



EBARA

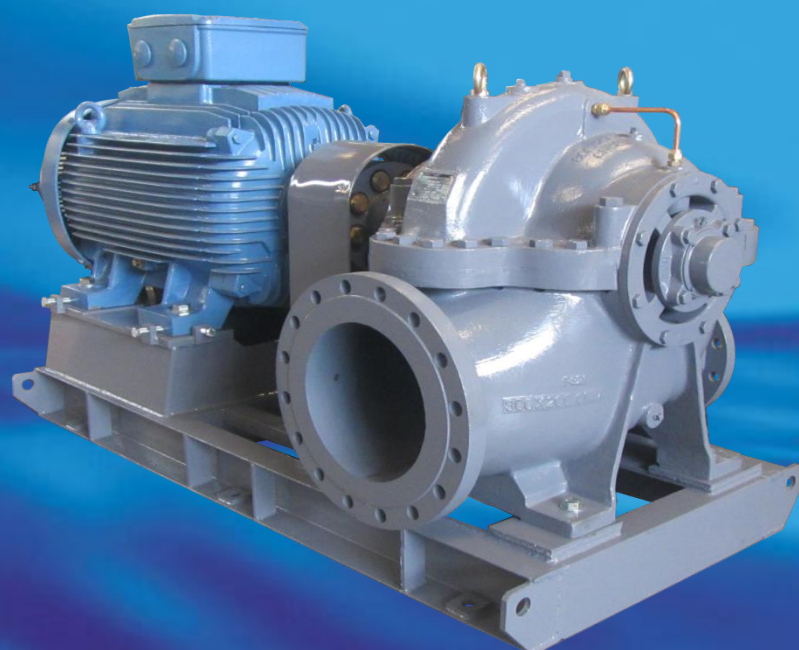
CN 8001-5N-A

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

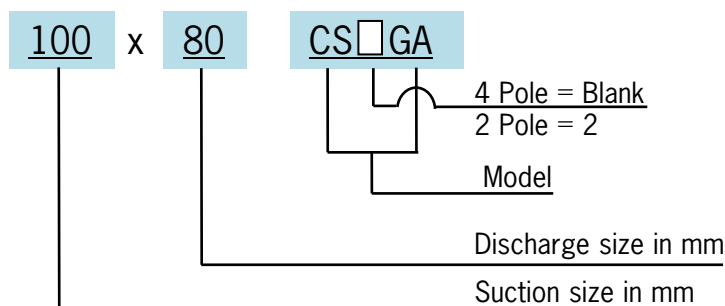
John Crane type mechanical seal is standard, easily obtainable in the market and replaceable without disturbing piping.

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.

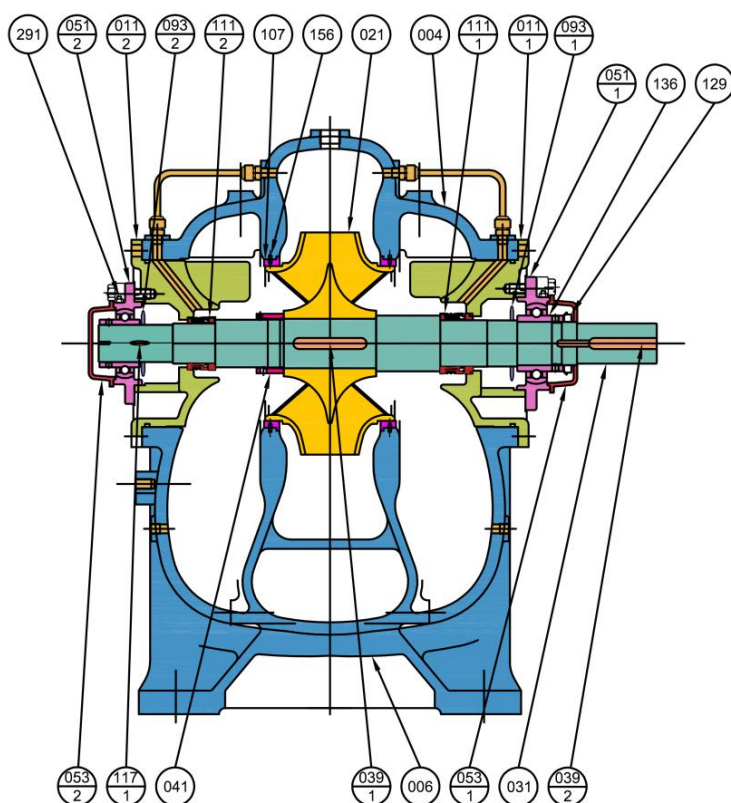
MODEL CODE



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.		

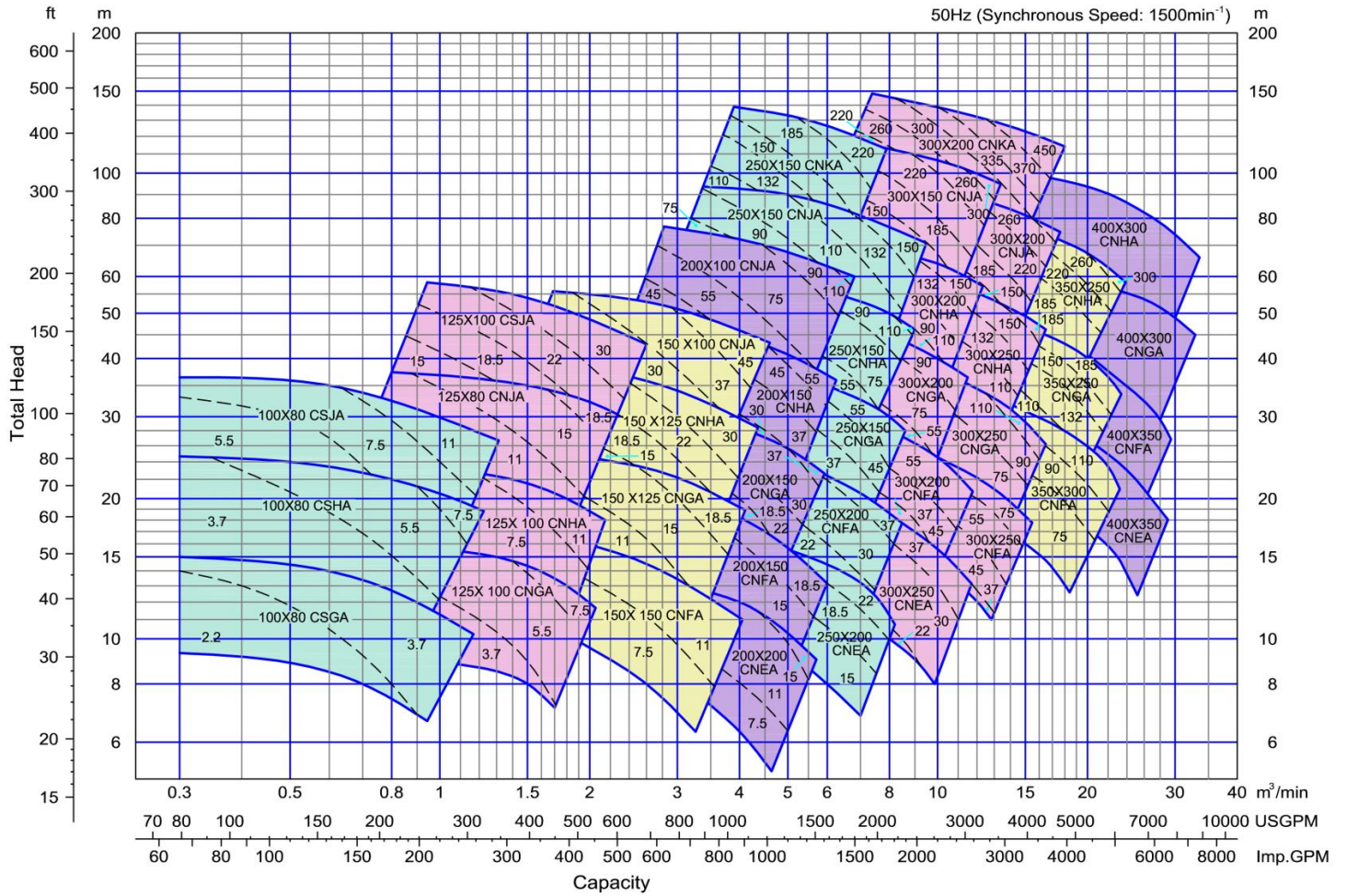
SECTIONAL VIEW



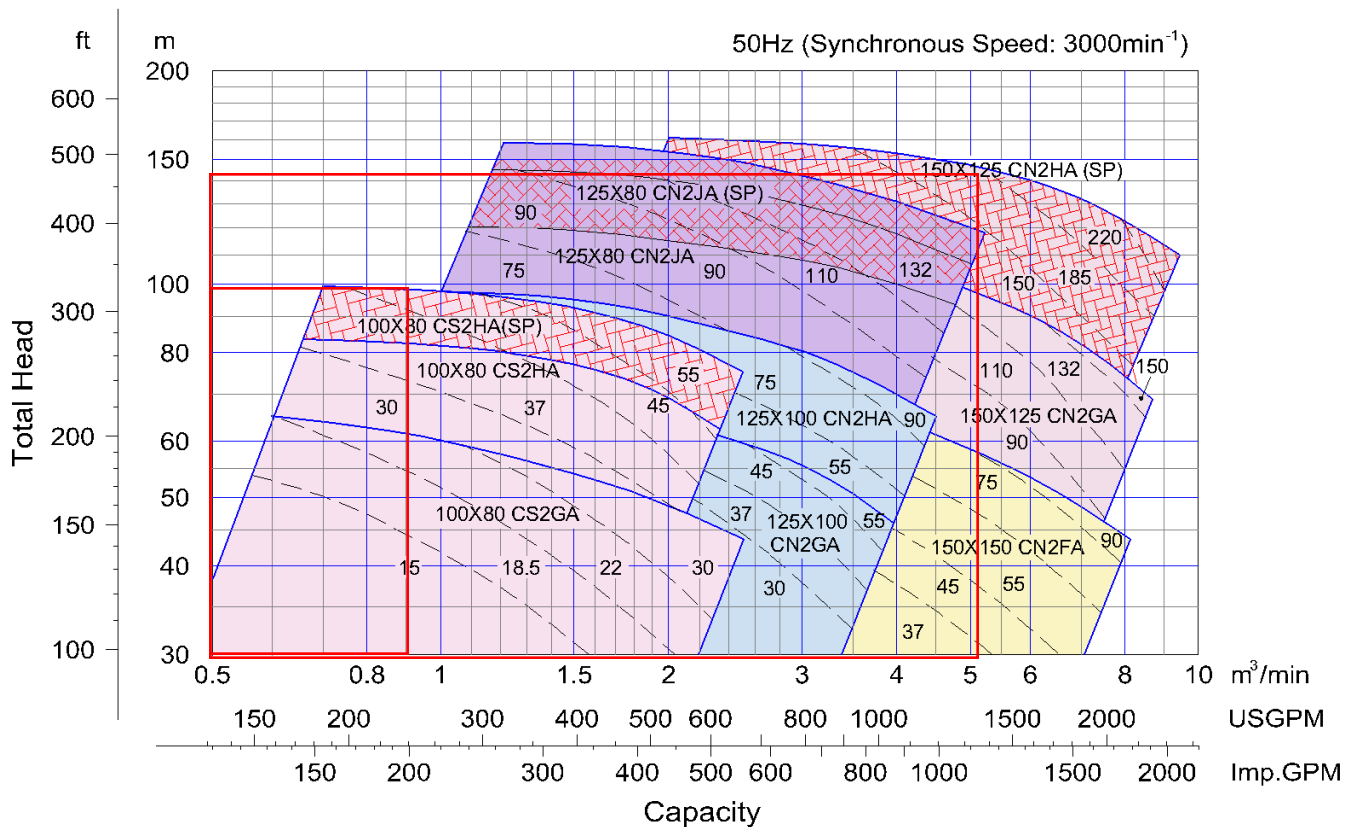
No	Part Name	Material	Qty
004	Casing Upper Half	FC250	1
006	Casing Lower Half		
011-1	Side Cover (CP Side)		
011-2	Side Cover (CCP Side)		
021	Impeller	BC6	
031	Shaft	316 Stainless Steel	
039-1	Impeller Key		
039-2	Coupling Key	S50C	
041	Impeller Nut	BC6	
051-1	Bearing Unit (CP Side)	FC200	
051-2	Bearing 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

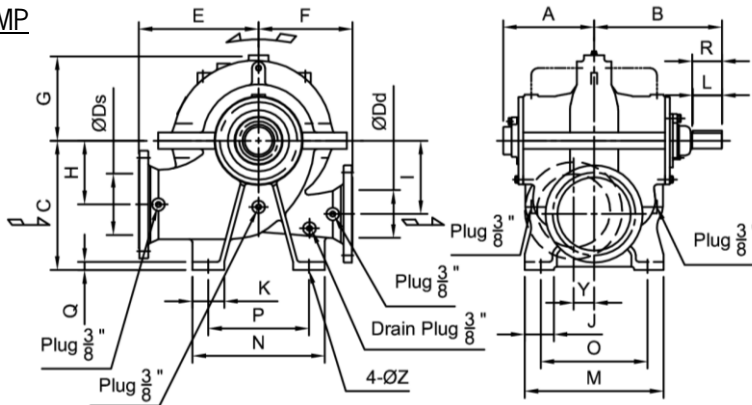


2 Poles

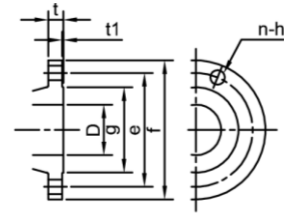


DIMENSION - Bare Shaft Pump C-Type Mechanical Seal Type

PUMP



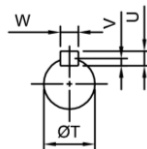
FLANGE



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

SHAFT END



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	200											200																																		
125x100 CSJA	125	100	247	325	375	350	280	263	200	230	90	100	430	400	350	300	25	80	19	80	82	38	8	5	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	262	370	355	330	290	226	190	190	70	80	340	320	280	250	25	-	19	80	82	38	8	5	10	250																													
150x150 CNFA	150	150				271		395		330																260	224	190	190	80	90	380	360	310	270	25	-	19	80	82	38	8	5	10	253										
150x125 CNGA		125				262		370		350																280	243		190										210	90	100	430	400	350	300	25	-	19	90	102	48	9	5.5	14	275
150x125 CNHA						275*		395*																		240	-												19										95*	104*	48*	9*	5.5*	14*	-
150x125 CNHA*						275*		395*																																									240	-	19	95*	104*	48*	9*
150x100 CNJA	150	100	271	395	390	380	290	269	200	240	90	100	430	400	350	300	25	-	19	90	102	48	9	5.5	14	330																													
200x200 CNEA	200	200	263	370	355	300	223	190		190	90	100	430	400	350	300				25	-	19	80	82	38	8	5	10	270																										
200x150 CNFA		150				224	245			210																			90	100	430	400	350	300	25	-	19	80	82	38	8	5	10	280											
200x150 CNGA						282	395			390																																		375	295	268	200	230	90	92	48	9	5.5	14	355
200x150 CNHA						282	395			390																																		375	295	268	200	230							90
200x100 CNJA	200	100	305	450	445	420	335	309	270	270	100	110	480	450	390	340	25	-	24	100	112	55	10	6	16	445																													
250x200 CNEA	250	200	273	395	425	395	315	243		210	100	110	480	450	390	340				25	-	24	80	97	38	8	5	10	360																										
250x200 CNFA			282					247		210																			90	110	480	450	390	340	25	-	24	90	92	48	9	5.5	14	380											
250x150 CNGA		150	315			450		445		430	325	299	220	260	110	120				550	520	450	400	30	-	24	100	102																55	10	6	16	500							
250x150 CNHA			350	500	495	470	355	346		300	110	120	550	520															450	400	30	-	24	110	124	65	11	7	18	605															
250x150 CNJA			382	530	500	505	430	407		290																															345	110	120					550	520	450	400	30	-	24	125
250x150 CNKA			382	530	500	505	430	407	290	345	110	120	550	520			450	400	30										-	24	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		235	100	110	480	450			390	340	25										-	24	90	92	48	9	5.5	14	490																		
300x200 CNGA			315	470				300		270																											100					110	480	450	390	340	25	-	24	90	92	48	9	5.5	14
300x200 CNHA		350	500	495	465	365	332	290	110	120	550	520	450	400			30	-	24										110	124	65	11	7	18	625																				
300x150 CNJA		150	382	530	500	520	405	384	250	335	110	120	550	520	450	400	30	-	24	125	141	75	12	8	20	785																													
300x250 CNFA		250	335	470	495	405		306	260	100																102	48	9	5.5	14	570																								
300x250 CNGA			360	500	495			313																							260	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	447	345	310	130	150	620	700	500	550	38	-	26	110	125	65	11	7	18	800																														
350x250 CNGA		250	414	560				440		373															315	330	135	150	620	700	500	550	38	-	26	125	140	75	12	7.5	20	790													
350x250 CNHA	414		560	440				373		315															330	135																150	620	700	500	550	38	-	26	125	140	75	12	7.5	20
400x300 CNGA	400	300	451	627	630	625	510	390	315	380	150	150	700	550	550	38	-	26	140	158	85	10	6	22																															
400x300 CNHA		456	630	660	620	530	432	350	400	160	550				38	-	140									162	110	124	65	11	7	18	1030																						
400x350 CNEA	400	350	451	600	630	620	470	355	325	335	140	150	720	700	550	590	35	-	26	110	124	65	11	7	18	1035																													
400x350 CNFA			439	585		625	510	385	305	344	150					590	38	-									125	140	75	12	7.5	20	1035																						



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