

Turkey's largest  
and one of the world's most renowned producers of gearboxes.



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**Yılmaz Redüktör Sanayi ve Ticaret A.Ş.**

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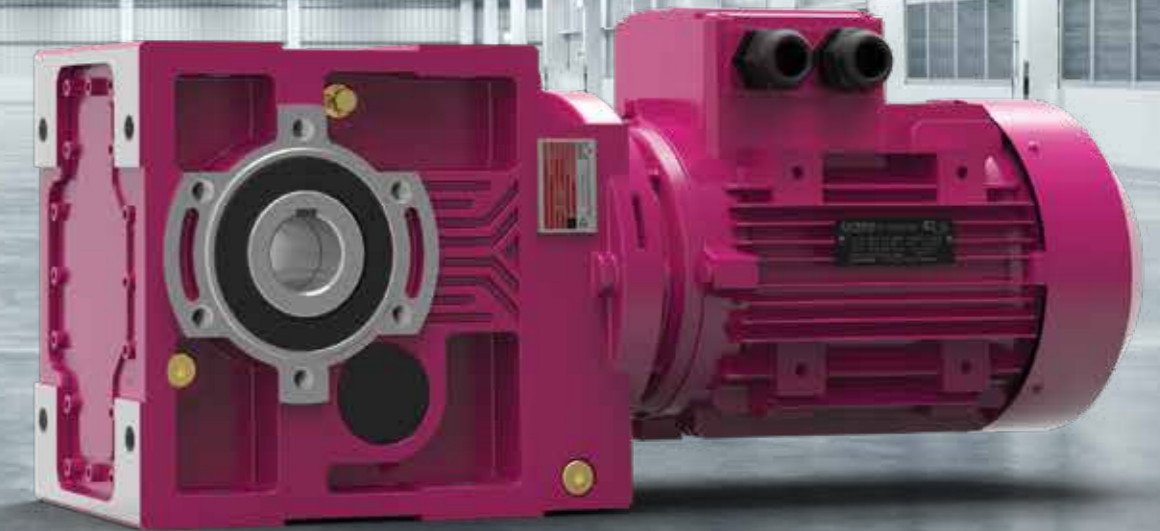
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Founded in 1958, Yılmaz Reduktor quickly became Turkey's leading gearbox manufacturer, aided by consistent product quality, work discipline, strategic planning and consistent vision. Today Yılmaz Reduktor remains Turkey's leading gearbox producer and is rapidly becoming well known throughout the world. Yılmaz Reduktor uses its extensive experience to develop new products, uses the latest available production technology and continually invests in engineering to provide its customers with products that fulfil the expectations of the world market. Our products are used in many industries and our customers regard us as trusted partners.



Mesut Yılmaz was born in 1932 in Kastamonu Abana as the third child of the Yılmaz family. He had a hard childhood, marred by World War II and industrialization problems around Turkey. During this period he worked at his father's café in Abana. After leaving primary school, he travelled to Istanbul on a ship to learn a new profession without seeking his family's permission. During his first years in Turkey's capital he encountered many challenges. Living in an attic above a café in Karaköy Perşembe Pazarı, he worked as an apprentice to a Greek craftsman.

Always planning to open his own workshop he worked hard and strove to learn from masters. In those challenging years he married Sabahat Yılmaz. She was born in 1933 in Kastamonu Abana as the daughter of Hulusi Hacıyüzbaşı. They had three children together. She supported Mesut Yılmaz throughout his life and did many great things for her children and for Yılmaz Redüktör. Together with a friend, Mesut Yılmaz opened his first workshop in 1958 at Şişhane İstanbul. Initially they had only three machines: a lathe, a drill, and a sawhorse, all of which they built themselves.

Mesut Yılmaz's life consisted of his family and his work. The few occasions that he did take time off he spent hunting and fishing. He died of heart failure on 17 August 2001 while fishing in his boat. After his death his sons and Sabahat Yılmaz continued his work, striving to accomplish Mesut Yılmaz's dream of establishing Yılmaz Redüktör on the World market.

From its humble beginnings as a producer of machine components in 1958 Yılmaz Redüktör has become Turkey's largest gearbox producer and counts among the world's most renowned manufacturers.



Mesut Yılmaz  
1932 - 2001

## 1963 - First Gearboxes A Series

In 1963 First Gearbox orders are received and decided to focus on Gearbox production

## 1987 - New Gearbox Facility

Turkey's largest gearbox plant opened in İstanbul - Beylikdüzü with a 23,000 m<sup>2</sup> floor area

## 2005 - ATEX Certificate

Yılmaz receives ATEX certification for its products - again a first for gearbox production in Turkey. Today nearly all of Yılmaz Product's are ATEX certified

## 2009 - T Series

Production of T series started, which were optimized for conveyor applications.

## 2017 January - AC Drives

While adding speed control devices to gear unit and AC motor couples, Yılmaz Redüktör start to offer complete solutions for customers

## 2020 - Second Factory

The foundations of Yılmaz Redüktör's second gearbox factory with a 70.000m<sup>2</sup> floor area to be established in Çerkezköy were laid.

## 1970 - First Factory

Yılmaz Redüktör buys building for casting and gearbox production which was our old sales headquarters.

## 2004 - High Tech Investment

Second high tech investment made accelerating the transition to automated production

## 2007 - H Series

In 2007 First Industrial gearboxes presented in Turkey. The new units were labeled as "H"

## 2010 June - New CNC Machines

In 2010 Yılmaz Redüktör invests 30 new CNC Machines, loaded by robots these machines boost production speed and quality.

## 2013 September Electric Motor Works

In 2013 September Yılmaz Redüktör establishes subsidiary company ELK motor plant in Çerkezköy Tekirdağ with second plant for MES Döküm, which will increase production capacity to 50.000 tonnes per year

ELK  
MOTOR

## 2021 - CT Series

Yılmaz Redüktör releases its CT series gear units with low gear backlash for circular saw machines

## 1958 - First Workshop

Yılmaz Redüktör's first workshop opened in İstanbul Şişhane

## 1994 - First Export

First export made to the European market

## 2002 - MES Foundry

Mes Foundry was established with fully automated production lines. Mes foundry meets all of Yılmaz Redüktör's cast part needs.

## 2010 January - New D Series

New D Series Gearboxes are designed and started to produce according to "High Power Density" principle.

## 2011 - P/R Series

In 2011 Yılmaz Redüktör starts production of Turkey's first mass-produced planetary gearboxes

## 2012 - V Series

Yılmaz Redüktör releases its V series hoist drum drive units, which is offering a lot of advantages for crane manufacturers.

## 2013 May - New K Series

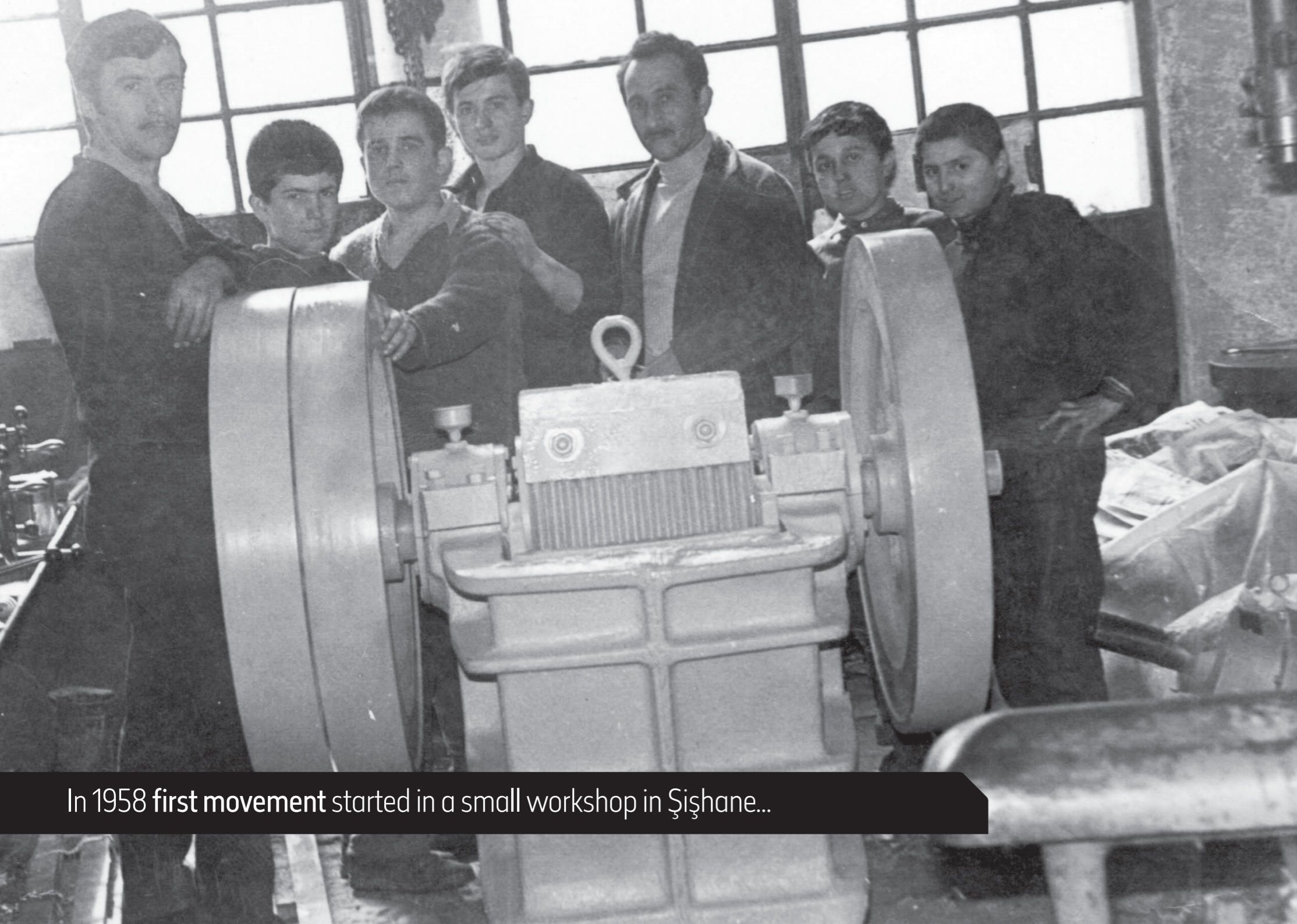
In 2013 Yılmaz Redüktör releases its K series gearboxes with higher efficiency than the E series worm gearboxes

## 1995 - Quality grade 6 gears

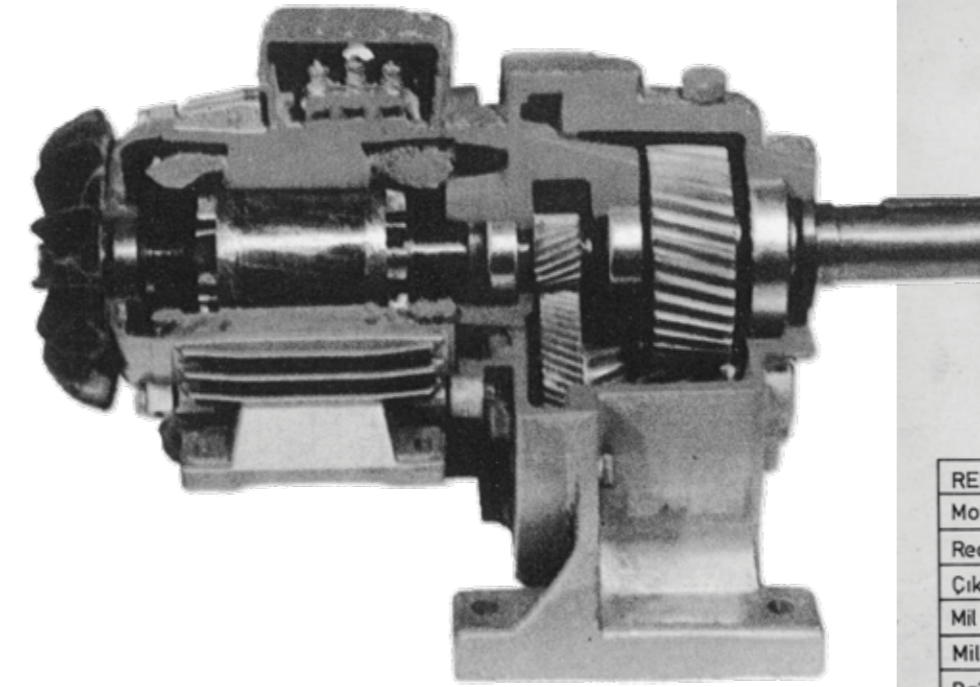
With the technology investment in 1995 first quality grade six gears were made.

## 2000 - ISO 9001 Certificate

Yılmaz Redüktör is Turkey's first gearbox producer to receive ISO 9001 certification, adding management quality to existing product quality

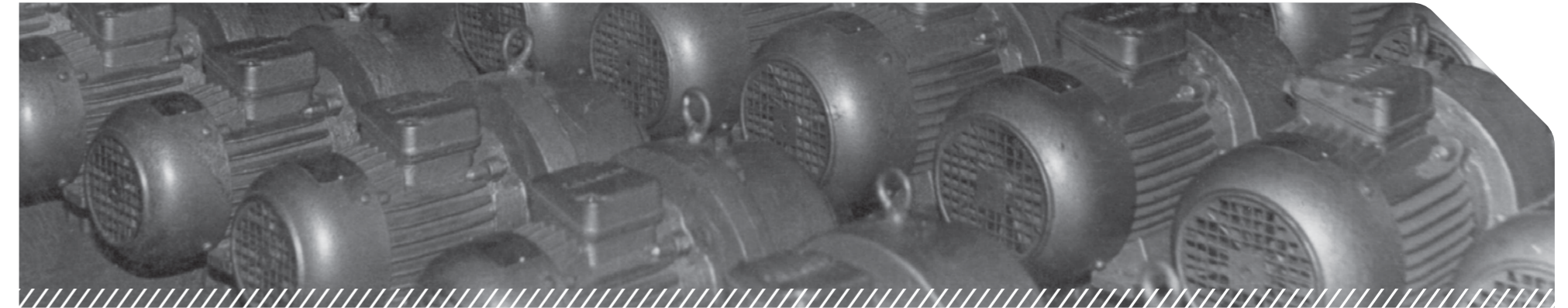
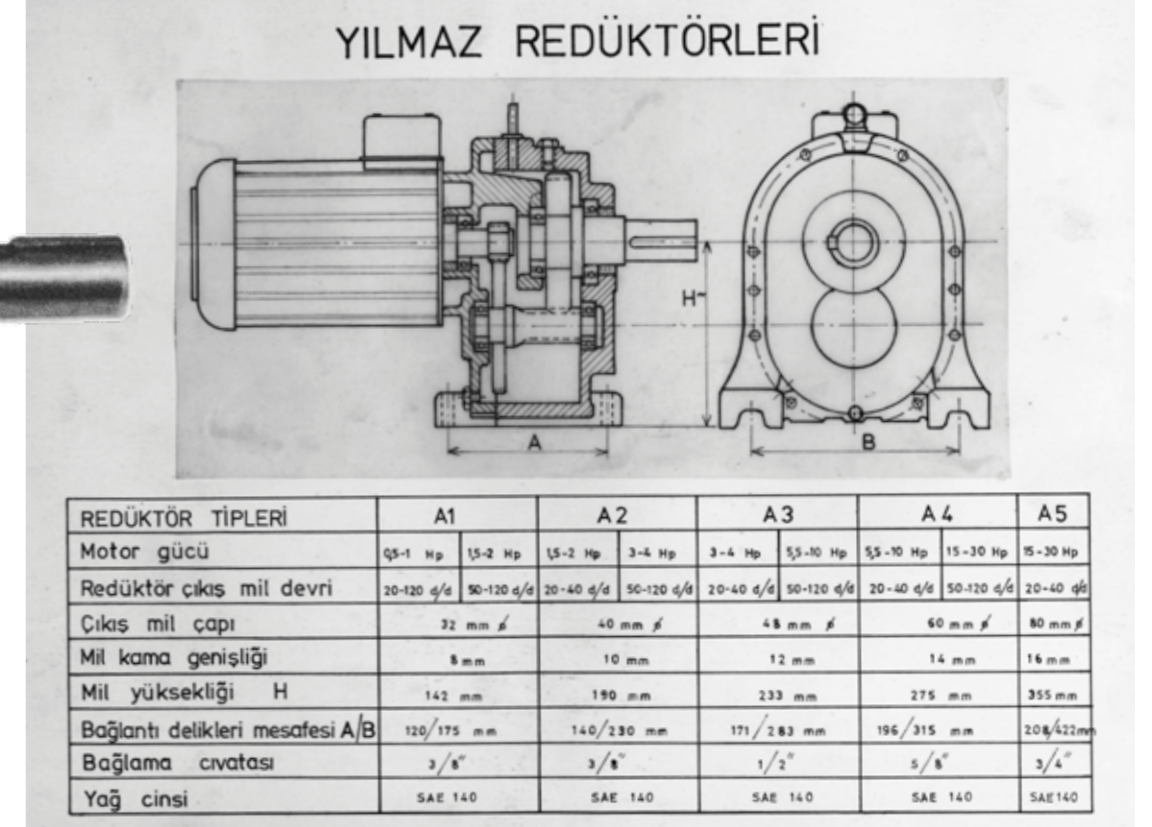


In 1958 first movement started in a small workshop in Şişhane...



## FIRST PRODUCT

Şişhane - 1963



### ELK Electric Motors San. ve Tic. A.Ş.

Established as a subsidiary of Yılmaz Redüktör in 2011, ELK's electric motor factory, located in the Cerkezkoy industrial park, began series production in 2013. The factory produces motors of types IE2, IE3 and IE4 ranging from size 63 to 315 (0.12 to 250 kW). All motors have been designed and engineered according to EU standards. They are sold under the ELK or Yılmaz brand.

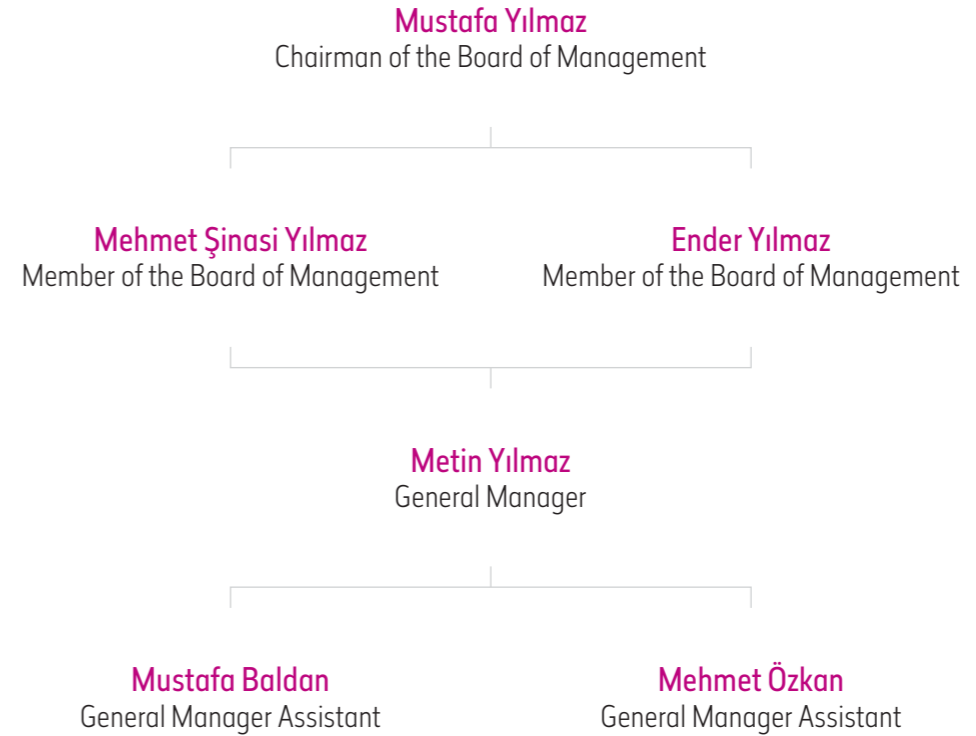


### Mes Foundry San. ve Tic. Ltd. Şti.

Subsidiary MES foundry was founded to meet Yılmaz Redüktör's needs for cast part. The company has a capacity of 50.000 tonnes per year and can produce standard cast iron, modular cast iron and bronze castings. The majority of MES Foundry's output – 95 percent – goes to Yılmaz Redüktör. Its facilities consist of induction furnaces, moulding lines, core making machines, and an in-house test lab.



## Yılmaz Redüktör Board of Management



## SERVICES

# Customer Service

- ▶ You can take technical advice from our sales engineers with a phone call. You can easily choose suitable gear units for your applications while exchanging technical know-how with them



# Web Site Applications

- ▶ You can find detailed information about our products and services on our web site. All of our product catalogues, manuals, certificates, 2D and 3D technical drawings and PDF drawings can be downloaded from our web site. With the help of easy to use "GST" application on our web site you can make engineering calculations for your application and choose suitable gearbox easily. For additional information about our mobile applications, please contact with our sales engineers.



# Online Stock and Order Tracking

- ▶ You can find online stock and order tracking system under "GST" on our web site, which is available for our dealers and OEM customers. If you are an OEM customer of ours, you can request a user name and password for the system from our sales department.



# Contracted Dealer Network

- We are as close to you as your next-door neighbour with our wide dealer network. Our dealers can help you for all of your requests with before and after sales



# Certificates

- Yılmaz Redüktör have international certificates approved by authorized notified bodies.



# Service

- Please contact our service head quarters below.

## Domestic Service

Atatürk Mah. Lozan Cad. No:17 34522 Esenyurt - İstanbul - Türkiye  
Tel: 0090 212 886 90 00

## Service:

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E-Mail: servis@yr.com.tr  
Whatsapp: +90 554 713 71 02

## Spare Parts:

Intern: 1224, 1277  
E-Mail: yedekparca@yr.com.tr  
Whatsapp: +90 506 774 44 35



# PRODUCTS

The new generation of Yilmaz gearboxes is of a monoblock (one-piece housing) design, which has the advantages of lower noise level, reduced oil leakage and higher rigidity and gear strength. All bearings are supported by the housing itself and not by split housings. All axes are machined on the same mounting plate, which gives a high precision on all axes with very tight tolerances. The gear manufacturing processes used allows exceptionally tight gear tolerances. This requires machining of the GG22 material housing to obtain the same tight tolerances, which can be achieved only with a monoblock housing. The one-piece housing also makes higher bearing and gear life as well as greater overhung loads possible. Gear strength, bearing life, shaft strength etc. are calculated with professional software applications according to DIN and Niemann's calculation principles. The middle bearing support plate is integrally cast and provides optimum support for bearings used in three-stage gearboxes. The middle bearing support plate allows the gears to be supported from both sides and very close to the gear wheel. This minimizes runout and deformation on running under load, making it possible to make low noise gearboxes. The new generation of gearboxes feature many additional mounting possibilities. According to customer specifications IEC B14, B5 or standard coupled geared motors are available. All models are two- or three-stage and foot- or flange-mounted. The new gearboxes have lower axle heights than the old models and are more compact at the same power and speed. All gearboxes are of a modular design, allowing double gearboxes to be integrated with minimum change. All gearbox tolerances are actively checked by our quality control system.



## GEAR UNITS

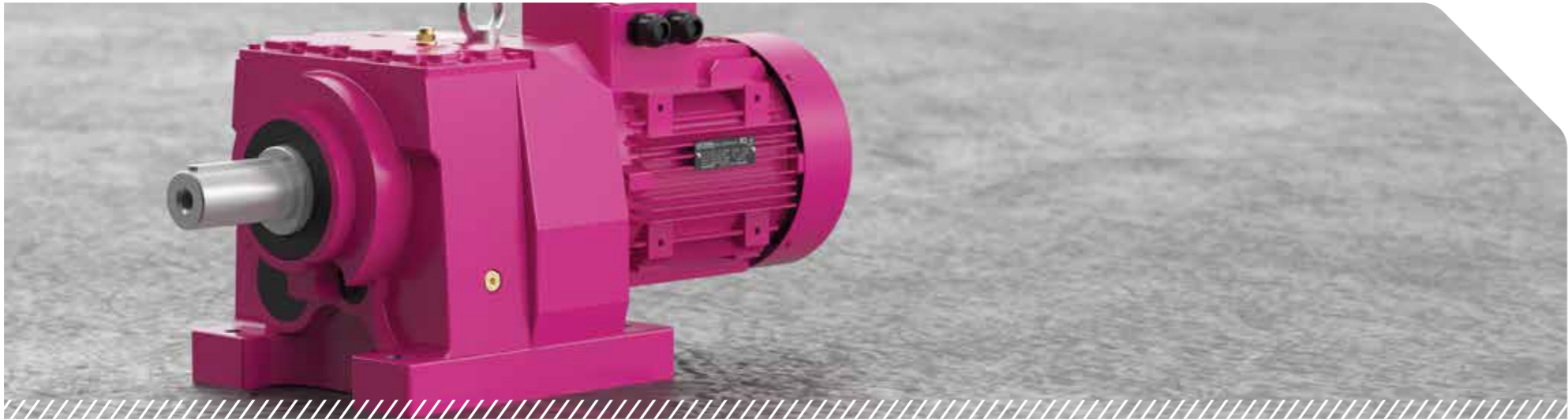


# M Series

## Foot-Mounted Helical Gearboxes

► Foot-mounted, helical gear units with solid output shaft, Input and output shafts are parallel to each other.

Torque Range [Nm]	50 - 18.000
Motor Power Range [kW]	0,12 - 160
Output Speed Range [rpm]	0,1 - 780



### Specifications and Advantages

- Monoblock housing design
- Two or three stages can be in same housing
- Reduction can be increased up to six stages with additional housing
- Bearing solutions for high radial and axial loads

### Options and Accessories

- Output shaft options
- Servomotor-specific connection flanges
- Electromagnetic brake motors (24V/220V/380V)
- Backstop applications
- 512 or 1024 pulse encoder
- External fan cooling option for frequency inverter applications

### Input Type



**MR Series**  
Direct motor coupled



**MV Series**  
With IEC B5/B14 motor mounted



**MN Series**  
Foot mounted gear unit with IEC B5/B14 motor flange



**MT Series**  
With input shaft without motor

### Output Type



**MRF**  
With flange and foot mounted

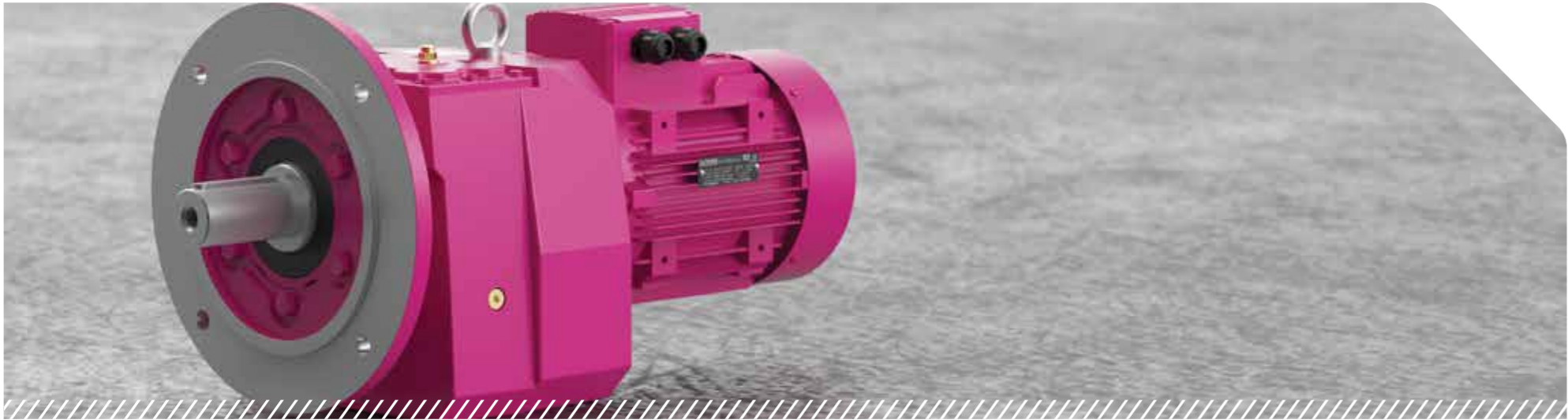
► Please see **Options and Accessories** chapter for additional information

# N Series

## Flange Mounted Helical Gearboxes

► Flange-mounted, helical gear units with solid output shaft, Input and output shafts are parallel to each other.

Torque Range [Nm]	50 - 18.000
Motor Power Range [kW]	0,12 - 160
Output Speed Range [rpm]	0,1 - 780



### Specifications and Advantages

- Monoblock housing design
- Two or three stages can be in same housing
- Reduction can be increased up to six stages with additional housing
- Bearing solutions for high radial and axial loads
- Output shaft options

### Options and Accessories

- Output shaft and flange options
- Servomotor-specific connection flanges
- Electromagnetic brake motors (24V/220V/380V)
- Backstop applications
- 512 or 1024 pulse encoder
- External fan cooling option for frequency inverter applications

### Input Type



**NR Series**  
Direct motor coupled



**NV Series**  
With IEC B5/B14 motor mounted



**NN Series**  
Flange mounted gear unit with IEC B5/B14 motor flange



**NT Series**  
With input shaft without motor

### Output Type



**Output Shaft Options**

► Please see **Options and Accessories** chapter for additional information

# D Series

## Parallel Shaft Helical Gearboxes

► Helical gear units, their input and output shafts are parallel and they can be connected to machines from sides of housing, with torque arm or from output flange.

Torque Range [Nm]	130 – 18.000
Motor Power Range [kW]	0,12 - 160
Output Speed Range [rpm]	0,1 - 580



### Specifications and Advantages

- Monoblock housing design
- Two or three stages can be in same housing
- Reduction can be increased up to six stages with additional housing
- Bearing solutions for high radial and axial loads
- Output shaft options (Hollow shaft, solid shaft, shrink disk, hollow and solid splines)
- Extruder output option for extruder machines (DRE Type)

### Options and Accessories

- Output flange and output shaft options
- Servomotor specific connection flanges
- Electromagnetic brake motors (24V/220V/380V)
- Backstop application
- 512-1024 pulse encoder applications
- External fan cooling option for frequency inverter applications

## Input Type



**DR Series**  
Direct motor coupled



**DV Series**  
With IEC B5/B14 motor mounted



**DN Series**  
Gear unit with IEC B5/B14 motor flange



**DT Series**  
With input shaft without motor

## Output Type



**D..00**  
With hollow shaft



**D..01**  
With solid shaft



**D..02**  
With solid shaft and flange



**D..03**  
With hollow shaft and flange



**D..0S**  
With hollow shaft and shrink disk



**D..0E**  
With extruder shaft

► Please see **Options and Accessories** chapter for additional information

# K Series

## Bevel - Helical Gearboxes

► Helical bevel gear units, their input and output shafts are perpendicular to each other. They can be mounted to machine from foot, output flange or with torque arm.

Torque Range [Nm]	80 – 20.000
Motor Power Range [kW]	0,12 - 160
Output Speed Range [rpm]	0,1 - 460



### Specifications and Advantages

- Monoblock housing design
- Two or three stages can be in same housing
- Reduction can be increased up to six stages with additional housing
- Bearing solutions for high radial and axial loads
- Output shaft options (Hollow shaft, solid shaft, shrink disk, hollow and solid splines)
- Extruder output option for extruder machines (KRE Type)

### Options and Accessories

- Output flange and output shaft options
- Servomotor specific connection flanges
- Electromagnetic brake motors (24V/220V/380V)
- Backstop application
- 512-1024 pulse encoder applications
- External fan cooling option for frequency inverter applications

## Input Type



**KR Series**  
Direct motor coupled



**KV Series**  
With IEC B5/B14 motor mounted



**KN Series**  
Gear unit with IEC B5/B14 motor flange



**KT Series**  
With input shaft without motor

## Output Type



**K..00**  
With hollow shaft



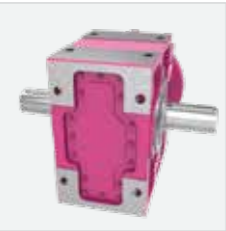
**K..01**  
With solid shaft



**K..02**  
With solid shaft and flange



**K..03**  
With hollow shaft and flange



**K..04**  
With double solid output shaft



**K..05**  
With double solid output shaft and flange



**K..08**  
With double hollow output shaft and flange



**K..0S**  
With hollow shaft and shrink disk



**K..0E**  
With extruder shaft

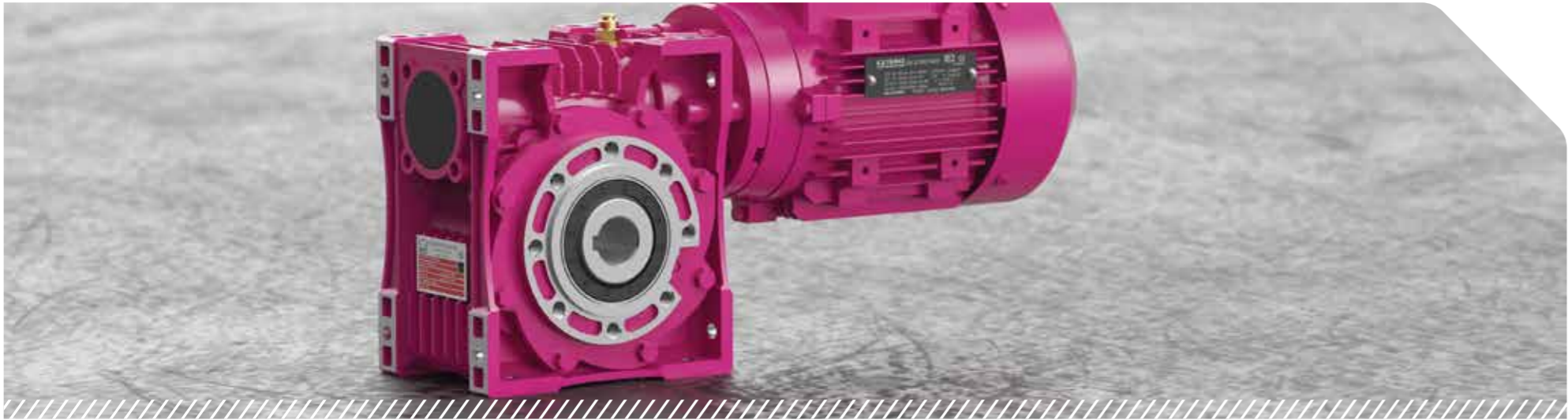
► Please see **Options and Accessories** chapter for additional information

# E Series

## Worm Gearboxes

► The worm gearboxes of the E series feature input and output shafts that are perpendicular to each other. Their worms are made of steel and gears are made of bronze. They can be mounted to the driven machine by the foot, flange or torque arm on the gearbox.

Torque Range [Nm]	5 – 1.000
Motor Power Range [kW]	0,06 – 7,5
Output Speed Range [rpm]	0,2 - 260



### Specifications and Advantages

- Maximum thermal capacity through optimized design of cooling fins
- Additional helical gear stage for low output speeds
- Bearing solutions for high radial and axial loads
- Special motor flanges

### Options and Accessories

- IEC B5 and B14 motor flanges
- Output flange options
- Special sealings
- Torque arm
- Electromagnetic brakes
- Optional output shaft dimensions
- Servomotor specific connection flanges

## Input Type



**EV Series**  
With IEC B5/B14 motor mounted



**EN Series**  
Gear unit with IEC B5/B14 motor flange



**ET Series**  
With input shaft without motor



**EN + EV Series**  
Two worm stage gearbox



**EN + NR Series**  
Worm gearbox with helical gear stage input

## Output Type



**E..00**  
With hollow shaft



**E..01**  
With solid shaft



**E..02**  
With solid shaft and flange



**E..03**  
With hollow shaft and flange



**E..04**  
With double solid output shaft



**E..05**  
With double solid output shaft and flange



**E..06**  
Worm geared motor with shaft extension from opposite side of motor



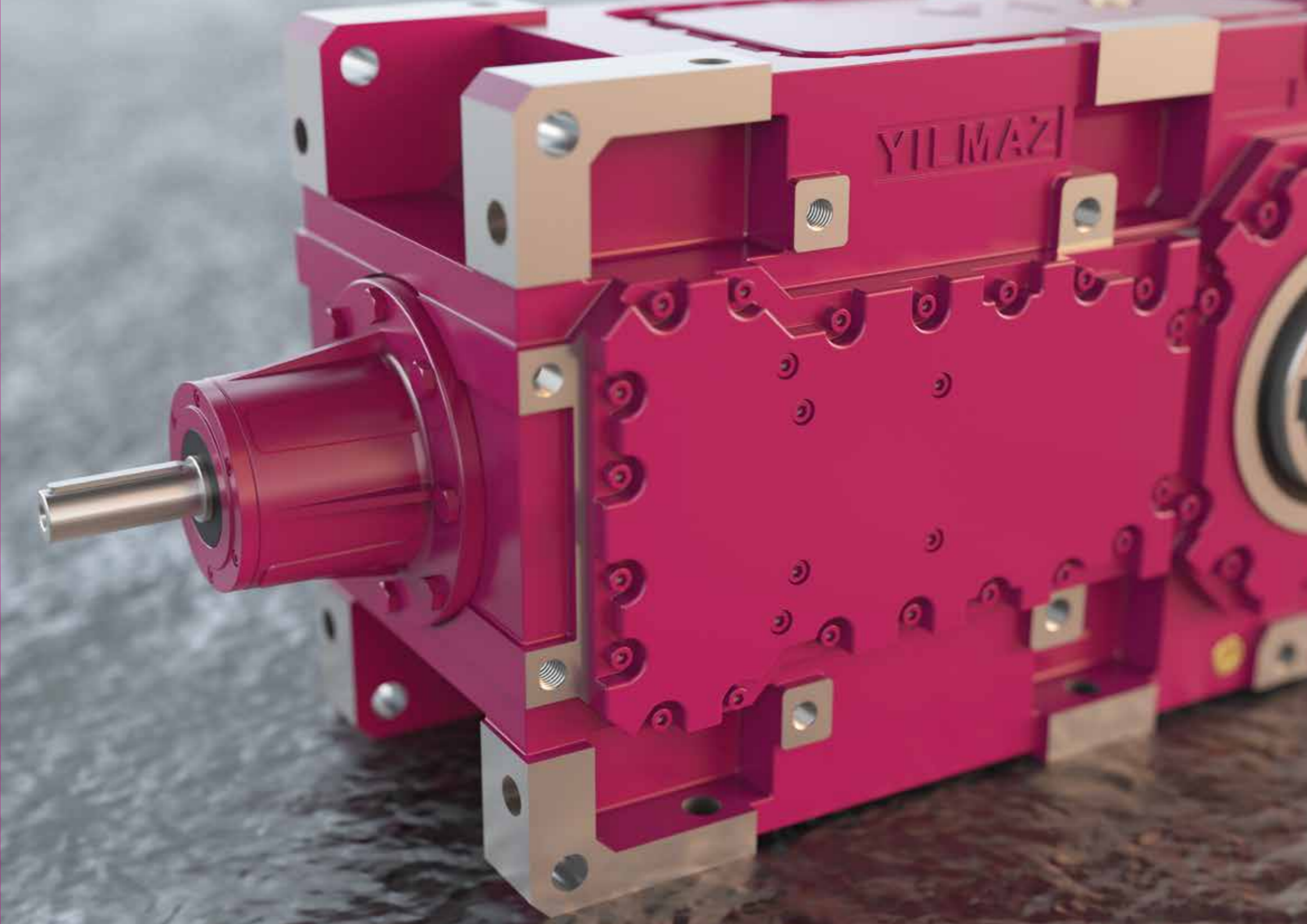
**E..07**  
Worm gear unit with double input shaft



**E..08**  
With Double hollow output shaft

► Please see **Options and Accessories** chapter for additional information

## INDUSTRIAL GEARBOXES



# P Series

## Planetary, Flange Mounted Gearboxes

► Gearboxes that have a modular design and consist of sun, planet and internal gearing, which can be mounted with torque arm or output flange. They are suitable for mobile applications with their high torque capacity and compact design.

Torque Range [Nm]	1.000 – 135.000
Motor Power Range [kW]	0,37 - 90
Output Speed Range [rpm]	0,1 - 410



### Specifications and Advantages

- High torque density with the help of compact housing and bearings
- Bearing solutions for high radial and axial loads
- Output shaft options (Solid shaft, shrink disk, hollow shaft with splines, solid shaft with splines)
- AC and hydromotor flanges
- Perpendicular input shaft options with bevel gear stage
- Worm and bevel gear unit coupling options to decrease output speed
- Different cooling and lubrication options for different working conditions

### Options and Accessories

- Servomotor specific connection flanges
- Electromagnetic brakes
- Electromagnetic and hydraulic brakes
- 512 - 1024 pulse encoder application
- External fan cooling option for frequency inverter applications
- Special sealings
- Glass oil level indicator

### Input Type



**PV..L Series**  
Planetary geared AC or hydro motor with IEC B5, B14, C26 or M46 input flange



**PN..L Series**  
Planetary gear unit with IEC B5, B14, C26 or M46 input flange



**PT..L Series**  
Planetary gear unit with solid input shaft



**P..K Series**  
Planetary gear unit with bevel stage input



**P + EV Series**  
Planetary gear box with worm gear unit coupled



**P + KR Series**  
Planetary gear unit with bevel gear unit coupled

### Output Type



**P..01**  
Solid output shaft



**P..0K/OL**  
Hollow output shaft with splines



**P..1K/1L**  
Solid output shaft with splines



**P..0S**  
With shrink disk

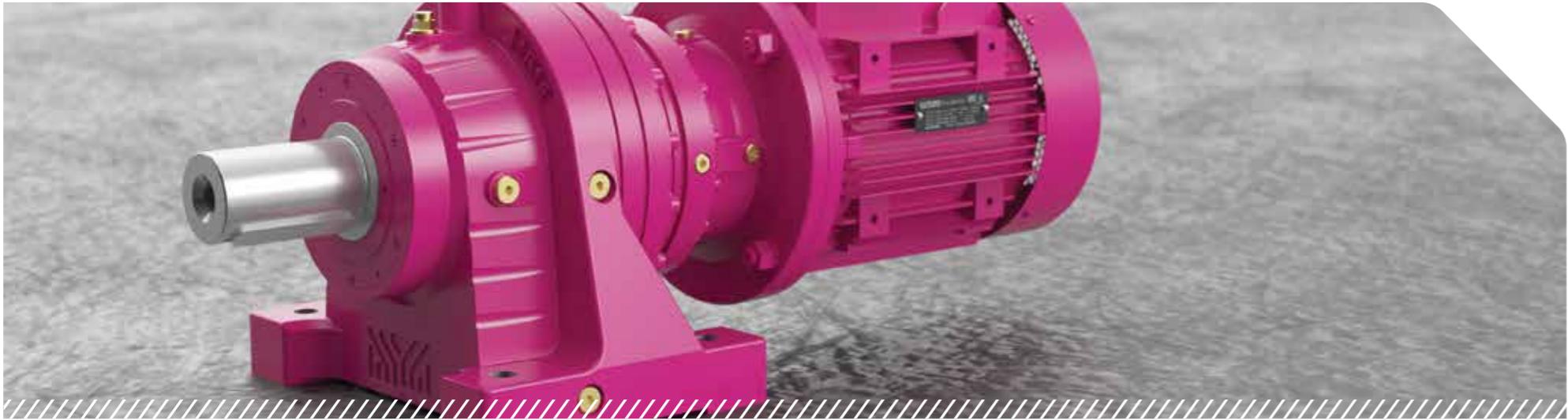
► Please see **Options and Accessories** chapter for additional information

# R Series

## Planetary, Foot Mounted Gearboxes

► Gearboxes that have a modular design and consist of sun, planet and internal gearing, which can be mounted with mounting holes on housing. They are suitable for mobile applications with their high torque capacity and compact design.

Torque Range [Nm]	1.000 – 135.000
Motor Power Range [kW]	0,37 - 90
Output Speed Range [rpm]	0,1 - 410



### Specifications and Advantages

- High torque density with the help of compact housing and bearings
- Bearing solutions for high radial and axial loads
- Output shaft options (Solid shaft, shrink disk, hollow shaft with splines, solid shaft with splines)
- AC and hydromotor flanges
- Perpendicular input shaft options with bevel gear stage
- Worm and bevel gear unit coupling options to decrease output speed
- Different cooling and lubrication options for different working conditions

### Options and Accessories

- Servomotor specific connection flanges
- Electromagnetic brakes
- Electromagnetic and hydraulic brakes
- 512 - 1024 pulse encoder application
- External fan cooling option for frequency inverter applications
- Special sealings
- Glass oil level indicator

## Input Type



**RV..L Series**  
Planetary geared AC or hydro motor with IEC B5, B14, C26 or M46 input flange



**RN..L Series**  
Planetary gear unit with IEC B5, B14, C26 or M46 input flange



**RT..L Series**  
Planetary gear unit with solid input shaft



**R..K Series**  
Planetary gear unit with bevel stage input



**R + EV Series**  
Planetary gear box with worm gear unit coupled



**R + KR Series**  
Planetary gear unit with bevel gear unit coupled

## Output Type



**R..01**  
Solid output shaft



**R..1K/1L**  
Solid output shaft with splines

► Please see **Options and Accessories** chapter for additional information

# H Series

## Industrial Helical-Geared Units

► Helical industrial type gear units with parallel input and output shaft. They can be mounted to driven machine with foot, output flange or torque arm.

Ratio Range	5,33 - 420
Torque Range [Nm]	4.850 – 470.000
Speed Range [rpm]	0,1 - 263



### Specifications and Advantages

- GGG40 sphero compact housing
- Gears with modifications and tapered rolling bearings
- Mounting from all sides
- Motor mounting with IEC B5 flange
- Output flange options
- Output shaft options (solid shaft, shrink disk, hollow shaft with splines, solid shaft with splines)
- Lubrication options
- Cooling options
- Option for coupling with K series gear units to further increase ratio

### Options and Accessories

- Mechanical brake option on housing
- Complete solutions including eldro brake, hydrolic coupling and electric motor on steel base frame
- Oil heater, oil flow sensor, oil filter, glass oil level indicator and special sealings
- Torque arm

## Input Type



**HT Series**  
With input shaft without motor



**HK Series**  
With IEC B5 input flange without motor



**HV Series**  
Gear unit with motor



**HT + KR Series**  
Gear unit with additional housing

## Output Type



**H..00**  
With hollow shaft



**H..01**  
With solid output shaft



**H..02**  
With solid shaft and flange



**H..03**  
With hollow shaft and flange



**H..04**  
With double solid output shaft



**H..05**  
With double solid output shaft and flange



**H..08**  
With double hollow output shaft and flange



**H..05**  
With shrink disk



**H..0E**  
With extruder output shaft

► Please see **Options and Accessories** chapter for additional information

# B Series

## Industrial Helical-Bevel Gear Units

► Helical and bevel industrial type gear units with perpendicular input and output shaft. They can be mounted to driven machine with foot,output flange or torque arm.

Ratio Range	9,78 - 430
Torque Range [Nm]	4.850 – 345.000
Speed Range [rpm]	0,1 - 140



- Specifications and Advantages**
- GGG40 sphero compact housing
  - Gears with modifications and tapered rolling bearings
  - Mounting from all sides
  - Motor mounting with IEC B5 flange
  - Output flange options
  - Output shaft options (solid shaft, shrink disk, hollow shaft with splines, solid shaft with splines)
  - Lubrication options
  - Cooling options
  - Option for coupling with D series gear units to further increase ratio

- Options and Accessories**
- Mechanical brake option on housing
  - Complete solutions including eldro brake, hydrolic coupling and electric motor on steel base frame
  - Oil heater, oil flow sensor, oil filter, glass oil level indicator and special sealings
  - Torque arm

### Input Type



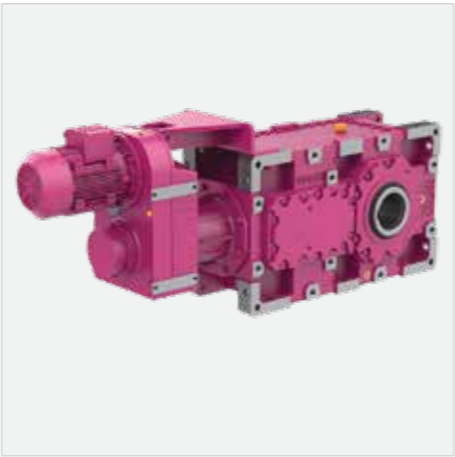
**BT Series**  
With input shaft without motor



**BK Series**  
With IEC B5 input flange without motor



**BV Series**  
Gear unit with motor



**BT + DR Series**  
Gear unit with additional housing

### Output Type



**B..00**  
With hollow shaft



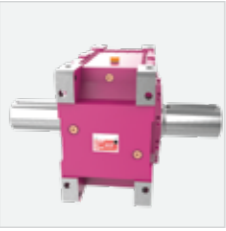
**B..01**  
With solid output shaft



**B..02**  
With solid shaft and flange



**B..03**  
With hollow shaft and flange



**B..04**  
With double solid output shaft



**B..05**  
With double solid output shaft and flange



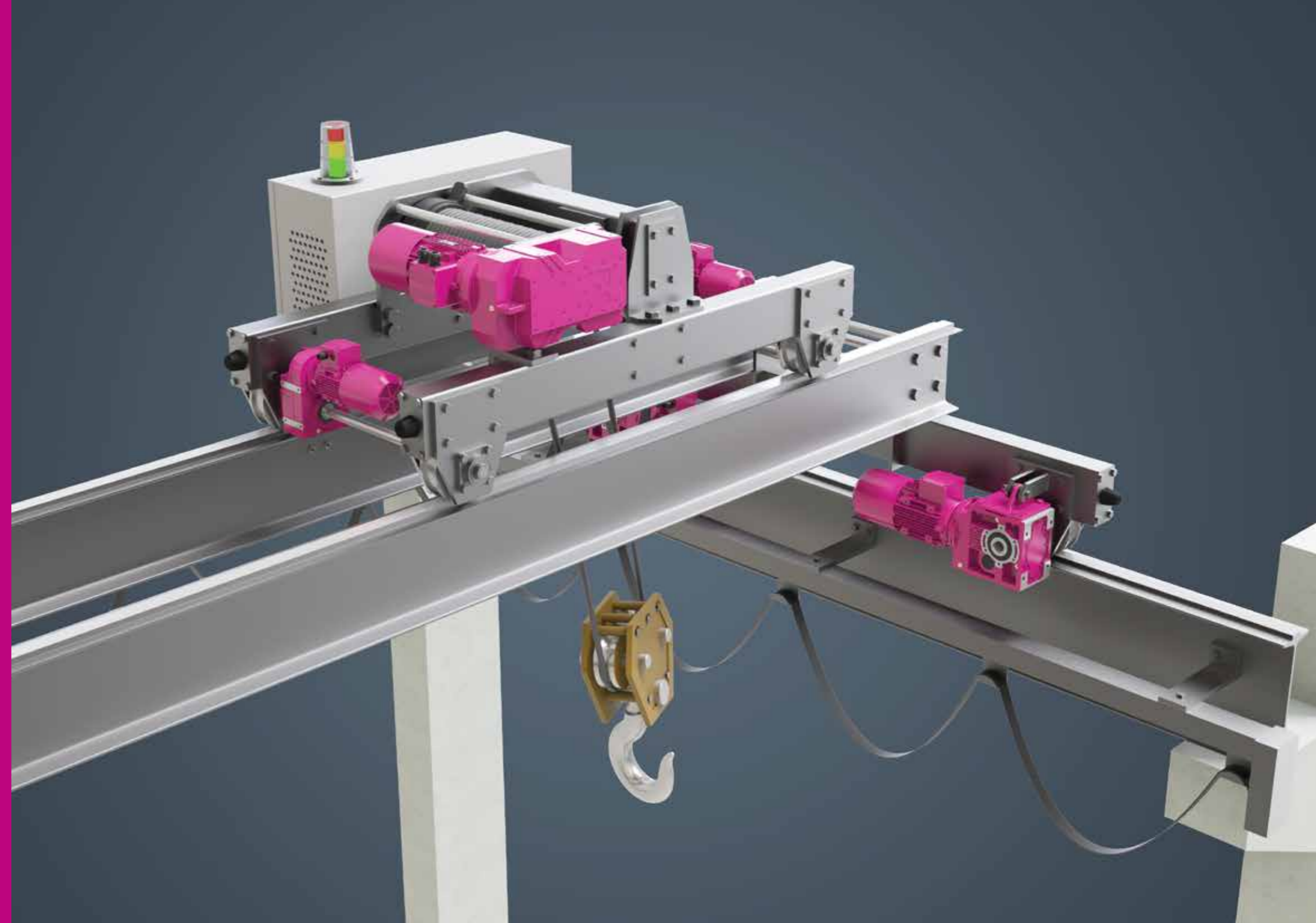
**B..08**  
With double hollow output shaft and flange



**B..05**  
With shrink disk

► Please see **Options and Accessories** chapter for additional information

## Special Application Gearboxes



# VR

## Crane

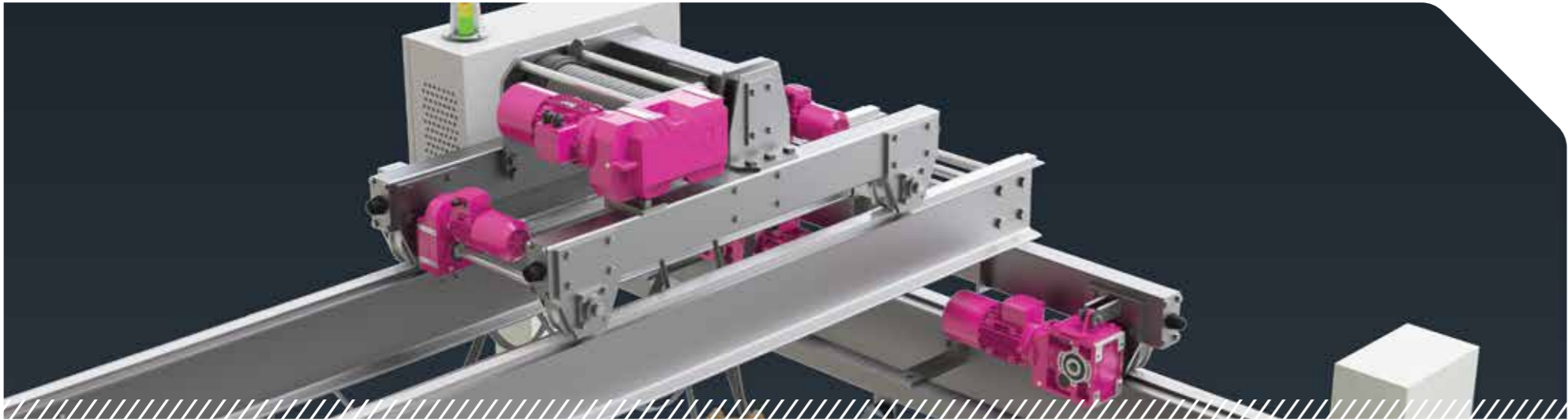


► V series gear units are three stage, helical-gearred hoist drum drive units. Input and output centre distances are as far apart as possible. Input and output shafts are parallel to each other. Output shafts are splined according to standards.

### Specifications and Advantages

- GGG40 sphero cast iron housings
- With the help of taper rolling bearings they have the capability of withstanding high radial loads
- Input and output centre distances are as far apart as possible to allow the use of larger drums
- Electromagnetic brakes, encoder and fan cooling applications
- Optional drum connection flange
- Nitrated and splined output shafts
- Bolted connections are made directly on the housing through connection holes
- Wide speed range
- Designed for double- and single-speed brake motors

Ratio Range	23,58 – 233,77
Tonnage Range [Tonne]	0,5 - 75
Motor Rower Range [kW]	0,37 - 90



# NRB

## Agitator



► Helical gearboxes with longer output shaft and reinforced spherical roller bearings for withstanding high radial and axial loads designed specifically for agitator applications.

### Specifications and Advantages

- Longer output shaft with agitator housing with reinforced spherical roller bearings
- Wide speed and power range
- Special sealings

Torque Range [Nm]	280 – 18.000
Motor Rower Range [kW]	0,12 - 160
Speed Range [rpm]	0,1 - 414

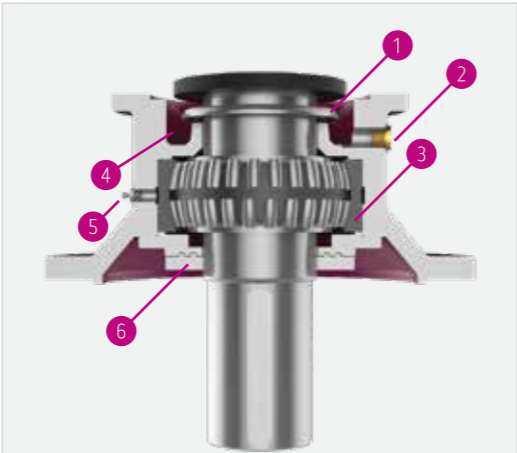


# KR

## Mixer Gearboxes - Drywell



► K series mixer gearboxes with forced output shaft bearings,special sealings and extra oil leakage pool to prevent oil leakage out of gear unit. They are specifically designed for food and wastewater treatment industries where oil leakage can be a problem. Oil leakage can also be detected with optional oil sensor.



### Output Flange Properties

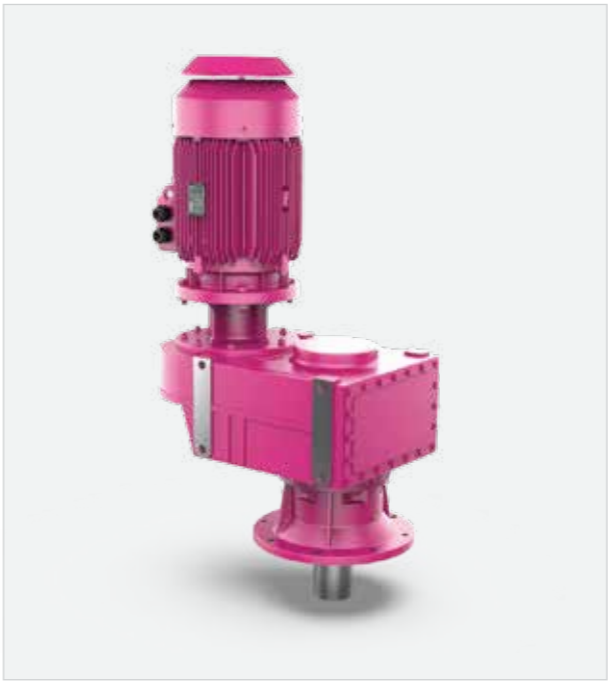
- 1-Oil slinger ring
- 2-Transparent oil plug or sensor
- 3-Spherical roller bearing
- 4-Oil leakage room
- 5-Greaser for bearing
- 6-Special sealing for excessive dust

Torque Range [Nm]	450 – 20.000
Motor Power Range [kW]	0,12 - 160
Speed Range [rpm]	0,1 - 460

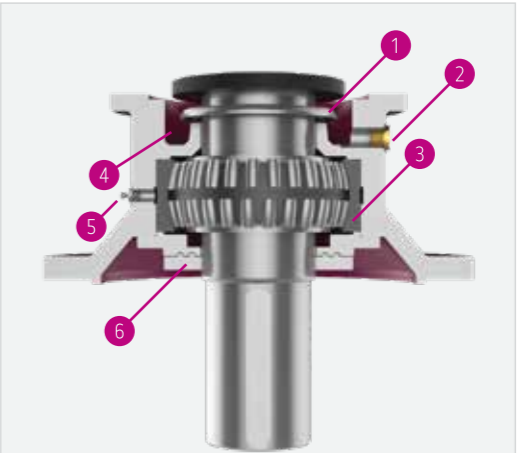


# DR

## Mixer Gearboxes - Drywell



► D series mixer gearboxes with forced output shaft bearings,special sealings and extra oil leakage pool to prevent oil leakage out of gear unit. They are specifically designed for food and wastewater treatment industries where oil leakage can be a problem. Oil leakage can also be detected with optional oil sensor.



### Output Flange Properties

- 1-Oil slinger ring
- 2-Transparent oil plug or sensor
- 3-Spherical roller bearing
- 4-Oil leakage room
- 5-Greaser for bearing
- 6-Special sealing for excessive dust

Torque Range [Nm]	600 – 18.000
Motor Power Range [kW]	0,12 - 160
Speed Range [rpm]	0,1 - 580



# KR

Bandsaw



- K series gearboxes specifically designed for bandsaw machines with special output shaft housing to withstand high radial loads, with forced output shaft bearings and special sealings.

### Specifications and Advantages

- Output flange with two row bearings
- Special sealing system to prevent cutting oil to enter gearbox interior
- Nitreated output shafts
- Grinded bevel gear stage to reduce noise
- Optional flange and shaft dimensions

Torque Range [Nm]	140 – 15.000
Motor Power Range [kW]	0,12 - 90
Speed Range [rpm]	10 - 227



# HTE

Extruder Machines

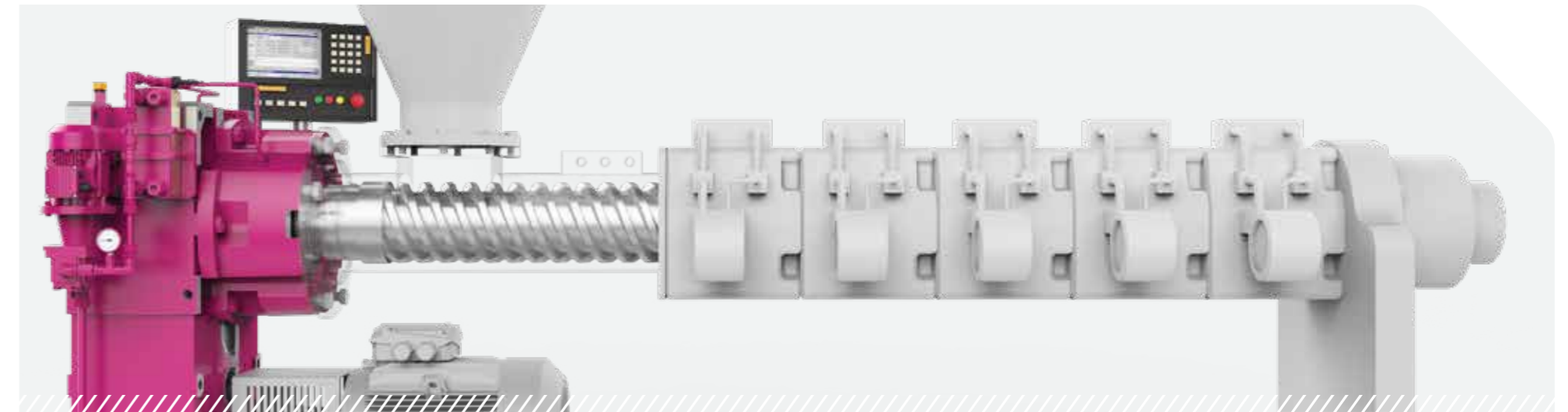


- H series gearboxes specifically designed for extruder machines with 29400 series bearings and output shaft housing to withstand high axial loads.They have different cooling options to increase thermal powers at heavy working conditions.

### Specifications and Advantages

- Housing and output shaft housing made from GGG40 material
- 29400 series output bearings
- Different 29400 bearings sizes according to axial load
- Gears with modification and tapered roller bearings
- Input flange option with IECB5
- Output shaft options (With key or splines)
- Lubrication options according to mounting position
- Cooling options (Heat exchangers or coils)

Ratio Range	5,33 - 420
Torque Range [Nm]	4,850 – 165.000
Speed Range [rpm]	0,1 - 263



# DRE

## Extruder Machines

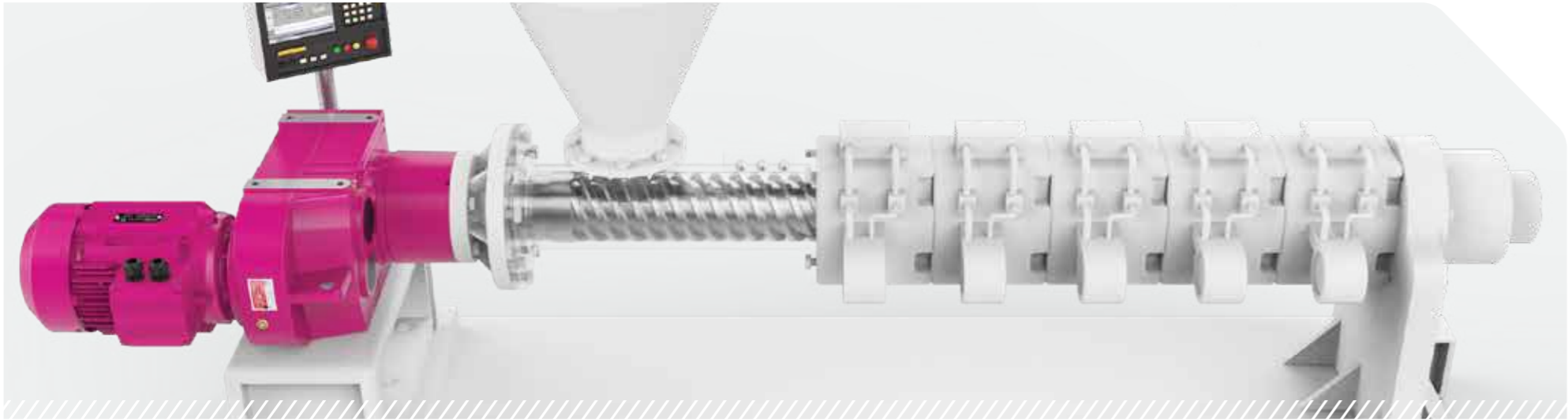


► D series parallel shaft gearboxes specifically designed for extruder machines with smaller capacity.

### Specifications and Advantages

- Compact design with direct coupled AC motor
- 29400 series output bearings
- Four different mounting positions
- Output shaft options (With key or splines)

Torque Range [Nm]	130 – 18.000
Motor Power Range [kW]	0,12 - 160
Speed Range [rpm]	0,1 - 580



# KRE

## Extruder Machines

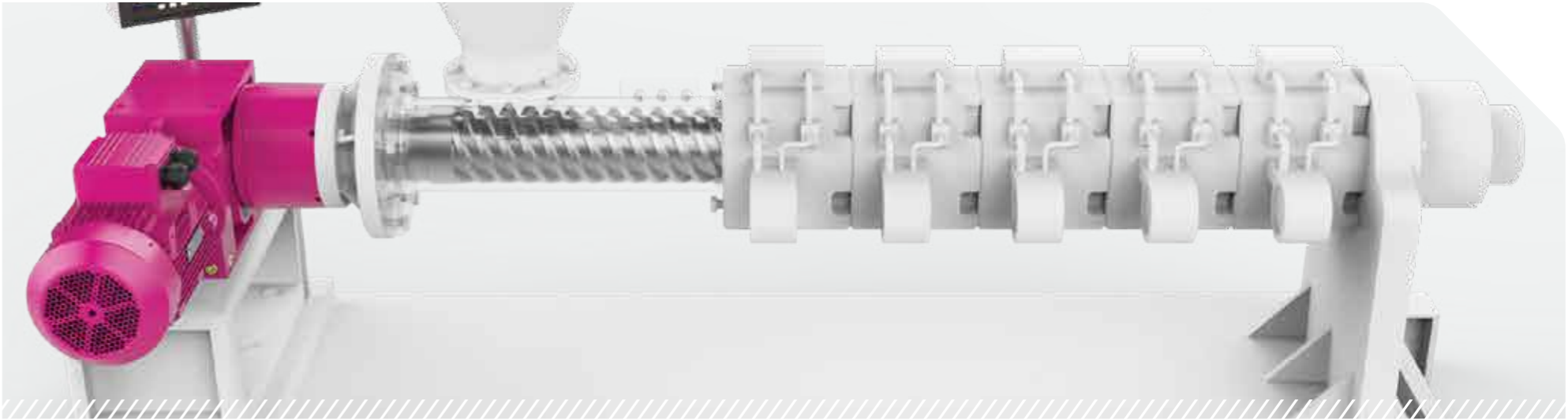


► K series gearboxes specifically designed for extruder machines with smaller capacity.

### Specifications and Advantages

- Direct coupled AC motor with perpendicular input and output shafts
- 29400 series output bearings
- Four different mounting positions
- Output shaft options (With key or splines)

Torque Range [Nm]	450 – 20.000
Motor Power Range [kW]	0,12 - 160
Speed Range [rpm]	0,1 - 460



T

Conveyor

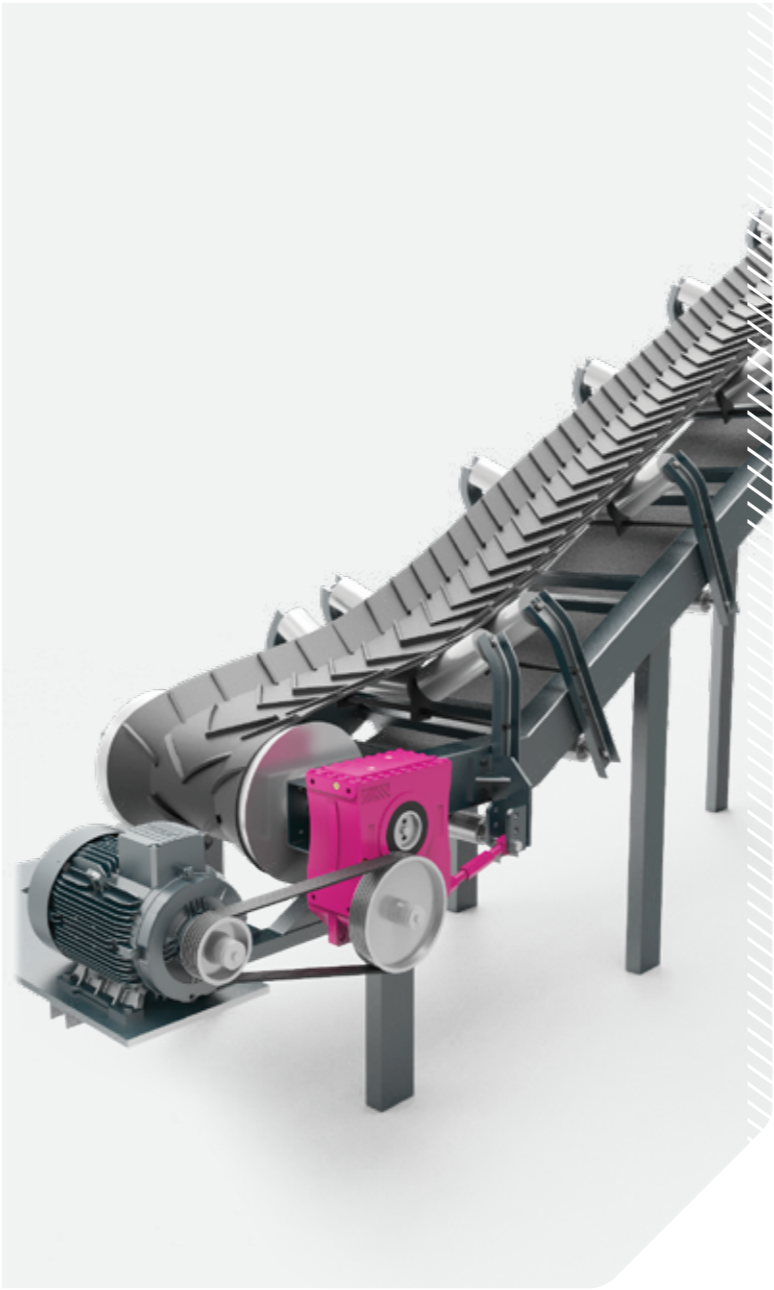


► Two stage compact helical gear units without motor designed for conveyor applications.

Specifications and Advantages

- Two stage compact design
- Forced input shaft bearings designed for belt and pulley applications
- 6 different mounting positions
- Optional outshaft dimensions
- Output shafts with key or shrink disk
- Mechanical backstop application for one way conveyors

Ratio Range	5,0 - 30
Torque Range [Nm]	200 - 18.000
Speed Range [rpm]	30 - 600



BTY

Elevator

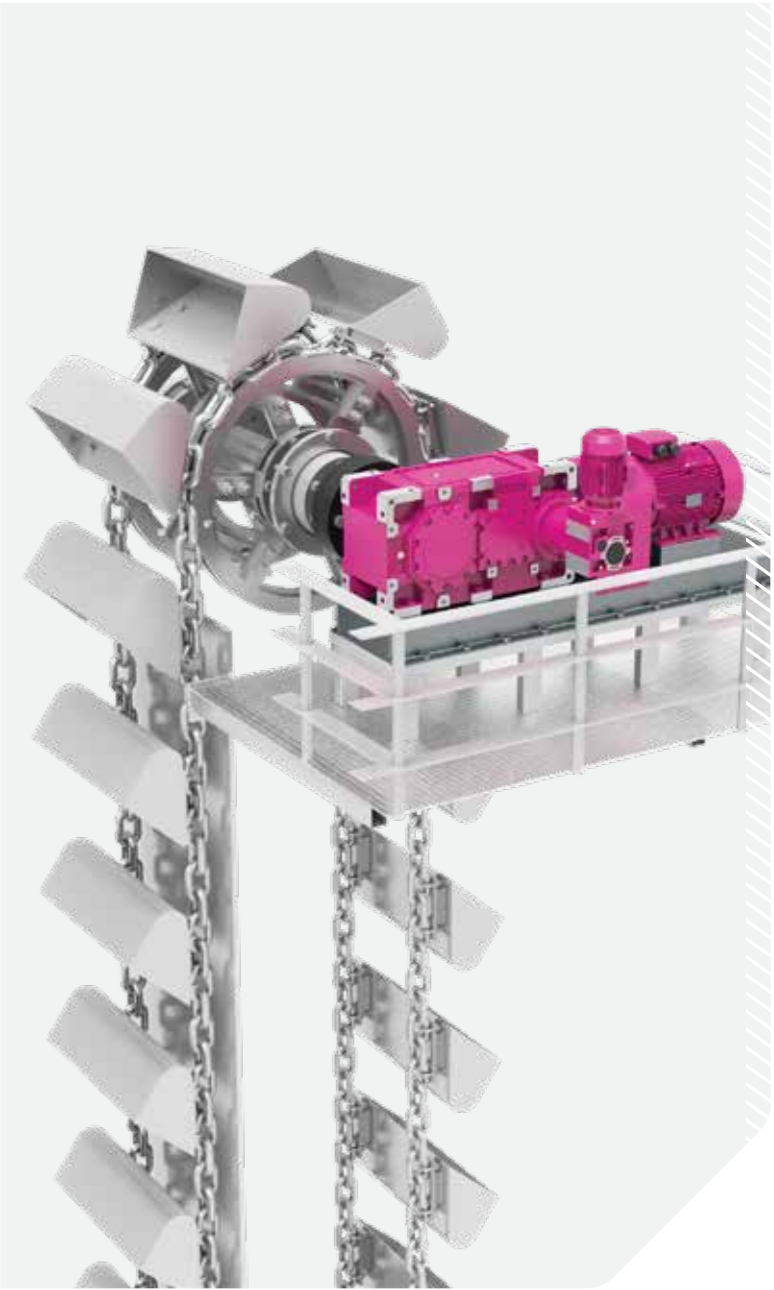


► BT series gearboxes with backstop on housing and auxiliary drive for maintenance of bucket elevators

Specifications and Advantages

- Auxiliary drive for low speed working during maintenance
- Two different auxiliary drive options for empty and full bucket conveyors
- Backstop application
- Special backstop application between main drive and auxiliary drive
- IEC B5 input flange option for motor connection
- Cooling options according to working conditions

Ratio range	20 - 70
Torque Range [Nm]	4.850 - 165.000
Speed Range [rpm]	20 - 70



# PF

Concrete Mixer

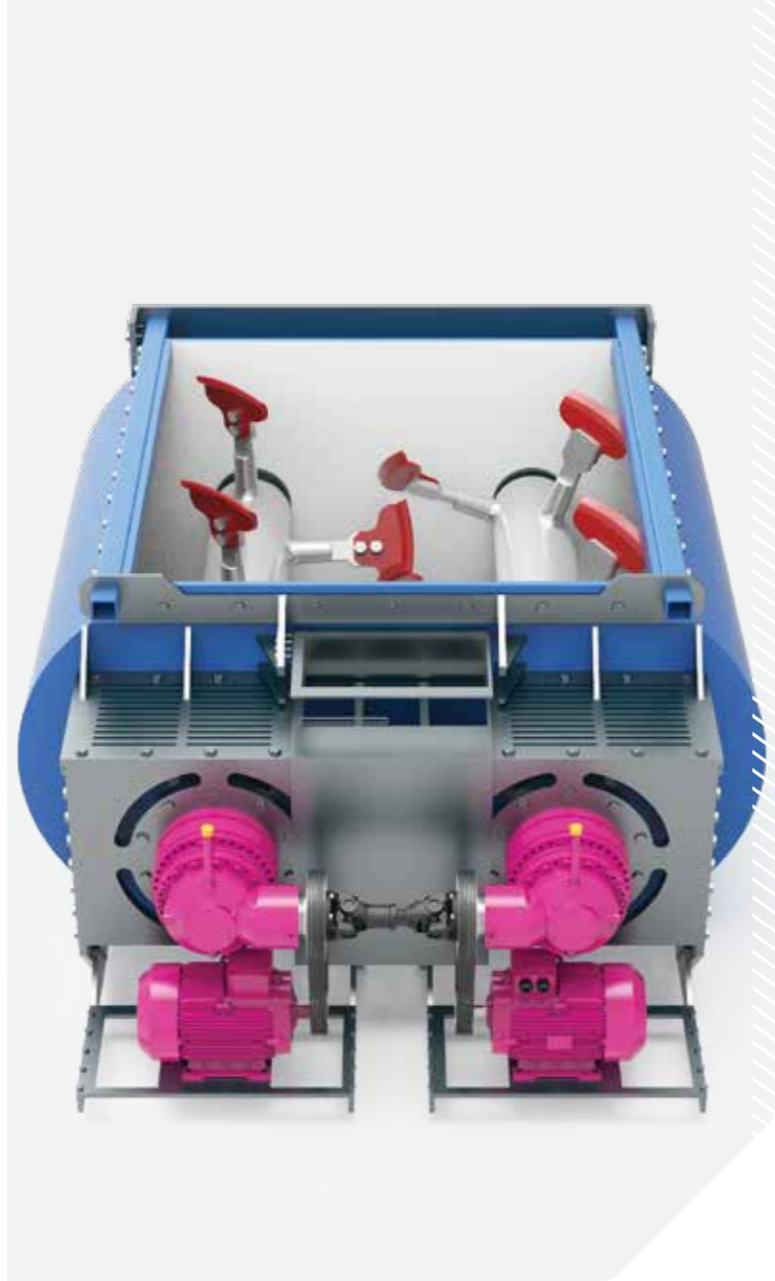


- ▶ Planetary gearboxes with bevel stage input designed for twin shaft concrete mixer applications with special flange for pulley connection.

### Specifications and Advantages

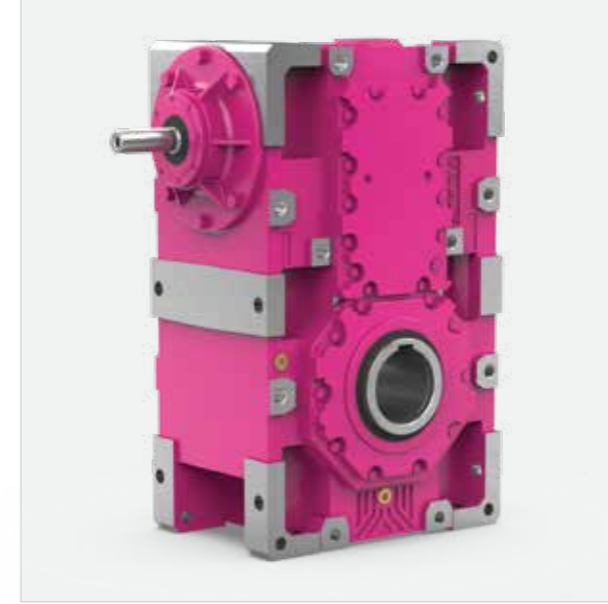
- Compact design with planet and bevel gear stages
- Input flange suitable for pulley connection
- Tapered Input shaft bearings
- GGG40 material input flange and housing
- Splined interior connections
- Standard output seal cover
- Optional oil expansion tank

Ratio Range	11 - 28
Torque Range [Nm]	9.800 - 21.700
Speed Range [rpm]	50 - 150



# BT

Concrete Mixer



- ▶ BT series industrial helical gearboxes with bevel stage input designed for twin shaft concrete mixer applications.

### Specifications and Advantages

- Perpendicular input and output shafts suitable for twin shaft applications
- Input flange suitable for pulley connection
- Tapered bearings
- GGG40 material housing
- Gears with modifications
- Output shaft options (Hollow, solid, shrink disk, hollow splined shaft, solid splined shaft)
- Lubrication options (Forced lubrication, oil expansion tank)

Çevrim Oranı Aralığı	10 - 87,
Tork Aralığı [Nm]	4.850 - 70.000
Devir Aralığı [rpm]	18 - 143



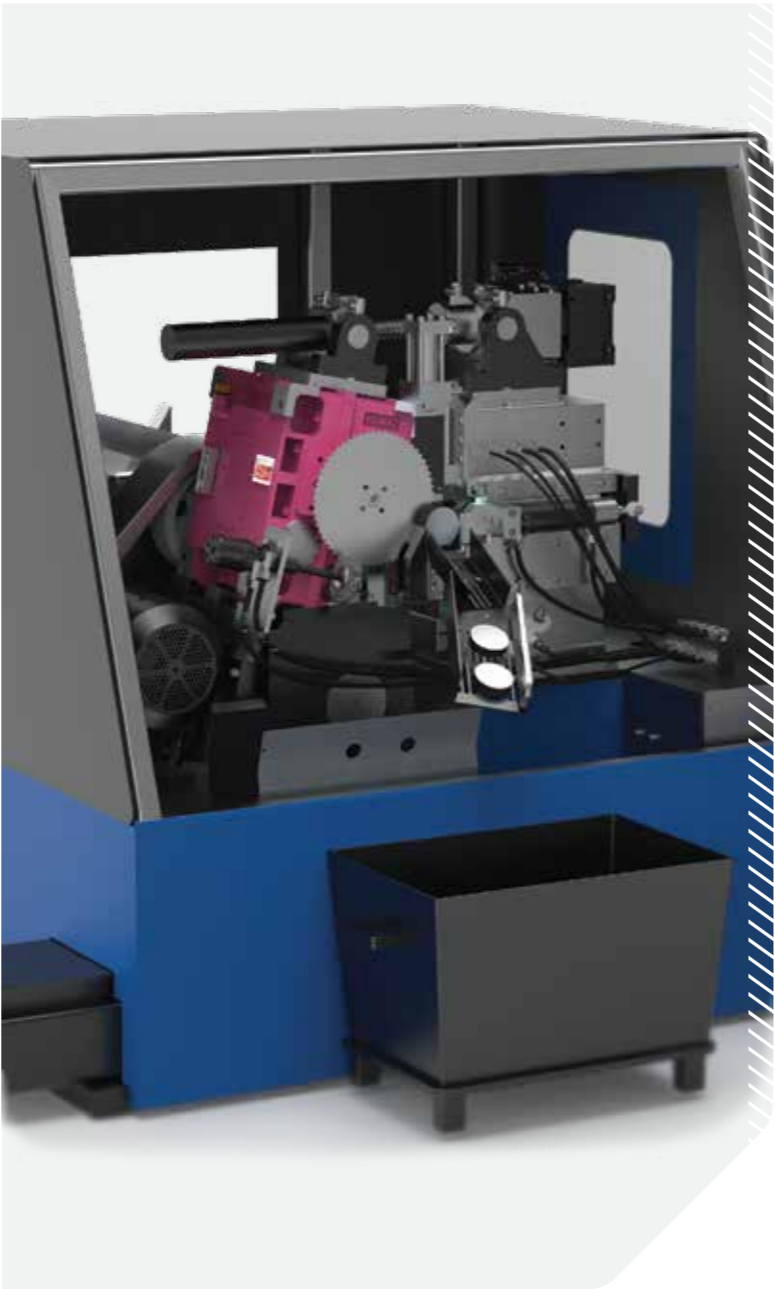
# CT

## Circular Saw



- Specially designed helical gear units for circular saw machines which provide precise and serial cutting thanks to their low backlash and rigid body structure.
- Specifications and Advantages**
- Low backlash and bearing selection for precision cutting
  - GGG40 sphero rigid housing
  - Demountable flange made of 4140 material for saw blade connection
  - Shaft and flange input for brake connection

Ratio Range	4,36 - 5,25
Motor Power [kW]	7,5 - 15
Material Diameter [mm]	≤Ø150



# PVR

## Wind Turbine



- They are compact planetary gearboxes used in the blade-nacelle orientation of wind turbines. Due to their working principle, they are exposed to high radial loads and peak torques which they are capable of withstanding.
- Specifications and Advantages**
- Reinforced bearings and flange for withstanding high radial and axial loads
  - Integrated pinion shaft made of 8620 material

Ratio Range	184 - 1093
Nominal Torque [Nm]	32.650
Static Torque [Nm]	160.600



# LRG

## Tram Drives



- ▶ High efficiency and silent tram drives with high quality grinded hypoid gears, rigid monoblock housing and labyrinth sealing system with non contact leakproofing which reduces power losses because of sealings.

### Specifications and Advantages

- Single stage compact structure with hypoid gear
- GGG40 sphero monoblock rigid housing
- Special labyrinth cover systems providing sealless design on input and output shaft
- Bearings with high working life
- Elastic coupling on input shaft, wedge type coupling on output shaft

Ratio Range	5,2
Nominal Torque [Nm]	1.660
Motor Power [kW]	110



# HRG

## Railways



- ▶ Two stage helical railway drives with gear modifications calculated according to real working conditions and with non-contact labyrinth sealing systems and housing with special lubrication canals which is an upgrade from traditional sealing solutions.

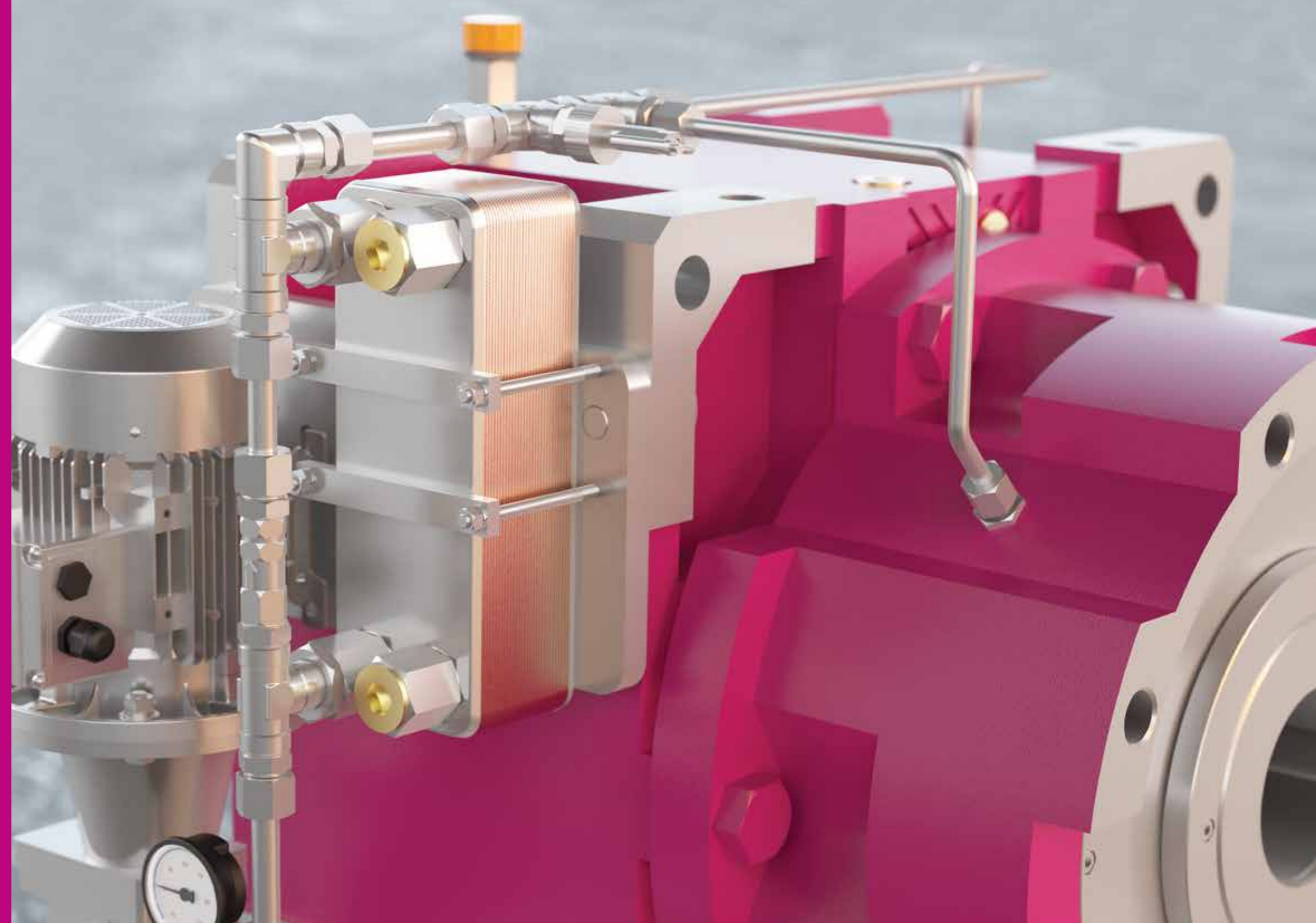
### Specifications and Advantages

- Parallel shaft helical gear unit design
- Special labyrinth cover systems providing sealless design on input and output shaft
- GGG40 sphero monoblock rigid housing
- Maintenance-free gears for up to 30 years of use of the train
- Maintenance-free bearings for up to 1,500,000 km of use of the train

Ratio	4,57
Nominal Torque [Nm]	7.084
Motor Power [kW]	325



## Options and Accessories



Output Shaft Options

Gearbox Options



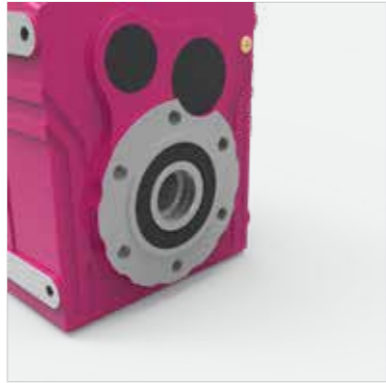
**Solid Output Shaft**  
All gearbox types have output shaft with key according to DIN6685. Materials for output shaft are C45 or 42CrMo4 according to size of gear unit.



**Hollow Output Shaft**  
Lots of our gearboxes can be manufactured with hollow shaft according to DIN6685.



**Output Shaft with Spline**  
Output shafts can be manufactured according to DIN5480 recommended for high frequent start stop applications with high inertia.



**Hollow Output Shaft with Spline**  
Hollow output shafts can be manufactured according to DIN5480 recommended for high frequent start stop applications with high inertia.



**Output Shaft with Shrink Disk**  
Shrink Disk applications are recommended for high frequent start stop working conditions, key is not sufficient. Output shafts are without key and with the help of screws on disk output torque on driven machine can be adjusted. Also it is useful in humid working conditions for easy demontage.

Input Flange Options



**Input Flanges according to IEC B5-B14 and NEMA**  
Our input flanges and input shafts can be produced according to IEC B5-B14 and NEMA standards.



**Servo-Motor connection**  
We have different input flange options and dimensions according to common servo-motors in the market.

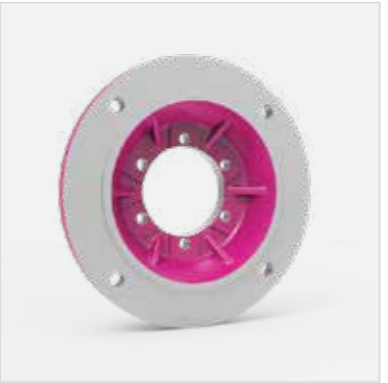


**HydroMotor Connection**  
P and R series gearboxes input flange can be produced for hydro-motor connections.



**Input flanges with coupling and shrink disk**  
Especially for servo-motors without key, input shaft with shrink disk is suitable. It is recommended for high frequent start stop applications to prevent faults about keys.

Output Flange Options



**Output Flange**  
Our gearboxes have lots of different output flange options with square, circle types. They can be with solid or hollow shafts according to customer needs

Mounting with Torque Arm



E series Torque Arm

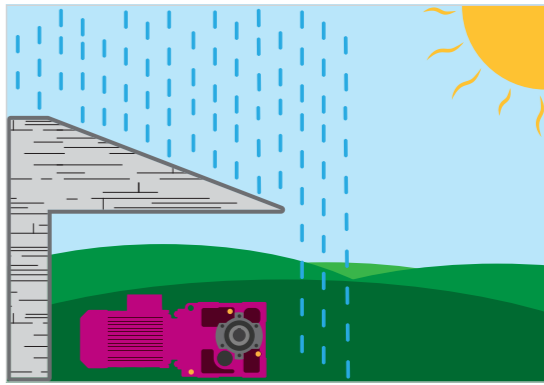
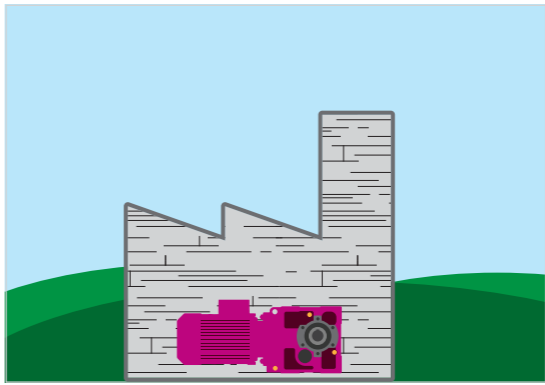
E series torque arm can be used in three different 90 degree positions which is mounted on housing.



K series Torque Arm

K series have two different torque arm options; standard and optional.

Painting and Corrosion Production Classes



C2 Corrosion Category

Our standard painting class. It is suitable for indoor and outdoor with protection where humidity and contamination is low.



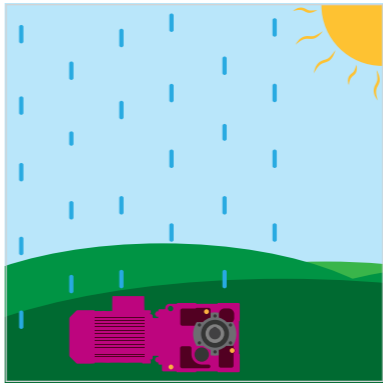
D series Torque Arm

Rubber torque arms are standard with D series which have to be used when mounting through holes on housing.



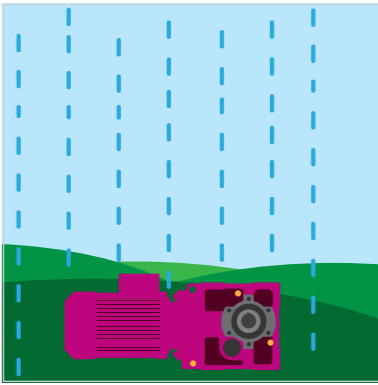
H and B series Torque Arms

H and B series torque arms designed to mount on foot mounting holes.



C3 Corrosion Category

It is suitable for indoor installation and outdoor installation subject to weathering where humidity and chemical contamination is mean.



C4 Corrosion Category

It is suitable for indoor installation and outdoor installation subject to weathering where humidity and chemical contamination is usually high.



P series Torque Arm

P series have two different torque arm options; one and two sided.



C5 Corrosion Category

It is suitable for indoor installation and outdoor installation subject to weathering where humidity and chemical contamination is permanently high.

Oil Types



**Mineral Oils**

ISO VG 220, 320 and 460 viscosity oils are used in aour units. They are usually recommended for temperatures higher then zero and up to 40 degrees. The mineral lubricant should be changed after every 10000 hours.



**Synthetic Oils**

They are recommended for higher and lower ambient temperatures compared to mineral oils, because their viscosity change is low with the temperature. 25000 hours change interval is recommended between -25C / 40C ambient temperatures.

Sealing Options



**Nitrile Sealing (NBR)**

Nitrile sealings are suitable for low speed shafts. Their working temperatures are between -40 °C +100 °C. We are using nitrile sealings with dust lip on output shafts of our gear units.



**Viton Sealing (FKM)**

These sealings are produced from floroarbon material and used on high speed shafts. They are suitable for -25 °C to the +160 °C working temperatures. We use viton sealing on our input shafts.



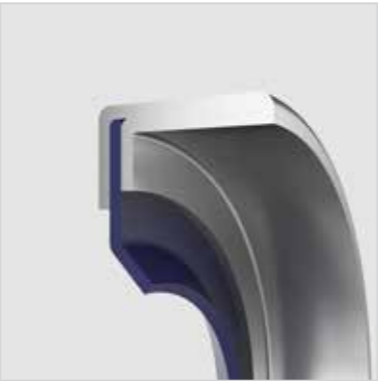
**-40° Ambient Oils**

Special ISO VG 150 and 220 viscosity synthetic oils are recommended for gear units working under -25 °C ambient temperature conditions.



**Food Grade Oils**

Recommended oils for gear units working in food production lines, where oil can be mix in products accidently.They are suitable for NSF H1 category.



**PTFE Sealing**

Sealings made from polytetrafluoroethylene material which has low friction coefficient and are very resistant to chemical enviroments. They can work between -80C and +200C temperatures. They are useful for chemical working conditions.



**Cassette Sealing (FKM, NBR)**

They are specially designed sealings made from FKM and NBR materials. They are mostly used corrosive enviroments to prevent these corrosive materials to enter inside gear unit. We use these sealings on low speed shafts.



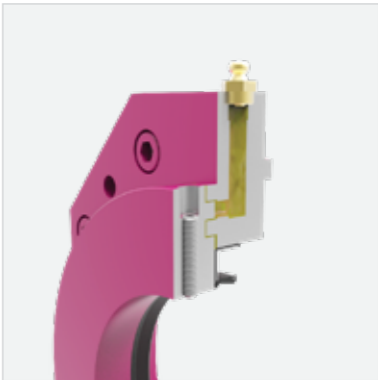
**Biodegradable**

They are not harmful to the environment as low as possible with their high soluble properties. They are compatible to CEC-L-33-A-93 test standard which defines maximum 21 days of biological solubility.



**Labyrinth Seal Application**

Different protective techniques applied on sealings working on very dusty enviroments.



**Taconite Sealing Application**

Labyrinth sealing application suitable for very dusty and corrosive working enviroments. They are usually mounted with extra graser system.

## Lubrication Options



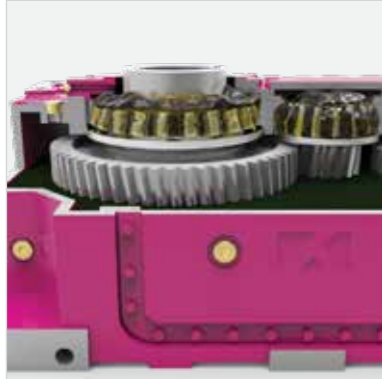
### Oil Bath Lubrication

Lubrication sytem without any additional equipment. All of interior parts(gears, bearings and seals) gets lubricated by splash or directly.



### Forced Lubrication

Especially for industrial gearbox-es upper bearings can not get oil with bath lubrication while working on some mounting positions. To lubricate these bearings oil from lower levels pump up directly to the bearing. Efficiency is much higher with the help of lower churning loses.



### Nilos Ring Application

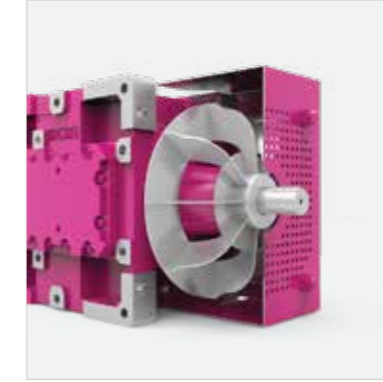
Upper bearings thats can not lubricated by splash are made closed bearing by sheet metals named nilos ring. Closed bearings are lubricated by greasers.



### Oil Expansion Tank

While gear unit is working on some mounting positions oil level needs to be very high to lubricate higher working parts and this can cause oil leakage when working speed is high. To prevent leakage an expansion tank is mounted on gear unit, creating extra space for increasing volume of inside oil while working.

## Cooling Options



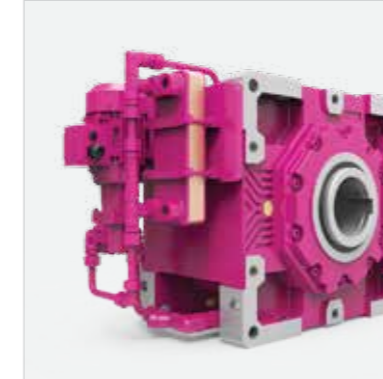
### Cooling with Fan

A cooling fan is mounted on input shaft to create air flow through gear unit. It is the most practical cooling option without any need for cooling water. It is suitable for working conditions below 40 degrees and it is not suitable for dusty enviroments.



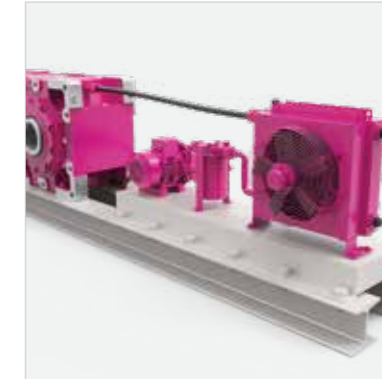
### Cooling with Coil

Cooling is done with cold water passing through copper pipes inside gear units oil. It needs cold water maximum 30 °C tempera-ture. It is suitable for H and B series gear units for M1 mounting position.



### Cooling with Oil/Water Heat Exchanger

An oil/water heat exchanger with pump is mounted on gear unit. Cooling is done through heat exchanger with cold water. Additional equipment is available if needed like pressure switch, flow switch and manometer. It is suitable for every mounting position.



### Cooling with Oil/Air Heat Exchanger

Cooling system consists oil/air heat exchanger, motor pump and a filter. Gear unit and cooling system mounts on a steel base frame. It is recommended for ambient temperatures below 40C and not very dusty enviroments. Another advantage is that it does not need cooling water.

## Brake Montage



### Electromagnetic Brakes on Housing

Electromagnetic brakes are mounted on opposite side of input shaft in H series gear units. Usually preferred for crane applications because they enable easy maintenance of AC motor.

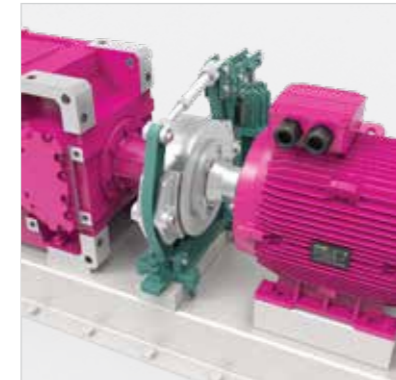
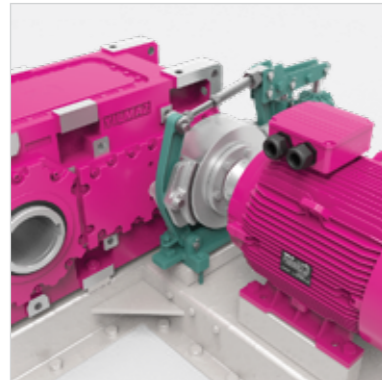
## Centrifugal Brake



### Centrifugal Brake

Centrifugal brakes are mounted between AC motor and gear unit for extra safety purposes with main brake. It stops the AC motor while running with inertia of main load that occurs if main brake has any failure.

## Eldro Brake



### Eldro Brake Application

Eldro brakes are usually preferred for high tonnage crane applications. They are mounted between gear unit and AC motor. We use Eldro brakes on H series gear units if our customer wants.

## Backstop



### Backstop on AC Motor Shaft

Backstop applications that are mounted on back side cover of AC Motor. They are usually preferred because they are economic and compact.

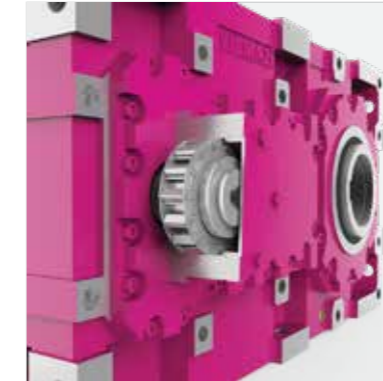


### B5/B14 Input Flange with Backstop

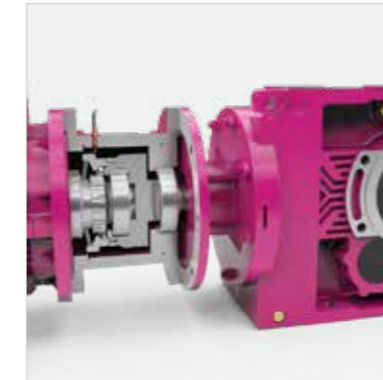
Backstop can be supplied inside new B5/B14 input flange which includes two bearings and elastic coupling.

### Backstop on Housing

Backstop application that are mounted opposite side of input shafts on H series gear units and on secondary stage shafts on K and B series gear units.



## Torque Limiter



### Torque Limiter

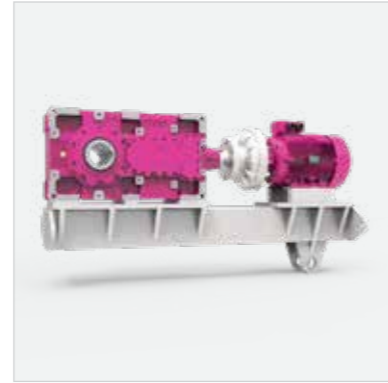
Torque limiters are mounted between AC motor and gear unit with B5 flange. They limit the passing torque to the set value between motor and gearbox. When the limit torque reached proximity sensor sends signal to stop motor to prevent damage to limiter.

**Gear Units with Base Frame**



**BT Series Base Frame Application**

BT series gear unit, coupling and AC motor with foot are all mounted on steel base frame. Couplings can be geared, rubfleks or hydraulic.



**BT Series Base Frame Application with Torque Arm**

BT series gear unit with hollow output shaft, coupling and AC motor with foot are all mounted on steel base frame with torque arm. Gear units are mounted to driven machine shaft with hollow output shaft and base frame is mounted to machine base with torque arm.



**HT Series Base Frame Application**

HT series gear unit, coupling and AC motor with foot are all mounted on steel base frame. Couplings can be geared, rubfleks or hydraulic.

**Couplings**



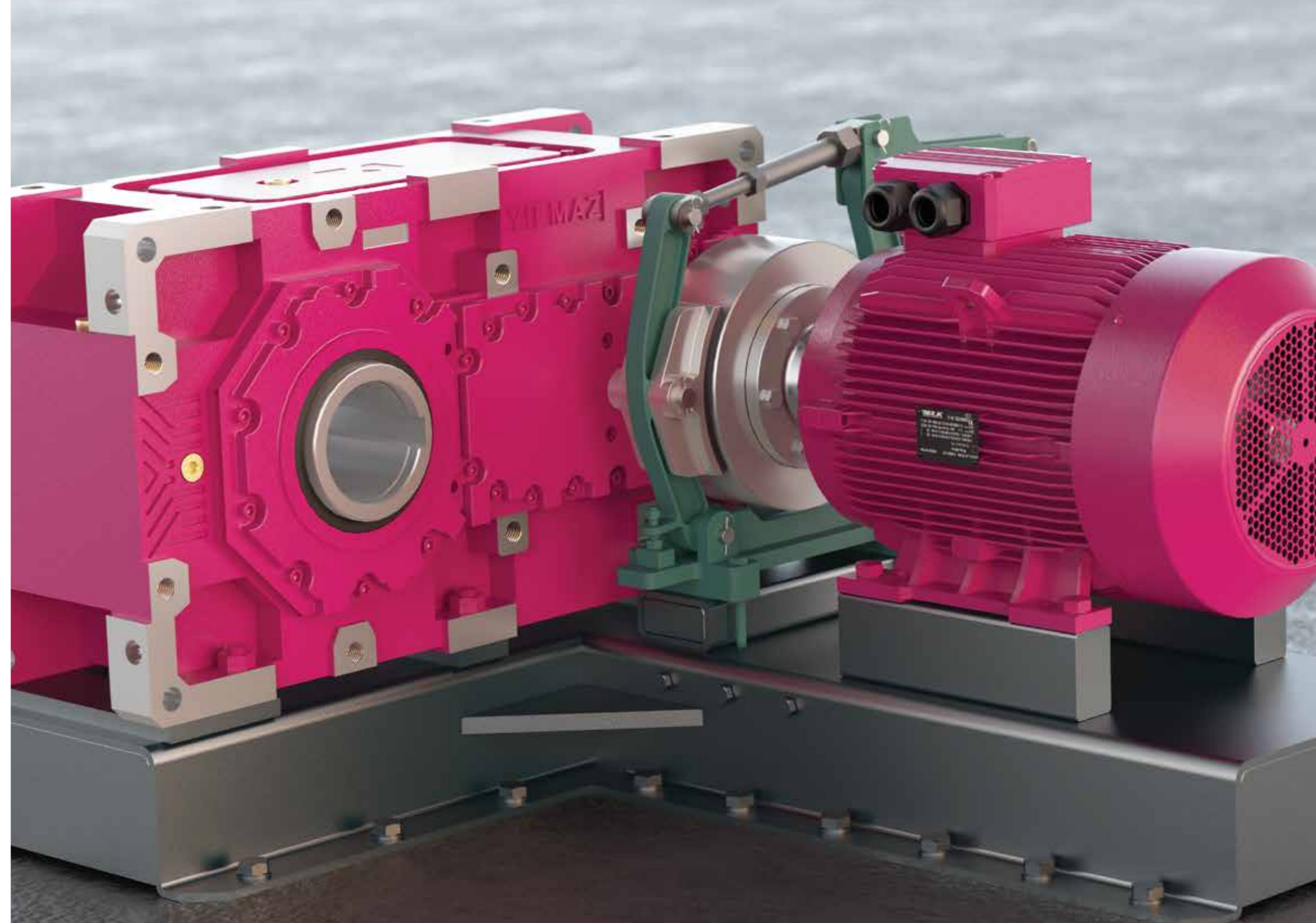
**Rubfleks Coupling**

It can be used on input or output shafts of gear units. It compensates misalignment of shaft connection. Material of coupling housing is GS52 steel.

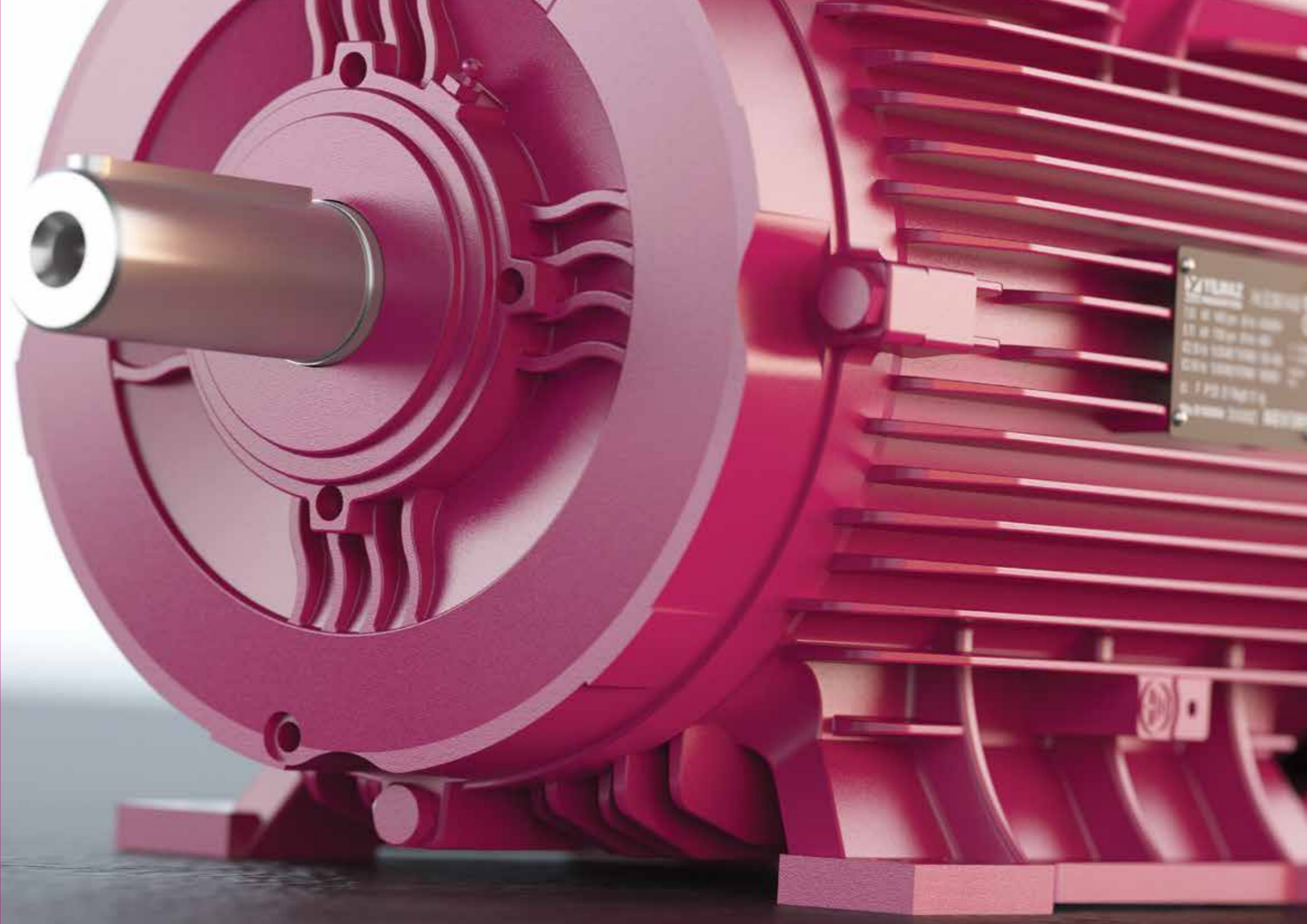


**Hydraulic Coupling**

They are mounted between AC motor and gear unit. It is preferred for applications with high inertia to soft start the motor and lengthen the gearbox life.



## Electric Motors



### ELK Electric Motors San. ve Tic. A.Ş.

ELK Motor has been founded by major shareholders of Yılmaz Redüktör A.Ş. as the continuation of the product family. ELK Motor manufactures electric motors in a 50.000 m<sup>2</sup> closed area built on a 135.000 m<sup>2</sup> open area.

ELK Motors are designed and manufactured completely in accordance with European standard with its whole product range. IE2, IE3 and IE4 efficiency classes are available in full product range currently. Motor shafts and end shields are manufactured by fully automatic CNC machines under a continuous quality control. The rotor and stator cores are manufactured in our fully automatic punching and interlocking lines.



# Single Speed Motors

6, 4 and 2 Poles

Power Range [kW]	0,12 - 250
Frame Size	63 - 315
Speed Range [rpm]	1000, 1500, 3000
Efficiency Class	IE2, IE3, IE4
Voltage [V]	400
Insulation Class	F, H
Protection Class	IP55, IP56, IP65, IP66

All motor series are designed and manufactured in accordance with European standards and in IE2, IE3 and IE4 efficiency classes. The main design and technology of ELK Motor is completely suitable to the IE3 efficiency class. Since the outside dimensions of the IE3 and IE2 design are completely same the replacement of the IE2 motor with IE3 motors will be done easily. In addition to the motors according to the European standards, ELK Motor also manufactures special motors for its customers to decrease the cost and increase the productivity.

### Specifications and Advantages

- High starting and brake down torques
- Single winding and double winding double speed motors
- Detachable feet between 71 and 132 frames that make getting left or right terminal box very easy for the customer
- IE2 efficiency class compact engines
- Specially designed engines for 87 Hz applications
- Motors available for S3 intermittent periodic duty type



# Double Speed Motors

ELK motor has single winding and double winding double speed motors in its standard production lines. ELK motor recommends single winding dahlender type motors for double the difference between speeds and double winding motors for higher speed differences. Also 12/2 poles double speed motors are available for crane industry.

## Constant Torque Dahlander (Single) Winding Motors

4 / 2 Poles – 1500 / 3000 rpm	
Power [kW]	Frame Size
1 / 1,3	90
1,3 / 1,8	90
2,4 / 3	100
3,7 / 4,5	112
4,7 / 5,9	132
6,3 / 7,5	132
7,5 / 10	132
9 / 11	160
12,5 / 15	160
17 / 20	180
25 / 30	200

8 / 4 Poles – 750 / 1500 rpm	
Power [kW]	Frame Size
0,35 / 0,55	80
0,4 / 0,7	90
0,6 / 0,9	90
0,75 / 1,1	100
1 / 1,6	100
1,5 / 2,5	112
2,2 / 3,4	132
3,5 / 5,5	132
4,5 / 6	160
5,5 / 7,5	160
7,5 / 11	160
11 / 15	180

## Constant Torque Double Winding Motors (Crane Motors)

8 / 2 Poles – 750 / 3000 rpm	
Power [kW]	Frame Size
0,2 / 0,8	90
0,45 / 1,8	90
0,6 / 2,4	100
1 / 4	112
1,5 / 6	132

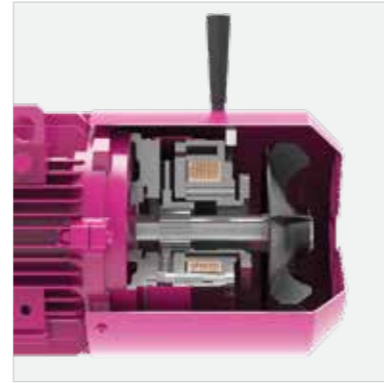
12 / 2 Poles – 500 / 3000 rpm	
Power [kW]	Frame Size
0,37 / 2,5	100
0,8 / 4,9	112
1,6 / 9,5	132
2,6 / 16	160

## Electric Motor Options



### Electromagnetic Brakes

Available for all motor sizes. We are using from 5 Nm up to the 1600 Nm with 24 Volt, 230 Volt and 400 Volt DC voltage electromagnetic brakes according to customer needs.



### Hand Release Brake

When electricity is cut or manually releasing of brakes is needed, hand release brakes can be used.



### Forced Cooling

Especially for encoder applications where motor speed is not enough for cooling an, extra self powered fan is needed.



### Forced Cooling with Encoder

If needed; encoder and self powered fan can be mounted on back of motor, inside cover where synchronous working is essential.



### Forced Cooling with Brake and Encoder

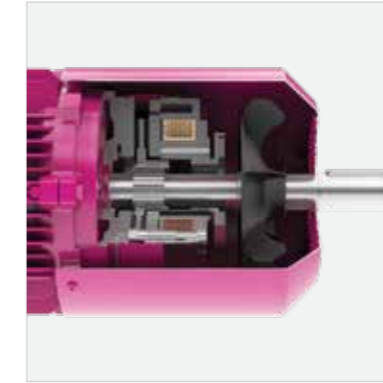
If needed; brake, encoder and self powered fan can be mounted on back of motor, inside cover.



### Backstop

Applications that are working one way and reverse movement needs to be stopped, backstops are necessary. They can be mounted inside motor cover.

## Protection Class



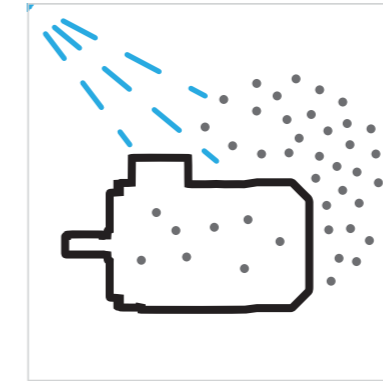
### Electric Motor Extension Shaft

When motor movement needed on backside or motor needs to be turned manually an extension shaft at the back of the motor can be produced.



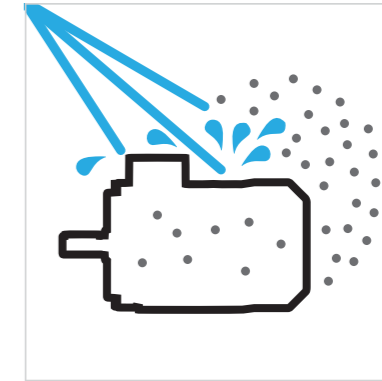
### Canopy

Canopy for electric motors that are working outside is available to prevent rain to enter inside motor.



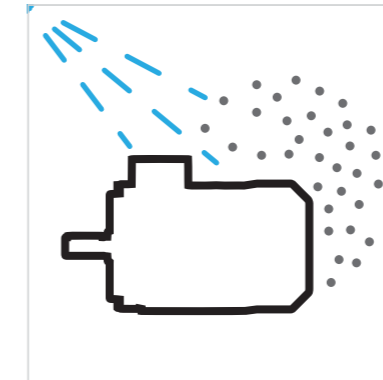
### IP55 (Standard)

The ingress of dust is not totally prevented, but dust does not enter in sufficient quantity to interfere with satisfactory operation of the motor. Water projected by a nozzle against the motor from any direction will have no harmful effect.



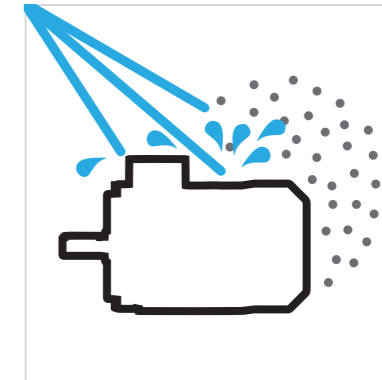
### IP56

The ingress of dust is not totally prevented, but dust does not enter in sufficient quantity to interfere with satisfactory operation of the motor. Water from heavy seas or water projected in powerful jets will not enter the motor in harmful quantities.



### IP65

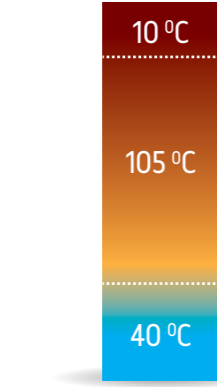
The ingress of dust is totally prevented, water projected by a nozzle against the motor from any direction will have no harmful effect.



### IP66

The ingress of dust is totally prevented, water from heavy seas or water projected in powerful jets will not enter the motor in harmful quantities.

## Insulation Class



### F (Standard)

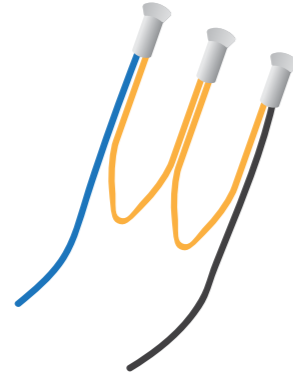
ELK motors standard isolation class is F. Permissible winding temperature is 155 °C at 40 °C ambient temperature.



### H

ELK motors can be produced in H isolation class. Permissible winding temperature rises to 180 °C at 40 °C ambient temperature.

## Thermal Protection



### PTC Thermistor

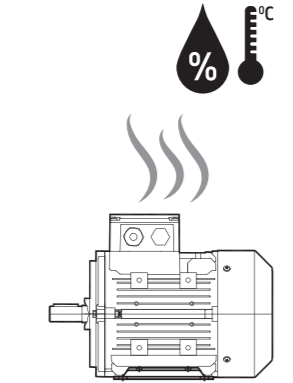
When the temperature of windings rises too high thermistor mounted inside motor windings cuts the circuit and protects motor from any harm.



### Thermostat

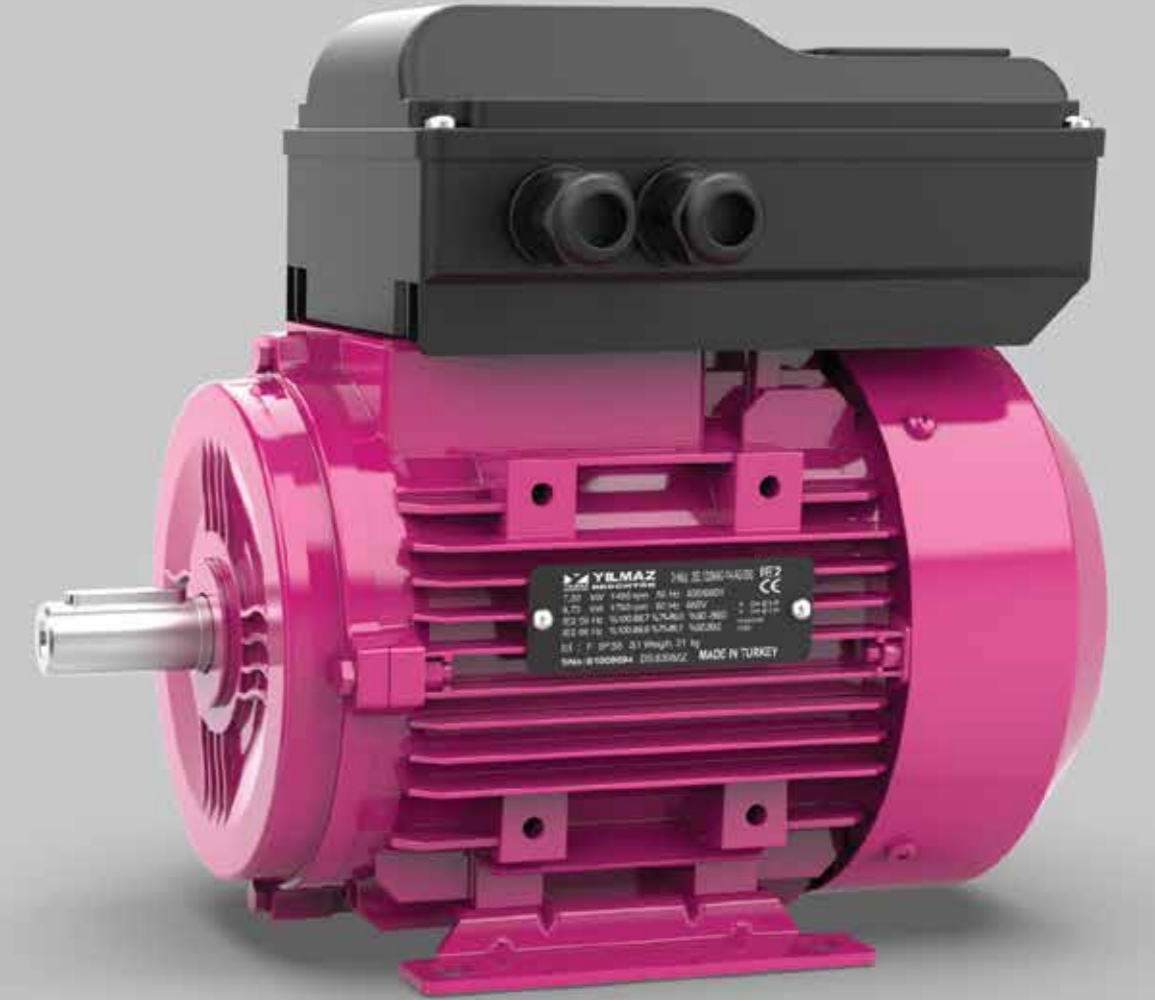
When the temperature of windings rises too high thermostat mounted inside motor windings cuts the circuit and protects motor from any harm.

## Heaters and Drain Holes



### Heaters and Drain Holes

There can be condensation of water when motor is working in very humid environments. To prevent this heaters are mounted inside motor to keep temperatures of windings stable. Additionally drain holes are opened to prevent accumulation of water inside motor.



# Variable Speed Drives

Yılmaz Redüktör has been offering the gearbox and AC motor portfolio of its own manufacturing plants to industry sector since 1958. Recently Yılmaz Redüktör has established Automation Division to include AC drives to this portfolio to provide complete drive train solutions to world-wide distributors, OEMs and end users under same roof. By this horizontal growth move, Yılmaz Redüktör targets to more efficiently serve his powerful engineering experience and skills to all users within same brand name.

A quick glance at Yılmaz Redüktör drive family products reveals that drive products are categorized within seven groups.

- YB1000 Basic Series Variable Frequency Drive
- YA2000 Advanced Series Variable Frequency Drive
- YE8000 Expert Series Variable Frequency Drive
- YI1000 Motor Integrated Series Variable Frequency Drive
- YP65 Wall Mounting Series Variable Frequency Drive
- Variable Frequency Drive for Special Applications
  - YMP-Multi Pump
  - YDD-Door Drive
  - YC3000-Compressor

# YB 1000

## Basic Series

### ► Specifications

- Power Rate: Up to 22kW
- Supply: 1 Phase 230V (170..240V)
- Supply: 3 Phase 400V (330..440V)
- Auto identification
- Simple to use, user friendly oriented
- Built-in PID Control
- Jogging function
- IP20 Protection class
- V/F Control and torque boost
- Multi-functional I/O
- Usable under heavy duties (%150 for 60s with constant torque)
- RS485 (MODBUS) Communication



# YA 2000

## Advanced Series

### ► Specifications

- Power Rate: Up to 450kW
- Supply: 1 Phase 230V +/- %15
- Supply: 3 Phase 400V +/- %15
- Auto identification
- Simple to use, user friendly oriented
- PID Process Control
- Jogging function
- IP20 Protection class
- SLVC - Sensorless Vector Control
- Multi-functional I/O
- Usable under Heavy Duties (%150 for 60s with Constant Torque)
- RS485 (MODBUS) Communication
- Special functions for Crane Applications



# YE 8000

## Expert Series



### ► Specifications

- Power Rate: Up to 630kW
- Supply: 1 Phase 230V +/- %15
- Supply: 3 Phase 400V +/- %15
- Auto identification
- Simple to use, user friendly oriented
- Permanent magnet motor control
- RS485 (MODBUS) Communication
- Multi-Functional I/O
- PID Process Control
- Jogging function
- SLVC - Open Loop Vector Control
- Closed Loop Vector Control (with Encoder)
- Coated PCBs
- Sized for Heavy Duty Use (3s %180, 60s %150)

# YI 1000

## Integrated Series



### ► Specifications

- Power Rating: Up to 2.2kW
- Supply: Single-Phase 230V +/- %15
- IP65 Protection class
- Motor-Integrated Building
- V/f Control
- Coated PCBs
- MODBUS Communication

# YP 65

Wall Mounted



## ► Specifications

- Power Rate: Up to 30kW
- Supply: 1 Phase 230V +/- %15
- Supply: 3 Phase 400V +/- %15
- Simple to use, user friendly oriented
- IP65 Protection class
- Mounting with Adapter plate on motor
- RS485 (MODBUS) Communication
- Multi-Functional I/O
- PID Process Control
- Multi-Pump Application (Up to 6 Pumps)
- Equal Aging Function
- Anti-Freeze Function for Pumps
- Jogging function
- Coated PCBs
- Heavy Duty Applications (3s %180, 60s %150)

# YC 3000

Special Application Drives



## ► Specitications

- Single drive model from 7.5kW to 132kW
- Dual drive model from 22kW to 160kW
- Supply: 3 Phase 400V
- SLVC - Sensorless Vector Control
- Heavy Duty Application (Compressor - %150 Overload Capacity along 60 seconds)
- Automatic torque boost
- Increasing the automatic stoppage time (Protection Feature)
- Coated PCBs
- Jogging function
- IP20 Protection class
- MODBUS Communication

# YMP

## Special Application Drives



### ► Specifications

- Power: Up to 55kW
- CE Declaration, International Certificates
- Multi-Pump Application up to 4 Pumps
- Mains and/or mains + Inverter running mode for every pumps (upto 4 Pumps)
- Ability to set different set value at different times during the day
- 0-10V or 0-20mA/4-20mA feedback input
- Heavy Duty Application (Fan/Pump - %150 Overload Capacity along 60 seconds)
- Pressure control with built-in PID
- MODBUS Communication
- Working ambient temperature -10...+40°C
- Automatic torque boost
- Coated PCBs
- IP20 Protection class

# YDD

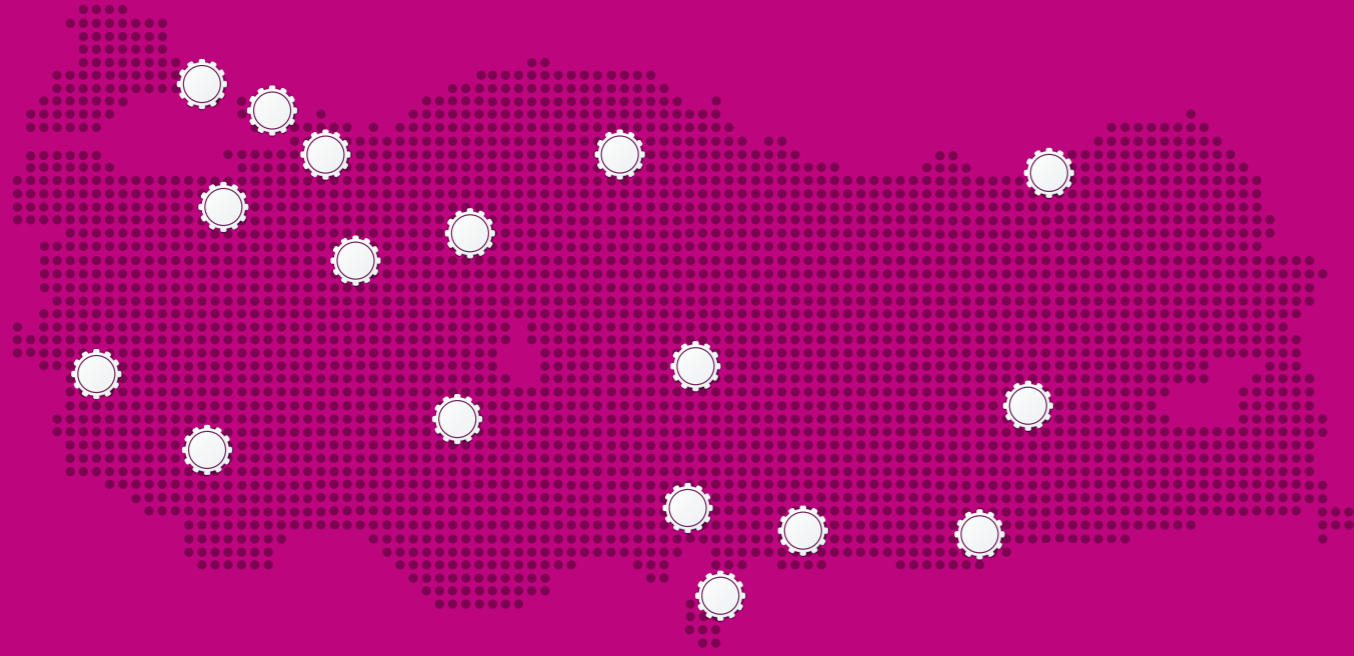
## Special Application Drives



### ► Specifications

- Power Rate: from 0,4kW up to 22kW
- Supply: Single-Phase 230V/Three-Phase 400V
- Position Based Speed Profiling with Encoder
- Running with limit switches
- Automatic door length definition feature (In encoder operation)
- Increasing the automatic stoppage time (Protection Feature)
- Coated PCBs
- IP20 Protection class
- MODBUS Communication

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You can find our dealer addresses at our web site [www.gr.com.tr](http://www.gr.com.tr)

