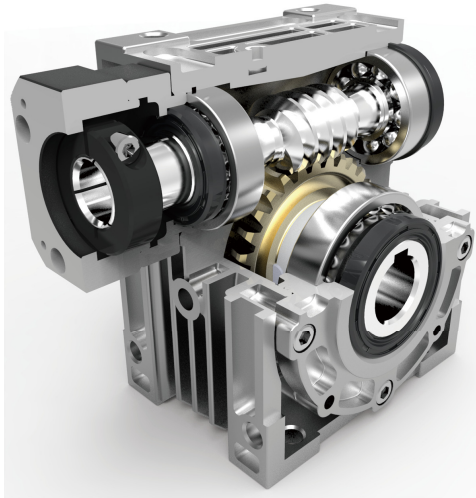


KWE series



Low Backlash Worm Reducer

서보용 정밀 웜 감속기

- Backlash \leq 8 arcmin

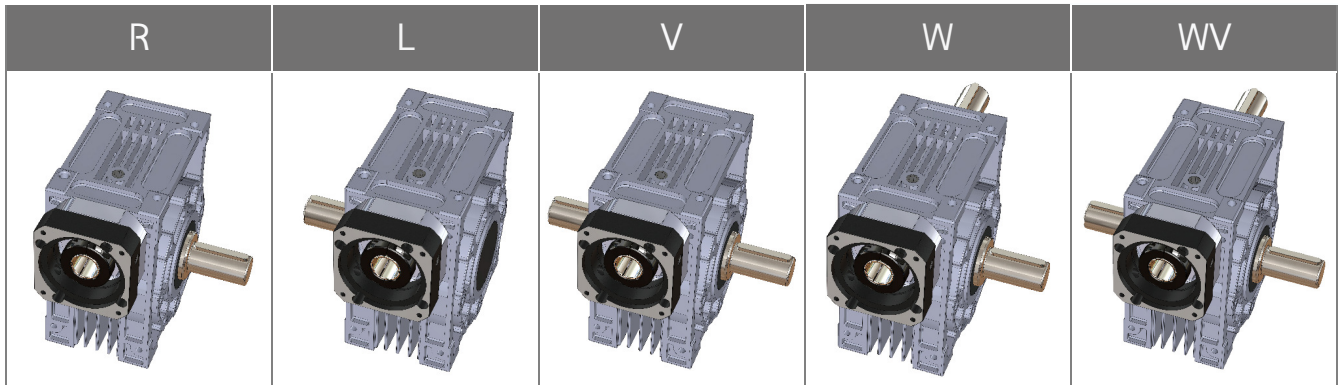
Indication of Model Numbers

KWE	N		60	30	L	MOTOR
Type	Output Shaft	Output Flange	Model	Ratio	Shaft Dircetion	Motor Type
KWE	S: Solid O: Hollow N: Clamping	□ None F: Output Flange	30 40 50 60 70	1/5 1/10 1/15 1/20 1/30 1/40 1/50 1/60	R L	

Features of KWE Series

KWE Series 제품 특성

Shaft Direct



출력축 위치

- R: 우측 출력축 (입력단 기준으로 출력샤프트가 우측에 위치)
- L: 좌측 출력축 (입력단 기준으로 출력샤프트가 좌측에 위치)
- V: 하나의 입력축과 좌우 양쪽으로 두개의 출력샤프트
- W: 두개의 입력축과 한개의 출력샤프트
- WV: 두개의 입력축과 두개의 출력샤프트

Shaft Direction

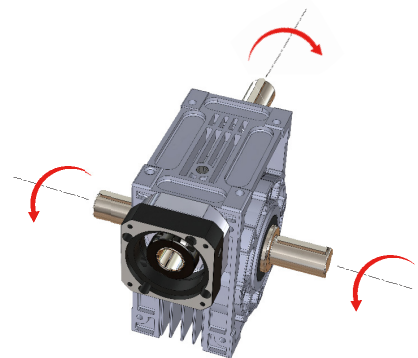
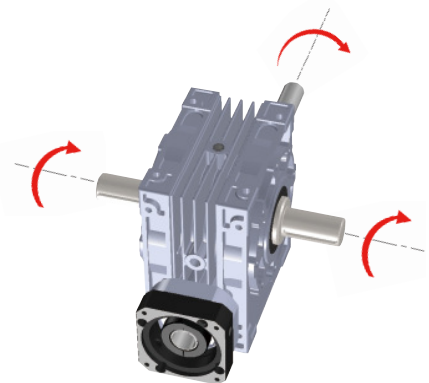
- R: Right Shaft (input shaft to the face; output shaft to the right)
- L: Left Shaft (input shaft to the face; output shaft to the left)
- V: Single Input Shaft & Double Output Shaft
- W: Double Input Shaft & Single Output Shaft
- WV: Double Input Shaft & Double Output Shaft

회전 방향

(입력축이 상단에 위치한 기준) 입력축이 시계방향으로 회전시 출력축은 시계 반대방향으로 회전합니다.
필요에 따라 감속기 설치 방향을 우측 그림과 같이 바꿔서 사용이 가능합니다.

Rotation Direction

upper worm for right-directed thread, so the input shaft is rotating clockwise and the output shaft counterclockwise; for any rotating direction required, be sure to specify it.



Rotation Direction

Features of KWE Series

KWE

KGT

KST

KHY

KWE



KWES
○ Solid output shaft



KWESF
○ Solid output shaft



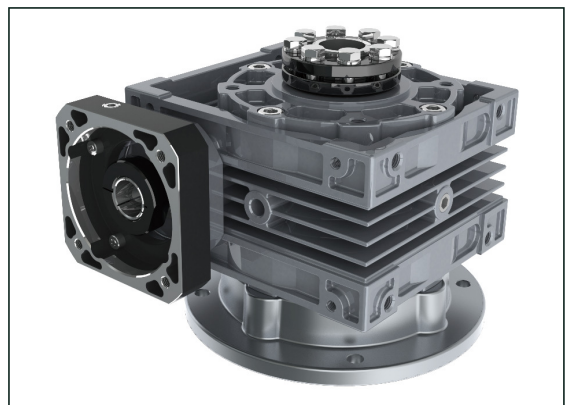
KWEO
○ Hollow output shaft



KWEOF
○ Hollow output shaft



KWEN
○ Clamping output shaft



KWENF
○ Clamping output shaft

Characteristic of KWE Series

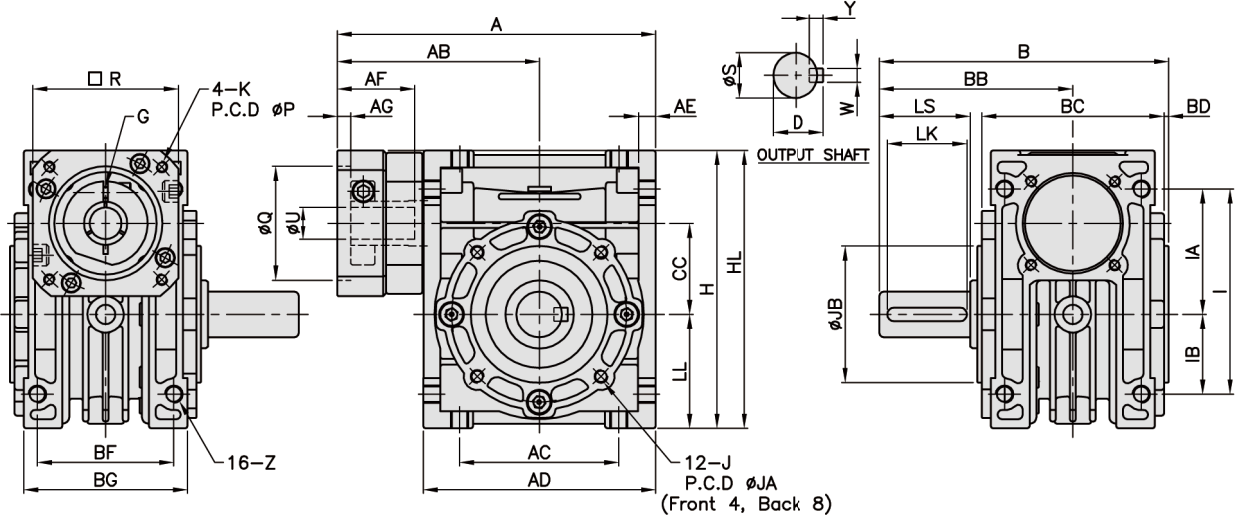
Model No.		Unit	Ratio	30	40	50	60	70	
Rated Output Torque (Nominal output torque) / Efficiency	T_{2N}	Nm	5	8.3	22.3	30.6	41.2	70.6	
				90.3	92.3	92.6	92.6	93.6	
			10	8.8	20.7	41.9	65.9	92	
				83.7	86.6	89.6	90.1	90.5	
			15	11.4	26.2	40.9	64.5	90	
				81.9	83.7	85.3	86.1	86.6	
	20	9.52	22.6	40.7	63.5	106.1			
		72.3	76.6	81.7	82.4	85.1			
	η	%	30	12.1	27.4	43.2	67.9	95	
				69.6	72.3	74.5	75.9	76.7	
			40	9.2	24.3	43.8	69.1	111	
				56.8	66.3	69.2	70.3	74.3	
			50	10.4	24	43.6	69.2	105.6	
				58.7	64.6	67.7	68.9	71.2	
	60	9.6	20.5	36.1	58.3	100.5			
		54.6	56.8	59.3	61.3	68.8			
	Max. Output Torque Emergency Stop Torque	T_{2NOT}	Nm	5~60	2 Times of Rated Output Torque				
	Rated Input Speed	n_{1N}	rpm	5~60	2,000				
Max. Input Speed	n_{1B}	rpm	5~60	3,000					
Backlash Ps		arcmin	5~60	≤ 8					
Max. Radial Force	F_{2rB}	N	5~60	1,830	3,490	4,840	6,270	7,380	
Max. Axial Force	F_{2aB}	N	5~60	915	1,745	2,420	3,135	3,690	
Service Life	L_H	hr	5~60	S5 Cycle Operation: >12,000 (S1 Continuous Operation: >6,000hrs)					
Operating Temperature		°C	5~60	-15° C ~ +50 ° C					
Lubrication			5~60	Synthetic Oil					
Protection Class			5~60	IP65					
Mounting Position			5~60	Any					

Mass Moments of Inertia (Nm)

Ratio	30	40	50	60	70
5	0.12	0.35	0.86	1.89	3.40
10	0.12	0.35	0.86	1.89	3.40
15	0.12	0.35	0.86	1.89	3.40
20	0.11	0.33	0.83	1.81	3.10
30	0.12	0.35	0.86	1.89	3.40
40	0.11	0.33	0.83	1.81	3.10
50	0.10	0.30	0.80	1.78	2.90
60	0.10	0.30	0.80	1.78	2.90

KWES series

RATIO : 5.10.15.20.30.40.50.60



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BF	BG	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	99.5	67.5	60	2	45	58	30	40	72	45	27	M6	98	1.3
40	140	89	70	102	7.5	34	6	127	85	80	2	60	72	40	50	90	55	35	M8	122	2.69
50	158	98	80	120	8.5	34, 41	6	150	100	94	3	70	85	50	60	105	65	40	M10	145	4.24
60	195	122	100	146	10	59	9	159	105	102	3	85	103	60	75	136	83	53	M10	180	6.59
70	219	134	120	170	12	54, 59	9	187	125	118	3	90	110	70	85	150	90	60	M10	200	10.22

unit : mm

Model Code	30	40	50	60	70	
OUTPUT SHAFT	S	16	20	25	30	
	Y	5	6	7	7	
	W	5	6	8	8	
	D	18	22.5	28	28	
	LS	35	40	50	50	
	LK	30	35	45	45	
	J	8-M6 x P1.0	12-M6 x P1.0	12-M6 x P1.0	12-M8 x P1.25	12-M10 x P1.5
	JA	65	77	95	120	140
MOTOR FLANGE & INPUT BORE	JB	55	60	70	80	
	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145	90, 100, 115, 145
	K	M3 x P0.5 M4 x P0.7 M5 x P0.8	M4 x P0.7 M5 x P0.8 M6 x P1.0	M4 x P0.7 M5 x P0.8 M6 x P1.0	M5 x P0.8 M6 x P1.0 M8 x P1.25	M5 x P0.8 M6 x P1.0 M8 x P1.25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130	92, 110, 130
	G	M4 x P0.7	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110	70, 80, 95, 110
	U	8	14	14, (19)	24	19, 24
	HL	100	122, 125, 130	145, 150	181, 190, 200	210, 220

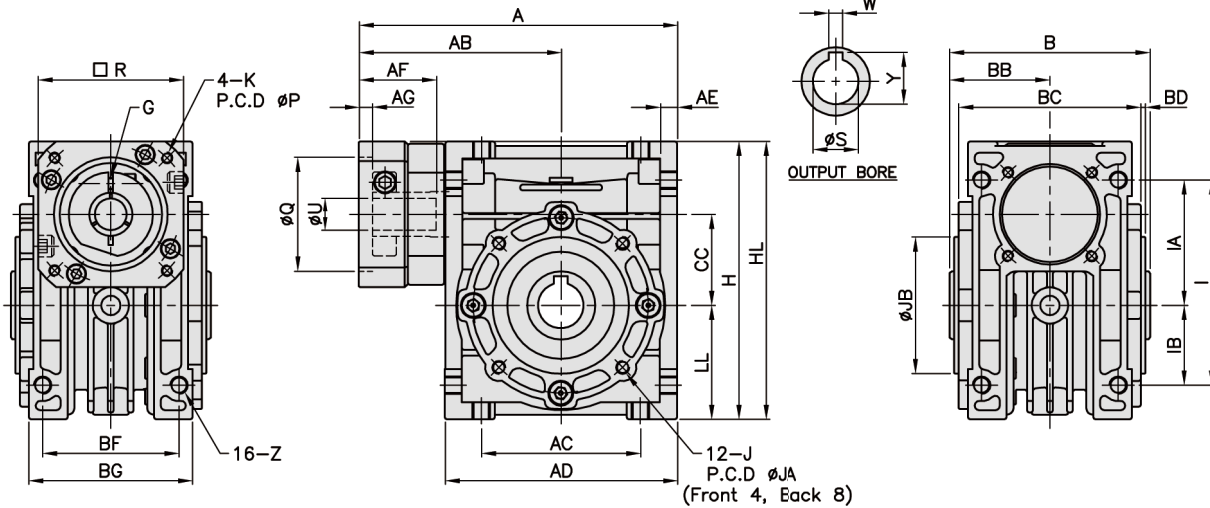
* U: () 치수는 1/5~1/40 만 가능.

KWEO series

RATIO : 5.10.15.20.30.40.50.60



KWEO



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BF	BG	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	65	32.5	60	2	45	58	30	40	72	45	27	M6	98	1.2
40	140	89	70	102	7.5	34	6	88	44	80	2	60	72	40	50	90	55	35	M8	122	2.44
50	158	98	80	120	8.5	34, 41	6	98	50	94	3	70	85	50	60	105	65	40	M10	145	3.91
60	195	122	100	146	10	59	9	108	54	102	3	85	103	60	75	136	83	53	M10	180	6.08
70	219	134	120	170	12	54, 59	9	128	64	118	3	90	110	70	85	150	90	60	M10	200	9.32

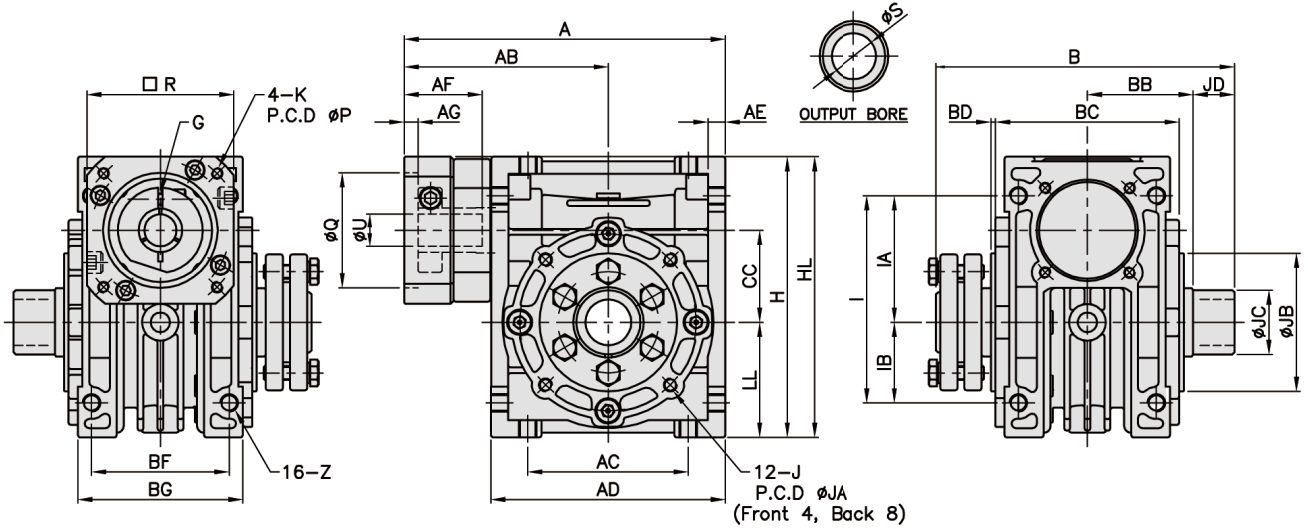
unit : mm

Model Code	30	40	50	60	70	
OUTPUT SHAFT	S	14	20	25	30	
	Y	16.3	22.8	28.3	33.3	
	W	5	6	8	8	
	J	8-M6 x P1.0	12-M6 x P1.0	12-M6 x P1.0	12-M8 x P1.25	12-M10 x P1.5
	JA	65	77	95	120	140
	JB	55	60	70	80	90
MOTOR FLANGE & INPUT BORE	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145	90, 100, 115, 145
	K	M3 x P0.5 M4 x P0.7 M5 x P0.8	M4 x P0.7 M5 x P0.8 M6 x P1.0	M4 x P0.7 M5 x P0.8 M6 x P1.0	M5 x P0.8 M6 x P1.0 M8 x P1.25	M5 x P0.8 M6 x P1.0 M8 x P1.25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130	92, 110, 130
	G	M4 x P0.7	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110	70, 80, 95, 110
	U	8	14	14, (19)	24	19, 24
	HL	100	122, 125, 130	145, 150	181, 190, 200	210, 220

* U: () 치수는 1/5~1/40 만 가능.

KWEN series

RATIO : 5.10.15.20.30.40.50.60



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BF	BG	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	108	36	60	2	45	58	30	40	72	45	27	M6	98	1.43
40	140	89	70	102	7.5	34	6	128	46	80	2	60	72	40	50	90	55	35	M8	122	2.7
50	158	98	80	120	8.5	34, 41	6	146	53	94	3	70	85	50	60	105	65	40	M10	145	4.22
60	195	122	100	146	10	59	9	154	57	102	3	85	103	60	75	136	83	53	M10	180	6.39
70	219	134	120	170	12	54, 59	9	172	65	118	3	90	110	70	85	150	90	60	M10	200	9.75

unit : mm

Model Code	30	40	50	60	70
OUTPUT SHAFT	S	14	20	25	30
	J	8-M6 x P1.0	12-M6 x P1.0	12-M6 x P1.0	12-M8 x P1.25
	JA	65	77	95	120
	JB	55	60	70	80
	JC	22	28	34	34
	JD	18	18	20	20
MOTOR FLANGE & INPUT BORE	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145
	K	M3 x P0.5 M4 x P0.7 M5 x P0.8	M4 x P0.7 M5 x P0.8 M6 x P1.0	M4 x P0.7 M5 x P0.8 M6 x P1.0	M5 x P0.8 M6 x P1.0 M8 x P1.25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130
	G	M4 x P0.7	M5 x P0.8	M5 x P0.8	M6 x P1.0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110
	U	8	14	14, (19)	24
	HL	100	122, 125, 130	145, 150	181, 190, 200

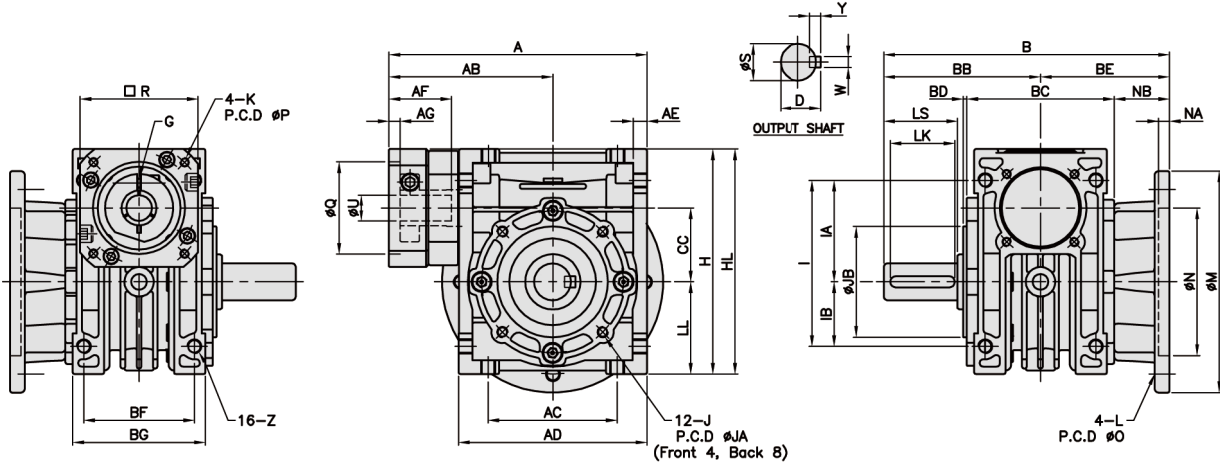
* U: () 치수는 1/5~1/40 만 가능.

KWESF series

RATIO : 5.10.15.20.30.40.50.60



KWME



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BE	BF	BG	NB	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	127.5	67.5	60	2	60	45	58	30	30	40	72	45	27	M6	98	1.44
40	140	89	70	102	7.5	34	6	155	85	80	2	70	60	72	30	40	50	90	55	35	M8	122	2.91
50	158	98	80	120	8.5	34, 41	6	180	100	94	3	80	70	85	33	50	60	105	65	40	M10	145	4.57
60	195	122	100	146	10	59	9	205	105	102	3	100	85	103	49	60	75	136	83	53	M10	180	7.25
70	219	134	120	170	12	54, 59	9	225	125	118	3	100	90	110	41	70	85	150	90	60	M10	200	11.19

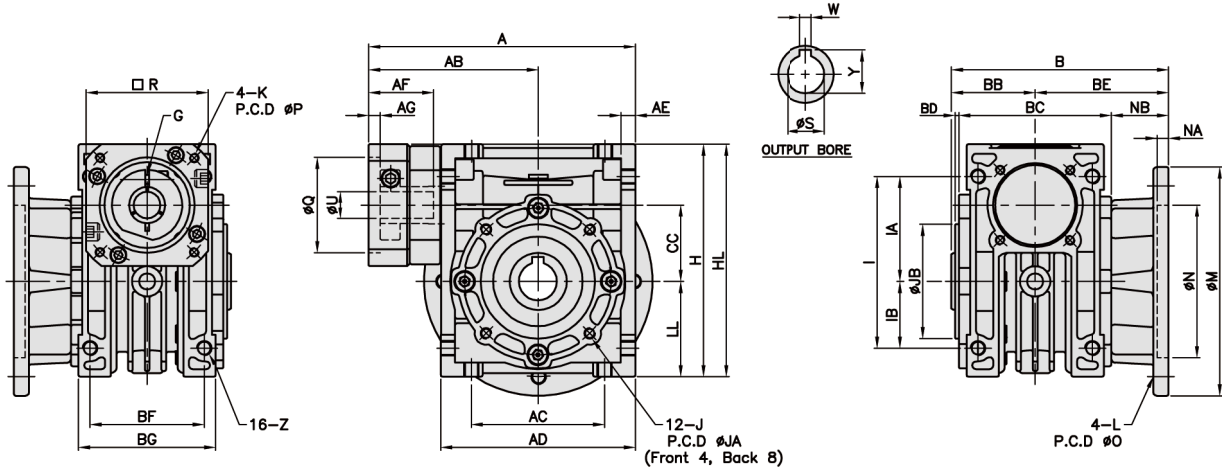
unit : mm

Code	Model	30	40	50	60	70
OUTPUT SHAFT	S	16	20	25	25	30
	Y	5	6	7	7	7
	W	5	6	8	8	8
	D	18	22.5	28	28	33
	LS	35	40	50	50	60
	LK	30	35	45	45	55
	J	8-M6 x P1.0	12-M6 x P1.0	12-M6 x P1.0	12-M8 x P1.25	12-M10 x P1.5
	JA	65	77	95	120	140
	JB	55	60	70	80	90
	N	70	80	95	130	150
	NA	5	6	6	7	7
	O	85	100	120	160	185
	L	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
M	100	120	140	180	210	
MOTOR FLANGE & INPUT BORE	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145	90, 100, 115, 145
	K	M3 x P0.5 M4 x P0.7 M5 x P0.8	M4 x P0.7 M5 x P0.8 M6 x P1.0	M4 x P0.7 M5 x P0.8 M6 x P1.0	M5 x P0.8 M6 x P1.0 M8 x P1.25	M5 x P0.8 M6 x P1.0 M8 x P1.25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130	92, 110, 130
	G	M4 x P0.7	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110	70, 80, 95, 110
	U	8	14	14, (19)	24	19, 24
	HL	100	122, 125, 130	145, 150	181, 190, 200	210, 220

* U: () 치수는 1/5~1/40 만 가능.

KWEOF series

RATIO : 5.10.15.20.30.40.50.60



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BE	BF	BG	NB	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	92,5	32,5	60	2	60	45	58	30	30	40	72	45	27	M6	98	1,34
40	140	89	70	102	7,5	34	6	114	44	80	2	70	60	72	30	40	50	90	55	35	M8	122	2,66
50	158	98	80	120	8,5	34, 41	6	130	49	94	3	80	70	85	33	50	60	105	65	40	M10	145	4,24
60	195	122	100	146	10	59	9	154	54	102	3	100	85	103	49	60	75	136	83	53	M10	180	6,74
70	219	134	120	170	12	54, 59	9	164	64	118	3	100	90	110	41	70	85	150	90	60	M10	200	10,29

unit : mm

Code	Model	30	40	50	60	70
OUTPUT SHAFT	S	14	20	25	25	30
	Y	16,3	22,8	28,3	28,3	33,3
	W	5	6	8	8	8
	J	8-M6 x P1,0	12-M6 x P1,0	12-M6 x P1,0	12-M8 x P1,25	12-M10 x P1,5
	JA	65	77	95	120	140
	JB	55	60	70	80	90
	N	70	80	95	130	150
	NA	5	6	6	7	7
	O	85	100	120	160	185
	L	M6 x P1,0	M8 x P1,25	M10 x P1,5	M10 x P1,5	M12 x P1,75
	M	100	120	140	180	210
MOTOR FLANGE & INPUT BORE	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145	90, 100, 115, 145
	K	M3 x P0,5 M4 x P0,7 M5 x P0,8	M4 x P0,7 M5 x P0,8 M6 x P1,0	M4 x P0,7 M5 x P0,8 M6 x P1,0	M5 x P0,8 M6 x P1,0 M8 x P1,25	M5 x P0,8 M6 x P1,0 M8 x P1,25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130	92, 110, 130
	G	M4 x P0,7	M5 x P0,8	M5 x P0,8	M6 x P1,0	M6 x P1,0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110	70, 80, 95, 110
	U	8	14	14, (19)	24	19, 24
	HL	100	122, 125, 130	145, 150	181, 190, 200	210, 220

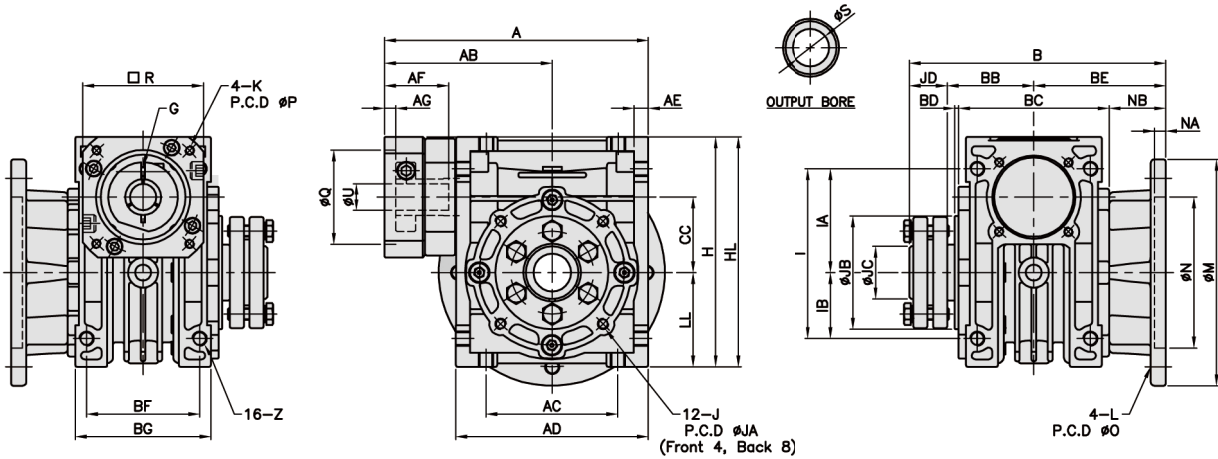
* U: () 치수는 1/5~1/40 만 가능.

KWENF series

RATIO : 5.10.15.20.30.40.50.60



KWME



Model Code	A	AB	AC	AD	AE	AF	AG	B	BB	BC	BD	BE	BF	BG	NB	CC	LL	I	IA	IB	Z	H	Weight (KG)
30	108	68	55	80	6	32	5	114	36	60	2	60	45	58	30	30	40	72	45	27	M6	98	1.56
40	140	89	70	102	7.5	34	6	134	46	80	2	70	60	72	30	40	50	90	55	35	M8	122	2.92
50	158	98	80	120	8.5	34, 41	6	153	53	94	3	80	70	85	33	50	60	105	65	40	M10	145	4.56
60	195	122	100	146	10	59	9	177	57	102	3	100	85	103	49	60	75	136	83	53	M10	180	7.48
70	219	134	120	170	12	54, 59	9	186	65	118	3	100	90	110	41	70	85	150	90	60	M10	200	10.72

unit : mm

Code	Model	30	40	50	60	70
OUTPUT SHAFT	S	14	20	25	25	30
	J	8-M6 x P1.0	12-M6 x P1.0	12-M6 x P1.0	12-M8 x P1.25	12-M10 x P1.5
	JA	65	77	95	120	140
	JB	55	60	70	80	90
	JC	22	28	34	35	40
	JD	18	18	20	20	21
	N	70	80	95	130	150
	NA	5	6	6	7	7
	O	85	100	120	160	185
	L	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M12 x P1.75
	M	100	120	140	180	210
MOTOR FLANGE & INPUT BORE	P	46, 60, 63	70, 75, 90	70, 75, 90	90, 100, 115, 145	90, 100, 115, 145
	K	M3 x P0.5 M4 x P0.7 M5 x P0.8	M4 x P0.7 M5 x P0.8 M6 x P1.0	M4 x P0.7 M5 x P0.8 M6 x P1.0	M5 x P0.8 M6 x P1.0 M8 x P1.25	M5 x P0.8 M6 x P1.0 M8 x P1.25
	R	46, 55	64, 70, 80	64, 70, 80	92, 110, 130	92, 110, 130
	G	M4 x P0.7	M5 x P0.8	M5 x P0.8	M6 x P1.0	M6 x P1.0
	Q	30, 40, 50	50, 60, 70	50, 60, 70	70, 80, 95, 110	70, 80, 95, 110
	U	8	14	14, (19)	24	19, 24
	HL	100	122, 125, 130	145, 150	181, 190, 200	210, 220

* U: () 치수는 1/5~1/40 만 가능.