

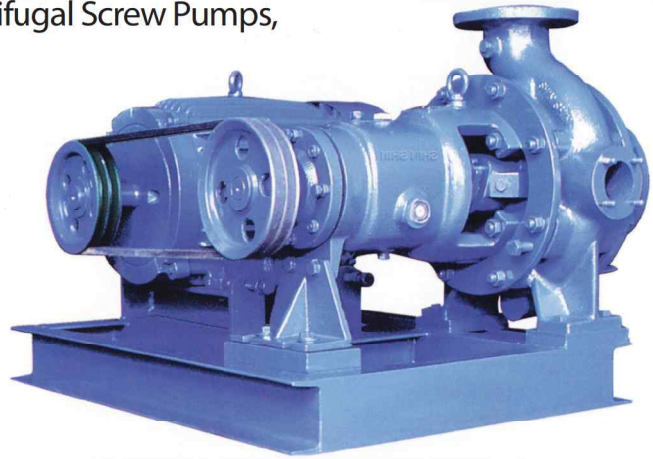
NSC

Horizontal, Single Stage, Volute Casing, Centrifugal Screw Pumps, Foot Mounted Type.

횡축, 단단, 볼류트 케이싱 원심 스크류 펌프 푸트 마운트형

막히지 않는 수처리 펌프

Non-clog pump for unscreened sewage and sludges.



용도 및 적용 분야 / Usages and applications

여과하지 아니한 하수, 슬러지, 폐수, 원수, 식품폐기물, 펄프, 슬러지, 가스함유 액체, 섬유질 액체, 어류 등의 이송에 사용되며 수처리 플랜트 기타 여러 산업분야에 적용된다.

For the applications and services such as unscreened sewages, sludges, waste water, raw water, food-stuffs waste, paper pulp, slurry, gas-entrained liquid, fibrous liquid, fish, etc, transfer and feed in the waste treatment plant and various branches of industry.

설계 및 구조적 특징 / Design and operation features

01. 용적형 스크류 펌프와 원심 펌프의 원리를 동시에 적용함으로써 재래식 논클로그 펌프의 단점을 개선시켰다.
 02. 급경사 양정 곡선의 특징을 가져 유량제어가 쉽다.
 03. 유량변화에 따른 동력의 과부하 염려가 적다.
 04. 고농도 액 또는 고형물질 함유액 펌핑에 적합하다.
 05. 임펠러와 흡입 커버 사이의 간극 조정이 가능하다.
 06. 임펠러 후방 취출 구조.
 07. 구동측에서 보아 좌회전.
 08. 무냉각 스테핑 박스, 팩킹링 또는 메카니칼 씰.
 09. 로울러 베어링 및 볼 베어링, 오일배쓰식 윤활.
 10. 상하면을 기계가공한 용접구조의 강재 베이스 플레이트
 11. 플랜지는 KS D4308 적용
(KS D4308: 수도용 덕타일 주철 이형관)
- ※ 상기 사양범위를 초과하는 대형 펌프도 제작합니다.

01. By combining design theories of volumetric screw pumps and centrifugal pumps, improved the design of conventional non-clog pumps.
02. Steep curve of performance enables easy control of capacity.
03. Power consumption is not so much sensitive to the variation of flow.
04. Suitable for pumping of liquids with high viscosity or containing solids.
05. Clearance between the impeller and the suction cover is adjustable.
06. Impeller back pull-out design.
07. Counter Clock wise(CW) rotation when viewed form the driver end.
08. Uncooled stuffing box. Packing rings or mechanical seal.
09. Roller bearing and ball bearing. Oil bath type lubrication.
10. Welded steel base plate, machined both up side and bottom side.
11. Flange : KS D 4308

* The out of the above range can be supplied according to customer's order placement.

형식 표시 방법 / Type nomenclature

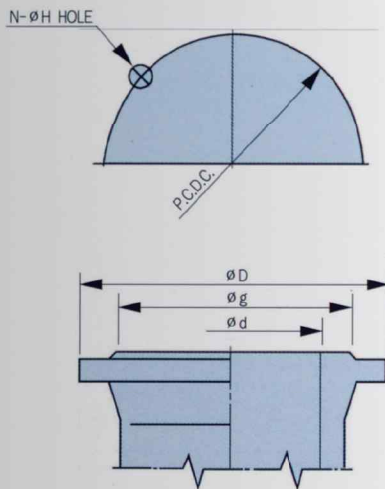
- ▶ 씨리즈(Series) _____
- ▶ 사이즈/흡입구경(Size/Nominal dia. of suction nozzle) _____

NSC-150

기초자료 / Principle particulars

PUMP TYPE	SUCTION & DISCHARGE FLANGE					SHAFT SEALING SIZE (GLAND PACKING)	BEARING NUMBER		WEIGHT (PUMP)			
	BORE SIZE(mm)		CODE	RATING	FACING		ROLLER B/R	BALL B/R				
	SUC.	DIS.										
NSC 80	Ø 80	Ø 65	KS B 1511	10K	RF	Ø 50 x Ø 70	NU 309	7309BDB	120			
NSC 100	Ø100	Ø 80	KS D 4308	-					Ø 60 x Ø 85	NU 311	7311BDB	150
NSC 150	Ø150	Ø120										175
NSC 200	Ø 200	Ø150				230						
NSC 250	Ø 250	Ø 200				Ø 80 x Ø 110	NU 314	7314BDB	-			
NSC 300	Ø 300	Ø 250							430			
NSC 450	Ø 450	Ø 400							-			
NSC 600	Ø 600	Ø 500								1700		

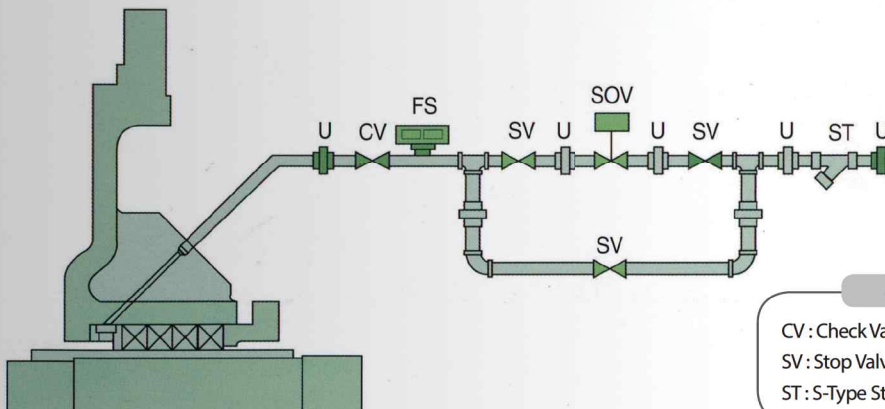
KS D 4308, 플랜지 치수표 / Flange Dimension



* 단위<UNIT>:mm

CODE	NOMINAL SIZE	FLANGE DIMENSION					
		d	g	D	C	N	H
KS B 1511	65	65	120	175	140	4	19
	80	80	130	185	150	8	19
KS D 4308	80	80	133	200	160	4	19
	100	100	153	220	180	8	
	120	120	183	250	210		
	150	150	209	285	240	12	23
	200	200	264	340	295		
	250	250	319	400	350		
	300	300	367	455	400		
350	350	427	505	460	16	23	

축봉수 장치 / Sealing Unit

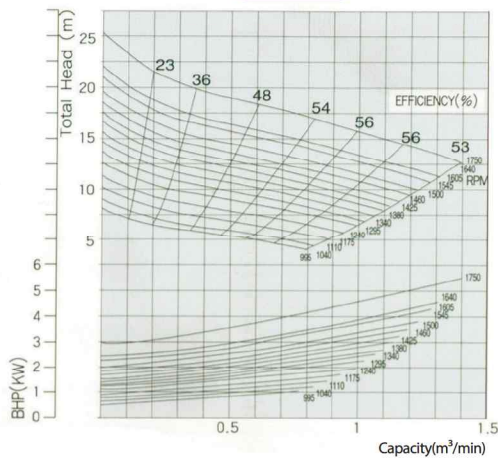


• 약어 (Abbreviation)

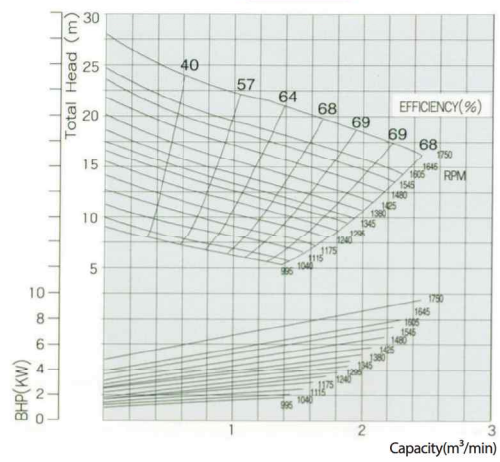
- CV : Check Valve
- SV : Stop Valve
- ST : S-Type Strainer
- FS : Flow Switch
- SOV : Solenoid valve
- U : Union

선정표 / Performance selection chart(60Hz)

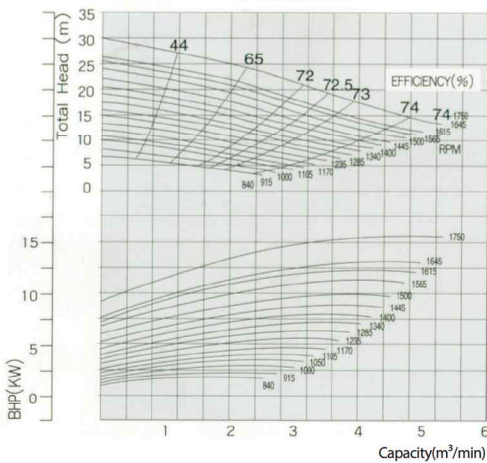
NSC 80



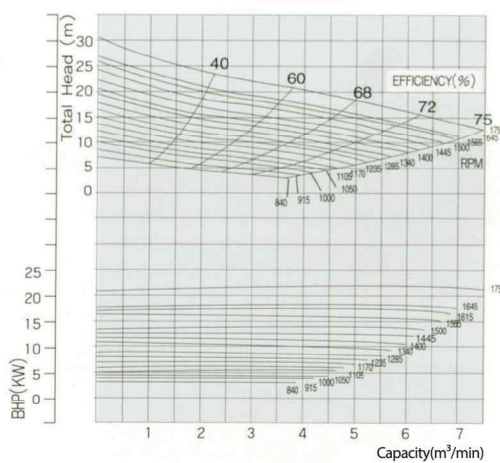
NSC 100



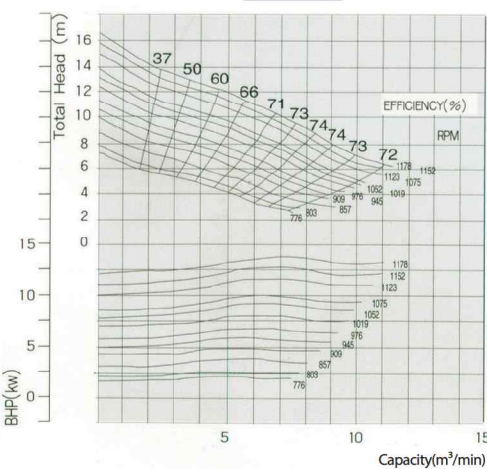
NSC150



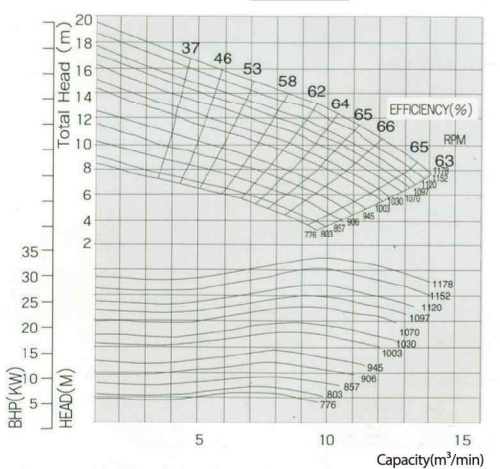
NSC 200



NSC 250

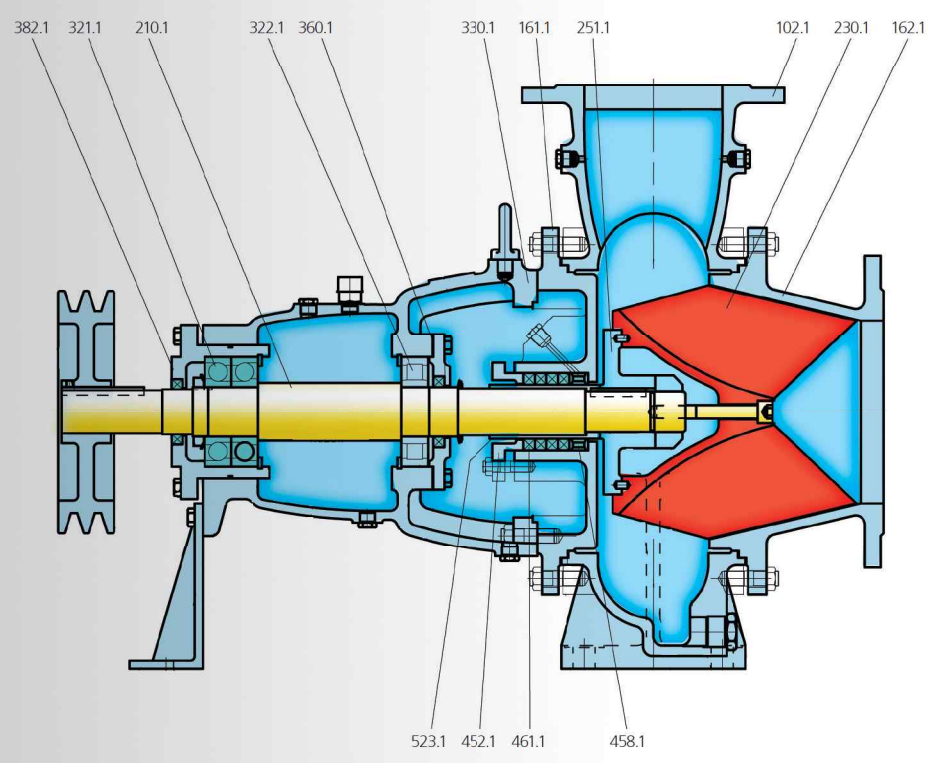


NSC 300



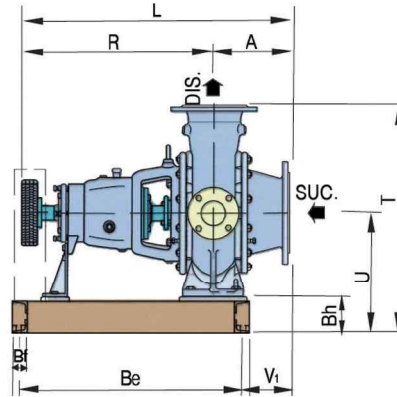
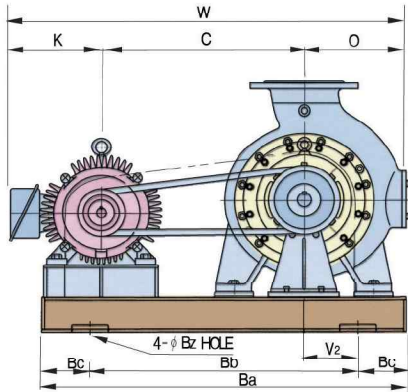
※상기 선정표는 예비선정표입니다. 최종 선정은 당사 영업부와 협의 바랍니다.

조립 단면도 / Sectional drawing



NO.	PART NAME	MATERIAL			Q'ty
		CLASS 1	CLASS 2	CLASS 3	
102.1	VOLUTE CASING	GCD 450	Hi Cr-GC	SSC 13	1
161.1	CASING COVER	GCD 450		SSC 13	1
162.1	SUCTION COVER	GCD 450	Hi Cr-GC	SSC 13	1
210.1	SHAFT	STS 304		STS 304	1
230.1	IMPELLER	Hi Cr-GC		SSC 13	1
251.1	IMPELLER HUB	GC 200			1
321.1	BALL BEARING	STB 2			1
322.1	ROLLER BEARING	STB 2			1
330.1	BEARING HOUSING	GC 200			1
360.1	BEARING COVER	GC 200			1
382.1	BEARING CASE	GC 200			1
452.1	PACKING GLAND	GC 200		SSC 13	1
458.1	LANTERN RING	CAC 406		SSC 13	1
461.1	PACKING	NON METALLIC			1
523.1	SHAFT SLEEVE	STS304			1

외형치수도(수평형) / Outline dimensions

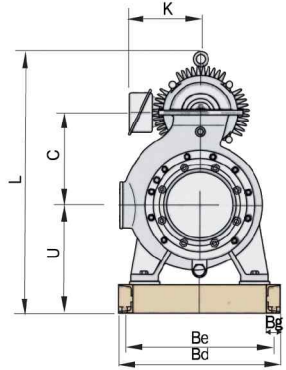
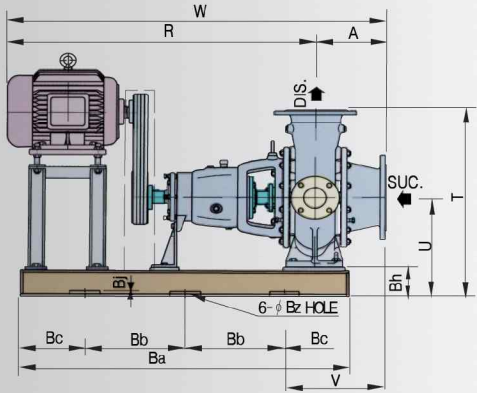


* Dimensions for the standard unit driven by IEC standard motor.

PUMP TYPE	BORE		PUMP (RPM)	PUMP & MOTOR DIMENSIONS(MM)											BASE PLATE DIMENSIONS(MM)						WEIGHT(KG)			
	SUC.	DIS.		A	C	K	L	O	R	T	U	V1	V2	W	Ba	Bb	Bc	Bd	Be	Bf		Bz	Bh	PUMP
NSC 80	Ø 80	Ø 65	1750	398										811	750	500	125	650	615	40	15	90	120	
			1605	400	223									813										
			1500	382																				775
			1425	403	203	705	190	525	495	270	125	25												796
			1340	405																				798
			1240	402	182																			774
			1110	407																				759
			995	403	162																			755
NSC 100	Ø100	Ø 80	1750	451	227									953	900	550	175	650	605	50	19	120	150	
			1545	453																				901
			1425	454	223																			902
			1345	456		735	225	535	625	345	145	7												904
			1240	454	203																			882
			1115	445	203																			873
			1040	447	182																			854
NSC150	Ø150	Ø125	1750	495	288									1033	950	600	175	700	655	50	19	120	175	
			1645	506	277																			1033
			1565	502	277																			1029
			1445	505																				1032
			1340	498	277	770	250	545	685	370	172.5	35												1025
			1235	495																				968
			1105	499	223																			972
			1000	503	203																			956
			840	498																				951
NSC 200	Ø 200	Ø150	1750	538										1121	+1100	400	150	800	755	50	19	120	230	
			1615	548	228																			1131
			1500	551																				1134
			1400	553																				1125
			1285	556	227	895	295	645	755	400	177.5	110												1128
			1170	547																				1119
			1050	547	223																			1065
			915	546	223																			1064
			NSC 250	Ø 250	Ø 200	78	573	288																
70	612														1262									
45	607	261				1005	362	680	885	435	212.5	165			1230									
57	601	213													1175									
76	618														1180									
NSC 300	Ø 300	Ø 250				78	675	362									1459	*1300	500	150	950	890	65	23
			70	706	301										1429									
			45	685		1105	422	705	1070	520	245	185			1447									
			57	717	287										1440									
			76	696											1405									
			NSC 400	Ø 400	Ø 400	750	450	900	474	474	474	474	474	474	474	474	1645							
NSC 450	Ø 450	Ø 400				750	450	900	474	474	474	474	474	474	474	1654	*1800	700	200	1350	1280	75	28	230
NSC 600	Ø 600	Ø 500	500	600	1200	428	428	428	428	428	428	428	2568	*2400	950	250	1500	1430	75	28	230			

• 치수는 참고용임.

외형치수도(수직형) / Outline dimensions



* Dimensions for the standard unit driven by IEC standard motor.

PUMP TYPE	BORE		PUMP (RPM)	PUMP & MOTOR DIMENSIONS(MM)								BASE PLATE DIMENSIONS(MM)						WEIGHT(KG)																			
	SUC.	DIS.		A	C	K	L	R	T	U	V	W	Ba	Bb	Bc	Bd	Be		Bf	Bh	Bz	PUMP															
NSC 80	Ø 80	Ø 65	1750	180	398	223	888	969	525	300	282.5	1149	+950	600	175	340	295	50	120	19	120																
			1605		400		890	969				1149																									
			1500		382	203	852	907				1087																									
			1425		403	203	872	907				1087																									
			1340		405		874	907				1087																									
			1240		402	182	847	883				1063																									
			1110		407	162	852	883				1063																									
			995		403	162	848	883				1063																									
NSC 100	Ø 100	Ø 80	1750	200	451	223	1024	1128	625	345	227.5	1328	1100	400	150	400	355	50	120	19	150																
			1545		453		1026	1017				1217																									
			1425		454	1027	979	1179																													
			1345		456	1029	979	1179																													
			1240		454	203	969	917				1117																									
			1115		445	203	960	917				1117																									
			995		447	182	944	893				1093																									
			NSC 150		Ø 150	Ø 125	1750	225				495										277	1121	1213	685	370	285	1438	1200	450	150	440	395	50	120	19	175
1645	506	1104		1182			1407																														
1565	502	277		1100			1182		1407																												
1445	505	277		1103			1138		1363																												
1340	498	277		1096			1138		1363																												
1235	495	223		1055			1027		1252																												
1105	499	223		1059			989		1214																												
1000	503	203		1043			927		1152																												
840	498	203		1038			927		1152																												
NSC 200	Ø 200	Ø 150		1750			250		538	288	1219	1351	780	425	265	1601	1350	550	125	560	500	65	145	23				230									
			1615	548	1229	1313		1563																													
			1500	551	1232	1313		1563																													
			1400	553	1206	1282		1532																													
			1285	556	277	1209		1282	1532																												
			1170	547	277	1200		1238	1488																												
			1050	547	223	1162		1127	1377																												
			915	546	223	1161		1089	1339																												
			NSC 250	Ø 250	Ø 200	1178		325	573	288	1271	1386				910									460	340	1711		1400	550	150	600	530	65	145	23	320
						1070			612		1310	1386															1711										
1052	601	261				1281	1317		1642																												
976	615	261				1295	1317		1642																												
945	607	261				1287	1273		1598																												
909	594	261				1274	1273		1598																												
857	601	213				1246	1127		1452																												
803	594	213				1239	1127		1452																												
776	618	213				1263	1089		1414																												
NSC 300	Ø 300	Ø 250				1178	400		675	362	1487	1386	1095	545	415		1991	1600	600	200	700	550	75	170			23	430									
			1070	706	301	1489		1301	1896																												
			945	685		1468		1291	1896																												
			857	717		1500		1291	1811																												
			776	696	288	1461		1269	1773																												
NSC 400	Ø 400	Ø 400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900																
NSC 450	Ø 450	Ø 400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900																
NSC 600	Ø 600	Ø 500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200																

• 치수는 참고용임.