

IKO

C-Lube Linear Way MH
Linear Way H

ALMOTION

MH • LWH



C-Lube Linear Way MH

ALMOTION

MH



The aquamarine end plate is the symbol of maintenance free.

Track rail

Slide unit

Casing

C-Lube

Ball

End plate

Under seal

Ball retaining band

End seal

Grease nipple

Linear Way H

LWH

Points

- High rigidity series with the largest-class load rating among ball types

High rigidity linear motion rolling guides designed to evenly support high load capacity by incorporating large-diameter balls.

- Wide range of variations for your needs For details P.I-26

As the lineup of 5 types of slide unit shape including the flange type, block type with small width and side mounting type, etc., and 3 types with different slide unit length with same section are available, you can select an optimal product for the specifications of your machine and device.

- Stainless steels selections superior in corrosion resistance are listed on lineup. For details P.I-39

Products made of stainless steel are highly resistant to corrosion, so that they are suitable for applications where rust prevention oil is not preferred, such as in cleanroom environment.

- Series of ultra seal specification for excellent dust protection performance

Products of ultra seal specifications have excellent dust protection performance thanks to the combination of the dedicated track rail finished with total ground and slide unit with end seal and under seal of special shapes. Special specification with inner seal further improves dust protection property of the ball circulation section against foreign substances from the upper surface of the track rail.

Identification Number and Specification

Example of an identification number

The specifications of MH and LWH series are indicated by the identification number. Indicate the identification number, consisting of a model code, dimensions, a part code, a dust protection code, a material code, a preload symbol, a classification symbol, an interchangeable code, and any supplemental codes for each specification to apply.

Non-interchangeable specification					1	2	3	4	5	1	6	7	8	9	10	11	
Assembled set					MHT	G	20	C1	R840					T ₁	P		/FV

Interchangeable specification																	
Single slide unit					MHT	G	20	C1						T ₁	P	S1	/V
Single track rail ⁽¹⁾					LWH		20		R840	B					P	S1	/F
Assembled set					MHT	G	20	C1	R840					T ₁	P	S1	/FV

1

Model

Model code

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2

Length of slide unit

3

Size

Dimensions

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4

Number of slide units

Part code

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5

Length of track rail

6

Dust protection specification

Dust protection code

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7

Material type

Material code

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8

Preload amount

Preload symbol

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9

Accuracy class

Classification symbol

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10

Interchangeable

Interchangeable code

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11

Special specification

Supplemental code

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Note ⁽¹⁾ Indicate "LWH...B" or "LWH" for the model code of the single track rail regardless of the series and the combination of slide unit models.

MH・LWH

Identification Number and Specification — Model —

1	Model	C-Lube Linear Way MH (MH series)	Flange type mounting from bottom	: MH
			Flange type mounting from top ⁽²⁾	: MHT
	Block type mounting from top		: MHD	
	Compact block type mounting from top		: MHS	
	Linear Way H ⁽¹⁾ (LWH series)		Flange type mounting from bottom	: LWH (…B)
		Flange type mounting from top ⁽²⁾	: LWHT (…B)	
		Block type mounting from top	: LWHD (…B)	
		Compact block type mounting from top	: LWHS (…B)	
		Side mounting type	: LWHY	
	For applicable models and sizes, see Table 1.1 and Table 1.2.			
Indicate "LWH…B" or "LWH" for the model code of the single track rail regardless of the series and the combination of slide unit models.				
Notes ⁽¹⁾ This model has no built-in C-Lube.				
⁽²⁾ Some models may be mounted upward.				

Table 1.1 Models and sizes of MH and LWH series

Material	Shape	Length of slide unit	Model	Size											
				8	10	12	15	20	25	30	35	45	55	65	
High carbon steel made	Flange type mounting from bottom	Standard	MH	—	—	—	○	○	○	○	○	○	—	—	
			LWH…B	—	—	—	○	○	○	○	○	○	○	○	
		Long	MH…M (U)	—	—	—	—	—	○	○	—	—	—	—	
			LWH…M (U)	—	—	—	○	○	○	○	○	○	—	—	
	Flange type mounting from top	Standard	MHG	—	—	—	—	○	○	○	○	○	—	—	
			LWHG	—	—	—	—	○	○	○	○	○	○	○	
		Long	MHT	—	—	○ ⁽¹⁾	○	○	○	○	○	○	—	—	
			LWHT…B	—	—	○ ⁽¹⁾⁽²⁾	○	○	○	○	○	○	○	○	
		Extra long	MHT…M (U)	—	—	—	—	—	○	○	—	—	—	—	
			LWHT…M (U)	—	—	—	—	—	○	○	○	○	—	—	
	Block type mounting from top	Standard	MHTG	—	—	—	○ ⁽¹⁾	○	○	○	○	○	—	—	
			LWHTG	—	—	—	—	○	○	○	○	○	○	○	
		Long	MHTL ⁽¹⁾	—	—	—	—	—	—	○	○	○	—	—	
			MHTL ⁽¹⁾	—	—	—	—	—	—	○	○	○	—	—	
		Extra long	MHTL ⁽¹⁾	—	—	—	—	—	—	○	○	○	—	—	
			MHTL ⁽¹⁾	—	—	—	—	—	—	○	○	○	—	—	
	Compact block type mounting from top	Standard	MHD	—	—	○	○	—	○	○	○	○	—	—	
			LWHD…B	—	—	○ ⁽²⁾	○	—	○	○	○	○	○	○	
		Long	MHD…M (U)	—	—	—	—	—	○	○	—	—	—	—	
			LWHD…M (U)	—	—	—	—	—	○	○	○	○	—	—	
		Extra long	MHDG	—	—	—	—	—	○	○	○	○	—	—	
			LWHDG	—	—	—	—	—	○	○	○	○	○	○	
	Side mounting type	Standard	MHDL	—	—	—	—	—	—	○	○	○	—	—	
			MHDL	—	—	—	—	—	—	○	○	○	—	—	
		Long	MHS	—	—	—	○	○	○	○	—	—	—	—	
			LWHS…B	—	—	—	○	○	○	○	—	—	—	—	
		Extra long	MHS…M (U)	—	—	—	—	—	○	○	—	—	—	—	
			LWHS…M (U)	—	—	—	—	—	○	○	○	○	—	—	

Notes ⁽¹⁾ This may be mounted upward.
⁽²⁾ "…B" is not included in the model code.
Remark: For the models indicated in , the interchangeable specification is available.

— Length of Slide Unit · Size · Number of Slide Unit —

2	Length of slide unit	Short	: C	For applicable models and sizes, see Table 1.1 and Table 1.2.
		Standard	: No symbol	
		Long	: G	
		Extra long	: L	
3	Size	8, 10, 12, 15, 20, 25, 30, 35, 45, 55, 65	For applicable models and sizes, see Table 1.1 and Table 1.2.	
4	Number of slide units		: C○	For an assembled set, indicates the number of slide units assembled on a track rail. For a single slide unit, only "C1" is specified.

Table 1.2 Models and sizes of MH and LWH series

Material	Shape	Slide unit Length	Model	Size											
				8	10	12	15	20	25	30	35	45	55	65	
Stainless steel made	Flange type mounting from bottom	Standard	LWH…SL	—	—	—	○	○	○	○	—	—	—	—	
				—	—	—	○	○	○	○	—	—	—	—	
	Flange type mounting from top	Standard	MHT…SL	○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	○	○	○	○	—	—	—	—	
				○ ⁽¹⁾	○ ⁽¹⁾	○ ⁽¹⁾	○	○	○	○	—	—	—	—	
	Block type mounting from top	Short	MHDC…SL	○	○	○	—	—	—	—	—	—	—	—	
				○	○	○	—	—	—	—	—	—	—	—	
		Standard	MHD…SL	○	○	○	—	—	—	—	—	—	—	—	
				○	○	○	—	—	—	—	—	—	—	—	
		Long	MHDG…SL	○	○	○	—	—	—	—	—	—	—	—	
				○	○	○	—	—	—	—	—	—	—	—	
	Compact block type mounting from top	Standard	MHS…SL	—	—	—	○	○	○	○	—	—	—	—	
				—	—	—	○	○	○	○	—	—	—	—	

Note ⁽¹⁾ This may be mounted upward.
Remark: For the models indicated in , the interchangeable specification is available.

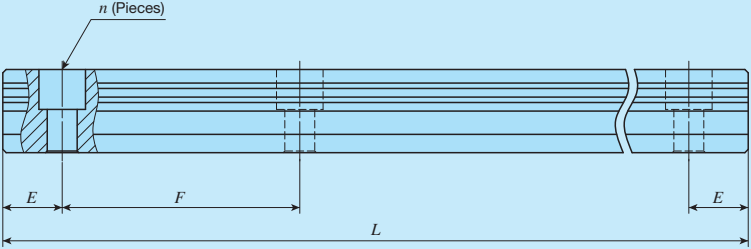
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MH · LWH

5 Length of track rail

: RO Indicate the length of track rail in mm.
For standard and maximum length, see Table 2.1 and Table 2.2.

Table 2.1 Standard and maximum length of high carbon steel track rail



Item	Identification number	MH 12 LWH12	MH 15 LWH15...B	MH 20 LWH20...B	MH 25 LWH25...B	MH 30 LWH30...B
Standard length L (n)		80 (2)	180 (3)	240 (4)	240 (4)	480 (6)
		160 (4)	240 (4)	480 (8)	480 (8)	640 (8)
		240 (6)	360 (6)	660 (11)	660 (11)	800 (10)
		320 (8)	480 (8)	840 (14)	840 (14)	1 040 (13)
		400 (10)	660 (11)	1 020 (17)	1 020 (17)	1 200 (15)
		480 (12)	900 (15)	1 200 (20)	1 200 (20)	1 520 (19)
		560 (14)	1 200 (20)	1 500 (25)	1 500 (25)	2 000 (25)
		640 (16)			1 980 (33)	
		720 (18)				
Pitch of mounting holes F		40	60	60	60	80
E		20	30	30	30	40
Standard E or higher		5.5	7	8	9	10
dimensions ⁽¹⁾ below		25.5	37	38	39	50
Maximum length ⁽²⁾		1 480	1 500 (3 000)	1 980 (3 000)	3 000 (3 960)	2 960 (4 000)
Item	Identification number	MH 35 LWH35...B	MH 45 LWH45...B	LWH55...B	LWH65...B	
Standard length L (n)		480 (6)	840 (8)	840 (7)	1 500 (10)	
		640 (8)	1 050 (10)	1 200 (10)	1 950 (13)	
		800 (10)	1 260 (12)	1 560 (13)	3 000 (20)	
		1 040 (13)	1 470 (14)	1 920 (16)		
		1 200 (15)	1 995 (19)	3 000 (25)		
		1 520 (19)				
Pitch of mounting holes F		80	105	120	150	
E		40	52.5	60	75	
Standard E or higher		10	12.5	15	17	
dimensions ⁽¹⁾ below		50	65	75	92	
Maximum length ⁽²⁾		2 960 (4 000)	2 940 (3 990)	3 000 (3 960)	3 000 (3 900)	

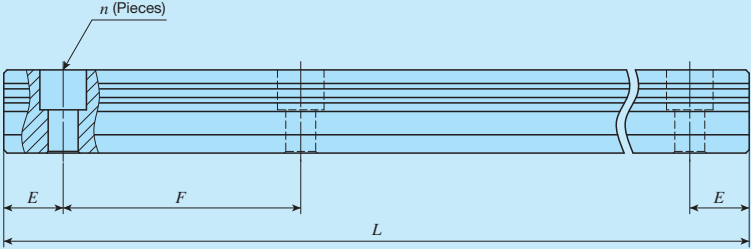
Notes ⁽¹⁾ This does not apply to female threads for bellows (supplemental code "/J").
⁽²⁾ Length up to the value in () can be produced. If needed, please contact **IKO**.
Remarks 1. A typical identification number is indicated, but is applied to all models of the same size.
2. Indicate "LWH" for series of size 12 or "LWH...B" for series of size 15 or above for the model code of the single track rail regardless of the series and the combination of slide unit models.
3. For ultra seal specifications, refer to Table 2.3 and Table 2.4.
4. If not directed, E dimensions for both ends will be the same within the range of standard E dimensions. To change the dimensions, indicate the specified rail mounting hole positions "/E" of special specification. For more information, see page III –30.

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6 Dust protection specification

Standard specification : No symbol For applicable models and sizes, see Table 1.1 and Table 1.2.
Ultra seal specification : M Each specification of ultra seal specification with track rail mounting from bottom is in compliance to the ultra seal specification.
Ultra seal specification : MU Ultra seal specification with track rail mounting from bottom applies to products to fix the track rail on the mounting surface side by pressing in the aluminum alloy caps for rail mounting holes to the mounting hole of the track rail in advance. As the upper surface of the track rail is flat, adhesion to the seal is high and dust protection effect is improved further.
with track rail mounting from bottom For track rail specifications, see Table 2.3 and Table 2.4.

Table 2.2 Standard and maximum length of stainless steel track rail



Item	Identification number	MH 8...SL LWH8...SL	MH 10...SL LWH10...SL	MH 12...SL LWH12...SL	MH 15...SL LWH15...SL	MH 20...SL LWH20...SL	MH 25...SL LWH25...SL	MH 30...SL LWH30...SL
Standard length L (n)		40 (2)	50 (2)	80 (2)	180 (3)	240 (4)	240 (4)	480 (6)
		80 (4)	100 (4)	160 (4)	240 (4)	480 (8)	480 (8)	640 (8)
		120 (6)	150 (6)	240 (6)	360 (6)	660 (11)	660 (11)	800 (10)
		160 (8)	200 (8)	320 (8)	480 (8)	840 (14)	840 (14)	1 040 (13)
		200 (10)	250 (10)	400 (10)	660 (11)			
		240 (12)	300 (12)	480 (12)				
		280 (14)	350 (14)	560 (14)				
			400 (16)	640 (16)				
			450 (18)	720 (18)				
Pitch of mounting holes F		20	25	40	60	60	60	80
E		10	12.5	20	30	30	30	40
Standard E or higher		4.5	5	5.5	7	8	9	10
dimensions ⁽¹⁾ below		14.5	17.5	25.5	37	38	39	50
Maximum length ⁽²⁾		480 (1 000)	850 (1 000)	1 000 (1 480)	1 200 (1 500)	1 200 (3 000)	1 200 (3 000)	1 200 (2 960)

Notes ⁽¹⁾ This does not apply to female threads for bellows (supplemental code "/J").
⁽²⁾ Length up to the value in () can be produced. If needed, please contact **IKO**.
Remarks 1. A typical identification number is indicated, but is applied to all models of the same size.
2. Indicate "LWH" for the model code of the single track rail regardless of the series and the combination of slide unit models.
3. If not directed, E dimensions for both ends will be the same within the range of standard E dimensions. To change the dimensions, indicate the specified rail mounting hole positions "/E" of special specification. For more information, see page III –30.

MH · LWH

Table 2.3 Standard and maximum length of ultra seal specification high carbon steel track rail

The diagram illustrates a high carbon steel track rail with the following dimensions and components:

- n (Pieces):** Indicated by an arrow pointing to the rail's cross-section.
- E:** The distance from the end of the rail to the first mounting hole.
- F:** The pitch of the mounting holes.
- L:** The total length of the rail.

unit: mm

Item \ Identification number	LWH15...M	LWH20...M	MH 25...M LWH25...M	MH 30...M LWH30...M	LWH35...M	LWH45...M
Standard length <i>L</i> (<i>n</i>)	180 (3) 240 (4) 360 (6) 480 (8) 660 (11)	240 (4) 480 (8) 660 (11) 840 (14) 1 020 (17) 1 200 (20) 1 500 (25)	240 (4) 480 (8) 660 (11) 840 (14) 1 020 (17) 1 200 (20) 1 500 (25)	480 (6) 640 (8) 800 (10) 1 040 (13) 1 200 (15) 1 520 (19)	480 (6) 640 (8) 800 (10) 1 040 (13) 1 200 (15) 1 520 (19)	840 (8) 1 050 (10) 1 260 (12) 1 470 (14) 1 995 (19)
Pitch of mounting holes <i>F</i>	60	60	60	80	80	105
<i>E</i>	30	30	30	40	40	52.5
Standard <i>E</i> or higher dimensions ⁽¹⁾ below	7 37	8 38	9 39	10 50	10 50	12.5 65
Maximum length	1 500	1 980	3 000	2 960	2 960	2 940
Maximum number of butt-jointing track rails	3	3	3	3	3	3
Maximum length of butt-jointing track rail	4 200	5 640	8 700	8 480	8 480	8 295

Note ⁽¹⁾ This does not apply to female threads for bellows (supplemental code "/J").

Remarks 1. A typical identification number is indicated, but is applied to all models of the same size.

2. If not directed, *E* dimensions for both ends will be the same within the range of standard *E* dimensions. To change the dimensions, indicate the specified rail mounting hole positions "/E" of special specification. For more information, see page III –30.

Table 2.4 Standard and maximum length of ultra seal specification with track rail mounting from bottom

unit: mm

Item	Identification number	LWH15...MU	LWH20...MU	MH 25...MU LWH25...MU	MH 30...MU LWH30...MU	LWH35...MU	LWH45...MU
Standard length <i>L</i> (<i>n</i>)		180 (3)	240 (4)	240 (4)	480 (6)	480 (6)	840 (8)
		240 (4)	480 (8)	480 (8)	640 (8)	640 (8)	1 050 (10)
		360 (6)	660 (11)	660 (11)	800 (10)	800 (10)	1 260 (12)
		480 (8)	840 (14)	840 (14)	1 040 (13)	1 040 (13)	1 470 (14)
		660 (11)	1 020 (17)	1 020 (17)	1 200 (15)	1 200 (15)	1 995 (19)
		1 200 (20)	1 200 (20)	1 520 (19)	1 520 (19)		
		1 500 (25)	1 500 (25)				
Pitch of mounting holes <i>F</i>		60	60	60	80	80	105
<i>E</i>		30	30	30	40	40	52.5
Standard <i>E</i> or higher dimensions ⁽¹⁾ below		7	8	9	10	10	12.5
		37	38	39	50	50	65
Maximum length		1 500	1 980	3 000	2 960	2 960	2 940
Maximum number of butt-jointing track rails		3	3	3	3	3	3
Maximum length of butt-jointing track rail		4 200	5 640	8 700	8 480	8 480	8 295

Note ⁽¹⁾ This does not apply to female threads for bellows (supplemental code "/J").

Remarks 1. A typical identification number is indicated, but is applied to all models of the same size.

2. Track rail mounting bolt is not included.

3. If not directed, *E* dimensions for both ends will be the same within the range of standard *E* dimensions. To change the dimensions, indicate the specified rail mounting hole positions "/E" of special specification. For more information, see page III –30.

7	Material type	High carbon steel made	: No symbol	For applicable models and sizes, see Table 1.1 and Table 1.2.
		Stainless steel made ⁽¹⁾	: SL	
		Note ⁽¹⁾ Mount a standard grease nipple (brass) on the stainless steel type, too. Stainless steel grease nipple is also available. If needed, please contact IKO .		
8	Preload amount	Clearance	: T ₀	Specify this item for an assembled set or a single slide unit.
		Standard	: No symbol	For details of the preload amount, see Table 3.
		Light preload	: T ₁	For applicable preload types, see Table 4.
		Medium preload	: T ₂	
		Heavy preload	: T ₃	

Table 3 Preload amount

Item	Preload symbol	Preload amount N	Operational conditions
Preload type			
Clearance	T ₀	0 ⁽²⁾	· Very light motion
Standard	(No symbol)	0 ⁽³⁾	· Light and precise motion
Light preload	T ₁	0.02C ₀	· Almost no vibrations · Load is evenly balanced · Light and precise motion
Medium preload	T ₂	0.05C ₀	· Medium vibration · Medium overhung load
Heavy preload	T ₃	0.08C ₀	· Operation with vibration and/or shock · Overhanging load applied · Heavy cutting

Notes ⁽²⁾ There is zero or subtle clearance.

⁽³⁾ Indicates zero or minimal amount of preload.

Remark: C₀ indicates the basic static load rating.

Table 4 Application of preload

Size	Preload type (preload symbol)				
	Clearance (T ₀)	Standard (No symbol)	Light preload (T ₁)	Medium preload (T ₂)	Heavy preload (T ₃)
8	○	○	○	—	—
10	○	○	○	—	—
12	○	○	○	—	—
15	—	○	○	○	○
20	—	○	○	○	○
25	—	○	○	○	○
30	—	○	○	○	○
35	—	○	○	○	○
45	—	○	○	○	○
55	—	○	○	○	○
65	—	○	○	○	○

Remark: The mark  indicates that interchangeable specification products are available.

9	Accuracy class	High	: H	For interchangeable specification products, assemble a slide unit and a track rail of the same accuracy class. For details of accuracy class, see Table 5.1 and Table 5.2. For applicable accuracy class, see Table 6.
		Precision	: P	
		Super precision	: SP	

Table 5.1 Tolerance and allowance (Series of size 15 or higher)

Flange type, block type, and compact block type

Side mounting type

unit: mm

Item	Class (classification symbol)	High (H)	Precision (P)	Super precision (SP)
Dim. H tolerance		± 0.040	± 0.020	± 0.010
Dim. N tolerance		± 0.050	± 0.025	± 0.015
Dim. variation of H ⁽¹⁾		0.015	0.007	0.005
Dim. variation of N ⁽¹⁾		0.020	0.010	0.007
Dim. variation of H for multiple assembled sets ⁽²⁾		0.035	0.025	—
Slide unit against the A surface Parallelism during running on the C surface		See Fig. 1.1		
Slide unit against the B surface Parallelism during running on the D surface		See Fig. 1.1		

Notes ⁽¹⁾ It means the size variation between slide units mounted on the same track rail.
⁽²⁾ Applicable to the interchangeable specifications.

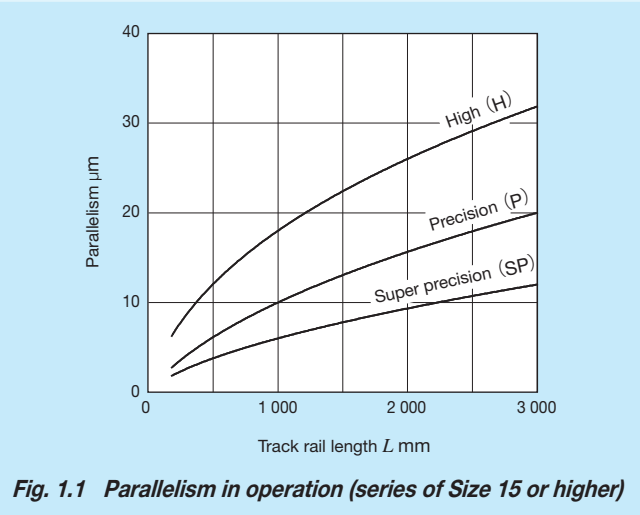
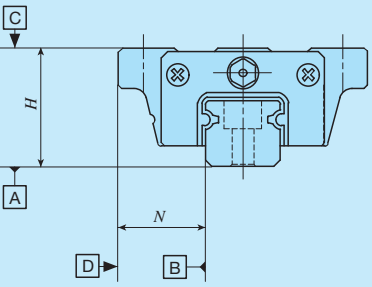
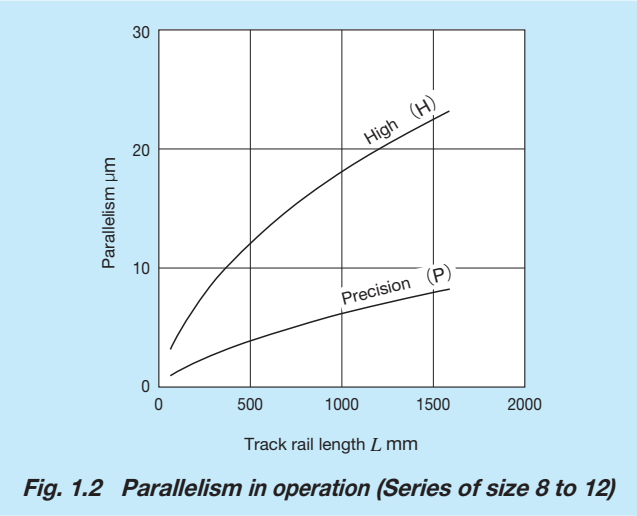


Table 5.2 Tolerance and allowance (Series of size 8 to 12)

		unit: mm	
Item	Class (classification symbol)	High (H)	Precision (P)
Dim. H tolerance		± 0.020	± 0.010
Dim. N tolerance		± 0.025	± 0.015
Dim. variation of H ⁽¹⁾		0.015	0.007
Dim. variation of N ⁽¹⁾		0.020	0.010
Dim. variation of H for multiple assembled sets ⁽²⁾		0.030	0.020
Parallelism in operation of the slide unit C surface to A surface		See Fig. 1.2	
Parallelism in operation of the slide unit D surface to B surface		See Fig. 1.2	

Notes ⁽¹⁾ It means the size variation between slide units mounted on the same track rail.
⁽²⁾ Applicable to the interchangeable specifications.



10	Interchangeable	S1 specification	: S1	This is specified for the interchangeable specifications. Assemble a track rail and a slide unit with the same interchangeable code. Performance and accuracy of "S1" and "S2" are the same. For applicable models and sizes, see Table 1.1 and Table 1.2. "No symbol" is indicated for non-interchangeable specification.
		S2 specification	: S2	
		Non-interchangeable specification	: No symbol	

Size	Class (classification symbol)		
	High (H)	Precision (P)	Super precision (SP)
8	○	○	—
10	○	○	—
12	○	○	—
15	○	○	○
20	○	○	○
25	○	○	○
30	○	○	○
35	○	○	○
45	○	○	○
55	○	○	○
65	○	○	○

Remark: The mark  indicates that interchangeable specification products are available.

ALMOTION

/A, /BS, /D, /E, /F, /I, /JO,
/LO, /LFO, /MA, /MN, /N,
/PS, /Q, /RE, /T, /U, /UR,
/VO, /WO, /YO, /ZO

For applicable special specifications, see Table 7.1, Table 7.2, Table 7.3, and Table 7.4.
For combination of multiple special specifications, see Table 8.
For details of special specification, see page III-29.

Special specification	Supplemental code	Size										
		8	10	12	15	20	25	30	35	45	55	65
Stainless steel end plate ⁽¹⁾	/BS	×	×	×	○	○	○	○	×	×	×	×
Female threads for bellows ⁽²⁾	/J○	×	×	×	○	○	○	○	○	○	○	○
No end seal	/N	○	○	○	○	○	○	○	○	○	○	○
With C-Lube plate ⁽¹⁾	/Q	○	○	○	○	○	○	○	○	○	○	○
Special environment seal ⁽¹⁾	/RE	×	×	×	○	○	○	○	×	×	×	×
Under seal	/U	○	○	○	×	×	×	×	×			
Double end seals	/N○	×	×	×	○	○	○	○	○	○	○	○
Scrapers	/Z○	×	×	×	○	○	○	○	○	○	○	○

Notes (1) Applicable to LWH series.
(2) Not applicable to stainless steel made products.
(3) Attached as standard.

Special specification	Supplemental code	Size										
		8	10	12	15	20	25	30	35	45	55	65
Specified rail mounting hole positions	/E	○	○	○	○	○	○	○	○	○	○	○
Caps for rail mounting holes	/F	×	×	○	○	○	○	○	○	○	○	○
Female threads for bellows ⁽¹⁾	/J○	×	×	×	○	○	○	○	○	○	○	○
Black chrome surface treatment	/LR	×	×	×	○	○	○	○	○	○	○	○
Without track rail mounting bolt	/MN	○	○	○	○	○	○	○	○	○	○	○
Butt-jointing track rails	/T	×	×	×	○	○	○	○	○	○	○	○

Note (1) Not applicable to stainless steel made products.

Special specification	Supplemental code	Size										
		8	10	12	15	20	25	30	35	45	55	65
Stainless steel end plate ⁽¹⁾	/BS	×	×	×	○	○	○	○	×	×	×	×
Opposite reference surfaces arrangement	/D	○	○	○	○	○	○	○	○	○	○	○
Specified rail mounting hole positions	/E	○	○	○	○	○	○	○	○	○	○	○
Caps for rail mounting holes	/F	×	×	○	○	○	○	○	○	○	○	○
Female threads for bellows ⁽²⁾	/J○	×	×	×	○	○	○	○	○	○	○	○
Black chrome surface treatment	/L○	×	×	×	○	○	○	○	○	○	○	○
Fluorine black chrome surface treatment	/LF○	×	×	×	○	○	○	○	○	○	○	○
With track rail mounting bolt ⁽³⁾	/MA	○	○	○	○	○	○	○	○	○	×	×
Without track rail mounting bolt ⁽¹⁾	/MN	○	○	○	○	○	○	○	○	○	○	○
No end seal	/N	○	○	○	○	○	○	○	○	○	○	○
With C-Lube plate ⁽¹⁾	/Q	○	○	○	○	○	○	○	○	○	○	○
Special environment seal ⁽¹⁾	/RE	×	×	×	○	○	○	○	×	×	×	×
Butt-jointing track rails	/T	×	×	×	○	○	○	○	○	○	○	○
Under seal	/U	○	○	○	×	×	×	×	×			
Double end seals	/V○	×	×	×	○	○	○	○	○	○	○	○
Specified grease ⁽⁴⁾	/Y○	×	×	×	○	○	○	○	○	○	○	○
Scrapers	/Z○	×	×	×	○	○	○	○	○	○	○	○

Notes (1) Applicable to LWH series.
(2) Not applicable to stainless steel made products.
(3) Applicable to MH series.
(4) MH series is applicable only to YCG.
(5) Attached as standard.

Table 7.4 Application of special specifications (Non-interchangeable specification)

Special specification	Supplemental code	Size											
		8	10	12	15	20	25	30	35	45	55	65	
Butt-jointing track rails	/A	○	○	○ ⁽¹⁾	○	○	○	○	○	○	○	○	
Stainless steel end plate ⁽²⁾ ⁽³⁾	/BS	×	×	×	○	○	○	○	×	×	×	×	
Opposite reference surfaces arrangement ⁽³⁾	/D	○	○	○	○	○	○	○	○	○	○	○	
Specified rail mounting hole positions	/E	○	○	○	○	○	○	○	○	○	○	○	
Caps for rail mounting holes ⁽⁴⁾	/F	×	×	○	○	○	○	○	○	○	○	○	
Inspection sheet	/I	○	○	○	○	○	○	○	○	○	○	○	
Female threads for bellows ⁽³⁾	/J○	×	×	×	○	○	○	○	○	○	○	○	
Black chrome surface treatment	/L○	○ ⁽⁵⁾	○ ⁽⁵⁾	○ ⁽⁵⁾	○	○	○	○	○	○	○	○	
Fluorine black chrome surface treatment	/LF○	×	×	×	○	○	○	○	○	○	○	○	
With track rail mounting bolt ⁽⁶⁾	/MA	○	○	○	○	○	○	○	○	○	×	×	
Without track rail mounting bolt ⁽²⁾ ⁽⁴⁾	/MN	○	○	○	○	○	○	○	○	○	○	○	
No end seal ⁽⁷⁾	/N	○	○	○	○	○	○	○	○	○	○	○	
Rail cover plate for track rail ⁽⁷⁾ ⁽⁸⁾	/PS	×	×	×	×	×	○	○	○	○	○	○	
With C-Lube plate ⁽²⁾ ⁽³⁾ ⁽⁷⁾	/Q	○	○	○	○	○	○	○	○	○	○	○	
Special environment seal ⁽²⁾ ⁽⁷⁾	/RE	×	×	×	○	○	○	○	×	×	×	×	
Under seal	/U	○	○	○	×	×	×	×	×				
Inner seal ⁽¹⁰⁾	/UR	×	×	×	×	×	○	○	×	×	×	×	
Double end seals	/V○	×	×	×	○	○	○	○	○	○	○	○	
A pair of multiple assembled sets ⁽³⁾	/W○	○	○	○	○	○	○	○	○	○	○	○	
Specified grease ⁽¹¹⁾	/Y○	○	○	○	○	○	○	○	○	○	○	○	
Scrapers	/Z○	×	×	×	○	○	○	○	○	○	○	○	

Notes

- (1) Not applicable to high carbon steel made products.
- (2) Applicable to LWH series.
- (3) This does not apply to side mounting type (LWHY).
- (4) This does not apply to ultra seal specification with track rail mounting from bottom (LWH··MU).
- (5) Applicable only to "LR".
- (6) Applicable to MH series.
- (7) This does not apply to ultra seal specification (LWH··M) and ultra seal specification with track rail mounting from bottom (LWH··MU).
- (8) Not applicable to stainless steel made products.
- (9) Attached as standard.
- (10) Applicable only to MH··M(U).
- (11) MH series is applicable only to /YCG.

[illegible]

Note (!) Contact **IKO** for the case of size 8 to 12.

Remarks 1. The combination of "—" shown in the table is not available.

2. Contact **IKO** for the combination of the interchangeable specification marked with ●.

3. When using multiple types for combination, please indicate by arranging the symbols in alphabetical order.

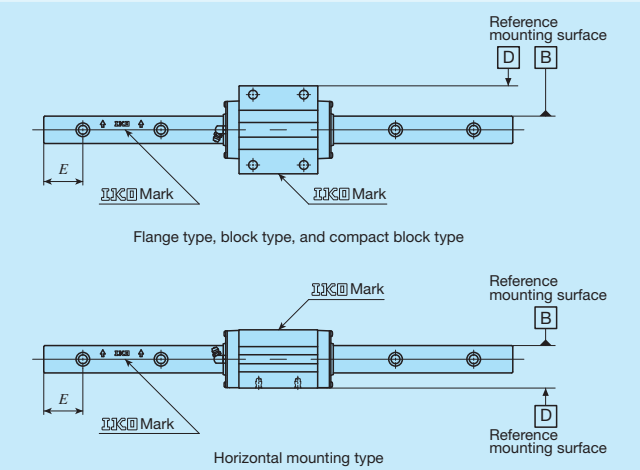


Fig. 2 Specified rail mounting hole positions (Supplemental code /E)

Remark: For details of specified rail mounting hole positions (supplemental code /E), see page III-30.

Table 9.1 Dimension of female threads for bellows (Supplemental code Single unit: /J Assembled set: /J /JJ)

Identification number		Slide unit										Track rail		
		a_1	a_2	b_1	b_2	b_3	b_4	$M_1 \times \text{depth}$	$L_1^{(2)}$	H_3	a_3	a_4	$M_2 \times \text{depth}$	
MH(T) 15	LWH(T) 15...B	3	7	15.5	16	9.5	28	M3× 6	83	6.5	4	8	M3× 6	
—	LWH(T) 15...M								86					
MHTG 15	—								99					
MH(T) 20	LWH(T) 20...B	4	10	20.5	22	13.5	36	M3× 6	99	8.5	5	9	M4× 8	
—	LWH(T) 20...M(U)								103					
MH(T)G 20	LWH(T)G 20								128					
MH(T) 25	LWH(T) 25...B	4	13	22	26	15	40	M3× 6	110	8.5	5	12	M4× 8	
MH(T) 25...M(U)	LWH(T) 25...M(U)								115					
MH(T)G 25	LWH(T)G 25								133					
MH(T) 30	LWH(T) 30...B	5	17	28	34	20	50	M3× 6	128	11	6	14	M4× 8	
MH(T) 30...M(U)	LWH(T) 30...M(U)								133					
MH(T)G 30	LWH(T)G 30								154					
MHTL 30	—	6	20	30	40	20	60	M3× 6	200	13	7	15	M4× 8	
MH(T) 35	LWH(T) 35...B								137					
—	LWH(T) 35...M(U)								143					
MH(T)G 35	LWH(T)G 35	7	26	35	50	23	74	M4× 8	165	15	8	19	M5×10	
MHTL 35	—								213					
MH(T) 45	LWH(T) 45...B								160					
—	LWH(T) 45...M(U)	7	32	40	60	27	86	M4× 8	167	17	8	25	M5×10	
MH(T)G 45	LWH(T)G 45								203					
MHTL 45	—								251					
—	LWH(T) 55...B	10	46	50	70	32	106	M5×10	196	20	10	28	M6×12	
—	LWH(T)G 55								248					
—	LWH(T) 65...B								240					
—	LWH(T)G 65								314					

Flange type

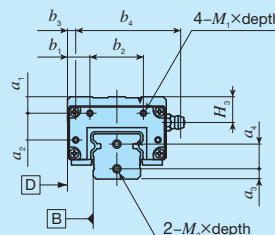
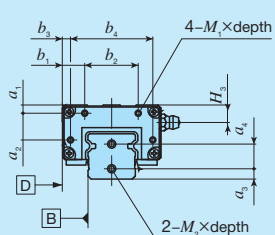
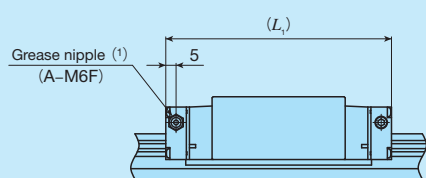
(L_1)

Grease nipple (1)
(A-M6F)

unit: mm

Notes (1) The specification and mounting positions of grease nipple are different from those of the standard specification product. Provided grease nipple for size 15 models is NPB2 type (special specification). For details of dimensions, contact **IKO**.
(2) Dimensions of the specification that female threads for bellows are fitted to both ends of the slide unit are indicated.
Remark: This is also applicable to stainless steel models of the same size.

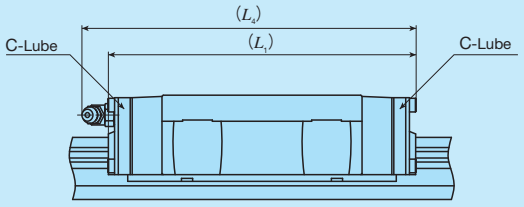
Table 9.2 Dimension of female threads for bellows (Supplemental code Single unit: /J Assembled set: /J /JJ)

								
Block type			Compact block type					

Identification number			Slide unit								Track rail		
			a ₁	a ₂	b ₁	b ₂	b ₃	b ₄	M ₁ ×depth	L ₁ ⁽²⁾	H ₃	a ₃	a ₄
MHD 15	LWHD 15…B	7	7	9	16	3	28	M3× 6	83	10.5	4	8	M3× 6
—	LWHD 15…M								86				
MHS 15	LWHS 15…B	3	7	9	16	3	28	M3× 6	83	6.5	4	8	M3× 6
—	LWHS 15…M(U)								86				
MHSG 15	—	4	10	11	22	4	36	M3× 6	99	8.5	5	9	M4× 8
MHS 20	LWHS 20…B								99				
—	LWHS 20…M(U)								103				
MHSG 20	LWHS 20	8	13	11	26	4	40	M3× 6	128	12.5	5	12	M4× 8
MHD 25	LWHD 25…B								110				
MHD 25…M(U)	LWHD 25…M(U)								115				
MHDG 25	LWHDG 25	4	13	11	26	4	40	M3× 6	133	8.5	5	12	M4× 8
MHS 25	LWHS 25…B								110				
MHS 25…M(U)	LWHS 25…M(U)								115				
MHSG 25	LWHS 25	8	17	13	34	5	50	M3× 6	133	14	6	14	M4× 8
MHD 30	LWHD 30…B								128				
MHD 30…M(U)	LWHD 30…M(U)								133				
MHDG 30	LWHDG 30	5	17	13	34	5	50	M3× 6	154	11	6	14	M4× 8
MHDL 30	—								200				
MHS 30	LWHS 30…B								128				
MHS 30…M(U)	LWHS 30…M(U)	13	20	15	40	5	60	M3× 6	133	20	7	15	M4× 8
MHSG 30	LWHS 30								154				
MHD 35	LWHD 35…B								137				
—	LWHD 35…M(U)	17	26	18	50	6	74	M4× 8	143	25	8	19	M5×10
MHDG 35	LWHDG 35								165				
MHDL 35	—								213				
MHD 45	LWHD 45…B	17	32	20	60	7	86	M4× 8	160	27	8	25	M5×10
—	LWHD 45…M(U)								167				
MHDG 45	LWHDG 45								203				
MHDL 45	—	10	46	28	70	10	106	M5×10	251	20	10	28	M6×12
—	LWHD 55…B								196				
—	LWHDG 55								248				
—	LWHD 65…B	10	46	28	70	10	106	M5×10	240	20	10	28	M6×12
—	LWHDG 65								314				

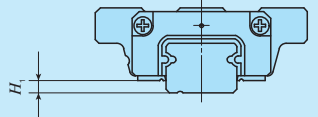
Notes (1) The specification and mounting positions of grease nipple are different from those of the standard specification product. Provided grease nipple for size 15 models is NPB2 type (special specification). For details of dimensions, contact **IKO**.
(2) Dimensions of the specification that female threads for bellows are fitted to both ends of the slide unit are indicated.
Remark: This is also applicable to stainless steel models of the same size.

Table 10 Dimension of slide unit with C-Lube plate
(Supplemental code /Q)

		
unit: mm		
Identification number	L_1	L_4
LWHDC 8...SL	26	—
LWHT 8...SL	32	—
LWHD 8...SL		
LWHDG 8...SL	38.5	—
LWHDC 10...SL	34	—
LWHT 10...SL	42	—
LWHD 10...SL		
LWHDG 10...SL	50	—
LWHDC 12...SL	44	48
LWHT 12	56	60
LWHD 12		
LWHDG 12...SL	68	72
LWH 15...B	75	78
LWH 20...B	92	105
LWHG 20	121	134
LWH 25...B	105	116
LWHG 25	127	139
LWH 30...B	125	135
LWHG 30	151	161
LWH 35...B	134	146
LWHG 35	162	174
LWH 45...B	160	170
LWHG 45	203	214
LWH 55...B	196	207
LWHG 55	248	258
LWH 65...B	246	253
LWHG 65	321	328

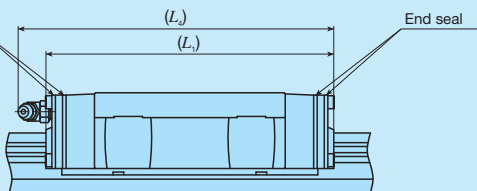
Remarks 1. The dimensions of the slide unit with C-Lube at both ends are indicated.
2. A typical identification number is indicated, but is applied to all LWH series models of the same size.

Table 11 H₁ dimension with under seal (Supplemental code /U)

	
unit: mm	
Size	H_1
8	1.5
10	1.8
12	3.2 ⁽¹⁾

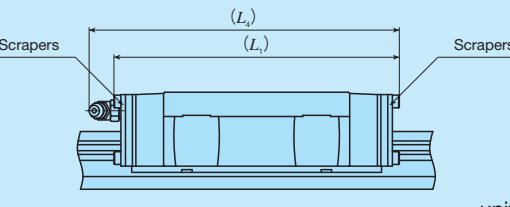
Note ⁽¹⁾ The dimensions are the same as those before mounting of under seal.

Table 12 Dimension of slide unit with double end seals
(Supplemental code Single unit: /V Assembled set: /V /VV)

			
unit: mm			
Identification number		L_1	L_4
MH 15	LWH 15...B	72	77
—	LWH 15...M(U)	71	76
MHTG 15	—	88	93
MH 20	LWH 20...B	91	104
—	LWH 20...M(U)	90	103
MHG 20	LWHG 20	119	133
MH 25	LWH 25...B	104	116
MH 25...M(U)	LWH 25...M(U)	103	115
MHG 25	LWHG 25	127	139
MH 30	LWH 30...B	122	134
MH 30...M(U)	LWH 30...M(U)	121	
MHG 30	LWHG 30	148	160
MHL 30	—	194	206
MH 35	LWH 35...B	133	146
—	LWH 35...M(U)		
MHG 35	LWHG 35	161	173
MHL 35	—	209	222
MH 45	LWH 45...B	159	170
—	LWH 45...M(U)	158	
MHG 45	LWHG 45	202	213
MHL 45	—	251	261
—	LWH 55...B	195	206
—	LWHG 55	247	258
—	LWH 65...B	241	251
—	LWHG 65	316	325

Remarks 1. The dimensions of the slide unit with double end seals at both ends are indicated.
2. A typical identification number is indicated, but is applied to all models of the same size.

Table 13 Dimension of slide unit with scrapers (Supplemental code Single unit: /Z Assembled set: /Z /ZZ)

				
unit: mm				
Identification number		L_1	L_4	
MH 15	LWH 15...B	73	75	
—	LWH 15...M(U)	72	74	
MHTG 15	—	89	91	
MH 20	LWH 20...B	91	104	
—	LWH 20...M(U)	90	100	
MHG 20	LWHG 20	119	133	
MH 25	LWH 25...B	104	116	
MH 25...M(U)	LWH 25...M(U)	103	112	
MHG 25	LWHG 25	126	138	
MH 30	LWH 30...B	124	135	
MH 30...M(U)	LWH 30...M(U)	123	131	
MHG 30	LWHG 30	150	161	
MHL 30	—	196	206	
MH 35	LWH 35...B	133	146	
—	LWH 35...M(U)			
MHG 35	LWHG 35	161	174	
MHL 35	—	209	222	
MH 45	LWH 45...B	160	170	
—	LWH 45...M(U)	159		
MHG 45	LWHG 45	203	214	
MHL 45	—	251	262	
—	LWH 55...B	196	207	
—	LWHG 55	248	258	
—	LWH 65...B	242	251	
—	LWHG 65	317	326	

Remarks 1. The dimensions of the slide unit with scraper at both ends are indicated.
2. A typical identification number is indicated, but is applied to all models of the same size.

Table 15 Parts for lubrication

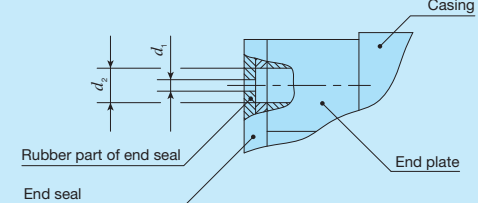
Size	Grease nipple type ⁽¹⁾	Applicable supply nozzle type		Bolt size of female threads for piping	
8	Oil hole	Miniature greaser		—	
10					
12	A-M3	A-5120V A-5240V B-5120V B-5240V	— M4		
15	A-M4				
20	B-M6	Grease gun available on the market		M6	
25					
30					
35	JIS type 4			PT1/8	
45					
55					
65					

Note ⁽¹⁾ For grease nipple specification, see Table 14.1 and Table 14.2 on page Ⅲ-23.
Remark: Stainless steel grease nipple is also available. If needed, please contact **IKO**.

Lubrication

In the series of size 8 to 12 of MH series and LWH series, lithium-soap base grease (MULTEMP PS No.2, KYODO YUSHI) is pre-packed, and in the series of size 15 to 65, lithium-soap base grease with extreme-pressure additive (Alvania EP grease 2, [SHOWA SHELL SEKIYU K. K.]) is pre-packed. Additionally, MH series has C-Lube placed in the recirculation part of balls, so that the interval for reapplying lubricant can be extended and maintenance works such as grease job can be reduced significantly.
MH series and LWH series have grease nipple or oil hole as indicated in Table 15. Supply nozzles fit to each shapes of grease nipple and dedicated supplying equipment (miniature greasers) fit to oil holes are also available. For order of these parts for lubrication, see Table 13 and Table 14.1 on Page Ⅲ-23, and Table 15 on page Ⅲ-24.

Table 14 Oil hole specifications

		
unit: mm		
Size	d_1	d_2
8	0.5	1.5
10		

Dust Protection

The slide units of MH series and LWH series are equipped with end seals and under seals as standard for dust protection. However, if large amount of contaminant or dust are floating, or if large particles of foreign substances such as chips or sand may adhere to the track rail, it is recommended to cover the whole unit with bellows or telescope type shield, etc. MH series and LWH series are provided with specific bellows. The bellows are easy to mount and provide excellent dust protection. If needed, please refer to Ⅲ-26 for ordering. And, track rail mounting from bottom with no mounting hole on the upper surface of the track rail (Figure 3) is also available. If needed, contact **IKO**.

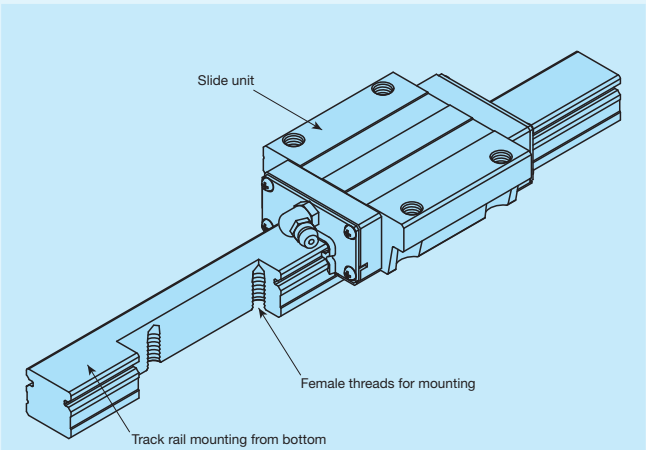


Fig. 3 Track rail mounting from bottom specification

Precaution for Use

① Mounting surface, reference mounting surface and typical mounting structure

When mounting the MH series and LWH series, properly align the reference mounting surfaces B and D of the track rail and slide unit with the reference mounting surface of the table and bed and fix them. (See Fig. 4.) The reference mounting surfaces B and D and mounting surfaces A and C are precisely ground. Machining the mounting surface of the table and bed, such as machine or device, to high accuracy and mounting them properly will ensure stable linear motion with high accuracy. Reference mounting surface of the slide unit is the opposite side of the **IKO** mark. The track rail reference mounting surface is identified by locating the **IKO** mark on the top surface of the track rail. It is the side surface above the mark (in the direction of the arrow). (See Fig. 5.)

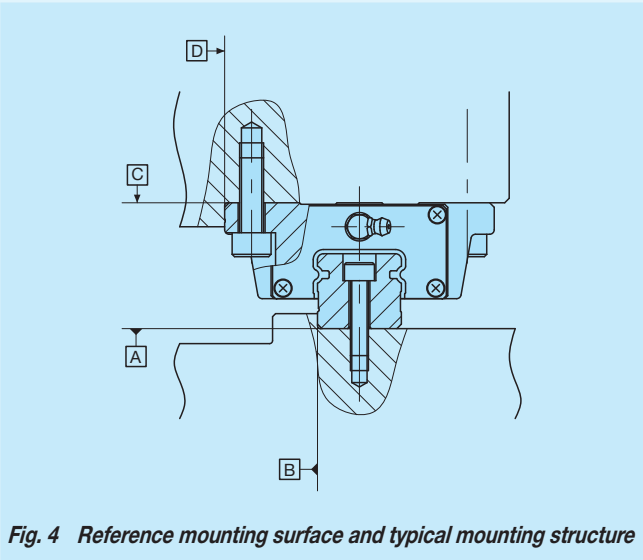


Fig. 4 Reference mounting surface and typical mounting structure

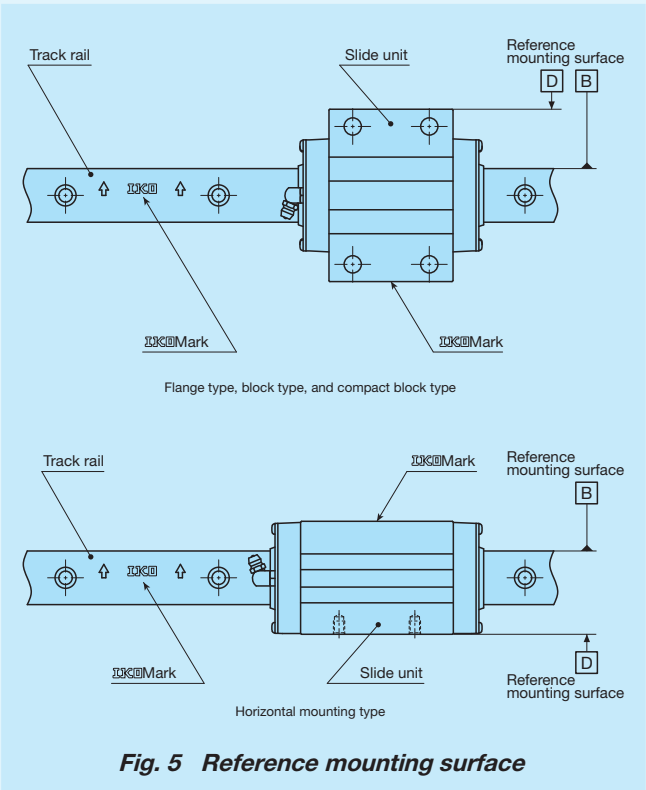


Fig. 5 Reference mounting surface

② Shoulder height and corner radius of the reference mounting surface

For the opposite corner of the mating reference mounting, it is recommended to have relieved fillet as indicated in Fig. 6. Recommended value for the shoulder height and corner radius on the mating side is indicated in Table 16.

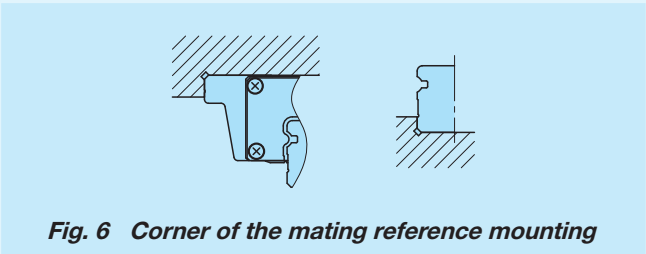


Fig. 6 Corner of the mating reference mounting

ALMOTION

Table 16 Shoulder height and corner radius of the reference mounting surface

Size	Mounting part of slide unit		Mounting part of track rail	
	Shoulder height h_1	Corner radius R_1 (Maximum)	Shoulder height h_2	Corner radius R_2 (Maximum)
8	3.5(4) ⁽¹⁾	0.5	1.6 ⁽²⁾	0.2
10	4.5(5) ⁽¹⁾	0.5	1.9 ⁽²⁾	0.2
12	6	0.5	2.7 ⁽²⁾	0.7
15	4	0.5	3	0.5
20	5	0.5	3	0.5
25	6	1	4	1
30	8	1	5	1
35	8	1	6	1
45	8	1.5	7	1.5
55	10	1.5	8	1.5
65	10	1.5	10	1.5

Notes ⁽¹⁾ The values in () are applied to MHD and LWH.
⁽²⁾ For models with under seals (supplemental code "/U"), it is recommended to use the values 0.6 mm smaller than the values in the table.

③ Tightening torque for fixing screw

Typical tightening torque for mounting of the MH series and LWH series to the steel mating member material is indicated in Table 17. When vibration and shock of the machine or device are large, fluctuating load is large, or moment load is applied, fix it by using the torque 1.2 to 1.5 times larger than the value indicated in the table as necessary. If the mating member material is cast iron or aluminum alloy, reduce the tightening torque depending on the strength characteristics of the mating member material.

Table 17 Tightening torque for fixing screw

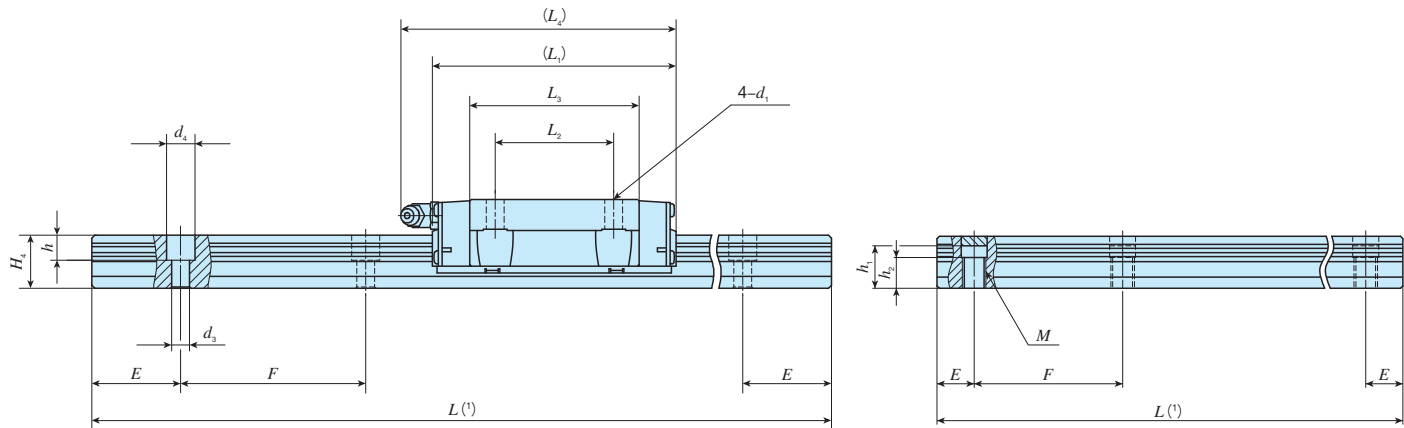
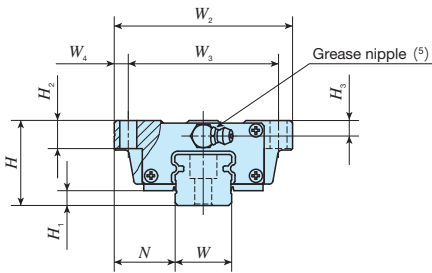
Bolt size	Tightening torque N · m		
	High carbon steel-made screw		Stainless steel-made screw
	Size: 12	Size: 15 to 65	
M 1.6×0.35	—	—	0.15
M 2 ×0.4	—	—	0.31
M 2.3×0.4	—	—	0.49
M 2.6×0.45	—	—	0.70
M 3 ×0.5	1.3	—	1.1
M 4 ×0.7	2.9	4.1	2.5
M 5 ×0.8	—	8.0	5.0
M 6 ×1	—	13.6	8.5
M 8 ×1.25	—	32.7	20.4
M10 ×1.5	—	63.9	40.0
M12 ×1.75	—	110	—
M14 ×2	—	175	—
M16 ×2	—	268	—

Remark: The tightening torque is calculated based on strength division 8.8 for high carbon steel bolts in product size 12, strength division 12.9 for carbon steel bolts in product size 15 to 65, and property division A2-70 for stainless steel bolts.

IKO C-Lube Linear Way MH

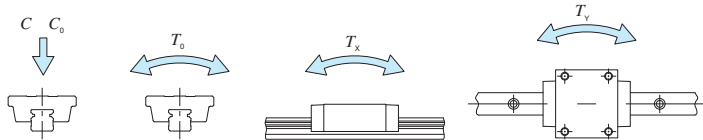
Flange type mounting from bottom

Shape	MH · LWH			
Size	15	20	25	30
	35	45	55	65



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm											Dimensions of track rail mm										Appended mounting bolt for track rail ⁽³⁾ mm	Basic dynamic load rating ⁽⁴⁾	Basic static load rating ⁽⁴⁾	Static moment rating ⁽⁴⁾																															
			Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	d ₁	H ₂	H ₃		W	H ₄	d ₃	d ₄	h	M	h ₁ (²)	h ₂	E	F				Bolt size×ℓ	C N	C ₀ N	T ₀ N·m	T _x N·m	T _y N·m																										
MH 15		○	0.22	1.47	24	4.5	16	47	38	4.5	66	30	44.2	69	4.5	7	4.5		15	15	4.5	8	6	—	—	—	30	60	M4×16	11 600	13 400	112	95.6 556	95.6 556																													
	LWH 15···B	○																																																													
—	LWH 15···SL	○																												44.6																																	
—	LWH 15···M*	—																																																													
—	LWH 15···MU*	—																			—	—	—	M 6	12	9			—																																		
MH 20		○	0.48	2.56	30	5	21.5	63	53	5	83	40	56	94	6	10	5.5		20	18	6	9.5	8.5	—	—	—	30	60	M5×18	18 100	21 100	232	195 1 090	195 1 090																													
	LWH 20···B	○																																																													
—	LWH 20···SL	○																												57.2																																	
—	LWH 20···M*	—																											—	—	—	M 8	13.5	9.5			—																										
—	LWH 20···MU*	—																																																													
MHG 20		○	0.71								112		84.8	122							6	9.5	8.5	—	—	—			M5×18	24 100	31 700	349	421 2 140	421 2 140																													
	LWHG 20	○																																									86																				
MH 25		○	0.70	3.50	36	6.5	23.5	70	57	6.5	95	45	63.9	105	7	10	6.5		23	22	7	11	9	—	—	—	30	60	M6×22	25 200	28 800	362	309 1 690	309 1 690																													
	LWH 25···B	○																																																													
—	LWH 25···SL	○																																										64.7																			
MH 25···M*		—																																										63.9																			
	LWH 25···M*	—																												64.7																																	
MH 25···MU*		—																			63.9																																										
	LWH 25···MU*	—											64.7																																																		
MHG 25		○	0.93								118		86.6	128							7	11	9	—	—	—			M6×22	30 800	38 300	483	533 2 740	533 2 740																													
	LWHG 25	○																																									87.4																				

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93, Table 2.2 on page II-94, and Tables 2.3 and 2.4 on page II-95.
(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .
(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.
In an assembled set of MH series and LWH···MU model, track rail mounting bolts are not appended.
(4) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
(5) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II-104.
Remark: The identification numbers with * are our semi-standard items.



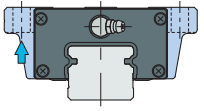
Example of identification number of assembled set

Model code	Dimensions	Part code	Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MH	G	20	C2	R480			T1	P	N
1	2	3	4	5	6	7	8	9	10
11									
① Model		⑤ Length of track rail (480 mm)		⑧ Preload amount		⑩ Interchangeable			
MH		Flange type mounting from bottom		No symbol		No symbol			
LWH(···B)				Standard specification		S1			
② Length of slide unit		⑥ Dust protection code		T1		S2			
No symbol		No symbol		Standard specification		S1 specification			
G		M		Ultra seal specification		S2 specification			
③ Size		MU		Ultra seal specification with track rail mounting from bottom		⑪ Special specification			
15, 20, 25						A, BS, D, E, F, I, J, L, LF, MA, MN, N, PS, Q, RE, T, UR, V, W, Y, Z			
④ Number of slide unit (2)		⑦ Material type		⑨ Accuracy class					
		No symbol		H					
		SL		High carbon steel made					
				Stainless steel made					
				P					
				SP					

Flange type mounting from bottom

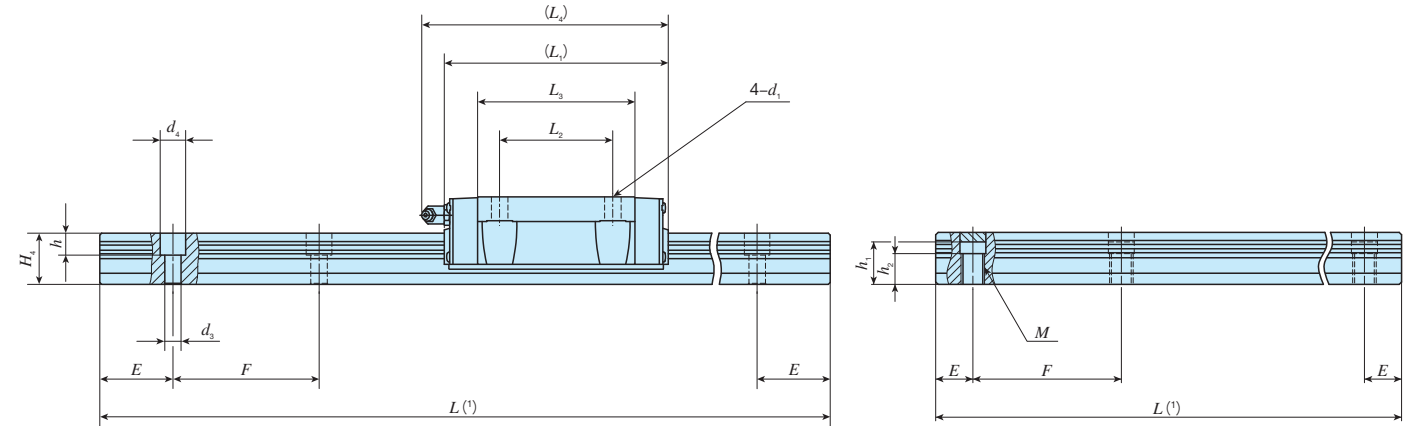
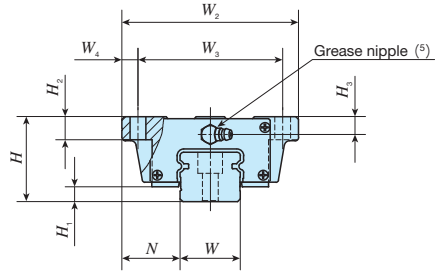
MH • LWH

Shape



Size

15	20	25	30
35	45	55	65



Ultra seal specification with track rail mounting from bottom

[illegible]

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93, Table 2.2 on page II-94, and Tables 2.3 and 2.4 on page II-95.

(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .

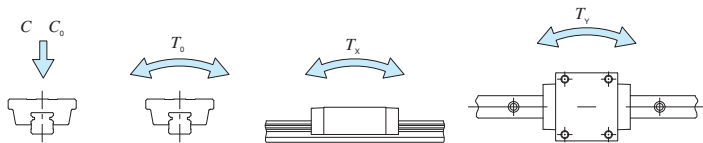
⁽³⁾ The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.

In an assembled set of MH series and LWH...MU model, track rail mounting bolts are not appended.

⁽⁴⁾ The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0, T_x, T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

(5) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II – 104.

Remark: The identification numbers with * are our semi-standard items.



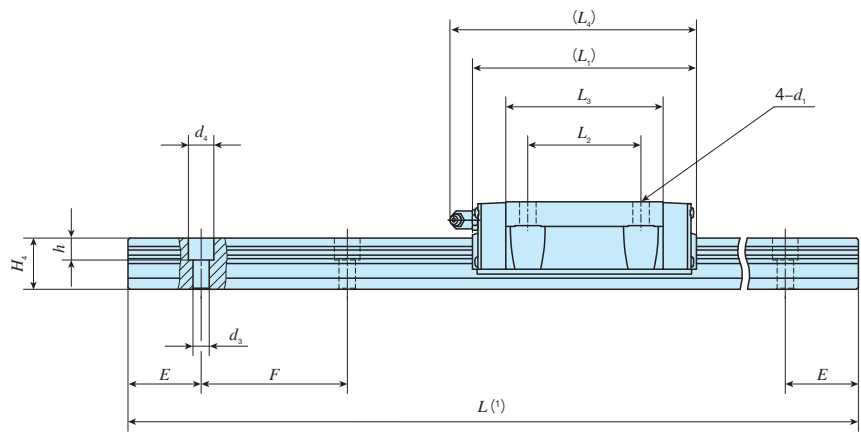
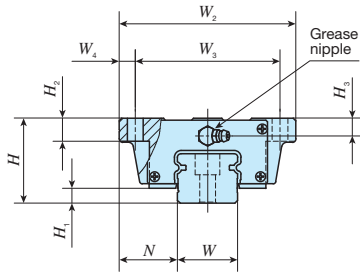
Example of identification number of assembled set

Model code		Dimensions		Part code		Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MH	G	35	C2	R800				T₁	P			
1	2	3	4	5	1	6	7	8	9	10	11	

① Model MH LWH(---B)	Flange type mounting from bottom	⑤ Length of track rail (800 mm)	⑧ Preload amount No symbol Standard T ₁ Light preload T ₂ Medium preload T ₃ Heavy preload	⑩ Interchangeable No symbol Non-interchangeable specification S ₁ S1 specification S ₂ S2 specification
② Length of slide unit No symbol Standard G Long		⑥ Dust protection code No symbol Standard specification M Ultra seal specification MU Ultra seal specification with track rail mounting from bottom		
③ Size 30, 35, 45		⑦ Material type No symbol High carbon steel made SL Stainless steel made	⑨ Accuracy class H High P Precision SP Super precision	⑪ Special specification A, BS, D, E, F, I, J, L, LF, MA MN, N, PS, Q, RE, T, UR, V, W, Y, Z
④ Number of slide unit (2)				

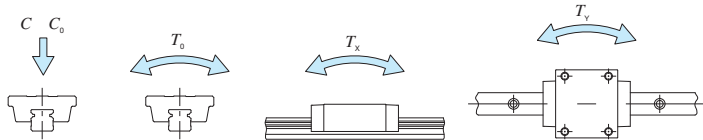
Flange type mounting from bottom

Shape	LWH			
Size	15	20	25	30
	35	45	55	65



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm							Appended mounting bolt for track rail (2) mm		Basic dynamic load rating (3)	Basic static load rating (3)	Static moment rating (3)		
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H1	N	W2	W3	W4	L1	L2	L3	L4	d1	H2	H3	H5	W	H4	d3	d4	h	E	F	Bolt size × ℓ	C N	C0 N	T0 N · m	Tx N · m	Ty N · m
—	LWH 55···B	○	5.30	15.5	70	13	43.5	140	116	12	183	95	132	194	14	17	14	—	53	41	16	23	20	60	120	M14×45	113 000	121 000	2 870	2 210	2 030
—	LWHG 55	○	7.40								235		183.6	246													142 000	168 000	3 970	4 120	10 600
—	LWH 65···B	○	12.3	22.2	90	14	53.5	170	142	14	229	110	164	239	16	23	20	—	63	48	18	26	22	75	150	M16×50	176 000	184 000	5 180	4 130	3 790
—	LWHG 65	○	17.6								303		238.8	313													229 000	269 000	7 560	8 530	20 200

Notes (1) Track rail lengths L are shown in Table 2.1 on page II – 93.
(2) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176.
(3) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
Remark: The specifications of grease nipple are shown in Table 15 on page II – 104.



Example of identification number of assembled set

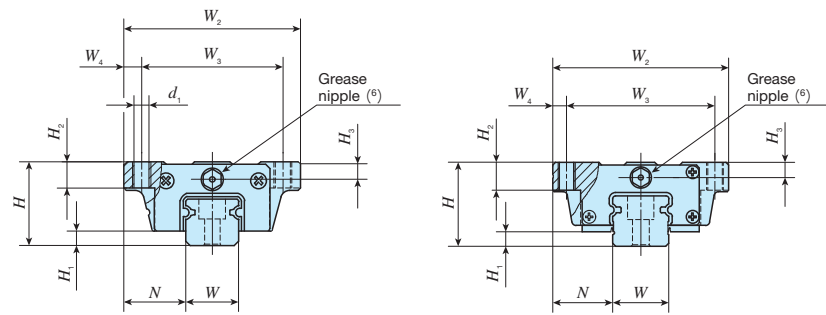
Model code	Dimensions	Part code	Model code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
LWH	G	55	C2 R1200	T1	P		/N
1	2	3	4	5	6	7	8

① Model LWH(···B) Flange type mounting from bottom.	③ Size 55, 65	⑥ Preload amount No symbol Standard T1 Light preload T2 Medium preload T3 Heavy preload	⑧ Interchangeable No symbol Non-interchangeable specification S1 S1 specification S2 S2 specification
② Length of slide unit No symbol Standard G Long	④ Number of slide unit (2)	⑦ Accuracy class H High P Precision SP Super precision	⑨ Special specification A, D, E, F, I, J, L, LF, MN N, PS, Q, T, V, W, Y, Z

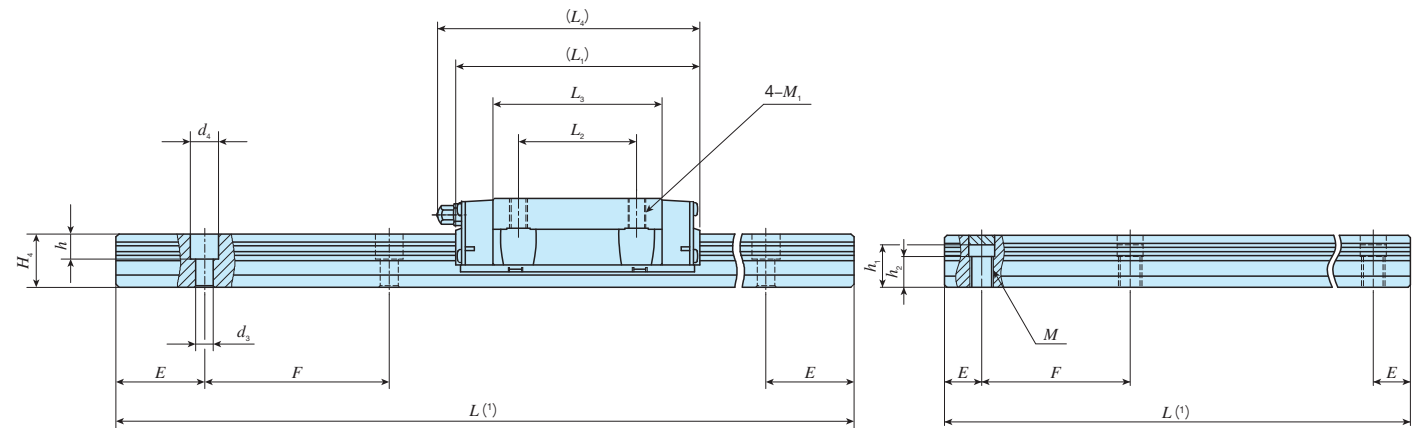
IKO C-Lube Linear Way MH

Flange type mounting from top

Shape	MHT · LWHT					
Size	8	10	12	15	20	25
	30	35	45	55	65	



MHT 8 ...SL, LWHT 8 ...SL
MHT 10 ...SL, LWHT 10 ...SL
MHT 12 (...SL) , LWHT 12 (...SL)
MHTG 15

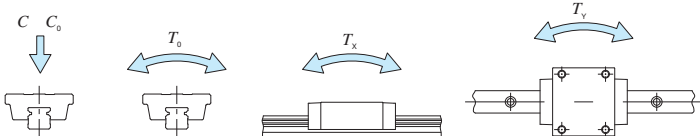


Ultra seal specification with track rail mounting from bottom

Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm												Dimensions of track rail mm										Appended mounting bolt for track rail ⁽⁴⁾ mm	Basic dynamic load rating ⁽⁵⁾	Basic static load rating ⁽⁵⁾	Static moment rating ⁽⁵⁾															
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	d ₁ ⁽²⁾	M ₁	H ₂	H ₃		W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽³⁾	h ₂	E	F				Bolt size×ℓ	C N	C ₀ N	T ₀ N・m	T _x N・m	T _y N・m										
MHT 8…SL	LWHT 8…SL	○	0.015	0.32	10	2.1	8	24	19	2.5	24	10	15.3	—	1.9	M2.3	3.5	2		8	6	2.4	4.2	2.3	—	—	—	10	20	M2× 8	1 510	2 120	8.8	^{5.5} _{32.0}	^{4.7} _{26.9}													
MHT 10…SL	LWHT 10…SL	○	0.031	0.47	12	2.4	10	30	24	3	32	12	21.4	—	2.6	M3	4.5	2.5		10	7	3.5	6	3.5	—	—	—	12.5	25	M3× 8	2 640	3 700	19.2	^{13.3} _{73.8}	^{11.1} _{61.9}													
		○	0.032																																													
MHT 12	LWHT 12	○	0.108																																													
	LWHT 12	○	0.11	0.86	19	3.2	14	40	32	4	46	15	31.6	50	3.4	M4	6	4		12	10.5	3.5	6	4.5	—	—	—	20	40	M3×12	6 260	8 330	51.6	^{44.7} ₂₃₇	^{37.5} ₁₉₉													
MHT 12…SL		○	0.108																																													
	LWHT 12…SL	○	0.11																																													
MHT 15	LWHT 15…B	○	0.22	1.47	24	4.5	16	47	38	4.5	66	30	44.2	69	—	M5	7	4.5		15	15	4.5	8	6	—	—	—	30	60	M4×16	11 600	13 400	112	^{95.6} ₅₅₆	^{95.6} ₅₅₆													
	LWHT 15…B	○											44.6																																			
MHT 15…SL		○											44.2																																			
	LWHT 15…SL	○											44.6																																			
—	LWHT 15…M*	—																																														
—	LWHT 15…MU*	—																																														
MHTG 15	—	○	0.29								82		60.1	85	4.4							4.5	8	6	—	—	—			M4×16	14 400	18 300	153	¹⁷² ₉₁₈	¹⁷² ₉₁₈													

Notes (1) Track rail lengths L are shown in Table 2.1 on page II—93, Table 2.2 on page II—94, and Tables 2.3 and 2.4 on page II—95.
(2) Series of size 8 to 12 and MHTG15 can also be mounted in upward direction.
(3) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .
(4) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.
In an assembled set of MH series and LWHT...MU model, track rail mounting bolts are not appended.
(5) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
(6) Series of size 8 and 10 are provided with an oil hole. The specifications of oil holes are shown in Table 14 on page II—104.
The shapes of grease nipples of size 12 and 15 vary by size. The specifications are shown in Table 15 on page II—104.

Remark: The identification numbers with * are our semi-standard items.



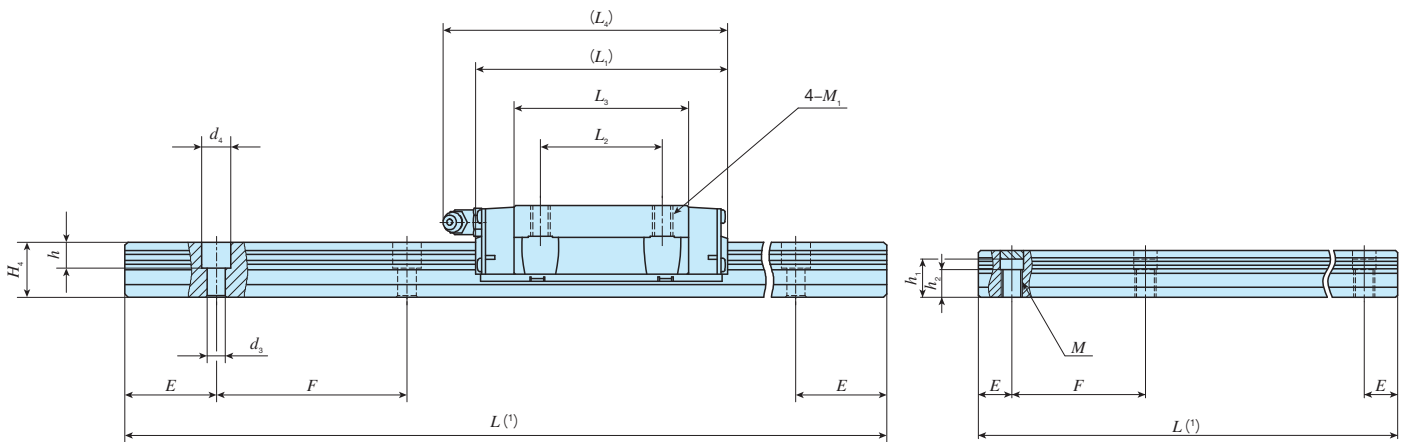
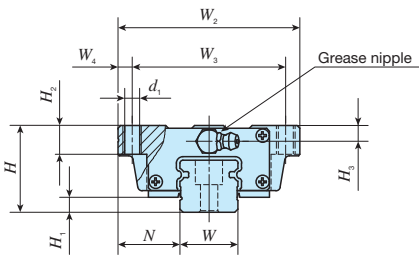
Example of identification number of assembled set

Model code	Dimensions	Part code	Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code	
MHT	G	15	C2	R900		T ₁	P		N	
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
① Model MHT LWHT (...B) Flange type mounting from top			⑤ Length of track rail (900 mm)			⑧ Preload amount T₀ Clearance No symbol Standard T₁ Light preload T₂ Medium preload T₃ Heavy preload		⑩ Interchangeable No symbol Non-interchangeable specification S1 S1 specification S2 S2 specification		
② Length of slide unit No symbol Standard G Long			⑥ Dust protection code No symbol Standard specification M Ultra seal specification MU Ultra seal specification with track rail mounting from bottom			⑨ Accuracy class H High P Precision SP Super precision		⑪ Special specification A, BS, D, E, F, I, J, L, LF, MA MN, N, Q, RE, T, U, V, W, Y, Z		
③ Size 8, 10, 12, 15			⑦ Material type No symbol High carbon steel made SL Stainless steel made							
④ Number of slide unit (2)										

IKO C-Lube Linear Way MH

Flange type mounting from top

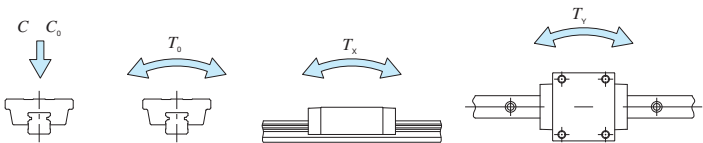
Shape	MHT · LWHT					
Size	8	10	12	15	20	25
	30	35	45	55	65	



Ultra seal specification with track rail mounting from bottom

Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm										Appended mounting bolt for track rail ⁽³⁾ mm	Basic dynamic load rating ⁽⁴⁾	Basic static load rating ⁽⁴⁾	Static moment rating ⁽⁴⁾				
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	d ₁	M ₁	H ₂		H ₃	W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽²⁾	h ₂	E	F	Bolt size×ℓ	C N	C ₀ N	T ₀ N・m	T _x N・m	T _y N・m
MHT 20		○	0.48	2.56	30	5	21.5	63	53	5	83	40	56	94	—	M6	10		5.5	20	18	6	9.5	8.5	—	—	—	30	60	M5×18	18 100	21 100	232	195 1 090	195 1 090
	LWHT 20…B	○											57.2																						
MHT 20…SL		○											56																						
	LWHT 20…SL	○									57.2																								
—	LWHT 20…M*	—																																	
—	LWHT 20…MU*	—																																	
MHTG 20		○	0.71								112		84.8	122								6	9.5	8.5	—	—	—	30	60	M5×18	24 100	31 700	349	421 2 140	421 2 140
	LWHTG 20	○											86																						
MHT 25		○	0.70	3.50	36	6.5	23.5	70	57	6.5	95	45	63.9	105	—	M8	10		6.5	23	22	7	11	9	—	—	—	30	60	M6×22	25 200	28 800	362	309 1 690	309 1 690
	LWHT 25…B	○											64.7																						
MHT 25…SL		○											63.9																						
	LWHT 25…SL	○											64.7																						
MHT 25…M*		—											63.9																						
	LWHT 25…M*	—									64.7																								
MHT 25…MU*		—									63.9																								
	LWHT 25…MU*	—									64.7																								
MHTG 25		○	0.93								118		86.6	128								7	11	9	—	—	—	30	60	M6×22	30 800	38 300	483	533 2 740	533 2 740
	LWHTG 25	○											87.4																						

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93, Table 2.2 on page II-94, and Tables 2.3 and 2.4 on page II-95.
(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .
(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.
In an assembled set of MH series and LWHT...MU model, track rail mounting bolts are not appended.
(4) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
Remarks 1. The specifications of grease nipple are shown in Table 15 on page II-104.
2. The identification numbers with * are our semi-standard items.

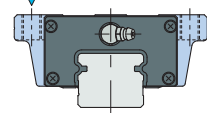


Example of identification number of assembled set

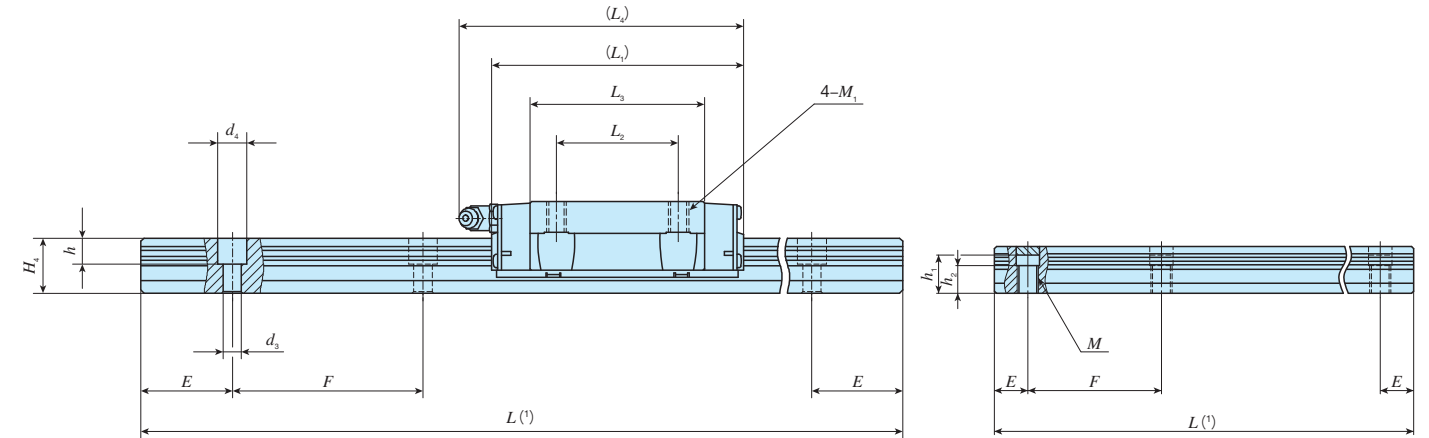
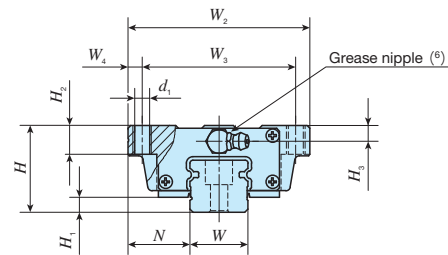
Model code	Dimensions	Part code	Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MHT	G	25	C2	R840			T ₁	P	N
1	2	3	4	5	6	7	8	9	10
									11
① Model			⑤ Length of track rail (840 mm)			⑧ Preload amount		⑩ Interchangeable	
MHT		Flange type mounting from top		⑥ Dust protection code		No symbol Standard		No symbol Non-interchangeable specification	
LWHT(...B)				No symbol Standard specification		T ₁ Light preload		S ₁ S ₁ specification	
② Length of slide unit			M Ultra seal specification		T ₂ Medium preload		S ₂ S ₂ specification		
No symbol Standard				MU Ultra seal specification with track rail mounting from bottom		T ₃ Heavy preload			
G Long									
③ Size			⑦ Material type		⑨ Accuracy class		⑪ Special specification		
20, 25			No symbol High carbon steel made		H High		A, BS, D, E, F, I, J, L, LF, MA MN, N, PS, Q, RE, T, UR, V, W, Y, Z		
			SL Stainless steel made		P Precision				
④ Number of slide unit (2)					SP Super precision				

Flange type mounting from top

MHT • LWHT



Size	8	10	12	15	20	25
	30	35	45	55	65	



Ultra seal specification with track rail mounting from bottom

[illegible]

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93, Table 2.2 on page II-94, and Tables 2.3 and 2.4 on page II-95.

(2) MHTL30 and MHTL35 can also be mounted in upward direction.

(3) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .

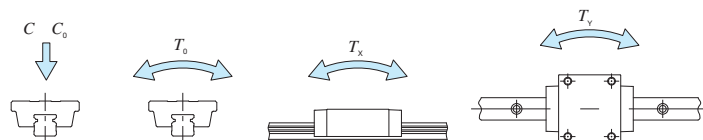
(4) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.

In an assembled set of MH series and LWHT...MU model, track rail mounting bolts are not appended.

(5) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

(6) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II - 104.

Remark: The identification numbers with * are our semi-standard items.



Example of identification number of assembled set

Model code		Dimensions	Part code		Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MHT	G	35	C2	R1040				T₁	P		N
1	2	3	4	5	1	6	7	8	9	10	11

① Model	
MHT	Flange type mounting from top
LWHT(...B)	
② Length of slide unit	
No symbol	Standard
G	Long
L	Extra long
③ Size	
30, 35	
④ Number of slide unit (2)	

⑤ Length of track rail (1,040 mm)	
⑥ Dust protection code	
No symbol	Standard specification
M	Ultra seal specification
MU	Ultra seal specification with track rail mounting from bottom
⑦ Material type	
No symbol	High carbon steel made
SL	Stainless steel made

⑧ Preload amount	
No symbol	Standard
T ₁	Light preload
T ₂	Medium preload
T ₃	Heavy preload

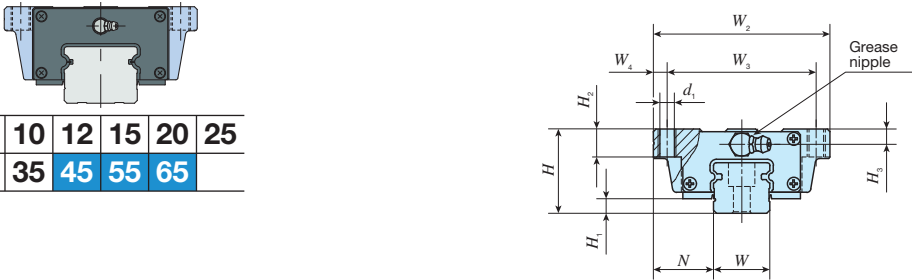
⑨ Accuracy class	
H	High
P	Precision
SP	Super precision

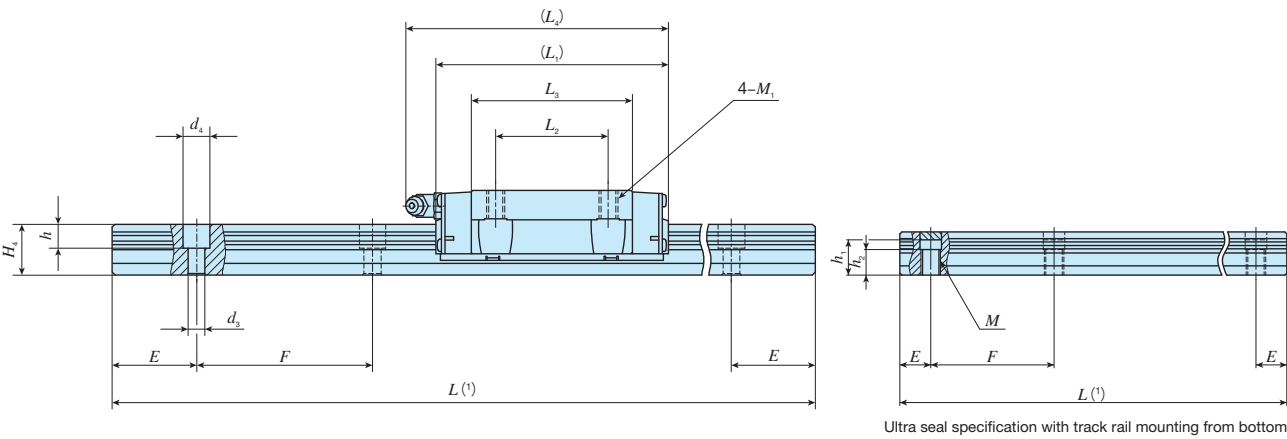
⑩ Interchangeable	
No symbol	Non-interchangeable specification
S1	S1 specification
S2	S2 specification

⑪ Special specification	
A, BS, D, E, F, I, J, L, LF, MA MN, N, PS, Q, RE, T, UR, V, W, Y, Z	

IKO C-Lube Linear Way MH

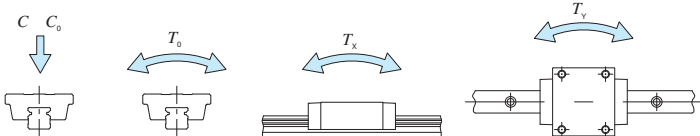
Flange type mounting from top

Shape	MHT · LWHT					
						
Size	8	10	12	15	20	25
	30	35	45	55	65	



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm										Appended mounting bolt for track rail ⁽⁴⁾ mm	Basic dynamic load rating ⁽⁵⁾	Basic static load rating ⁽⁵⁾	Static moment rating ⁽⁵⁾																				
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	d ₁ ⁽²⁾	M ₁	H ₂		H ₃	H ₅	W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽³⁾				h ₂	E	F	Bolt size×ℓ	C N	C ₀ N	T ₀ N·m	T _x N·m	T _y N·m												
MHT 45		○	3.17	10.7	60	13	37.5	120	100	10	147	80	103.4	158	—	M12	15	ALMOTION	13	—	45	34	14	20	17	—	—	—	52.5	105	M12×35	74 600	80 200	1 610	1 150 6 190	1 060 5 690															
—	LWHT 45--B	○				10																															—	M12	15	13	—	45	34	14	20	17	—	—	—	52.5	105
—	LWHT 45--M*	—				10																									—	M12	15	13	—	45															
—	LWHT 45--MU*	—	10	—	M12	15	13	—	45	34	14	20	17	—	—	—	52.5	105	M12×35	74 600	80 200	1 610	1 150 6 190	1 060 5 690																											
MHTG 45		○	4.34																								13					190	80	146.6	201									14	20	17	—	—	—		
—	LWHTG 45	○		10	—	M12	15	13	—	45	34	14	20	17	—	—	—	52.5	105	M12×35	74 600	80 200	1 610	1 150 6 190			1 060 5 690																								
MHTL 45	—	○	5.70																													238	95	194.8	249	10.5															
—	LWHT 55--B	○	5.30									183	95	132	194	—	M14	17																																	
—	LWHTG 55	○	7.40																													235	110	183.6	246	—	M14	17													
—	LWHT 65--B	○	12.3									229	110	164	239	—	M16	23																																	
—	LWHTG 65	○	17.6																													303	110	238.8	313	—	M16	23													

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93 and Tables 2.3 and 2.4 on page II-95.
(2) MHTL45 can also be mounted in upward direction.
(3) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .
(4) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176.
In an assembled set of MH series and LWHT...MU model, track rail mounting bolts are not appended.
(5) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
Remarks 1. The specifications of grease nipple are shown in Table 15 on page II-104.
2. The identification numbers with * are our semi-standard items.



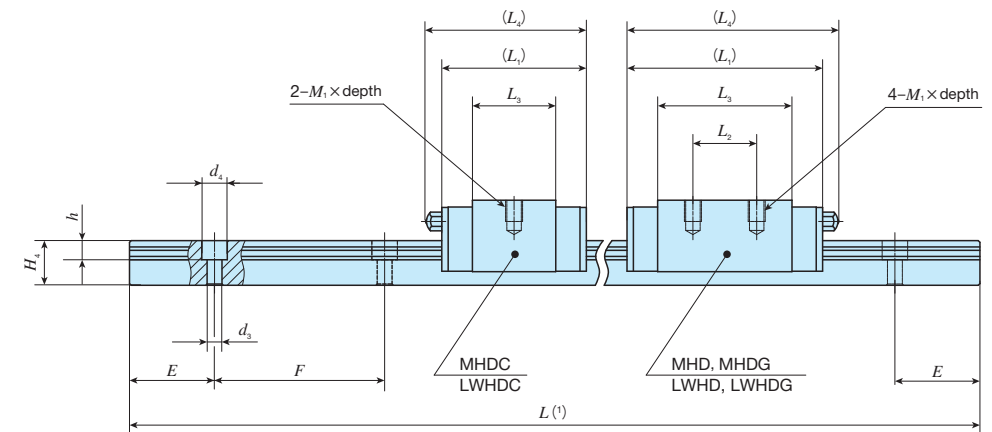
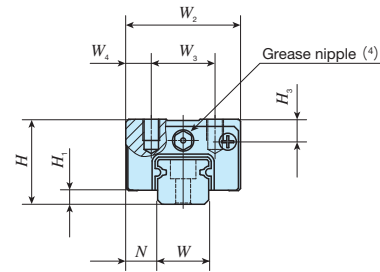
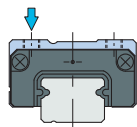
Example of identification number of assembled set

Model code	Dimensions	Part code	Model code	Dust protection code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MHT	G	45	C2	R1260	T1	P	N	
1	2	3	4	5	6	7	8	9

① Model MHT LWHT (...B) Flange type mounting from top	⑤ Length of track rail (1,260 mm)	⑦ Preload amount No symbol Standard T1 Light preload T2 Medium preload T3 Heavy preload	⑨ Interchangeable No symbol Non-interchangeable specification S1 S1 specification S2 S2 specification
② Length of slide unit No symbol Standard G Long L Extra long	⑥ Dust protection code No symbol Standard specification M Ultra seal specification MU Ultra seal specification with track rail mounting from bottom	⑧ Accuracy class H High P Precision SP Super precision	⑩ Special specification A, BS, D, E, F, I, J, L, LF, MA MN, N, PS, Q, RE, T, V, W, Y, Z
③ Size 45, 55, 65	④ Number of slide unit (2)		

Block type mounting from top

MHD • LWHD



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm								Appended mounting bolt for track rail ⁽²⁾ mm	Basic dynamic load rating ⁽³⁾	Basic static load rating ⁽³⁾	Static moment rating ⁽³⁾													
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	M ₁ ×depth		H ₃	W	H ₄	d ₃	d ₄	h	E	F	Bolt size×ℓ	C N	C ₀ N	T ₀ N・m	T _x N・m	T _y N・m												
MHDC 8…SL	LWHDC 8…SL	○	0.008	0.32	11	2.1	4	16	10	3	18	—	9.0	—	M2 ×2.5	ALMOTION	3	8	6	2.4	4.2	2.3	10	20	M2× 8	1 050	1 270	5.3	$\frac{2.2}{15.5}$	$\frac{1.8}{13.0}$												
MHD 8…SL	LWHD 8…SL	○	0.013								24	10	15.3													—	1 510	2 120	8.8	$\frac{5.5}{32.0}$	$\frac{4.7}{26.9}$											
MHDG 8…SL	LWHDG 8…SL	○	0.018								30.5		21.7																			1 910	2 970	12.3	$\frac{10.4}{55.4}$	$\frac{8.8}{46.4}$						
MHDC 10…SL	LWHDC 10…SL	○	0.018	0.47	13	2.4	5	20	13	3.5	24	—	13.4	—	M2.6×3	ALMOTION	3.5	10	7	3.5	6	3.5	12.5	25	M3× 8	1 920	2 350	12.2	$\frac{5.8}{37.1}$	$\frac{4.8}{31.2}$												
MHD 10…SL		○	0.026								32	12	21.4													—	M2.6×3	ALMOTION	3.5	10	7	3.5	6	3.5	12.5	25	M3× 8	2 640	3 700	19.2	$\frac{13.3}{73.8}$	$\frac{11.1}{61.9}$
	LWHD 10…SL	○	0.027								40		29.4																									3 280	5 050	26.2	$\frac{23.8}{123}$	$\frac{20.0}{103}$
MHDG 10…SL	LWHDG 10…SL	○	0.035									40														29.4	3 280	5 050	26.2	$\frac{23.8}{123}$	$\frac{20.0}{103}$											
	LWHDG 10…SL	○	0.036								40		29.4																			3 280	5 050	26.2	$\frac{23.8}{123}$	$\frac{20.0}{103}$						
MHDC 12…SL		○	0.057	0.86	20	3.2	7.5	27	15	6		34		—	19.6	38	M4 ×5	ALMOTION	5	12	10.5	3.5	6	4.5	20	40	M3×12	4 560	5 300	32.8	$\frac{19.4}{117}$						$\frac{16.3}{98.5}$					
	LWHDC 12…SL	○	0.058								46	15	31.6	50	M4 ×5	ALMOTION												5	12	10.5	3.5	6	4.5	20	40	M3×12	6 260	8 330	51.6	$\frac{44.7}{237}$	$\frac{37.5}{199}$	
MHD 12		○	0.089																																							46
	LWHD 12	○	0.091								46	15	31.6	50	M4 ×5	ALMOTION												5	12	10.5	3.5	6	4.5	20	40	M3×12	6 260	8 330	51.6	$\frac{44.7}{237}$	$\frac{37.5}{199}$	
MHD 12…SL		○	0.089																																							46
	LWHD 12…SL	○	0.091								46	15	31.6	50	M4 ×5	ALMOTION												5	12	10.5	3.5	6	4.5	20	40	M3×12	6 260	8 330	51.6	$\frac{44.7}{237}$	$\frac{37.5}{199}$	
MHDG 12…SL		○	0.115	46	15	31.6	50	M4 ×5	ALMOTION	5							12	10.5	3.5	6	4.5	20	40	M3×12	6 260	8 330	51.6															$\frac{44.7}{237}$
	LWHDG 12…SL	○	0.118								46	15	31.6	50	M4 ×5	ALMOTION												5	12	10.5	3.5	6	4.5	20	40	M3×12	6 260	8 330	51.6	$\frac{44.7}{237}$	$\frac{37.5}{199}$	

Notes (1) Track rail lengths L are shown in Table 2.1 on page II – 93 and Table 2.2 on page II – 94.

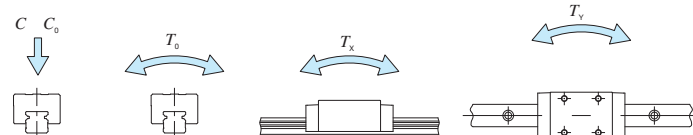
(2) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.

In an assembled set of MH series, track rail mounting bolts are not appended.

⁽³⁾ The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

(4) Series of size 8 and 10 are provided with an oil hole. The specifications of oil holes are shown in Table 14 on page II – 104.

The specification of grease nipple for size 12 is shown in Table 15 on page II – 104.



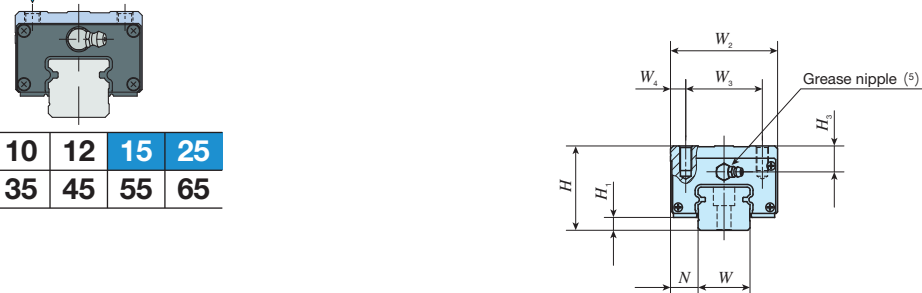
Example of identification number of assembled set

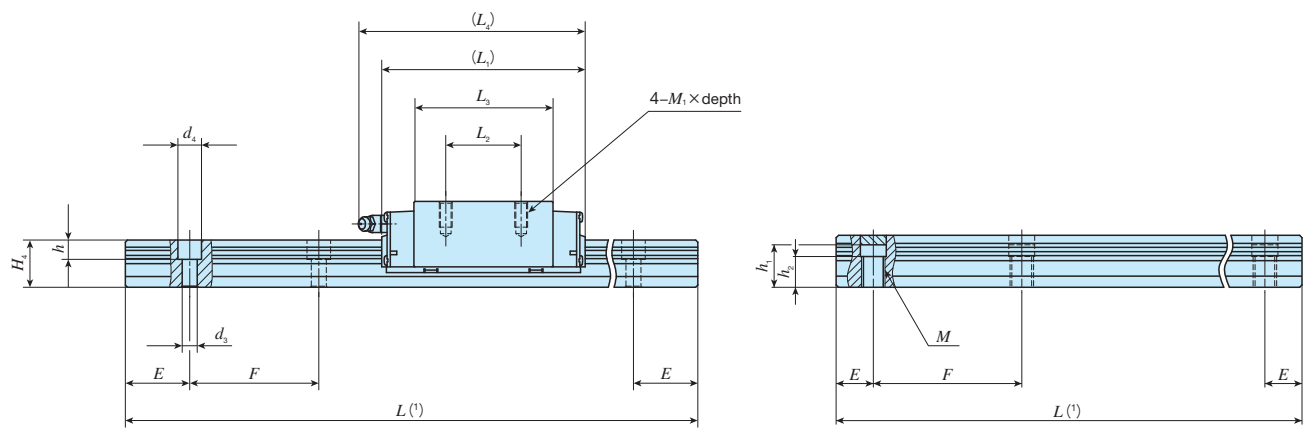
Model code		Dimensions	Part code		Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
<u>MHD</u>	<u>G</u>	<u>12</u>	<u>C2</u>	<u>R320</u>	<u>SL</u>	<u>T₁</u>	<u>P</u>	<u>—</u>	<u>N</u>
1	2	3	4	5	6	7	8	9	10

① Model		④ Number of slide unit (2)		⑦ Preload amount		⑨ Interchangeable	
MHD	Block type mounting from top	⑤ Length of track rail (320 mm)		To	Clearance	No symbol	Non-interchangeable specification
LWHD				No symbol	Standard	S1	S1 specification
② Length of slide unit		⑥ Material type		T1	Light preload	S2	S2 specification
C	Short			⑧ Accuracy class		⑩ Special specification	
No symbol	Standard	No symbol	High carbon steel made	H	High	A, D, E, F, I, LR, MA MN, N, Q, U, W, Y	
G	Long	Sl	Stainless steel made	P	Precision		
③ Size							
8, 10, 12							

IKO C-Lube Linear Way MH

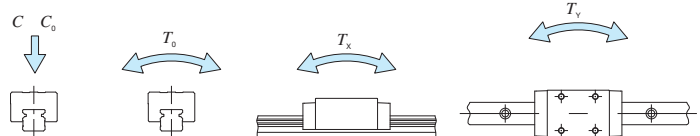
Block type mounting from top

Shape	MHD · LWHD				
					
Size	8	10	12	15	25
	30	35	45	55	65



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm										Appended mounting bolt for track rail ⁽³⁾ mm	Basic dynamic load rating ⁽⁴⁾	Basic static load rating ⁽⁴⁾	Static moment rating ⁽⁴⁾															
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	M ₁ ×depth	H ₃	W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽²⁾	h ₂	E	F	Bolt size×ℓ				C N	C ₀ N	T ₀ N·m	T _x N·m	T _y N·m											
MHD 15	LWHD 15…B	○	0.23	1.47	28	4.5	9.5	34	26	4	66	26	44.2	69	M4×10	8.5	15	15	4.5	8	6	—	—	—	30	60	M4×16	11 600	13 400	112	95.6 556	95.6 556														
—	LWHD 15…M*	—											44.6						—	—	—	—	—	—			—																			
—	LWHD 15…MU*	—											—						—	—	M 6	12	9	—			—																			
MHD 25	LWHD 25…B	○	0.65	3.50	40	6.5	12.5	48	35	6.5	95	35	63.9	105	M6×12	10.5	23	22	7	11	9	—	—	—	30	60	M6×22	25 200	28 800	362	309 1 690	309 1 690														
MHD 25…M*	LWHD 25…M*	—											63.9																																	
MHD 25…MU*	LWHD 25…MU*	—											64.7																																	
MHD 25…MU*	LWHD 25…MU*	—											64.7																																	
MHDG 25	LWHDG 25	○									118	50	86.6	128					7	11	9	—	—	—			M6×22						30 800	38 300	483	533 2 740	533 2 740									
MHD 30	LWHD 30…B	○											87.4																																	
MHD 30…M*	LWHD 30…M*	—	1.12	4.82	45	7	16	60	40	10	113	40	80.6	123	M8×16	11	28	25							9	14		12	—	—	—	40						80	M8×28	35 400	40 700	623	536 2 820	536 2 820		
MHD 30…MU*	LWHD 30…MU*	—																							—	—		—	—	—	—														—	—
MHDG 30	LWHDG 30	○																	1.44	9	139	60	106.6	149	9	14		12	—	—	—								M8×28						42 700	53 200
MHD 30…MU*	LWHD 30…MU*	—	—	—	—	—	—	—	—	—	—	—	—	—					—	—	—		—	—																						
MHDG 30	LWHDG 30	○	1.92	7	185	60	152.2	194	1740 8 240	1740 8 240																																				
MHDL 30	—	○					1.92	7			185	60	152.2	194					1740 8 240	1740 8 240																										

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93 and Tables 2.3 and 2.4 on page II-95.
(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .
(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176.
In an assembled set of MH series and LWHD···MU model, track rail mounting bolts are not appended.
(4) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
(5) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II-104.
Remark: The identification numbers with * are our semi-standard items.



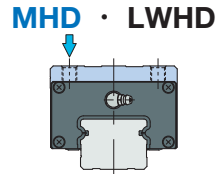
Example of identification number of assembled set

Model code	Dimensions	Part code	Model code	Dust protection code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MHD	G	25	C2	R840		T1	P	N
1	2	3	4	5	6	7	8	9

① Model MHD LWHD(···B)	④ Number of slide unit (2)	⑦ Preload amount No symbol Standard T1 Light preload T2 Medium preload T3 Heavy preload	⑩ Interchangeable No symbol Non-interchangeable specification S1 S1 specification S2 S2 specification
② Length of slide unit No symbol Standard G Long L Extra long	⑤ Length of track rail (840 mm)	⑧ Accuracy class H High P Precision SP Super precision	⑨ Special specification A, BS, D, E, F, I, J, L, LF, MA, MN, N, PS, Q, RE, T, UR, V, W, Y, Z
③ Size 15, 25, 30	⑥ Dust protection code No symbol Standard specification M Ultra seal specification MU Ultra seal specification with track rail mounting from bottom		

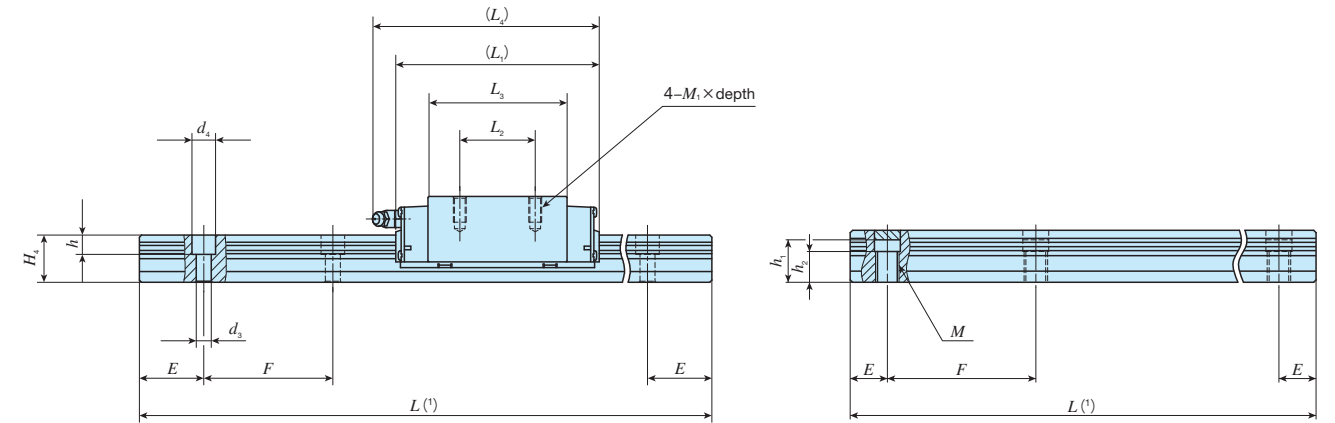
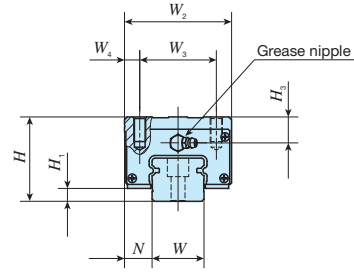
Block type mounting from top

Shape



Size

8	10	12	15	25
30	35	45	55	65



Ultra seal specification with track rail mounting from bottom

Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm										Appended mounting bolt for track rail ⁽³⁾ mm	Basic dynamic load rating ⁽⁴⁾	Basic static load rating ⁽⁴⁾	Static moment rating ⁽⁴⁾		
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	M ₁ ×depth		H ₃	W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽²⁾	h ₂	E	F				Bolt size×ℓ	C N	C ₀ N
MHD 35		○	1.74	6.85	55	10	18	70	50	10	123	50	86.2	135	M 8×16		17	34	28	9	14	12	—	—	—	40	80	M 8×28	48 700	53 700	823	631 3 480	579 3 190
—	LWHD 35…B	○				8																											
—	LWHD 35…M*	—																															
—	LWHD 35…MU*	—																															
MHDG 35		○	2.26	6.85	55	10	18	70	50	10	151	72	114	163	M 8×28		17	34	28	9	14	12	—	—	—	40	80	M 8×28	59 500	71 600	1 100	1 090 5 570	1 000 5 110
—	LWHDG35	○				8																											
MHDL 35	—	○				3.08																											
MHD 45		○	3.30	10.7	70	13	20.5	86	60	13	147	60	103.4	158	M10×20		23	45	34	14	20	17	—	—	—	52.5	105	M12×35	74 600	80 200	1 610	1 150 6 190	1 060 5 690
—	LWHD 45…B	○				10																											
—	LWHD 45…M*	—																															
—	LWHD 45…MU*	—																															
MHDG 45		○	4.57	6.85	70	13	20.5	86	60	13	190	80	146.6	201	M10×20		23	45	34	14	20	17	—	—	—	52.5	105	M12×35	95 200	114 000	2 280	2 240 11 100	2 050 10 200
—	LWHDG45	○				10																											
MHDL 45	—	○				5.85																											
—	LWHD 55…B	○	5.36	15.5	80	13	23.5	100	75	12.5	183	75	132	194	M12×25		24	53	41	16	23	20	—	—	—	60	120	M14×45	113 000	121 000	2 870	2 210 11 600	2 030 10 600
—	LWHDG55	○	7.20																														
—	LWHD 65…B	○	9.80																														
—	LWHDG65	○	14.3	22.2	90	14	31.5	126	76	25	303	120	238.8	313	M16×30		20	63	48	18	26	22	—	—	—	75	150	M16×50	176 000	184 000	5 180	4 130 22 000	3 790 20 200

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93 and Tables 2.3 and 2.4 on page II-95.

(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_r .

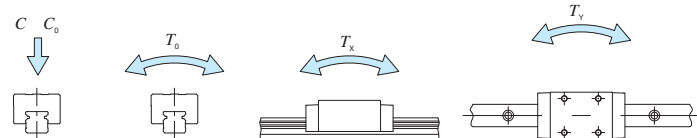
(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176.

In an assembled set of MH series and LWHD···MU model, track rail mounting bolts are not appended.

⁽⁴⁾ The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

Remarks 1. The specifications of grease nipple are shown in Table 15 on page II – 104.

2. The identification numbers with * are our semi-standard items.



Example of identification number of assembled set

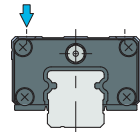
Model code		Dimensions	Part code		Model code	Dust protection code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
<u>MHD</u>	<u>G</u>	<u>45</u>	<u>C2</u>	<u>R1260</u>	<u> </u>	<u> </u>	<u>T₁</u>	<u>P</u>	<u> </u>	<u>N</u>
1	2	3	4	5	1	6	7	8	9	10

① Model		④ Number of slide unit (2)		⑦ Preload amount		⑨ Interchangeable			
MHD	Block type mounting from top	⑤ Length of track rail (1,260 mm)		No symbol	Standard	No symbol	Non-interchangeable specification		
LWHD (...B)				T1	Light preload	S1	S1 specification		
② Length of slide unit		⑥ Dust protection code		T2	Medium preload	S2	S2 specification		
No symbol	Standard			T3	Heavy preload	⑩ Special specification A, D, E, F, I, J, L, LF, MA MN, N, PS, Q, T, V, W, Y, Z			
G	Long	No symbol	Standard specification	⑧ Accuracy class					
L	Extra long	M	Ultra seal specification	H	High				
③ Size		MU	Ultra seal specification with track rail mounting from bottom	P	Precision				
	35, 45, 55, 65			SP	Super precision				

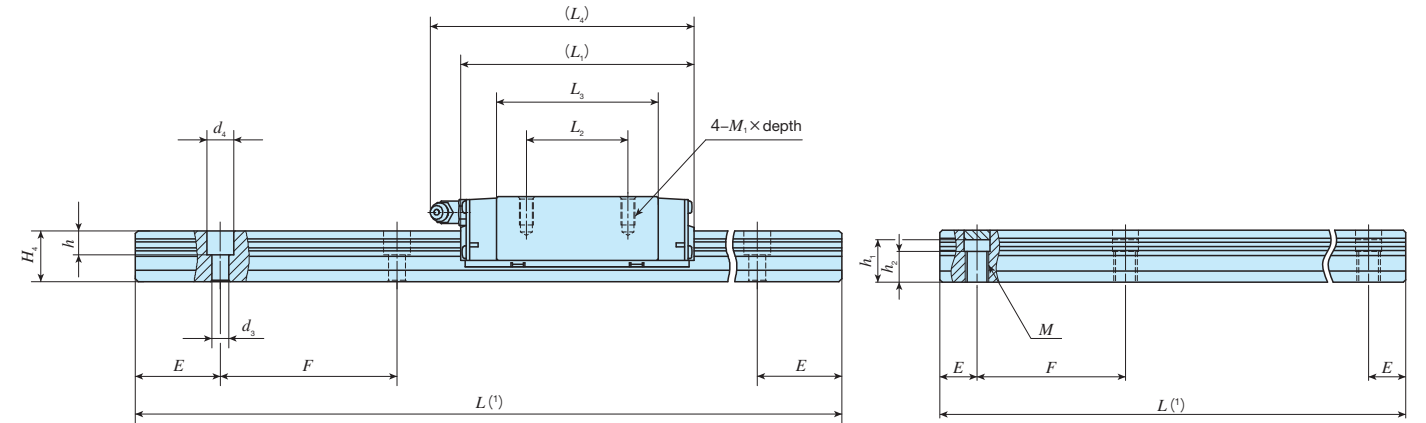
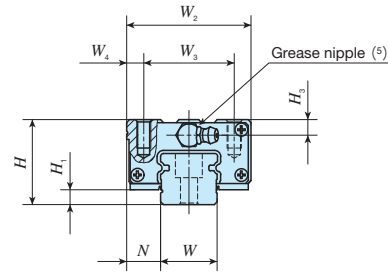
Compact block type mounting from top

MHS • LWHS

Shape



Size	15	20	25	30
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Ultra seal specification with track rail mounting from bottom

[illegible]

Notes (1) Track rail lengths L are shown in Table 2.1 on page II – 93, Table 2.2 on page II – 94, and Tables 2.3 and 2.4 on page II – 95.

(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_r .

(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.

In an assembled set of MH series and LWHS···MU model, track rail mounting bolts are not appended.

⁽⁴⁾ The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

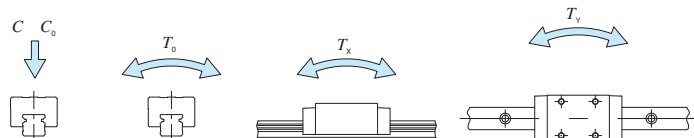
(5) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II – 104.

Remark: The identification numbers with * are our semi-standard items.

Example of identification number of assembled set

Model code		Dimensions		Part code		Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
<u>MHS</u>	<u>G</u>	<u>20</u>	<u>C2</u>	<u>R480</u>	<u> </u>	<u> </u>	<u> </u>	<u>T₁</u>	<u>P</u>	<u> </u>	<u>N</u>	
1	2	3	4	5	1	6	7	8	9	10	11	

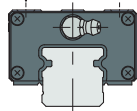
① Model		⑤ Length of track rail (480 mm)		⑧ Preload amount		⑩ Interchangeable	
MHS	Compact block type mounting from top	⑥ Dust protection code		No symbol	Standard	No symbol	Non-interchangeable specification
LWHS(---B)		No symbol	Standard specification	T ₁	Light preload	S ₁	S ₁ specification
② Length of slide unit		M	Ultra seal specification	T ₂	Medium preload	S ₂	S ₂ specification
No symbol	Standard	MU		T ₃	Heavy preload	⑪ Special specification	
G	Long						
③ Size		⑦ Material type		⑨ Accuracy class		A, BS, D, E, F, I, J, L, LF, MA MN, N, Q, RE, T, V, W, Y, Z	
15, 20		No symbol	High carbon steel made	H	High		
④ Number of slide unit (2)		SL	Stainless steel made	P	Precision		
				SP	Super precision		



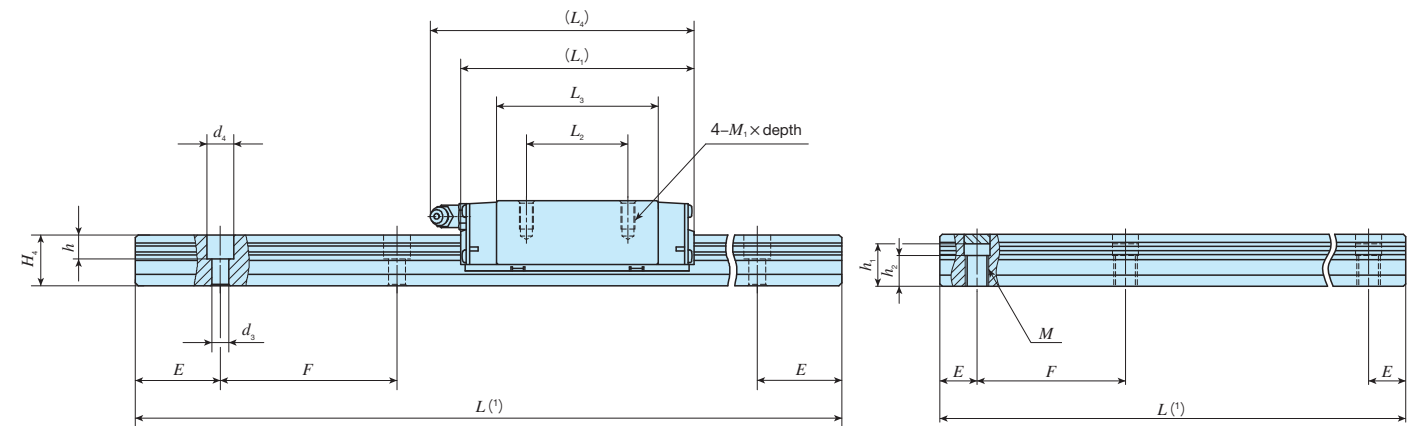
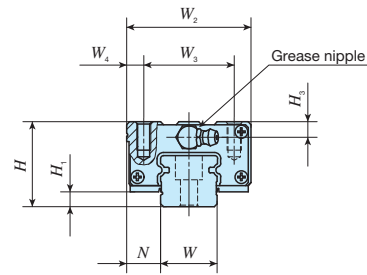
Compact block type mounting from top

MHS • LWHS

Shape



Size	15	20	25	30
------	----	----	----	----



Ultra seal specification with track rail mounting from bottom

Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm										Appended mounting bolt for track rail ⁽³⁾ mm	Basic dynamic load rating ⁽⁴⁾	Basic static load rating ⁽⁴⁾	Static moment rating ⁽⁴⁾																									
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H ₁	N	W ₂	W ₃	W ₄	L ₁	L ₂	L ₃	L ₄	M ₁ ×depth		H ₃	W	H ₄	d ₃	d ₄	h	M	h ₁ ⁽²⁾	h ₂	E	F				Bolt size×ℓ	C N	C ₀ N	T ₀ N・m	T _x N・m	T _y N・m																				
MHS 25	LWHS 25…B	○	0.55	3.50	36	6.5	12.5	48	35	6.5	95	35	63.9	105	M6×12		6.5	23	22	7	11	9	—	—	—	30	60	M6×22	25 200	28 800	362	309 1 690	309 1 690																							
		○											64.7																																											
MHS 25…SL	LWHS 25…SL	○											63.9																																											
		○											64.7																																											
MHS 25…M*	LWHS 25…M*	—											63.9																																											
		—											64.7																																											
MHS 25…MU*	LWHS 25…MU*	—											63.9						—	—	—	M10	18	13																																
		—											64.7																																											
MHSG 25	LWHS 25	○	0.67								118	50	86.6	128						7	11	9	—	—	—			M6×22	30 800	38 300	483	533 2 740	533 2 740																							
	LWHS 25	○											87.4																																											
MHS 30	LWHS 30…B	○	1.00	4.82	42	9	16	60	40	10	113	40	80.6	123	M8×16		8	28	25	9	14	12	—	—	—	40	80	M8×28	35 400	40 700	623	536 2 820	536 2 820																							
		○				7																																																		
MHS 30…SL	LWHS 30…SL	○				9																																																		
		○																																																						
MHS 30…M*	LWHS 30…M*	—				7																																																		
		—																																																						
MHS 30…MU*	LWHS 30…MU*	—																																																						
		—																																																						
MHSG 30	LWHS 30	○	1.29			9							139	60	106.6	149												M8×28	42 700	53 200	814	894 4 460	894 4 460																							
	LWHS 30	○				7																																																		

Notes (1) Track rail lengths L are shown in Table 2.1 on page II – 93, Table 2.2 on page II – 94, and Tables 2.3 and 2.4 on page II – 95.

(2) Choose bolts whose dimension allow fixing thread depth into track rail to be less than h_1 .

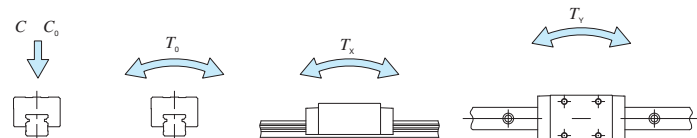
(3) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176. For stainless steel model, stainless steel bolts are appended.

In an assembled set of MH series and LWHS...MU model, track rail mounting bolts are not appended.

(4) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.

Remarks 1. The specifications of grease nipple are shown in Table 15 on page II – 104.

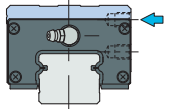
2. The identification numbers with * are our semi-standard items.

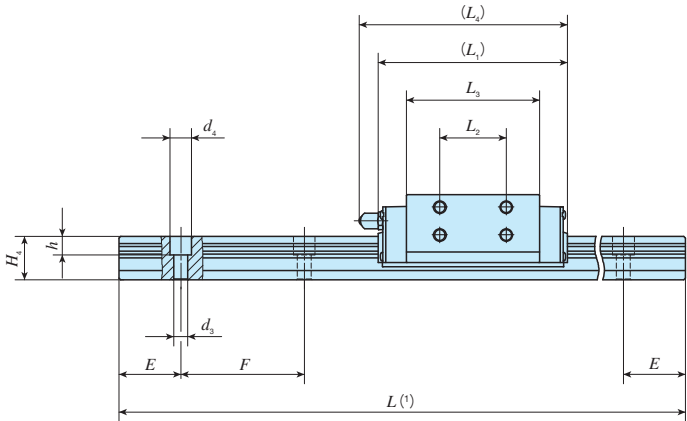
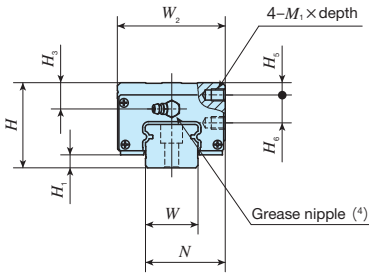


Example of identification number of assembled set

Model code		Dimensions	Part code		Model code	Dust protection code	Material code	Preload symbol	Classification symbol	Interchangeable code	Supplemental code
MHS	G	30	C2	R480				T₁	P		N
1	2	3	4	5	1	6	7	8	9	10	11

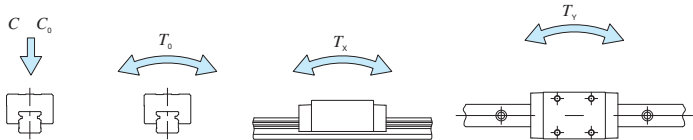
① Model		⑤ Length of track rail (480 mm)		⑧ Preload amount		⑩ Interchangeable	
MHS	Compact block type	⑥ Dust protection code	No symbol Standard specification	No symbol	Standard	No symbol	Non-interchangeable specification
LWHS(…B)	mounting from top			T1	Light preload	S1	S1 specification
② Length of slide unit		M	Ultra seal specification	T2	Medium preload	S2	S2 specification
No symbol	Standard	MU	Ultra seal specification with track rail mounting from bottom	T3	Heavy preload	⑪ Special specification	
G	Long			⑨ Accuracy class			
③ Size		⑦ Material type		H	High	A, BS, D, E, F, I, J, L, LF, MA MN, N, PS, Q, RE, T, UR, V, W, Y, Z	
25, 30		No symbol	High carbon steel made	P	Precision		
④ Number of slide unit (2)		SL	Stainless steel made	SP	Super precision		

Side mounting type			
Shape	LWHY		
			
Size	15	20	25
	30	35	45



Identification number		Interchangeable	Mass (Ref.)		Dimensions of assembly mm			Dimensions of slide unit mm										Dimensions of track rail mm						Appended mounting bolt for track rail (2) mm	Basic dynamic load rating (3) C N	Basic static load rating (3) C0 N	Static moment rating (3)		
MH series	LWH series (No C-Lube)		Slide unit kg	Track rail kg/m	H	H1	N	W2	L1	L2	L3	L4	M1 x depth	H3	H5	H6	W	H4	d3	d4	h	E	F	Bolt size x l			T0 N · m	Tx N · m	Ty N · m
—	LWHY 15*	—	0.23	1.47	28	4.5	24.3	34	66	18	44.6	69	M 4 x 4	8.5	4	9	15	15	4.5	8	6	30	60	M 4 x 16	9 360	13 900	116	99.2 577	99.2 577
—	LWHY 20*	—	0.36	2.56	30	5	31.5	43.7	83	25	57.2	94	M 5 x 5	5.5	4	10	20	18	6	9.5	8.5	30	60	M 5 x 18	14 500	21 900	241	202 1 130	202 1 130
—	LWHY 25*	—	0.65	3.50	40	6.5	35	47.7	95	30	64.7	105	M 6 x 6	10.5	6	12	23	22	7	11	9	30	60	M 6 x 22	20 100	29 800	376	320 1 750	320 1 750
—	LWHY 30*	—	1.12	4.82	45	7	43.5	59.7	113	40	80.6	123	M 6 x 7	11	8	14	28	25	9	14	12	40	80	M 8 x 28	28 100	42 200	646	556 2 930	556 2 930
—	LWHY 35*	—	1.74	6.85	55	8	51.5	69.7	123	43	86.2	135	M 8 x 9	17	8	18	34	28	9	14	12	40	80	M 8 x 28	31 200	43 500	878	665 3 600	601 3 310
—	LWHY 45*	—	3.30	10.7	70	10	65	85.7	147	55	103.4	158	M10 x 11	23	10	22	45	34	14	20	17	52.5	105	M12 x 35	47 600	65 000	1 720	1 200 6 420	1 100 5 900

Notes (1) Track rail lengths L are shown in Table 2.1 on page II-93.
(2) The appended track rail mounting bolts are hexagon socket head bolts equivalent to JIS B 1176.
(3) The direction of basic dynamic load rating (C), basic static load rating (C_0), and static moment rating (T_0 , T_x , T_y) are shown in the sketches below. The upper values of T_x and T_y are for one slide unit and the lower values are for two slide units in close contact.
(4) The shapes of grease nipple vary by size. The specifications are shown in Table 15 on page II-104.
Remark: The identification numbers with * are our semi-standard items.



Example of identification number of assembled set

Model code	Dimensions	Part code	Preload symbol	Classification symbol	Supplemental code
LWHY	30	C2 R480	T1	P	/N
1	2	3	4	5	6
7					
① Model LWHY Side mounting type		⑤ Preload amount No symbol Standard T1 Light preload T2 Medium preload T3 Heavy preload		⑦ Special specification A, E, F, I, L, LF, MA, N, PS, RE, Y, Z	
② Size 15, 20, 25, 30, 35, 45		⑥ Accuracy class H High P Precision SP Super precision			
③ Number of slide unit (2)					
④ Length of track rail (480 mm)					