



S series — Basic Line Gearboxes



SPL



SPLF



SPLN



SPLS



SPH



SVL



SVX

K Series — Valued Line Gearboxes



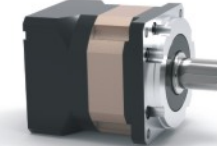
KPE



KPLF



KPLN



KPX



KVE



KVX

KGV Solutions — KGV Wheel



KGV-W

K series — Advanced Line Gearboxes



KPE-B



KPLF-B



KPX-B



KPG



KPH



KVE-B



KVX-B



KVG



KVH

KT series — Precision Spiral Bevel Gearbox



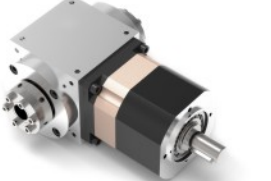
KTL



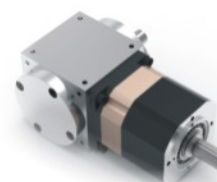
KTL1



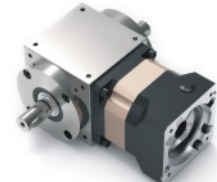
KTH



KTC



KTR1



KTFL



KTFL1



KTFH



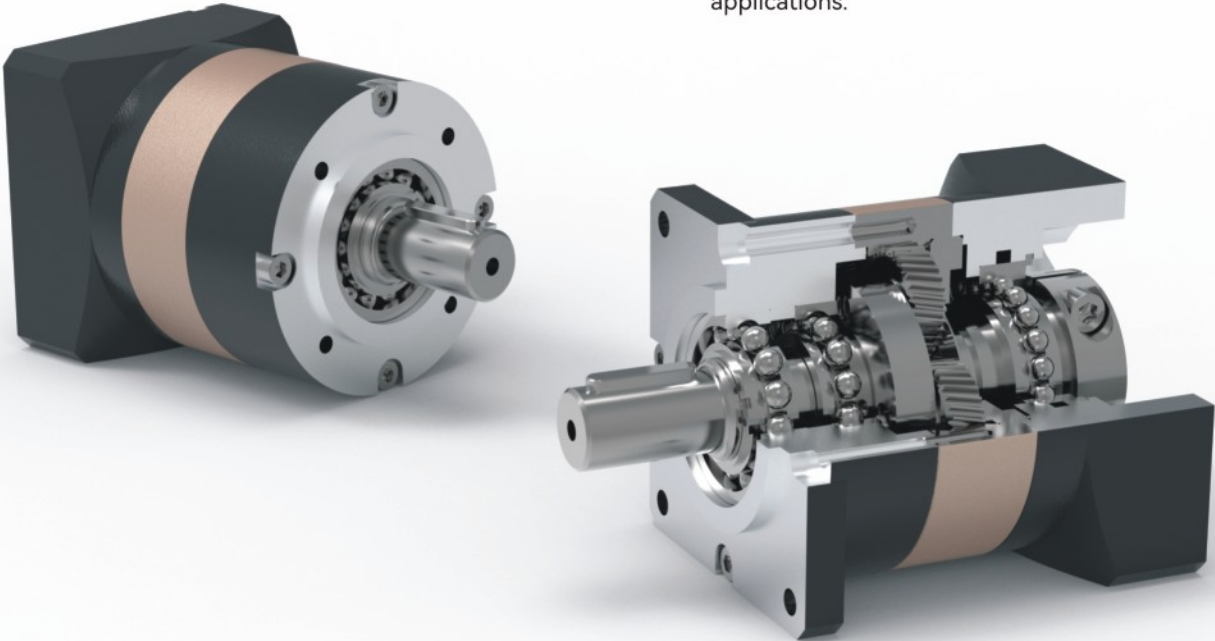
KTFC



KTFR1

SPL+SPLF

As our mostly cost-effective servo gearbox family, the **SPL** and **SPLF** are powered by the helical gearing system and high precision gear tooling. The **SPL** and **SPLF** are the great servo gearbox solutions for the standard precision motion related manufacturing applications.



Nominal Output Torque	12-1850 Nm
Radial Force	385-14000 N
Axial Force	250-7800 N
Torsional Backlash	8-17 arcmin
Protection Class	IP65
Ratio	3-512

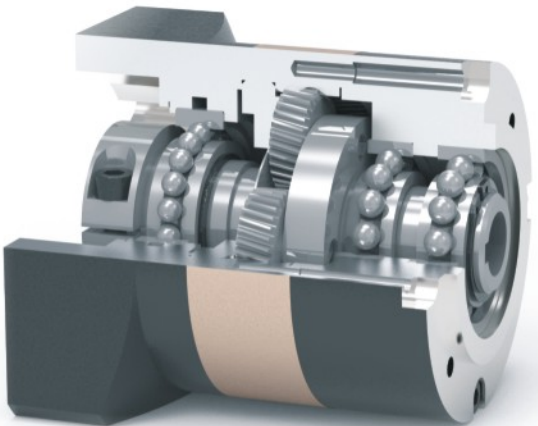
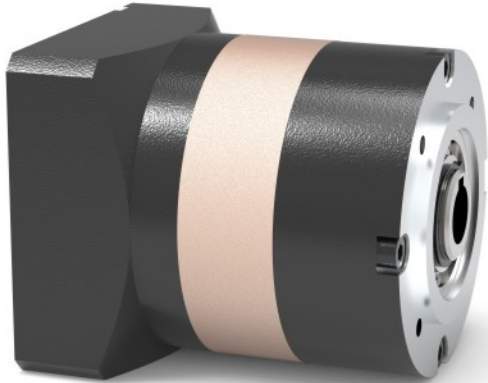
Frame Sizes

40	60	70	80	90
120	160	205	235	

-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  The Powerful Cantilever Planetary Carrier
-  Dynamic Balance Clamping and Sealing System

SPLN

The **SPLN** provides the flexible output hollow shaft options, while keep great helical gearing technology. The **SPLN** is the suitable gearbox solution when the customized connections requested in precision motion related manufacturing applications.



Nominal Output Torque	32-1000 Nm
Radial Force	550-12000 N
Axial Force	375-6800 N
Torsional Backlash	8-12 arcmin
Protection Class	IP65
Ratio	3-512

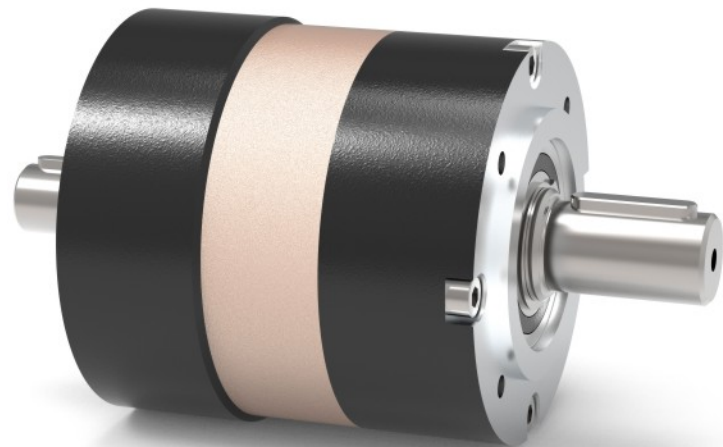
Frame Sizes

70	90	120	160	205
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-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  The Powerful Cantilever Planetary Carrier
-  Dynamic Balance Clamping and Sealing System

SPLS

The **SPLS** provides the option of double solid shafts, while keeps great helical gearing technology. The **SPLS** is the suitable gearbox solution when the customized connections requested in precision motion related manufacturing applications.



Nominal Output Torque	32-1000 Nm
Radial Force	550-12000 N
Axial Force	375-6800 N
Torsional Backlash	8-12 arcmin
Protection Class	IP65
Ratio	3-512

Frame Sizes

- 70
- 90
- 120
- 160
- 205



Helical Gear System



Low-friction Deep Groove Ball Bearings



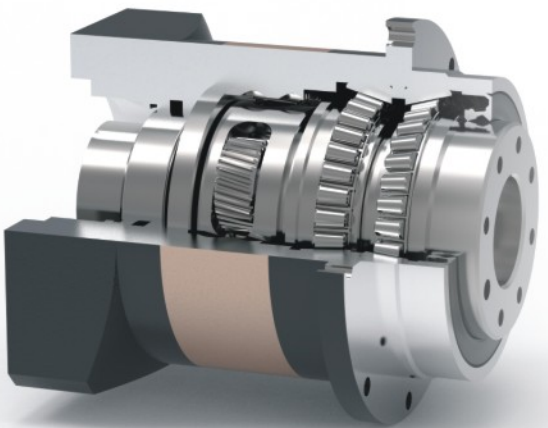
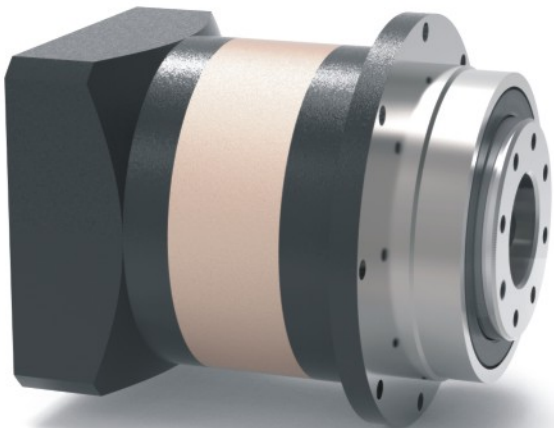
The Powerful Cantilever Planetary Carrier



Dynamic Balance Clamping and Sealing System

SPH

The **SPH** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier, super taper roller bearings. It provides high performance for radial force, axial force and precision with disc output connection option. The **SPH** is the powerful servo gearbox solutions for the precision motion applications.



Nominal Output Torque	32-1000 Nm
Radial Force	2000-16000 N
Axial Force	1600-13000 N
Torsional Backlash	8-12 arcmin
Protection Class	IP65
Ratio	3-512

Frame Sizes

- 70
- 90
- 120
- 160
- 205



Helical Gear System



Preloaded Tapered Roller Bearings



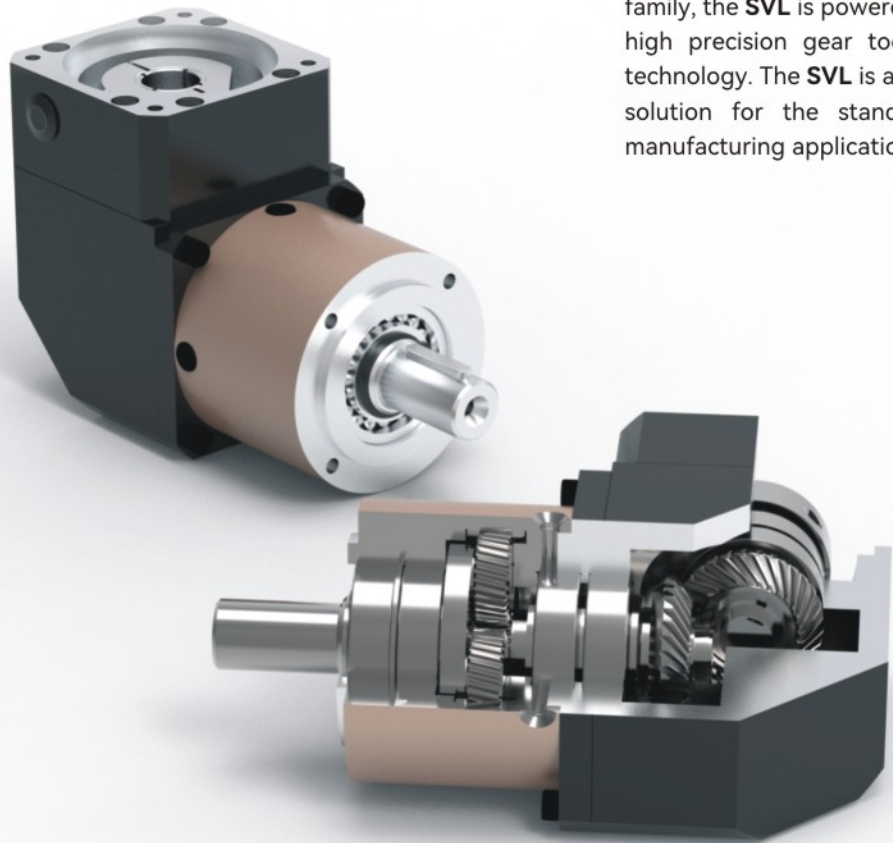
Master Cagespindle Planetarycarrier



Dynamic Balance Clamping and Sealing System

SVL

As our mostly cost-effective right angle servo gearbox family, the **SVL** is powered by the helical gearing system, high precision gear tooling and bevel gear grinding technology. The **SVL** is a great right angle servo gearbox solution for the standard precision motion related manufacturing applications.



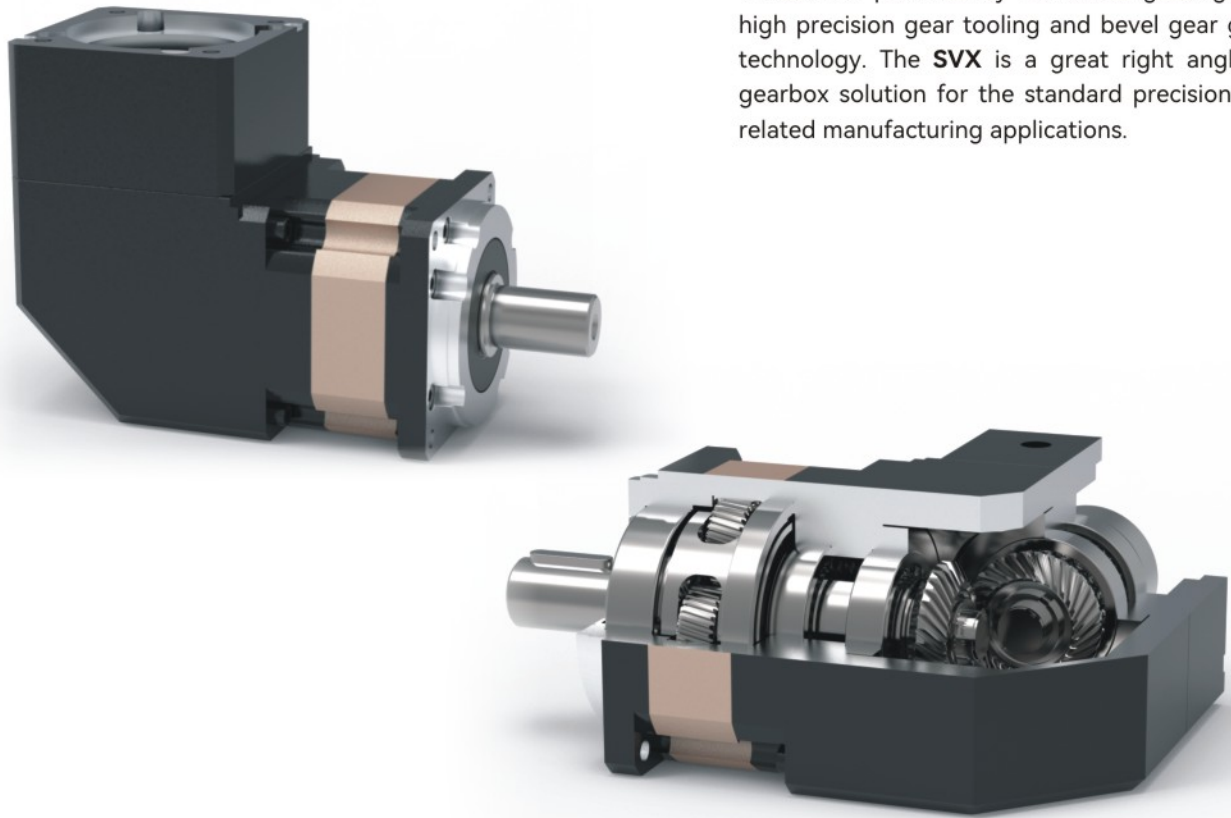
-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  The Powerful Cantilever Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

Nominal Output Torque	25-608 Nm
Radial Force	430-7300 N
Axial Force	320-6400 N
Torsional Backlash	10-15 arcmin
Protection Class	IP65
Ratio	3-512

Frame Sizes
60 80 120 160

SVX

The **SVX** is powered by the helical gearing system, high precision gear tooling and bevel gear grinding technology. The **SVX** is a great right angle servo gearbox solution for the standard precision motion related manufacturing applications.



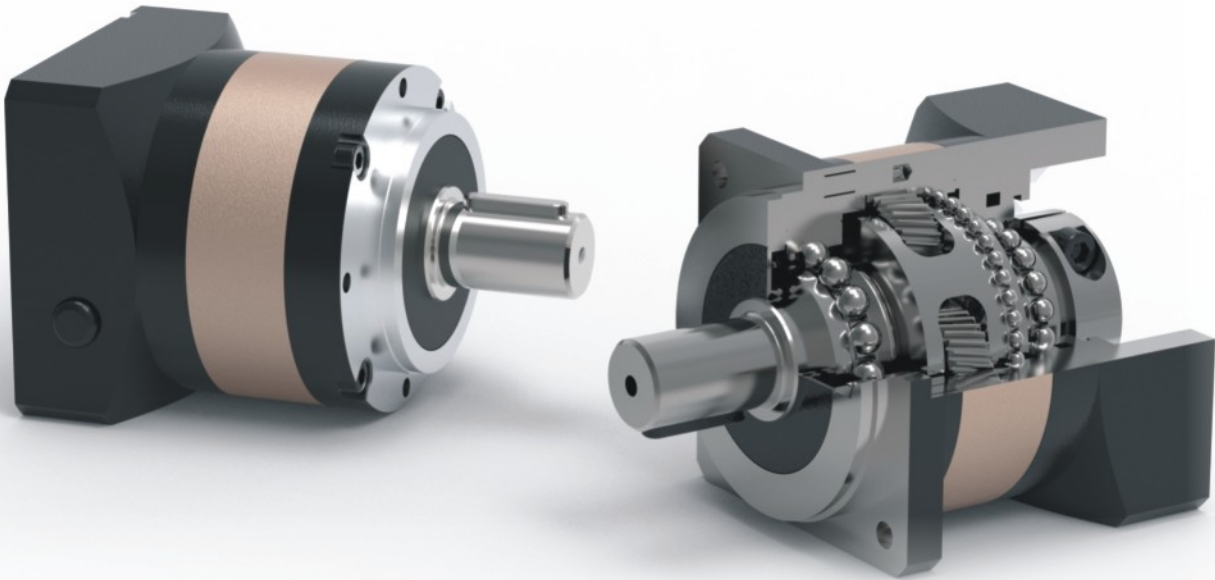
-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  The Powerful Cantilever Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

Nominal Output Torque	32-1850 Nm
Radial Force	550-14000 N
Axial Force	375-7800 N
Torsional Backlash	10-15 arcmin
Protection Class	IP65
Ratio	3-512

Frame Sizes
65 85 115 142 180 220

KPE + KPLF

As our best seller servo gearbox family, the **KPE** and **KPLF** are powerfully featured by the helical gearing system, gear grinding technology and patented Master CagedSpindle planetary carrier. The **KPE** and **KPLF** are the ideal servo gearbox solutions for the high precision motion applications.



Nominal Output Torque	14-2050 Nm
Radial Force	770-16000 N
Axial Force	380-8000 N
Torsional Backlash	6-10 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

50	70	90	120	160
205	235			



Helical Gear System



Low-friction Deep Groove Ball Bearings



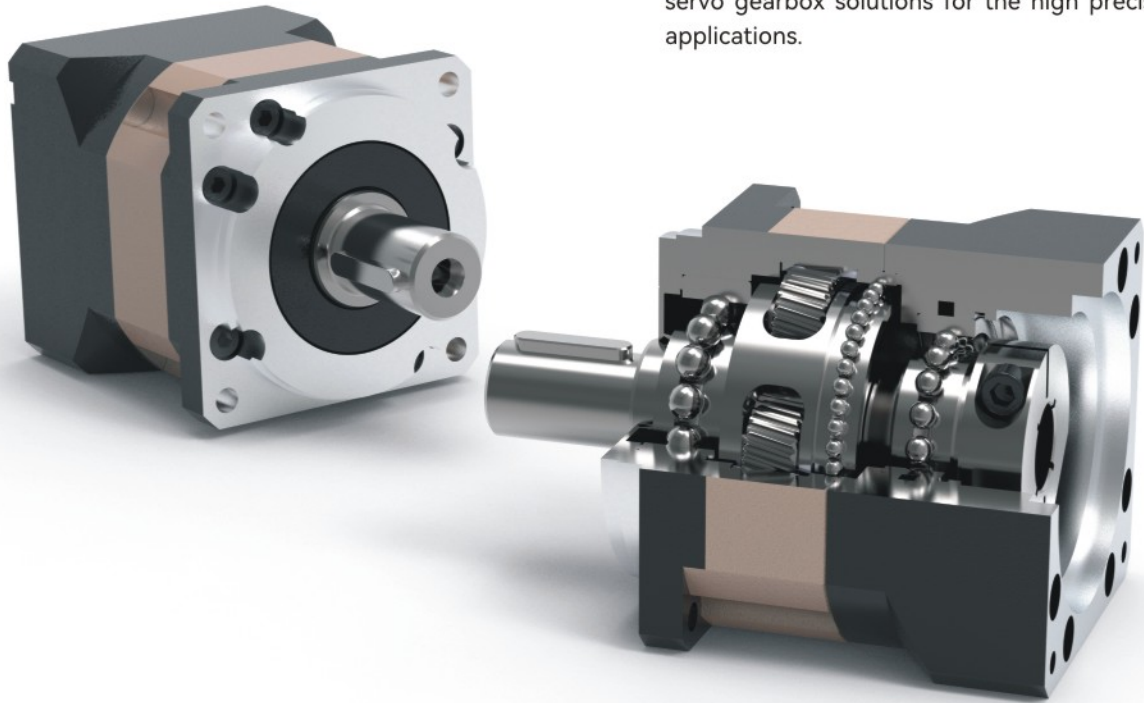
Master CagedSpindle Planetary Carrier



Dynamic Balance Clamping and Sealing System

KPX

The **KPX** is powerfully featured by the helical gearing system, gear grinding technology and patented Master CagedSpindle planetary carrier. The **KPX** is the ideal servo gearbox solutions for the high precision motion applications.



Nominal Output Torque	14-2050 Nm
Radial Force	770-16000 N
Axial Force	380-8000 N
Torsional Backlash	6-10 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

45	65	85	115	142
180	220			



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CagedSpindle Planetary Carrier



Dynamic Balance Clamping and Sealing System

KVE



As our best seller right angle servo gearbox family, the **KVE** is powerfully featured by the helical gearing system, gear grinding technology and patented Master CagedSpindle planetary carrier. The **KVE** is the ideal servo gearbox solutions for the high precision motion applications.



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master Cagespindle Planetary Carrier



Dynamic Balance Clamping and Sealing System



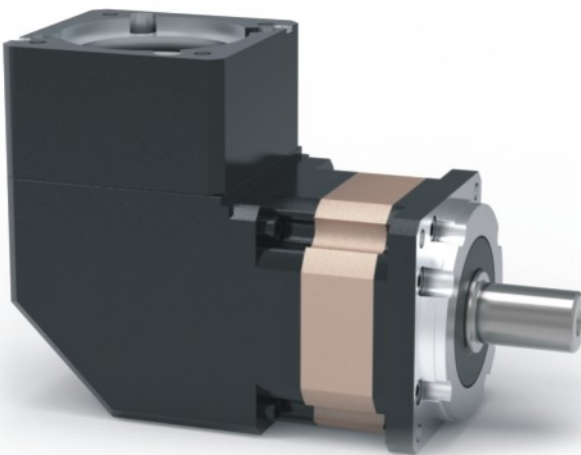
Bevel Gear Right Angle Stage

Nominal Output Torque	14-2050 Nm
Radial Force	1500-14000 N
Axial Force	760-7000 N
Torsional Backlash	6-8 arcmin
Protection Class	IP65
Ratio	3-100

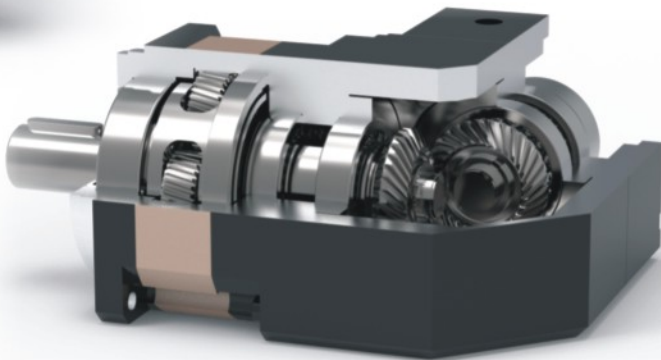
Frame Sizes

70	90	120	160	205
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KVX



The **KVX** is powerfully featured by the helical gearing system, gear grinding technology and patented Master CagedSpindle planetary carrier. The **KVX** is the ideal servo gearbox solutions for the high precision motion applications.



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CageSpindle Planetary Carrier



Dynamic Balance Clamping and Sealing system



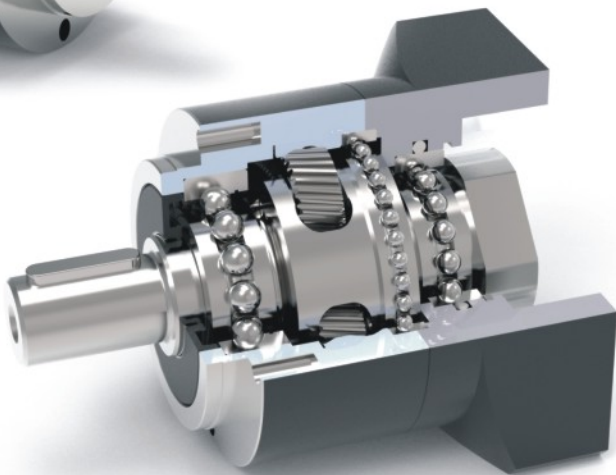
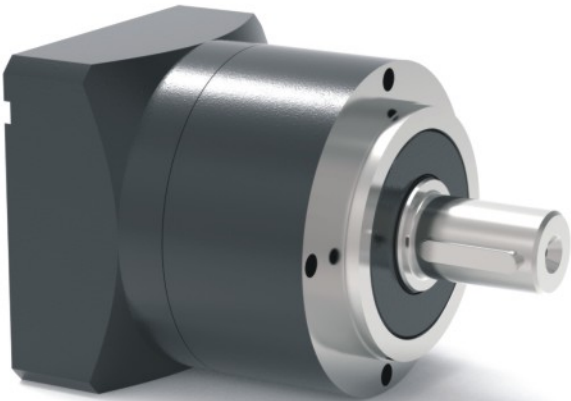
Bevel Gear Right Angle Stage

Nominal Output Torque	14-2050 Nm
Radial Force	770-16000 N
Axial Force	380-8000 N
Torsional Backlash	8-10 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

65	85	115	142	180
220				

KPE-B



The **KPE-B** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier and integrated gear housing technology. It provides high precision and ultra precision with solid output shaft connection option.



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CageSpindle Planetary Carrier



Integral Design of Gear Housing and Front Flange



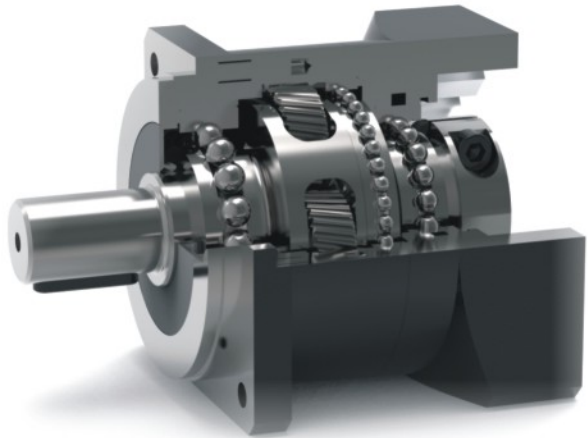
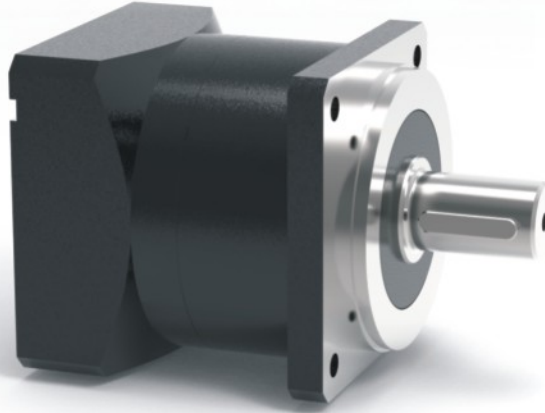
Dynamic Balance Clamping and Sealing System

Nominal Output Torque	14-2050 Nm
Radial Force	770-16000 N
Axial Force	80-8000 N
Torsional Backlash	1-8 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

50	70	90	120	160
205	235			

KPLF-B



The **KPE-B** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier and integrated gear housing technology. It provides high precision and ultra precision with solid output shaft connection option.



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CageSpindle Planetary Carrier



Integral Design of Gear Housing and Front Flange



Dynamic Balance Clamping and Sealing System

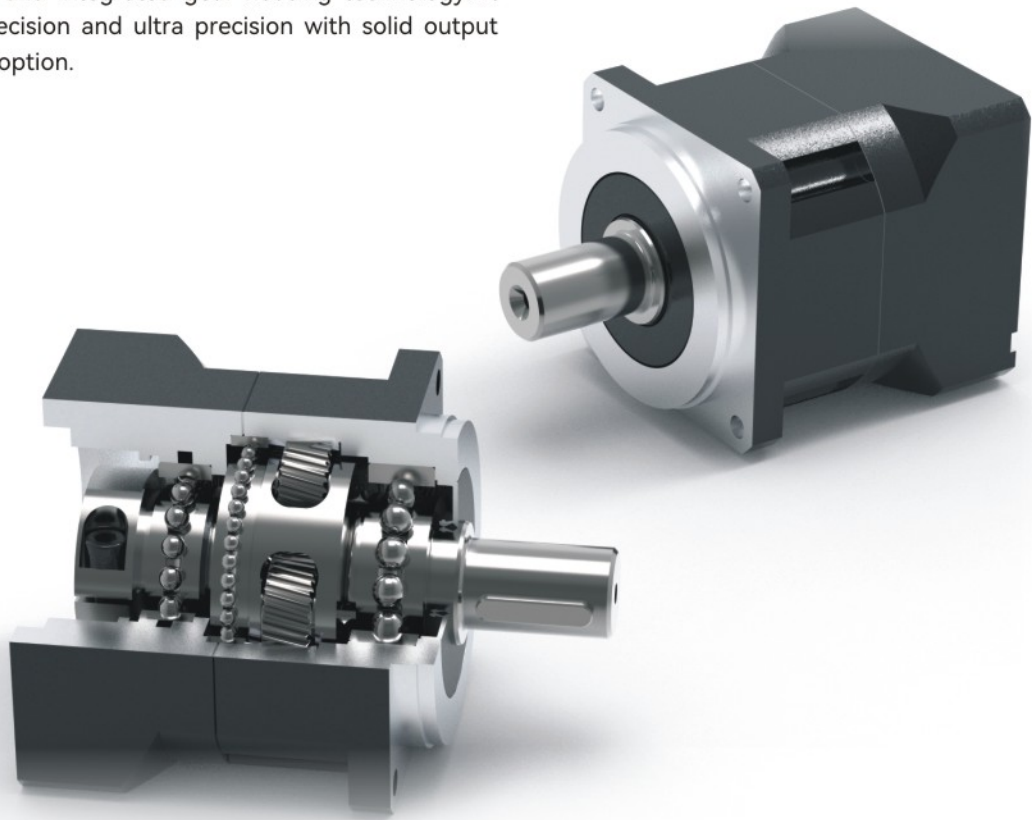
Nominal Output Torque	15-2050 Nm
Radial Force	770-16000 N
Axial Force	380-8000 N
Torsional Backlash	1-8 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

50	70	90	120	160
205	235			

KPX-B

The **KPX-B** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier and integrated gear housing technology. It provides high precision and ultra precision with solid output shaft connection option.



Nominal Output Torque	15-2050 Nm
Radial Force	770-16000 N
Axial Force	380-8000 N
Torsional Backlash	1-8 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

45	65	85	115	142
180	220			



Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CageSpindle Planetary Carrier



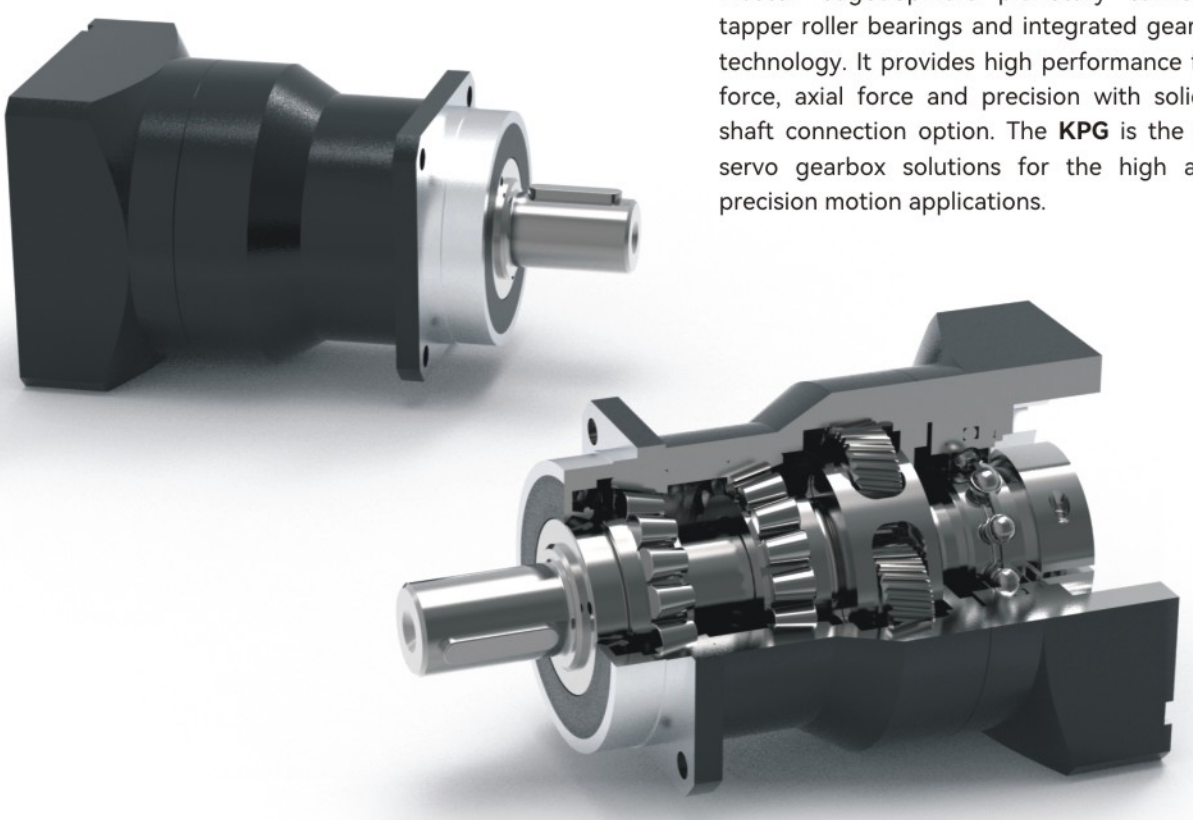
Integral Design of Gear Housing and Front Flange



Dynamic Balance Clamping and Sealing System

KPG

The **KPG** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier, super taper roller bearings and integrated gear housing technology. It provides high performance for radial force, axial force and precision with solid output shaft connection option. The **KPG** is the powerful servo gearbox solutions for the high and ultra precision motion applications.



Nominal Output Torque	42-1250 Nm
Radial Force	4300-24000 N
Axial Force	3900-22000 N
Torsional Backlash	1-7 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

70	90	120	160	205
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Helical Gear System



Low-friction Deep Groove Ball Bearings



Master CageSpindle Planetary Carrier

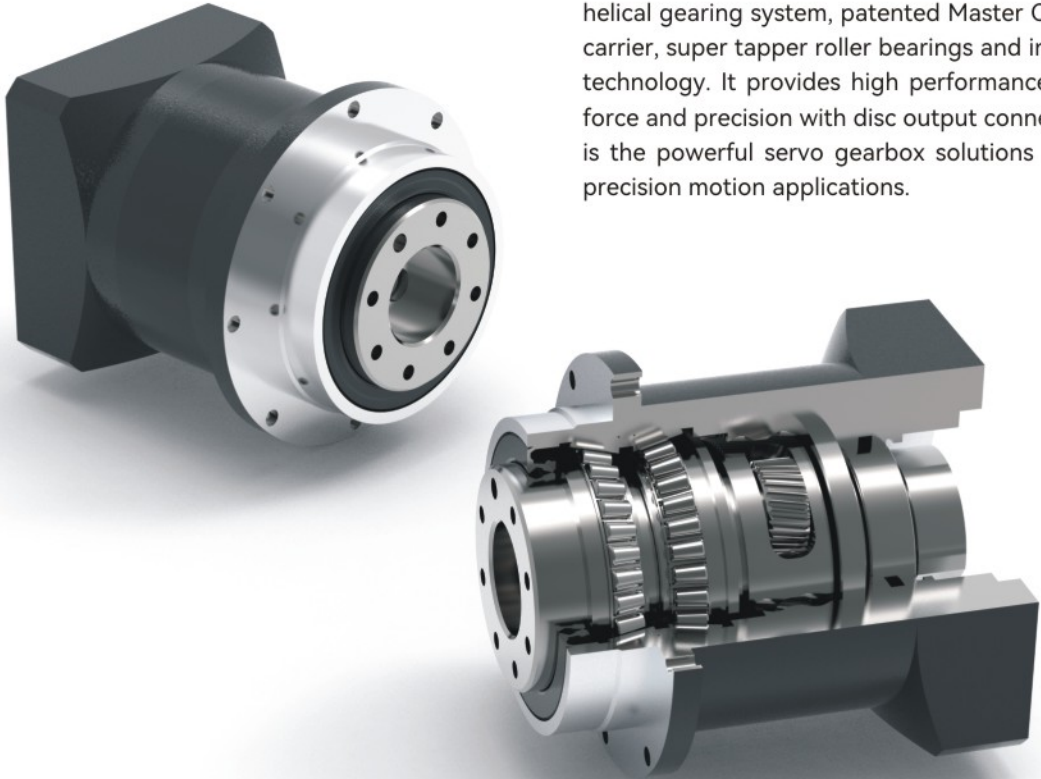


Integral Design of Gear Housing and Front Flange



Dynamic Balance Clamping and Sealing System

KPH



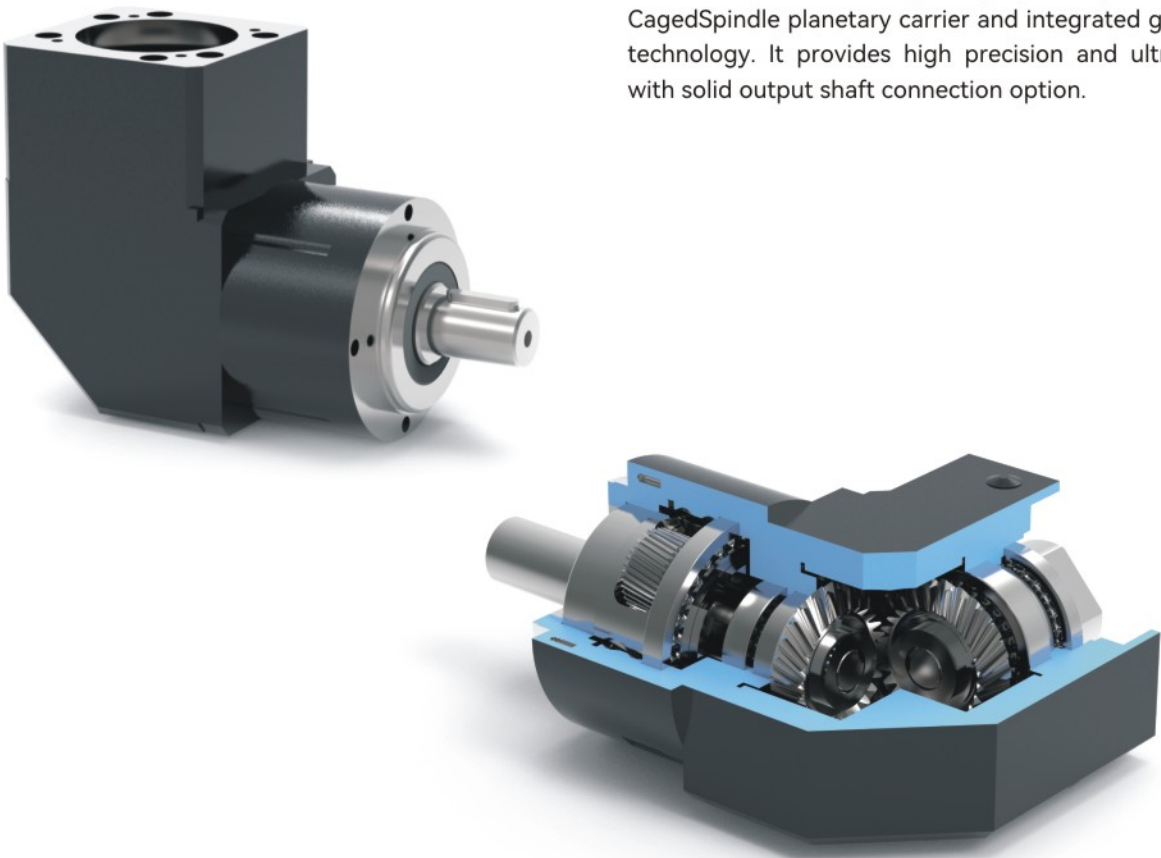
The **KPH** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier, super taper roller bearings and integrated gear housing technology. It provides high performance for radial force, axial force and precision with disc output connection option. The **KPH** is the powerful servo gearbox solutions for the high and ultra precision motion applications.

-  Helical Gear System
-  Preloaded tapered roller bearings
-  Master CageSpindle Planetary Carrier
-  Integral design of gear housing and front flange
-  Dynamic Balance Clamping and Sealing system

Nominal Output Torque	14-3050 Nm
Radial Force	700-45000 N
Axial Force	450-22500 N
Torsional Backlash	1-8 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes				
50	70	90	120	160
205	255			

KVE-B



The **KVE-B** right angle servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier and integrated gear housing technology. It provides high precision and ultra precision with solid output shaft connection option.

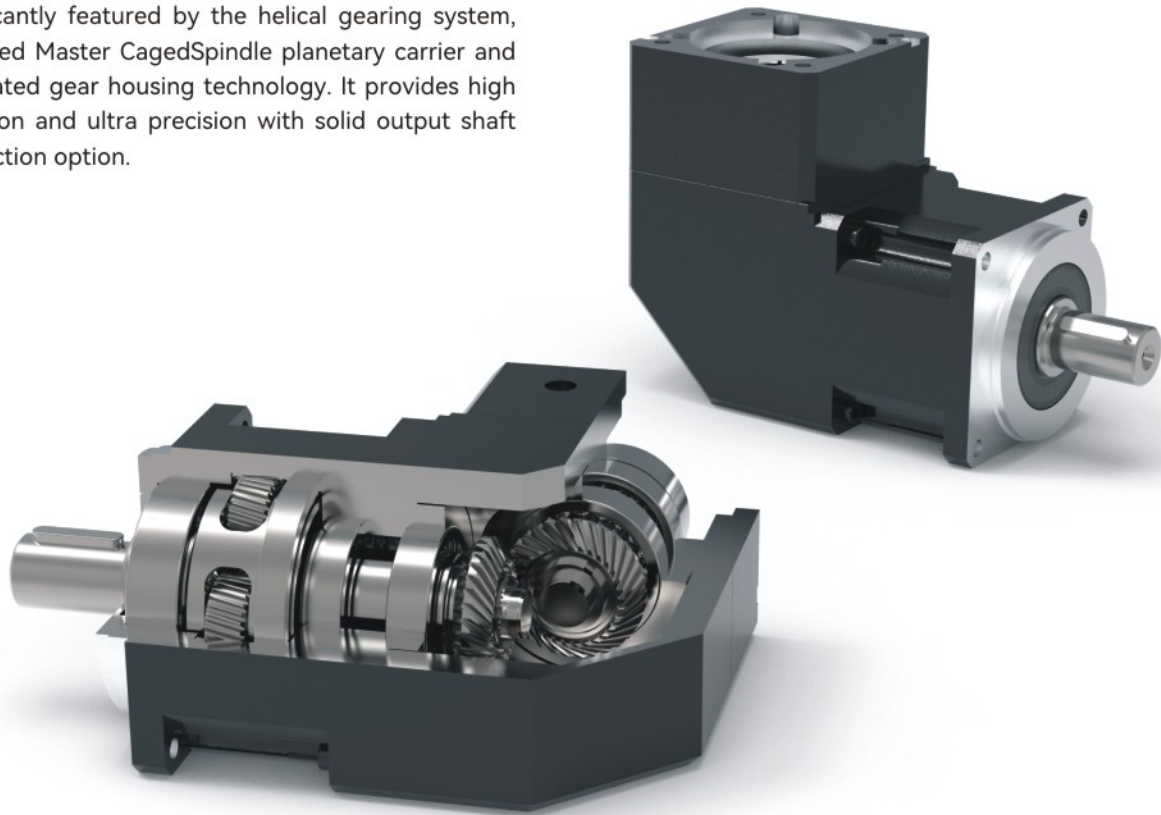
-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  Master CageSpindle Planetary Carrier
-  Integral design of gear housing and front flange
-  Dynamic Balance Clamping and Sealing system
-  Bevel Gear Right Angle Stage

Nominal Output Torque	42-1250 Nm
Radial Force	1500-14000 N
Axial Force	760-7000 N
Torsional Backlash	3-9 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes				
70	90	120	160	205

KVX-B

The **KVX-B** right angle servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier and integrated gear housing technology. It provides high precision and ultra precision with solid output shaft connection option.



-  Helical Gear System
-  Low-friction Deep Groove Ball Bearings
-  Master CageSpindle Planetary Carrier
-  Integral Design of Gear Housing and Front Flange
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

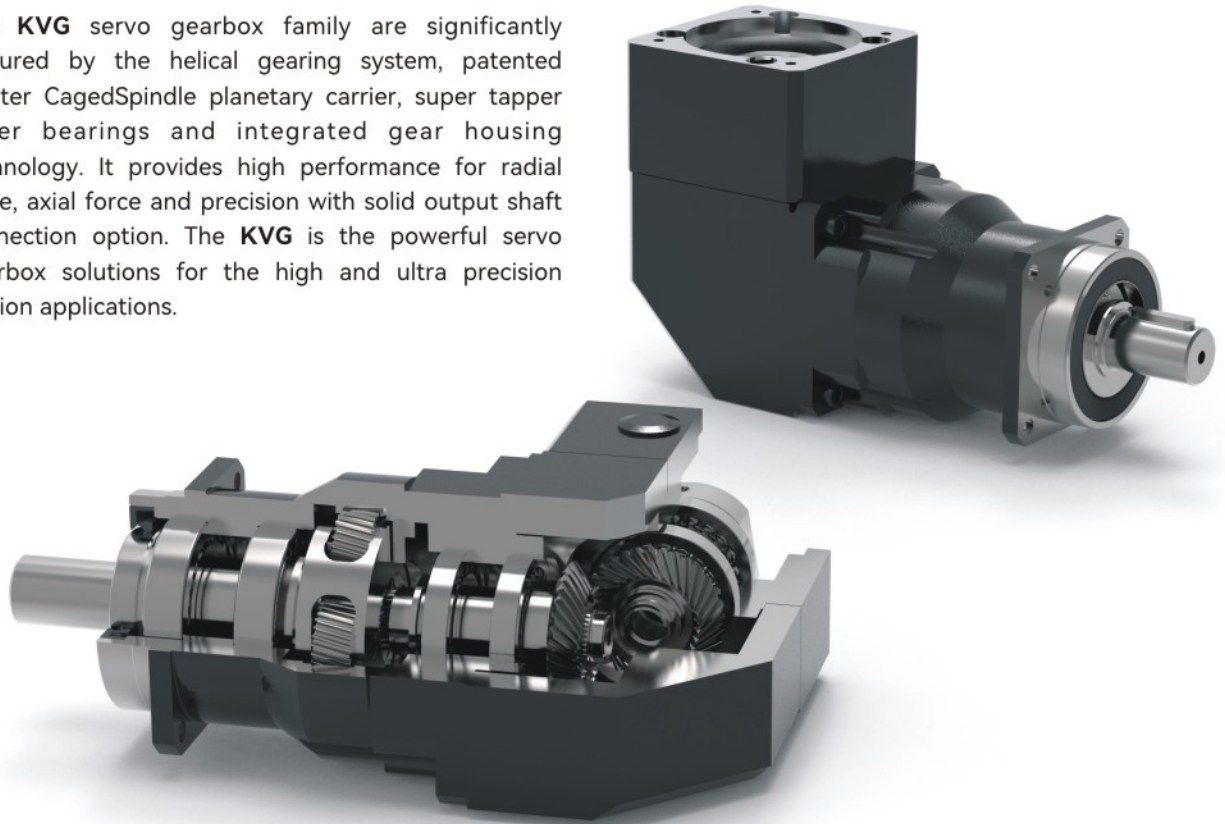
Nominal Output Torque	42-2050 Nm
Radial Force	1500-16000 N
Axial Force	760-8000 N
Torsional backlash	3-9 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

- 65
- 85
- 115
- 142
- 180
- 220

KVG

The **KVG** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier, super taper roller bearings and integrated gear housing technology. It provides high performance for radial force, axial force and precision with solid output shaft connection option. The **KVG** is the powerful servo gearbox solutions for the high and ultra precision motion applications.



-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Integral Design of Gear Housing and Front Flange
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

Nominal Output Torque	42-1250 Nm
Radial Force	4300-24000 N
Axial Force	3900-22000 N
Torsional Backlash	3-9 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

- 70
- 90
- 120
- 160
- 205

KVH



The **KVH** servo gearbox family are significantly featured by the helical gearing system, patented Master CagedSpindle planetary carrier, super taper roller bearings and integrated gear housing technology. It provides high performance for radial force, axial force and precision with disc output connection option. The **KVH** is the powerful servo gearbox solutions for the high and ultra precision motion applications.



Helical Gear System



Preloaded Tapered Roller Bearings



Master CageSpindle Planetary Carrier



Integral Design of Gear Housing and Front Flange



Dynamic Balance Clamping and Sealing System



Bevel Gear Right Angle Stage

Nominal Output Torque	42-1250 Nm
Radial Force	2500-18000 N
Axial Force	2000-15000 N
Torsional Backlash	3-9 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes

70

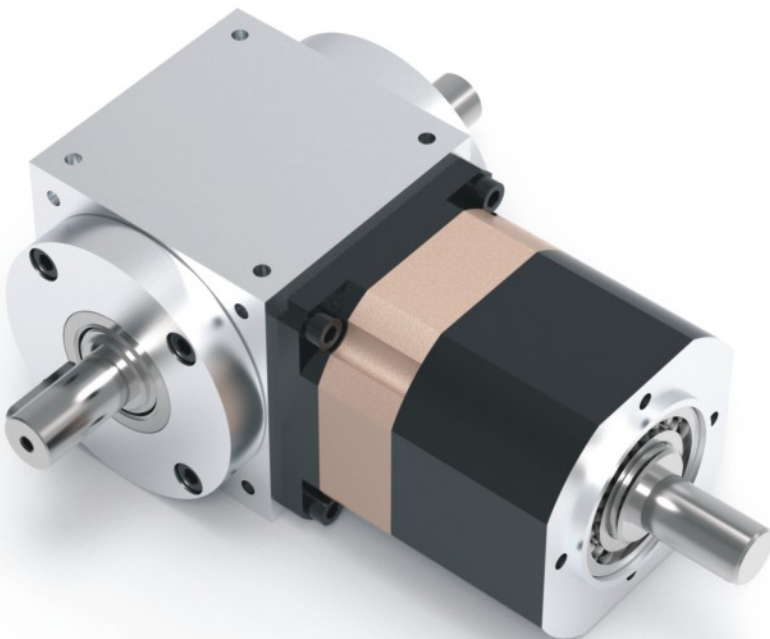
90

120

160

205

KTL



The **KTL** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTL** can provides high gearbox performance and the double output solid shafts connection option.



Helical Gear System



Preloaded Tapered Roller Bearings



Master CageSpindle Planetary Carrier



Dynamic Balance Clamping and Sealing System



Bevel Gear Right Angle Stage

Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes

70

90

110

140

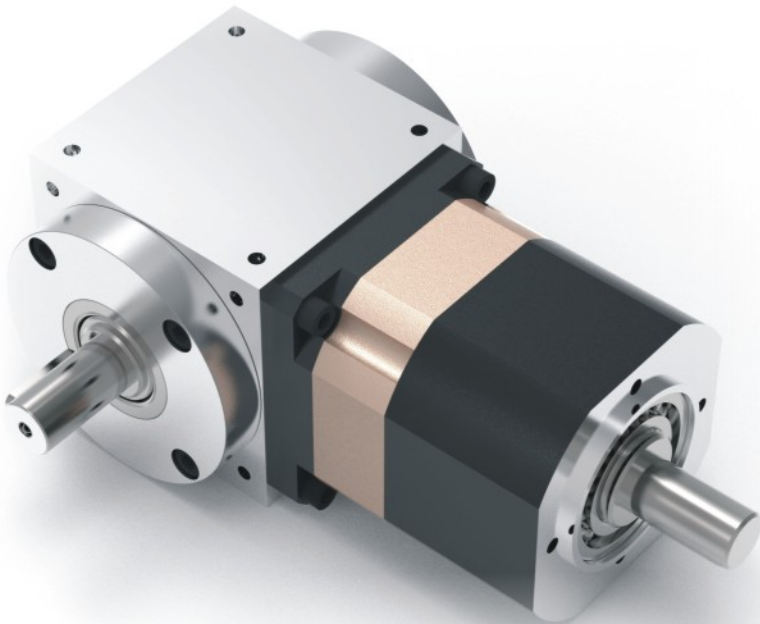
170

210

240

KTL1

The **KTL1** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTL1** can provides high gearbox performance and the output solid shafts on the left side connection option



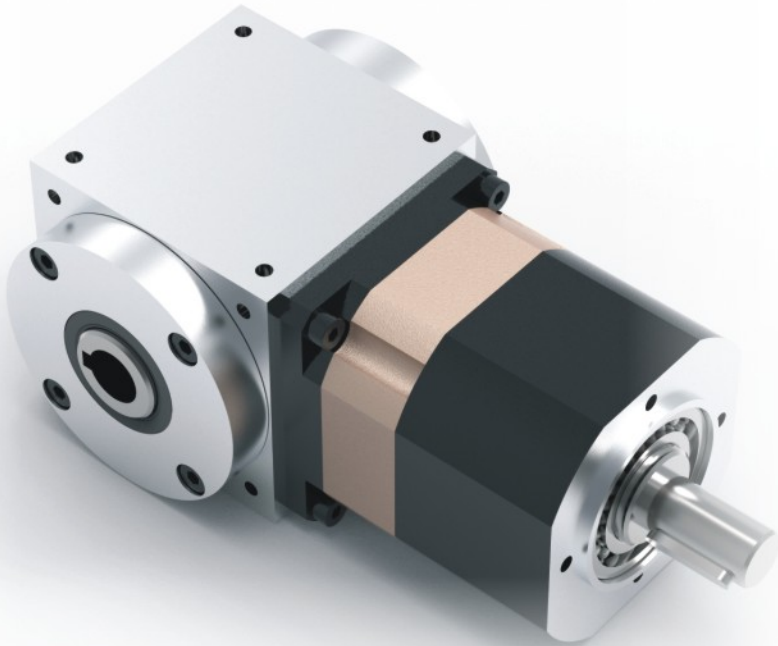
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTH

The **KTH** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTH** can provides high gearbox performance and the double output hollow shafts connection option.



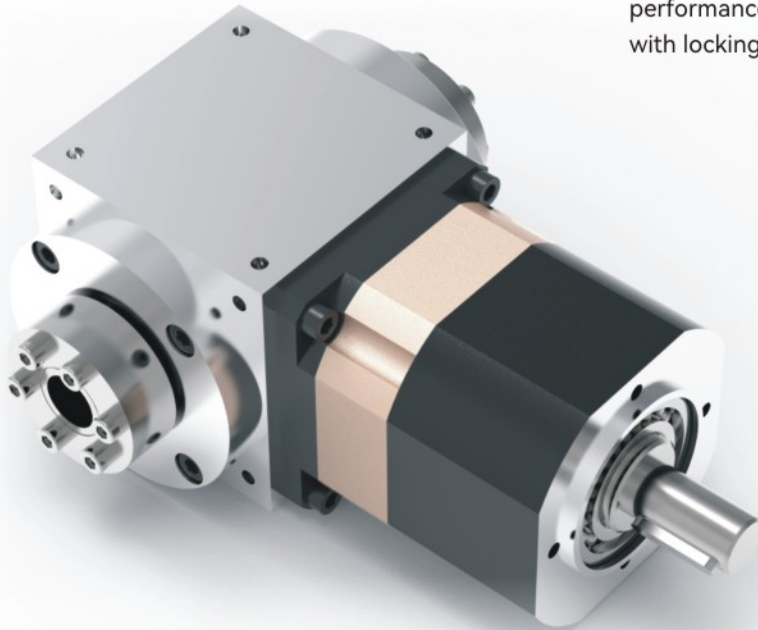
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTC

The **KTC** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTC** can provides high gearbox performance and the double output hollow shafts with locking assemblies connection option.



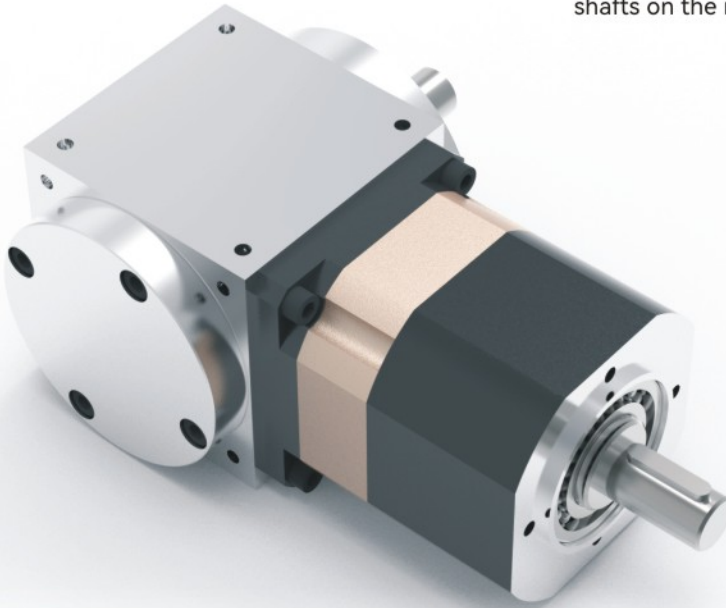
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTR1

The **KTR1** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTR1** can provides high gearbox performance and the output solid shafts on the right side connection option



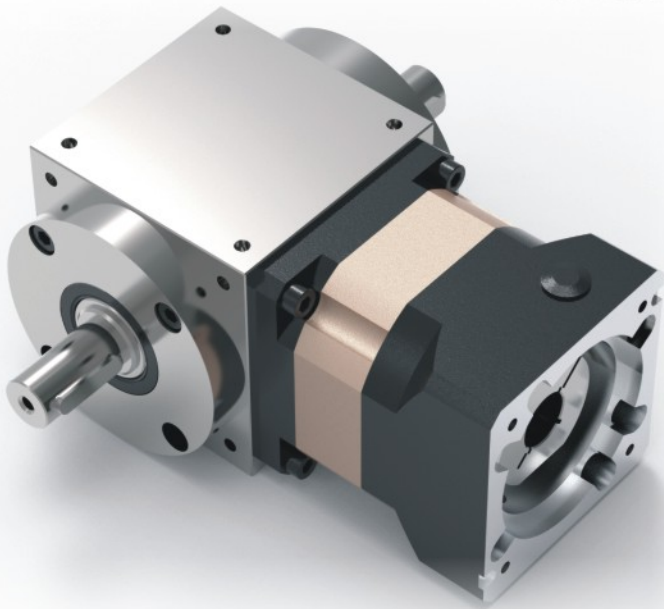
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTFL

The **KTFL** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTFL** can provides high gearbox performance and the double output solid shafts connection option.



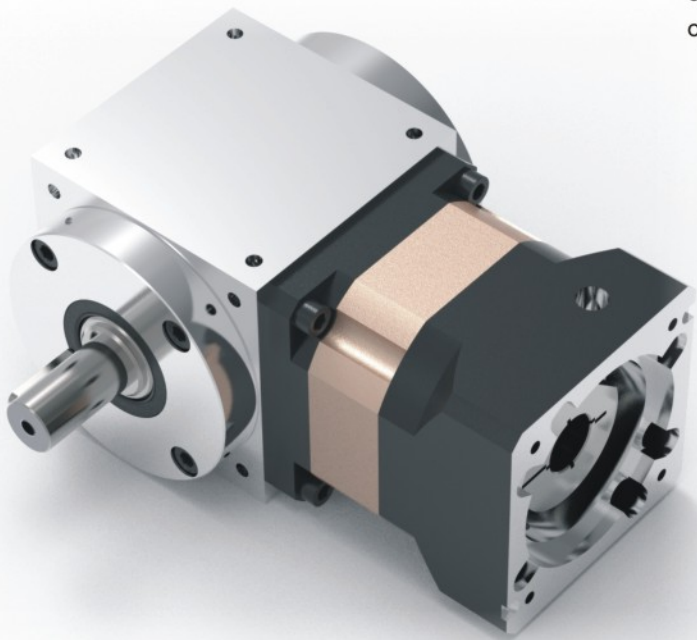
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTFL1

The **KTFL1** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTFL1** can provides high gearbox performance and the output solid shafts on the left side connection option



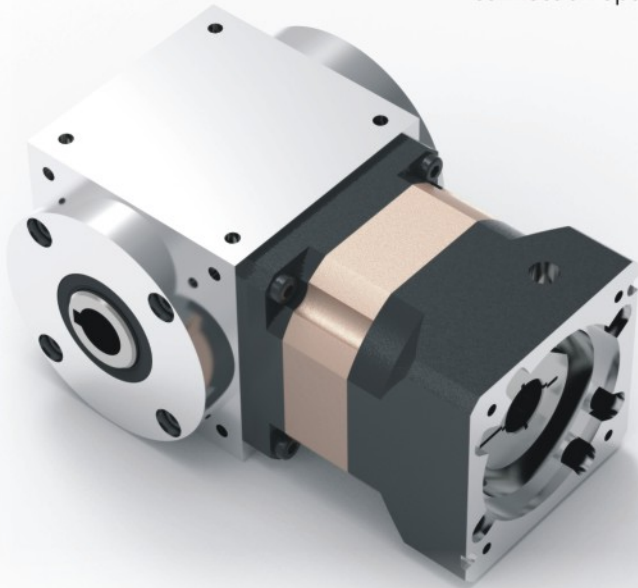
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes	
70	90
110	140
170	210
240	

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KTFH

The **KTFH** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTFH** can provides high gearbox performance and the double output hollow shafts connection option.



Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes

- 70
- 90
- 110
- 140
- 170
- 210
- 240



Helical Gear System



Preloaded Tapered Roller Bearings



Master CageSpindle Planetary Carrier



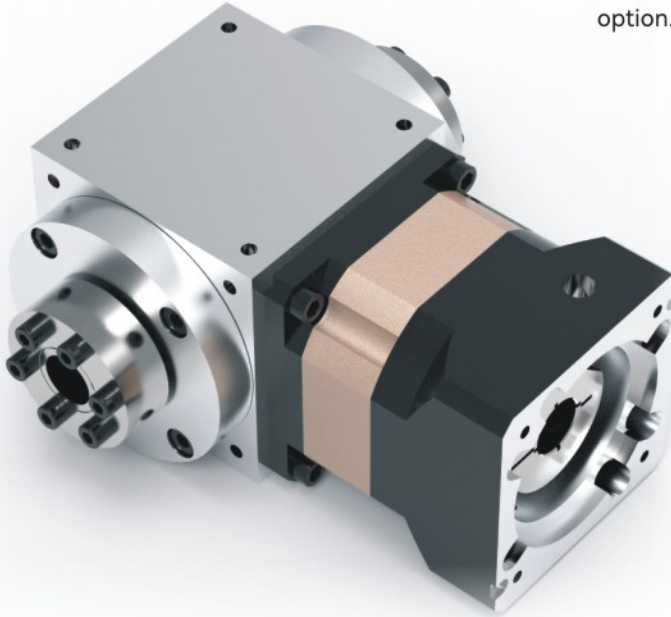
Dynamic Balance Clamping and Sealing System



Bevel Gear Right Angle Stage

KTFC

The **KTFC** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTFC** can provides high gearbox performance and the double output hollow shafts with locking assemblies connection option.



Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes

- 70
- 90
- 110
- 140
- 170
- 210
- 240



Helical Gear System



Preloaded Tapered Roller Bearings



Master CageSpindle Planetary Carrier



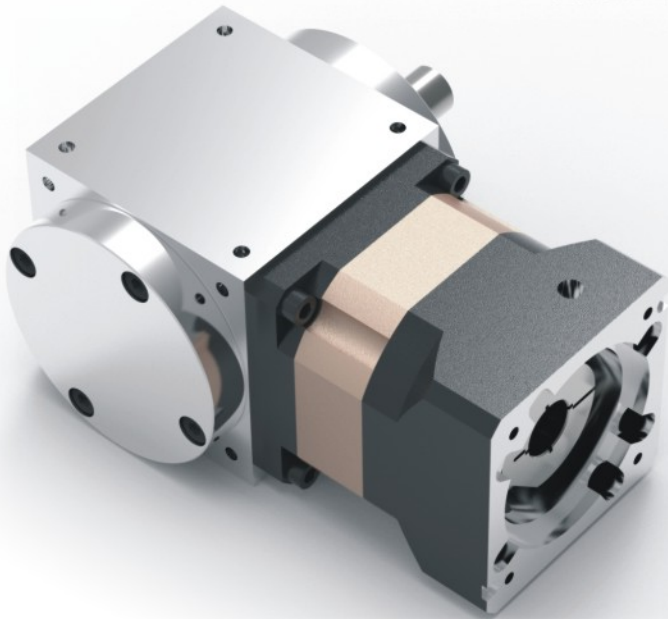
Dynamic Balance Clamping and Sealing System



Bevel Gear Right Angle Stage

KTFR1

The **KTFR1** family is our typical powerful spiral bevel gearbox solution. Featured with high level bevel gear grinding technology and reinforced type taper roller bearing, the **KTFR1** can provides high gearbox performance and the output solid shafts on the right side connection option



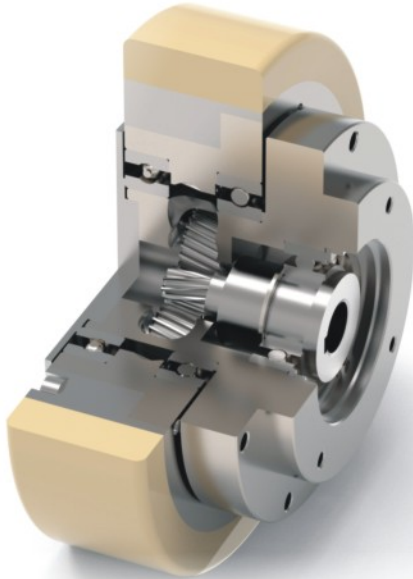
Nominal Output Torque	32-2150 Nm
Radial Force	1100-16000 N
Axial Force	550-8500 N
Torsional Backlash	6-17 arcmin
Protection Class	IP65
Ratio	1-100

Frame Sizes					
70	90	110	140	170	
210	240				

-  Helical Gear System
-  Preloaded Tapered Roller Bearings
-  Master CageSpindle Planetary Carrier
-  Dynamic Balance Clamping and Sealing System
-  Bevel Gear Right Angle Stage

KGV-W

As our most popular wheel servo gearbox family, the **KGV-W** is significantly featured by the super compact design, lifetime maintenance free, integrated with rubber wheel and output by the gear housing. With its unique output by gear housing concept and the option of direct mounting to the vehicle chassis, our **KGV-W** perfectly meets all the requirements of the AGV(Automated Guided Vehicles) industry.



Nominal Output Torque	42-1250 Nm
Radial Force	2500-18000 N
Axial Force	2000-15000 N
Torsional Backlash	3-9 arcmin
Protection Class	IP65
Ratio	3-100

Frame Sizes					
70	90	120	160	205	

-  Helical Gear System
-  Master CageSpindle Planetary Carrier
-  Output by the Gear Housing

Technical Memo

