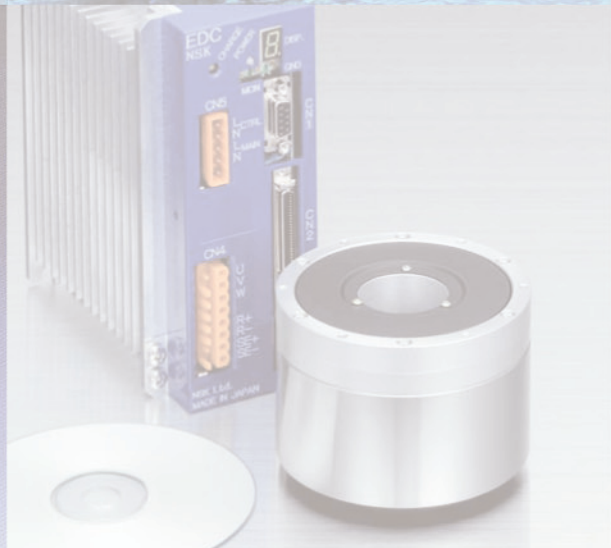
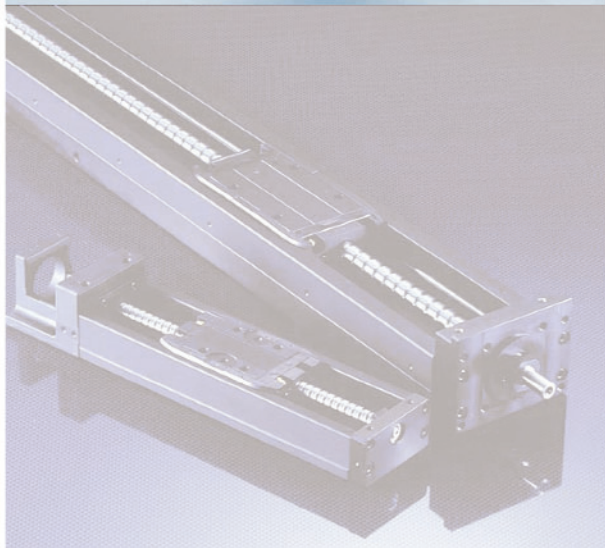
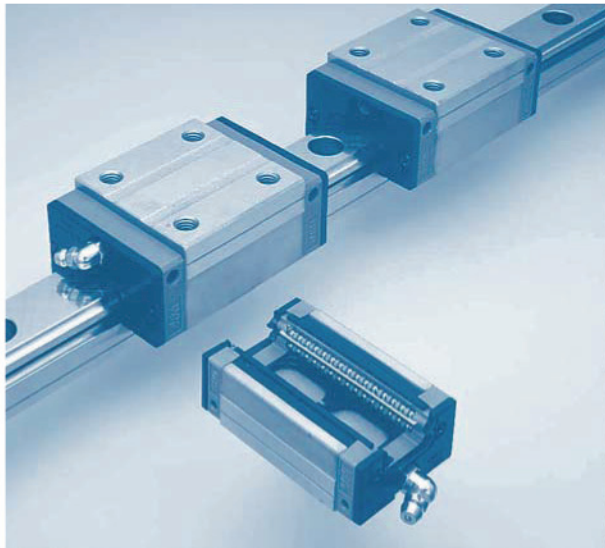


# Precision Machine Components

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- **Linear Guides**

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## LH Series

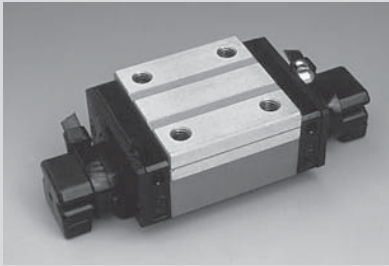
### Main features:

Both the sliders and the ball tracks are hardened by surface hardening. Due to the X configuration in the contact points of the balls with the tracks, the LH series feature a high self aligning ability.

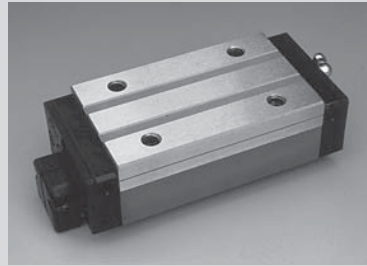
The LH series is available as interchangeable type. Interchangeable types enable random matching of rails and ball slides for prompt delivery.

The LH series are also available in black chrome plating, for enhanced protection in the sort of applications that are potentially corrosive.

This LH series are ideal for the general applications of the mechanical engineering, particularly for the conveying of heavy loads and the construction of linear positioning systems.



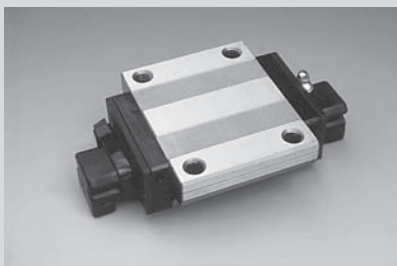
ANZ / ALZ Type  
Tap fixing holes.



Type BNZ / BLZ  
Tap fixing holes.



GMZ type  
The fixing holes can be used both as drill or as tap hole.

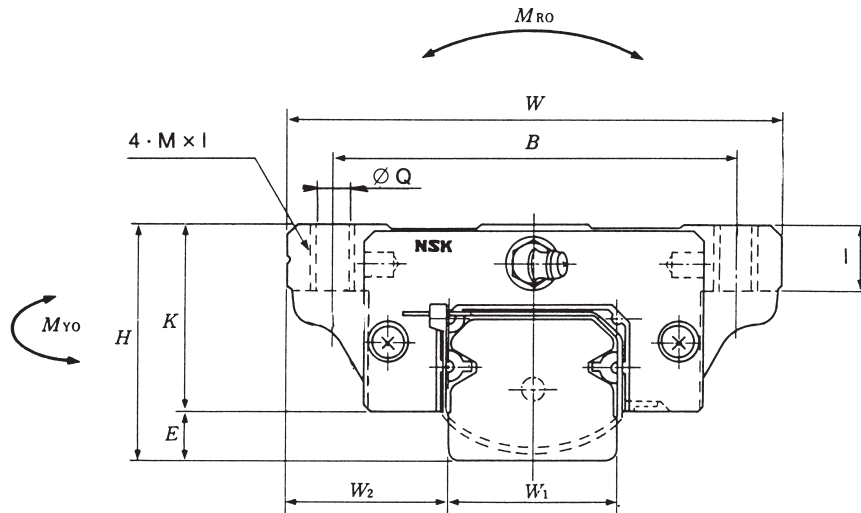


EMZ type  
The fixing holes can be used both as drill or as a tap hole.



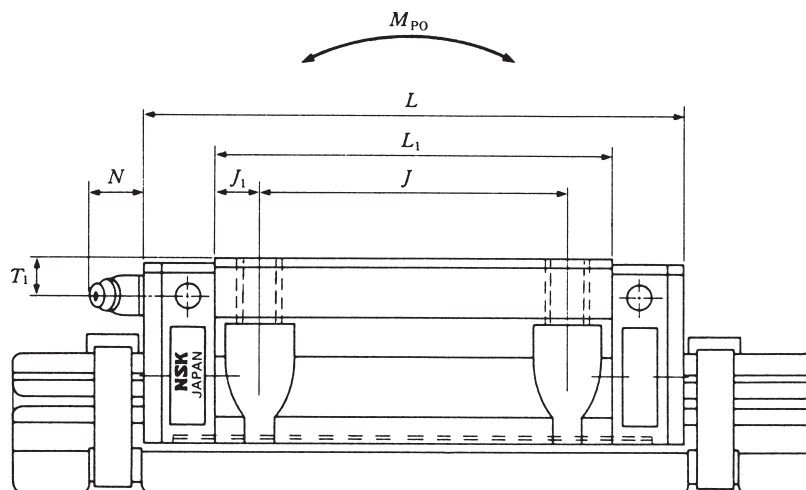
Rail

## Sliders EMZ and GMZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

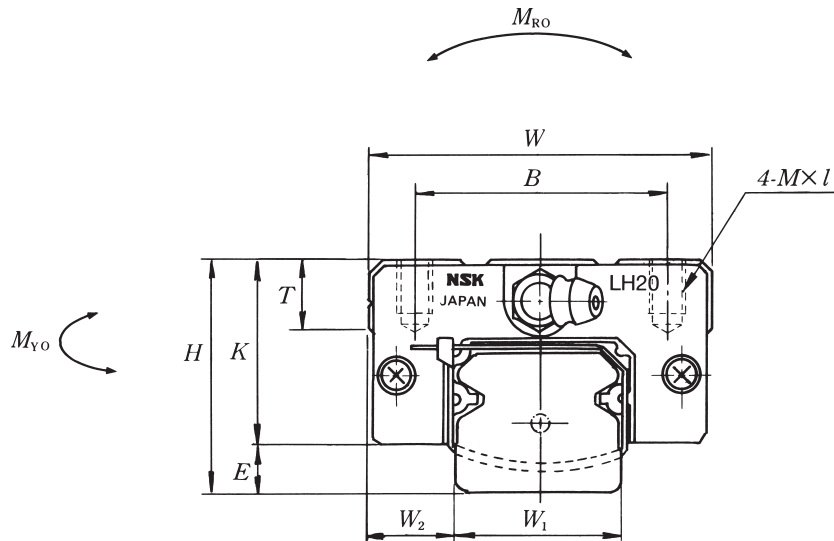
Model-No.	Assembly (mm)			Slider (mm)									
	H	E	W <sub>2</sub>	W	B × J	L	L <sub>1</sub>	J <sub>1</sub>	K	T	Q × l	M × l	
LAH15	EMZ	24	4.6	16	47	38 × 30	55	39	4.5	19.4	8	4.5 × 7	M 5 × 8
	GMZ	24	4.6	16	47	38 × 30	74	58	14	19.4	8	4.5 × 7	M 5 × 8
LAH20	EMZ	30	5	21.5	63	53 × 40	69.8	50	5	25	10	5.3 × 10	M 6 × 10
	GMZ	30	5	21.5	63	53 × 40	91.8	72	16	25	10	5.3 × 10	M 6 × 10
LAH25	EMZ	36	7	23.5	70	57 × 45	79	58	6.5	29	11	6.4 × 10	M 8 × 10
	GMZ	36	7	23.5	70	57 × 45	107	86	20.5	29	11	6.4 × 10	M 8 × 10
LAH30	EMZ	42	9	31	90	72 × 52	98.6	72	10	33	11	8.4 × 12	M 10 × 12
	GMZ	42	9	31	90	72 × 52	124.6	98	23	33	11	8.4 × 12	M 10 × 12
LAH35	EMZ	48	9.5	33	100	82 × 62	109	80	9	38.5	12	8.4 × 13	M 10 × 13
	GMZ	48	9.5	33	100	82 × 62	143	114	26	38.5	12	8.4 × 13	M 10 × 13
LAH45	EMZ	60	14	37.5	120	100 × 80	139	105	12.5	46	13	10.5 × 15	M 12 × 15
	GMZ	60	14	37.5	120	100 × 80	171	137	28.5	46	13	10.5 × 15	M 12 × 15
LAH55	EMZ	70	15	43.5	140	116 × 95	163	126	15.5	55	15	12.5 × 18	M 14 × 18
	GMZ	70	15	43.5	140	116 × 95	201	164	34.5	55	15	12.5 × 18	M 14 × 18
LAH65	EMZ	90	16	53.5	170	142 × 110	193	147	18.5	74	23	14.6 × 23	M 16 × 23
	GMZ	90	16	53.5	170	142 × 110	253	207	48.5	74	23	14.6 × 23	M 16 × 23



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

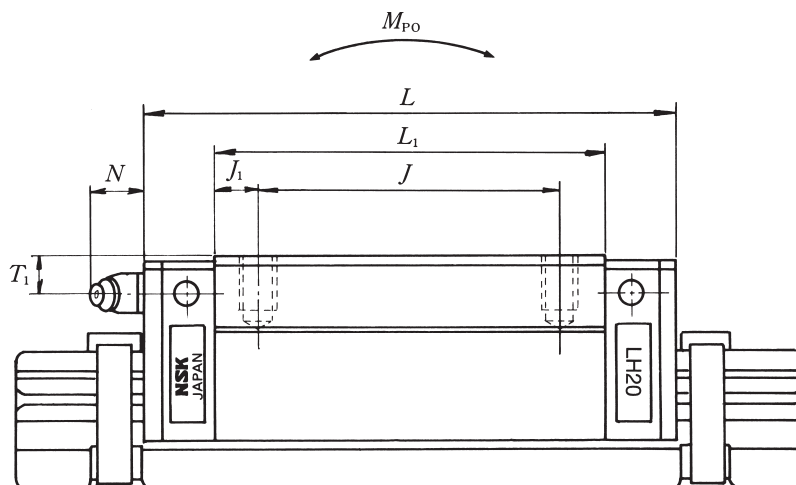
Grease fitting (mm)		Basic load rating (N)		Static moment (Nm)			Weight (kg)	Slider length with 2 K1 (mm)	
	T <sub>1</sub>	N	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>			M <sub>YO</sub>
∅ 3 mm	4.6	3.3	10 800	20 700	108	95	80	0.17	65.6
			14 600	32 000	166	216	181	0.25	84.6
M 6 × 0.75	5	11	17 400	32 500	219	185	155	0.45	80.4
			23 500	50 500	340	420	355	0.65	102.4
M 6 × 0.75	6	11	25 600	46 000	360	320	267	0.63	90.6
			34 500	71 000	555	725	610	0.93	11
M 6 × 0.75	7	11	35 500	63 000	600	505	125	1.2	110.6
			46 000	91 500	870	1 030	865	1.6	136.6
M 6 × 0.75	8	11	47 500	80 500	950	755	630	1.7	122
			61 500	117 000	1 380	1 530	1 280	2.4	156
R 1/8"	10	13	81 000	140 000	2 140	1 740	1 460	3.0	154
			99 000	187 000	2 860	3 000	2 520	3.9	186
R 1/8"	11	13	119 000	198 000	3 600	3 000	2 510	5.0	178
			146 000	264 000	4 850	5 150	4 350	6.5	216
R 1/8"	19	13	181 000	281 000	6 150	4 950	4 150	10.0	211
			235 000	410 000	8 950	10 100	8 450	14.1	271

## Slider ANZ and BNZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

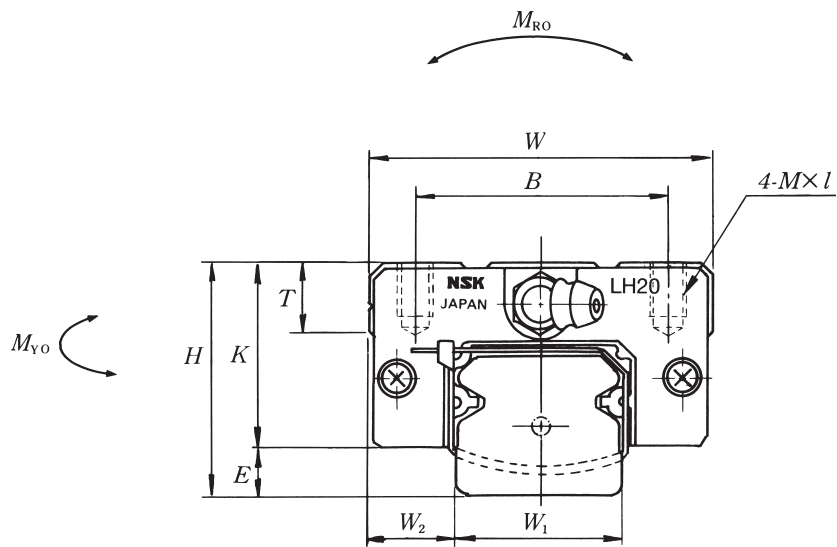
Model-No.	Assembly (mm)			Slider (mm)								
	H	E	W <sub>2</sub>	W	B × J	L	L <sub>1</sub>	J <sub>1</sub>	K	T	M × l	
LAH15 ANZ BNZ	28	4.6	9.5	34	26 × 26	55 74	39 58	6.5 16	23.4	8	M 4 × 6	
LAH20 ANZ BNZ	30	5	12	44	32 × 36 32 × 50	69.8 91.8	50 72	7 11	25	12	M 5 × 6	
LAH25 ANZ BNZ	40	7	12.5	48	35 × 35 35 × 50	79 107	58 86	11.5 18	33	12	M 6 × 9	
LAH30 ANZ BNZ	45	9	16	60	40 × 40 40 × 60	85.6 124.6	59 98	9.5 19	36	14	M 8 × 10	
LAH35 ANZ BNZ	55	9.5	18	70	50 × 50 50 × 72	109 143	80 114	15 21	45.5	15	M 8 × 12	
LAH45 ANZ BNZ	70	14	20.5	86	60 × 60 60 × 80	139 171	105 137	22.5 28.5	56	17	M 10 × 17	
LAH55 ANZ BNZ	80	15	23.5	100	75 × 75 75 × 95	163 201	126 164	25.5 34.5	65	18	M 12 × 18	
LAH65 ANZ BNZ	90	16	31.5	126	76 × 70 76 × 120	193 253	147 207	38.5 43.5	74	23	M 16 × 20	



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

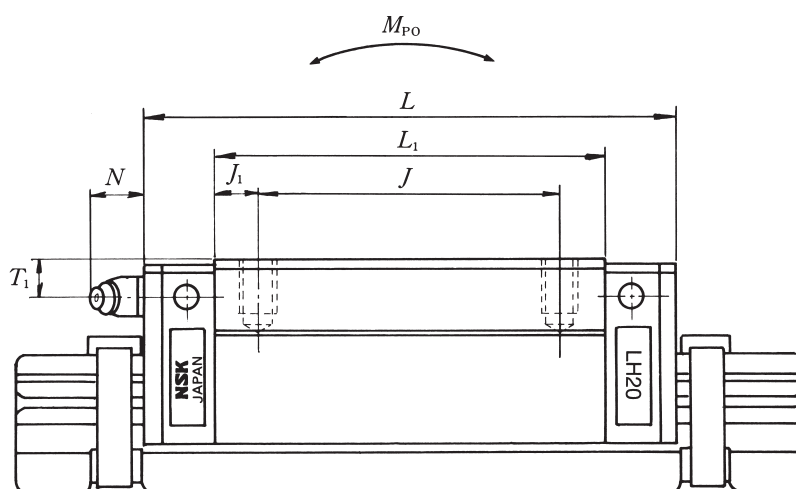
Grease fitting (mm)		Basic load rating (N)		Static moment (Nm)			Weight (kg)	Slider length with 2 K1 (mm)	
	T <sub>1</sub>	N	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>			M <sub>VO</sub>
∅ 3 mm	8.5	3.3	10 800	20 700	108	95	80	0.18	65.6
			14 600	32 000	166	216	181	0.26	84.6
M 6 × 0.75	5	11	17 400	32 500	219	185	151	0.33	80.4
			23 500	50 500	340	420	355	0.48	102.4
M 6 × 0.75	10	11	25 600	46 000	360	320	267	0.55	90.6
			34 500	71 000	555	725	610	0.82	118.6
M 6 × 0.75	10	11	31 000	51 500	490	350	292	0.77	97.6
			46 000	91 500	870	1 030	865	1.3	136.6
M 6 × 0.75	15	11	47 500	80 500	950	755	630	1.5	122
			61 500	117 000	1 380	1 530	1 280	2.1	156
R 1/8"	20	13	81 000	140 000	2 140	1 740	1 460	3.0	154
			99 000	187 000	2 860	3 000	2 520	3.9	186
R 1/8"	21	13	119 000	198 000	3 600	3 000	2 510	4.7	178
			146 000	264 000	4 850	5 150	4 350	6.1	216
R 1/8"	19	13	181 000	281 000	6 150	4 950	4 150	7.7	211
			235 000	410 000	8 950	10 100	8 450	10.8	271

## Sliders ALZ and BLZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Model-No.	Assembly (mm)			Slider (mm)								
	H	E	W <sub>2</sub>	W	B × J	L	L <sub>1</sub>	J <sub>1</sub>	K	T	M × Lead × l	
LAH25 ALZ BLZ	36	7	12.5	48	35 × 35 35 × 50	79 107	58 86	11.5 18	29	12	M6 × 1 × 6	
LAH30 ALZ BLZ	42	9	16	60	40 × 40 40 × 60	85.6 124.6	59 98	9.5 19	33	14	M8 × 1.25 × 8	
LAH35 ALZ BLZ	48	9.5	18	70	50 × 50 50 × 72	109 143	80 114	15 21	38.5	15	M8 × 1.25 × 8	

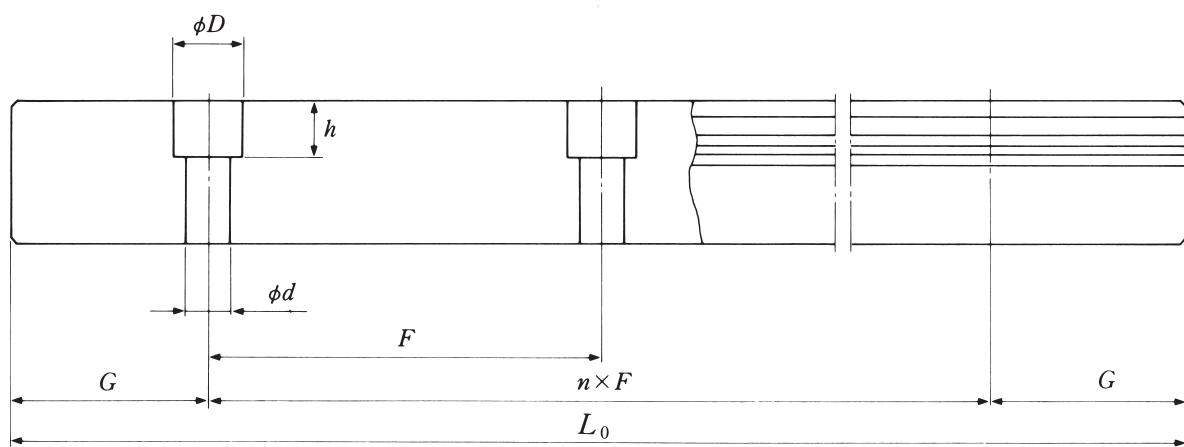


Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Grease fitting (mm)		Basic load rating (N)		Static moment (Nm)			Weight (kg)	Slider length with 2 K1 (mm)	
	T <sub>1</sub>	N	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>			M <sub>YO</sub>
M 6 × 0.75	6	11	25 600	46 000	360	320	267	0.46	90.6
			34 500	71 000	555	725	610	0.69	118.6
M 6 × 0.75	7	11	31 000	51 500	490	350	292	0.69	97.6
			46 000	91 500	870	1 030	865	1.16	136.6
M 6 × 0.75	8	11	47 500	80 500	950	755	630	1.2	122
			61 500	117 000	1 380	1 530	1 280	1.7	156

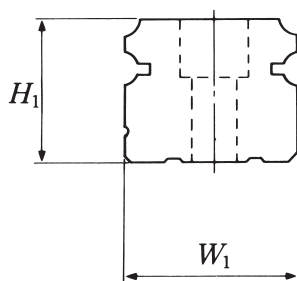


## Rail LH type



Model-No.	Rail dimensions (mm)				
	$W_1$	$H_1$	$F$	$d \times D \times h$	$G$ (recommended)
L1H15 . . . Z	15	15	60	4.5 × 7.5 × 5.3	20 <sub>-2</sub>
L1H20 . . . Z	20	18	60	6 × 9.5 × 8.5	20 <sub>-2</sub>
L1H25 . . . Z	23	22	60	7 × 11 × 9	20 <sub>-2</sub>
L1H30 . . . Z	28	26	80	9 × 14 × 12	20 <sub>-2</sub>
L1H35 . . . Z	34	29	80	9 × 14 × 12	20 <sub>-2</sub>
L1H45 . . . Z	45	38	105	14 × 20 × 17	22.5 <sub>-2</sub>
L1H55 . . . Z	53	44	120	16 × 23 × 20	30 <sub>-2</sub>
L1H65 . . . Z	63	53	150	18 × 26 × 22	35 <sub>-2</sub>

The cutting tolerance of the ends of the rail (G dimension) is - 2 mm for standard, and - 0.5 mm for butting rails.



Weight kg/m	Max. Length $L_0$ for standard	Max. Length $L_0$ for black chrome	Model-No.
1.6	2000	2000	L1H15 ... Z
2.6	3960	3000	L1H20 ... Z
3.6	3960	3000	L1H25 ... Z
5.2	4000	3040	L1H30 ... Z
7.2	4000	3040	L1H35 ... Z
12.3	3990	3045	L1H45 ... Z
16.9	3960	3000	L1H55 ... Z
24.3	3900	3000	L1H65 ... Z

When cutting the black chrome rails to the desired length, the extreme faces of the rail will lack this black chrome plating.

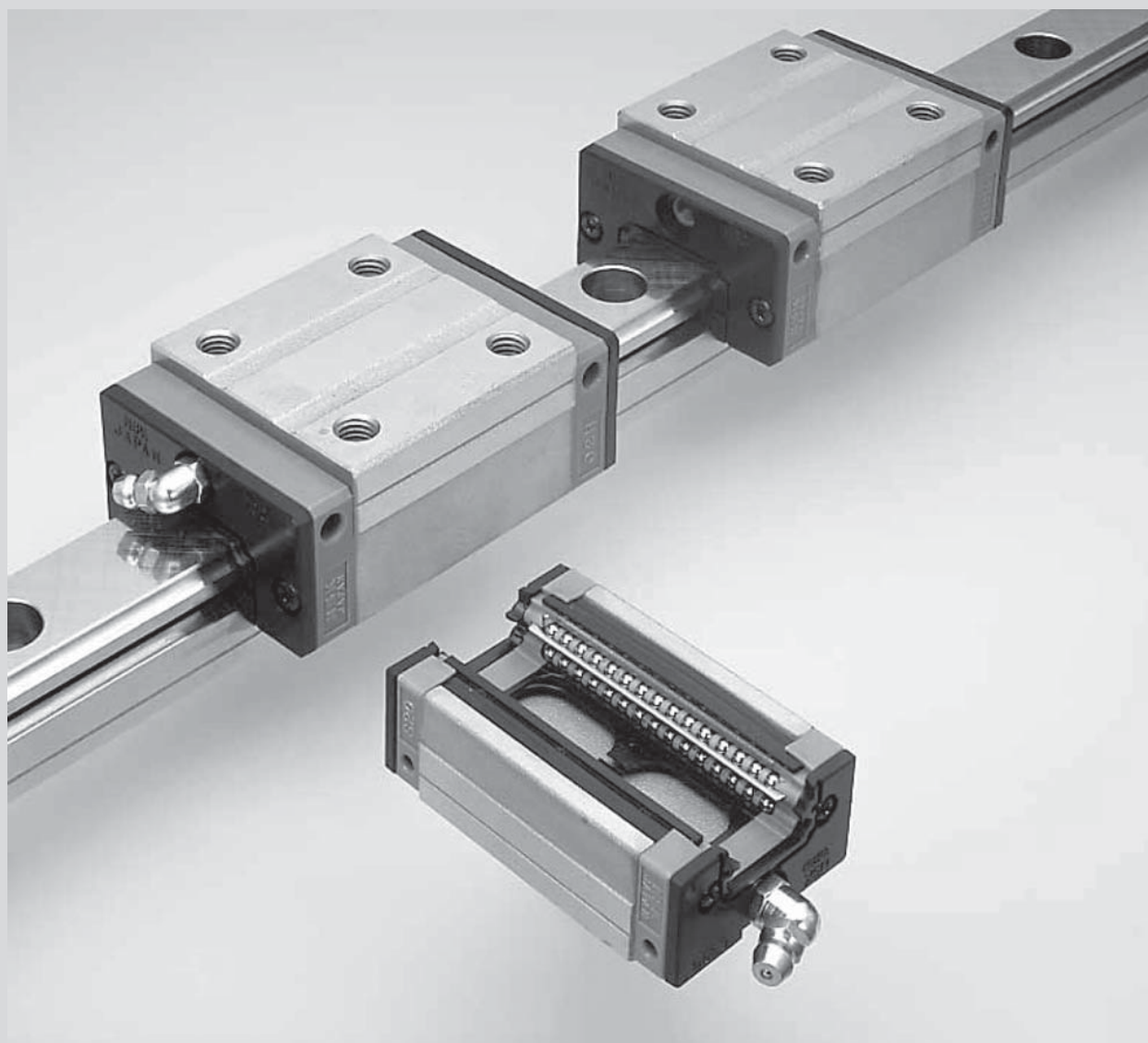


## SH Series

### Main features:

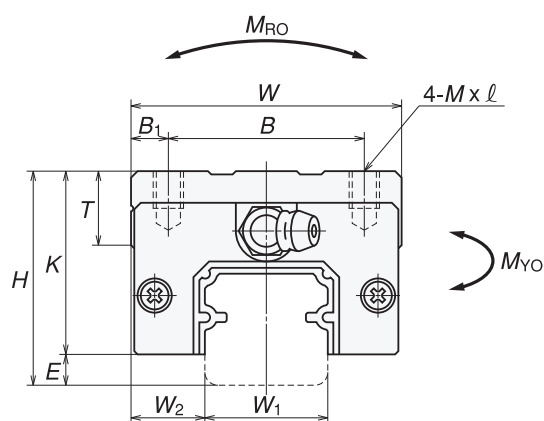
The SH series is available as interchangeable type. Interchangeable types enable random matching of rails and ball slides for prompt delivery.

Silent operation and low friction due to the ball spacers between the balls, that prevent collision and rubbing.



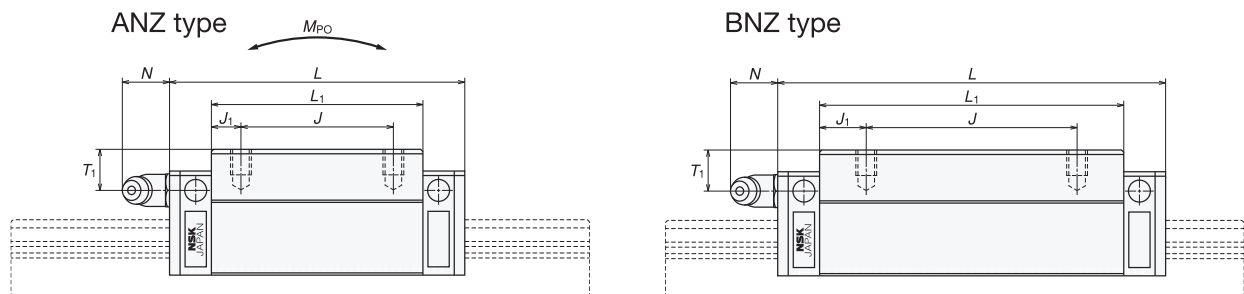
SH interchangeable type  
applicable to standard LH rail

## Sliders ANZ and BNZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Model-No.	Assembly (mm)			Slider (mm)									
	$H$	$E$	$W_2$	$W$	$L$	$B$	$J$	$M \times \text{Lead} \times l$	$B_1$	$L_1$	$J_1$	$K$	$T$
SAH15ANZ SAH15BNZ	28	4.6	9.5	34	55 74	26	26	M4×0.7×6	4	39 58	6.5 16	23.4	8
SAH20ANZ SAH20BNZ	30	5	12	44	69.8 91.8	32	36 50	M5×0.8×6	6	50 72	7 11	25	12
SAH25ANZ SAH25BNZ	40	7	12.5	48	79 107	35	35 50	M6×1×9	6.5	58 86	11.5 18	33	12
SAH30ANZ SAH30BNZ	45	9	16	60	85.6 124.6	40	40 60	M8×1.25×10	10	59 98	9.5 19	36	14
SAH35ANZ SAH35BNZ	55	9.5	18	70	109 143	50	50 72	M8×1.25×12	10	80 114	15 21	45.5	15

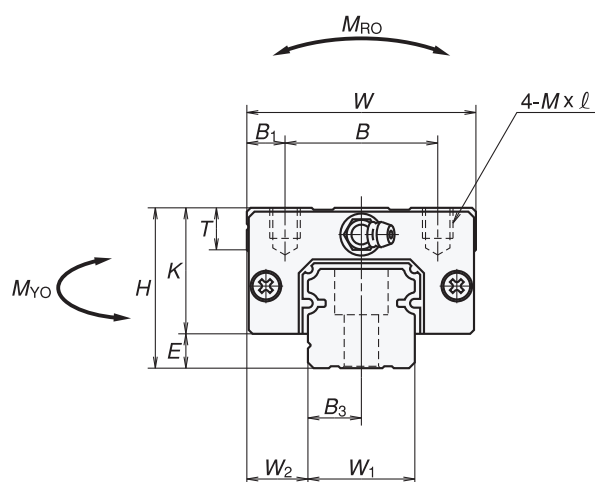


Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Grease fitting (mm)		Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)	
	$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)		Rail (kg/m)
Ø3	8.5	3.3	10 100	18 800	98	87	73	3.175	0.18	1.6	65.6
			13 400	28 200	147	193	162		0.26		84.6
M6×0.75	5	11	16 300	29 600	199	167	141	3.698	0.33	2.6	80.4
			21 600	44 500	298	360	305		0.48		102.4
M6×0.75	10	11	22 400	37 500	295	246	207	4.762	0.55	3.6	90.6
			32 000	62 500	490	615	515		0.82		118.6
M6×0.75	10	11	31 000	51 500	490	365	305	5.556	0.77	5.2	97.6
			46 000	91 500	870	1 060	885		1.3		136.6
M6×0.75	15	11	47 500	80 500	950	780	655	6.35	1.5	7.2	122
			61 500	117 000	1 380	1 600	1 340		2.1		156

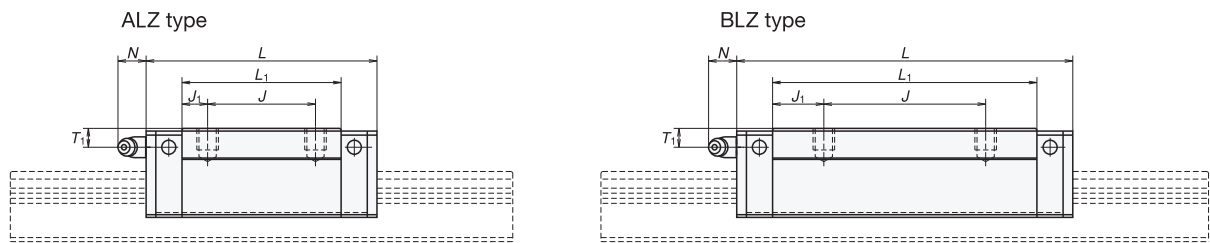
## Sliders ALZ and BLZ type

Frontal view of ALZ and BLZ types



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Model-No.	Assembly (mm)			Slider (mm)									
	H	E	W <sub>2</sub>	W	L	B	J	M×Lead×ℓ	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	T
SAH25ALZ	36	7	12.5	48	79	35	35	M6×1×6	6.5	58	11.5	29	12
SAH25BLZ					107		50				18		
SAH30ALZ	42	9	16	60	85.6	40	40	M8×1.25×8	10	59	9.5	33	14
SAH30BLZ					124.6		60				19		
SAH35ALZ	48	9.5	18	70	109	50	50	M8×1.25×8	10	80	15	38.5	15
SAH35BLZ					143		72				21		

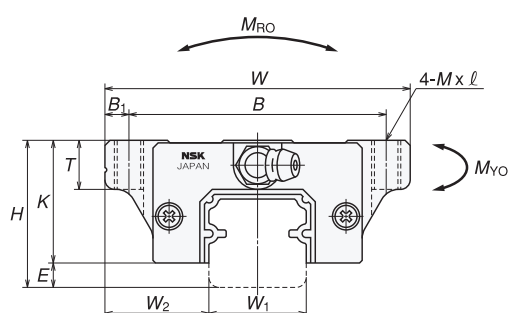


Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Grease fitting (mm)		Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)	
$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)	Rail (kg/m)		
M6×0.75	6	11	22 400	37 500	295	246	207	4.762	0.55	3.6	90.6
			32 000	62 500	490	615	515		0.82		
M6×0.75	7	11	31 000	51 500	490	365	305	5.556	0.77	5.2 <sup>^</sup>	97.6
			46 000	91 500	870	1 060	885		1.3		
M6×0.75	8	11	47 500	80 500	950	780	655	6.35	1.5	7.2	122
			61 500	117 000	1 380	1 600	1 340		2.1		



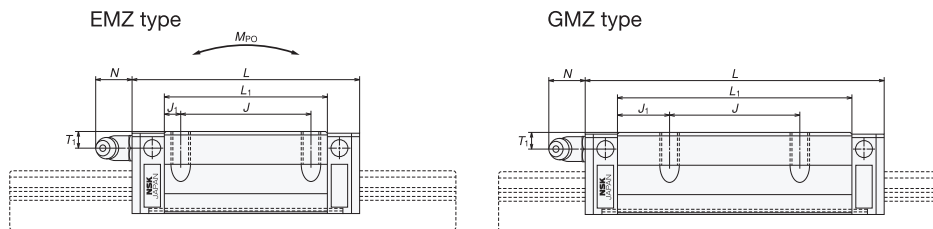
## Sliders EMZ and GMZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Model-No.	Assembly (mm)			Slider (mm)										
	H	E	W <sub>2</sub>	W	L	B	J	M×Lead×l	Q×l	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	T
SAH15EMZ SAH15GMZ	24	4.6	16	47	55 74	38	30	M5×0.8×7	4.5×7	4.5	39 58	4.5 14	19.4	8
SAH20EMZ SAH20GMZ	30	5	21.5	63	69.8 91.8	53	40	M6×1×9.5	6×10	5	50 72	5 16	25	10
SAH25EMZ SAH25GMZ	36	7	23.5	70	79 107	57	45	M8×1.25×10 (M8×1.25×11.5)	7×10 (7×11.5)	6.5	58 86	6.5 20.5	29	11 (12)
SAH30EMZ SAH30GMZ	42	9	31	90	98.6 124.6	72	52	M10×1.5×12 (M10×1.5×14.5)	9×12 (9×14.5)	9	72 98	10 23	33	11 (15)
SAH35EMZ SAH35GMZ	48	9.5	33	100	109 143	82	62	M10×1.5×13	9×13	9	80 114	9 26	38.5	12

Dimension in ( ) are applicable to stainless steel products.



Slider mounted on a dummy rail. For dimensions of the rail see pages 38 and 39

Grease fitting (mm)			Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)
$T_1$	$N$	<i>Dynamic C</i>	<i>Static C<sub>0</sub></i>	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)	Rail (kg/m)		
Ø3	4.5	3.3	10 100	18 800	98	87	73	3.175	0.17	1.6	65.6
			13 400	28 200	147	193	162		0.25		84.6
M6×0.75	5	11	16 300	29 600	199	167	141	3.698	0.45	2.6	80.4
			21 600	44 500	298	360	305		0.65		102.4
M6×0.75	6	11	22 400	37 500	295	246	207	4.762	0.63	3.6	90.6
			32 000	62 500	490	615	515		0.93		118.6
M6×0.75	7	11	35 500	63 000	600	540	450	5.556	1.2	5.2	110.6
			46 000	91 500	870	1 060	885		1.6		136.6
M6×0.75	8	11	47 500	80 500	950	780	655	6.35	1.7	7.2	122
			61 500	117 000	1 380	1 600	1 340		2.4		156



## LS Series

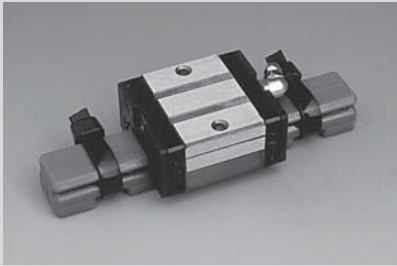
### Main features:

Both the sliders and the ball tracks are hardened by surface hardening. Due to the X configuration in the contact points of the balls with the tracks, the LH series feature a high self-aligning ability.

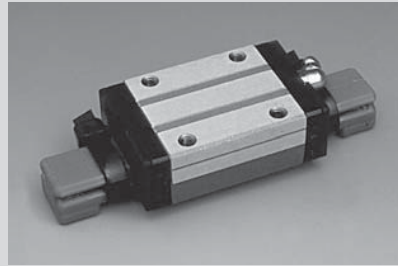
The LS series are available as interchangeable type. Interchangeable types enable random matching of rails and ball slides for prompt delivery.

As the LH series, this LS series are ideal for the general applications of the mechanical engineering, specially when there is a limited mounting space.

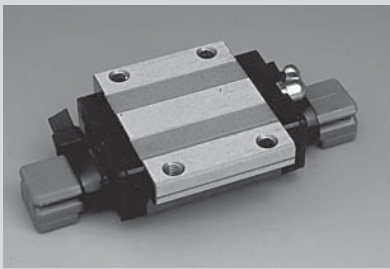
The LS Series are also available in stainless steel.



CL type  
Tap fixing holes

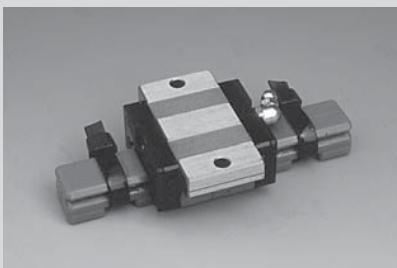


AL type  
Tap fixing holes



EM type  
Drill / tap holes

Size  
15 to 35



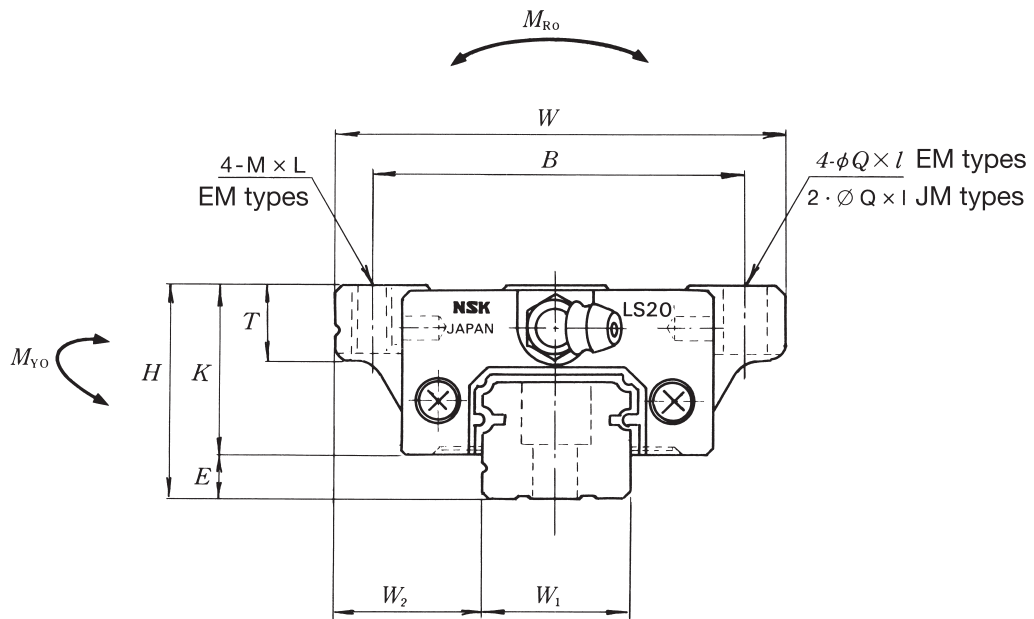
JM type  
Drill / tap holes

Size  
15 to 35



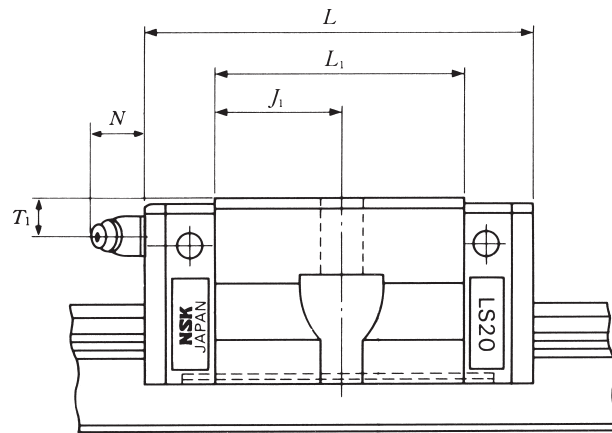
Rail

## Sliders JMZ and EMZ type

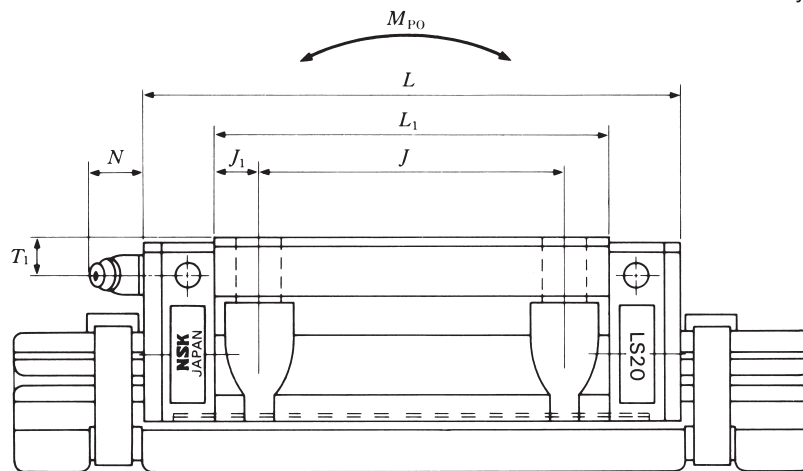


Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Model-No.	Assembly (mm)			Slider (mm)								
	H	E	W <sub>2</sub>	W	B × J	L	L <sub>1</sub>	J <sub>1</sub>	K	T	Q × l	M × l
LAS 15 JMZ EMZ	24	4.6	18.5	52	41 41 × 26	40.4 56.8	23.6 40	11.8 7	9.4	8	4.5 × 7	M5 × 7
LAS 20 JMZ EMZ	28	6	19.5	59	49 49 × 32	47.2 65.2	30 48	15 8	22	10	5.3 × 9	M6 × 9
LAS 25 JMZ EMZ	33	7	25	73	60 60 × 35	59.4 81.4	38 60	19 12.5	26	11	6.8 × 10	M8 × 12
LAS 30 JMZ EMZ	42	9	31	90	72 × 40 72 × 40	96.4 96.4	71 71	15.5 15.5	33	11	8.6 × 12	M10 × 12
LAS 35 JMZ EMZ	48	10.5	33	100	82 × 50 82 × 50	108 108	80 80	15 15	37.5	12	8.6 × 13	M10 × 13



JM types

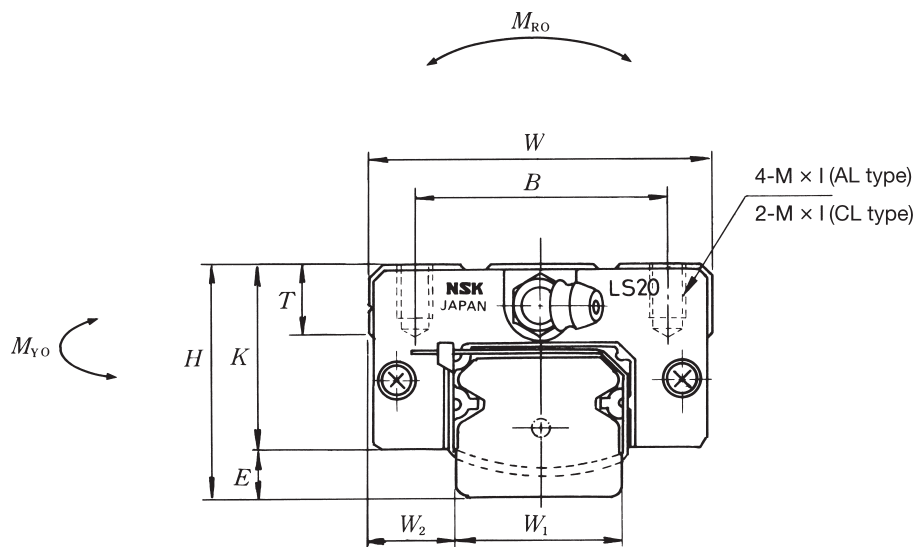


EM types

Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

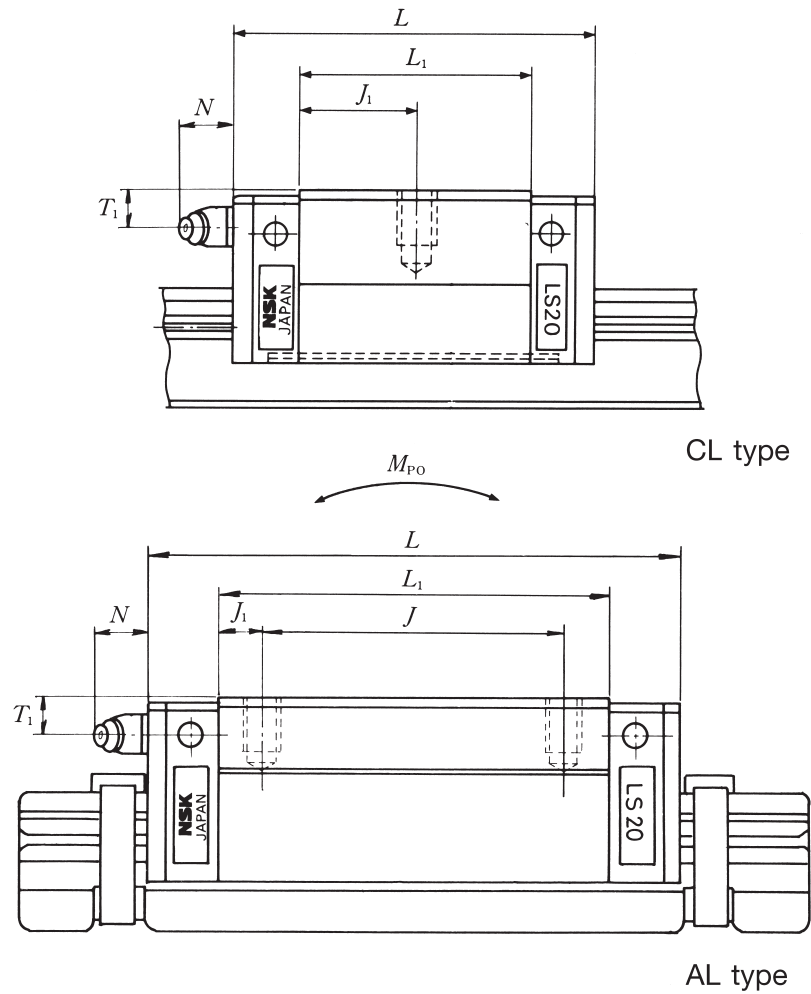
Grease fitting (mm)			Basic load rating (N)		Static moment (Nm)			Weight (kg)	Slider length with 2 K1 (mm)
	T <sub>1</sub>	N	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>YO</sub>		
Ø 3	6	3	5 400	9 100	46	25	21	0.17	50
			8 350	16 900	85	77	65	0.26	66.4
M 6 × 0.75	5.5	11	7 900	13 400	92	47	39	0.24	57.8
			11 700	23 500	160	133	111	0.35	75.8
M 6 × 0.75	7	11	12 700	20 800	164	91	76	0.44	70.2
			18 800	36 500	286	258	217	0.66	92.2
M 6 × 0.75	8	11	28 800	55 000	520	435	365	1.20	79.4
			28 800	55 000	520	435	365	1.20	108.4
M 6 × 0.75	8.5	11	40 000	74 500	865	695	580	1.70	90
			40 000	74 500	865	695	580	1.70	121

## Sliders CLZ and ALZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Model-No.	Assembly (mm)			Slider (mm)								
	H	E	W <sub>2</sub>	W	B × J	L	L <sub>1</sub>	J <sub>1</sub>	K	T	M × I	
LAS 15	CLZ ALZ	24	4.6	9.5	34	26 26 × 26	40.4 56.8	23.6 40	11.8 7	19.4	10	M4 × 6
LAS 20	CLZ ALZ	28	6	11	42	32 32 × 32	47.2 65.2	30 48	15 8	22	12	M5 × 7
LAS 25	CLZ ALZ	33	7	12.5	48	35 35 × 35	59.4 81.4	38 60	19 12.5	26	12	M6 × 9
LAS 30	CLZ ALZ	42	9	16	60	40 40 × 40	67.4 96.4	42 71	21 15.5	33	13	M8 × 12
LAS 35	CLZ ALZ	48	10.5	18	70	50 50 × 50	77 108	49 80	24.5 15	37.5	14	M8 × 12

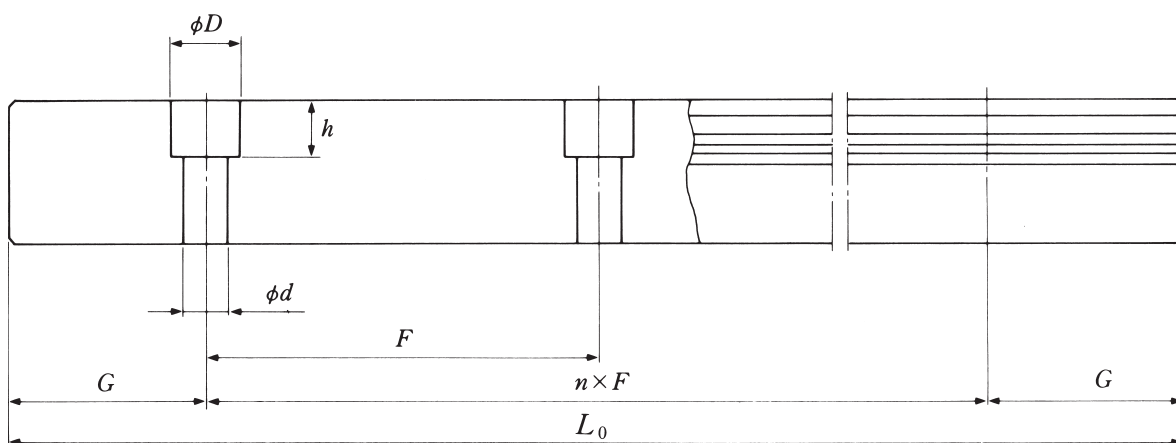


Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Grease fitting (mm)			Basic load rating (N)		Static moment (Nm)			Weight (kg)	Slider length with 2 K1 (mm)
	T <sub>1</sub>	N	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>YO</sub>		
Ø 3	6	3	5 400	9 100	46	25	21	0.14	50
			8 350	16 900	85	77	65	0.20	66.4
M 6 × 0.75	5.5	11	7 900	13 400	92	47	39	0.19	57.8
			11 700	23 500	160	133	111	0.28	75.8
M 6 × 0.75	7	11	12 700	20 800	164	91	76	0.34	70.2
			18 800	36 500	286	258	217	0.51	92.2
M 6 × 0.75	8	11	18 700	29 600	282	139	116	0.58	67.4
			28 800	55 000	520	435	365	0.85	79.4
M 6 × 0.75	8.5	11	26 000	40 000	465	220	185	0.86	90
			40 000	74 500	865	695	580	1.25	121

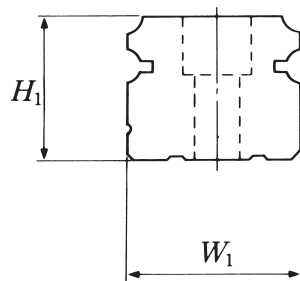


## Rail LS type



Model-No.	Rail dimensions (mm)				
	$W_1$	$H_1$	$F$	$d \times D \times h$	G (recommended)
L1S15 . . . Z	15	12.5	60	3.5 × 6 × 4.5	20 <sub>-2</sub>
L1S15 . . . T . . . Z	15	12.5	60	4.5 × 7.5 × 5.3	20 <sub>-2</sub>
L1S20 . . . Z	20	15.5	60	6 × 9.5 × 8.5	20 <sub>-2</sub>
L1S25 . . . Z	23	18	60	7 × 11 × 9	20 <sub>-2</sub>
L1S30 . . . Z	28	23	80	7 × 11 × 9	20 <sub>-2</sub>
L1S35 . . . Z	34	27.5	80	9 × 14 × 12	20 <sub>-2</sub>

The cutting tolerance of the ends of the rail (G dimension) is - 2 mm for standard, and - 0.5 mm for butting rails.

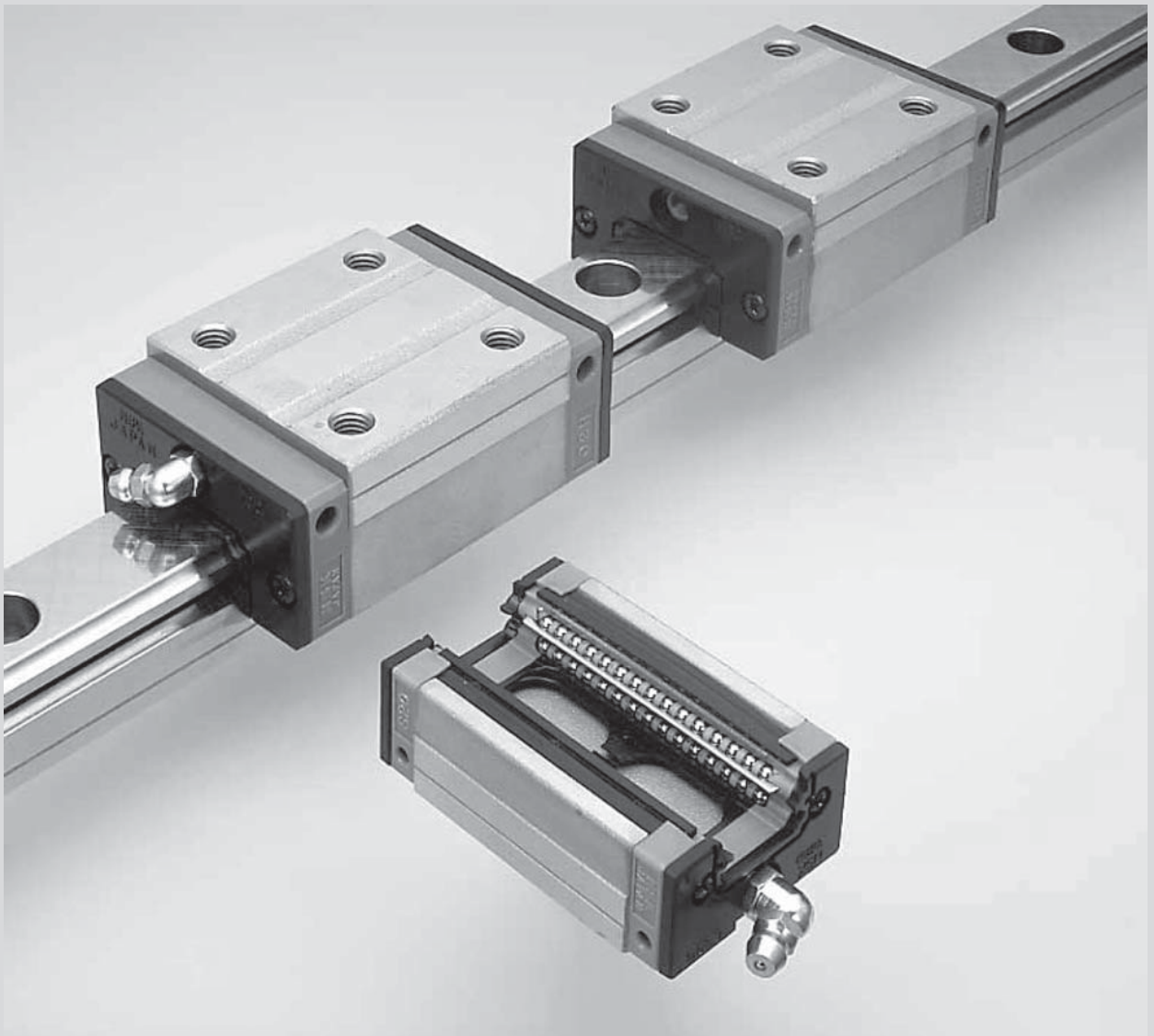


Weight kg	Max. Length $L_0$	Max. Length $L_0$ for stainless steel	Model-No.
1.4	2000	1700	L1S15 ... Z
1.4	1600	1000	L1S15 ... T ... Z
2.3	3960	3500	L1S20 ... Z
3.1	3960	3500	L1S25 ... Z
4.8	4000	3500	L1S30 ... Z
7.0	4000	3500	L1S35 ... Z



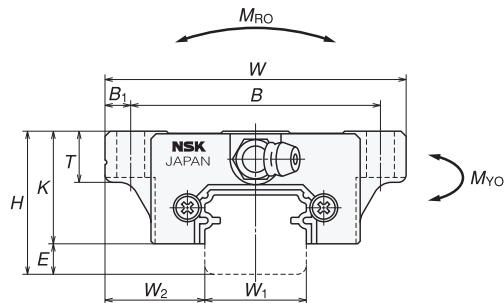
## SS Series

5



SS interchangeable type  
applicable to standard LS rail

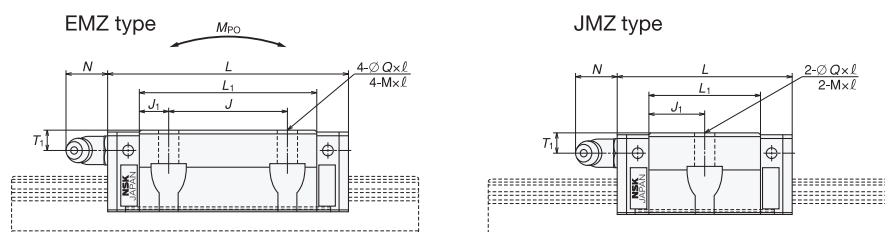
## Linear guide with slider **SS-EMZ** (high load type) and **SS-KLZ** (medium load type)



Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Model-No.	Assembly (mm)			Slider (mm)										
	H	E	W <sub>2</sub>	W	L	B	J	Q×ℓ	M×Lead×ℓ	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	T
SAS15JMZ	24	4.6	18.5	52	40.4	41	—	4.4×7	M5×0.8×7	5.5	23.6	11.8	19.4	8
SAS15EMZ					56.8		26					7		
SAS20JMZ	28	6	19.5	59	47.2	49	—	5.3×9	M6×1×9	5	30	15	22	10
SAS20EMZ					65.2		32					8		
SAS25JMZ	33	7	25	73	59.6	60	—	6.8×10	M8×1.25×10	6.5	38	19	26	11
SAS25EMZ					81.6		35					12.5		
SAS30JMZ	42	9	31	90	67.4	72	—	8.6×12	M10×1.5×12	9	42	21	33	11
SAS30EMZ					96.4		40					15.5		
SAS35JMZ	48	10.5	33	100	77	82	—	8.6×13	M10×1.5×13	9	49	24.5	37.5	12
SAS35EMZ					108		50					15		

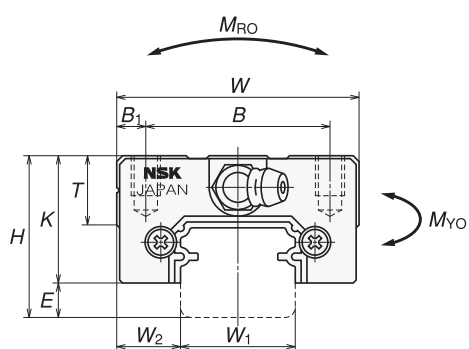
Dimensions in ( ) are applicable to stainless steel products.



Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

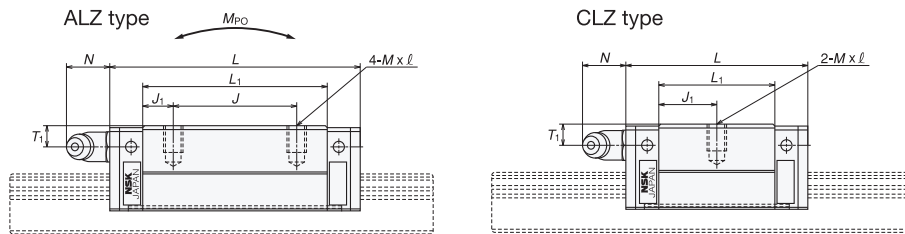
Grease fitting (mm)		Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)	
$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)	Rail (kg/m)		
Ø3	6	3	4 900	7 800	39	21	18	2.778	0.17	1.4	50
			7 900	15 600	78	74	62		0.26		66.4
M6x0.75	5.5	11	7 250	11 800	80	41	34	3.175	0.24	2.3	57.8
			11 100	21 800	149	124	104		0.35		75.8
M6x0.75	7	11	12 700	20 800	164	96.5	81	3.968	0.44	3.1	70.2
			17 900	33 500	266	242	203		0.66		92.2
M6x0.75	8	11	18 700	29 600	282	153	128	4.762	0.76	4.8	79.4
			27 300	50 500	480	415	350		1.2		108.4
M6x0.75	8.5	11	26 000	40 000	465	234	196	5.556	1.2	7	90
			38 000	68 500	800	620	520		1.7		121

## Sliders ALZ and CLZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Model-No.	Assembly (mm)			Slider (mm)									
	H	E	W <sub>2</sub>	W	L	B	J	M×Lead×ℓ	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	T
SAS15CLZ	24	4.6	9.5	34	40.4	26	—	M4×0.7×6	4	23.6	11.8	19.4	10
SAS15ALZ					56.8		26			40	7		
SAS20CLZ	28	6	11	42	47.2	32	—	M5×0.8×7	5	30	15	22	12
SAS20ALZ					65.2		32			48	8		
SAS25CLZ	33	7	12.5	48	59.6	35	—	M6×1×9	6.5	38	19	26	12
SAS25ALZ					81.6		35			60	12.5		
SAS30CLZ	42	9	16	60	67.4	40	—	M8×1.25×12	10	42	21	33	13
SAS30ALZ					96.4		40			71	15.5		
SAS35CLZ	48	10.5	18	70	77	50	—	M8×1.25×12	10	49	24.5	37.5	14
SAS35ALZ					108		50			80	15		



Slider mounted on a dummy rail. For dimensions of the rail see pages 54 and 55

Grease fitting (mm)		Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)	
	$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)		Rail (kg/m)
Ø3	6	3	4 900	7 800	39	21	18	2.778	0.14	1.4	50
			7 900	15 600	78	74	62		0.2		66.4
M6×0.75	5.5	11	7 250	11 800	80	41	34	3.175	0.19	2.3	57.8
			11 100	21 800	149	124	104		0.28		75.8
M6×0.75	7	11	12 700	20 800	164	97	81	3.968	0.34	3.1	70.2
			17 900	33 500	266	242	203		0.51		92.2
M6×0.75	8	11	18 700	29 600	282	153	128	4.762	0.58	4.8	67.4
			27 300	50 500	480	415	350		0.85		79.4
M6×0.75	8.5	11	26 000	40 000	465	234	196	5.556	0.86	7	90
			38 000	68 500	800	620	520		1.3		121

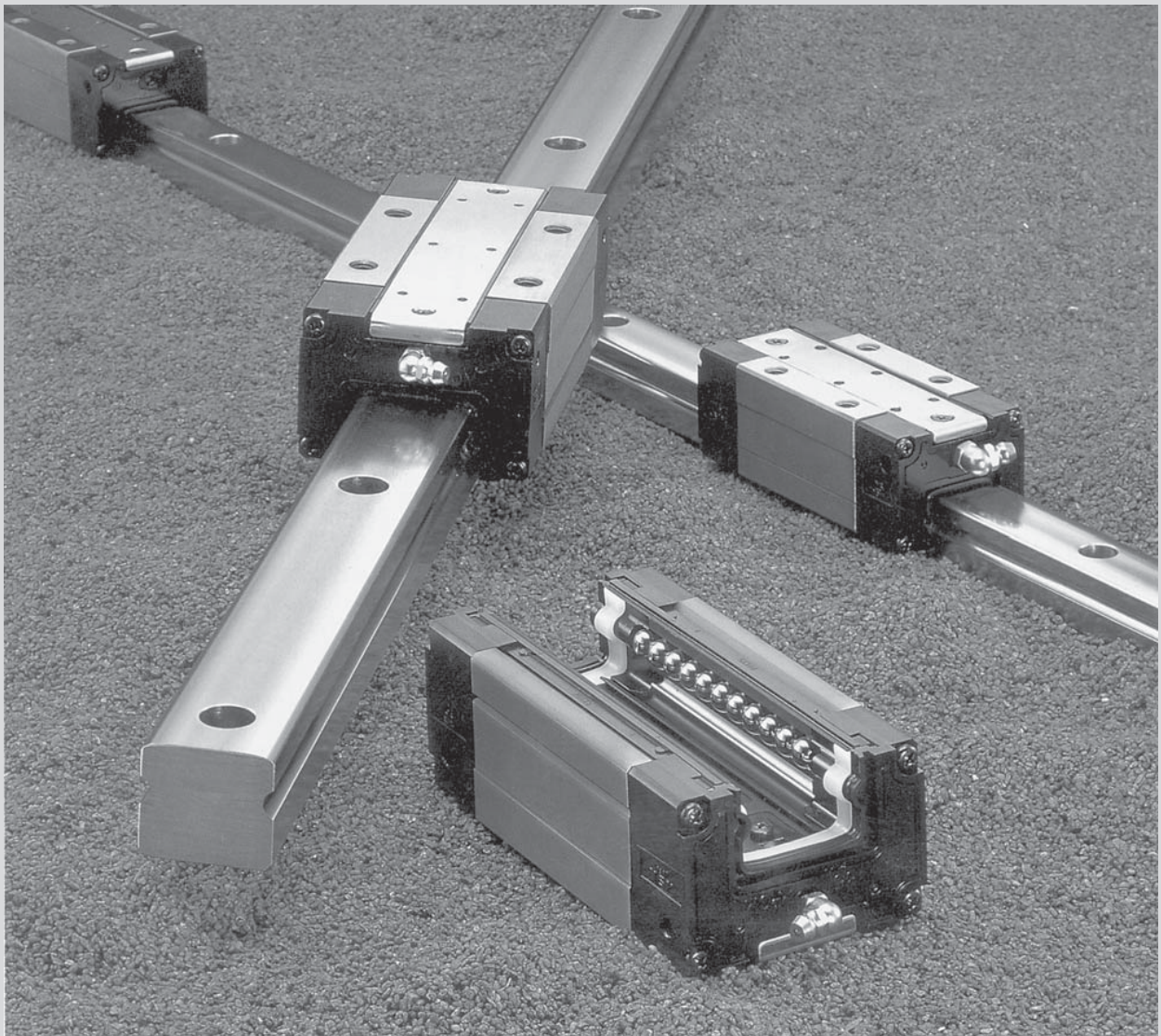




## Translide™

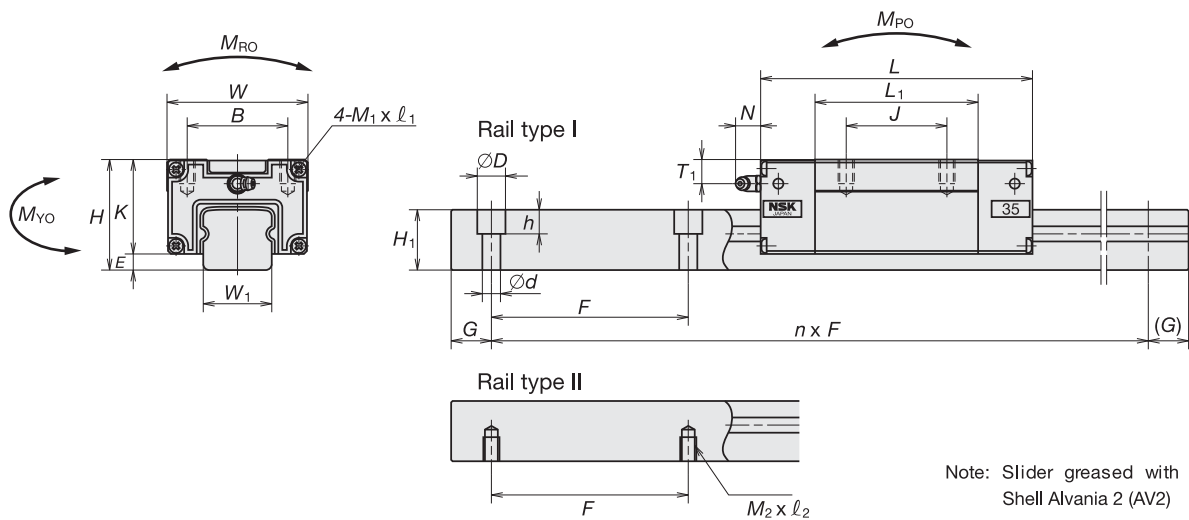
### Main features:

This innovative guiding system features an outstanding reliability in contaminated environments, and at the same time is economically convenient. Translide™ is equipped with the K1 lubrication units and with the triple lipped high performance seal as standard. Translide™ is specially suitable for transportation equipment.



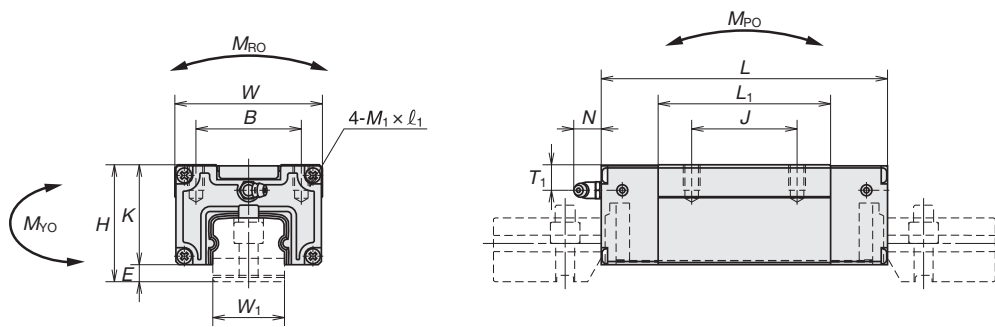
AN type  
Slider with tap fixing holes.

## Translide with AN slider



For the reference number of the rail, see page 9

Model-No.	Assembly (mm)		Slider (mm)										Rail dimensions		
	$H^{\pm 0.1}$	E	W	L	B	J	$M_1 \times \text{Lead} \times l_1$	$L_1$	K	Grease fitting (mm)			$W_1$	$H_1$	F
										$\varnothing$	$T_1$	N			
TAS15AN	28	3	34	72.2	26	26	M4×0.7×6	39	25	∅3	6.5	(5)	15	14	120
TAS20AN	30	3	44	87	32	36	M5×0.8×8	50	27	M6×0.75	6.5	(14)	20	15	120
TAS25AN	40	4	48	100	35	35	M6×1×9	58	36	M6×0.75	9.5	(14)	23	20	120
TAS30AN	45	6.5	60	115	40	40	M8×1.25×10	70	38.5	M6×0.75	9.5	(14)	28	25	160
TAS35AN	55	8	70	135.8	50	50	M8×1.25×12	81.8	47	M6×0.75	12	(14)	34	30	160



For the reference number of the rail, see page 9

Rail dimensions (mm)				Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight	
Type I $d \times h$	Type II $M_2 \times \text{Lead} \times l_2$	G	Max. length $L_{0\text{max}}^*$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)	(kg/m)
4.5×7.5×5.3	M4×0.7×6	20	1 960	9 800	11 800	92	64	64	3.968	0.21	1.5
6×9.5×8.5	M5×0.8×8	20	2 920	15 700	19 100	196	137	137	4.762	0.37	2.1
7×11×9	M6×1×9	20	4 000	21 800	26 000	320	217	217	5.556	0.47	3.4
9×14×12	M8×1.25×12	20	4 040	31 000	37 500	565	395	395	6.350	0.77	5.3
9×14×12	M8×1.25×12	20	4 040	46 500	53 000	970	635	635	7.937	1.3	7.7

\* Maximum length of a rail. Nevertheless, it is possible to assemble various rails up to the desired total length.

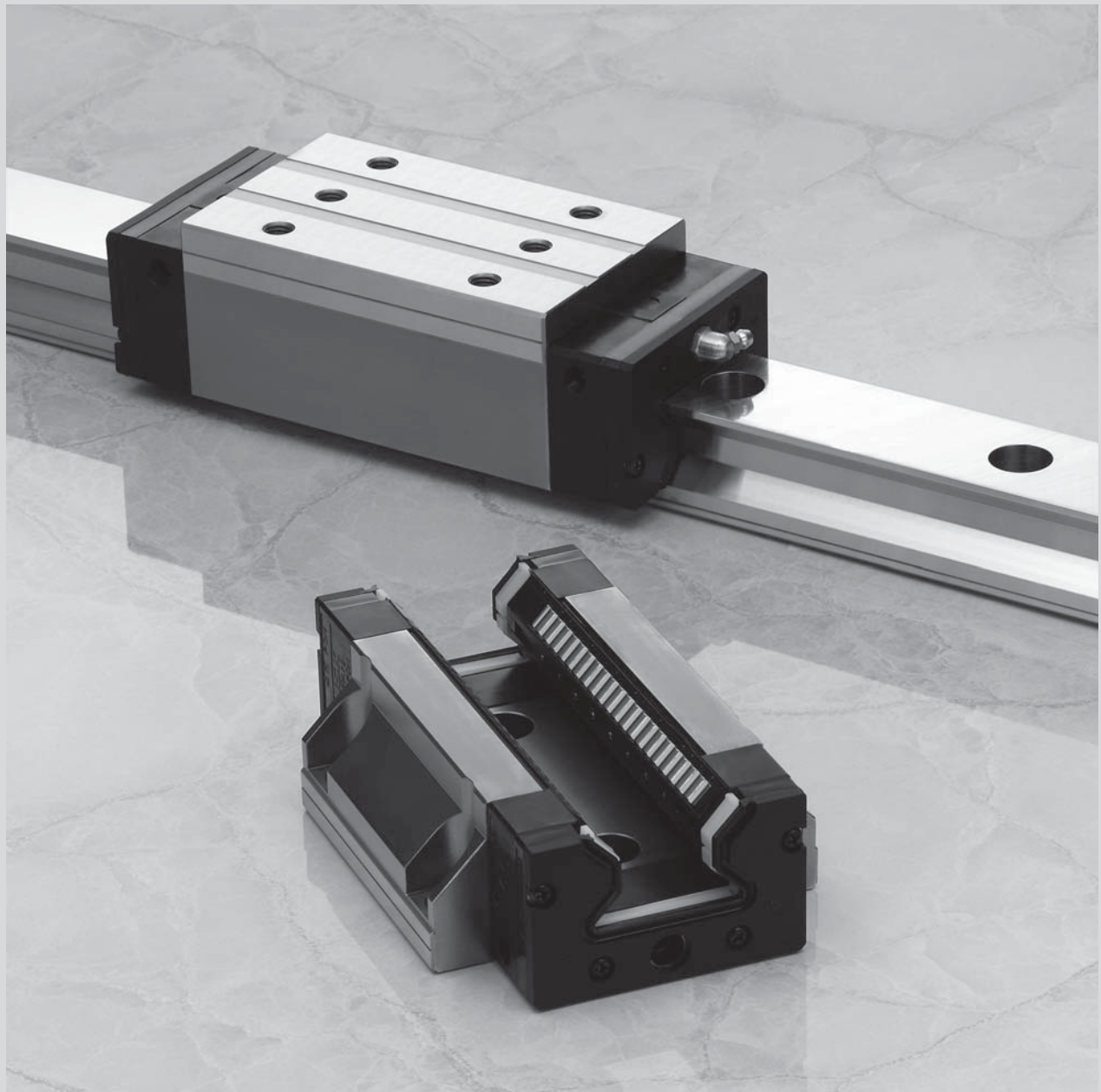


## RA Series

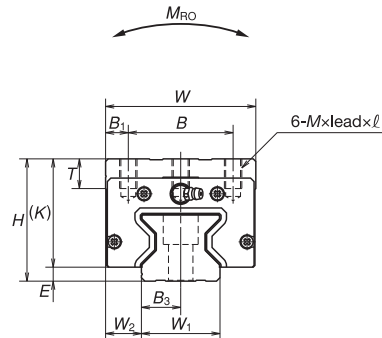
### Main features:

A roller guide series employing advanced analysis technology offers super-high load capacity and rigidity. The RA series includes a complete line-up to handle a wide range of applications.

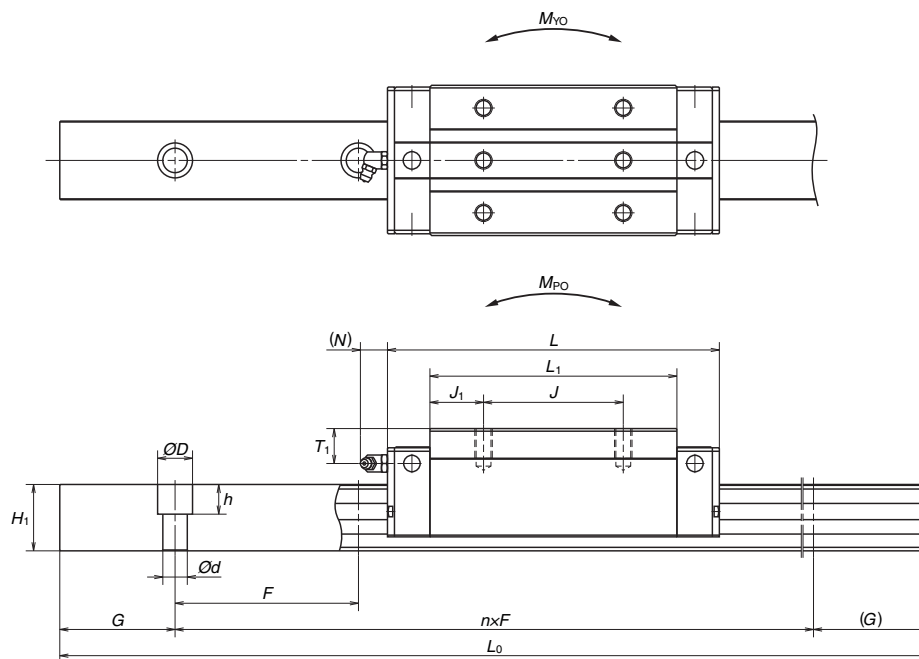
The RA series of roller guides is the product of a combination of NSK's extensive experience in roller bearings and linear guide technologies. The result is an optimal design that takes full advantage of NSK's unique expertise to realize super-high load capacity, rigidity and motion accuracy, plus smooth motion. Capable of handling a variety of applications, the RA series supports high machine performance.



## Roller guide with sliders RA-AL, RA-AN (high load type) RA-BL, RA-BN (super-high load type)



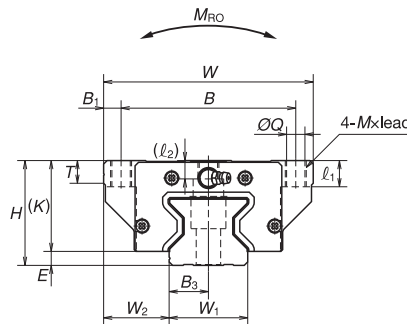
Model No.	Assembly [mm]			Slider [mm]											Grease fitting [mm]	
	H	E	W <sub>2</sub>	W	L	Fixing holes			B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	T	Grease fitting [mm]		
						B	J	M×lead×ℓ						T <sub>1</sub>		
RA15AL	24				70			M4×0.7×5.5		44.8	9.4	20			4	
RA15AN	28	4	9.5	34		26	26	M4×0.7×6	4			24	8	M3×0.5	8	3
RA15BL	24				85.4			M4×0.7×5.5		60.2	17.1	20			4	
RA15BN	28							M4×0.7×6				24			8	
RA20AN	30	5	12	44	86.5	32	36	M5×0.8×6	6	57.5	10.75	25	12	M3×0.5	4	3
RA20BN					106.3		50			77.3	13.65					
RA25AL	36				97.5		35			65.5	15.25	31			6	
RA25AN	40	5	12.5	48		35		M6×1×9	6.5			35	12	M6×0.75	10	11
RA25BL	36				115.5		50			83.5	16.75	31			6	
RA25BN	40											35			10	
RA30AL	42				110.8		40	M8×1.25×11		74	17	35.5			7	
RA30AN	45	6.5	16	60		40		M8×1.25×11	10			38.5	14	M6×0.75	10	11
RA30BL	42				135.4		60	M8×1.25×11		98.6	19.3	35.5			7	
RA30BN	45							M8×1.25×11				38.5			10	
RA35AL	48				123.8		50			83.2	16.6	41.5			8	
RA35AN	55	6.5	18	70		50		M8×1.25×12	10			48.5	15	M6×0.75	15	11
RA35BL	48				152		72			111.4	19.7	41.5			8	
RA35BN	55											48.5			15	
RA45AL	60				154		60	M10×1.5×16		105.4	22.7	52			10	
RA45AN	70	8	20.5	86		60		M10×1.5×17	13			62	17	Rc1/8	20	14
RA45BL	60				190		80	M10×1.5×16		141.4	30.7	52			10	
RA45BN	70							M10×1.5×17				62			20	
RA55AL	70				184		75			128	26.5	61			11	
RA55AN	80	9	23.5	100		75		M12×1.75×18	13			71	18	Rc1/8	21	14
RA55BL	70				234		95			178	41.5	61			11	
RA55BN	80											71			21	
RA65AN	90	13	31.5	126	228.4	76	70	M16×2×20	25	155.4	42.7	77	22	Rc1/8	19	14
RA65BN					302.5		120			229.5	54.75					



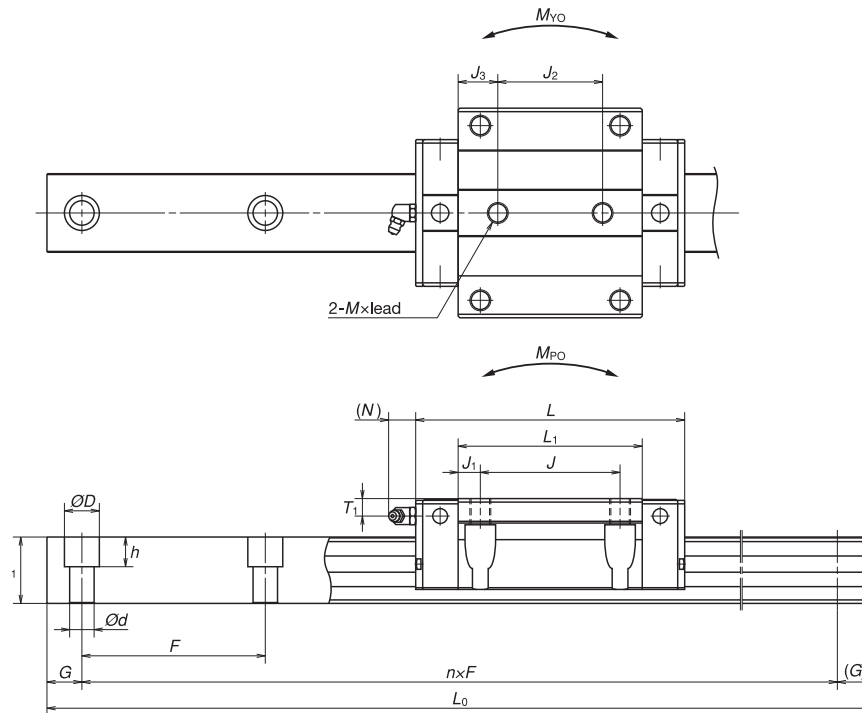
Rail dimensions [mm]							Basic load rating (N)					Weight		Slider Length (mm)
W <sub>1</sub>	H <sub>1</sub>	F	d×D×h	B <sub>3</sub>	G (recommended)	L <sub>0max</sub>	Dynamic	Static	Static moment [Nm]			Slider (kg)	Rail (kg/m)	
							C (N)	C <sub>0</sub> (N)	M <sub>R0</sub> (N·m)	M <sub>P0</sub> (N·m)	M <sub>Y0</sub> (N·m)			
15	16.3	60 (30)	4.5×7.5×5.3	7.5	20	2000	10300	27500	210	210	210	0.17	1.6	79
							13000	37000	350	375	375	0.21		94.4
20	20.8	60 (30)	6×9.5×8.5	10	20	3000	19200	52500	665	505	505	0.38	2.6	95.5
							24000	70000	890	900	900	0.50		115.3
23	24	30	7×11×9	11.5	20	3000	29200	72700	970	760	760	0.45	3.4	107.5
							35400	92900	1240	1240	1240	0.60		125.5
28	28	40	9×14×12	14	20	3000	38900	93500	1670	1140	1140	0.85	4.9	122.8
							47600	121000	2170	1950	1950	1.0		147.4
34	31	40	9×14×12	17	20	3000	53300	129000	2810	1800	1800	1.2	6.8	136.8
							67400	175000	3810	3250	3250	1.6		165
45	38	52.5	14×20×17	22.5	22.5	3000	92800	229000	6180	4080	4080	2.5	10.9	168
							116000	305000	8240	7150	7150	3.0		204
53	43.5	60	16×23×20	26.5	30	3000	129000	330000	10200	7060	7060	4.1	14.6	198
							168000	462000	14300	13600	13600	4.9		248
63	55	75	18×26×22	31.5	35	3000	210000	504000	19200	12700	12700	5.7	22.0	243.3
							288000	756000	28700	28600	28600	6.7		317.5



## Roller guide with sliders RA-EM (high load type) RA-GM (super-high load type)



Model No.	Assembly [mm]					Slider [mm]											Grease fitting [mm]		
	H	E	W <sub>2</sub>	W	L	Fixing holes					B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	J <sub>3</sub>	K	T	Grease fitting		
						B	J	J <sub>2</sub>	Mxleadxℓ	Qxℓ							T <sub>1</sub>	N	
RA15EM	24	4	16	47	70	38	30	26	M5×0.8×8.5(6.5)	4.4×8.5(6.5)	4.5	44.8	7.4	9.4	20	8	M3×0.5	4	3
RA15GM					85.4							60.2	15.1	17.1					
RA20EM	30	5	21.5	63	86.5	53	40	35	M6×1×9.5(8)	5.3×9.5(8)	5	57.5	8.75	11.25	25	10	M3×0.5	4	3
RA20GM					106.3							77.3	18.65	21.15					
RA25EM	36	5	23.5	70	97.5	57	45	40	M8×1.25×10(11)	6.8×10(11)	6.5	65.5	10.25	12.75	31	11	M6×0.75	6	11
RA25GM					115.5							83.5	19.25	21.75					
RA30EM	42	6.5	31	90	110.8	72	52	44	M10×1.5×12(12.5)	8.6×12(12.5)	9	74	11	15	35.5	11	M6×0.75	7	11
RA30GM					135.4							98.6	23.3	27.3					
RA35EM	48	6.5	33	100	123.8	82	62	52	M10×1.5×13(7)	8.6×13(7)	9	83.2	10.6	15.6	41.5	12	M6×0.75	8	11
RA35GM					152							111.4	24.7	29.7					
RA45EM	60	8	37.5	120	154	100	80	60	M12×1.75×15(10.5)	10.5×15(10.5)	10	105.4	12.7	22.7	52	13	Rc1/8	10	14
RA45GM					190							141.4	30.7	40.7					
RA55EM	70	9	43.5	140	184	116	95	70	M14×2×18(13)	12.5×18(13)	12	128	16.5	29	61	15	Rc1/8	11	14
RA55GM					234							178	41.5	54					
RA65EM	90	13	53.5	170	228.4	142	110	82	M16×2×24(18.5)	14.6×24(18.5)	14	155.4	22.7	36.7	77	22	Rc1/8	19	14
RA65GM					302.5							229.5	59.75	73.75					



Rail dimensions [mm]							Basic load rating (N)					Weight		Slider Length (mm)
$W_1$	$H_1$	$F$	$d \times D \times h$	$B_3$	G (recommended)	$L_{0max}$	Dynamic C (N)	Static $C_0$ (N)	Static moment [Nm]			Slider (kg)	Rail (kg/m)	
									$M_{R0}$ (N·m)	$M_{P0}$ (N·m)	$M_{Y0}$ (N·m)			
15	16.3	60 (30)	4.5×7.5×5.3	7.5	20	2000	10300	27500	210	210	210	0.21	1.6	79
							13000	37000	350	375	375	0.28		94.4
20	20.8	60 (30)	6×9.5×8.5	10	20	3000	19200	52500	665	505	505	0.45	2.6	95.5
							24000	70000	890	900	900	0.65		115.3
23	24	30	7×11×9	11.5	20	3000	29200	72700	970	760	760	0.8	3.4	107.5
							35400	92900	1240	1240	1240	1.1		125.5
28	28	40	9×14×12	14	20	3000	38900	93500	1670	1140	1400	1.3	4.9	122.8
							47600	121000	2170	1950	1950	1.7		147.4
34	31	40	9×14×12	17	20	3000	53300	129000	2810	1800	1800	1.7	6.8	136.8
							67400	175000	3810	3250	3250	2.3		165
45	38	52.5	14×20×17	22.5	22.5	3000	92800	229000	6180	4080	4080	3.2	10.9	168
							116000	305000	8240	7150	7150	4.3		204
53	43.5	60	16×23×20	26.5	30	3000	129000	330000	10200	7060	7060	5.4	14.6	198
							168000	462000	14300	13600	13600	7.5		248
63	55	75	18×26×22	31.5	35	3000	210000	504000	19200	12700	12700	12.2	22.0	243.4
							288000	756000	28700	28600	28600	16.5		317.5



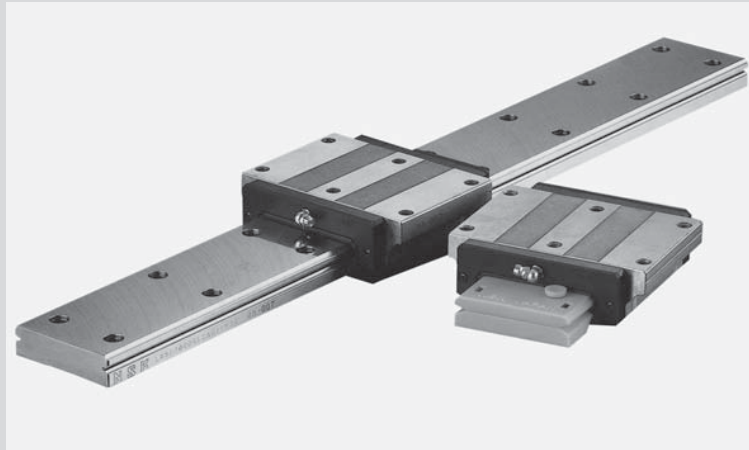
## LW Series

### Main features:

The sliders and the ball tracks are hardened by surface hardening.

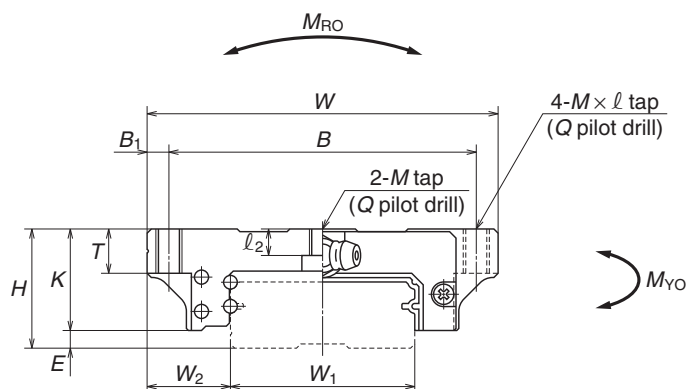
The design of the guide is similar to the LH type, but the width of the rail is over-sized, in order to bear high moment loads in rolling direction.

It is specially suitable for use as single rail, and it is available as interchangeable type for prompt delivery.



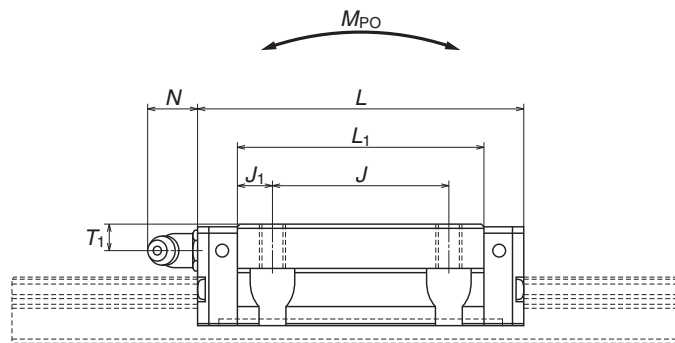
LW interchangeable type

## Slider ELZ type



Slider mounted on a dummy rail. For dimensions of the rail see pages 76 and 77

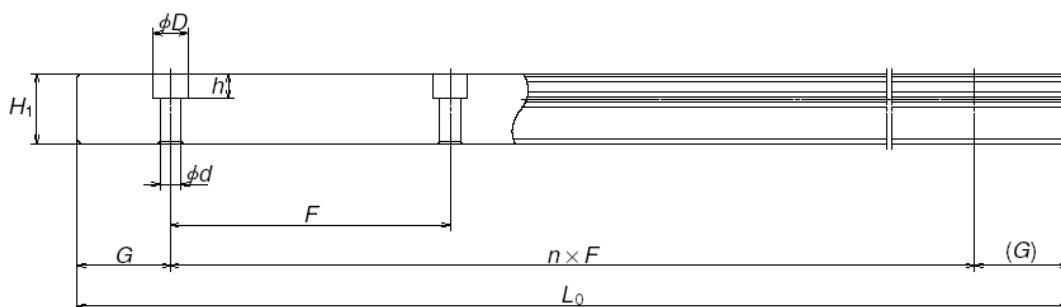
Model-No.	Assembly mm			Slider mm										
	H	E	W <sub>2</sub>	W	B	B <sub>1</sub>	L	l <sub>2</sub>	J	J <sub>1</sub>	K	T	M × l	Q
LAW17ELZ	17	2.5	13.5	60	53	3.5	51.4	3.2	26	4.5	14.5	6	M 4 × 6	3.3
LAW21ELZ	21	3	15.5	68	60	4	58.8	3.7	29	6	18	8	M 5 × 8	4.4
LAW27ELZ	27	4	19	80	70	5	74	6	40	8	23	10	M 6 × 10	5.3
LAW35ELZ	35	4	25.5	120	107	6.5	108	9	60	12	31	14	M 8 × 14	6.8
LAW50ELZ	50	4.5	36	162	144	9	140.6	14	80	14	45.5	18	M 10 × 18	8.6



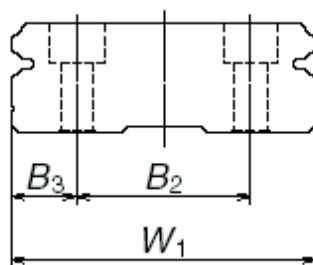
Slider mounted on a dummy rail. For dimensions of the rail see pages 76 and 77

Grease fitting		Basic load rating N		Static moment Nm			Slider Length with 2 K1	
	$T_1$	N	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$		$M_{YO}$
$\varnothing 3$	4	3	5600	11300	135	44	37	61.6
M6 × 0.75	4.5	11	6450	13900	185	66	55	71.4
M6 × 0.75	6	11	12800	26900	400	171	143	86.6
M6 × 0.75	8	11	33000	66500	1690	645	545	123
$R_c \frac{1}{8}$	14	14	61500	117000	3900	1530	1280	155.6

## Rail LW Series



Model-No.	Rail dimensions (mm)						
	$W_1$	$H_1$	$B_2$	$F$	$d \times D \times h$	$B_3$	G (recommended)
L1W17	33	8.7	18	40	4.5 x 7.5 x 5.3	7.5	15
L1W21	37	10.5	22	50	4.5 x 7.5 x 5.3	7.5	15
L1W27	42	15	24	60	4.5 x 7.5 x 5.3	9	20
L1W35	69	19	40	80	7 x 11 x 9	14.5	20
L1W50	90	24	60	80	9 x 14 x 12	15	20



Rail		Model-No.
Max. Length $L_{0 \max}$	Weight (kg / m)	
1000	2,1	L1W17
1600	2,9	L1W21
2000	4,7	L1W27
2400	9,6	L1W35
3000	15,8	L1W50





## Miniature Series PU and PE

### Main features:

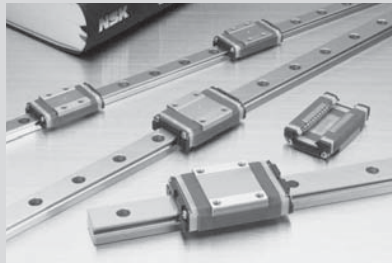
#### PU Series and PE Series

The PU series is a miniature linear guide with the re-circulation way made in resin. This innovative solution allows a weight reduction of the slider a smooth operation, because it is eliminated the metal-to-metal contact in the re-circulation way. For the same reason, the operation of the guide is more silent, and the dust emission is lower. The sealing system was improved, therefore the slider is better protected against the contamination by particles. The PU series can incorporate the lubrication system K1, for long free maintenance periods.

The PE series is similar to the PU series but with oversized wide rail. It allows the guide to bear higher moments in the rolling direction, which makes it suitable for single-rail applications.

#### LU Series

The LU series is similar to the PU series, but without the resin re-circulation way. Available in size 15, in special high carbon steel.



PU- and PE Series

#### Sizes PU Series

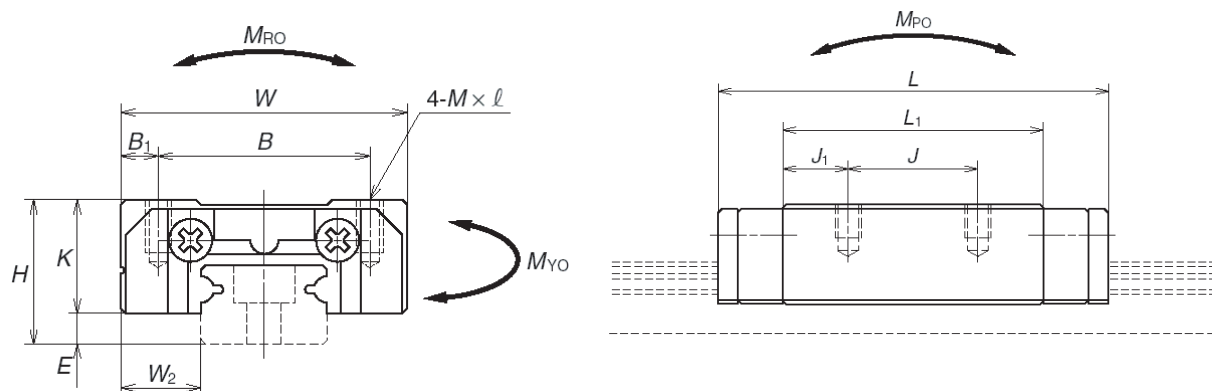
05 TR  
07 TR  
09 TR  
12 TR  
15 AL

#### Sizes PE Series

05 AR  
07 TR  
09 TR  
12 TR  
15 AR

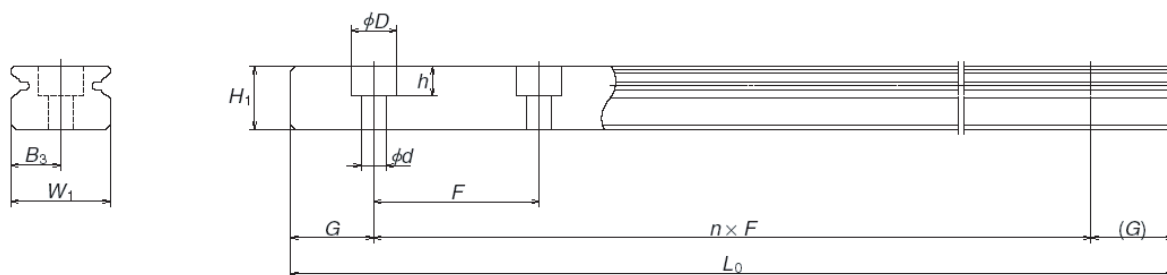


### Miniature Slider LU Series, size 15



Model No.	Assembly			Slider									Basic load rating (N)		Static moment (N·m)			Ball dia.	Weight
	Height H	E	W <sub>2</sub>	Width W	Length L	B	J	M x pitch x l	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	Dynamic C	Static C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>YO</sub>	D <sub>w</sub>	Slider (g)
LAU15AL	16	4	8.5	32	43.6	25	20	M3x0.5x4	3.5	27	3.5	12	5550	6600	50	26	26	3.175	70

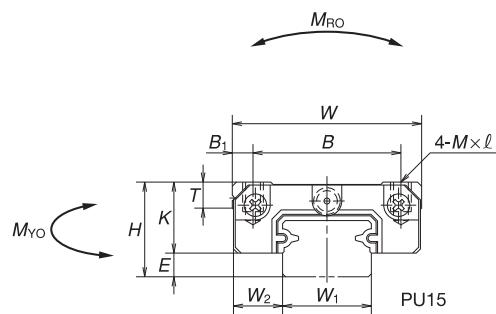
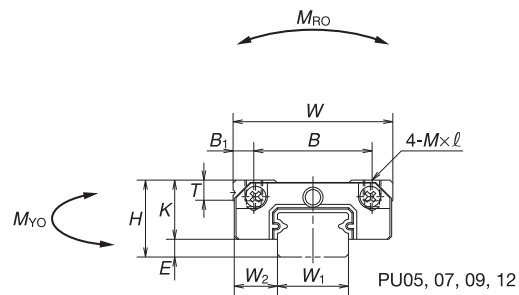
### Miniature Rail LU Series, size 15



Model No	Rail								Model No
	Width W <sub>1</sub>	Height H <sub>1</sub>	Pitch F	Mounting bolt Hole d x D x h	B <sub>3</sub>	G (recommended)	Max. length L <sub>0max</sub>	Weight (g / 100 mm)	
L1U15	15	9.5	40	3.5x6x4.5	7.5	15	2000	105	L1U15

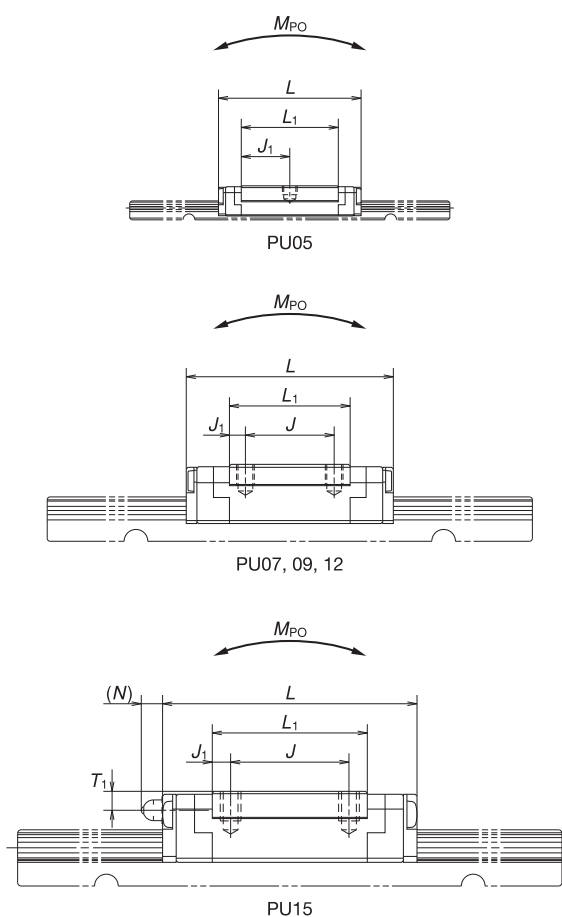
The size LU15AL is available in special high carbon steel (NSK standard)

## Miniature linear guide with sliders TR and AL type



Slider mounted on a dummy rail. For dimensions, see pages 84 and 85

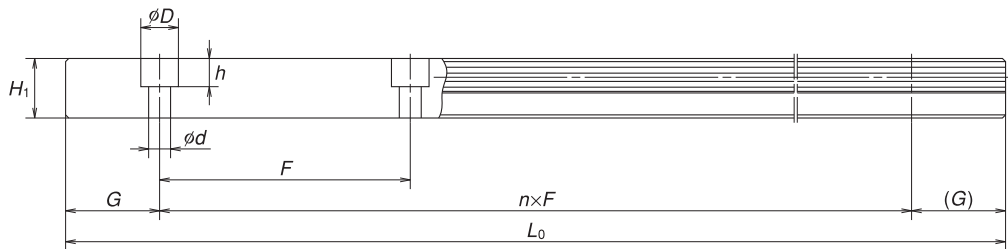
Model-No.	Assembly (mm)			Slider (mm)									
	$H$	$E$	$W_2$	$W$	$L$	$B$	$J$	$M \times \text{Lead} \times \ell$	$B_1$	$L_1$	$J_1$	$K$	$T$
PAU05TR	6	1	3.5	12	19.4	8	–	M2×0.4×1.5	2	11.4	5.7	5	2.3
PAU07AR	8	1.5	5	17	23.4	12	8	M2×0.4×2.4	2.5	13.3	2.65	6.5	2.45
PAU09TR	10	2.2	5.5	20	30	15	10	M3×0.5×3	2.5	19.6	4.8	7.8	2.6
PAU12TR	13	3	7.5	27	35	20	15	M3×0.5×3.5	3.5	20.4	2.7	10	3.4
PAU15AL	16	4	8.5	32	43	25	20	M3×0.5×5	3.5	26.2	3.1	12	4.4



Slider mounted on a dummy rail. For dimensions, see pages 84 and 85

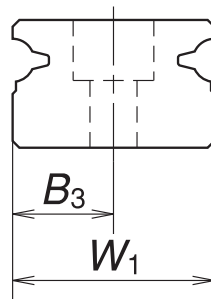
Grease fitting (mm)			Basic load rating (N)		Static moment (N · m)			Ball dia. $D_w$	Weight		Slider length with 2 K1 (mm)
	$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$		Slider (kg)	Rail (kg/m)	
-	-	-	520	775	2	1	1	1	3	11	24.4
-	-	-	1 090	1370	5	3	3	1.5875	8	23	29.4
-	-	-	1 490	2150	10	6	6	1.5875	16	35	36.4
-	-	-	2 830	3500	21	11	11	2.3812	32	65	42
Ø3	3.2	(3.3)	5 550	6600	50	26	26	3.175	59	105	51.2

## Rail PU Series



Model-No.	Rail dimensions (mm)					
	$W_1$	$H_1$	$F$	$d \times D \times h$	$B_3$	$G$ (recommended)
P1U05	5	3.2	15	2.3 x 3.3 x 0.8	2.5	5
P1U07	7	4.7	15	2.4 x 4.2 x 2.3	3.5	5
P1U09	9	5.5	20	3.5 x 6 x 4.5	4.5	7.5
P1U12	12	7.5	25	3.5 x 6 x 4.5	6	10
P1U15	15	9.5	40	3.5 x 6 x 4.5	7.5	15

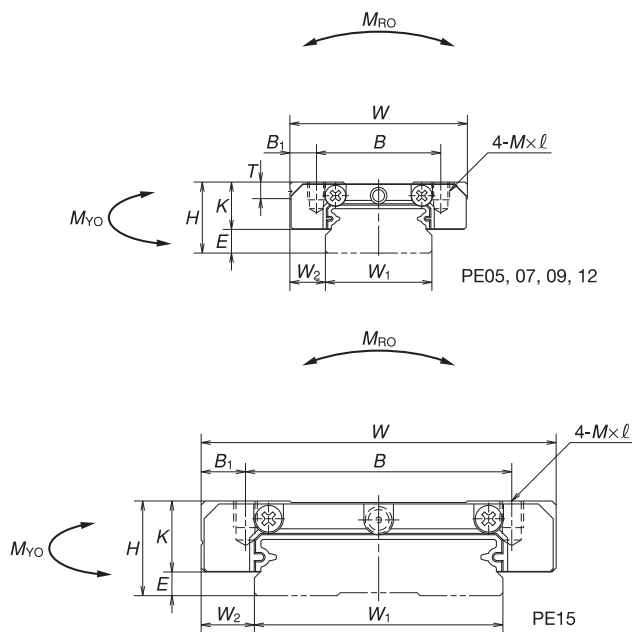
**Rail PU Series**



Rail		Model-No.
Max. Length $L_{0\max}$	Weight (g / 100 mm)	
210	11	P1U05
375	23	P1U07
600	35	P1U09
800	65	P1U12
1000	105	P1U15

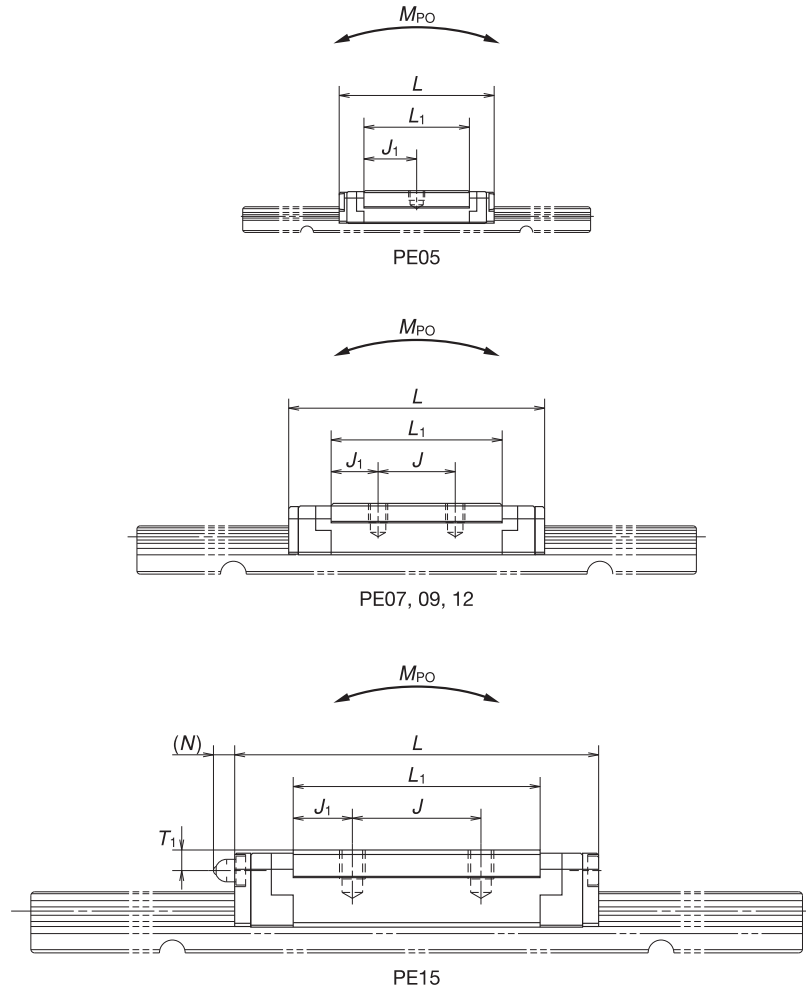


## Miniature wide rail type with sliders AR and TR



Slider mounted on a dummy rail for dimensions see pages 88 and 89

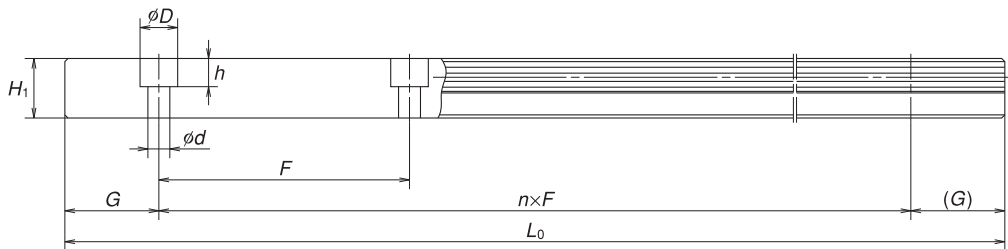
Model-No.	Assembly (mm)			Slider (mm)									
	$H$	$E$	$W_2$	$W$	$L$	$B$	$J$	$M \times \text{Lead} \times \ell$	$B_1$	$L_1$	$J_1$	$K$	$T$
PAE05AR	6.5	1.4	3.5	17	24.1	13	–	M2.5×0.45×1.5	2	16.4	8.2	5.1	2.5
PAE07TR	9	2	5.5	25	31.1	19	10	M3×0.5×2.8	3	20.9	5.45	7	3
PAE09TR	12	4	6	30	39.8	21	12	M3×0.5×3	4.5	26.6	7.3	8	2.8
PAE12AR	14	4	8	40	45	28	15	M3×0.5×4	6	31	8	10	3.2
PAE15AR	16	4	9	60	56.6	45	20	M4×0.7×4.5	7.5	38.4	9.2	12	4.1



Slider mounted on a dummy rail for dimensions see pages 88 and 89

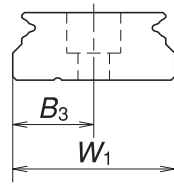
Grease fitting (mm)			Basic load rating (N)		Static moment (N · m)			Ball dia.	Weight		Slider length with 2 K1 (mm)
	$T_1$	$N$	Dynamic C	Static $C_0$	$M_{RO}$	$M_{PO}$	$M_{YO}$	$D_w$	Slider (kg)	Rail (kg/m)	
-	-	-	690	1160	6	3	3	1	10	34	28.9
-	-	-	1 580	2 350	17	7	7	1.5875	22	55	37.1
-	-	-	3 000	4 500	37	17	17	2	34	95	46.8
-	-	-	4 350	6 350	71	29	29	2.3812	63	140	53
Ø3	3.2	(3.3)	7 600	10 400	207	59	59	3.175	130	275	66.2

## Rail PE Series

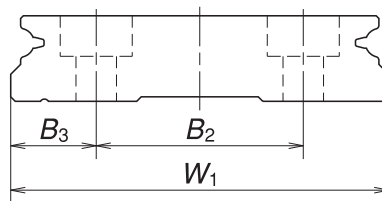


Model-No.	Rail dimensions (mm)						
	$W_1$	$H_1$	$B_2$	$F$	$d \times D \times h$	$B_3$	G (recommended)
P1E05	10	4	-	20	3 x 5 x 1.6	5	7.5
P1E07	14	5.2	-	30	3.5 x 6 x 3.2	7	10
P1E09	18	7.5	-	30	3.5 x 6 x 4.5	9	10
P1E12	24	8.5	-	40	4.5 x 8 x 4.5	12	15
P1E15	42	9.5	23	40	4.5 x 8 x 4.5	9.5	15

## Rail PE Series



PE05, 07, 09, 12



PE15

Rail		Model-No.
Max. Length $L_{0 \max}$	Weight (g / 100 mm)	
150	34	P1E05
600	55	P1E07
800	95	P1E09
1000	140	P1E12
1200	275	P1E15

