

# GSR

## LM Guide

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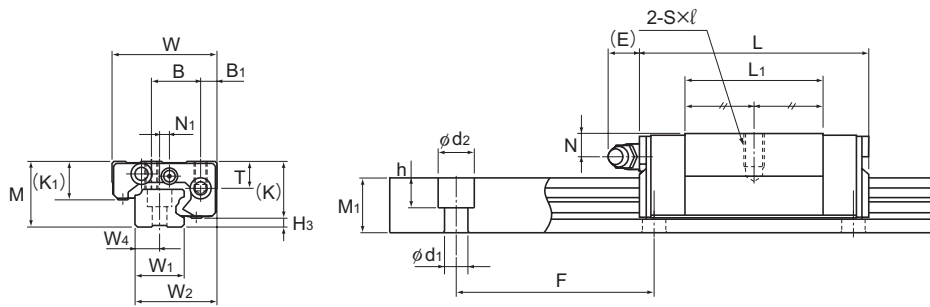
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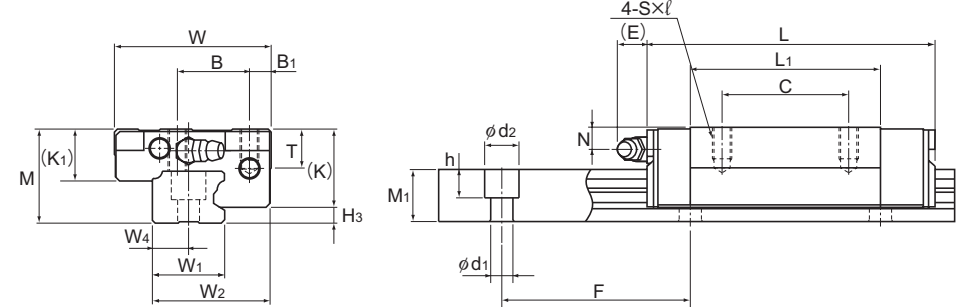
\* Please see the separate "A Technical Descriptions of the Products".

# Models GSR-T and GSR-V



Model GSR15T/V

Models GSR15 to 25V



Models GSR20 to 35T, Models GSR20V and 25V

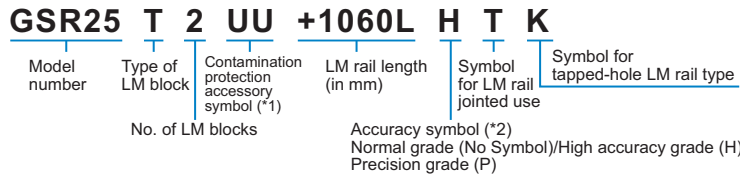
Models GSR15 to 35T

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 M	Width W	Length L	B <sub>1</sub>	B	C	S×ℓ	L <sub>1</sub>	T	K	K <sub>1</sub>	N	N <sub>1</sub>	E		Grease nipple	Width W <sub>1</sub>	W <sub>2</sub>	W <sub>4</sub>	Height M <sub>1</sub>	Pitch F	d <sub>1</sub> ×d <sub>2</sub> ×h	Length* Max	C kN	C <sub>0</sub> kN	M <sub>A</sub>		M <sub>B</sub>		LM block kg	LM rail kg/m
																										1 block	Double blocks	1 block	Double blocks		
GSR 15T GSR 15V	20	32	59.8 47.1	5	15	26 —	M4×7	40.2 27.5	8.25	17.5	12	4.5	3	5.5	PB107	8	15	25	7.5	11.5	60	4.5×7.5×5.3	2000	5.69 4.31	8.43 5.59	0.0525 0.0252	0.292 0.158	0.0452 0.0218	0.252 0.136	0.13 0.08	1.2
GSR 20T GSR 20V	24	43	74 58.1	7	20	30 —	M5×8	50.2 34.3	9.7	20.6	13.6	5	—	12	B-M6F	10.4	20	33	10	13	60	6×9.5×8.5	3000	9.22 7.01	13.2 8.82	0.102 0.0498	0.564 0.307	0.0885 0.0431	0.486 0.265	0.25 0.17	1.8
GSR 25T GSR 25V	30	50	88 69	7	23	40 —	M6×10	60.2 41.2	12.7	25.5	16.8	7	—	12	B-M6F	13.2	23	38	11.5	16.5	60	7×11×9	3000	13.5 10.29	19 12.65	0.177 0.0858	0.965 0.522	0.152 0.0742	0.831 0.451	0.5 0.29	2.6
GSR 30T	33	57	103	8	26	45	M8×12	70.3	14.6	28.5	18	7	—	12	B-M6F	15	28	44.5	14	19	80	9×14×12	3000	18.8	25.9	0.282	1.54	0.243	1.32	0.6	3.6
GSR 35T	38	68	117	9	32	50	M8×15	80.3	15.6	32.5	20.5	8	—	12	B-M6F	17.5	34	54	17	22	80	11×17.5×14	3000	25.1	33.8	0.421	2.28	0.362	1.96	1	5

### Model number coding

Combination of LM rail and LM block



(\*1) See contamination protection accessory on A-368. (\*2) See A-124.

Note) One set of model GSR: This model number indicates that a single-rail unit constitutes one set.

Note) A moment in the direction M<sub>c</sub> can be received if two rails are used in parallel. However, since it depends on the distance between the two rails, the moment in the direction M<sub>c</sub> is omitted here.

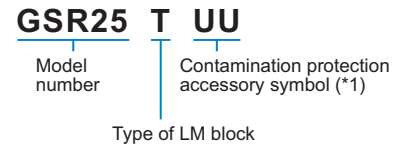
The maximum length under "Length\*" indicates the standard maximum length of an LM rail. (See B-148.)

Static permissible moment\*: 1 block: static permissible moment value with 1 LM block

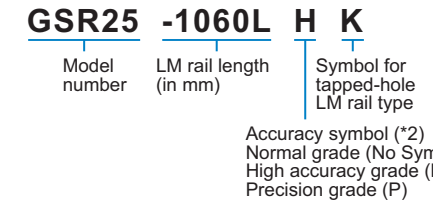
Double blocks: static permissible moment value with 2 blocks closely contacting with each other

### Model number coding

LM block



LM rail



(\*1) See contamination protection accessory on A-368. (\*2) See A-124.

## Standard Length and Maximum Length of the LM Rail

Table1 shows the standard lengths and the maximum lengths of model GSR variations. In case the required quantity is large and the lengths are not the same, we recommend preparing an LM rail of the maximum length in stock. This is economical since it allows you to cut the rail to the desired length as necessary.

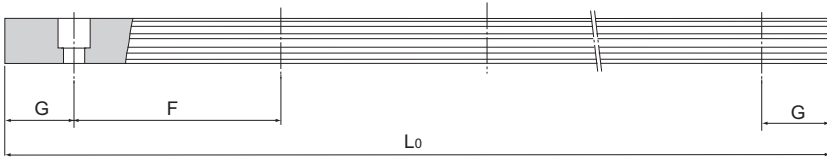


Table1 Standard Length and Maximum Length of the LM Rail for Model GSR

Unit: mm

Model No.	GSR 15	GSR 20	GSR 25	GSR 30	GSR 35
LM rail standard length (L <sub>0</sub> )	460	460	460	1240	1240
	820	820	820	1720	1720
	1060	1060	1060	2200	2200
	1600	1600	1600	3000	3000
Standard pitch F	60	60	60	80	80
G	20	20	20	20	20
Max length	2000	3000	3000	3000	3000

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

## Tapped-hole LM Rail Type of Model GSR

- Since the bottom of the LM rail has a tapped hole, this model can easily be installed on an H-shape steel and channel.
- Since the top face of the LM rail has no mounting hole, the sealability is increased and entrance of foreign material (e.g., cutting chips) can be prevented.

- (1) Determine the bolt length so that a clearance of 2 to 3 mm is secured between the bolt end and the bottom of the tap (effective tap depth).
- (2) As shown in Fig.1, a tapered washer is also available that allows GSR to be mounted on a section steel.
- (3) For model number coding, see B-146 to B-147.

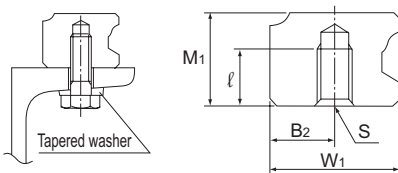


Fig.1

Table2 Tap Position and Depth Shape

Model No.	W <sub>1</sub>	B <sub>2</sub>	M <sub>1</sub>	S × l
GSR 15	15	7.5	11.5	M4 × 7
GSR 20	20	10	13	M5 × 8
GSR 25	23	11.5	16.5	M6 × 10
GSR 30	28	14	19	M8 × 12
GSR 35	34	17	22	M10 × 14