

## 9.2 E2 Self - lubricant



### • Features:

#### • Cost savings:

The E2 series saves cost by eliminating piping joint systems, change and waste disposal, and by reducing oil purchases.

#### • Greatly extends the maintenance period:

The E2 series will supply proper lubrication for long periods of time extending the maintenance period.

#### • Easy maintenance:

The special construction of the E2 design requires no tools to replace the oil cartridge. There is no disassembly required when adding the E2 option.

#### • Ideal lubrication position:

The lubrication point is located inside the ball nut allowing for the lubrication to be firmly applied onto the ball tracks.

#### • Effortless and flexible installation:

The lubrication performs properly in every direction so there are no restrictions when installing the E2.

#### • Clean and environmentally friendly:

Prevents oil leakage, making the E2 the ideal solution for clean room environments.

#### • Interchangeable oil selection:

The replaceable oil cartridge can be refilled with any approved lubrication oil.

#### • Applications for special environments:

The lubrication oil can be combined with grease for better results, especially in dusty, dirty, or wet environments.

#### • Characteristic of lubrication oil:

The E2 self-lubrication cartridge is equipped with synthetic hydrocarbon based oil. The lubricate oil has a viscosity grade of ISO VG680.

The E2 is compatible with mineral, hydrocarbon, and ester based greases. The E2 can accept synthetic oils with stable characteristics. A high viscosity grade will work well in conditions where there are high and low temperatures.

The low fluid draft factor prevents excessive power consumption and deters against corrosion and rust.

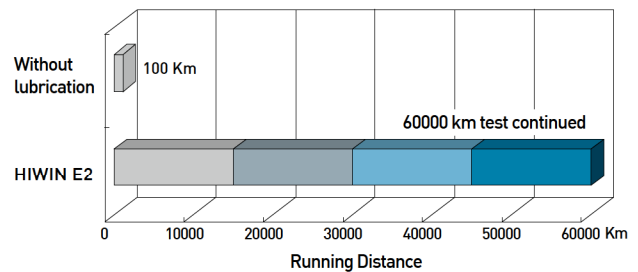
A compatible lubricate oil with the same viscosity grade can also be used in the replaceable cartridge.

### • Performance:

The E2 series will extend the maintenance period by supplying proper lubrication for long periods of time.

Test condition :	
Specification	R40-40K2-FSC
Oil	Mobil SHC 636 (50C.C.)
Speed	3000 rpm
Stroke	1000mm

E2 Performance Test



\* Note : above test with no grease added

### • Lubricant oil characteristics:

The E2 self-lubricant cartridge is equipped with synthetic hydrocarbon based oil. The lubricant oil has a viscosity grade of ISO VG680.

- The E2 is compatible with mineral, hydrocarbon, and ester based greases.
- The E2 can accept synthetic oils with stable characteristics.
- A high viscosity grade will work well in conditions where there are high and low temperatures.
- The low fluid draft factor prevents excessive power consumption.
- Anti-corrosion and rust.
  - ◇ A compatible lubricate oil with the same viscosity grade can also be used in the replaceable cartridge.

• **Application:**

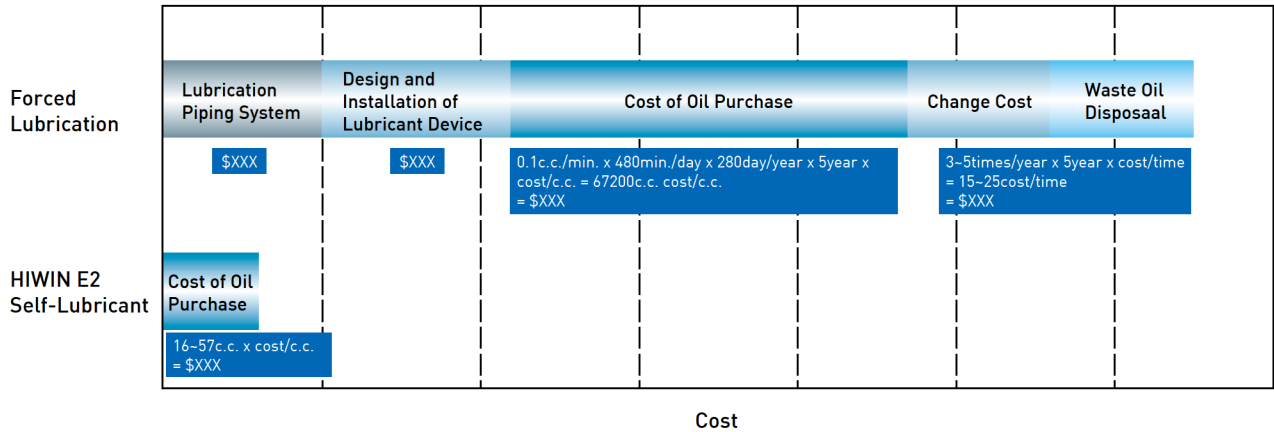
- Machine tools
- Industrial machinery : printing machine, paper-processing machine, automatic machine, textile machine, cutting and grinding machines, etc.
- Electronic machinery : robots, measuring equipment, X-Y tables, etc.
- Miscellaneous: medical equipment, factory automation equipment, etc.

• **Temperature range:**

The ideal E2 temperature range is from -10°C to 60 °C, please notify Hiwin engineers if the temperature requirement is out of this range.

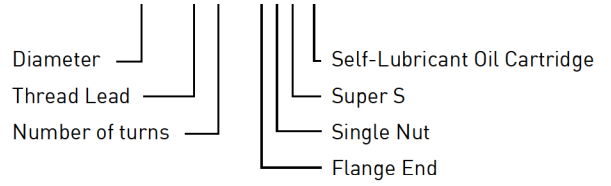
• **Cost saving:**

The E2 series saves cost by eliminating piping joint systems, change and waste disposal, and by reducing oil purchases.



• **Specification number:**

Example: R40 - 20K3 - FSCE2 - 1200 - 1600 - 0.008



• **Specification:**

Nut type : FSV, FDV, FSW, FDW, PFDW, OFSW, Super S  
Please contact HIWIN engineers with other specification needs.

In order to get the good lubrication efficiency; please notify HIWIN engineers of the ballscrew installation direction.