

Mounting Instructions

General Instructions

Rexroth Cam Roller Guides are high-quality products and should be treated with the utmost care during transportation and mounting.

All steel parts are coated with preservative oil. The preservative coating need not be removed provided the recommended lubricants are used in the application. Unfavorable environmental conditions

(vibrations, major temperature fluctuations, etc.) can cause a relative shift between the aluminum frame and the rolled-in (or pressed-in) steel shafts of all guide rails. To prevent this phenomenon we recommend a positive-locking axial retention.

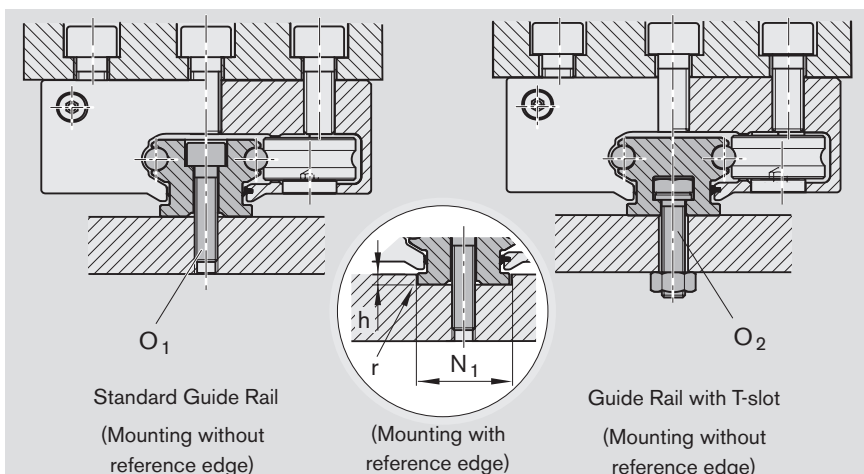
Guide Rail Mounting

To mount the guide rail:

- Slightly tighten screws.
- Align guide rail.
- Tighten screws to torque as shown in the table.

Standard Guide Rail (R1921-...):
If the maximum permissible load is to be utilized, install washers to ISO 7092.

Guide Rail with T-slot (R1922-...):
Washers are supplied with the rail.



Screw sizes for guide rails

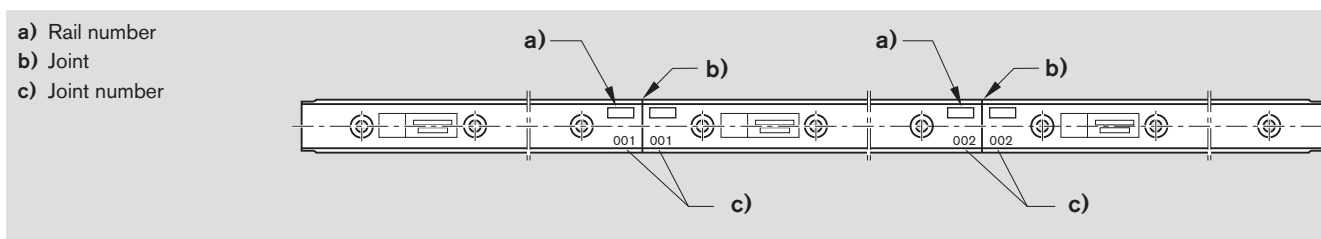
Size - Version	20	25	32	32-2	42	52	52-2	52-4
Stand- O ₁ (ISO 4762)	M4x16	M5x20	M6x25	M6x25	M8x25	M10x40	M10x40	M12x40
With O ₂ (ISO 4014)	-	M5	M6	-	-	M10	-	-
T-slot (DIN EN 2417)								
N ₁ min. (mm)	17,1	21,1	24,1	24,1	-	40,1	40,1	40,1
h max. (mm)	1,0	1,5	3,0	3,0	-	5,0	5,0	5,0
r max. (mm)	0,2	0,2	0,2	0,2	-	0,2	0,2	0,2

Permissible side loads

Recommended values for permissible side forces without additional lateral retention of the rail.

Size - Version	20	25	32	32-2	42	52	52-2	52-4
F _{per} (N)	200	330	450	900	1000	1000	1600	4000

Composite Guide Rails made up of several sections



Mounting Instructions

Instructions for mounting Standard and Super Runner Blocks to the Guide Rail

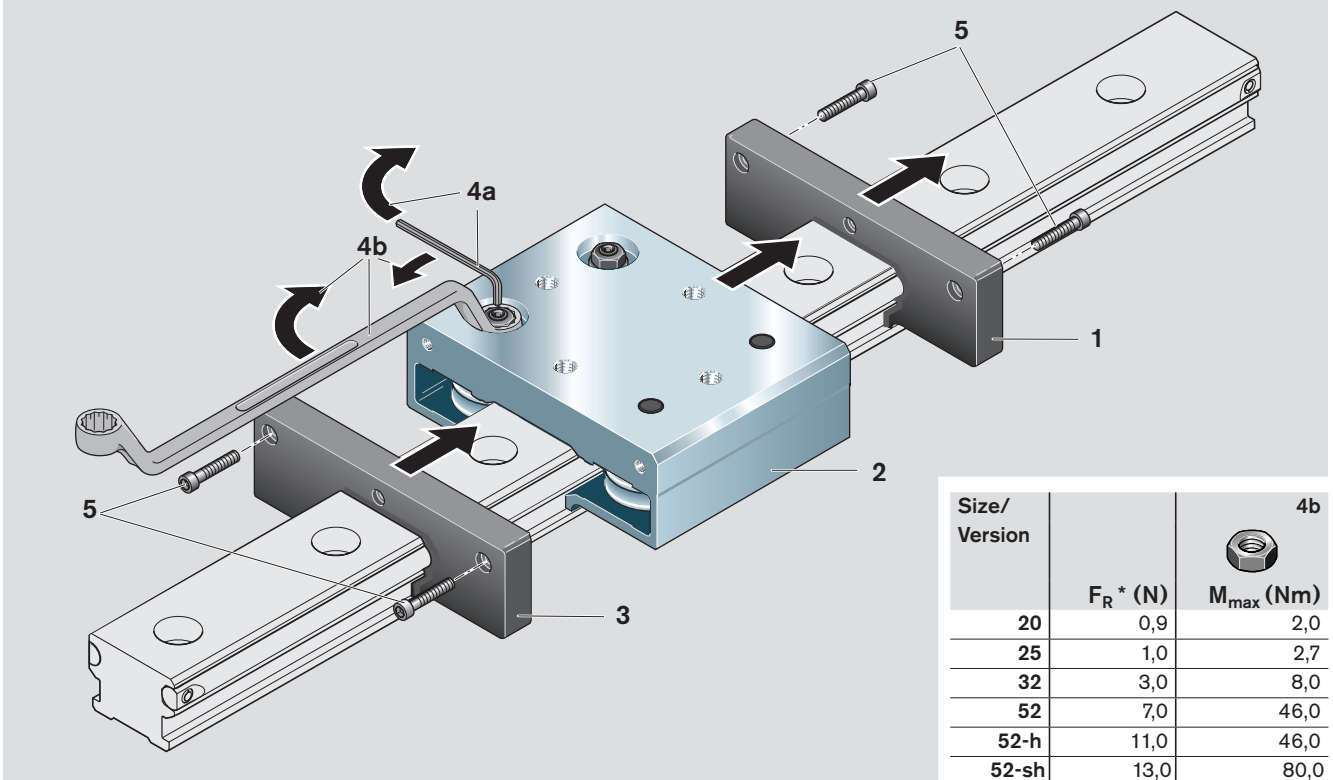
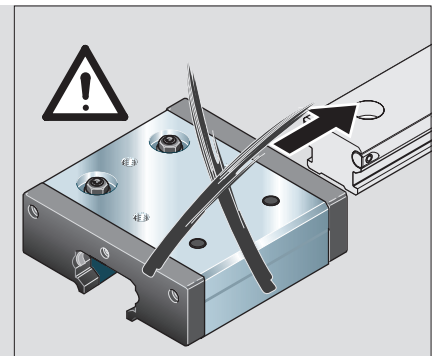
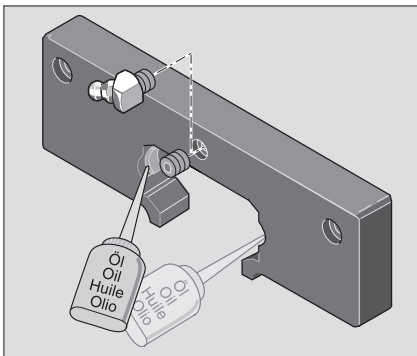
To mount the runner block:
The oil applicator and wiper units ("oiling units" for short) are delivered separate to facilitate installation work.


- Vor dem Aufschieben die Abstreif- und Schmiereinheiten mit Öl benetzen (Öl siehe "Schmierung")
- Push on the first oiling unit (1):
The felt wiper strips are automatically pressed in by the chamfers on the steel shafts.
- Carefully slide the runner block (2) onto the guide rail.
- Adjust the eccentric rollers (4a), until a slight shifting force F_R is felt (see table for recommended values).

- Tighten the hex nut to torque as shown in the table using a hex wrench to stop the pin from turning (4b).
- Mount the second oiling unit (3).
- Screw the two oiling units to the runner block (5).

⚠ After mounting, the runner block should move freely when pushed.

- Fill the oiling unit with oil after it has been mounted.



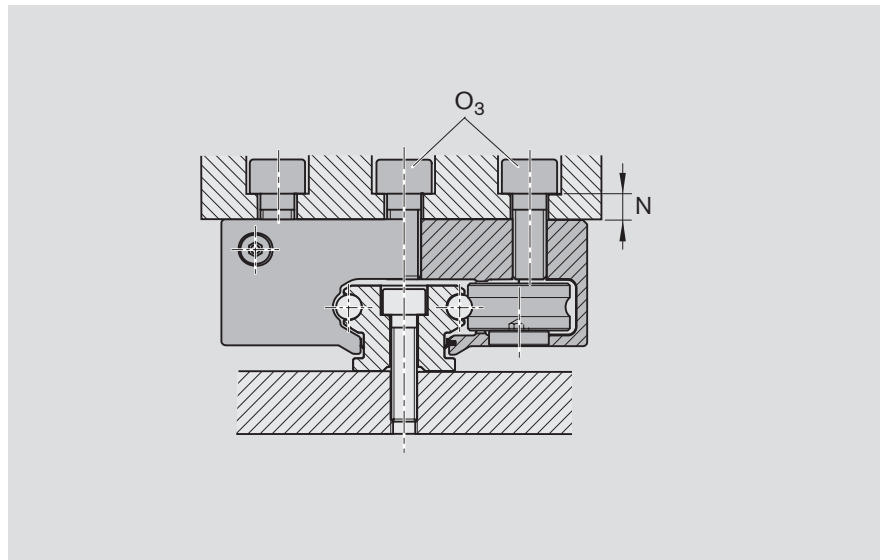
Size/ Version	F_R^* (N)	 4b M_{max} (Nm)
20	0,9	2,0
25	1,0	2,7
32	3,0	8,0
52	7,0	46,0
52-h	11,0	46,0
52-sh	13,0	80,0

* Computed average shifting force of the runner block for standard adjustment 0.08 C

Mounting Superstructures on Runner Blocks:

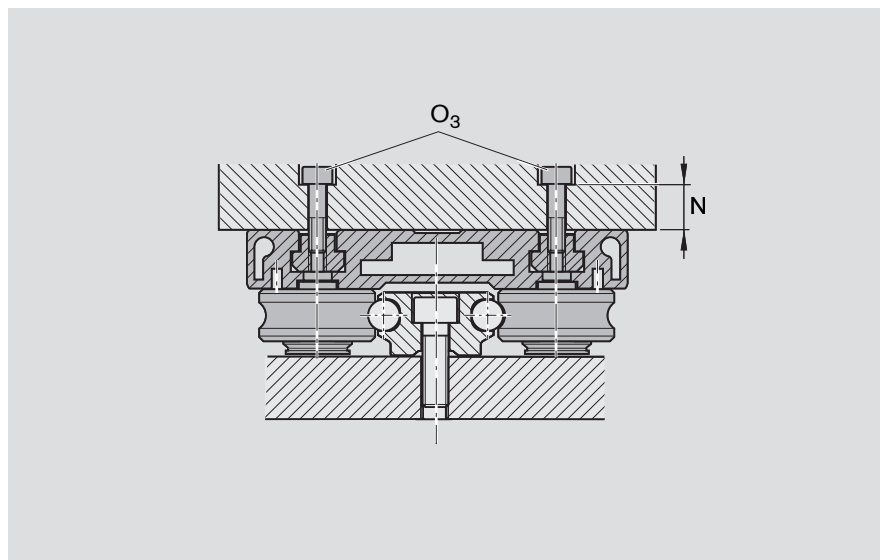
Standard Runner Block R1902, R1906

- Use screws as per table. Do not use overlong screws! Observe the minimum material strength N!
- Align the superstructure.
- Torque up the screws to the values given in the table.



Profile Runner Block R1907-



- Use screws as per table. Do not use overlong screws! Observe the minimum material strength N!
- Align the superstructure.
- Torque up the screws to the values given in the table.



Runner Blocks

Size - Version	20	25	32	32-2	42	52	52-2
O ₃ (DIN ISO 4762)	M5x16	M5x16	M8x25	M8X20	M10x30	M10x35	M12x35
N (mm)	8	7	7	7	12	12	12

Tightening torques for mounting screws

	8.8	M4	M5	M6	M8	M10	M12
							
	(Nm)	2,7	5,5	9,5	23	46	80

Design of mounting surface

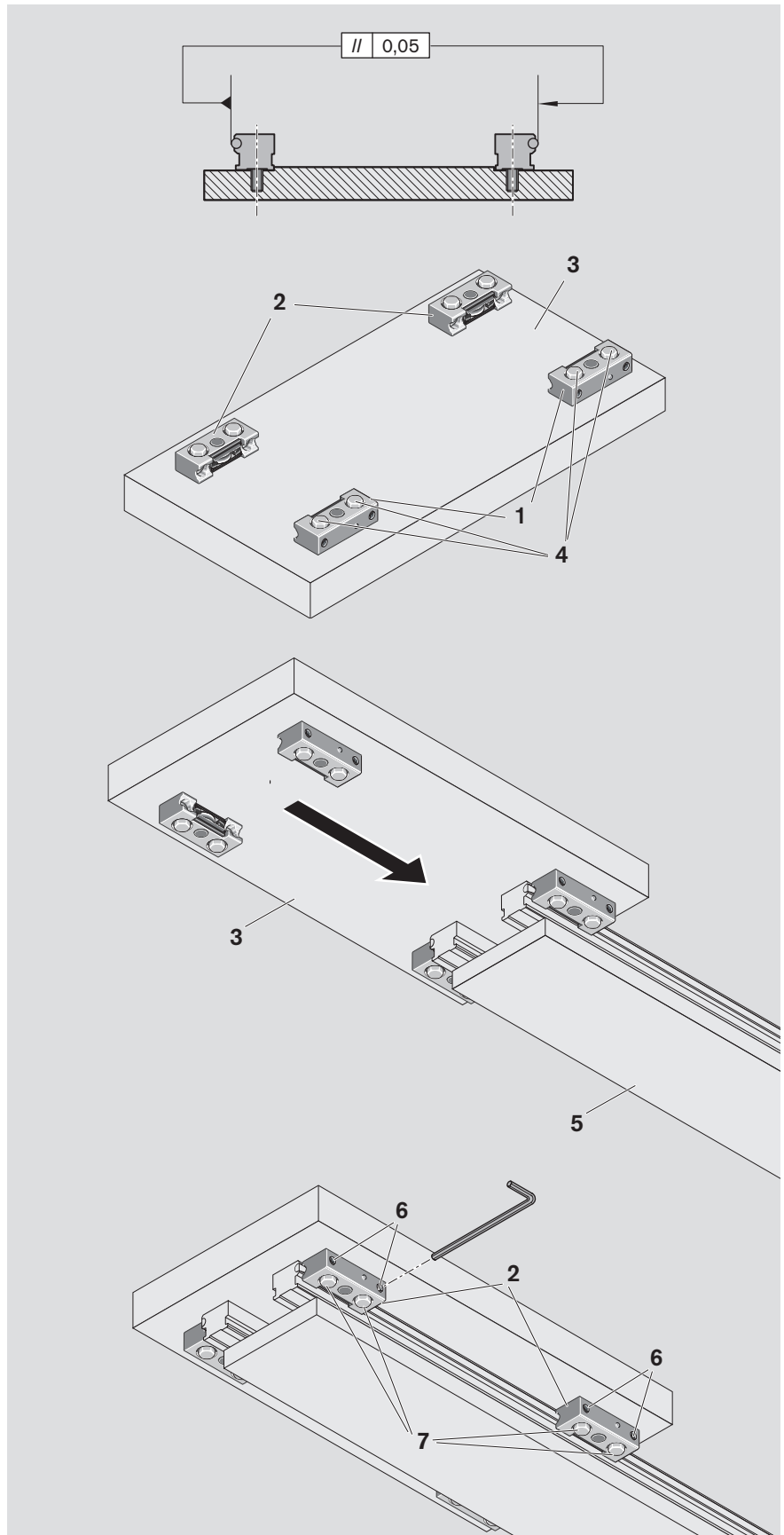
Unevenness or distortion of mounting surfaces (adjoining structures) will impair the accuracy of the guideway and should be kept to a minimum.

Mounting Instructions

Mounting Single/Double Bearing Runner Blocks with Adjustment Screws

1. Mounting

- Align and mount the rails.
- Preassemble runner blocks (1+2) on the carriage (3). Do not yet tighten the screws.
- Align the runner blocks on one side (1) of the carriage (3) and tighten the mounting screws (4) alternately until tightening torque M_A is reached.
- Slide the carriage (3) onto the rails (5).
- Adjust the runner blocks on the opposite side (2) to zero clearance against the guide rail using adjustment screws (6). Adjust the preload.
- Alternately tighten the mounting screws (7) on the runner blocks (2) until tightening torque M_A is reached.



Size -Version	32	52	52-h	52-sh
M_A (Nm)	23	46	80	80