QZ Lubricator feeds a right amount of lubricant to the raceway of the ball screw shaft. This allows an oil film to be constantly formed between the balls and the raceway, improves lubricity and significantly extends the lubrication maintenance interval.

The structure of QZ Lubricator consists of three major components: (1) a heavily oil-impregnated fiber net (stores the lubricant), (2) a high-density fiber net (applies the lubricant to the raceway) and (3) an oil-control plate (adjusts the oil flow). The lubricant contained in the QZ Lubricator is fed by the capillary phenomenon, which is used also in felt pens and many other products.

**Features**
- Since it supplements an oil loss, the lubrication maintenance interval can be significantly extended.
- Since the right amount of lubricant is applied to the ball raceway, an environmentally friendly lubrication system that does not contaminate the surroundings is achieved.

Note) Some types of QZ have a vent hole. Be careful not to block the hole with grease or other obstructions.
**Significantly extended maintenance interval**
Since QZ Lubricator continuously feeds a lubricant over a long period, the maintenance interval can be significantly extended.

![Graph showing maintenance interval](image)

**Environmentally friendly lubrication system**
Since QZ Lubricator feeds the right amount of lubricant directly to the raceway, the lubricant can effectively be used without waste.

**[Test conditions]**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Screw</td>
<td>BIF2510V</td>
</tr>
<tr>
<td>Maximum rotational speed</td>
<td>2500min⁻¹</td>
</tr>
<tr>
<td>Maximum speed</td>
<td>25m/min</td>
</tr>
<tr>
<td>Stroke</td>
<td>500mm</td>
</tr>
<tr>
<td>Load</td>
<td>Internal preload only</td>
</tr>
</tbody>
</table>

**QZ Lubricator + THK AFA Grease**
32cm³
(QZ Lubricator attached to both ends of the ball screw nut)

**Forced lubrication**

![Graph showing amount of oil](image)

**Compared**

Forced lubrication
0.25cm³/3min×24h×125d
=15000cm³

Reduced to approx. \(\frac{1}{470}\)