Improved linear recirculating roller bearing and guideway assembly RUE25-E

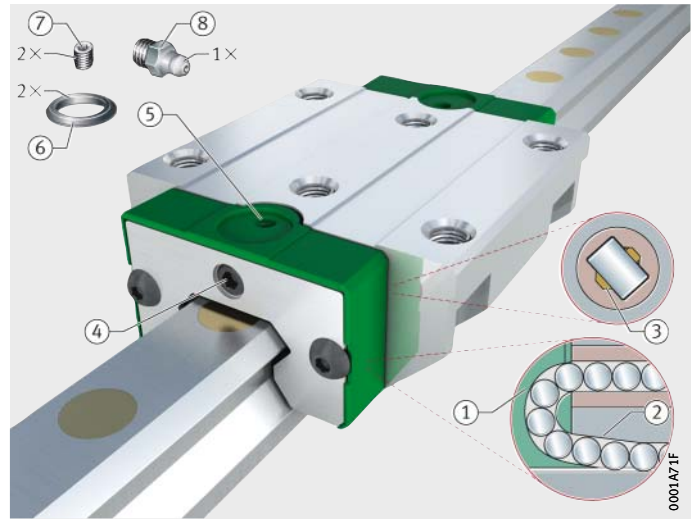
Linear recirculating roller bearing and guideway assemblies RUE..-E have a full complement rolling element system. Since they have the maximum possible number of rolling elements, they have extremely high load carrying capacity and high rigidity. Such units are particularly suitable if the loads involved are extremely high and there is a requirement for high rigidity and accuracy.

Technical modifications to RUE25-E

As part of this proven series, the RUE25-E has now also been revised in terms of certain significant functional aspects.

The improved design:

- has a new return and entry geometry design for the rolling elements, *Figure 1*. The friction has thus been reduced by 40% (in measurements, this gives a mean displacement force F_m of only 7,5 N). As a result, this reduces the drive power required.
- requires 30% less lubricant due to the modified lubricant feed system. This is achieved by means of the lubricant reservoir in the recirculation channels for the rolling elements, in combination with a modified end seal, *Figure 1*.
  As a result, the maintenance intervals of the guidance system are increased to a considerable extent. Measurement of the lubricant requirement in tests gave a value of 0,04 cm^3/h (load ratio C/P = 4, travel velocity v = 3 m/s, mounting position = 90°).
- facilitates lubrication in any mounting position due to the design for optimum flow of the lubricant ducts leading to the transfer points in the rolling element return channels.
- is supplied with a lubrication connector mounting kit, *Figure 1*:
  – O rings for sealing and grub screws for closing off the lubrication hole in the top face of the end piece
  – lubrication nipples for grease lubrication.
- is 100% interchangeable within the standard preload and accuracy class with other linear recirculating roller guidance systems of this size. This gives easier stockholding, better availability and improved scheduling flexibility.
- is interchangeable in geometry and performance with RUE25D.



① Return geometry
② Entry geometry
③ Lubricant reservoir
④ Closed lubrication connector
⑤ Open lubrication hole

Lubrication connector mounting kit:
⑥ O-rings
⑦ Grub screws
⑧ Lubrication nipple for grease lubrication

Figure 1
Improved linear recirculating roller bearing and guideway assembly RUE25-E

Linear recirculating roller bearing and guideway assemblies

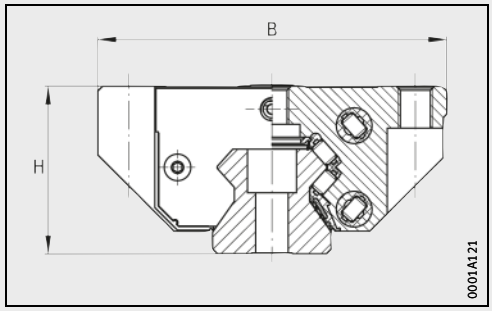
Full complement
Standard and L carriages
H and HL carriages

Dimension table · Dimensions in mm

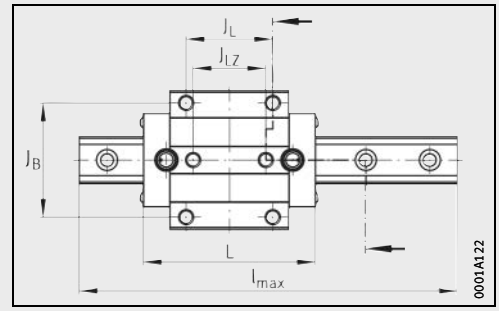
Designation		Dimensions				Mounting dimensions			Load carrying capacity				
Unit	Carriage	l_{max} [1]	H	B	L [2]	J_B	J_L	J_{LZ}	Basic load ratings		Moment ratings		
									C N	C_0 N	M_{0x} Nm	M_{0y} Nm	M_{0z} Nm
RUE25-E	**RWU25-E**	1 980	36	70	91	57	45	40	28 000	65 000	350	760	680
RUE25-E-L	**RWU25-E-L**	1 980	36	70	107	57	45	40	33 500	82 000	440	1 200	1 080
RUE25-E-H	**RWU25-E-H**	1 980	40	48	91	35	35	35	28 000	65 000	350	760	680
RUE25-E-HL	**RWU25-E-HL**	1 980	40	48	107	35	50	50	33 500	82 000	440	1 200	1 080

1) Maximum length of one guideway. Maximum single-piece guideway length 6 m.

2) Minimum covered length for sealing the lubrication connectors.



RUE25-E



RUE25-E · View rotated 90°

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