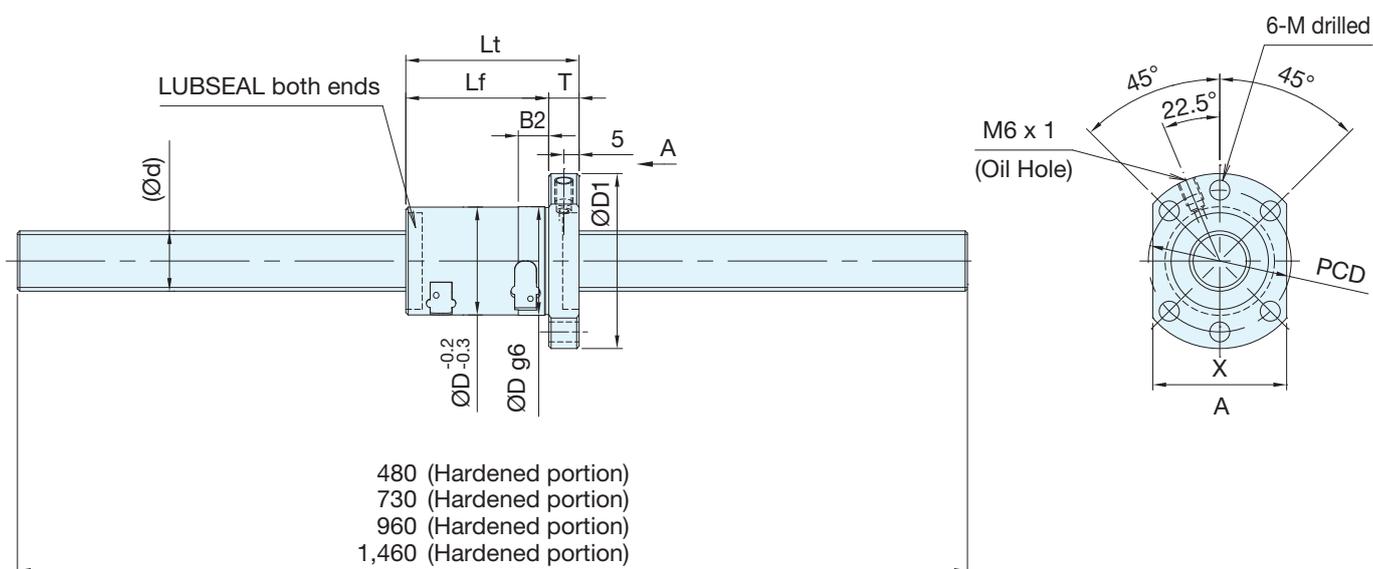


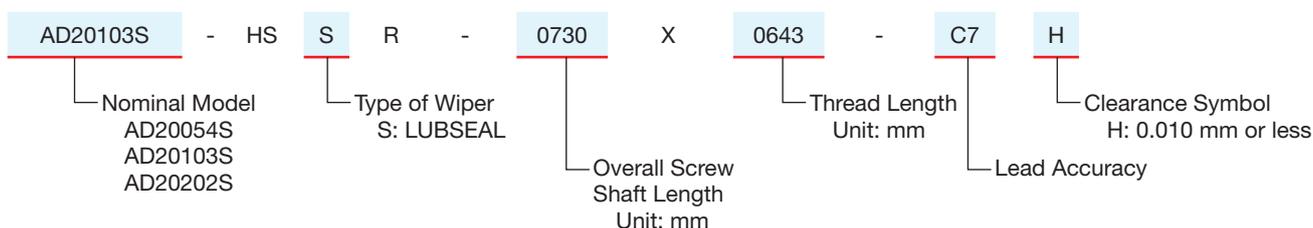
Ball Screw Specifications

| Nominal Model | AD20054S | AD20103S | AD20202S |
|--|----------------------------|----------------------------|----------------------------|
| Nominal Diameter [mm] - Lead [mm] | 20 - 5 | 20 - 10 | 20 - 20 |
| Number of Circuits / Thread Direction | 3.7 turns per row / Right | 2.7 turns per row / Right | 1.7 turns per row / Right |
| Ball Diameter [mm] | 3.175 | 3.175 | 3.175 |
| Root Diameter [mm] | 17.5 | 17.5 | 17.5 |
| Basic Dynamic Load Rating C [N] | 10,400 | 7,800 | 5,100 |
| Basic Static Load Rating C_0 [N] | 18,500 | 13,400 | 8,500 |
| Accuracy Grade / Clearance Symbol | C7 / H | C7 / H | C7 / H |
| Axial Clearance [mm] | 0.010 or less | 0.010 or less | 0.010 or less |
| Ball Re-Circulation System | Side Deflector™ method | Side Deflector™ method | Side Deflector™ method |
| Wiper / Lubrication Unit | LUBSEAL™ | LUBSEAL™ | LUBSEAL™ |
| Lubricant | Multemp LRL No.3 | Multemp LRL No.3 | Multemp LRL No.3 |
| Maximum Rotational Speed [min^{-1}] | 5,000 DN \leq 100,000 | 5,000 DN \leq 100,000 | 5,000 DN \leq 100,000 |



| Nominal Model | Nominal Diameter | Lead Ph | Screw Shaft Diameter d | Nut Dimensions | | | | | | | | |
|---------------|------------------|---------|------------------------|------------------|--------------------|--------------------|-------------|-------------------|-----------|-------------------|--------------------------|---------|
| | | | | Outer Diameter D | Flange Diameter D1 | Total Length L_t | Thickness T | Body Length L_f | Length B2 | Mounting Hole PCD | Mounting Hole Diameter M | Width X |
| AD20054S | 20 | 5 | 20 | 36 | 58 | 50 | 10 | 40 | 10 | 47 | 6.6 | 44 |
| AD20103S | | 10 | | | | 57 | | 47 | | | | |
| AD20202S | | 20 | | | | 66 | | 56 | | | | |

Guide to Model Numbers



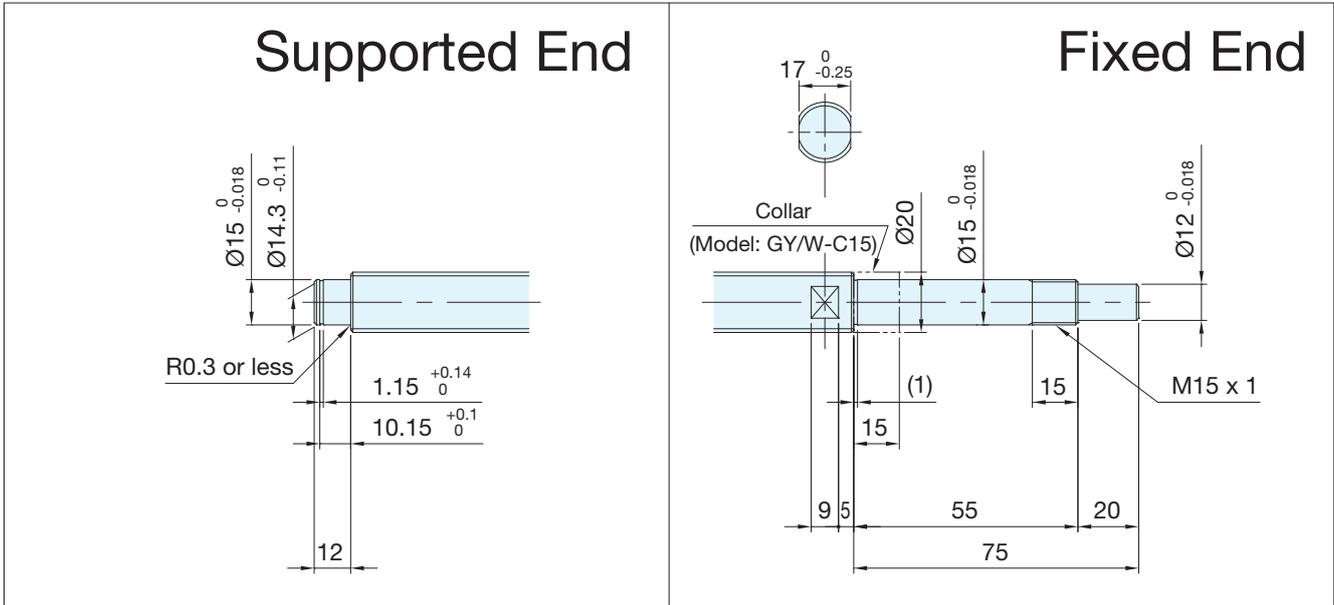
● Shaft End Design

Recommended shaft end configurations are available by size for AD Series ball screws.

As well as our recommended shaft end configuration below, additional machining for keyways, tap holes, D-cut machining, etc. are also available upon request.

A sample machined shaft end configuration is shown below.

Model example: Shaft end not machined (left page) ⇒ Shaft end machined
 AD20103S-HSSR-0730A ⇒ AD20103S-HSSR-0730 X 0643 -C7H
 ↳ Thread Length
 ↳ Overall Screw Shaft Length



● Applicable Support Units

| Applicable supported end support units | Applicable fixed end support units |
|--|--|
| BUK-15S (square) Refer to page 22 | BUK-15/BUK-15F (square) Refer to page 22 |
| BUM-15S (round) Refer to page 23 | BUM-15/BUM-15F (round) Refer to page 23 |

● Optional Specifications

Anti-rust black oxide film treatment (film thickness 1-2 µm) is available.