

Corrosion-Resistant Ball Guide Rails

## Product Description, Resist NR II

### General notes on Ball Guide Rails in Resist NR II

For part numbers, see the following pages. For recommended rail lengths, dimensions and weights, please refer to the corresponding standard steel guide rails ☞ 122 – 131.

Follow the mounting instructions! Send for the publications "Mounting Instructions for Ball Rail Systems" and "Mounting Instructions for the Cover Strip."

### Corrosion resistance and conditions of use

Ball Guide Rails Resist NR II and all steel parts are made of corrosion-resistant steel per EN 10088, with aluminum strip clamps. They are specifically intended for use in applications involving aqueous media, very dilute acids, alkalis or salt solutions. These guides are particularly suitable for environments with a relative humidity of over 70% and temperatures above 30 °C. Conditions like these are found above all in cleaning systems, galvanization and pickling lines, steam degreasing systems, and also cooling equipment. Since they have built-in corrosion protection, Ball Rail Systems Resist NR II are also ideal for use in clean rooms and for general printed circuit board assembly. Other application areas include the pharmaceuticals and food industries.

### Recommended runner blocks for Ball Guide Rails Resist NR II

– Ball Runner Blocks, Resist NR II ☞ 104

### Combinations of different accuracy classes



Combining ball guide rails and runner blocks of different accuracy classes results in different tolerances for dimensions H and A<sub>3</sub>. ("Accuracy classes and their tolerances" ☞ 26)

## Ball Guide Rails, Resist NR II

### R2045 .3. ..., SNS for mounting from above, with cover strip and strip clamps

#### Options and part numbers

Size	Ball guide rail with size	Accuracy class			Number of sections „ Rail length L (mm), ...	
		N	H	P	One-piece	Composite
15 <sup>1)</sup>	R2045 13	4	3	2	31, ...	3., ...
20	R2045 83	4	3	2	31, ...	3., ...
25	R2045 23	4	3	2	31, ...	3., ...
30	R2045 73	4	3	2	31, ...	3., ...
35	R2045 33	4	3	2	61, ...	6., ...
e.g.	R2045 73		3		31, 1676	

1) Maximum rail length 1856 mm, maximum number of holes n<sub>B</sub> 30

#### Note on installation

- Secure the cover strip!
- Strip clamps are included in the supply scope.
- Composite guide rails also available.

#### Recommended rail lengths, dimension drawing, dimensions and weights ☞ 122 – 123.

#### Accessories

- Cover strip ☞ 176
- Strip clamps ☞ 178

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

- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - One-piece
  - Rail length L = 1676 mm
- Part number:  
R2045 733 31, 1676 mm



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

- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - **2 sections**
  - Rail length L = 5116 mm
- Part number:  
R2045 733 32, 5116 mm

## Ball Guide Rails, Resist NR II

### R2045 .0. ..., SNS for mounting from above, with plastic mounting hole plugs

#### Options and part numbers

Size	Ball guide rail with size	Accuracy class			Number of sections ,, Rail length L (mm), ...	
		N	H	P	One-piece	Composite
15 <sup>1)</sup>	R2045 10	4	3	2	31, ...	3., ...
20	R2045 80	4	3	2	31, ...	3., ...
25	R2045 20	4	3	2	31, ...	3., ...
30	R2045 70	4	3	2	31, ...	3., ...
35	R2045 30	4	3	2	31, ...	3., ...
e.g.	R2045 70	3			31, 1676	

#### Note on installation

- Plastic mounting hole plugs included in scope of supply.
- Composite guide rails also available.

#### Recommended rail lengths, dimension drawing, dimensions and weights

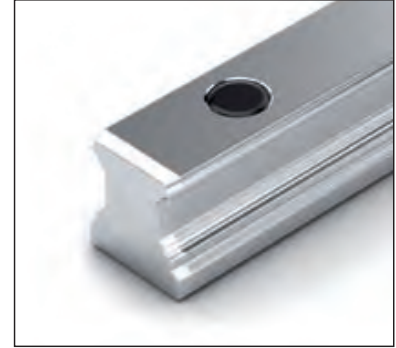
☞ 126 – 127.

#### Accessories

- Plastic mounting hole plugs  
☞ 179

#### Ordering example 1 (up to $L_{max}$ )

- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - One-piece
  - Rail length  $L = 1676$  mm
- Part number:  
R2045 703 31, 1676 mm



#### Ordering example 2 (over $L_{max}$ )

- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - **2 sections**
  - Rail length  $L = 5116$  mm
- Part number:  
R2045 703 32, 5116 mm

### R2047 .0. ..., SNS for mounting from below

#### Options and part numbers

Size	Ball guide rail with size	Accuracy class			Number of sections ,, Rail length L (mm), ...	
		N	H	P	One-piece	Composite
15 <sup>1)</sup>	R2047 10	4	3	2	31, ...	3., ...
20	R2047 80	4	3	2	31, ...	3., ...
25	R2047 20	4	3	2	31, ...	3., ...
30	R2047 70	4	3	2	31, ...	3., ...
35	R2047 30	4	3	2	31, ...	3., ...
e.g.	R2047 70	3			32, 5116	

1) Maximum rail length 1856 mm, maximum number of holes  $n_B 30$

#### Note on installation

- Composite guide rails also available.

#### Recommended rail lengths, dimension drawing, dimensions and weights

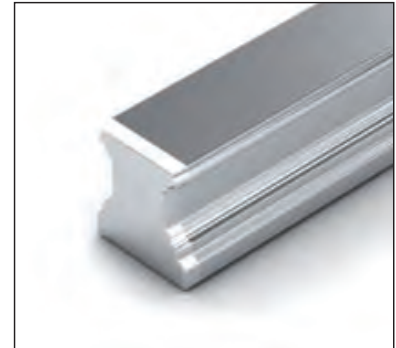
☞ 130 – 131.

#### Ordering example 1 (up to $L_{max}$ )

- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - One-piece
  - Rail length  $L = 1676$  mm
- Part number:  
R2047 703 31, 1676 mm

#### Ordering example 2 (over $L_{max}$ )


- Options:
- Ball Guide Rail NR II, SNS
  - Size 30
  - Accuracy class H
  - **2 sections**
  - Rail length  $L = 5116$  mm
- Part number:  
R2047 703 32, 5116 mm



## Corrosion-Resistant Ball Guide Rails

## Product Description, Resist CR

General notes  
on Ball Guide Rails  
in Resist CR

For part numbers, see the following pages. For recommended rail lengths, dimensions and weights, please refer to the corresponding standard steel guide rails  122 – 131.

Follow the mounting instructions! Send for the publications "Mounting Instructions for Ball Rail Systems" and "Mounting Instructions for the Cover Strip."

## Corrosion-resistant coating Resist CR

Ball guide rail made of steel with matte-silver hard-chrome plated corrosion-resistant coating.

## One-piece guide rails with uncoated or coated end faces

- End faces **uncoated**
  - End faces, chamfers and end-face threads **coated**
- Part numbers:  
– R16.. ... 31 or R16.. ... 61
- Part numbers:  
– R16.. ... 41 or R16.. ... 71


## Composite guide rails with coated end faces

- End faces, chamfers and end-face threads coated, part numbers:  
– R16.. ... 41 or R16.. ... 71
- Composite ball guide rails are chamfered on both sides at the joints.

Recommended ball runner blocks  
for Resist CR guide rails in accuracy  
class H for preload classes C0 and C1

- Size 15 - 65
- Accuracy class H
  - **Preload class C0** = without preload
- Size 30 - 65
- Accuracy class H
  - **Preload class C1** = 2% C

Combinations of different accuracy  
classes

Combining ball guide rails and runner blocks of different accuracy classes results in different tolerances for dimensions H and  $A_3$ .  
("Accuracy classes and their tolerances"  26)

## Ball Guide Rails, Resist CR

## R1645 .3. ..., SNS for mounting from above, with cover strip and strip clamps


## Options and part numbers

Size	Ball guide rail with size	Accuracy class	Number of sections, , Rail length L (mm), ...			
			H	One-piece Uncoated end faces	Coated end faces	Composite Coated end faces
15	R1645 13		3	31, ...	41, ...	4, ...
20	R1645 83		3	31, ...	41, ...	4, ...
25	R1645 23		3	31, ...	41, ...	4, ...
30	R1645 73		3	31, ...	41, ...	4, ...
35	R1645 33		3	61, ...	71, ...	7, ...
45	R1645 43		3	61, ...	71, ...	7, ...
55	R1645 53		3	61, ...	71, ...	7, ...
65	R1645 63		3	61, ...	71, ...	7, ...
e.g.	R1645 73		3	31, 1676		





## Note on installation

- Secure the cover strip!
- Strip clamps are included in scope of supply.
- Composite guide rails also available.

Recommended rail lengths, dimension drawing, dimensions and weights  
 122 – 123.

## Accessories

- Cover strip  176
- Strip clamps  178

Ordering example 1 (up to  $L_{max}$ )

- Options:
- Ball Guide Rail CR, SNS
  - Size 30
  - Accuracy class H
  - One-piece
  - Uncoated end faces
  - Rail length  $L = 1676$  mm
- Part number:  
R1645 733 31, 1676 mm

Ordering example 2 (over  $L_{max}$ )

- Options:
- Ball Guide Rail CR, SNS
  - Size 30
  - Accuracy class H
  - **2 sections**
  - Coated end faces
  - Rail length  $L = 5116$  mm
- Part number:  
R1645 733 42, 5116 mm

## Ball Guide Rails, Resist CR

### R1645 .0. ..., SNS for mounting from above, with plastic mounting hole plugs

#### Options and part numbers

Size	Ball guide rail with size	Accuracy class	Number of sections ,, Rail length L (mm), ...		
			One-piece	Composite	
		H	Uncoated end faces	Coated end faces	Coated end faces
15	R1645 10	3	31, ...	41, ...	4, ...
20	R1645 80	3	31, ...	41, ...	4, ...
25	R1645 20	3	31, ...	41, ...	4, ...
30	R1645 70	3	31, ...	41, ...	4, ...
35	R1645 30	3	31, ...	41, ...	4, ...
45	R1645 40	3	31, ...	41, ...	4, ...
55	R1645 50	3	31, ...	41, ...	4, ...
65	R1645 60	3	31, ...	41, ...	4, ...
e.g.	R1645 70	3	31, 1676		

#### Note on installation

- Plastic mounting hole plugs included in scope of supply.
- Composite guide rails also available.

#### Recommended rail lengths, dimension drawing, dimensions and weights

☞ 126 – 127.

#### Accessories

- Plastic mounting hole plugs  
☞ 179

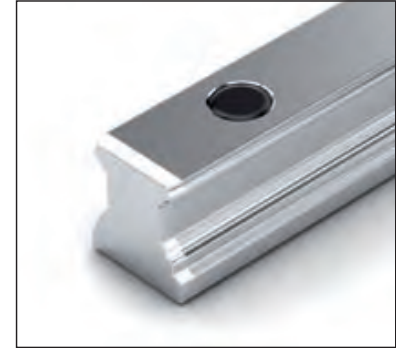
#### Ordering example 1 (up to $L_{max}$ )

##### Options:

- Ball Guide Rail CR, SNS
- Size 30
- Accuracy class H
- One-piece
- Uncoated end faces
- Rail length L = 1676 mm

##### Part number:

R1645 703 31, 1676 mm



#### Ordering example 2 (over $L_{max}$ )

##### Options:

- Ball Guide Rail CR, SNS
- Size 30
- Accuracy class H
- **2 sections**
- Coated end faces
- Rail length L = 5116 mm

##### Part number:

R1645 703 42, 5116 mm

### R1647 .0. ..., SNS for mounting from below

#### Options and part numbers

Size	Ball guide rail with size	Accuracy class	Number of sections ,, Rail length L (mm), ...		
			One-piece	Composite	
		H	Uncoated end faces	Coated end faces	Coated end faces
15	R1647 10	3	31, ...	41, ...	4, ...
20	R1647 80	3	31, ...	41, ...	4, ...
25	R1647 20	3	31, ...	41, ...	4, ...
30	R1647 70	3	31, ...	41, ...	4, ...
35	R1647 30	3	31, ...	41, ...	4, ...
45	R1647 40	3	31, ...	41, ...	4, ...
55	R1647 50	3	31, ...	41, ...	4, ...
65	R1647 60	3	31, ...	41, ...	4, ...
e.g.	R1647 70	3	42, 5116		

#### Note on installation

- Composite guide rails also available.

#### Recommended rail lengths, dimension drawing, dimensions and weights

☞ 130 – 131

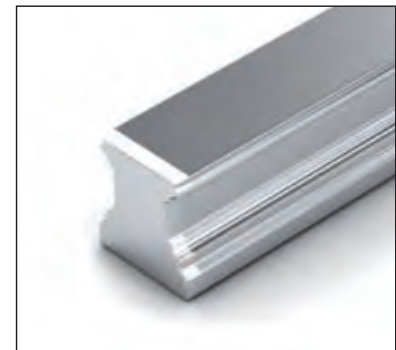
#### Ordering example 1 (up to $L_{max}$ )

##### Options:

- Ball Guide Rail CR, SNS
- Size 30
- Accuracy class H
- One-piece
- Uncoated end faces
- Rail length L = 1676 mm

##### Part number:

R1647 703 31, 1676 mm



#### Ordering example 2 (over $L_{max}$ )

##### Options:

- Ball Guide Rail CR, SNS
- Size 30
- Accuracy class H
- **2 sections**
- Coated end faces
- Rail length L = 5116 mm

##### Part number:

R1647 703 42, 5116 mm