

S.C. Brake Motor 120W (□ 90mm)

120W

Speed Control
Brake Motor
120W(□ 90mm)

S.C. Brake Motor 120W (□ 90mm)

Motor 사양

| Model 9SBDG*~120F2□: Gear Type Shaft 9SBDG*~120F2□: D-Cut Type Shaft 9SBDK*~120F2: Key Type Shaft | Output W | Voltage V | Frequency Hz | Poles | Duty | Speed Range r/min | Starting Torque | | Permissible Torque | | | | Capacitor μF / VAC |
|------------------------------------------------------------------------------------------------------------|-------------|--------------|-----------------|-------|--------|----------------------|-----------------|-------|--------------------|-------|---------|-------|-----------------------|
| | | | | | | | | | 1200r/min | | 90r/min | | |
| | | | | | | | | | kgfcm | N.m | kgfcm | N.m | |
| Lead Wire Type | | | | | | | | | | | | | |
| 9SBDG1(A)-120F2□ | 120 | 1φ110 | 60 | 4 | 30min. | 90-1700 | 7.80 | 0.780 | 8.20 | 0.820 | 3.60 | 0.360 | 30.0 / 250 |
| 9SBDG2(D)-120F2□ | 120 | 1φ220 | 60 | 4 | 30min. | 90-1700 | 7.60 | 0.760 | 8.00 | 0.800 | 3.30 | 0.330 | 7.0 / 450 |
| 9SBDGE-120F2□ | 120 | 1φ220 | 50 | 4 | 30min. | 90-1400 | 6.00 | 0.600 | 7.50 | 0.750 | 3.30 | 0.330 | 7.0 / 450 |
| | | 1φ240 | | | | | 6.50 | 0.650 | 8.00 | 0.800 | 3.80 | 0.380 | |

- 1) 모터 모델명 * 자리에는 전압코드가, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다.
- 2) 전압코드 A, D, E는 TP(Termal Protector) 부착 사양입니다.
- 3) Gear Type Shaft는 감속기 부착용이며 D-Cut 및 Key Type Shaft는 모터 단독 사용시의 출력축입니다.

감속기 부착 시 최대허용토크

| Motor Model | Gearbox Model | 회전속도 r/min | 전압 V | 주파수 Hz | 감속비 | 2 | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 |
|---------------|--------------------|---------------|---------|-----------|-------|------|------|------|------|------|------|------|-------|-------|------|-------|-------|
| 9SBDG*~120F2P | 9PBK□BH 9PFK□BH | 1200 | 110 | 60 | kgfcm | 13.3 | 19.9 | 23.9 | 33.2 | 39.9 | 49.8 | 59.8 | 66.4 | 74.8 | 89.8 | 107.7 | 119.7 |
| | | | | | N.m | 1.30 | 1.95 | 2.34 | 3.25 | 3.91 | 4.88 | 5.86 | 6.51 | 7.33 | 8.80 | 10.56 | 11.73 |
| | | | | | kgfcm | 13.0 | 19.4 | 23.3 | 32.4 | 38.9 | 48.6 | 58.3 | 64.8 | 73.0 | 87.6 | 105.1 | 116.8 |
| | | N.m | 1.27 | 1.91 | 2.29 | 3.18 | 3.81 | 4.76 | 5.72 | 6.35 | 7.15 | 8.58 | 10.30 | 11.45 | | | |
| | | kgfcm | 12.2 | 18.2 | 21.9 | 30.4 | 36.5 | 45.6 | 54.7 | 60.8 | 68.4 | 82.1 | 98.6 | 109.5 | | | |
| | | N.m | 1.19 | 1.79 | 2.14 | 2.98 | 3.57 | 4.47 | 5.36 | 5.95 | 6.71 | 8.05 | 9.66 | 10.73 | | | |
| 90 | 110 | 60 | kgfcm | 5.8 | 8.7 | 10.5 | 14.6 | 17.5 | 21.9 | 26.2 | 29.2 | 32.9 | 39.4 | 47.3 | 52.6 | | |
| | | | N.m | 0.57 | 0.86 | 1.03 | 1.43 | 1.71 | 2.14 | 2.57 | 2.86 | 3.22 | 3.86 | 4.64 | 5.15 | | |
| | | | kgfcm | 5.3 | 8.0 | 9.6 | 13.4 | 16.0 | 20.0 | 24.1 | 26.7 | 30.1 | 36.1 | 43.4 | 48.2 | | |
| | N.m | 0.52 | 0.79 | 0.94 | 1.31 | 1.57 | 1.96 | 2.36 | 2.62 | 2.95 | 3.54 | 4.25 | 4.72 | | | | |
| | kgfcm | 5.3 | 8.0 | 9.6 | 13.4 | 16.0 | 20.0 | 24.1 | 26.7 | 30.1 | 36.1 | 43.4 | 48.2 | | | | |
| | N.m | 0.52 | 0.79 | 0.94 | 1.31 | 1.57 | 1.96 | 2.36 | 2.62 | 2.95 | 3.54 | 4.25 | 4.72 | | | | |

| Motor Model | Gearbox Model | 회전속도 r/min | 전압 V | 주파수 Hz | 감속비 | 25 | 30 | 36 | 40 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 | | | |
|---------------|--------------------|---------------|---------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 9SBDG*~120F2P | 9PBK□BH 9PFK□BH | 1200 | 110 | 60 | kgfcm | 135.3 | 162.4 | 194.8 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | | |
| | | | | | N.m | 13.26 | 15.91 | 19.09 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 |
| | | | | | kgfcm | 132.0 | 158.4 | 190.1 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 |
| | | N.m | 12.94 | 15.52 | 18.63 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | | |
| | | kgfcm | 123.8 | 148.5 | 178.2 | 198.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | | |
| | | N.m | 12.13 | 14.55 | 17.46 | 19.40 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | | |
| 90 | 110 | 60 | kgfcm | 59.4 | 71.3 | 85.5 | 95.0 | 118.8 | 142.6 | 159.3 | 191.2 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | | |
| | | | N.m | 5.82 | 6.99 | 8.38 | 9.31 | 11.64 | 13.97 | 15.61 | 18.73 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | | |
| | | | kgfcm | 54.5 | 65.3 | 78.4 | 87.1 | 108.9 | 130.7 | 146.0 | 175.2 | 194.7 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | | |
| | N.m | 5.34 | 6.40 | 7.68 | 8.54 | 10.67 | 12.81 | 14.31 | 17.17 | 19.08 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | | | | |
| | kgfcm | 54.5 | 65.3 | 78.4 | 87.1 | 108.9 | 130.7 | 146.0 | 175.2 | 194.7 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | | | | |
| | N.m | 5.34 | 6.40 | 7.68 | 8.54 | 10.67 | 12.81 | 14.31 | 17.17 | 19.08 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | 19.60 | | | | |

| Motor Model | Gearbox Model | 회전속도 r/min | 전압 V | 주파수 Hz | 감속비 | 3 | 3.6 | 5 | 6 | 7.5 | 9 | 10 | 12.5 | 15 | 18 | 20 | 25 | 30 |
|---------------|--------------------|---------------|---------|-----------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 9SBDG*~120F2H | 9HBK□BH 9HFK□BH | 1200 | 110 | 60 | kgfcm | 19.9 | 23.9 | 33.2 | 39.9 | 49.8 | 59.8 | 66.4 | 74.8 | 89.8 | 107.7 | 119.7 | 135.3 | 162.4 |
| | | | | | N.m | 1.95 | 2.34 | 3.25 | 3.91 | 4.88 | 5.86 | 6.51 | 7.33 | 8.80 | 10.56 | 11.73 | 13.26 | 15.91 |
| | | | | | kgfcm | 19.4 | 23.3 | 32.4 | 38.9 | 48.6 | 58.3 | 64.8 | 73.0 | 87.6 | 105.1 | 116.8 | 132.6 | 158.4 |
| | | N.m | 1.91 | 2.29 | 3.18 | 3.81 | 4.76 | 5.72 | 6.35 | 7.15 | 8.58 | 10.30 | 11.45 | 12.94 | 15.52 | | | |
| | | kgfcm | 18.2 | 21.9 | 30.4 | 36.5 | 45.6 | 54.7 | 60.8 | 68.4 | 82.1 | 98.6 | 109.5 | 123.8 | 148.5 | | | |
| | | N.m | 1.79 | 2.14 | 2.98 | 3.57 | 4.47 | 5.36 | 5.95 | 6.71 | 8.05 | 9.66 | 10.73 | 12.13 | 14.55 | | | |
| 90 | 110 | 60 | kgfcm | 8.7 | 10.5 | 14.6 | 17.5 | 21.9 | 26.2 | 29.2 | 32.9 | 39.4 | 47.3 | 52.6 | 59.4 | 71.3 | | |
| | | | N.m | 0.86 | 1.03 | 1.43 | 1.71 | 2.14 | 2.57 | 2.86 | 3.22 | 3.86 | 4.64 | 5.15 | 5.82 | 6.99 | | |
| | | | kgfcm | 8.0 | 9.6 | 13.4 | 16.0 | 20.0 | 24.1 | 26.7 | 30.1 | 36.1 | 43.4 | 48.2 | 54.5 | 65.3 | | |
| | N.m | 0.79 | 0.94 | 1.31 | 1.57 | 1.96 | 2.36 | 2.62 | 2.95 | 3.54 | 4.25 | 4.72 | 5.34 | 6.40 | | | | |
| | kgfcm | 8.0 | 9.6 | 13.4 | 16.0 | 20.0 | 24.1 | 26.7 | 30.1 | 36.1 | 43.4 | 48.2 | 54.5 | 65.3 | | | | |
| | N.m | 0.79 | 0.94 | 1.31 | 1.57 | 1.96 | 2.36 | 2.62 | 2.95 | 3.54 | 4.25 | 4.72 | 5.34 | 6.40 | | | | |

B AC Motors

S.C. Brake Motor 120W (□ 90mm)

감속기 부착 시 최대허용토크

| Motor Model | Gearbox Model | 회전 속도 r/min | 전압 V | 주파수 Hz | 감속비 | 36 | 40 | 50 | 60 | 75 | 90 | 100 | 120 | 150 | 180 | 200 | |
|---------------|------------------------|----------------|---------|-----------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 9SBDG*-120F2H | 9HBK □ BH 9HFK □ BH | 1200 | 110 | 60 | kgfcm N.m | 194.8 19.09 | 216.5 21.22 | 270.6 26.52 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | |
| | | | | 60 | kgfcm N.m | 190.1 18.63 | 211.2 20.70 | 264.0 25.87 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | |
| | | | 220/240 | 50 | kgfcm N.m | 178.2 17.46 | 198.0 19.40 | 247.5 24.26 | 297.0 29.11 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 |
| | | 90 | 110 | 60 | kgfcm N.m | 85.5 8.38 | 95.0 9.31 | 118.8 11.64 | 142.6 13.97 | 159.3 15.61 | 191.2 18.73 | 212.4 20.82 | 254.9 24.98 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 | 300.0 29.40 |
| | | | | 60 | kgfcm N.m | 78.4 7.68 | 87.1 8.54 | 108.9 10.67 | 130.7 12.81 | 146.0 14.31 | 175.2 17.17 | 194.7 19.08 | 233.6 22.90 | 292.1 28.62 | 300.0 29.40 | 300.0 29.40 | |
| | | | 220/240 | 50 | kgfcm N.m | 78.4 7.68 | 87.1 8.54 | 108.9 10.67 | 130.7 12.81 | 146.0 14.31 | 175.2 17.17 | 194.7 19.08 | 233.6 22.90 | 292.1 28.62 | 300.0 29.40 | 300.0 29.40 | |

| Motor Model | Gearbox Model | 회전속도 r/min | 전압 V | 주파수 Hz | 감속비 | 10 | 12 | 15 | 18 | 25 | 30 | 36 | 50 | 60 | |
|---------------|-------------------------|---------------|---------|-----------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 9SBDG*-120F2W | 9WD □ BL/□ BR/ □ BRL | 1200 | 110 | 60 | kgfcm N.m | 67.2 6.59 | 78.7 7.71 | 94.7 9.28 | 109.2 10.70 | 143.5 14.06 | 162.4 15.91 | 153.1 15.00 | 142.9 14.00 | 122.4 12.00 | |
| | | | | 60 | kgfcm N.m | 65.6 6.43 | 76.8 7.53 | 92.4 9.06 | 106.6 10.44 | 140.0 13.72 | 158.4 15.52 | 153.1 15.00 | 142.9 14.00 | 122.4 12.00 | |
| | | | 220/240 | 50 | kgfcm N.m | 61.5 6.03 | 72.0 7.06 | 86.6 8.49 | 99.9 9.79 | 131.3 12.86 | 148.5 14.55 | 153.1 15.00 | 142.9 14.00 | 122.4 12.00 | |
| | | 90 | 110 | 60 | kgfcm N.m | 29.5 2.89 | 34.6 3.39 | 41.6 4.07 | 48.0 4.70 | 63.0 6.17 | 71.3 6.99 | 82.9 8.13 | 82.9 8.13 | 108.0 10.58 | 122.4 12.00 |
| | | | | 60 | kgfcm N.m | 27.1 2.65 | 31.7 3.10 | 38.1 3.74 | 44.0 4.31 | 57.8 5.66 | 65.3 6.40 | 76.0 7.45 | 99.0 9.70 | 122.4 12.00 | |
| | | | 220/240 | 50 | kgfcm N.m | 27.1 2.65 | 31.7 3.10 | 38.1 3.74 | 44.0 4.31 | 57.8 5.66 | 65.3 6.40 | 76.0 7.45 | 99.0 9.70 | 122.4 12.00 | |

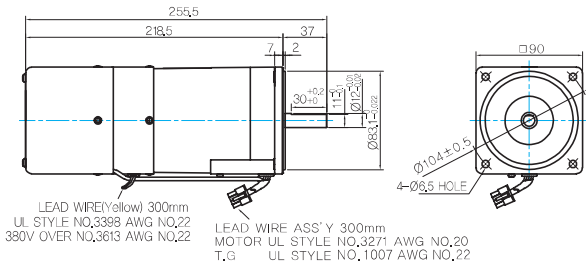
| Motor Model | Gearbox Model | 회전속도 r/min | 전압 V | 주파수 Hz | 감속비 | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 |
|----------------|---------------|---------------|---------|-----------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 9SBDG*-120F2WH | 9WHD □ -030 | 1200 | 110 | 60 | kgfcm N.m | 28.5 2.80 | 41.3 4.05 | 53.1 5.21 | 74.8 7.33 | 94.5 9.26 | 108.2 10.61 | 126.0 12.34 | 154.8 15.17 | 173.5 17.00 | 163.3 16.00 | 132.7 13.00 |
| | | | | 60 | kgfcm N.m | 27.8 2.73 | 40.3 3.95 | 51.8 5.08 | 73.0 7.15 | 92.2 9.03 | 105.6 10.35 | 122.9 12.04 | 151.0 14.80 | 173.5 17.00 | 163.3 16.00 | 132.7 13.00 |
| | | | 220/240 | 50 | kgfcm N.m | 27.8 2.73 | 40.3 3.95 | 51.8 5.08 | 73.0 7.15 | 92.2 9.03 | 105.6 10.35 | 122.9 12.04 | 151.0 14.80 | 173.5 17.00 | 163.3 16.00 | 132.7 13.00 |
| | | 90 | 110 | 60 | kgfcm N.m | 12.5 1.23 | 18.1 1.78 | 23.3 2.29 | 32.8 3.22 | 41.5 4.06 | 47.5 4.66 | 55.3 5.42 | 68.0 6.66 | 77.8 7.62 | 86.4 8.47 | 101.4 9.93 |
| | | | | 60 | kgfcm N.m | 11.5 1.13 | 16.6 1.63 | 21.4 2.10 | 30.1 2.95 | 38.0 3.73 | 43.6 4.27 | 50.7 4.97 | 62.3 6.11 | 71.3 6.99 | 79.2 7.76 | 92.9 9.11 |
| | | | 220/240 | 50 | kgfcm N.m | 13.2 1.30 | 19.2 1.88 | 24.6 2.41 | 34.7 3.40 | 43.8 4.29 | 50.2 4.92 | 58.4 5.72 | 71.7 7.03 | 82.1 8.04 | 91.2 8.94 | 107.0 10.49 |

- 1) 모터 모델명 * 자리에는 전압코드가 들어갑니다.
- 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
- 3) 위의 표에서 색칠된 범위의 감속비를 선택했을 때 감속기의 출력속도는 모터의 출력속도와 같은 방향으로 회전합니다.
흰색 바탕 범위의 감속비에서는 감속기 출력속도는 모터 출력속도의 회전방향과 반대방향으로 회전합니다.
- 4) 회전속도(r/min)는 모터의 동기회전속도(50Hz:1500r/min, 60Hz:1800r/min)를 감속비로 나누어 계산합니다.
실제 회전속도는 부하의 크기에 따라 표시보다 2~20% 정도 느립니다.

Dimensions

MOTOR ONLY

MOTOR MODEL: 9SBDD□-120F2 (POWERFUL FAN)



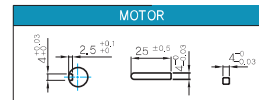
LEAD WIRE(Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG NO.22

MOTOR OUTPUT SHAFT

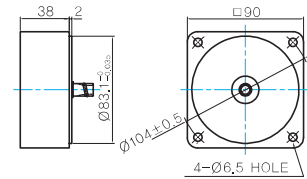
| MODEL | SPEC |
|--------------|-------------------------------------|
| D-CUT TYPE | |
| 9SBDD□-120F2 | 37, 30 ± 0.3, 10 ± 0.05, 1.5 ± 0.05 |
| KEY TYPE | |
| 9SBDD□-120F2 | 37, 25 ± 0.2, 10 ± 0.05, 1.5 ± 0.05 |

KEY SPEC



중간감속기

MODEL: 9XD10□□



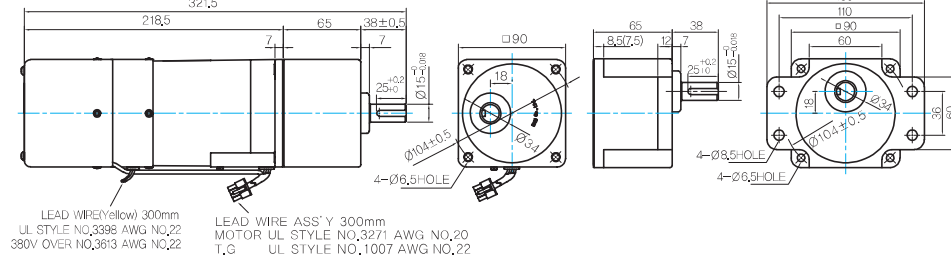
GEARED MOTOR

P TYPE GEARBOX

MOTOR MODEL: 9SBDG□-120F2P (POWERFUL FAN)

GEARBOX MODEL: 9PBK□BH

GEARBOX MODEL: 9PFK□BH



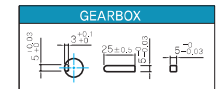
LEAD WIRE(Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG NO.22

GEARBOX OUTPUT SHAFT

| MODEL | SPEC |
|--------------------|-------------------------------------|
| KEY TYPE | |
| 9PBK□BH 9PFK□BH | 38, 25 ± 0.2, 10 ± 0.05, 1.5 ± 0.05 |

KEY SPEC

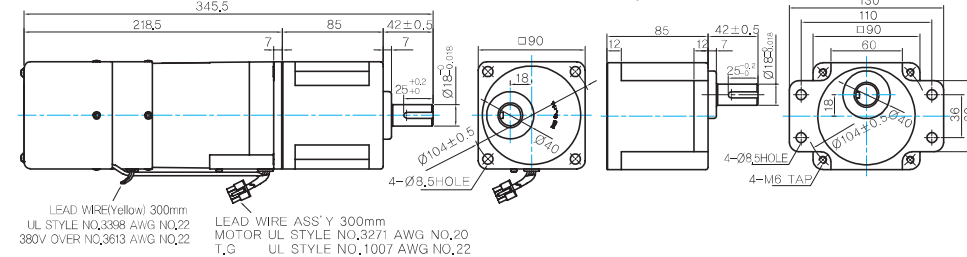


H TYPE GEARBOX

MOTOR MODEL: 9SBDG□-120F2H (POWERFUL FAN)

GEARBOX MODEL: 9HBK□BH

GEARBOX MODEL: 9HFK□BH



LEAD WIRE(Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG NO.22

GEARBOX OUTPUT SHAFT

| MODEL | SPEC |
|--------------------|-------------------------------------|
| KEY TYPE | |
| 9HBK□BH 9HFK□BH | 42, 25 ± 0.2, 10 ± 0.05, 1.5 ± 0.05 |

KEY SPEC

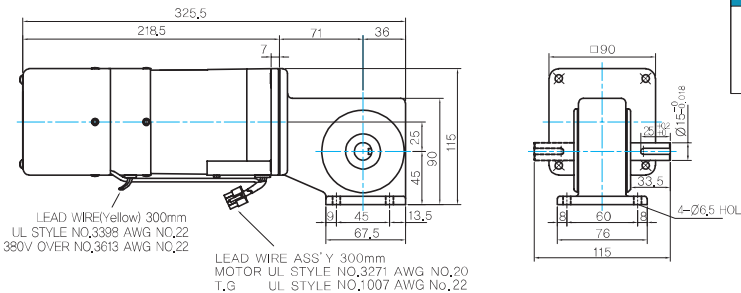


W TYPE GEARBOX

MOTOR MODEL: 9SBDG□-120F2W (POWERFUL FAN)

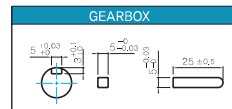
GEARBOX MODEL: 9WD□BL/BR/BRL

KEY SPEC



LEAD WIRE(Yellow) 300mm
UL STYLE NO.3398 AWG NO.22
380V OVER NO.3613 AWG NO.22

LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG NO.22

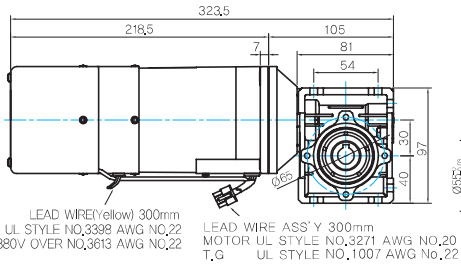


B AC Motors

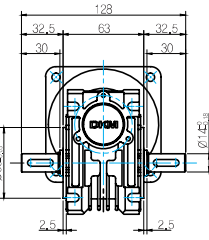
S.C. Brake Motor 120W (□ 90mm)

WH TYPE GEARBOX

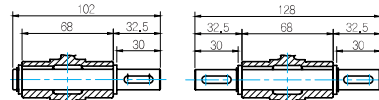
● MOTOR MODEL:
9SBDG□-120F2WH (POWERFUL FAN)



● GEARBOX MODEL:
9WHD□-030



● SHAFT



한방향

양방향



INPUT



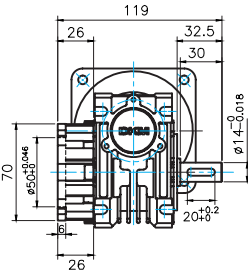
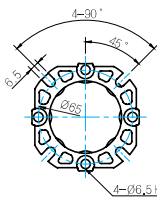
OUTPUT

WEIGHT

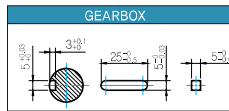
| PART | WEIGHT(Kg) |
|-----------------------------|------------|
| MOTOR | 3,7 |
| 9PB(F)K2BH - 9PB(F)K10BH | 1,28 |
| 9PB(F)K12.5BH - 9PB(F)K20BH | 1,3 |
| 9PB(F)K25BH - 9PB(F)K60BH | 1,45 |
| 9PB(F)K75BH - 9PB(F)K200BH | 1,47 |
| 9HB(F)K3BH - 9HB(F)K10BH | 1,62 |
| 9HB(F)K12.5BH - 9HB(F)K20BH | 1,68 |
| 9HB(F)K25BH - 9HB(F)K60BH | 1,73 |
| 9HB(F)K75BH - 9HB(F)K200BH | 1,78 |
| 9WD□BL/BR/BRL | 1,0 |
| 9WHD□-030 | 1,2 |
| 9XD10□ | 0,6 |

* 출력 FLANGE와 SHAFT는 별매입니다.

● FLANGE



● KEY SPEC



Motor Images

