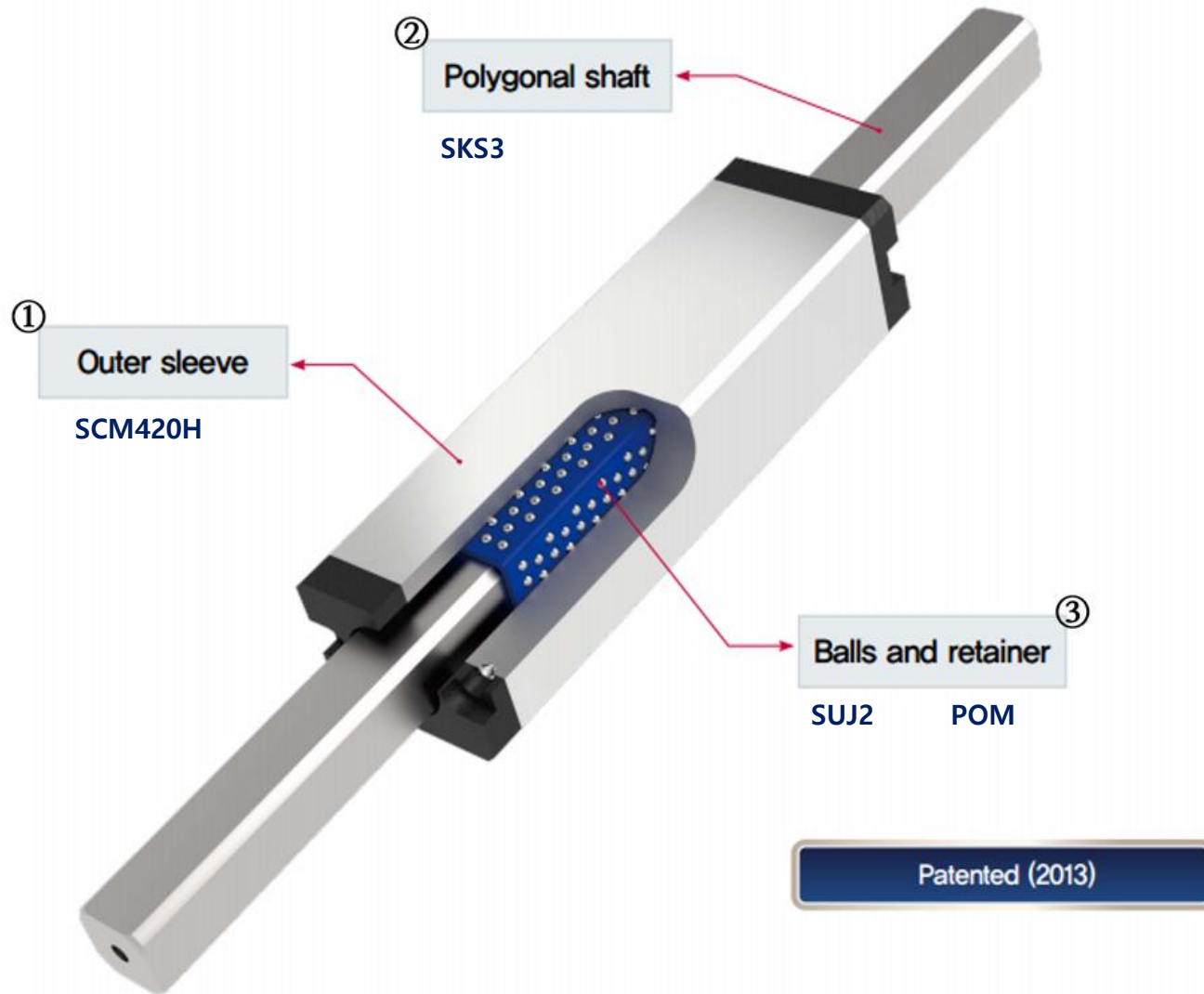


POLYGON BALL GUIDE (PBG)





Product Configuration

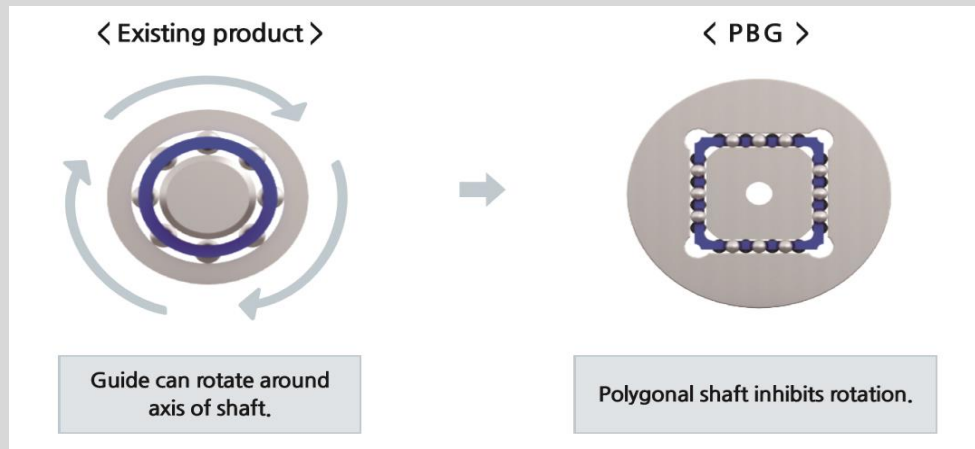
- Outer Sleeve: It is a metallic outer sleeve made of bearing steel to transmit the load with sufficient strength to the rolling element. Like the post, it has a polygonal structure and is treated with a mirror-finish.
- Polygonal Shaft(Post): A mirror-finished polygonal structure that directly contacts approximately 300 balls and performs functions such as Pick & Place.
- -Ball Cage: A part that arranges and maintains balls of high carbon chrome bearing steel in large quantities.

2020-10-16

Function

- Definition

- ✓ Compact, high rigidity and high precision finite miniature stroke guide using precision balls on polygon post and outer sleeves.



Refer to the following link for an article on PBG.

<https://www.linearmotiontips.com/new-polygon-ball-guide-pbg-from-samick-precision-industry/>

- Features

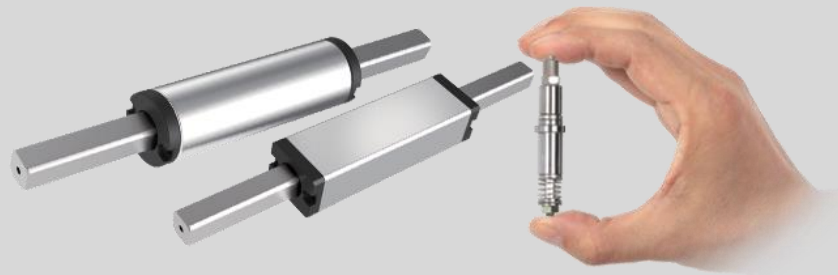
- ✓ Compact design is possible by minimizing the outer diameter of the outer sleeve by combining a polygonal post and a cage containing a large amount of balls inside the outer sleeve.
- ✓ A large number of balls are arranged on a polygonal surface, realizing high rigidity and minimizing preload for very smooth movement
- ✓ The mirrored polygonal structure of the post and the ball are arranged inside the outer cylinder by making points contact to ensure straightness, smooth movement and constrain the rotation direction. This minimizes the occurrence of yaw, rolling, and pitching to maintain stable precision and achieve high rigidity due to the arrangement of many balls on the polygonal surface.

Usage

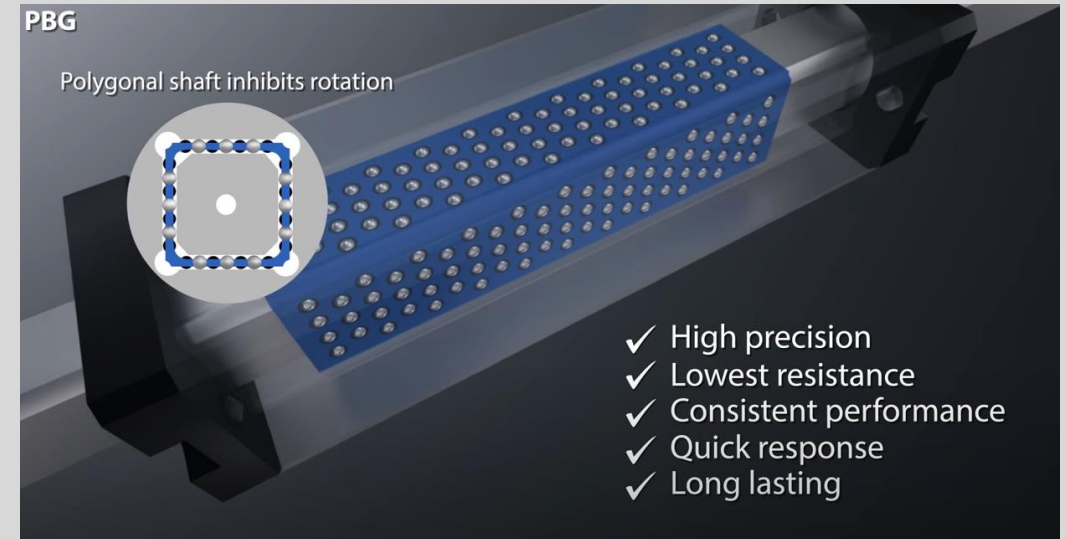
- Use

- ✓ It is used as a miniature guide for a system that transports small precision parts such as small precision measuring devices, OA devices, semiconductor and LED chip sorters, and small lens sorters.

- ✓ Especially when you need an **alternative to miniature ball spline** that lacks distortion or rigidity.



- Movie Clip



Refer to the following link for PBG on YouTube
<https://youtu.be/BqgOapoJy6U>

For more information, please contact to
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