

Stainless steel **Hygienic parts.**

Stainless steel **Gearboxes.**

Stainless steel **Electric Motors.**

# Motors & gearboxes.

Product range

Stainless steel



**dertec**<sup>®</sup>  
Designed to Perform

# Stainless steel Electric Motors.

A round, smooth housing,  
which simplifies cleaning and  
prevents bacterial growth.

IE3, IE4 and IE5  
efficiency.

IP69K



Dertec stainless steel motors are designed according to the highest levels in terms of hygiene and cleanability, we have managed to design a product that can be used under the most demanding conditions.

The design is smooth and round to prevent dirt build-up and makes them easy to clean. Special attention was paid to the shape of the terminal box and bearing shields to minimize dirt accumulation.

All our products are built to order, according to our customers' demands.

## Totally enclosed non ventilated

**FP3SS**

Standard AC motor

IEC56 - 90

0,06 - 1,5 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**FP3ENSS**

AC Encoder motor

IEC71 - 80

0,18 - 0,75 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**FP3EJSS**

AC Brake motor

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

## Totally enclosed fan cooled

**FP3SS**

Standard AC motor

IEC80 - 160

0,75 - 18,5 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**FP3ENSS**

AC Encoder motor

IEC80 - 100

0,75 - 3 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**FP3EJSS**

AC Brake motor

IEC90 - 100

1,1 - 3 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

## Customized motors

**FP3SS Water Cooled**

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**Motor for vertical use**

IEC63 - 90

0,12 - 1,5 kW

2,4,6 Pole

Asynchronous &amp; Synchronous

**Custom Solutions**

When a standard motor doesn't fit you to your needs, we offer customer specific solutions. Special shafts, motorflanges, different mountings etc.

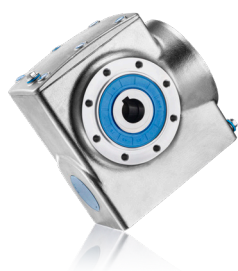
# Stainless steel Gearboxes.



Dertec gearboxes are specifically developed with hygiene and cleanability in mind. With a design that aims to minimize build-up of dirt, the shape contributes to less accumulation and adhesion of contaminants.

The high efficiency (92-94%) of the drive reduces energy consumption and contributes to a low surface temperature.

## Right Angle gearboxes

**FS(A) Serie**

Helical worm gearbox

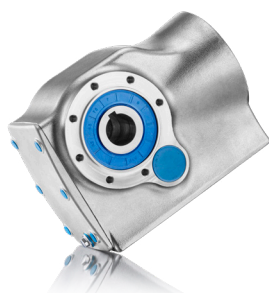
4 Frame Sizes

Shaft  $\varnothing$ : 20, 25, 30, 35, 40 & 45mm

Ratio's: 6,8:1 &gt; 217,41:1

Max Torque: 520 Nm

Max Power: 3,0 kW

**FKA Serie**

Helical bevel gearbox

5 Frame Sizes

Shaft  $\varnothing$ : 30, 35, 40, 50 & 60mm

Ratio's: 3,98:1 &gt; 197,37:1

Max Torque: 2700 Nm

Max Power: 7,5 kW

**K-Serie**

Bevel gearbox

5 Frame Sizes

Shaft  $\varnothing$ : 12, 15, 18, 20, 24, 25, 28, 32 & 35mm

Ratio's: 1:1 &gt; 6:1

Max Torque: 660 Nm

Max Power: 15 kW

**FVS Serie**

Worm gearbox

7 Frame Sizes

Shaft  $\varnothing$ : 14, 18, 25, 28, 35 & 42mm

Ratio's: 7,5:1 &gt; 100:1

Max Torque: 660 Nm

Max Power: 7,5 kW

**FH Serie**

Hypoid bevel gearbox

4 Frame Sizes

Shaft  $\varnothing$ : 20, 25, 30 & 35mm

Ratio's: 7,5:1 &gt; 300:1

Max Torque: 500 Nm

Max Power: 4,0 kW

## Accessories

**Open/Closed cover**

Offers extra safety and water ingress protection.

**Torque arm**

Gives you a perfect flexible mounting.

**Shrink disc**

Friction-locked connections are the more powerful and reliable alternative to conventional key mountings.

# Stainless steel Gearboxes.

A round, smooth housing,  
which simplifies cleaning and  
prevents bacterial growth.

Stainless Steel  
AISI316 housing

IP69K

Up to 94% efficiency



Laser engraved  
tag plates.



Duplex



Seals & O-rings made  
of special Engineered  
Foodgrade Material.

FR series helical gearboxes are being developed to achieve high torques, low energy consumption and thus a lower surface temperature. The case-hardened gears ensure a long lifetime and smooth running. The smart use of 2 stage or 3 stage gearing in the same housing offers a complete spectrum of ratio's.

The footprint and shaft sizes are similar to commonly used standards in the market.

## Coaxial gearboxes

**FR Serie**

Helical gearbox

3 Frame Sizes

Shaft  $\varnothing$ : 25, 30 & 35mm

Ratio's: 3,41:1 &gt; 199,81:1

Max Torque: 600 Nm

Max Power: 7,5 kW

**FRX Serie**

Single stage gearbox

3 Frame Sizes

Shaft  $\varnothing$ : 15, 20 & 25mm

Ratio's: 1,4:1 &gt; 6:1

Max Torque: 150 Nm

Max Power: 7,5 kW

**FRC Serie**

Helical gearbox

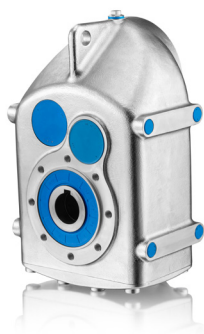
2 Frame Sizes

Shaft  $\varnothing$ : 20 & 25mm

Ratio's: 3,84:1 &gt; 54,00:1

Max Torque: 200 Nm

Max Power: 1,5 kW

**FFA Serie**

Parallel shaft gearbox

4 Frame Sizes

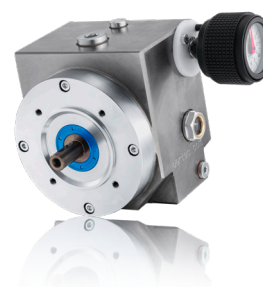
Shaft  $\varnothing$ : 30, 35, 40 & 50mm

Ratio's: 3,77:1 &gt; 281,71:1

Max Torque: 1500 Nm

Max Power: 7,5 kW

## Variators

**KR Serie**

Speed ball variator

4 Frame Sizes

Shaft  $\varnothing$ : 11, 14, 19, 24mm

Ratio's: 2:1

Max Torque: 16 Nm

Max Power: 2,2 kW

## Accessories

**Secondary flange**

Using flanges adds flexibility to your mounting.

**Solid secondary shaft**

We supply insert shafts or fixed shafts to all hollow shaft gearboxes.

**Foot plate**

Our external foot plate to transform the shaft mounted gears to foot mounting.

# Stainless steel **Hygienic parts.**

A round, smooth housing,  
which simplifies cleaning and  
prevents bacterial growth.



Stainless Steel  
AISI316 housing



Laser engraved  
tag plates.



Seals & O-rings made  
of special Engineered  
Foodgrade Material.

A complete range of stainless steel bearing units for the very challenging food and beverage industry. Regularly cleaning of the machinery means that the machines are frequently exposed to pressure washdowns with caustic, antibacterial cleaning agents. Dertec Signature line ball bearing units offer a range of bearing solutions for such demanding environments. Standard made in stainless steel 316, double sealed with O-rings and Hygienic seals.

The blue optical, detectable hygienic seals and stainless steel housing are made to EHEDGE hygienic guidelines.

## Hygienic bearing systems



### DHLASS F

4 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS FB

3 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS FL

2 Hole plain bearing

Bore: 20-50mm

Bearing Type: SA & SB



### DHLASS P & PA

Standing bearings

Bore: 20-50mm

Bearing Type: SA & SB

## Hygienic parts



### Hygienic star knobs and handles

Engineered according to the latest hygienic guidelines and produced in AISI316 with blue silicon seals.



### Hygienic norm parts

Produced in AISI316 with silicon bonded seals these hygienic nuts, hygienic bolts and bonded seals are developed to reduce bacterial growth at maximum.



### Hygienic glands

These glands offer IP69 + EMC protection for your electric motor cable connection. For food safety the glands are being produced in AISI316 and blue silicon.



**Dutch  
design**

# An independent **company.**

Dertec is a second generation family company, founded in 2002. The first in-house production of stainless steel motors and gears started in 2008. In 2022, Dertec moved to a new and built to purpose building, where we have the possibility for further growth and development of our product range and global market leadership.

# Vision.

Innovative, hygienic solutions. Always one step ahead. Tailored to our customers. That's our goal. Years of experience, technical insight, focused on market demands, and great engagement with the customer. Qualities that have earned Dertec a leading position throughout the world. The company has developed strongly over the years and has grown into a global market player with a very clear defined expertise: innovative, hygienic, sustainable, and efficient.

Customer **first.**

Customer satisfaction is what matters most at Dertec. This also applies to partnership. No short-term investments, but long-lasting relationships. We are proud to work for leading companies all over the world. Dertec is a Dutch family-owned company, founded in 2002. Agile, with a friendly atmosphere and informal culture.

Driven **organization.**

The unique position of Dertec is thanks to our continuous efforts in research and development. Our team of professionals constantly strives for the best solution. Our innovative stainless steel solutions are developed and built in-house. Continuous market changes demand swift adaptation. Our engineering department makes a significant contribution to fully supporting our relationships with the most efficient hygienic solutions possible.





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