



CN 8001-5N-A

EBARA HORIZONTAL SPLIT CASE PUMP

MODEL CSA/CNA

50 Hz



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 150 m.
- 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 unit provide high durability.
- 7. High allowable working pressure can ensure stable running.
- 8. Mechanical seal for easy maintenance.

Casing

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 *high pressure designed* and able to withstand against water surge.

Recirculation

Recirculation pipe line for self-flushing are provided.

Impeller

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

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

316 stainless steel materials is standard, ensure 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 cost and maintain high operating efficiency.

Bearing

Replenish able grease lubricated deep-groove bearing units with low friction loss has a *long life* can easily inspected and replaceable. *Auto alignment structure* absorbs shaft deflection.

Stuffing Box

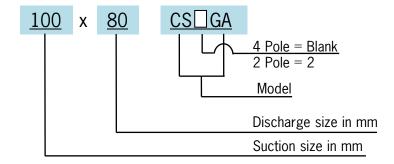
John Crane type mechanical seal is standard, easily obtainable in the market and replaceable without disturbing piping.

Gland packing is available as option.

APPLICATIONS

MODEL CODE

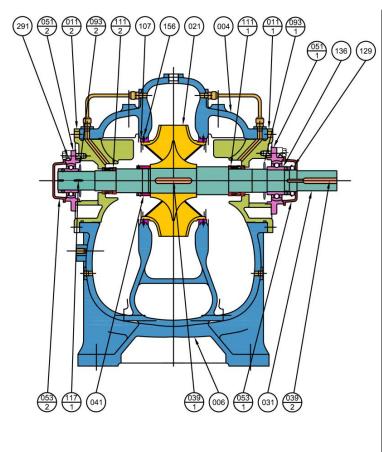
- 1. Water supply.
- 2. Hot and cold water circulation.
- 3. For cooling tower.
- 4. Irrigation.
- 5. Industrial use.
- 6. Drainage
- 7. Sprinkling.
- 8. Air-conditioning.



SPECIFICATION

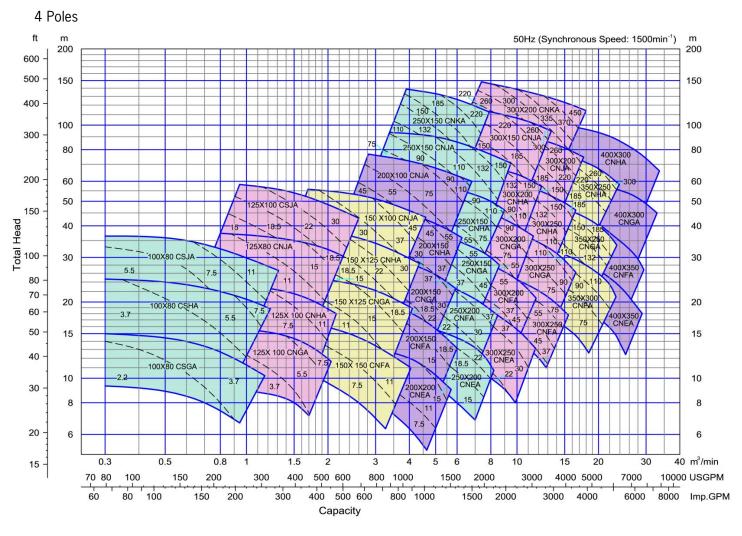
Deci	ryptions	Standard Option								
Model		CSA/CNA								
	Type of Liquid	Fresh Water, Industrial Water, River Water								
Liquid Handle	Temperature	Below 80°C (176°F)	Below 80°C (176°F) 81°C - 120°C (177°F 248°F) (only applicable for Mechanical Seal Models)							
Max. Working Press	sure	16 Bar	10 bar, 20 bar, 30 ba	r						
	Shaft Seal	Mechanical Seal	Gland Packing	Mechanical Seal with Sleeve						
Construction	Bearing	Ball Bearing								
	Lubrication	Grease								
	Casing	Cast Iron	Ductile Cast Iron (FCD)							
Material	Impeller	- Bronze - SCS 13 For Model: 250x150 CNKA, 300x150 CNJA & 300x200 CNKA	SCS 13, SCS 14							
	Shaft	SUS 316	SUS 403, SUS 304							
	Shaft Sleeve	-	Bronze, SUS 304, SUS 316							
	Mechanical Seal	Ceramic - Carbon	SIC - SIC, SIC - Carbon							
Flange	Suction	JIS 16 KRF	JIS 16 KRF JIS 10K, JIS 30K, ANSI 150, ANSI 250, D							
rialige	Discharge	JIS 16 KRF	JIS 10K, JIS 30K, ANSI 150, ANSI 250, DIN PN-16							
		Accessories								
Standard		Common Base, Shaft Coupling, Coupling	Common Base, Shaft Coupling, Coupling Guard, Air Vent Piping, Flushing Pipe.							
Option		Anchor Bolt, Pressure Gauge, RTD Senso	Anchor Bolt, Pressure Gauge, RTD Sensor, Tools for Pump Disassembly, Drain Bucket.							

SECTIONAL VIEW

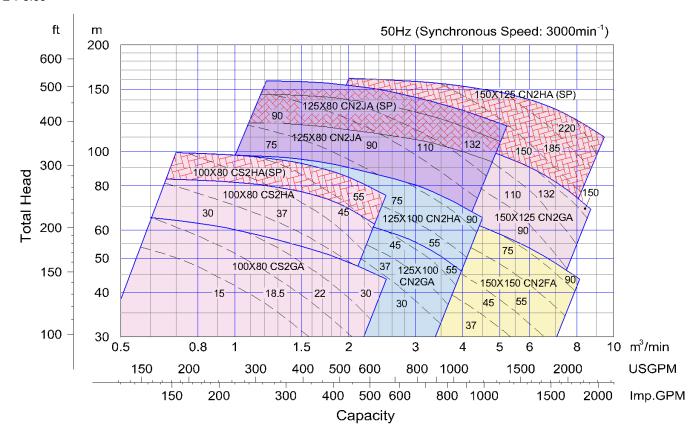


No	Part Name	Material	Qty						
004	Casing Upper Half								
006	Casing Lower Half	FC250							
011-1	Side Cover (CP Side)	10230							
011-2	Side Cover (CCP Side)	e Cover (CCP Side)							
021	Impeller	BC6							
031	Shaft	316 Stainless Steel							
039-1	Impeller Key								
039-2	Coupling Key	S50C	1						
041	Impeller Nut	BC6							
051-1	Bearing Unit (CP Side)								
051-2	Bearing Unit (CCP Side)	FC200							
053-1	Bearing Cover (CP Side)	FG200							
053-2	Bearing Cover (CCP Side)								
093-1	Deflector (CP Side)	Rubber							
093-2	Deflector (CCP Side)	Rubber							
107	Casing Wear Ring	BC6	2						
111-1	Mechanical Seal (CP Side)	-							
111-2	Mechanical Seal (CCP Side)	-							
117-1	Gasket (Casing)	V#6500	1						
129	Bearing Nut	SS400							
136	Bearing Washer								
156	Lock Pin	304 Stainless Steel	2						
291	Grease Nipple	C3604BD-F							

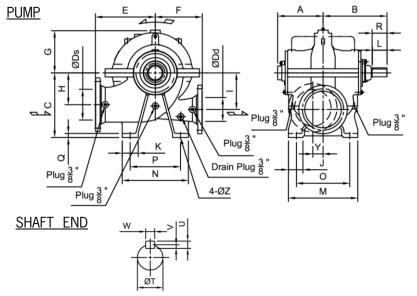
PERFORMANCE CHART

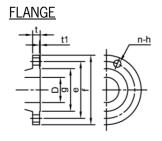






DIMENSION - Bare Shaft Pump C-Type Mechanical Seal Type





Flange Dimension (JIS 16K)

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
80	200	160	135	2	24	8	23
100	225	185	160	2	26	8	23
125	270	225	195	2	26	8	25
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27
350	540	480	440	3	38	16	33
400	605	540	495	3	42	16	33

Mode	400 000 040 450 0 42 10 55																														
Mathematical Residue	Model	Si	ze	Pump									Shaft W					Weight													
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Modera	100x80 CSGA						270	240	169	140	140											60					143				
10000000000000000000000000000000000000	100x80 CSHA	100	80	221	250	295	200	220	185	150	160	60	70	300	290	250	230	20	70	10	56	00	28	0	5	10	165				
125 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100x80 CSJA						200	230	202	160	180									19		63		0	5		200				
1-25 100	125x100 CSJA	125	100	247	325	375	350	280	263	200	230	90	100	430	400	350	300	25	80		80	82	38			12	280				
125110011111111111111111111111111111111	125x100 CNGA	125	100				290		181		150	60	70	300	200	250	330										209				
1501150 CNTA 150125 CNTA 15012	125x100 CNHA	123	100	231	350	295	300	250	195	150	160	00	70	300	230	230	230	20	-	19	80	82	38	8	5	10	242				
1501-125 CNI-AN 1501 150	125x80 CNJA	125	80				330		226		190	70	80	340	320	280	250										250				
150125 CNIAL 150125	150x150 CNFA		150	262	370		330	290	205	180	170										80	82	38	8	5	10	253				
150K125 CNHAN 150K106 CNHAN 15	150x125 CNGA			271	395	355	330	260	224		190	80	an	380	360	310	270				90	102	48	9	5.5	14	275				
150x13C ONNA	150x125 CNHA	150	125	262	370	333	350	280	2/13	100	210	00	90	300	300	310	270	25	-	19	80	82	38	8	5	10	270				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	150x125 CNHA*			275*	395*		330	200	243	190	210										95*	104*	48*	9*	5.5*	14*	-				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	150x100 CNJA		100	271	395	390	380	290	269		240	90	100	430	400	350	300				90	102	48	9	5.5	14	330				
2001150 CNICA 2001 1	200x200 CNEA		200					300	223	100	100																270				
200100 CNHA 200100 CNHA 200100 CNHA 305 80 398 390 380 380 399 370 380 399 370 380 399 370 380 399 370 380 399 380 380 399 370 380 399 380 380 399 380 380 399 380 380 399 380 380 399 380 380 380 399 380 380 399 380 380 380 399 380 380 380 380 380 380 380 380 380 380	200x150 CNFA			263	370	375	355	205	224	190	190	00	100	120	400	250	200			10	80	82	38	8	5	10	280				
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250x200 CNFA 250x200 CNFA 250x150 CNGA 380 30 40 40 40 40 40 40 4	200x150 CNHA			282	395	390	375	295	268	200	230										90	92	48	9	5.5	14	355				
250x200 CNFA 250x150 CNFA 250x	200x100 CNJA		100	305	450	445	420	335	309		270	100	110	480	450	390	340			24	100	112	55	10	6	16	445				
250x150 CNIA 250x150 CNIA 250x150 CNIA 250x150 CNIA 250x150 CNIA 350 500 495 470 355 346 299 220 300x250 CNIA 3	250x200 CNEA		200	273		425			243	210	210										80	97	38	8	5	10	360				
250x150 CNIAA 250x150 CNIAA 250x150 CNIAA 250x150 CNIAA 350 500 495 470 355 340 407 290 345 300x250 CNEA 300x	250x200 CNFA		200	202	395	425	395	315	247	210	210		110	100	450	200	240	10 25		Ī	00	S	10	5	55	1.4	380				
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250x150 CNIAA 250x150 CNIAA 250x150 CNIAA 250x150 CNIAA 300x250 CNIBA 300x200 CNIBA 300x200 CNIBA 300x200 CNIBA 300x200 CNIBA 300x200 CNIBA 300x200 CNIBA 300x20	250x150 CNHA	230	150	315	450	443	430	325	25 299 220	220	260								-	24	100	102	55	10	6	16	500				
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300x200 CNGA 300x200 CNGA 300x200 CNGA 300x200 CNGA 300x20 CNGA 30	250x150 CNKA			382	530	500	505	430	407	290	345	110	120	550	320	450	400	5			125	141	75	12	8	20	835				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	300x250 CNEA		250	302	415	175	115	355	274	235	235										90	92	48	9	5.5	14	435				
300x200 CNGA 300x200 CNGA 300x200 CNGA 300x250 CNGA 300x2	300x200 CNFA			315	450	473	1	333	280	25	233										100	102	55	10	6	16	490				
300x200 CNIA 300x150 CNJA 300x250 CNFA 350x300 CNFA 350x3	300x200 CNGA		200	315	470	105	445	355	300		270										100	122	5	10	0	10	520				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x200 CNHA			350	500	493	465	365	332		290										110	124	65	11	7	18	625				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x150 CNJA	300	150	382	530	500	520		384	250	335	110	120	550	520	450	400	30	-	24	125	141	75	12	8	20	785				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x250 CNFA	300		335	470	495		405	306		260										100	102	55	10	6	16	570				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x250 CNGA]	250	360	500	733	495	400	313		200										110	114	65	11	7	1Ω	620				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x250 CNHA			300	500	520			337	275	295										110	114	00	11	/	10	615				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	300x200 CNJA		200	382	530	500	525	415	379	2/3	320										125	141	75	12	7.5	20	860				
350x250 CNGA 350 250 386 530 600 560 447 350 315 330 315	300x200 CNKA		200	415	585	560	570	475	436	290	380	140	150	620	700	500	550	35	-	26	140	156	85	14	9	22	1070				
350x250 CNGA 350 250 414 560 560 447 350 303 135 150 500	350x300 CNFA			300	386	530			450	345	310	310	130									110	125	65	11	7	12	800			
	350x250 CNGA	350	250			330	550	600	600	600	560	447	350	310	303	135	150	620	700	500	550	38	-	26	110	123	05	11	,	10	790
400x300 CNHA 400 300 456 630 660 620 530 432 350 400 160 400x350 CNEA 400 350 451 600 630 620 470 355 325 335 140 720 720 550 35 -	350x250 CNHA		230	414	560			440	373	315	330	133									125	140	75	12	7.5	20	845				
400x300 CNHA	400x300 CNGA	400	300	451	627	630	625	510	390	315	380	150		700			550	38	-		140	158	25	10	6	22					
400x350 CNEA 400 350 451 600 630 620 470 355 325 335 140 720 590 35 - 110 124 65 11 7 18 1030	400x300 CNHA	400	300	456	630	660	620	530	432	350	400		150		700	550			-	26	1+0	162	0.5	10	J	22					
400x350 CNFA 700 439 585 625 510 385 305 344 150 700 550 38 125 140 75 12 7.5 20 1035	400x350 CNEA	400	350	451	600	630	620	470	355	325	335	140	150	720	700	330	590	35	_	20	110	124	65	11	7	18	1030				
* use for Dimension 2 Pole	400x350 CNFA	400	330	439	585	030	625	510	385	305	344	150		700			550	38			125	_									

Unit: mm, unless otherwise stated



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