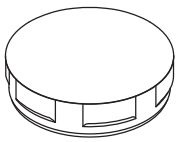
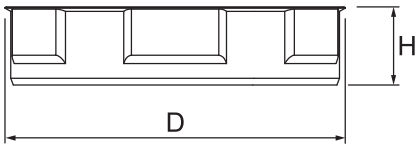
Dedicated Cap for LM Rail Mounting Holes

Using dedicated caps to cover the LM rail mounting holes helps prevent foreign material from entering the mounting holes and LM block.

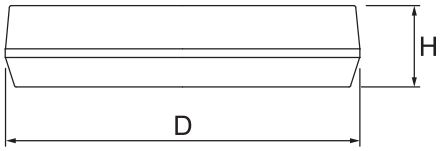
● Cap CV/Cap C

The caps are made of a special synthetic resin.
The CV cap is the successor to the C cap, and its new structure makes it easier to insert.





Cap CV



Cap C

Dimensions and Supported Model Numbers

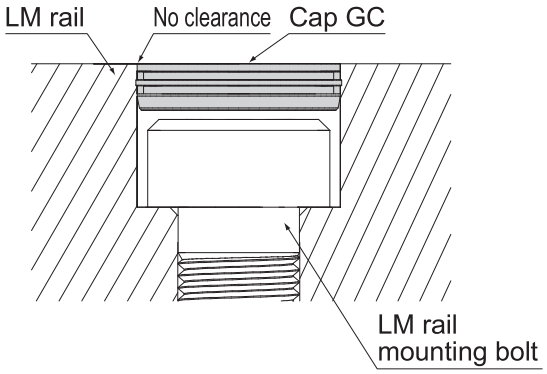
Model No.	Bolt used	Main dimensions(mm)		Supported model number															
		D	H	SSR	SR	SVR SVS NR-X NRS-X	NR NRS	SHS HSR SCR CSR HCR	HMG	SHW HRW	SRG SRN	SRW	GSR	HR	SRS RSR	SRS-W RSR-W	RSX	RSX-W	NSR-TBC
C3	M3	6.3	1.2	—	15	—	—	12	—	—	—	—	—	1123 1530	12 15	9	12 15	9	—
C4	M4	7.9	1.0	15Y	—	—	—	15	15	12*, 14, 17, 21, 27	15	—	15	—	—	14	—	—	—
CV5	M5	9.8	2.6	20 25	20 25	25	—	20	—	—	20	—	20	2042	20	—	—	—	20
CV6	M6	11.4	2.6	25Y 30	25Y 30	30	—	25	25	35	25	—	25	—	25	—	—	—	25 30
CV8	M8	14.4	3.3	35	35	35	—	30 35	35	50	30 35	—	30	2555 3065	—	—	—	—	40
CV10	M10	17.9	3.3	—	45	—	—	—	—	60	—	70	35	3575	—	—	—	—	50
CV12	M12	20.4	3.4	—	55	45	—	45	45	—	45	85	—	4085	—	—	—	—	70
CV14	M14	23.4	5.5	—	—	55	—	55	—	—	55	100	—	—	—	—	—	—	—
CV16	M16	26.4	5.6	—	70 85	65	—	65	65	—	65	130	—	50105	—	—	—	—	—
C20	M20	32.3	5.7	—	—	—	75	—	—	—	—	—	—	—	—	—	—	—	—
C22	M22	35.5	5.7	—	—	—	85	85	—	—	85	150	—	—	—	—	—	—	—
C24	M24	39.5	7.7	—	—	—	100	100	—	—	100	—	—	—	—	—	—	—	—

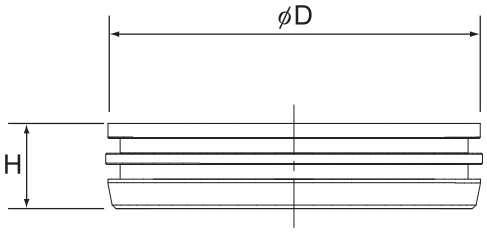
*#12 applies to SHW only.
Note1) Contact THK if this product will be used in special environments such as in a vacuum, at very low or high temperatures, or with coolants or corrosive solvents.
Note2) CV caps and C caps must be arranged separately from the LM Guide.
Note3) Contact THK if caps C5 to 16 are desired.

● Cap GC

GC caps are made of metal. (They are RoHS compliant.)

GC caps adhere closer to the counterbore than CV caps and C caps, so there is no clearance once they are inserted.





Dimensions and Supported Model Numbers

Model No.	Bolt used	Main dimensions(mm)		LM Guide model number											
		D	H	SSR	SR	SVR SVS NR-X NRS-X	NR NRS	SHS HSR HCR	SCR CSR	SHW HRW	SRG SRN	SRW	GSR	HR	NSR-TBC
GC5	M5	9.86	2.5	20	20	25	—	20	20	—	20	—	20	2042	20
GC6	M6	11.36	2.5	25Y 30	25Y 30	30	—	25	25	35	25	—	25	—	25 30
GC8	M8	14.36	3.5	35	35	35	—	30 35	30 35	50	30 35	—	30	2555 3065	40
GC10	M10	17.86	3.5	—	45	—	—	—	—	60	—	70	35	3575	50
GC12	M12	20.36	4.6	—	55	45	—	45	45	—	45	85	—	4085	70
GC14	M14	23.36	5.0	—	—	55	—	55	—	—	55	100	—	—	—
GC16	M16	26.36	5.0	—	70 85	65	—	65	65	—	65	130	—	50105	—
GC22	M22	35.36	5.0	—	—	—	85	85	—	—	85	150	—	—	—
GC24	M24	39.36	5.0	—	120	—	100	100	—	—	100	—	—	—	—

Note1) GC caps are only sold with LM Guides. They are not sold separately.
The LM Guide model number code will have “GC” at the end when it is delivered.

(Example 1) Multiple axes: SVR45LR+1200L -Ⅱ GC
- GC caps attached
- Symbol for No. of rails used on the same plane (2 axes)

(Example 2) One axis: SVR45LR+1200L GC
- GC caps attached

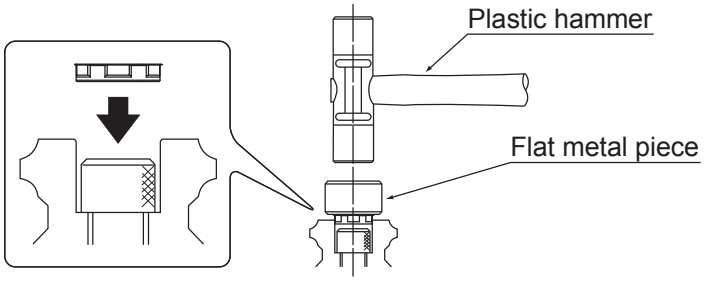
Note2) GC caps cannot be used with LM rails that are made of stainless steel or rails that have undergone surface treatment.
Note3) LM rail mounting holes for GC caps are special. (The mouth is not chamfered.)
Note4) Be careful not to injure your hand when inserting GC caps.
Note5) Be sure to make the GC caps level with the upper surface of the LM rail and clean (wipe) that surface after insertion.
Note6) If this product will be used in special environments, such as in a vacuum or at very low or high temperatures, contact THK.

● Guidelines for use in extreme environments

Extreme environment		Cap C Cap CV	GC cap	Example of use
Foreign matter concentration: Low	Metal powder, sputtering	○	◎	Welding machines, robots
	Wood shavings, coolant (Environments that strip away oils)	○	◎	Woodworking machinery, washers
	Metal powder + coolant	○	◎	Lathes, machining centers
Foreign matter concentration: High	Metal powder, sputtering	△	◎	Welding machines, robots
	Wood shavings, coolant (Environments that strip away oils)	△	◎	Woodworking machinery, washers
	Metal powder + coolant	△	◎	Lathes, machining centers

◎:Particularly effective ○:Effective △:Not particularly effective

● Cap insertion method



For best performance, caps must be inserted so that they are level with the rail surface. Have a flat aligning fitting and plastic hammer available.

① Set the cap on the LM rail mounting hole and place the alignment fitting on top.
② Use the plastic hammer to gradually drive the cap in until it is level with the upper surface of the LM rail.
③ As necessary, remove any slight burrs that appear.