



Ball Screws

Compact, efficient, precise

We pioneer motion

SCHAEFFLER

Our offer

Schaeffler ball screws are widely used in a variety of applications where high accuracy, efficiency and long service life are needed. We offer a wide range of screw types and nut sizes to suit almost every customer requirement.

Different applications can have very different needs and our ball screws can be tailored to the various requirements with customized shaft machined ends and an assortment of accessories to ease integration in existing systems. Our dedicated manufacturing processes with precision rolling and inhouse heat treatment are the main contributors to the product's high quality. Most standard components are available in stock for quick delivery.

Common applications

- Lifting and handling
- Woodworking machinery
- Printing machinery
- Food and beverage
- General automation
- Metal forming
- Machine tools
- Medical equipment

General features



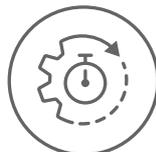
Wide assortment of leads
2 to 50mm



Precision rolled screws
Classes G9, G7 and G5 available.



Axial play and preload
Different levels available



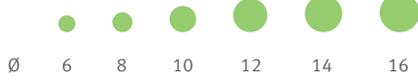
Highly efficient drive
Efficiency close to 90%



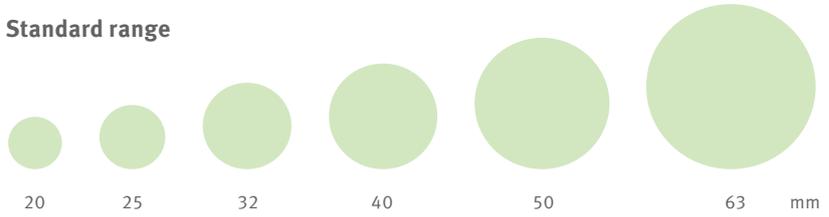
Range overview

Size

Miniature range



Standard range



Nut and flange designs

SD/SP
Miniature range



SH
Miniature range



SX
Standard range



SND*
Standard range



SN
Standard range



SL
Standard range



SND: Nut interfaces according to DIN 69051

Application examples



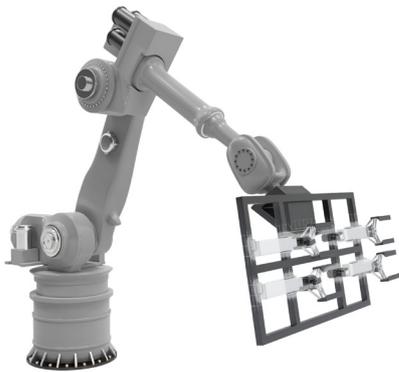
Filling machine

Food and beverage

A machine that is used to fill either a bottle or a pouch. Type of food products may range from solid to semi-solids, from liquids to frozen.

The advantages of our ball screws:

- Available in stainless steel up to Ø16mm
- Extremely compact design
- Adapted to operate in a clean environment



Automotive assembly and automation applications

A flexible end effector is the device at the end of a robotic arm, designed to handle objects in an assembly line.

The advantages of our ball screws:

- High positioning accuracy (repeatability)
- High rigidity
- Long life



CNC punching machine

Metal forming

A specialty CNC punch machine used to position the steel plates with a precision of 50 µm in 1500 mm stroke.

The advantages of our ball screws:

- Quick lead time and better cost compared to ground ball screw for long stroke
- High accuracy (G5) and repeatable positioning

Schaeffler ball screws

How are they different?



Materials, heat treatment

- Carbon and stainless steel versions
- available in standard sizes up to Ø16 mm
- Specific surface coating for improved ball screw performance upon request
- Perfect control of in-house heat treatment

Engineered solutions

- Customized solutions available upon request
- Engineering assistance in case of no drawing and/or lack of specifications
- Additional ball circuits for higher load
- Specific nut or shaft interfaces
- In-house testing facility for unexpected wear, tolerances, rigidity, hardness, etc.

Mounting accessories

- Various bearing support units for Ø16 to 63 mm
- Mounting flanges for threaded nose nuts
- Rotating nut assembly SLT for long lead series

Schaeffler also offer optional steel inserts, safety rings and safety nuts for severe or vertical applications.

Services



- Rolled shafts in lengths up to 5,7 m
- Nuts on sleeve in various configurations
- Available in stock for quick deliveries
- Multiple options for shaft end machining
- **Short lead time service center for end machining and urgent demands**
 - Nuts on sleeve 3-5 days
 - Rolled shafts 5 days
 - Complete screw 10-15 days

Supporting tool

Digital

Schaeffler has developed a portfolio of tool to support customers in easy selection and calculation the right Schaeffler product for their application.

EWELLIX Actuator select

- Product selection
- Performance calculator
- Cost saving calculator

Ball and Roller Screw select

- Product selection
- Product calculator
- Product verification

Linear guides select

- Product selection
- Product calculator
- Cross-reference
- Product sear



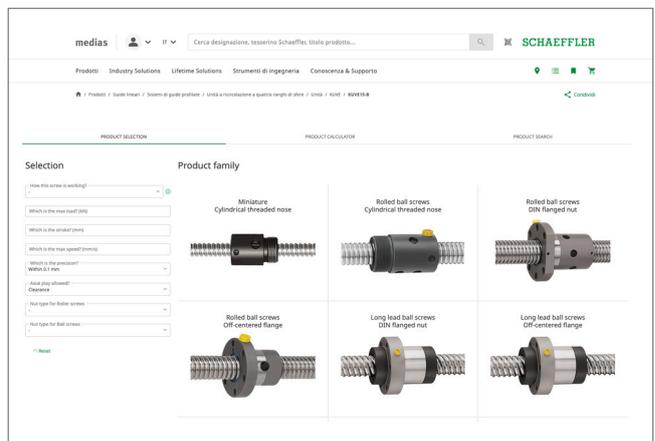
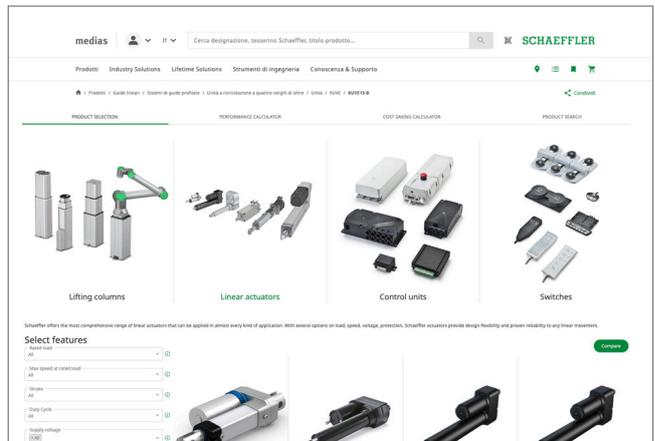
EWELLIX Actuator select

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- › Click on [link](#)



Ball and Roller Screw select

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Publications

Supporting documents are available for download on Schaeffler.com on each product page under the technical data section:

- Operating manual
- Mounting instruction



Ball screws

› Scan QR code

› Click on [link](#)

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