

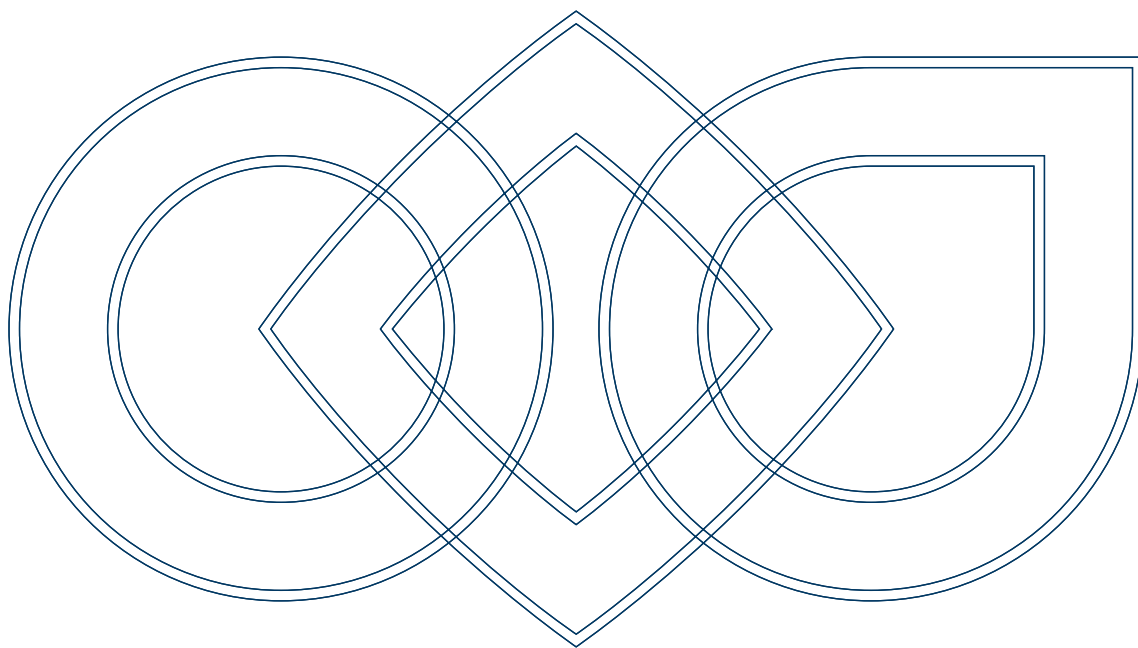
Bonfiglioli Riduttori

A-C-F
Servo gearmotors



PRODUCT

 **Bonfiglioli**
Forever Forward



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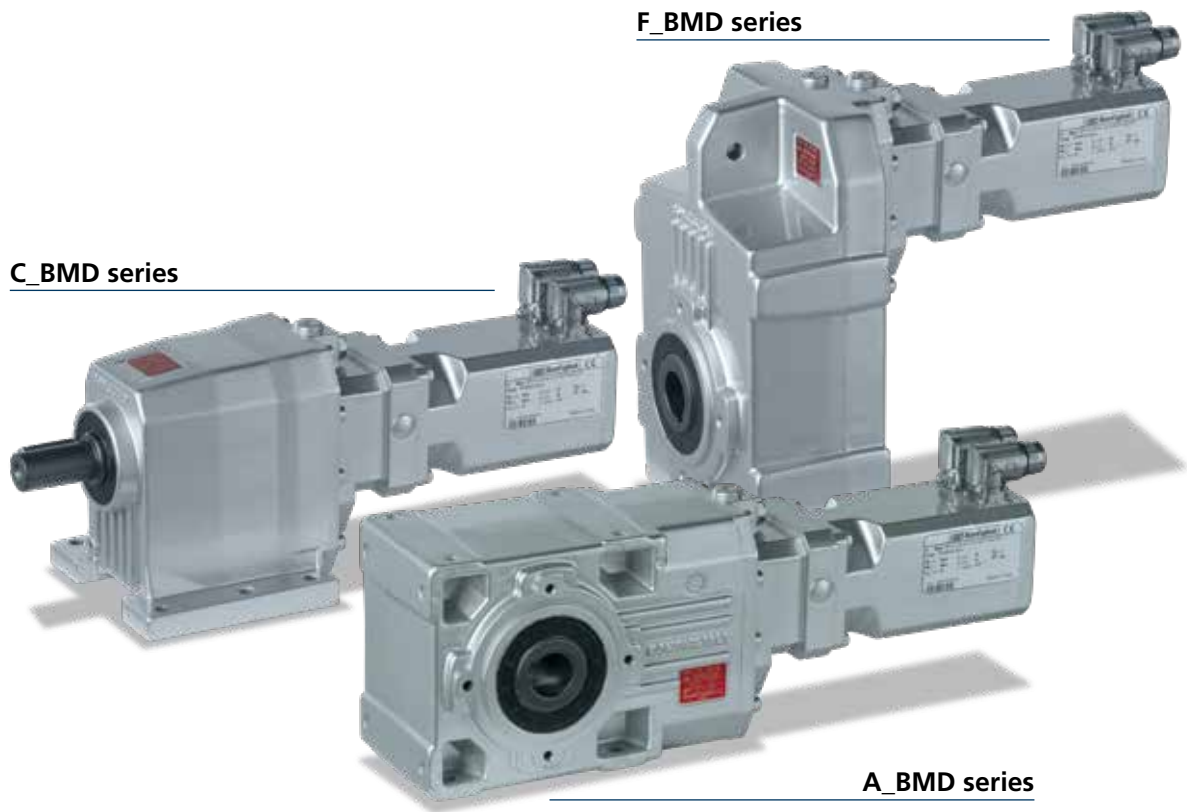
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New combination of gearboxes for dynamic acceleration and more precise performance.



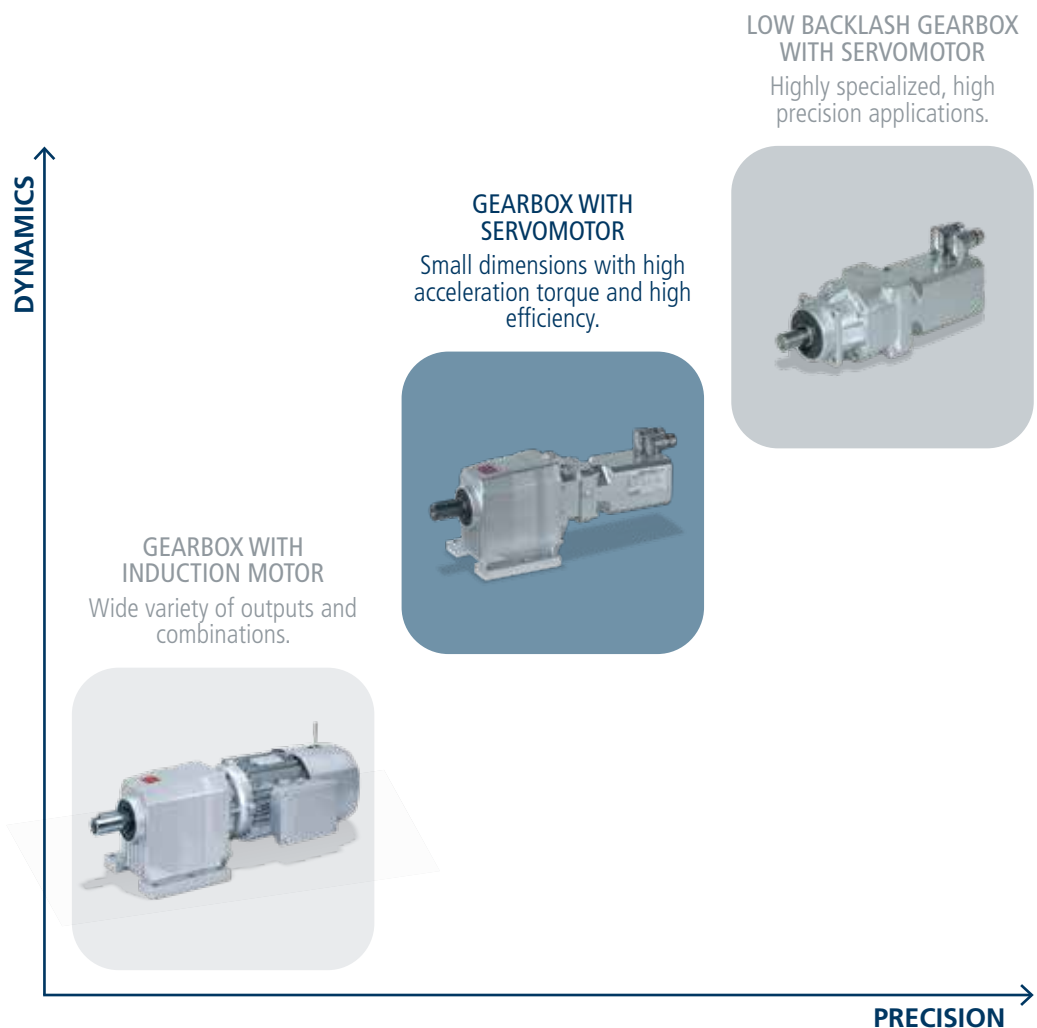
A new generation of gearmotors

Bonfiglioli's impressive offering of industrial gearmotors reaches new heights of excellence when combined with BMD permanent magnet synchronous motors.

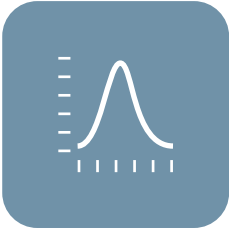
The range and modularity of the A-C-F platform, which includes Bonfiglioli's famous bevel-helical, parallel shaft and shaft-mounted units, have been extended by the synergy with next generation servomotors designed and developed entirely by Bonfiglioli's own mechatronic division.

The result is a perfectly balanced power transmission system with far better dynamic performance, efficiency and precision than could ever be achieved using conventional induction motors.

Superior performance and an extended torque range make this new combination of gearboxes and motors both a premium alternative to conventional gearmotors and a logical extension to Bonfiglioli's existing range of low backlash gearboxes.



Benefits



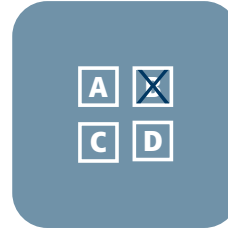
Servomotors with high **accelerating torque** combined with robustly designed industrial gearboxes guarantee improved productivity in applications involving cyclical movements, and drastically reduce cycle times too.



And if **precision** is a requirement, gearboxes are also available in low backlash versions to make full use of the positioning accuracy provided by the servomotors.



Thanks to the **high power density** of the synchronous motors, this new generation of gearmotor is ideal for applications where limited space is available for the drive system.



A **wide range of construction types and mountings** allows customers to choose the most suitable configuration for their application.



These new concept gearmotors also benefit from a combination that offers **high efficiency** in excess of class IE3.

OVERVIEW

Extended range and close progression of torque ratings

Extended range and close progression of reduction ratios

Optional low backlash version available

High efficiency drive line

Large number of conventional gearbox versions and options

Quick and easy connection of the motor

Perfect solution for significant dynamics, cyclical applications

Typical applications



ROTARY TABLE SOLUTIONS



MATERIAL HANDLING SOLUTIONS



ROTARY MACHINE SOLUTIONS



PACKAGING SOLUTIONS



PHOTOVOLTAIC PANEL SOLUTIONS



PICK AND PLACE SOLUTIONS

Range

	A_BMD	C_BMD	F_BMD
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Sizes	9	8	7
Number of stages	2, 3, 4	2, 3, 4	2, 3, 4
Accelerating torque range (Nm)	110-2800	45-1600	140-2900
Output speed range (rpm)	1.9-571	1.6-1077	0.9-437
Reduction ratio range	4.9-793	2.6-885	6.4-1539
Motor efficiency class	Comparable to IE4	Comparable to IE4	Comparable to IE4
Low backlash values	4-12	7-13	-

VERSIONS

Provisions for servomotor	Input with keyway Input with clamping device		
Provisions for output	<ul style="list-style-type: none"> Hollow shaft with keyway Solid single sided shaft Solid through shaft Hollow shaft with shrink disc Hollow shaft with splines (DIN 5480) Hollow shaft with adapter bushes and shrink disc 	<ul style="list-style-type: none"> Casing with integral feet Casing with integral flange UNIBOX universal casing UNIBOX casing with machined flange 	<ul style="list-style-type: none"> Hollow shaft with keyway Hollow shaft with shrink disc Solid single sided shaft Hollow shaft with adapter bushes and shrink disc
Surface protection	C3, C4		
Seals	Fluoroelastomer seals		

Combination and performance examples



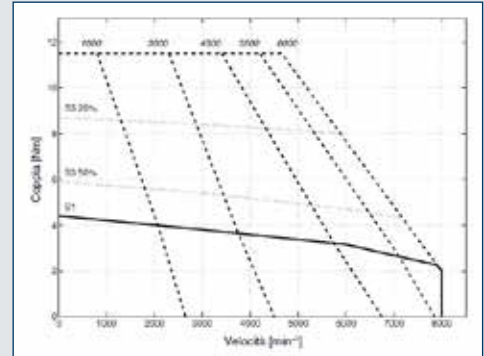
CONFIGURATION 1

A 10 2 stages (ratio $i \sim 20$) flange SK95B +
BMD 82 4.4 3000 rpm 400 115 19

Potential application:

Duty S3 20%
 Resisting torque (load) $M_2 \sim 100\text{Nm}$
 Output speed $n^2 \sim 150\text{rpm}$

MOTOR LOAD CURVE



Gearmotor performance:

Efficiency in nominal service: >IE3
 Inertia: $4.7 \times 10^{-4} \text{kgm}^2$
 Accelerating torque: 171 Nm



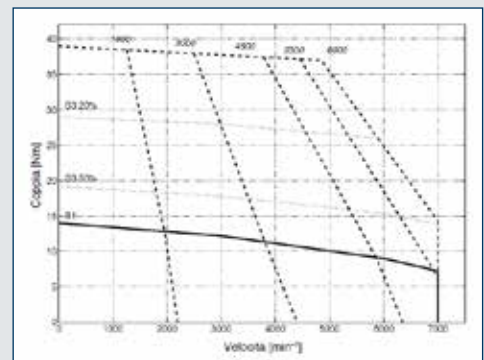
CONFIGURATION 2

F 31 2 stages (ratio $i \sim 20$) flange SK110B +
BMD 118 14 3000 rpm 400 130 24

Potential application:

Duty S3 20%
 Resisting torque (load) $M_2 \sim 300\text{Nm}$
 Output speed $n^2 \sim 150\text{rpm}$

MOTOR LOAD CURVE



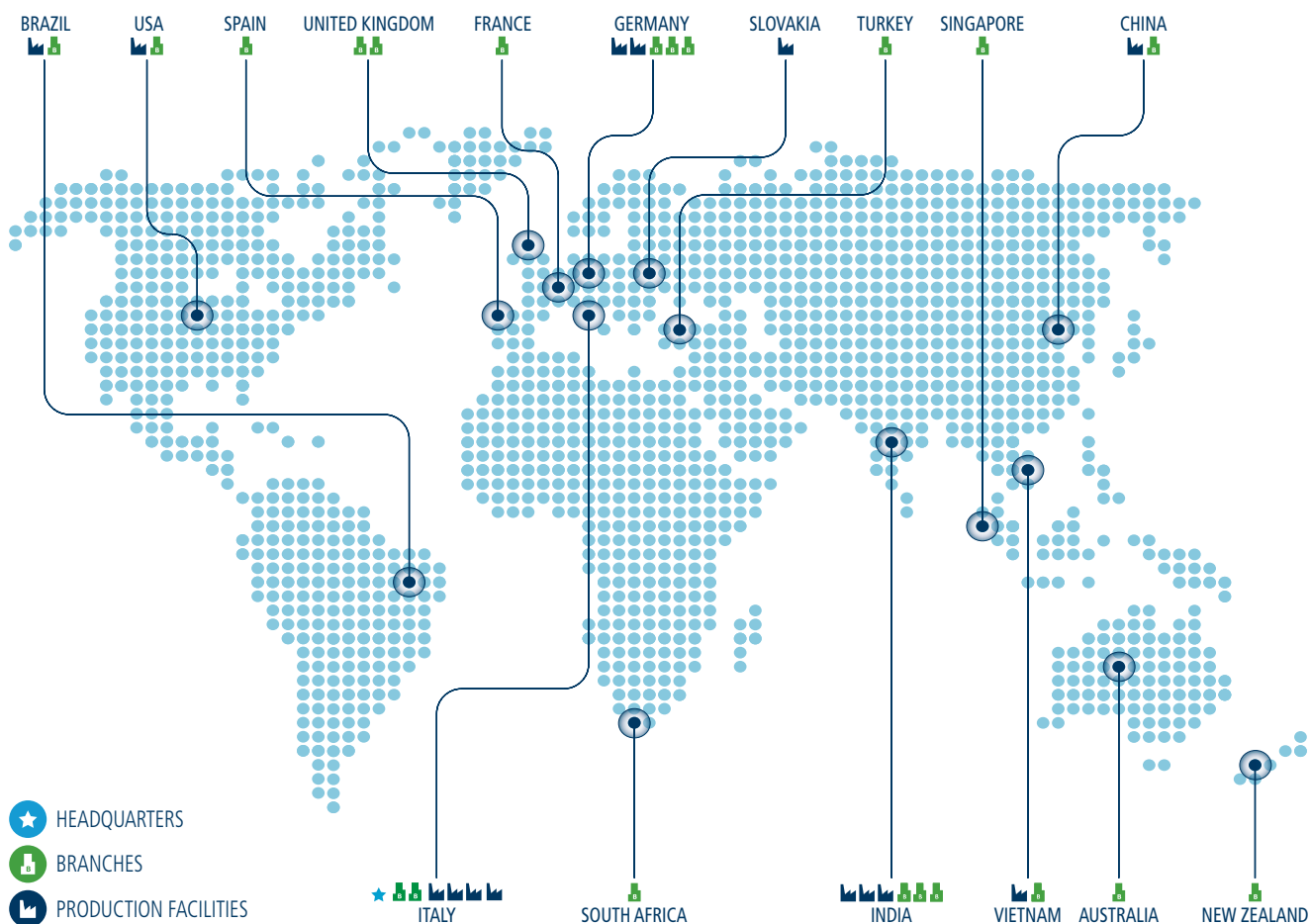
Gearmotor performance:

Efficiency in nominal service: >IE3
 Inertia: $13.6 \times 10^{-4} \text{kgm}^2$
 Accelerating torque: 562 Nm

Bonfiglioli worldwide presence

Bonfiglioli is located in regions and countries around the world that enable us to provide faster sales and service to customers.

We are around the world, and around the corner.



LOCAL SUPPORT
Sales, Customer Service,
Warranty, Tech support,
Spare parts



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IN 15 COUNTRIES**



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We have a relentless commitment to excellence, innovation and sustainability. Our team creates, distributes and services world-class power transmission and drive solutions to keep the world in motion.



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