

DKM-Motoren





DSY Series



DSY Series

Index

DSY motor 100W	B-341
DSY motor 200W	B-343
DSY motor 400W	B-345

B AC Motors

Constitution

Helicross Gearbox

We chose Helicross gear to design our new gearbox. Our new right-angle gearbox which is produced by patented technology is made with a hollow shaft.



Strengthen housing durability

Design optimized for Helical gear

Special Steel with advanced heat treatment

Helical Gear

Cross Gear

Premium Design

- Strong and elegant-looking design
- Load distributing design for enhanced durability



High Durability

- Optimized angle of twist in gear and All Ball Bearing application maximize power transmission efficiency
- Design for the maximum of gear module
- Realization of Max. torque 140 N.m through special heat treatment
- Double heat treated steel for improved gear durability



User-Centered Design

- Exposed output shaft is made of SUS material and can be applied to food-related machinery(optional)
- There are no restrictions on machine assembly because holes and tabs are processed in the product



Low Noise and Low Vibration

- Reduced noise through High-Precision process for input and first gear
- RSG(Round Super Grinding) processing realized high precision machining

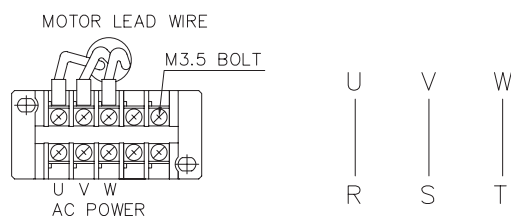
B AC Motors

Model

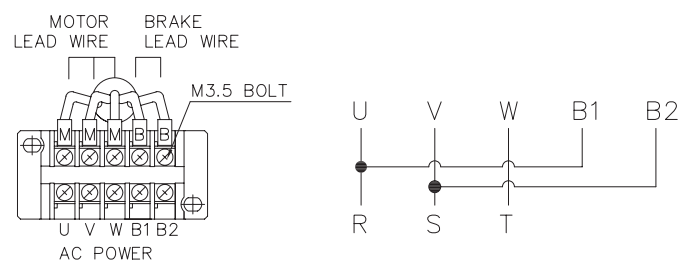
Specifications

Item	DSY series
Output	0.1 / 0.2 / 0.4kW
Type	Induction motor / Brake motor
Number of poles	4P
Number of phases	3 Phase
Voltage	220~230V, 380~400V, 415~440V
Frequency	50/60Hz
Gear ratio	7.5~60
Rating	Continuous (S1)
Heat resistance class	B Class (130)
Starting method	Direct start
Cooling method	Totally-enclosed fan-cooled type
Degree of protection	IP55(Induction Motor) / IP40(Brake Motor)
Output shaft	Hollow Shaft type
Mounting method	For both flange and face mounting methods
Mounting direction	Installation in any direction
Installation location	Indoor
Ambient temperature	-10°C ~ +40°C
Ambient humidity	85% RH or less
Altitude	1000 m or less above sea level
Brake type	B type, DC spring brake
Lubrication method	Grease lubrication
Paint colour	Glossy Beige

Connection Diagrams

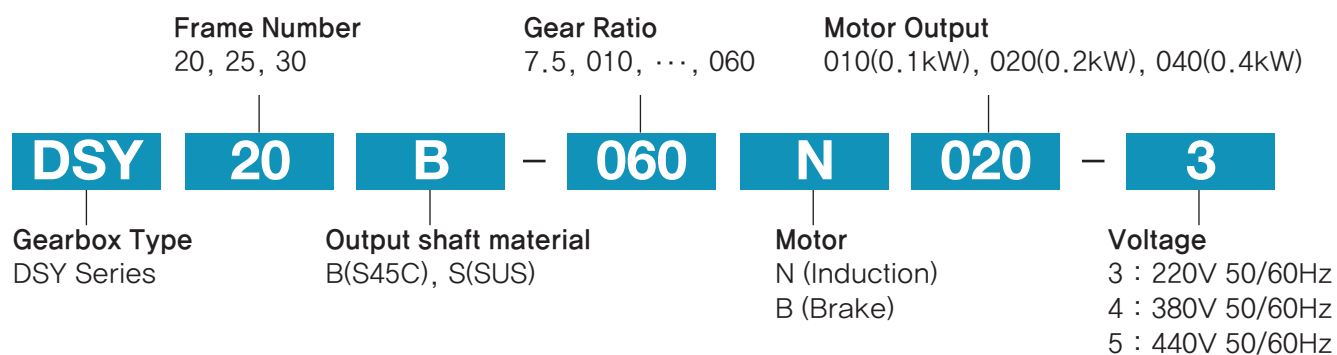


Induction Motor



Brake Motor

DSY Series Coding System



Products Line-up

Motor	Gear ratio													
0.1kW	7.5	10	12.5	15	20	25	30	40	50	60	Hollow Shaft Ø20		Hollow Shaft Ø25	
	7.5	10	12.5	15	20	25	30	40	50	60	Hollow Shaft Ø20		Hollow Shaft Ø25	
0.2kW	7.5	10	12.5	15	20	25	30	40	50	60	Hollow Shaft Ø20		Hollow Shaft Ø25	
	7.5	10	12.5	15	20	25	30	40	50	60	Hollow Shaft Ø25		Hollow Shaft Ø30	

■ Induction Motor 3Φ 220V 50/60Hz
 3Φ 380V 50/60Hz
 3Φ 440V 50/60Hz

■ Brake Motor 3Φ 220V 50/60Hz
 3Φ 380V 50/60Hz
 3Φ 440V 50/60Hz

※ Brake input power is the same as motor voltage

B AC Motors

DSY Series 100W

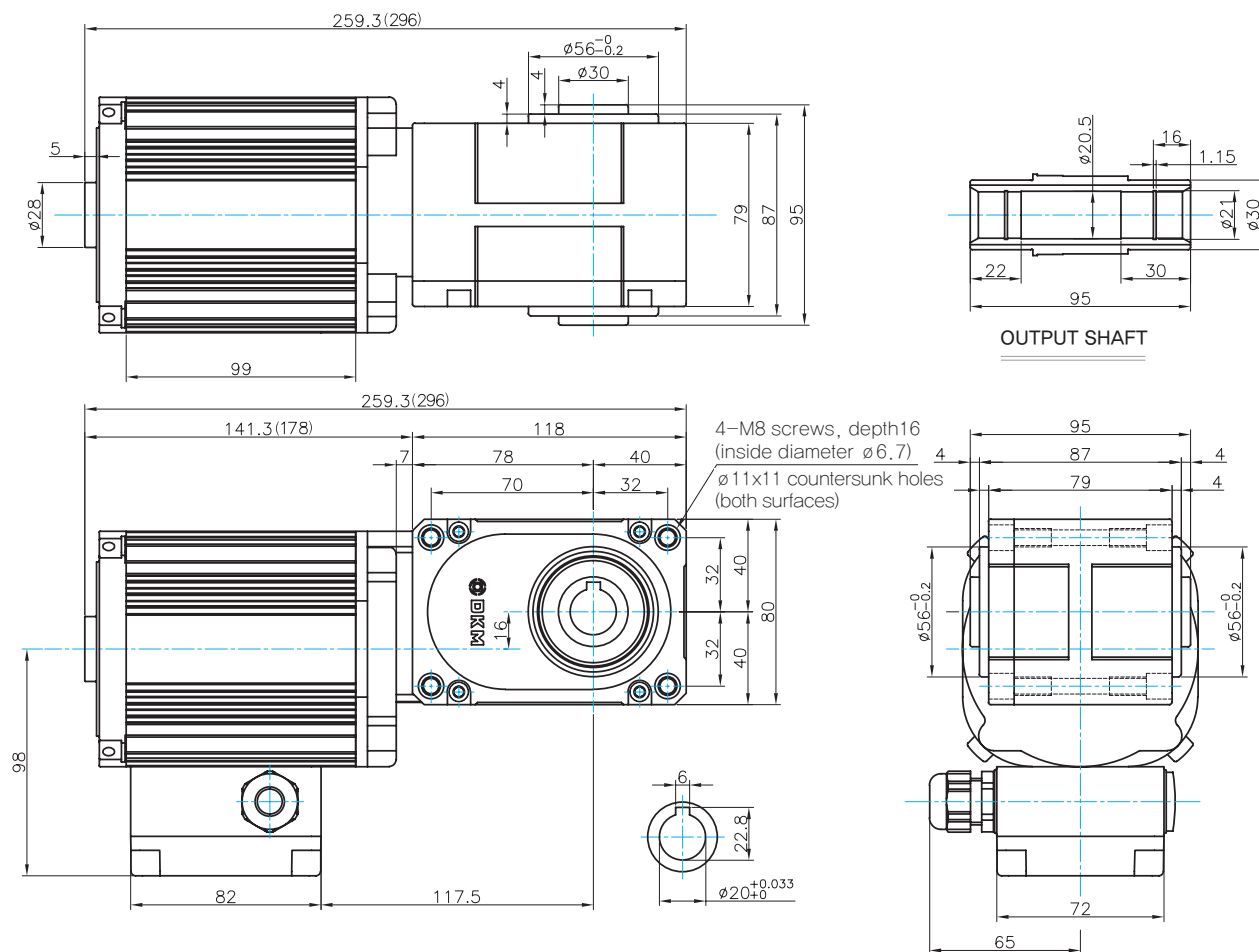
Maximum Permissible Torque

Output	Gear Ratio		7.5	10	12.5	15	20	25	30	40	50	60
0.1kw	60Hz	r/min	240	180	144	120	90	72	60	45	36	30
	50Hz		200	150	120	100	75	60	50	37.5	30	25
	60Hz	kgfcm	33.8	45.1	56.3	67.6	90.1	113	135	180	225	270
	50Hz		40.6	54.1	67.6	81.1	108	135	162	216	270	325

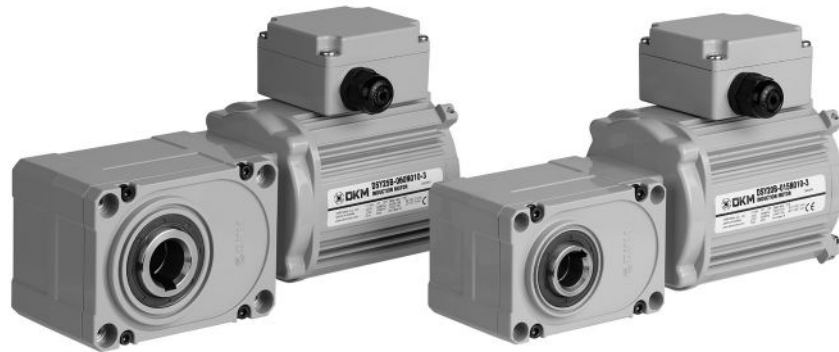
※ The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

Dimensions

DSY Series 0.1kW, Gear Ratio(7.5:1~30:1)



※ Dimensions in brackets for brake motors
※ Brake input power is the same as motor voltage

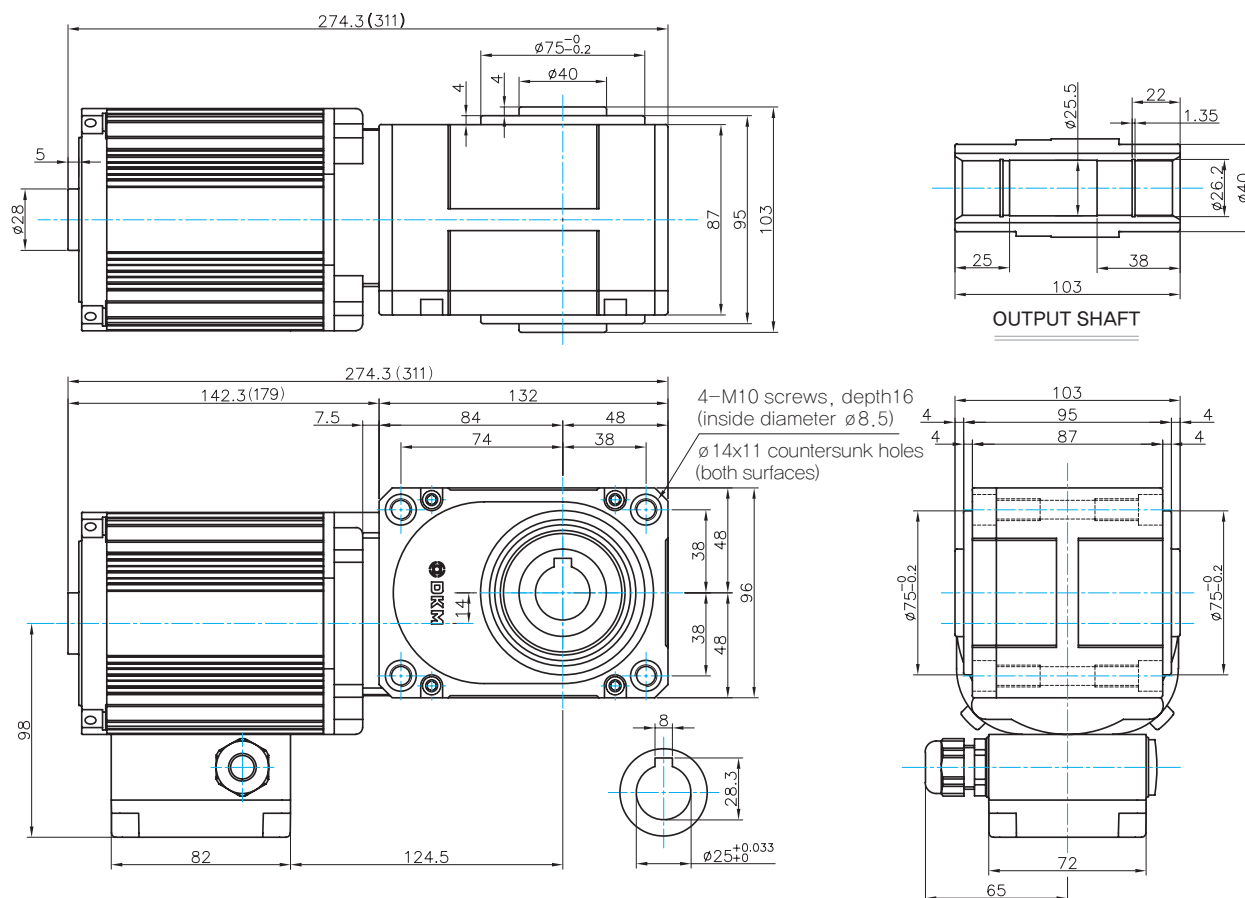


Weight(Motor+Gearbox)

(단위 : kg)

Output	Motor	7.5	10	12.5	15	20	25	30	40	50	60	
0.1kw	INDUCTION	6.2						7.2				
	BRAKE	7						8				

DSY Series 0.1kW, Gear Ratio(40:1~60:1)



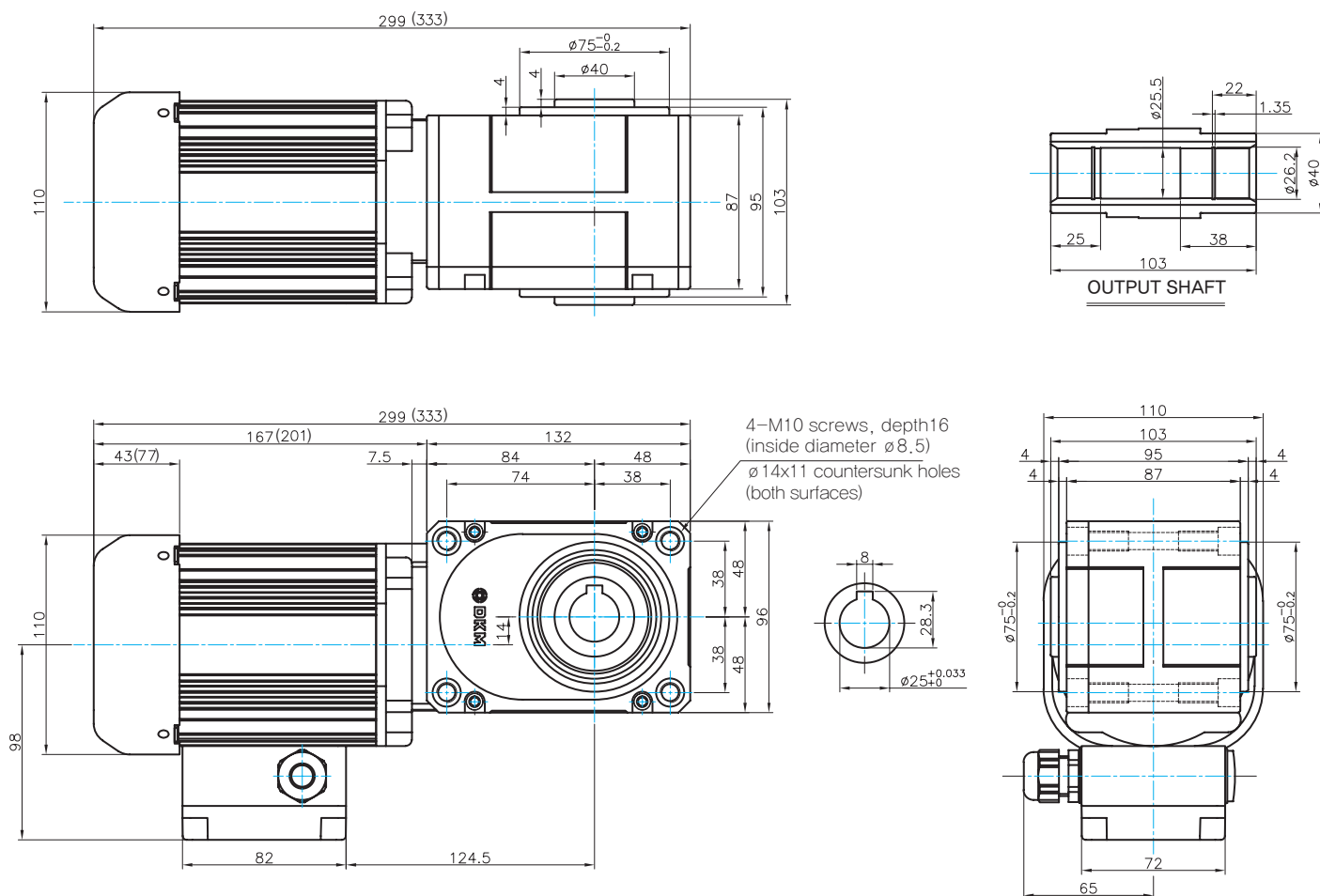
- ※ Dimensions in brackets for brake motors
- ※ Brake input power is the same as motor voltage



Weight(Motor+Gearbox)

Output	Motor	7.5	10	12.5	15	20	25	30	40	50	60	
0.2kw	INDUCTION	6.4						7.4				
	BRAKE	7.2						8.2				

DSY Series 0.2kW, Gear Ratio(40:1~60:1)



※ Dimensions in brackets for brake motors
 ※ Brake input power is the same as motor voltage

B AC Motors

DSY Series 400W

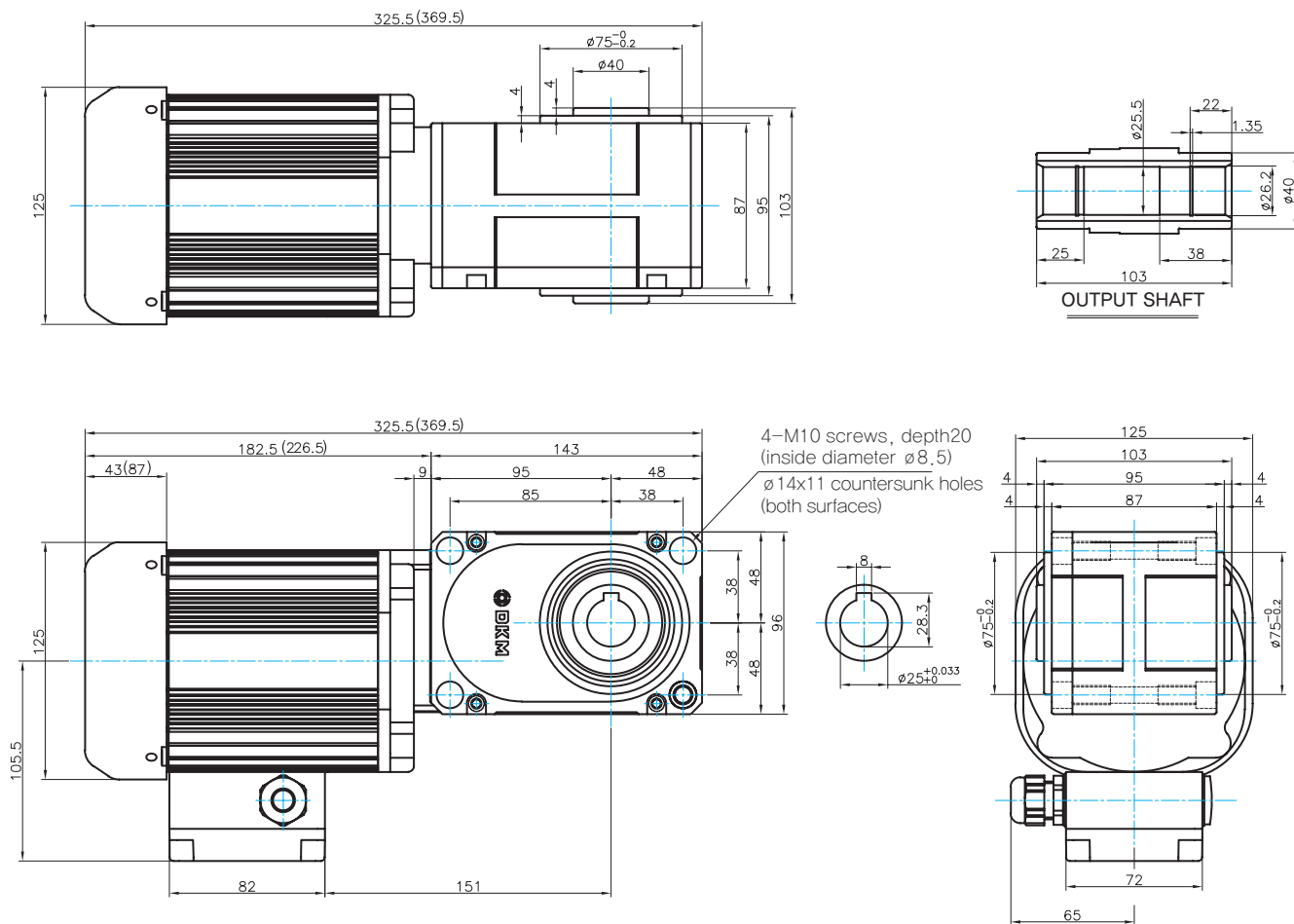
Maximum Permissible Torque

Output	Gear Ratio		7.5	10	12.5	15	20	25	30	40	50	60
0.4kw	60Hz	r/min	240	180	144	120	90	72	60	45	36	30
	50Hz		200	150	120	100	75	60	50	37.5	30	25
	60Hz	kgfcm	135	180	225	270	361	451	541	721	901	1082
	50Hz		162	216	270	325	433	541	649	865	1082	1298

※ The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

Dimensions

DSY Series 0.4kW, Gear Ratio(7.5:1~30:1)



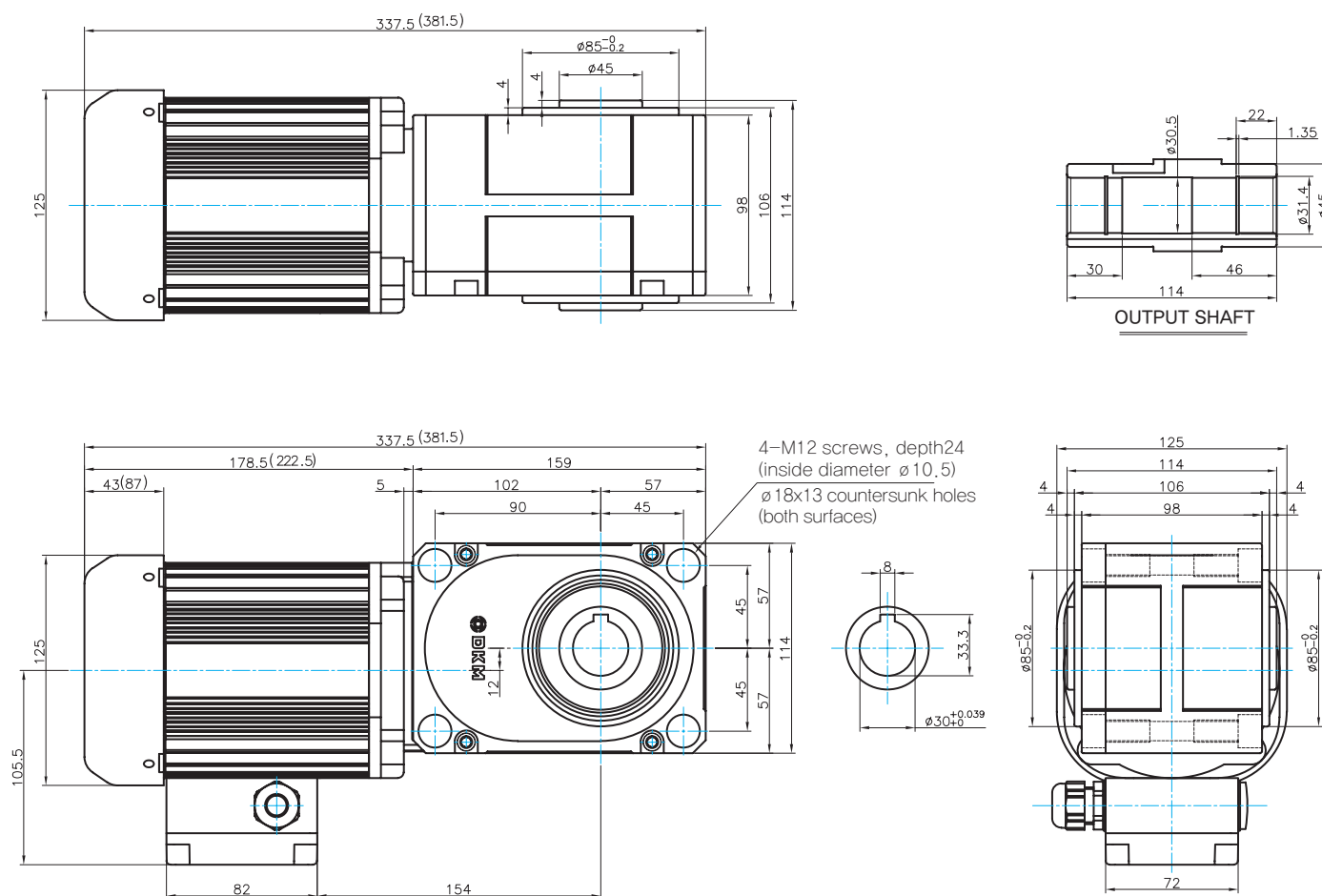
※ Dimensions in brackets for brake motors
※ Brake input power is the same as motor voltage



Weight(Motor+Gearbox)

Output	Motor	7.5	10	12.5	15	20	25	30	40	50	60
0.4kw	INDUCTION				9.7					11.5	
	BRAKE				11.2					13	

DSY Series 0.4kW, Gear Ratio(40:1~60:1)



※ Dimensions in brackets for brake motors
 ※ Brake input power is the same as motor voltage