

Linear Guideways

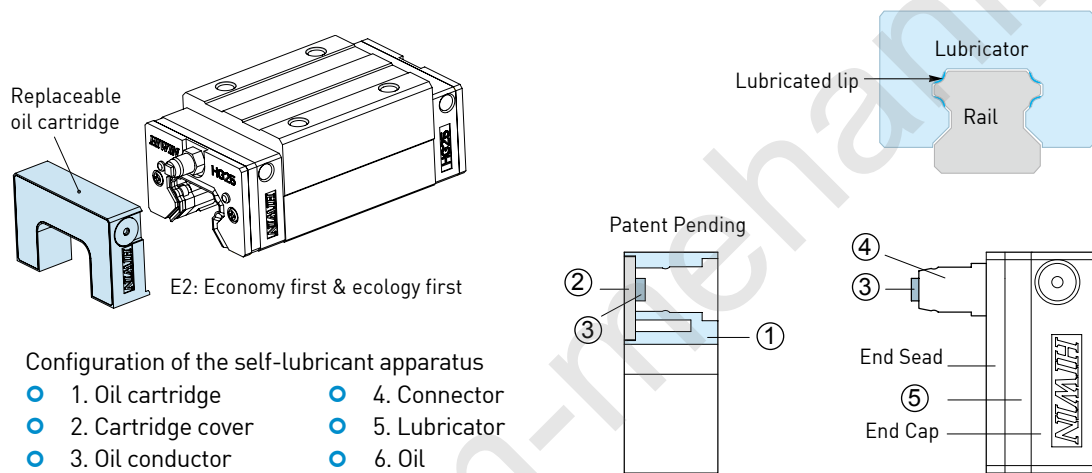
E2 Type

2-5 E2 Series - Self lubrication Kit for Linear Guideways

2-5-1 Construction of E2 Series

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

Lubrication oil flows to the lubricator from the replaceable oil cartridge 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 or oil flow becomes less, and thus the lubrication oil inside the oil cartridge can be used up via capillary action.



2-5-2 Feature of E2 Series

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

Table 2.73

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 installation 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.

2-5-3 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.

2-5-4 Specification

- (1) Add “/E2” after the specification of linear guideway

Ex. HGW25CC2R1600ZAPII + ZZ / E2

2-5-5 Lubrication Capability

- (1) Life testing with light load

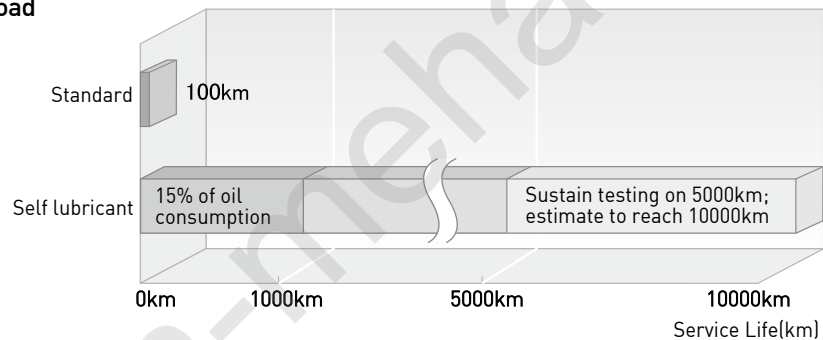


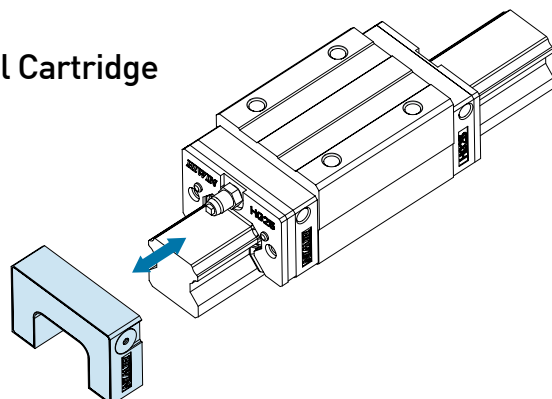
Table 2.74 Test condition

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

(2) Characteristic of lubricant oil

1. Synthetic oils with stable characteristics.
2. Range of oil operation temperature -15°C~240 °C, which covers most working conditions for linear guideways.
3. Reduces friction.
4. Prevents corrosion.
5. Non-toxic.

2-5-6 Assembling and Dismantling of Oil Cartridge

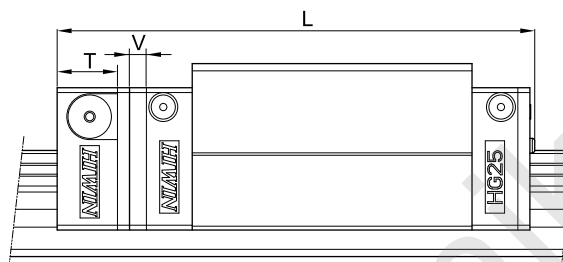
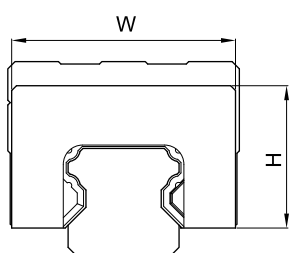


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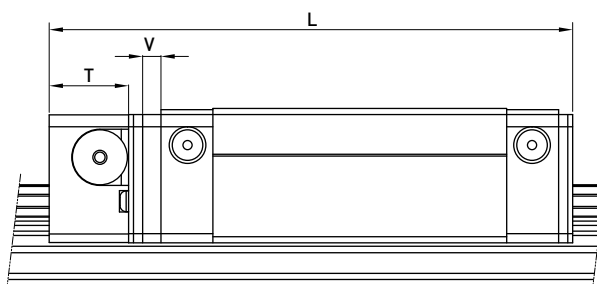
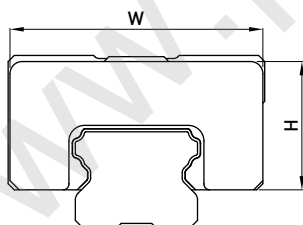
2-5-7 Dimension Table for E2 Type

(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	93.6
HG 20 H					108.3
HG 25 C	46.4	29.5	13.5	3.5	100.5
HG 25 H					121.1
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	219.7
HG 65 H					279.1

(1) 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