QZ Lubricator

●For the supported models and the ball screw nut dimension with QZ attached, see △15-344 to △15-352.

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.

Appearance Drawing

Structural Drawing
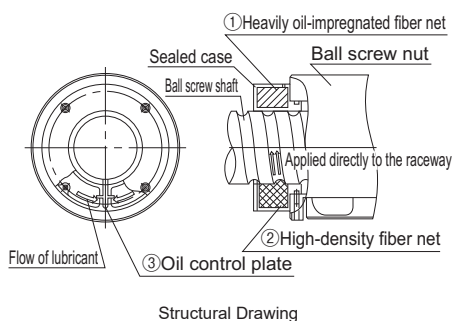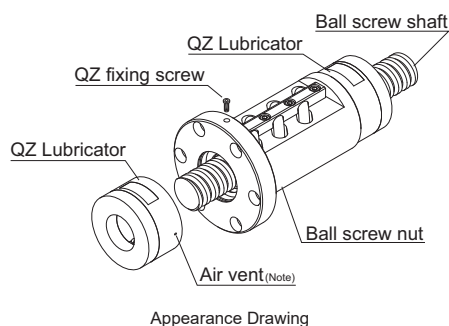
[Features]

● 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.

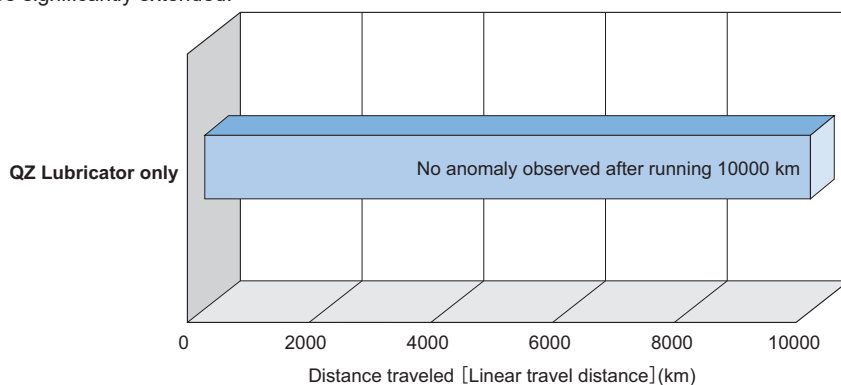Model number coding

BIF2505V-5 QZ WW G0 +1000L C5

With QZ Lubricator

With wiper ring W

(*) See △15-344.

● **Significantly extended maintenance interval**

Since QZ Lubricator continuously feeds a lubricant over a long period, the maintenance interval can be significantly extended.
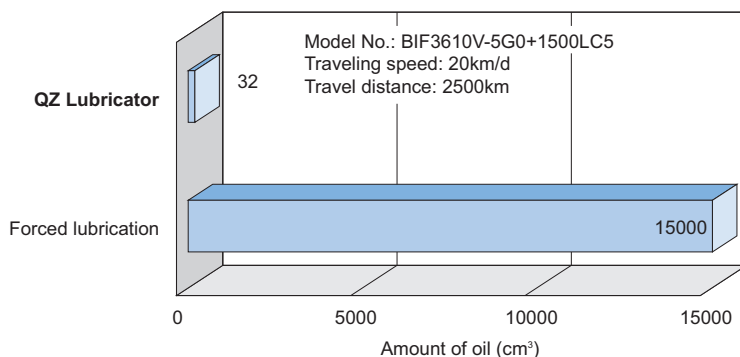
QZ Lubricator only No anomaly observed after running 10000 km

0   2000   4000   6000   8000   10000

Distance traveled［Linear travel distance］(km)

[Test conditions]

Item	Description
Ball Screw	BIF2510V
Maximum rotational speed	2500 min^{-1}
Maximum speed	25 m/min
Stroke	500 mm
Load	Internal preload only

● **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.

QZ Lubricator 32   Model No.: BIF3610V-5G0+1500LC5
Traveling speed: 20km/d
Travel distance: 2500km

Forced lubrication   15000

0   5000   10000   15000

Amount of oil (cm³)

QZ Lubricator + THK AFA Grease		Forced lubrication
32 cm³	**Compared**	**0.25 cm³/3 min×24 h×125d**
(QZ Lubricator attached to both ends of the ball screw nut)		**＝15000 cm³**

Reduced to approx. $\dfrac{1}{470}$

THK Ⓐ**15-343**