A Information

Product Coding System

AC Motors

Phase & Voltage
- **1** : 1Ø AC 110V 60Hz
- **2** : 1Ø AC 220V 60Hz
- **3** : 3Ø AC 220V~230V 50/60Hz
- **4** : 3Ø AC 380V~400V 50/60Hz
- **5** : 3Ø AC 415V~440V 50/60Hz
- **6** : 3Ø 220/380V 60Hz
- **7** : 3Ø 230/400V 50Hz
- **8** : 3Ø 440V 50Hz/60Hz

'Thermal Protector' Attached
- **A** : 1Ø AC 110V 60Hz
- **D** : 1Ø AC 220V 60Hz
- **E** : 1Ø AC 220~240V 50Hz
- **G** : 3Ø AC 220V~230V 50/60Hz
- **K** : 3Ø AC 380V~400V 50/60Hz
- **L** : 3Ø AC 415V~440V 50/60Hz

Motor
- **I** : Induction Motor
- **R** : Reversible Motor
- **B** : Brake Motor
- **CI** : Clutch & Brake Motor
- **T** : Torque Motor
- **S** : Speed Control Induction Motor
- **SR** : Speed Control Reversible Motor
- **SB** : Speed Control Brake Motor
- **CS** : Speed Control Clutch & Brake Motor

Fan Type
- **F** : General Fan (Self-ventilation)
- **F2** : Powerful Fan (Forced ventilation) Powerful fan makes powerful cooling performance rotating in high speed regardless of motor shaft speed.
- **No Mark** : No Fans

Connection Type
- **T** : Terminal Box Type
- **C** : Connector Type (Speed Motor)
- **No Mark** : Lead Wire Type

Pole
- **A** : 2 Pole
- **No Mark** : 4 Pole

9	I	D	G	A	–	90	F	P	–	A	T

Brand
- **D** : DKM

Output Shaft Type
- **G** : Gear Type Shaft (Pinion Shaft for Attaching Gearbox)
- **D** : D-Cut Type Shaft
- **K** : Key Type Shaft

Motor Frame Size
- **6** : □60mm sq. (2.36 in.sq.)
- **7** : □70mm sq. (2.76 in.sq.)
- **8** : □80mm sq. (3.15 in.sq.)
- **9** : □90mm sq. (3.54 in.sq.)
- **10** : □104mm sq. (4.09 inch sq.)

Output
- **6** : 6W
- **10** : 10W
- **15** : 15W
- **25** : 25W
- **40** : 40W
- **60** : 60W
- **90** : 90W
- **120** : 120W
- **150** : 150W
- **180** : 180W
- **200** : 200W
- **250** : 250W (E)
- **300** : 300W (D, 7, 8)
- **400** : 400W (6)

Attaching Gearbox
- **G** : General Box Type (6W~40W)
- **P** : Powerful Box/Flange Type (40W~120W)
- **H** : High Powerful Box/Flange Type (60W~200W)
- **U** : Ultra Powerful Box Type (250W~400W)
- **W** : Worm Solid Type (15W~120W)
- **WH** : Worm Hollow Type (030/040) (60W~400W)
- **HC** : Helicross Gearbox (90/104mm) (90W~400W)
- **No Mark** : Without Gearbox

DSY Series

Frame Number 20, 25, 30

Gear Ratio 7.5, 010, ..., 060

Motor Output 010(0.1kW), 020(0.2kW), 040(0.4kW)

DSY	20	B	–	060	N	020	–	3

Gearbox Type DSY Series

Output shaft material B(S45C), S(SUS)

Motor
- N (Induction)
- B (Brake)

Voltage
- 3 : 220V 50/60Hz
- 4 : 380V 50/60Hz
- 5 : 440V 50/60Hz

DC Motors

DC DC MOTOR

Output Shaft Type
- **D** : D-Cut Type Shaft
- **K** : Key Type Shaft
- **G** : Shaft for General Type Gearbox(15W~120W)
- **P** : Shaft for Powerful Type Gearbox(60W~120W)
- **W** : Shaft for Worm Solid Type Gearbox(25W~120W)
- **H** : Shaft for High Powerful Box/Flange Type Gearbox (200W)

9	DC	G	12	–	25	–	30

Motor Frame Size
- **6** : □60mm sq. (2.36 in.sq.)
- **8** : □80mm sq. (3.15 in.sq.)
- **9** : □90mm sq. (3.54 in.sq.)

DC Voltage
- **12** : DC 12V
- **24** : DC 24V
- **90** : DC 90V

Output
- **15** : 15W
- **25** : 25W
- **40** : 40W
- **60** : 60W
- **90** : 90W
- **120** : 120W
- **200** : 200W

r/min
- **30** : 3000r/min

Parallel Gearbox

Gearbox Frame Size
6 : □ 60mm sq. (2.36 in.sq.)
7 : □ 70mm sq. (2.76 in.sq.)
8 : □ 80mm sq. (3.15 in.sq.)
9 : □ 90mm sq. (3.54 in.sq.)
10 : □ 104mm sq. (4.09 in.sq.)

Frame Type
B : Box Type □
F : Flange Type
(Only available for powerful and high powerful type Gearbox)

Bearing Type
B : Ball Bearing
BM : Ball Bearing + Metal Bearing
M : Metal Bearing

9	P	B	K	36	B	H

Gear Type
G : General Gear (6W~40W)
P : Powerful Gear (40W~120W)
H : High Powerful Gear (60W~200W)
U : Ultra Powerful Gear (250W~400W)

Output Shaft Type
K : Key Type
D : D-Cut Type

Gear Ratio
36 : 1/36

Input Gear Type
H : Helical Gear

Worm Solid Gearbox

Gearbox Type
W : Worm Solid Type Gearbox (15W~120W)

Gear Ratio
30 : 1/30

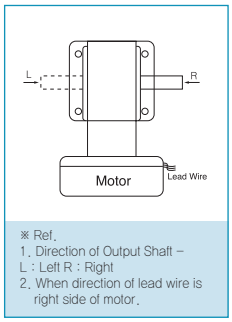
Direction of Output Shaft
L : Left
R : Right
RL : Bi-directional

9	W	D	30	B	L

Gearbox Frame Size
8 : □ 80mm sq. (3.15 in.sq.)
9 : □ 90mm sq. (3.54 in.sq.)

Brand
D : DKM

Bearing Type
B : Ball Bearing



※ Ref.
1. Direction of Output Shaft –
L : Left R : Right
2. When direction of lead wire is right side of motor.

Worm Hollow Gearbox

Gearbox Type
WH : Worm Hollow Gearbox (60W~400W)

Gear Ratio
30 : 1/30

9	WH	D	30	—	030

Gearbox Frame Size
9 : □ 90mm sq. (3.54 in.sq.)
10 : □ 104mm sq. (4.09 in.sq.)

Brand
D : DKM

Center Distance between Worm Wheel and Shaft
030 : 30mm
040 : 40mm

Helicross Gearbox

Gearbox Type
HC : Helicross Gearbox (90W ~ 400W)

Output Shaft Material
B : S45C
S : SUS

9	HC	240	B

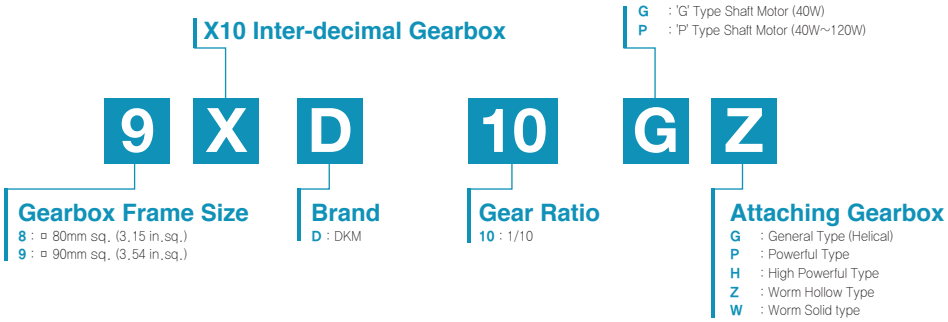
Gearbox Frame Size
9 : □ 90mm sq. (3.54 in.sq.)
10 : □ 104mm sq. (4.09 in.sq.)

Gear Ratio
240 : 1/240

A Information

Product Coding System

Inter-decimal Gearbox

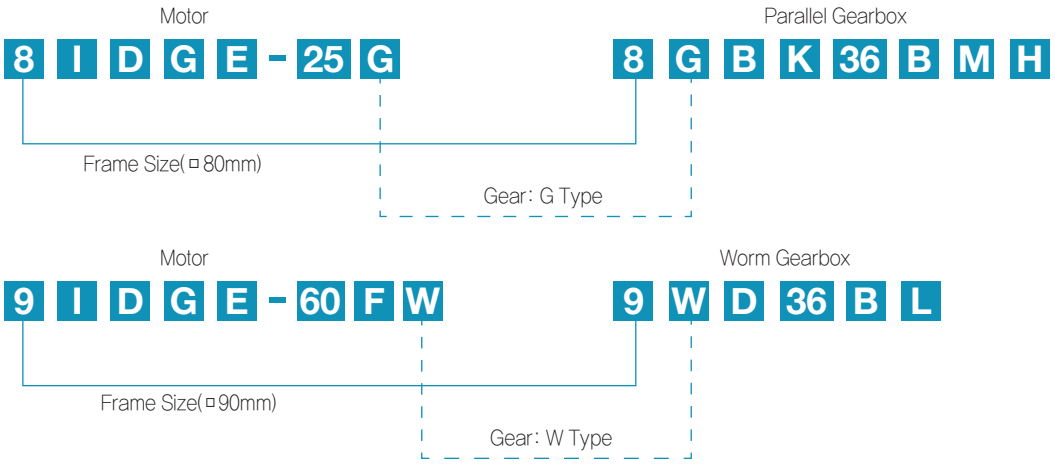


In case of requiring high gear reduction ratio that cannot be generated by single gearbox, please use inter-decimal gearbox with a general gearbox.
And please be advised that in this case only revolution speed of output shaft will be reduced by 10:1 without increasing of maximum permissible torque.

Assembly of Motor and Gearbox

Motor + Gearbox

- As shown in the following scheme, the motor and the gearbox which have same frame size and gear type could be assembled.



Motor + Inter-decimal Gearbox + Gearbox

- When using an inter-decimal gearbox together, give attention to the gear types of a motor, a gearbox and an inter-decimal gearbox.