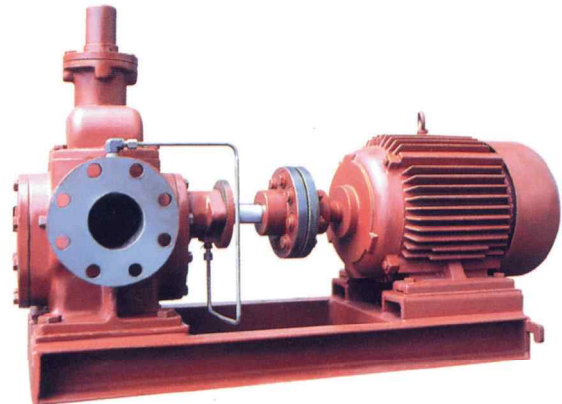


## Horizontal, External Gear Pumps with Built-in Relief Valve

횡축, 외치차 기어펌프 안전변 내장식



30m<sup>3</sup>/h × ~6kg/cm<sup>2</sup>

### 설계 및 운전특징 / Design and operation features

01. 용도 : 윤활유, 연료유, 윤활성이 있는 액체
02. 사용압력 : 6kg/cm<sup>2</sup> 까지
03. 베어링 : 메탈베어링 내장식. 펌핑액체로써 윤활.
04. 안전변 : 내장식. 추천 설정 압력은 총 압력의 132%이며  
최저 2.2kg/cm<sup>2</sup>, 최고 6.2kg/cm<sup>2</sup>
05. 축씰일링 : 그랜드 팩킹 또는 메카니칼 씰
06. 펌핑온도 : 일반적으로 70℃ 이하(최고 130℃)
07. 플랜지 : KS 또는 JIS 10kg/cm<sup>2</sup>, (흡토출측 공통),  
플랜지는 모드 평면 플랜지 임(FF).
08. 회전수 : 400cst 이내는 1800rpm 까지  
500cst 이내는 1500rpm 까지  
1000cst 이내는 1200~1000rpm 까지
09. 점도 : 5~3000cst
10. 표준용량 : 표준용량 25.8cst(Rw, No.1, 100초)에서  
계산하였으며, 전동기 회전수 슬립은 고려되어 있다.  
25.8cst 이하에서 용량을 유지하기 위해서는  
큰 사이즈의 펌프를 선정 하거나 회전수를  
높여야 한다.

※ 상기 사양범위를 초과하는 대형 펌프도 제작합니다.

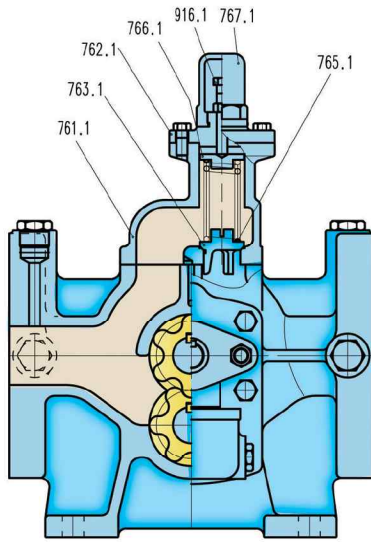
01. Applications : Lubrication oil, fuel oil, liquids with lubricating property
  02. Differential pressure : Up to 6kg/cm<sup>2</sup>.
  03. Bearings : Internally setted metal bearing, lubricated by the pumping liquid.
  04. Relief valve : Built-in type. Recommended Setting pressure is 132% of total pressure.  
Setting pressure : minimum 2.2kg/cm<sup>2</sup>  
maximum 6.2kg/cm<sup>2</sup>
  05. Shaft sealing : Gland packing or mechanical seal.
  06. Pumping temperature : Up to 70°C in general(max.130°C)
  07. Flanges : Suction and delivery KS or JIS 10kg/cm<sup>2</sup> rating.  
Flange faces are flat faced.(FF)
  08. Number of revolutions :  
Less than 400cst up to 1800rpm  
Less than 500cst up to 1500rpm  
Less than 1000cst up to 1200rpm~1000rpm
  09. Viscosity : 5~3000cst.
  10. Standard capacity : calculated at 25.8cst(Rw.No.1, 100sec.),  
rpm-slip of motor is considered.  
To keep the capacity at iscosity less than  
25.8cst, select bigger size or increase rpm.
- \*The out of the above range can be supplied according to customer's order placement

### 형식 표시 방법 / Type nomenclature

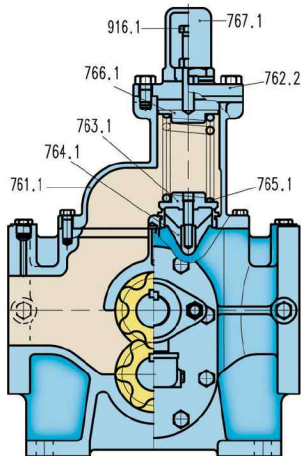
- ▶ 씨리즈(Series)
- ▶ 1200rpm에서의 표준용량, m<sup>3</sup>/h (Standard capacity in m<sup>3</sup>/h at 1200rpm)

**NLG - 7.5**

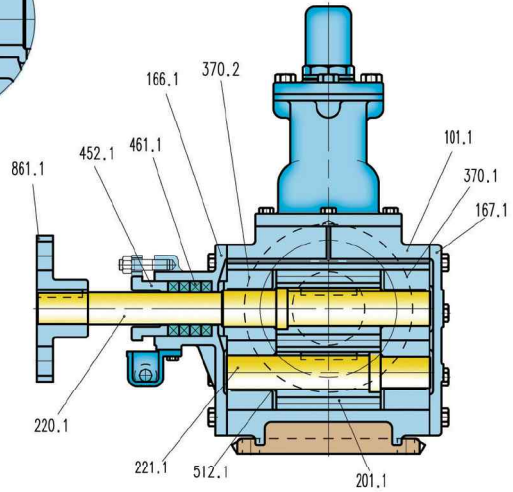
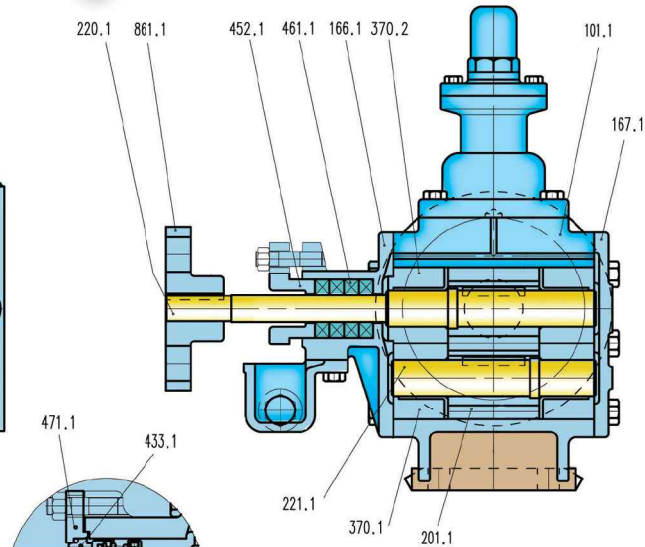
## 조립 단면도 / Sectional drawing



**B Above the NLG 4**



**A Below the NLG 3 & NHG 0.5**

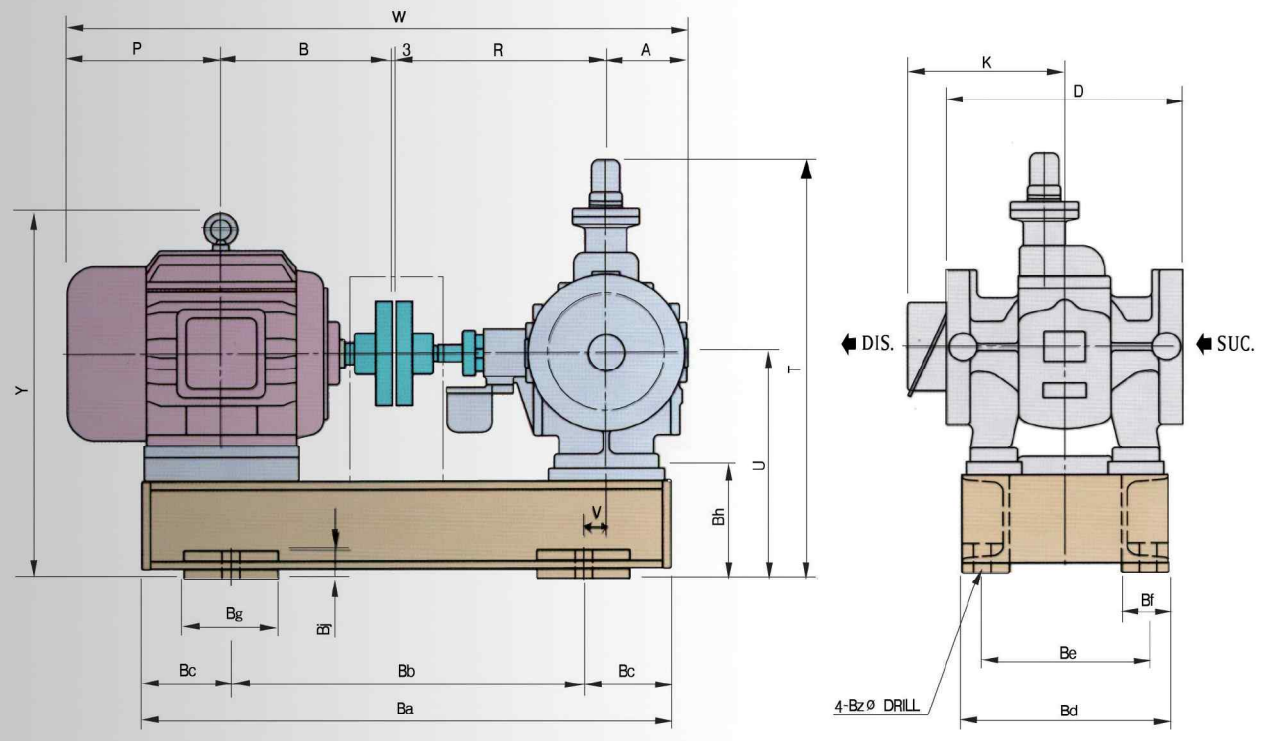


No	PART NAME	MATERIAL			Q'ty
		1	2	3	
101.1	PUMP CASING				1
166.1	SIDE COVER(INNER)	GC 200	GCD 450	SC 450	1
167.1	SIDE COVER(OUTER)				1
201.1	GEAR				1set
220.1	DRIVE SHAFT	SM 45C		SCM 440	1
221.1	DRIVEN SHAFT				1
370.1	SLIDING BEARING		LBC 4		1
370.2	SLIDING BEARING				1
452.1	PACKING GLAND		GC 200		1
461.1	PACKING		NON METALLIC		1set
471.1	*SEAL COVER		SM 45C		1

\*OPTION

NO.	PART NAME	MATERIAL			Q'ty
		1	2	3	
512.1	GEAR SET RING				1
761.1	VALVE BODY	GC 200	GCD 450	SC 450	1
762.2	VALVE COVER	GC 200			
763.1	SAFETY VALVE	Below the NLG 3 : CAC 406 Above the NLG 4 : STS 304			1
764.1	VALVE SEAT	CAC 406			1
765.1	VALVE SPRING	SPS 6			1
766.1	SPRING CARRIER	SS 400			1
767.1	VALVE CAP	GC 200			1
861.1	COUPLING	GC 200			1
916.1	ADJUSTING SCREW	SS 400			1
433.1	*MECHANICAL SEAL				1set

외형치수도 / Outline dimensions

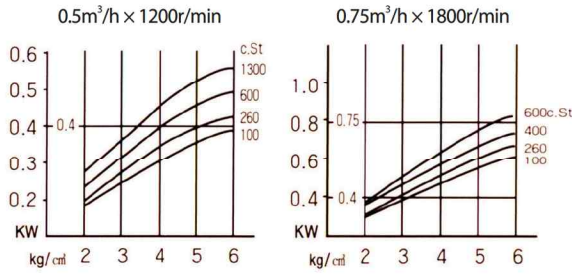


PUMP TYPE	MOTOR FRAME NO.	BORE		PUMP & MOTOR DIMENSIONS(MM)											BASE PLATE DIMENSIONS(MM)								WEIGHT(KG)																		
		SUC.	DIS.	A	B	D	K	P	R	T	U	V	W	Y	Ba	Bb	Bc	Bd	Be	Bf	Bg	Bh	Bj	Bz	PUMP	BASE	MOTOR														
NLG-1.5	80M	Ø20	Ø20	70	140	144	138	175	365	185	0	526	272	450	350	50	175	140	40	80	95	25	15	11	10	10															
	90L				169	158	159																	20	576	285	500	75	245	210	11	12	24								
	100L				187	169	175																	604	329	550	245	210	117	12	19	39									
	112M				200	199	182																	45	630	410	600	100	285	250	16	19	62								
	132M				239	220	45																	707	410	600	100	285	250	16	19	62									
NLG-2.5	80M	Ø32	Ø32	80	140	144	138	180	385	195	541	282	450	300	175	140	40	80	95	25	15	10	10	10																	
	90L				169	158	159															20	591	295	500	350	175	140	12	24											
	100L				193	175	175															631	364	550	245	210	107	18	34												
	112M				200	199	182															397	207	645	364	550	400	17	40												
	132M				239	218	220															45	722	410	600	100	285	250	19	62											
NLG-4	90L	Ø40	Ø40	90	169	158	152	220	432	207	5	633	306	550	400	100	235	200	40	80	95	25	15	17	17	17															
	100L				193	175	169																	30	681	366	600	235	200	19	34										
	112M				200	182	182																	30	695	366	600	275	240	40	40										
	132M				239	205	205																	40	757	417	650	275	240	20	21	56									
	132M				259	217	224																	452	227	40	796	417	650	450	21	70									
	160M				323	273	273																	55	909	750	750	500	125	365	330	28	102								
NLG-7.5	100L	Ø50	Ø50	110	193	175	175	250	507	207	30	731	386	600	400	100	235	200	40	80	95	25	15	19	34	19															
	112M				200	199	182																	207	30	745	349	600	400	100	235	200	19	39							
	132S				239	217	205																	227	55	807	417	700	450	125	275	240	25	56							
	132M				259	217	224																	535	255	80	846	417	700	450	125	275	240	28	70						
	160M				323	275	273																	535	255	80	959	470	800	500	150	320	285	28	102						
NLG-12	100L	Ø65	Ø65	115	193	175	175	270	527	227	45	756	386	605	450	100	275	240	40	80	95	25	15	24	40	24															
	112M				200	182	182																	770	417	750	275	240	28	56											
	132S				239	217	205																	832	417	750	275	240	35	70											
	132M				259	217	224																	871	417	750	275	240	35	70											
	160M				323	273	270																	555	255	66	981	482	800	500	150	325	290	35	109						
NLG-20	132M	Ø80	Ø80	145	239	217	224	320	605	255	20	951	445	800	500	150	290	290	40	80	95	25	15	35	62	35															
	132M				259	217	224																	605	255	20	951	445	800	500	150	290	290	40	80	95	25	15	35	70	
	160M				323	273	270																	630	280	70	1061	507	950	600	175	325	280	50	100	120	28	19	65	40	109
	160L				345	292	292																	630	280	70	1105	507	950	600	175	325	280	50	100	120	28	19	65	40	136
	180M				352	295	295																	650	300	95	1115	546	1000	600	200	365	320	50	100	140	28	19	65	45	161
180L	371	314	314	650	300	95	1153	546	1000	600	200	365	320	50	100	140	28	19	65	45	177																				

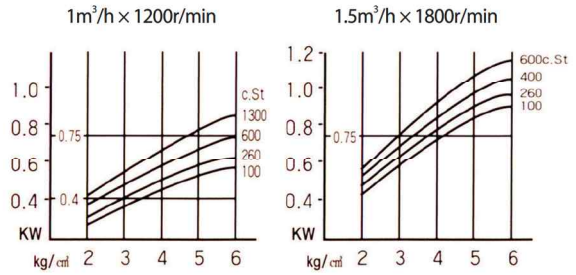
• 치수는 참고용임.

For 60Hz

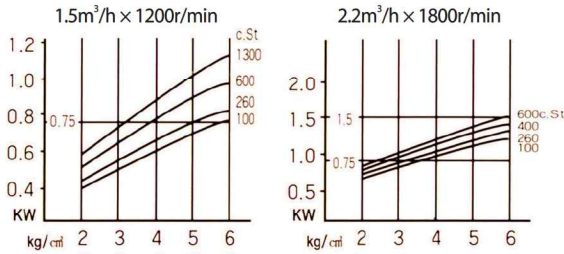
**NHG - 0.5**



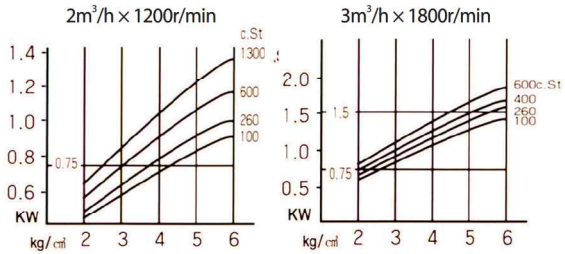
**NLG - 1**



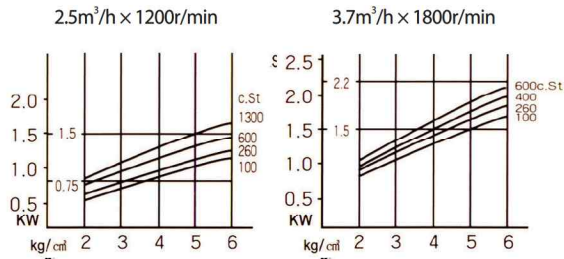
**NLG - 1.5**



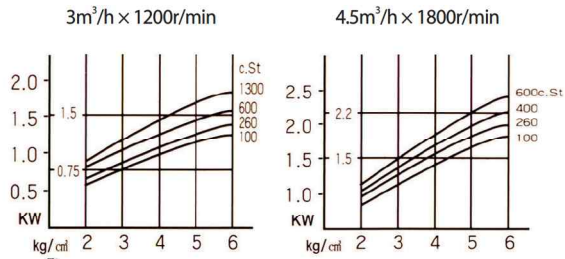
**NLG - 2**



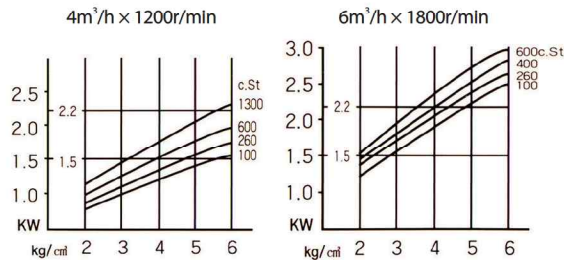
**NLG - 2.5**



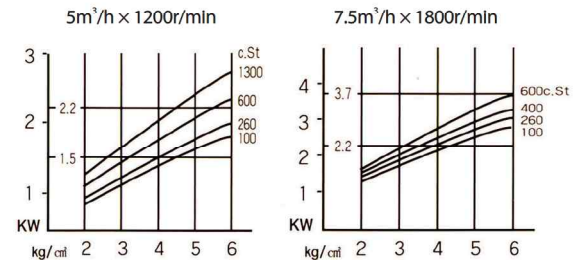
**NLG - 3**



**NLG - 4**

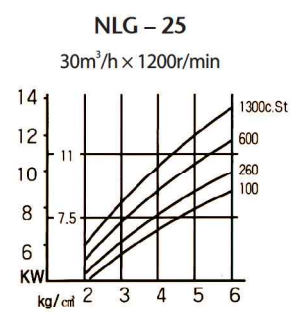
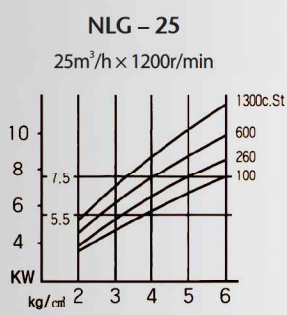
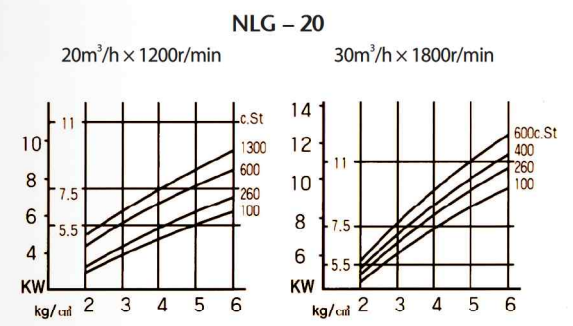
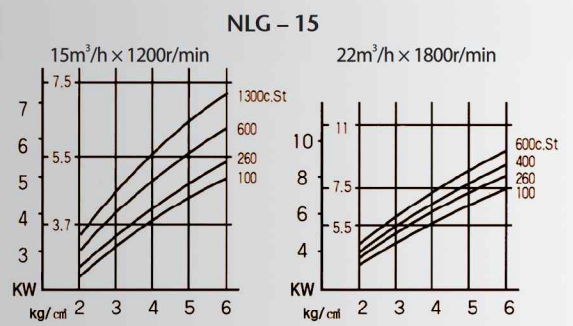
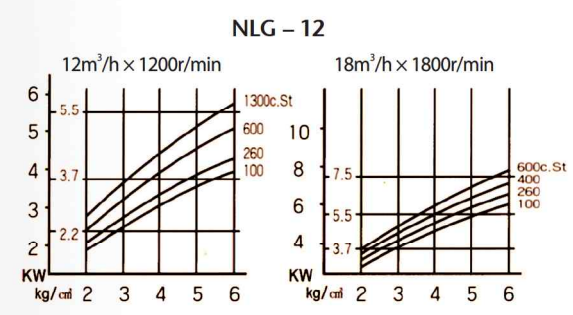
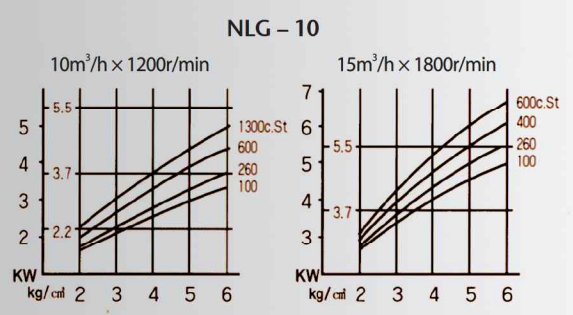
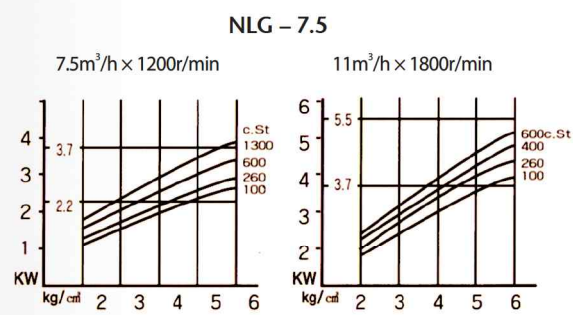
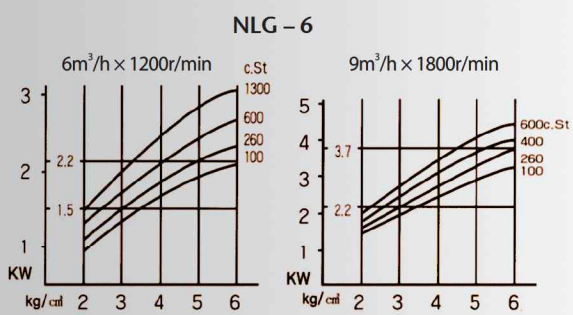


**NLG - 5**



선정표 / General performance selection chart

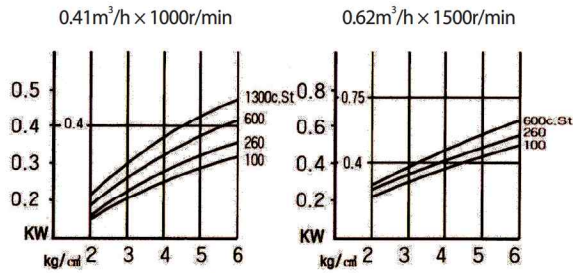
For 60Hz



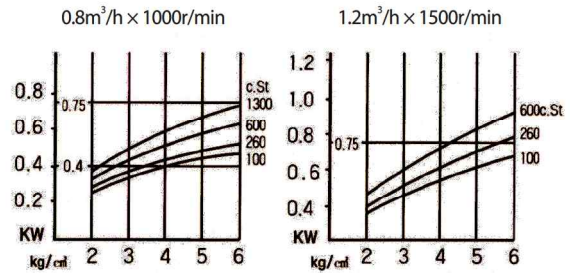
※상기 선정표는 예비선정표임.

For 50Hz

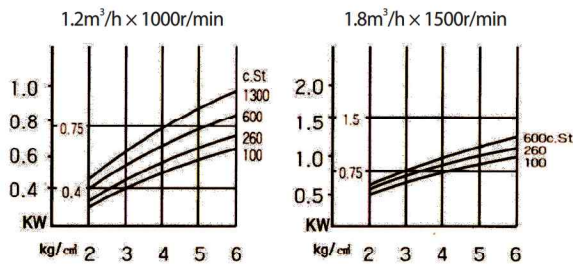
NHG - 0.5



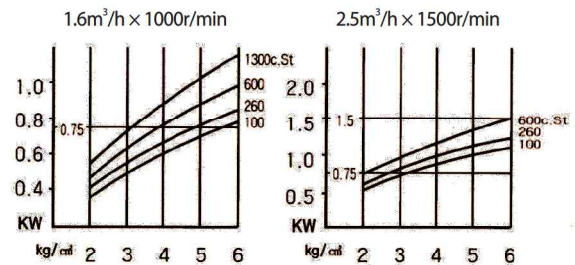
NLG - 1



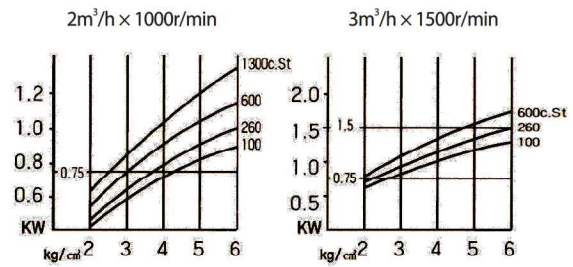
NLG - 1.5



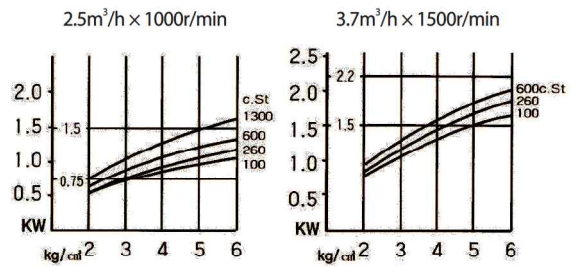
NLG - 2



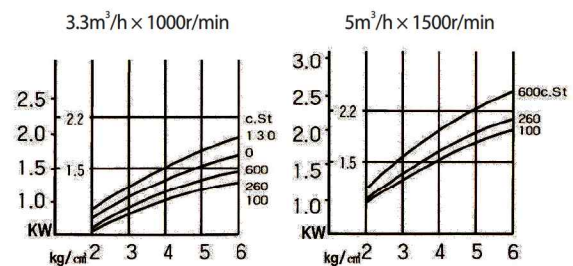
NLG - 2.5



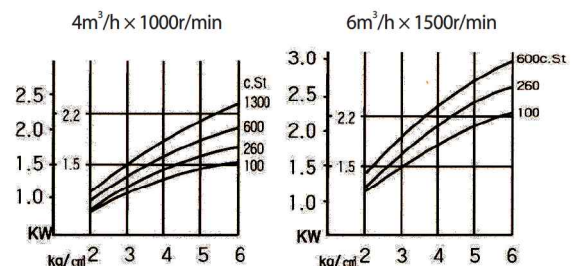
NLG - 3



NLG - 4

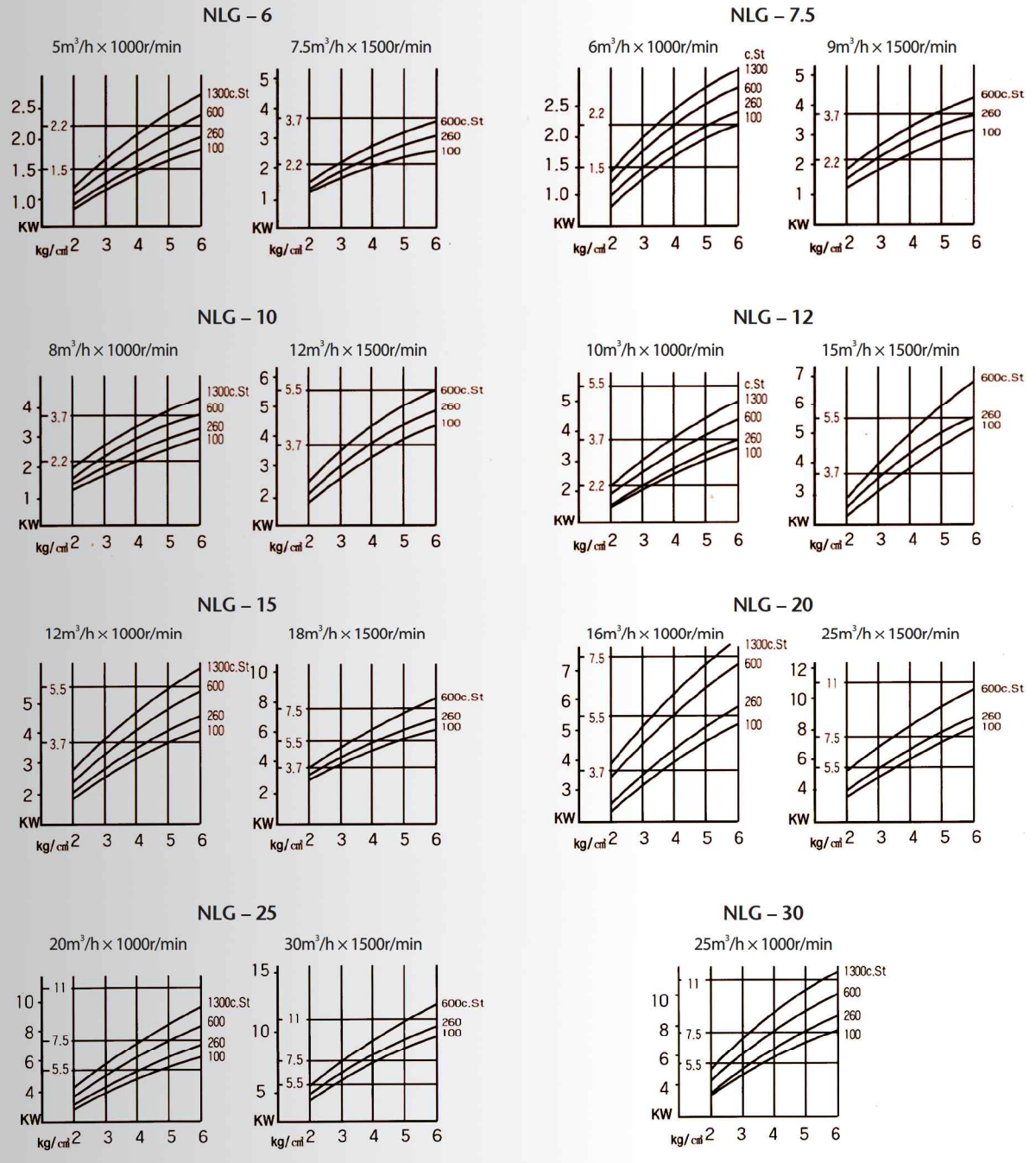


NLG - 5



선정표 / General performance selection chart

For 50Hz



※상기 선정표는 예비선정표임.