



**EBARA**

Certified System  
Quality  
ISO 9001

SAI GLOBAL  
Lic. No. QEC22090

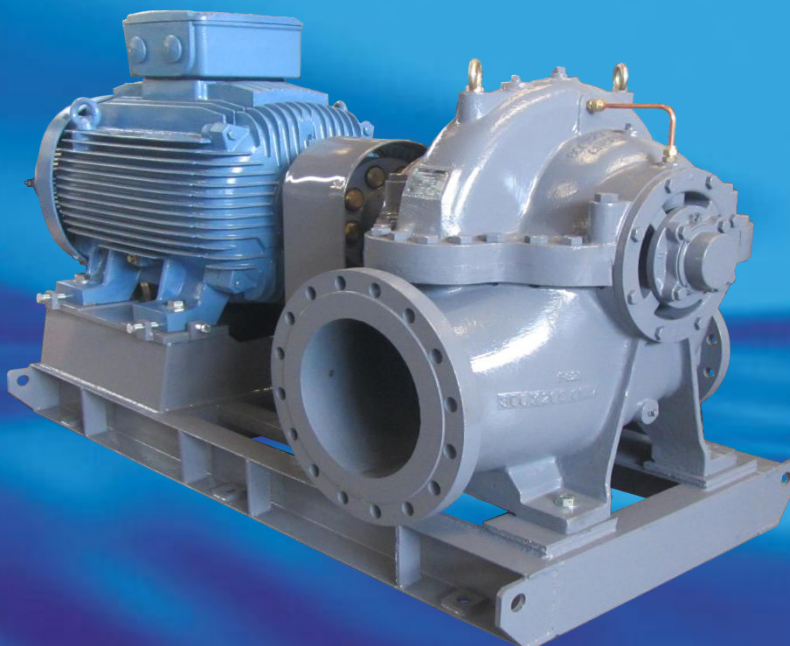
CN 8001-5N-A

# 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.

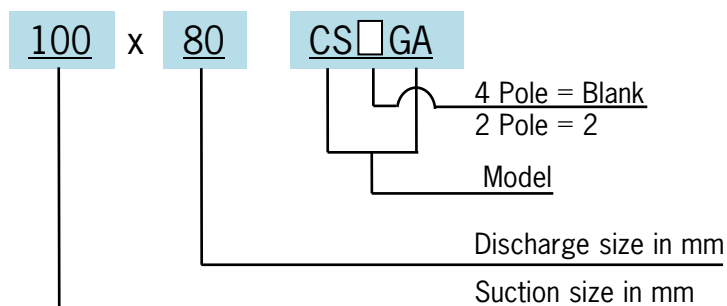
### Bearing

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.

## APPLICATIONS

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.

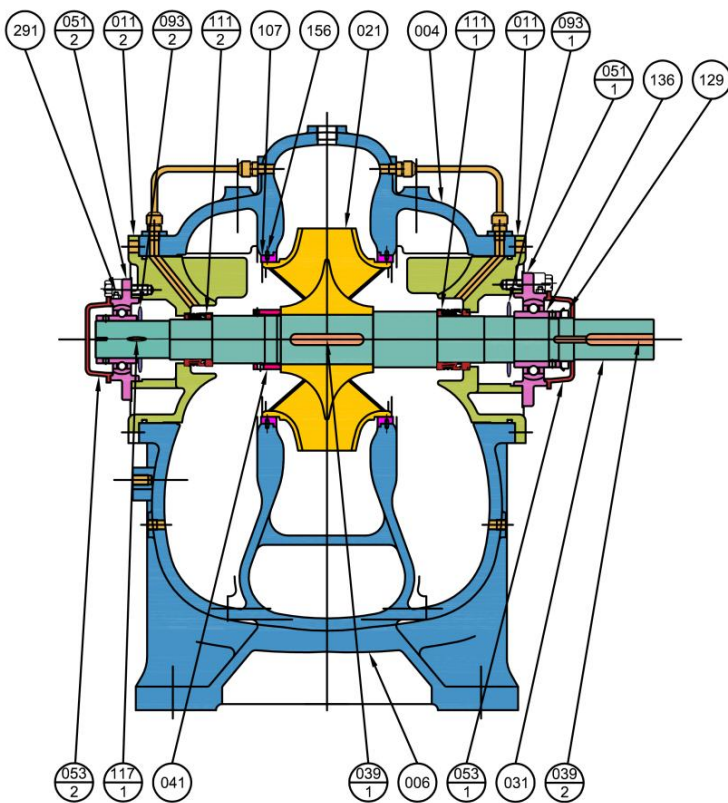
## MODEL CODE



# SPECIFICATION

Decryptions		Standard	Option
Model		CSA/CNA	
Liquid Handle	Type of Liquid	Fresh Water, Industrial Water, River Water	
	Temperature	Below 80°C (176°F)	81°C - 120°C (177°F - 248°F) (only applicable for Mechanical Seal Models)
Max. Working Pressure		16 Bar	10 bar, 20 bar, 30 bar
Construction	Shaft Seal	Mechanical Seal	Gland Packing
	Bearing	Ball Bearing	
	Lubrication	Grease	
Material	Casing	Cast Iron	Ductile Cast Iron (FCD)
	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 10K, JIS 30K, ANSI 150, ANSI 250, DIN PN-16
	Discharge	JIS 16 KRF	JIS 10K, JIS 30K, ANSI 150, ANSI 250, DIN PN-16
<b>Accessories</b>			
Standard		Common Base, Shaft Coupling, Coupling Guard, Air Vent Piping, Flushing Pipe.	
Option		Anchor Bolt, Pressure Gauge, RTD Sensor, Tools for Pump Disassembly, Drain Bucket.	

# SECTIONAL VIEW

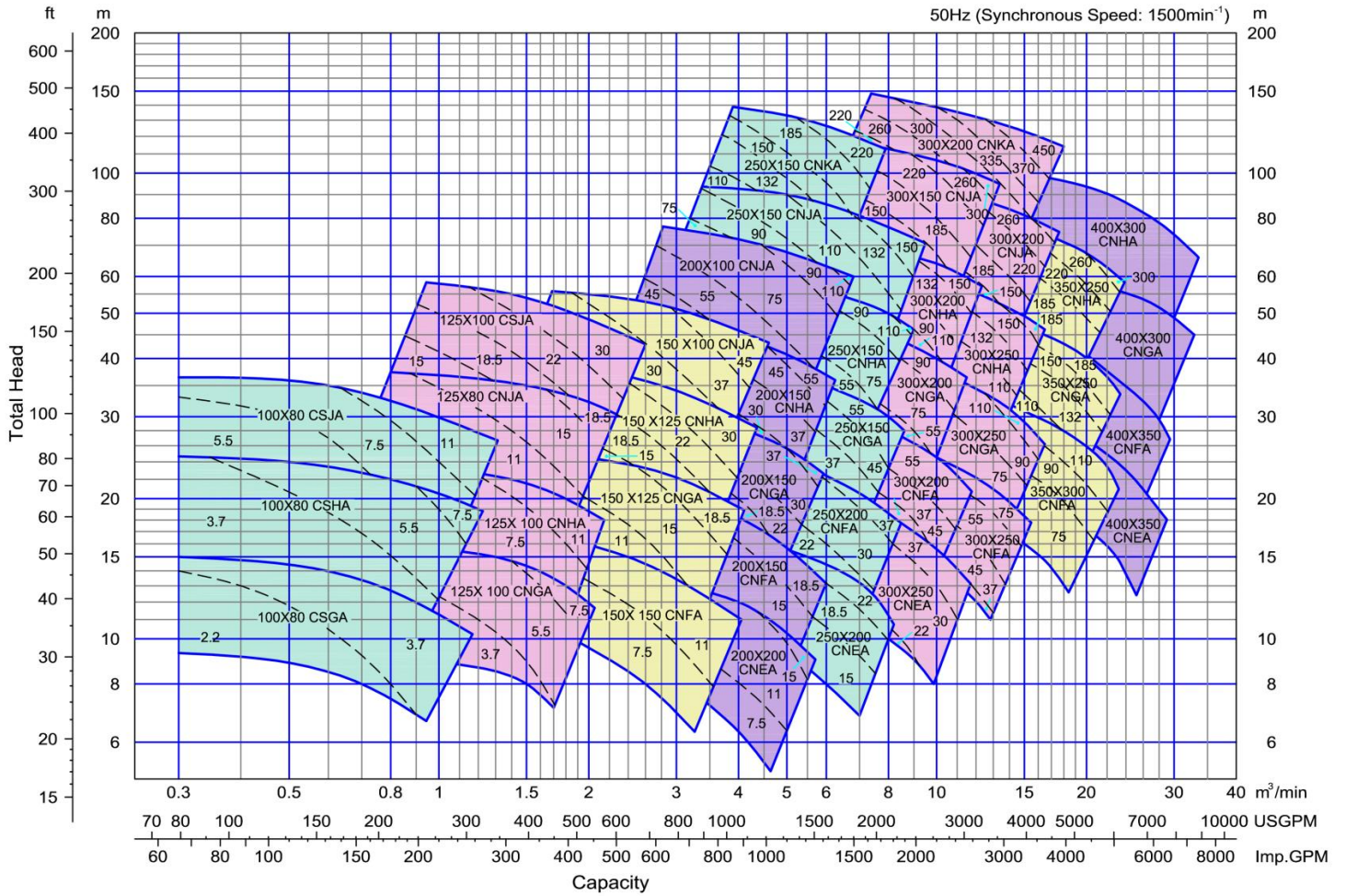


No	Part Name	Material	Qty
004	Casing Upper Half	FC250	1
006	Casing Lower Half		
011-1	Side Cover (CP Side)		
011-2	Side Cover (CCP Side)		
021	Impeller	BC6	1
031	Shaft	316 Stainless Steel	
039-1	Impeller Key		
039-2	Coupling Key	S50C	
041	Impeller Nut	BC6	1
051-1	Bearing Unit (CP Side)	FC200	
051-2	Bearing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

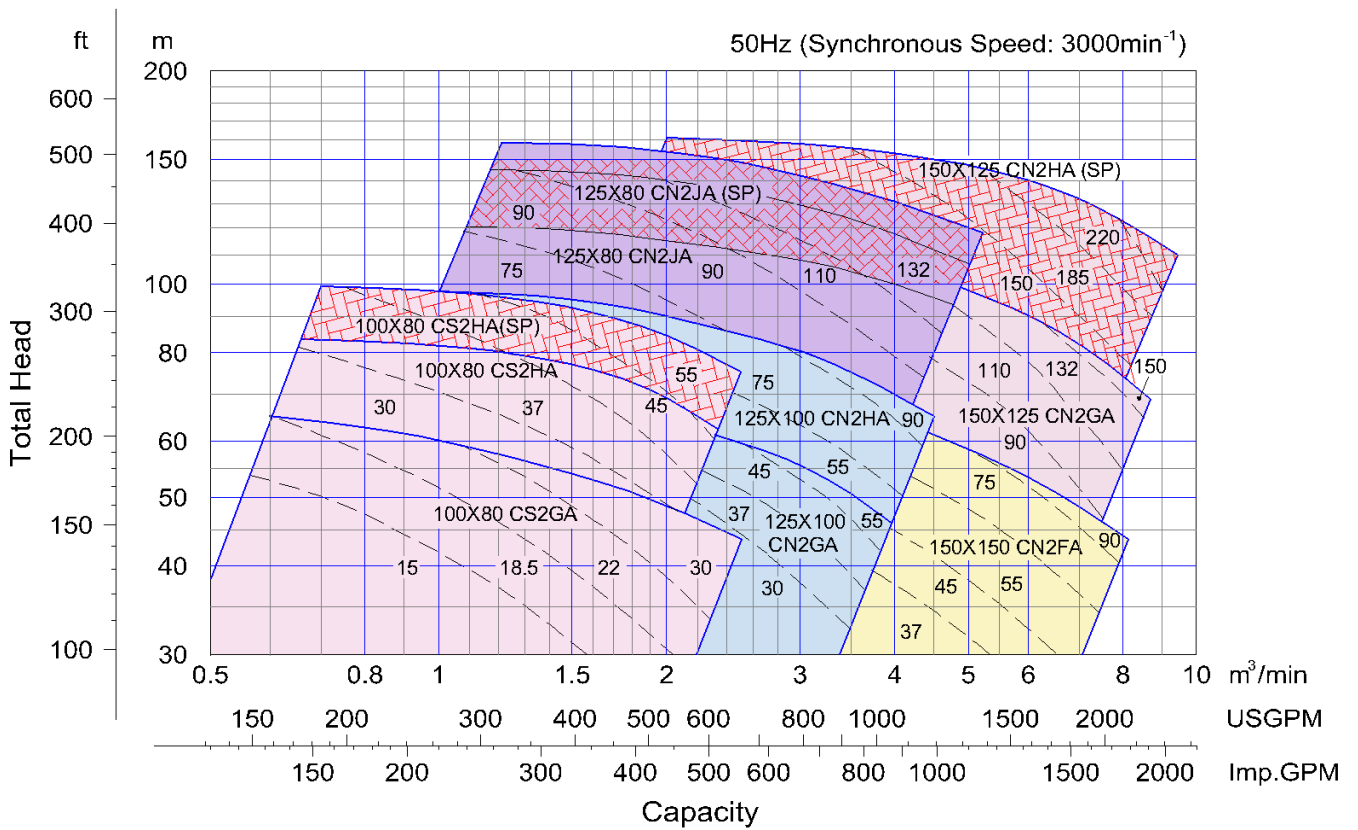


# PERFORMANCE CHART

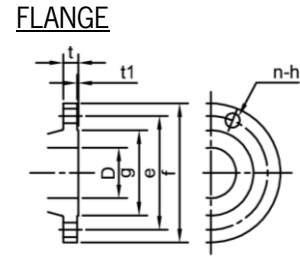
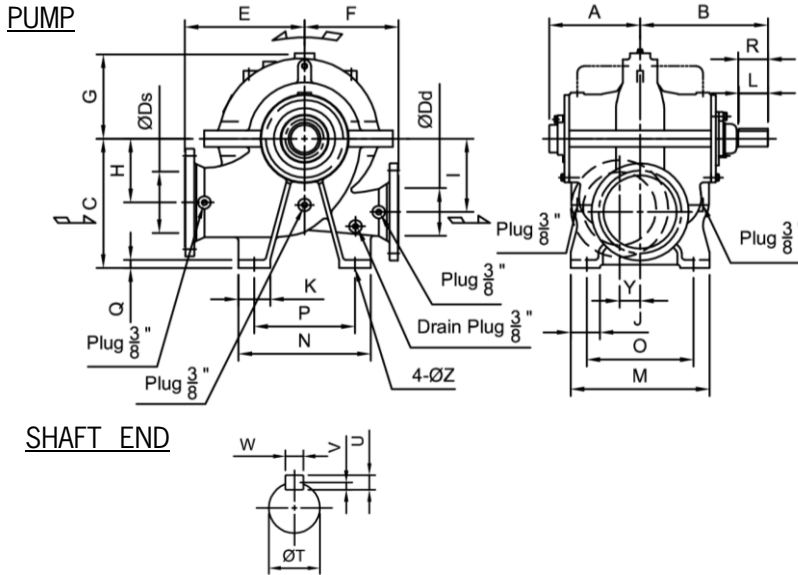
## 4 Poles



## 2 Poles



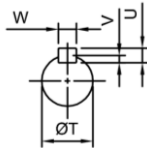
# DIMENSION - Bare Shaft Pump C-Type Mechanical Seal Type



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

SHAFT END



Model	Size		Pump																	Shaft						Weight kg		
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W			
100x80 CSGA						270	240	169	140	140																	143	
100x80 CSHA	100	80	221	250	295	280	220	185	150	160	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	165		
100x80 CSJA							230	202	160	180											63					200		
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		
125x100 CNGA	125	100				290		181		150																209		
125x100 CNHA			231	350	295	300	250	195	150	160	60	70	300	290	250	230	20	-	19	80	82	38	8	5	10	242		
125x80 CNJA	125	80				330		226		190	70	80	340	320	280	250										250		
150x150 CNFA		150	262	370		330	290	205	180	170											80	82	38	8	5	10	253	
150x125 CNGA			271	395	355		260	224		190										90	102	48	9	5.5	14	275		
150x125 CNHA	150	125	262	370		350	280	243	190	210	80	90	380	360	310	270	25	-	19	80	82	38	8	5	10	270		
150x125 CNHA*			275*	395*																95*	104*	48*	9*	5.5*	14*	-		
150x100 CNJA		100	271	395	390	380	290	269		240	90	100	430	400	350	300				90	102	48	9	5.5	14	330		
200x200 CNEA		200				300	223		190	190																270		
200x150 CNFA			263	370	375	355	285	224		210											80	82	38	8	5	10	280	
200x150 CNGA	200	150					245			230	90	100	430	400	350	300	25	-	19							310		
200x150 CNHA			282	395	390	375	295	268	200	230											90	92	48	9	5.5	14	355	
200x100 CNJA		100	305	450	445	420	335	309		270	100	110	480	450	390	340				24	100	112	55	10	6	16	445	
250x200 CNEA		200	273				243		210	210											80	97	38	8	5	10	360	
250x200 CNFA			395	425	395	315	247		210												90	92	48	9	5.5	14	380	
250x150 CNGA	250		282				276		240		100	110	480	450	390	340	25	-	24							415		
250x150 CNHA		150	315	450	445	430	325	299	220	260											100	102	55	10	6	16	500	
250x150 CNJA			350	500	495	470	355	346		300	110	120	550	520	450	400	30				110	124	65	11	7	18	605	
250x150 CNKA			382	530	500	505	430	407	290	345											125	141	75	12	8	20	835	
300x250 CNEA		250	302	415		475	445	355	274	235											90	92	48	9	5.5	14	435	
300x200 CNFA			315	450					280												100	102		55	10	6	16	490
300x200 CNGA		200	315	470	495	445	355	300		270											100	122					520	
300x200 CNHA			350	500		465	365	332		290											110	124	65	11	7	18	625	
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	
300x250 CNFA			335	470				306		260											100	102	55	10	6	16	570	
300x250 CNGA		250			495	405		313		295											110	114	65	11	7	18	620	
300x250 CNHA			360	500		520		337		295											110	114	65	11	7	18	615	
300x200 CNJA		200	382	530	500	525	415	379	275	320											125	141	75	12	7.5	20	860	
300x200 CNKA			415	585	560	570	475	436	290	380	140	150	620	700	500	550	35	-	26		140	156	85	14	9	22	1070	
350x300 CNFA	350	300	386	530	600	560	450	345	310	130											110	125	65	11	7	18	800	
350x250 CNGA		250					447	350	310	303	135	150	620	700	500	550	38	-	26		125	140	75	12	7.5	20	790	
350x250 CNHA			414	560			440	373	315	330											125	140	75	12	7.5	20	845	
400x300 CNGA	400	300	451	627	630	625	510	390	315	380	150		700				550	38	-		140	158	85	10	6	22		
400x300 CNHA			456	630	660	620	530	432	350	400	160										140	162						
400x350 CNEA	400	350	451	600	630	620	470	355	325	335	140	150	720	700	550		590	35	-		110	124	65	11	7	18	1030	
400x350 CNFA			439	585		625	510	385	305	344	150		700				550	38	-		125	140	75	12	7.5	20	1035	

\* use for Dimension 2 Pole

Unit : mm, unless otherwise stated



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