

## S.C. Brake Motor 90W (□ 90mm)

# 90W

Speed Control  
Brake Motor  
90W(□ 90mm)

### Motor 사양

Model 9SBDG*~90F2□: Gear Type Shaft 9SBDG*~90F2: D-Cut Type Shaft 9SBDK*~90F2: Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque		Permissible Torque				Capacitor μF / VAC
							kgfcm	N.m	1200r/min		90r/min		
Lead Wire Type									kgfcm	N.m	kgfcm	N.m	
9SBDG1(A)-90F2□	90	1φ110	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	25.0 / 250
9SBDG2(D)-90F2□	90	1φ220	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	6.5 / 450
9SBDGE-90F2□	90	1φ220	50	4	30min.	90-1400	5.50	0.550	7.00	0.700	2.80	0.280	6.5 / 450
		1φ240					6.00	0.600	7.50	0.750	3.30	0.330	

- 1) 모터 모델명 \* 자리에는 전압코드가, □ 안에는 부착되는 감속기의 모델 타입명칭이 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*~90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
					N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44
					kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
		N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44			
		kgfcm	11.3	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2			
		N.m	1.11	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02			
90	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8		
			N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29		
			kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8		
			N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29		
			kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9		
			N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01		

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*~90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0		
					N.m	11.80	14.16	17.00	18.89	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
					kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	11.80	14.16	17.00	18.89	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	115.5	138.6	166.3	184.8	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	11.32	13.58	16.30	18.11	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	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0	200.0	200.0		
			N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60	19.60	19.60		
			kgfcm	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	
			N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60	19.60	19.60	19.60	
			kgfcm	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0	200.0	200.0	200.0	
			N.m	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	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*~90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5	144.5
					N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80	14.16
					kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5	144.5
		N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80	14.16			
		kgfcm	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2	115.5	138.6			
		N.m	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02	11.32	13.58			
90	110	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4		
			N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82		
			kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4		
			N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82		
			kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4		
			N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43		

# B AC Motors

## S.C. Brake Motor 90W (□ 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* -90F2H	9HBK □ BH 9HFK □ BH	1200	110	60	kgfcm	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40
					kgfcm	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40			
		kgfcm	166.3	184.8	231.0	277.2	300.0	300.0	300.0	300.0	300.0	300.0	300.0			
		N.m	16.30	18.11	22.64	27.17	29.40	29.40	29.40	29.40	29.40	29.40	29.40			
	90	110	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0	
				N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40	
				kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0	
		N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40			
		kgfcm	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0			
		N.m	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40			

Motor Model	Gearbox Model	회전속도 r/min	전압 V	주파수 Hz	감속비	10	12	15	18	25	30	36	50	60
9SBDG* -90F2W	9WD □ BL/□ BR/ □ BRL	1200	110	60	kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
					N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00
					kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
		N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00			
		kgfcm	61.5	72.0	86.6	99.9	131.3	148.5	153.1	142.9	122.4			
		N.m	6.03	7.06	8.49	9.79	12.86	14.55	15.00	14.00	12.00			
	90	110	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0	
				N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70	
				kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0	
		N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70			
		kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	108.9			
		N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	10.67			

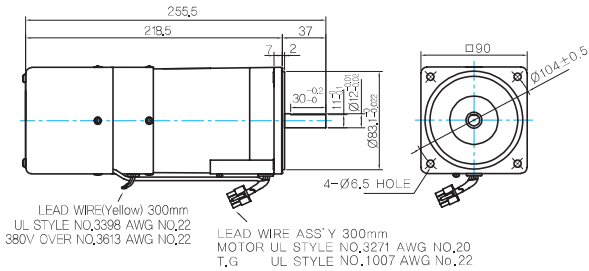
Motor Model	Gearbox Model	회전 속도 r/min	전압 V	주파수 Hz	감속비	5	7.5	10	15	20	25	30	40	50	60	80
9SBG* -90F2WH	9WHD □ -030	1200	110	60	kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
					N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00
					kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
		N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00			
		kgfcm	26.1	37.8	48.6	68.4	86.4	99.0	115.2	141.6	162.0	163.3	132.7			
		N.m	2.56	3.70	4.76	6.70	8.47	9.70	11.29	13.88	15.88	16.00	13.00			
	90	110	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5	
				N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28	
				kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5	
		N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28			
		kgfcm	11.5	16.6	21.4	30.1	38.0	43.6	50.7	62.3	71.3	79.2	92.9			
		N.m	1.13	1.63	2.10	2.95	3.73	4.27	4.97	6.11	6.99	7.76	9.11			

- 1) 모터 모델명 \* 자리에는 전압코드가 들어갑니다.
- 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
- 3) 위의 표에서 색칠된 범위의 감속비를 선택했을 때 감속기의 출력축은 모터의 출력축과 같은 방향으로 회전합니다.  
흰색 바탕 범위의 감속비에서는 감속기 출력축은 모터 출력축의 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

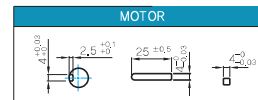
- MOTOR MODEL:  
9SBDD□-90F2 (POWERFUL FAN)



### MOTOR OUTPUT SHAFT

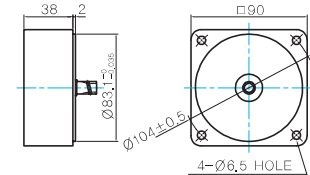
MODEL	SPEC
D-CUT TYPE	37 30±0.2 Ø12±0.05
9SBDD□-90F2	
KEY TYPE	37 25±0.5 Ø12±0.05
9SBDK□-90F2	

### KEY SPEC



### 중간감속기

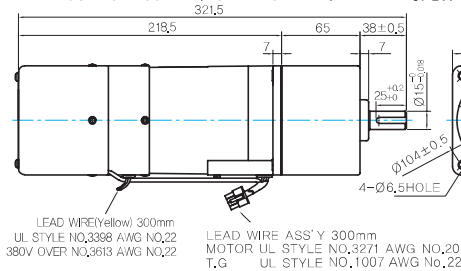
- MODEL: 9XD10□□



### GEARED MOTOR

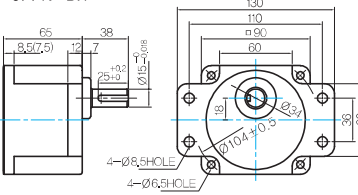
#### P TYPE GEARBOX

- MOTOR MODEL:  
9SBDG□-90F2P (POWERFUL FAN)



- GEARBOX MODEL:  
9PBK□BH

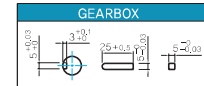
- GEARBOX MODEL:  
9PFK□BH



### GEARBOX OUTPUT SHAFT

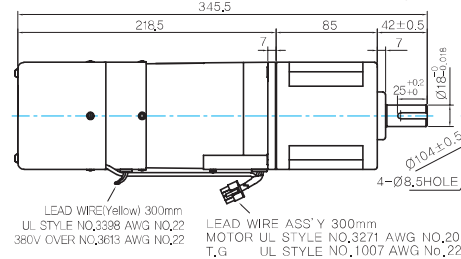
MODEL	SPEC
KEY TYPE	38 +0.2 25±0.5 Ø15±0.08
9PBK□BH	
9PFK□BH	

### KEY SPEC



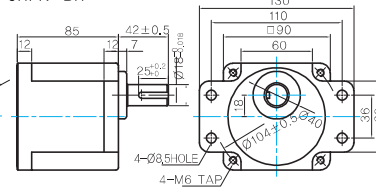
#### H TYPE GEARBOX

- MOTOR MODEL:  
9SBDG□-90F2H (POWERFUL FAN)



- GEARBOX MODEL:  
9HBK□BH

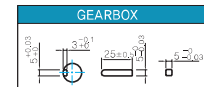
- GEARBOX MODEL:  
9HFK□BH



### GEARBOX OUTPUT SHAFT

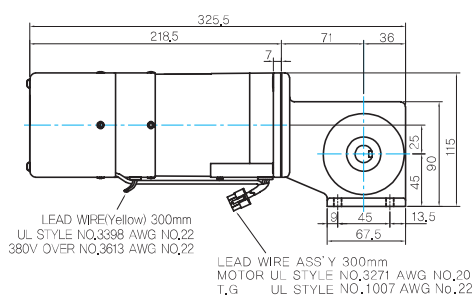
MODEL	SPEC
KEY TYPE	42 +0.2 25±0.5 Ø15±0.08
9HBK□BH	
9HFK□BH	

### KEY SPEC



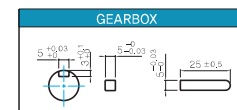
#### W TYPE GEARBOX

- MOTOR MODEL:  
9SBDG□-90F2W (POWERFUL FAN)



- GEARBOX MODEL:  
9WD□BL/BR/BRL

### KEY SPEC

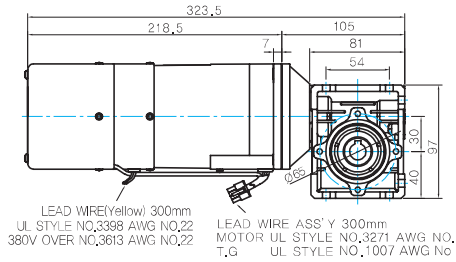


# B AC Motors

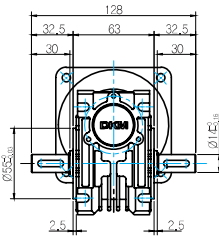
## S.C. Brake Motor 90W (□ 90mm)

### WH TYPE GEARBOX

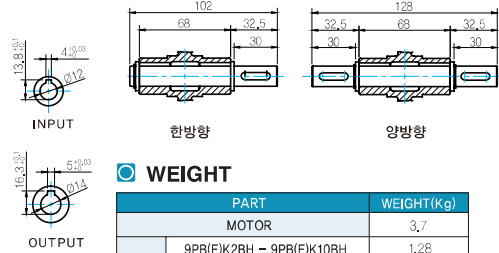
● MOTOR MODEL:  
9SBDG□-90F2WH (POWERFUL FAN)



● GEARBOX MODEL:  
9WHD□-030



● SHAFT

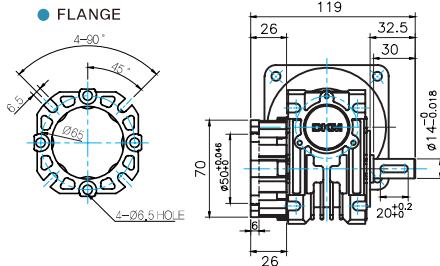


### WEIGHT

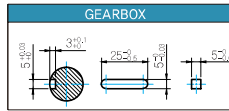
PART	WEIGHT(Kg)
MOTOR	3,7
9PB(F)K2BH - 9PB(F)K10BH	1,28
9PB(F)K12.5BH - 9PB(F)K20BH	1,3
9PB(F)K25BH - 9PB(F)K60BH	1,45
9PB(F)K75BH - 9PB(F)K200BH	1,47
9HB(F)K3BH - 9HB(F)K10BH	1,62
9HB(F)K12.5BH - 9HB(F)K20BH	1,68
9HB(F)K25BH - 9HB(F)K60BH	1,73
9HB(F)K75BH - 9HB(F)K200BH	1,78
9WD□BL/BR/BRL	1,0
9WHD□-030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

\* 출력 FLANGE와 SHAFT는 별매입니다.

● FLANGE



● KEY SPEC



### Motor Images

