



HORIZONTAL SPLIT CASING PUMP

Model CSA/CNA

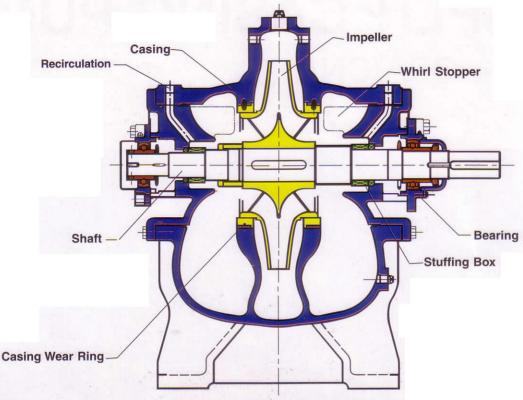
50Hz



HORIZONTAL SPLIT CASING PUMP

FEATURES

- 1. Very Compact design for ease of installation and permits minimum maintenance.
- 2. Axially split casing allows the easy removal of the top casing for inspection and service.
- 3. A wider range of performance with head up to 150m.
- 4. High speed drives and vertical mount available.
- 5. Anti-corrosion materials used on the rotating parts.
- 6. High quality sealed and cartridge type bearing units provide high durability.
- 7. High allowable working pressure can ensure stable running.
- 8. Mechanical seal for easy maintenance.



Casina

The rotating assembly can be removed without disturbing connected piping as the suction and discharge flanges are integrally casted into the lower casing half. Casing is <u>high pressure designed</u> and able to withstand against water surge.

Recirculation

Recirculation pipe lines for self-flushing are provided.

Impeller

The hydraulic matching of casing and impeller minimizes axial thrust and recirculation, ensuring <u>high efficiency</u>, <u>low NPSH required</u> and <u>quiet performance</u> over the entire range of operation. <u>Bronze material is standard</u>.

Whirl Stopper

The cast whirl stopper direct flow into the impeller eye for more even suction distribution. The gradually accelerated inlet flow has low tendency for velocity distortion, ensuring a *quiet operation*.

Shaft

<u>Stainless steel material</u> ensures long life against corrosion and wear. Short support span of bearing lengthen bearing life.

Casing Wear Ring

Replaceable bronze casing wear rings are locked to prevent rotation. It protects the pump casing from wear, permits simple maintenance of proper running clearances to reduce maintenance costs and maintain high operating efficiency.

Bearing

Replenishable grease lubricated deep-groove bearing units with low friction loss has a <u>long life</u> can be easily inspected and replaceable. <u>Auto alignment structure</u> absorbs shaft deflection.

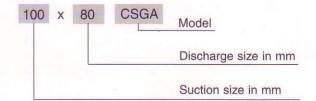
Stuffing Box

John Crane type mechanical seal is standard, easily obtainable in the market and replaceable without disturbing piping. Gland packing is available as option.

APPLICATIONS

- Water supply.
- 2. Hot and cold water circulation.
- 3. Air conditioning.
- 4. Irrigation.
- 5. Industrial use.

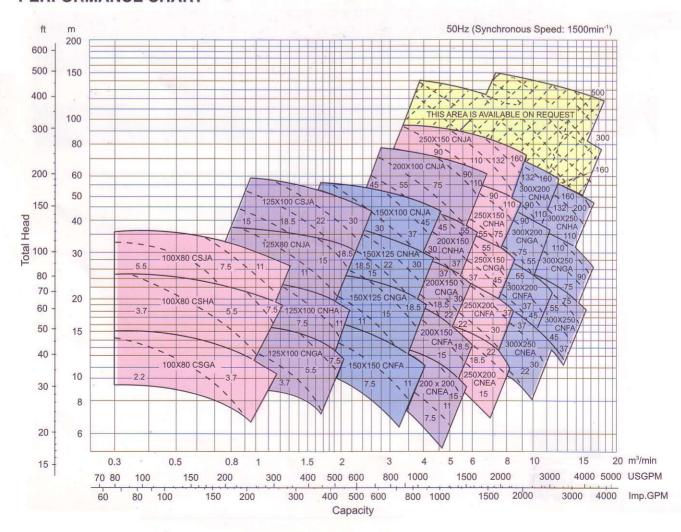
MODEL CODE



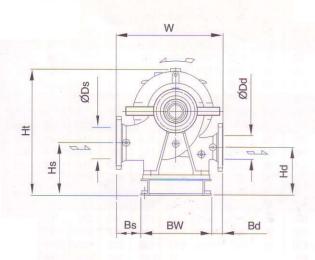
SPECIFICATION

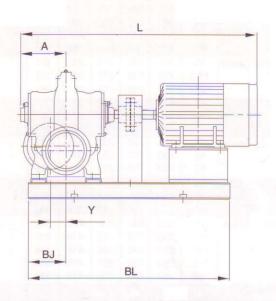
Description		Standard		Option								
Model		CSA, CNA										
	Type of liquid	Clean Water, Industrial	Water, River Water									
Liquid Handled	Temperature	Below 80°C (176°F)		81°C-120°C (177°F-248°F) (only applicable for Mechanical Seal Models)								
Max. Positive	Suction Pressure	10 kgf/cm ²	2 kgf/cm ²	10 kgf/cm ²								
	Shaft seal	Mechanical Seal	Gland Packing	Mechanical Seal								
Construction	Bearing	Ball Bearing										
	Lubrication	Grease										
	Casing	Cast Iron										
Material	Impeller	Bronze										
	Shaft	SUS 316	SUS 403	SUS 304								
	Shaft sleeve		Bronze	Bronze -								
Flange	Suction	JIS 16 KRF										
	Discharge	JIS 16 KRF										
		Accessories										
Standard		Air vent piping, M. Seal or G. Packing, flushing water piping, Lift bolts. Drain piping (only applicable for G. Packing models)										
Optional		Common base, Anchor bolts, Shaft coupling, Coupling guard										

■ PERFORMANCE CHART



DIMENSION





	Motor		Pump								Comm	on Ba		Total				
Model								wt						wt				wt
	kW	Ds	Dd	Α	Hs	Hd	Υ	kg	Bs	Bd	BJ	BL	BW	kg	Ht	W	L	kg
100X80 CSGA	2.2	100	80	221	271	271	70	143	80	50	170	720	380	37	580	510	837	210
	3.7	100	80	221	271	271	70	143	80	50	170	730	380	37	580	510	856	222
100X80 CSHA	3.7	100	80	221	261	251	70	165	90	30	170	730	380	37	596	500	856	244
	5.5	100	80	221	261	251	.70	165	90	30	170	770	380	38	596	500	920	268
	7.5	100	80	221	261	251	70	165	90	30	170	810	380	39	596	500	958	280
100X80 CSJA	5.5	100	80	221	251	231	70	200	90	40	170	770	380	38	613	510	920	303
	7.5	100	80	221	251	231	70	200	90	40	170	810	380	39	613	510	958	315
	11	100	80	221	251	231	70	200	90	40	170	890	380	43	613	510	1078	361
125X100 CSJA	15	125	100	247	291	261	80	280	125	55	235	1080	450	79	754	630	1220	498
	18.5	125 125	100	247	291	261	80	280	125	55	235	1080	450	89	754	630	1242	558
	30	125	100	247	291	261	80	280	125 125	55	235	1120	450	92	754	630	1280	575
10EV100 CNC A	-	125	100	231	261	261	-	209	100	55		1160	450	96 39	754	630	1344	666
125X100 CNGA	5.5	125	100	231	261	261		209		60	170	-	380	THE REAL PROPERTY.	592	540	966	290
									100	60	170	870	380	40	592	540	1030	314
105V100 CNII IA	7.5	125	100	231	261	261		209	100	60	170	900	380	45	592	540	1068	1330
125X100 CNHA	11	125 125	100	231	261	251	- '	242	110	60	170	900	380	45	606	550	1068	363
125X80 CNJA	11	125	80	231	261	251	-	242	110	60	170	990	380	56	606	550	1188	416
125X80 CINJA	15	125	80	231	261	221		250 250	130	50	190	1010	400	60	637	580	1188	428
	18.5	125	80	231	261	221		250	130	50 50	190	1060	400	62 82	637	580 580	1232	451
150X150 CNFA	7.5	150	150	262	291	301	-	253	105	65	210	970	450	69	676	620	1251 1119	398
130X 130 CINFA	11	150	150	262	291	301		253	105	65	210	1050	450	73	676	620	1239	444
150X125 CNGA	CONTRACTOR OF THE PARTY OF THE	150	125	271	281	281		275	105	35	210	1070	450	77	695	590	1239	470
130X123 CNGA	15	150	125	271	281	281		275	105	35	210	1120	450	79	695	590	1317	493
	18.5	150	125	271	281	281		275	105	35	210	1130	450	86	695	590	1336	550
150X125 CNHA	The state of the s	150	125	262	281	261		270	125	55	210	1100	450	85	714	630	1302	544
TOOK ILO OTTI	22	150	125	262	281	261	-	270	125	55	210	1140	450	87	714	630	1340	560
	30	150	125	262	281	261	-	270	100	30	210	1180	500	95	714	630	1404	655
150X100 CNJA	30	150	100	271	316	266		330	155	65	235	1230	450	98	775	670	1438	718
	37	150	100	271	316	266		330	130	40	235	1260	500	106	775	670	1481	756
	45	150	100	271	316	266		330	130	40	235	1290	500	108	775	670	1506	793
200X200 CNEA	7.5	200	200	263	301	301		270	130	75	235	990	450	74	714	655	1120	420
	11	200	200	263	301	301	_	270	130	75	235	1070	450	78	714	655	1240	466
	15	200	200	263	301	301	-	270	130	75	235	1120	450	80	714	655	1284	489
200X150 CNFA	15	200	150	263	301	301		280	130	60	235	1120	450	80	715	640	1284	499
	18.5	200	150	263	301	301		280	130	60	235	1130	450	91	715	640	1303	560
200X150 CNGA	* CONTRACTOR OF THE PERSON NAMED IN COLUMN NAM	200	150	263	291	281	-	310	130	60	235	1130	450	91	736	640	1303	590
	22	200	150	263	291	281	_	310	130	60	235	1160	450	93	736	640	1341	606
	30	200	150	263	291	281	-	310	105	35	235	1210	500	97	736	640	1405	697
	37	200	150	263	291	281	-	310	105	35	235	1240	500	105	736	640	1448	735
200X150 CNHA	30	200	150	282	306	276		355	150	70	235	1230	450	98	774	670	1449	743
	37	200	150	282	306	276		355	125	45	235	1260	500	106	774	670	1492	781
	- 45	200	150	282	306	276		355	125	45	235	1290	500	108	774	670	1517	818
	55	200	150	282	331	301	-	355	95	15	235	1310	560	143	799	670	1554	1018

	Motor Pump								Common Base							Total				
Model								wt						wt				wt		
Model	kW	Ds	Dd	Α	Hs	Hd	Υ	kg	Bs	Bd	BJ	BL	BW	kg	Ht	W	L	kg		
200X100 CNJA	45	200	100	305	361	291		445	170	85	260	1370	500	117	870	755	1595	917		
	55	200	100	305	386	316	-	445	140	55	260	1390	560	155	895	755	1632	1120		
	75	200	100	305	386	316	-	445	140	55	260	1430	560	159	895	755	1670	1184		
	90	200	100	305	386	316		445	100	15	260	1500	640 500	179	895 784	755 710	1766	1324 589		
250X200 CNEA	15	250	200	273	331	331	-	360 360	145 145	65 65	260	1180	500	103	784	710	1319	652		
	18.5	250 250	200	273	331	331		360	145	65	260	1210	500	100	784	710	1376	663		
OFOYOGO ONEA	22	250	200	282	331	331		380	145	65	260	1210	500	107	788	710	1385	690		
250X200 CNFA	30	250	200	282	331	331		380	145	65	260	1260	500	109	788	710	1449	779		
	37	250	200	282	331	331		380	145	65	260	1290	500	114	788	710	1492	814		
250X150 CNGA	37	250	150	282	341	321		415	145	65	260	1290	500	114	837	710	1492	849		
230X130 0NGA	45	250	150	282	341	321	-	415	145	65	260	1310	500	115	837	710	1517	885		
	55	250	150	282	366	346	W	415	115	35	260	1330	560	153	862	710	1554	1088		
250X150 CNHA	55	250	150	315	366	326		500	150	45	260	1390	560	155	885	755	1642	1175		
	75	250	150	315	366	326	-	500	150	45	260	1430	560	159	885	755	1680	1239		
	90	250	150	315	366	326		500	110	5	260	1500	640	179	885	755	1776	1379		
250X150 CNJA	75	250	150	350	416	336	-	605	180	65	295	1520	580	172	982	825	1765	1357		
	90	250	150	350	416	336	-	605	150	35	295	1580	640	184	982	825	1861	1489		
	110	250	150	350	416	336	7	605	150	35	295	1640	640	188	982	825	1912	1593		
	132	250	150	350	416	336	-	605	150	35	295	1650	640	215	982	825	1960	1850		
	160	250	150	350	416	336	-	605	150	35	295	1700	640	220	982	825	2011	2045		
300X250 CNEA	22	300	250	302	381	381	-	435	145	55	295	1270	600	141	890	800	1425	779		
	30	300	250	302	381	381		435	145	55	295 295	1310	600	149	890	800	1489 1532	869		
	37	300	250	302	381	381	+	435	145	55	295	1370	600	160	896	800	1580	970		
300X200 CNFA	37	300	200	315	381	381		490	145	55	295	1400	600	162	896	800	1605	1007		
	45 55	300	200	315	381	381		490	145	55	295	1420	600	167	896	800	1642	1177		
300X200 CNGA	The second second	300	TO BE SOURCE OF	315	386	366		520	125	35	295	1440	640	167	936	800	1662	1207		
300AZ00 CNGA	55 75	300	200	315	386	366		520	125	35	295	1480	640	171	936	800	1770	1271		
	90	300	200	315	386	366		520	125	35	295	1550	640	183	936	800	1796	1403		
300X200 CNHA	-	300	200	350	386	346	-	625	145	45	295	1580	640	184	968	830	1861	1509		
OUUNEOU CIVIIA	110	300	200	350	386	346	2 1	625	145	45	295	1640	640	188	968	830	1912	1613		
	132	300	200	350	386	346	-	625	145	45	295	1650	640	215	968	830	1960	1870		
	160	300	200	350	386	346	-	625	145	45	295	1700	640	220	968	830	2011	2065		
300X250 CNFA	37	300	250	335	386	376	-	570	195	105	295	1400	600	160	942	900	1620	1050		
	45	300	250	335	386	376		570	195	105	295	1410	600	162	942	900	1645	1087		
	55	300	250	335	386	376		570	175	85	295	1440	640	167	942	900	1682	1257		
	75	300	250	335	386	376	-	570	175	85	295	1480	640	171	942	900	1720	1321		
300X250 CNGA		300	250	360	386	376	-	620	205	115	295	1520	580	172	949	900	1775	1372		
me Hang	90	300	250	360	386	376	-	620	175	85	295	1580	640	184	949	900	1871	1504		
	110	300	250	360	386	376	-	620	175	85	295	1640	640	188	949	900	1922	1608		
300X250 CNHA		300	250	360	386	366	1.00	815	175	85	295	1640	640	189	998	900	1922	1804		
	132	300	250	360	386	366		815	175	85	295	1650	640	216	998	900	1970	2061		
	160	300	250	360	386	366		815	175	85	295	1700	640	221	998	900	2021	2256		

Note: (1) All dimensions indicated are for reference only. Please request approval drawing for detail.

(2) 2-pole drive and 60 Hz application are available upon request. Please check with our local representative office.

