



Descriptions

A **Precision Bevel Gearbox with Planetary Gearbox** is a specialized type of gearbox designed for use with servo motors or stepper motors, featuring spiral bevel gears to transmit power at a right angle with high precision and efficiency. A wide range of motor adapter are available for installation to virtually all servo motors. Compact structure, integration of alloy aluminum body to ensure the maximum rigidity and corrosion resistance, and easy to assemble with multiple precision machined surface. The following standard transmission ratios are available: **1-stage - 1:1 and 2:1. 2-stage - 3:1, 4:1, 5:1, 6:1, 8:1 and 10:1. 3-stage - 9:1, 12:1, 15:1, 16:1, 20:1, 25:1, 30:1, 32:1, 40:1, 50:1.** Rated torque is from **25Nm to 3200Nm**. These servo spiral bevel gearboxes are ideal for use in applications that require high dynamic and positioning motion control. The compact and rigid design precise right-angle gearboxes ensure good performance with space-saving and weight efficient at the same time.

Key Characteristics and Advantages:

- **Precision:** These bevel gearboxes are designed for minimal backlash and transmission error, enabling precise movement control and repeatability in demanding applications.
- **Smooth and Quiet Operation:** The helical teeth of spiral bevel gears mesh gradually, resulting in reduced vibration and noise compared to straight bevel gears.
- **High Efficiency:** The design of spiral bevel gears increases tooth contact area, improving load distribution and overall efficiency, which is critical in applications where minimizing power loss is essential.
- **High Load Capacity:** The spiral tooth configuration allows for larger tooth contact area, distributing the load more evenly and enabling higher torque and power transmission.
- **Compact Design:** These bevel gearboxes can be designed with a compact structure, making them suitable for applications where space is limited.
- **Reduced Backlash:** Reduced backlash is achieved by precisely fitting the gear teeth to minimize the distance between them, resulting in quieter operation.
- **Compatibility with Servo Motors:** Many high precision spiral bevel gearboxes with planetary gearboxes are specifically designed to interface with servo motors, facilitating the integration into automated systems.

Applications:

High precision servo spiral bevel gearboxes are widely used in applications where accuracy, reliability, and efficient power transmission are critical, such as:

- **Robotics:** They are integral components in robotic joint mechanisms, gearboxes, and transmission systems, contributing to precise and agile robotic movements.
- **Industrial Automation:** They are used in various automation systems, including belt actuators, ball screws, conveyors, rack & pinion systems, and rotary tables.
- **Machine Tools:** They transmit power from the motor to the spindle in machine tools like milling machines and lathes, enabling precise control during machining operations.
- **Other Applications:** They can also be found in automotive differentials, aerospace landing gear systems, marine propulsion systems, and conveyor systems in the mining industry.

Selection Guide

Sample Part Number (Example):

KMP065S2L1R1P2

(1) Model

* **KMP** : Shaft Input Configuration * **KMPF** : Motor Flange Input Configuration

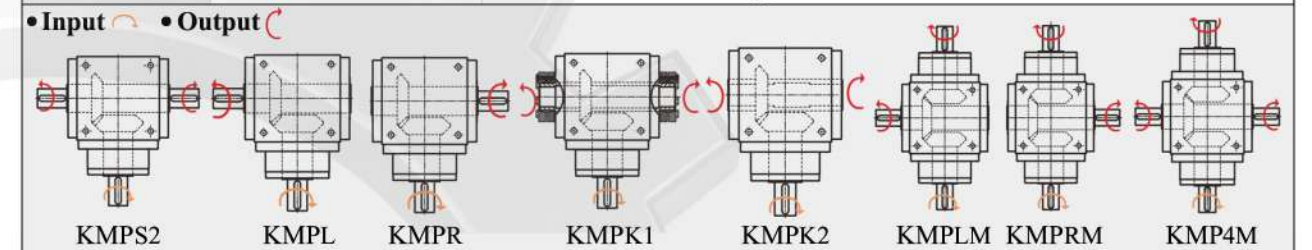
KMP065	KMP075	KMP090	KMP110	KMP140	KMP170	KMP210	KMP240	KMP280
KMPF065	KMPF075	KMPF090	KMPF110	KMPF140	KMPF170	KMPF210	KMPF240	KMPF280

Selection Guide

(2) Output Configuration

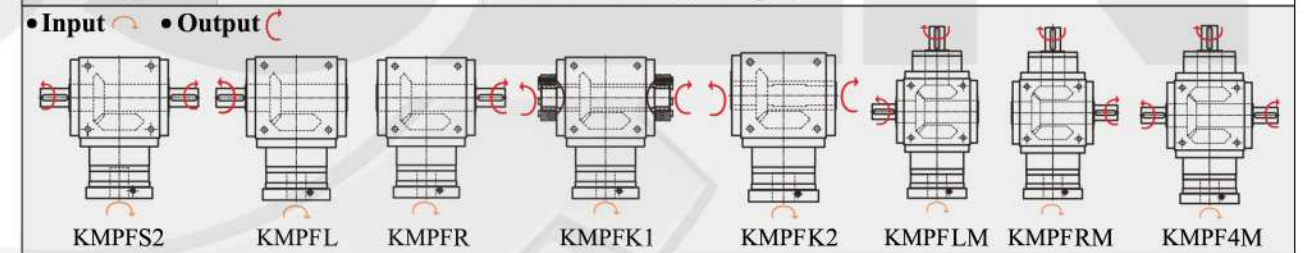
* **KMP series**

Code	Input Configuration	Output Configuration
KMPS2	Solid Shaft Input	Dual Solid Shafts Output
KMPL/R		Single Solid Shaft Output
KMPK1		Dual Hollow Shafts with Shrinks Discs Output
KMPK2		Dual Hollow Shafts Output
KMPLM/RM		Dual Right Angle Solid Shafts Output with Opposite Rotation Sense
KMP4M		Three Solid Shafts Output



* **KMPF series**

Code	Input Configuration	Output Configuration
KMPFS2	Solid Shaft Input	Dual Solid Shafts Output
KMPFL/R		Single Solid Shaft Output
KMPFK1		Dual Hollow Shafts with Shrinks Discs Output
KMPFK2		Dual Hollow Shafts Output
KMPFLM/RM		Dual Right Angle Solid Shafts Output with Opposite Rotation Sense
KMPF4M		Three Solid Shafts Output



(3) Stage and Gear Ratios

Stage	Gear Ratio
L1: 1 stage	1:1, 2:1
L2: 2 stage	3:1, 4:1, 5:1, 6:1, 8:1, 10:1
L3: 3 stage	9:1, 12:1, 15:1, 16:1, 20:1, 25:1, 30:1, 32:1, 40:1, 50:1

(4) Backlash (arcmin)

- P2: Standard ● P1: Precision ● P0: Ultra Precision

(5) Motor Designation

- Motor Types: Servo Motor, Stepper Motor, AC Motor and DC Motor
- Manufacturer Type
- And Model





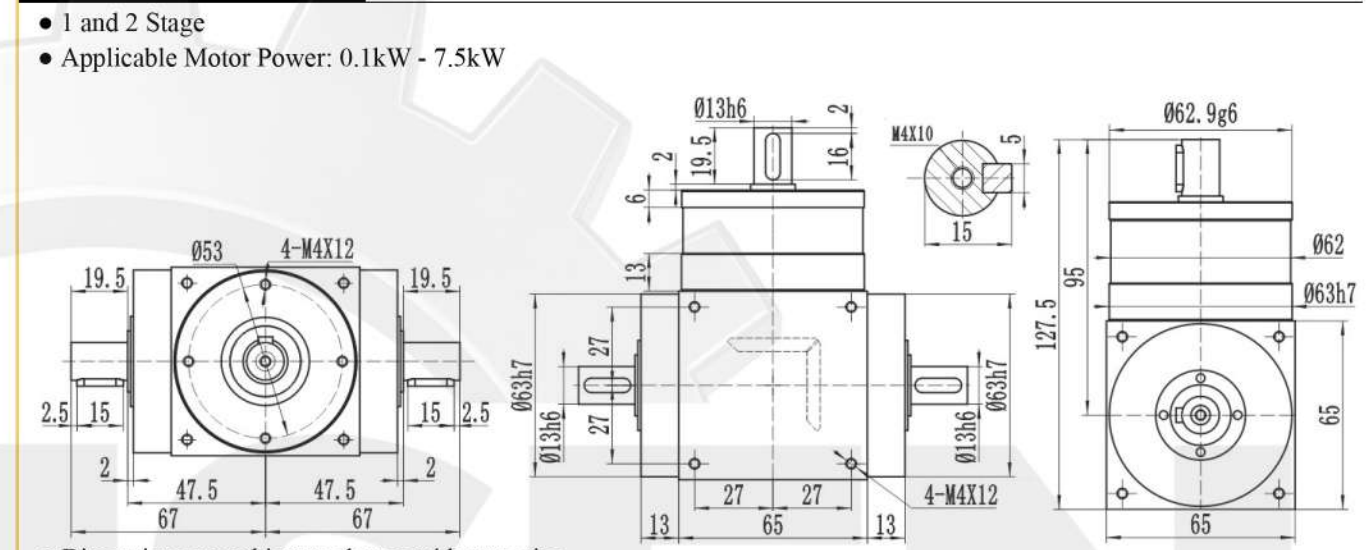
Specifications

Model	Stage	Ratio	KMP065S2	KMP075S2	KMP090S2	KMP110S2	KMP140S2	KMP170S2	KMP210S2	KMP240S2	KMP280S2
			KMP065K1	KMP075K1	KMP090K1	KMP110K1	KMP140K1	KMP170K1	KMP210K1	KMP240K1	KMP280K1
Nominal Output Torque (N.m)	1	1	25	45	78	150	360	585	1300	2150	3200
		2	24	42	68	150	330	544	1220	2010	3050
		3	25	45	78	150	360	585	1300	2150	3200
	2	4	25	45	78	150	360	585	1300	2150	3200
		5	25	45	78	150	360	585	1300	2150	3200
		6	25	45	78	150	360	585	1300	2150	3200
		8	25	45	78	150	360	585	1300	2150	3200
	3	10	24	42	68	150	330	544	1220	2010	3050
		9	25	45	78	150	360	585	1300	2150	3200
		12	25	45	78	150	360	585	1300	2150	3200
		15	25	45	78	150	360	585	1300	2150	3200
		16	25	45	78	150	360	585	1300	2150	3200
		20	25	45	78	150	360	585	1300	2150	3200
		25	25	45	78	150	360	585	1300	2150	3200
		30	25	45	78	150	360	585	1300	2150	3200
	Maximum Acceleration Torque	1&2&3	N.m	1.5 times of Nominal Output Torque							
3 times of Nominal Output Torque											
3 times of Nominal Output Torque											
3 times of Nominal Output Torque											
Nominal Input Speed	1&2&3	rpm	3000	3000	3000	3000	2000	1500	1000	1000	1000
			6000	6000	6000	6000	4000	3000	2000	2000	2000
Maximum Input Speed	1&2&3	rpm	6000	6000	6000	6000	4000	3000	2000	2000	2000
			6000	6000	6000	6000	4000	3000	2000	2000	2000
Precision Backlash	1	P2	6	6	6	6	6	6	8	10	12
	2	arcmin	8	8	8	8	8	8	10	12	15
	3		10	10	10	10	10	10	12	15	18
Noise Level	1&2&3	dB	60	63	65	68	70	72	75	75	78
Maximum Radial Load Of Output Shaft	1&2&3	N	900	1100	1700	2700	4800	6600	11500	16000	18000
Maximum Axial Load Of Output Shaft	1&2&3	N	450	550	850	1350	2400	3300	5750	8500	9000
Maximum Radial Load Of Input Shaft	1&2&3	N	700	950	1450	2100	2700	3800	7800	9600	10500
Maximum Axial Load Of Input Shaft	1&2&3	N	350	425	725	1050	1350	1900	3900	4800	5250
Efficiency	1&2	%	≥97%								
	3		≥94%								
Operating Temperature	1&2&3	°C	(-15°C ~ +40°C)								
Service Life	1&2&3	h	≥20000								
Lubrication	1&2&3		Synthetic Lubrication Oils (Maintenance-free)								

Main Product Data

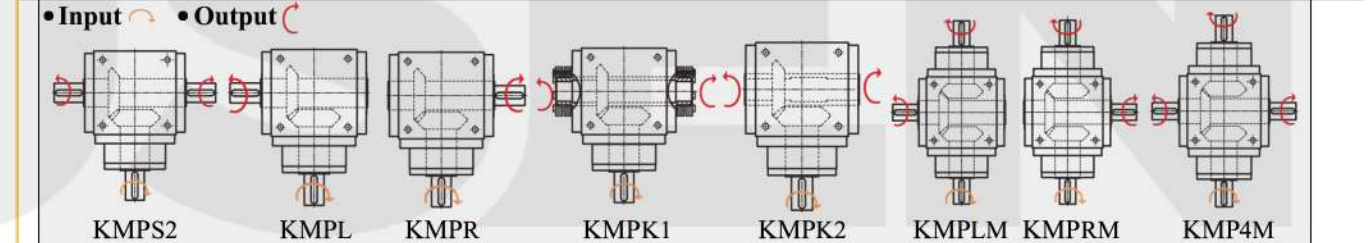
KMP065	S2	L1	R1	P2 +	Motor size
Model	Output Configuration	Stage	Ratio	Backlash	Servo Motor, Stepper Motor, AC Motor, DC Motor

Overall Dimensions



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

• *1) i= Input Speed / Output Speed.
 • *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
 • *3) Customizable high and low temperature grease

Ratio	Stage	L	1				2					
			i	1	2	3	4	5	6	8	10	
Nominal Output Torque		N.m	25	24					25	6	8	24
Maximum Acceleration Torque		N.m	38	36					38			36
Emergency Stop Torque		N.m	75	72					75			72
Nominal Input Speed		rpm							3000			
Maximum Input Speed		rpm							6000			
Precision Backlash		P2 arcmin	≤6				≤8					
Noise Level		dB	≤60									
Maximum Radial Load Of Output Shaft *2		N	900									
Maximum Axial Load Of Output Shaft		N	450									
Maximum Radial Load Of Input Shaft		N	700									
Maximum Axial Load Of Input Shaft		N	350									
Efficiency		%	≥97									
Operating Temperature		°C	(-15°C ~ +40°C)									
Service Life		h	≥20000									
Lubrication *3			Synthetic Lubrication Oils (Maintenance-free)									
Weight		kg	2.6									



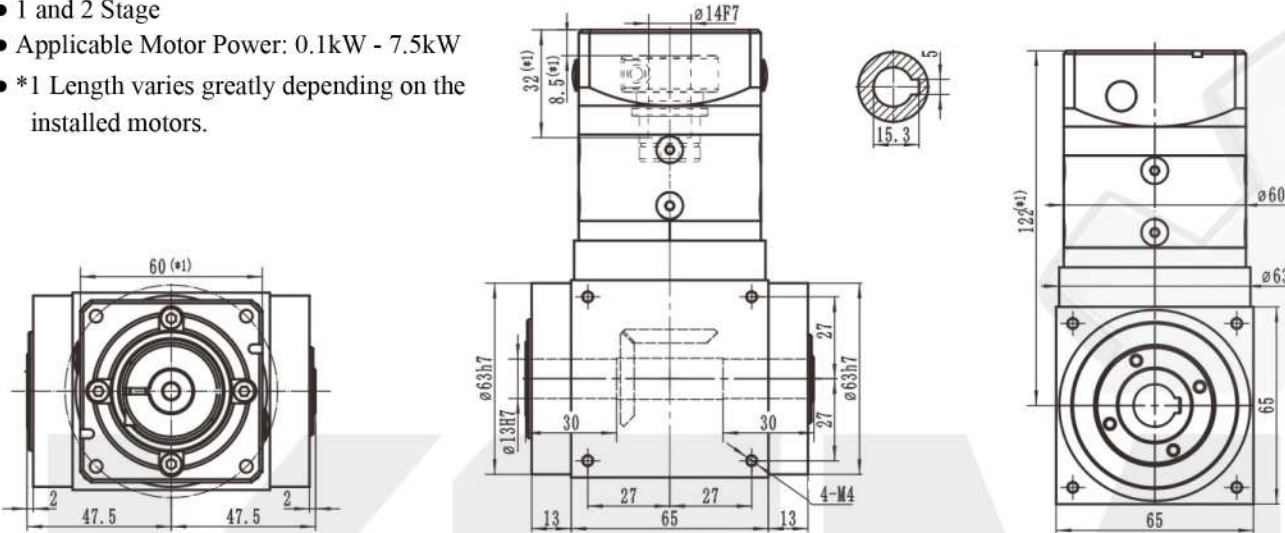
Main Product Data

KMPF065K2L2

KMPF065 **K2** **L2** **R2** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

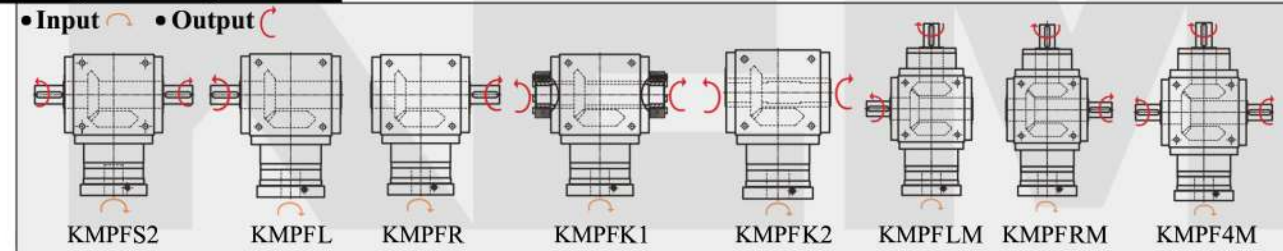
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.1kW - 7.5kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i							
		1	2	3	4	5	6	8	10
Ratio *1	i								
Nominal Output Torque	N.m	25	24			25			24
Maximum Acceleration Torque	N.m	38	36			38			36
Emergency Stop Torque	N.m	75	72			75			72
Nominal Input Speed	rpm					3000			
Maximum Input Speed	rpm					6000			
Precision Backlash	P2 arcmin	≤6					≤8		
Noise Level	dB					≤60			
Maximum Radial Load Of Output Shaft *2	N					900			
Maximum Axial Load Of Output Shaft	N					450			
Maximum Radial Load Of Input Shaft	N					700			
Maximum Axial Load Of Input Shaft	N					350			
Efficiency	%					≥97			
Operating Temperature	°C					(-15°C ~ +40°C)			
Service Life	h					≥20000			
Lubrication *3		Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg	2.6							

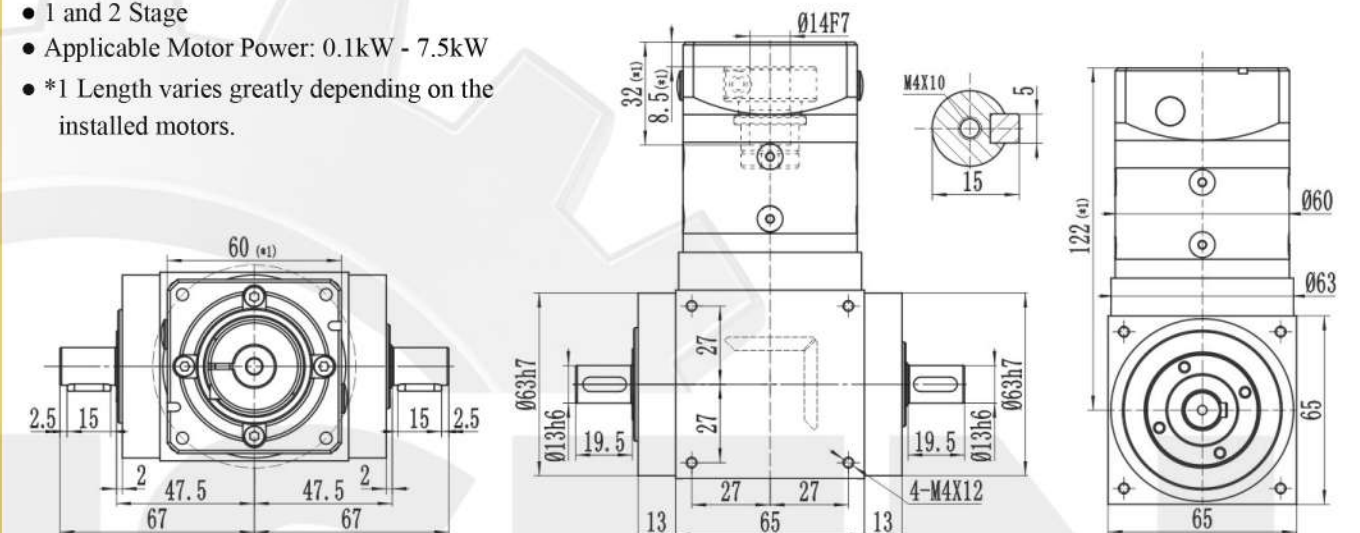
Main Product Data

KMPF065S2L2

KMPF065 **S2** **L2** **R5** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

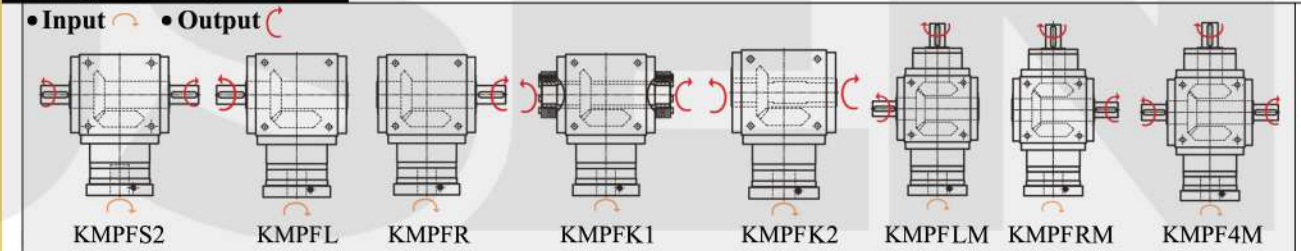
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.1kW - 7.5kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i							
		1	2	3	4	5	6	8	10
Ratio *1	i								
Nominal Output Torque	N.m	25	24			25			24
Maximum Acceleration Torque	N.m	38	36			38			36
Emergency Stop Torque	N.m	75	72			75			72
Nominal Input Speed	rpm					3000			
Maximum Input Speed	rpm					6000			
Precision Backlash	P2 arcmin	≤6					≤8		
Noise Level	dB					≤60			
Maximum Radial Load Of Output Shaft *2	N					900			
Maximum Axial Load Of Output Shaft	N					450			
Maximum Radial Load Of Input Shaft	N					700			
Maximum Axial Load Of Input Shaft	N					350			
Efficiency	%					≥97			
Operating Temperature	°C					(-15°C ~ +40°C)			
Service Life	h					≥20000			
Lubrication *3		Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg	2.6							



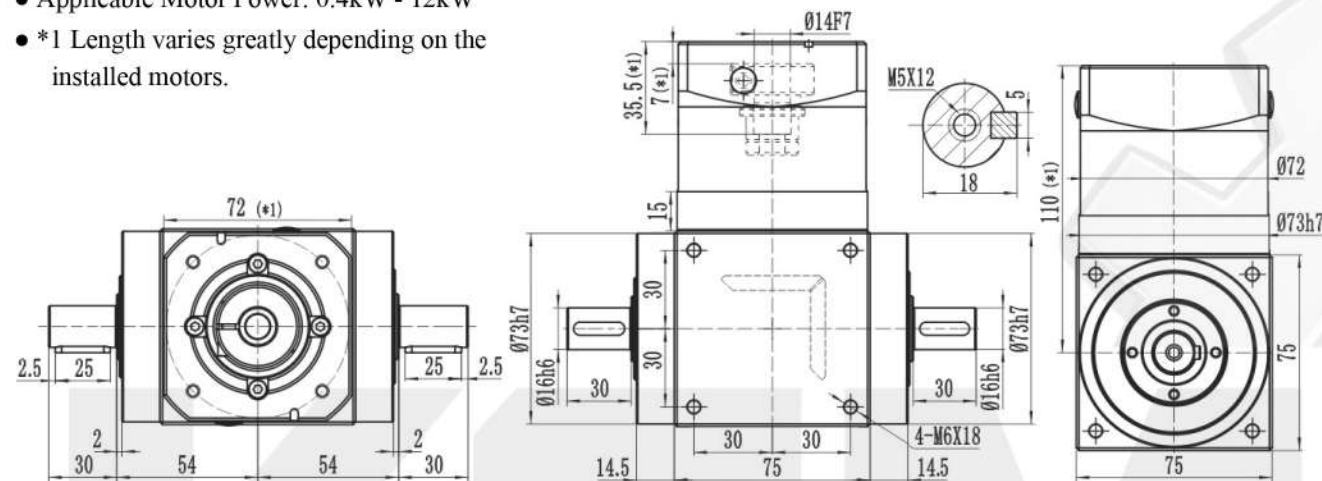
Main Product Data

KMPF075S2L1

KMPF075 Model	S2 Output Configuration	L1 Stage	R2 Ratio	P2 Backlash	+	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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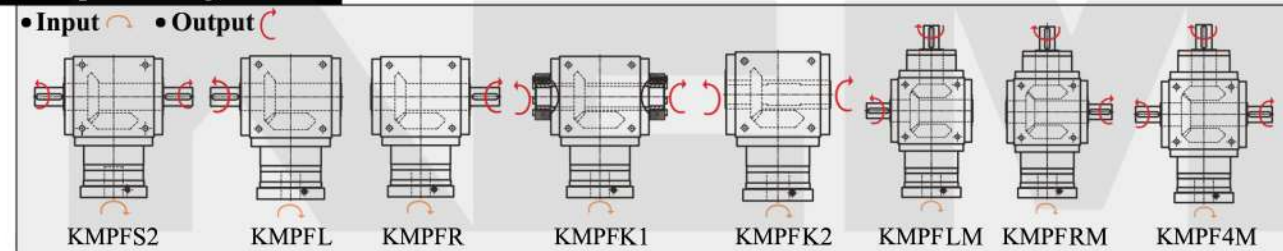
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.4kW - 12kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L i	1				2			
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	45	42			45			42
Maximum Acceleration Torque		N.m	68	63			68			63
Emergency Stop Torque		N.m	135	126			135			126
Nominal Input Speed		rpm					3000			
Maximum Input Speed		rpm					6000			
Precision Backlash	P2 arcmin		≤6				≤8			
Noise Level	dB						≤63			
Maximum Radial Load Of Output Shaft *2	N						1100			
Maximum Axial Load Of Output Shaft	N						550			
Maximum Radial Load Of Input Shaft	N						950			
Maximum Axial Load Of Input Shaft	N						425			
Efficiency	%						≥97			
Operating Temperature	°C						(-15°C ~ +40°C)			
Service Life	h						≥20000			
Lubrication *3			Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg						3.9			

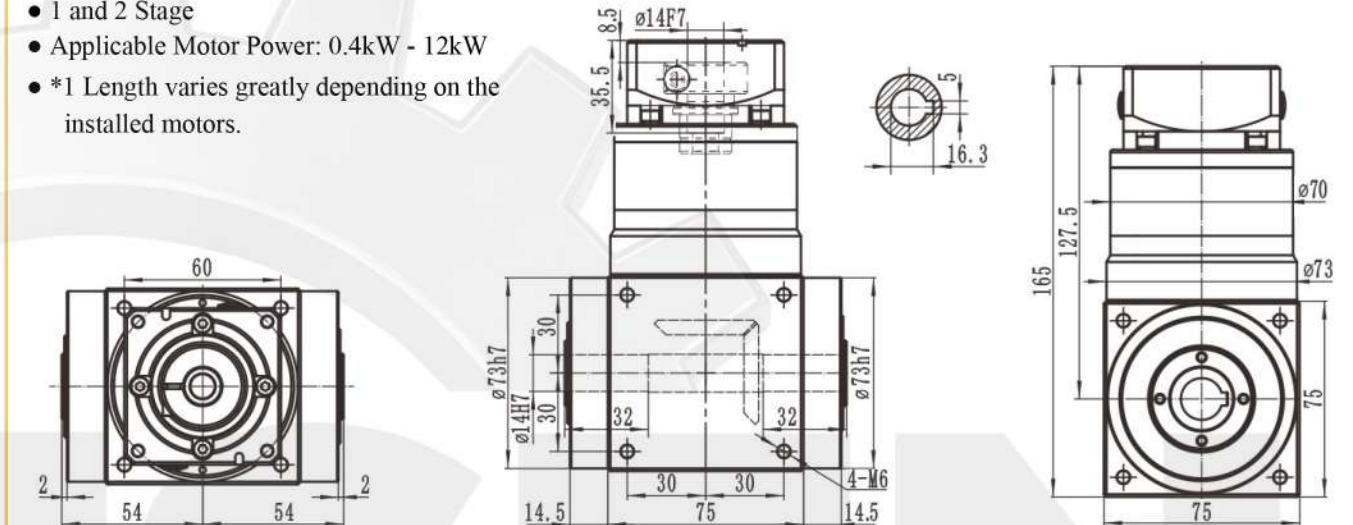
Main Product Data

KMPF075K2L2

KMPF075 Model	K2 Output Configuration	L2 Stage	R5 Ratio	P2 Backlash	+	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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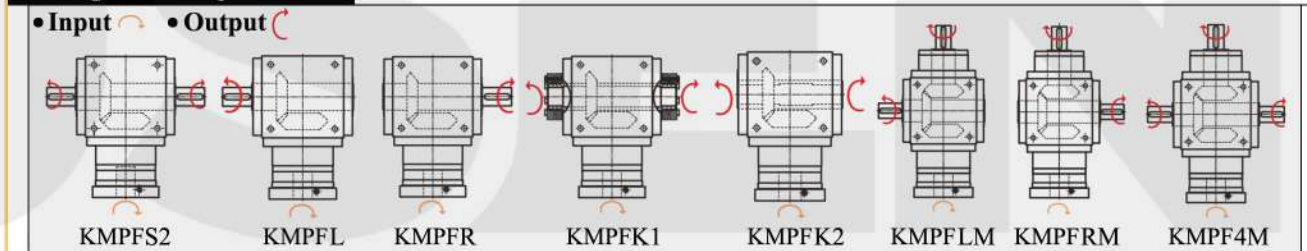
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.4kW - 12kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L i	1				2			
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	45	42			45			42
Maximum Acceleration Torque		N.m	68	63			68			63
Emergency Stop Torque		N.m	135	126			135			126
Nominal Input Speed		rpm					3000			
Maximum Input Speed		rpm					6000			
Precision Backlash	P2 arcmin		≤6				≤8			
Noise Level	dB						≤63			
Maximum Radial Load Of Output Shaft *2	N						1100			
Maximum Axial Load Of Output Shaft	N						550			
Maximum Radial Load Of Input Shaft	N						950			
Maximum Axial Load Of Input Shaft	N						425			
Efficiency	%						≥97			
Operating Temperature	°C						(-15°C ~ +40°C)			
Service Life	h						≥20000			
Lubrication *3			Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg						3.9			



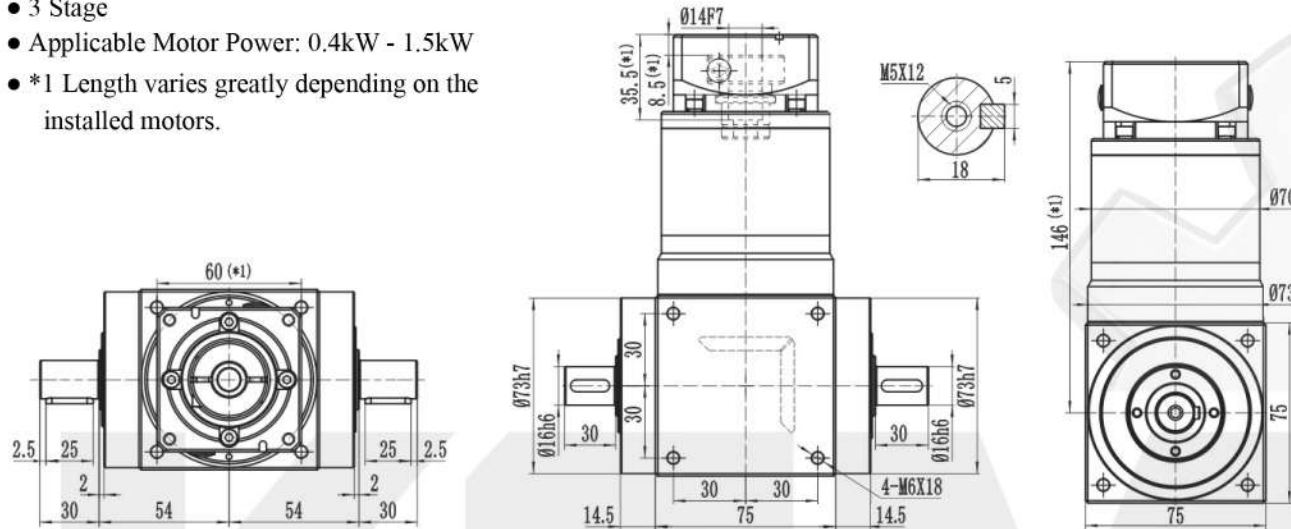
Main Product Data

KMPF075S2L3

KMPF075 **S2** **L3** **R25** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

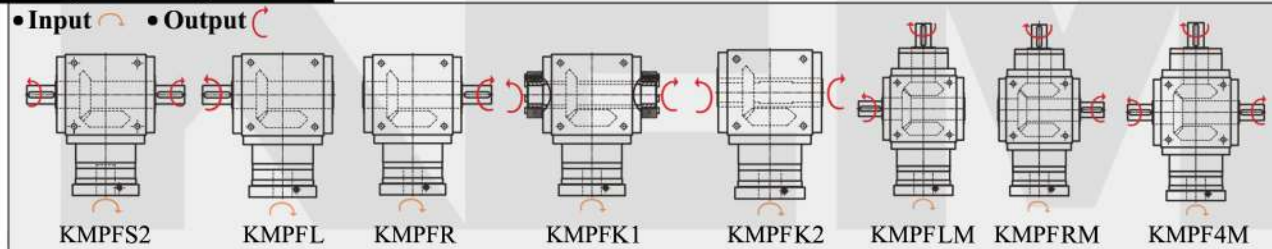
Overall Dimensions

- 3 Stage
- Applicable Motor Power: 0.4kW - 1.5kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L										
		i	9	12	15	16	20	25	30	32	45	50
Nominal Output Torque	N.m						45					
Maximum Acceleration Torque	N.m						68					
Emergency Stop Torque	N.m						135					
Nominal Input Speed	rpm						3000					
Maximum Input Speed	rpm						6000					
Precision Backlash	P2 arcmin						≤10					
Noise Level	dB						≤63					
Maximum Radial Load Of Output Shaft *2	N						1100					
Maximum Axial Load Of Output Shaft	N						550					
Maximum Radial Load Of Input Shaft	N						950					
Maximum Axial Load Of Input Shaft	N						425					
Efficiency	%						≥94					
Operating Temperature	°C						(-15°C ~ +40°C)					
Service Life	h						≥20000					
Lubrication *3							Synthetic Lubrication Oils (Maintenance-free)					
Weight	kg						5.6					

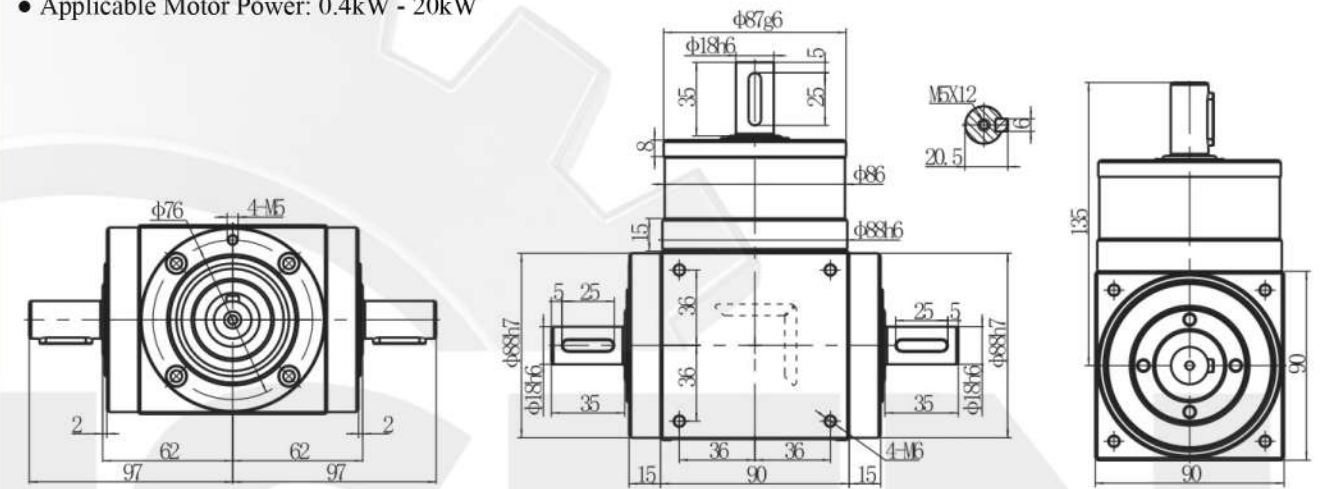
Main Product Data

KMP090S2L1

KMP090 **S2** **L1** **R5** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

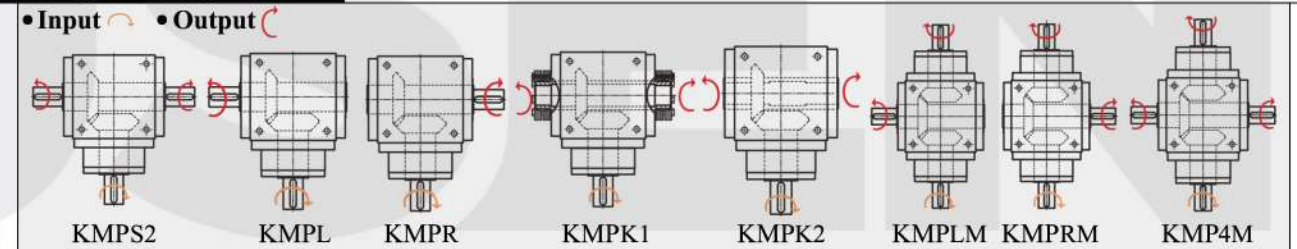
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.4kW - 20kW



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L	1					2				
			i	1	2	3	4	5	6	8	10	
Nominal Output Torque	N.m		78	68				78				68
Maximum Acceleration Torque	N.m		117	102				117				102
Emergency Stop Torque	N.m		234	204				234				204
Nominal Input Speed	rpm							3000				
Maximum Input Speed	rpm							6000				
Precision Backlash	P2 arcmin		≤6					≤8				
Noise Level	dB							≤65				
Maximum Radial Load Of Output Shaft *2	N							1700				
Maximum Axial Load Of Output Shaft	N							850				
Maximum Radial Load Of Input Shaft	N							1450				
Maximum Axial Load Of Input Shaft	N							725				
Efficiency	%							≥97				
Operating Temperature	°C							(-15°C ~ +40°C)				
Service Life	h							≥20000				
Lubrication *3								Synthetic Lubrication Oils (Maintenance-free)				
Weight	kg							6.4				

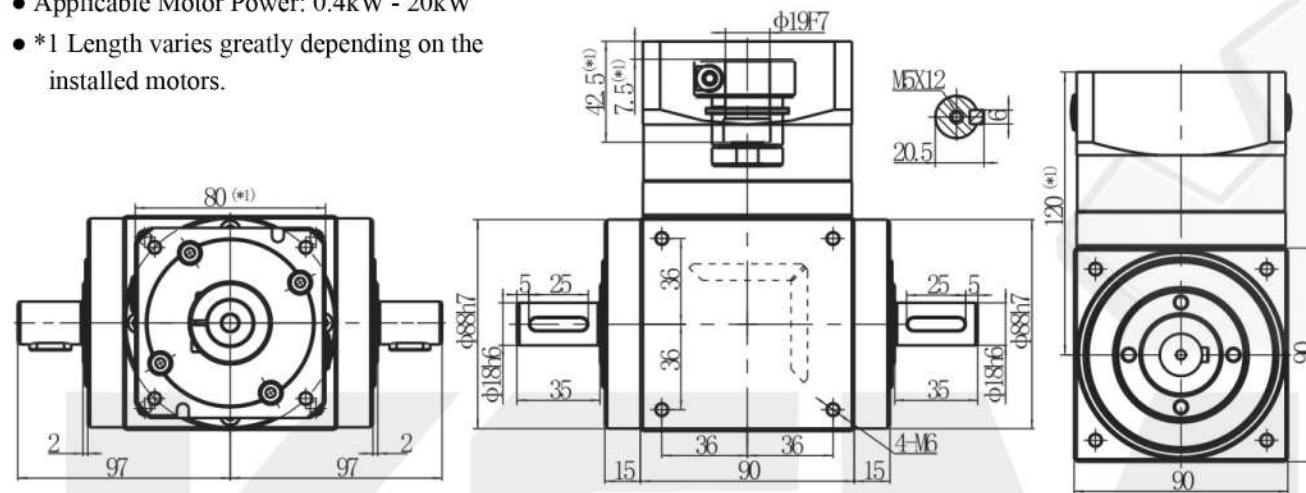
Main Product Data

KMPF090S2L1

KMPF090 Model	S2 Output Configuration	L1 Stage	R5 Ratio	P2 Backlash	+	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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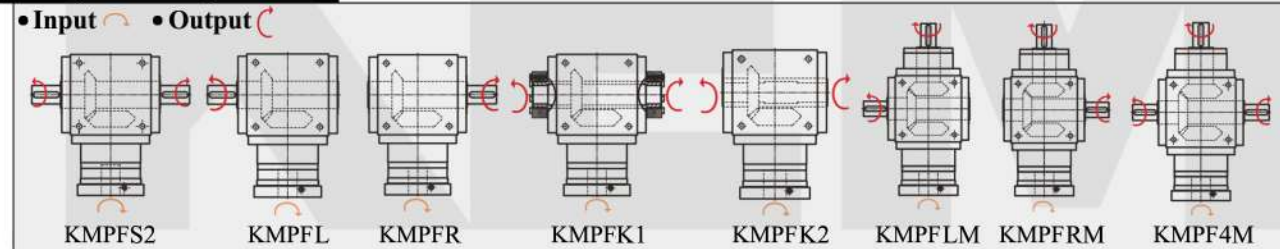
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.4kW - 20kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i									
		1	2	3	4	5	6	8	10		
Ratio *1	i	1	2	3	4	5	6	8	10		
Nominal Output Torque	N.m	78	68			78			68		
Maximum Acceleration Torque	N.m	117	102			117			102		
Emergency Stop Torque	N.m	234	204			234			204		
Nominal Input Speed	rpm					3000					
Maximum Input Speed	rpm					6000					
Precision Backlash	P2 arcmin	≤6					≤8				
Noise Level	dB					≤65					
Maximum Radial Load Of Output Shaft *2	N					1700					
Maximum Axial Load Of Output Shaft	N					850					
Maximum Radial Load Of Input Shaft	N					1450					
Maximum Axial Load Of Input Shaft	N					725					
Efficiency	%					≥97					
Operating Temperature	°C					(-15°C ~ +40°C)					
Service Life	h					≥20000					
Lubrication *3		Synthetic Lubrication Oils (Maintenance-free)									
Weight	kg	6.4									

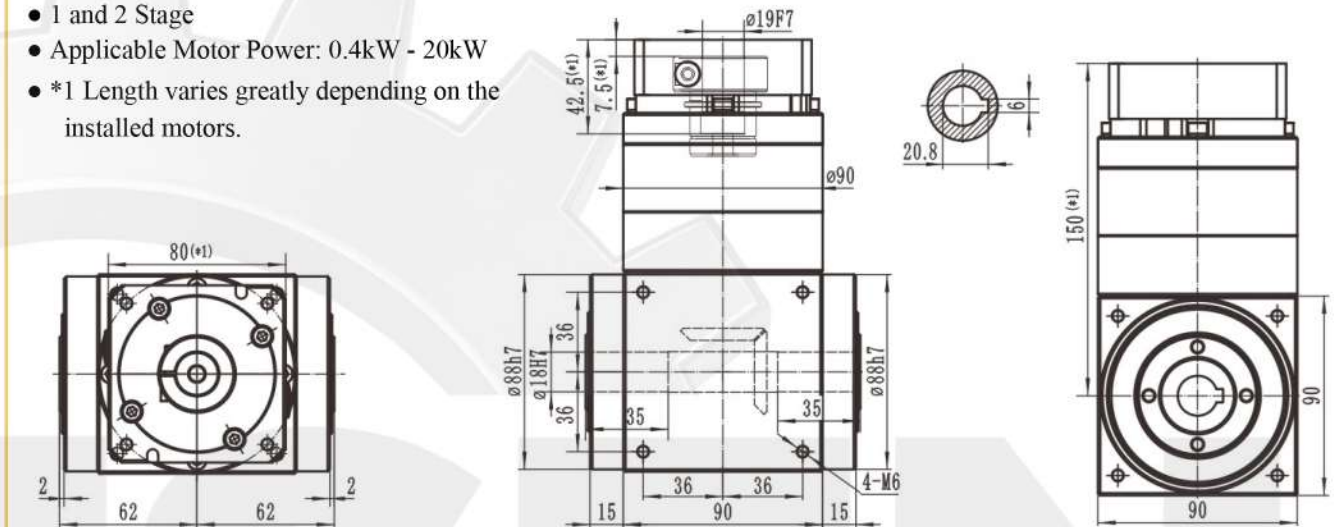
Main Product Data

KMPF090K2L2

KMPF090 Model	K2 Output Configuration	L2 Stage	R5 Ratio	P2 Backlash	+	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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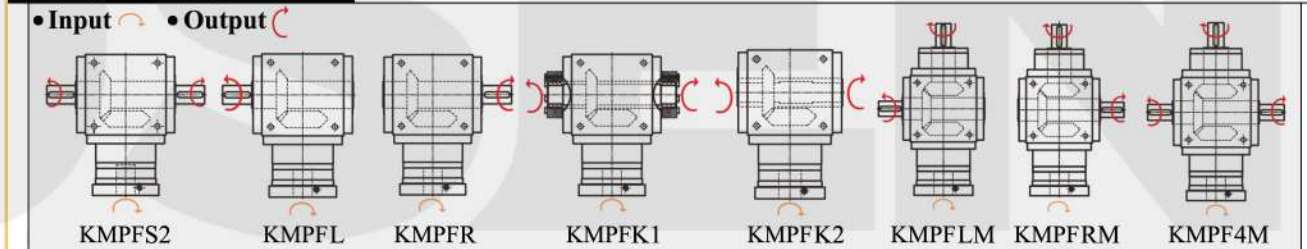
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.4kW - 20kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i									
		1	2	3	4	5	6	8	10		
Ratio *1	i	1	2	3	4	5	6	8	10		
Nominal Output Torque	N.m	78	68			78			68		
Maximum Acceleration Torque	N.m	117	102			117			102		
Emergency Stop Torque	N.m	234	204			234			204		
Nominal Input Speed	rpm					3000					
Maximum Input Speed	rpm					6000					
Precision Backlash	P2 arcmin	≤6					≤8				
Noise Level	dB					≤65					
Maximum Radial Load Of Output Shaft *2	N					1700					
Maximum Axial Load Of Output Shaft	N					850					
Maximum Radial Load Of Input Shaft	N					1450					
Maximum Axial Load Of Input Shaft	N					725					
Efficiency	%					≥97					
Operating Temperature	°C					(-15°C ~ +40°C)					
Service Life	h					≥20000					
Lubrication *3		Synthetic Lubrication Oils (Maintenance-free)									
Weight	kg	6.4									

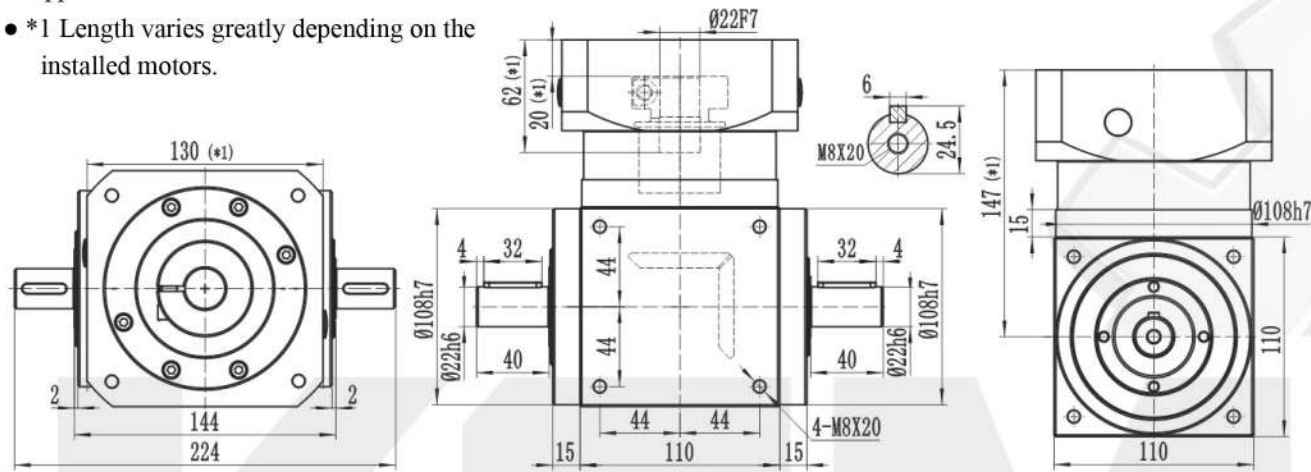
Main Product Data

KMPF110S2L1

KMPF110 Model	S2 Output Configuration	L1 Stage	R1 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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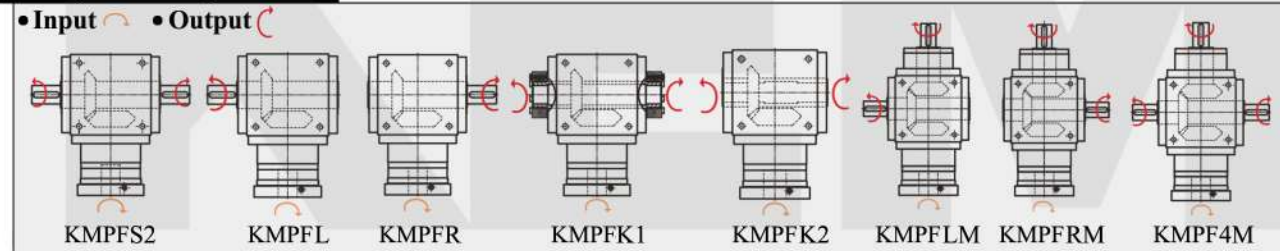
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.75kW - 40kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i									
		1	2	3	4	5	6	8	10		
Ratio *1	i										
Nominal Output Torque	N.m					150					
Maximum Acceleration Torque	N.m					225					
Emergency Stop Torque	N.m					450					
Nominal Input Speed	rpm					3000					
Maximum Input Speed	rpm					6000					
Precision Backlash	P2 arcmin		≤6				≤8				
Noise Level	dB					≤68					
Maximum Radial Load Of Output Shaft *2	N					2700					
Maximum Axial Load Of Output Shaft	N					1350					
Maximum Radial Load Of Input Shaft	N					2100					
Maximum Axial Load Of Input Shaft	N					1050					
Efficiency	%					≥97					
Operating Temperature	°C					(-15 ⁰ C ~ +40 ⁰ C)					
Service Life	h					≥20000					
Lubrication *3						Synthetic Lubrication Oils (Maintenance-free)					
Weight	kg					11					

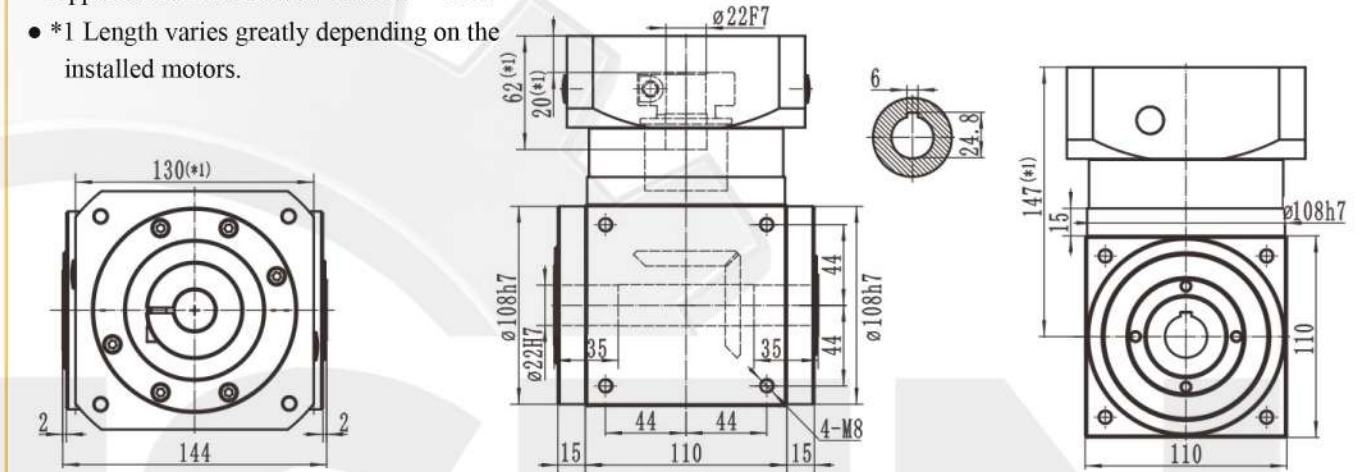
Main Product Data

KMPF110K2L2

KMPF110 Model	K2 Output Configuration	L2 Stage	R5 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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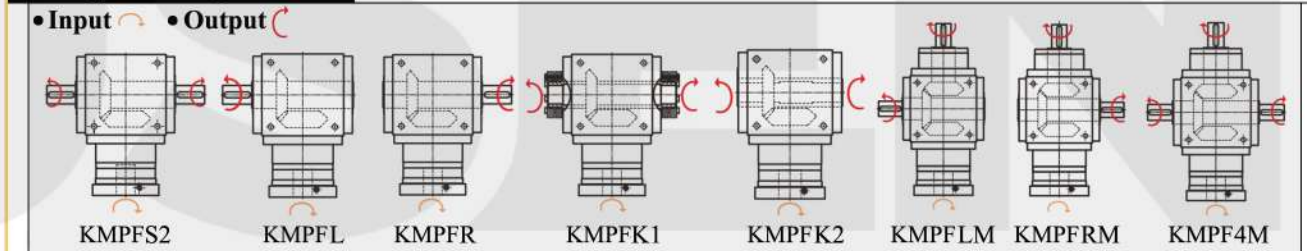
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 0.75kW - 40kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Stage	L	i									
		1	2	3	4	5	6	8	10		
Ratio *1	i										
Nominal Output Torque	N.m					150					
Maximum Acceleration Torque	N.m					225					
Emergency Stop Torque	N.m					450					
Nominal Input Speed	rpm					3000					
Maximum Input Speed	rpm					6000					
Precision Backlash	P2 arcmin		≤6				≤8				
Noise Level	dB					≤68					
Maximum Radial Load Of Output Shaft *2	N					2700					
Maximum Axial Load Of Output Shaft	N					1350					
Maximum Radial Load Of Input Shaft	N					2100					
Maximum Axial Load Of Input Shaft	N					1050					
Efficiency	%					≥97					
Operating Temperature	°C					(-15 ⁰ C ~ +40 ⁰ C)					
Service Life	h					≥20000					
Lubrication *3						Synthetic Lubrication Oils (Maintenance-free)					
Weight	kg					11					

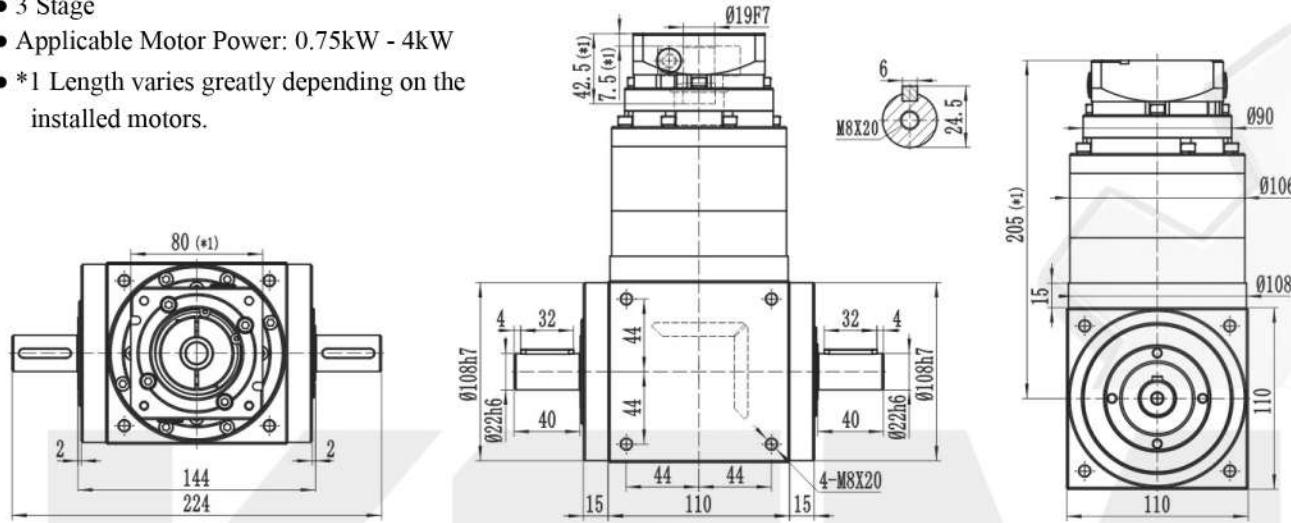
Main Product Data

KMPF110S2L3

KMPF110 **S2** **L3** **R25** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

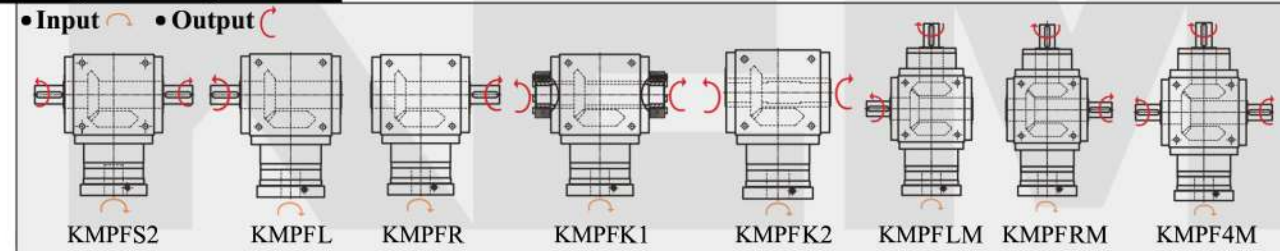
Overall Dimensions

- 3 Stage
- Applicable Motor Power: 0.75kW - 4kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L	3													
			i	9	12	15	16	20	25	30	32	45	50			
Nominal Output Torque		N.m														150
Maximum Acceleration Torque		N.m														225
Emergency Stop Torque		N.m														450
Nominal Input Speed		rpm														3000
Maximum Input Speed		rpm														6000
Precision Backlash		P2 arcmin														≤10
Noise Level		dB														≤68
Maximum Radial Load Of Output Shaft *2		N														2700
Maximum Axial Load Of Output Shaft		N														1350
Maximum Radial Load Of Input Shaft		N														2100
Maximum Axial Load Of Input Shaft		N														1050
Efficiency		%														≥94
Operating Temperature		°C														(-15°C ~ +40°C)
Service Life		h														≥20000
Lubrication *3																Synthetic Lubrication Oils (Maintenance-free)
Weight		kg														15

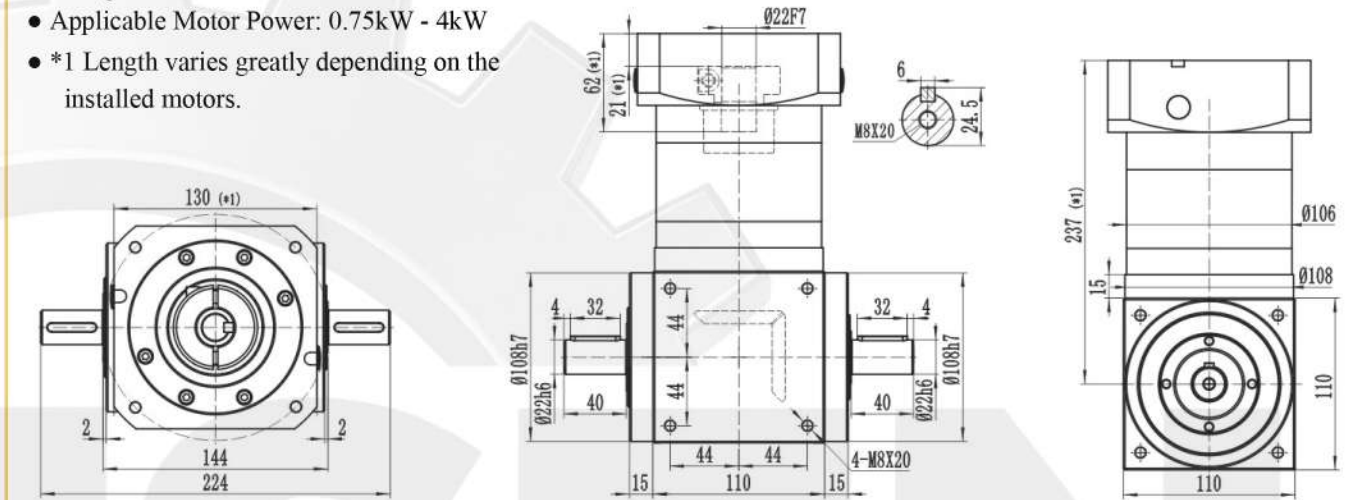
Main Product Data

KMPF110S2L3

KMPF110 **S2** **L3** **R25** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

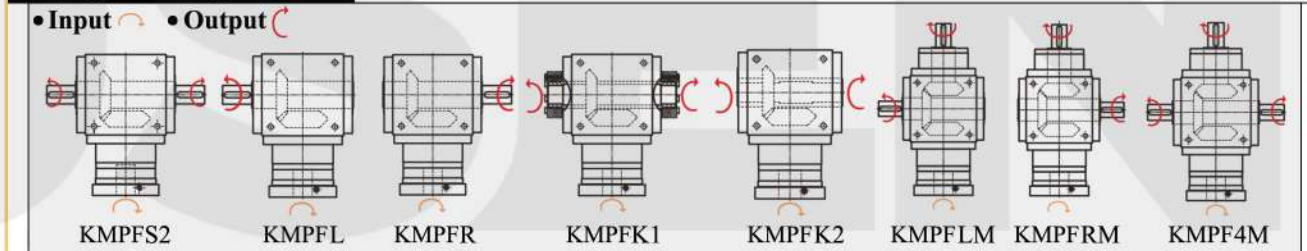
Overall Dimensions

- 3 Stage
- Applicable Motor Power: 0.75kW - 4kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L	3													
			i	9	12	15	16	20	25	30	32	45	50			
Nominal Output Torque		N.m														150
Maximum Acceleration Torque		N.m														225
Emergency Stop Torque		N.m														450
Nominal Input Speed		rpm														3000
Maximum Input Speed		rpm														6000
Precision Backlash		P2 arcmin														≤10
Noise Level		dB														≤68
Maximum Radial Load Of Output Shaft *2		N														2700
Maximum Axial Load Of Output Shaft		N														1350
Maximum Radial Load Of Input Shaft		N														2100
Maximum Axial Load Of Input Shaft		N														1050
Efficiency		%														≥94
Operating Temperature		°C														(-15°C ~ +40°C)
Service Life		h														≥20000
Lubrication *3																Synthetic Lubrication Oils (Maintenance-free)
Weight		kg														15

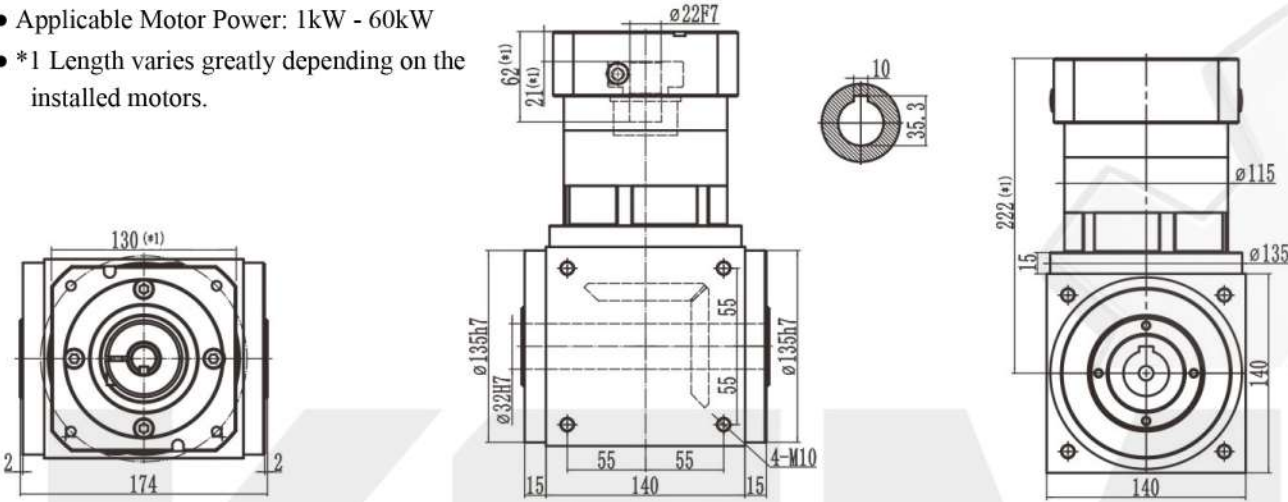
Main Product Data

KMPF140K2L2

KMPF140 Model **K2** Output Configuration **L2** Stage **R5** Ratio **P2** Backlash + **Motor size** Servo Motor, Stepper Motor, AC Motor, DC Motor

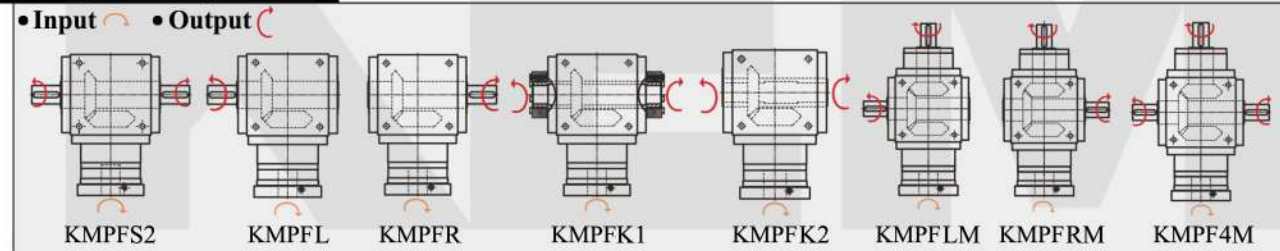
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 1kW - 60kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio ^{*1}	Stage	L	i	1		2		3		4		5		6		8		10		
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Nominal Output Torque		N.m		360	330								360						330	
Maximum Acceleration Torque		N.m		540	495								540						495	
Emergency Stop Torque		N.m		1080	990								1080						990	
Nominal Input Speed		rpm											2000						2000	
Maximum Input Speed		rpm											4000						4000	
Precision Backlash		P2 arcmin		≤6									≤8							
Noise Level		dB											≤70						≤70	
Maximum Radial Load Of Output Shaft ^{*2}		N											4800						4800	
Maximum Axial Load Of Output Shaft		N											2400						2400	
Maximum Radial Load Of Input Shaft		N											2700						2700	
Maximum Axial Load Of Input Shaft		N											1350						1350	
Efficiency		%											≥97						≥97	
Operating Temperature		°C											(-15°C ~ +40°C)						(-15°C ~ +40°C)	
Service Life		h											≥20000						≥20000	
Lubrication ^{*3}				Synthetic Lubrication Oils (Maintenance-free)																
Weight		kg		18																

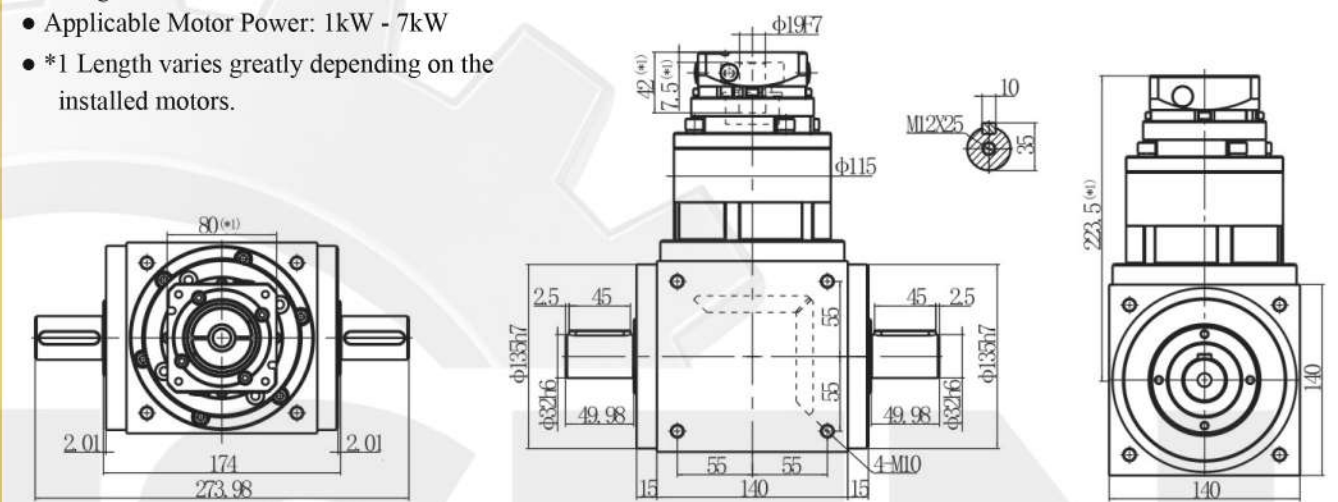
Main Product Data

KMPF140S2L3

KMPF140 Model **S2** Output Configuration **L3** Stage **R25** Ratio **P2** Backlash + **Motor size** Servo Motor, Stepper Motor, AC Motor, DC Motor

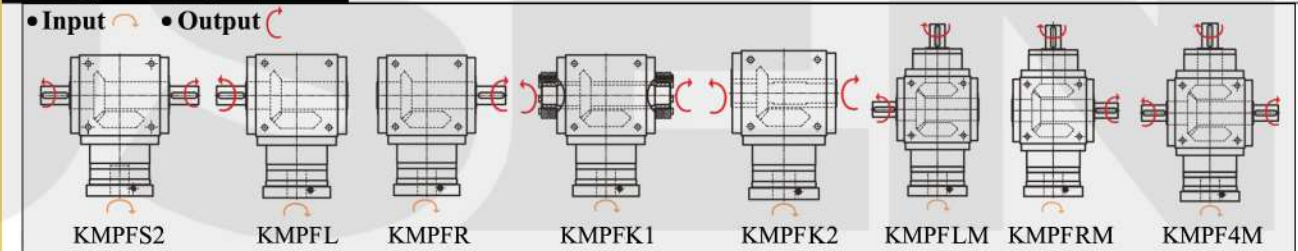
Overall Dimensions

- 3 Stage
- Applicable Motor Power: 1kW - 7kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

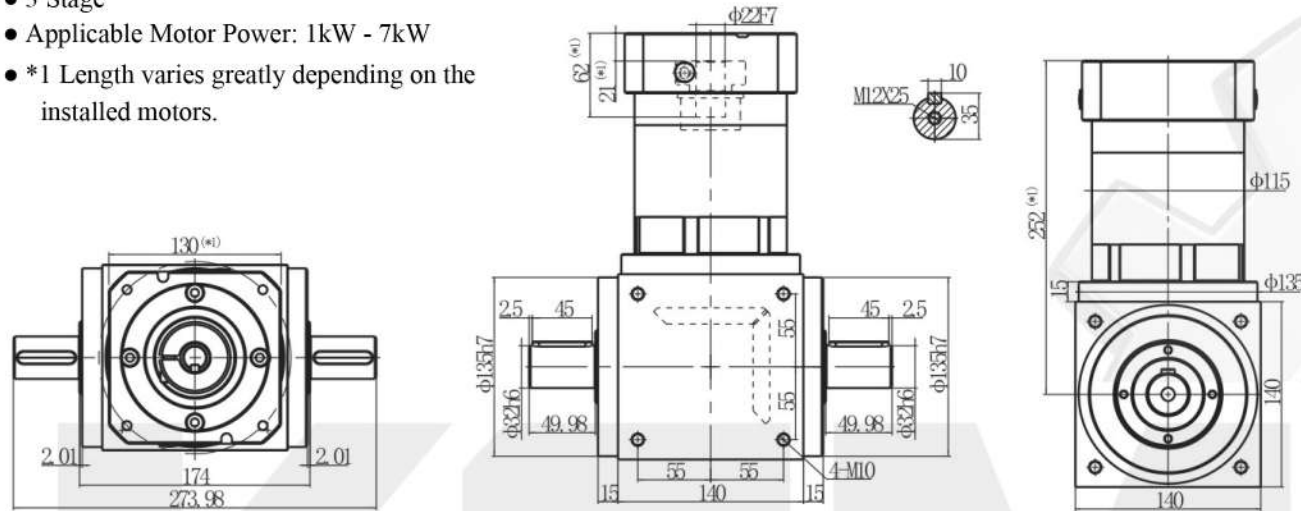
Ratio ^{*1}	Stage	L	i	1		2		3		4		5		6		8		10		
				9	12	15	16	20	25	30	32	45	50							
Nominal Output Torque		N.m																	360	
Maximum Acceleration Torque		N.m																	540	
Emergency Stop Torque		N.m																	1080	
Nominal Input Speed		rpm																	2000	
Maximum Input Speed		rpm																	4000	
Precision Backlash		P2 arcmin		≤6									≤8							
Noise Level		dB											≤70						≤70	
Maximum Radial Load Of Output Shaft ^{*2}		N											4800						4800	
Maximum Axial Load Of Output Shaft		N											2400						2400	
Maximum Radial Load Of Input Shaft		N											2700						2700	
Maximum Axial Load Of Input Shaft		N											1350						1350	
Efficiency		%											≥94						≥94	
Operating Temperature		°C											(-15°C ~ +40°C)						(-15°C ~ +40°C)	
Service Life		h											≥20000						≥20000	
Lubrication ^{*3}				Synthetic Lubrication Oils (Maintenance-free)																
Weight		kg		24																

Main Product Data
KMPF140S2L3

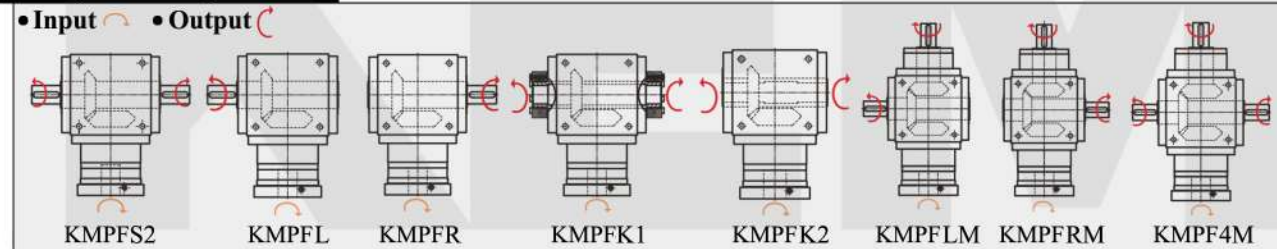
KMPF140 **S2** **L3** **R25** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

Overall Dimensions

- 3 Stage
- Applicable Motor Power: 1kW - 7kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

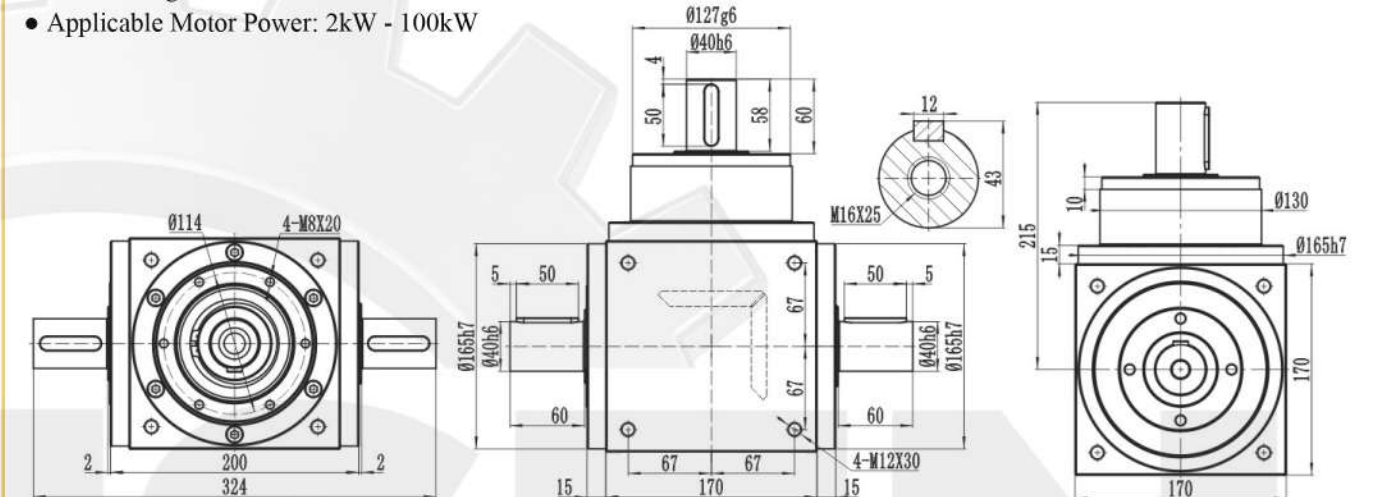
Ratio ^{*1}	Stage	L	i										
			9	12	15	16	20	25	30	32	45	50	
Nominal Output Torque		N.m	360										
Maximum Acceleration Torque		N.m	540										
Emergency Stop Torque		N.m	1080										
Nominal Input Speed		rpm	2000										
Maximum Input Speed		rpm	4000										
Precision Backlash		P2 arcmin	≤10										
Noise Level		dB	≤70										
Maximum Radial Load Of Output Shaft ^{*2}		N	4800										
Maximum Axial Load Of Output Shaft		N	2400										
Maximum Radial Load Of Input Shaft		N	2700										
Maximum Axial Load Of Input Shaft		N	1350										
Efficiency		%	≥94										
Operating Temperature		°C	(-15°C ~ +40°C)										
Service Life		h	≥20000										
Lubrication ^{*3}			Synthetic Lubrication Oils (Maintenance-free)										
Weight		kg	24										

Main Product Data
KMP170S2L1

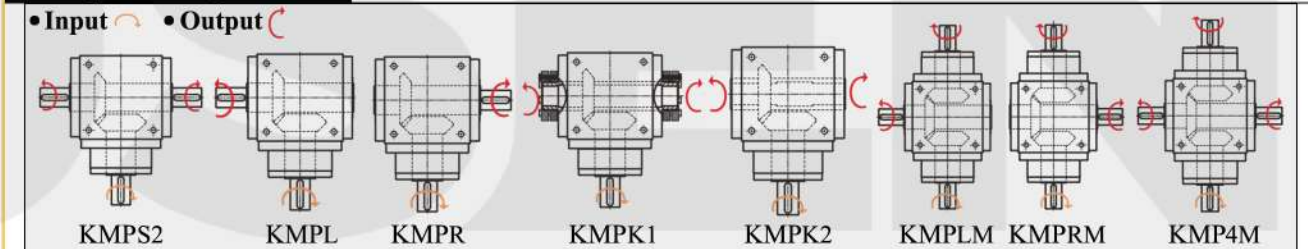
KMP170 **S2** **L1** **R1** **P2** + **Motor size**
 Model Output Stage Ratio Backlash Servo Motor, Stepper Motor,
 Configuration AC Motor, DC Motor

Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 2kW - 100kW



• Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio ^{*1}	Stage	L	i									
			1	2	3	4	5	6	8	10		
Nominal Output Torque		N.m	585	544			585				544	
Maximum Acceleration Torque		N.m	878	816			878				816	
Emergency Stop Torque		N.m	1755	1632			1755				1632	
Nominal Input Speed		rpm	2000									
Maximum Input Speed		rpm	4000									
Precision Backlash		P2 arcmin	≤6								≤8	
Noise Level		dB	≤72									
Maximum Radial Load Of Output Shaft ^{*2}		N	6600									
Maximum Axial Load Of Output Shaft		N	3300									
Maximum Radial Load Of Input Shaft		N	3800									
Maximum Axial Load Of Input Shaft		N	1900									
Efficiency		%	≥97									
Operating Temperature		°C	(-15°C ~ +40°C)									
Service Life		h	≥20000									
Lubrication ^{*3}			Synthetic Lubrication Oils (Maintenance-free)									
Weight		kg	34									



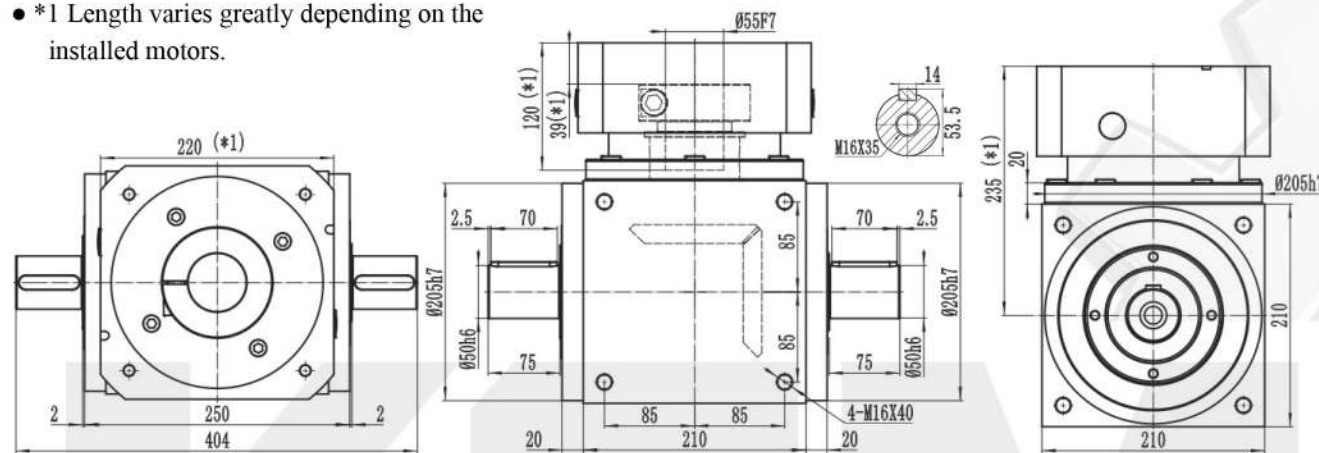
Main Product Data

KMPF210S2L1

KMPF210 Model **S2** Output Configuration **L1** Stage **R2** Ratio **P2** Backlash + **Motor size** Servo Motor, Stepper Motor, AC Motor, DC Motor

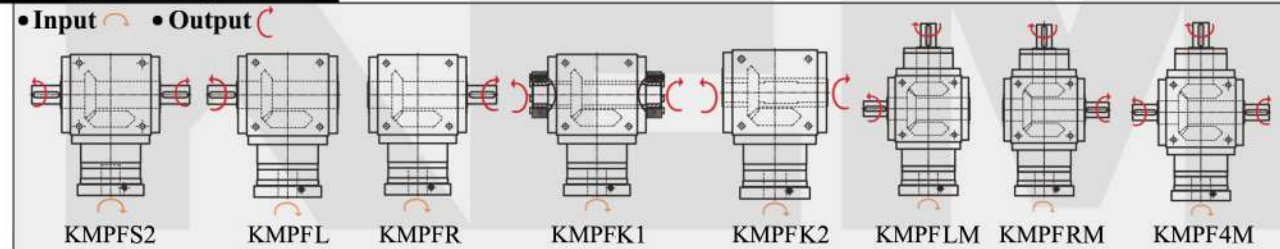
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 3kW - 110kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L i	1			2				
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	1300	1220			1300			1220
Maximum Acceleration Torque		N.m	1950	1830			1950			1830
Emergency Stop Torque		N.m	3900	3660			3900			3660
Nominal Input Speed		rpm					1000			
Maximum Input Speed		rpm					2000			
Precision Backlash	P2 arcmin		≤8				≤10			
Noise Level	dB						≤75			
Maximum Radial Load Of Output Shaft *2	N						11500			
Maximum Axial Load Of Output Shaft	N						5750			
Maximum Radial Load Of Input Shaft	N						7800			
Maximum Axial Load Of Input Shaft	N						3900			
Efficiency	%						≥97			
Operating Temperature	°C						(-15°C ~ +40°C)			
Service Life	h						≥20000			
Lubrication *3			Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg						65			

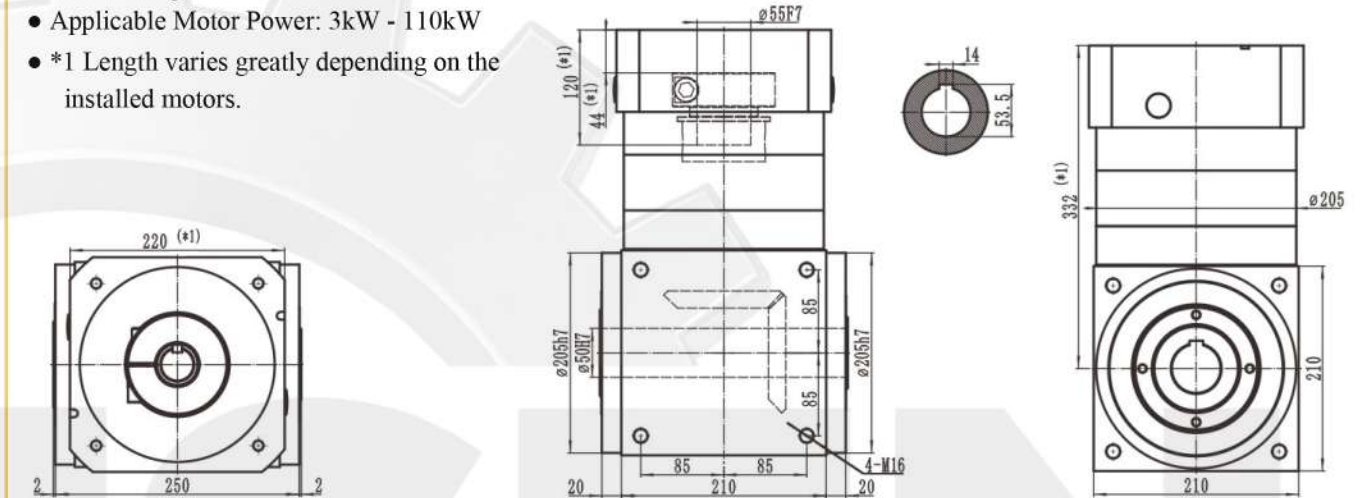
Main Product Data

KMPF210K2L2

KMPF210 Model **K2** Output Configuration **L2** Stage **R5** Ratio **P2** Backlash + **Motor size** Servo Motor, Stepper Motor, AC Motor, DC Motor

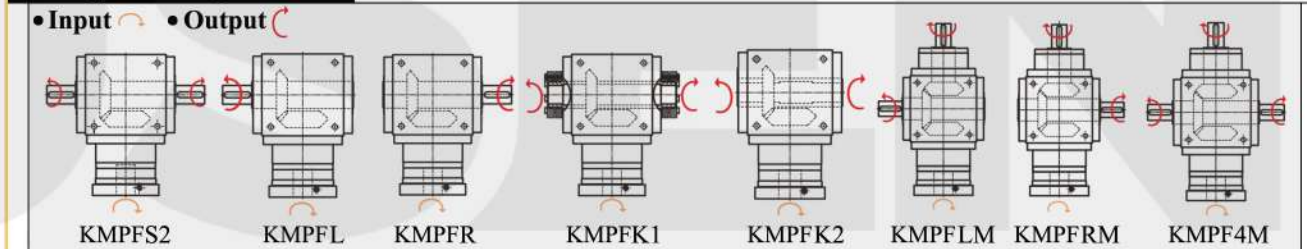
Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 3kW - 110kW
- *1 Length varies greatly depending on the installed motors.



• Dimensions are subject to change without notice

Output Configuration



Performance Parameters

- *1) i= Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio *1	Stage	L i	1			2				
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	1300	1220			1300			1220
Maximum Acceleration Torque		N.m	1950	1830			1950			1830
Emergency Stop Torque		N.m	3900	3660			3900			3660
Nominal Input Speed		rpm					1000			
Maximum Input Speed		rpm					2000			
Precision Backlash	P2 arcmin		≤8				≤10			
Noise Level	dB						≤75			
Maximum Radial Load Of Output Shaft *2	N						11500			
Maximum Axial Load Of Output Shaft	N						5750			
Maximum Radial Load Of Input Shaft	N						7800			
Maximum Axial Load Of Input Shaft	N						3900			
Efficiency	%						≥97			
Operating Temperature	°C						(-15°C ~ +40°C)			
Service Life	h						≥20000			
Lubrication *3			Synthetic Lubrication Oils (Maintenance-free)							
Weight	kg						65			

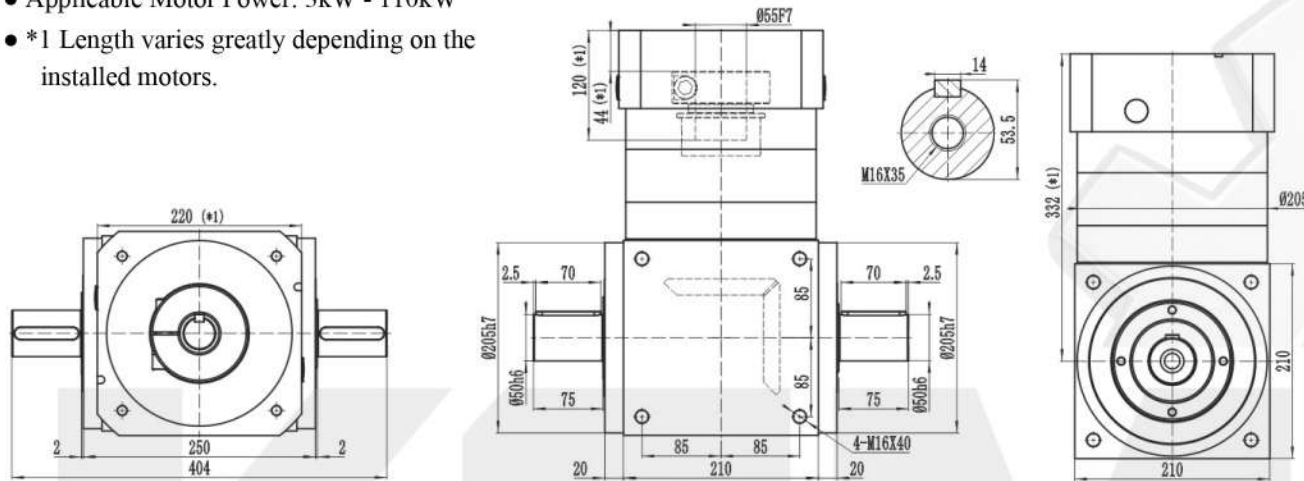


Main Product Data
KMPF210S2L2

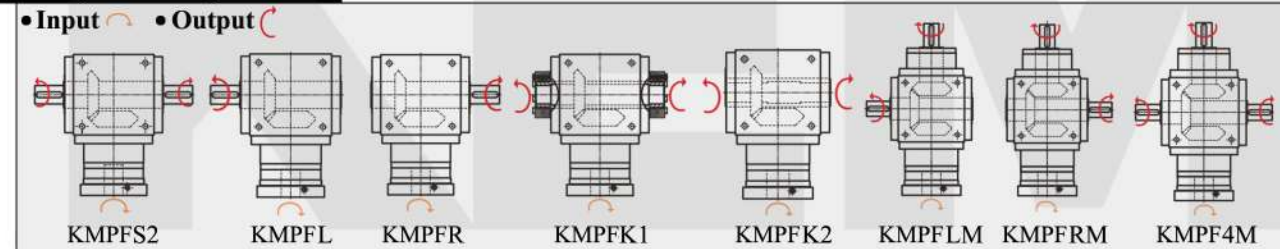
KMPF210 Model	S2 Output Configuration	L2 Stage	R5 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 3kW - 110kW
- *1 Length varies greatly depending on the installed motors.



- Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

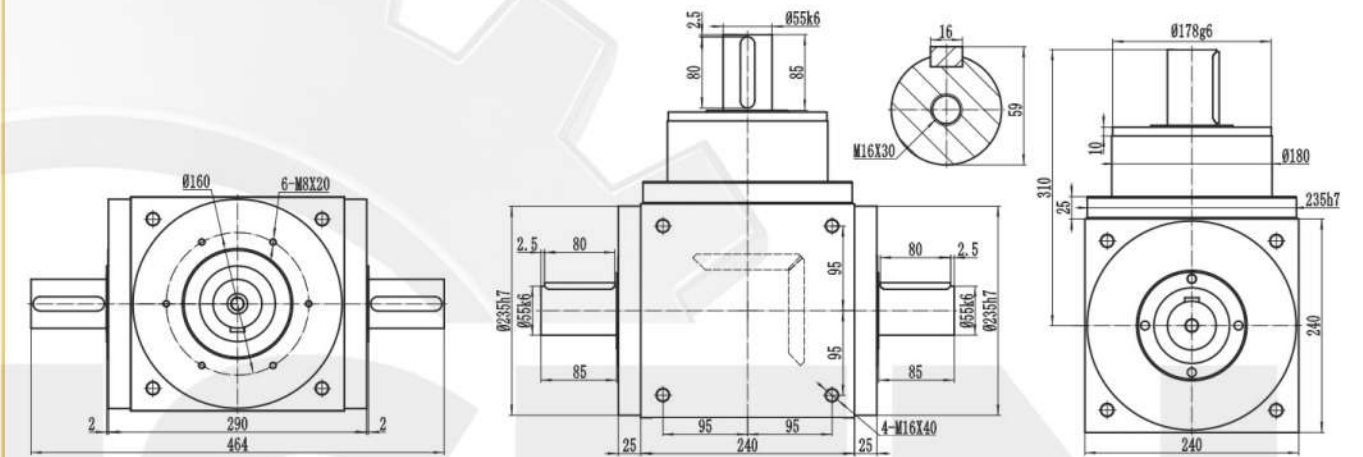
Ratio ^{*1}	Stage	L i	1				2			
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	1300	1220			1300			1220
Maximum Acceleration Torque		N.m	1950	1830			1950			1830
Emergency Stop Torque		N.m	3900	3660			3900			3660
Nominal Input Speed		rpm					1000			
Maximum Input Speed		rpm					2000			
Precision Backlash		P2 arcmin	≤8				≤10			
Noise Level		dB	≤75							
Maximum Radial Load Of Output Shaft ^{*2}		N					11500			
Maximum Axial Load Of Output Shaft		N					5750			
Maximum Radial Load Of Input Shaft		N					7800			
Maximum Axial Load Of Input Shaft		N					3900			
Efficiency		%					≥97			
Operating Temperature		°C					(-15°C ~ +40°C)			
Service Life		h					≥20000			
Lubrication ^{*3}							Synthetic Lubrication Oils (Maintenance-free)			
Weight		kg					65			

Main Product Data
KMP240S2L1

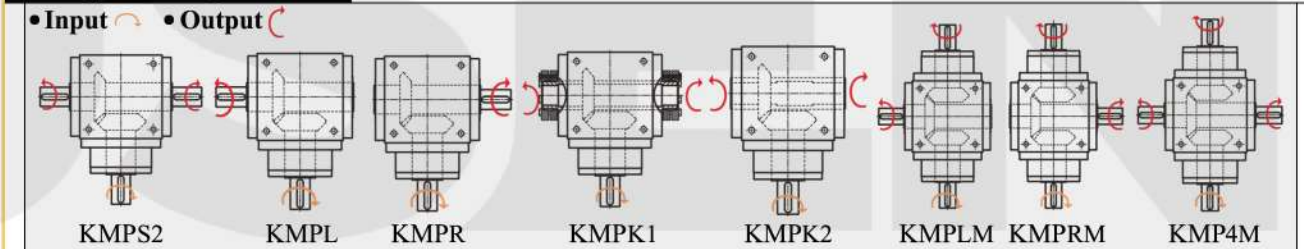
KMP240 Model	S2 Output Configuration	L1 Stage	R1 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 4kW - 180kW



- Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

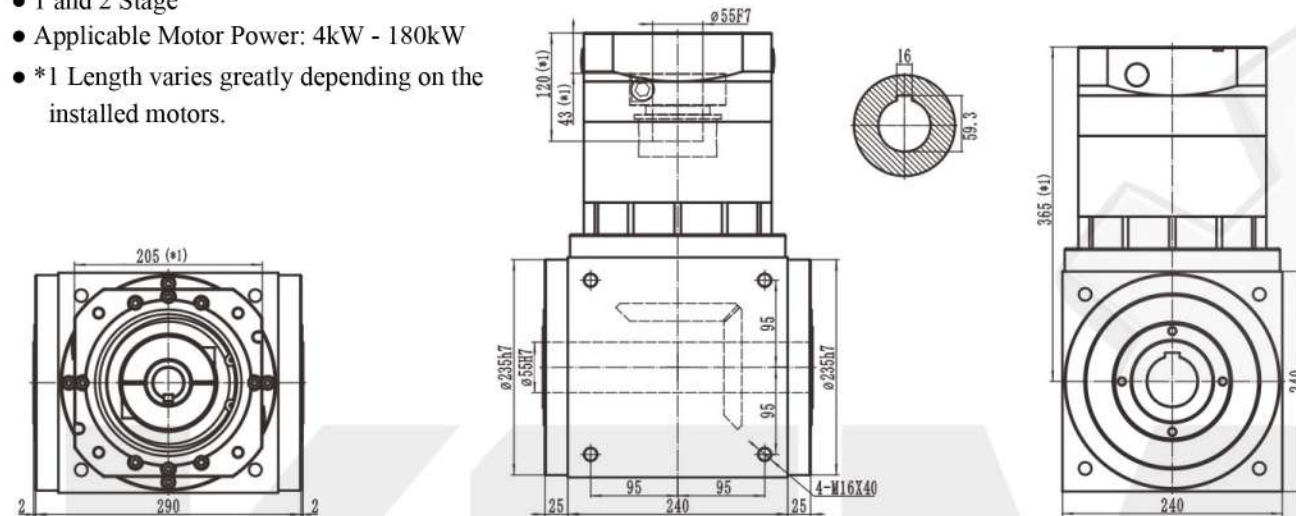
Ratio ^{*1}	Stage	L i	1				2			
			1	2	3	4	5	6	8	10
Nominal Output Torque		N.m	2150	2010			2150			2010
Maximum Acceleration Torque		N.m	3225	3015			3225			3015
Emergency Stop Torque		N.m	6450	6030			6450			6030
Nominal Input Speed		rpm					1000			
Maximum Input Speed		rpm					2000			
Precision Backlash		P2 arcmin	≤10				≤12			
Noise Level		dB					≤75			
Maximum Radial Load Of Output Shaft ^{*2}		N					16000			
Maximum Axial Load Of Output Shaft		N					8500			
Maximum Radial Load Of Input Shaft		N					9600			
Maximum Axial Load Of Input Shaft		N					4800			
Efficiency		%					≥97			
Operating Temperature		°C					(-15°C ~ +40°C)			
Service Life		h					≥20000			
Lubrication ^{*3}							Synthetic Lubrication Oils (Maintenance-free)			
Weight		kg					89			

Main Product Data
KMPF240K2L2

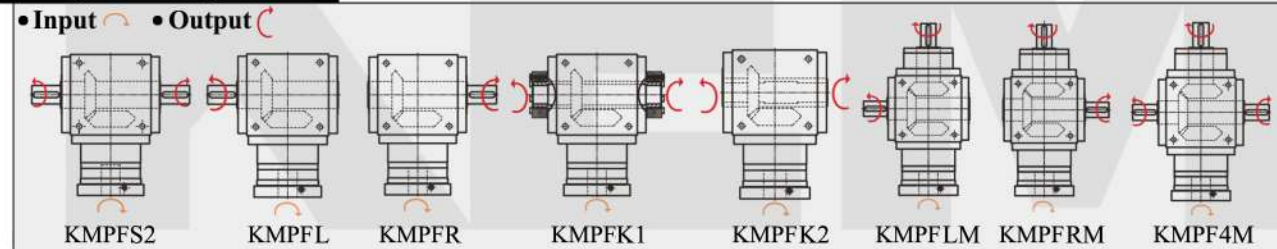
KMPF240 Model	K2 Output Configuration	L2 Stage	R5 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 4kW - 180kW
- *1 Length varies greatly depending on the installed motors.



- Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

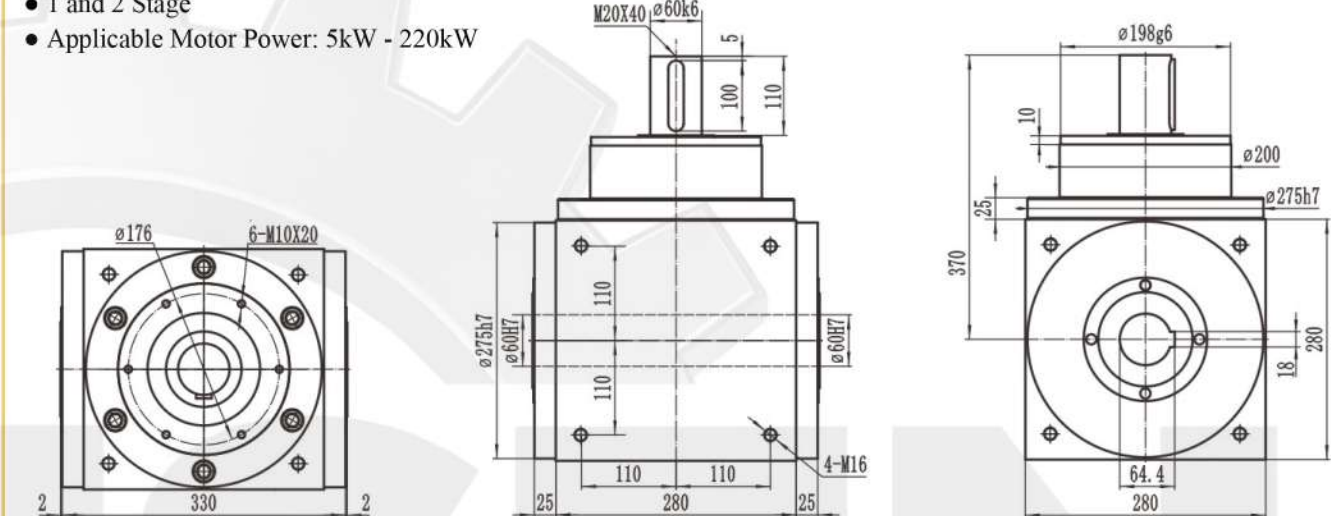
Ratio ^{*1}	Stage	L	1			2						
			i	1	2	3	4	5	6	8	10	
Nominal Output Torque		N.m	2150	2010				2150				2010
Maximum Acceleration Torque		N.m	3225	3015				3225				3015
Emergency Stop Torque		N.m	6450	6030				6450				6030
Nominal Input Speed		rpm						1000				
Maximum Input Speed		rpm						2000				
Precision Backlash		P2 arcmin	≤10					≤12				
Noise Level		dB						≤75				
Maximum Radial Load Of Output Shaft ^{*2}		N						16000				
Maximum Axial Load Of Output Shaft		N						8500				
Maximum Radial Load Of Input Shaft		N						9600				
Maximum Axial Load Of Input Shaft		N						4800				
Efficiency		%						≥97				
Operating Temperature		°C						(-15°C ~ +40°C)				
Service Life		h						≥20000				
Lubrication ^{*3}			Synthetic Lubrication Oils (Maintenance-free)									
Weight		kg	89									

Main Product Data
KMP280K2L1

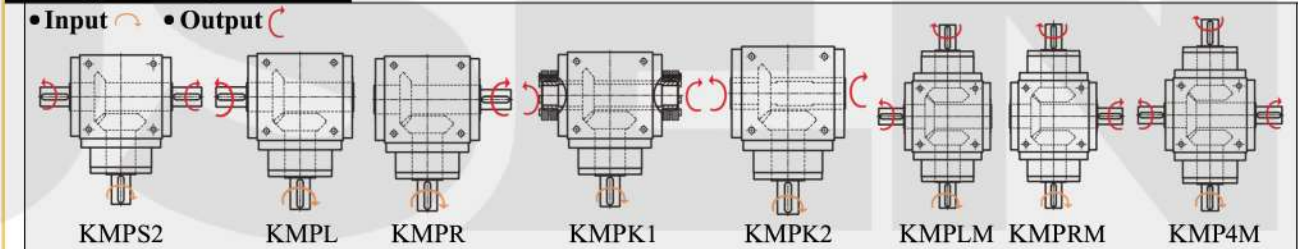
KMP280 Model	K2 Output Configuration	L1 Stage	R2 Ratio	P2 + Backlash	Motor size Servo Motor, Stepper Motor, AC Motor, DC Motor
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Overall Dimensions

- 1 and 2 Stage
- Applicable Motor Power: 5kW - 220kW



- Dimensions are subject to change without notice

Output Configuration

Performance Parameters

- *1) i = Input Speed / Output Speed.
- *2) When the output speed is 100rpm, the load acts on the center position of the output shaft.
- *3) Customizable high and low temperature grease

Ratio ^{*1}	Stage	L	1			2						
			i	1	2	3	4	5	6	8	10	
Nominal Output Torque		N.m	3200	3050				3200				3050
Maximum Acceleration Torque		N.m	4800	4575				4800				4575
Emergency Stop Torque		N.m	9600	9150				9600				9150
Nominal Input Speed		rpm						1000				
Maximum Input Speed		rpm						2000				
Precision Backlash		P2 arcmin	≤12					≤15				
Noise Level		dB						≤78				
Maximum Radial Load Of Output Shaft ^{*2}		N						18000				
Maximum Axial Load Of Output Shaft		N						9000				
Maximum Radial Load Of Input Shaft		N						10500				
Maximum Axial Load Of Input Shaft		N						5250				
Efficiency		%						≥97				
Operating Temperature		°C						(-15°C ~ +40°C)				
Service Life		h						≥20000				
Lubrication ^{*3}			Synthetic Lubrication Oils (Maintenance-free)									
Weight		kg	150									