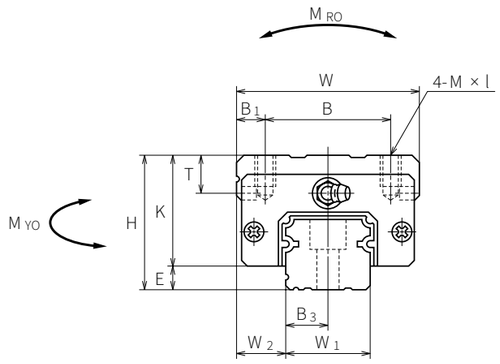
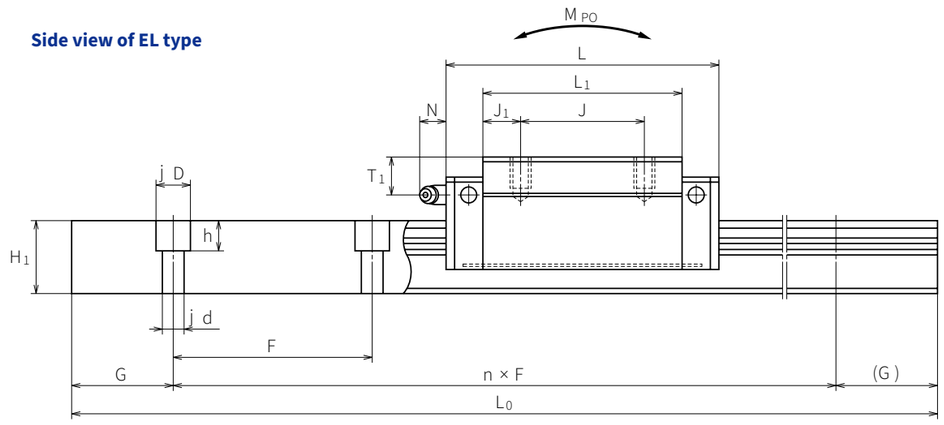
LH-EL (High load type), LH-GL (Super high load type)

LH 25 1000 AN C 2 * PC Z**

- Series
- Size
- Rail length (mm)
- Shape/height
- Material/surface treatment
  - C: Carbon steel (NSK standard)
  - K: Stainless steel
  - D: Carbon steel + surface treatment
  - H: Stainless steel + surface treatment
- Number of ball slides per rail
- Design Serial number
- Accuracy: normal grade PC
- Slight preload ZZ, fine clearance ZT (Z0)



Side view of EL type



Unit: mm

Model No.	Assembly			Ball slide											Rail							Basic load rating					Ball diameter	Weight	
	Height			Width	Length	Mounting hole							Grease fitting			Width	Height	Pitch	Mounting bolt hole			Max. length (Single rail)	Dynamic	Static	Static moment				Ball slide	Rail
	H	E	W_2	W	L	B	J	M × pitch × l	B_1	L_1	J_1	K	T	Mounting hole size	T_1	N	W_1	H_1	F	d× D × h	B_3	G	L_{0max} ( ) for stainless	C (N)	C_0 (N)	M_{RO} (N·m)	M_{PO} (N·m)	M_{YO} (N·m)	D_W	(kg)	(kg/m)
LH25EL	36	7	23.5	70	79	57	45	M8 × 1.25 × 16	6.5	58	6.5	29	11	M6×0.75	6	11	23	22	60	7×11×9	11.5	20	3960	21000	39000	355	315	305	4.762	0.63	3.6
LH25GL					107					86	20.5												(3500)	26900	52500	470	530	520		0.93	

LH Series Features

(1) High self-aligning capability (rolling direction)
Same as the DF combination in angular contact bearings, self-aligning capability is high because the cross point of the contact lines of balls and grooves comes inside, reducing moment rigidity. This increases the capacity to absorb the error of installation.

(2) High load carrying capacity to vertical direction
The contact angle is set at 50 degrees, increasing load carrying capacity as well as rigidity in vertical direction.

(3) High resistance against shock load
The bottom ball groove is formed in gothic-arch and the center of the top and bottom grooves are offset as shown in Fig.I-5•2. The vertical load is generally carried by the top rows, at where balls are contacting at two points. Because of this design, the bottom rows will carry load when a large impact load is applied vertically as shown in Fig.I-5•3. This assures high resistance to the shock load.

(4) Highly accurate As shown in Fig.
I-5.4, fixing the master rollers is easy thanks to the gothic-arch groove. This makes easy and accurate measuring of ball grooves.

(5) Interchangeable rail and ball slide (prompt delivery)
Randomly matching rails and ball slides are stocked as standardized interchangeable items. This reduces delivery time.

(6) Easy to handle, and designed with safety in mind.
Balls are retained in the retainer, therefore they do not fall out when theball slider is withdrawn from the rail.

(7) Abundant models and sizes
Each series has various models of ball slides, rendering the linear guide available for numerous uses.

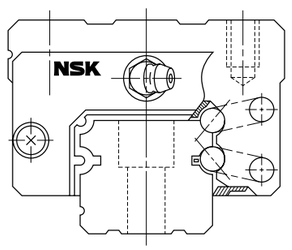


Fig I-5.1 LH Series

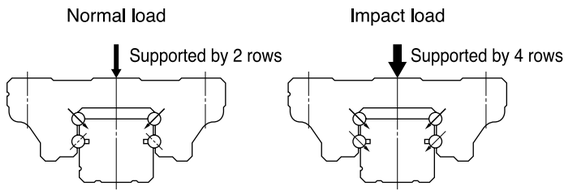


Fig I-5.3 When load is applied

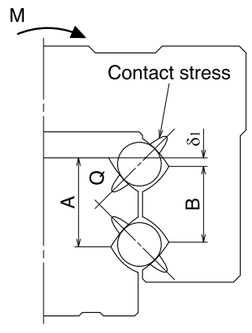


Fig I-5.2 Enlarged illustration of the offset gothic-arch

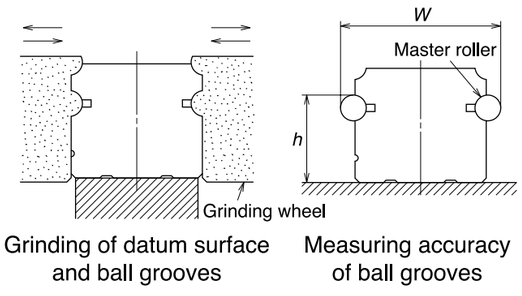


Fig I-5.4 Rail grinding and measuring