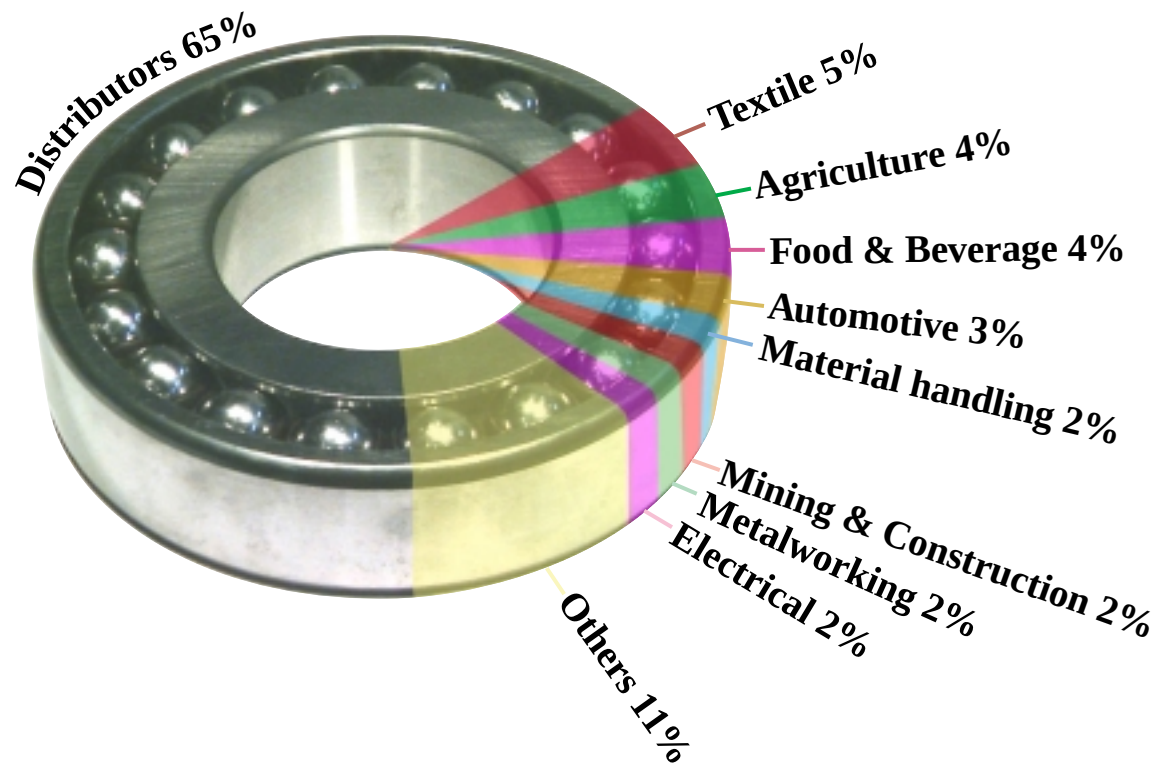




**Why buy this bearing
for another 90 years?**

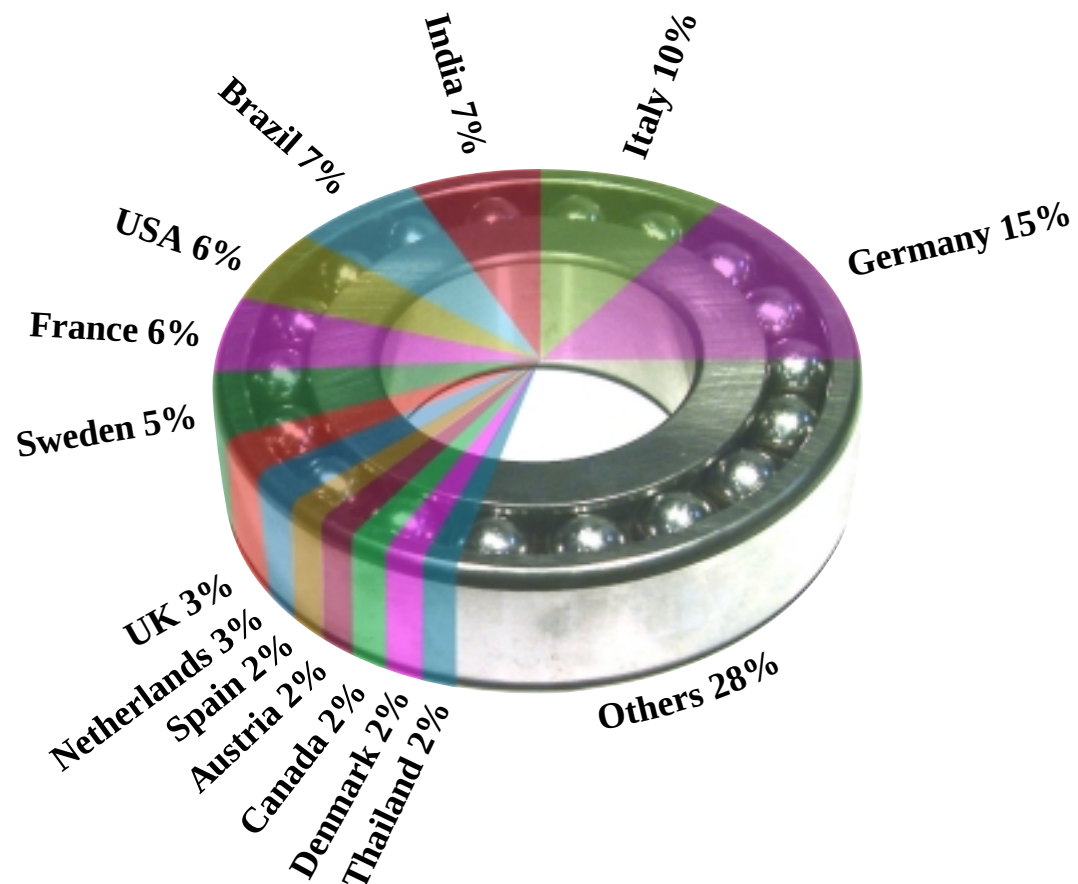
Sales per segment

– Self-Aligning Ball Bearings

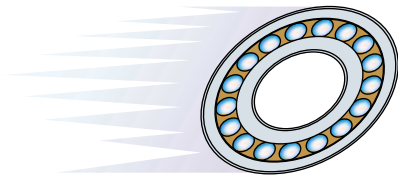


Sales per Country

– Self-Aligning Ball Bearings



Decisive features of Self-aligning ball bearings



High speed performance

- High machine productivity



Minimum maintenance needed

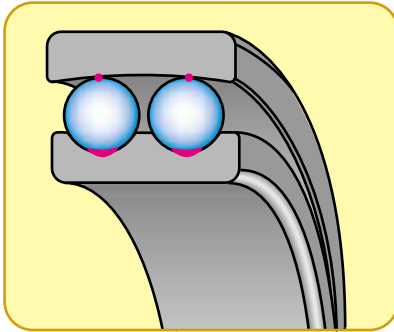
- Economic operation



Self-aligning

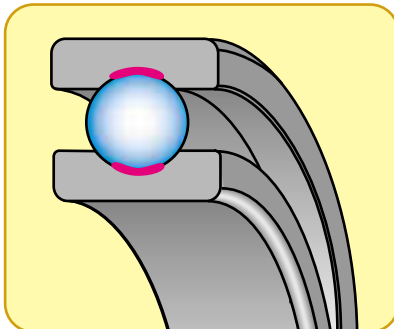
- Lighter and more compact machines

Self-aligning ball bearings



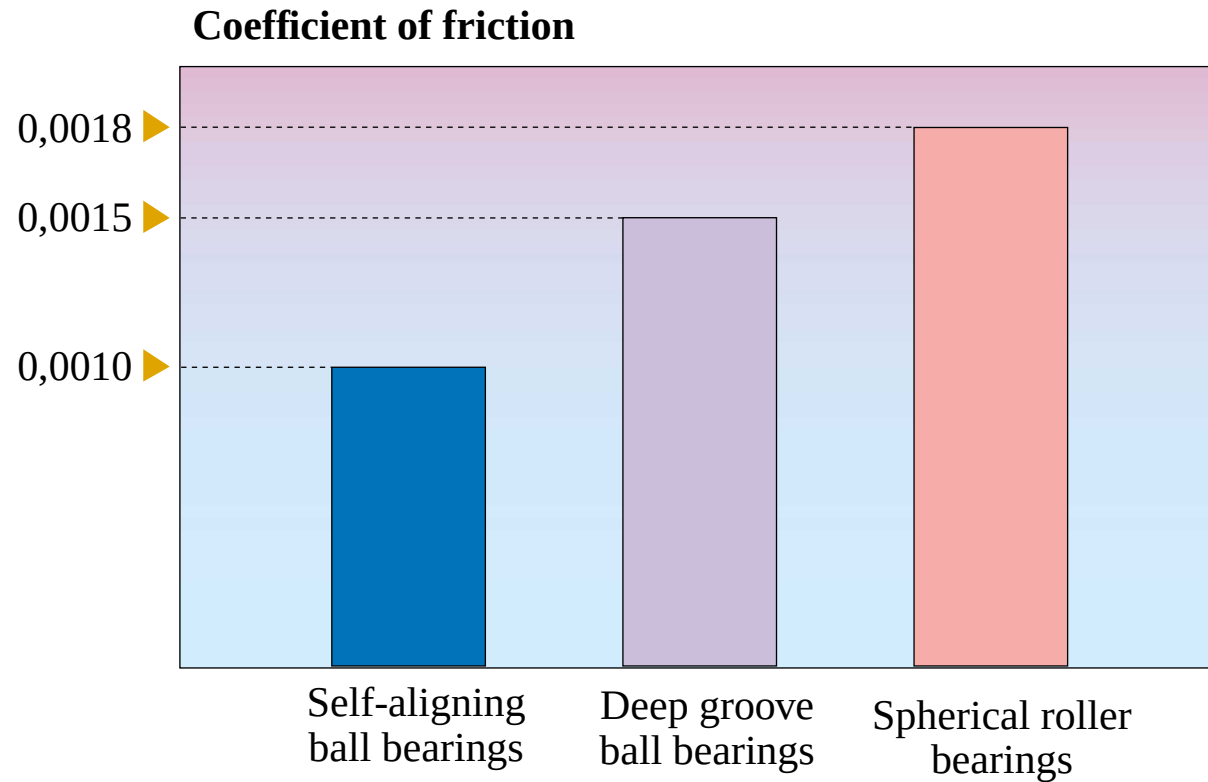
Outer ring: Point contact
Inner ring: Elliptical contact

Deep groove ball bearings

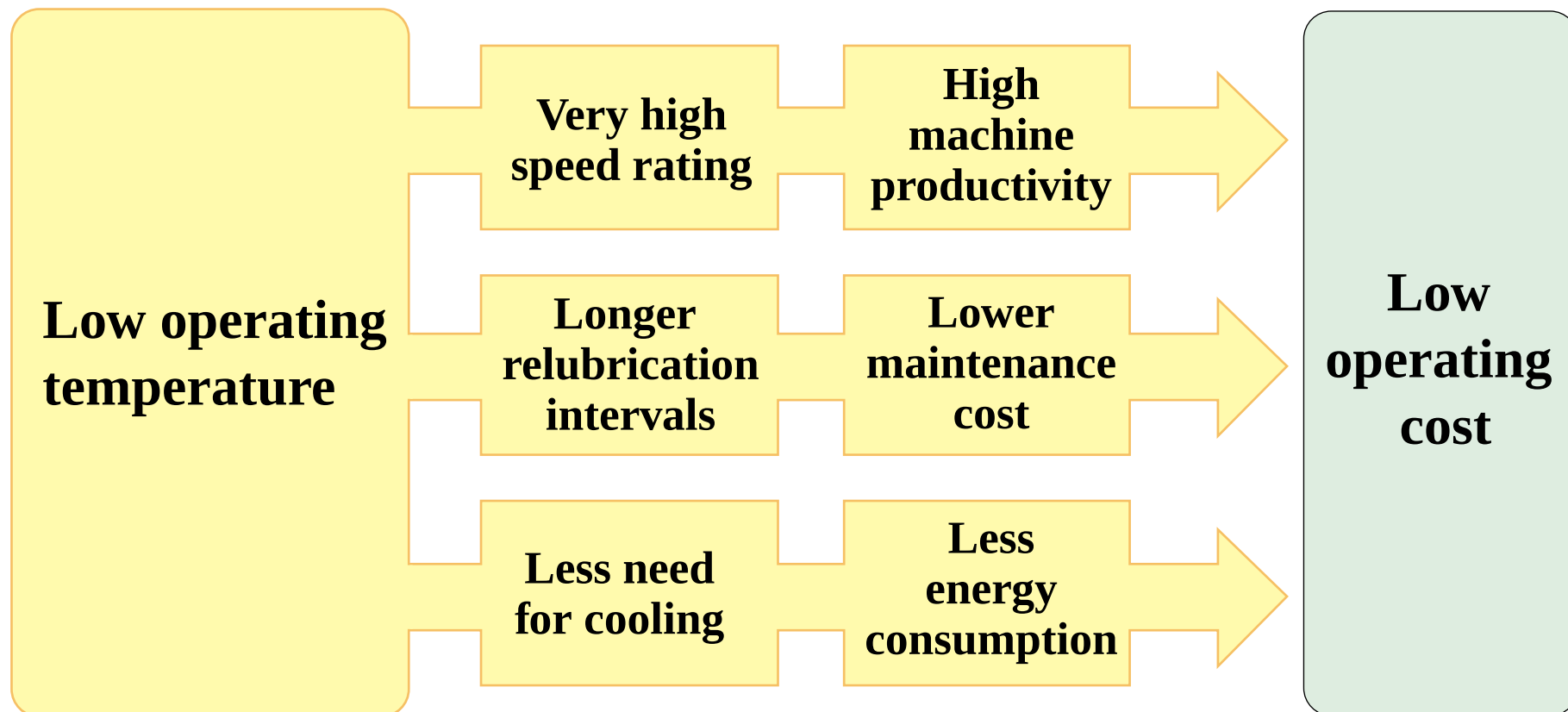


Outer and inner ring:
Elliptical contact

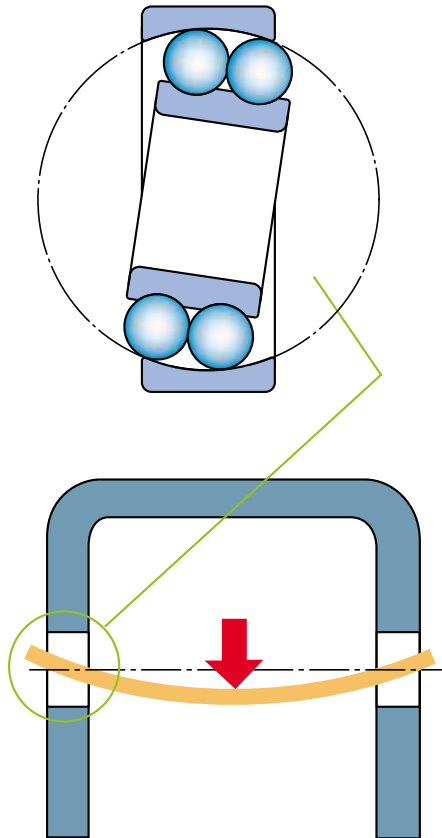
Low friction



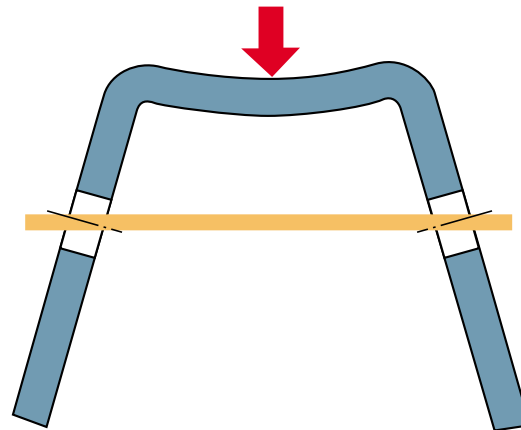
Low friction



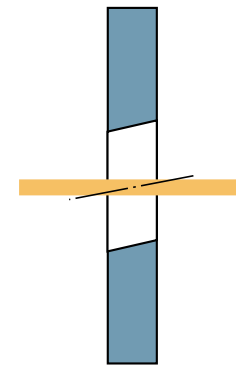
Types of misalignment



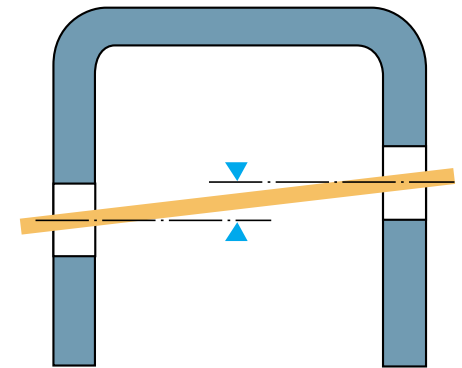
Deflected shaft



Deflected house



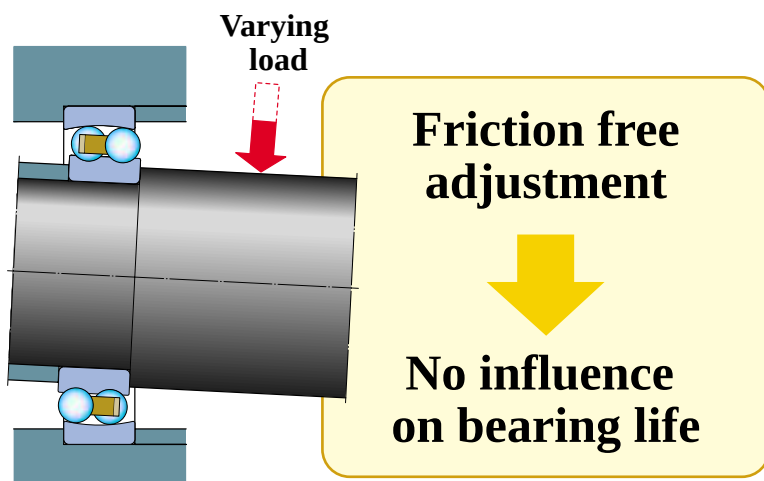
Seating out of square



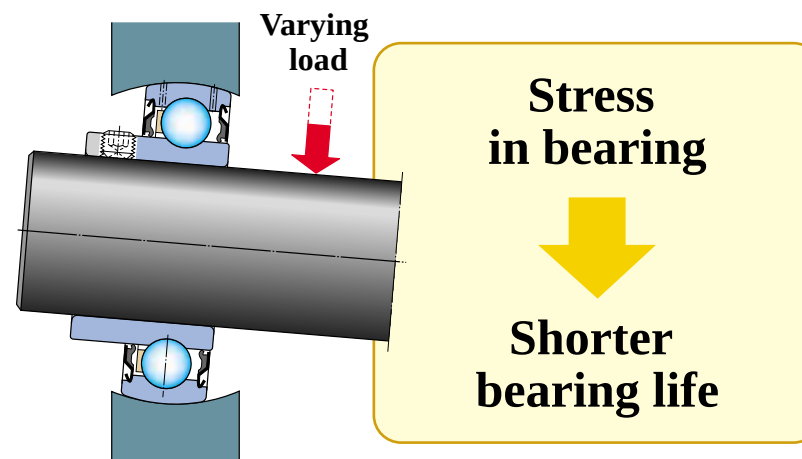
Seatings offset

Self-alignment

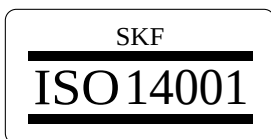
Self-aligning ball bearings



Y-units

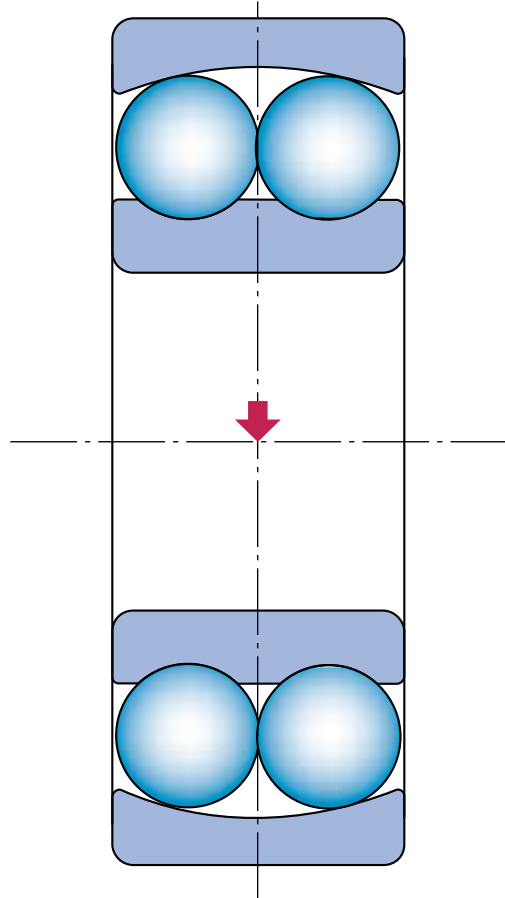


Environmentally friendly



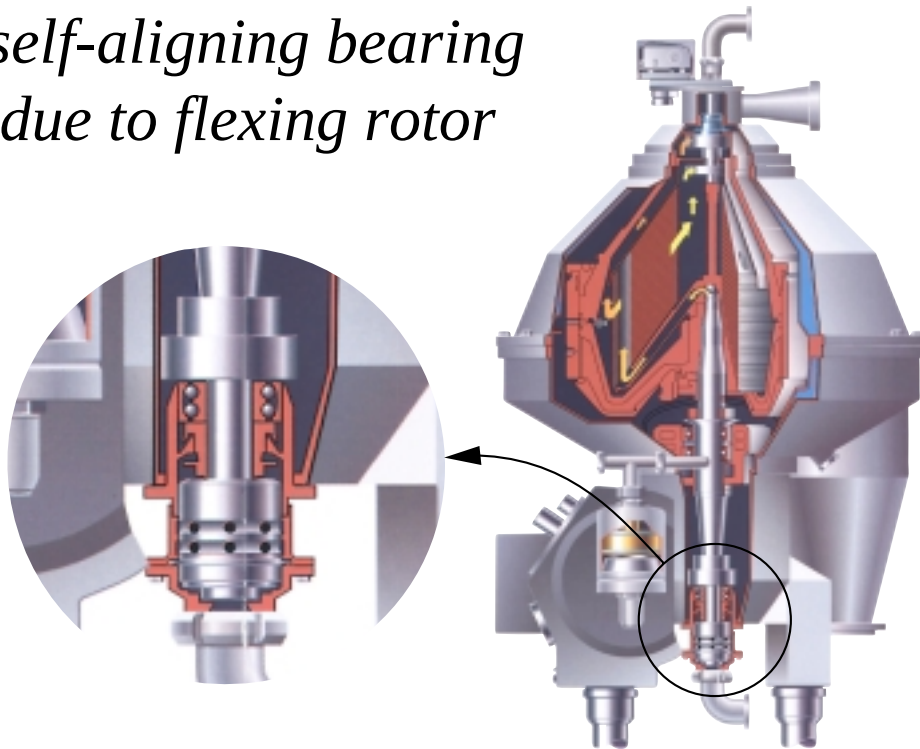
*Low
friction
and
minimum
lubricant
consumption
saves
recources*

Excellent minimal load performance



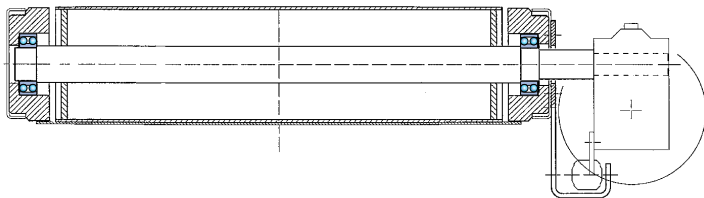
Separators

*Demand for
very high speed
and
self-aligning bearing
due to flexing rotor*



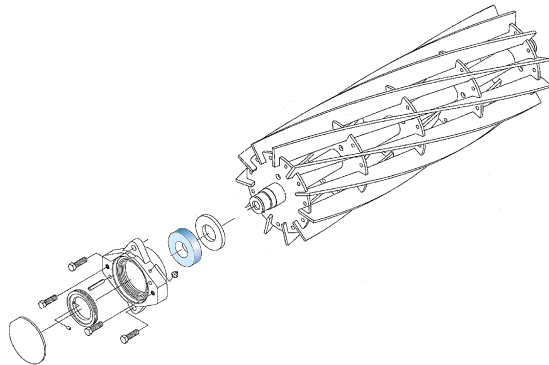
Conveyors

*Demand
for
minimum
maintenance*



Tractor mowers

*Demand for
minimum maintenance
and
self-aligning bearings
due to
flexing structure*



Clean air fans

*Demand for
low noise
and
vibration*

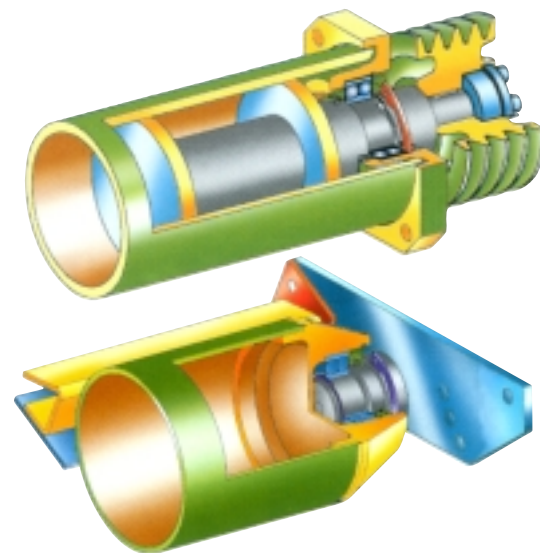


Vegetable mulchers



Berti Macchine Agricole

*Demand for
minimum maintenance
and self-aligning bearings
due to flexing structures*

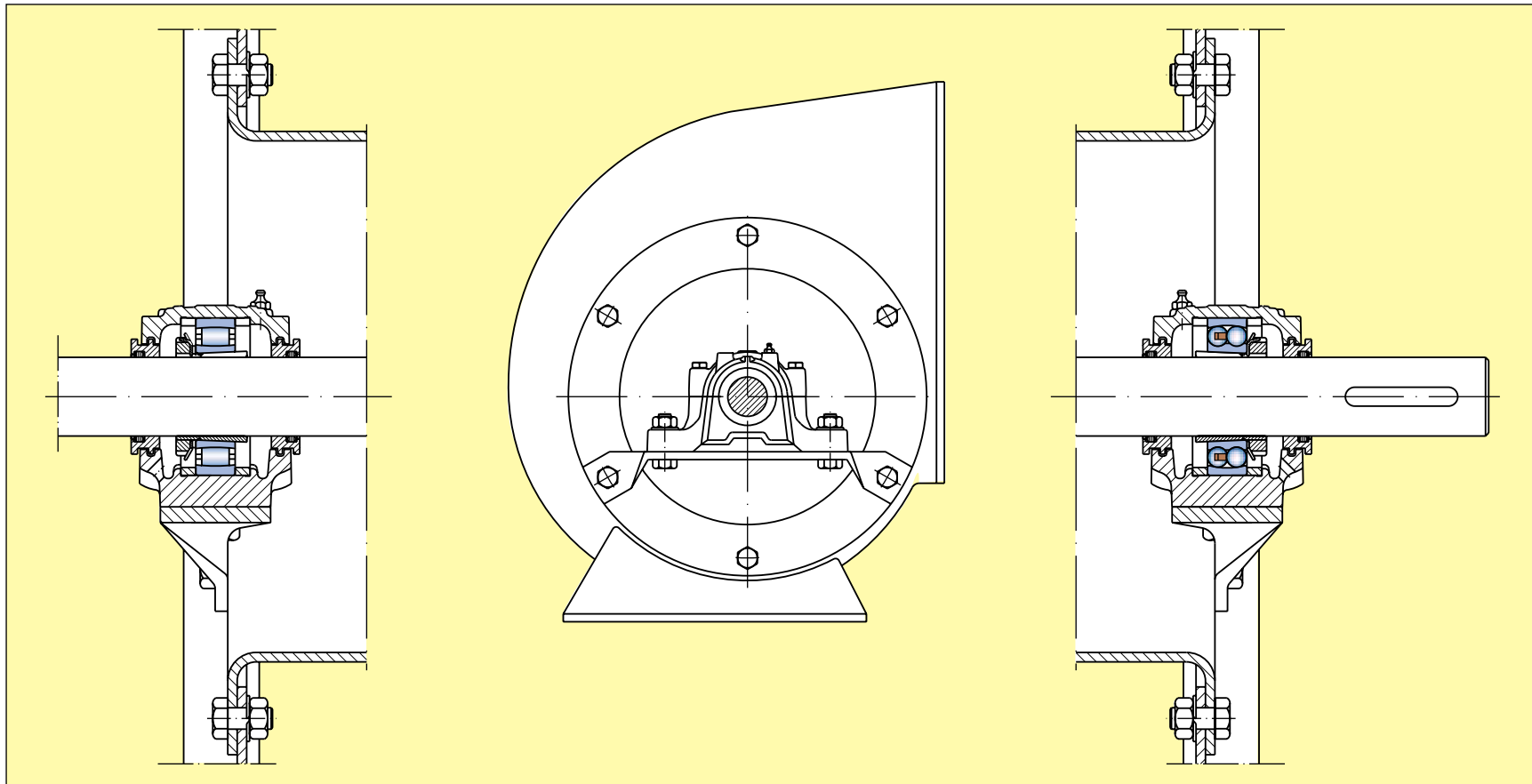


Spinning machines

*Demand for
quick and safe
mounting*

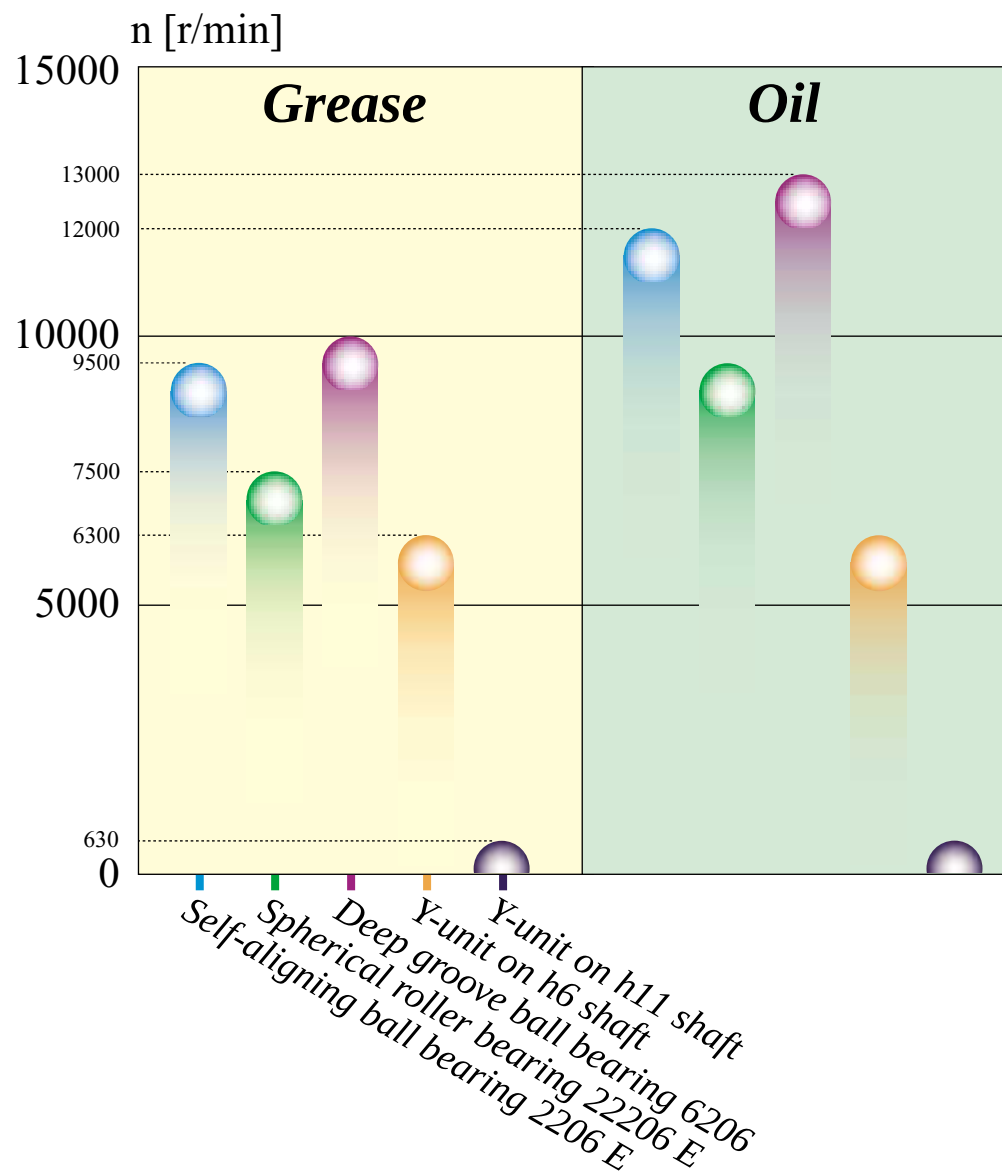


Self-aligning ball bearings in harmonic combination with CARB™ and spherical roller bearings



Speed performance

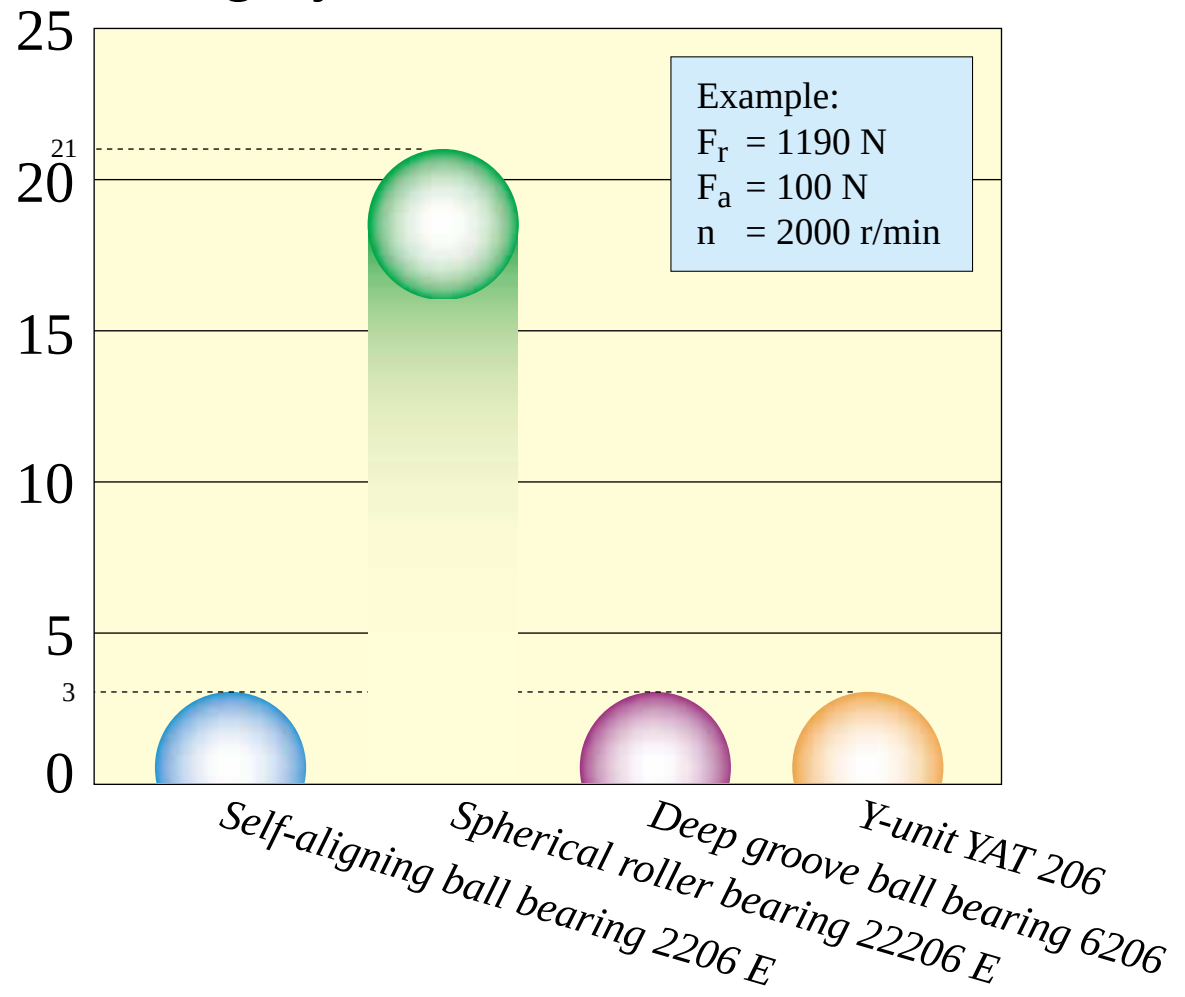
Speed ratings for different bearing types



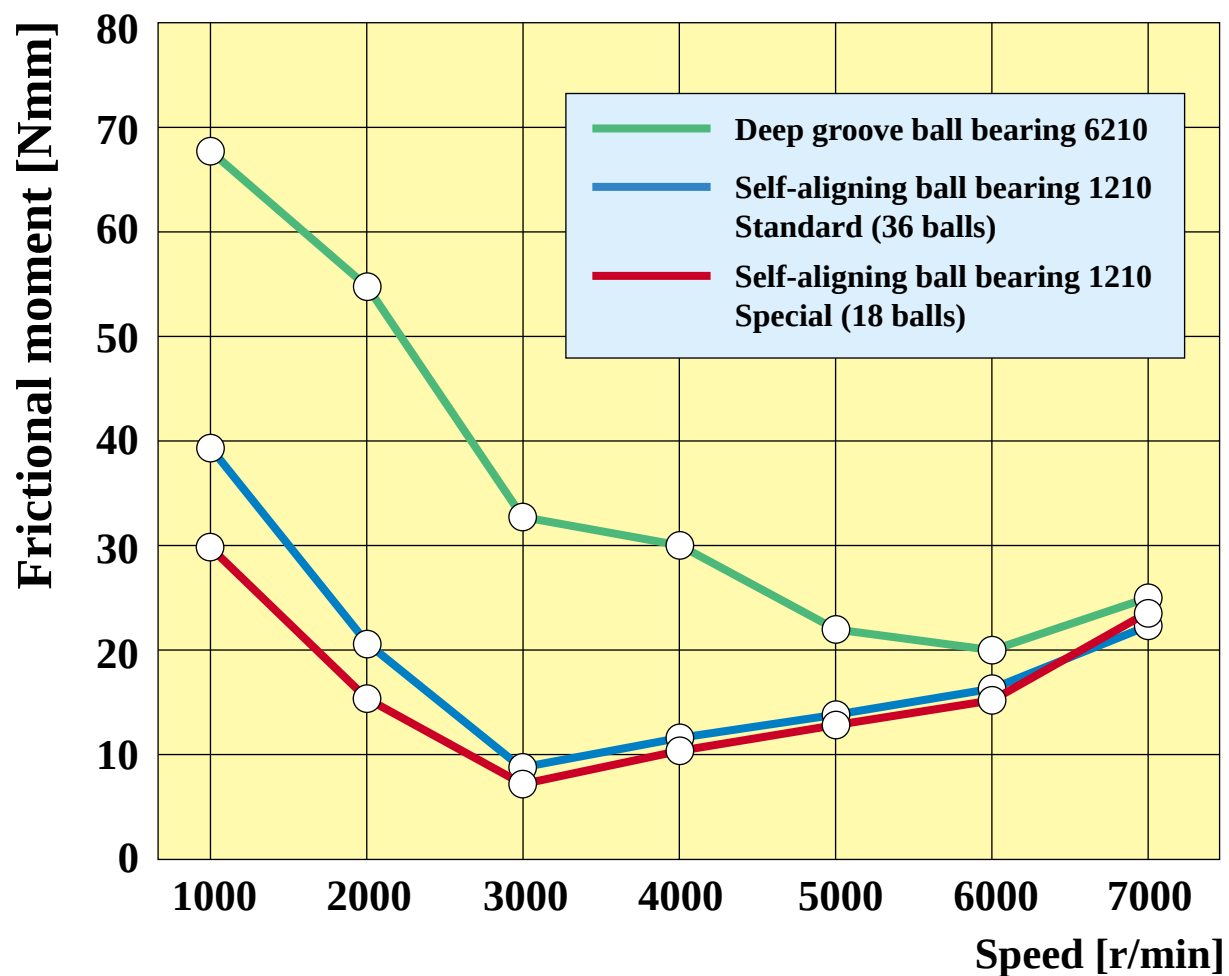
Relubrication interval

- *comparison with other bearing types*

Number of stops for relubrication during 5 years

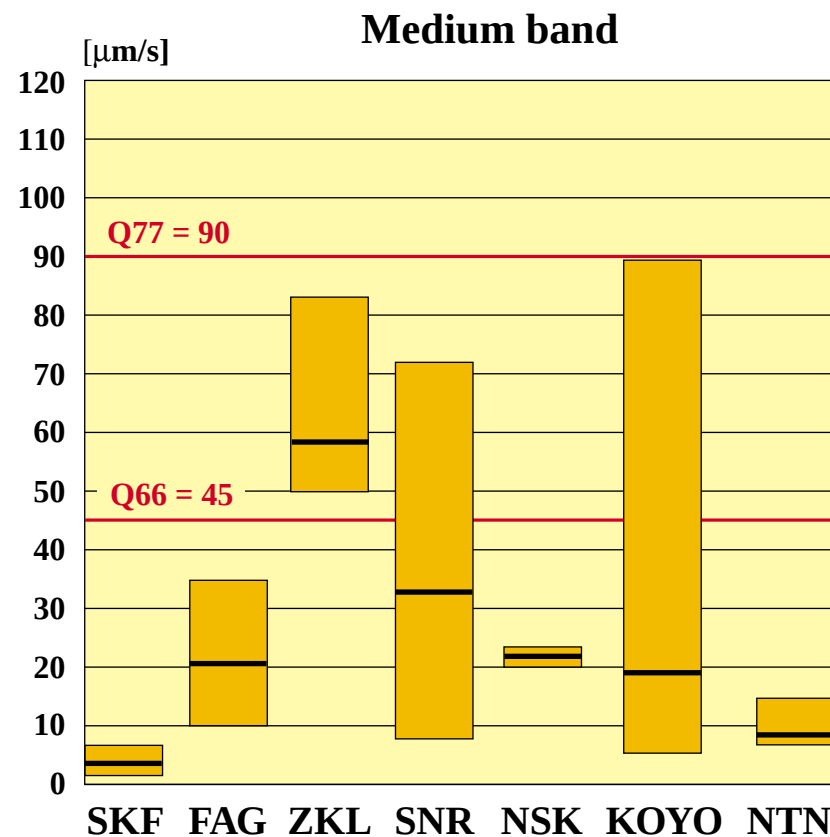
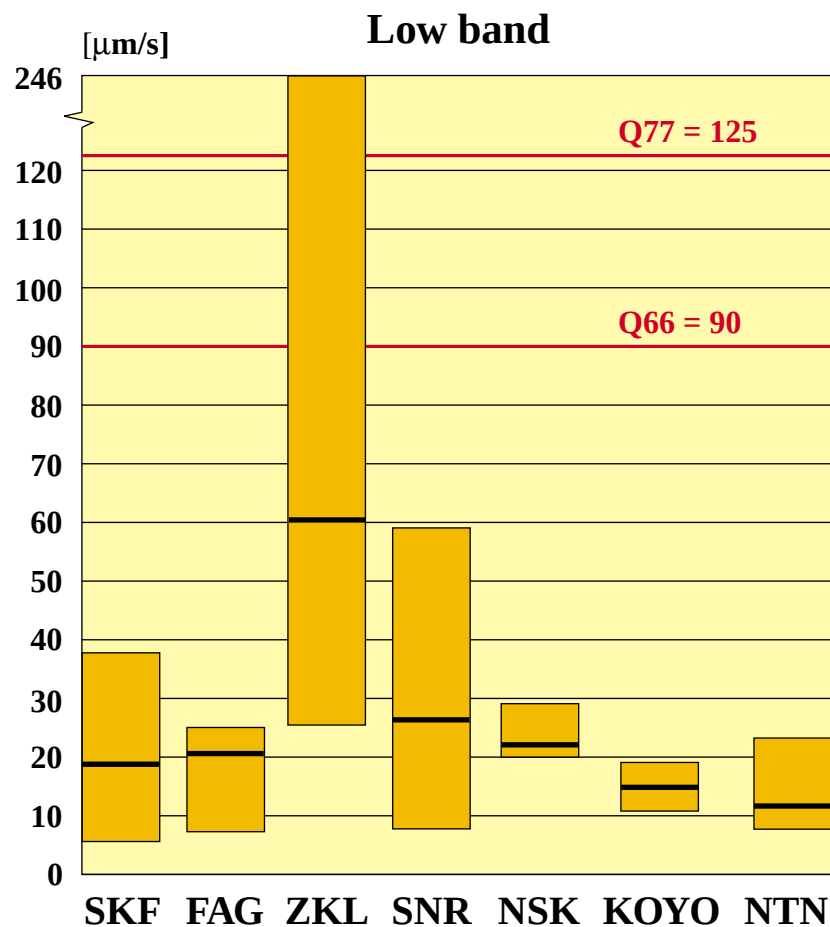


Bearing friction



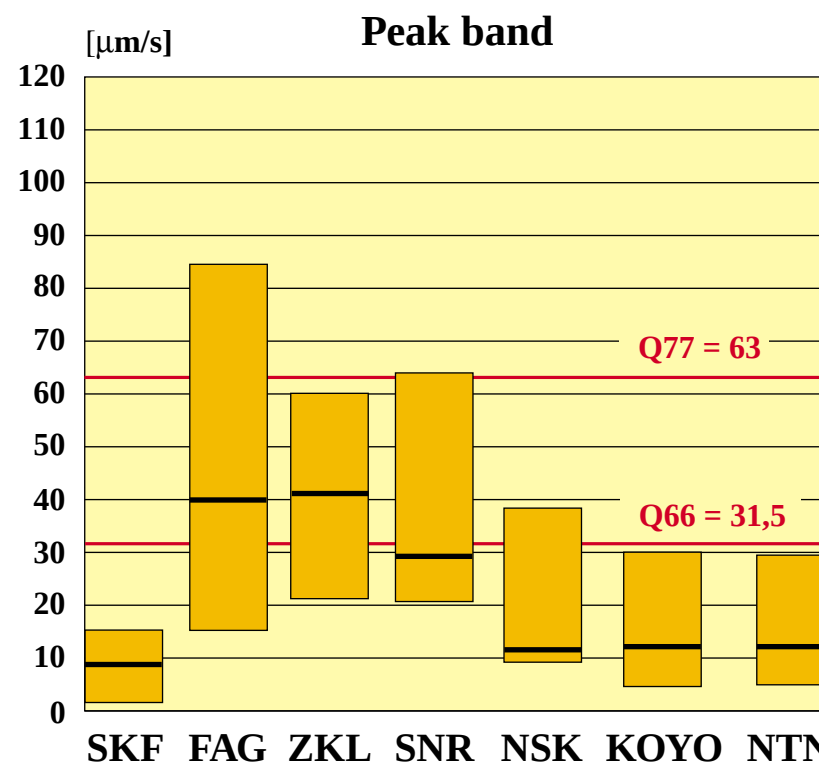
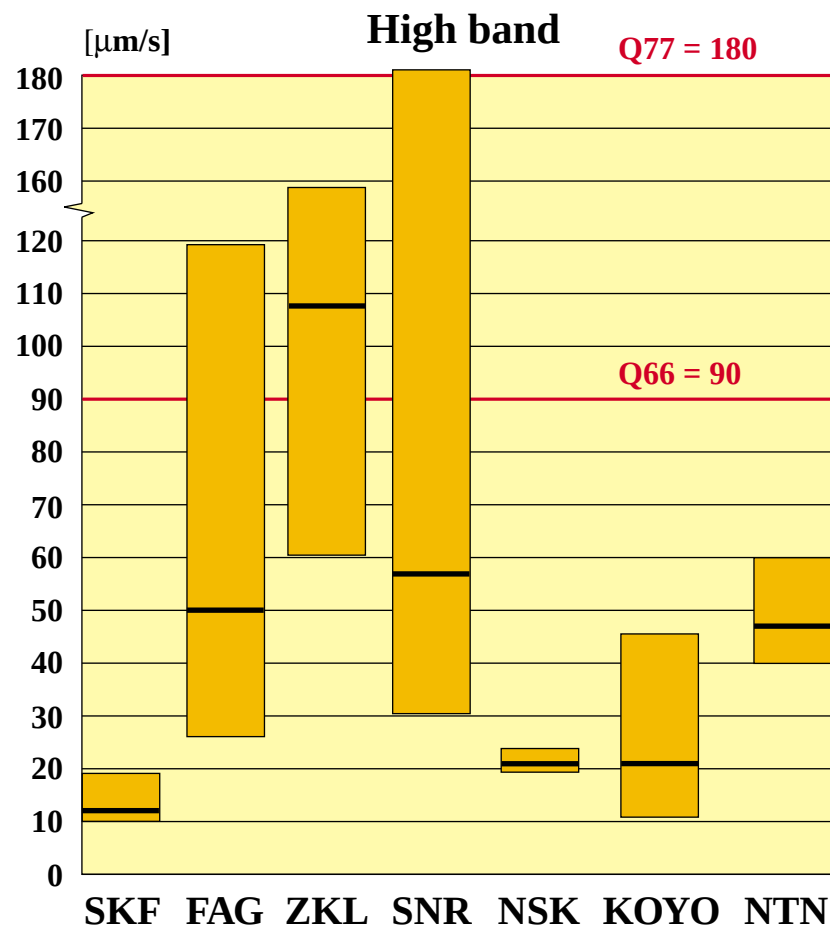
Vibration

Investigated bearing size: 2206



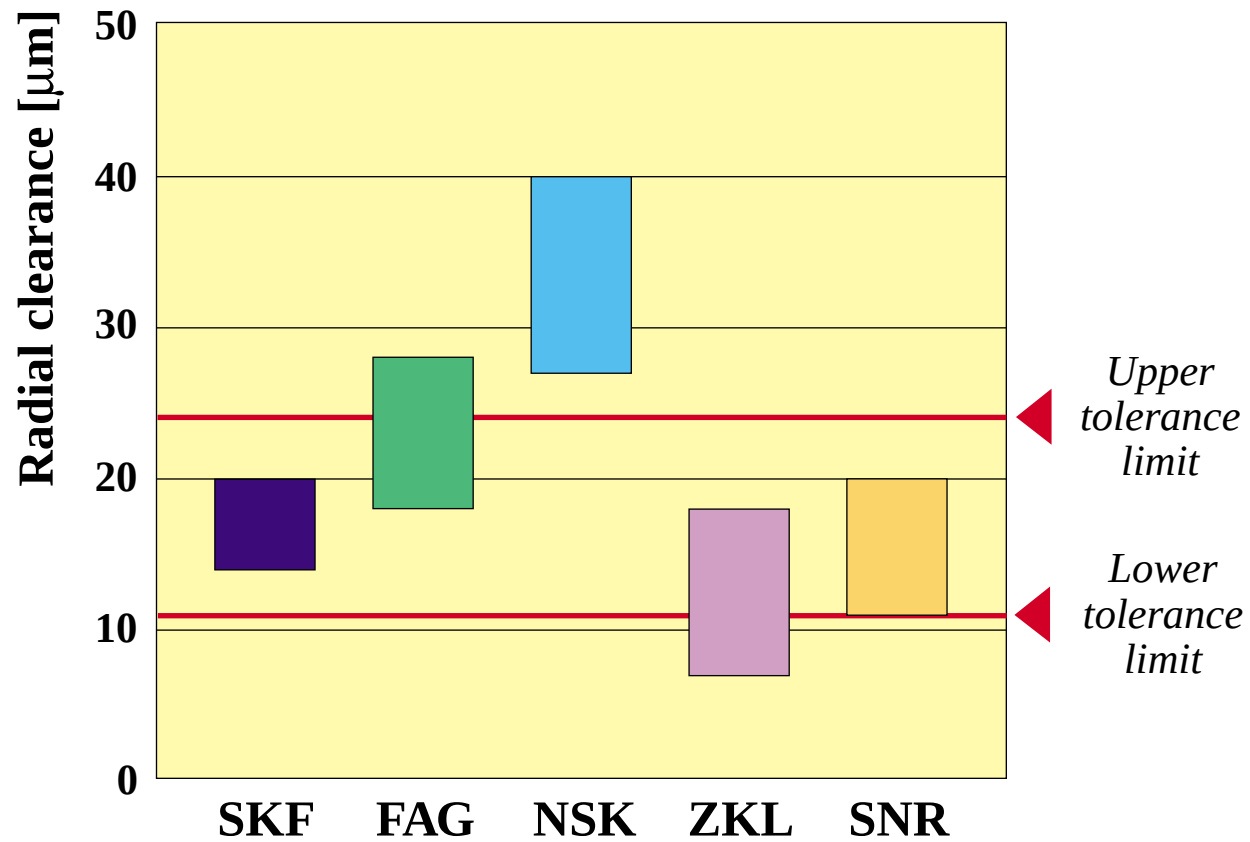
Vibration

Investigated bearing size: 2206



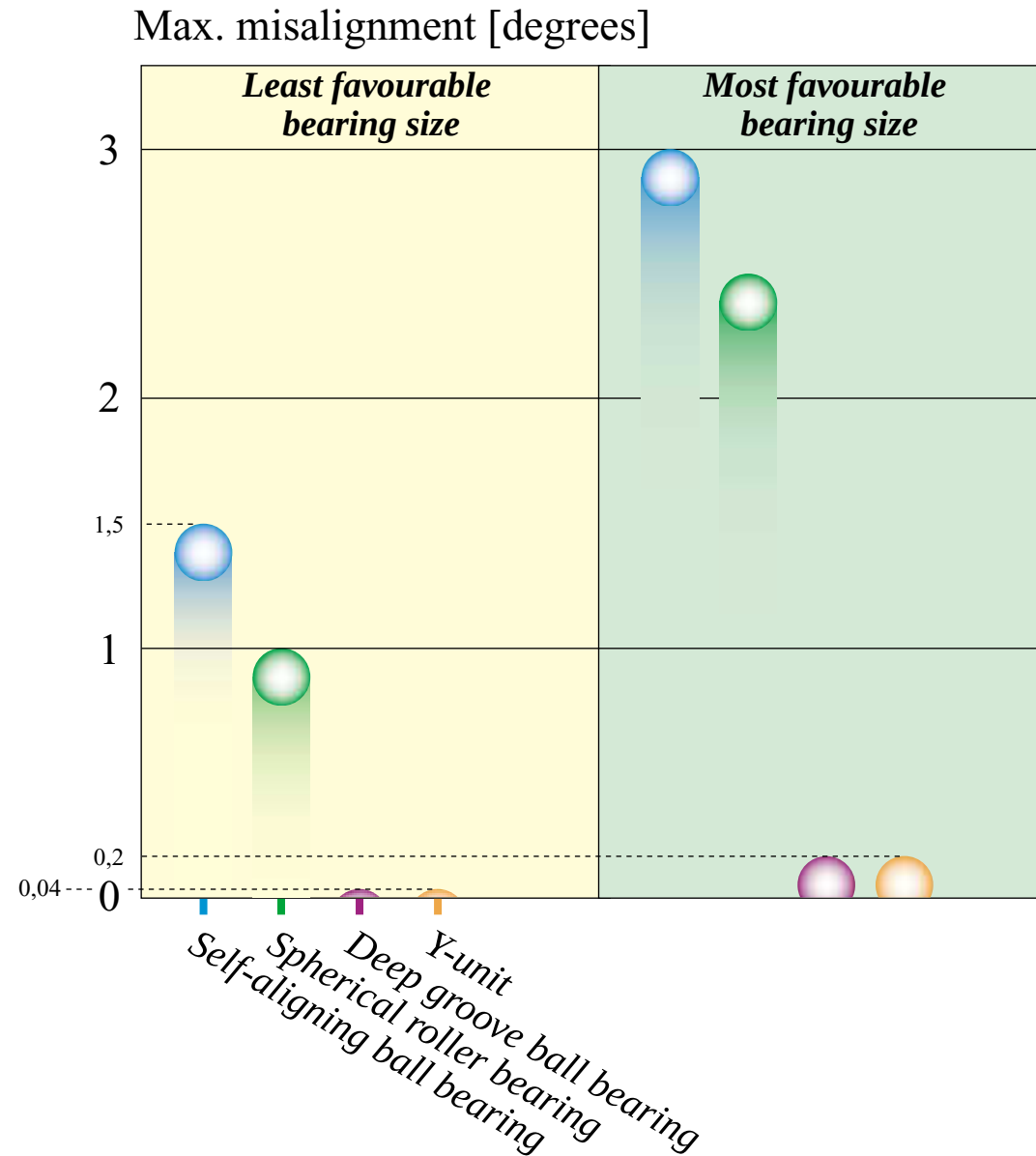
Bearing clearance

Investigated bearing size: 2206



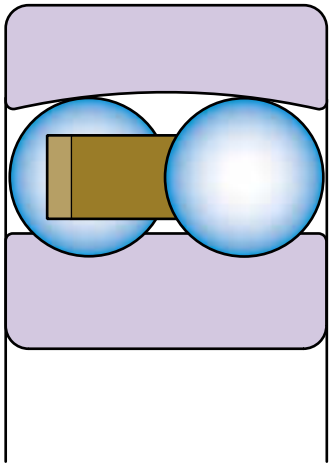
Self-alignment

Self-aligning capability of different bearing types

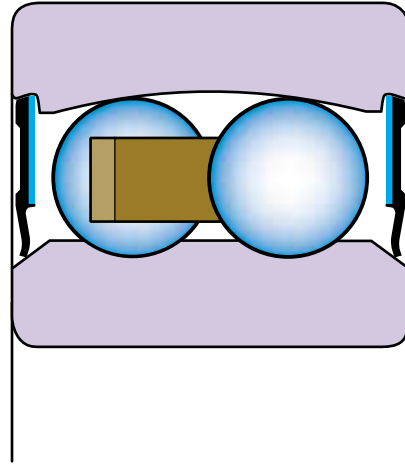


Basic designs

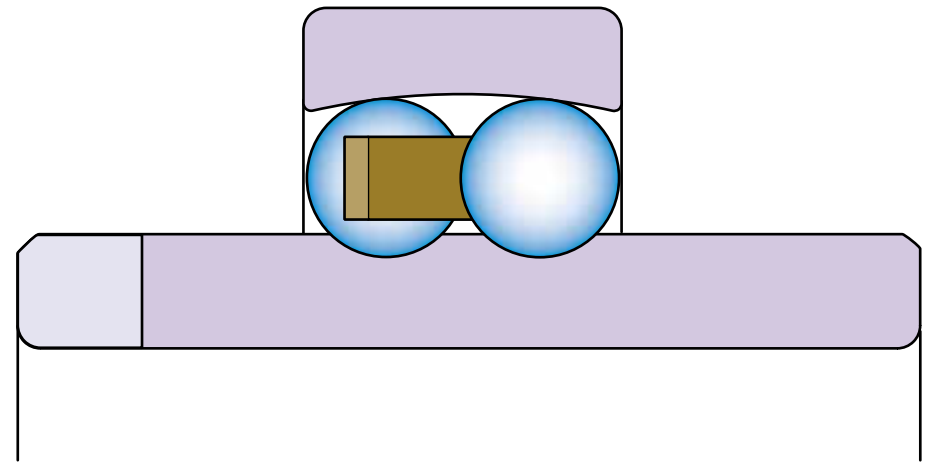
Open



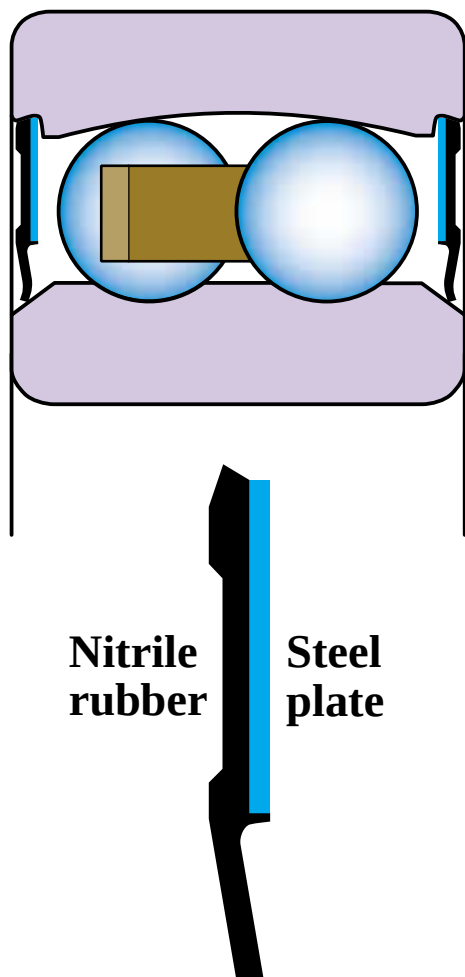
Sealed



**Extended
inner ring**



Sealed bearings greased for life



**Protected from
contaminants
during handling
and operation**

**No grease leakage
into the
environment**

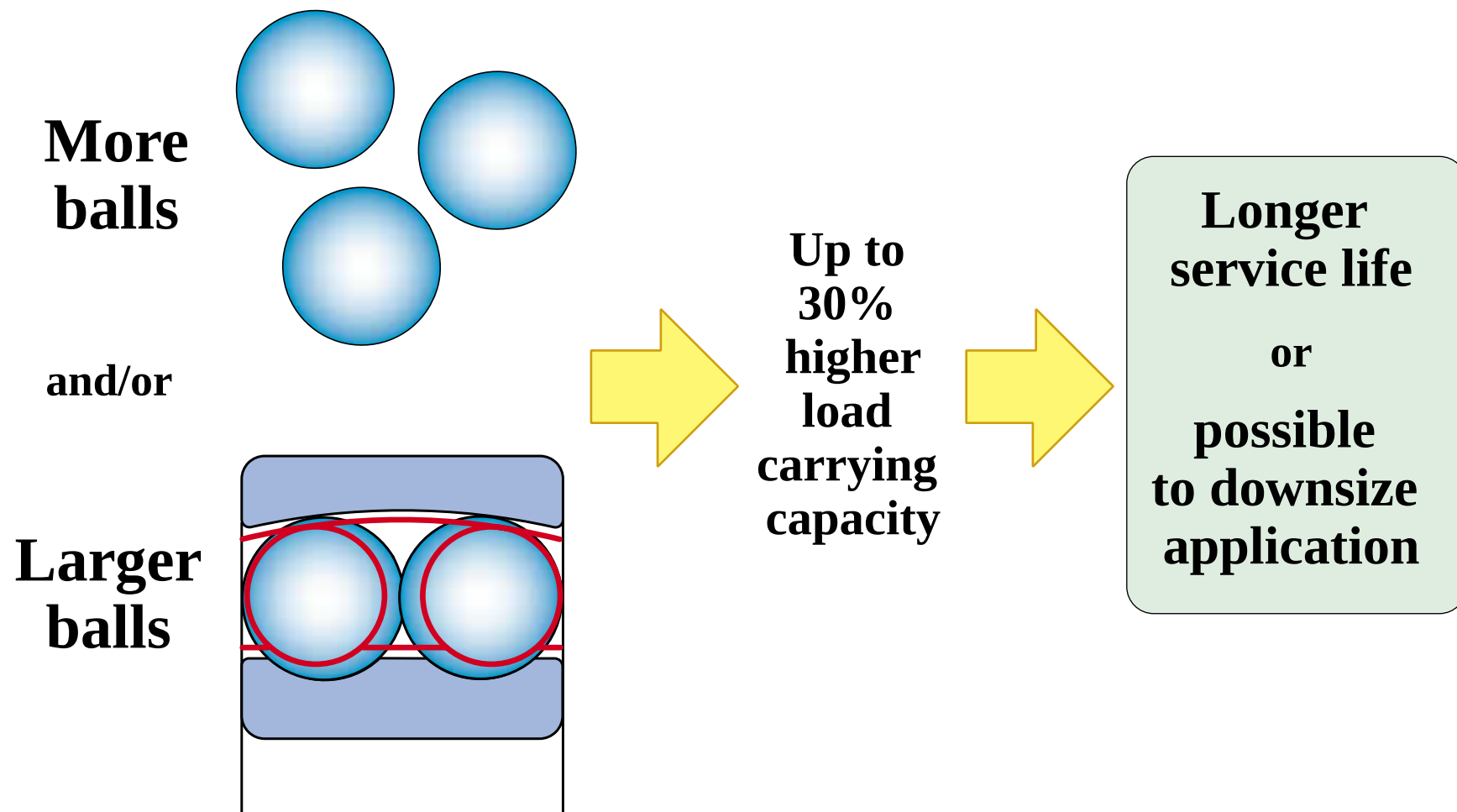
Maintenance-free

**Longer bearing
service life**

**Environmentally
friendly**

**Convenient
to use**

SKF E design



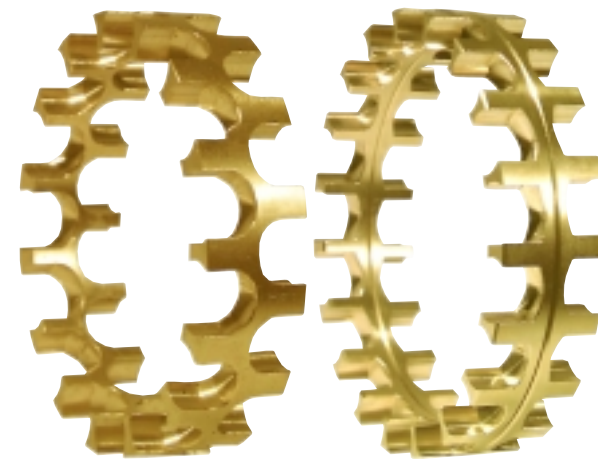
Cage designs



Polyamide 6.6

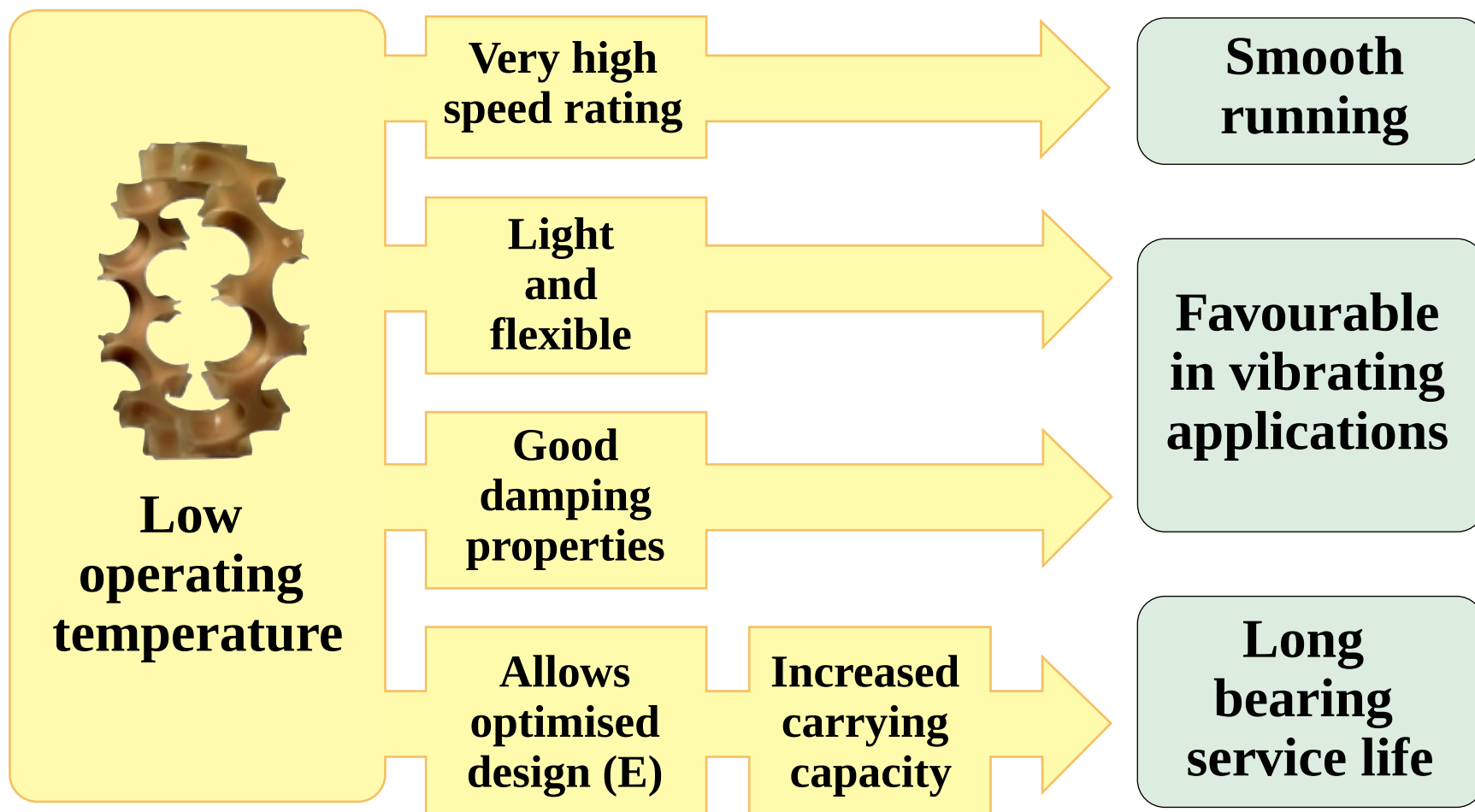


Pressed steel

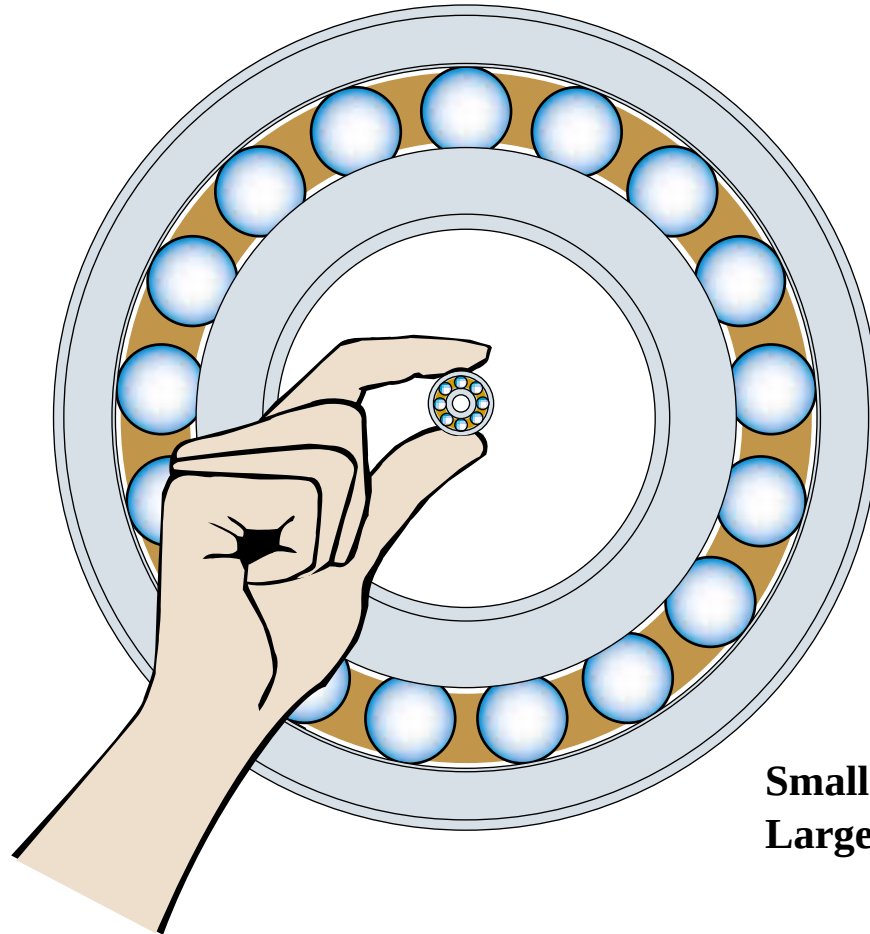


Machined brass

Polyamide cage



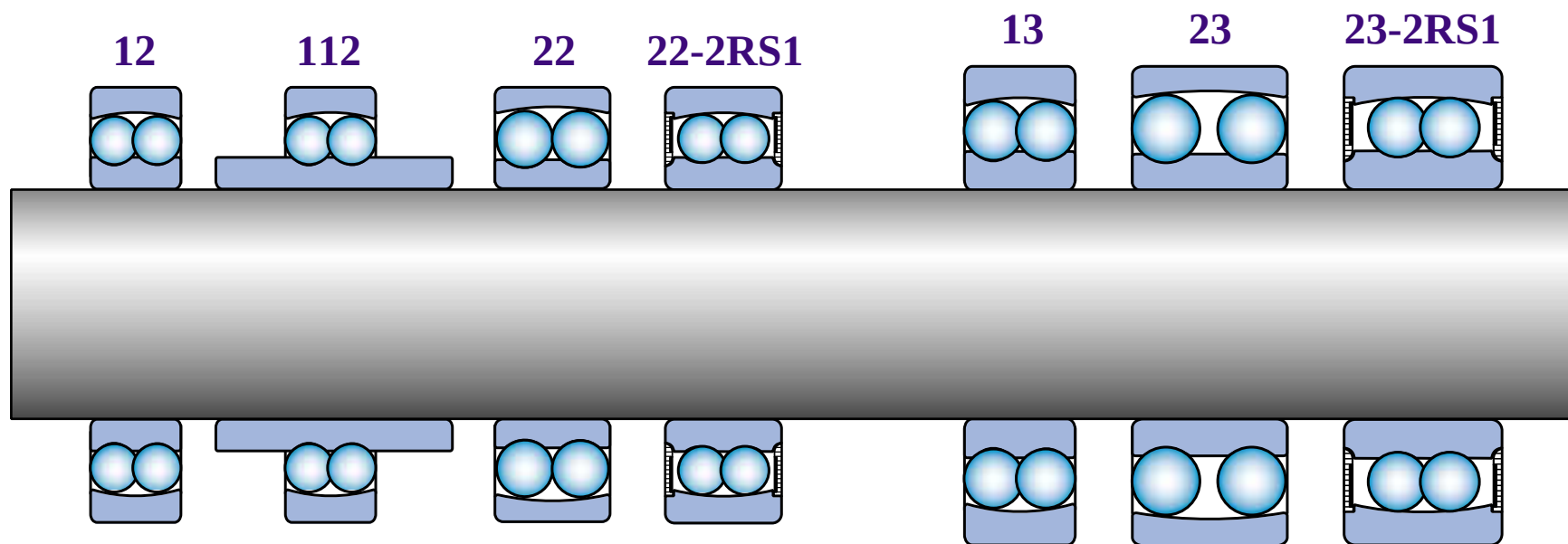
Size range of SKF self-aligning ball bearings



Smallest: 19 mm / 0,009 kg

Largest : 240 mm / 17,5 kg

SKF self-aligning ball bearing series



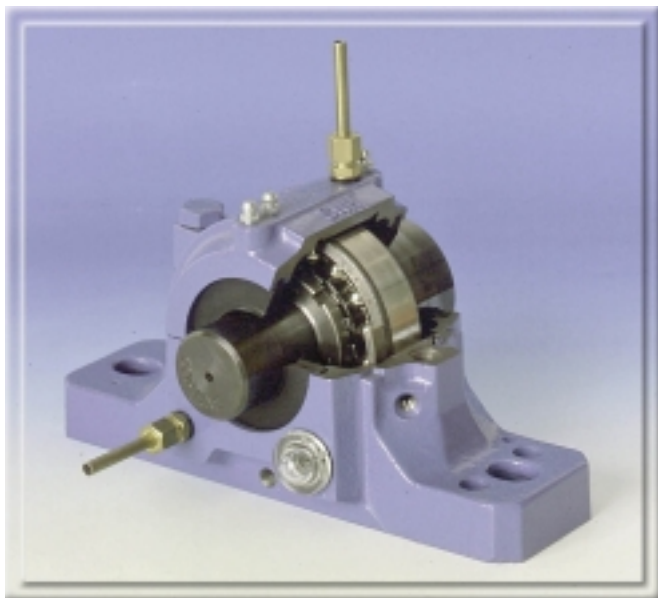
The product range

Series	12	22	13	23	14	112
						
Design						
Size	E	E	E	E	E	E
00						
01						
02						
03						
04	K	K K	K			
05	K	K K	K	K		
06	K	K K	K	K		
07	K	K K	K	K		
08	K	K K	K	K		
09	K	K K	K	K		
10	K	K K	K	K		
11	K	K K	K	K		
12	K	K K	K	K		
13	K	K K	K	K		
14		*				
15	K	K	K	K		
16	K	K	K	K		
17	K		K	K		
18	K	K	K	K		
19	K	K	K	K		
20	K	K	K	K		
22	K		K			
24						
26						

Small sizes		
Size	Bore (mm)	
135	5	
126	6	
127	7	
108	8	
129	9	

-  Open design
-  Sealed design
- K Also with tapered bore
- * Not E design

SKF housings



**...for better
bearing performance**

**Precision in
manufacturing**

**Excellent bearing
running accuracy**

**Long
bearing
service life**

**Axially free
or fixed**

**Grease or oil
lubrication**

**Widest range
of seals**

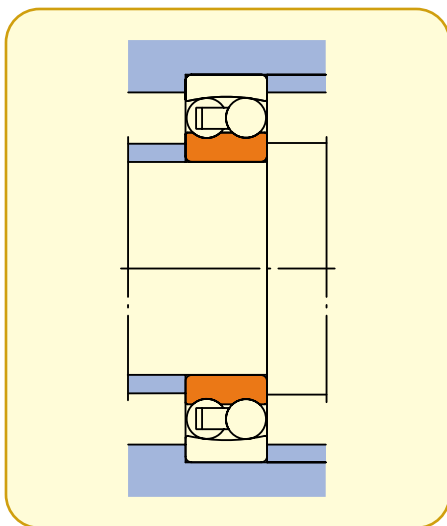
**Wide choice
and
design flexibility**

SKF self-aligning ball bearing kit

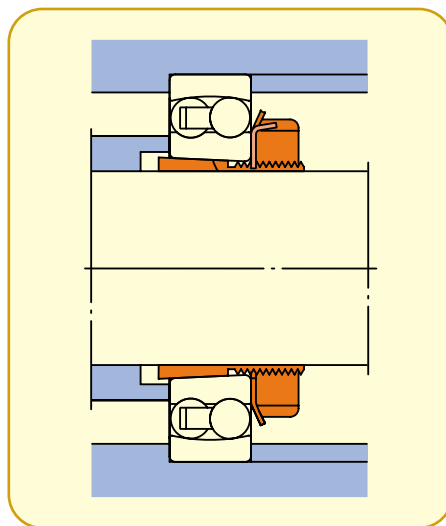
- ✓ *Quick and safe mounting*
- ✓ *One item to plan, source and stock*
- ✓ *Always the right components*
- ✓ *All components in SKF quality*



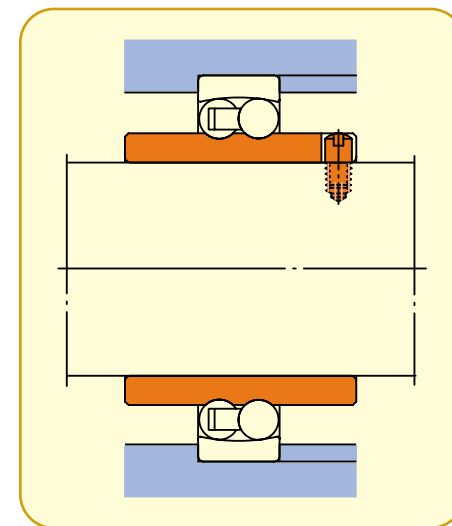
Different methods of mounting



Interference fit
(Cylindrical bore)



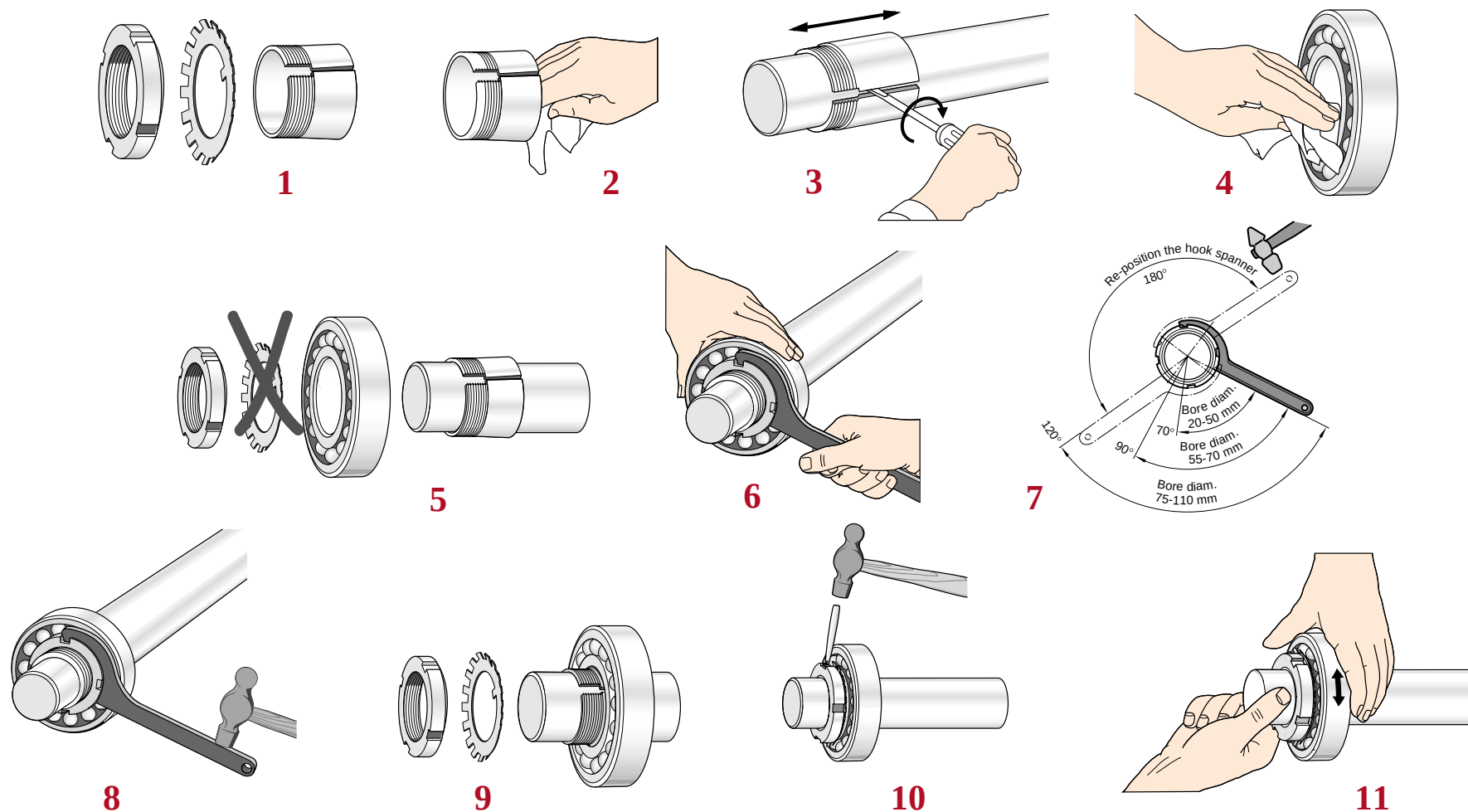
Adapter sleeve
(Tapered bore)



Set screw locking
(Wider inner ring; loose fit)

Easy mounting on adapter sleeve

...with SKF hook spanner (Method A)





Because it is cost efficient!

The SKF self-aligning ball bearing makes it possible to

- * increase machine productivity*
- * minimise maintenance*
- * reduce machine weight and make machines more compact*