



FUTURE IN MOTION

SERVO SPIRAL BEVEL GEARBOX

Catalogue 05/11:
The new servo-gearbox catalogue



SERVO SPIRAL BEVEL GEARBOX

The family:



SERVO SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



- For toughest demands in dynamics
- Flexible
- Robust and durable
- For any installation position due to a flexible lubrication system
- Available in different versions and combinations

SERVO SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



Sizes:

050/ 100/ 200/

Ratios mathematically exact:

Single stage 3.000 up to 10.000

Nominal output torque:

15 - 150 Nm

Types:

SK(N)/ SKH

SERVO SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



Types:

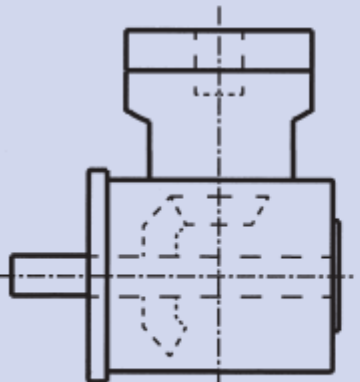
SK/ SKN/ SKH/

- SK = Servo-bevel
- N = Keyway on output side
- H = Hollow output shaft

SERVO SPIRAL BEVEL GEARBOX



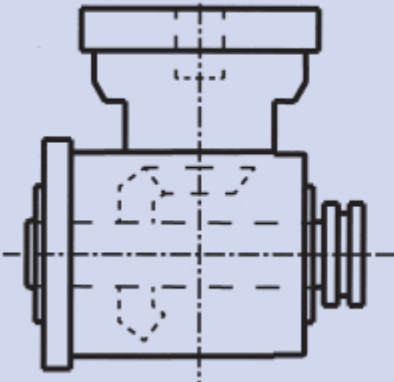
Type SK(N):

Typ Type	Übersetzung Ratio	Abtriebsdrehmoment Output torque	Ausführungsform Design description
SK (N) 	3 - 10	bis / up to 150 Nm	mit Abtriebswelle with free output shaft

SERVO SPIRAL BEVEL GEARBOX



Type SKH:

Typ Type	Übersetzung Ratio	Abtriebsdrehmoment Output torque	Ausführungsform Design description
SKH 	3-10	bis / up to 150 Nm	mit Abtriebshohlwelle with hollow output shaft

SERVO SPIRAL BEVEL GEARBOX

Type SKH:

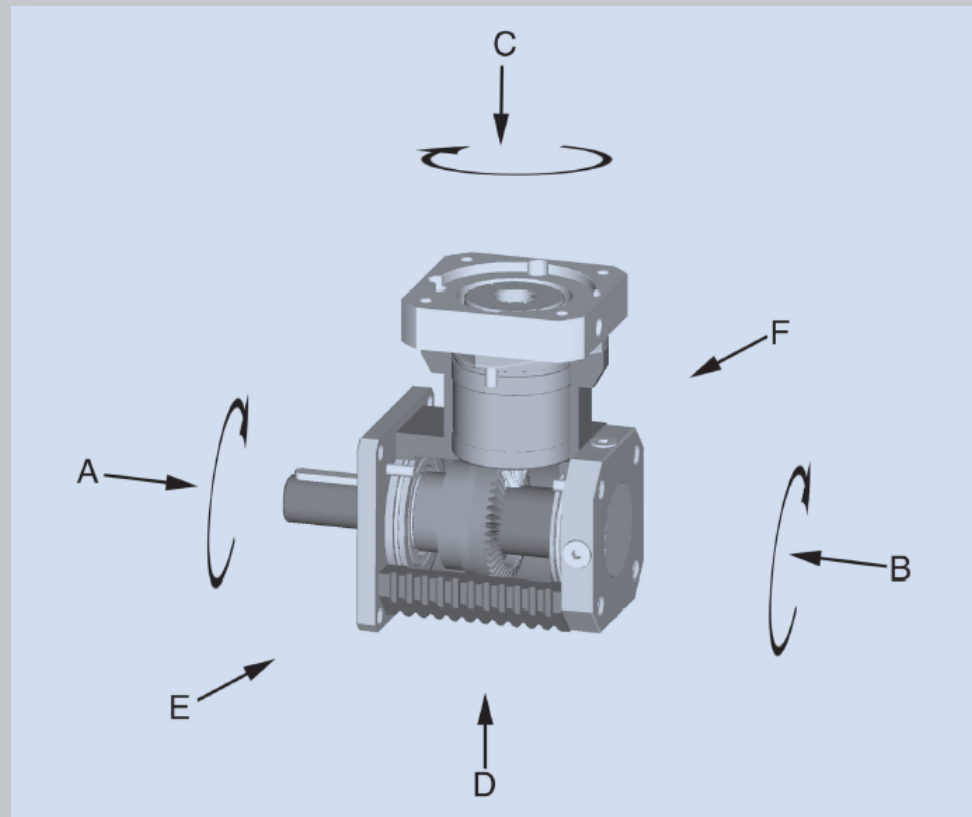


SKH: 050/ 100/ 200

- H = Hollow output shaft
- With shrink disc on Side B
- Protection cover optional

SERVO SPIRAL BEVEL GEARBOX

Identification of sides / Direction of rotation:



SERVO-SPIRAL BEVEL GEARBOX



Identification of sides / Direction of rotation:

To describe and define a Servo-Spiral bevel-gearbox accurately, uniform standards are required.

The important points here are a way of identifying each side of a gearbox and the positions of the bevel gears, and clear definition of the directions of rotation.

Identification of sides:

The sides of a Servo-Spiral bevel-gearbox are identified with the **letters A,B,C,D,E, and F. See previous drawing.**

Positions of bevel gears:

The bevel gears are positioned against **sides C and A**, and **side C** is defined as the input side.

Directions of rotation:

The direction of rotation of each shaft end is defined as though you were looking **from the outside at the shaft end**. From this viewpoint, the **direction of rotation** is given as **clockwise or counterclockwise**.

SERVO-SPIRAL BEVEL GEARBOX



Hypoid tooth design

The Hypoid transmission (also hypoid gear) is a modification of the spiral bevel gearbox. In contrast to the normal bevel gearbox, here the axes are connected by a pinion and output gear.

By the so-called axis placing (usually driving) the pinion - with unchanged size (usually driven) of the output gear - becomes larger or smaller, according to whether the axis placing is positive or negative. A positive axis placing entails not only a diameter increase of the pinion, but also an enlargement of the spiral angle and the contact pattern. Thus the quiet running and the maximum stress increase at the same time as saving space.

SERVO SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



Types:

SKPR/ SKPRN

- SK = Servo-bevel
- P = Planetary
- R = Reduced backlash
- N = Keyway

SERVO-SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



Sizes:

01/ 02/ 03/ 04

Ratios mathematically exact:

Two stage 12.000 up to 100.000

Nominal output torque:

70 - 550 Nm

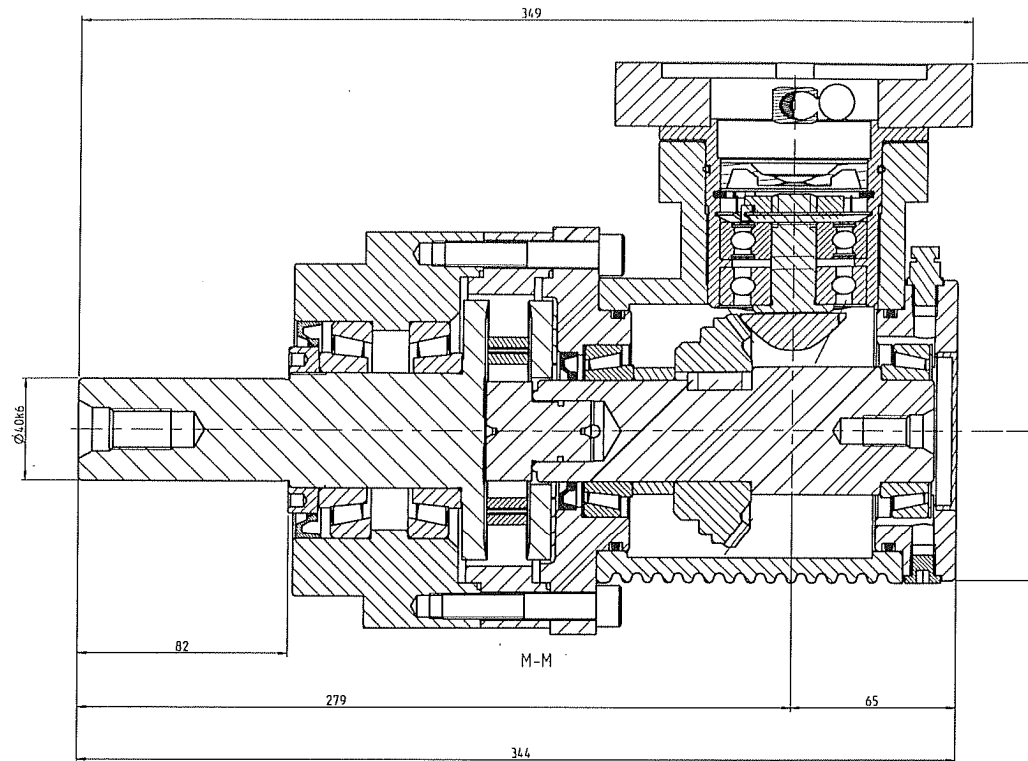
Type:

SKPR(N)

SERVO-SPIRAL BEVEL GEARBOX



Sectional drawing SKPR:



SERVO SPIRAL BEVEL GEARBOX

Servo spiral bevel gearboxes.



Types:
SKPG

- SK = Servo-bevel
- P = Planetary
- G = Output flange

SERVO SPIRAL BEVEL GEARBOX



Servo spiral bevel gearboxes.



Sizes:

01/ 02/ 03/ 04

Ratios mathematically exact:

Two stage 12.000 up to 100.000

Nominal output torque:

70 - 550 Nm

Type:

SKPG

SERVO SPIRAL BEVEL GEARBOX

Please find in our catalogue:

- Technical details
- Ratio
- Output torque
- Acceleration torque
- Emergency stop output torque
- Moment of inertia
- Possible motor connections
- And all other details.



SERVO SPIRAL BEVEL GEARBOX



Functional range:

The gearboxes are suit a wide range of machinery:

- General machinery
- Special Purpose machines
- Printing machinery
- Packaging machinery
- Robots
- Compact modular design
- High power to weight ratio
- High efficiency
- Quite running
- Easy to maintain

SERVO SPIRAL BEVEL GEARBOX

Advantages of SK gearboxes:

- High input speed
- Small assembly space
- Low weight
- Low noise
- Robotic precision
- Low backlash



SERVO SPIRAL BEVEL GEARBOX **VOGEL** ANTRIEBSTECHNIK

Thank you very much for your attention:





V I E L E N D A N K F Ü R I H R E
A U F M E R K S A M K E I T

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