

**Special execution for vertical use**



When using electric motors in a vertical position with shaft up, a so called pooling effect can appear. Regardless the IP class, type of oil seal or other solutions, a small quantity of water could enter the motor over time. For these kind of situations Dertec has developed a special motor execution. This motor works with a tapered flange and a blue sling ring. The blue ring makes sure that no water will stay around the shaft seal and will get slinged away with by the blue sling ring.

The tapered flange makes sure the water can flow away easy, preventing the pooling effect.



For all the gearboxes Dertec produces we have developed a range of accessoires.

- Mounting flanges
- Torque arms for a perfect flexible mounting.
- Open and Closed covers for more waterproofing

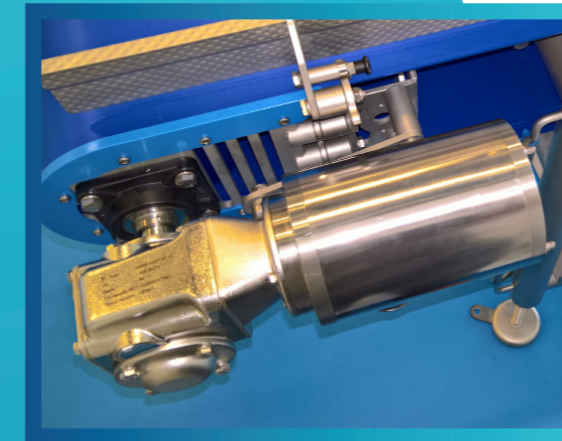
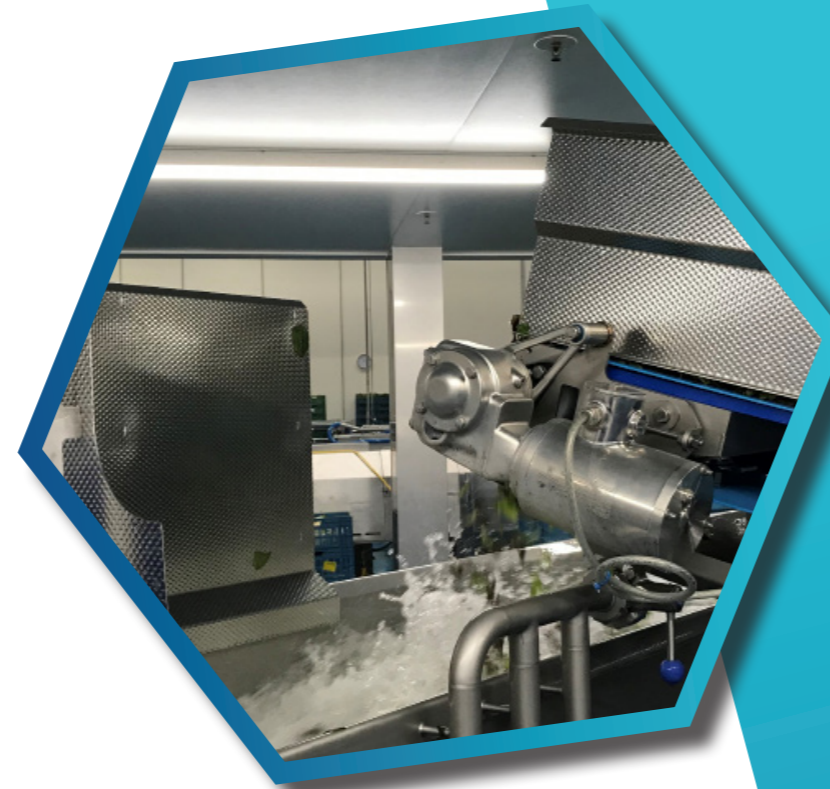
**Accessoires for gearboxes**



**Custom solutions**



A standard motor is not the solution for everyone. Sometimes a custom solution is needed for the specific position or use of the motor. Dertec is a flexible company and has many possibilities to produce a non standard motor for your application. For example a special shaft execution like in the photo



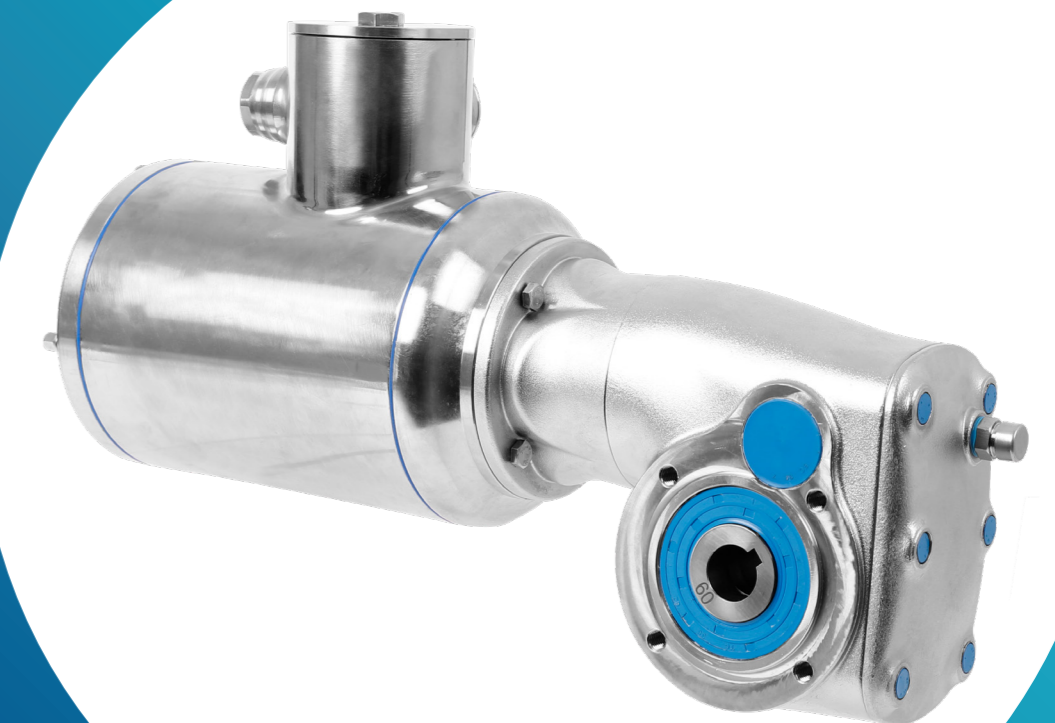
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Stainless steel  
Motors & Gearboxes  
**Product range.**

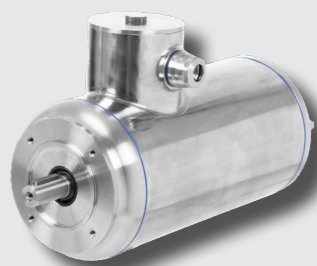


## Stainless steel Electric motors

Already in 2007 Dertec offered its first Dertec Stainless AC motor to the industry. Today we offer a complete line of Stainless steel AC IE3/4 Asynchronous motors, AC Permanent Magnet Synchronous motors and Servo motors. From start all these motors have been designed by Dertec with the food industry in mind.

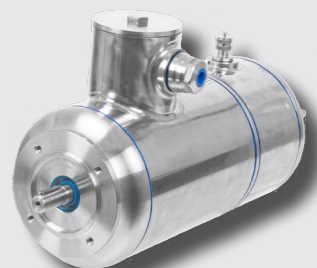
### FP3SS Motors

Stainless Steel AC Motors  
IEC56 - IEC180  
(NEMA on demand)  
0,06 - 18,5 kW  
2, 4 & 6 pole versions  
UL & CSA Certified  
IP69K  
Efficiency class IE3 (IE4)



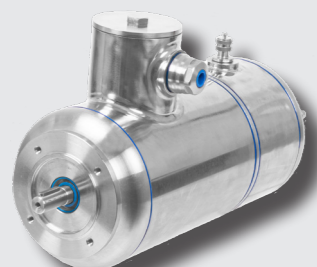
### FP3EJSS Motors

Stainless Steel Brake Motors  
IEC71 - IEC100  
(NEMA on demand)  
2, 4 & 6 pole versions  
UL & CSA Certified  
IP69K  
Efficiency class IE3 (IE4)



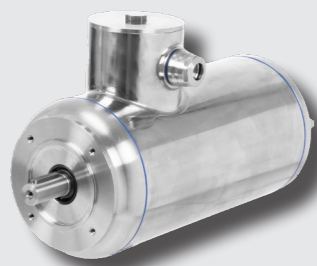
### FP3ENSS Motors

Stainless Steel Encoder Motors  
IEC71 - IEC100  
(NEMA on demand)  
HTL+ (TTL possible on Request)  
2, 4 & 6 pole versions  
UL & CSA Certified  
IP69K  
Efficiency class IE3 (IE4)



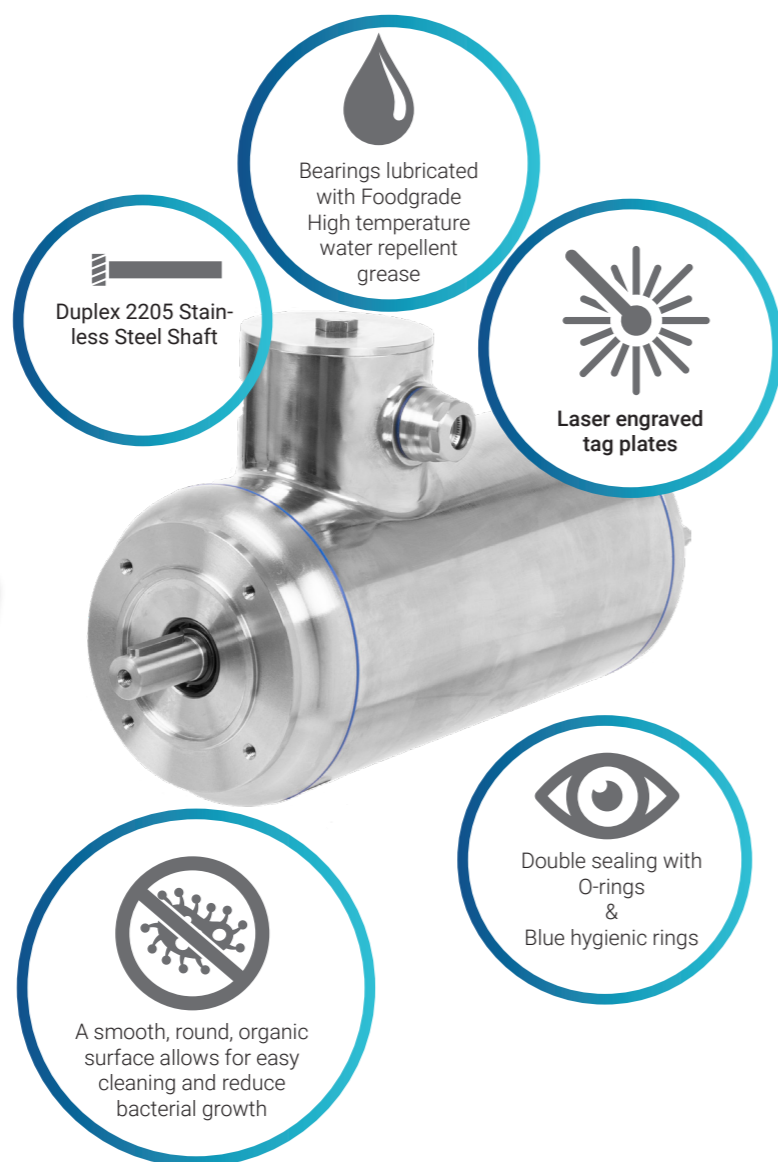
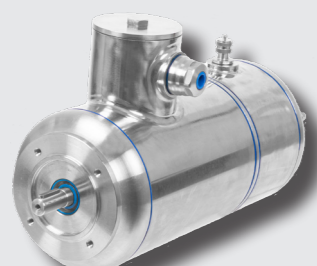
### FPM4SS Motors

Synchronous Motors  
IEC71 - IEC90  
(NEMA on demand)  
6 pole  
UL & CSA Certified  
IP69K  
Efficiency class IE4



### FPM4ENSS Motors

Synchronous Motors with Encoder  
IEC71 - IEC90  
(NEMA on demand)  
HTL+ (TTL possible on Request)  
6 pole  
UL & CSA Certified  
IP69K  
Efficiency class IE4

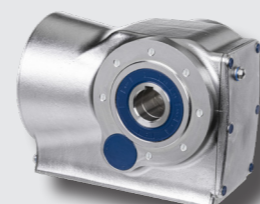


## Stainless steel gearboxes

All our designs are organic round, and the smooth design, makes the gearboxes extremely applicable in the food industry. The gearboxes are made of high quality carefully electro polished Stainless Steel AISI 316. All shafts are produced in Duplex Stainless Steel 2205.

### FKA Serie

Helical Bevel gearbox  
5 Frame Sizes  
Shaft Ø: 30, 35, 40, 50 & 60mm  
Ratio's: 3,98:1 > 197,37:1  
Max Torque: 2700 Nm  
Max Power: 7,5 kW



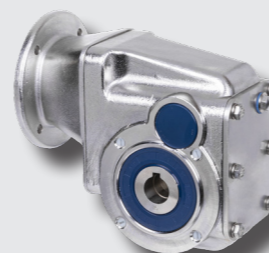
### FFA Serie

Parallel Shaft gearbox  
4 Frame Sizes  
Shaft Ø: 30, 35, 40 & 50mm  
Ratio's: 3,77:1 > 281,71:1  
Max Torque: 1500 Nm  
Max Power: 7,5 kW



### FK Serie

Hypoid Bevel gearbox  
4 Frame Sizes  
Shaft Ø: 20, 25, 30 & 35 mm  
Ratio's: 7,5:1 > 300:1  
Max Torque: 500 Nm  
Max Power: 3,0 kW



### FV Serie

Worm gearbox  
7 Frame Sizes  
Shaft Ø: 14, 18, 25, 28, 35 & 42mm  
Ratio's: 7,5:1 > 100:1  
Max Torque: 630 Nm  
Max Power: 7,5 kW

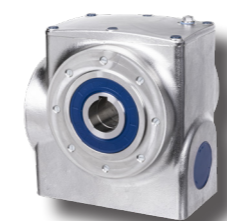


### Optional

Shrink disc executions  
Solid shaft versions

### FSA Serie

Helical Wormgearbox  
4 Frame Sizes  
Shaft Ø: 20, 25, 30, 35 & 40mm  
Ratio's: 22,5:1 > 217,41:1  
Max Torque: 520 Nm  
Max Power: 3,0 kW



### FR Serie

Helical Gearbox  
3 Frame Sizes  
Shaft Ø: 25, 30 & 35mm  
Ratio's: 3,41:1 > 199,81:1  
Max Torque: 600 Nm  
Max Power: 7,5 kW



### FH Serie

Hypoid Bevelgearbox  
4 Frame Sizes  
Shaft Ø: 20, 25, 30 & 35 mm  
Ratio's: 7,5:1 > 300:1  
Max Torque: 500 Nm  
Max Power: 3,0 kW



### FRC Serie

Helical Gearbox  
2 Frame Sizes  
Shaft Ø: 20 & 25 mm  
Ratio's: 3,66:1 > 54:1  
Max Torque: 200 Nm  
Max Power: 1.5 kW



## DERTEC Hygienic parts

Hygienic engineering does not stop with the Dertec geared motors only. Around the production line there are many parts that can be changed into hygienic solutions. As a service we offer Stainless steel hygienic solutions such as Cable glands, Nuts & Bolts, Starknobs, Handles and hygienic bonded rings. These products follow the hygienic guidelines to reduce bacterial contamination.

### DERTEC hygienic glands



Dertec Stainless steel Hygienic cable glands offer the best possible hygienic solution. If selected well ( cable & insert match) these glands offer IP69K + EMC protection for your electric motor cable connection. For food safety the glands are being produced in SS316 and blue silicon

### Hygienic norm parts



Hygienic design at its very best. Steel to steel contact is, according to the latest guidelines, not hygienic. The seam between the steel parts offer a high risk of bacterial growth. For this reason it is recommended to separate the two parts by using ( bonded) seals. Produced in SS316 with Silicon bonded seals these Hygienic nuts, hygienic bolts and bonded seals are developed to reduce bacterial growth at a maximum.

### Hygienic starknobs & handles



In every construction doorhandles and starknobs are a part of the final construction. These Dertec parts have been engineered with the latest hygienic guidelines in sight and produced in SS316 and made with blue silicon seals.

### Hygienic Bearings



Dertec bearing systems have been designed to optimize the hygienic use of flange and pillow block bearing housings in the food industry. Our engineers have designed a line of full AISI-316 bearing housings which can be assembled with spherical inserts with grub screw (SB) or clamping ring (SA) bearings.

Typical design elements such as blue hygienic rings and blue seals supports the engineer to reach a high level of cleanability.

The DERTEC hygienic bearing housings can be equipped with spacers to obtain so-called 'Stand-Off' housings.