

DH

Horizontal Split Case Centrifugal Pumps

50 Hz • 60 Hz



Since 1918 in Japan

DH Horizontal Split Case Centrifugal Pumps

■ Applications

- General water supply in dwelling houses, city buildings, etc.
- Circulation of cold and/or hot water
- Industrial water supply system
- Irrigation use
- Fire fighting and sprinkler

■ Features

● Easy Disassembly

Inspection is simplified, it is not necessary to disturb pump alignment and suction & discharge piping when parts replacement are necessary.

● Wide Range of Material

Pump material can be changed in accordance with customer's request.

● High Efficiency

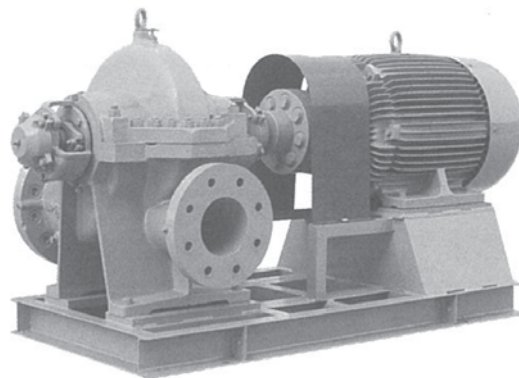
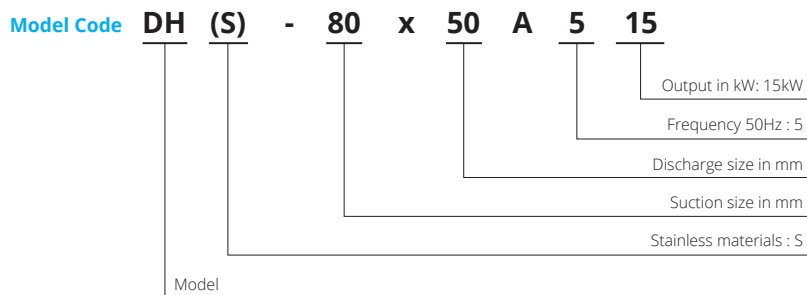
High operating efficiency realize lower operation cost and smaller motor output.

● High suction lift

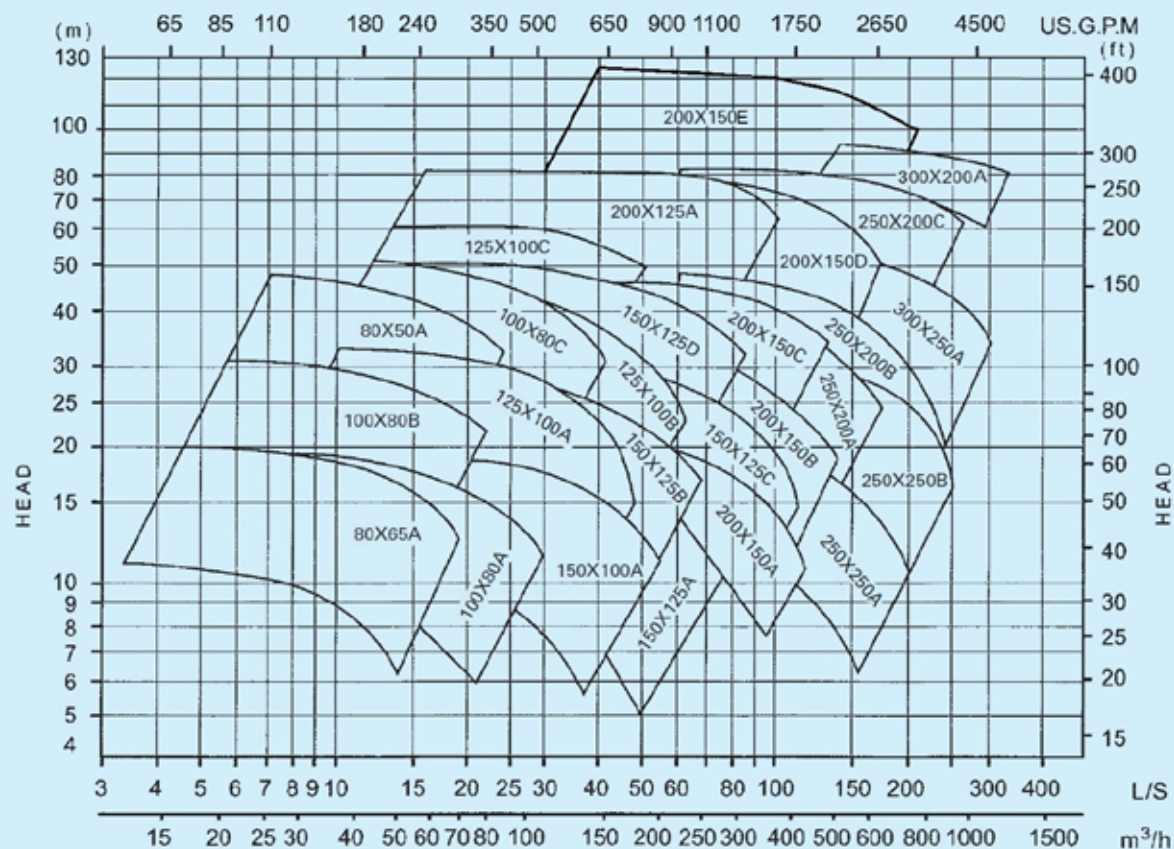
Double suction pump ensures high suction lift performance with wide capacities.

■ Specifications

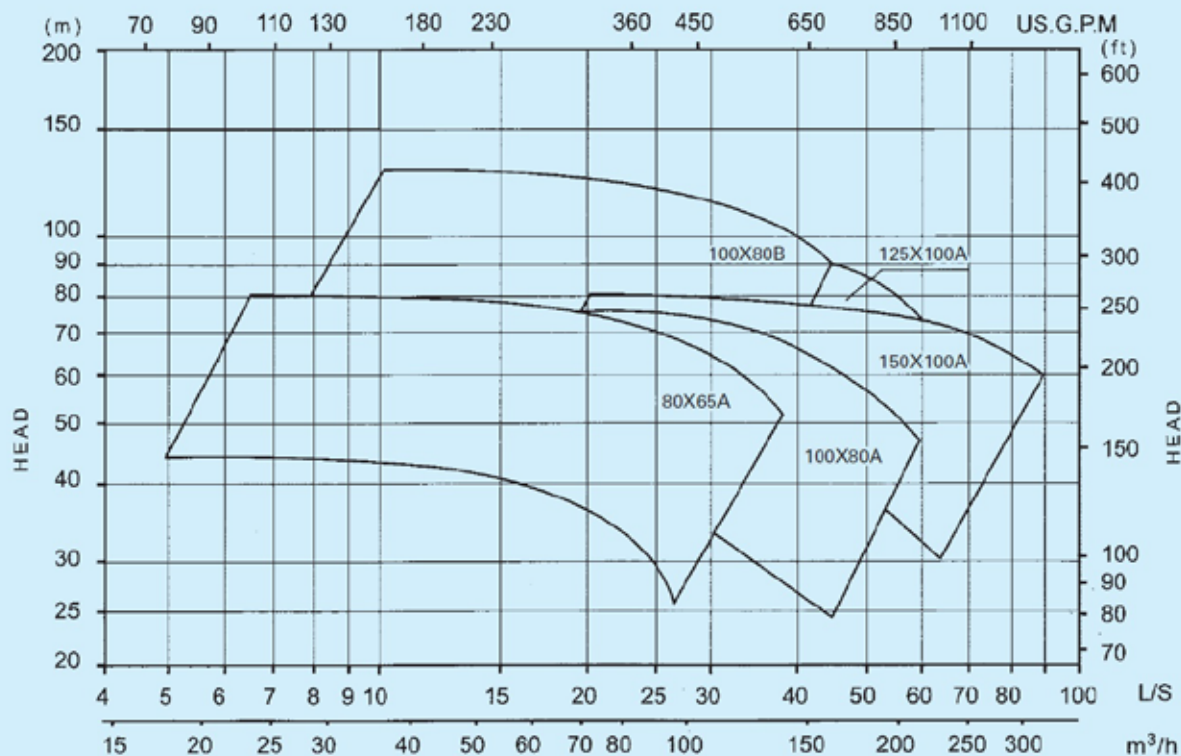
- **Liquid** : Fresh Water (-10°C~80°C) Option : up to 90°C
- **Re. NPSH** : See the individual charastric curve
- **Max suc. Press** : 16kgf/cm² - $\frac{\text{shut off head}}{10}$
- **Max working Press** : 16kgf/cm²
- **Revolution** : 1500 rpm or 3000 rpm at 50Hz
: 1800 rpm or 3600 rpm at 60Hz
- **Structure**
 - Impeller** : Closed
 - Shaft seal** : Mechanical seal (Option: Gland packing)
 - Bearing** : Closed ball bearing
- **Material**
 - Impeller** : Cast iron (FC250) / Bronze (CAC701) Option : Stainless Steel (SCS14)
 - Shaft** : Stainless Steel (SUS420J1)
 - Casing** : Cast iron (FC250) Option : Ductile Cast iron (FCD450)
Stainless Steel (SCS14)



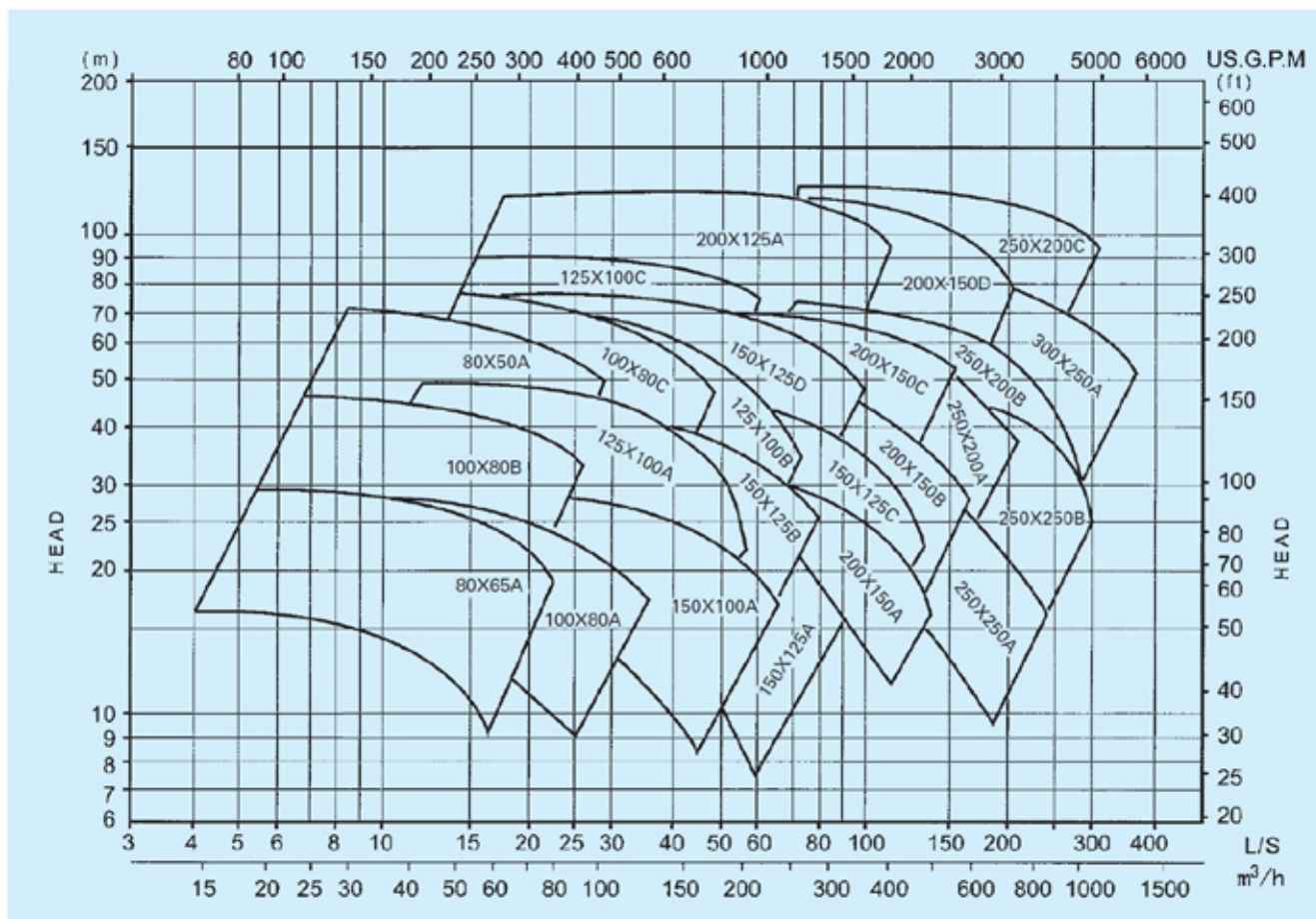
DH 50Hz Synchronous Revolution 1450 r.p.m.



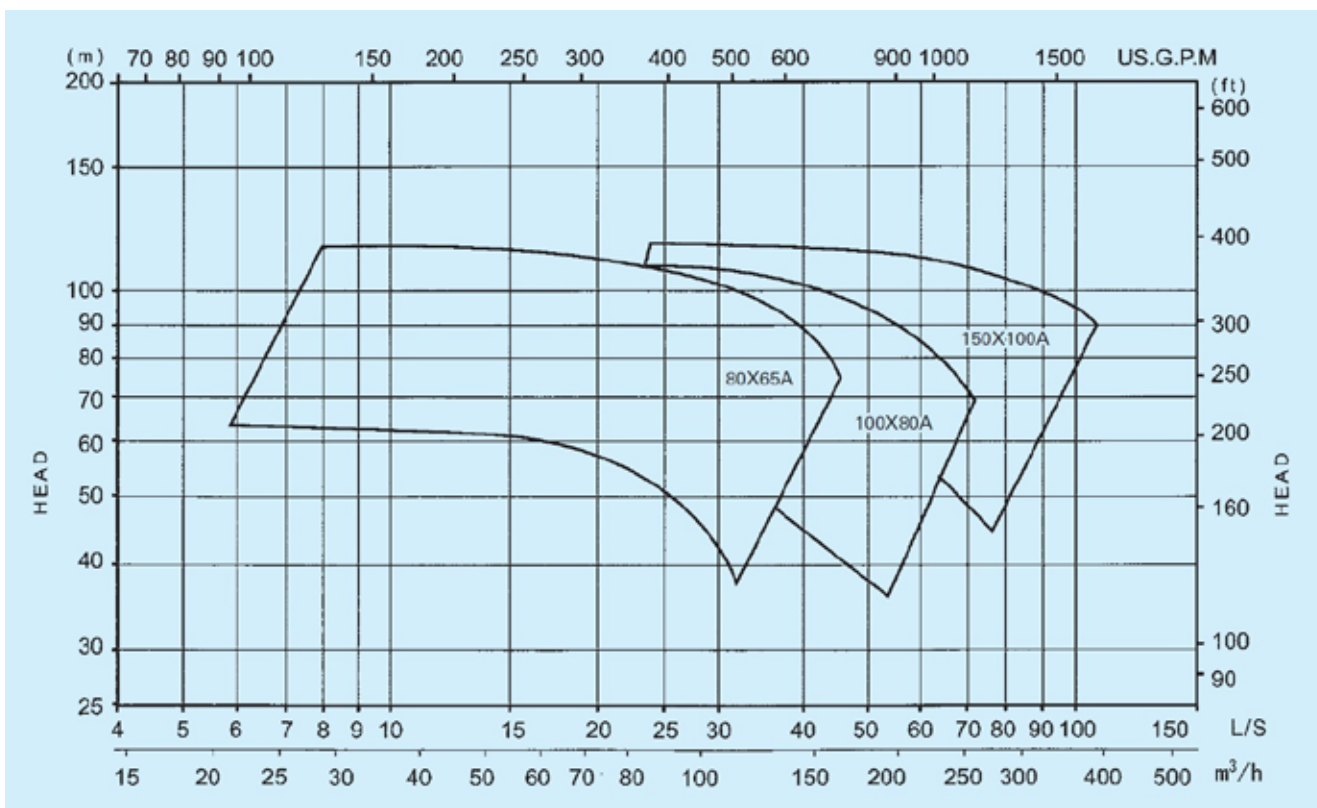
DH 50Hz Synchronous Revolution 2900 r.p.m.



DH 60Hz Synchronous Revolution 1750 r.p.m.



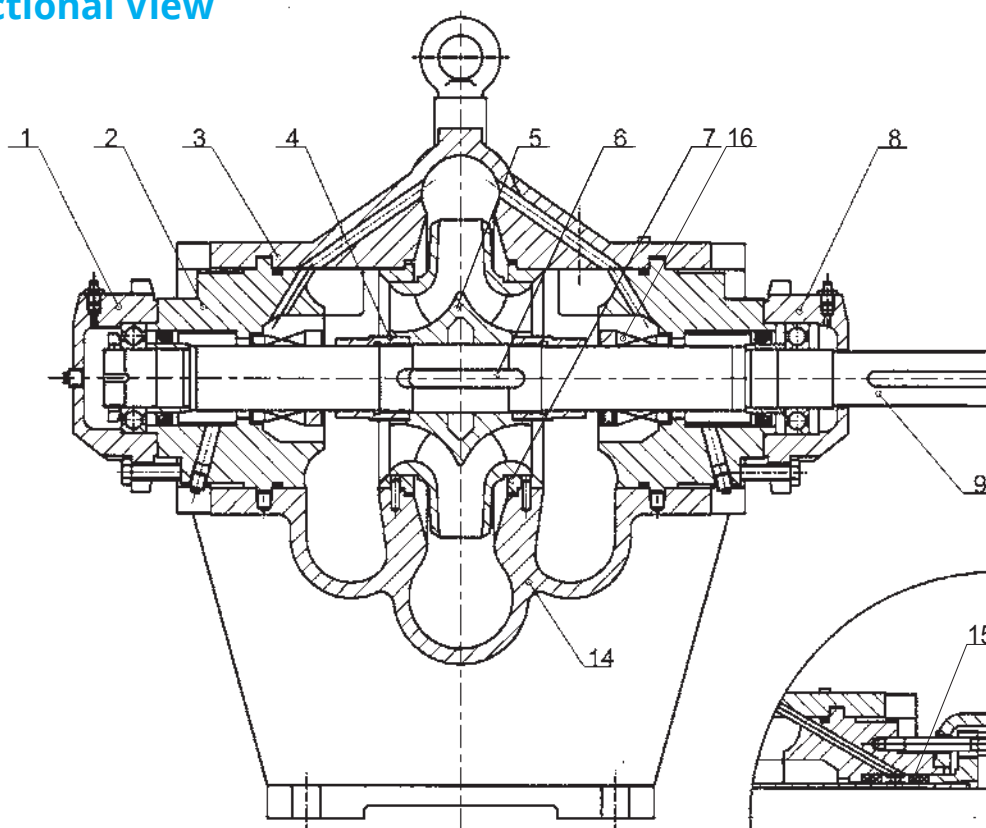
DH 60Hz Synchronous Revolution 3500 r.p.m.



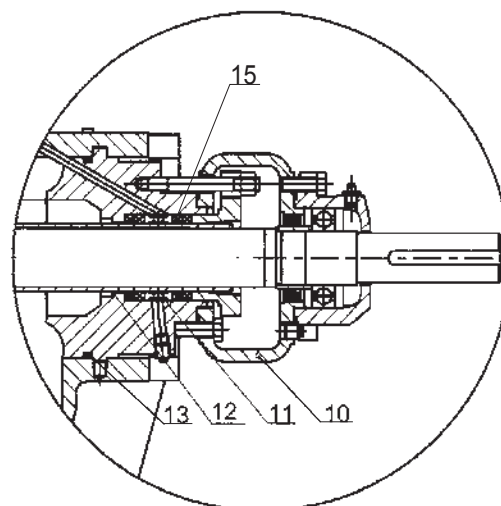
Design Detail

Pump Model - DH	Bearing	Shaft Dimension at coupling (mm)	
		Diameter	Key size
	x2 pcs	d	u x T
80x50A / 80x65A / 100x80A,B,C / 125x100A / 150x125A,B,C / 200x150A	6306	25	8 x 7
125x100B,C / 150x100A / 150x125D / 200x150B,C / 250x200A / 250x250A,B	6309	42	12 x 8
200x125A / 200x150D,E / 250x200B,C / 300x200A / 300x250A	6312	55	16 x 10

Sectional View



Mechanical seal type drawing



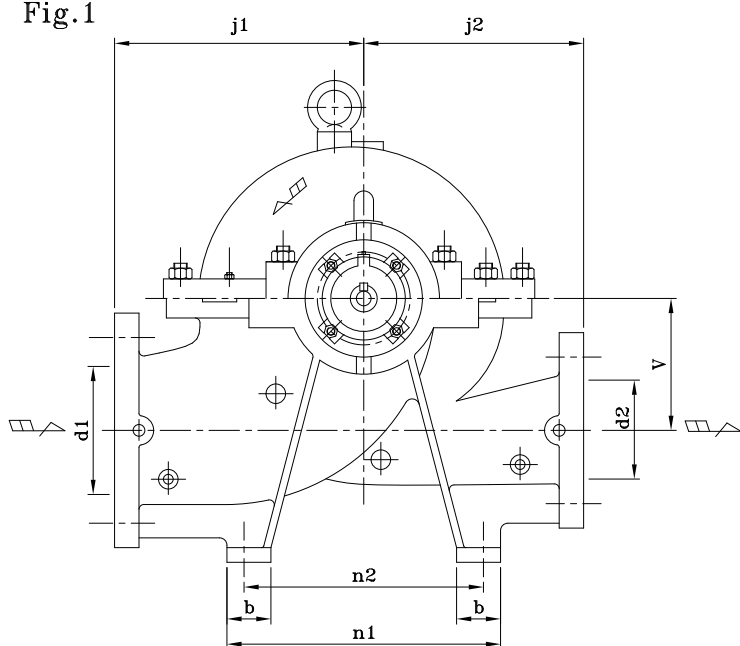
Gland packing type drawing

No	Parts Description	Q'ty	Materials
1	Left bearing body	1	FC250 (Cast Iron)
3	Casing cover	1	FC250 (Cast Iron)
5	Impeller	1	CAC701 (Bronze)
7	Casing wearing ring	2	CAC 406 (Bronze)
9	Shaft	1	SUS420J1(Stainless Steel)
11	Lantern ring	2	FC250 (Cast Iron)
13	Casing O-ring	2	NBR
15	Gland packing	8	Aramid fiber

No	Parts Description	Q'ty	Materials
2	Stuffing box	2	FC250(Cast Iron)
4	Impeller lock sleeve	2	S45C (Steel)
6	Anti-flexible impeller key	1	S45C (Steel)
8	Right bearing body	1	FC250(Cast Iron)
10	Motor stool	2	FC250(Cast Iron)
12	Gland cover	2	FC250(Cast Iron)
14	Casing lower half	1	FC250(Cast Iron)
16	Mechanical seal	2	Ceramic x Carbon

Dimensions (Bare shaft pump)

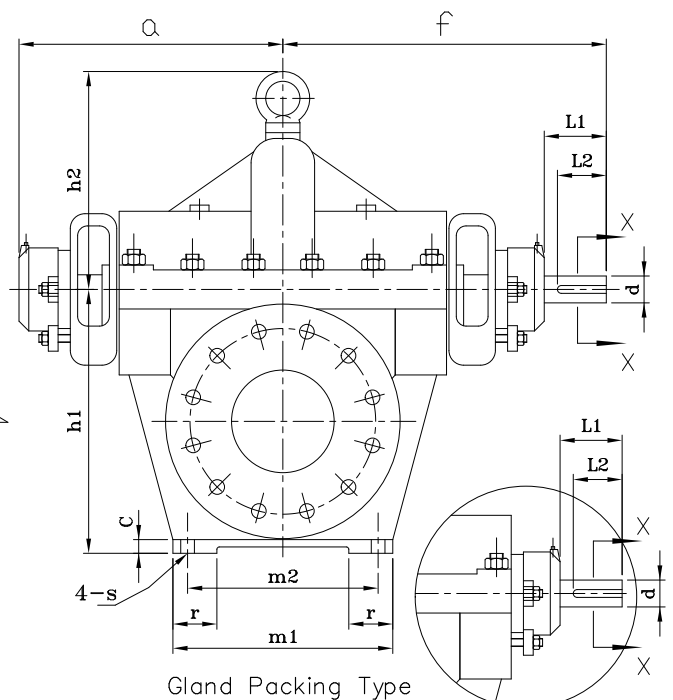
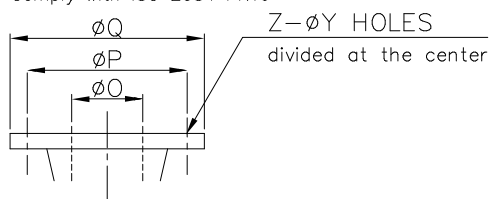
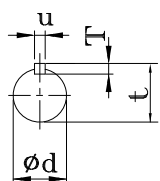
Fig.1



SECTION X-X

Flange Size

Comply with ISO 2084 PN16



Gland Packing Type

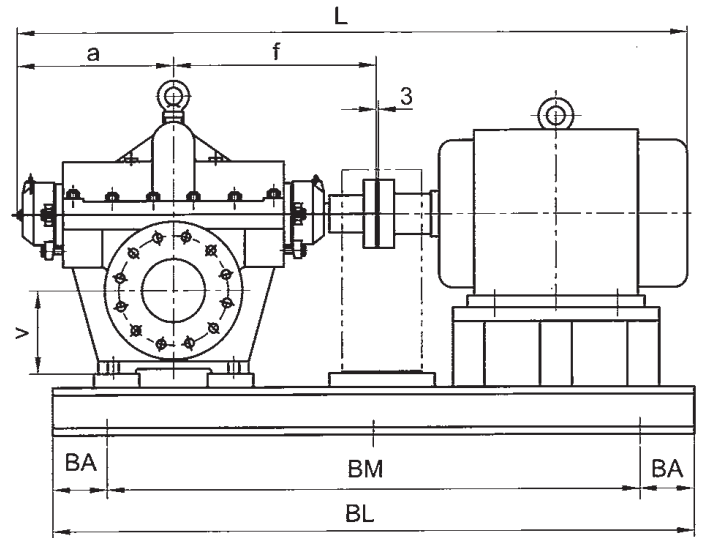
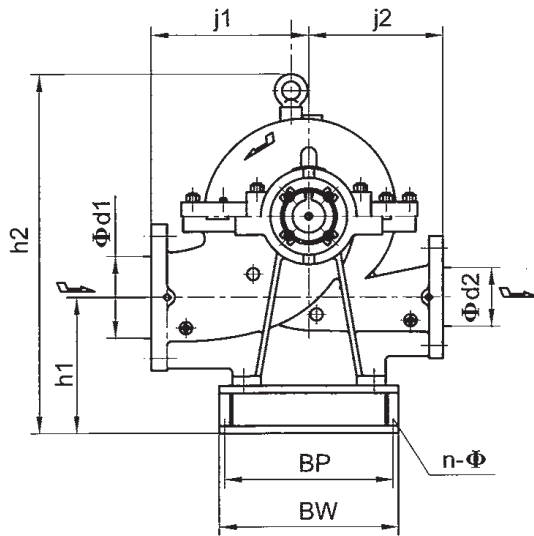
Mechanical Seal Type

Flange Dimension

Unit : mm

	50	65	80	100	125	150	200	250	300
O	125	145	160	180	210	240	295	355	410
P	165	185	200	220	250	285	340	405	460
Q	4	4	8	8	8	8	12	12	12
Y	18	18	18	18	18	22	22	26	26

Model DH	Flange		a		f		h1	h2	j1	j2	v	m1	m2	n1	n2	b	c	r	s	t	u	d	L1	L2	Unit: mm	
	Suc. d1	Dis. d2	MS	SP	MS	SP																			Weight (Kg)	
																									SP	MS
80x50A	80	50	246	331	314	399	300	315	355	280	170	330	270	400	340	65	25	65	22	28	8	25	70	63	186	175
80x65A	80	65	246	331	314	399	250	254	280	225	130	300	240	350	290	65	25	65	22	28	8	25	70	63	129	118
100x80A	100	80	246	331	314	399	280	249	270	230	130	300	240	350	290	65	25	65	22	28	8	25	70	63	137	126
100x80B	100	80	246	331	314	399	280	274	290	275	150	300	240	350	290	65	25	65	22	28	8	25	70	63	150	135
100x80C	100	80	246	400	314	399	320	330	340	350	175	330	270	400	340	65	25	65	22	28	8	25	70	63	205	194
125x100A	125	100	246	382	314	399	320	299	320	275	170	300	240	350	290	65	25	65	22	28	8	25	70	63	166	175
125x100B	125	100	301	400	401	500	340	346	340	350	190	330	270	450	390	75	25	75	22	45	12	42	100	90	248	227
125x100C	125	100	301	400	401	500	390	362	400	350	210	330	270	450	390	75	25	75	22	45	12	42	100	90	330	315
150x100A	150	100	301	400	401	500	340	289	310	250	170	300	240	350	290	75	25	75	22	45	12	42	100	90	224	203
150x125A	150	125	277	362	345	430	340	278	325	250	180	330	270	400	340	75	25	75	22	28	8	25	70	63	238	226
150x125B	150	125	246	331	314	399	340	308	310	290	160	330	240	350	290	75	25	75	22	28	8	25	70	63	196	185
150x125C	150	125	277	400	345	430	340	309	335	290	175	330	270	400	340	75	25	75	22	28	8	25	70	63	249	238
150x125D	150	125	301	400	401	500	390	360	400	350	210	330	270	450	390	75	25	75	22	45	12	42	100	90	331	310
200x125A	200	125	371	460	496	585	500	425	480	450	260	450	390	560	490	90	28	90	28	59	16	55	127	100	640	615
200x150A	200	150	277	445	345	430	390	298	365	310	200	330	270	400	340	75	25	75	22	28	8	25	70	63	265	255
200x150B	200	150	301	445	401	500	440	337	365	315	235	420	360	400	340	75	25	75	22	45	12	42	100	90	336	315
200x150C	200	150	301	400	401	500	440	349	410	350	210	420	360	400	340	75	25	75	22	45	12	42	100	90	376	355
200x150D	200	150	371	460	496	585	540	446	510	450	270	450	390	560	490	90	28	90	28	59	16	55	127	100	595	570
200x150E	200	150	473		585		540	510	473	585	300	450	390	560	490	90	28	90	27	59	16	55	127	100	725	700
250x200A	250	200	346	445	446	545	540	381	450	385	285	500	440	510	450	75	25	75	22	45	12	42	100	90	535	515
250x200B	250	200	371	460	496	585	460	411	480	420	225	420	350	510	440	90	28	90	28	59	16	55	127	100	530	550
250x200C	250	200	371	460	496	585	540	445	550	450	270	450	390	560	490	90	28	90	28	59	16	55	127	100	675	647
250x250A	250	250	346	331	446	545	440	375	490	340	210	420	360	400	340	75	25	75	22	45	12	42	100	90	415	390
250x250B	250	250	346	331	446	545	540	391	430	400	250	500	440	510	450	75	25	75	22	45	12	42	100	90	489	460
300x200A	300	200	385	471	496	585	550	490	564	524	290	500	380	720	560	160	35	130	28	59	16	55	127	100	845	820
300x250A	300	250	371	460	496	585	540	466	550	420	265	500	430	560	490	90	28	90	28	59	16	55	127	100	685	660



Suction Flange

Discharge Flange

The Table for the Installation Dimensions

Model DH	Pump Dimensions									Motor		Basic Dimensions										Total WT(Kg)
	Inlet ød1	Outlet ød2	a	f	j1	j2	h1	v	h2	Output KW	Mating Motor	BA	BM	BL	BP	BW	L	AD	n-ø			
80X65A	80	65	246	314	280	225	240	120	615	4	112M/4P	175	500	850	510	550	1010	200	4-ø19	243		
							265		640	30	200L/2P	125	2*475	1200	510	550	1348	215	6-ø19	451		
100X80A	100	80	246	314	270	230	270	150	648	5	132S/4P	175	600	950	510	550	1003	200	4-ø19	253		
							295		674	45	225M/2P	125	2*525	1300	560	600	1408	215	6-ø24	513		
150X125B	150	125	246	314	310	290	325	180	778	15	160L/4P	125	2*425	1100	560	600	1150	215	6-ø19	412		
100X80B	100	80	246	314	290	275	250	130	674	7.5	132M/4P	175	600	950	510	550	1043	200	4-ø19	270		
							275		699	55	250M/2P	125	2*550	1350	560	600	1493	200	6-ø24	698		
125X100A	125	100	246	314	320	275	270	150	740	15	160L/4P	175	750	1100	510	550	1150	200	4-ø19	357		
							370		839	75	280S/2P	200	2*550	1500	610	650	1563	225	6-ø29	970		
150X100A	150	100	301	401	310	250	315	170	793	11	160M/4P	125	2*450	1150	550	600	1292	215	6-ø24	395		
							390		868	75	280S/2P	200	2*600	1600	610	650	1705	225	6-ø24	1006		
150X125A	150	125	277	345	350	250	305	160	780	11	160M/4P	125	2*425	1100	610	650	1212	230	6-ø24	422		
150X125C	150	125	277	345	335	290	310	165	794	30	200L/4P	125	2*525	1300	610	650	1400	230	6-ø24	603		
200X150A	200	150	277	345	365	310	335	190	838	18.5	180M/4P	125	2*475	1200	610	650	1252	230	6-ø24	554		
250X250A	250	250	346	446	490	340	400	230	985	30	200L/4P	150	2*575	1450	610	650	1570	285	6-ø24	820		
80X50A	80	50	246	314	355	280	250	130	762	15	160L/4P	175	750	1100	560	600	1150	215	4-ø19	370		
100X80C	100	80	246	314	340	350	290	145	790	22	180L/4P	125	2*450	1150	610	650	1227	230	6-ø24	462		
125X100B	125	100	301	401	340	350	295	150	831	30	200L/4P	125	2*550	1350	610	650	1480	230	6-ø24	600		
150X125D	150	125	301	401	400	350	350	180	940	37	225S/4P	150	2*550	1400	610	650	1550	240	6-ø24	734		
200X150C	200	150	301	401	410	350	400	230	1036	55	250M/4P	200	2*575	1550	660	700	1635	285	6-ø24	1064		
125X100C	125	100	301	401	410	350	400	180	1036	45	225M/4P	200	2*575	1450	610	650	1550	285	6-ø24	1552		
200X125A	200	125	371	496	480	450	455	240	1036	90	280M/4P	200	2*575	1450	610	650	1550	285	6-ø28	1922		
250X200B	250	200	371	496	480	420	455	235	1089	75	280S/4P	200	2*675	1750	750	800	1870	285	6-ø28	1430		
300X250A	300	250	371	496	590	420	495	275	1231	132	315M/4P	200	2*775	1950	750	800	2210	325	6-ø28	1953		
200X150D	200	150	371	496	510	450	490	270	1212	132	315M/4P	200	2*775	1950	750	800	2110	305	6-ø28	1860		
250X200C	250	200	371	496	550	450	490	270	1205	200	315L/4P	200	2*800	2000	750	800	2210	325	6-ø28	2250		
300X200A	300	200	385	496	564	524	510	290	1290	315	355L/4P	300	2*860	2320	960	1010	2591	305	6-ø28	2416		