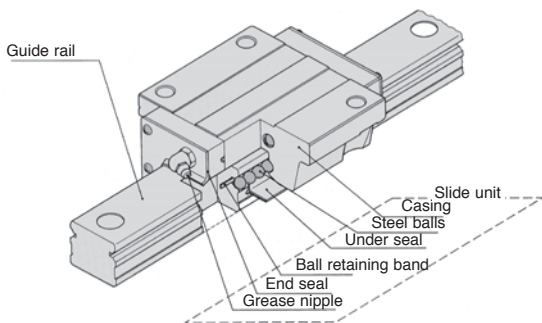
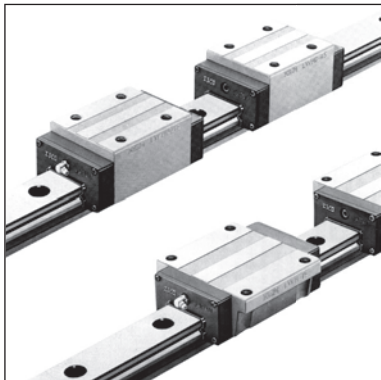


# High rigidity linear slide

## LWHIKO

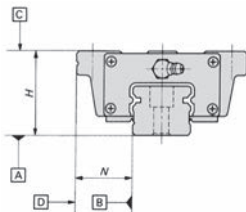
## Introduction



The LWH series of interchangeable linear guides are lateral movement guides with a high load capacity of which the stroke-length is limited only by the length of the guide rails. The dimensional accuracy of both the slides and the rails is controlled 100% during manufacture to ensure interchangeability and all components can therefore be added or replaced freely. The conception of a double track, use of large diameter steel balls in 4 point contact with the rail not only provide a accurate and repeated linear movement, but also high rigidity, even under combined or variable loads.

### Accuracy

Accuracy of total assembly (mm)		
Tolerance on H		±0,040
Tolerance on N <sup>(3)</sup>		±0,050
On 1	Variation on H <sup>(1)</sup>	0,015
total	Variation on N <sup>(2)(3)</sup>	0,020
Variation on H for multiple units <sup>(4)</sup>		0,040
Parallelism between C and A		See Fig. 1.
Parallelism entre D and B		See Fig. 1



**Note (1):** This is the difference in the dimension H between two slides mounted on the same track or on a pair of tracks when H is measured at a specified position.

**Note (2):** This is the difference in the dimension N between two slides mounted on the same track or on a pair of tracks when N is measured at a specified position.

**Note (3):** These values also apply when the reference surfaces are assembled opposite each other.

**Note (4):** The difference in the dimension H for multiple assemblies represents the dimensional variation between the slides of an arbitrary number of assemblies having the same accuracy class.

**Note:** All of the above are applicable only when the dimensions are measured at the centre of the slide mounted on a rail attached to a flat base.

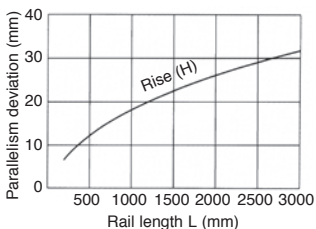


Fig.1 Working parallelism

### Lubrication

These linear slides are supplied lubricated with a Lithium soap based grease (Class 2) containing extreme pressure additives. A stoppered grease injector is supplied with each slide, this should be attached before use.

### Assembly

To assemble LWH linear slides, correctly position the assembly reference surfaces of the slide and rail on the reference surfaces of the table or frame and fasten securely.

### Reference mounting surface

The reference side of the slide is the opposite side to the surface carrying the manufacturer's logo. In the same way, the reference side of the rail is that one opposite the upper surface which is marked with the manufacturer's logo.

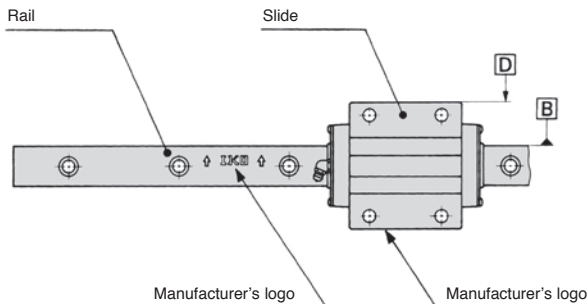


Fig.2 Assembly reference surfaces

**Assembly recommendations****1- Manipulation**

Every slide is supplied mounted on a dummy rail. When assembling the slide onto its guide rail, align the slots of the dummy rail with the guide rail and then move the slide on to the guide rail keeping the parts aligned correctly.

**f<sub>w</sub>** : load factor (see table 1)

**F<sub>c</sub>** : calculated theoretical load, N

**2- Multiple slides mounted side by side**

Every slide is supplied mounted on a dummy rail. When assembling the slide onto its guide rail, align the slots of the dummy rail with the guide rail and then move the slide on to the guide rail keeping the parts aligned correctly.

**3- Example of multiple slide units mounted close together**

Referring to Figure 3, the reference mounting surfaces **B** and **D** and mounting surfaces **A** and **C** of the LWH linear slides have an accurately ground finish. Stable and high accurate linear motion will be obtained by finishing the mounting surfaces of machines or equipment to the same high accuracy and correctly mounting the guides on these surfaces.

It is recommended to machine a fillet at the corner of the mating reference mounting surfaces as shown in Fig. 4 . However, a radius smaller than **R<sub>1</sub>** of the slide or smaller than **R<sub>2</sub>** of the rail( see table 1) is also possible.

The heights of flanges on assembly reference surfaces are also given in table 1.

Fig.3 : Typical assembly

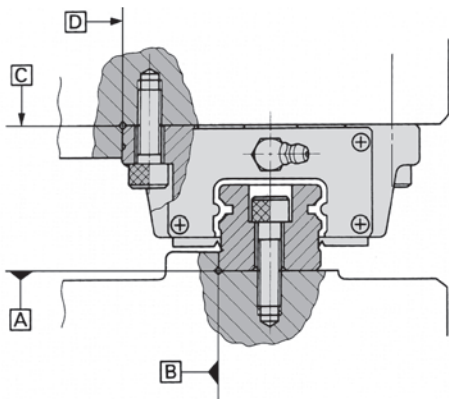
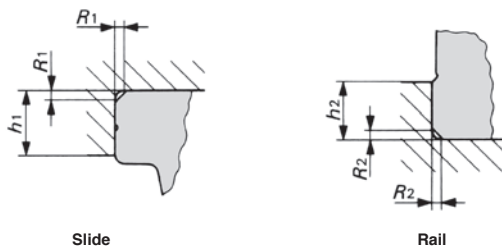


Table 1 : Accuracy



Part number	Slide		Rail	
	Radius R1 (max.)	Height of flange h1	Radius R2 (max.)	Height of flange h2
LWH15	0,5	4	0,5	0,5
LWH20	0,5	5	0,5	0,5
LWH25	1,0	6	1,0	1,0
LWH30	1,0	8	1,0	1,0
LWH35	1,0	8	1,0	1,0
LWH45	1,5	8	1,7	1,7

Note : These values apply to all types of slides

#### 4- Mounting bolt tightening torque

Table 2 gives the tightening torque of fastening bolts in normal use.

**Table 2 : Mounting bolt tightening torque**

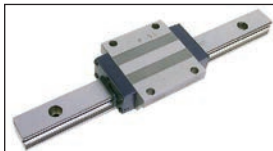
Bolt dimensions	Locking torque (Nm)
M4 x 0,7	40
M5 x 0,8	80
M6 x 1	130
M8 x 1,25	320
M10 x 1,5	640
M12 x 1,75	1100

#### 5- Working temperature

The normal continuous operating temperature of the LWH linear slides is 100°C with occasional use at up to 120°C. If your application will exceed 100°C, please contact us for advice.

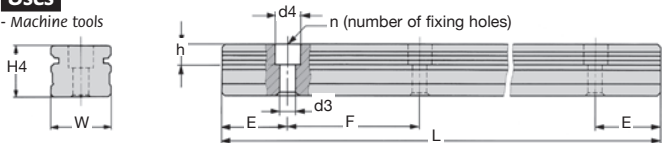
## LWH **IKO** Dynamic load from 9320 N to 24320 N

- Linear slide for heavy loads not subject to vibrations or shocks
- Recirculating ball type linear slide
- Standard accuracy
- Rails and slides have separate part numbers, remember to order both
- Linear slide with steel balls



### Uses

- Machine tools

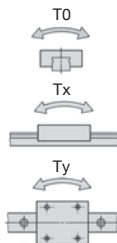
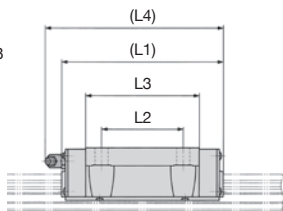
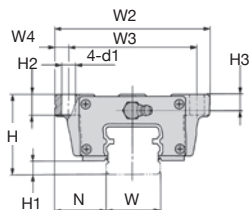


### DISCOUNTS

Qty	1+	5+	10+
Disc. List	-	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Stock*	Price each 1 to 4
LWH15-180	180	3	1500	-	✓	54.61 €
LWH15-240	240	4	1500	-	✓	72.84 €
LWH15-360	360	6	1500	-	✓	109.30 €
LWH15-480	480	8	1500	-	✓	145.75 €
LWH15-660	660	11	1500	-	-	200.42 €
LWH15-900	900	15	1500	-	-	273.35 €
LWH15-1200	1200	20	1500	-	-	364.48 €
LWH15-1500	1500	25	1500	-	-	455.62 €
LWH15-C	-	Slide	-	Standard	✓	159.86 €
LWH20-240	240	4	1980	-	✓	78.09 €
LWH20-480	480	8	1980	-	✓	156.28 €
LWH20-660	660	11	1980	-	✓	214.91 €
LWH20-840	840	14	1980	-	✓	273.57 €
LWH20-1020	1020	17	1980	-	-	332.20 €
LWH20-1200	1200	20	1980	-	-	390.84 €
LWH20-1500	1500	25	1980	-	-	488.54 €
LWH20-1980	1980	33	1980	-	-	644.91 €
LWH20-C	-	Slide	-	Standard	✓	178.17 €
LWH20G-C	-	Slide	-	Long	-	227.39 €
LWH25-240	240	4	3000	-	✓	82.49 €
LWH25-480	480	8	3000	-	✓	165.08 €
LWH25-660	660	11	3000	-	✓	227.00 €
LWH25-840	840	14	3000	-	-	288.91 €
LWH25-1020	1020	17	3000	-	-	350.83 €
LWH25-1200	1200	20	3000	-	-	412.79 €
LWH25-1500	1500	25	3000	-	-	516.03 €
LWH25-1980	1980	33	3000	-	-	681.17 €
LWH25-3000	3000	50	3000	-	-	1 032.11 €
LWH25-C1H	-	Slide	-	Standard	✓	190.40 €
LWH25G-C	-	Slide	-	Long	✓	245.70 €

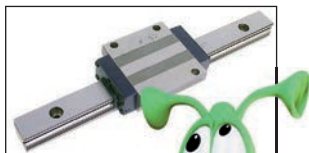
\*Depending on availability - Dimensions in mm



	LWH15-C	LWH20-C	LWH20G-C	LWH25-C	LWH25G-C
<b>Weight (kg)</b>					
Slide	0,22	0,48	0,71	0,70	0,93
Rail (by m)	1,47	2,56	2,56	3,50	3,50
<b>Total dimensions</b>					
H±0,04	24,00	30,00	30,00	36,00	36,00
H1	4,50	5,00	5,00	6,00	6,00
N±0,05	16,00	21,50	21,50	23,50	23,50
<b>Slide dimensions</b>					
W2	47,00	63,00	63,00	70,00	70,00
W3	38,00	53,00	53,00	57,00	57,00
W4	4,50	5,00	5,00	6,50	6,50
L1	66,00	83,00	112,00	95,00	118,00
L2	30,00	40,00	40,00	45,00	45,00
L3	44,60	57,50	86,00	64,70	87,40
L4	69,00	95,00	124,00	106,00	129,00
d1	4,50	6,00	6,00	7,00	7,00
H2	7,00	10,00	10,00	10,00	10,00
H3	4,50	5,50	5,50	6,50	6,50
<b>Rail dimensions</b>					
W	15,00	20,00	20,00	23,00	23,00
H4	15,00	18,00	18,00	22,00	22,00
d3	4,50	6,00	6,00	7,00	7,00
d4	8,00	9,50	9,50	11,00	11,00
h	6,00	8,50	8,50	9,00	9,00
E	30,00	30,00	30,00	30,00	30,00
F	60,00	60,00	60,00	60,00	60,00
Rail fixing screw	M4 x 16	M5 x 18	M5 x 18	M6 x 22	M6 x 22
<b>Dynamic load</b>					
C (N)	9320	14520	19030	20110	24320
<b>Static load</b>					
C <sub>0</sub> (N)	14520	21875	32860	29820	39820
<b>Static moment</b>					
T <sub>0</sub> (Nm)	116	240	360	375	500
T <sub>x</sub> (Nm)	99	202	435	320	550
T <sub>y</sub> (Nm)	575	1130	2200	1750	2845
T <sub>y</sub> (Nm)	99	202	435	320	550
	575	1130	2200	1750	2845

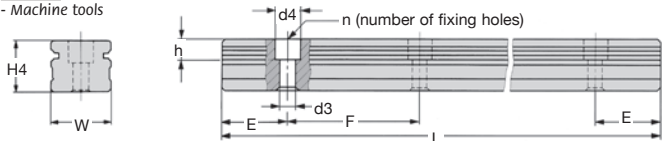


- Linear slide for heavy loads not subject to vibrations or shocks
- Recirculating ball type linear slide
- Standard accuracy
- Rails and slides have separate part numbers, remember to order both
- Linear slide with steel balls



### Uses

- Machine tools

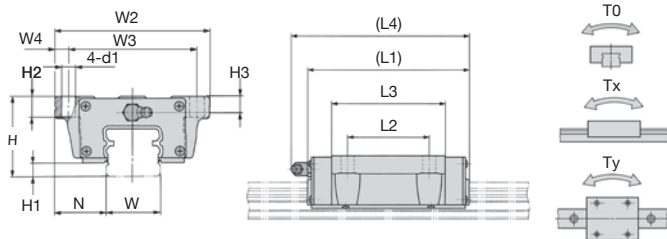


### DISCOUNTS

Qty	1+	5+	10+
Disc.	List	-6%	On request

Part number	L	No. of holes	Max. length	Type of slide	Stock*	Price each 1 to 4
LWH30-480	480	6	2960	-	-	196,70 €
LWH30-640	640	8	2960	-	-	262,29 €
LWH30-800	800	10	2960	-	-	327,89 €
LWH30-1040	1040	13	2960	-	-	426,27 €
LWH30-1200	1200	15	2960	-	-	491,85 €
LWH30-1520	1520	19	2960	-	-	623,05 €
LWH30-2000	2000	25	2960	-	-	819,79 €
LWH30-2960	2960	37	2960	-	-	1 213,33 €
LWH30-C	-	Slide	-	Standard	-	227,39 €
LWH30G-C	-	Slide	-	Long	-	294,95 €
LWH35-480	480	6	2960	-	-	265,20 €
LWH35-640	640	8	2960	-	-	353,66 €
LWH35-800	800	10	2960	-	-	442,08 €
LWH35-1040	1040	13	2960	-	-	574,70 €
LWH35-1200	1200	15	2960	-	-	663,15 €
LWH35-1520	1520	19	2960	-	-	840,00 €
LWH35-2960	2960	37	2960	-	-	1 635,87 €
LWH35-C	-	Slide	-	Standard	-	313,33 €
LWH35G-C	-	Slide	-	Long	-	411,68 €
LWH45-840	840	8	2940	-	-	547,20 €
LWH45-1050	1050	10	2940	-	-	684,01 €
LWH45-1260	1260	12	2940	-	-	820,83 €
LWH45-1470	1470	14	2940	-	-	957,63 €
LWH45-1995	1995	19	2940	-	-	1 299,68 €
LWH45-2940	2940	28	2940	-	-	1 915,37 €
LWH45-C	-	Slide	-	Standard	-	416,47 €
LWH45G-C	-	Slide	-	Long	-	566,53 €

\*Depending on availability - Dimensions in mm



	LWH30-C	LWHG30-C	LWH35-C	LWHG35-C	LWH45-C	LWHG45-C
<b>Weight (kg)</b>						
Slide	1,28	1,69	1,78	2,35	3,17	4,34
Rail (by m)	4,82	4,82	6,85	6,85	10,70	10,70
<b>Total dimensions</b>						
H±0,04	42,00	42,00	48,00	48,00	60,00	60,00
H1	7,00	7,00	8,00	8,00	10,00	10,00
N±0,05	31,00	31,00	33,00	33,00	37,50	37,50
<b>Slide dimensions</b>						
W2	90,00	90,00	100,00	100,00	120,00	120,00
W3	72,00	72,00	82,00	82,00	100,00	100,00
W4	9,00	9,00	9,00	9,00	10,00	10,00
L1	113,00	139,00	123,00	151,00	147,00	190,00
L2	52,00	52,00	62,00	62,00	80,00	80,00
L3	80,60	106,60	86,20	114,00	103,40	146,60
L4	124,00	150,00	135,00	163,00	158,00	201,00
d1	9,00	9,00	9,00	9,00	12,00	12,00
H2	10,00	10,00	13,00	13,00	15,00	15,00
H3	8,00	8,00	10,00	10,00	13,00	13,00
<b>Rail dimensions</b>						
W	28,00	28,00	34,00	34,00	45,00	45,00
H4	25,00	25,00	28,00	28,00	34,00	34,00
d3	9,00	9,00	9,00	9,00	14,00	14,00
d4	14,00	14,00	14,00	14,00	20,00	20,00
h	12,00	12,00	12,00	12,00	17,00	17,00
E	40,00	40,00	40,00	40,00	52,50	52,50
F	80,00	80,00	80,00	80,00	105,00	105,00
Rail fixing screw	M8 x 28	M8 x 28	M8 x 28	M8 x 28	M12 x 35	M12 x 35
<b>Dynamic load</b>						
C (N)	28050	33550	37000	44920	56600	71300
<b>Static load</b>						
C <sub>o</sub> (N)	42180	55230	55700	74260	83200	117720
<b>Static moment</b>						
T <sub>o</sub> (Nm)	645	840	875	1165	1715	2430
T <sub>x</sub> (Nm)	550	925	655	1125	1195	2320
	2900	4630	3610	5775	6425	11475
T <sub>y</sub> (Nm)	550	925	600	1040	1098	2120
	2900	4630	3315	5300	5900	10500