

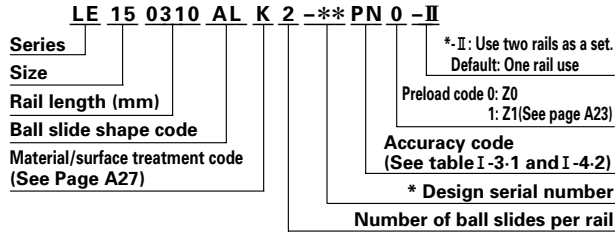
Dimensions of LE Series

LE-AL (Wide rail, miniature)

LE-TL (Wide rail, miniature, large mounting tap hole)

LE-AR (Wide rail, miniature, with ball retainer)

LE-TR (Wide rail, miniature, large mounting tap hole, with ball retainer)



\* Please note that we assign the design number, and omit the last code (II) that indicates a use of two rails as a set to finalize the reference number as product identification.

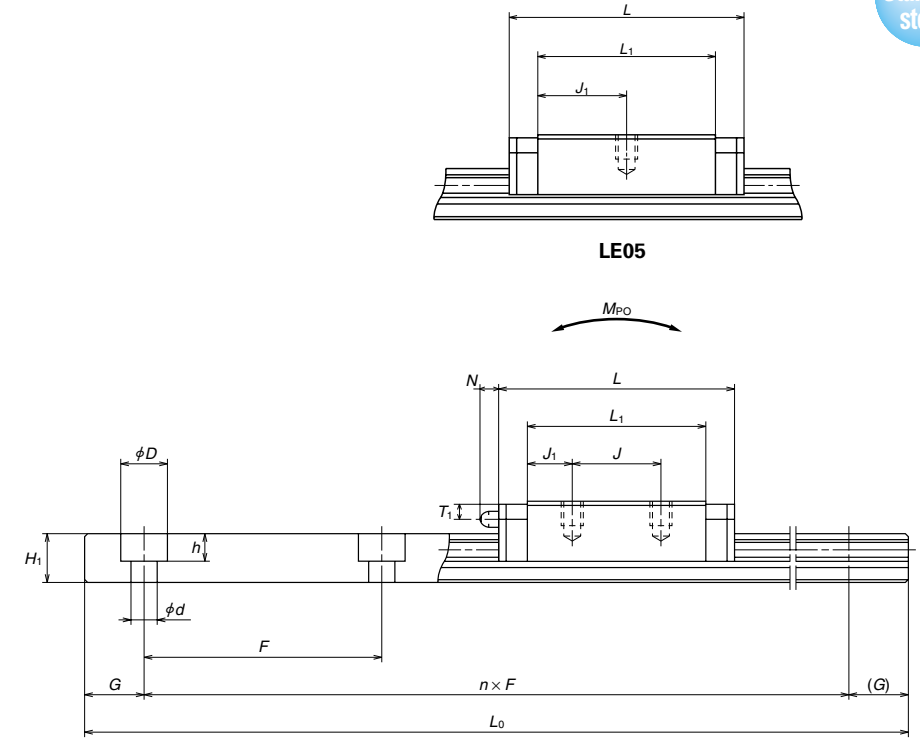
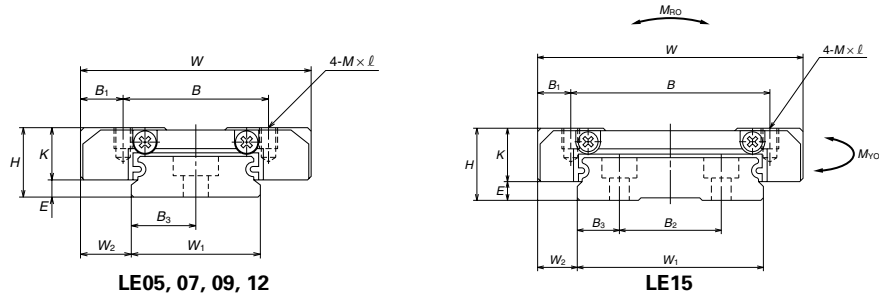


Table. I-5-26

Model No.	Assembly			Ball slide									Grease fitting				
	Height H	E	W <sub>2</sub>	Width W	Length L	Mounting hole			B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K	Hole size	T <sub>1</sub>	N	W <sub>1</sub>	Height H <sub>1</sub>
						B	J	M × pitch × ℓ									
LE05AL	6.5	1.4	3.5	17	24	13	—	M2.5×0.45×2	2	17	8.5	5.1	—	—	—	10	4
LE07TL	9	2	5.5	25	31	19	10	M3×0.5×3	3	21.2	5.6	7	—	—	—	14	5.2
LE09AL	12	4	6	30	39	21	12	M2.6×0.45×3 M3×0.5×3	4.5	27.6	7.8	8	—	—	—	18	7.5
LE09AR	12	4	6	30	39.8	21	12	M2.6×0.45×3 M3×0.5×3	4.5	27.6	7.8	8	—	—	—	18	7.5
LE12AL	14	4	8	40	44 45	28	15	M3×0.5×4	6	31	8	10	—	—	—	24	8.5
LE15AL	16	4	9	60	55 56.6	45	20	M4×0.7×4.5	7.5	38.4	9.2	12	φ3	3.2	3	42	9.5

LE has only two mounting tap holes.

													Unit: mm		
B <sub>2</sub>	Pitch F	Mounting bolt hole d × D × h	B <sub>3</sub>	G (recomm. ended)	Max. length L <sub>0max</sub>	Basic load rating					Ball dia. D <sub>w</sub>	Weight			
						Dynamic C (N)	Static C <sub>0</sub>	Static moment (N·m)				Ball slide (g)	Rail (g/100mm)		
								M <sub>RO</sub>	M <sub>PO</sub>	M <sub>TO</sub>					
—	20	3×5×1.6	5	7.5	150	725	1110	5.7	2.6	2.6	1.200	11	34		
—	30	3.5×6×3.2	7	10	600	1580	2350	17	7.2	7.2	1.587	25	55		
—	30	3.5×6×4.5	9	10	800	3000	4500	36	17	17	2.000	40	95		
—	30	3.5×6×4.5	9	10	800	3000	4500	36	17	17	2.000	40	95		
—	40	4.5×8×4.5	12	15	1000	4350	6350	71	29	29	2.381	75	140		
23	40	4.5×8×4.5	9.5	15	1200	7600	10400	207	59	59	3.175	150	275		

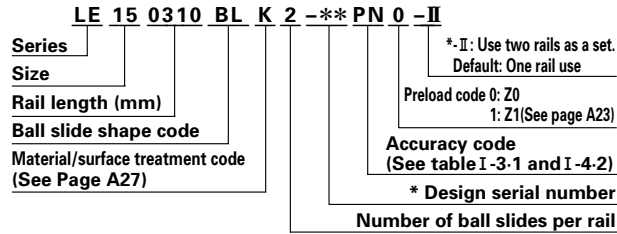
The basic dynamic load rating is a load that furnishes 50 km rating fatigue life; it is a vertical and constant load to the ball slide mounting surface.

When converting the basic dynamic load rating C to the dynamic load rating C<sub>100</sub> for 100 km rating fatigue life, divide the C by 1.26

For fixing a rail of LE05AL, use cross-recessed pan head machine screw for precision instruments M2.5×0.45 (JCS 10-70 : Japan Camera Industry Association, No.0, class 3).

LE-BL (High load type, wide rail, miniature)

LE-UL (High load type, wide rail, miniature, large mounting tap hole)



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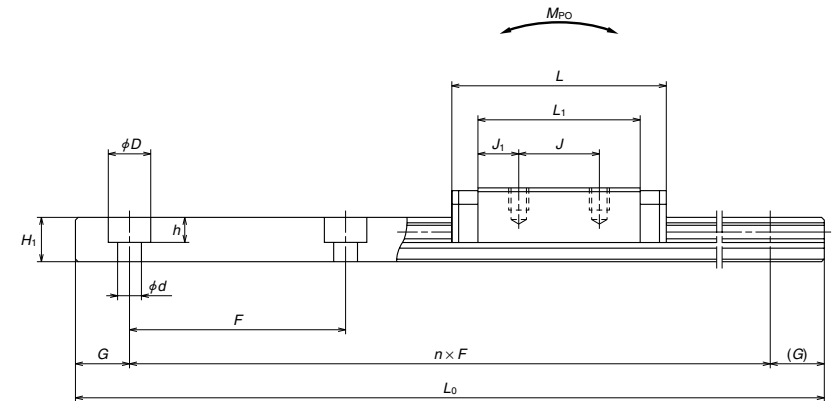
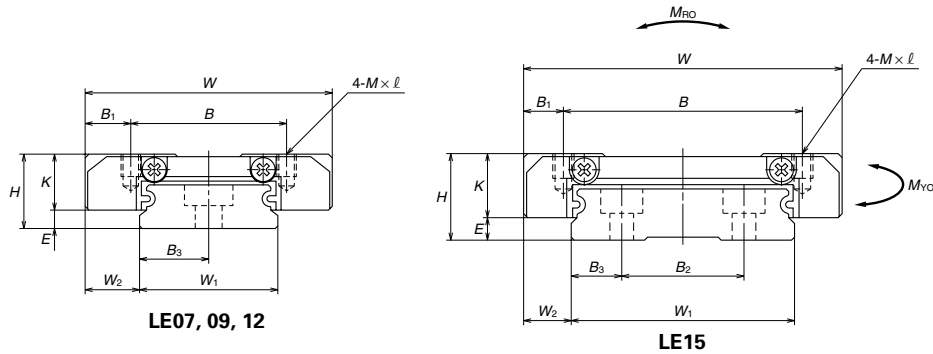


Table. I-5-27

Model No.	Assembly			Ball slide										
	Height H	E	W <sub>2</sub>	Width W	Length L	Mounting hole						Width W <sub>1</sub>	Height H <sub>1</sub>	
						B	J	M × pitch × l	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>			K
LE07UL	9	2	5.5	25	42	19	19	M3×0.5×3	3	32.2	6.6	7	14	5.2
LE09BL LE09UL	12	4	6	30	50.4	23	24	M2.6×0.45×3 M3×0.5×3	3.5	39	7.5 7.5	8	18	7.5
LE12BL	14	4	8	40	59	28	28	M3×0.5×4	6	46	9	10	24	8.5
LE15BL	16	4	9	60	74.5	45	35	M4×0.7×4.5	7.5	57.8	11.4	12	42	9.5

Unit: mm

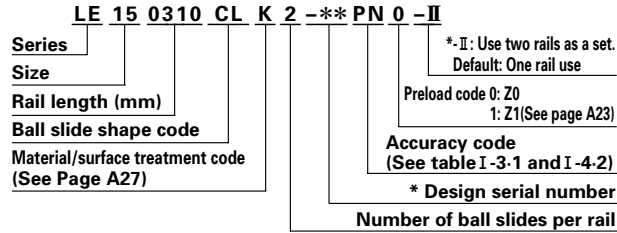
Rail						Basic load rating					Ball dia.	Weight	
Pitch	Mounting bolt hole	G	Max. length	Dynamic	Static	Static moment			D <sub>w</sub>	Ball slide (g)	Rail (g/100mm)		
						C	C <sub>0</sub>	M <sub>RO</sub>				M <sub>EO</sub>	M <sub>VO</sub>
30	3.5×6×3.2	7	600	2180	3700	26	17	17	1.587	39	55		
30	3.5×6×4.5	9	800	4000	6700	54	38	38	2.000	58	95		
40	4.5×8×4.5	12	1000	5800	9550	106	63	63	2.381	115	140		
23	4.5×8×4.5	9.5	1200	10300	16000	320	135	135	3.175	235	275		

The basic dynamic load rating is a load that furnishes 50 km rating fatigue life; it is a vertical and constant load to the ball slide mounting surface.

When converting the basic dynamic load rating C to the dynamic load rating C<sub>100</sub> for 100 km rating fatigue life, divide the C by 1.26

LE-CL (Medium load type, wide rail, miniature)

LE-SL (Medium load type, wide rail, miniature, large mounting tap hole)



\* Please note that we assign the design number, and omit the last code (II) that indicates a use of two rails as a set to finalize the reference number as product identification.

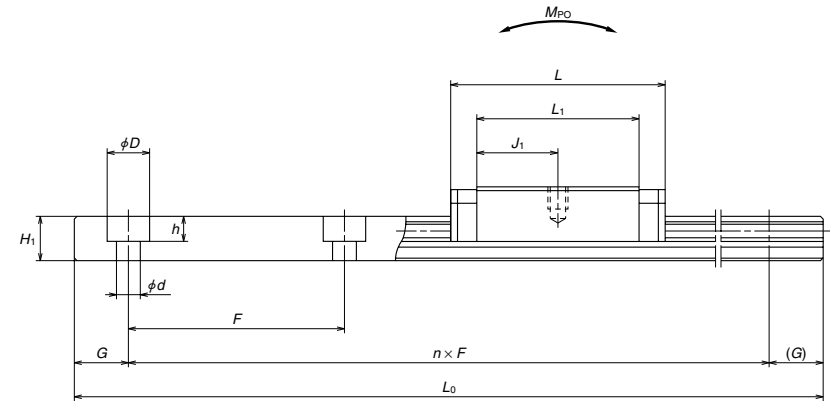
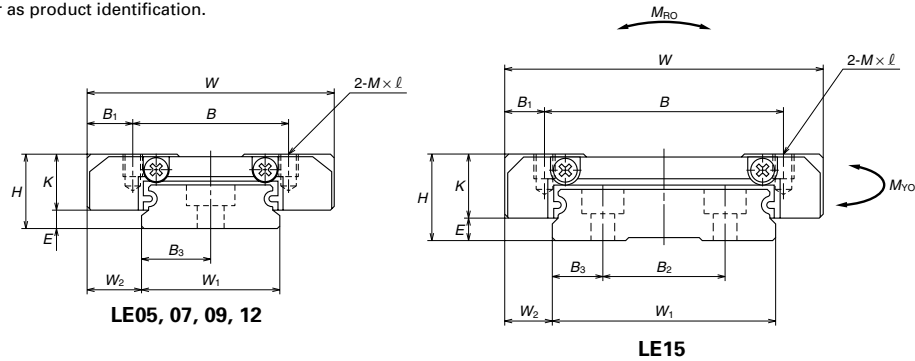


Table. I-5-28

Model No.	Assembly			Ball slide									Width	Height
	Height	E	W <sub>2</sub>	Width	Length	Mounting hole			B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K		
						B	J	M × pitch × l						
LE05CL	6.5	1.4	3.5	17	20	13	—	M2.5×0.45×2	2	13	6.5	5.1	10	4
LE07SL	9	2	5.5	25	22.5	19	—	M3×0.5×3	3	12.6	6.3	7	14	5.2
LE09CL	12	4	6	30	26.4	21	—	M2.6×0.45×3	4.5	15	7.5	8	18	7.5
LE09SL								M3×0.5×3						
LE12CL	14	4	8	40	30.5	28	—	M3×0.5×4	6	17.5	8.75	10	24	8.5
LE15CL	16	4	9	60	41.4	45	—	M4×0.7×4.5	7.5	24.8	12.4	12	42	9.5

CL and SL types have only two mounting tap holes in the center.

													Unit: mm		
Rail						Basic load rating					Ball dia.		Weight		
Pitch	Mounting bolt hole	G	Max. length	G (recomm. ended)	L <sub>0max</sub>	Dynamic	Static	Static moment			D <sub>w</sub>	Ball slide (g)	Rail (g/100mm)		
						C	C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>TO</sub>					
20	3×5×1.6	5	7.5	150	595	835	4.3	1.5	1.5	1.200	8	34			
30	3.5×6×3.2	7	10	600	980	1170	8.3	2.0	2.0	1.587	17	55			
30	3.5×6×4.5	9	10	800	1860	2240	18	4.8	4.8	2.000	25	95			
40	4.5×8×4.5	12	15	1000	2700	3150	35	8.2	8.2	2.381	50	140			
23	4.5×8×4.5	9.5	15	1200	5000	5650	113	19	19	3.175	110	275			

The basic dynamic load rating is a load that furnishes 50 km rating fatigue life; it is a vertical and constant load to the ball slide mounting surface. When converting the basic dynamic load rating C to the dynamic load rating C<sub>100</sub> for 100 km rating fatigue life, divide the C by 1.26. For fixing a rail of LE05CL, use cross-recessed pan head machine screw for precision instruments M2.5x045 (JCS 10-70 : Japan Camera Industry Association, No.0, class 3).

Dimensions of LE Series (Interchangeable ball slide)

LAE-AR (miniature, with ball retainer)

LAE-TR (miniature, large mounting tap hole, with ball retainer)

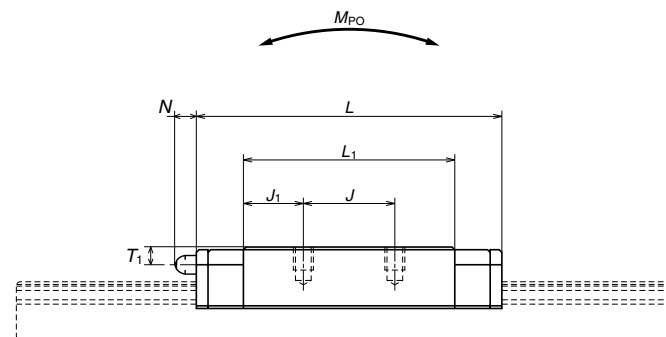
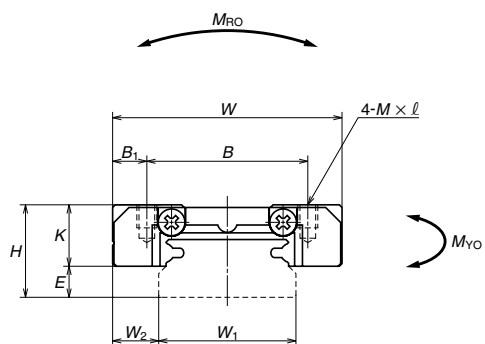
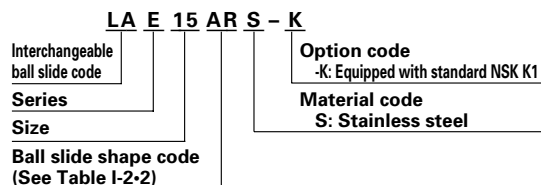


Table. I-5-29

Model No.	Assembly			Ball slide								
	Height			Width	Length	Mounting hole						
	H	E	W <sub>2</sub>	W	L	B	J	M × pitch × l	B <sub>1</sub>	L <sub>1</sub>	J <sub>1</sub>	K
LAE09AR	12	4	6	30	39.8	21	12	M2.6×0.45×3	4.5	27.6	7.8	8
LAE09TR	—	—	—	—	—	—	—	M3×0.5×3	—	—	—	—
LAE12AR	14	4	8	40	45	28	15	M3×0.5×4	6	31	8	10
LAE15AR	16	4	9	60	56.6	45	20	M4×0.7×4.5	7.5	38.4	9.2	12

Unit: mm

Grease fitting			Basic load rating					Ball dia.	Weight
Hole size	T <sub>1</sub>	N	Dynamic	Static	Static moment			D <sub>w</sub>	Ball slide
			C	C <sub>0</sub>	M <sub>RO</sub>	M <sub>PO</sub>	M <sub>YO</sub>		
—	—	—	3000	4500	36	17	17	2.000	40
—	—	—	4350	6350	71	29	29	2.381	75
∅3	3.2	3	7600	10400	207	59	59	3.175	150

The basic dynamic load rating is a load that furnishes 50 km rating fatigue life; it is a vertical and constant load to the ball slide mounting surface. When converting the basic dynamic load rating C to the dynamic load rating C<sub>100</sub> for 100 km rating fatigue life, divide the C by 1.26