

# NR/NRS

## LM Guide

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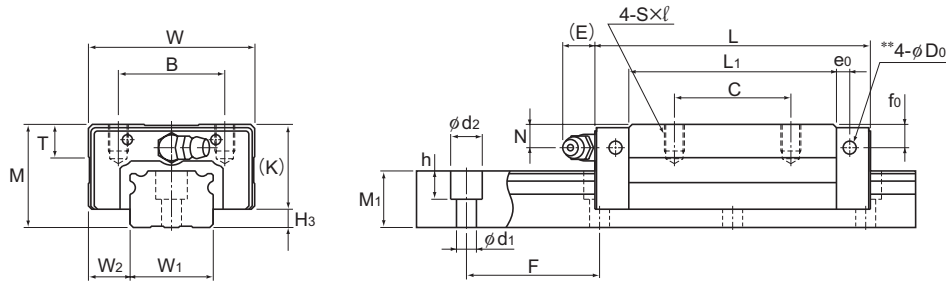
### A Technical Descriptions of the Products (Separate)

#### Technical Descriptions

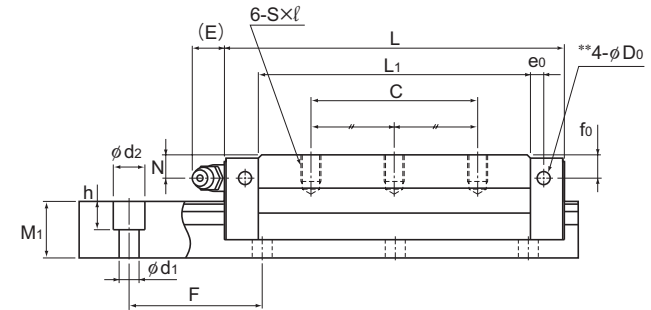
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\* Please see the separate "A Technical Descriptions of the Products".

# Models NR-R and NR-LR



Model NR-R

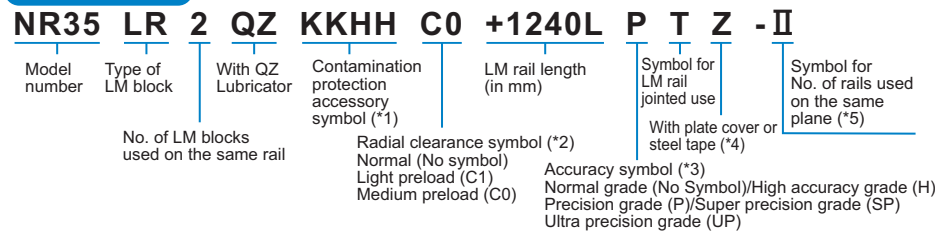


Model NR-LR

Unit: mm

Model No.	Outer dimensions			LM block dimensions												H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass		
	Height	Width	Length	B	C	S×ℓ	L <sub>1</sub>	T	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>	Grease nipple		Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail		
	M	W	L															W <sub>1</sub>	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> ×d <sub>2</sub> ×h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NR 25XR NR 25XLR	31	50	82.8 102	32	35 50	M6×8	62.4 81.6	9.7	25.5	7	7	12	4	3.9	B-M6F	5.5	25	12.5	17	40	6×9.5×8.5	2500	33 44	84.6 113	0.771 1.26	3.86 6.29	0.469 0.775	2.33 3.82	0.91 1.21	0.43 0.55	3.1
NR 30R NR 30LR	38	60	98 120.5	40	40 60	M8×10	70.9 93.4	9.7	31	7	7	12	5	3.9	B-M6F	7	28	16	21	80	7×11×9	3000	48.7 64.9	122 162	1.26 2.18	6.63 10.6	0.778 1.33	4.05 6.47	1.47 1.95	0.74 1	4.3
NR 35R NR 35LR	44	70	109.5 135	50	50 72	M8×12	77.9 103.4	11.7	35	8	8	12	6	5.2	B-M6F	9	34	18	24.5	80	9×14×12	3000	63.1 85.7	155 210	1.75 3.14	9.47 15.5	1.08 1.92	5.8 9.43	2.24 3.03	1.1 1.4	6.2
NR 45R NR 45LR	52	86	139 171	60	60 80	M10×17	105 137	14.7	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	20.5	29	105	14×20×17	3090	96 126	231 303	3.37 5.93	17.7 28	2.07 3.59	10.8 16.9	4.45 5.82	2 2.8	9.8
NR 55R NR 55LR	63	100	162.8 200	65	75 95	M12×18	123.6 160.8	17.5	49	11	10	16	8	5.2	B-PT1/8	14	53	23.5	36.5	120	16×23×20	3060	131 170	310 402	5.39 8.87	27.8 43.8	3.3 5.41	16.9 26.6	6.98 9.05	3.3 4.3	14.5
NR 65R NR 65LR	75	126	185.6 245.6	76	70 110	M16×20	143.6 203.6	21.5	60	16	15	16	9	8.2	B-PT1/8	15	63	31.5	43	150	18×26×22	3000	189 260	436 600	8.76 16.8	44.7 79.9	5.39 10.1	27.3 48	11.6 15.9	6 8.7	20.3
NR 75R NR 75LR	83	145	218 274	95	80 130	M18×25	170.2 226.2	25.3	68	18	17	16	9	8.2	B-PT1/8	15	75	35	44	150	22×32×26	3000	271 355	610 800	14.4 25.4	73.3 118	8.91 15.4	44.7 71.4	19.3 25.2	8.7 11.6	24.6
NR 85R NR 85LR	90	156	246.7 302.8	100	80 140	M18×25	194.9 251	27.3	73	20	20	16	10	8.2	B-PT1/8	17	85	35.5	48	180	24×35×28	3000	336 435	751 972	20.3 34.7	102 160	12.4 21	62.6 96.2	26.8 34.6	12.3 15.8	30.5
NR 100R NR 100LR	105	200	288.8 328.8	130	150 200	M18×27	223.4 263.4	34.3	85	23	23	10	12	8.2	B-PT1/4	20	100	50	57	210	26×39×32	2500	479 599	1040 1300	34 47.3	167 238	20.7 29.2	101 146	43.4 54.6	21.8 26.1	42.6

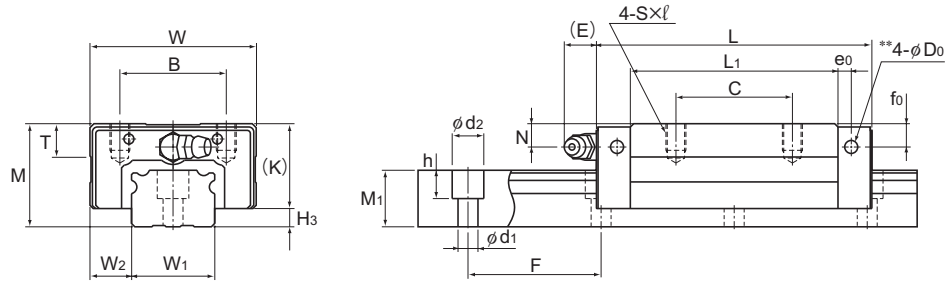
### Model number coding



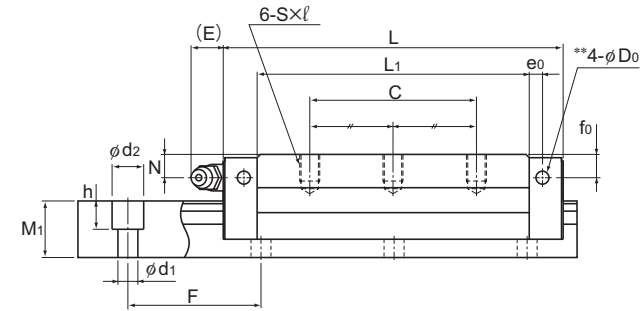
(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119. (\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple. The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.) Static permissible moment\*: 1 block: static permissible moment value with 1 LM block Double blocks: static permissible moment value with 2 blocks closely contacting with each other

# Models NRS-R and NRS-LR



Model NRS-R

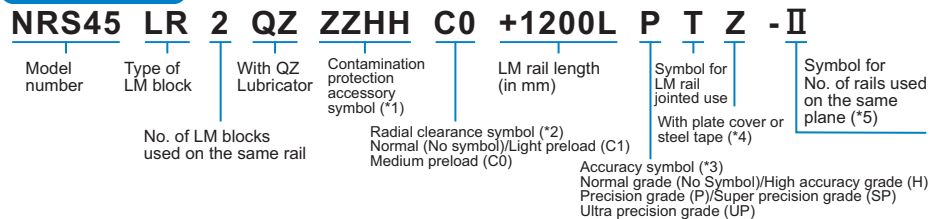


Model NRS-LR

Unit: mm

Model No.	Outer dimensions			LM block dimensions											H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass			
	Height	Width	Length	B	C	S × l	L <sub>1</sub>	T	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>		Grease nipple	Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>a</sub>		M <sub>b</sub>		M <sub>c</sub>	LM block	LM rail		
	M	W	L															W <sub>1</sub> 0 -0.05	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> × d <sub>2</sub> × h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NRS 25XR NRS 25XLR	31	50	82.8 102	32	35 50	M6 × 8	62.4 81.6	9.7	25.5	7	7	12	4	3.9	B-M6F	5.5	25	12.5	17	40	6 × 9.5 × 8.5	3000	25.9 34.5	59.8 79.7	0.568 0.926	2.84 4.6	0.568 0.926	2.84 4.6	0.633 0.846	0.43 0.55	3.1
NRS 30R NRS 30LR	38	60	98 120.5	40	40 60	M8 × 10	70.9 93.4	9.7	31	7	7	12	5	3.9	B-M6F	7	28	16	21	80	7 × 11 × 9	3000	38.2 51	86.1 115	0.926 1.6	4.86 7.83	0.926 1.6	4.86 7.83	1.02 1.36	0.74 1	4.3
NRS 35R NRS 35LR	44	70	109.5 135	50	50 72	M8 × 12	77.9 103.4	11.7	35	8	8	12	6	5.2	B-M6F	9	34	18	24.5	80	9 × 14 × 12	3000	49.5 67.2	109 148	1.28 2.29	6.92 11.3	1.28 2.29	6.92 11.3	1.54 2.09	1.1 1.4	6.2
NRS 45R NRS 45LR	52	86	139 171	60	60 80	M10 × 17	105 137	14.7	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	20.5	29	105	14 × 20 × 17	3000	75.3 98.8	163 214	2.47 4.34	13 20.5	2.47 4.34	13 20.5	3.09 4.06	2 2.8	9.8
NRS 55R NRS 55LR	63	100	162.8 200	65	75 95	M12 × 18	123.6 160.8	17.5	49	11	10	16	8	5.2	B-PT1/8	14	53	23.5	36.5	120	16 × 23 × 20	3000	103 133	220 284	3.97 6.49	20.5 32	3.97 6.49	20.5 32	4.86 6.28	3.3 4.3	14.5
NRS 65R NRS 65LR	75	126	185.6 245.6	76	70 110	M16 × 20	143.6 203.6	21.5	60	16	15	16	9	8.2	B-PT1/8	15	63	31.5	43	150	18 × 26 × 22	3000	148 204	309 425	6.45 12.3	32.9 58.6	6.45 12.3	32.9 58.6	8.11 11.1	6 8.7	20.3
NRS 75R NRS 75LR	83	145	218 274	95	80 130	M18 × 25	170.2 226.2	25.3	68	18	17	16	9	8.2	B-PT1/8	15	75	35	44	150	22 × 32 × 26	3000	212 278	431 566	10.6 18.6	53.8 87	10.6 18.6	53.8 87	13.4 17.6	8.7 11.6	24.6
NRS 85R NRS 85LR	90	156	246.7 302.8	100	80 140	M18 × 25	194.9 251	27.3	73	20	20	16	10	8.2	B-PT1/8	17	85	35.5	48	180	24 × 35 × 28	3000	264 342	531 687	14.9 25.4	75.3 117	14.9 25.4	75.3 117	18.7 24.2	12.3 15.8	30.5
NRS 100R NRS 100LR	105	200	288.8 328.8	130	150 200	M18 × 27	223.4 263.4	34.3	85	23	23	10	12	8.2	B-PT1/4	20	100	50	57	210	26 × 39 × 32	3000	376 470	737 920	25.1 34.6	123 174	25.1 34.6	123 174	30.4 38.1	21.8 26.1	42.6

### Model number coding



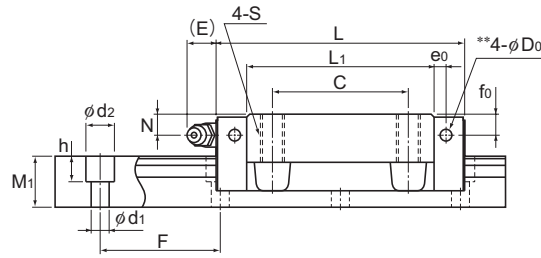
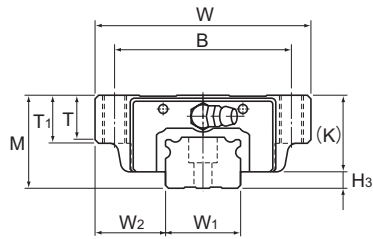
(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119.

(\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

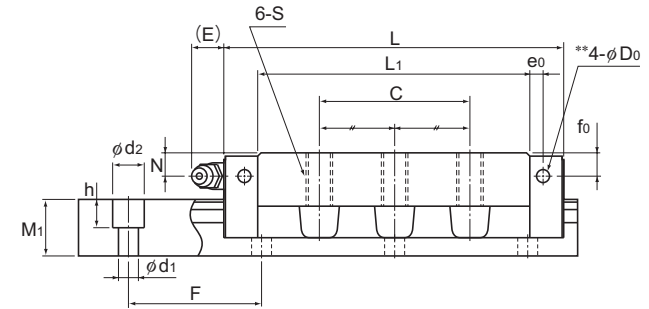
Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.) Those models equipped with QZ Lubricator cannot have a grease nipple.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple. The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.) Static permissible moment\*: 1 block: static permissible moment value with 1 LM block Double blocks: static permissible moment value with 2 blocks closely contacting with each other

# Models NR-A and NR-LA



Model NR-A



Model NR-LA

Unit: mm

Model No.	Outer dimensions			LM block dimensions													H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass		
	Height	Width	Length	B	C	S×ℓ	L <sub>1</sub>	T	T <sub>1</sub>	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>	Grease nipple		Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>a</sub>		M <sub>b</sub>		M <sub>c</sub>	LM block	LM rail		
	M	W	L																W <sub>1</sub> 0 -0.05	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> ×d <sub>2</sub> ×h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NR 25XA NR 25XLA	31	72	82.8 102	59	45	M8×16	62.4 81.6	14.8	16	25.5	7	7	12	4	3.9	B-M6F	5.5	25	23.5	17	40	6×9.5×8.5	3000	33 44	84.6 113	0.771 1.26	3.86 6.29	0.469 0.775	2.33 3.82	0.91 1.21	0.58 0.77	3.1
NR 30A NR 30LA	38	90	98 120.5	72	52	M10×18	70.9 93.4	16.8	18	31	7	7	12	5	3.9	B-M6F	7	28	31	21	80	7×11×9	3000	48.7 64.9	122 162	1.26 2.18	6.63 10.6	0.778 1.33	4.05 6.47	1.47 1.95	1.1 1.4	4.3
NR 35A NR 35LA	44	100	109.5 135	82	62	M10×20	77.9 103.4	18.8	20	35	8	8	12	6	5.2	B-M6F	9	34	33	24.5	80	9×14×12	3000	63.1 85.7	155 210	1.75 3.14	9.47 15.5	1.08 1.92	5.8 9.43	2.24 3.03	1.5 1.9	6.2
NR 45A NR 45LA	52	120	139 171	100	80	M12×22	105 137	20.5	22	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	37.5	29	105	14×20×17	3000	96 126	231 303	3.37 5.93	17.7 28	2.07 3.59	10.8 16.9	4.45 5.82	2.7 3.5	9.8
NR 55A NR 55LA	63	140	162.8 200	116	95	M14×24	123.6 160.8	22.5	24	49	11	10	16	8	5.2	B-PT1/8	14	53	43.5	36.5	120	16×23×20	3000	131 170	310 402	5.39 8.87	27.8 43.8	3.3 5.41	16.9 26.6	6.98 9.05	4.4 5.7	14.5
NR 65A NR 65LA	75	170	185.6 245.6	142	110	M16×28	143.6 203.6	26	28	60	16	15	16	9	8.2	B-PT1/8	15	63	53.5	43	150	18×26×22	3000	189 260	436 600	8.76 16.8	44.7 79.9	5.39 10.1	27.3 48	11.6 15.9	7.6 10.9	20.3
NR 75A NR 75LA	83	195	218 274	165	130	M18×30	170.2 226.2	28	30	68	18	17	16	9	8.2	B-PT1/8	15	75	60	44	150	22×32×26	3000	271 355	610 800	14.4 25.4	73.3 118	8.91 15.4	44.7 71.4	19.3 25.2	11.3 15	24.6
NR 85A NR 85LA	90	215	246.7 302.8	185	140	M20×34	194.9 251	32	34	73	20	20	16	10	8.2	B-PT1/8	17	85	65	48	180	24×35×28	3000	336 435	751 972	20.3 34.7	102 160	12.4 21	62.6 96.2	26.8 34.6	16.2 20.7	30.5
NR 100A NR 100LA	105	260	288.8 328.8	220	150 200	M20×38	223.4 263.4	35	38	85	23	23	10	12	8.2	B-PT1/4	20	100	80	57	210	26×39×32	3000	479 599	1040 1300	34 47.3	167 238	20.7 29.2	101 146	43.4 54.6	26.7 31.2	42.6

### Model number coding

**NR35 A 2 QZ KKHH C0 +1400L P T Z -II**

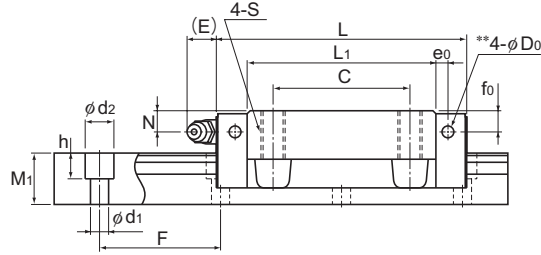
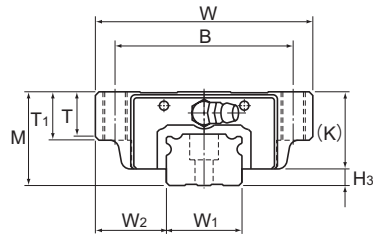
- Model number
- Type of LM block
- With QZ Lubricator
- Contamination protection accessory symbol (\*1)
- LM rail length (in mm)
- Radial clearance symbol (\*2)
- Normal (No symbol)
- Light preload (C1)
- Medium preload (C0)
- Symbol for LM rail jointed use
- With plate cover or steel tape (\*4)
- Accuracy symbol (\*3)
- Normal grade (No Symbol)/High accuracy grade (H)
- Precision grade (P)/Super precision grade (SP)
- Ultra precision grade (UP)
- Symbol for No. of rails used on the same plane (\*5)

(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119. (\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

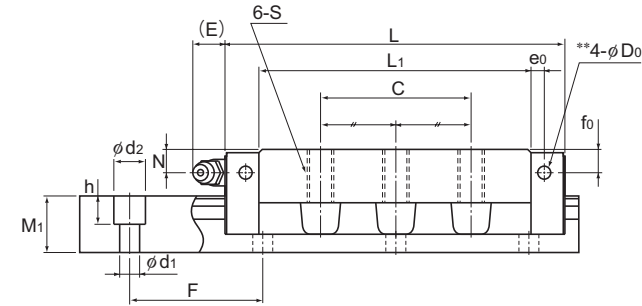
Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.) Those models equipped with QZ Lubricator cannot have a grease nipple.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple. The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.) Static permissible moment\*: 1 block: static permissible moment value with 1 LM block Double blocks: static permissible moment value with 2 blocks closely contacting with each other

# Models NRS-A and NRS-LA



Model NRS-A

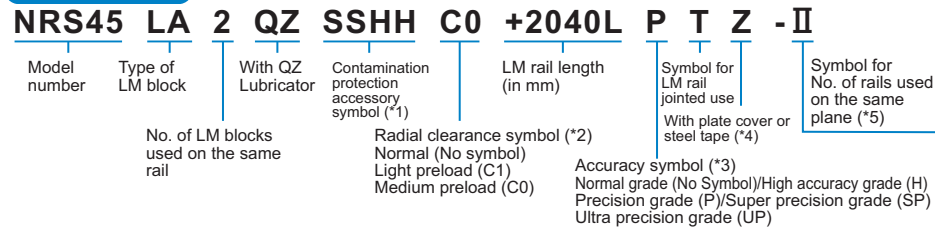


Model NRS-LA

Unit: mm

Model No.	Outer dimensions			LM block dimensions													H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass		
	Height	Width	Length	B	C	S×ℓ	L <sub>1</sub>	T	T <sub>1</sub>	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>	Grease nipple		Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail		
	M	W	L																W <sub>1</sub> 0 -0.05	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> ×d <sub>2</sub> ×h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NRS 25XA NRS 25XLA	31	72	82.8 102	59	45	M8×16	62.4 81.6	14.8	16	25.5	7	7	12	4	3.9	B-M6F	5.5	25	23.5	17	40	6×9.5×8.5	3000	25.9 34.5	59.8 79.7	0.568 0.926	2.84 4.6	0.568 0.926	2.84 4.6	0.633 0.846	0.58 0.77	3.1
NRS 30A NRS 30LA	38	90	98 120.5	72	52	M10×18	70.9 93.4	16.8	18	31	7	7	12	5	3.9	B-M6F	7	28	31	21	80	7×11×9	3000	38.2 51	86.1 115	0.926 1.6	4.86 7.83	0.926 1.6	4.86 7.83	1.02 1.36	1.1 1.4	4.3
NRS 35A NRS 35LA	44	100	109.5 135	82	62	M10×20	77.9 103.4	18.8	20	35	8	8	12	6	5.2	B-M6F	9	34	33	24.5	80	9×14×12	3000	49.5 67.2	109 148	1.28 2.29	6.92 11.3	1.28 2.29	6.92 11.3	1.54 2.09	1.5 1.9	6.2
NRS 45A NRS 45LA	52	120	139 171	100	80	M12×22	105 137	20.5	22	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	37.5	29	105	14×20×17	3000	75.3 98.8	163 214	2.47 4.34	13 20.5	2.47 4.34	13 20.5	3.09 4.06	2.7 3.5	9.8
NRS 55A NRS 55LA	63	140	162.8 200	116	95	M14×24	123.6 160.8	22.5	24	49	11	10	16	8	5.2	B-PT1/8	14	53	43.5	36.5	120	16×23×20	3000	103 133	220 284	3.97 6.49	20.5 32	3.97 6.49	20.5 32	4.86 6.28	4.4 5.7	14.5
NRS 65A NRS 65LA	75	170	185.6 245.6	142	110	M16×28	143.6 203.6	26	28	60	16	15	16	9	8.2	B-PT1/8	15	63	53.5	43	150	18×26×22	3000	148 204	309 425	6.45 12.3	32.9 58.6	6.45 12.3	32.9 58.6	8.11 11.1	7.6 10.9	20.3
NRS 75A NRS 75LA	83	195	218 274	165	130	M18×30	170.2 226.2	28	30	68	18	17	16	9	8.2	B-PT1/8	15	75	60	44	150	22×32×26	3000	212 278	431 566	10.6 18.6	53.8 87	10.6 18.6	53.8 87	13.4 17.6	11.3 15	24.6
NRS 85A NRS 85LA	90	215	246.7 302.8	185	140	M20×34	194.9 251	32	34	73	20	20	16	10	8.2	B-PT1/8	17	85	65	48	180	24×35×28	3000	264 342	531 687	14.9 25.4	75.3 117	14.9 25.4	75.3 117	18.7 24.2	16.2 20.7	30.5
NRS 100A NRS 100LA	105	260	288.8 328.8	220	150 200	M20×38	223.4 263.4	35	38	85	23	23	10	12	8.2	B-PT1/4	20	100	80	57	210	26×39×32	3000	376 470	737 920	25.1 34.6	123 174	25.1 34.6	123 174	30.4 38.1	26.7 31.2	42.6

### Model number coding

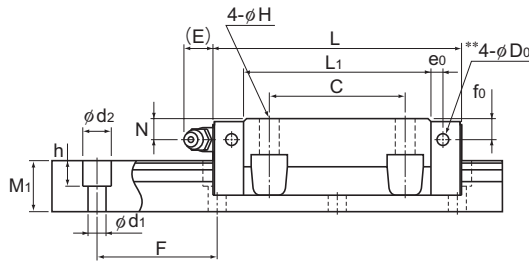
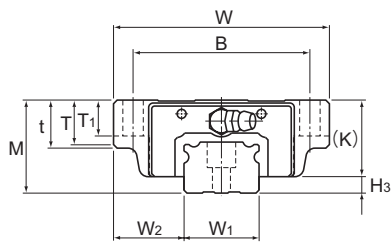


(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119. (\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

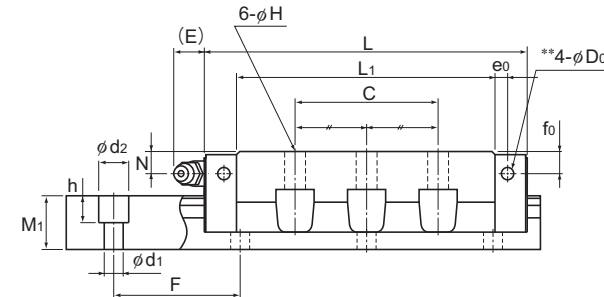
Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.) Those models equipped with QZ Lubricator cannot have a grease nipple.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple. The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.) Static permissible moment\*: 1 block: static permissible moment value with 1 LM block. Double blocks: static permissible moment value with 2 blocks closely contacting with each other.

# Models NR-B and NR-LB



Model NR-B



Model NR-LB

Unit: mm

Model No.	Outer dimensions			LM block dimensions														H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass		
	Height	Width	Length	B	C	H	L <sub>1</sub>	t	T	T <sub>1</sub>	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>	Grease nipple		Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail		
	M	W	L																	W <sub>1</sub> 0 -0.05	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> × d <sub>2</sub> × h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NR 25XB NR 25XLB	31	72	82.8 102	59	45	7	62.4 81.6	16	14.8	12	25.5	7	7	12	4	3.9	B-M6F	5.5	25	23.5	17	40	6 × 9.5 × 8.5	3000	33 44	84.6 113	0.771 1.26	3.86 6.29	0.469 0.775	2.33 3.82	0.91 1.21	0.58 0.77	3.1
NR 30B NR 30LB	38	90	98 120.5	72	52	9	70.9 93.4	18	16.8	14	31	7	7	12	5	3.9	B-M6F	7	28	31	21	80	7 × 11 × 9	3000	48.7 64.9	122 162	1.26 2.18	6.63 10.6	0.778 1.33	4.05 6.47	1.47 1.95	1.1 1.4	4.3
NR 35B NR 35LB	44	100	109.5 135	82	62	9	77.9 103.4	20	18.8	16	35	8	8	12	6	5.2	B-M6F	9	34	33	24.5	80	9 × 14 × 12	3000	63.1 85.7	155 210	1.75 3.14	9.47 15.5	1.08 1.92	5.8 9.43	2.24 3.03	1.5 1.9	6.2
NR 45B NR 45LB	52	120	139 171	100	80	11	105 137	22	20.5	20	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	37.5	29	105	14 × 20 × 17	3000	96 126	231 303	3.37 5.93	17.7 28	2.07 3.59	10.8 16.9	4.45 5.82	2.7 3.5	9.8
NR 55B NR 55LB	63	140	162.8 200	116	95	14	123.6 160.8	24	22.5	22	49	11	10	16	8	5.2	B-PT1/8	14	53	43.5	36.5	120	16 × 23 × 20	3000	131 170	310 402	5.39 8.87	27.8 43.8	3.3 5.41	16.9 26.6	6.98 9.05	4.4 5.7	14.5
NR 65B NR 65LB	75	170	185.6 245.6	142	110	16	143.6 203.6	28	26	25	60	16	15	16	9	8.2	B-PT1/8	15	63	53.5	43	150	18 × 26 × 22	3000	189 260	436 600	8.76 16.8	44.7 79.9	5.39 10.1	27.3 48	11.6 15.9	7.6 10.9	20.3
NR 75B NR 75LB	83	195	218 274	165	130	18	170.2 226.2	30	28	26	68	18	17	16	9	8.2	B-PT1/8	15	75	60	44	150	22 × 32 × 26	3000	271 355	610 800	14.4 25.4	73.3 118	8.91 15.4	44.7 71.4	19.3 25.2	11.3 15	24.6
NR 85B NR 85LB	90	215	246.7 302.8	185	140	18	194.9 251	34	32	28	73	20	20	16	10	8.2	B-PT1/8	17	85	65	48	180	24 × 35 × 28	3000	336 435	751 972	20.3 34.7	102 160	12.4 21	62.6 96.2	26.8 34.6	16.2 20.7	30.5
NR 100B NR 100LB	105	260	288.8 328.8	220	150 200	20	223.4 263.4	38	35	32	85	23	23	10	12	8.2	B-PT1/4	20	100	80	57	210	26 × 39 × 32	3000	479 599	1040 1300	34 47.3	167 238	20.7 29.2	101 146	43.4 54.6	26.7 31.2	42.6

### Model number coding

**NR35 B 2 QZ DDHH C0 +1080L P T Z -II**

Model number	Type of LM block	With QZ Lubricator	Contamination protection accessory symbol (*1)	LM rail length (in mm)	Symbol for LM rail jointed use	Symbol for No. of rails used on the same plane (*5)
	No. of LM blocks used on the same rail		Radial clearance symbol (*2) Normal (No symbol) Light preload (C1) Medium preload (C0)	Accuracy symbol (*3) Normal grade (No Symbol)/High accuracy grade (H) Precision grade (P)/Super precision grade (SP) Ultra precision grade (UP)	With plate cover or steel tape (*4)	

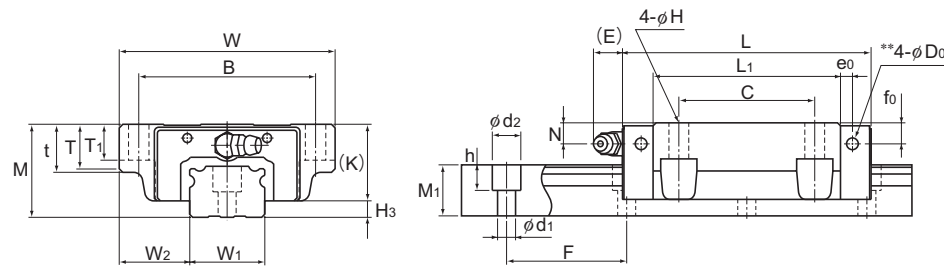
(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119.

(\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

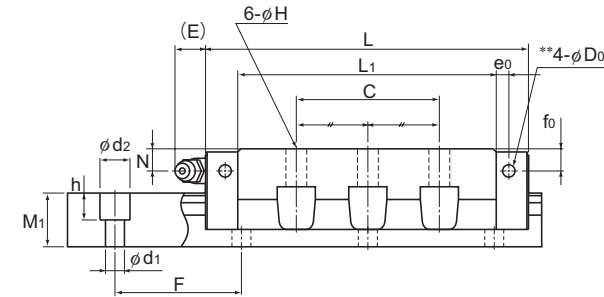
Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.)  
Those models equipped with QZ Lubricator cannot have a grease nipple.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple.  
The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.)  
Static permissible moment\*: 1 block: static permissible moment value with 1 LM block  
Double blocks: static permissible moment value with 2 blocks closely contacting with each other

# Models NRS-B and NRS-LB



Model NRS-B

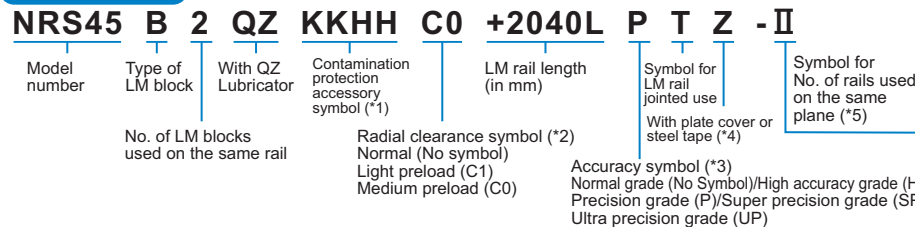


Model NRS-LB

Unit: mm

Model No.	Outer dimensions			LM block dimensions														H <sub>3</sub>	LM rail dimensions					Basic load rating		Static permissible moment kN-m*					Mass		
	Height	Width	Length	B	C	H	L <sub>1</sub>	t	T	T <sub>1</sub>	K	N	f <sub>0</sub>	E	e <sub>0</sub>	D <sub>0</sub>	Grease nipple		Width	Height	Pitch	Length*	C	C <sub>0</sub>	M <sub>A</sub>		M <sub>B</sub>		M <sub>C</sub>	LM block	LM rail		
	M	W	L																	W <sub>1</sub>	W <sub>2</sub>	M <sub>1</sub>	F	d <sub>1</sub> × d <sub>2</sub> × h	Max	kN	kN	1 block	Double blocks	1 block	Double blocks	1 block	kg
NRS 25XB NRS 25XLB	31	72	82.8 102	59	45	7	62.4 81.6	16	14.8	12	25.5	7	7	12	4	3.9	B-M6F	5.5	25	23.5	17	40	6 × 9.5 × 8.5	3000	25.9 34.5	59.8 79.7	0.568 0.926	2.84 4.6	0.568 0.926	2.84 4.6	0.633 0.846	0.58 0.77	3.1
NRS 30B NRS 30LB	38	90	98 120.5	72	52	9	70.9 93.4	18	16.8	14	31	7	7	12	5	3.9	B-M6F	7	28	31	21	80	7 × 11 × 9	3000	38.2 51	86.1 115	0.926 1.6	4.86 7.83	0.926 1.6	4.86 7.83	1.02 1.36	1.1 1.4	4.3
NRS 35B NRS 35LB	44	100	109.5 135	82	62	9	77.9 103.4	20	18.8	16	35	8	8	12	6	5.2	B-M6F	9	34	33	24.5	80	9 × 14 × 12	3000	49.5 67.2	109 148	1.28 2.29	6.92 11.3	1.28 2.29	6.92 11.3	1.54 2.09	1.5 1.9	6.2
NRS 45B NRS 45LB	52	120	139 171	100	80	11	105 137	22	20.5	20	40.5	10	8	16	7	5.2	B-PT1/8	11.5	45	37.5	29	105	14 × 20 × 17	3000	75.3 98.8	163 214	2.47 4.34	13 20.5	2.47 4.34	13 20.5	3.09 4.06	2.7 3.5	9.8
NRS 55B NRS 55LB	63	140	162.8 200	116	95	14	123.6 160.8	24	22.5	22	49	11	10	16	8	5.2	B-PT1/8	14	53	43.5	36.5	120	16 × 23 × 20	3000	103 133	220 284	3.97 6.49	20.5 32	3.97 6.49	20.5 32	4.86 6.28	4.4 5.7	14.5
NRS 65B NRS 65LB	75	170	185.6 245.6	142	110	16	143.6 203.6	28	26	25	60	16	15	16	9	8.2	B-PT1/8	15	63	53.5	43	150	18 × 26 × 22	3000	148 204	309 425	6.45 12.3	32.9 58.6	6.45 12.3	32.9 58.6	8.11 11.1	7.6 10.9	20.3
NRS 75B NRS 75LB	83	195	218 274	165	130	18	170.2 226.2	30	28	26	68	18	17	16	9	8.2	B-PT1/8	15	75	60	44	150	22 × 32 × 26	3000	212 278	431 566	10.6 18.6	53.8 87	10.6 18.6	53.8 87	13.4 17.6	11.3 15	24.6
NRS 85B NRS 85LB	90	215	246.7 302.8	185	140	18	194.9 251	34	32	28	73	20	20	16	10	8.2	B-PT1/8	17	85	65	48	180	24 × 35 × 28	3000	264 342	531 687	14.9 25.4	75.3 117	14.9 25.4	75.3 117	18.7 24.2	16.2 20.7	30.5
NRS 100B NRS 100LB	105	260	288.8 328.8	220	150	20	223.4 263.4	38	35	32	85	23	23	10	12	8.2	B-PT1/4	20	100	80	57	210	26 × 39 × 32	3000	376 470	737 920	25.1 34.6	123 174	25.1 34.6	123 174	30.4 38.1	26.7 31.2	42.6

### Model number coding



(\*1) See contamination protection accessory on A-368. (\*2) See A-113. (\*3) See A-119. (\*4) Specify the plate cover or the steel tape. (\*5) See A-59.

Note) This model number indicates that a single-rail unit constitutes one set. (i.e., required number of sets when 2 rails are used in parallel is 2 at a minimum.) Those models equipped with QZ Lubricator cannot have a grease nipple.

Note) Pilot holes for side nipples\*\* are not drilled through in order to prevent foreign material from entering the product. THK will mount grease nipples per your request. Therefore, do not use the side nipple pilot holes\*\* for purposes other than mounting a grease nipple. The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-106.) Static permissible moment\*: 1 block: static permissible moment value with 1 LM block Double blocks: static permissible moment value with 2 blocks closely contacting with each other



## Standard Length and Maximum Length of the LM Rail

Table1 shows the standard lengths and the maximum lengths of models NR/NRS variations. If the maximum length of the desired LM rail exceeds them, jointed rails will be used. Contact THK for details.

For the G dimension when a special length is required, we recommend selecting the corresponding G value from the table. The longer the G dimension is, the less stable the G area may become after installation, thus causing an adverse impact to accuracy.

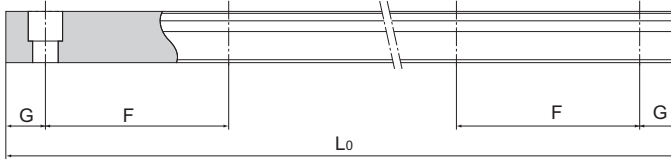


Table1 Standard Length and Maximum Length of the LM Rail for Models NR/NRS

Unit: mm

Model No.	NR/NRS25X	NR/NRS30	NR/NRS35	NR/NRS45	NR/NRS55	NR/NRS65	NR/NRS75	NR/NRS85	NR/NRS100
LM rail standard length ( $L_0$ )	230	280	280	570	780	1270	1280	1530	1340
	270	360	360	675	900	1570	1580	1890	1760
	350	440	440	780	1020	2020	2030	2250	2180
	390	520	520	885	1140	2620	2630	2610	2600
	470	600	600	990	1260				
	510	680	680	1095	1380				
	590	760	760	1200	1500				
	630	840	840	1305	1620				
	710	920	920	1410	1740				
	750	1000	1000	1515	1860				
	830	1080	1080	1620	1980				
	950	1160	1160	1725	2100				
	990	1240	1240	1830	2220				
	1070	1320	1320	1935	2340				
	1110	1400	1400	2040	2460				
	1190	1480	1480	2145	2580				
	1230	1560	1560	2250	2700				
	1310	1640	1640	2355	2820				
	1350	1720	1720	2460	2940				
	1430	1800	1800	2565					
	1470	1880	1880	2670					
	1550	1960	1960	2775					
	1590	2040	2040	2880					
	1710	2200	2200	2985					
1830	2360	2360							
1950	2520	2520							
2070	2680	2680							
2190	2840	2840							
2310	3000	3000							
2430									
2470									
Standard pitch F	40	80	80	105	120	150	150	180	210
G	15	20	20	22.5	30	35	40	45	40
Max length	3000	3000	3000	3000	3000	3000	3000	3000	3000

Note1) The maximum length varies with accuracy grades. Contact THK for details.

Note2) If jointed rails are not allowed and a greater length than the maximum values above is required, contact THK.