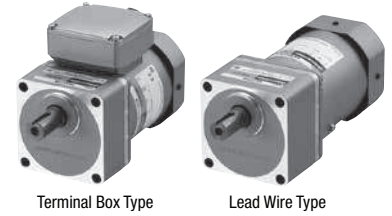


Induction Motors

90 W

□ 90 mm

Combination Type, Round Shaft Type



Terminal Box Type

Lead Wire Type

Specifications - Continuous Rating



Product Name Upper Level: Combination Type Lower Level: Round Shaft Type		Output Power W	Voltage VAC	Frequency Hz	Current A	Starting Torque mN·m	Rated Torque mN·m	Rated Speed r/min	Capacitor μF	Overheat Protection Device
Terminal Box Type	Lead Wire Type									
51K90UAT2-□ 51K90A-UAT2	51K90UA-□ 51K90A-UA	90	Single-Phase 110	60	1.44	450	585	1500	20	TP
			Single-Phase 115		1.44					
51K90GCT2-□ 51K90A-GCT2	51K90GC-□ 51K90A-GC	90	Single-Phase 220	50	0.70	480	730	1200	6.0	
			Single-Phase 230		0.70					
51K90UCT2-□ 51K90A-UCT2	51K90UC-□ 51K90A-UC	90	Single-Phase 220	60	0.71	450	605	1450	5.0	
			Single-Phase 230		0.71					

● The specifications apply to the motor only.

TP: This indicates that there is a built-in thermal protector (automatic return type). If a motor overheats for any reason, the thermal protector is activated and the motor is stopped. When the motor temperature drops, the thermal protector closes and the motor restarts automatically. Be sure to turn the power supply off before inspecting.

Product Line

Combination Type	The combination type comes with a motor and a gearhead pre-assembled.	
	The combination of the motor and the gearhead can be changed.	
	They are also available separately.	
	You can also remove the gearhead to change the installation position by 90°.	

● Combination Type

◇ Terminal Box Type

Product Name	Gear Ratio
51K90UAT2-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180
51K90GCT2-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180
51K90UCT2-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180

The following items are included in each product.
Motor, Gearhead, Capacitor, Capacitor Cap, Installation Screws, Parallel Key, Operating Manual

◇ Lead Wire Type

Product Name	Gear Ratio
51K90UA-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180
51K90GC-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180
51K90UC-□	5, 6, 7.5, 9, 12.5, 15, 18
	25, 30, 36, 50, 60
	75, 90, 100, 120, 150, 180

● Round Shaft Type

◇ Terminal Box Type

Product Name
51K90A-UAT2
51K90A-GCT2
51K90A-UCT2

◇ Lead Wire Type

Product Name
51K90A-UA
51K90A-GC
51K90A-UC

The following items are included in each product.
Motor, Capacitor, Capacitor Cap, Operating Manual

● A number indicating the gear ratio is entered where the box □ is located within the product name.

Permissible Torque on Combination Types

- The speed is calculated by dividing the motor's synchronous speed (50 Hz: 1500 r/min, 60 Hz: 1800 r/min) by the gear ratio.
- The actual speed is 2 to 20% less, depending on the load.

50 Hz

Unit : N·m

Product Name	Speed r/min	300	250	200	166	120	100	83	60	50	41	30	25	20	16.6	15	12.5	10	8.3
	Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
5IK90GC□-□		3.3	3.9	4.9	5.9	8.2	9.9	11.3	15.7	18.8	22.6	31.4	37.7	40	40	40	40	40	40

60 Hz

Unit : N·m

Product Name	Speed r/min	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
	Gear Ratio	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
5IK90UA□-□		2.6	3.2	3.9	4.7	6.6	7.9	9.1	12.6	15.1	18.1	25.2	30.2	35.5	40	40	40	40	40
5IK90UC□-□		2.7	3.3	4.1	4.9	6.8	8.2	9.4	13.0	15.6	18.7	26.0	31.2	36.8	40	40	40	40	40

Permissible Radial Load/Permissible Axial Load

→ page 32

Permissible Inertia J of Combination Types

→ page 32

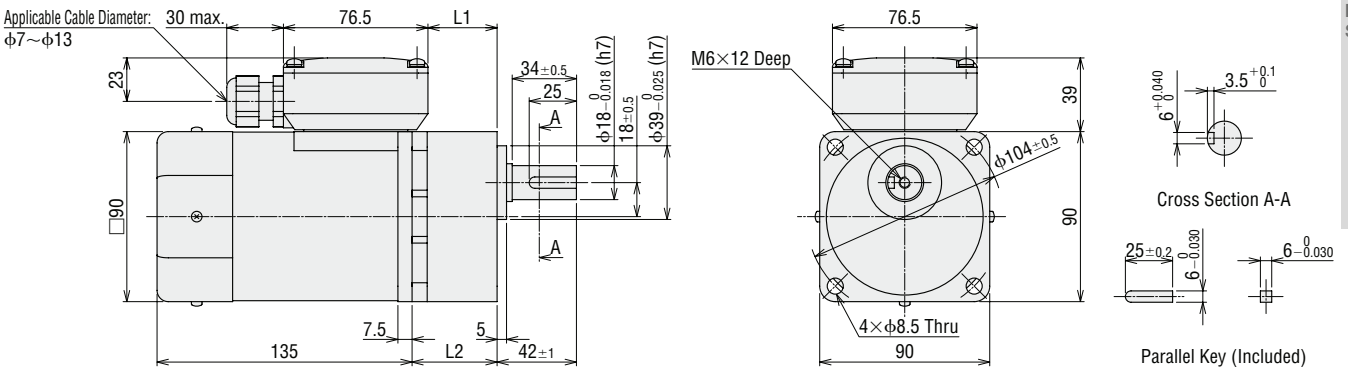
Dimensions (Unit = mm)

- "Installation screws" are included with the combination type. Dimensions of installation screws → page 31
- The cable outlet of the terminal box can be changed and fixed to four different directions.

Terminal Box Type

◇ Combination Type

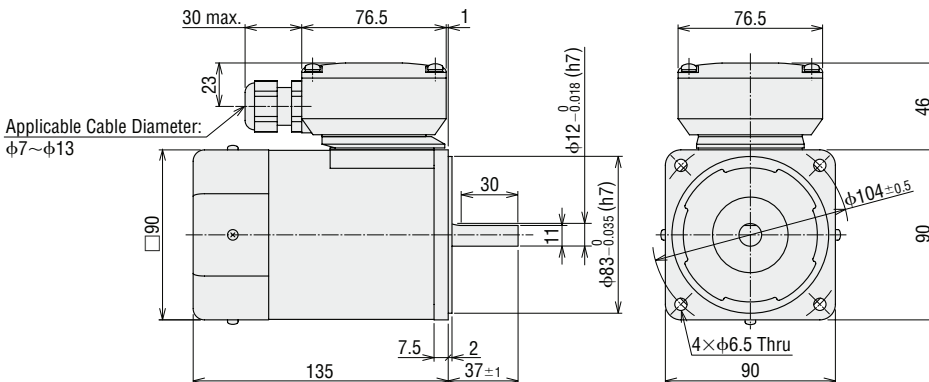
Product Name	Motor Product Name	Gearhead Product Name	Gear Ratio	L1	L2	Mass kg
5IK90U□T2-□	5IK90GVR-U□T2	5GVR□B	5~15	36.6	45	5.0
5IK90GCT2-□	5IK90GVR-GCT2		18~36	49.6	58	
			50~180	61.6	70	



◇ Round Shaft Type

5IK90A-U□T2, 5IK90A-GCT2

Mass: 3.5 kg



- Either **A** or **C** indicating the power supply voltage is replaced with the box **□** in the product name.
- A code **(T2)** indicating the terminal box type is replaced with the box **□** in the product name.
- A number indicating the gear ratio is entered where the box **□** is located within the product name.

