

Linear Guideways

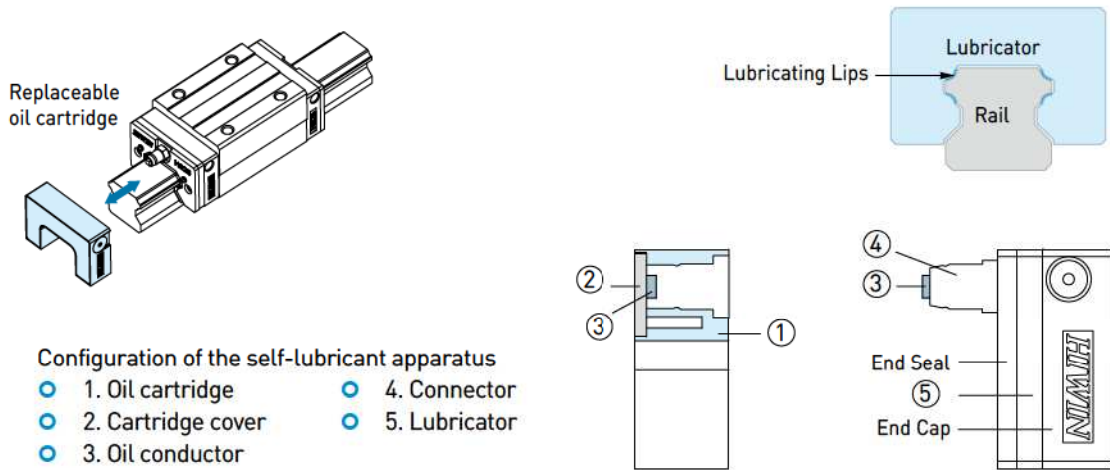
E2 Type

2-8 E2 Type - Self lubrication Kit for Linear Guideways

2-8-1 Construction of E2 Type

E2 self-lubricating linear guideway contains a lubricator between the end cap and end seal. Outside of the block is equipped with a replaceable oil cartridge, the configuration of which is listed below.

Lubrication oil flows from the replaceable oil cartridge to the lubricator and then lubricates grooves of rails. The Oil cartridge comprises a oil conductor with 3D structure that enables the lubricator to contact oil despite that blocks are placed at a random position , and thus the lubrication oil inside the oil cartridge can be used up via capillary action.



2-8-2 Feature of E2 Type

(1) Cost reduction: Save costs by reducing oil usage and maintenance.

Table 2-8-1

Item	Standard Block	E2 (Self-lubricant) Block
Lubricant device	\$ XXX	-
Design and installation of lubricant device	\$ XXX	-
Cost of oil purchase	0.3cc / hr x 8hrs / day x 280 days / year x 5 year = 3360 cc x cost / cc = \$ XXX	10 cc(5 years10000km) x cost/cc = \$ XX
Cost of refillin	3-5hrs / time x 3-5times / year x 5year x cost / time = \$ XXX	-
Waste oil disposal	3-5 times / year x 5year x cost / time = \$ XXX	-

(2) Clean and environmentally friendly: Optimized oil usage prevents leaking, making it the ideal solution for clean working environments.

(3) Long last and low maintenance: Self-lubricating block is maintenance free in most applications.

(4) No installed limitations: The linear guideway can be lubricated by E2 self-lubricating module irrespective of mounting directions.

(5) Easy to be assembled and dismantled: The cartridge can be added or removed from the block even when the guideway is installed on a machine.

(6) Different oils can be selected: The replaceable oil cartridge can be refilled with any approved lubrication oil depending on different requirements.

(7) Applications for special environments: Sealing grease into the block leads to better lubrication effects especially in dusty, dirty, or wet environments.

2-8-3 Applications

- (1) Machine tools
- (2) Manufacturing Machines : Plastic injection, printing, paper making, textile machines, food processing machines, wood working machines, and so on.
- (3) Electronic Machinery : Semiconductor equipment, robotics, X-Y table, measuring and inspecting equipment.
- (4) Others : Medical equipment, transporting equipment, construction equipment.

2-8-4 Specification

- (1) Add “/ E2” after the specification of linear guideway
Ex. HGW25CC2R1600ZAPII + ZZ / E2

2-8-5 Lubrication Capability

- (1) Life testing with light load

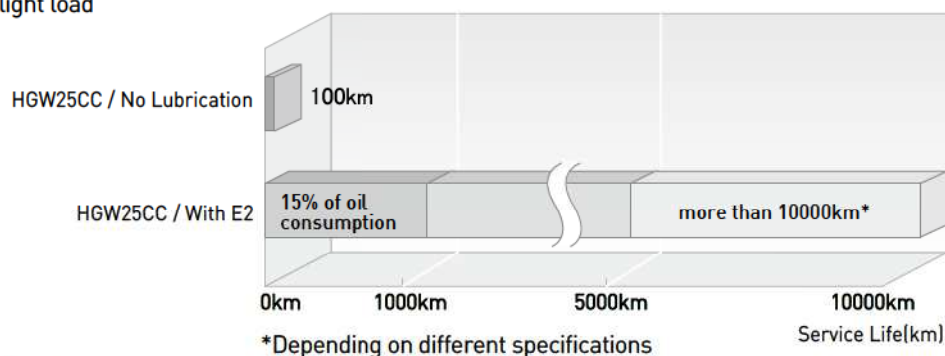


Table 2-8-2 Test condition

Model No.	HGW25CC
Speed	60m / min
Stroke	1500mm
Load	500kgf

- (2) Characteristic of lubricating oil

The standard oil filled in the oil cartridge is Mobil SHC 636, which is a fully synthetic lubricant with a main constituent, synthetic hydrocarbons (PAO). The viscosity class of the oil is 680 (ISO VG 680). Its characteristics are as follows.

- Compatible with lubrication grease of which the base oil is synthetic hydrocarbon oil, mineral oil or ester oil.
- Synthetic oil with superb high temperature thermal/oxidation resistance.
- High viscosity index to provide outstanding performance in service applications at extremely high and low temperatures.
- Low traction coefficient to reduce power consumption.
- Anti-corrosion and rust-proof.

- * Lubricants with the same viscosity class can also be used; however, their compatibility should be taken into consideration.

2-8-6 Temperature Range for Application

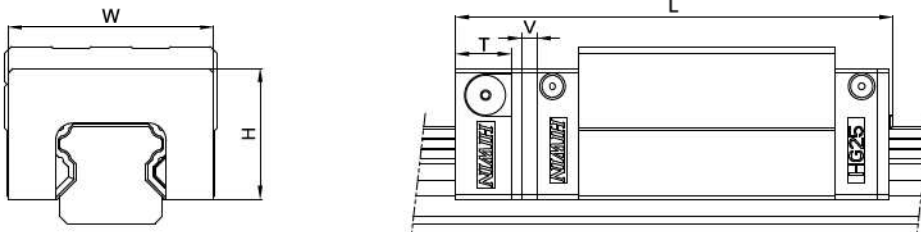
The application temperature for this product is -10°C ~ 60°C. Please contact with HIWIN for further discussion and information if the temperature is out of this range.

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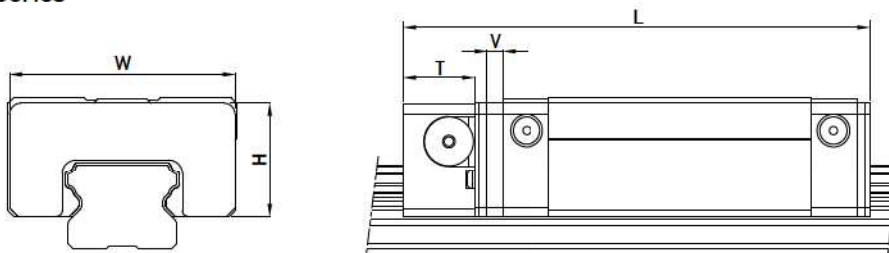
2-8-8 Dimension Table for E2 Type

(1) HG Series



Model No.	E2 self-lubricating module dimensions				
	W	H	T	V	L
HG 15 C	32.4	19.5	12.5	3	75.4
HG 20 C	43	24.4	13.5	3.5	93.5
HG 20 H					108.2
HG 25 C	46.4	29.5	13.5	3.5	100
HG 25 H					120.6
HG 30 C	58	35	13.5	3.5	112.9
HG 30 H					135.9
HG 35 C	68	38.5	13.5	3.5	127.9
HG 35 H					153.7
HG 45 C	82	49	16	4.5	157.2
HG 45 H					189
HG 55 C	97	55.5	16	4.5	183.9
HG 55 H					222
HG 65 C	121	69	16	4.5	219.2
HG 65 H					278.6

(2) EG Series



Model No.	E2 self-lubricating module dimensions				
	W	H	T	V	L
EG 15 S	33.3	18.7	11.5	3	54.6
EG 15 C					71.3
EG 20 S	41.3	20.9	13	3	66
EG 20 C					85.1
EG 25 S	47.3	24.9	13	3	75.1
EG 25 C					98.6
EG 30 S	59.3	31	13	3	85.5
EG 30 C					114.1