

4 중공축 WORM REDUCER

■ MTW (마이티 웜) 시리즈

4- 1



제품 특징

- **중공축 장착 (Hollow Shaft Mounting)**
- **출력 플랜지 장착 (Flange Mounting)**
- **상하좌우 만능 장착 (Universal Mounting)**
- **고효율 장수명화 (Maintenance Free)**

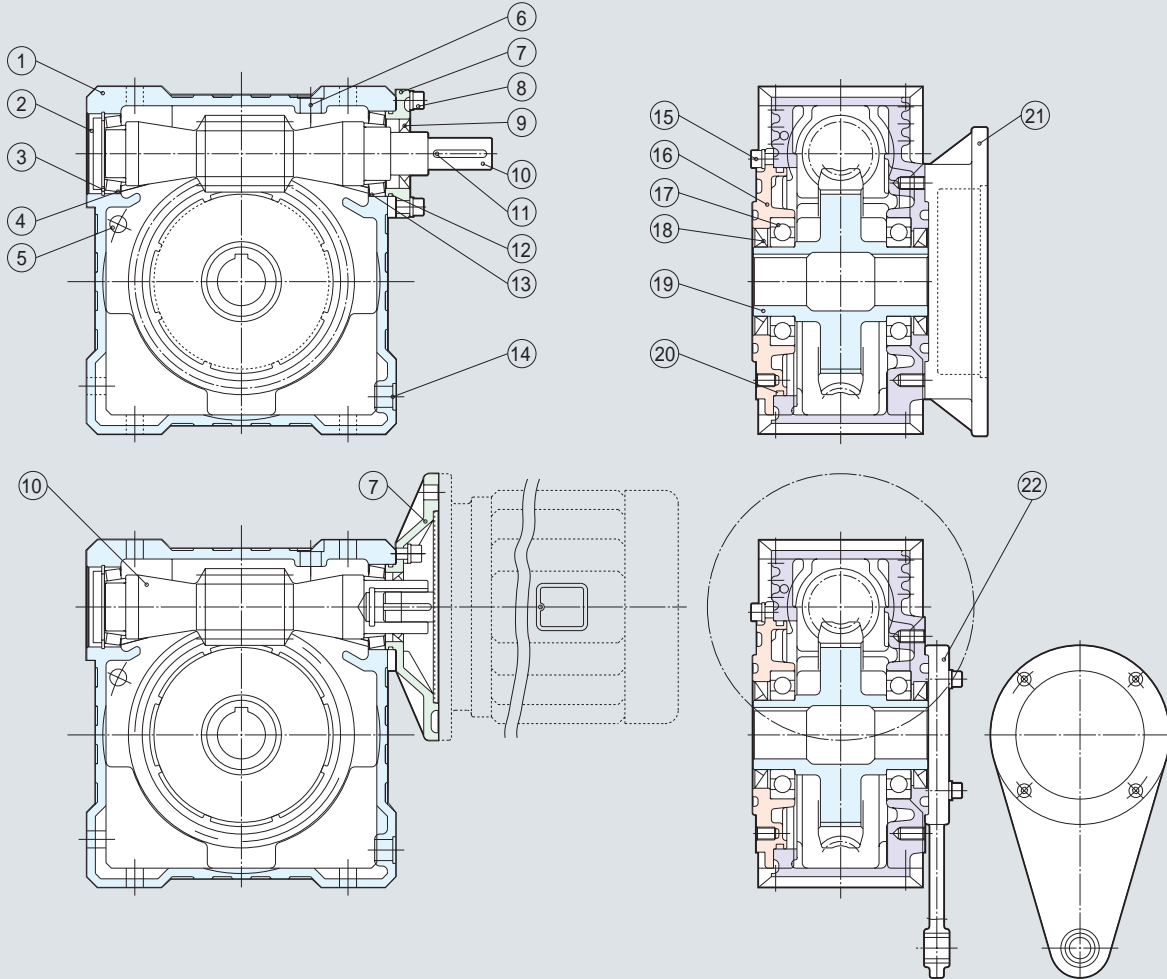
중공축 worm 감속기 MTW 시리즈는 비교적 중소형 worm 감속기입니다. 출력축을 중공축으로 하였으며, 장착 설치면을 전, 후, 좌, 우, 상, 하, 자유로이 선택하여 사용할 수 있으므로, 구매 후 설치 우려가 없습니다. 작은것은 알루미늄 다이캐스팅을 사용하여 가벼우면서도 강하여, 자동화 설비에 적합합니다.

- **형번 크기 : 25 ~ 155**
- **전달 동력 : 6W ~ 7.5KW (1/8마력~10마력)**
- **감속 비율 : 1/10 ~ 1/60**
- **MTW90~MTW155 형번의 하우징 재질은 IRON입니다**

MTW is a series of Hollow Shaft Worm Reducer with/without motor for medium and smaller size. Output shaft is designed hollow shaft as a pipeline for you to mount easily. Also mounting surface is universal so that you can install the reducer on your base with bottom, top, sides, torque arm or any other way you intent. Aluminum case with light mass will satisfy you in automations or material handling system.

- **Model size : #25 ~ #155**
- **Power : 6W ~ 7.5KW (1/8Hp ~ 10Hp)**
- **Gear Ratio : 1/10 ~ 1/60 for Standard**

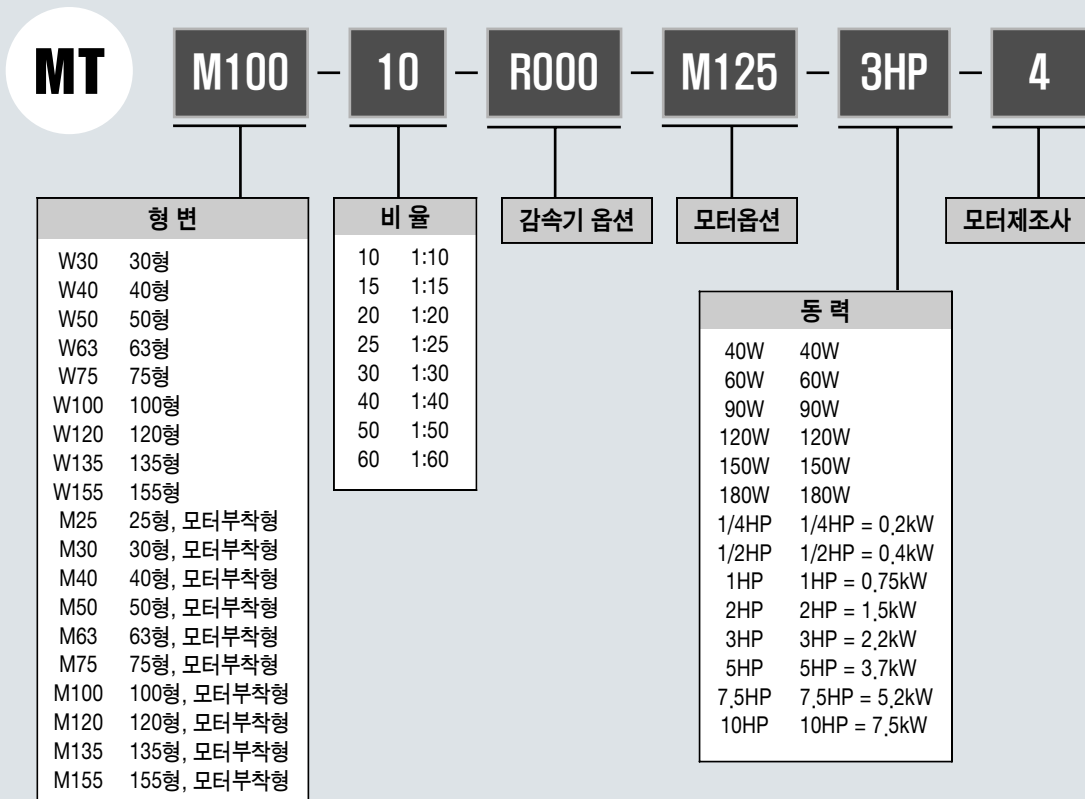
조립도



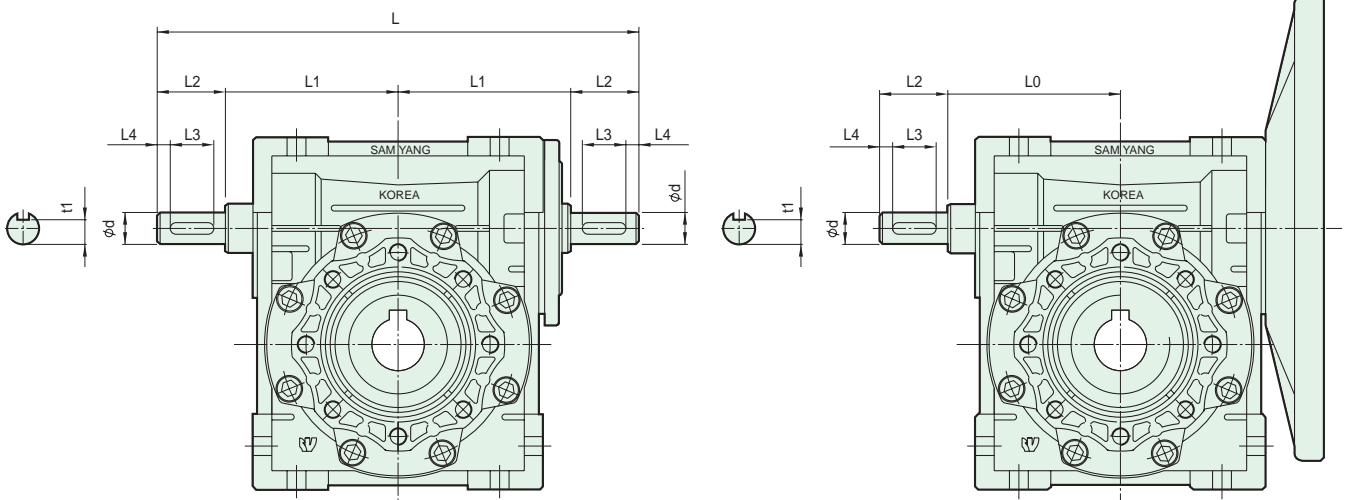
각부명칭

- | | |
|-------------------------|------------------|
| 1. CASE | 12. O-RING |
| 2. OIL CAP | 13. BEARING |
| 3. SNAP RING | 14. DRAIN PLUG |
| 4. BEARING | 15. WRENCH BOLT |
| 5. OIL GAUGE | 16. OUTPUT COVER |
| 6. DRAIN PLUG | 17. BEARING |
| 7. INPUT COVER / FLANGE | 18. OIL SEAL |
| 8. WRENCH BOLT | 19. WORM WHEEL |
| 9. OIL SEAL | 20. O-RING |
| 10. INPUT SHAFT | 21. FOOT FLANGE |
| 11. KEY | 22. TORQUE ARM |

SAMYANG MIGHTY WORM



입력 양축 (Option)

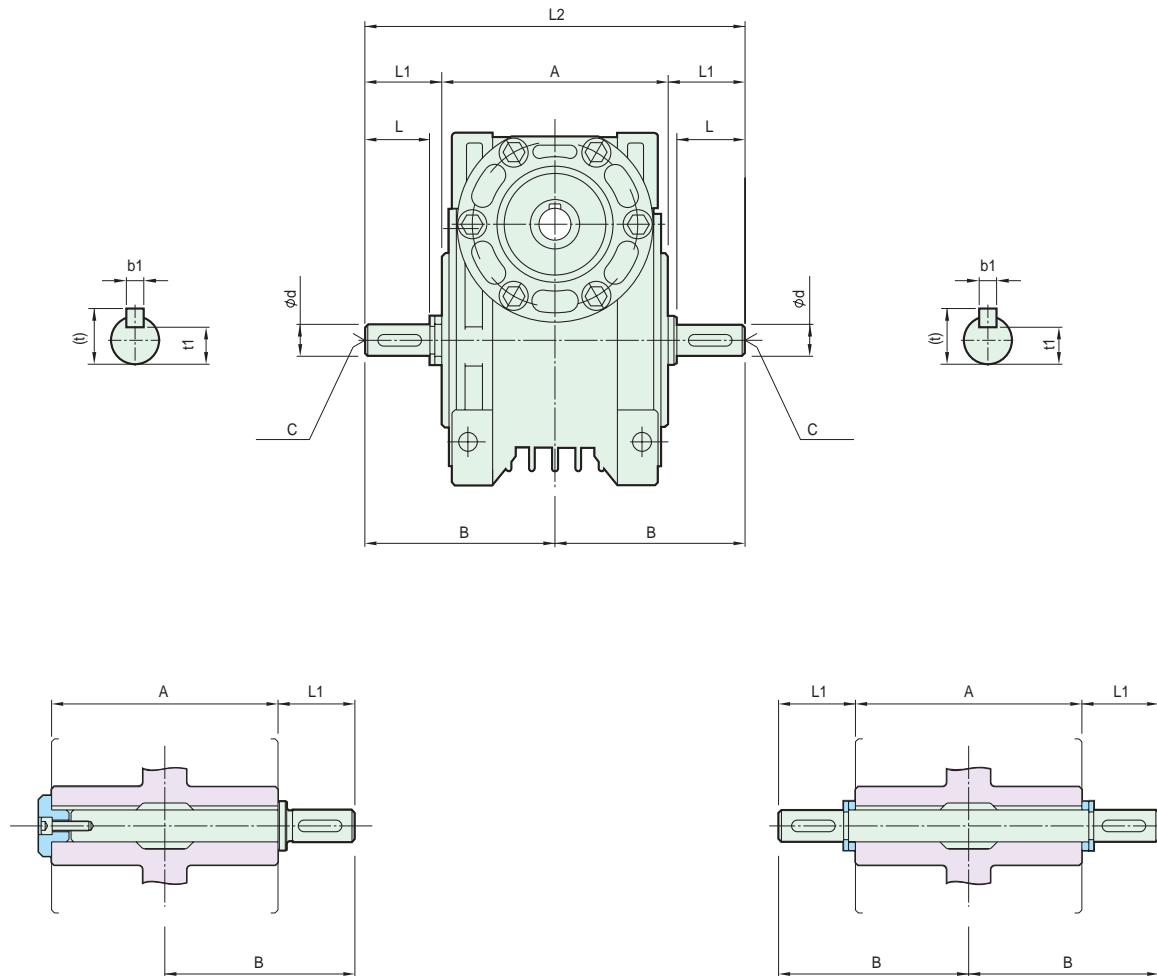


삼양
임속기
WORM REDUCER

형번	L	L0	L1	L2	L3	L4	t1	φ d	KEY
30형	142	45	51	20	15	2	7,2	φ 9	3×3×15L-2R
40형	166	53	60	23	15	4	8,5	φ 11	4×4×15L-2R
50형	208	64	74	30	20	5	11	φ 14	5×5×20L-2R
63형	260	75	90	40	30	5	15,5	φ 19	6×6×30L-2R
75형	310	90	105	50	40	7,5	20	φ 24	8×7×35L-2R
90형	350	108	125	50	40	5	20	φ 24	8×7×40L-2R
100형	380	122	140	50	40	5	21	φ 25	8×7×40L-2R
110형	411	135	145,5	60	50	5	24	φ 28	8×7×50L-2R
120형	470	150	175	60	50	5	26	φ 30	8×7×50L-2R
135형	524	157	187	75	65	5	30,5	φ 35	10×8×65L-2R
155형	592	181	211	85	75	5	35	φ 40	12×8×75L-2R

SAMYANG MIGHTY WORM

출력 중실축 (Option)



출력축 (한방향)

출력축 (양방향)

형번	ϕd	A	B	C	L	L1	L2	b1	(t)	t1
25형	$\phi 11g6$	50	51	-	23	26	102	4	12.5	8.5
30형	$\phi 14g6$	63	64.5	M6	30	33	129	5	16	11
40형	$\phi 18h6$	78	82	M6	40	43	164	6	20.5	14.5
50형	$\phi 25h6$	92	100	M10	50	54	200	8	28	21
63형	$\phi 25h6$	112	110	M10	50	54	220	8	28	21
75형	$\phi 28h6$	120	124	M10	60	64	248	8	31	24
90형	$\phi 35h6$	140	154.5	M12	80	84.5	309	10	38	30
100형	$\phi 40h6$	147	158.25	M12	80	84.75	316.5	12	43	35
110형	$\phi 42h6$	155	162.25	M16	80	84.75	324.5	12	45	37
120형	$\phi 45h6$	165	177.25	M16	90	94.75	354.5	14	48.5	39.5
135형	$\phi 48h6$	177	188.25	M16	95	99.75	376.5	14	48.5	42.5
155형	$\phi 52h6$	208	209	M16	100	105	418	16	56	46

SELECTION GUIDE

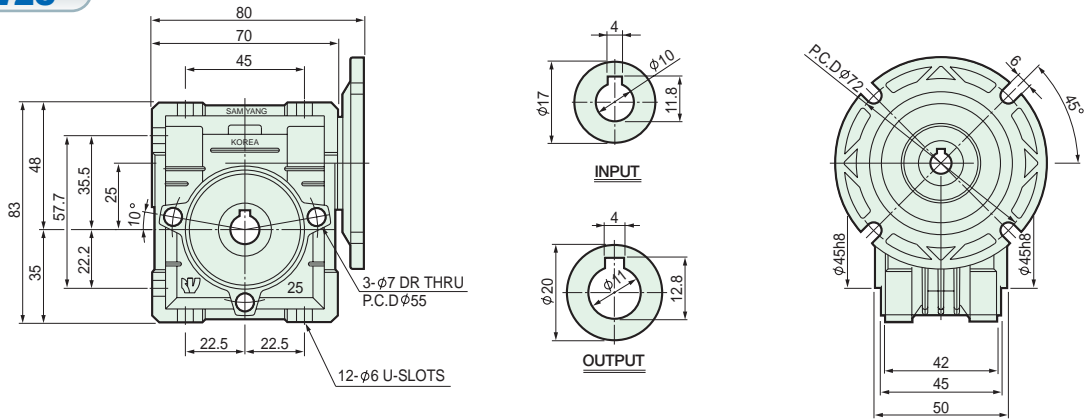
형번	감속비	동력			형번	감속비	동력		
		모터동력	모터축경	IEC 프레임			모터동력	모터축경	IEC 프레임
25	10	0.04KW	ø 10 (sym)		75	60	0.75KW	ø 19	IEC 80
	15					2.2KW	ø 28	IEC 100	
	20								
	30								
	40								
	50								
30	60	0.2KW	ø 12 (sym)		90	40	1.5KW	ø 24	IEC 90
	10					2.2KW	ø 28	IEC 100	
	15								
	20								
	25								
	30								
40	30	0.18KW ~ 0.06KW	ø 12 (sym)		100	40	1.5KW	ø 24	IEC 90
	40					3.7KW	ø 28	IEC 112	
	50								
	60								
	10								
	15								
50	15	0.4KW	ø 14	IEC 71	110	20	2.2KW	ø 28	IEC 100
	20					2.2KW	ø 28	IEC 100	
	25								
	30								
	40								
	50								
63	60	0.2KW	ø 12 (sym)	IEC 63	120	40	3.7KW	ø 28	IEC 112
	10					5.5KW	ø 38	IEC 132	
	15								
	20								
	25								
	30								
75	20	0.75KW	ø 19	IEC 80	135	40	3.7KW	ø 28	IEC 112
	25					7.5KW	ø 38	IEC 132	
	30								
	40								
	50								
	60								
75	30	1.5KW	ø 24	IEC 90	155	40	5.5KW	ø 38	IEC 132
	40					5.5KW	ø 38	IEC 132	
	50								
	60								
	10								
	15								
75	15	2.2KW	ø 28	IEC 100	155	20	7.5KW	ø 38	IEC 132
	20					7.5KW	ø 38	IEC 132	
	25								
	30								
	40								
	50								

회전축
KHO
WORM REDUCER

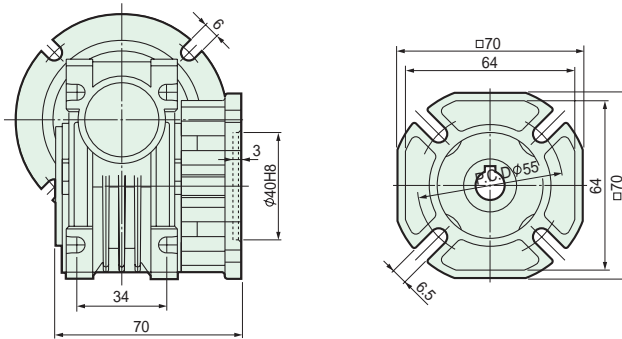


SAMYANG MIGHTY WORM

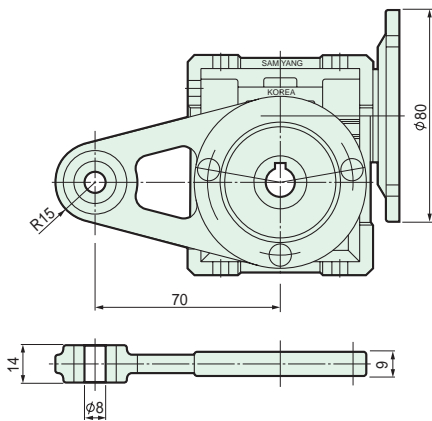
MTW25



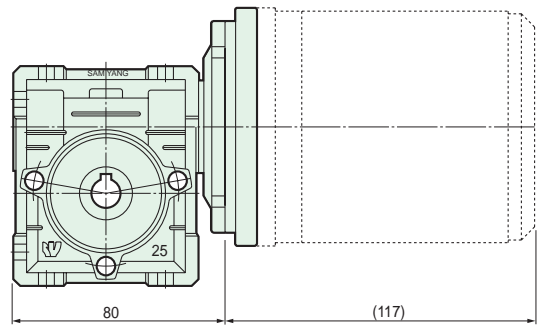
MTW25-F



MTW25-T



MTWM25

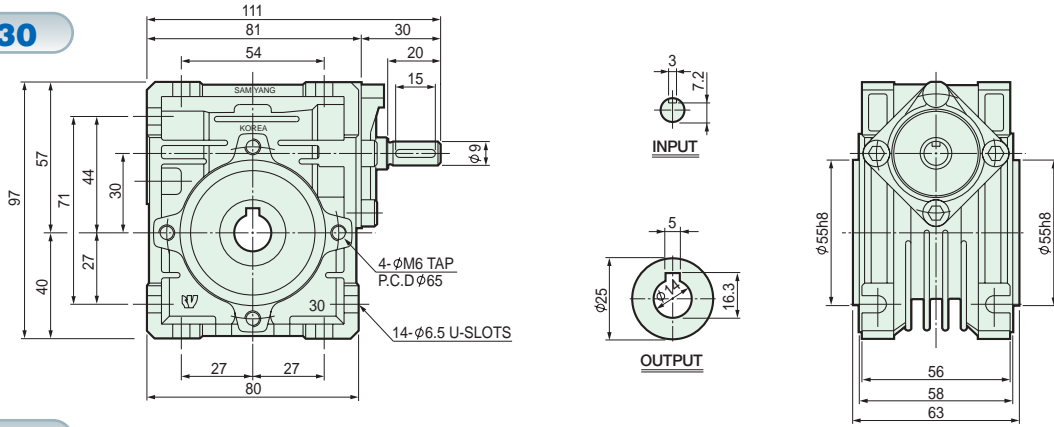


선정 기준 동력표

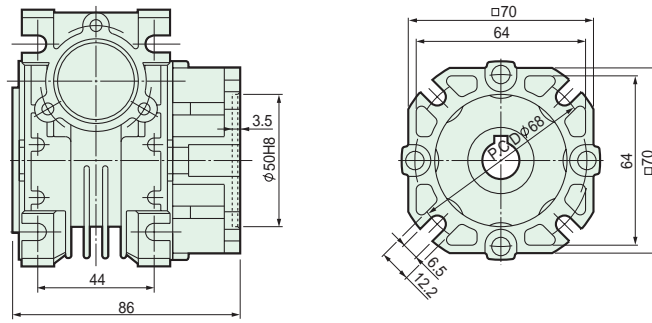
CASE : ALDC

INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	0.239	0.163	0.879	0.04	0.190	0.129	1.049	0.16	0.11	1.177
15	0.167	0.102	0.827		0.134	0.082	0.995	0.11	0.07	1.089
20	0.134	0.075	0.812		0.104	0.058	0.945	0.08	0.04	0.970
25	-	-	-	-	-	-	-	-	-	-
30	0.099	0.046	0.739	0.04	0.082	0.038	0.918	0.07	0.03	1.045
40	0.086	0.035	0.763		0.068	0.028	0.905	0.05	0.02	0.887
50	0.066	0.024	0.643		0.052	0.019	0.760	0.04	0.01	0.779
60	0.046	0.016	0.508		0.036	0.012	0.596	0.03	0.01	0.662

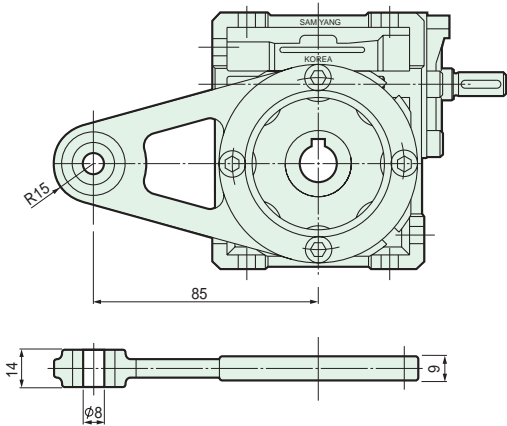
MTW30



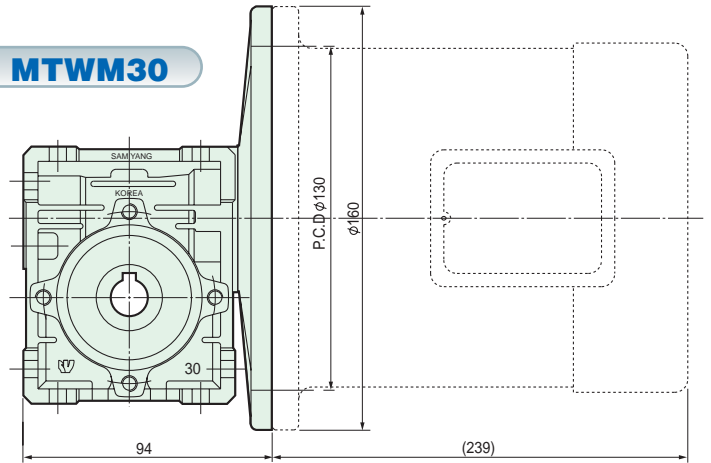
MTW30-F



MTW30-T



MTWM30



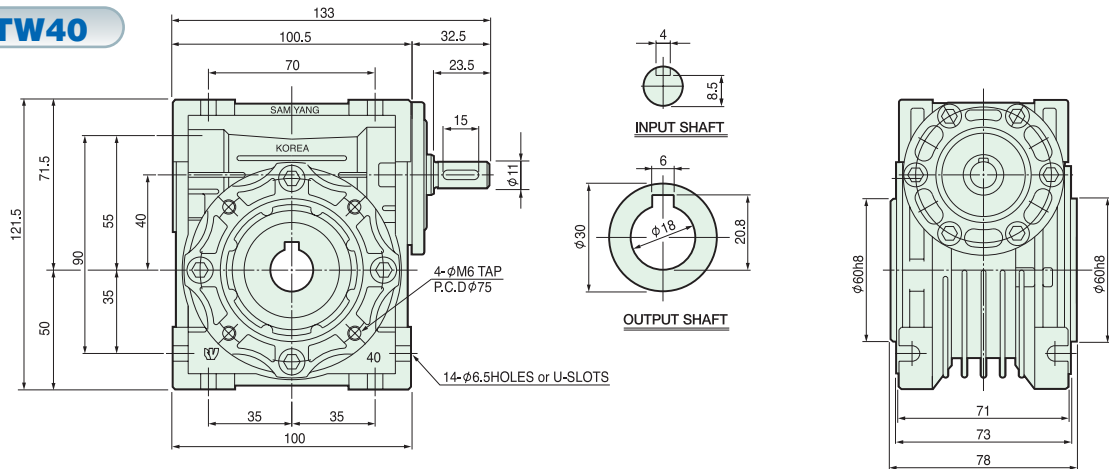
선정 기준 동력표

CASE : ALDC

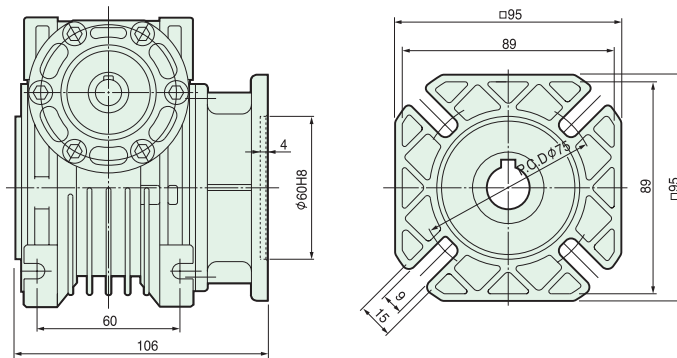
INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	0,357	0,225	1,217	0,2	0,288	0,181	1,473	0,24	0,15	1,636
15	0,253	0,139	1,129		0,206	0,113	1,379	0,17	0,09	1,518
20	0,194	0,097	1,050		0,154	0,077	1,250	0,13	0,07	1,407
25	0,198	0,085	1,152	0,18	0,170	0,073	1,483	0,14	0,06	1,629
30	0,167	0,065	1,057		0,134	0,052	1,273	0,11	0,04	1,393
40	0,124	0,043	0,939		0,102	0,036	1,159	0,09	0,03	1,364
50	0,099	0,031	0,830	0,06	0,082	0,025	1,032	0,07	0,02	1,174
60	0,086	0,023	0,754		0,072	0,019	0,947	0,06	0,02	1,052

SAMYANG MIGHTY WORM

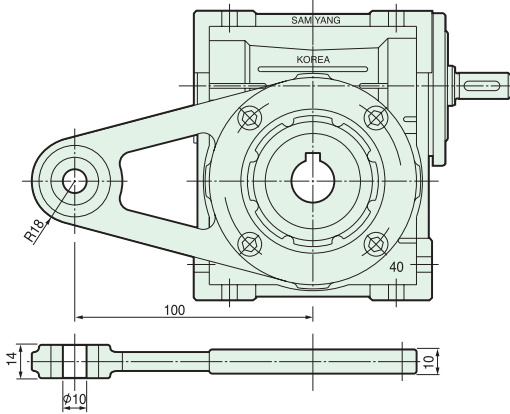
MTW40



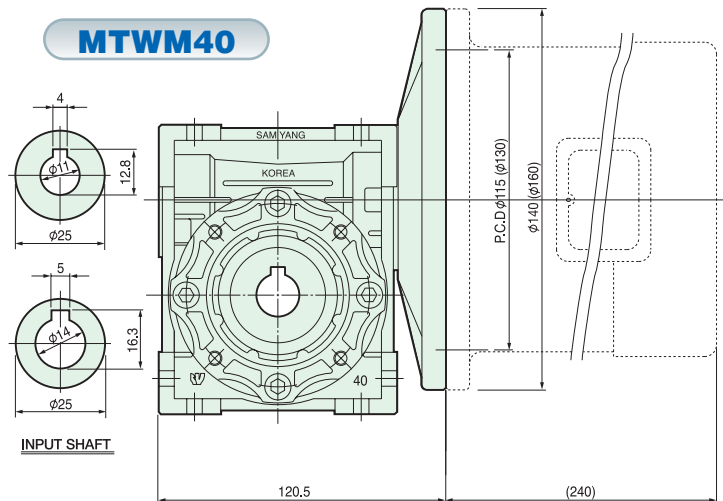
MTW40-F



MTW40-T



MTWM40

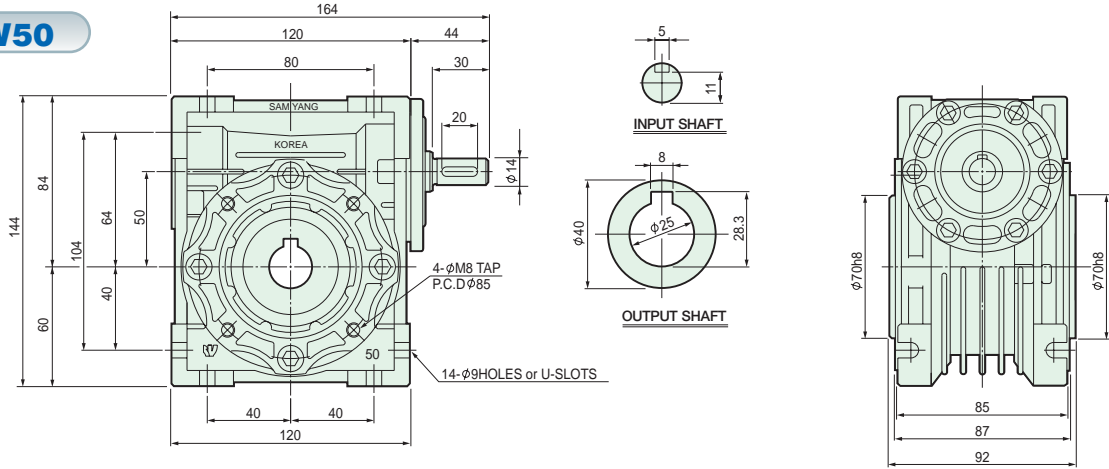


선정 기준 동력표

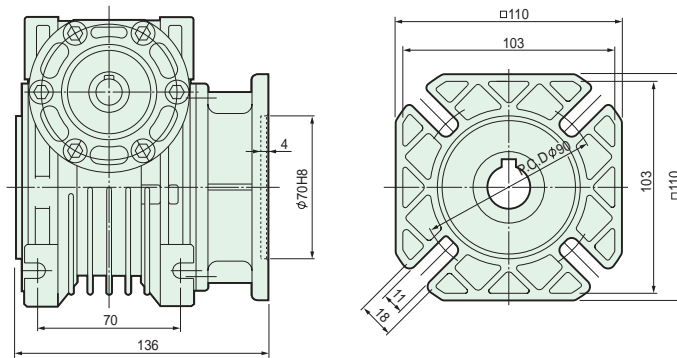
CASE : ALDC

INPUT rpm RATIO	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	0.770	0.516	2.792	0.4	0.614	0.411	3.339	0.50	0.34	3.625
15	0.549	0.329	2.674		0.432	0.259	3.156	0.36	0.22	3.506
20	0.413	0.227	2.458		0.334	0.184	2.982	0.28	0.15	3.333
25	0.334	0.170	2.304	0.2	0.272	0.139	2.815	0.23	0.12	3.174
30	0.347	0.156	2.535		0.278	0.125	3.046	0.23	0.10	3.360
40	0.256	0.102	2.216		0.206	0.082	2.675	0.17	0.07	2.944
50	0.203	0.073	1.977	0.15	0.164	0.059	2.396	0.14	0.05	2.724
60	0.167	0.053	1.735		0.134	0.043	2.088	0.11	0.04	2.286

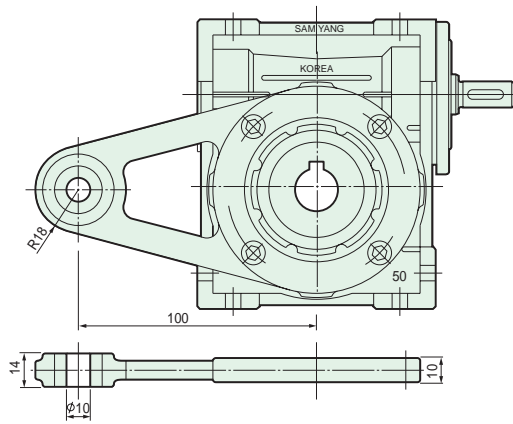
MTW50



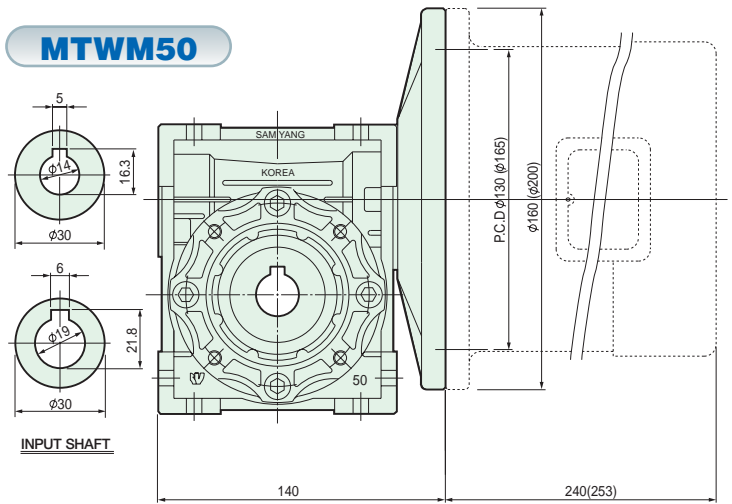
MTW50-F



MTW50-T



MTWM50



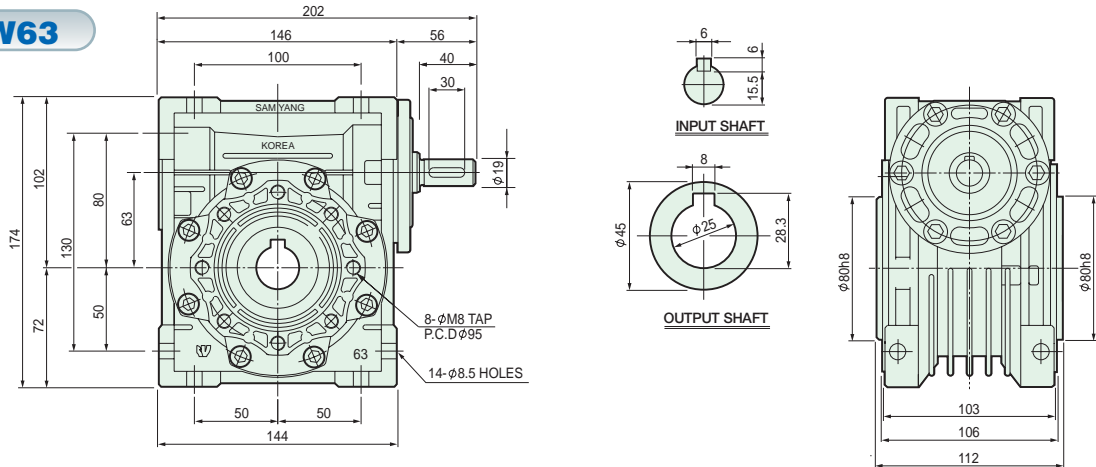
선정 기준 동력표

CASE : ALDC

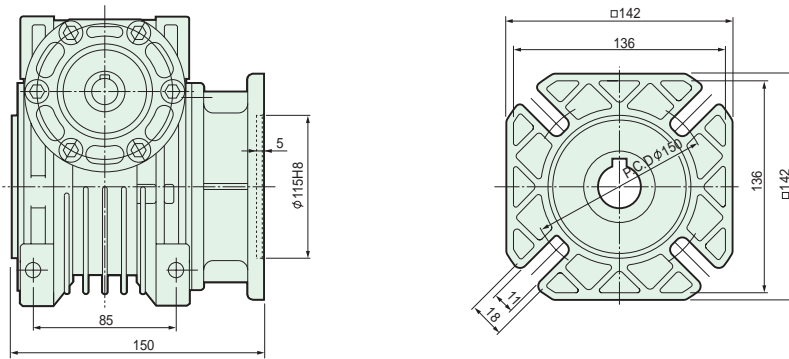
INPUT rpm RATIO	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	1,393	0,919	4,975	0.75	1,114	0,735	5,968	0,94	0,62	6,714
15	1,003	0,592	4,803		0,796	0,470	5,718	0,67	0,40	6,417
20	0,757	0,416	4,506		0,600	0,330	5,357	0,48	0,26	5,714
25	0,600	0,306	4,140	0.4	0,480	0,245	4,967	0,39	0,20	5,381
30	0,641	0,282	4,578		0,510	0,224	5,464	0,42	0,18	6,000
40	0,469	0,183	3,959		0,376	0,147	4,761	0,31	0,12	5,234
50	0,371	0,129	3,513	0.2	0,304	0,106	4,318	0,25	0,09	4,735
60	0,306	0,097	3,179		0,252	0,081	3,927	0,21	0,07	4,364

SAMYANG MIGHTY WORM

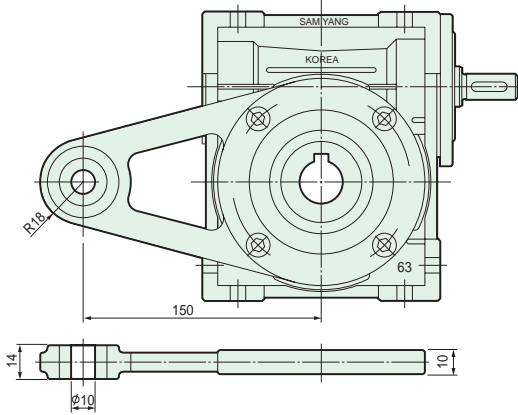
MTW63



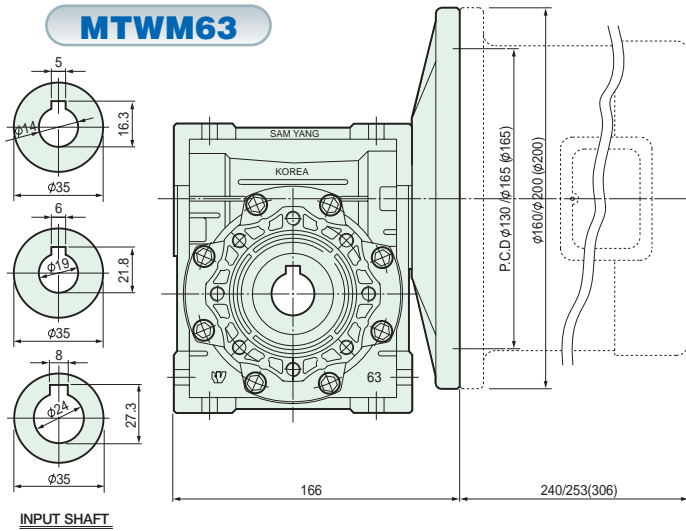
MTW63-F



MTW63-T



MTWM63

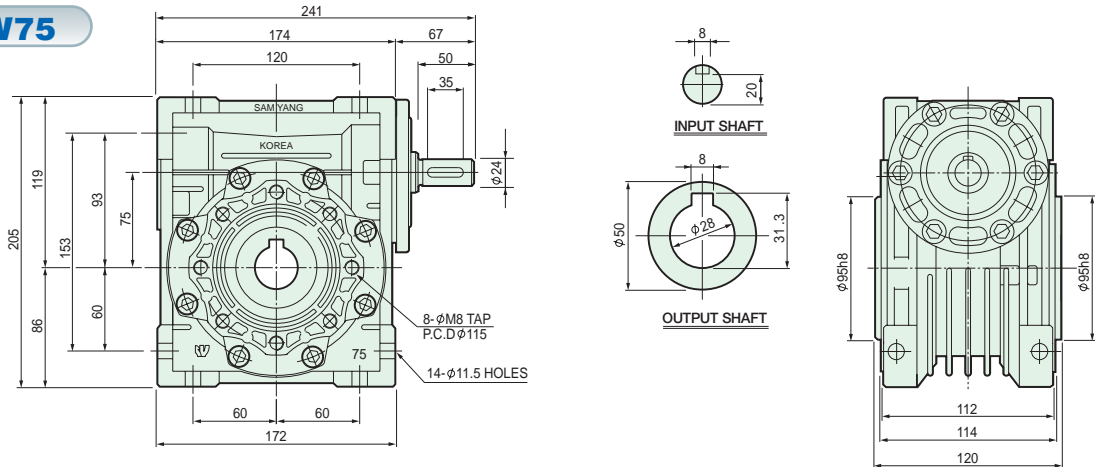


선정 기준 동력표

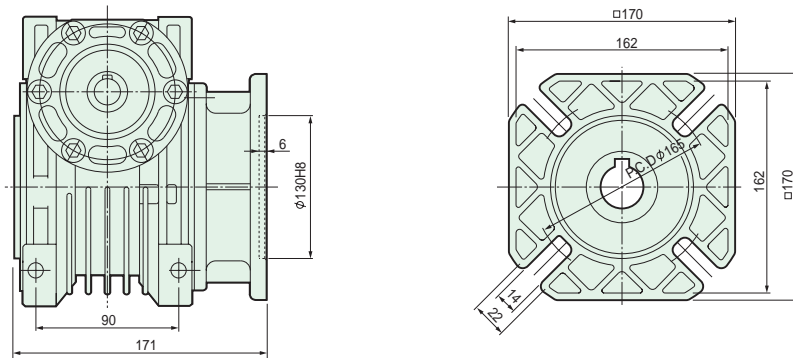
CASE : ALDC

INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	2.479	1.661	8.987	1.5	1.994	1.336	10.844	1.70	1.14	12.327
15	1.847	1.108	8.995		1.470	0.882	10.738	1.20	0.72	11.688
20	1.371	0.754	8.160		1.096	0.603	9.785	0.91	0.50	10.833
25	1.007	0.549	7.430	0.75	0.864	0.441	8.941	0.69	0.35	9.521
30	1.214	0.546	8.868		0.976	0.439	10.695	0.79	0.36	11.542
40	0.846	0.338	7.324		0.688	0.275	8.935	0.58	0.23	10.043
50	0.666	0.239	6.487	0.4	0.540	0.194	7.889	0.45	0.16	8.766
60	0.559	0.185	5.989		0.454	0.150	7.296	0.37	0.12	7.928

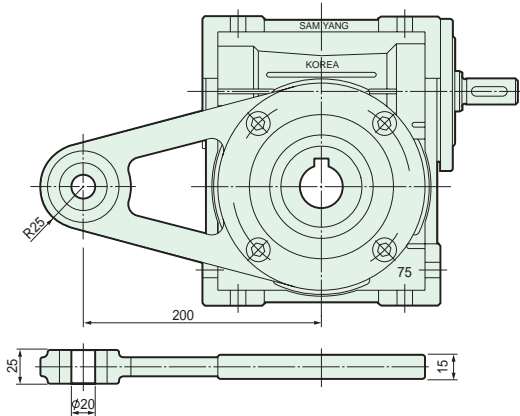
MTW75



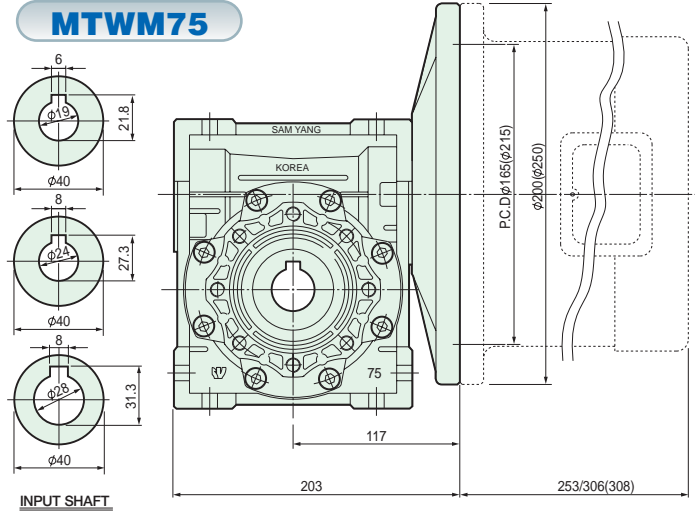
MTW75-F



MTW75-T



MTWM75



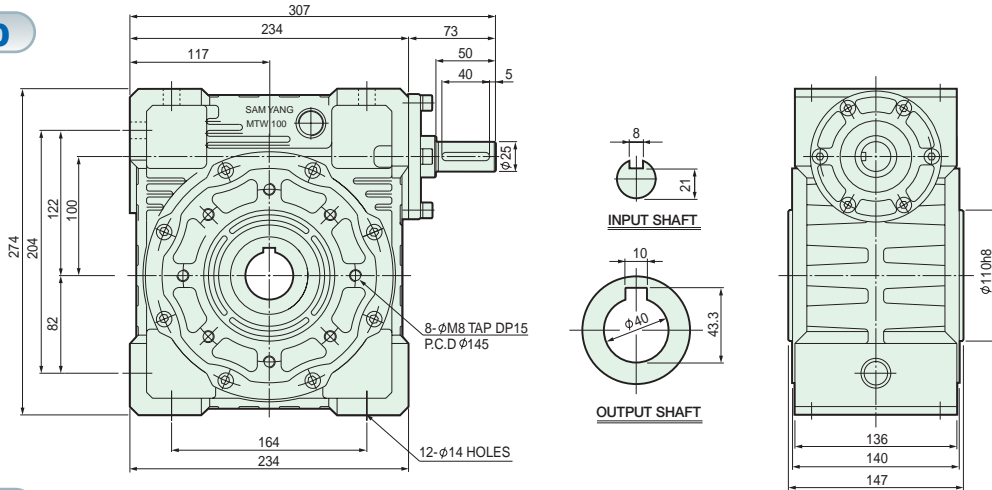
선정 기준 동력표

CASE : ALDC

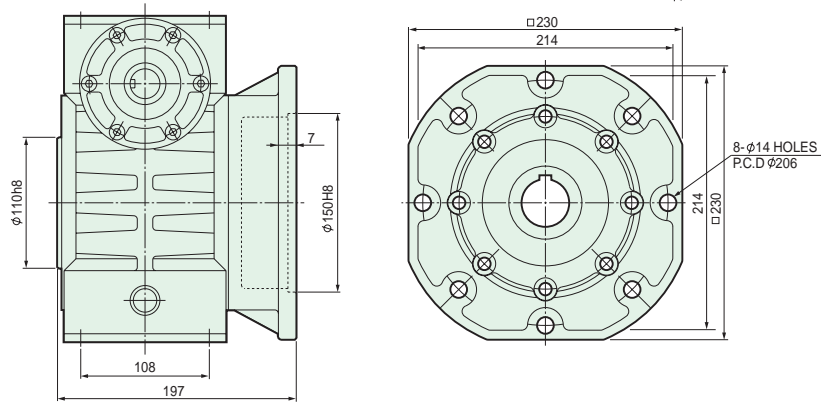
INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	3,670	2,496	13,504	2.2	2,958	2,001	16,326	2,52	1,71	18,545
15	2,606	1,589	12,903		2,100	1,281	15,596	1,80	1,10	17,824
20	2,131	1,215	13,145		1,688	0,962	15,619	1,40	0,80	17,272
25	1,656	0,877	11,873	1.5	1,322	0,701	14,218	1,10	0,58	15,773
30	1,657	0,762	12,373		1,328	0,611	14,875	1,10	0,51	16,428
40	1,249	0,525	11,354		1,004	0,422	13,691	0,83	0,35	15,091
50	0,979	0,372	10,065	0.75	0,794	0,302	12,245	0,65	0,25	13,365
60	0,821	0,287	9,329		0,666	0,233	11,352	0,54	0,19	12,272

SAMYANG MIGHTY WORM

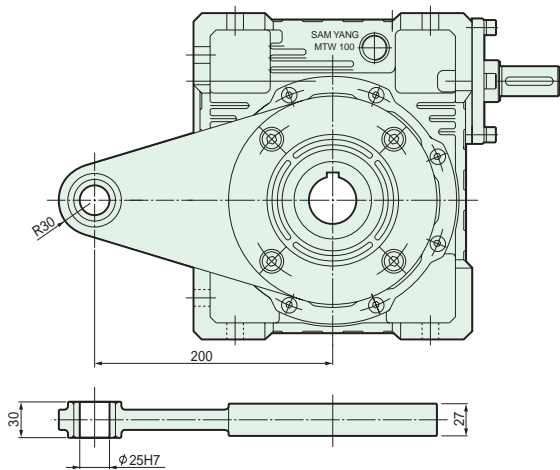
MTW100



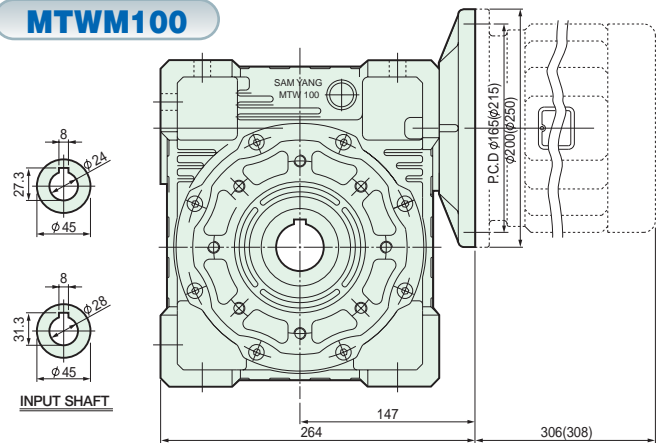
MTW100-F



MTW100-T



MTWM100

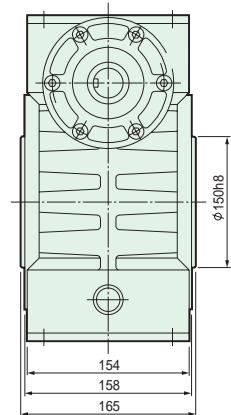
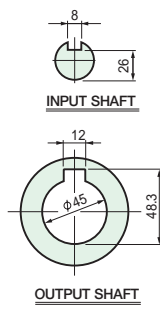
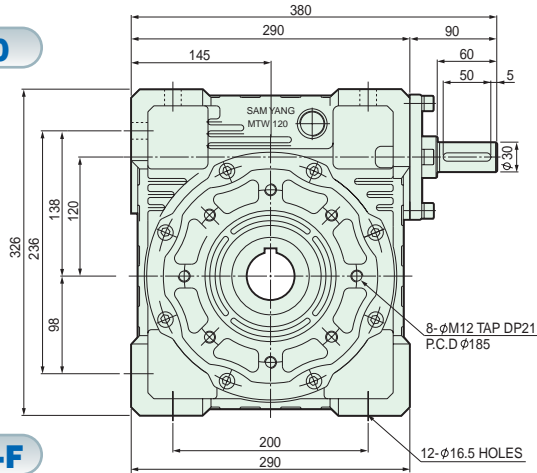


선정 기준 동력표

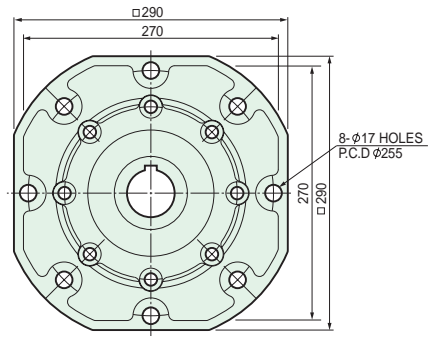
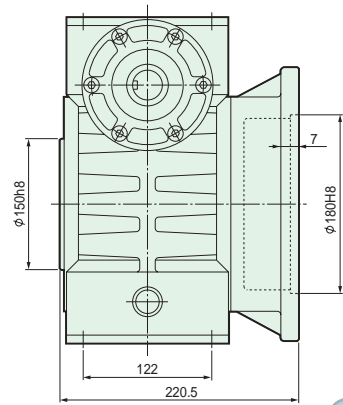
CASE : IRON

INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	MOTOR KW	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m	INPUT KW	OUTPUT KW	OUTPUT TORQUE Kgf-m
10	4.815	3.968	20.96	2.2	3.825	3.090	24.56	3.240	2.588	27.72
15	3.488	2.775	21.99		2.805	2.205	25.96	2.385	1.815	28.90
20	2.775	2.168	22.94		2.220	1.703	27.13	1.875	1.395	29.63
30	2.318	1.658	26.32		1.845	1.275	30.22	1.598	0.855	33.82
40	1.748	1.215	25.81	1.5	1.410	0.945	30.07	1.118	0.705	33.82
50	1.320	0.878	23.38		1.065	0.683	27.21	0.923	0.578	29.56
60	1.080	0.698	22.35		0.878	0.518	25.66	0.758	0.435	28.01

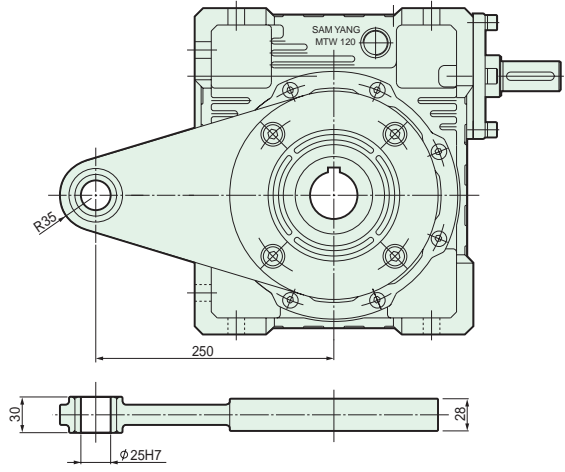
MTW120



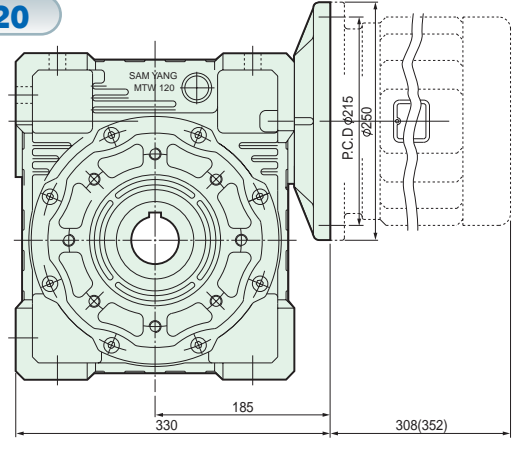
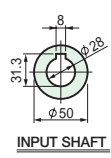
MTW120-F



MTW120-T



MTWM120



선정 기준 동력표

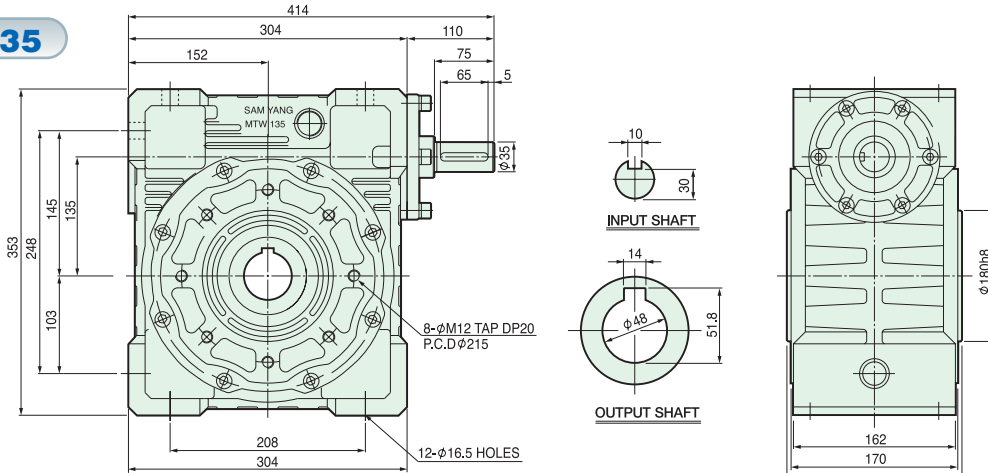
CASE : IRON

INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	MOTOR kW	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m
10	7,613	6,285	33,60	3.7	6,068	4,980	39,56	5,175	4,163	44,19
15	5,513	4,440	35,29		4,455	3,488	41,54	3,765	2,910	46,18
20	3,945	3,060	32,35		3,158	2,378	37,72	2,678	1,980	41,91
30	3,675	2,663	42,28		2,925	2,048	48,75	2,513	1,703	54,34
40	2,580	1,763	37,28	2.2	2,078	1,350	43,01	1,785	1,118	47,65
50	2,168	1,515	40,07		1,740	1,170	46,02	1,485	0,945	50,51
60	1,740	1,125	35,96		1,388	0,863	41,32	1,200	0,705	45,07

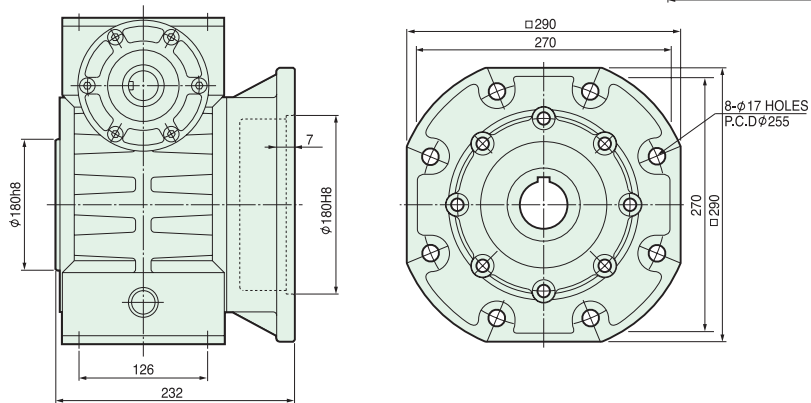
한국 삼양임속기
WORM REDUCER

SAMYANG MIGHTY WORM

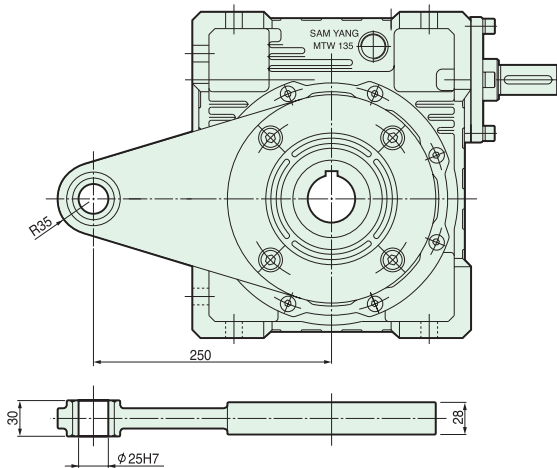
MTW135



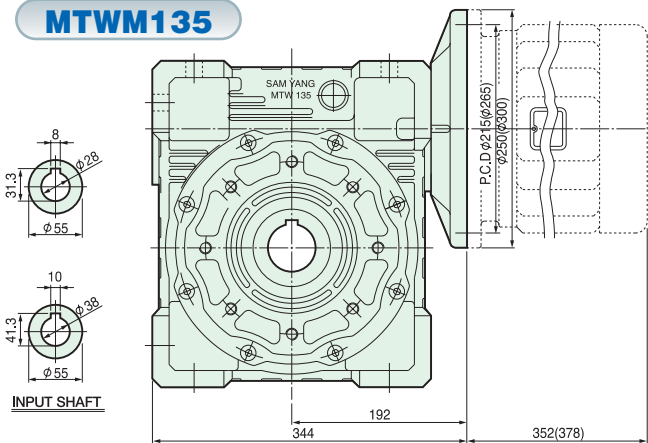
MTW135-F



MTW135-T



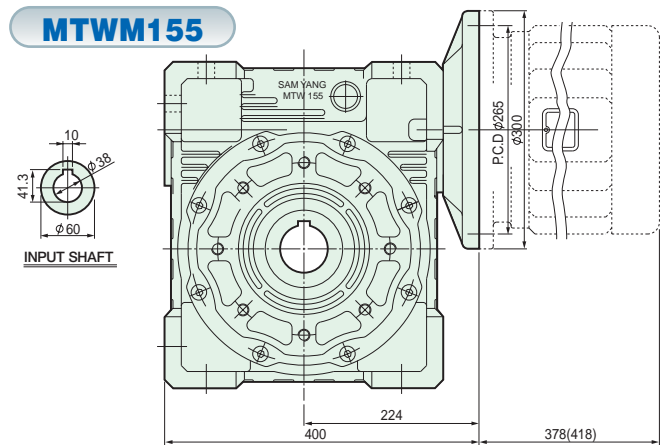
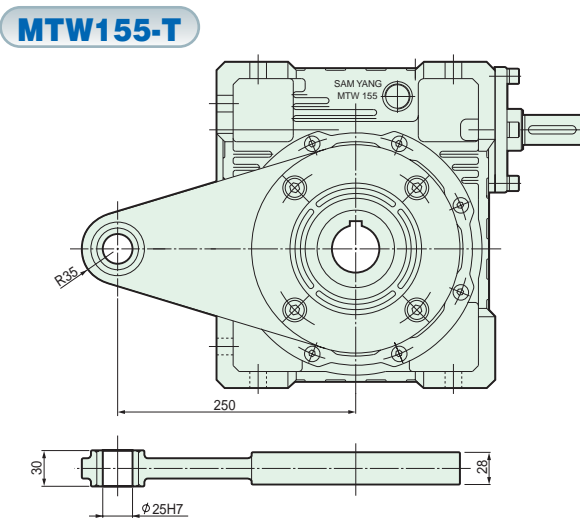
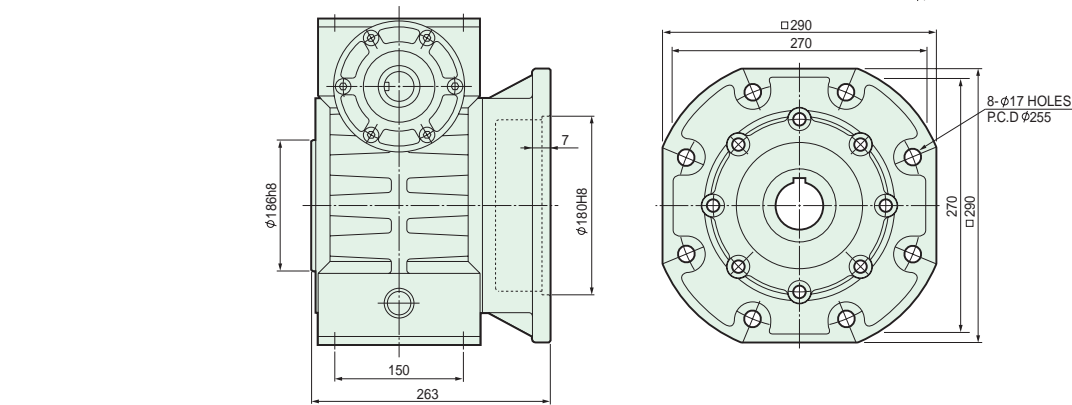
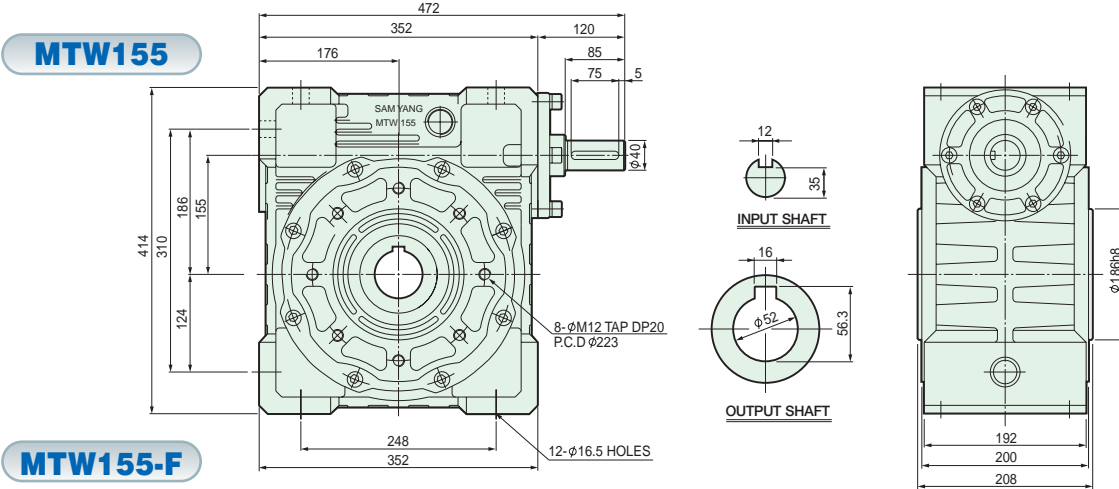
MTWM135



선정 기준 동력표

CASE : IRON

INPUT rpm	1800 rpm				1200 rpm			900 rpm		
	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	MOTOR kW	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m
10	10,868	9,098	48,53	5.5	8,715	7,170	57,13	7,335	6,008	63,82
15	8,055	6,563	52,50		6,510	5,175	61,76	5,490	4,320	68,60
20	6,233	5,025	53,31		4,950	3,878	61,69	4,238	3,263	69,34
30	5,340	3,975	63,24		4,253	3,053	72,87	3,638	2,550	80,88
40	3,855	2,805	59,41	3.7	3,090	2,160	68,82	2,648	1,800	76,47
50	2,910	2,055	54,56		2,333	1,583	63,09	1,988	1,298	68,82
60	2,288	1,545	49,26		1,823	1,185	56,62	1,568	0,968	61,84



선정 기준 동력표

CASE : IRON

RATIO	1800 rpm				1200 rpm			900 rpm		
	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	MOTOR kW	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m	INPUT kW	OUTPUT kW	OUTPUT TORQUE Kgf-m
10	18,143	15,053	77.21	7.5	14,558	11,970	91.91	12,240	9,983	102.21
15	12,630	10,200	77.94		9,983	7,943	91.18	8,490	6,615	102.21
20	8,220	6,510	69.49		6,563	5,123	80.88	5,513	4,245	89.71
30	7,335	5,393	82.35		5,738	4,163	95.59	5,010	3,488	107.35
40	5,138	3,675	77.94	5.5	4,080	2,813	89.71	3,465	2,325	98.53
50	3,930	2,738	72.72		3,180	2,115	83.82	2,700	1,748	92.65
60	3,225	2,198	70.07		2,603	2,123	80.15	2,190	1,380	86.76

WORM REDUCER

