EBARA

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.

Stuffing Box

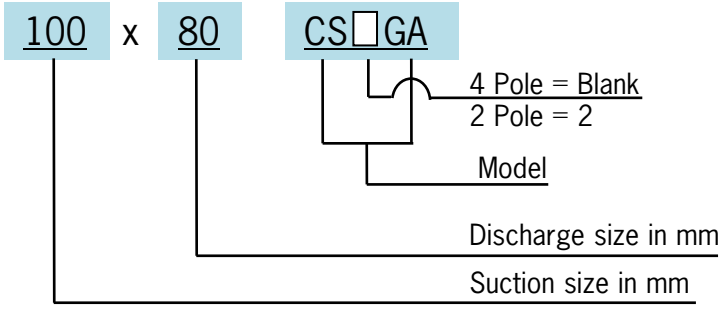
John Crane type mechanical seal is standard, easily obtainable in the market and replaceable without disturbing piping.

Gland packing is available as option.

APPLICATIONS

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.

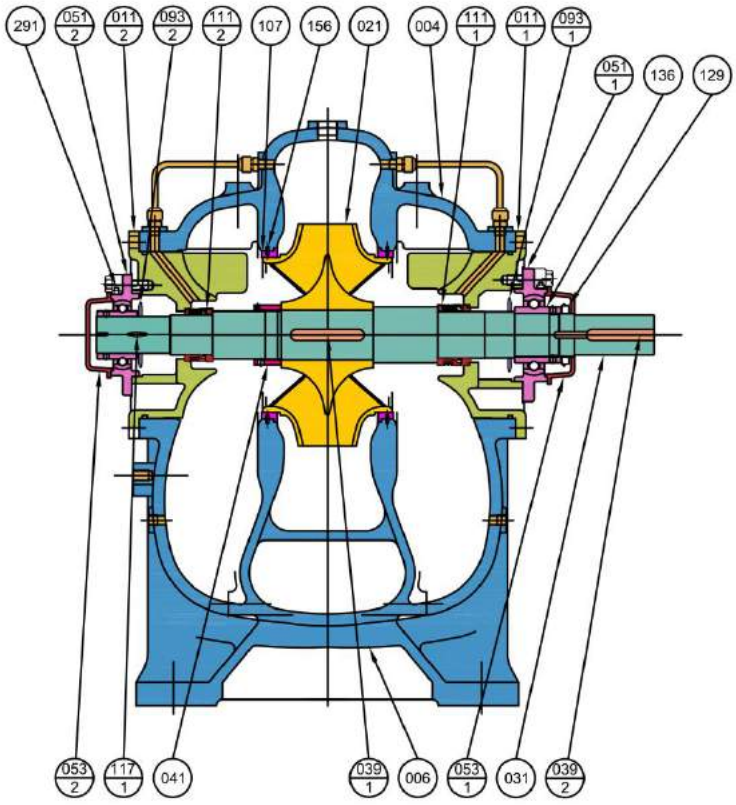
MODEL CODE



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	Mechanical Seal with Sleeve
	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	
Accessories				
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.		

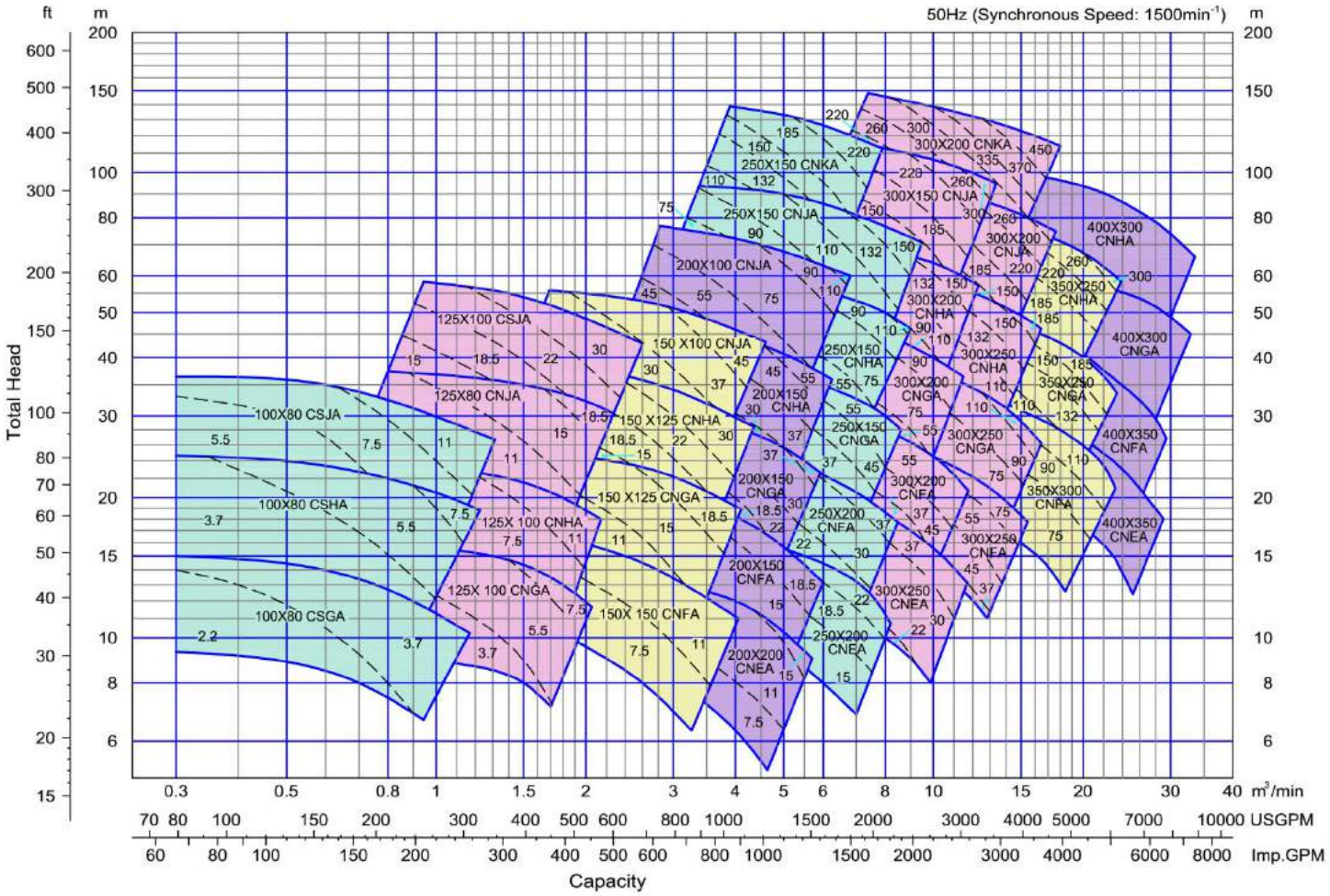
SECTIONAL VIEW



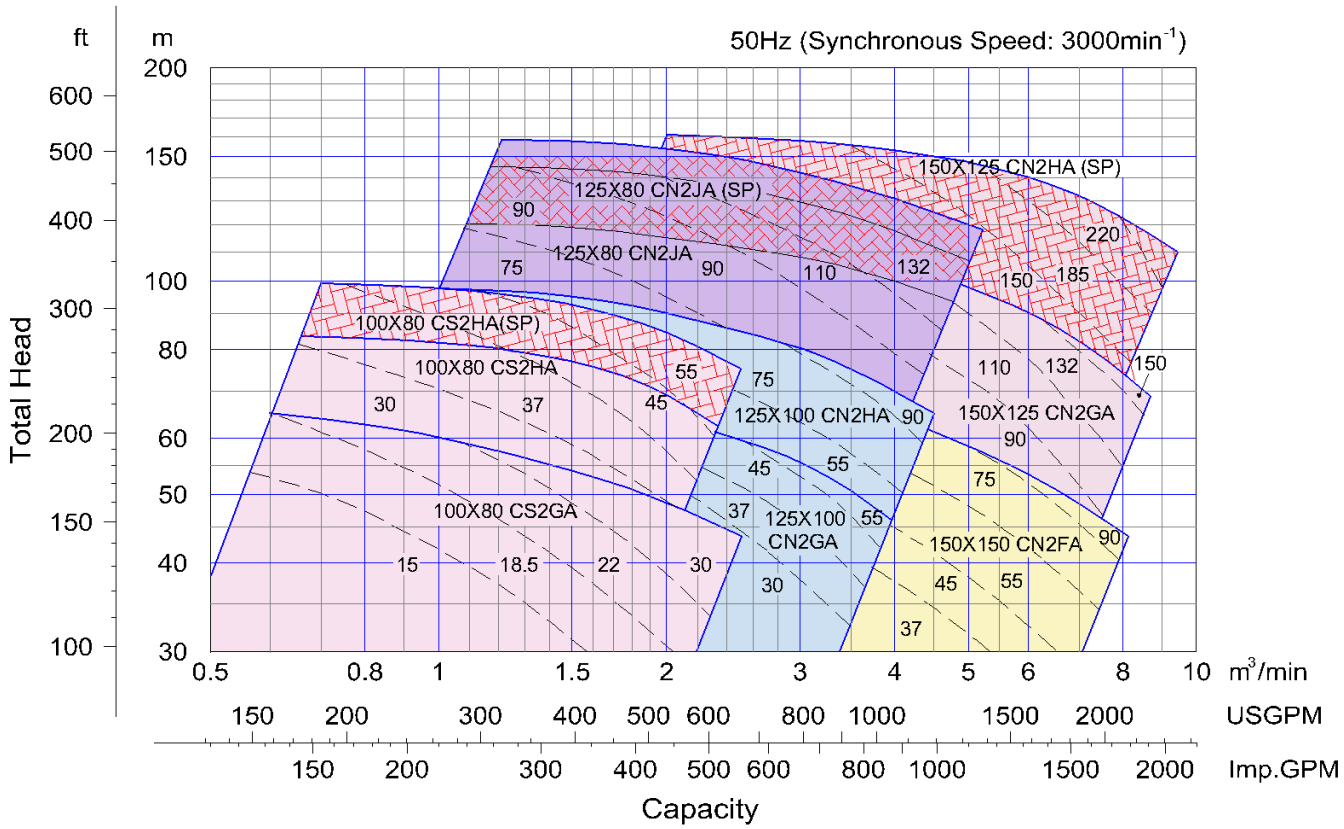
No	Part Name	Material	Qty
004	Casing Upper Half	FC250	1
006	Casing Lower Half		
011-1	Side Cover (CP Side)		
011-2	Side Cover (CCP Side)		
021	Impeller	BC6	
031	Shaft	316 Stainless Steel	
039-1	Impeller Key		
039-2	Coupling Key	S50C	
041	Impeller Nut	BC6	
051-1	Bearing Unit (CP Side)	FC200	
051-2	Bearing Unit (CCP Side)		
053-1	Bearing Cover (CP Side)		
053-2	Bearing Cover (CCP Side)		
093-1	Deflector (CP Side)	Rubber	
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		
156	Lock Pin	304 Stainless Steel	2
291	Grease Nipple	C3604BD-F	

PERFORMANCE CHART

4 Poles

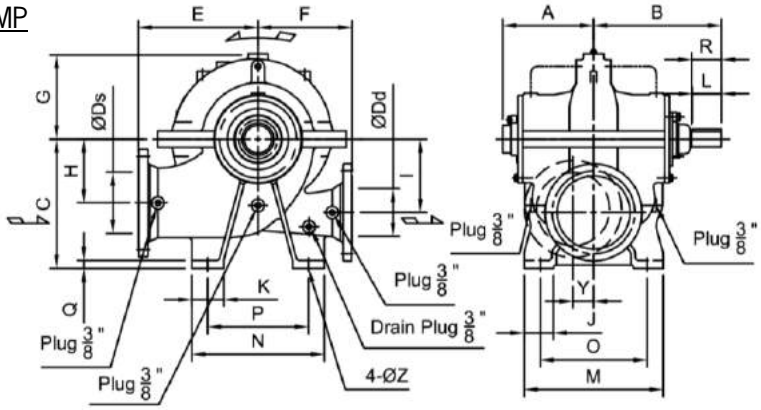


2 Poles

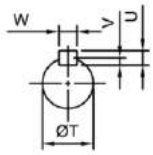


DIMENSION - Bare Shaft Pump C-Type Mechanical Seal Type

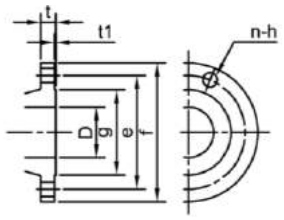
PUMP



SHAFT END



FLANGE



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

Model	Size		Pump																	Shaft						Weight
	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	kg
100x80 CSGA	100	80	221	250	295	270	240	169	140	140	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	143
100x80 CSHA						280	220	185	150	160																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	231	350	295	290	250	181	150	150	60	70	300	290	250	230	20	-	19	80	82	38	8	5	10	209
125x100 CNHA						300		195		160																242
125x80 CNJA	125	80				330		226		190	70	80	340	320	280	250										250
150x150 CNFA	150	150	262	370	355	330	290	205	180	170	80	90	380	360	310	270	25	-	19	80	82	38	8	5	10	253
150x125 CNGA		125	271	395			260	224	190	190										90	102	48	9	5.5	14	275
150x125 CNHA			262	370		350	280	243		210										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	200	263	370	375	355	300	223	190	190	90	100	430	400	350	300	25	-	19	80	82	38	8	5	10	270
200x150 CNFA		150					285	224																		280
200x150 CNGA								245		210																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	250	200	273	395	425	395	315	243	210	210	100	110	480	450	390	340	25	-	24	80	97	38	8	5	10	360
250x200 CNFA			282					247												90	92	48	9	5.5	14	380
250x150 CNGA		150			445			276	220	240																415
250x150 CNHA			315	450		430	325	299		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	300	250	302	415	475	445	355	274	235	235	110	120	550	520	450	400	30	-	24	90	92	48	9	5.5	14	435
300x200 CNFA		200	315	450				280												100	102	55	10	6	16	490
300x200 CNGA			315	470	495	445	355	300	250	270											122					520
300x200 CNHA			350	500		465	365	332		290										110	124	65	11	7	18	625
300x150 CNJA		150	382	530	500	520	405	384		335										125	141	75	12	8	20	785
300x250 CNFA		250	335	470	495	495		306		260										100	102	55	10	6	16	570
300x250 CNGA			360	500				313												110	114	65	11	7	18	620
300x250 CNHA					520			337	275	295																615
300x200 CNJA		200	382	530	500	525	415	379		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	310	130	150	620	700	500	550	38	-	26	110	125	65	11	7	18	800
350x250 CNGA		250					447	350		303	135															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	150	700	700	550	550	38	-	26	140	158	85	10	6	22	
400x300 CNHA			456	630	660	620	530	432	350	400	160							-			162					
400x350 CNEA	400	350	451	600	630	620	470	355	325	335	140		720			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