BALL SCREWS

HIGH LIFE EXPECTANCY
EXCELLENT COST PERFORMANCE RATIO

▶ MATERIAL:
Cf 53 induction-hardened to HRC 62 ± 2

▶ SPECIFICATIONS:
- Pitch accuracy ≤ 0.1 mm / 300 mm,
  ISO class 7.
- Screw pitches of 2.5, 4, 5, 10 and 20 mm.
  Available with machined and unmachined ends in lengths up to 3 m.
  Ø16 mm, rolled and polished.

Produce greater than 90% efficiency in converting rotary to linear motion.

Machined screws are designed to be held by a double bearing on one side and on the other side by either a floating bearing, or no bearing and a guiding ball nut.

Root Diameter: \( D_2 = 12.98 \) for 5, 10, 20 mm Pitch
\( D_2 = 13.34 \) for 2.5 mm Pitch

** These lengths are available machined only.

** Longer ball screws available on special request.
KM SERIES ANTI-BACKLASH BALL NUTS

THIS ISEL BALL NUT IS PATENTED

> MATERIAL:
   Ball Nut - Steel, Crl 53, ground, polished and hardened to HRC 62 ± 2

> SPECIFICATIONS:
   Ball nut is 50 mm long by 28 mm diameter.
   2 optional mounting brackets allow for flange mounting or base mounting. Both feature standard lubrication ports and are made of steel with a black oxide finish.
   Available in 2.5, 5, 10 and 20 mm pitch.
   Repeatability < 0.01 mm, accuracy < 0.1 mm/300 mm when used with our sleeve.
   Optional wipers available.
   Compatible with 16 mm diameter ball screws. See index under Ball Screws.

   Produce greater than 90% efficiency in converting rotary to linear or linear to rotary motion.

---

METRIC COMPONENT

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fig. 1</td>
<td></td>
</tr>
<tr>
<td>S6652HM2135025</td>
<td>2.5</td>
</tr>
<tr>
<td>S6652HM2135050</td>
<td>5</td>
</tr>
<tr>
<td>S6652HM2135100</td>
<td>10</td>
</tr>
<tr>
<td>S6652HM2135200</td>
<td>20</td>
</tr>
</tbody>
</table>

---

Catalog Number

| FLANGE MOUNTING BLOCK (Fig. 2) | S6652HMF2135 |
| BASE MOUNTING BLOCK (Fig. 3)  | S6652HMB2135 |
| WIPPERS (not shown)            | S6652HMW6135 |
SERIES 1 ANTI-BACKLASH BALL NUTS

THIS ISEL BALL NUT IS A PATENTED ANTI-BACKLASH DESIGN

> MATERIAL:
- Balls - Hardened Steel HRC 63 ± 2
- Ball Nut - Steel, Cl 53, ground, polished and hardened to HRC 62 ± 2

> SPECIFICATIONS:
- Repeatability of 0.01 mm and accuracy of 0.1 mm/300 mm when used with our ball screws.
- Blank shaft is used to retain balls during shipment.
- Can be used with 16 mm ball screws; see index.
- Available in 2 heights of 25.3 mm and 28.5 mm.

Photographed with blank shaft to retain balls.

---

### METRIC COMPONENT

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Fig. No.</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>S6653HM2130040</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>S6653HM2130050</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>S6653HM2130100</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>S6653HM2130200</td>
<td>2</td>
<td>20</td>
</tr>
</tbody>
</table>

©Copyright 2019 Stock Drive Products / Sterling Instrument, a Designatronics company. All rights reserved.