

BE UP TO GLOBAL STANDARD

GTR gearmotors contribute to customers around the globe.
We support “global demands” that will expand in the future.



BROTHER INDUSTRIES (U.S.A.) INC.
Brother Group's manufacturing subsidiary in the U.S.A.



BROTHER INTERNATIONAL CORPORATION (U.S.A.)
Brother Group's sales subsidiary in the U.S.A.



Nissei Gear Motor Mfg. (Changzhou) Co., Ltd.
(manufacturing subsidiary in China)



NISSEI TRADING (SHANGHAI) CO., Ltd
(sales subsidiary in China)



BROTHER INTERNATIONAL KOREA CO., LTD.
Brother Group's sales subsidiary in South Korea



NISSEI CORPORATION
Headquarters and Main Plant

NISSEI CORPORATION

Company Overview

Trade name	NISSEI CORPORATION
Capital	3.475 billion yen
Location of headquarters	Anjo City, Aichi Prefecture
Plants	Main plant, Anjo Minami Plants, Gearmotors No.2 Plant
Description of business	Reducers, variable speed reducers, small gears (made-to-order gears), etc.

Sales and Marketing Management

Overseas Sales Sect.
1-1, Inoue, Izumi-cho, Anjo City, Aichi Prefecture
TEL: <0566>92-5312
FAX: <0566>92-7002
E-mail: oversea@nissei-gtr.co.jp

<https://www.nissei-gtr.global/en/>

NISSEI CORPORATION website
For introduciton website of NISSEI CORPORATION



High Stiffness Reducers
For introduciton website of High Stiffness Reducers



Selection Tool
For product search or CAD data download



Digital catalog
For browsing the comprehensive catalog of gearmotors



If you have any problems, or need any further information, please visit the NISSEI CORPORATION website.

NISSEI CORPORATION



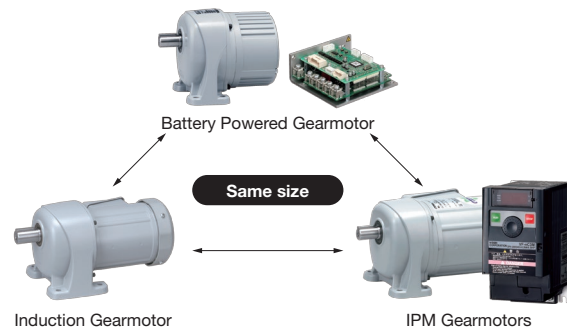
DIGEST CATALOG





Mounting dimensions that have remained unchanged since release

Since the mounting dimensions have not changed since the product was released, there is no need to modify the equipment drawings even after the renewal. In addition, it can be easily replaced even in the event of a failure, and can be installed in to a different categories such as induction gearmotor can be changed to battery powered gearmotor.



GTR Lineup

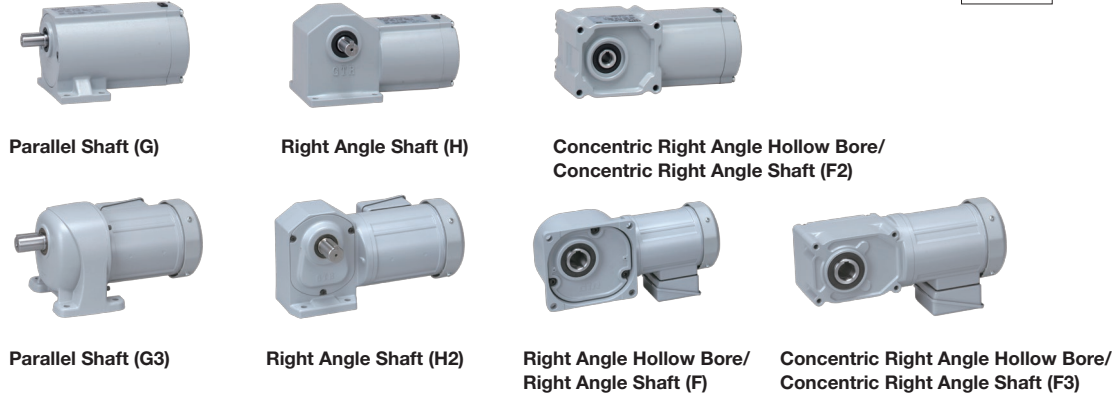
Induction Gearmotors

Motor Power	15 W to 90 W
Reduction Ratio	1/5 to 1/1800

RoHS

Motor Power	0.1 kW to 2.2 kW
Reduction Ratio	1/5 to 1/1500

RoHS



IPM Gearmotors

Motor Power	0.1 kW to 2.2 kW
Reduction Ratio	1/5 to 1/1500

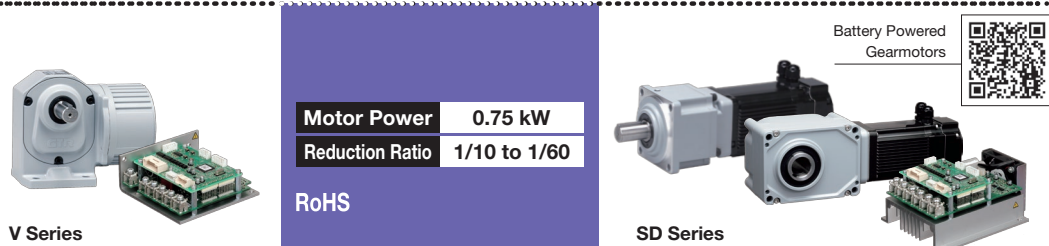
RoHS (Speed Control Type)



Battery Powered Gearmotors

Motor Power	50 W to 0.4 kW
Reduction Ratio	1/5 to 1/240

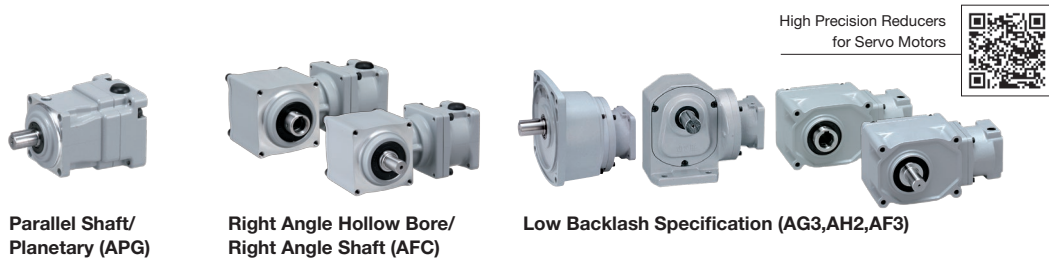
RoHS



High Precision Reducers for Servo Motors

Motor Power	100 W to 3000 W
Reduction Ratio	1/3 to 1/240

RoHS



KOMPASS Bevel Gearbox

Output Shaft Diameter	Ø10 to Ø40
Reduction Ratio	1/1, 1/2

RoHS



High Stiffness Reducers

In multiple ways, High accuracy drive.

The High Stiffness Reducer has functionality which can meet the needs for increased productivity as well provides efficiency from every angle. For Fast and Powerful industrial robots or FA products. Large hollow shaft enables great freedom in product design and composition. We will provide greater performance than ever in various applications with High Stiffness Reducer.

High Stiffness Reducers



High Stiffness Reducers Lineup

High Stiffness Reducers

OD	73, 79, 93mm
Reduction Ratio	1/19 to 1/119

Solid Type (DGS)



OD	71, 81, 95, 110, 142mm
Reduction Ratio	1/19 to 1/59

Large Hollow Shaft Type (DGH)



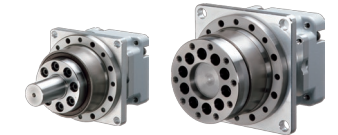
OD	71.5, 81.5, 91.5mm
Reduction Ratio	1/50, 1/100

Flat, lightweight Type (DGF)

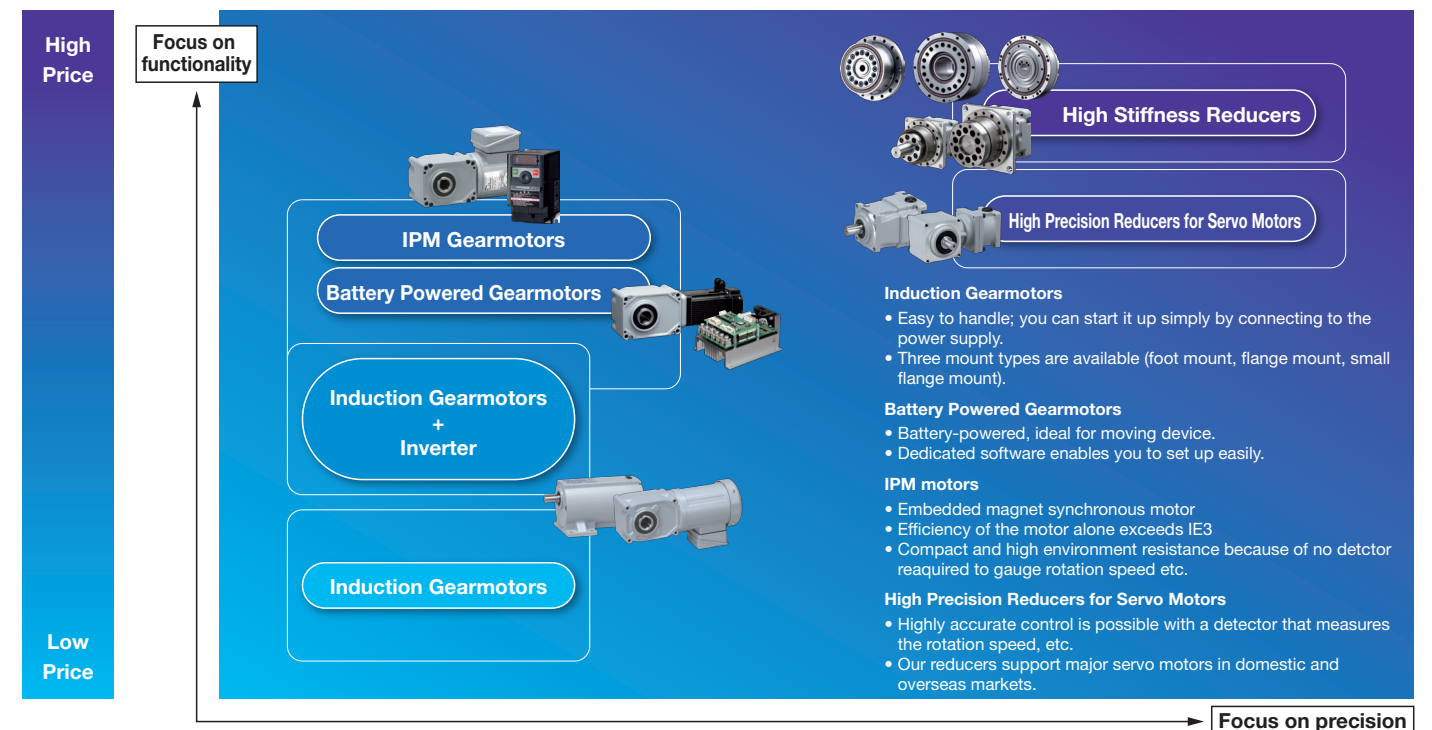


Motor Power	100 W to 750 W
Reduction Ratio	1/19 to 1/119

Gear Head Type



Product System Diagram



High Stiffness Reducers

Best fit for wide variety of use

Choose optimum size from three types, DGS type, DGH type and DGF type, for robots, FA equipment, and other various applications. Outstanding scalability meet customer's needs with high performance.



High Stiffness Reducers TOP



Model configuration table

Type	Frame Size	Reduction Ratio
High torque and wide range of reduction ratios	DGS	010 — 1/19, 1/29, 1/49, 1/79, 1/99
		030 — 1/19, 1/29, 1/49, 1/79, 1/99, 1/119
		050 — 1/19, 1/29, 1/49, 1/79, 1/99, 1/119
Easily couples with motors	Gear Head	
Large Hollow Shaft with High Stiffness and High Torque	DGH	010 — 1/19, 1/29, 1/59
		030 — 1/19, 1/29, 1/59
		040 — 1/19, 1/29, 1/59
		080 — 1/19, 1/29, 1/59
		150 — 1/19, 1/29, 1/59
Flat and lightweight with input bearing inside	DGF	005 — 1/50, 1/100
		020 — 1/50, 1/100
		030 — 1/50, 1/100



Powerful drive, High resistance against loads and impacts. Large hollow bore shaft is able to contain a thick cable.



The relationship between the three types

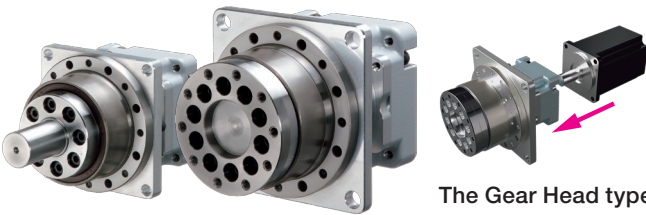
1. High Stiffness & High Torque
2. Input bearing inside Compact
3. Low reduction
4. Hollow diameter



The planetary gear is inside the cross roller bearing, enabling thinness and lightweight. It will give you greater freedom on equipment design.

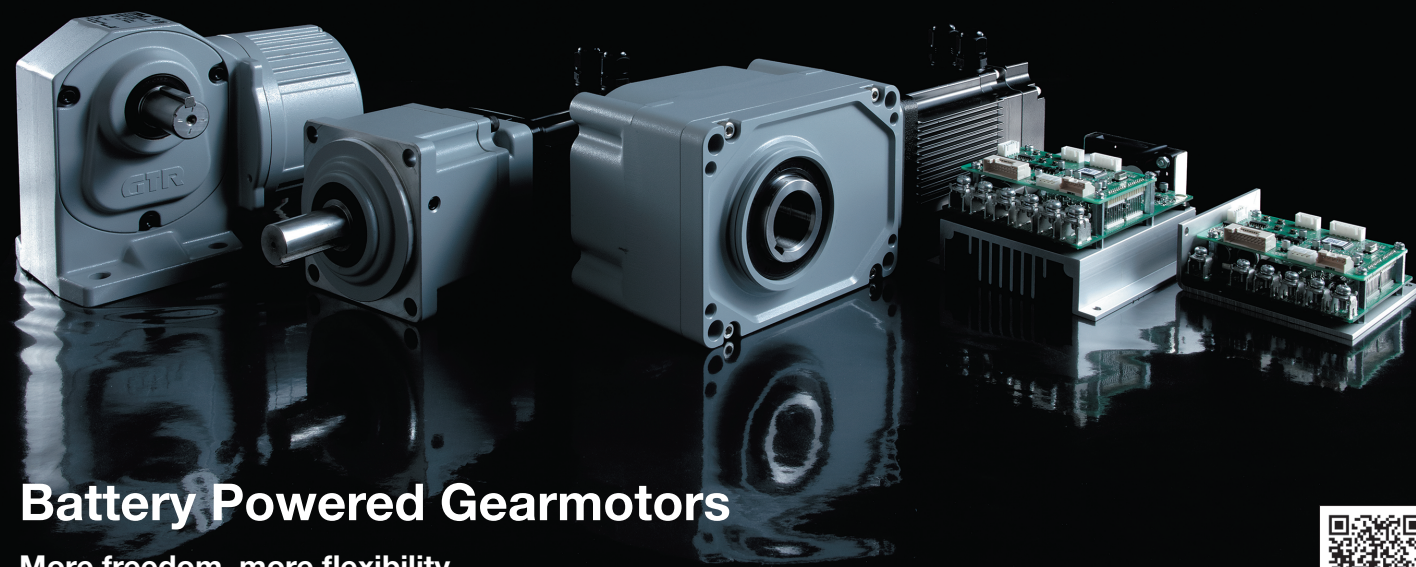


High torque, a wide range of reduction ratios, and high stiffness for resistance to impacts. A compact and flexible design is possible.



Gear Head

The Gear Head type can be easily coupled with the servo motors of other companies.

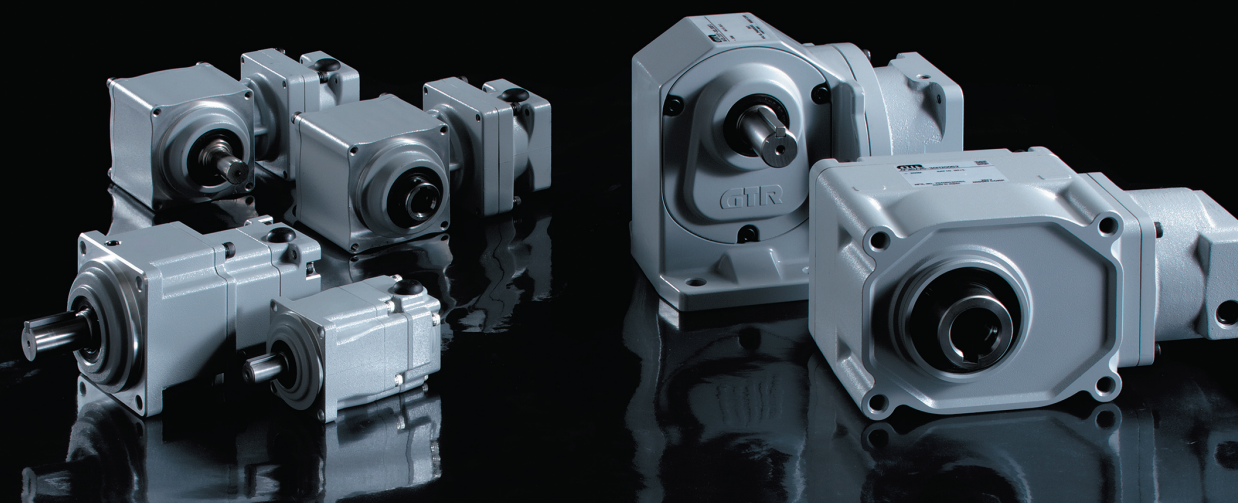


Battery Powered Gearmotors

More freedom, more flexibility
AGV / AMR development



Encoder-mounted



High Precision Reducers for Servo Motors

Reducers that pursue the excellence in compact size and high precision.
Meet variety of application demand by providing a wide range of products line-up.



High Precision Reducers
for Servo Motors

Waterproof, vibration resistant, ideal
for outdoor advanced operation.

IP65 class waterproofing and 2G
vibration resistance drastically
improve AGV operation outdoors.
This allows for stable operation on
asphalt, over bumps, and on wet
roads in the rain, for speedy
transport even across spacious
factory sites.



Capacity	V type		SD type	
	12 VDC	Voltage 24 VDC	48 VDC	
50 W	Parallel shaft			
70 W		For AMR		
0.1 kW	Parallel shaft/Right angle shaft Concentric hollow shaft/ Concentric solid shaft			
0.2 kW				
0.4 kW				
0.75 kW				Parallel shaft/Right angle shaft

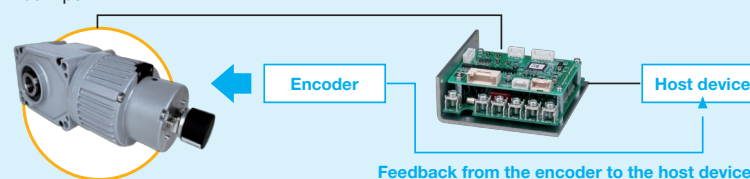
*Please contact us separately for detailed specifications of Gearmotors for AMR.

Encoder-mounted battery-powered gearmotor that enables more accurate feedback control.

For the encoder-mounted option, an encoder will be attached to the gearmotor before shipment. Please select the encoder according to the device to which the encoder signal will be input.

Configuration example 1

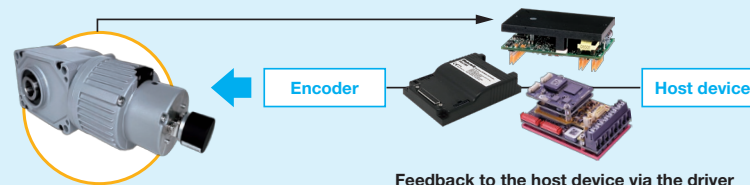
Encoder-mounted
battery-powered gearmotor
+
Dedicated driver



Simple positioning (adjustment,
etc.) can be done by feeding back
the encoder signal to the host
device.

Configuration example 2

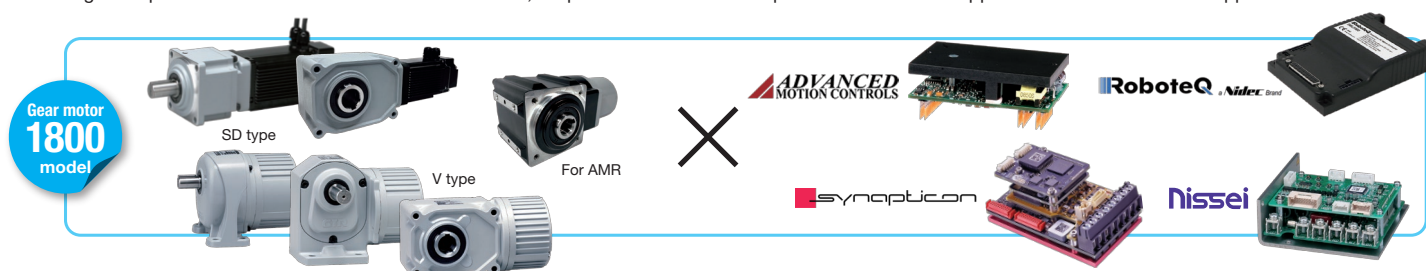
Encoder-mounted
battery-powered gearmotor
+
Third-party drivers and
Customer-made drivers



Improves the speed controllability
(stability at low-speed and uneven
rotation) by feeding back the
encoder signal to the driver. It can
also provide position control
depending on the selected driver.

Perfect collaboration with our gearmotors and drivers made by other companies.

Through tie-ups with driver manufacturers and distributors, we provide the best driver options and technical support documents for various applications.



High Precision Reducers for Servo Motors that has accomplish compactness

The high precision reducer APG type
is compact and highly rigid due to the
adoption of a planetary mechanism,
which contributes to downsizing
devices. Moreover, the AFC Type
features compactness thanks to a
specially designed gear case. The
reducer can be mounted
perpendicularly to the device it saves
space on the equipment.

Power: 100 W to 3000 W

APG Parallel Shaft Reduction ratio: 1/3 to 1/100
Backlash: 3 arc min, 15 arc min

AFC Right Angle Shaft Reduction ratio: 1/3 to 1/60
Backlash: 3 arc min, 30 arc min

The gearhead has the same shape as the Induction Gearmotor

Since the induction gearmotor and
gearhead are common, no extra
design changes are required while
changing specifications.

In addition, the concentric hollow
shaft/concentric right angle shaft
(AF3) is available with backlash
accuracy of 1 arc min and 3 arc min.
Enables highly accurate positioning
control.

Power: 100 W to 2000 W

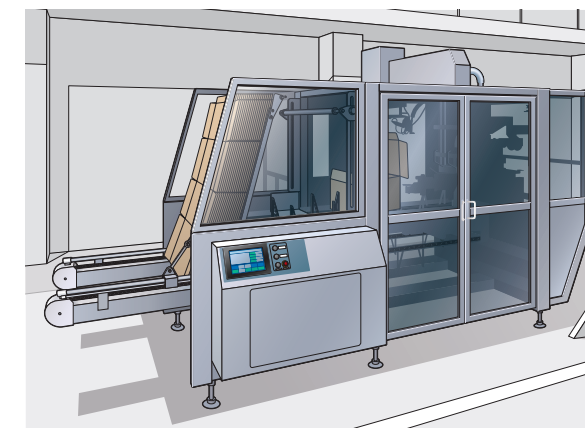
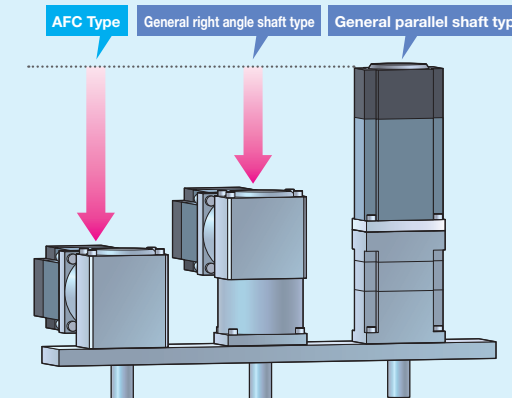
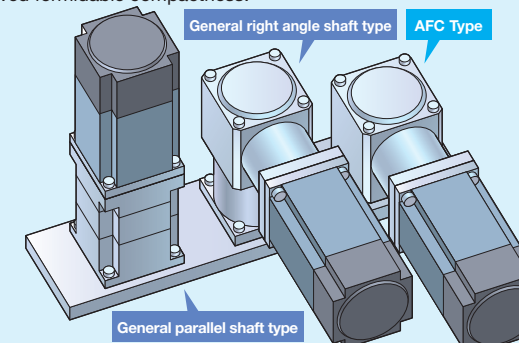
AG3 Parallel Shaft Reduction ratio: 1/5 to 1/200
Backlash: 30 arc min

AH2 Right Angle Shaft Reduction ratio: 1/5 to 1/240
Backlash: 30 arc min

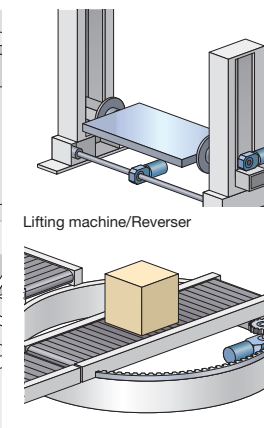
AF3 Concentric Right Angle Hollow Shaft
Concentric Right Angle Shaft Reduction ratio:
1/10 to 1/180, 1/5 to 1/240
Backlash:
1 arc min, 3 arc min, 30 arc min

Shape in pursuit of compactness

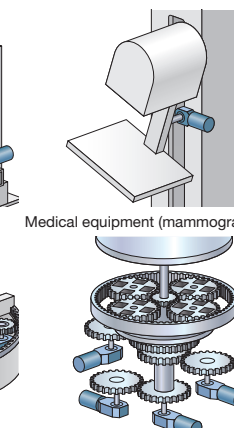
Compared to reducers made by other companies,
we have achieved formidable compactness.



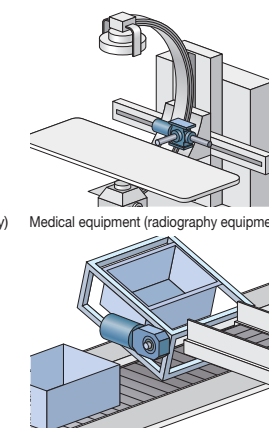
Wrap round caser



Rotary driver



Grinder



Reverse mechanism