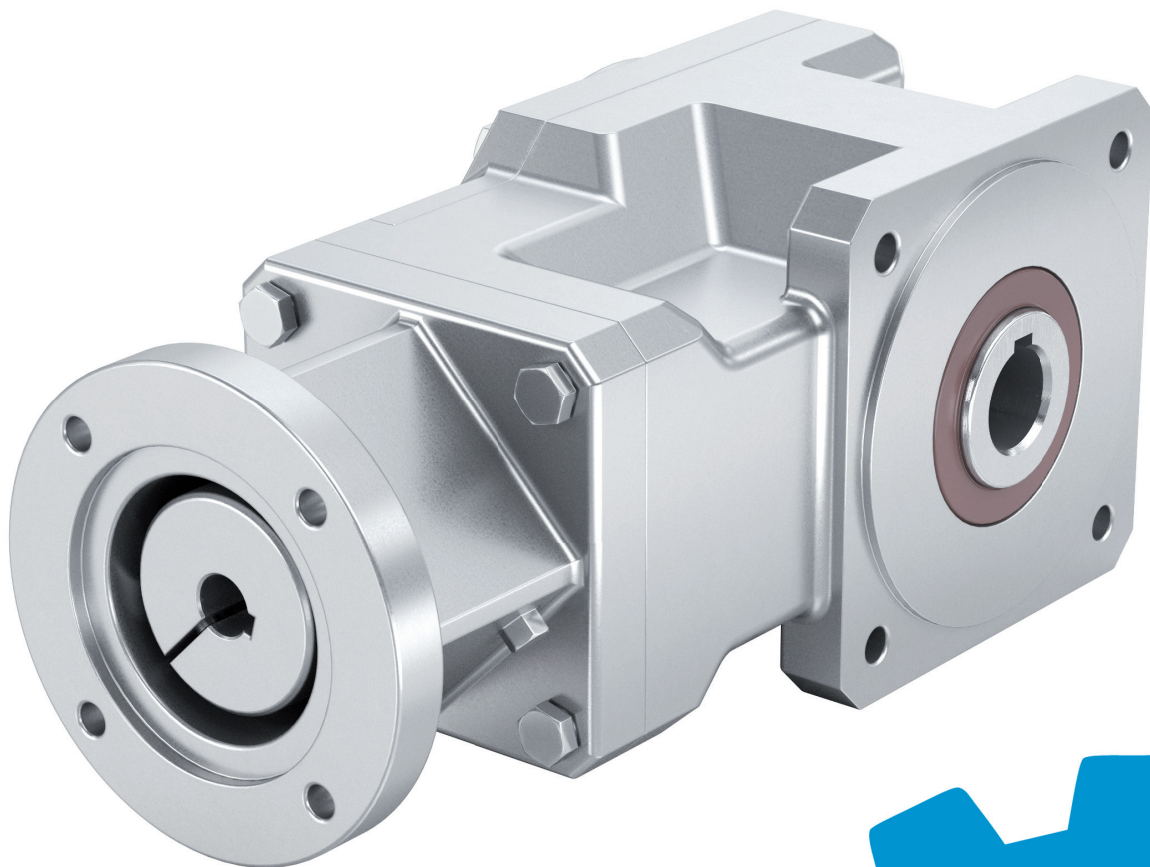


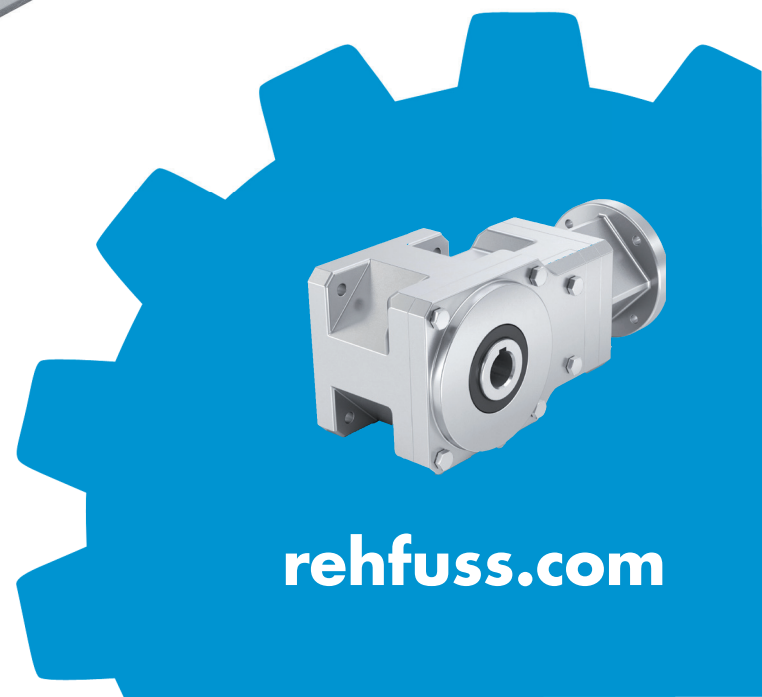


# BEVEL HELICAL GEARBOX KSN / KS

The compact drive unit for high-dynamic applications



**success based on  
quality and reliability**



**rehfuss.com**

# Technical data

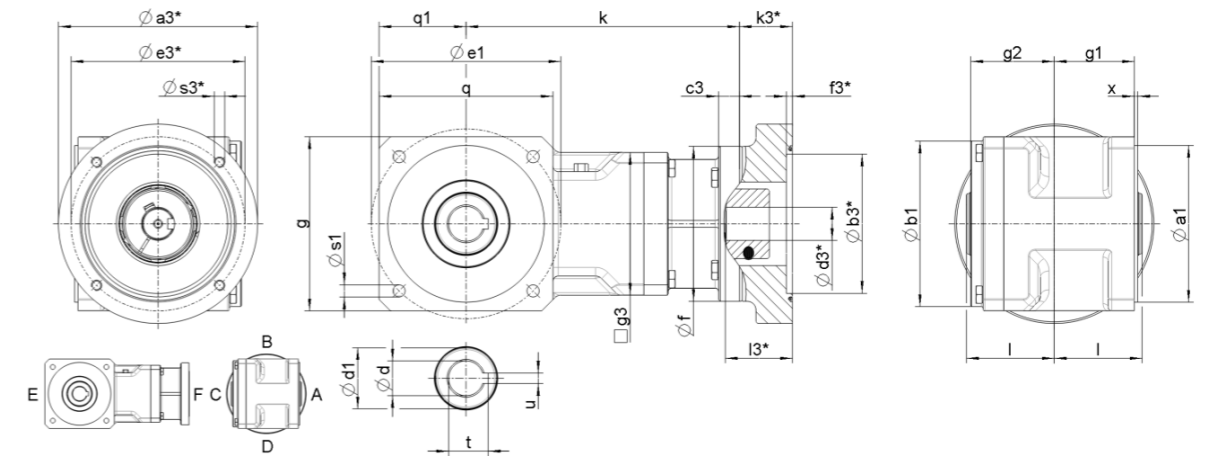
T2N = Nominal output torque, T2B = Max. acceleration torque, T2S = Emergency stop torque. (max. 500 times), J = Mass moment of inertia

| Ratios | KSN205 / KS205 |     |     |                   | KSN210 / KS210 |     |     |                   | KSN230 / KS230 |     |     |                   |
|--------|----------------|-----|-----|-------------------|----------------|-----|-----|-------------------|----------------|-----|-----|-------------------|
|        | T2N            | T2B | T2S | J                 | T2N            | T2B | T2S | J                 | T2N            | T2B | T2S | J                 |
| i      | Nm             | Nm  | Nm  | kgcm <sup>2</sup> | Nm             | Nm  | Nm  | kgcm <sup>2</sup> | Nm             | Nm  | Nm  | kgcm <sup>2</sup> |
| 4:1    | 20             | 31  | 40  | 1,5               | 24             | 31  | 43  | 1,9               |                |     |     |                   |
| 6:1    | 30             | 40  | 60  | 1,3               | 36             | 48  | 70  | 1,7               |                |     |     |                   |
| 8:1    | 35             | 45  | 80  | 1,2               | 45             | 58  | 81  | 1,6               |                |     |     |                   |
| 10:1   | 30             | 40  | 60  | 1,0               | 36             | 48  | 70  | 1,4               |                |     |     |                   |
| 12:1   | 30             | 40  | 60  | 0,9               | 36             | 48  | 70  | 1,3               |                |     |     |                   |
| 14:1   | 30             | 40  | 60  | 0,9               | 36             | 48  | 70  | 1,3               |                |     |     |                   |
| 15:1   | 35             | 45  | 70  | 1,0               | 45             | 58  | 81  | 1,4               |                |     |     |                   |
| 18:1   | 35             | 45  | 70  | 0,9               | 45             | 58  | 81  | 1,3               |                |     |     |                   |
| 20:1   | 35             | 45  | 80  | 0,9               | 60             | 70  | 85  | 1,3               |                |     |     |                   |
| 21:1   | 35             | 45  | 70  | 0,9               | 45             | 58  | 81  | 1,3               |                |     |     |                   |
| 24:1   | 35             | 45  | 80  | 0,9               | 60             | 70  | 85  | 1,3               |                |     |     |                   |
| 28:1   | 35             | 45  | 80  | 0,9               | 60             | 70  | 85  | 1,3               |                |     |     |                   |

|                             |                            |  |                            |  |
|-----------------------------|----------------------------|--|----------------------------|--|
| Torsional backlash [arcmin] | < 6                        |  | < 6                        |  |
| Weight approx. [kg]         | KSN205 = 6,4 / KS205 = 4,0 |  | KSN210 = 9,7 / KS210 = 5,0 |  |
| Efficiency at full load [%] | 92                         |  |                            |  |

|                                                                                                     |                                    |  |             |  |
|-----------------------------------------------------------------------------------------------------|------------------------------------|--|-------------|--|
| Radial force [N] at n2 = 200 1/ min                                                                 | 1500                               |  | 2200        |  |
| Nominal input speed / max. input speed [1/min] – allowed operation temperature must not be exceeded | 3000 / 6000                        |  | 3000 / 6000 |  |
| Life time [h]                                                                                       | > 30.000                           |  |             |  |
| Lubrication                                                                                         | H1 registered lifetime lubrication |  |             |  |
| Protection class                                                                                    | IP66 (optional: IP69K)             |  |             |  |
| Installation position                                                                               | universal                          |  |             |  |
| Operation temperature                                                                               | -20°C to +90°C                     |  |             |  |

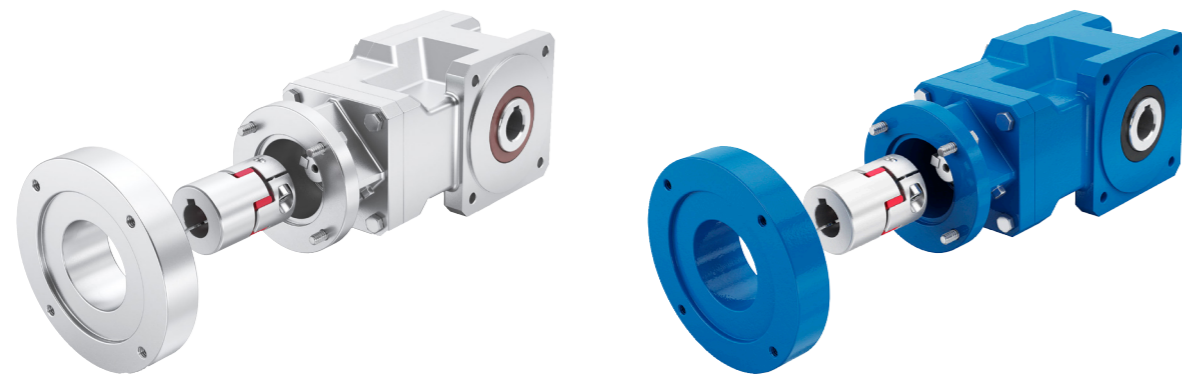
# Dimensions (in mm):



| Type of gearbox | KSN205 / KS205    | KSN210 / KS210 | KSN230 / KS230 |  |
|-----------------|-------------------|----------------|----------------|--|
| Gearbox         | Ø a1,6            | 75             | 90             |  |
|                 | Ø b1              | 75             | 95             |  |
|                 | c3                | 9              | 12             |  |
|                 | Ø e1              | 95             | 109            |  |
|                 | Ø f               | 89             | 89             |  |
|                 | g                 | 80             | 100            |  |
|                 | g1                | 40             | 46             |  |
|                 | g2                | 42             | 48             |  |
|                 | □g3               | 75             | 82             |  |
|                 | k                 | 143,5          | 157,2          |  |
|                 | q                 | 80             | 100            |  |
|                 | q1                | 40             | 50             |  |
|                 | s1                | 7              | 7              |  |
|                 | x                 | 2              | 2              |  |
|                 | Ø d <sup>H7</sup> | 20             | 20             |  |
|                 | Ø d1              | 30             | 35             |  |
|                 | l                 | 44             | 50,5           |  |
| t               | 22,8              | 22,8           |                |  |
| u JS9           | 6                 | 6              |                |  |

| Motor flange / motor shaft |                    |
|----------------------------|--------------------|
| Motor flange*              | Ø a3               |
|                            | Ø b3 <sup>H7</sup> |
|                            | Ø e3               |
|                            | f3                 |
|                            | s3                 |
| Motor shaft*               | Ø d3 <sup>H7</sup> |
|                            | l3                 |

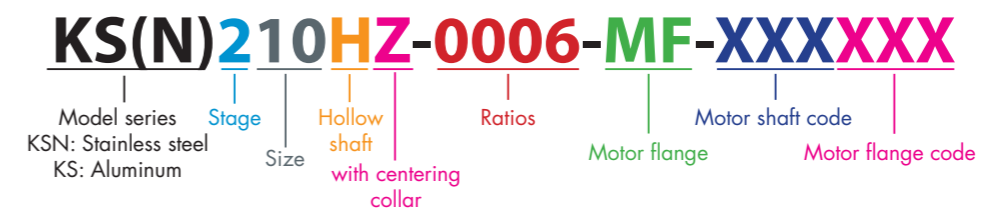
**\*Motor-specific flange- and motor shaft geometries. Dimensions vary.**



**KSN210, Stainless steel** for particularly high requirements for corrosion protection

**KS210, Aluminum** is the weight-optimized version

# Order key:



# Highlights

## SYMMETRICAL INLINE HOUSING DESIGN

compact design enables universal space-saving mounting in all positions

## SMOOTH HOUSING SURFACE

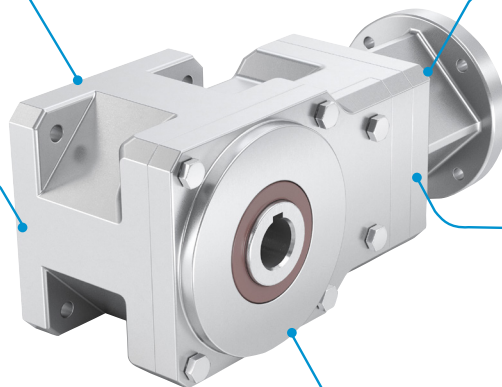
for particularly high demands on the surface finish e.g. wash-down applications

## LOW TORSIONAL BACKLASH

## H1 REGISTERED LIFETIME LUBRICATION

Mounting position - independent lubricant filling

## HIGH EFFICIENCY



## MAINTENANCE-FREE LIFETIME LUBRICATION

## TORSIONAL STIFF SERVO COUPLING

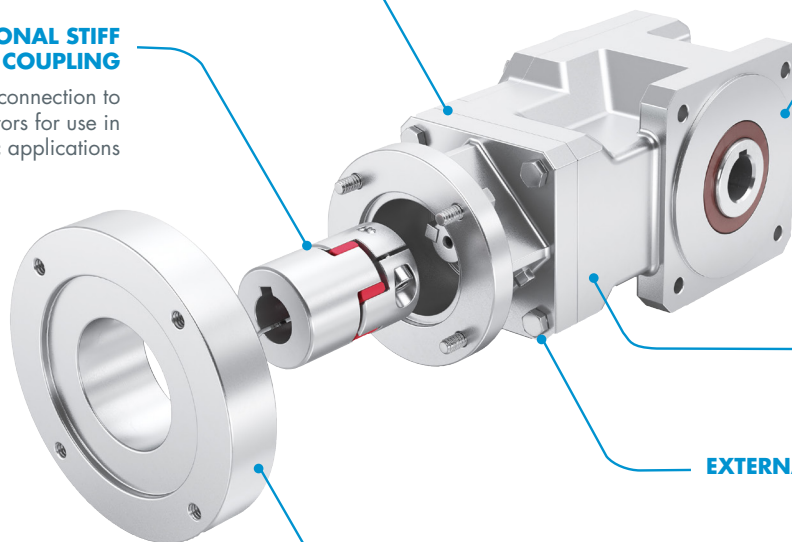
enables an optimal connection to standard and servo motors for use in highly dynamic applications

## SQUARE FLANGE

with external centering

## INTEGER RATIOS

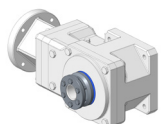
## EXTERNAL STAINLESS STEEL SCREWS



## MODULAR MOTOR FLANGE SYSTEM

for the adaptation of all common motors

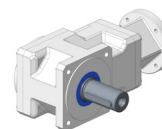
## Options:



Hollow shaft with shrink disc



Stainless steel cover for Covering the hollow shaft



Version with solid shaft

## Rehfuss Drive Solutions GmbH

E-Mail: [info@rehfuss.com](mailto:info@rehfuss.com)  
[rehfuss.com](http://rehfuss.com)

Phone: +49 7432 7015-0  
 Fax: +49 7432 7015-90

Illustrations, dimensions and representations are non-binding. Images show options technical changes reserved. 01-2025 / 097.07210.00002.1