



# Bonfiglioli

## Industrial

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Products range



**Bonfiglioli**

power, control and green solutions

# Power, control and green solutions



## Bonfiglioli, one name for a large international group.

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It was back in 1956 that Clementino Bonfiglioli established in Bologna, Italy, the company that still bears his name. Now, some fifty years later, the same enthusiasm and dedication is driving Bonfiglioli to become the world's top name in power transmission and control solutions. Through directly controlled subsidiaries and production plants around the world, Bonfiglioli designs, manufactures and distributes a complete range of gearmotors, drive systems and planetary gearboxes, and boasts the most integrated offering on the market today.

Now, to emphasise its commitment to health, safety and environmental sustainability, Bonfiglioli is adding the term "green" to the description of its offering.

This commitment can be seen too in the Group's new trademark, made up of three shapes and colours identifying Bonfiglioli's three main business areas - Power, Control & Green Solutions and symbolising a set of values that includes openness and respect for other cultures.

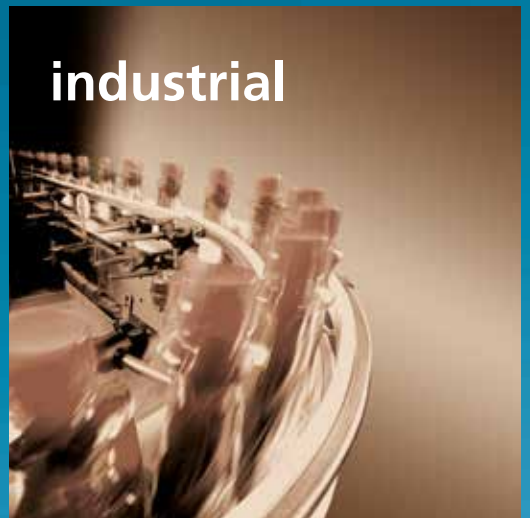
In a market in which excellent product quality alone is no longer sufficient, Bonfiglioli also provides experience, know-how, an extensive sales network, excellent pre-sales and after-sales service and modern communication tools and systems to create high level solutions for industry, mobile machinery and renewable energy.

# Bonfiglioli solutions

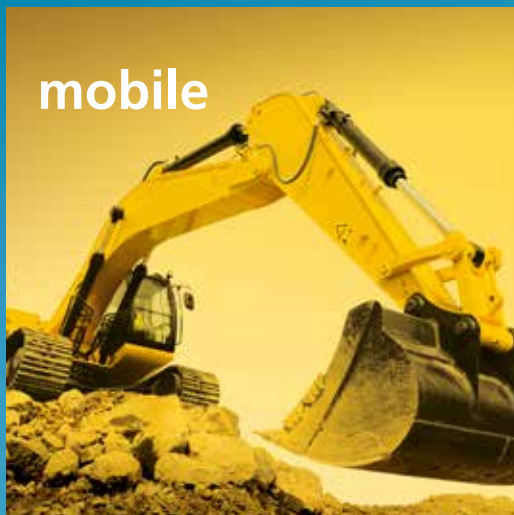
wind



industrial



mobile



photovoltaic



## Innovative solutions for the industrial field.

Bonfiglioli Riduttori today is one of the leading brands in the power transmission industry. The company's success is the result of a business strategy that relies on three fundamental factors: know-how, innovation and quality. The complete range of Bonfiglioli gearmotors offers excellent technical characteristics and guarantees the highest performance. Substantial investment and technical expertise have enabled the company to achieve an annual production of 1.600.000 units using fully automated processes.

Certification of the company's Quality System by DNV and TÜV is proof of the high quality standards achieved.

Centres of excellence around the world allow the Bonfiglioli Group to guarantee the high levels of quality and efficiency needed to compete in industry today.

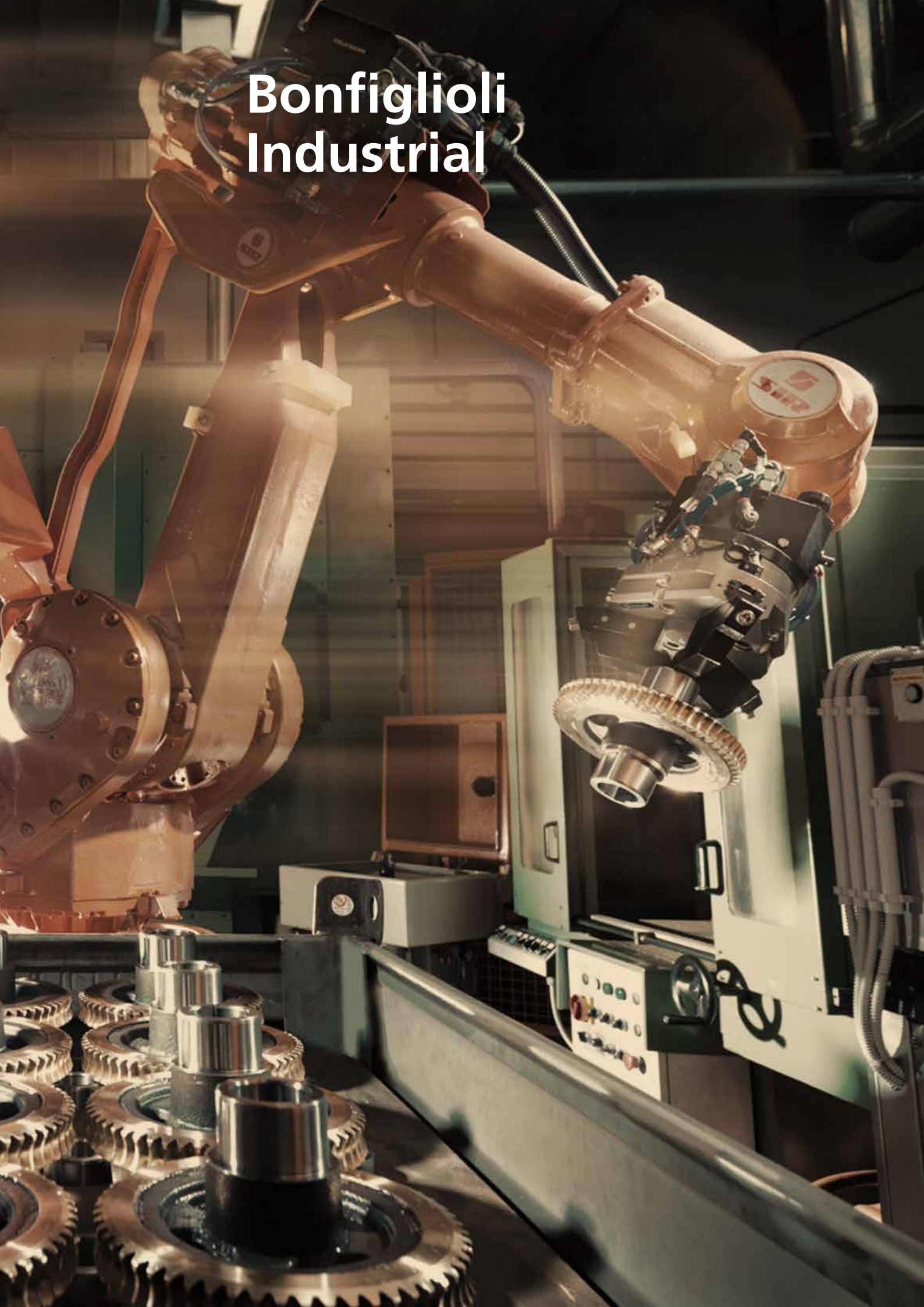
Optimised lean manufacturing principles, major investments in research and development to maintain a high level of innovation, a "local for local" service strategy, and a customer service network that is near to the customer and can rely on a large number of directly controlled subsidiaries and distributors all over the world, enable the Bonfiglioli group to be flexible and rapid and to stay in close touch with the changing needs of the markets it serves.

With the acquisition of the Vectron brand, Bonfiglioli established itself as leader in the industrial automation sector.

Bonfiglioli Vectron supplies products and services for completely integrated inverter solutions. These solutions complement Bonfiglioli's power transmission and control offering to the industrial sector.



# Bonfiglioli Industrial



## Specific solutions for power transmission and motion control.

Product diversification, process automation, and quality have enabled Bonfiglioli to play a leading role in industry.

Bonfiglioli's policy focuses on integrated solutions, competence, innovative technology and careful production planning as key factors in guaranteeing customer satisfaction.

The Bonfiglioli product portfolio aims at meeting the toughest and most sophisticated requirements in industrial processes and automation solutions.



# Bonfiglioli products



Industrial market segment is covered through the following Product Lines:



## Product offer

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# C series

## In-line helical gearmotors



**When Customers benefit from the know-how developed over the years.**  
Top torque density, product variety, extremely wide speed choice, great compactness and price effectiveness make the C series the unparalleled line of helical gearmotors and speed reducers.

### Torque range

45 ... 12000 Nm

### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

0.08 ... 213 kW

### Gear ratios

2.6 ... 1481

### Output

Foot and flange mount  
Metric or inch series solid output shaft

### Input

IEC and NEMA motor adaptors  
Metric or inch series solid input shaft

### Applicable AC motors

Integral motors and brake motors - M series / ME series  
IEC-normalized motors and brake motors - BN series / BE series  
Single and dual speed motors

### Main brake features

DC and AC supply  
Faster brake engage/disengage through electronically  
Controlled AC/DC rectifier type SB, NBR, SBR (options)

### Main motor options

Thermistors and thermostat sensors  
Separate supply forced ventilation  
Line driver and push-pull incremental encoder

Type	Torque [Nm]
C 05	45
C 11	100
C 21	200
C 31	300
C 35	450
C 41	600
C 51	1000
C 61	1600
C 70	2300
C 80	4000
C 90	7200
C 100	12000



## S series

### Single reduction helical gearmotors

#### Simplicity above all.

Simple and yet powerful is the S series, developed for the pump industry as well as the fan and blower application.

Foot and flange mounted, with shaft dimensions to the UNEL - MEC standard.

Type	Torque [Nm]
S 10	21
S 20	37
S 30	70
S 40	125
S 50	200

#### Torque range

21 ... 200 Nm

#### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

0.12 ... 11.6 kW

#### Gear ratios

1.4 ... 13.1

#### Output

Foot and flange mount

#### Input

IEC-normalized motor adaptors

Solid input shaft

#### Applicable AC motors

Integral motors and brake motors - M series / ME series

IEC-normalized motors and brake motors - BN series / BE series

Single and dual speed motors

#### Main brake features

DC and AC supply

Faster brake engage/disengage through electronically

Controlled AC/DC rectifier type SB, NBR, SBR (options)

#### Main motor options

Thermistors and thermostat sensors

Separate supply forced ventilation

Line driver and push-pull incremental encoder

# F series

## Shaft mounted gearmotors

**Ruggedness and effectiveness to the state-of-the-art.**

No better, easier and neater installation than with a shaft mounted unit of the F series. Lightweight and performing, an F unit is the dependable drive for all the material handling applications.



**Torque range**

140 ... 14000 Nm

**Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )**

0.17 ... 125 kW

**Gear ratios**

6.4 ... 2099

**Output**

Keyed hollow shaft - two bore options per size  
Keyless shrink disc fitting  
Plug-in solid output shaft as an option

**Input**

IEC-normalized motor adaptors  
Solid input shaft

**Applicable AC motors**

Integral motors and brake motors - M series / ME series  
IEC-normalized motors and brake motors - BN series / BE series  
Single and dual speed motors

**Main brake features**

DC and AC supply  
Faster brake engage/disengage through electronically  
Controlled AC/DC rectifier type SB, NBR, SBR (options)

**Main motor options**

Thermistors and thermostat sensors  
Separate supply forced ventilation  
Line driver and push-pull incremental encoder

Type	Torque [Nm]
F 10	140
F 20	250
F 25	400
F 31	600
F 41	1100
F 51	1800
F 60	2900
F 70	5000
F 80	8000
F 90	14000



## A series Helical-bevel gearmotors

**When efficiency and versatility meet each other.**

The A series is the first product to prove equally good in regard to efficiency and versatility within a highly competitive context, both performance- and price-wise.

Type	Torque [Nm]
A 05	100
A 10	150
A 20	250
A 30	410
A 35	600
A 41	850
A 50	1500
A 55	2000
A 60	2800
A 70	5000
A 80	8000
A 90	14000

### Torque range

100 ... 14000 Nm

### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

0.22 ... 150 kW

### Gear ratios

5.4 ... 1715

### Output

Foot and shaft mount - two bore options per size

Keyless shrink disc fitting

Metric or Inch series solid output shaft

Taper bushings matching more shaft diameters

Splined hollow shaft to DIN 5480

### Input

IEC and NEMA motor adaptors

Servomotor adaptors

Metric or inch series solid input shaft

### Main gear options

Backstop

Reinforced bearings for higher overhung load capacity

Reduced backlash

### Applicable AC motors

Integral motors and brake motors - M series / ME series

IEC-normalized motors and brake motors - BN series / BE series

Single and dual speed motors

### Main brake features

DC and AC supply

Faster brake engage/disengage through electronically

Controlled AC/DC rectifier type SB, NBR, SBR (options)

### Main motor options

Thermistors and thermostat sensors

Separate supply forced ventilation

Line driver and push-pull incremental encoder

# VF W series

## Worm gearmotors



**A smart design enhanced by latest materials technology and advanced manufacturing.** Wormgears of the VF and W series are milestones for the industry worldwide. They succeeded in combining uncompromising quality with state-of-the-art technology and renown price effectiveness.

Absolute flexibility is achieved by the wide choice of mounting options, shaft configurations and motor interfaces, all offered as standard. The helical-worm and the double-worm versions, with or without the torque limiter, also enhance a highly versatile drive system.

### Torque range

13 ... 7100 Nm

### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

0.04 ... 75 kW

### Gear ratios

7 ... 10000

### Output

Keyed hollow shaft  
Plug-in solid output shaft  
Torque limiter as an option

### Input

IEC-normalized motor adaptors  
Solid input shaft

### Applicable AC motors

Integral motors and brake motors - M series / ME series  
IEC-normalized motors and brake motors - BN series / BE series  
Single and dual speed motors

### Main brake features

DC and AC supply  
Faster brake engage/disengage through electronically  
Controlled AC/DC rectifier type SB, NBR, SBR (options)

### Main motor options

Thermistors and thermostat sensors  
Separate supply forced ventilation  
Line driver and push-pull incremental encoder

Type	Torque [Nm]
VF 27	13
VF 30	24
VF 44	55
VF 49	88
W 63	190
W 75	320
W 86	440
W 110	830
VF 130	1500
VF 150	2000
VF 185	3600
VF 210	5000
VF 250	7100



## 300 series Planetary gearmotors

### A powerful solution to heavy duty drive needs.

Compact, and yet extremely powerful, are the units of the 300 series. Their planetary drive train makes them the ideal choice for all the severe duty applications where shock loadings and impacts are more the rule than the exception. The product configuration is highly versatile, due to the largely modular options of mounting, gear layout, output shafts and motor interfaces. All features are available for each of the 18 closely spaced frame sizes, spanning over the 1000 - 1100000 Nm torque range. Finding the perfect match to any drive problem is therefore more than a wish, it is something users can safely rely on - always.

Type	Torque [Nm]
300	1000
301	1750
303	2500
304	3600
305	5000
306	8500
307	12500
309	18000
310	25000
311	40000
313	55000
314	80000
315	100000
316	135000
317	170000
318	250000
319	350000
321	500000
323	800000
325	1100000

### Torque range

1000 ... 1100000 Nm

### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

up to 450 kW

### Gear ratios

3.4 ... 5000

### Gear unit versions

In line

Right angle (with Gleason bevel gear set)

### Output

Foot and flange mounted

Output shaft: keyed solid, splined, splined hollow, hollow shaft with shrink disc

### Input

IEC and NEMA motor adaptors

Solid input shaft with or without fan cooling - inch or metric dims.

### Applicable AC motors

Compact motors and brake motors M series

IEC motors and brake motors BN series

Single and dual speed motors

### Main brake features

DC and AC supply

Faster brake reaction through electronically controlled rectifier

### Main motor options

Thermistors and thermostat sensors

Independent forced cooling

Line driver and push-pull incremental encoder

# TA series

## Shaft mounted speed reducers

**The sturdy and weather-resistant product for the material handling industry.**  
The TA series is long established, and well respected in industry, especially in quarry and mine applications where absolute reliability and low maintenance are key factors. Also appreciated is the backstop option that prevents backdriving on inclined conveyors or elevators.



**Torque range ( $n_1 = 900 \text{ min}^{-1}$ )**  
150 ... 16000 Nm

**Mechanical rating ( $n_1 = 900 \text{ min}^{-1}$ )**  
1.1 ... 156 kW

**Gear ratios**  
5.0 ... 31.5

**Output**  
Keyed hollow shaft  
Up to three bore options per frame size

**Gearcase**  
Sturdy cast iron housing suitable for outdoor installation

**Backstop**  
Available on all frame sizes - externally accessible

Type	Torque [Nm]
TA 30	150
TA 35	400
TA 40	900
TA 45	1350
TA 50	2100
TA 60	3500
TA 70	4900
TA 80	6600
TA 100	10500
TA 125	16000





## HDP series

### Parallel shaft gear units

**The new benchmark in the parallel shaft category.**

High torque ratings, gear ratios in close progression, numerous mounting options, together with compact dimensions will facilitate the engineering of any application. The housing, made from nodular cast iron ensures robustness even in the harshest environment. State of the art precision ground gears help to produce an extremely quiet and vibration-free product.

Type	Torque [Nm]
HDP 60	5000
HDP 70	6850
HDP 80	12600
HDP 90	17650
HDP 100	25650
HDP 110	28900
HDP 120	37500
HDP 130	63250
HDP 140	79150
HDP 150	106550
HDP 160	133700
HDP 170	176350
HDP 180	194050

**Torque range**

5000 ... 194050 Nm

**Gear ratios**

7.1 ... 500

**Mounting**

Foot, flange, shaft mounting

**Input**

solid shaft, motor adapter

**Output**

solid (single and double extension), keyed hollow, shrink disc

**Options**

- Fan cooling, cooling coil, heaters
- Independent cooling systems
- Backstop
- Non-contacting seals
- Forced lubrication
- Temperature and oil level sensors
- Drywell

# HDO series

## Bevel helical gear units

**The heavy-duty product that matches performance and versatility with compactness.** The new bevel helical series from Bonfiglioli optimises superior performance with compact dimensions and flexibility. The many standard options that can be selected from the catalogue facilitate customization to meet specific application requirements. The gear case is nodular cast iron to guarantee rigidity in all circumstances while the gears, using latest profile ground finishing techniques, ensure quiet and vibration-free operation even in the harshest conditions.



### Torque range

25650 ... 194050 Nm

### Gear ratios

5.6 ... 400

### Mounting

Foot, flange, shaft mounting

### Input

Solid shaft, lantern housing c/w flexible coupling double input shaft (pony drive)

### Output

solid (single and double extension), keyed hollow, shrink disc

### Options

Fan cooling, cooling coil, heaters  
Independent cooling systems  
Backstop  
Non-contacting seals  
Forced lubrication  
Temperature and oil level sensors  
Drywell for installations with vertical shaft

Type	Torque [Nm]
HDO 100	25650
HDO 110	28900
HDO 120	37500
HDO 130	63250
HDO 140	79150
HDO 150	106550
HDO 160	133700
HDO 170	176350
HDO 180	194050

## RAN series Bevel gears



### The handy drive when it comes to angled transmissions.

The units of the RAN series are designed to fit the purposes of transmissions laid out in right angle setting. Easy to fit and largely maintenance-free, RAN units offer multiple shaft arrangements and a choice of several exact gear ratios, beside the 1:1, that come in handy when designing synchronized drive systems. Also available in the version for screw jack duty.

Type	Torque [Nm]
RAN 1	1350
RAN 2	3000
RAN 2R	3000
RAN 8	3
RAN 15	8
RAN 18	15
RAN 20	28
RAN 24	80
RAN 25	39
RAN 28	150
RAN 38	300
RAN 48	600

### Torque range

3 ... 3000 Nm

### Mechanical rating ( $n_1 = 1400 \text{ min}^{-1}$ )

0.15 ... 91 kW

### Gear ratios

1.0 ... 7.4

### Shaft arrangement

Single and double shaft projection

### Input

Solid input shaft

### RAN 1 / RAN 2 / RAN 2R

#### Input

Solid - single and double projection

Output shaft

Keyed hollow

### Gear ratios

$i = 3$

### Rated thrust capacity

RAN 1 50000 N

RAN 2 80000 N

RAN 2R 150000 N

# W VF\_EP series

## Gearmotors for hostile environments

**When multi-purpose products become specific and meet industry requirements.** Wormgears and motors are also available in the enhanced protection "EP" configuration, featuring food grade specifications and extra corrosion protection, ensuring risk free operation in hygienic environments, and facilitate effective sanitising. In addition to food processing applications, the EP configuration will also suit the requirements of the chemical and pharmaceutical industry, as well as marine on-board and quayside installations.



### Applications

Food processing, chemical and pharmaceutical industry  
Marine on-board and quayside installations  
Corrosive and/or highly hygienic environments

### Availability on

Gears: VF 44, VF 49, W 63, W 75, W 86  
Motors: BN 63 ... BN 112 / M1SD ... M3LC

### Standard features

Stainless steel hollow shaft  
Stainless steel mounting hardware and tag  
Oil seals loaded with stainless steel spring  
Sealed gearcase (unvented)  
Unused tapped holes closed with button plugs  
Four draining holes on motor DE and NDE shield  
Motor protection IP 56

### Options

Epoxy primer+epoxy top coating FDA approved  
Washdown duty oil seals  
Food grade lubricant, class H1

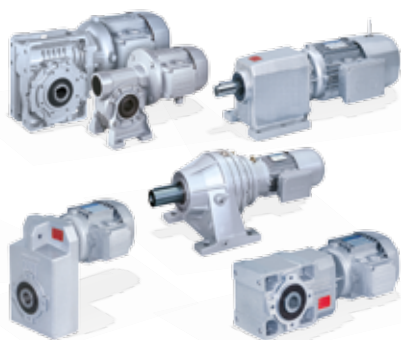
### Configurations

Foot, flange and shaft mount

### Accessories

Plug-in solid output shaft from stainless steel  
Safety cover for the hollow output shaft  
Torque arm

## ATEX



### **Gearmotors for use in potentially explosive atmosphere.**

ATEX-compliant gear units in categories 2G and 2D are available, according to the classification set forth by the European Directive 94/9/CE, applying to areas with presence of potentially explosive atmosphere. AC three-phase motors in category Ex II 2D 125 °C are also available in either the integral or the IEC design.

#### **Coaxials series C**

C11 ... C61

#### **Bevel helicals series A**

A10 ... A60

#### **Shaft mounts series F**

F10 ... F60

#### **Worm gears series VF and W**

VF30 ... VF49

W63 ... W110

#### **Planetaries series 300**

300 ... 321

#### **Motors series M and BN**

0.12 ... 3 kW

# LC series

## Low backlash planetary gearboxes

**Low backlash at a competitive price.**

The LC Series of planetary gearboxes is characterised by low backlash, silent running and easy motor coupling.



**Torque range**

12 ... 300 Nm

**Maximum acceleration torque**

20 ... 450 Nm

**Transmission ratios**

3 ... 100

**Output configuration**

Flange mounting

**Input configuration**

Wide range of coupling configurations to suit most common servomotors

**Maintenance**

Lubricated for life

Type	Rated torque [Nm]
LC 050	12
LC 070	25
LC 090	43
LC 120	110
LC 155	300

Type	Acceleration torque [Nm]
LC 050	20
LC 070	35
LC 090	80
LC 120	190
LC 155	450

Type	Backlash [arcmin]	
	1 stage	2 stages
Standard	12	15
Reduced	6	8



## LCK series

### Low backlash right-angle gearboxes

The economical, precise and efficient solution wherever space is at a premium. LCK Series gearboxes offer the same exceptional performance as the LC in-line series, but their right-angle design makes them easier to install in tight spaces.

Type	Rated torque [Nm]
LCK 050	12
LCK 070	25
LCK 090	43
LCK 120	110
LCK 155	300

Type	Acceleration torque [Nm]
LCK 050	20
LCK 070	35
LCK 090	80
LCK 120	190
LCK 155	450

Type	Backlash [arcmin]	
	2 stages	3 stages
Standard	6	8

#### Torque range

10 ... 300 Nm

#### Maximum acceleration torque

20 ... 450 Nm

#### Transmission ratios

6 ... 100

#### Output configuration

Flange mounting

#### Input configuration

Wide range of coupling configurations to suit most common servomotors

#### Maintenance

Lubricated for life

# MP series

## Low backlash planetary gearboxes

### High precision for excellent results.

The MP Series of low backlash planetary gearboxes is characterised by a wide range of mounting configurations, silent running, and superbly easy motor coupling.



**Torque range**  
20 ... 1000 Nm

**Maximum acceleration torque**  
30 ... 1200 Nm

**Transmission ratios**  
3 ... 1000

**Output configuration**  
Flange mounting

**Input configuration**  
Wide range of coupling configurations to suit most common servomotors

**Maintenance**  
Lubricated for life

### Versions available



**MP**



**MP ... IS**



**MP ... G**



**MP ... MB**

Type	Rated torque [Nm]
MP 053	20
MP 060	30
MP 080	70
MP 105	170
MP 130	450
MP 160	700
MP 190	1000

Type	Acceleration torque [Nm]
MP 053	30
MP 060	45
MP 080	100
MP 105	250
MP 130	700
MP 160	950
MP 190	1200

Type	Backlash [arcmin]		
	1 stage	2 stages	3 stages
Standard	15	15	17
Reduced	10	10	12





## TR series

### Low backlash planetary gearboxes

**Maximum precision for highly dynamic applications.**

TR Series planetary gearboxes set new standards for low backlash, superb reliability, extremely silent operation and compatibility with all leading brands of servomotor.

Type	Rated torque [Nm]
TR 053	20
TR 060	30
TR 080	70
TR 105	170
TR 130	450
TR 160	700
TR 190	1000

Type	Acceleration torque [Nm]
TR 053	30
TR 060	45
TR 080	100
TR 105	250
TR 130	700
TR 160	950
TR 190	1200

Type	Backlash [arcmin]		
	1 stage	2 stages	3 stages
Standard	5	5	7
Reduced	3	3	5

#### Torque range

20 ... 1000 Nm

#### Maximum acceleration torque

30 ... 1200 Nm

#### Transmission ratios

3 ... 1000

#### Output configuration

Flange mounting

#### Input configuration

Wide range of coupling configurations to suit most common servomotors

#### Maintenance

Lubricated for life

#### Versions available



TR



TR ... IS



TR ... G



TR ... MB

# SL series

## Low backlash planetary gearboxes for pulley drives

**Perfect for timing belt drives.**

The new SL Series from Tecnoingranaggi knows no rivals when it comes to compactness, efficiency and an optimised design for use with timing belt drive systems. SL Series low backlash gearboxes are the ideal complement to servo-drive systems in applications that need to combine precision and high overhung loads with ultra compact dimensions. SL Series, without pulleys, are also ideal for revolving tables.



**Torque range**

18 ... 110 Nm

**Maximum acceleration torque**

35 ... 190 Nm

**Transmission ratios**

3 ... 10

**Output configuration**

Flange mounting

**Input configuration**

Wide range of coupling configurations to suit most common servomotors

**Maintenance**

Lubricated for life

Type	Rated torque [Nm]
SL 070	25
SL 090	43
SL 120	110

Type	Acceleration torque [Nm]
SL 070	35
SL 090	80
SL 120	190

Type	Backlash [arcmin]
Standard	12
Reduced	6



## KR series

### Low backlash right-angle gearboxes

**The economical, flexible and efficient solution for low backlash right-angle transmissions.**

The KR Series of low backlash, right-angle gearboxes delivers the best possible combination of precision, dynamics and compactness. A wide range of input and output configurations combined with a selection of transmission ratios give these gearboxes unrivalled flexibility.

Type	Rated torque [Nm]
KR 010	10
KR 020	24
KR 030	55
KR 040	120

Type	Acceleration torque [Nm]
KR 010	14
KR 020	35
KR 030	75
KR 040	170

Type	Backlash [arcmin]
Standard	8

#### Torque range

3 ... 120 Nm

#### Maximum acceleration torque

14 ... 170 Nm

#### Transmission ratios

1, 2, 5

#### Output configuration

Hollow shaft with keyway  
Solid shaft, single or double sided  
Hollow shaft with shrink disc  
Mounting flange

#### Input configuration

Wide range of coupling configurations to suit most common servomotors

#### Maintenance

Lubricated for life

# TQ series

## Low backlash planetary gearboxes

The TQ Series of low backlash planetary gearboxes is designed to deliver the highest possible level of transmission precision. Low backlash combined with a high torsional stiffness guarantees a very competent product, especially in high dynamic and reversing applications.

The technical design of this gearbox also allows high axial and radial loads on the output shaft and a very silent operation.



### Torque range

30 ... 800 Nm

### Maximum acceleration torque

45 ... 1200 Nm

### Transmission ratios

3 ... 100

### Output configuration

Square flange mounting

### Input configuration

Wide range of coupling configurations to suit most common servomotors

### Maintenance

Lubricated for life

Type	Rated torque [Nm]
TQ 060	30
TQ 070	70
TQ 090	200
TQ 130	400
TQ 160	800

Type	Acceleration torque [Nm]
TQ 060	45
TQ 070	100
TQ 090	300
TQ 130	600
TQ 160	1200

Type	Backlash [arcmin]	
	1 stage	2 stages
Standard	3	5
TQ 060	4	6
TQ 070	4	6



## TQK series

### Low backlash right-angle gearboxes

Low backlash bevel-planetary drives of the TQK series are the solution to space problems often posed by increasingly compact machines. TQK drives combine high levels of dynamic operation with top precision, which results in great accuracy and repeatability for any positioning mechanism in which they are installed.

On top of their robustness and dependability TQK drives also feature a distinctive Italian style that makes them clearly recognizable amongst like products within the reference industry.

Type	Rated torque [Nm]
TQK 060	30
TQK 070	70
TQK 090	200
TQK 130	400
TQK 160	800

Type	Acceleration torque [Nm]
TQK 060	45
TQK 070	100
TQK 090	300
TQK 130	600
TQK 160	1200

Type	Backlash [arcmin]	
	2 stage	3 stages
Standard	5	7
TQK 060	6	8
TQK 070		

#### Torque range

30 ... 800 Nm

#### Maximum acceleration torque

45 ... 1200 Nm

#### Transmission ratios

3 ... 100

#### Output configuration

Square flange mounting

#### Input configuration

Wide range of coupling configurations to suit most common servomotors

#### Options

Smooth, keyless output shaft

#### Maintenance

Lubricated for life

# V Series

## Mechanical speed variators



**A conventional product optimised by re-engineering.**

The completely renewed V Series features a brand new speed control mechanism that optimises functioning, extends the lifetime of key components, and allows the variator to run cooler and more silently than ever. V Series speed variators are available with an additional helical reduction stage and can be coupled to most Bonfiglioli gearboxes.

**Max. to Min. speed setting**

5.2 times

∞ Reduction through a differential unit

**Transmissible power ( $n_1 = 1400 \text{ min}^{-1}$ )**

0.18 ... 9,2 kW

**Additional helical reduction stage**

$i_N = 2.5 \dots 6.3$

**Output configuration**

Foot or flange mounting

Metric or Inch series solid output shaft

Compact and IEC coupling for helical and worm gearboxes

**Speed setting**

Manual by handwheel

Remote by servo mechanism

Optional speed measuring kit with display

**Input configuration**

Provision for IEC and NEMA standard motors

Solid input shaft

**Applicable three phase motors**

IEC standard and BN Series self-braking motors

Type	Power kW
V 0.25	4
V 0.5	8
V 1	16
V 2	35
V 3	56
V 5.5	72
V 10	144



## BN series AC motors

**A complete range of AC motors developed for gearmotor duty that will exceed expectations.**

The IEC-normalized BN motors comply with all the applicable international standards, including the EMC and LV Directives. They are available in the 0.06 - 30 kW range in the foot and the flange mounting version, the latter in both the IM B5 and the IM B14 configuration. Single and multispeed versions available with generally, three brake options offered, one DC and two AC supply, lending further flexibility to the system. Finally, all motors are inverter duty.

Type	kW rating
BN 56A	0.06
BN 56B	0.09
BN 63A	0.12
BN 63B	0.18
BN 63C	0.25
BN 71A	0.25
BN 71B	0.37
BN 71C	0.55
BN 80A	0.55
BN 80B	0.75
BN 80C	1.1
BN 90S	1.1
BN 90LA	1.5
BN 90LB	1.85
BN 100LA	2.2
BN 100LB	3
BN 112M	4
BN 132S	5.5
BN 132MA	7.5
BN 132MB	9.2
BN 160MR	11
BN 160M	15
BN 180M	18.5
BN 180L	22
BN 200L	30

### kW rating (4 pole)

0.06 ... 30 kW

### Frame sizes

56A ... 200L

### Pole numbers

2, 4, 6, 8, 2/4, 2/6, 2/8, 2/12, 4/6, 4/8

### Mounting options

Foot IM B3

Flange IM B5 and IM B14

### Operation

50 Hz and 60 Hz

### Compliance

2006/95/EC (LVD) and 2004/108/EC (EMC)

### Inverter duty

All frame sizes

### Housing

Cast aluminium

### Main brake features

DC and AC supply

Faster brake engage/disengage through electronically

Controlled AC/DC rectifier type SB, NBR, SBR (options)

### Main options

Thermistors and thermostat sensors

Separate supply forced ventilation

Line driver and push-pull incremental encoder

CSA and UL approved design

# BE series IE2 AC motors



### Class IE2 high efficiency AC motors.

The IEC-normalized BE motors comply with IEC 60034-30:2008 (efficiency classes) and all the applicable international standards, including the EMC and LV Directives. They are available in the 0.75 - 22 kW range in the foot and the flange mounting version, the latter in both the IM B5 and the IM B14 configuration. Single and multispeed versions are available with generally, two brake options offered, one DC and one AC supply, lending further flexibility to the system. Finally, all motors are inverter duty.

### kW rating (4 pole)

0.75 ... 22 kW

### Frame sizes

80B ... 180L

### Pole numbers

2, 4, 6

### Mounting options

Foot IM B3

Flange IM B5 and IM B14

### Operation

50 Hz and 60 Hz

### Compliance

IEC 60034-30:2008 (IE), 640/2009/EC

2006/95/EC (LVD) and 2004/108/EC (EMC)

### Inverter duty

All frame sizes

### Housing

Cast aluminium

### Main brake features

DC and AC supply

Faster brake engage/disengage through electronically controlled AC/DC rectifier type SB, NBR, SBR (options)

### Main options

Thermistors and thermostat sensors

Separate supply forced ventilation

Line driver and push-pull incremental encoder

CSA and UL approved design

Type	kW rating
BE 80B	0.75
BE 90S	1.1
BE 90LA	1.5
BE 100LA	2.2
BE 100LB	3
BE 112M	4
BE 132S	5.5
BE 132MA	7.5
BE 132MB	9.2
BE 160M	11
BE 160L	15
BE 180M	18.5
BE 180L	22





## BS series

### Single-phase induction motors

#### A range of motors dedicated to domestic and light workshop duty.

Single-phase motors of the BS series are manufactured to the applicable IEC standards and are of the enclosed type, externally ventilated and with run capacitor permanently connected.

Motors are available in the B5 and B14 flange mountings, in the 4-pole execution. For applications requiring high starting torque the version with both the run and starting capacitor can be specified.

Type	kW rating
BS 56A	0.06
BS 56B	0.09
BS 63A	0.12
BS 63B	0.18
BS 71A	0.25
BS 71B	0.37
BS 80A	0.55
BS 80B	0.75
BS 90S	1.1
BS 90L	1.5

#### kW ratings

0.06 ... 1.5 kW

#### Frame sizes

56A to 90L

#### Poles

4

#### Mounting

Flange mounting IM B5 and IM B14

#### Frequency

50 and 60 Hz

#### European norms

2006/95/EC (LVD) and 2004/108/EC (EMC)

#### Housing

Cast Aluminium

#### Main options

Starting and run capacitors

Bimetal thermal protector

Balanced winding

# BC series DC motors

**A comprehensive range of permanent magnet DC motors.**

The BC series of motors are the simple, proven and economical solution to the requirements of DC drives. The materials and the design concepts exploited allow the use of BC motors under the severest duty and with 4-quadrants thyristor converters. Motors can be operated in the -20 to +40 °C ambient temperature range and are IP54 protected and class F insulated.



**Torque range**

0.3 ... 4.5 Nm

**Speed**

1500, 2000, 3000 min<sup>-1</sup>

**Supply**

12, 24, 36, 48,65, 110, 180, Vdc

**Configurations**

IM B5 and IM B14 Flange Mount

**Ventilation**

BC110 ... BC140 non-ventilated

BC220 ... BC310 TEFC

Type	Torque [Nm]
BC 110	0.3
BC 120	0.8
BC 140	1.4
BC 220	0.9
BC 240	1.2
BC 270	2.2
BC 310	4.5



## BMD series Permanent Magnet AC motors

### Bonfiglioli Permanent Magnet AC Synchronous motors series.

They are manufactured using the "salient pole" technology. The dimensions of the motor are drastically reduced, with considerable advantages in terms of torque density, overall dimensions and dynamic performance.

Thanks to the high quality and performance of the Neodymium iron boron rare-earth magnets maximize performance in terms of very high accelerations and withstand high overloads without risk of demagnetization of the magnets.

Type	Torque [Nm]
BMD 65	1.7
BMD 82	3.2
BMD 102	7.2
BMD 118	10.2
BMD 145	16.8
BMD 170	34

### Stall torque

1.7 Nm ... 34 Nm

### Rated speed

1600; 3000; 4500; 5500; 6000 min<sup>-1</sup>

### Power supply

230, 400 Vac

### Inertia

0.04 ... 2.82 (Kgm<sup>2</sup> x 10<sup>-3</sup>)

### Conformity

2006/95/EC (LVD) and 2004/108/EC (EMC)

### Electromagnetical Holding Brake (Optional)

24 Vdc

### Additional flywheel (optional)

0.05 ... 7.00 (Kgm<sup>2</sup> x 10<sup>-3</sup>)

### Feedback

2-poles resolver with excitation frequency 8 KHz or 10 KHz

Absolute encoder EnDAT 2.1 (single turn / multiturn) encoder with sincos track

Absolute encoder Hyperface (single turn / multiturn) encoder with sincos track

Sensorless (no feed-back)

### Degree of protection

IP65

IP67

### Temperature sensor

PTC

KTY

### Certification

CE

# BTD series

## Compact AC brushless servomotors

### A range of compact servomotors.

BTD Series servomotors are designed to provide effective solutions for applications demanding high efficiency, compact motors.

The extremely small size of these motors, achieved by the use of advanced materials and design technology, ensures exceptional dynamics and low temperature operation. Equipped with IP65 push-pull connectors (IP67 connectors are optional), in conformity to EMC requirements, and a PTC temperature probe with reinforced insulation, these motors guarantee secure electrical connections under all ambient operating conditions.



### Stall torque

0.26 ... 27 Nm

### Rated speed

3000, 4500 min<sup>-1</sup>

### Power supply

230, 400 Vac

### Inertia

Low for BTD sizes from 0.26 Nm ... to 1 Nm

### Conformity

2006/95/EC (LVD) and 2004/108/EC (EMC)

### DC brake

Optional 24 Vdc

### Certification

CE, UL

Type	Torque [Nm]
BTD2 0026	0.26
BTD2 0053	0.53
BTD2 0074	0.74
BTD2 0095	0.95
BTD3 0095	0.95
BTD3 0190	1.9
BTD3 0325	3.25
BTD3 0420	4.2
BTD4 0410	4.1
BTD4 0630	6.3
BTD4 0860	8.6
BTD5 1160	11.6
BTD5 1490	14.9
BTD5 1870	18.7
BTD5 2730	27.3



## BCR series AC brushless servomotors

### A range of high performance servomotors.

BCR Series servomotors are designed to satisfy the needs of continuous and transient high torque applications. Thanks to a wide torque range and above average instantaneous overload ratings, BCR servomotors are robust enough for even the most demanding drive applications. Equipped with IP65 push-pull connectors (IP67 connectors are optional), in conformity to EMC requirements, and with a PTC temperature probe with reinforced insulation, these motors guarantee a secure electrical connection under all ambient operating conditions.

Type	Torque [Nm]
BCR2 0020	0.2
BCR2 0040	0.4
BCR2 0060	0.6
BCR2 0080	0.8
BCR3 0065	0.65
BCR3 0130	1.3
BCR3 0250	2.5
BCR3 0300	3
BCR4 0100	1
BCR4 0260	2.6
BCR4 0530	5.3
BCR4 0750	7.5
BCR5 0660	6.6
BCR5 1050	10.5
BCR5 1350	13.5
BCR5 1700	17
BCR5 2200	22
BCR6 1350	13.5
BCR6 1900	19
BCR6 2200	22
BCR6 2900	29
BCR7 2700	27
BCR7 3200	32
BCR7 4000	40
BCR8 0400	40
BCR8 0680	68
BCR8 0930	93
BCR8 1150	115

### Stall torque

0.2 ... 115 Nm

### Rated speed

2000, 3000, 4500 rpm

### Power supply

230, 400 Vac

### Inertia

Low for BCR sizes from 0.2 Nm ... to 1 Nm

### Conformity

2006/95/EC (LVD) and 2004/108/EC (EMC)

### DC brake

Optional 24 Vdc

### Certification

CE, UL

# VCB series Inverter



**Convenient in operation and flexible in application.**

Reliable, highly compact and a robust choice for any application, this inverter with high-level functions soundly meets the requirements of a constantly evolving market.

**Power range (VCB400)**

132 kW - 800 kW, three-phase 320 V - 506 V, 45 Hz - 66 Hz

**Type of control**

Selectable Vector control function:  
Sensor-less control, sensor-less field oriented control,  
Field oriented control with encoder

**Overload capacity**

120% / 150% for 60s

**Switching frequency**

1 kHz up to 8 kHz

**Enclosure**

IP20 up to 355 kW (EN 60529) / IP54 on demand

**Main standard hardware features**

Three-phase 230 V and three-phase 500 V on demand  
DC link connection, Plug-in and programmable control terminals  
8 digital input, 3 analog input  
2 digital output, 1 analog output  
1 Relay output (changeover contact)

**Optional expansion modules**

Motor temperature monitoring, expansion of analog, digital inputs and outputs,  
additional encoder or resolver input, repetition frequency output, Safety relay in  
combination with expansion module

**Optional communication modules**

RS232, RS485, Profibus-DP, CANopen, LON

**Optional keypad**

Removable keypad KP100

**Optional PC software**

VPlus for Windows operating system with set-up, terminal monitor,  
actual value window, scope function and teleservice

**Main software features**

Programmable reference value channel, Programmable start and stop characteristics,  
Motor potentiometer, Programmable S curve, 4 data sets, Auto start-up and  
commissioning, Auto start after power failure, PI controller, Volume flow control,  
Bump-less torque / speed changeover, Master / Slave function with electronic gear,  
Dynamic braking and motor chopper, Mechanical brake control free of friction,  
Intelligent current limits, Power failure regulation, Index and stability control,  
Comprehensive monitoring and protection capabilities, Function for lift, crane and  
winch applications

Type	Power kW
VCB400-250	132
VCB400-300	160
VCB400-370	200
VCB400-460	250
VCB400-570	315
VCB400-610	355



# Agile Inverter

### Innovative, eco-friendly, user-friendly.

Agile series provide in a sensorless vector inverter innovations able to boost plant efficiency through open loop vector control of brushless motors, MMC memory cards and web control.

Agile inverters are easy to install, program and quick to start-up without the needs of specialized resources.

Type	Power kW
AGL402-02	0.25
AGL402-03	0.37
AGL402-05	0.55
AGL402-07	0.75
AGL402-09	1.1
AGL402-11	1.5
AGL402-13	2.2
AGL402-15	3.0
AGL402-18	4.0
AGL402-19	5.5
AGL402-21	7.5
AGL402-22	9.2
AGL402-23	11

Type	Power kW (3ph)
AGL202-02	0.25
AGL202-03	0.37
AGL202-05	0.55
AGL202-07	0.75
AGL202-09	1.1
AGL202-11	1.5
AGL202-13	2.2
AGL202-15	3.0
AGL202-18	4.0
AGL202-19	5.5
AGL202-21	7.5

Type	Power kW (1ph)
AGL202-02	0.12
AGL202-03	0.18
AGL202-05	0.25
AGL202-07	0.37
AGL202-09	0.55
AGL202-11	0.75
AGL202-13	1.1
AGL202-15	1.5
AGL202-18	2.2
AGL202-19	3
AGL202-21	3

### Power range (AGL402)

0.25 - 11 kW / three-phase 320 V ... 530 V / 50 Hz - 60 Hz ( $\pm 10\%$ )

### Power range (AGL202)

0.25 - 7.5 kW / single or three-phase 200 V ... 240 V / 50 Hz - 60 Hz ( $\pm 10\%$ )

### Motor compatibility

Two types of motor:

Asynchronous AC motors

Permanent magnet synchronous (brushless) motors

### Type of control

Selectable control function:

V/f control for asynchronous motors

Sensor-less vector control for asynchronous motors

Sensor-less vector control for brushless motors

### Degree of protection

IP20 (EN 60529)

### Main hardware features

Power supply from common DC bus

Integrated braking module

Short circuit / ground fault protection

Integrated Safe Torque Off safety system

Plug-in and programmable control terminals

6 digital inputs, 2 multifunctional A/D inputs

1 multifunctional I/O, 1 digital output

1 multifunctional A/D/pulse output, 1 relay output (alarm)

available power outputs: +24 V DC, +10 V DC

optional separate 24 V DC electronic power supply

standard serial interfaces: RS-232, RS485, Systembus

Integrated Modbus

### Optional expansion modules

Resource Pack memory card

### Optional communication modules

Profibus-DP, CANopen, RS232, RS485, DeviceNet, EtherCAT®, ProfiNet, Ethernet VA BUS TCP

### PC software

VPlus suite

### Main software features

Permanent motor tuning

Selective Multi-Motor Control (SMMC)

Energy saving function

Ready to use application masks

Integrated maintenance wizard

Alarm history

Motor and inverter state memory

Autodiagnostics

Integrated PLC function with graphic development environment

Integrated oscilloscope function

Customisable units of measurement

# Active Solution Drive

## Versatility, rating, performances.

A full series of flexible solution drives that are versatile and extremely easy to use, featuring control for high performance and unbeatable advantages in their scalability and compact size.



### Power range (ACT401)

0.55 - 132 kW / three-phase 360 V - 480 V / 50 Hz - 60 Hz (± 10%)

### Power range (ACT201)

0.55 - 9.2 kW / single or three-phase 200 V - 240 V / 50 Hz - 60 Hz (± 10%)

### Type of control

Selectable Vector control function:  
sensor-less control, sensor-less field oriented control, field oriented control with encoder

### Overload capacity

150% for 60s / 200% for 1s

### Switching frequency

2, 4, 8, 12, 16 kHz

### Enclosure

IP20 (EN 60529)

### EMC filter

Integrated up to 9.2 kW (EN 61800-3)

### Main standard hardware features

Integrated dynamic braking module, DC link connection, Standard encoder interface, Motor temperature monitoring, Plug-in power terminals (up to 3kW), Plug-in and programmable control terminals, 6 digital input, 1 multifunction input, 1 digital output, 1 multifunction Output, 1 relay output (changeover contact)

### Optional expansion modules

Expansion of analog, digital inputs and outputs, additional encoder or resolver input, repetition frequency output, System bus

### Optional communication modules

RS232, RS485, Profibus-DP, CANopen

### Optional keypad

Removable keypad KP500 with copy function, Cabinet mounting kit and handheld for keypad

### Optional PC software

VPlus for Windows operating system with set-up, terminal monitor, actual value window, scope function and teleservice

### Main software features

Programmable reference value channel, Programmable start and stop characteristics, Motor potentiometer, Programmable S curve, 4 data sets, Auto start-up and commissioning, Auto reset after failure, Auto start after power failure, PI controller, Programmable logic and timer functions, Volume flow control, Bump-less torque / speed changeover, Master / Slave function with electronic gear, Enhanced positioning function, Mechanical brake control free of friction, Index and stability control, Intelligent current limits, Power failure regulation, Comprehensive monitoring and protection capabilities, High speed control, Function for lift, crane and winch applications, 3 different brake Management Functions.

Type	Power kW
ACT401-05	0.55
ACT401-07	0.75
ACT401-09	1.1
ACT401-11	1.5
ACT401-12	1.85
ACT401-13	2.2
ACT401-15	3.0
ACT401-18	4.0
ACT401-19	5.5
ACT401-21	7.5
ACT401-22	9.2

ACT401-23	11
ACT401-25	15
ACT401-27	18.5
ACT401-29	22
ACT401-31	30
ACT401-33	37
ACT401-35	45
ACT401-37	55
ACT401-39	65
ACT401-43	75
ACT401-45	90
ACT401-47	110
ACT401-49	132

ACT201-05	0.55
ACT201-07	0.75
ACT201-09	1.1
ACT201-11	1.5
ACT201-13	2.2
ACT201-15	3.0
ACT201-18	4.0
ACT201-19	5.5
ACT201-21	7.5
ACT201-22	9.2





# Active Cube Solution & Servo Drive

### Versatility, promptness, accuracy.

A full series of solution & servo drives, compact and flexible, dedicated both to high demanding industrial automation systems and to motion control architectures, all matched with Bonfiglioli servomotors.

Type	Power kW
ACU401-01	0.25
ACU401-03	0.37
ACU401-05	0.55
ACU401-07	0.75
ACU401-09	1.1
ACU401-11	1.5
ACU401-12	1.85
ACU401-13	2.2
ACU401-15	3.0
ACU401-18	4.0
ACU401-19	5.5
ACU401-21	7.5
ACU401-22	9.2

ACU401-23	11
ACU401-25	15
ACU401-27	18.5
ACU401-29	22
ACU401-31	30
ACU401-33	37
ACU401-35	45
ACU401-37	55
ACU401-39	65
ACU401-43	75
ACU401-45	90
ACU401-47	110
ACU401-49	132

ACU201-01	0.25
ACU201-03	0.37
ACU201-05	0.55
ACU201-07	0.75
ACU201-09	1.1
ACU201-11	1.5
ACU201-13	2.2
ACU201-15	3.0
ACU201-18	4.0
ACU201-19	5.5
ACU201-21	7.5
ACU201-22	9.2

### Power range (ACU401)

0.25 - 132 kW / three-phase 360 V - 480 V / 50 Hz - 60 Hz ( $\pm 10\%$ )

### Power range (ACU201)

0.25 - 9.2 kW / single or three-phase 200 V - 240 V / 50 Hz - 60 Hz ( $\pm 10\%$ )

### Type of control

Selectable Vector control function: sensor-less control, sensor-less field oriented control, field oriented control with speed sensor, field oriented control of synchronous servomotors with speed/position sensor

### Overload capacity

200% for 1min (size 01 and 03) / 150% for 1min (other ratings),  
Shorter overload: 200% for 1sec all ratings

### Switching frequency

2, 4, 8, 12, 16 kHz

### Enclosure

IP20 (EN 60529)

### EMC filter

Integrated up to 9.2 kW (EN 61800-3)

### Main standard hardware features

Integrated safe torque off function, External 24Vdc supply for control board and electronics, Integrated dynamic braking module, DC link connection, Standard encoders interface, Resolver module for feedback acquisition from Bonfiglioli servomotors, Motor temperature monitoring, Plug-in power terminals (up to 3kW), Plug-in and programmable control terminals 6 digital input, 1 multifunction input, 1 digital output, 1 multifunction, Output, 1 relay output (changeover contact)

### Optional expansion modules

Expansion of analog, digital inputs and outputs, additional encoder or resolver input and sincos encoder, repetition frequency output, System bus

### Optional communication modules

Profibus-DP, CANopen, RS232, RS485, DeviceNet, EtherCAT®, ProfiNet, Ethernet VA BUS TCP

### Optional keypad

Removable keypad KP500 with copy function, Cabinet mounting kit and handheld for keypad

### PC software VPlus

Windows-based engineering "workbench" with easy interface, Drive parameters set-up, Terminal monitor, Actual value window, Scope function, Bonfiglioli servomotors quick-configuration window, Motion block parameters management, Teleservice

### Main software features

32 Programmable Motion blocks, 36 Homing functions according to CANopen DSP4.02, Unit converter, Jog function, Absolute and relative positioning modes, Touch probe, Teach-In functions, Rotary table control, Programmable reference value channel, Programmable start and stop characteristics, Motor potentiometer, Programmable S curve, 4 data sets, Auto start-up and commissioning, Auto reset after failure, Auto start after power failure, PI controller, Programmable logic and timer functions, Bump less torque / speed changeover, Master / Slave function with electronic gear, Index and stability control, Intelligent current limits, Power failure regulation, Comprehensive monitoring and protection capabilities, High speed control, Function for lift, crane and winch applications, 3 different brake Management Functions. Advanced application functions: advanced brake release control, spindle control up to 1000Hz, traverse function for winders, Volume flow control, load evaluation.

# Synthesis Inverter

## Install and go.

The simple use, wide range of controls, integrated EMC filter, IP65 protection level and the limited size make the SYN10 a sound response to the broadest needs for electronic speed variation, where basic performance and contained costs are matched with robust construction and great reliability.



### Power range (SYN10 S 220)

0.2 - 0.75kW 1 - Phase 200 - 240V / 50 - 60Hz (+10, -15%)  
1.5 - 2.2kW 1 and 3 - Phase 200 - 240V / 50 - 60Hz (+10, -15%)

### Power range (SYN10 T 400)

0.75 - 2.2kW 3 - Phase 380 - 460V / 50 - 60Hz (+10, -15%)

### Type of control

V/f control with Torque Gain and Selectable Patterns

### Overload capacity

150% for 60s

### Switching frequency

4-16 kHz

### Enclosure

IP20, IP65

### EMC filter

Standard Integrated A Class (EN 61800-3)

### Main standard hardware features

Integrated braking module (SYN10 S 220/07/09 - SYN10 T 400)

DC link connection (SYN10 S 220/07/09 - SYN10 T 400)

Inverter temperature monitoring

1 Analog Input (V or I selectable)

4 Digital Input (programmable multifunction)

1 Analog Output (voltage linear)

1 Relay output (programmable multifunction)

### Keypad

Integrated standard

### Main functions

I2t Motor temperature monitoring

DC braking injection

Selectable Volt on Hz characteristic

JOG frequency

Selectable Auto-restart

Selectable stop method

Automatic alarm reset

Alarm history

Momentary power loss prevention

Stall prevention

Output Short-Circuit protection

Grounding fault protection

Heat sink overheat protection

Current limit

Type	Power kW
SYN10S-001	0.2
SYN10S-003	0.4
SYN10S-005	0.75
SYN10S-007	1.5
SYN10S-009	2.2
SYN10S-005	0.75
SYN10S-007	1.5
SYN10S-009	2.2



# Our qualities



## Sharing the value of our work with you.



The development of effective, tailored solutions for a wide range of applications is a fundamental aspect of our work.

We succeed in this because we co-operate closely with our customers, listen to their requests and work with them to improve our own performance.



Bonfiglioli is determined to deliver the best service possible – before, during and after the sale of any of our products – by applying all our know-how, experience, technology, and advanced communication tools. Bonfiglioli works to the strictest standards of quality and safety, as certified by seven different internationally recognised institutes.



We believe in innovation, and back up this belief by dedicating 100 of our people and 5 activity centres to research and development, and by working hand in hand with some of the world's most prestigious universities.

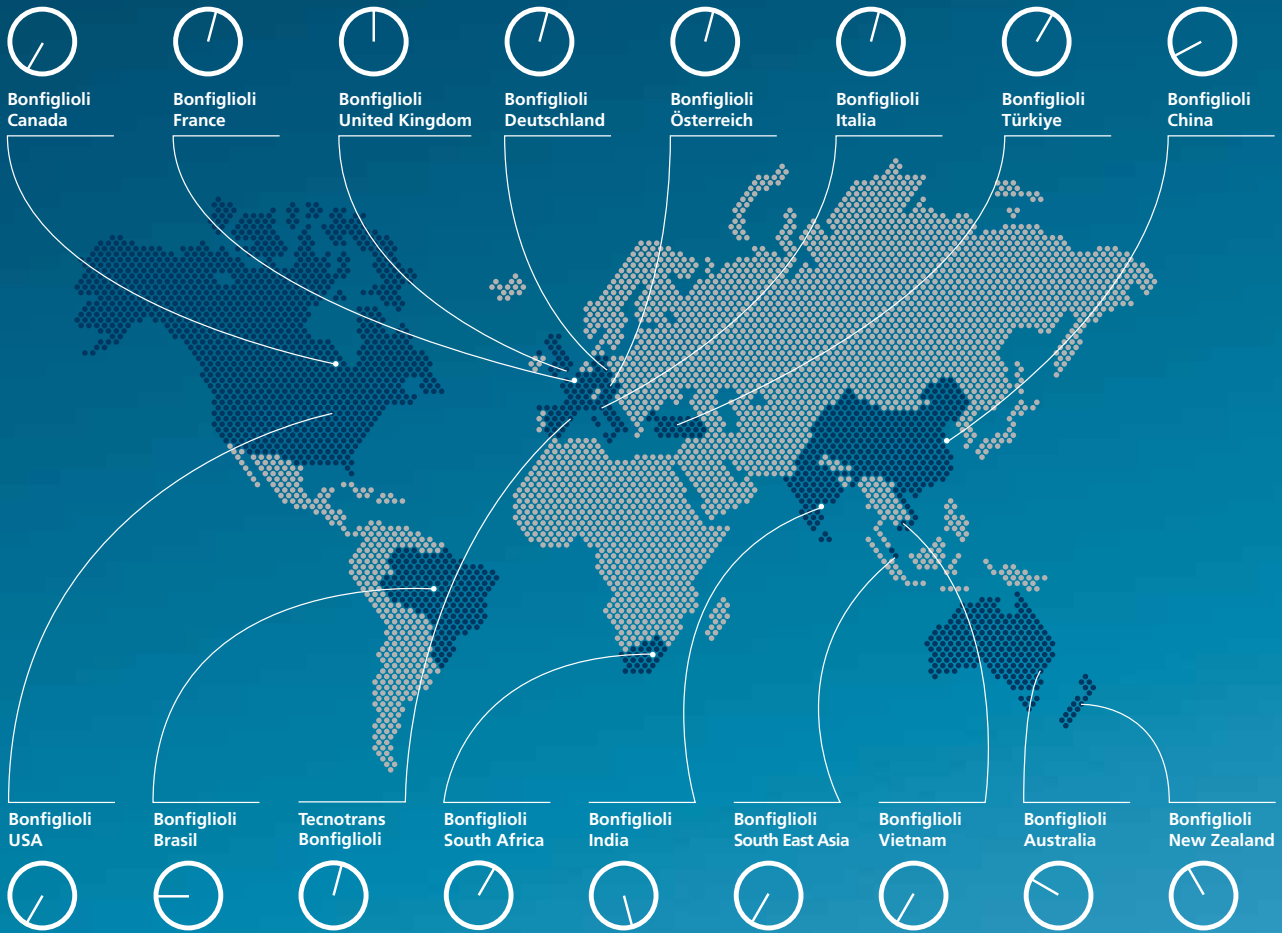
Our work increasingly brings us into contact with other nations and cultures, for which we have the greatest respect and with whom we share a vision of sustainable development based on renewable energy.

This bond of commitment allows us to be an authoritative and reliable global partner for the present and the future.

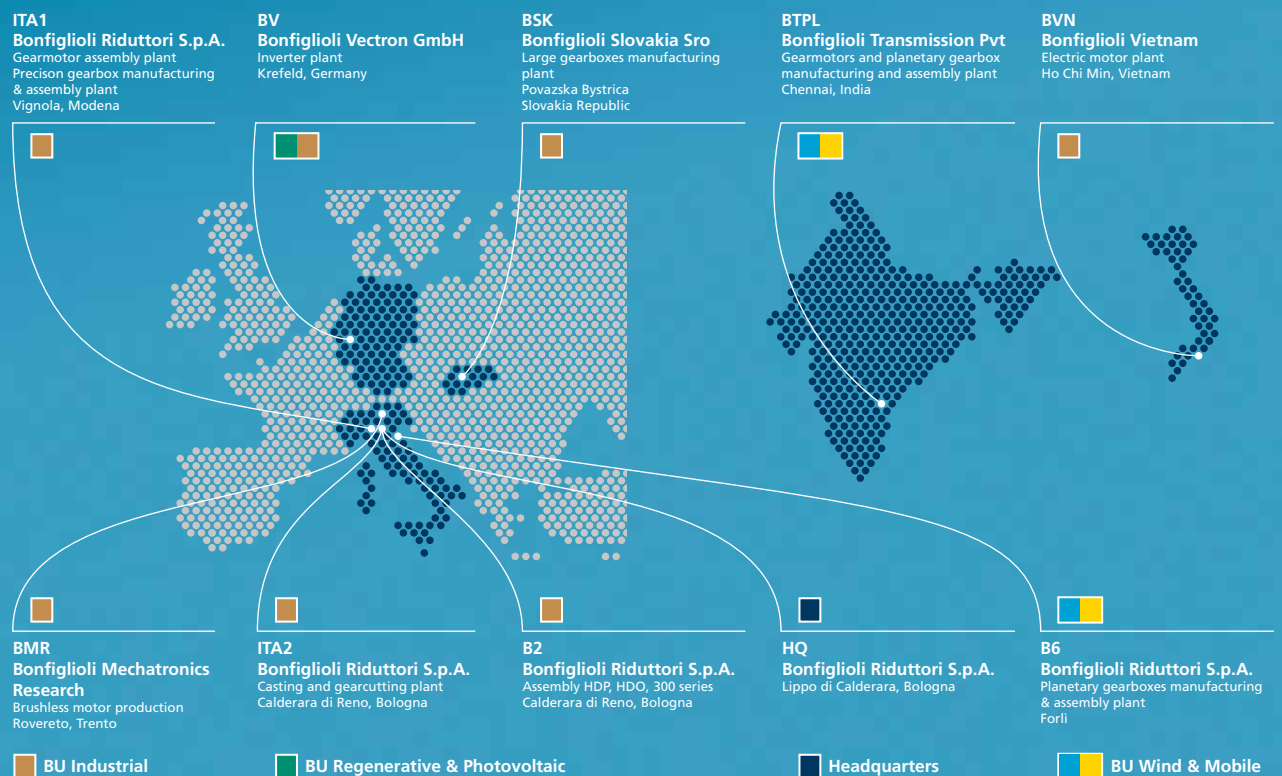


# Branches and facilities

## Our branches



## Our production facilities



## Bonfiglioli is your partner worldwide for power transmission and motion control.

Customer satisfaction has always been one of Bonfiglioli's key values. It is pursued around the world, and in a wide range of contexts, by a network of subsidiaries located in 17 countries and on 5 continents.

Each subsidiary provides rapid and efficient pre-sales and after-sales service, and can guarantee prompt deliveries from local assembly plant and warehouses.

In addition to our directly controlled subsidiaries, Bonfiglioli can also rely on an extensive network of authorised dealers, selected for their ability to guarantee excellent pre-sales and after-sales assistance.

To give everybody the chance to purchase a Bonfiglioli product - anywhere.

This is the ambitious objective that drives the development of our added value sales networks, off and on-line.

BEST (Bonfiglioli Excellence Service Team) is one of the most modern sales organisations in the field of power transmission.

Our BEST partners can benefit from our local assembly plant and warehouses, our training courses and tools, and our promotional activities.

For the first time ever, manufacturer and distributors are working together from the product assembly stage and in the design of new applications, in a sharing process that sees one party transferring know-how and technology and the other partly providing a thorough knowledge of the local market.



## Bonfiglioli worldwide network.

### Bonfiglioli Australia

2, Cox Place Glendenning NSW 2761  
Locked Bag 1000 Plumpton NSW 2761  
Tel. (+ 61) 2 8811 8000 - Fax (+ 61) 2 9675 6605  
www.bonfiglioli.com.au - sales@bonfiglioli.com.au

### Bonfiglioli Brasil

Travessa Cláudio Armando 171  
Bloco 3 - CEP 09861-730 - Bairro Assunção  
São Bernardo do Campo - São Paulo  
Tel. (+55) 11 4344 2323 - Fax (+55) 11 4344 2322  
www.bonfigliolidobrasil.com.br  
bonfigliolidobrasil@bonfiglioli.com

### Bonfiglioli Canada

2-7941 Jane Street - Concord, Ontario L4K 4L6  
Tel. (+1) 905 7384466 - Fax (+1) 905 7389833  
www.bonfigliolicanada.com  
sales@bonfigliolicanada.com

### Bonfiglioli China

19D, No. 360 Pu Dong Nan Road  
New Shanghai International Tower  
200120 Shanghai  
Tel. (+86) 21 5054 3357 - Fax (+86) 21 5970 2957  
www.bonfiglioli.cn - bdssales@bonfiglioli.com.cn

### Bonfiglioli Deutschland

Sperberweg 12 - 41468 Neuss  
Tel. (+49) 02131 2988-0  
Fax (+49) 02131 2988-100  
www.bonfiglioli.de - info@bonfiglioli.de

### Bonfiglioli España

TECNOTRANS BONFIGLIOLI S.A.  
Pol. Ind. Zona Franca sector C, calle F, nº6  
08040 Barcelona  
Tel. (+34) 93 4478400 - Fax (+34) 93 3360402  
www.tecnotrans.com - tecnotrans@tecnotrans.com

### Bonfiglioli France

14 Rue Eugène Pottier BP 19  
Zone Industrielle de Moimont II  
95670 Marly la Ville  
Tel. (+33) 1 34474510 - Fax (+33) 1 34688800  
www.bonfiglioli.fr - btf@bonfiglioli.fr

### Bonfiglioli India

PLOT AC7-AC11 Sidco Industrial Estate  
Thirumudivakkam - Chennai 600 044  
Tel. +91(0) 44 24781035 - 24781036 - 24781037  
Fax +91(0) 44 24780091 - 24781904  
www.bonfiglioliindia.com - bonfig@vsnl.com

### Bonfiglioli Italia

Via Sandro Pertini lotto 7b  
20080 Carpiano (Milano)  
Tel. (+39) 02 985081 - Fax (+39) 02 985085817  
www.bonfiglioli.it  
customerservice.italia@bonfiglioli.it

### Bonfiglioli New Zealand

88 Hastie Avenue, Mangere Bridge, Auckland  
2022, New Zealand - PO Box 11795, Ellerslie  
Tel. (+64) 09 634 6441 - Fax (+64) 09 634 6445  
npollington@bonfiglioli.com.au

### Bonfiglioli Österreich

Molkereistr 4 - A-2700 Wiener Neustadt  
Tel. (+43) 02622 22400 - Fax (+43) 02622 22386  
www.bonfiglioli.at  
info@bonfiglioli.at

### Bonfiglioli South East Asia

No 21 Woodlands industrial park E1  
#02-03 Singapore 757720  
Tel. (+65) 6893 6346/7 - Fax (+65) 6893 6342  
www.bonfiglioli.com.au  
sales@bonfiglioli.com.sg

### Bonfiglioli South Africa

55 Galaxy Avenue,  
Linbro Business Park - Sandton  
Tel. (+27) 11 608 2030 OR - Fax (+27) 11 608 2631  
www.bonfiglioli.co.za  
bonfigsales@bonfiglioli.co.za

### Bonfiglioli Türkiye

Atatürk Organize Sanayi Bölgesi,  
10044 Sk. No. 9, 35620 Çigli - Izmir  
Tel. +90 (0) 232 328 22 77 (pbx)  
Fax +90 (0) 232 328 04 14  
www.bonfiglioli.com.tr  
info@bonfiglioli.com.tr

### Bonfiglioli United Kingdom

**Industrial Solutions**  
Unit 7, Colemeadow Road  
North Moons Moat - Redditch,  
Worcestershire B98 9PB  
Tel. (+44) 1527 65022 - Fax (+44) 1527 61995  
www.bonfiglioli.com  
uksales@bonfiglioli.com

**Mobile Solutions**  
3 - 7 Grosvenor Grange, Woolston  
Warrington - Cheshire WA1 4SF  
Tel. (+44) 1925 852667 - Fax (+44) 1925 852668  
www.bonfiglioli.co.uk  
mobilesales@bonfiglioli.co.uk

### Bonfiglioli USA

3541 Hargrave Drive Hebron, Kentucky 41048  
Tel. (+1) 859 334 3333 - Fax (+1) 859 334 8888  
www.bonfiglioliusa.com

### Bonfiglioli Vietnam

Lot C-9D-CN My Phuoc Industrial Park 3  
Ben Cat - Binh Duong Province  
Tel. (+84) 650 3577411 - Fax (+84) 650 3577422  
www.bonfiglioli.vn  
salesvn@bonfiglioli.com







Bonfiglioli has been designing and developing innovative and reliable power transmission and control solutions for industry, mobile machinery and renewable energy applications since 1956.