

120W

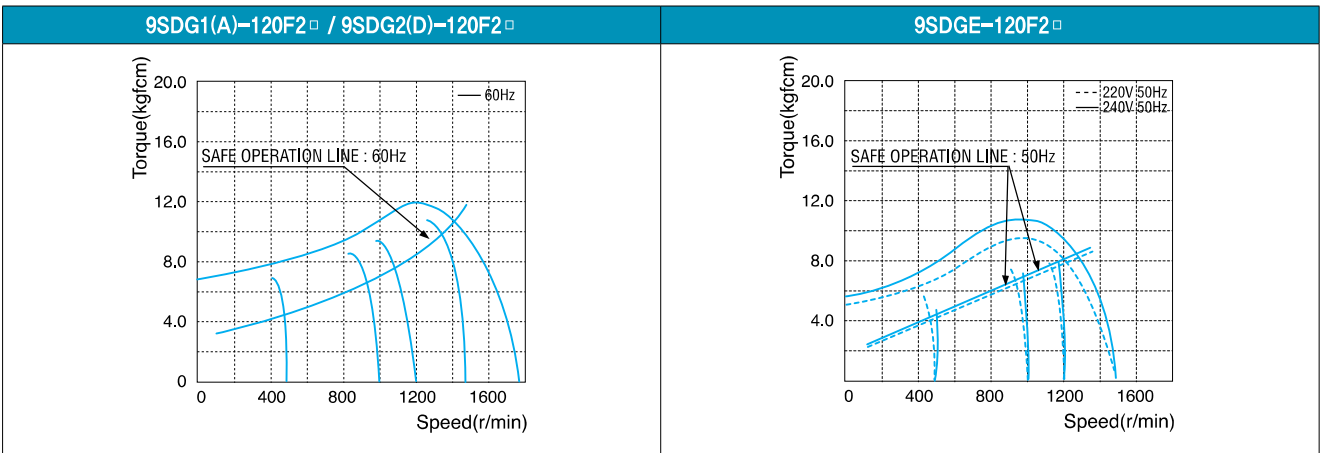
Speed Control Induction Motor 120W(□ 90mm)

Motor 사양

Model		Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque		Permissible Torque				Capacitor μF / VAC
9SDG*~120F2□-C(L): Gear Type Shaft 9SDD*~120F2-C(L): D-Cut Type Shaft 9SDK*~120F2-C(L): Key Type Shaft								kgfcm	N.m	1200r/min		90r/min		
Connector Type	Lead Wire Type	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m							
9SD◇1(A)-120F2□-C	9SD◇1(A)-120F2□-L	120	1φ 110	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	25.0 / 250
9SD◇2(D)-120F2□-C	9SD◇2(D)-120F2□-L	120	1φ 220	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	6.0 / 400
9SD◇E-120F2□-C	9SD◇E-120F2□-L	120	1φ 220	50	4	Cont.	90-1400	5.70	0.570	8.00	0.800	2.80	0.280	6.0 / 400
			1φ 240				90-1700	6.20	0.620	8.60	0.860	2.90	0.290	

- 1) 모터 모델명 * 자리에는 전압코드가 들어갑니다.
- 2) 모터 모델명 ◇ 자리에는 모터 출력축 타입명이 들어갑니다. (G: Gear Type / D: D-Cut Type / K: Key Type)
Gear Type Shaft는 감속기 부착용이며 D-Cut 및 Key Type Shaft는 모터 단독 사용 시의 출력축입니다.
- 3) 모터 출력축 타입이 Gear Type일 경우, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다. 4) 전압코드 A, D, E는 TP(Thermal Protector) 부착 사양입니다.

회전속도-토크 특성



감속기 부착 시 최대허용토크

Motor Model	Gear box Model	회전 속도 r/min	전압 V	주파 수 Hz	감속비	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200			
9SDG*~120F2P	9PBK □ BH	1200	110	60	kgfcm	13.4	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0	164.3	197.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0			
					N.m	1.32	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42	16.11	19.33	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
		220/240	50	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	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	1.27	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	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
		9PFK □ BH	90	110	60	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	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
						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	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
	220/240		50	60	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	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	0.44	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	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

- 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.

S.C. Induction Motor 120W (□ 90mm)

Motor Model	Gear box Model	회전속도 r/min	전압 V	주파수 Hz	감속비	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SDG*~120F2H	9HBK □ BH 9HFK □ BH	1200	110	60	kgfcm	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0
					N,m	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42
			220	60	kgfcm	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0
		220/240	50	kgfcm	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0	
		90	110	60	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
					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
220	60		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		
220/240	50	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			
					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

Motor Model	Gear box Model	회전속도 r/min	전압 V	주파수 Hz	감속비	30	36	40	50	60	75	90	100	120	150	180	200
9SDG*~120F2H	9HBK □ BH 9HFK □ BH	1200	110	60	kgfcm	164.3	197.2	219.1	273.9	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N,m	16.11	19.33	21.47	26.84	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	164.3	197.2	219.1	273.9	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		220/240	50	kgfcm	158.4	190.1	211.2	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
		90	110	60	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N,m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40
220	60		kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0		
220/240	50	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0			
					N,m	5.43	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
9SDG*~120F2W	9WD □ BL/ □ BR/ □ BRL	1200	110	60	kgfcm	68.1	79.7	95.9	110.6	145.3	164.3	153.1	142.9	122.4
					N,m	6.67	7.81	9.39	10.83	14.23	16.11	15.00	14.00	12.00
			220	60	kgfcm	68.1	79.7	95.9	110.6	145.3	164.3	153.1	142.9	122.4
		220/240	50	kgfcm	65.6	76.8	92.4	106.6	140.0	158.4	153.1	142.9	122.4	12.00
		90	110	60	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4
					N,m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	12.00
220	60		kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4		
220/240	50	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4			
					N,m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	12.00

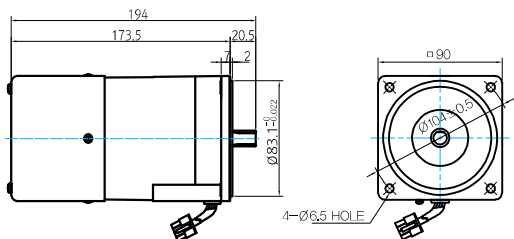
Motor Model	Gearbox Model	회전속도 r/min	전압 V	주파수 Hz	감속비	5	7.5	10	15	20	25	30	40	50	60	80
9SDG*~120F2WH	9WHD □ -030	1200	110	60	kgfcm	28.9	41.8	53.8	75.7	95.6	109.6	127.5	156.7	173.5	163.3	132.7
					N,m	2.83	4.10	5.27	7.42	9.37	10.74	12.49	15.36	17.00	16.00	13.00
			220	60	kgfcm	28.9	41.8	53.8	75.7	95.6	109.6	127.5	156.7	173.5	163.3	132.7
		220/240	50	kgfcm	29.9	43.3	55.7	78.4	99.1	113.5	132.1	162.4	173.5	163.3	132.7	
		90	110	60	kgfcm	9.7	14.1	18.1	25.5	32.3	37.0	43.0	52.9	60.5	67.2	78.8
					N,m	0.95	1.38	1.78	2.50	3.16	3.62	4.21	5.18	5.93	6.59	7.73
220	60		kgfcm	9.7	14.1	18.1	25.5	32.3	37.0	43.0	52.9	60.5	67.2	78.8		
220/240	50	kgfcm	10.1	14.6	18.8	26.4	33.4	38.3	44.5	54.8	62.6	69.6	81.7			
					N,m	0.99	1.43	1.84	2.59	3.27	3.75	4.37	5.37	6.14	6.82	8.00

Motor Model	Gearbox Model	회전속도 r/min	전압 V	주파수 Hz	감속비	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9SDG*~120F2HC	9HC □ -◇	1200	110	60	kgfcm	90.9	121	151	182	242	303	364	485	606	727	969	1212	1363	1454
					N,m	8.91	11.9	14.8	17.8	23.7	29.7	35.7	47.5	59.4	71.2	95	119	134	142
			220	60	kgfcm	90.9	121	151	182	242	303	364	485	606	727	969	1212	1363	1454
		220/240	50	kgfcm	87.6	117	146	175	234	292	350	467	584	701	934	1168	1314	1402	
		90	110	60	kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491
					N,m	3.01	4.01	5.01	6.01	8.02	10	12.1	16.1	20	24	32	40.1	45.1	48.1
220	60		kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491		
220/240	50	kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491			
					N,m	3.01	4.01	5.01	6.01	8.02	10	12.1	16.1	20	24	32	40.1	45.1	48.1

Dimensions

MOTOR ONLY

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

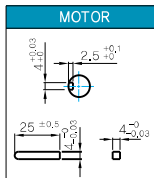


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO. 1007 AWG NO.22

MOTOR OUTPUT SHAFT

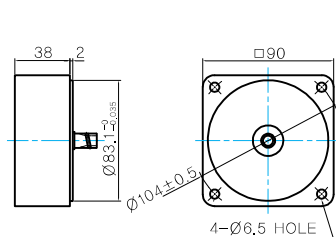
MODEL	SPEC
D-CUT TYPE	
KEY TYPE	
9SD□-120F2	
9SD□-120F2	

KEY SPEC



중간감속기

- MODEL: 9XD10□□



GEARED MOTOR

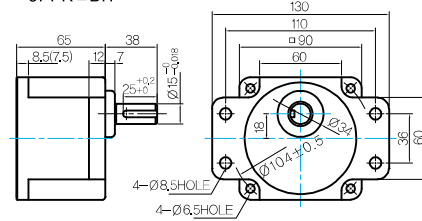
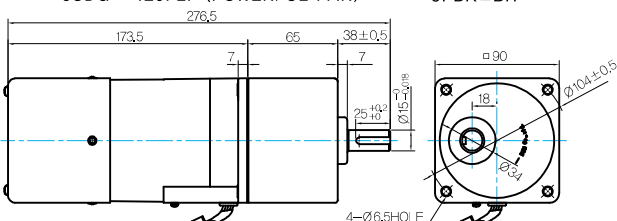
P TYPE GEARBOX

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

- GEARBOX MODEL:
9PBK□BH

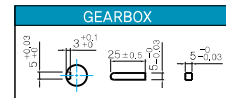
- GEARBOX MODEL:
9PFK□BH

GEARBOX OUTPUT SHAFT



MODEL	SPEC
KEY TYPE	
9PBK□BH	
9PFK□BH	

KEY SPEC



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

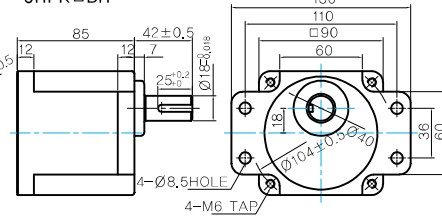
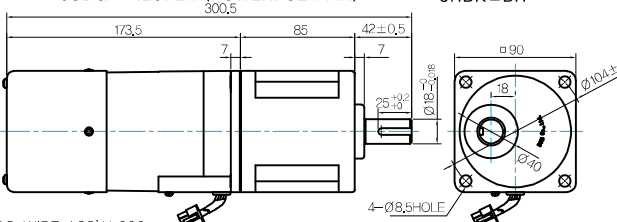
H TYPE GEARBOX

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

- GEARBOX MODEL:
9HBK□BH

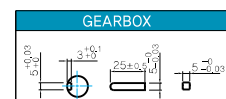
- GEARBOX MODEL:
9HFK□BH

GEARBOX OUTPUT SHAFT



MODEL	SPEC
KEY TYPE	
9HBK□BH	
9HFK□BH	

KEY SPEC



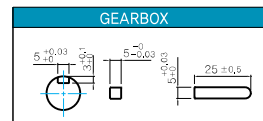
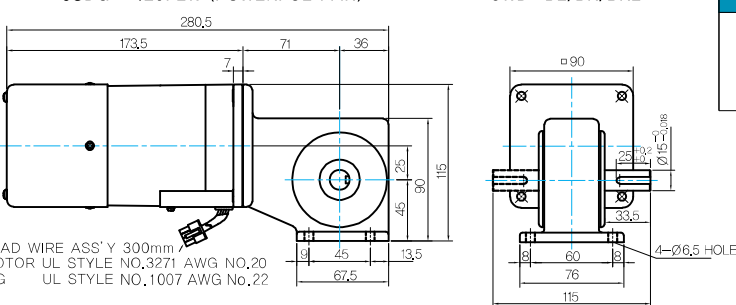
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG No.22

W TYPE GEARBOX

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

- GEARBOX MODEL:
9WD□BL/BR/BRL

KEY SPEC

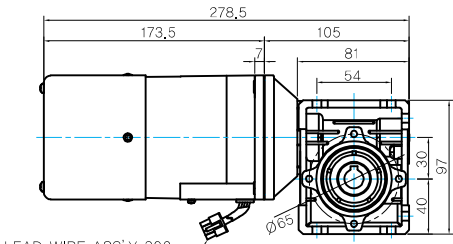


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG No.22

S.C. Induction Motor 120W (□ 90mm)

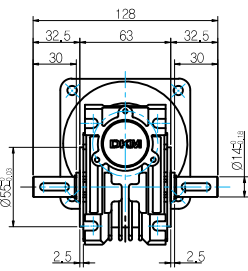
WH TYPE GEARBOX

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

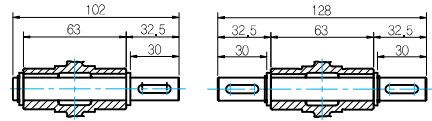


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG No.22

- GEARBOX MODEL:
9WHD□-030



- SHAFT



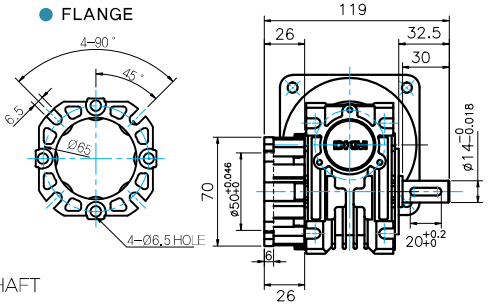
INPUT

OUTPUT

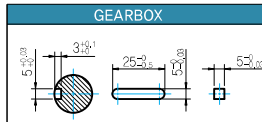
한방향

양방향

- FLANGE

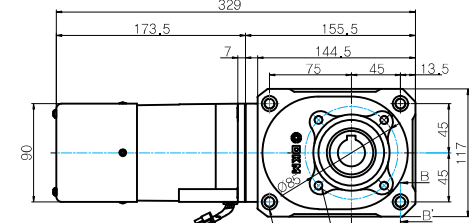


- KEY SPEC



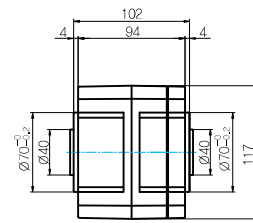
HC TYPE GEARBOX

- MOTOR MODEL:
9SDG□-120F2HC-□ (POWERFUL FAN)

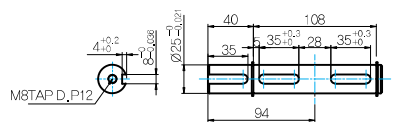


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG No.22

- GEARBOX MODEL:
9HC(15 ~ 60)□



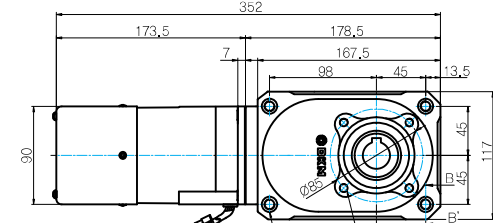
- SHAFT



OUTPUT

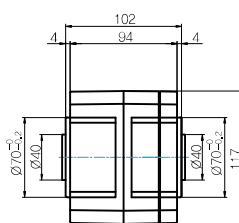
SECTION B-B'

- MOTOR MODEL:
9SDG□-120F2HC-□ (POWERFUL FAN)

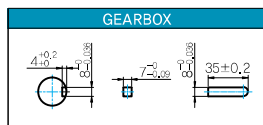


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T,G UL STYLE NO.1007 AWG No.22

- GEARBOX MODEL:
9HC(80 ~ 240)□



- KEY SPEC



WEIGHT

PART	WEIGHT(kg)
MOTOR	3.50
9PB(F)K2BH - 9PB(F)K10BH	1.28
9PB(F)K12.5BH - 9PB(F)K20BH	1.30
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	1.00
9WHD□-030	1.20
9HC15-◇	4.05
9HC20-◇ - 9HC60-◇	4.10
9HC80-◇ - 9HC240-◇	4.75
9XD10□○	0.60

*출력 FLANGE와 SHAFT는 별매입니다.

Motor Images

