.0           | 17.4           |

1) Preferred dimension T<sub>1S</sub> with tolerances +0.5/-1.0