



Linear Ball Slide

THK General Catalog

B Product Specifications

Dimensional Drawing, Dimensional Table

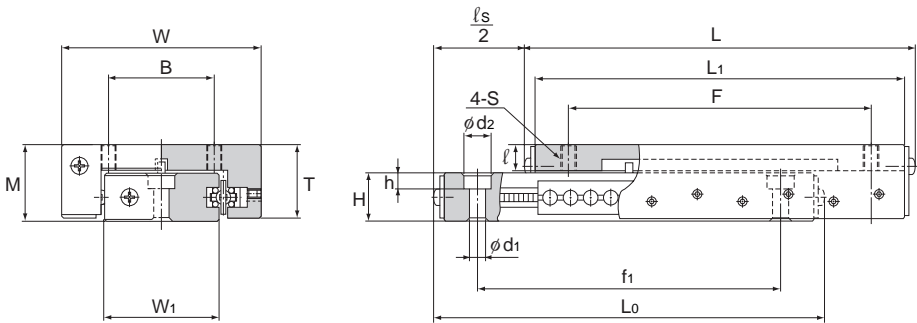
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A Technical Descriptions of the Products (Separate)

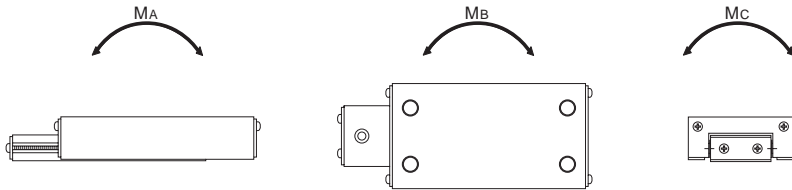
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* Please see the separate "A Technical Descriptions of the Products".

Model LSP



Model No.	Slider dimensions								
	Max. Stroke l_s	Height M ± 0.25	Width W ± 0.25	Length L	T	L_1	B	F	$S \times l$
LSP 1340	15	13	25	42.6	12.5	39	11	30	M3×5
LSP 1365	25	13	25	67.6	12.5	64	11	55	M3×5
LSP 1390	50	13	25	92.6	12.5	89	11	80	M3×5
LSP 2050	25	20	44	54	18.3	47	20	35	M5×8.4
LSP 2080	50	20	44	84	18.3	77	20	65	M5×8.4
LSP 20100	75	20	44	104	18.3	97	20	85	M5×8.4
LSP 25100	50	25	66	105.2	24	97	35	75	M5×8.5
LSP 25125	75	25	66	130.2	24	122	35	100	M5×8.5
LSP 25150	100	25	66	155.2	24	147	35	125	M5×8.5

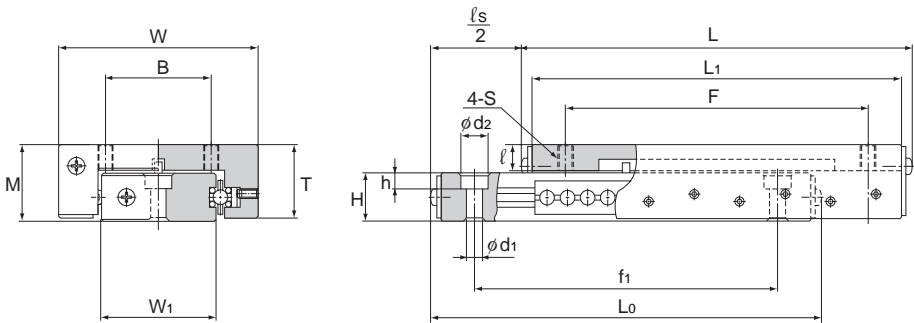


Unit: mm

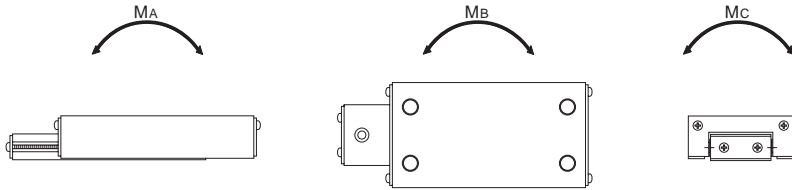
	Base dimensions					Static permissible moment*		Basic load rating		Mass g
	Width W_1	Height H	$d_1 \times d_2 \times h$	Length L_0	f_1	M_A, M_B N-m	M_C N-m	C N	C_0 N	
	12.2	7.7	3.3×6×3.3	42.6	30	0.88	0.49	68.6	118	37
	12.2	7.7	3.3×6×3.3	67.6	55	1.76	0.98	118	206	60
	12.2	7.7	3.3×6×3.3	92.6	80	3.04	1.27	157	275	85
	22.3	11	5.3×9×5.3	54	35	1.37	2.25	157	284	114
	22.3	11	5.3×9×5.3	84	65	3.53	4.51	304	559	184
	22.3	11	5.3×9×5.3	104	85	5	5.69	392	706	231
	38	16	5.3×9×5.3	105.2	75	9.22	14.5	588	1069	433
	38	16	5.3×9×5.3	130.2	100	12.9	18.1	735	1333	547
	38	16	5.3×9×5.3	155.2	125	17.5	21.9	882	1598	652

Note) * M_A , M_B and M_C each indicate the permissible moment per LM system, as shown in the figure above.

Model LS



Model No.	Slider dimensions								
	Max. Stroke l_s	Height M ± 0.25	Width W ± 0.25	Length L	T	L_1	B	F	$S \times l$
LS 827	13	8	14.2	29.6	7.6	26	5.5	16	M2×2.7
LS 852	25	8	14.2	54.6	7.6	51	5.5	41	M2×2.7
LS 877	50	8	14.2	79.6	7.6	76	5.5	66	M2×2.7
LS 1027	13	10	19	29.6	9.2	26	8.5	16	M3×3.2
LS 1052	25	10	19	54.6	9.2	51	8.5	41	M3×3.2
LS 1077	50	10	19	79.6	9.2	76	8.5	66	M3×3.2

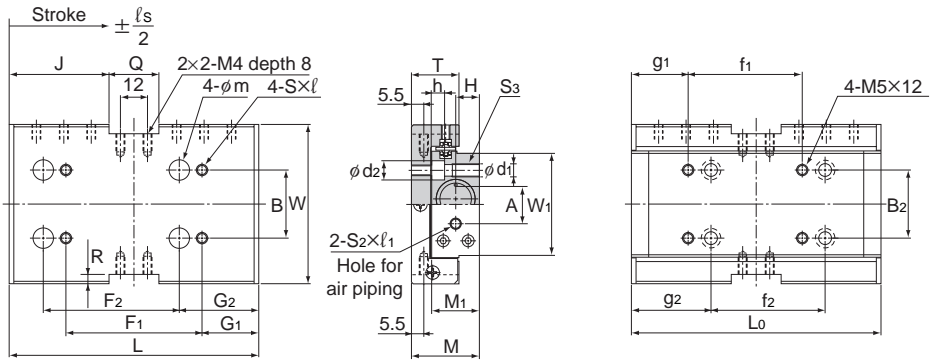


Unit: mm

	Base dimensions					Static permissible moment*		Basic load rating		Mass g
	Width W_1	Height H	$d_1 \times d_2 \times h$	Length L_0	f_1	M_A, M_B N-m	M_C N-m	C N	C_0 N	
	6.2	4.7	2.2×3.9×1.4	29.6	19	0.2	0.29	39.2	68.6	
6.2	4.7	2.2×3.9×1.4	54.6	35	0.49	0.39	68.6	118	15	
6.2	4.7	2.2×3.9×1.4	79.6	60	0.88	0.59	98	167	21	
9.6	6.2	3.3×6×3.1	29.6	19	0.29	0.59	58.8	108	13	
9.6	6.2	3.3×6×3.1	54.6	35	0.78	1.08	108	186	23	
9.6	6.2	3.3×6×3.1	79.6	60	1.47	1.57	157	275	34	

Note) * M_A , M_B and M_C each indicate the permissible moment per LM system, as shown in the figure above.

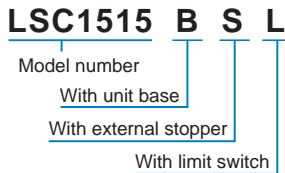
Model LSC



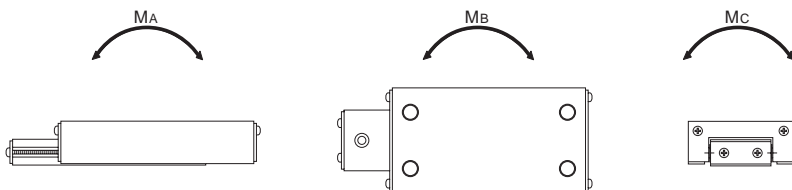
Model No.	Max. Stroke ℓ_s $+0.5$ 0	Cylinder Inner diameter	Slider dimensions					
			Theoretical thrust (at 500 kPa) N	Height M ± 0.05	Width W	L	T	B
LSC 1015	15	10	38.2	25	50	80	24	20
LSC 1515	15	15	86.3	30	70	80	21	30
LSC 1530	30	15	86.3	30	70	110	21	30
LSC 1550	50	15	86.3	30	70	150	21	30

Model No.	L_0	B_2	Slider dimensions				Base dimensions		
			f_2	g_2	f_1	g_1	$d_1 \times d_2 \times h$	A	S_3
LSC 1015	80	20	40	20	—	—	3.3×5.5×3.5	13	M4
LSC 1515	80	30	40	21	23	29.5	5.2×9×5.5	17	M6
LSC 1530	110	30	60	25	40	35	5.2×9×5.5	17	M6
LSC 1550	150	30	100	25	78	36	5.2×9×5.5	17	M6

Model number coding



Note) Unit base, external stopper and limit switch are not available for model LSC1015.
The speed controller is optional.



Unit: mm

Slider dimensions										
	F ₁	G ₁	S × ℓ	m	G ₂	F ₂	J	Q	R	M ₁
	40	20	M4×7	5.5	12.5	40	—	—	—	16.5
	40	19	M5×8	9	28.5	40	29	22	4	21
	60	25	M5×8	9	35	60	44	22	4	21
	100	25	M5×8	9	50	50	64	22	4	21

Base dimensions			Static permissible moment*		Basic load rating		Mass kg
W ₁	H	S ₂ × ℓ ₁	M _A , M _B N-m	M _C N-m	C N	C ₀ N	
31.2	5.5	M5×5	4.9	7.45	392	676	0.25
45	10.5	M5×4.5	4.9	11.1	392	676	0.37
45	10.5	M5×4.5	8.43	15.4	549	951	0.52
45	10.5	M5×4.5	15.4	22.1	794	1350	0.72

Note) *M_A, M_B and M_C each indicate the permissible moment per LM system, as shown in the figure above.

Speed Controller

Fig.1 shows the shape of the speed controller.

Note) The speed controller is optional.
(control method: meter out)

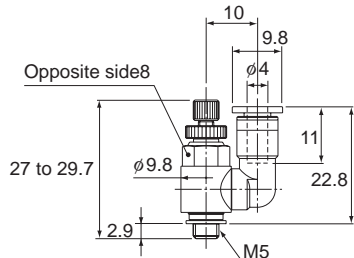


Fig.1 Shape of the Speed Controller (common to all model numbers)

Dedicated Unit Base Model B

With Linear Ball Slide model LSC, a limit switch for detecting the stroke end can be mounted using a dedicated unit base (Fig.2). When fine positioning is required, a dedicated stopper can be mounted on the unit base to adjust the position. (excluding model LSC1015)

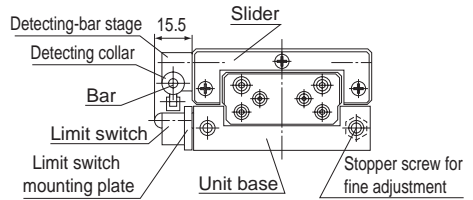
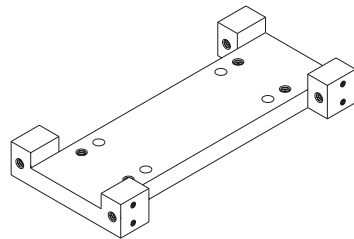
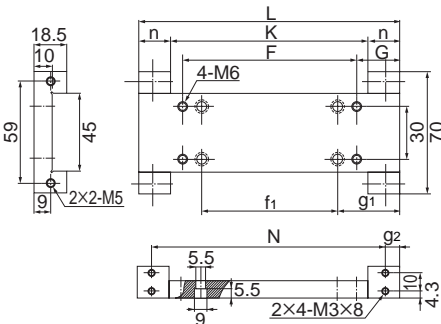


Fig.2 Unit Base and Limit Switch Installation



Unit: mm

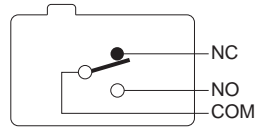
Unit base Model B	Unit base dimensions									Mass kg
	Length L	F	G	f ₁	g ₁	K	n	N	g ₂	
LSC1515	80	40	21	23	29.5	56	12	68	6	0.12
LSC1530	110	60	25	40	35	74	18	94	8	0.16
LSC1550	150	100	25	78	36	114	18	134	8	0.21

Limit Switch

The specifications of the limit switch are as follows.

<Limit switch specifications>

Type	D2VW-5L2A-1 (Omron)
Contact type	contact (1C contact)



<Rated Specifications>

Type	Rated voltage (V)		Non-inductive load (A)				Inductive load (A)	
			Resistance load		Ramp load		Inductive load	
			Normally closed	Normally open	Normally closed	Normally open	Normally closed	Normally open
D2VW-5	AC	125	5		0.5		4	
		250	5		0.5		4	
	DC	30	5		3		4	
		125	0.4		0.1		0.4	

Note1) The above figures indicate the constant current.

Note2) Inductive load refers to power factor of 0.7 or greater (alternate current) and time constant of 7 ms or less (direct current).

Note3) Ramp load implies a rush current 10 times greater.

Note4) The above rated values apply when a test is conducted with the following conditions in accordance with JIS C 4505.

- (1) Ambient temperature: 20°C ± 2°C
- (2) Ambient humidity: 65% ± 5% RH
- (3) Operating frequency: 30 times/min

Note) For applications under a minute load (5 to 24 VDC), a minute-load type is available. Contact THK for details.

