



F Series

수평형

수직형

IEC FLANGE

라인파워

F시리즈 특징

1. 신속한 공급

표준화된 모든 부품을 반제품화하여 확보해 됨으로써 수용가의 요구에 신속하게 공급해 드립니다.

2. 충격강도의 증가

기어드 모터의 1단 피니언은 모터축과 일체로 되어 충격강도가 향상되었으며 소음이 적습니다.

3. 소형·경량

1단 피니언은 모터축과 일체로 하며 2단 축간거리를 다르게 하여 소형·경량화 되었습니다.

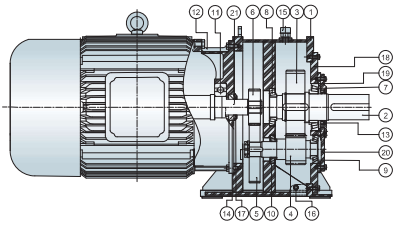
4. 확실한 Seal 구조

오일의 누유를 방지하기 위하여 고급 오일 Seal과 자체개발의 특수 봉입장치를 사용하였습니다.

5. 고성능 강력프레임

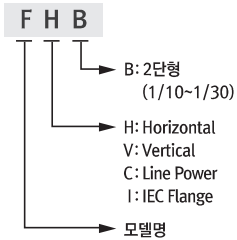
치차의 치형을 이상적인 치형으로 수정하고 개스 침탄 후 모든 기어를 연마하여 저소음, 고효율을 얻을 수 있으며 충분한 강성의 프레임으로 되어있습니다.

FHB 구조도

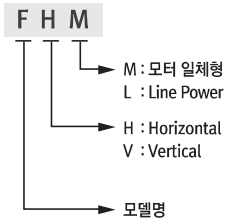


형식표시

• 5.5 ~ 15kW



• 18.5 ~ 160kW



NO	NAME	NO	NAME	NO	NAME	NO	NAME
1	CASING	7	BEARING	13	OIL SEAL	19	OUTPUT COVER
2	OUTPUT SHAFT	8	BEARING	14	OIL SEAL	20	2'ND COVER
3	2'ND GEAR	9	BEARING	15	AIR VENT	21	MOTOR SHAFT
4	2'ND PINION	10	BEARING	16	PLUG		
5	1'ST GEAR	11	BEARING	17	GAMMA SEAL		
6	1'ST PINION	12	MOTOR BRACKET	18	OUTPUT FLANGE		

F시리즈 GD², O.H.L표

kW	Ratio	최대허용토크		모터축 환산GD ²		출력축OHL	
		N·m	kgf·m	N·m ²	kg·m ²	N	kgf
5.5	1/5	209.7	21.4	1.578	0.161	11,270	1,150
	1/10	420.4	42.9	1.578	0.161	11,270	1,150
	1/15	631.1	64.4	1.578	0.161	11,270	1,150
	1/20	840.8	85.8	1.558	0.159	11,270	1,150
	1/30	1,264.2	129.0	1.558	0.159	11,760	1,200
7.5	1/5	287.1	29.3	2.029	0.207	10,486	1,070
	1/10	573.3	58.5	2.029	0.207	10,486	1,070
	1/15	860.4	87.8	2.029	0.207	10,486	1,070
	1/20	1,146.6	117.0	2.009	0.205	10,486	1,070
	1/30	1,724.8	176.0	2.009	0.205	11,760	1,200
11	1/5	420.4	42.9	4.273	0.436	12,740	1,300
	1/10	840.8	85.8	4.273	0.436	12,740	1,300
	1/15	1,264.2	129.0	4.273	0.436	12,740	1,300
	1/20	1,685.6	172.0	4.224	0.431	12,740	1,300
	1/30	2,518.6	257.0	4.234	0.432	17,640	1,800
15	1/5	573.3	58.5	5.204	0.531	11,760	1,200
	1/10	1,146.6	117.0	5.204	0.531	11,760	1,200
	1/15	1,724.8	176.0	5.204	0.531	11,760	1,200
	1/20	2,293.2	234.0	5.155	0.526	11,760	1,200
	1/30	3,440.0	351.0	5.165	0.527	16,660	1,700
18.5	1/5	707	72.1	10.69	1.091	18,620	1,900
	1/10	1,414	144	10.11	1.032	18,620	1,900
	1/15	2,121	216	10.08	1.029	18,620	1,900
	1/20	2,828	289	10.06	1.027	18,620	1,900
	1/30	4,242	433	10.2	1.041	28,420	2,900
22	1/5	841	85.8	10.69	1.091	17,640	1,800
	1/10	1,682	172	10.11	1.032	17,640	1,800
	1/15	2,523	257	10.08	1.029	17,640	1,800
	1/20	3,363	343	10.06	1.027	17,640	1,800
	1/30	5,045	515	10.2	1.041	26,460	2,700
30	1/5	1,147	117	13.02	1.329	23,520	2,400
	1/10	2,293	234	11.74	1.198	23,520	2,400
	1/15	3,440	351	11.68	1.192	23,520	2,400
	1/20	4,586	468	11.65	1.189	23,520	2,400
	1/30	6,880	702	11.9	1.214	38,220	3,900
37	1/5	1,414	144	16.12	1.645	21,560	2,200
	1/10	2,828	289	14.84	1.514	21,560	2,200
	1/15	4,242	433	14.78	1.508	21,560	2,200
	1/20	5,657	577	14.75	1.505	21,560	2,200
	1/30	8,485	866	14.99	1.53	35,280	3,600
45	1/5	1,720	176	20.23	2.064	32,340	3,300
	1/10	3,440	351	17.59	1.795	32,340	3,300
	1/15	5,160	527	17.47	1.783	32,340	3,300
	1/20	6,880	702	17.4	1.776	32,340	3,300
	1/30	10,319	1,053	17.76	1.812	42,140	4,300
55	1/5	2,102	214	36.52	3.727	29,400	3,000
	1/10	4,204	429	33.89	3.458	29,400	3,000
	1/15	6,306	643	33.77	3.446	29,400	3,000
	1/20	8,408	858	33.7	3.439	29,400	3,000
	1/30	12,613	1,287	34.06	3.475	39,200	4,000

* 75kW 이상 제품의 데이터는 당사 문의하시기 바랍니다.

FHB, FHM 외형도 및 외형치수

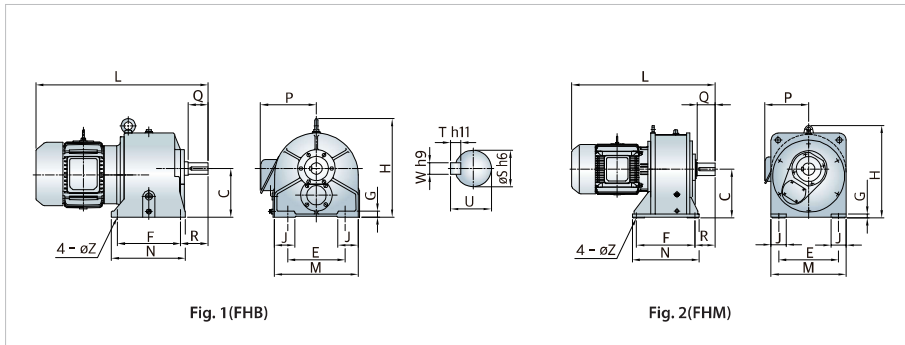


Fig. 1(FHB)

Fig. 2(FHM)

단위: mm

Type	kW	Ratio	Fig	Dimension													Output Shaft					오일량 (L)	중량 (kg)					
				C	E	F	G	H	J	L	M	P	R	N	Z	Q	S	T	U	W								
FHB	5.5	5	1	200	236	260	25	406	85	715	346	230	113	305	19	82	48	9	51.5	14	5	147						
	7.5			200	236	260	25	406	85	750	346	230	113	305	19	82	48	9	51.5	14	5	152						
	11			250	284	282	30	461	85	855	384	290	143.5	337	24	105	60	11	64	18	9	224						
	15			250	284	282	30	461	85	900	384	290	143.5	337	24	105	60	11	64	18	9	228						
FHM	18.5	5	2	290	370	370	24	570	100	1,010	470	315	145	420	24	130	80	14	85	22	10	442						
	22			290	370	370	24	570	100	1,010	470	315	145	420	24	130	80	14	85	22	10	442						
	30	10	2	350	430	420	28	665	110	1,085	540	315	145	480	28	130	90	14	95	25	15	656						
	37			350	430	420	28	665	110	1,155	540	370	145	480	28	130	90	14	95	25	15	730						
	45	20	2	400	520	470	28	750	120	1,220	640	370	170	550	28	165	100	16	106	28	22	795						
	55			400	520	470	28	800	120	1,235	640	-	170	550	28	165	100	16	106	28	22	835						
	75	2	2	400	520	470	28	890	120	1,310	640	-	170	550	28	165	100	16	106	28	22	810						
	90			450	560	520	28	935	150	1,415	710	-	200	610	33	180	112	18	119	32	31	1,075						
	FHB	5.5	30	1	225	265	280	30	413	70	735	346	230	110	334	19	82	55	10	59	16	7	157					
		7.5			225	265	280	30	413	70	770	346	230	110	334	19	82	55	10	59	16	7	162					
11		280			355	355	30	524	80	895	448	290	130	415	24	105	70	12	74.5	20	10	296						
15		280			355	355	30	524	80	940	448	290	130	415	24	105	70	12	74.5	20	10	302						
FHM	18.5	5	2	350	430	420	28	665	110	1,040	540	315	145	480	28	130	90	14	95	25	15	537						
	22			350	430	420	28	665	110	1,040	540	315	145	480	28	130	90	14	95	25	15	537						
	30	10	2	400	520	470	28	750	120	1,145	640	315	170	550	28	165	100	16	106	28	22	821						
	37			400	520	470	28	750	120	1,210	640	370	170	550	28	165	100	16	106	28	22	895						
	45	20	2	450	560	520	28	805	150	1,285	710	370	200	610	33	180	112	18	119	32	31	1,045						
	55			450	560	520	28	855	150	1,300	710	-	200	610	33	180	112	18	119	32	31	1,103						
	75	2	2	450	560	520	28	935	150	1,375	710	-	200	610	33	180	112	18	119	32	31	1,015						
	90			510	600	555	28	990	180	1,460	780	-	225	655	39	210	120	18	127	32	41	1,370						
	110	5-30	2	510	600	555	28	1,035	180	1,600	780	-	225	655	39	210	120	18	127	32	41	1,590						
	130			600	940	840	45	1,121	220	1,965	1,040	-	270	1,000	33	240	140	20	148	36	170	2,280						
160	600			940	840	45	1,121	220	2,115	1,040	-	270	1,000	33	240	140	20	148	36	170	2,950							

주: 1. 곡수는 4극 기준임.

FVB, FVM 외형도 및 외형치수

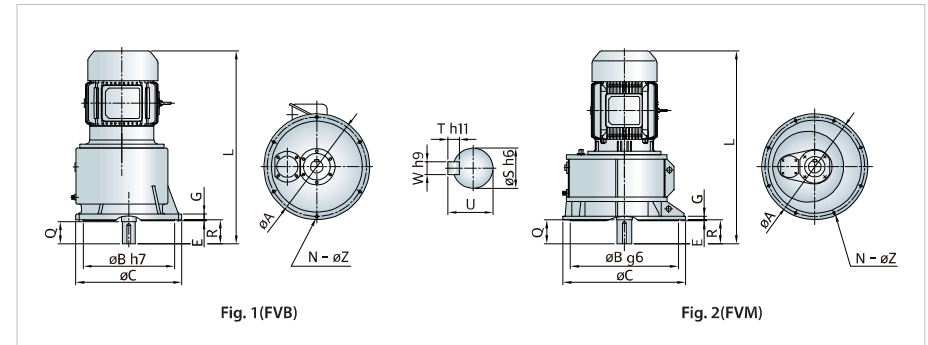


Fig. 1(FVB)

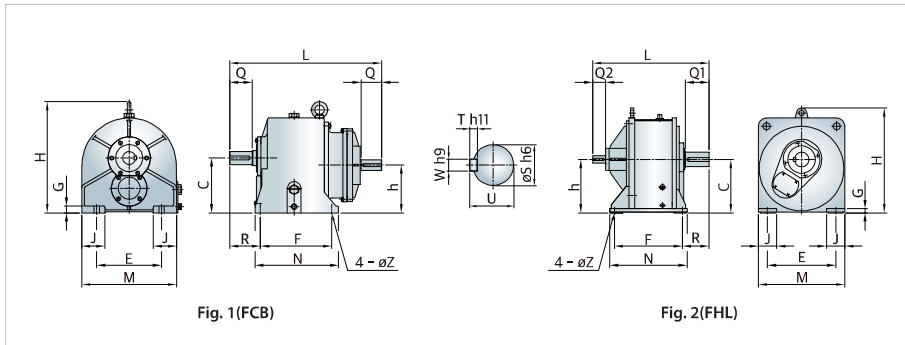
Fig. 2(FVM)

단위: mm

Type	kW	Ratio	Fig	Dimension													Output Shaft					오일량 (L)	중량 (kg)		
				A	B	C	E	G	L	R	N	Z	Q	S	T	U	W								
FVB	5.5	5	1	370	340	395	4	22	720	89	6	12	82	48	9	51.5	14	7.5	165						
	7.5			370	340	395	4	22	765	89	6	12	82	48	9	51.5	14	7.5	165						
	11			455	420	485	4	25	880	122	6	15	105	60	11	64	18	14	242						
	15			455	420	485	4	25	925	122	6	15	105	60	11	64	18	14	250						
FVM	18.5	5	2	630	590	670	5	20	1,065	130	8	18	130	80	14	85	22	16	502						
	22			630	590	670	5	20	1,065	130	8	18	130	80	14	85	22	16	502						
	30	10	2	715	675	755	5	20	1,135	130	8	18	130	90	14	95	25	24	730						
	37			715	675	755	5	20	1,195	130	8	18	130	90	14	95	25	24	804						
	45	20	2	810	760	860	6	22	1,265	165	8	22	165	100	16	106	28	35	939						
	55			810	760	860	6	22	1,280	165	8	22	165	100	16	106	28	35	997						
	75	2	2	810	760	860	6	22	1,355	165	8	22	165	100	16	106	28	35	909						
	90			900	840	960	6	26	1,465	180	8	26	172	112	18	119	32	50	1,270						
	FVB	5.5	30	1	410	390	435	4	22	740	92	6	12	82	55	10	59	16	11	172					
		7.5			410	390	435	4	22	780	92	6	12	82	55	10	59	16	11	177					
11		515			480	545	4	25	920	118	6	15	105	70	12	74.5	20	15	327						
15		515			480	545	4	25	965	118	6	15	105	70	12	74.5	20	15	330						
FVM	18.5	5	2	715	675	755	5	20	1,085	130	8	18	130	90	14	95	25	24	592						
	22			715	675	755	5	20	1,085	130	8	18	130	90	14	95	25	24	592						
	30	10	2	810	760	860	6	22	1,190	165	8	22	165	100	16	106	28	35	920						
	37			810	760	860	6	22	1,255	165	8	22	165	100	16	106	28	35	994						
	45	20	2	900	840	960	6	26	1,340	180	8	26	180	112	18	119	32	50	1,240						
	55			900	840	960	6	26	1,355	180	8	26	180	112	18	119	32	50	1,298						
	75	2	2	900	840	960	6	26	1,425	180	8	26	180	112	18	119	32	50	1,210						

주: 1. 곡수는 4극 기준임.

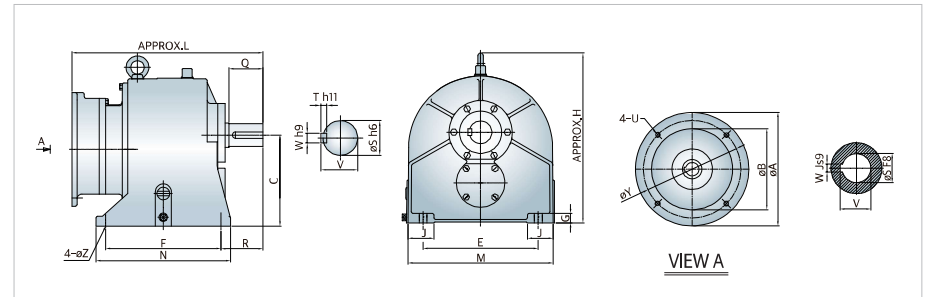
FCB, FHL 외형도 및 외형치수



Type	kW	Ratio	Fig	Dimension													Output Shaft					Input Shaft					오일량 (L)	중량 (kg)
				C	E	F	G	H	J	L	M	N	R	Z	h	S	W	T	U	Q	S	W	T	U	Q			
FCB	5.5	132	1	200	236	260	25	415	85	560	346	305	112	19	174	48	14	9	51.5	82	38	10	8	41	75	5	96	
	7.5		1	200	236	260	25	415	85	560	346	305	112	19	174	48	14	9	51.5	82	38	10	8	41	75	5	96	
	11	160	1	250	284	282	30	470	85	645	384	337	143.5	24	214	60	18	11	64	105	45	14	9	48.5	95	9	127	
	15		1	250	284	282	30	470	85	645	384	337	143.5	24	214	60	18	11	64	105	45	14	9	48.5	95	9	127	
	18.5		2	290	370	370	24	570	100	633	470	420	145	24	290	80	22	14	85	130	40	12	8	43	70	10	230	
FHL	22	15	2	290	370	370	24	570	100	633	470	420	145	24	290	80	22	14	85	130	40	12	8	43	70	10	230	
	30		2	350	430	420	28	663	110	705	540	480	145	28	350	90	25	14	95	130	50	14	9	53.5	80	15	365	
	37	20	2	350	430	420	28	663	110	705	540	480	145	28	350	90	25	14	95	130	50	14	9	53.5	80	15	365	
	45		2	400	520	470	28	750	120	800	640	550	170	28	400	100	28	16	106	165	60	18	11	64	90	22	480	
	55		2	400	520	470	28	750	120	800	640	550	170	28	400	100	28	16	106	165	60	18	11	64	90	22	480	
FCB	75	30	2	400	520	470	28	750	120	800	640	550	170	28	400	100	28	16	106	165	60	18	11	64	90	22	480	
	90		2	450	560	520	28	805	150	880	710	610	200	33	450	112	32	18	119	180	60	18	11	64	90	31	650	
	5.5		1	225	265	280	30	420	70	620	346	334	110	19	180	55	16	10	59	82	38	10	8	41	75	7	115	
	7.5		1	225	265	280	30	420	70	620	346	334	110	19	180	55	16	10	59	82	38	10	8	41	75	7	115	
	11		1	280	355	355	30	520	80	690	448	415	130	24	236	70	20	12	74.5	105	45	14	9	48.5	95	10	189	
FHL	15	30	1	280	355	355	30	520	80	690	448	415	130	24	236	70	20	12	74.5	105	45	14	9	48.5	95	10	189	
	18.5		2	350	430	420	28	665	110	685	540	480	145	28	350	90	25	14	95	130	40	12	8	43	70	15	370	
	22		2	350	430	420	28	665	110	685	540	480	145	28	350	90	25	14	95	130	40	12	8	43	70	15	370	
	30		2	400	520	470	28	750	120	785	640	550	170	28	400	100	28	16	106	165	50	14	9	53.5	80	22	480	
	37		2	400	520	470	28	750	120	785	640	550	170	28	400	100	28	16	106	165	50	14	9	53.5	80	22	480	
FHL	45	30	2	450	560	520	28	805	150	880	710	610	200	33	450	112	32	16	119	180	60	18	11	64	90	31	650	
	55		2	450	560	520	28	805	150	880	710	610	200	33	450	112	32	16	119	180	60	18	11	64	90	31	650	
	75		2	450	560	520	28	805	150	880	710	610	200	33	450	112	32	16	119	180	60	18	11	64	90	31	650	

주: 1. 곡수는 4극 기준임.

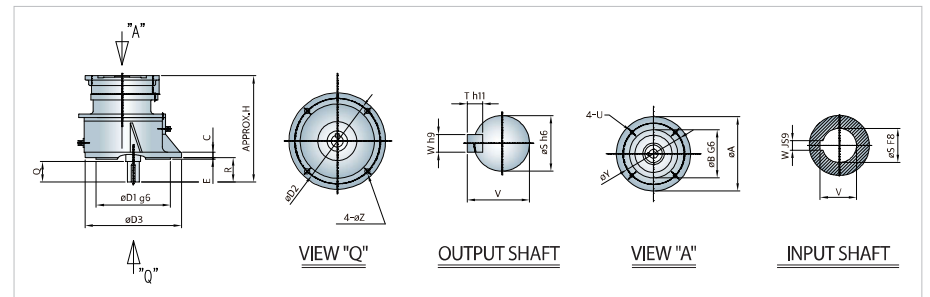
FHI 외형도 및 외형치수



kW	FRAME	Ratio	Dimension													Input flange				Input shaft				Output Shaft				오일량 (L)	중량 (kg)
			C	F	N	R	Z	L	E	M	J	G	H	Y	U	A	B	W	V	S	W	T	V	S	Q				
5.5	132	10-20	200	260	305	113	19	503	236	346	85	25	406	265	M12	300	230	10	41.3	38	14	9	51.5	48	82	5	100		
7.5		30	225	280	334	110	19	514	265	346	70	30	413	265	M12	300	230	10	41.3	38	16	10	59	55	82	7	120		
11	160	10-20	250	282	337	144	24	549	284	384	85	30	461	300	M16	350	250	12	45.3	42	18	11	64	60	105	9	133		
15		30	280	355	415	130	24	589	355	448	80	30	524	300	M16	350	250	12	45.3	42	20	12	74.5	70	105	10	195		

* F series 취부와 동일하여 기존제품 호환 가능
* 전동기 취부 IEC 국제표준에 부합하여 전동기 maker 호환 가능

FVI 외형도 및 외형치수

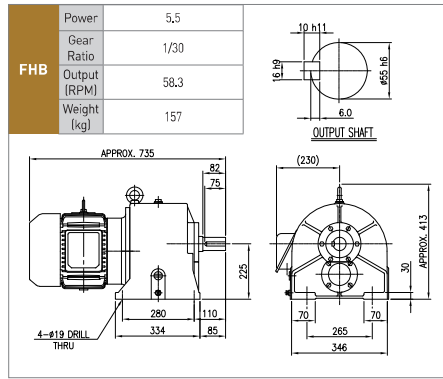
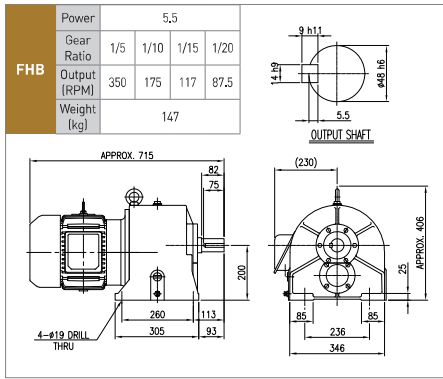


kW	FRAME	Ratio	Dimension													Input flange				Input shaft				Output Shaft				오일량 (L)	중량 (kg)
			D1	D2	D3	R	E	C	H	N	Z	Y	U	A	B	W	V	S	W	T	V	S	Q						
5.5	132	10-20	340	370	395	89	4	22	520	6	12	265	M12	300	230	10	41.3	38	14	9	51.5	48	82	7.5	113				
7.5		30	390	410	435	92	4	22	540	6	12	265	M12	300	230	10	41.3	38	16	10	59	55	82	11	135				
11	160	10-20	420	455	485	122	4	25	580	6	15	300	M16	350	250	12	45.3	42	18	11	64	60	105	14	151				
15		30	480	515	545	118	4	25	620	6	15	300	M16	350	250	12	45.3	42	20	12	74.5	70	105	15	226				

* F series 취부와 동일하여 기존제품 호환 가능
* 전동기 취부 IEC 국제표준에 부합하여 전동기 maker 호환 가능

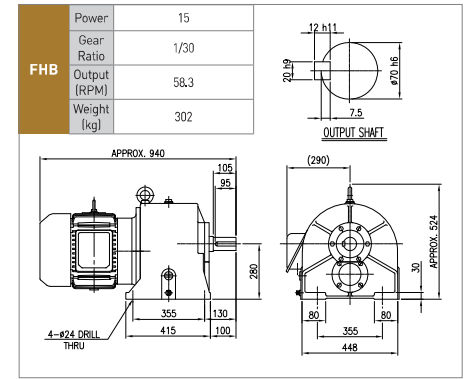
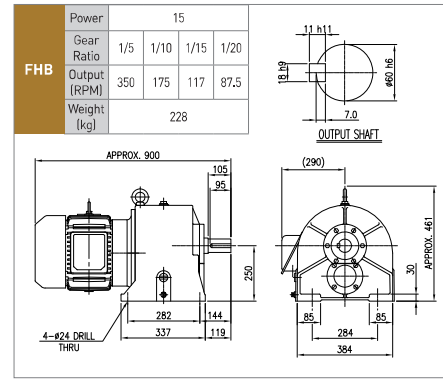
F 수평형

5.5kW

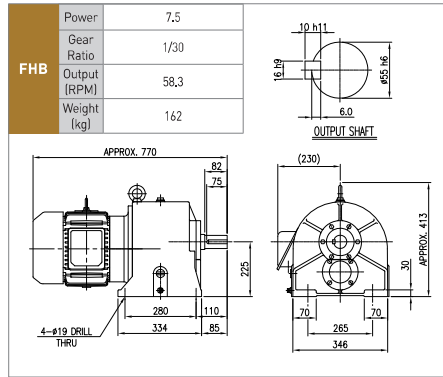
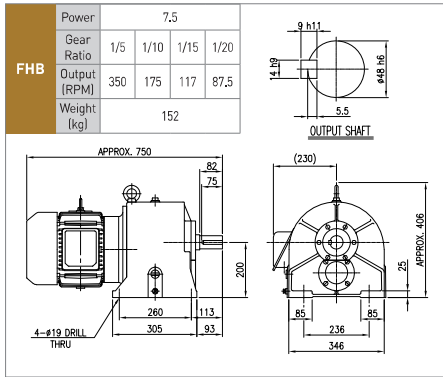


F 수평형

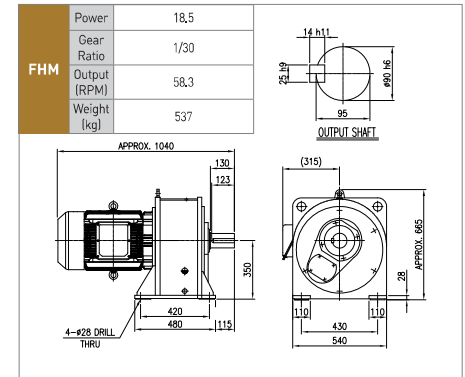
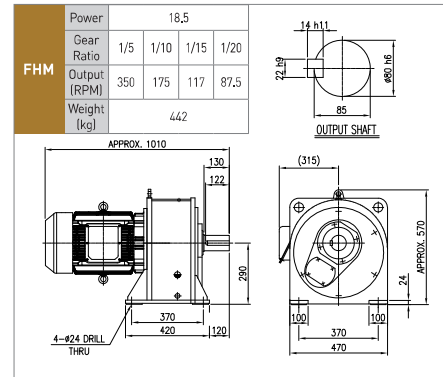
15kW



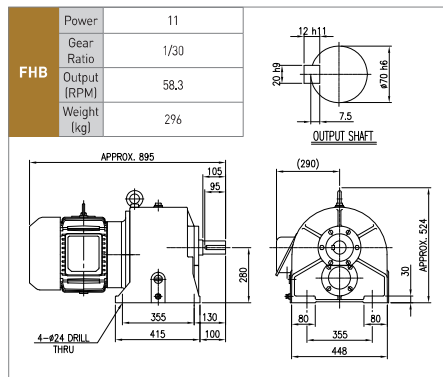
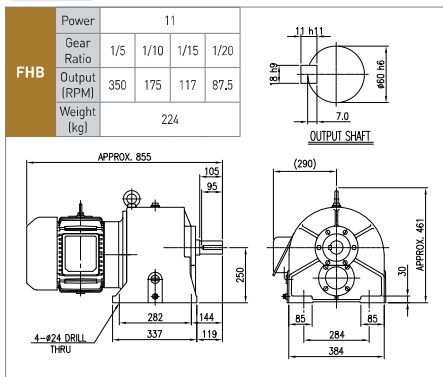
7.5kW



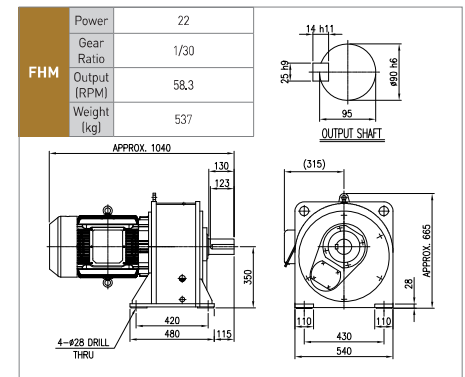
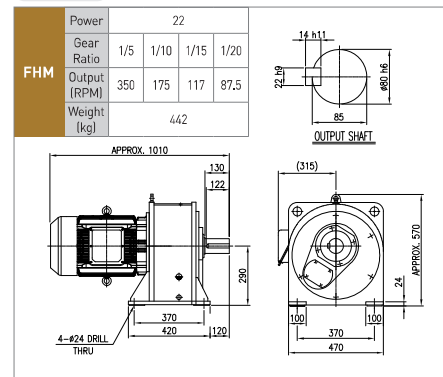
18.5kW



11kW

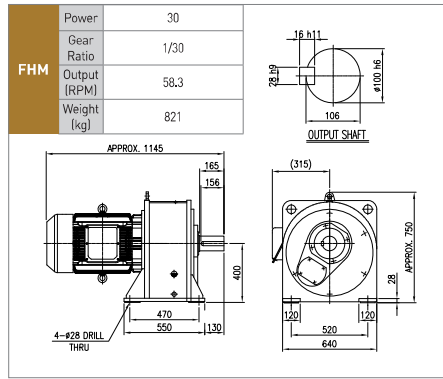
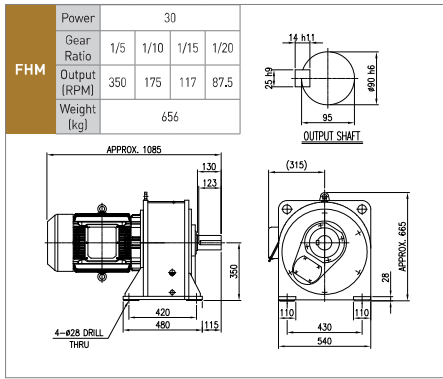


22kW



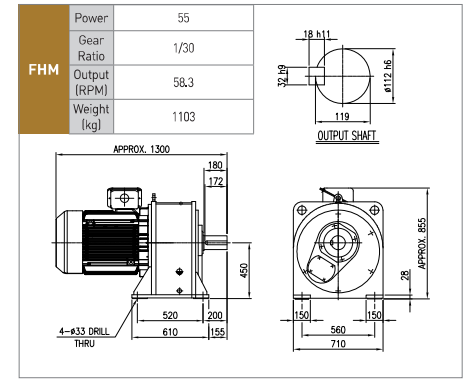
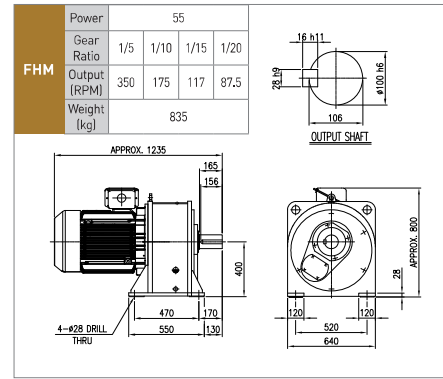
F 수평형

30kW

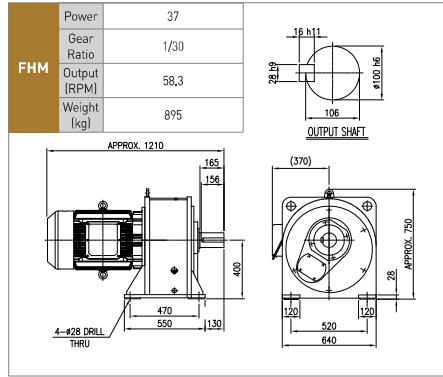
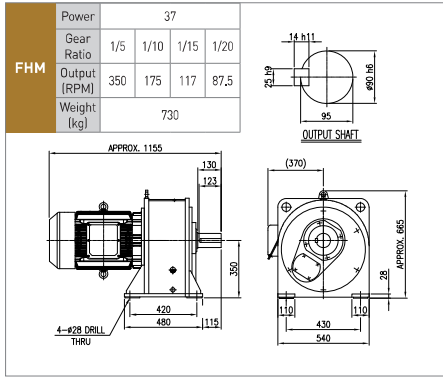


F 수평형

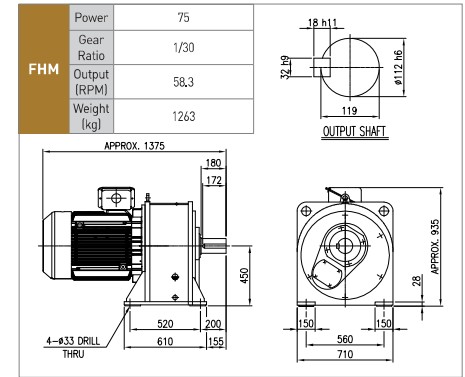
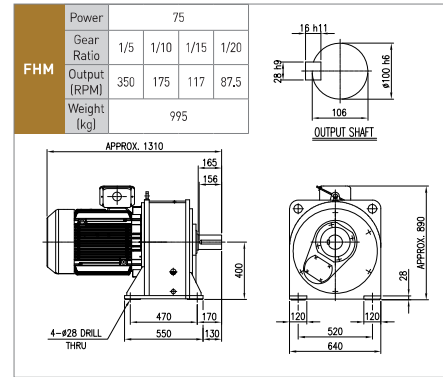
55kW



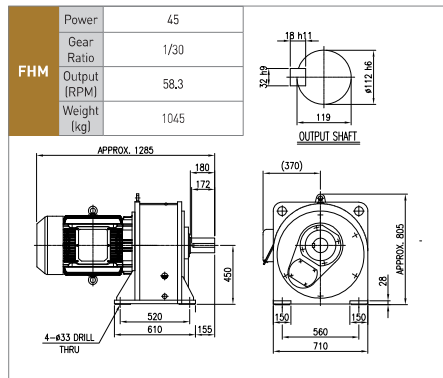
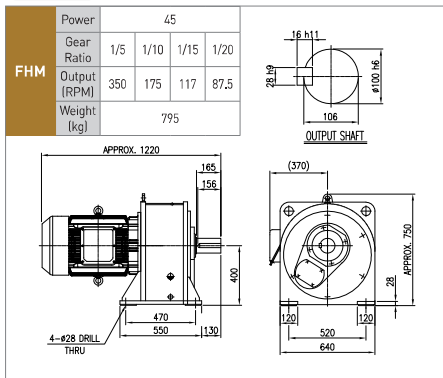
37kW



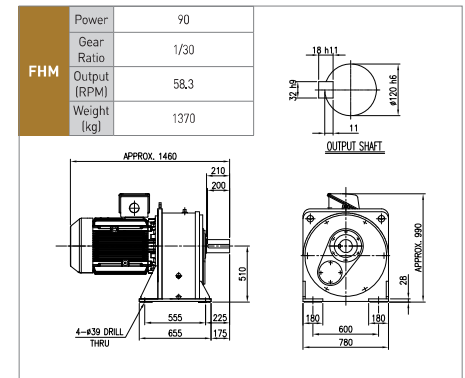
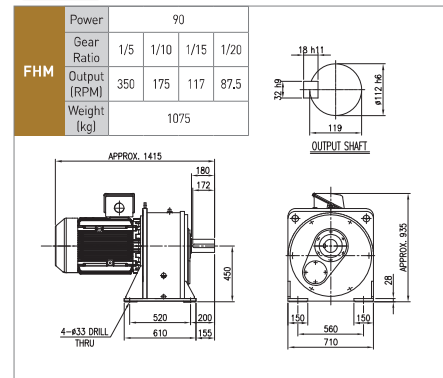
75kW



45kW

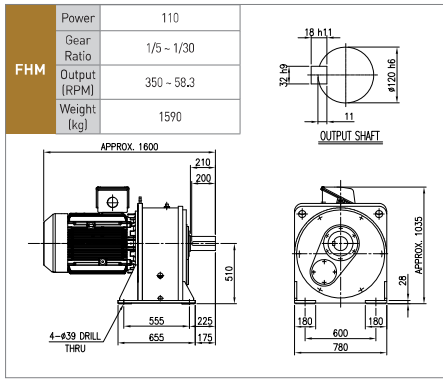


90kW

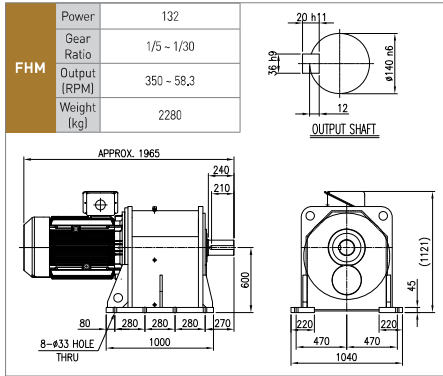


F 수평형

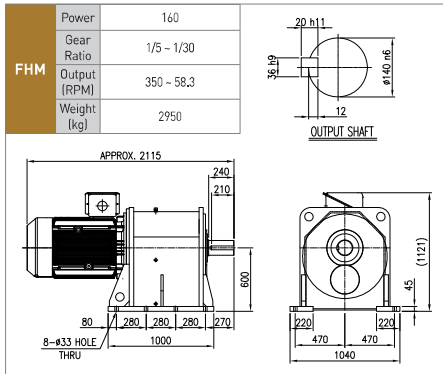
110kW



132kW

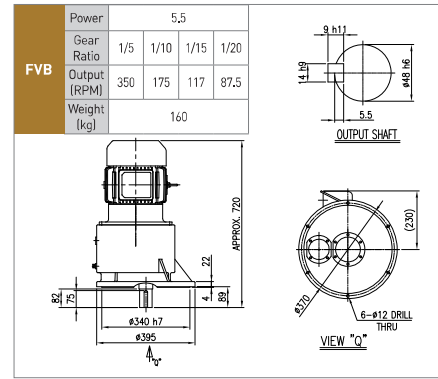


160kW

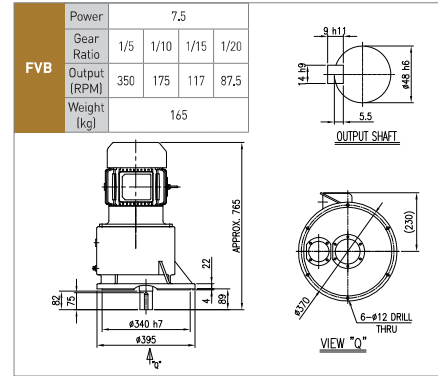


F 수직형

5.5kW



7.5kW



11kW

