

SC PUMPS

Double Suction Centrifugal Pump





GENERAL INFORMATION

Discharge Flange	DN 65 - DN 600
Capacity	Up to 8000 m ³ /h
Head	UP to 200 m
Frequency	Three Phase 50 Hz - 60 Hz*
Maximum Operating Pressure	Up to 25 bar



Transferable Liquids

- Clean or slightly contaminated low viscosity liquids without solid and fibrous particles.



Shaft Sealing

- Single, double, cartex type mechanical seal or soft packing is used depending on the type of fluid and operating conditions.



Applications

Water treatment and Pressurization	Power Plants
Heating, Ventilating and Air Conditioning	Oil Industry
Agricultural Irrigation and Drainage	Chemical Industry
Food and Beverage Industry	Mining
Iron and Steel Industry	Marine
Building System	Fire Fighting

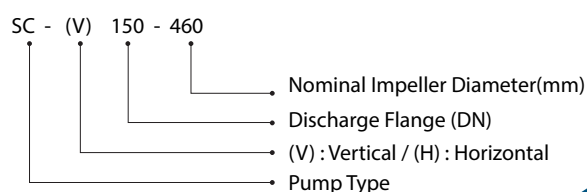


Design Features

- Suction and discharge flanges are on the same axis line. The double - suction design reduces axial forces by directing flow into both sides of the impeller. The double - volute design, available on most models, reduces the radial load and minimizes noise and vibration.
- Seal box is cooled with water. Seals are easily dismountable, which makes replacing and fitting up additional seals easy.
- Split case pumps could manufacturing horizontal or vertical.
- Direction of rotation is clockwise when viewed from the motor in standard manufacture. In this case, the suction flange is on the right side. If required, the direction of rotation can be adjusted counter-clockwise. In this case, the suction flange is on the left side.
- Replaceable case wear rings protect the pump the pump casing and reducing maintenance costs.
- All impellers are dynamically balanced according to ISO1940 class 6.3.
- Bronze shaft sleeves protect the shaft and help with fixation of the impeller.
- In horizontal installation, ball bearings with grease lubrication is used as standard. In the case of vertical installation, the bearing with fluid lubrication is used on the lower side and the ball bearing with grease lubrication is used on the upper side.
- Basic models designed with variety of motors (50Hz - 60Hz) 750 - 1000 - 1500 - 3000 RPM, with range up to 2000 KW.



Pump Code





DESCRIPTIONS



DIN



EN



AISI/SAE/ASTM

Cast Iron	0.6025	EN-GJL-250 (GG 25)	A 48 Class 40-B
Ductile Iron Casting	0.7040	EN-GJS-400-18-LT (GGG 40)	A 536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A 536 60-40-18
Steel Casting	1.0619	GP 240 GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	G-X5 Cr Ni 19-10	A 351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	G-X2 Cr Ni 19-11	A 351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C.)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351 CF3M
Austenitic Steel Casting	1.4500	G-X7 Cr Ni Mo Cu Nb 25-20	A 351 CN7M
Austenitic - Ferritic Steel Casting (Duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 CD4MCuN
Austenitic - Ferritic Steel Casting (S.D.)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 CE3MN
Martensitic Stainless Steel Casting	1.4317	G-X4 Cr Ni 13-4	A 352 CA6NM
Martensitic Stainless Steel Casting	1.4008	G-X7 Cr Ni Mo 12-1	A 217 CA15
Bronze Casting (Tinned)	2.1050.01	G-Cu Sn 10	B 427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-Cu Al10 Ni	B 148 C95500
Bronze Casting (Leaded)	2.1096.01	G-Cu Sn 5 Zn Pb	B 584 C83600
Chromium Steel	1.4021	X20 Cr13	A 276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20 Cr13	A 276 Type 420+QT
Chrome Nickel Steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome Nickel Molybdenum Steel (L.C.)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3 Cr Ni Mo N 27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2 Cr Ni Mo N 22-5-3	UNS S32205
Ductile Iron Casting	0.7050	EN-GJS-500- 7 -LT (GGG 50)	A 536 70-50-05

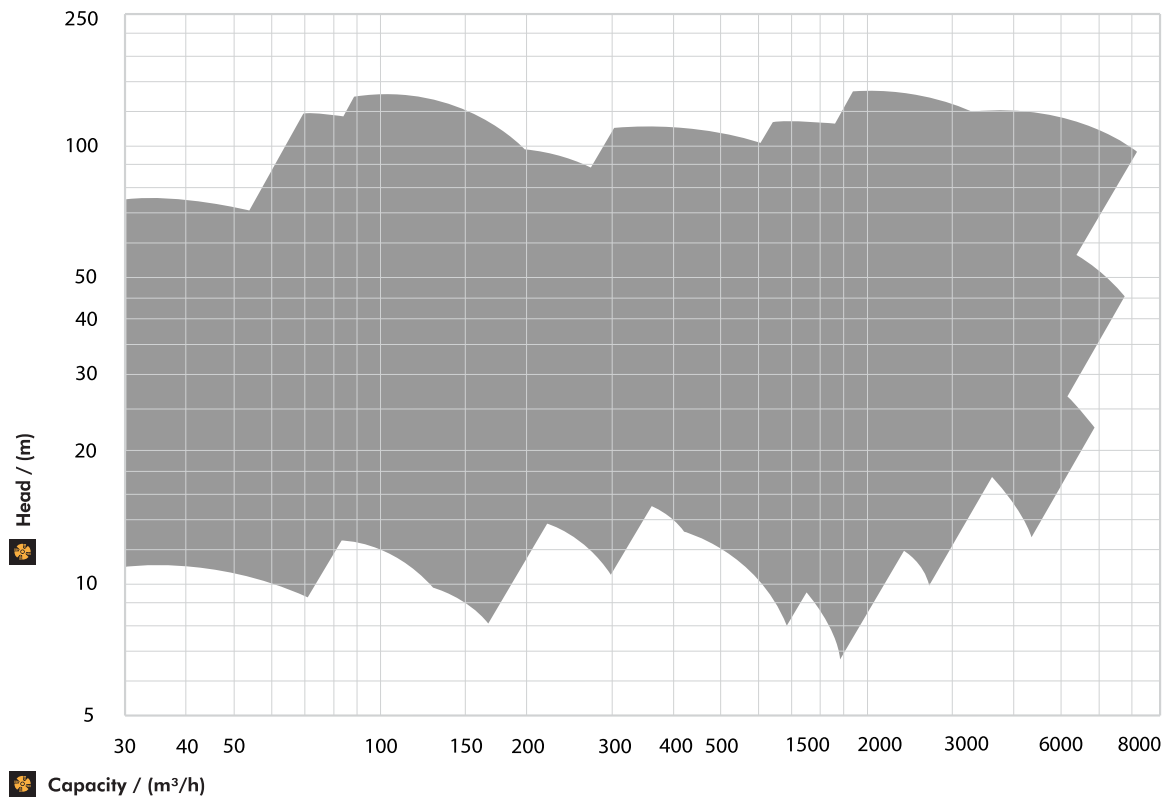




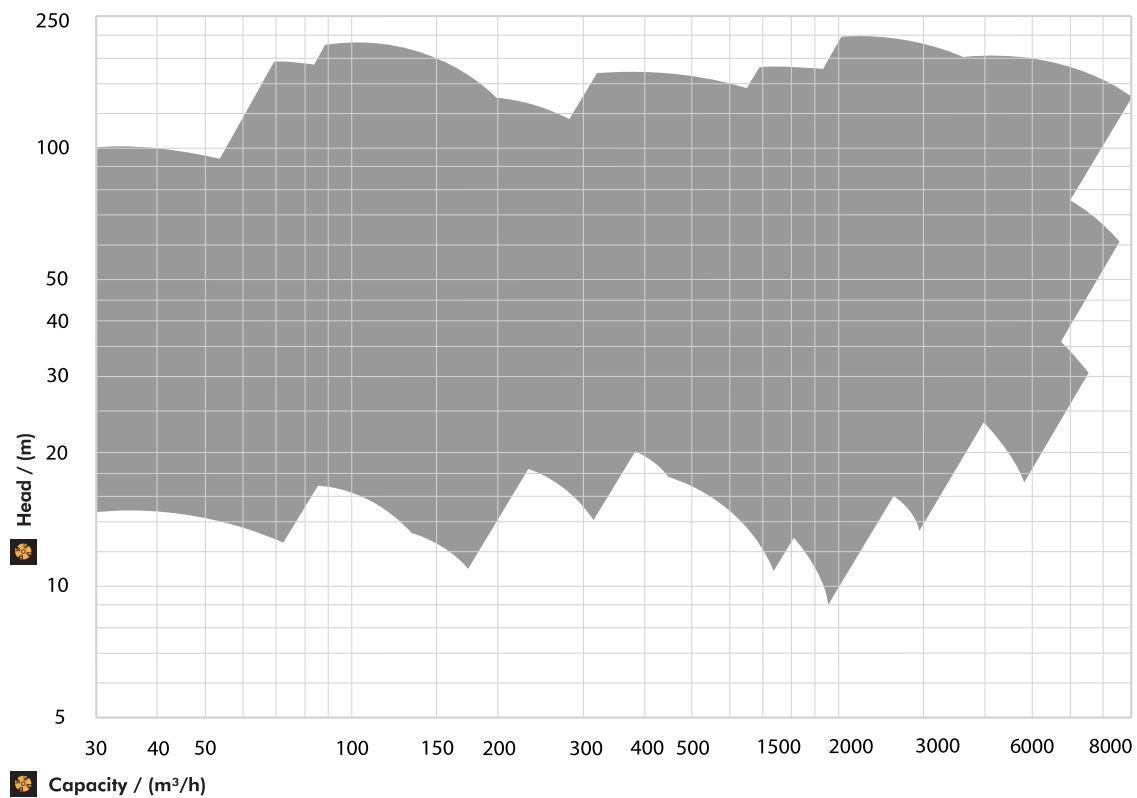
SELECTION CHARTS



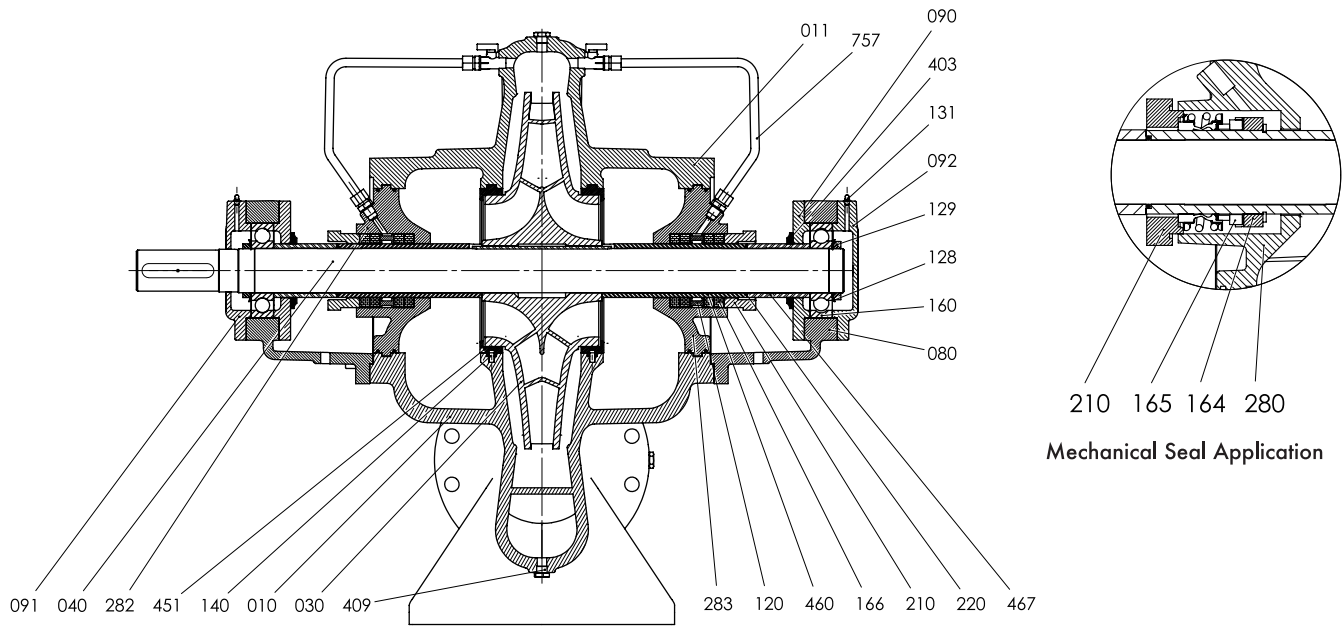
(50 Hz)



(60 Hz)



SECTIONAL VIEW



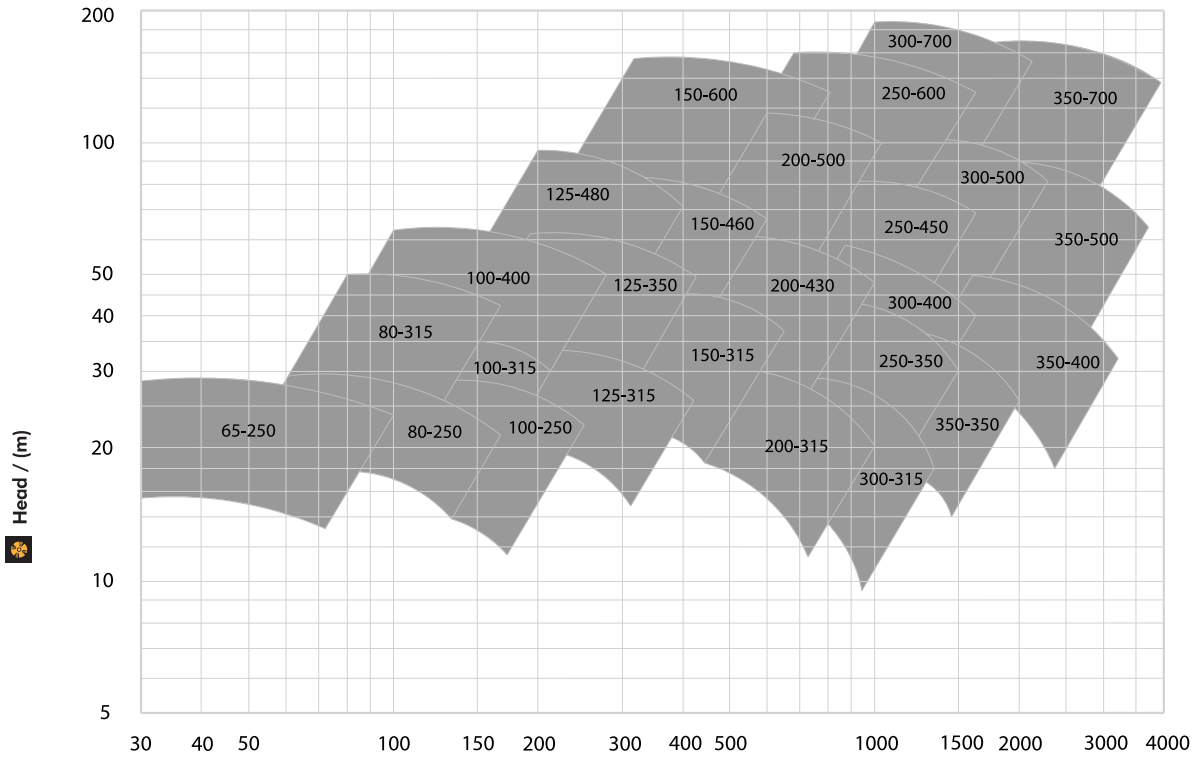
Application

Volute Casing (Lower)	010
Volute Casing (Up)	011
Impeller	030
Shaft	040
Bearing Housing	080
Bearing Cover (Inside)	090
Bearing Cover (Coupling)	091
Bearing Cover (Outside)	092
Flushing Pipe	120
Protection Sheet	128
Nut	129
Grease Nipple	131
Grooved Pin	140
Bearing	160
Mechanical Seal Setting Sleeve	164
Mechanical Seal	165
Soft Packing	166
Key	170
Connection Support	210
O-Ring	220
Mechanical Seal Box	280
Stuffing Box	282
Stuffing Box	283
Throw Protection	403
Drain Plug	409
Wear Ring	451
Shaft Seal	460
Setting Sleeve	467
Flushing Pipe	757



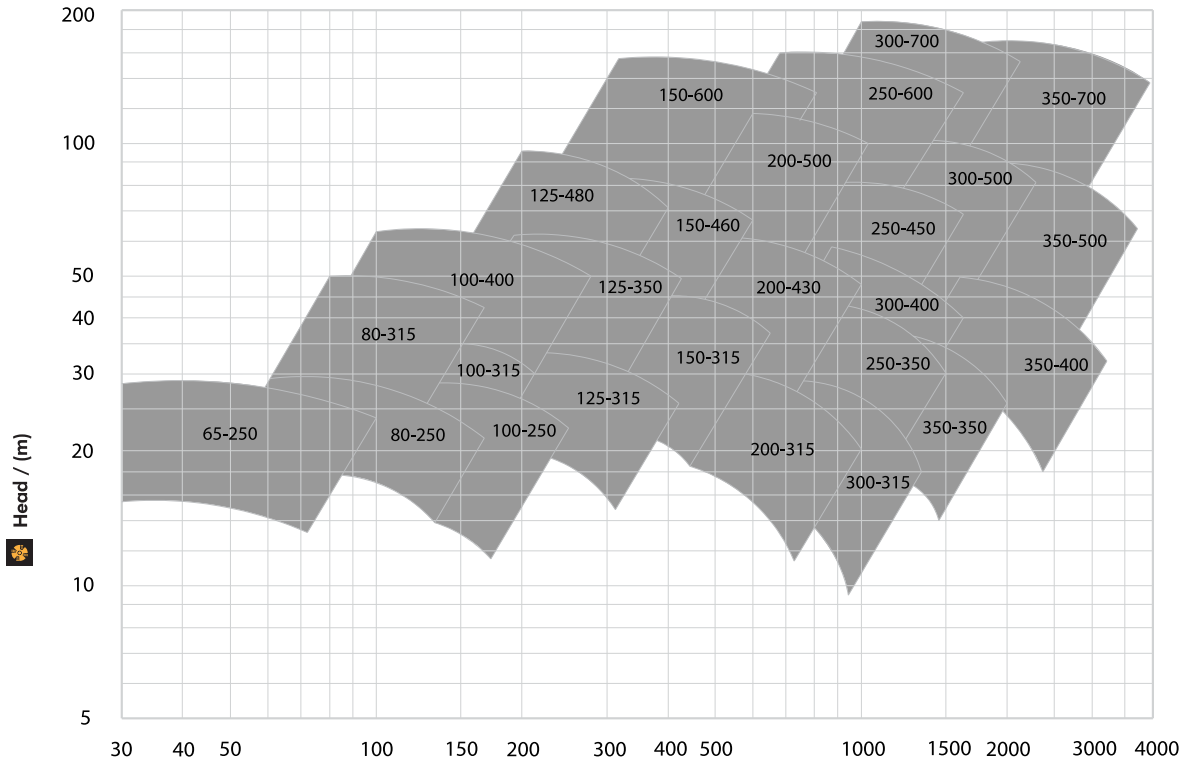
SELECTION CHARTS

1000 rpm / (d/d) (50 Hz)



Capacity / (m³/h)

1450 rpm / (d/d) (50 Hz)



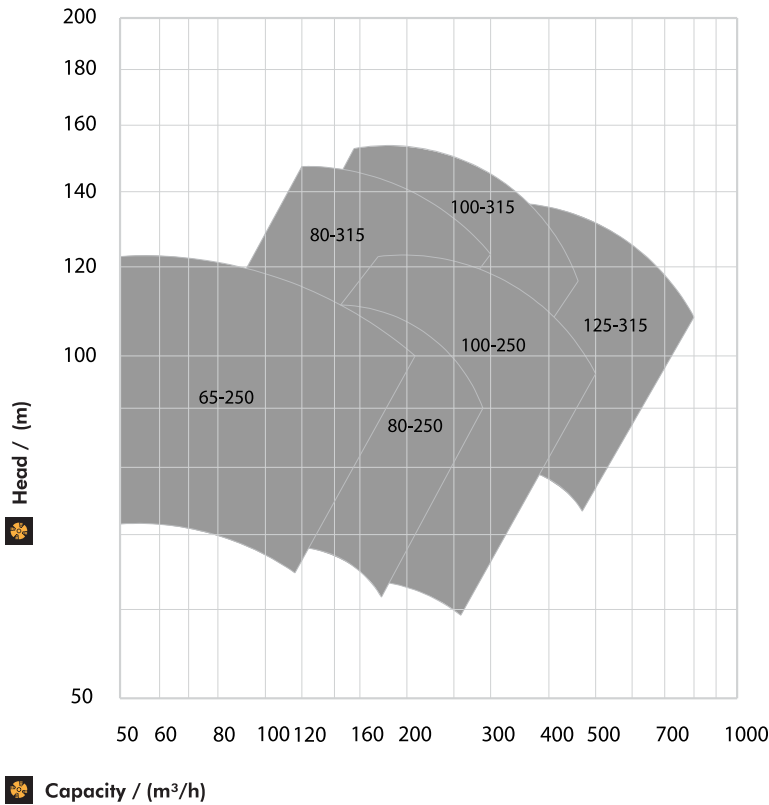
Capacity / (m³/h)





SELECTION CHARTS

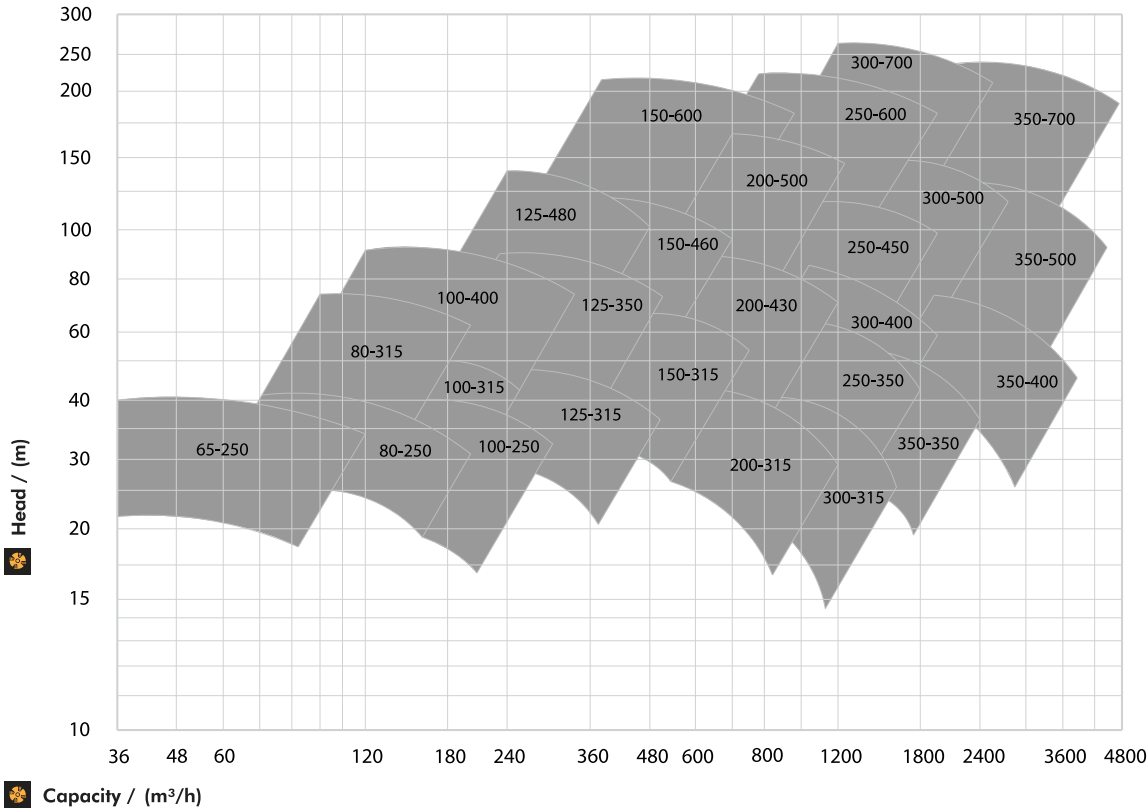
 2900 rpm / (d/d) (50 Hz)



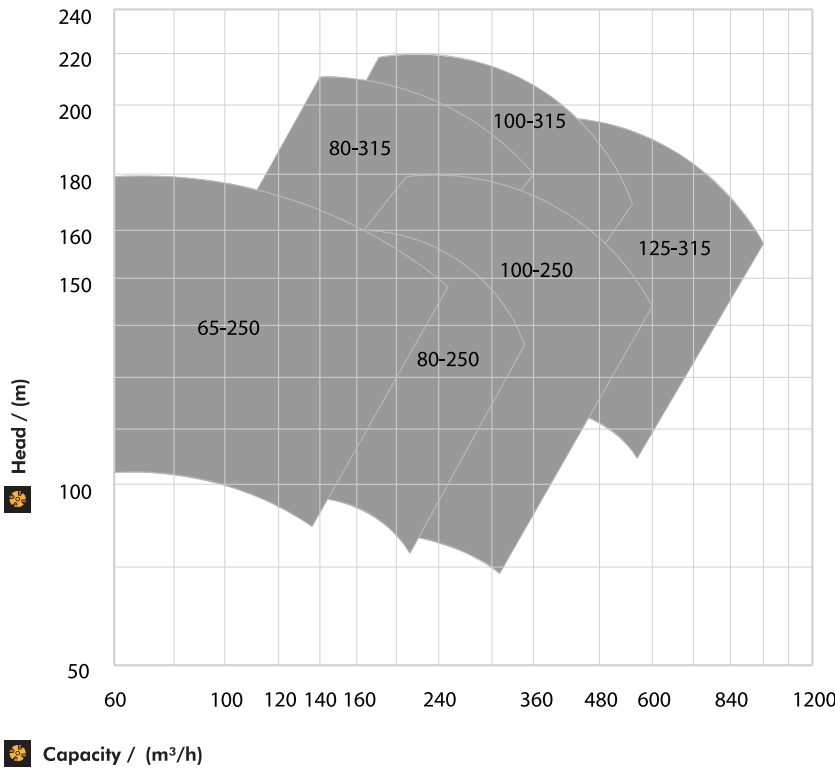


SELECTION CHARTS

1750 rpm / (d/d) (60 Hz)

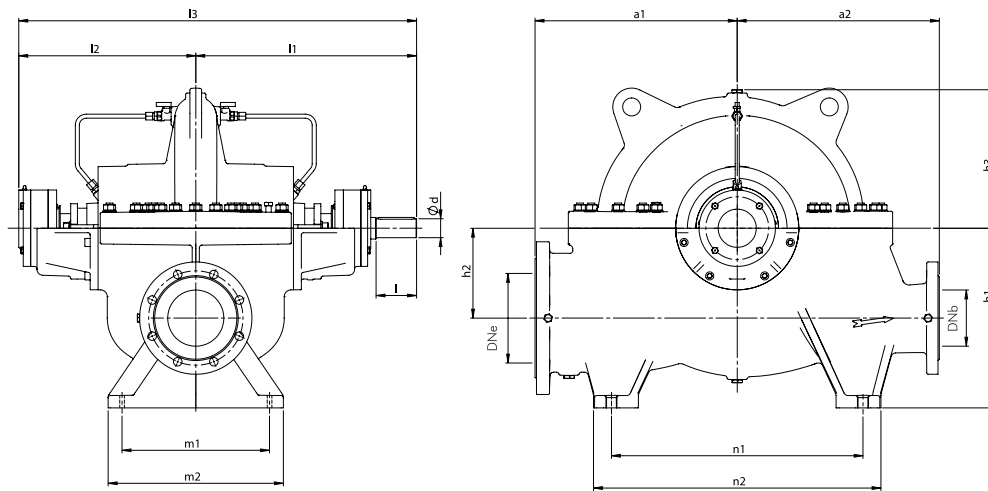


3500 rpm / (d/d) (60 Hz)





PUMP DIMENSIONS



Pump Type	Dimensions / (mm)																	Weight (kg)	
	DN _e	DN _b	Outside Dimensions									Supporting Foot Dimensions					Shaft Dimensions		
			I1	I2	I3	α1	α2	h1	h2	h3	n1	n2	m1	m2	s	ød	l		
65-250	100	65	390	305	695	320	280	300	140	200	380	460	230	300	20	35	75	157	
80-200	125	80	400	310	710	320	280	300	140	200	400	460	230	300	20	35	80	165	
80-250	125	80	395	305	700	320	280	300	140	220	405	470	230	300	20	35	75	162	
80-315	125	80	395	305	700	360	300	335	140	260	400	490	230	300	20	35	75	200	
100-250	150	100	450	350	800	360	310	355	170	225	400	480	285	340	20	42	90	223	
100-315	150	100	450	350	800	360	310	355	170	245	400	480	285	340	20	42	90	230	
100-400	150	100	450	350	800	420	370	355	170	295	460	560	285	340	20	42	90	303	
125-315	200	125	525	405	930	420	370	400	200	295	460	540	340	380	22	55	110	360	
125-350	200	125	525	405	930	470	450	400	200	310	540	660	330	380	22	55	110	402	
125-450	200	125	585	450	1035	500	450	400	200	350	540	640	320	380	22	55	120	420	
125-480	200	125	490	395	885	450	450	400	200	310	560	640	350	390	22	42	90	400	
150-315	200	150	525	405	930	470	400	400	200	330	540	640	330	380	22	55	110	400	
150-460	200	150	545	425	970	450	450	400	200	300	540	640	330	380	22	55	110	430	
150-600	250	150	640	500	1140	550	500	560	300	440	540	640	340	420	22	65	130	780	
200-315	250	200	640	500	1140	500	450	500	240	335	540	640	370	420	22	65	130	590	
200-400	250	200	645	500	1145	500	450	500	240	360	540	640	360	420	22	65	130	615	
200-430	250	200	640	450	1060	500	500	500	240	325	540	650	380	450	24	55	110	630	
200-500	250	200	610	500	1140	550	500	560	300	375	620	720	370	420	22	65	130	690	
250-350	300	250	645	500	1145	600	500	600	300	390	620	720	360	420	22	65	130	680	
250-450	300	250	645	500	1145	600	500	600	300	415	620	720	360	420	22	65	130	780	
250-600	300	250	720	540	1260	650	550	600	300	430	620	710	415	485	26	80	170	1200	
300-315	350	300	640	500	1140	600	500	630	300	400	620	720	360	420	22	65	130	700	
300-400	400	300	665	510	1175	630	560	630	320	385	680	800	440	520	22	60	140	930	
300-500	400	300	755	585	1340	700	750	710	350	425	700	800	420	520	26	80	170	1500	
300-700	400	300	865	675	1540	750	800	710	350	470	720	880	420	520	26	100	180	1650	
350-350	400	350	770	620	1390	700	550	670	350	450	720	800	440	520	26	75	140	1120	
350-400	500	350	770	620	1390	800	600	800	380	505	800	960	520	600	26	75	140	1410	
350-500	500	350	755	585	1340	800	600	800	400	435	740	900	500	600	26	80	170	1435	
350-600	500	350	900	715	1615	700	700	810	470	503	750	900	520	600	28	100	180	1900	
350-700	500	350	865	675	1540	850	750	850	450	525	720	880	500	600	26	100	180	2000	
400-800	600	400	1035	810	1845	900	900	880	450	565	950	1120	630	740	26	105	220	3400	





TECHNICAL SPECIFICATIONS

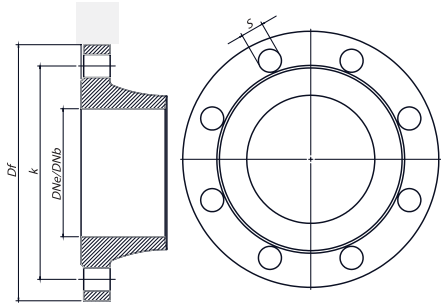
Group	Pump Type	Shaft End Diameter	Mechanical Seal Diameter	Bearing Type
A	65-250	35	50	2X6308
A	80-200	35	50	2X6308
A	80-250	35	50	2X6308
A	80-315	35	50	2X6308
B	100-250	42	60	2X6310
B	100-315	42	60	2X6310
B	100-400	42	60	2X6310
B	125-480	42	60	2X6310
C	125-315	55	70	2X6312
C	125-350	55	70	2X6312
C	125-450	55	70	2X6312
C	150-315	55	70	2X6312
C	150-460	55	70	2X6312
C	200-430	55	70	2X6312
D	150-600	65	80	2X6314
D	200-315	65	80	2X6314
D	200-400	65	80	2X6314
D	200-500	65	80	2X6314
D	250-350	65	80	2X6314
D	250-450	65	80	2X6314
D	300-315	65	80	2X6314
D	300-400	60	80	2X6313
E	350-350	75	100	2X6317
E	350-400	75	100	2X6317
F	250-600	80	100	2X6319
F	300-500	80	100	2X6319
F	350-500	80	100	2X6319
G	300-700	100	120	2X6322
G	350-600	100	120	2X6322
G	350-700	100	120	2X6322
H	400-800	105	120	6324 - Nu324





FLANGE DIMENSIONS

Pump Type	Suction & Discharge				Suction & Discharge			
	Df	k	s	n	Df	k	s	n
65	185	145	19	4	185	145	19	8
80	200	160	19	8	200	160	19	8
100	220	180	19	8	235	190	23	8
125	250	210	19	8	270	220	28	8
150	285	240	24	8	300	250	28	8
200	340	295	24	12	360	310	28	12
250	405	355	28	12	425	370	31	12
300	460	410	28	12	485	430	31	16
350	520	470	28	16	555	490	34	16
400	580	525	31	16	620	550	37	16
500	715	650	34	20	730	660	37	20
600	840	770	37	20	845	770	41	20



○ TS EN 1092 2 ○ "n" Number of Holes



SEAL SOLUTIONS

Packing Type	Packing Specifications	
	Temperature	Pressure
MG1	t = -20 °C ... +85 °C t = +85 °C ... +100 °C (*)	p1 = 16 bar (230 PSI) p1 = 16 bar (230 PSI) (*)
H12N	t = +100 °C ... +140 °C	p1 = 25 bar (363 PSI)
M7N	t = -20 °C ... +220 °C	p1 = 25 bar (363 PSI)
Soft Packing / Yumuşak Salmastıra	t = -20 °C ... +100 °C	p1 = 10 bar (145 PSI)
	t = -20 °C ... +140 °C (*)	p1 = 25 bar (230 PSI) (*)
CARTEX - DN	t = -20 °C ... +220 °C	p1 = 25 bar (363 PSI)

○ (*) Optional

*Note: Above datas mentioned according to BURGMANN Brand.
Packing can be changed according to customer request.

*Different seal application can be used according to liquid
specification.

