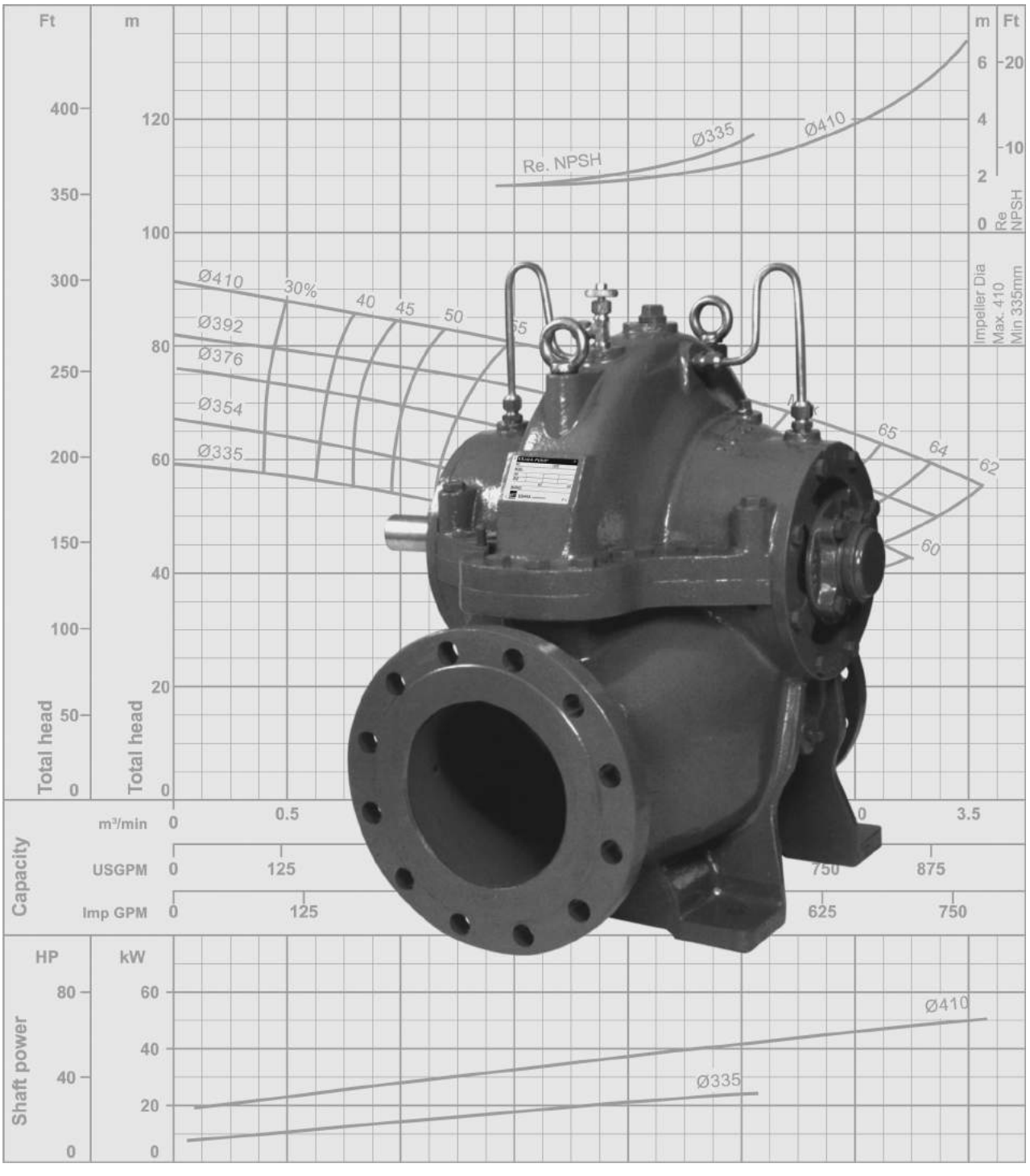
EBARA

CN 9001-5N

TECHNICAL DATA BOOK

HORIZONTAL SPLIT CASING PUMP

MODEL CSA/CNA SUCTION SIZE 100 ~ 400 MM 50Hz



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EBARA INDONESIA PRODUCTS

SELECTION CHART	4 POLE	2 POLE	BY ROTATION
END SUCTION VOLUTE PUMP – 50 Hz			
• FSA			
• FSSA			
• FSDA			
HORISONTAL SPLIT CASING PUMP – 50 Hz			
• **CNA / CSA**			
SUBMERSIBLE PUMP – 50 Hz			
• DS , DVS		,	
• DL , DF	,		
• DLM			
MIXED FLOW PUMP (SZ)			
• 200 , 250 , 300 , 350 , 400 , 500			, , , , , ,
SELF PRIMING PUMP (SQPB)			
• 50 , 80 , 100 , 150			, , ,

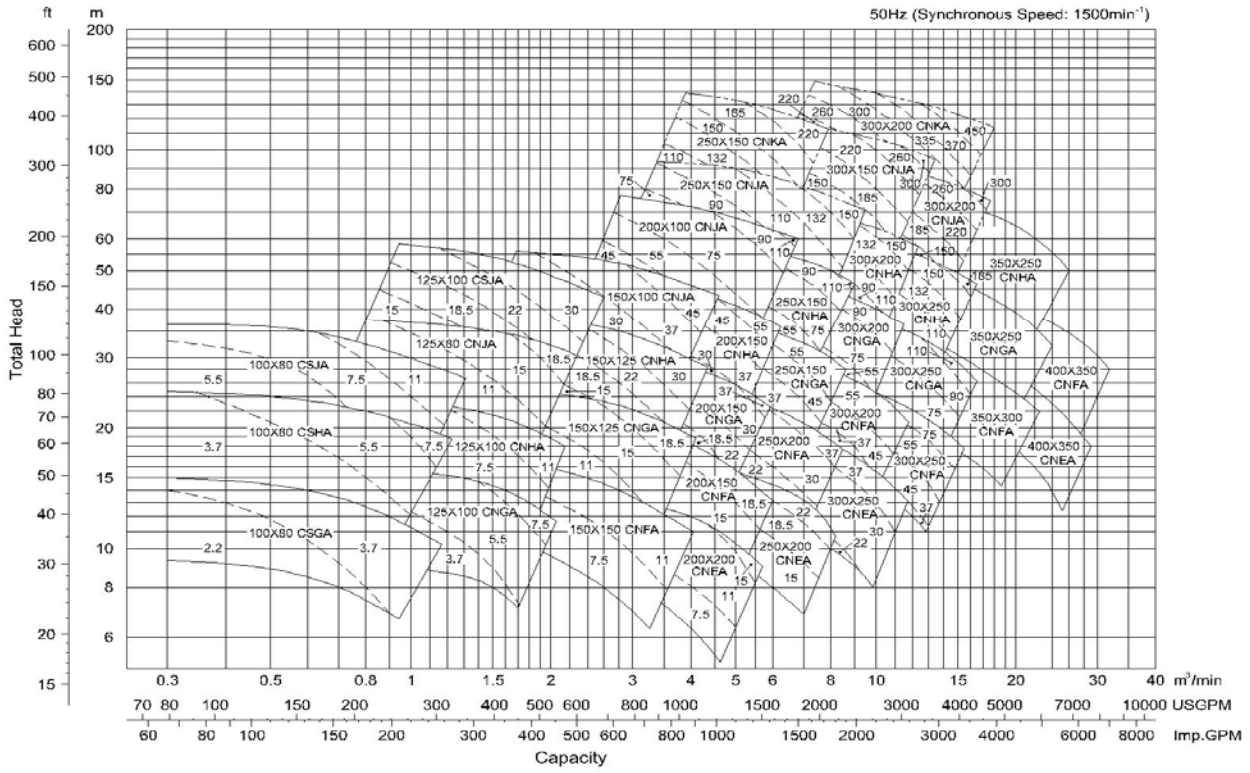
Features

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

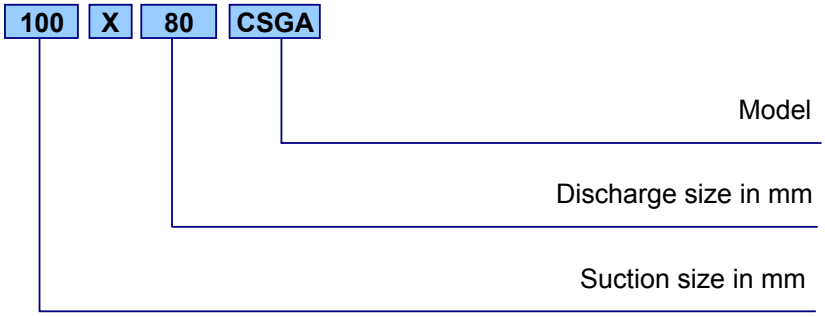
Applications

- Water supply
- Hot and cold water circulation
- For cooling tower.
- Irrigation
- Industrial use.
- Drainage
- Sprinkling.
- Air-conditioning.
- For cooling tower.

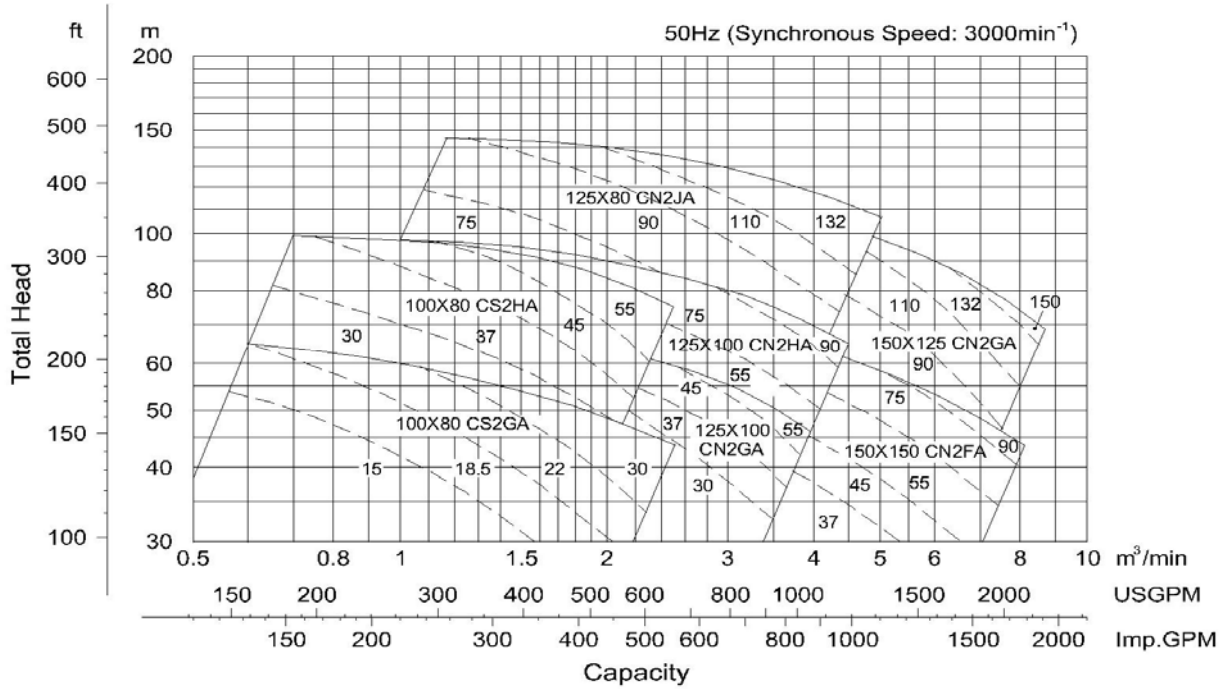
Performance Chart 4 -Pole 50 Hz



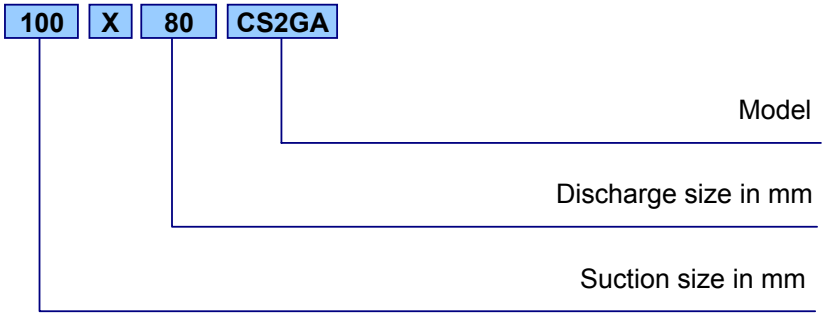
Model Code



Performance Chart 2 - Pole 50 Hz



Model Code



Specifications 50 Hz

Description		Standard	Optional	
Model		CSA/CNA.		
Liquid Handled	Type of liquid	Clean 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 (16.3 kgf/cm^2)		
Construction	Shaft Seal	Mechanical Seal	Gland Packing	Mechanical Seal
	Bearing	Ball Bearing		
	Lubrication	Grease		
Material	Casing	Cast Iron	Ductile Cast Iron (FCD)	
	Impeller	Bronze (except 300x200 CNKA)	SCS 13, SCS 14	
		SCS 13 for 300x200 CNKA		
	Shaft	SUS 316	SUS 403	SUS304
	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)		
Option		Common base, Anchor bolts, Shaft coupling, Coupling guard		

General

The contractor shall furnish and install as shown on drawing and as described in the specification of Ebara model _____ Horizontal Split Casing Pump.

Pump and motor shall be mounted on a common heavy base plate will be fabricated by structural Steel or cast iron and directly connected through a heavy-duty flexible coupling, pump shall operate at a synchronous speed 1500 min^{-1}.

Pump shall be capable with design condition of capacity of _____ against a total dynamic head of _____ m liquid temperature of clear water which is not exceeding of _____ ^{o}C.

Pump Performance

Thep pump efficiency is not less than _____ % at requirement of capacity and head (this data refers to page 56 - 64). The NPSH required is not more than _____ m at duty (This data refers to page 56-64).

Pump Casing

Casing is divided at the horizontal center line, the removal of the upper half of casing must allow the complete rotating assembly to be removed without disconnecting.

The Suction and discharge flange casing should be cast iron which has minimum hydro test pressure of _____ kg/cm^2 (this data refers to page 4).

Suction and discharge flange should be Integrated with the lower half of casing.

Impeller

Impeller should be enclosed with double suction type (Single suction type for Model CS) and material of impeller should be made of Bronze (Stainless steel for 300x200 CNKA).

Impeller should be balanced and be fitted to shaft by a key and locked by nut or shaft sleeves.

Shaft

The pump shaft shall be made of Stainless Steel.

Casing Wear Ring

Pump shall be fitted with renewable casing wear rings. The casing wear rings will be locked at its place by a dowel to prevent a rotation.

Bearing

Pump ball bearing shall be deep groove type with heavy-duty grease ball bearings.

- **Stuffing Box and Seal**

  - Gland Packing Type

    Stuffing box shall be placed on both sides of pump centerline to seal the pump shaft

    Material of gland packing shall be made of corbonized fiber.

    Lantern ring shall be fitted. Sealing water shall be supplied from pump pressure through piping (Self sealing system).

    Remark : In case of pump suction pressure is positive (not less than 0.5 kg/cm ^{2}) it does not need sealing water.

  - Mechanical Seal Type

    Stuffing box shall be placed on both sides of pump centerline to seal the pump shaft.

    Mechanical Seal shall be fitted of self-flushing type.

- **Motor**

  Motor should be not more than _____ kW, it will be operated continuously if is not exceeding its kW rating, exclusives of service factor at the design capacity and head.

Ebara Horizontal Split Casing Pump — Model CSA/CNA

Data Sheet — 50 Hz

1	Customer	:	
2	User	:	
3	Job No.	:	
4	Item No.	:	
5	Doc. No.	:	
	Operating Conditions		
6	Liquid	:	water
7	Liquid Temp.	:	max. 80^{0}C
8	Specific Gravity	:	1.0
9	Viscocity	:	1 cp
10	Capacity	:	☐ l/s ☐ m^3/min ☐ m^3/H ☐ USGPM
11	Total Head	:	☐ meter ☐ kg/cm^2 ☐ feet
12	Corrosion / Eros.	:	non
13	Solid	:	non
14	Suction Press.	:	
15	Discharge Press.	:	
16	Diff. Press.	:	
17	Vapor Press.	:	
18	NPSH Av (Aq)	:	
	Constructions		
19	Nozzles Position	:	end - suction top - discharge
20	Size (Suction) (discharge)	:	mm mm
21	Pump type	:	end suction volute foot mounted
22	No. of stage	:	one
23	Type of Impeller	:	closed type, single suction
24	Casing Test Pressure Hydro test Max. Positive Suction Press	: :	kg/m^2 kg/m^2
25	Bearing Type	:	grease lubricated ball bearing
26	Shaft Seal	:	☐ carbonized fiber gland packing ☐ mechanical seal
27	Flushing	:	☐ self ☐ external
28	Rotation	:	CW viewed from coupling end
29	Connection	:	

36	Number of pump required	:	
37	Ebara Model	:	
	Performance		
38	Pump Speed	:	rpm
39	Driver Output	:	kW
40	Efficiency	:	%
41	Shaft Power	:	kW
42	Req. NPSH (Aq)	:	m
	Materials		
43	Casing	:	Cast Iron
44	Impeller	:	Bronze
45	Shaft	:	Stainless Steel
46	C.W. Ring	:	Bronze
47	Base Plate	:	☐ Steel ☐ Cast Iron
	Accessories (Bare Shaft Pump)		
48	Priming cook and priming funnel		
	Scope of Our Supply for Each Unit		
49	☐ bare shaft pump ☐ motor ☐ flexible coupling ☐ coupling guard ☐ pressure gauge ☐ compound gauge ☐ foundation bolts ☐ base plate ☐ companions flanges (include bolt and packing)		
	Shop Test		
50	Performance Test : ☐ yes ☐ No Casing Hydro Test : ☐ yes Witnessed Test : (performance) ☐ yes ☐ no		
	Attachment		
51	☐ Outline dwg ☐ Sectional dwg ☐ Performance curve ☐ Spare part list		
	Remarks		

	Motor Driver		
30	Motor Power	:	kW; 2 poles; 3 phase — Voltage : ☐ 380 V ☐ 415 V ☐ 50 HZ ☐ 60 HZ kW; 2 poles; 3 phase — RPM : ☐ 1500 min^{-1} ☐ 1750 min^{-1} ☐ 3000 min^{-1} ☐ 3600 min^{-1}
31	Type	:	Three phases, squirrel cage rotor, horizontal foot mounted Protection - totally enclosed fan cooled (TEFC) ☐ IP-54, indoor inst. ☐ IP-55, outdoor inst.
32	Insulation	:	☐ class F ☐ class B
33	Starting Method	:	☐ star-delta ☐ direct on lone
34	Maker	:	☐ Teco ☐ ABB ☐ Leroy Somer ☐
35	Supplied by	:	☐ Customer ☐

Approved by Customer	Approved by	Made by

Technical Data - Allowable Pressure and Materials 50 Hz

Model	Allowable Pressure for Casing									Material		
	Hydro Test Press	Max. Working Pressure						Max. Suction Pressure		Casing	Impeller	Shaft
		Standard		Option 1		Option 2						
	kg	kg	psi	kg	psi	kg	psi	kg	psi		Standard	Standard
100x80 CSGA	24	16	230	17.6	250	20	285	10	143	Cast Iron	Bronze	Stainless Steel
100x80 CSHA												
100x80 CSJA												
125x100 CSJA												
125x100 CNGA	24	16	230	17.6	250	20	285	10	143	Cast Iron	Bronze	Stainless Steel
125x100 CNHA												
125x80 CNJA				17.8	255							
150x150 CNFA	24	16	230	17.6	250	20	285	10	143	Cast Iron	Bronze	Stainless Steel
150x125 CNGA												
150x125 CNHA				18.2	260							
150x100 CNJA				17.6	250							
200x200 CNEA	24	16	230	-	-	20	285	10	143	Cast Iron	Bronze	Stainless Steel
200x150 CNFA												
200x150 CNGA												
200x150 CNHA												
200x100 CNJA				18.0	257							
250x200 CNEA	24	16	230	-	-	20	285	10	143	Cast Iron	Bronze	Stainless Steel
250x200 CNFA												
250x150 CNGA												
250x150 CNHA				17.6	250							
250x150 CNJA				19.6	280							
250x150 CNKA				-	-							
300x250 CNEA	24	16	230	-	-	20	285	10	143	Cast Iron	Bronze	Stainless Steel
300x200 CNFA												
300x200 CNGA												
300x200 CNHA				18.2	260							
300x150 CNJA												
300x250 CNFA				-	-							
300x250 CNGA												
300x250 CNHA				17.0	243							
300x200 CNJA				-	-							
300x200 CNKA											Stainless Steel	
350x300 CNFA	24	16	230	-	-	20	285	10	143	Cast Iron	Bronze	Stainless Steel
350x250 CNGA												
350x250 CNHA												
400x350 CNEA	24	16	230	-	-	20	285	10	143	Cast Iron	Bronze	Stainless Steel
400x350 CNFA												

Technical Data - Allowable Maximum Speed 50 Hz

Model	Allowable Speed min^{-1} (rpm)	
	Standard Speed	Optional Speed
100 x 80 CSGA	3000	-
100 x 80 CSHA		
100 x 80 CSJA	1500	* 2000
125 x 100 CSJA		
125 x 100 CNGA	3000	-
125 x 100 CNHA		
125 x 80 CNJA	1500	* 3000
150 x 150 CNFA	3000	-
150 x 125 CNGA		
150 x 125 CNHA	1500	* 2000
150 x 100 CNJA		* 2000
200 x 200 CNEA	1500	* 2000
200 x 150 CNFA		-
200 x 150 CNGA		
200 x 150 CNHA		* 2000
200 x 100 CNJA		
250 x 200 CNEA	1500	-
250 x 200 CNFA		* 2000
250 x 150 CNGA		-
250 x 150 CNHA		
250 x 150 CNJA		
250 x 150 CNKA		
300 x 250 CNEA	1500	-
300 x 200 CNFA		
300 x 200 CNGA		
300 x 200 CNHA		
300 x 150 CNJA		
300 x 250 CNFA		
300 x 250 CNGA		
300 x 250 CNHA		
300 x 200 CNJA		
300 x 200 CNKA		
350 x 300 CNFA	1500	-
350 x 250 CNGA		
350 x 250 CNHA		
400 x 350 CNEA	1500	-
400 x 350 CNFA		

Remarks :

1. Standard Speed
   Pump can be operated and runs continuously.

2. Optional Speed
   Limit application which will be used for temporary operations such as fire fighting or emergency stand by application through diesel engine driven.

* This speed is available for “Gland packing version” only.
As for mechanical seal, it should be 1500 min^{-1} (r.p.m) and below.

Technical Data - Mechanical Seal (STANDARD) 50 Hz

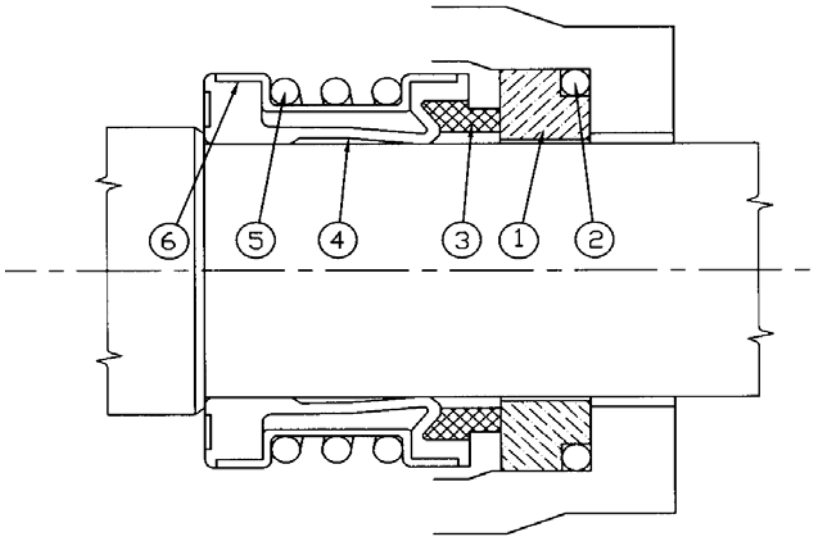
Model	Mechanical Seal				Side Cover O-Ring
	Driver (CP) Side		Opposite (CCP) Side		
	Type	Size	Type	Size	Size
100 x 80 CSGA	T2100/BR1C1/M	35	T2100/BR1C1/M	35	145
100 x 80 CSHA					
100 x 80 CSJA					
125 x 100 CSJA		45			180
125 x 100 CNGA	T2100/BR1C1/M	45	T2100/BR1C1/M	35	150
125 x 100 CNHA					
125 x 80 CNJA					
150 x 150 CNFA	T2100/BR1C1/M	45	T2100/BR1C1/M	35	180
150 x 125 CNGA		55		45	
150 x 125 CNHA		45		35	
150 x 100 CNJA		55		45	
200 x 200 CNEA	T2100/BR1C1/M	45	T2100/BR1C1/M	35	195
200 x 150 CNFA					
200 x 150 CNGA					
200 x 150 CNHA		55		45	205
200 x 100 CNJA		65		55	230
250 x 200 CNEA	T2100/BR1C1/M	45	T2100/BR1C1/M	35	195
250 x 200 CNFA		55		45	205
250 x 150 CNGA					
250 x 150 CNHA		65		55	230
250 x 150 CNJA	T2100/BR1C1/BS	75		65	260
250 x 150 CNKA		85	T2100/BR1C1/BS	75	275
300 x 250 CNEA	T2100/BR1C1/M	55	T2100/BR1C1/M	45	205
300 x 200 CNFA		65		55	230
300 x 200 CNGA					
300 x 200 CNHA	T2100/BR1C1/BS	75		65	260
300 x 150 CNJA		85	T2100/BR1C1/BS	75	275
300 x 250 CNFA	T2100/BR1C1/M	65	T2100/BR1C1/M	55	230
300 x 250 CNGA	T2100/BR1C1/BS	75		65	260
300 x 250 CNHA					
300 x 200 CNJA		85	T2100/BR1C1/BS	75	275
300 x 200 CNKA		95		85	290
350 x 300 CNFA	T2100/BR1C1/BS	75	T2100/BR1C1/M	65	260
350 x 250 CNGA		85	T2100/BR1C1/BS	75	290
350 x 250 CNHA					290
400 x 350 CNEA	T2100/BR1C1/BS	85	T2100/BR1C1/M	65	275
400 x 350 CNFA			T2100/BR1C1/BS	75	290

Technical Data - Mechanical Seal (OPTION : WITH SLEEVE) 50 Hz

Model	Mechanical Seal				Side Cover O-Ring	Sleeve	
	Driver (CP) Side		Opposite (CCP) Side			C.P. Side	C.C.P. Side
	Type	Size	Type	Size	Size	Type	Size
100 x 80 CSGA	T2100/BR1C1/M	45	T2100/BR1C1/M	45	145	45	45
100 x 80 CSHA							
100 x 80 CSJA							
125 x 100 CSJA		55			180	55	
125 x 100 CNGA	T2100/BR1C1/M	55	T2100/BR1C1/M	45	150	55	45
125 x 100 CNHA							
125 x 80 CNJA							
150 x 150 CNFA	T2100/BR1C1/M	55	T2100/BR1C1/M	45	180	55	45
150 x 125 CNGA		65		55		65	55
150 x 125 CNHA		55		45		55	45
150 x 100 CNJA		65		55		65	55
200 x 200 CNEA	T2100/BR1C1/M	55	T2100/BR1C1/M	45	195	55	45
200 x 150 CNFA							
200 x 150 CNGA							
200 x 150 CNHA		65		55	205	65	55
200 x 100 CNJA	T2100/BR1C1/BS	75		65	230	75	65
250 x 200 CNEA	T2100/BR1C1/M	55	T2100/BR1C1/M	45	195	55	45
250 x 200 CNFA		65		55	205	65	55
250 x 150 CNGA							
250 x 150 CNHA	T2100/BR1C1/BS	75		65	230	75	65
250 x 150 CNJA		85	T2100/BR1C1/BS	75	260	85	75
250 x 150 CNKA	T2100/BR1C1/BS	100	T2100/BR1C1/BS	90	275	100	90
300 x 250 CNEA	T2100/BR1C1/M	65	T2100/BR1C1/M	55	205	65	55
300 x 200 CNFA	T2100/BR1C1/BS	75		65	230	75	65
300 x 200 CNGA							
300 x 200 CNHA		85	T2100/BR1C1/BS	75	260	85	75
300 x 150 CNJA		100		90	275	100	90
300 x 250 CNFA		75	T2100/BR1C1/M	65	230	75	65
300 x 250 CNGA		85	T2100/BR1C1/BS	75	260	85	75
300 x 250 CNHA							
300 x 200 CNJA		100		90	275	100	90
350 x 300 CNFA	T2100/BR1C1/BS	85	T2100/BR1C1/BS	75	260	85	75
350 x 250 CNGA					290		
350 x 250 CNHA		100		90		100	90
400 x 350 CNEA	T2100/BR1C1/BS	100	T2100/BR1C1/BS	90	275	100	75
400 x 350 CNFA					290		90

Sectional View of Mechanical Seal

50 Hz



Part No.	Part Name	Material	Qty/unit
1	Mating Ring	Ceramic	1
2	O-ring	Nitrilie	1
3	Primary Ring	Carbon	1
4	Bellows	Nitrilie	1
5	Spring	316 Stainless Steel	1
6	Drive Band	316 Stainless Steel	1

Technical Data - Gland Packing

50 Hz

Model	Driver (CP) Side						Driver (CP) Side					
	Stuffing Box Data				Gland Packing		Stuffing Box Data				Gland Packing	
	Sleeve Size (mm)	Inner Dia. (mm)	Depth (mm)	Lantern Ring Width (mm)	Size (mm)	Qty.	Sleeve Size (mm)	Inner Dia. (mm)	Depth (mm)	Lantern Ring Width (mm)	Size (mm)	Qty.
100 x 80 CSGA	45	65	71	15	45x65x10	5	45	65	71	15	45x65x10	5
100 x 80 CSHA												
100 x 80 CSJA												
125 x 100 CSJA	55	75	72		55x75x10							
125 x 100 CNGA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
125 x 100 CNHA												
125 x 80 CNJA												
150 x 150 CNFA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
150 x 125 CNGA	70	95	90	18	70x95x12.5		70	95	90	18	70x95x12.5	
150 x 125 CNHA	55	75	72	15	55x75x10		55	75	72	15	55x75x10	
150 x 100 CNJA	70	95	90	18	70x95x12.5		70	95	90	18	70x95x12.5	
200 x 200 CNEA	55	75	72	15	55x75x10	5	55	75	72	15	55x75x10	5
200 x 150 CNFA												
200 x 150 CNGA												
200 x 150 CNHA	70	95	90	18	70x95x12.5							
200 x 100 CNJA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
250 x 200 CNEA	55	75	72	15	55x75x10	5	45	65	71	15	45x65x10	5
250 x 200 CNFA	70	95	90	18	70x95x12.5		55	75	72		55x75x10	
250 x 150 CNGA												
250 x 150 CNHA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
250 x 150 CNJA	90	119			90x119x14.5		80	109	103	20	80x109x14.5	
250 x 150 CNKA	100	129			100x129x14.5		90	119			90x119x14.5	
300 x 250 CNEA	70	95	90	18	70x95x12.5	5	55	75	72	15	55x75x10	5
300 x 200 CNFA	80	109	103	20	80x109x14.5		70	95	90	18	70x95x12.5	
300 x 200 CNGA												
300 x 200 CNHA	90	119			90x119x14.5		80	109	103	20	80x109x14.5	
300 x 150 CNJA	100	129			100x129x14.5		90	119			90x119x14.5	
300 x 250 CNFA	80	109			80x109x14.5		70	95	90		70x95x12.5	
300 x 250 CNGA	90	119			90x119x14.5		80	109	103		80x109x14.5	
300 x 250 CNHA												
300 x 200 CNJA	100	129			100x129x14.5		90	119			90x119x14.5	
300 x 200 CNKA	110	139		22	110x139x14.5		100	129			100x129x14.5	
350 x 300 CNFA	90	119	103	20	90x119x14.5	5	80	109	103	20	80x109x14.5	5
350 x 250 CNGA												
350 x 250 CNHA	100	129			100x129x14.5		90	119			90x119x14.5	
400 x 350 CNEA	90	119			90x119x14.5	5	80	109			80x109x14.5	5
400 x 350 CNFA	100	129			100x129x14.5		90	119			90x119x14.5	

Technical Data - Impeller

50 Hz

Model	Impeller Data							
	Impeller Dia.		Casing Ring		Total Eye Area	❖	No. of Vanes	Weight Approx.
	Max (mm)	Min (mm)	Dia. (mm)	Clearance (mm)	(cm^2)	(kg m^2)		(kg)
100 x 80 CSGA	218	175	124	0.240 – 0.344	73.7	0.4	5	4.2
100 x 80 CSHA	266	214	132	0.260 – 0.383	79.7	0.7		6.3
100 x 80 CSJA	326	266	136		82.7	1.3		13
125 x 100 CSJA	410	335	168	0.310 – 0.433	147.5	2.5		21
125 x 80 CNJA	327	264	144 / 140	0.280 – 0.403	179.3	1.3	5	14
125 x 100 CNGA	218	178	136 / 132	0.260 – 0.383	154	0.4		10
125 x 100 CNHA	265	210			166.8	0.7		12
150 x 150 CNFA	227	194	152 / 148	0.280 – 0.403	226.9	0.5	5	14
150 x 125 CNGA	274	227	162 / 158	0.310 – 0.433	244.4	0.8		16.5
150 x 125 CNHA	333	274	172 / 168		283.4	1.4		20
150 x 100 CNJA	397	327			264.4	2.3		24
200 x 200 CNEA	218	183	168	0.310 – 0.437	263.4	0.6	5	9.7
200 x 150 CNFA	254	218			284.2	0.8		13.3
200 x 150 CNGA	307	254	188	0.340 – 0.482	306.8	1		15.4
200 x 150 CNHA	373	307			331.4	2.9		20.2
200 x 100 CNJA	461	373	200		356.6	3.6		32
250 x 200 CNEA	244	205	188	0.340 – 0.482	349.4	0.7	5	12.2
250 x 200 CNFA	285	244	200		357.6	1.3		16.8
250 x 150 CNGA	344	285			386	1.9		21.1
250 x 150 CNHA	418	344	212	0.380 – 0.522	417.2	3.3		24.4
250 x 150 CNJA	517	418	224		448.8	6.2		40
250 x 150 CNKA	638	517	236	0.570 – 0.672	479.6	10.3		76
300 x 250 CNEA	274	230	200	0.340 – 0.482	417.6	1.3	5	17.2
300 x 200 CNFA	320	274	212	0.380 – 0.522	449.8	2.4		23.3
300 x 200 CNGA	386	320	224		485.6	4.2		29
300 x 200 CNHA	469	386	236	0.420 – 0.562	524.8	5.4		36.6
300 x 150 CNJA	580	469	250		565.4	8.2		65
300 x 250 CNFA	308	258	224	0.380 – 0.522	526	2.4		23.8
300 x 250 CNGA	359	308	236	0.420 – 0.562	567	3.9		31.9
300 x 250 CNHA	433	359	250		611.2	5.6		36
300 x 200 CNJA	526	433	264	0.480 – 0.641	720.6	7.7		52.5
300 x 200 CNKA	651	527	278	0.590 – 0.731	711.6	13.2		80
350 x 300 CNFA	345	290	250	0.420 – 0.562	664	4.1	5	40.4
350 x 250 CNGA	403	345	267	0.300 – 0.518	715.2	7.6		41
350 x 250 CNHA	486	437	280	0.480 – 0.641	772.1	13.3		49.8
400 x 350 CNEA	325	285	264	0.480 – 0.641	812	5.4	5	51
400 x 350 CNFA	388	325	280		836.3	7.6		50

❖ Including GD^2 of coupling.

❖ Do not apply above GD^2 when making water hammer analysis.

Technical Data - Bearing and Shaft 50 Hz

Model	Bearing		❖ Grease Replenishment		Shaft Data			
	Driver (CP) Side	Opposite (CCP) Side	CP SIDE	CCP SIDE	Approx. Wt.	Max. HP per 1000rpm	Shaft Dia. Coupling	Shaft Dia. Impeller
			(gr)	(gr)	(kg)	(HP)	(mm)	(mm)
100 x 80 CSGA	CUCFC 206C	UCFC 206E	2.2	2.2	3.4	11	28	42
100 x 80 CSHA								
100 x 80 CSJA								
125 x 100 CSJA	CUCFC208C				6.2	27	38	50
125 x 100 CNGA	CUCFC 208C	UCFC 206E	3.9	2.2	6.4	11	28	42
125 x 100 CNHA					6.4	27	38	50
125 x 80 CNJA					6.4			
150 x 150 CNFA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
150 x 125 CNGA	CUCFC 210C	UCFC 208E	5.4	3.9	11.6	55	48	60
150 x 125 CNHA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
150 x 100 CNJA	CUCFC 210C	UCFC 208E	5.4	3.9	11.6	55	48	60
200 x 200 CNEA	CUCFC 208C	UCFC 206E	3.9	2.2	7.6	27	38	50
200 x 150 CNFA								
200 x 150 CNGA								
200 x 150 CNHA	CUCFC 210C	UCFC 208E	5.4	3.9	12	58	48	60
200 x 100 CNJA	CUCFC 212C	UCFC 210E	10	5.4	18.3	83	55	70
250 x 200 CNEA	CUCFC 208C	UCFC 206E	3.9	2.2	8.1	27	38	50
250 x 200 CNFA	CUCFC 210C	UCFC 208E	5.4	3.9	12	55	48	60
250 x 150 CNGA								
250 x 150 CNHA	CUCFC 212C	UCFC 210E	10	5.4	18.8	83	55	70
250 x 150 CNJA	CUCFC 214C	UCFC 212E	13.6	10	27.3	136	65	80
250 x 150 CNKA	CUCFC 216C	UCFC 214CE	19.2	13.6	38	209	75	90
300 x 250 CNEA	CUCFC 210C	UCFC 208E	5.4	3.9	12.9	55	48	60
300 x 200 CNFA	CUCFC 212C	UCFC 210E	10	5.4	18.8	83	55	70
300 x 200 CNGA					19.1			
300 x 200 CNHA	CUCFC 214C	UCFC212E	13.6	10	27.3	136	65	80
300 x 150 CNJA	CUCFC 216C	UCFC 214CE	19.2	13.6	38	209	75	90
300 x 250 CNFA	CUCFC 212C	UCFC210E	10	5.4	20.1	83	55	70
300 x 250 CNGA	CUCFC 214C	UCFC212E	13.6	10	27.9	136	65	80
300 x 250 CNHA								
300 x 200 CNJA	CUCFC 216C	UCFC 214CE	19.2	13.6	38	209	75	90
300 x 200 CNKA	CUCFC 218C	UCFC 216CE	25.5	19.2	55	304	85	100
350 x 300 CNFA	CUCFC 214C	UCFC 212E	13.6	10	30.6	136	65	80
350 x 250 CNGA	CUCFC 214C	UCFC 212E	13.6	10	30.6	136	65	80
350 x 250 CNHA	CUCFC 216C	UCFC 214CE	19.2	13.6	40.2	209	75	90
400 x 350 CNEA	CUCFC 214C	UCFC 212E	13.6	10	45	136	65	80
400 x 350 CNFA	CUCFC 216C	UCFC 214CE	19.2	13.6	48	209	75	90

❖ Replenishment: Continuous operation 4300 hours.

Technical Data - Coupling (1/4) 50 Hz

4-Poles (1500 rpm)

Model	MOTOR		SHAFT DIAMETER		COUPLING CLA
	POWER	FRAME	MOTOR	PUMP	
	kW	No.	dM (mm)	dP (mm)	
100 x 80 CSGA	2.2	100L	28	28	125
	3.7	112M			
100 x 80 CSHA	3.7	112M	28	28	125
	5.5	132S	38		160
	7.5	132M			
100 x 80 CSJA	5.5	132S	38	28	160
	7.5	132M			
	11	160M	42		
125 x 100 CSJA	15	160L	42	38	160
	18.5	180MC	48		180
	22	180LC			
	30	200LC			
125 x 100 CNGA	3.7	112M	28	28	125
	5.5	132S	38		160
	7.5	132M			
125 x 100 CNHA	7.5	132M	38	38	160
	11	160M	42		
125 x 80 CNJA	11	160M	42	38	160
	15	160L			
	18.5	180MC	48		180
150 x 150 CNFA	7.5	132M	38	38	160
	11	160M	42		
150 x 125 CNGA	11	160M	42	48	180
	15	160L			
	18.5	180MC	48		
150 x 125 CNHA	18.5	180MC	48	38	180
	22	180LC			
	30	200LC	55		200
150 x 100 CNJA	30	200LC	55	48	200
	37	225SC	60		224
	45	225MC			
200 x 200 CNEA	7.5	132M	38	38	160
	11	160M	42		
	15	160L			
200 x 150 CNFA	15	160L	42	38	160
	18.5	180MC	48		180
200 x 150 CNGA	18.5	180MC	48	38	180
	22	180LC			
	30	200LC	55		200
	37	225SC	60		224
200 x 150 CNHA	30	200LC	55	48	200
	37	225SC	60		224
	45	225MC			
	55	250SC	70		250
200 x 100 CNJA	45	225MC	60	55	224
	55	250SC	70		250
	75	250MC			
	90	280SC	80		280

Technical Data - Coupling (2/4) 50 Hz

4-Poles (1500 rpm)

Model	MOTOR		SHAFT DIAMETER		COUPLING
	POWER	FRAME	MOTOR	PUMP	CLA
	kW	No.	dM (mm)	dP (mm)	
250 x 200 CNEA	15	160L	42	38	160
	18.5	180MC	48		180
	22	180LC			
250 x 200 CNFA	22	180LC	48	48	180
	30	200LC	55		200
	37	225SC	60		224
250 x 150 CNGA	37	225SC	60	48	224
	45	225MC			
	55	250SC	70		250
250 x 150 CNHA	55	250SC	70	55	250
	75	250MC			
	90	280SC	80		280
250 x 150 CNJA	75	250MC	70	65	250
	90	280SC	80		280
	110	280MC			
	132	315SC	85		315
	150	315MC			
250 x 150 CNKA	132	315SC	85	75	315
	150	315MC			
	185	315MB			
	220	315AB	95		355
300 x 250 CNEA	22	180LC	48	48	180
	30	200LC	55		200
	37	225SC	60		224
300 x 200 CNFA	37	225SC	60	55	224
	45	225MC			
	55	250SC	70		250
300 x 200 CNGA	55	250SC	70	55	250
	75	250MC			
	90	280SC	80		280
300 x 200 CNHA	90	280SC	80	65	280
	110	280MC			
	132	315SC	85		315
	150	315MC			
300 x 150 CNJA	150	315MC	85	75	315
	185	315MB			
	220	315AB	95		355
	260	315CB			
	300	315CB			
300 x 250 CNFA	37	225SC	60	55	224
	45	225MC			
	55	250SC	70		250
	75	250MC			
300 x 250 CNGA	75	250MC	70	65	250
	90	280SC	80		280
	110	280MC			
300 x 250 CNHA	110	280MC	80	65	280
	132	315SC	85		315
	150	315MC			

Technical Data - Coupling (3/4) 50 Hz

4-Poles (1500 rpm)

Model	MOTOR		SHAFT DIAMETER		COUPLING
	POWER	FRAME	MOTOR	PUMP	CLA
	kW	No.	dM (mm)	dP (mm)	
300 x 200 CNJA	185	315MB	85	75	315
	220	315AB	95		355
	260	315CB			
	300	315CB			
	335	315DB			
300 x 200 CNKA	260	315CB	95	85	355
	300	315CB			
	335	315DB			
	370	355AB			
	450	355CB			400
350 x 300 CNFA	75	250MC	80	65	250
	90	280SC	85		280
	110	280MC			
350 x 250 CNGA	110	280MC	80	65	280
	132	315SC	85		315
	150	315MC			
	185	315MB			
350 x 250 CNHA	185	315MB	85	75	315
	220	315AB	95		355
	260	315CB			
	300	315CB			
	335	315DB			
400 x 350 CNEA	90	280SC	80	65	280
	110	280MC			
	132	315SC	85		315
	150	315MC			
400 x 350 CNFA	150	315MC	85	75	315
	185	315MB			
	220	315AB	95		355

Technical Data - Coupling (4/4) 50 Hz

2-Poles (3000 rpm)

Model	MOTOR		SHAFT DIAMETER		COUPLING
	POWER	FRAME	MOTOR	PUMP	CLA
	kW	No.	dM (mm)	dP (mm)	
100x80 CSGA	15	160M	42	28	160
	18.5	160L			
	22	180MA	48		180
	30	200LA	55		
100x80 CSHA	30	200LA	55	28	180
	37	200LA			
	45	225MA			200
125x100 CNGA	30	200LA	55	28	200
	37	200LA			
	45	225MA			
	55	250SA	60		224
125x100 CNHA	45	225MA	55	38	224
	55	250SA	60		
	75	250MA			
	90	280SA	65		
125x80 CNJA	75	250MA	60	38	224
	90	280SA	65		
	110	280MA			
150x150 CNFA	55	250SA	60	38	224
	75	250MA			
	90	280SA	65		
	110	280MA			
150x125 CNGA	90	280SA	65	48	250
	110	280MA			
	132	315SA			
	150	315MA			

Part No.	Part Name	Standard Material	Qty / Unit	❖ Expected Life	
				Year	Hours
042-1, 042-2	Shaft Sleeves (Packing)	Bronze	1 Set	1	8,000
040-1, 040-2	Shaft Sleeves (Mechanical Seal)	Bronze	1 Set		8,000
051-1, 051-2	Bearing Unit	-	1 Set	3	25,000
107 or 107-1 & 107 2	Casing Wear Rings	Bronze	1 Set	2	16,000
111-1, 111-2	Mechanical Seals	-	1 Set	1	8,000
119-1, 119-2	Gland Packings	Carbonized Fiber	1 Set		8,000
117-01	Gasket (Casing)	Press Board or Asbestos	1	When the Casing is disassembled	
117-02, -03	Gasket (Sleeve)		1 Set	When the Shaft Sleeve is disassembled	
	Coupling Rubber	NBR	1 set	2	16,000

❖ Expected life of spare parts may be considered as shown in the above table.

Part Name	Material (JIS Code)	Standard		Optional Inner Surface
		Inner Surface	Outer Surface	
Casing	Cast Iron (FC)	1 coat of Zinc chromate primer	Under coat - 1 coat of Zinc chromate primer Finish coat - 1 coat of Phthalic resin enamel	1 coat of Tar epoxy resin
Side Cover Bearing Support (Gland packing Type)	Cast Iron (FC)			
Common Base	Cast Iron (FC)	Under coat - 1 coat of Zinc chromate primer Finish coat - 1 coat of Phthalic resin enamel		
	Steel			

Inspections and Test 50 Hz

Item Check	Standard		Option	
Material Inspection	**EI**	Material chemical composition and mechanical Properties are checked periodically according to JIS.	**CR/ ES**	Material certificat is to be submitted
Hydrostatic test ***3**	**EN**	Hydrostatic test is to be performed on casing using fresh water at normal temperature. Iron	**EN**	Hydrostatic test record is to be submitted
Balancing test ***3**	**EN**	Impeller is to be subject to balancing test	**EN**	
Assembly dimensional inspection ***3**	**EN**	Dimensions of the followings are to be subject to inspection * Position of foundation bolt hole * Position of suction & discharge flange * Relative positions of suction and discharge flange and foundation bolt hole.	**CR**	Outline dimensional inspection record is to be submitted.
Performance test General performance ***1**	**ES**	Capacity, total head, pump power input, and speed of rotation are to be measured and pump efficiency to be calculated. Measurement point are to be 5 points within the range from shutoff point 125% rated capacity. Judgement is to be based on JIS Testing Code B8301 9.1 (1)	**CR**	Judgement is to be based on following standards. * JIS Testing Code B8301 9.1 (2) * ISO 2548 Part 1 Class C (as requested by customer)
Bearing Vibration	**EN**	Vibration is to be measured on bearing housing at rated capacity. Judgement is to be based on JIS Testing Code B8301 9.4.1	**CR**	Measured record is to be submitted
Performance test Bearing Temperature	**EN**	Temperature is to be measured at saturated point of the temperature increase. Judgement is to be based on JIS Testing Code B8301 9.4.2	**CR**	Measurement record is to be submitted.
NPSH	**NA**		**CR**	Measurement record is to be performed for Req'd NPSH at above or below rated capacity
	EN	Internal Ebara Standard	**CR**	Noise level is to be measured at rated capacity. ***2**
Shipping Inspection	**ES**	Shipping Inspection is to be performed based on EBARA shipping inspection check sheet.	**ES**	

NOTE :

CR : Ebara Inspector Witness Point (Record shall be submitted)
EI : Ebara Inspector Witness Point (Record shall be not submitted)

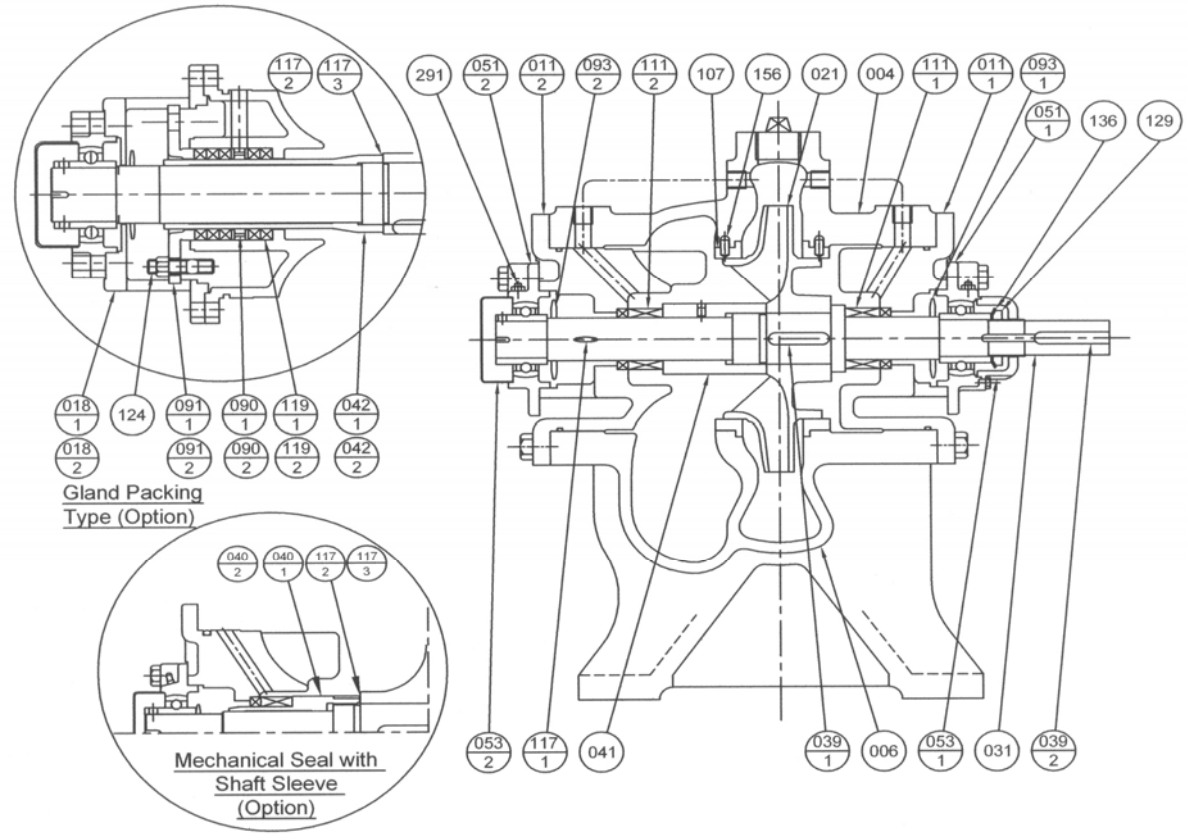
EN : Ebara Inspector Witness Point (Not Recorded but stamp/marking/OK inspection label)
ES : Ebara Inspector Witness Point (Record shall be kept)
NA : Not Applied.

***1** Performance test based on JIS B8301 " Testing Methods for Centrifugal Pumps, Mixed Flow Pumps and Axial Flow Pump" and JIS B8302 "Measurement Methods of Pump Discharge".

***2** Measured Value on pump noise is considered as reference value because its include background noise effect of motor, discharge valve, etc.

***3** Judgement is based on Ebara Standard.

Sectional View - CSA 50 Hz



Gland Packing Type (Option)

042-2	Shaft Sleeve (CCP Side)	BC6	1	119-2	Shaft Sleeve (CCP Side)	Carbonised Fiber	5
042-1	Shaft Sleeve (CP Side)			119-2	Shaft Sleeve (CP Side)	Carbonised Fiber	5
018-2	Bearing Support (CCP Side)	FC200	1	090-2	Lantern Ring (CCP Side)	BC6	1
				090-1	Lantern Ring (CP Side)		
018-1	Bearing Support (CP Side)			091-2	Gland (CCP Side)		
124	Gland Bolt	C3604BD-F	4	091-1	Gland (CP Side)		

Mechanical Seal with Shaft Sleeve Type (Option)

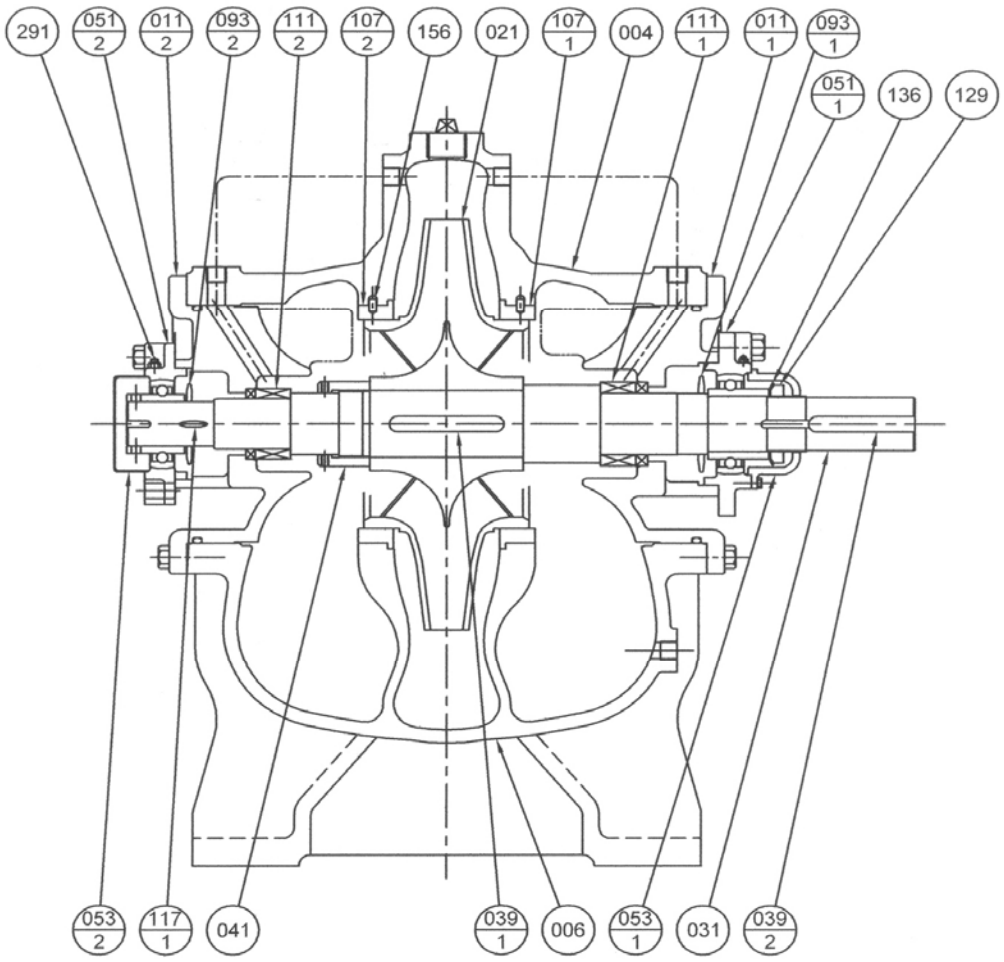
040-2	Shaft Sleeve (CCP Side)	BC6	1	117-3	Sleeve Gasket (CCP Side)	V#6500	1
040-1	Shaft Sleeve (CP Side)	BC6		117-2	Sleeve Gasket (CP Side)	V#6500	

Mechanical Seal Type (Standard)

051-2	Bearing Unit	FC200	1	291	Grease Nipple	C3604BD-F	2
051-1	Bearing Unit			156	Lock Pin	SUS304	
041	Impeller Nut	BC6		136	Bearing Washer	SS400	1
039-2	Coupling Key	S50C		129	Bearing Nut		
039-1	Impeller Key	316 Stainless Steel		117-1	Gasket (Casing)	V#6500	
031	Shaft			111-2	Mechanical Seal	-	
021	Impeller	BC6		111-1	Mechanical Seal	-	
011-2	Side Cover	FC250		107	Casing Wear Ring	BC6	2
011-1	Side Cover			093-2	Deflector (CCP Side)	Rubber	1
006	Casing Lower Half			093-1	Deflector (CP Side)		
004	Casing Upper Half			053-2	Bearing Cover	FC200	
				053-1	Bearing Cover		
No.	**Part Name**	**Material**	**Qty**	**No.**	**Part Name**	**Material**	**Qty**

Sectional View - CNA (1/2)

50 Hz

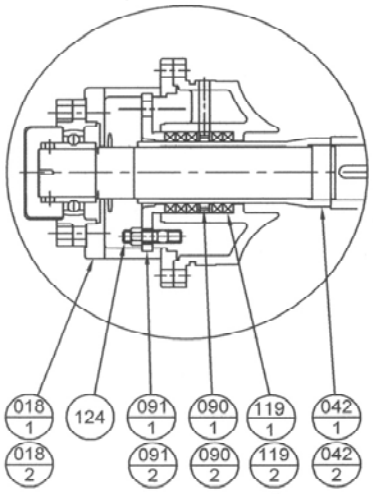


Mechanical Seal Type (Standard)

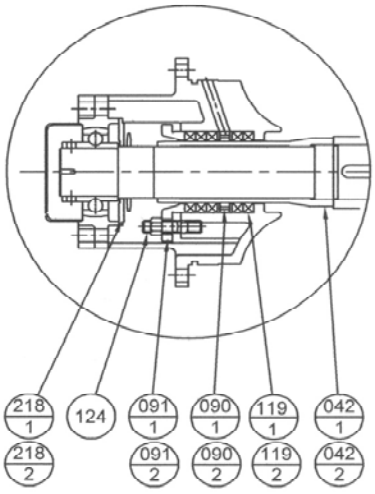
No.	Part Name	Material	Qty	No.	Part Name	Material	Qty
051-2	Bearing Unit	FC200	1	291	Grease Nipple	C3604BD-F	2
051-1	Bearing Unit			156	Lock Pin	SUS304	
041	Impeller Nut	BC6		136	Bearing Washer	SS400	1
039-2	Coupling Key	S50C		129	Bearing Nut		
039-1	Impeller Key	316 Stainless Steel		117-1	Gasket (Casing)	V#6500	
031	Shaft			111-2	Mechanical Seal	-	
021	Impeller	BC6		111-1	Mechanical Seal	-	
011-2	Side Cover	FC250		107	Casing Wear Ring	BC6	2
011-1	Side Cover			093-2	Deflector (CCP Side)	Rubber	1
006	Casing Lower Half			093-1	Deflector (CP Side)		
004	Casing Upper Half			053-2	Bearing Cover	FC200	
				053-1	Bearing Cover		

Sectional View - CNA (2/2)

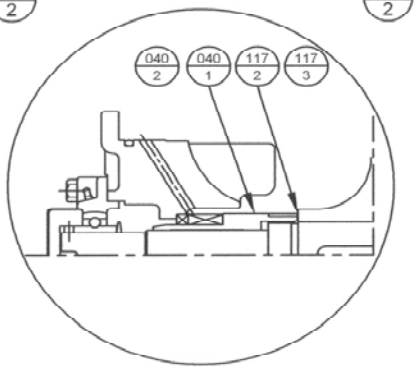
50 Hz



Gland Packing
Type 1 (Option)



Gland Packing
Type 2 (Option)



Mechanical Seal with
Shaft Sleeve
(Option)

Gland Packing Type 2 (Option)

042-2	Shaft Sleeve (CCP Side)	BC6	1	119-2	Gland Packing (CCP Side)	Carbonised Fiber	5
042-1	Shaft Sleeve (CP Side)			119-1	Gland Packing (CP Side)	Carbonised Fiber	5
218-2	Bearing Cover Plate (CCP Side)	FC150	1	090-2	Lantern Ring (CCP Side)	BC6	1
218-1	Bearing Cover Plate (CP Side)			090-1	Lantern Ring (CP Side)		
124	Gland Bolt	C3604BD-F	4	091-2	Gland (CCP Side)		
				091-1	Gland (CP Side)		

Gland Packing Type 1 (Option)

042-2	Shaft Sleeve (CCP Side)	BC6	1	119-2	Gland Packing (CCP Side)	Carbonised Fiber	5
042-1	Shaft Sleeve (CP Side)			119-1	Gland Packing (CP Side)	Carbonised Fiber	5
018-2	Bearing Support (CCP Side)	FC200	1	090-2	Lantern Ring (CCP Side)	BC6	1
018-1	Bearing Support (CP Side)			090-1	Lantern Ring (CP Side)		
124	Gland Bolt	C3604BD-F	4	091-2	Gland (CCP Side)		
				091-1	Gland (CP Side)		

Mechanical Seal with Shaft Sleeve Type (Option)

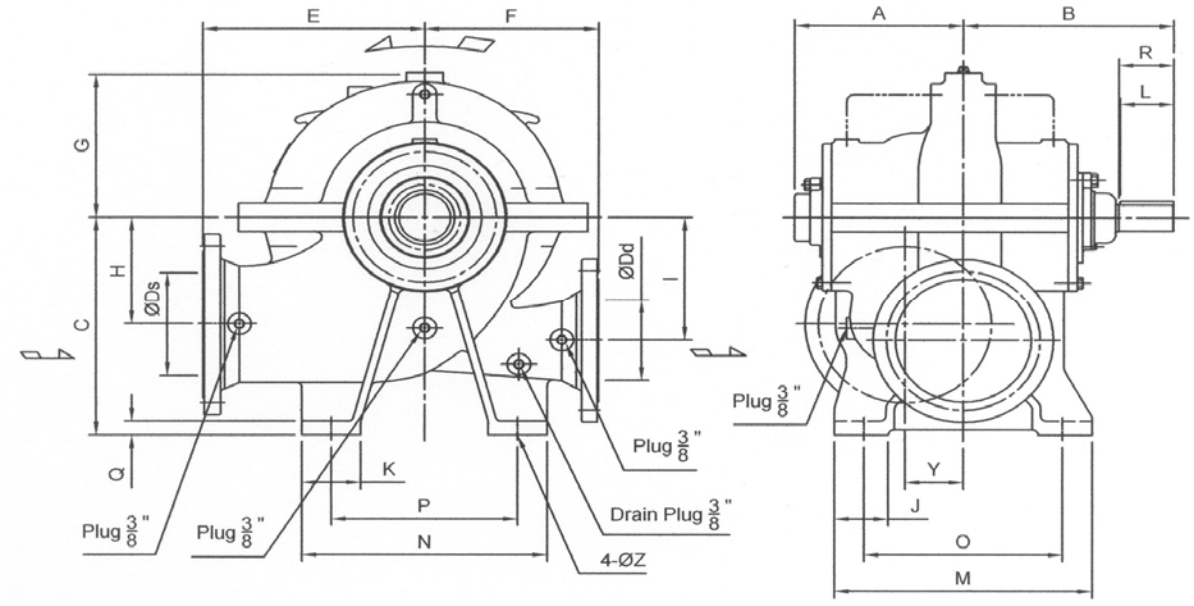
040-2	Shaft Sleeve (CCP Side)	BC6	1	117-3	Sleeve Gasket (CCP Side)	V#6500	1
040-1	Shaft Sleeve (CP Side)	BC6		117-2	Sleeve Gasket (CP Side)	V#6500	
No.	**Part Name**	**Material**	**Qty**	**No.**	**Part Name**	**Material**	**Qty**

Dimensions - Bare Shaft Pump CSA

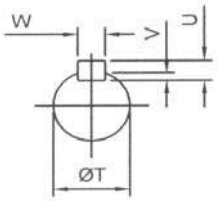
50 Hz

(Standard : Mechanical Seal Type)

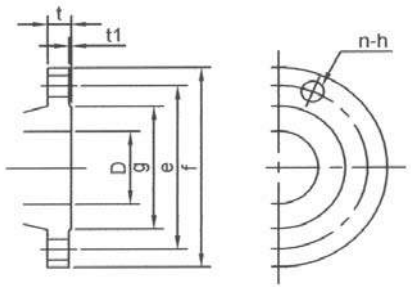
Pump



Shaft End



Flange



Dimension - Flange

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

Dimension - Pump

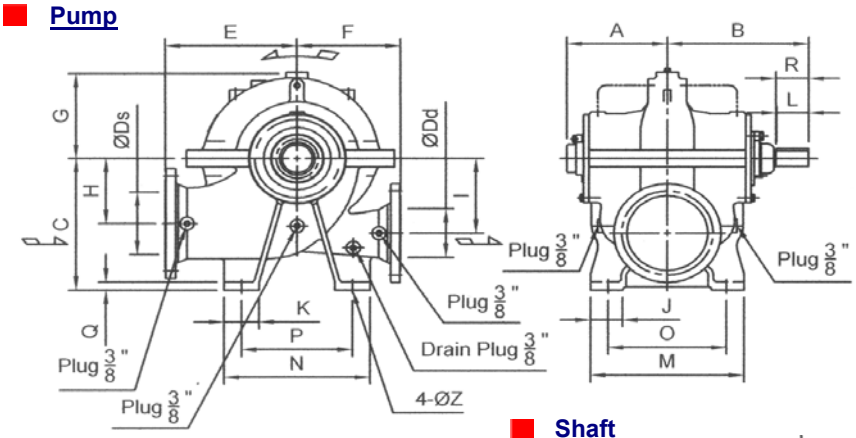
Model	Size		Pump																Shaft						wt
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W	kg
100 x 80 CSGA	100	80	221	250	295	270	240	169	140	140	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	143
100 x 80 CSHA						280	220	185	150	160															165
100 x 80 CSJA							230	202	160	180											63				200
125 x 100 CSJA	125	100	247	325	375	350	280	263	200	230	90	100	430	400	350	300	25	80		80	82	38			12	280

Unit: mm, unless otherwise stated

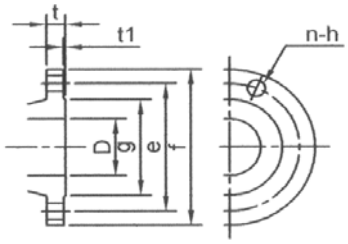
Dimensions - Bare Shaft Pump CNA 50 Hz

(Standard : Mechanical Seal Type)

Pump



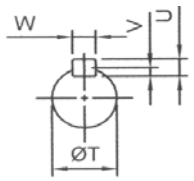
Flange



Dimension - Flange

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



Dimension - Pump

Model	Size		Pump																	Shaft						wt
	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
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		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
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	200	210																310
200x150 CNHA			282	395	390	375	295	268		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		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				470	495			300		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	250	335										125	141	75	12	8	20	785
300x250 CNFA		250	335	470	495	495	405	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	8	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	-	24	110	125	65	11	7	18	800
350x250 CNGA		250						350		303	135															790
350x250 CNHA			414	560			440	373	315	330										125	140	75	12	7.5	20	845
400x350 CNEA	400	350	451	600	630	570	470	355	320	320	140	150	700	700	550	550	35	-	26	110	124	65	11	7	18	1030
400x350 CNFA			439	585		625	510	385	305	344	150						38			125	140	75	12	7.5	20	1035

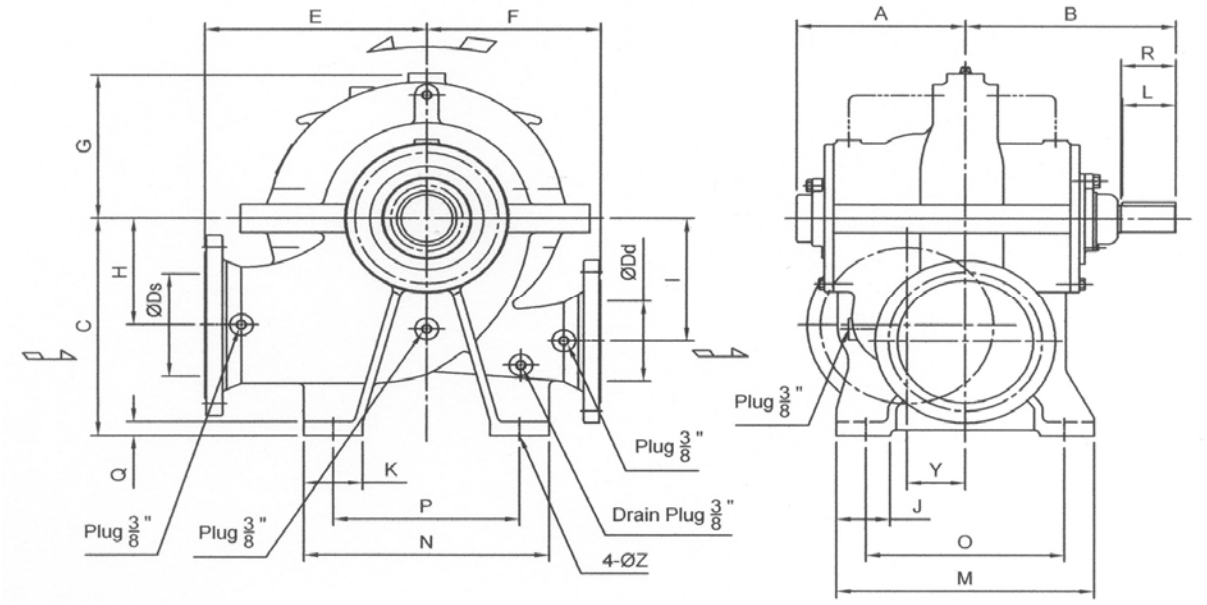
Unit: mm, unless otherwise stated

Dimensions - Bare Shaft Pump CSA

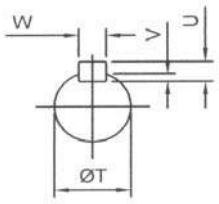
50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

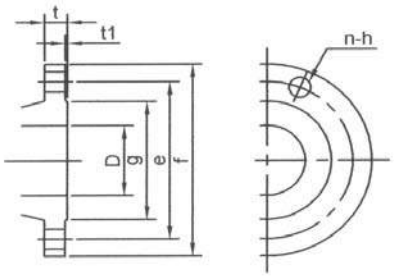
Pump



Shaft End



Flange



Dimension - Flange

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

Dimension - Pump

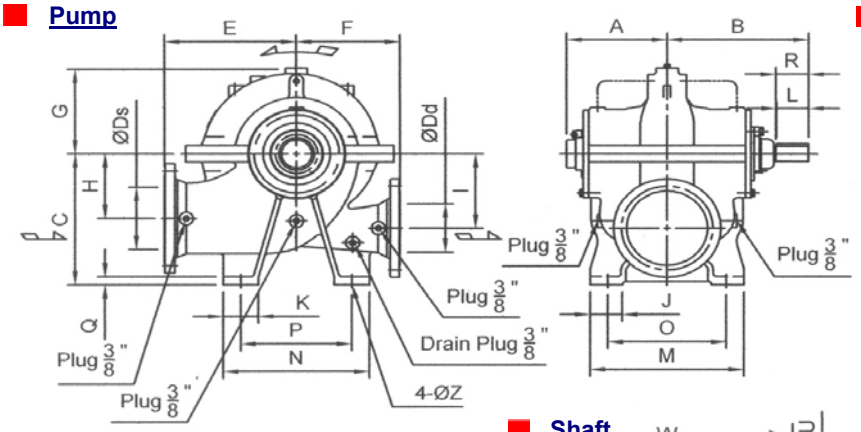
Model	Size		Pump																	Shaft						wt
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W	kg
100 x 80 CSGA	100	80	221	290	295	280	240	169	140	140	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	143
100 x 80 CSHA							220	185	150	160																165
100 x 80 CSJA							230	202	160	180											63					200
125 x 100 CSJA	125	100	247	370	375	350	280	263	200	230	90	100	430	400	350	300	25	80		80	82	38			12	280

Unit: mm, unless otherwise stated

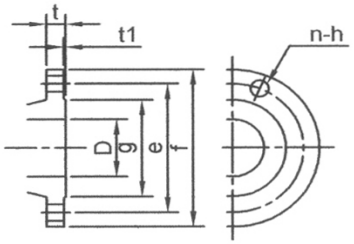
Dimensions - Bare Shaft Pump CNA 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump

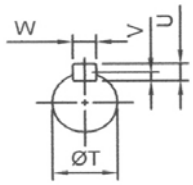


Flange



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



Dimension - Pump

Model	Size		Pump																	Shaft						wt
	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
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		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
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	200	210																310
200x150 CNHA			282	395	390	375	295	268		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	124	65	11	7	18	605
250x150 CNKA			382	530	500	505	430	407	290	345	110	120	550	520	450	400	30			125	141	75	12	8	20	840
300x250 CNEA	300	250	302	415	475	445		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				470	495			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	790
300x250 CNFA		250	335	470	495	495	405	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	8	20	865
300x200 CNKA			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
350x300 CNFA	350	300	386	530	600	560	450	345	310	310	130	150	620	700	500	550	38	-	24	110	125	65	11	7	18	805
350x250 CNGA		250						350		303	135															795
350x250 CNHA			414	560			440	373	315	330										125	140	75	12	7.5	20	850
400x350 CNEA	400	350	451	600	630	570	470	355	320	320	140	150	700	700	550	550	35	-	26	110	124	65	11	7	18	1035
400x350 CNFA			439	585		625	510	385	305	344	150						38			125	140	75	12	7.5	20	1040

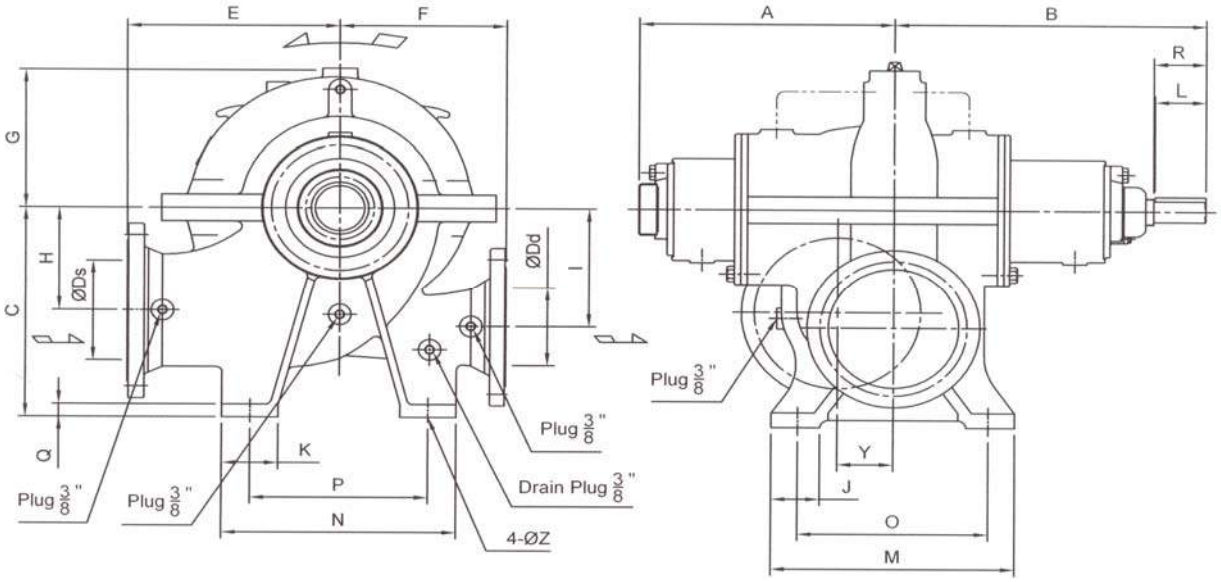
Unit: mm, unless otherwise stated

Dimensions - Bare Shaft Pump CSA

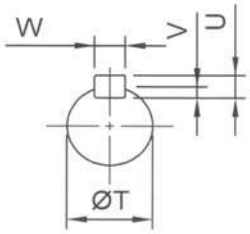
50 Hz

(Optional : Gland Packing Type)

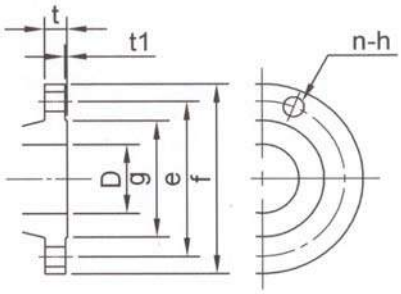
Pump



Shaft End



Flange



Dimension - Flange

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

Dimension - Pump

Model	Size		Pump																	Shaft						wt
	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
100 x 80 CSGA	100	80	314	385	295	270	240	169	140	140	60	70	300	290	250	230	20	70	19	56	68	28	8	5	10	147
100 x 80 CSHA						280	220	185	150	160																170
100 x 80 CSJA							230	202	160	180											63					206
125 x 100 CSJA	125	100	340	440	375	350	280	263	200	230	90	100	430	400	350	300	25	80		80	82	38			12	288

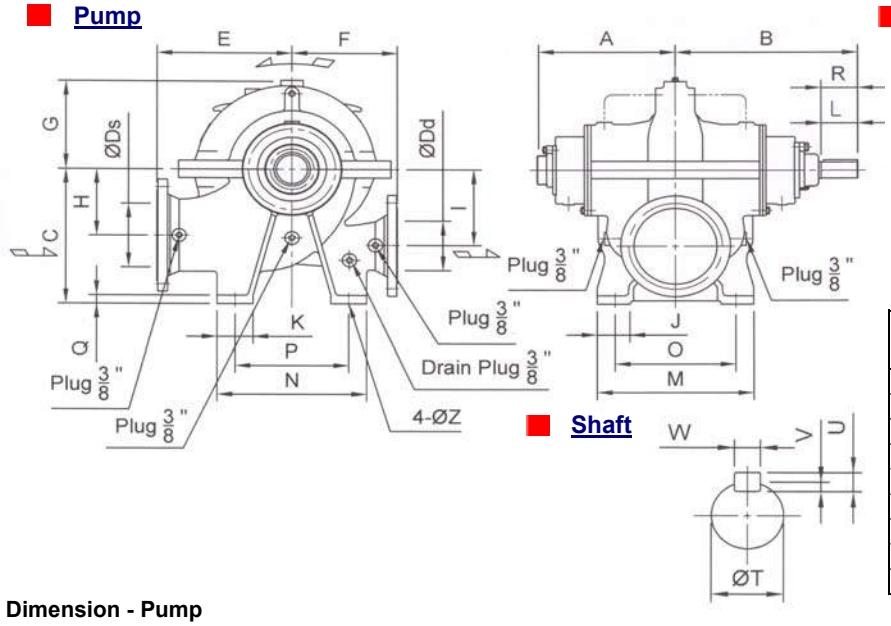
Unit: mm, unless otherwise stated

Dimensions - Bare Shaft Pump CNA

50 Hz

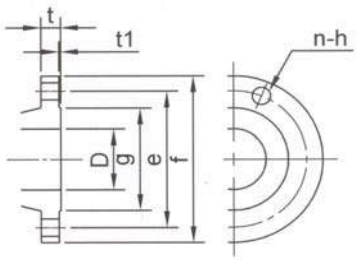
(Optional : Gland Packing Type)

Pump



Shaft

Flange



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

Dimension - Pump

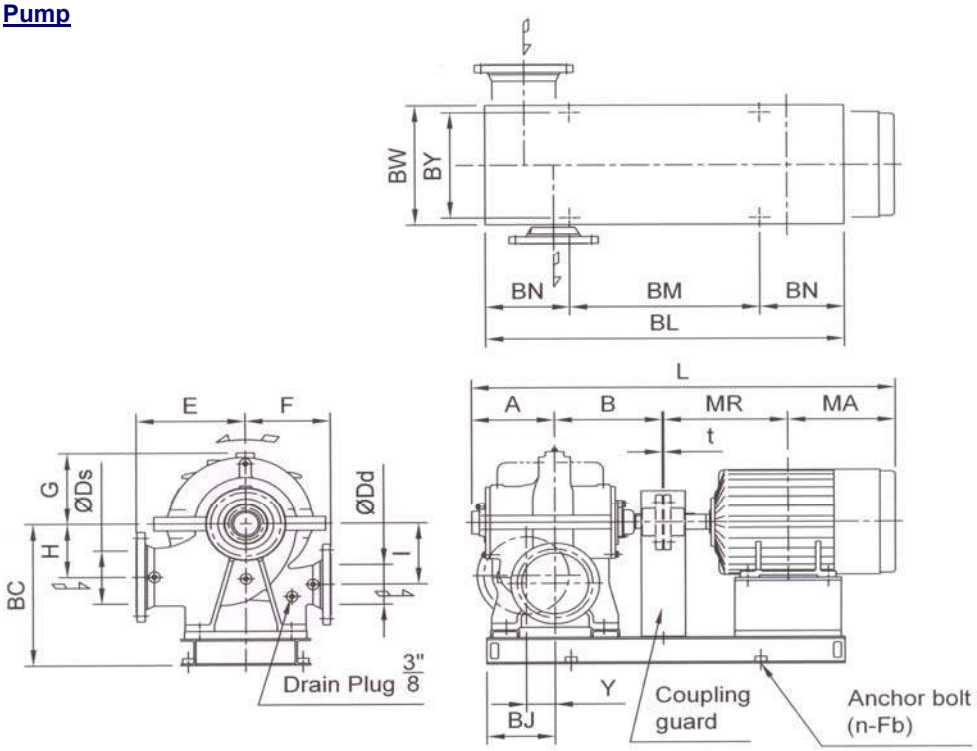
Model	Size		Pump																	Shaft						wt
	Ds	Dd	A	B	C	E	F	G	H	I	J	K	M	N	O	P	Q	Y	Z	L	R	T	U	V	W	kg
125x100 CNGA	125	100	326	450	295	290	250	181	150	150	60	70	300	290	250	230	20	-	19	80	97	38	8	5	10	215
125x100 CNHA						300		195		160																249
125x80 CNJA		80				330		226		190	70	80	340	320	280	250										258
150X150 CNFA	150	150	355	475	355	330	290	205	180	170	80	90	380	360	310	270	25	-	19	80	92	38	8	5	10	260
150X125 CNGA		125	364	505			260	224	190	190										90	96	48	9	5.5	14	283
150X125 CNHA			355	475		350	280	243		210										80	92	38	8	5	10	278
150X100 CNJA		100	364	505	390	380	290	269		240	90	100	430	400	350	300				90	96	48	9	5.5	14	340
200X200 CNEA	200	200	356	475	375	355	300	223	190	190	90	100	430	400	350	300	25	-	19	80	92	38	8	5	10	278
200X150 CNFA		150					285	224																		288
200X150 CNGA								245		210																319
200X150 CNHA			381	505	390	375	295	268	200	230										90	102	48	9	5.5	14	366
200X100 CNJA		100	410	560	445	420	335	309		270	100	110	480	450	390	340			24	100	117	55	10	6	16	458
250X200 CNEA	250	200	366	475	425	395	315	243	210	210	100	110	480	450	390	340	25	-	24	80	82	38	8	5	10	360
250X200 CNFA			381	505				247												90	102	48	9	5.5	14	380
250X150 CNGA		150			445			276		240																415
250X150 CNHA			420	560		430	325	299	220	260										100	107	55	10	6	16	500
250X150 CNJA			468	610	495	470	355	346		300	110	120	550	520	450	400	30			110	116	65	11	7	18	605
250X150 CNKA			467	615	500	505	430	407	290	345										125	141	75	12	8	20	872
300X250 CNEA	300	250	401	515	475	445	355	274	235	235	110	120	550	520	450	400	30	-	24	90	92	48	9	5.5	14	448
300X200 CNFA		200	420	560				280												100	107	55	10	6	16	505
300X200 CNGA				565	495			300		270											112					535
300X200 CNHA			468	610		465	365	332		290										110	116	65	11	7	18	644
300X150 CNJA		150	467	615	500	520	405	384	250	335										125	141	75	12	8	20	813
300X250 CNFA		250	440	575	495	495		306		260										100	102	55	10	6	16	587
300X250 CNGA			478	620				313												110	116	65	11	7	18	638
300X250 CNHA					520			337	275	295																632
300X200 CNJA		200	467	615	500	525	415	379		320										125	141	75	12	8	20	900
300X200 CNKA			505	675	560	570	475	436	290	380	140	150	620	700	500	550	35	-	26	140	156	85	14	9	22	1118
350X300 CNFA	350	300	481	613	600	560	450	345	310	310	130	150	620	700	500	550	38	-	24	110	125	65	11	7	18	836
350X250 CNGA		250						350		303	135															823
350X250 CNHA			491	645			440	373	315	330										125	140	75	12	7.5	20	885
400X350 CNEA	400	350	536	685	630	570	470	355	320	320	140	150	700	700	550	550	35	-	26	110	124	65	11	7	18	1062
400X350 CNFA			522	670		625	510	385	305	344	150						38			125	140	75	12	7.5	20	1076

Unit: mm, unless otherwise stated

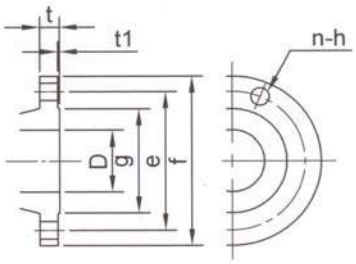
Dimensions - CSA Pump with Motor 4-Poles Drive 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

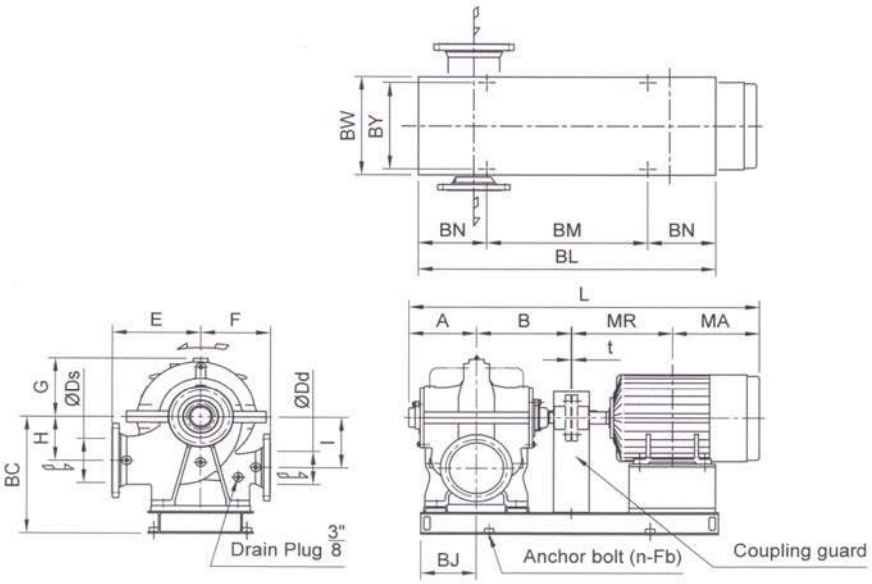
Model	Motor	Size		Pump									Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	169	140	140	70	143	100L	193	170	30	411	170	720	420	150	380	330	4-M12	37	3	837	210
	3.7												112M	200	182	42			730	430					37		856	222
100 x 80 CSHA	3.7	100	80	221	250	280	220	185	150	160	70	165	112M	200	182	42	411	170	730	430	150	380	330	4-M12	37	3	856	244
	5.5												132S	239	207	65			770	470					38		920	268
	7.5												132M	258	226	76			810	510					39		958	280
100 x 80 CSJA	5.5	100	80	221	250	280	230	202	160	180	70	200	132S	239	207	65	411	170	770	470	150	380	330	4-M12	38	3	920	303
	7.5												132M	258	226	76			810	510					39		958	315
	11												160M	323	281	120			890	590					43		1078	363
125 x 100 CSJA	15	125	100	247	325	350	280	263	200	230	80	280	160L	345	303	158	491	235	1080	730	175	450	400	4-M16	79	3	1220	517
	18.5												180M	351.5	315.5	180			1080	730					89		1242	549
	22												180L	370.5	334.5	205			1120	690	215				92		1280	577
	30												200L	395.5	372.5	290			1160	730					96	4	1344	666

Unit: mm, unless otherwise stated

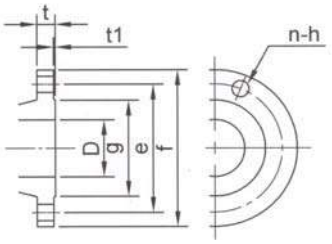
Dimensions - CNA Pump with Motor 4-Poles Drive (1/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

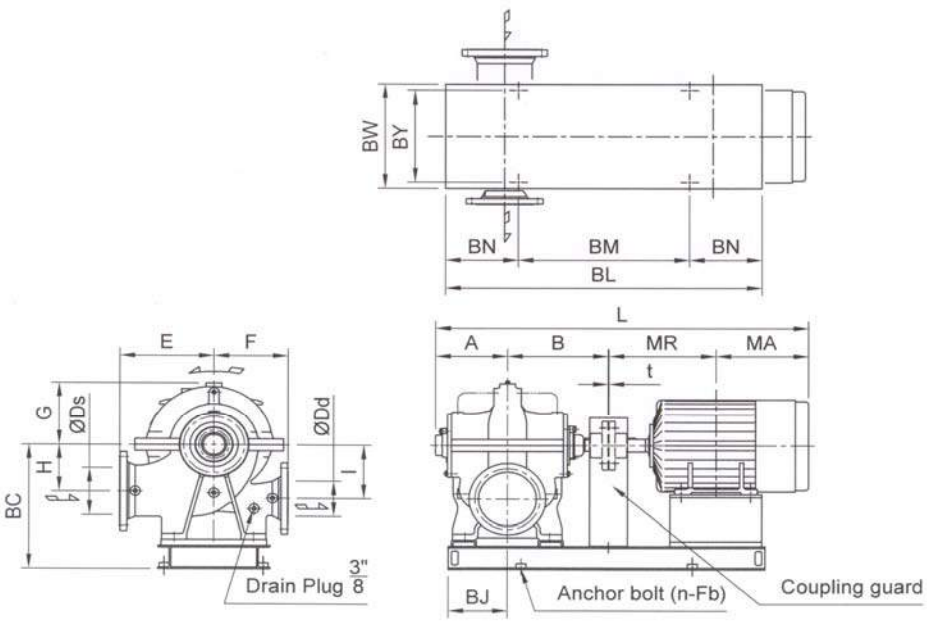
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	181	150	150	209	112M	200	182	42	411	170	830	530	150	380	330	4-M12	39	3	966	290
	5.5											132S	239	207	65			870	570					40		1030	314
	7.5											132M	258	226	76			900	550	175				45		1068	330
125 x 100 CNHA	7.5	125	100	231	350	300	250	195	150	160	242	132M	258	226	76	411	170	900	550	175	380	330	4-M12	45	3	1068	363
	11											160M	323	281	120			990	640				4-M16	56		1188	418
125 x 80 CNJA	11	125	80	231	350	330	250	226	150	190	250	160M	323	281	120	411	190	1010	780	175	400	350	4-M16	60	3	1188	430
	15											160L	345	303	158			1050	700					62		1232	470
	18.5											180M	351.5	315.5	180			1060	710					82		1251	512
150 x 150 CNFA	7.5	150	150	262	370	330	290	205	180	170	253	132M	258	226	76	471	210	970	620	175	450	400	4-M16	69	3	1119	398
	11											160M	323	281	120			1050	700					73		1239	446
150 x 125 CNGA	11	150	125	262	395	330	260	224	190	190	275	160M	323	281	120	471	210	1070	640	215	450	400	4-M16	77	3	1273	472
	15											160L	345	303	158			1120	690					79		1317	512
	18.5											180M	351.5	315.5	180			1130	700					86		1336	541
150 x 125 CNHA	18.5	150	125	262	370	350	280	243	190	210	270	180M	351.5	315.5	180	471	210	1100	670	215	450	400	4-M16	85	3	1302	535
	22											180L	370.5	334.5	205			1140	710					87		1340	562
	30											200L	395.5	372.5	290			1180	750		500	450		95	4	1404	655
150 x 100 CNJA	30	150	100	271	395	380	290	269	190	240	330	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1438	718
	37											225S	432	379	320			1260	830		500	450		106		1481	756
	45											225M	444.5	391.5	358			1290	860					108		1506	796

Unit: mm, unless otherwise stated

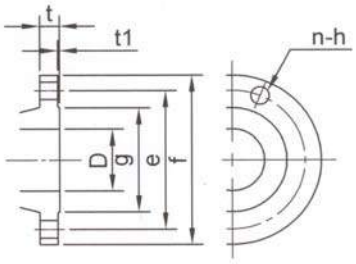
Dimensions - CNA Pump with Motor 4-Poles Drive (2/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

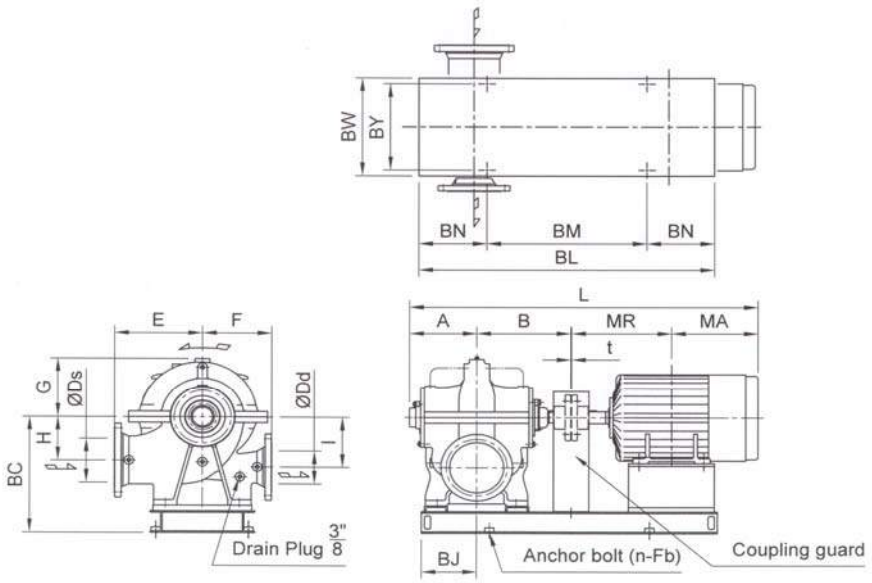
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
200 x 200 CNEA	7.5	200	200	263	370	355	300	223	190	190	270	132M	258	226	76	491	235	990	640	175	450	400	4-M16	74	3	1120	420
	11											160M	323	281	120			1070	720					78		1240	468
	15											160L	345	303	158			1120	690	215				80		1284	508
200 x 150 CNFA	15	200	150	263	370	355	285	224	190	190	280	160L	345	303	158	491	235	1120	690	215	450	400	4-M16	80	3	1284	518
	18.5											180M	351.5	315.5	180			1130	700					91		1303	551
200 x 150 CNGA	18.5	200	150	263	370	355	285	245	200	210	310	180M	351.5	315.5	180	491	235	1130	700	215	450	400	4-M16	91	3	1303	581
	22											180L	370.5	334.5	205			1160	730					93		1341	608
	30											200L	395.5	372.5	290			1210	780					97	4	1405	697
	37											225S	432	379	320			1240	810		500	450		105		1448	735
200 x 150 CNHA	30	200	150	282	395	375	295	268	200	230	355	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1449	743
	37											225S	432	379	320			1260	880		500	450		106		1492	781
	45											225M	444.5	391.5	358			1290	860					108		1517	821
	55											250S	463.5	409	520	531		1310	880		560	500	4-M20	143		1554	1018
200 x 100 CNJA	45	200	100	305	450	420	335	309	200	270	445	225M	444.5	391.5	358	561	260	1370	940	215	500	450	4-M16	117	4	1595	920
	55											250S	463.5	409	520	586		1390	960		560	500	4-M20	155		1632	1120
	75											250M	482.5	428	580			1430	1000					159		1670	1184
	90											280S	544	463	700			1500	950	275	640	580		179		1766	1324

Unit: mm, unless otherwise stated

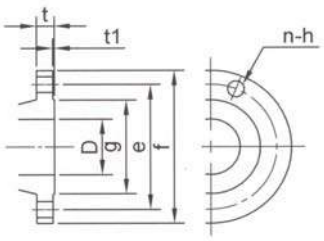
Dimensions - CNA Pump with Motor 4-Poles Drive (3/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

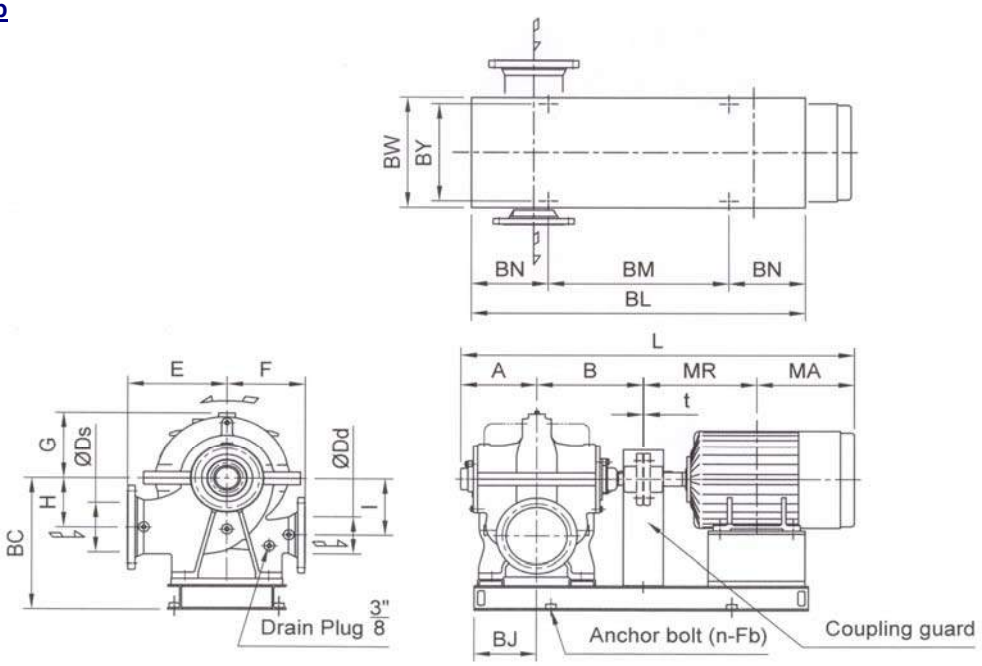
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
250 x 200 CNEA	15	250	200	273	395	395	315	243	210	210	360	160L	345	303	158	541	260	1170	740	215	500	450	4-M16	90	3	1319	608
	18.5											180M	351.5	315.5	180			1180	750					103		1338	643
	22											180L	370.5	334.5	205			1210	780					107		1376	672
250 x 200 CNFA	22	250	200	282	395	395	315	247	210	210	380	180L	370.5	334.5	205	541	260	1210	780	215	500	450	4-M16	107	3	1385	692
	30											200L	395.5	372.5	290			1260	830					109	4	1449	779
	37											225S	432	379	320			1290	860					114		1492	814
250 x 150 CNGA	37	250	150	282	395	395	315	276	220	240	415	225S	432	379	320	561	260	1290	860	215	500	450	4-M16	114	4	1492	849
	45											225M	444.5	391.5	358			1310	880					115		1517	888
	55											250S	463.5	409	520	586		1330	900		560	500	4-M20	153		1554	1088
250 x 150 CNHA	55	250	150	315	450	430	325	299	220	260	500	250S	463.5	409	520	586	260	1390	960	215	560	500	4-M20	155	4	1642	1175
	75											250M	482.5	428	580			1430	1000					159		1680	1239
	90											280S	544	463	700			1500	950	275	640	580		179		1776	1379
250 x 150 CNJA	75	250	150	350	500	470	355	346	220	300	605	250M	482.5	428	580	636	295	1520	970	275	580	520	4-M20	172	4	1765	1357
	90											280S	544	463	700			1580	1030		640	580		184		1861	1489
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188		1912	1592
	132											315S	589	517	1030			1650	2x650					215		1960	1850
	150											315M	614.5	552.5	1030			1700	2x675					220		2011	1855
250 x 150 CNKA	110	250	150	382	530	505	430	407	290	345	835	280M	569.5	488.5	800	666	300	1680	2x665	175	640	580	6-M20	192	4	1988	1827
	132											315S	589	517	920			1700	2x675					220		2032	1975
	150											315M	614.5	552.5	1030			1750	2x700					235		2083	2100
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2140
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2555

Unit: mm, unless otherwise stated

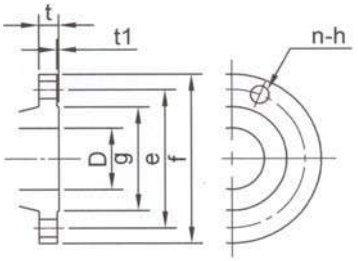
Dimensions - CNA Pump with Motor 4-Poles Drive (4/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

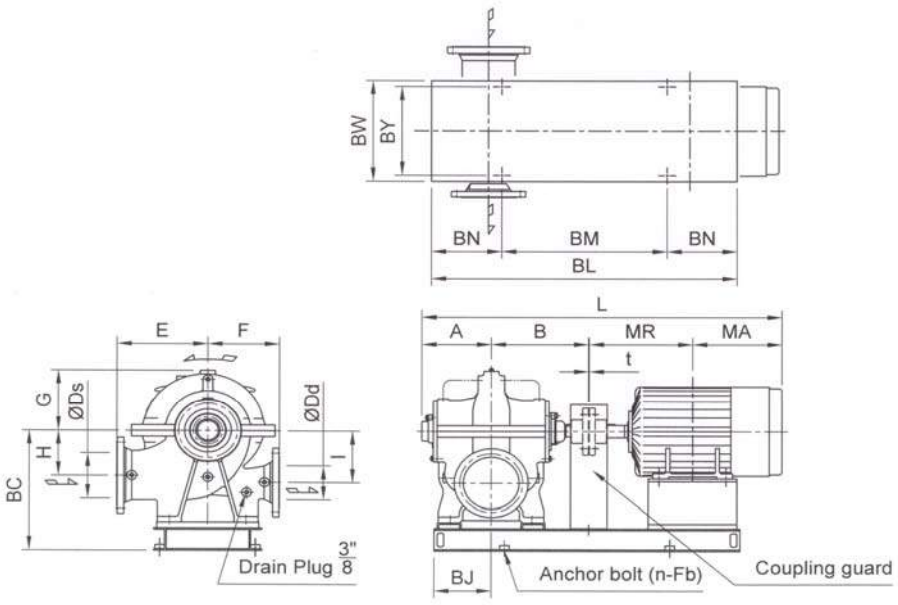
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNEA	22	300	250	302	415	445	355	274	235	235	435	180L	370.5	334.5	205	616	295	1270	840	215	600	540	4-M20	141	4	1425	781
	30											200L	395.5	372.5	290			1310	880					144		1489	869
	37											225S	432	379	320			1340	910					149		1532	904
300 x 200 CNFA	37	300	200	315	450	445	355	280	235	235	490	225S	432	379	320	616	295	1370	940	215	600	540	4-M20	160	4	1580	970
	45											225M	444.5	391.5	358			1400	970					162		1605	1010
	55											250S	463.5	409	520			1420	990					167		1642	1177
300 x 200 CNGA	55	300	200	315	470	445	355	300	250	270	520	250S	463.5	409	520	636	295	1440	1010	215	640	580	4-M20	167	4	1662	1207
	75											250M	482.5	428	580			1480	1050					171		1770	1271
	90											280S	544	463	700			1550	1000	275				183		1796	1403
300 x 200 CNHA	90	300	200	350	500	465	365	332	250	290	625	280S	544	463	700	636	295	1580	1030	275	640	580	4-M20	184	4	1861	1509
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188		1912	1613
	132											315S	589	517	1030			1650	2x650					215		1960	1870
	150											315M	614.5	552.5	1030			1700	2x725					220		2011	1875
300 x 150 CNJA	150	300	150	382	530	520	405	384	250	335	785	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2050
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2090
	220											315AB	666	830	1450			1910	2x740	215	700	640		270		2413	2505
	260											315CB	741	905	1660			2060	2x755	275			6-M22	280	5	2563	2725
	300											315CB	741	905	1800			2060	2x755					280		2563	2865

Unit: mm, unless otherwise stated

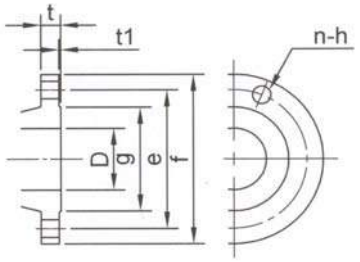
Dimensions - CNA Pump with Motor 4-Poles Drive (5/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

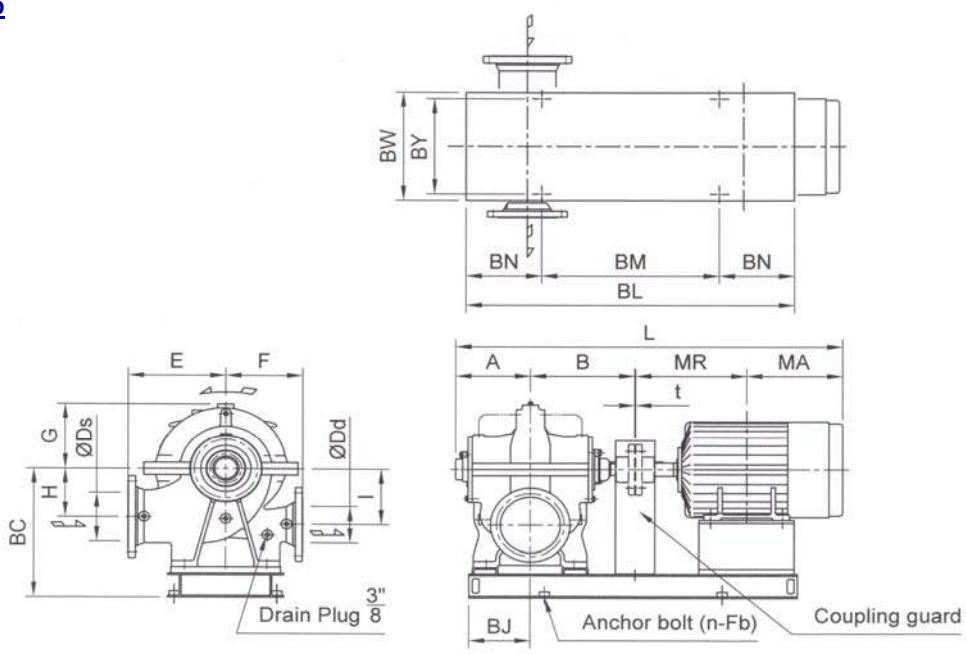
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNFA	37	300	250	335	470	495	405	306	250	260	570	225S	432	379	320	636	295	1400	970	215	600	540	4-M20	160	4	1620	1050
	45											225M	444.5	391.5	358			1410	980					162		1645	1090
	55											250S	463.5	409	520			1440	1010		640	580		167		1682	1257
	75											250M	482.5	428	580			1480	1050					171		1720	1321
300 x 250 CNGA	75	300	250	360	500	495	405	313	250	260	620	250M	482.5	428	580	616	295	1370	970	275	580	520	4-M20	172	4	1775	1372
	90											280S	544	463	700			1400	980		640	580		184		1871	1504
	110											280M	569.5	488.5	800			1420	2x645	175			6-M20	188		1922	1608
300 x 250 CNHA	110	300	250	360	500	495	405	337	275	295	615	280M	569.5	488.5	800	636	295	1440	2x645	175	640	580	6-M20	189	4	1922	1804
	132											315S	589	517	1030			1480	2x700					216		1970	2061
	150											315M	614.5	552.5	1030			1550	2x725					221		2021	2066
300 x 200 CNJA	150	300	200	382	530	525	415	379	275	320	860	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2125
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2165
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2580
	260											315CB	741	905	1660			2060	2x755	275				280		2563	2800
	300											315CB	741	905	1800			2060	2x755					280		2563	2940
300 x 200 CNKA	220	300	200	415	585	570	475	436	290	380	1070	315AB	666	830	1450	735	355	2030	3x560	175	790	720	8-M22	300	5	2501	2820
	260											315CB	741	905	1660			2180	3x610					315		2651	3045
	300											315CB	741	905	1800			2180	3x610					315		2651	3185
	335											315DB	841	1005	1900			2380	3x650	215		710		330		2851	3300
	370											355AB	779	970	2150	785		2240	3x630	175	840	760	8-M24	320		2754	3540
	450											400CB	990	1135	2500			2620	3x690	275	900	820		350		3130	3920

Unit: mm, unless otherwise stated

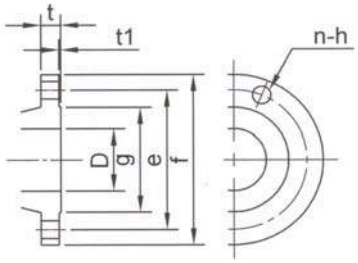
Dimensions - CNA Pump with Motor 4-Poles Drive (6/6) 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

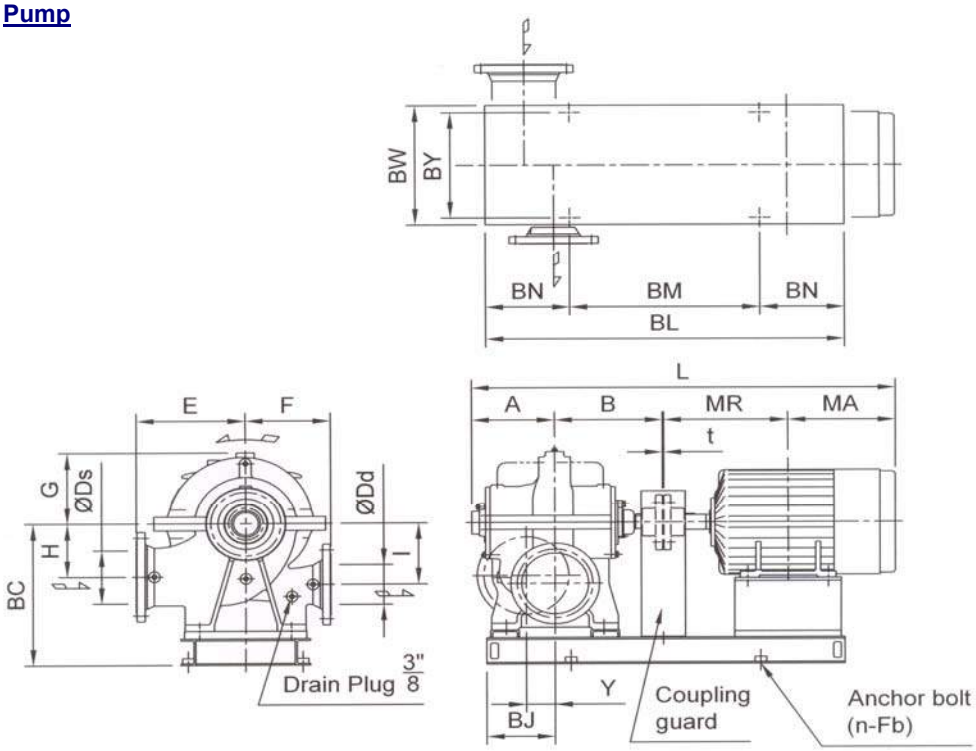
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
350 x 300 CNFA	90	350	300	386	530	560	450	345	310	310	800	280S	544	463	700	775	355	1700	2x675	175	790	720	6-M22	250	4	1927	1750
	110											280M	569.5	488.5	800			1750	2x700	175				265		1978	1865
	132											315S	589	517	1030			1770	2x710	175				270		2026	2100
350 x 250 CNGA	132	350	250	386	530	560	450	350	310	303	790	315S	589	517	920	775	355	1770	2x710	175	790	720	6-M22	270	4	2026	1980
	150											315M	614.5	552.5	1030			1820	2x695	215				285		2087	2105
	185											315M	614.5	552.5	1070			1820	2x695	215				285		2087	2145
350 x 250 CNHA	185	350	250	414	560	560	440	373	315	330	845	315M	614.5	552.5	1070	775	355	1850	2x710	215	790	720	6-M22	290	4	2145	2205
	220											315AB	666	830	1450			200	2x725	275				315	5	2474	2610
	260											315CB	741	905	1660			2150	3x600	175			8-M22	335		2624	2840
	300											315CB	741	905	1800			2150	3x600	175				335		2624	2980
	335											315DB	841	1005	1900			2350	3x640	215				350		2824	3095
400 x 350 CNEA	90	400	350	451	600	570	470	355	320	320	1030	280S	544	463	700	805	390	1810	2x730	175	790	720	6-M22	275	4	2062	2005
	110											280M	569.5	488.5	800			1860	2x715	215				285		2113	2115
	132											315S	589	517	1030			1870	2x720	215				285		2161	2345
	150											315M	614.5	552.5	1030			1920	2x745	215				295		2222	2355
400 x 350 CNFA	150	400	350	439	585	625	510	385	305	344	1035	315M	614.5	552.5	1030	805	390	1910	2x740	215	790	720	6-M22	295	4	2195	2360
	185											315M	614.5	552.5	1070			1910	2x740	215				295		2195	2400
	220											315AB	666	830	1450			2050	2x750	275				315	5	2524	2800

Unit: mm, unless otherwise stated

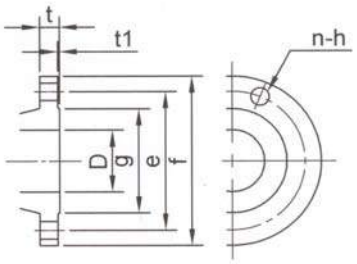
Dimensions - CSA Pump with Motor 4-Poles Drive 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

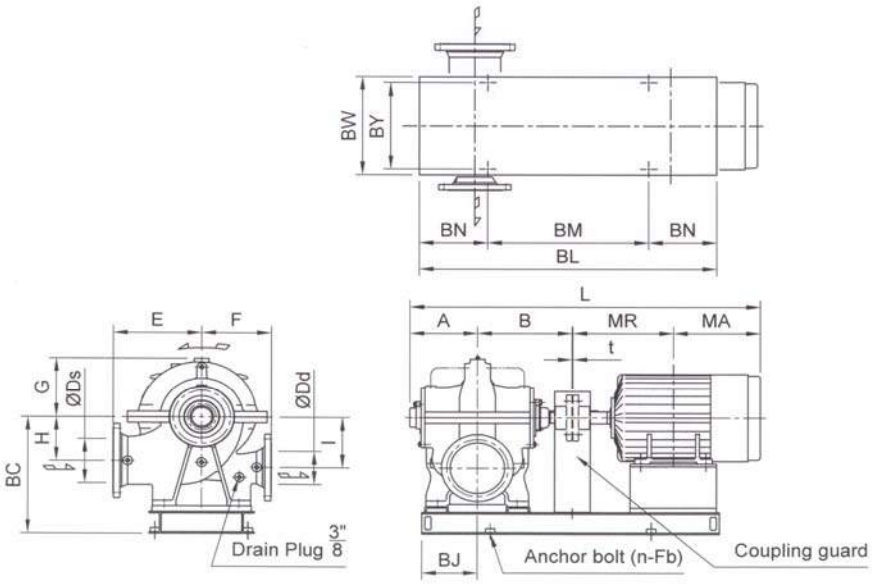
Model	Motor	Size		Pump									Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	169	140	140	70	143	100L	193	170	30	411	170	720	420	150	380	330	4-M12	37	3	837	210
	3.7												112M	200	182	42			730	430					37		856	222
100 x 80 CSHA	3.7	100	80	221	250	280	220	185	150	160	70	165	112M	200	182	42	411	170	730	430	150	380	330	4-M12	37	3	856	244
	5.5												132S	239	207	65			770	470					38		920	268
	7.5												132M	258	226	76			810	510					39		958	280
100 x 80 CSJA	5.5	100	80	221	250	280	230	202	160	180	70	200	132S	239	207	65	411	170	770	470	150	380	330	4-M12	38	3	920	303
	7.5												132M	258	226	76			810	510					39		958	315
	11												160M	323	281	120			890	590					43		1078	363
125 x 100 CSJA	15	125	100	247	325	350	280	263	200	230	80	280	160L	345	303	158	491	235	1080	730	175	450	400	4-M16	79	3	1220	517
	18.5												180M	351.5	315.5	180			1080	730					89		1242	549
	22												180L	370.5	334.5	205			1120	690	215				92		1280	577
	30												200L	395.5	372.5	290			1160	730					96	4	1344	666

Unit: mm, unless otherwise stated

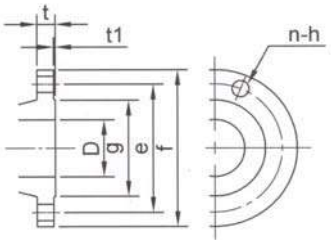
Dimensions - CNA Pump with Motor 4-Poles Drive (1/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

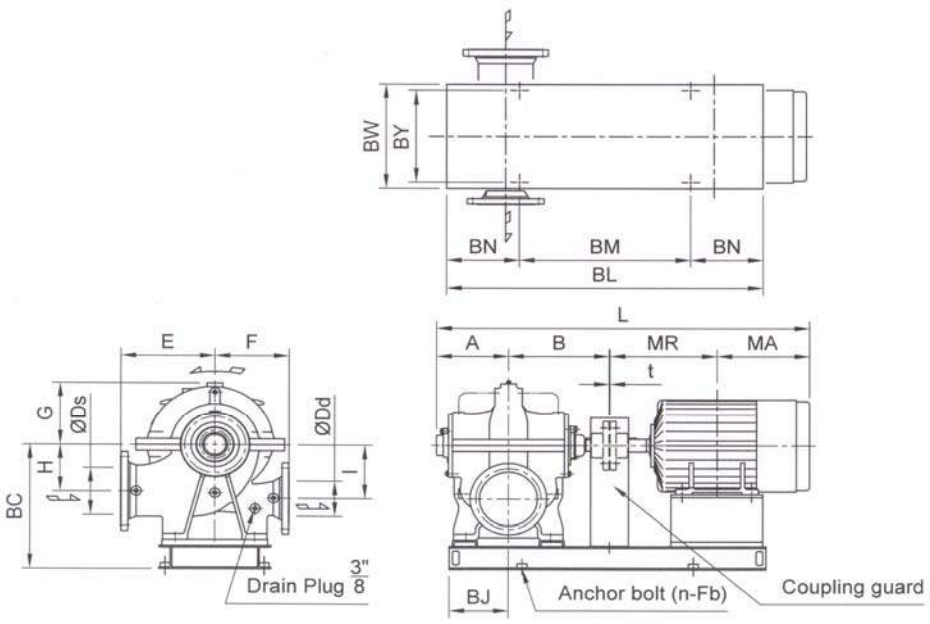
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	181	150	150	209	112M	200	182	42	411	170	830	530	150	380	330	4-M12	39	3	966	290
	5.5											132S	239	207	65			870	570					40		1030	314
	7.5											132M	258	226	76			900	550	175				45		1068	330
125 x 100 CNHA	7.5	125	100	231	350	300	250	195	150	160	242	132M	258	226	76	411	170	900	550	175	380	330	4-M12	45	3	1068	363
	11											160M	323	281	120			990	640				4-M16	56		1188	418
125 x 80 CNJA	11	125	80	231	350	330	250	226	150	190	250	160M	323	281	120	411	190	1010	780	175	400	350	4-M16	60	3	1188	430
	15											160L	345	303	158			1050	700					62		1232	470
	18.5											180M	351.5	315.5	180			1060	710					82		1251	512
150 x 150 CNFA	7.5	150	150	262	370	330	290	205	180	170	253	132M	258	226	76	471	210	970	620	175	450	400	4-M16	69	3	1119	398
	11											160M	323	281	120			1050	700					73		1239	446
150 x 125 CNGA	11	150	125	262	395	330	260	224	190	190	275	160M	323	281	120	471	210	1070	640	215	450	400	4-M16	77	3	1273	472
	15											160L	345	303	158			1120	690					79		1317	512
	18.5											180M	351.5	315.5	180			1130	700					86		1336	541
150 x 125 CNHA	18.5	150	125	262	370	350	280	243	190	210	270	180M	351.5	315.5	180	471	210	1100	670	215	450	400	4-M16	85	3	1302	535
	22											180L	370.5	334.5	205			1140	710					87		1340	562
	30											200L	395.5	372.5	290			1180	750		500	450		95	4	1404	655
150 x 100 CNJA	30	150	100	271	395	380	290	269	190	240	330	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1438	718
	37											225S	432	379	320			1260	830		500	450		106		1481	756
	45											225M	444.5	391.5	358			1290	860					108		1506	796

Unit: mm, unless otherwise stated

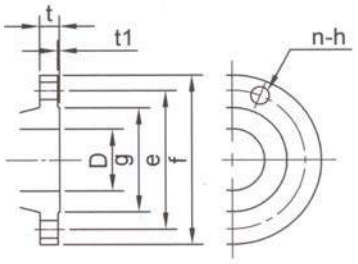
Dimensions - CNA Pump with Motor 4-Poles Drive (2/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

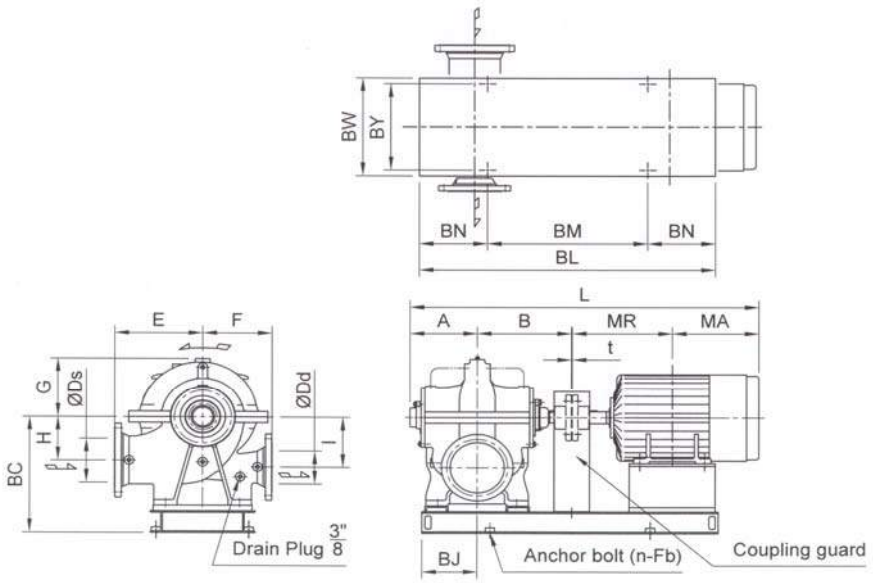
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
200 x 200 CNEA	7.5	200	200	263	370	355	300	223	190	190	270	132M	258	226	76	491	235	990	640	175	450	400	4-M16	74	3	1120	420
	11											160M	323	281	120			1070	720					78		1240	468
	15											160L	345	303	158			1120	690	215				80		1284	508
200 x 150 CNFA	15	200	150	263	370	355	285	224	190	190	280	160L	345	303	158	491	235	1120	690	215	450	400	4-M16	80	3	1284	518
	18.5											180M	351.5	315.5	180			1130	700					91		1303	551
200 x 150 CNGA	18.5	200	150	263	370	355	285	245	200	210	310	180M	351.5	315.5	180	491	235	1130	700	215	450	400	4-M16	91	3	1303	581
	22											180L	370.5	334.5	205			1160	730					93		1341	608
	30											200L	395.5	372.5	290			1210	780					97	4	1405	697
	37											225S	432	379	320			1240	810		500	450		105		1448	735
200 x 150 CNHA	30	200	150	282	395	375	295	268	200	230	355	200L	395.5	372.5	290	506	235	1230	800	215	450	400	4-M16	98	4	1449	743
	37											225S	432	379	320			1260	880		500	450		106		1492	781
	45											225M	444.5	391.5	358			1290	860					108		1517	821
	55											250S	463.5	409	520	531		1310	880		560	500	4-M20	143		1554	1018
200 x 100 CNJA	45	200	100	305	450	420	335	309	200	270	445	225M	444.5	391.5	358	561	260	1370	940	215	500	450	4-M16	117	4	1595	920
	55											250S	463.5	409	520	586		1390	960		560	500	4-M20	155		1632	1120
	75											250M	482.5	428	580			1430	1000					159		1670	1184
	90											280S	544	463	700			1500	950	275	640	580		179		1766	1324

Unit: mm, unless otherwise stated

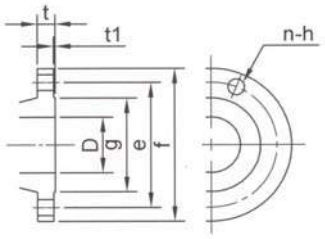
Dimensions - CNA Pump with Motor 4-Poles Drive (3/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

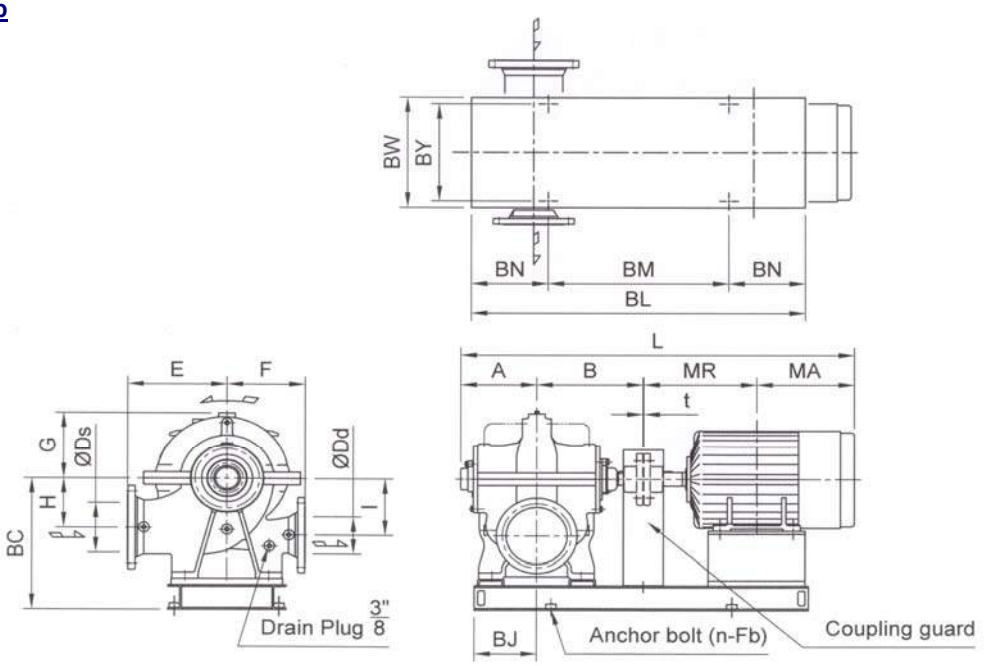
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
250 x 200 CNEA	15	250	200	273	395	395	315	243	210	210	360	160L	345	303	158	541	260	1170	740	215	500	450	4-M16	90	3	1319	608
	18.5											180M	351.5	315.5	180			1180	750					103		1338	643
	22											180L	370.5	334.5	205			1210	780					107		1376	672
250 x 200 CNFA	22	250	200	282	395	395	315	247	210	210	380	180L	370.5	334.5	205	541	260	1210	780	215	500	450	4-M16	107	3	1385	692
	30											200L	395.5	372.5	290			1260	830					109	4	1449	779
	37											225S	432	379	320			1290	860					114		1492	814
250 x 150 CNGA	37	250	150	282	395	395	315	276	220	240	415	225S	432	379	320	561	260	1290	860	215	500	450	4-M16	114	4	1492	849
	45											225M	444.5	391.5	358			1310	880					115		1517	888
	55											250S	463.5	409	520	586		1330	900		560	500	4-M20	153		1554	1088
250 x 150 CNHA	55	250	150	315	450	430	325	299	220	260	500	250S	463.5	409	520	586	260	1390	960	215	560	500	4-M20	155	4	1642	1175
	75											250M	482.5	428	580			1430	1000					159		1680	1239
	90											280S	544	463	700			1500	950	275	640	580		179		1776	1379
250 x 150 CNJA	75	250	150	350	500	470	355	346	220	300	605	250M	482.5	428	580	636	295	1520	970	275	580	520	4-M20	172	4	1765	1357
	90											280S	544	463	700			1580	1030		640	580		184		1861	1489
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188		1912	1592
	132											315S	589	517	1030			1650	2x650					215		1960	1850
	150											315M	614.5	552.5	1030			1700	2x675					220		2011	1855
250 x 150 CNKA	110	250	150	382	530	505	430	407	290	345	835	280M	569.5	488.5	800	666	300	1680	2x665	175	640	580	6-M20	192	4	1988	1827
	132											315S	589	517	920			1700	2x675					220		2032	1975
	150											315M	614.5	552.5	1030			1750	2x700					235		2083	2100
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2140
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2555

Unit: mm, unless otherwise stated

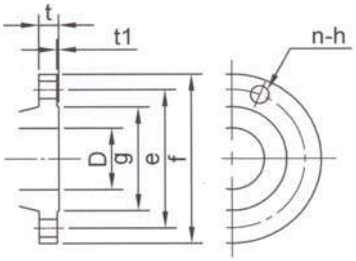
Dimensions - CNA Pump with Motor 4-Poles Drive (4/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

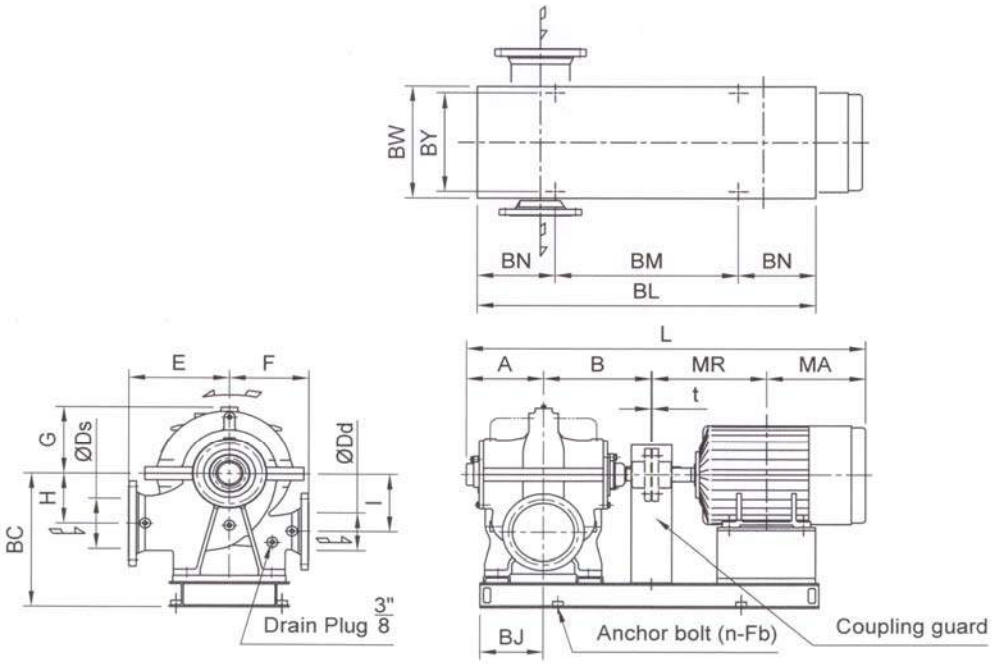
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNEA	22	300	250	302	415	445	355	274	235	235	435	180L	370.5	334.5	205	616	295	1270	840	215	600	540	4-M20	141	4	1425	781
	30											200L	395.5	372.5	290			1310	880					144		1489	869
	37											225S	432	379	320			1340	910					149		1532	904
300 x 200 CNFA	37	300	200	315	450	445	355	280	235	235	490	225S	432	379	320	616	295	1370	940	215	600	540	4-M20	160	4	1580	970
	45											225M	444.5	391.5	358			1400	970					162		1605	1010
	55											250S	463.5	409	520			1420	990					167		1642	1177
300 x 200 CNGA	55	300	200	315	470	445	355	300	250	270	520	250S	463.5	409	520	636	295	1440	1010	215	640	580	4-M20	167	4	1662	1207
	75											250M	482.5	428	580			1480	1050					171		1770	1271
	90											280S	544	463	700			1550	1000	275				183		1796	1403
300 x 200 CNHA	90	300	200	350	500	465	365	332	250	290	625	280S	544	463	700	636	295	1580	1030	275	640	580	4-M20	184	4	1861	1509
	110											280M	569.5	488.5	800			1640	2x645	175			6-M20	188		1912	1613
	132											315S	589	517	1030			1650	2x650					215		1960	1870
	150											315M	614.5	552.5	1030			1700	2x725					220		2011	1875
300 x 150 CNJA	150	300	150	382	530	520	405	384	250	335	790	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2055
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2095
	220											315AB	666	830	1450			1910	2x740	215	700	640		270		2413	2505
	260											315CB	741	905	1660			2060	2x755	275			6-M22	280	5	2563	2725
	300											315CB	741	905	1800			2060	2x755					280		2563	2865

Unit: mm, unless otherwise stated

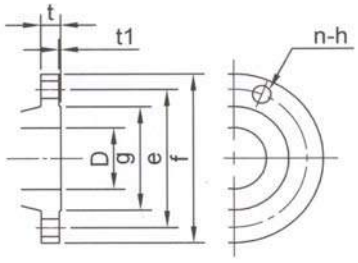
Dimensions - CNA Pump with Motor 4-Poles Drive (5/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

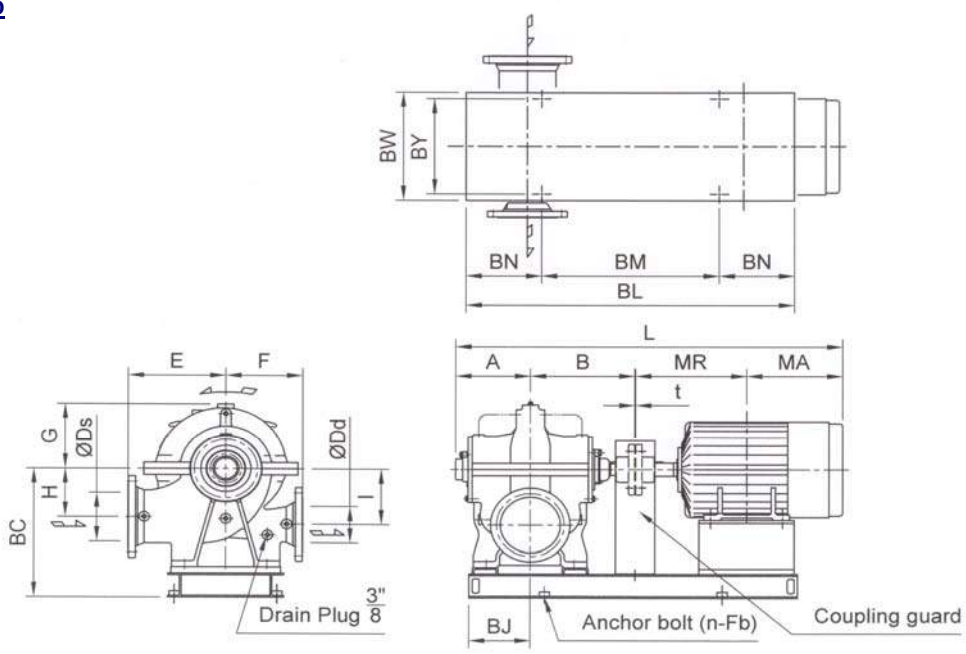
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNFA	37	300	250	335	470	495	405	306	250	260	570	225S	432	379	320	636	295	1400	970	215	600	540	4-M20	160	4	1620	1050
	45											225M	444.5	391.5	358			1410	980					162		1645	1090
	55											250S	463.5	409	520			1440	1010		640	580		167		1682	1257
	75											250M	482.5	428	580			1480	1050					171		1720	1321
300 x 250 CNGA	75	300	250	360	500	495	405	313	250	260	620	250M	482.5	428	580	616	295	1370	970	275	580	520	4-M20	172	4	1775	1372
	90											280S	544	463	700			1400	980		640	580		184		1871	1504
	110											280M	569.5	488.5	800			1420	2x645	175			6-M20	188		1922	1608
300 x 250 CNHA	110	300	250	360	500	495	405	337	275	295	615	280M	569.5	488.5	800	636	295	1440	2x645	175	640	580	6-M20	189	4	1922	1804
	132											315S	589	517	1030			1480	2x700					216		1970	2061
	150											315M	614.5	552.5	1030			1550	2x725					221		2021	2066
300 x 200 CNJA	150	300	200	382	530	525	415	379	275	320	865	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2130
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2170
	220											315AB	666	830	1450			1910	2x740	215	700	640		270	5	2413	2585
	260											315CB	741	905	1660			2060	2x755	275			6-M22	280		2563	2805
	300											315CB	741	905	1800			2060	2x755					280		2563	2945

Unit: mm, unless otherwise stated

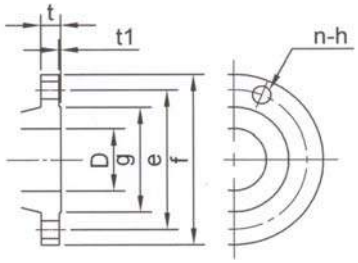
Dimensions - CNA Pump with Motor 4-Poles Drive (6/6) 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

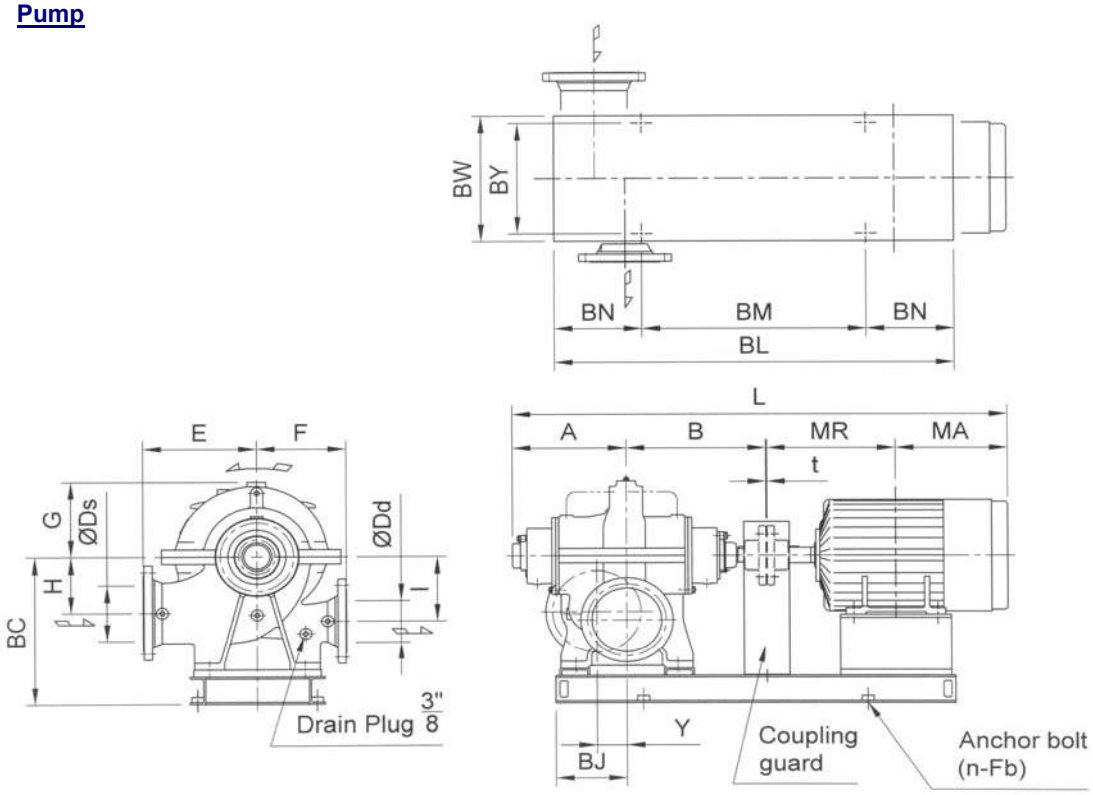
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
350 x 300 CNFA	90	350	300	386	530	560	450	345	310	310	805	280S	544	463	700	775	355	1700	2x675	175	790	720	6-M22	250	4	1927	1750
	110											280M	569.5	488.5	800			1750	2x700	175				265		1978	1870
	132											315S	589	517	1030			1770	2x710	175				270		2026	2105
350 x 250 CNGA	132	350	250	386	530	560	450	350	310	303	795	315S	589	517	920	775	355	1770	2x710	175	790	720	6-M22	270	4	2026	1985
	150											315M	614.5	552.5	1030			1820	2x695	215				285		2087	2110
	185											315M	614.5	552.5	1070			1820	2x695	215				285		2087	2150
350 x 250 CNHA	185	350	250	414	560	560	440	373	315	330	850	315M	614.5	552.5	1070	775	355	1850	2x710	215	790	720	6-M22	290	4	2145	2210
	220											315AB	666	830	1450			200	2x725	275				315	5	2474	2615
	260											315CB	741	905	1660			2150	3x600	175			8-M22	335		2624	2845
	300											315CB	741	905	1800			2150	3x600	175				335		2624	2985
	335											315DB	841	1005	1900			2350	3x640	215				350		2824	3100
400 x 350 CNEA	90	400	350	451	600	570	470	355	320	320	1035	280S	544	463	700	805	390	1810	2x730	175	790	720	6-M22	275	4	2062	2010
	110											280M	569.5	488.5	800			1860	2x715	215				285		2113	2120
	132											315S	589	517	1030			1870	2x720	215				285		2161	2350
	150											315M	614.5	552.5	1030			1920	2x745	215				295		2222	2360
400 x 350 CNFA	150	400	350	439	585	625	510	385	305	344	1045	315M	614.5	552.5	1030	805	390	1910	2x740	215	790	720	6-M22	295	4	2195	2365
	185											315M	614.5	552.5	1070			1910	2x740	215				295		2195	2405
	220											315AB	666	830	1450			2050	2x750	275				315	5	2524	2805

Unit: mm, unless otherwise stated

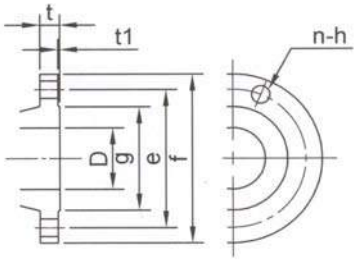
Dimensions - CNA Pump with Motor 4 Pole Drive 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Pump

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

Dimension - Pump

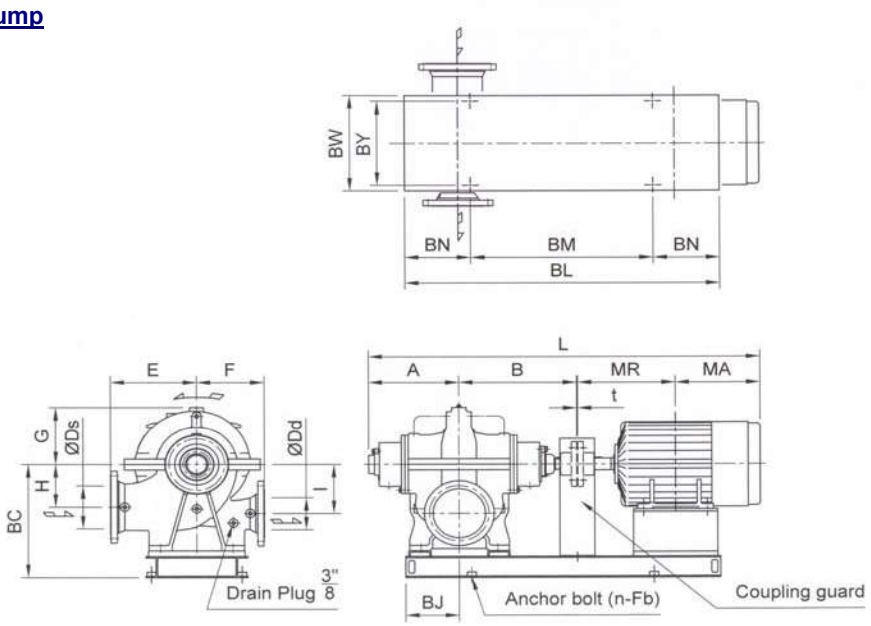
Model	Motor	Size		Pump									Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	2.2	100	80	314	385	270	240	169	140	140	70	147	100L	193	170	30	411	170	855	555	150	380	330	4-M12	40	3	1065	217
	3.7												112M	200	182	42			865	565					40		1084	229
100 x 80 CSHA	3.7	100	80	314	385	280	220	185	150	160	70	170	112M	200	182	42	411	170	865	565	150	380	330	4-M12	40	3	1084	252
	5.5												132S	239	207	65			905	605					41		1148	276
	7.5												132M	258	226	76			945	645					42		1186	286
100 x 80 CSJA	5.5	100	80	314	385	280	230	202	160	180	70	206	132S	239	207	65	411	170	905	605	150	380	330	4-M12	41	3	1148	312
	7.5												132M	258	226	76			945	645					42		1186	324
	11												160M	323	281	120			1025	725					46		1306	372
125 x 100 CSJA	15	125	100	340	440	350	280	263	200	230	80	288	160L	345	303	158	491	235	1195	845	175	450	400	4-M16	82	3	1431	528
	18.5												180M	351.5	315.5	180			1195	845					92		1450	560
	22												180L	370.5	334.5	205			1235	805	215				95		1488	588
	30												200L	395.5	372.5	290			1235	845					99	4	1552	677

Unit: mm, unless otherwise stated

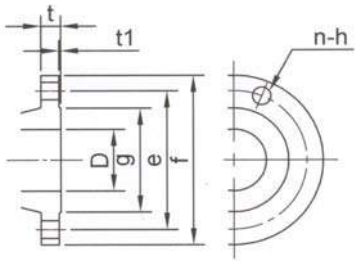
Dimensions - CNA Pump with Motor 4-Poles Drive (1/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

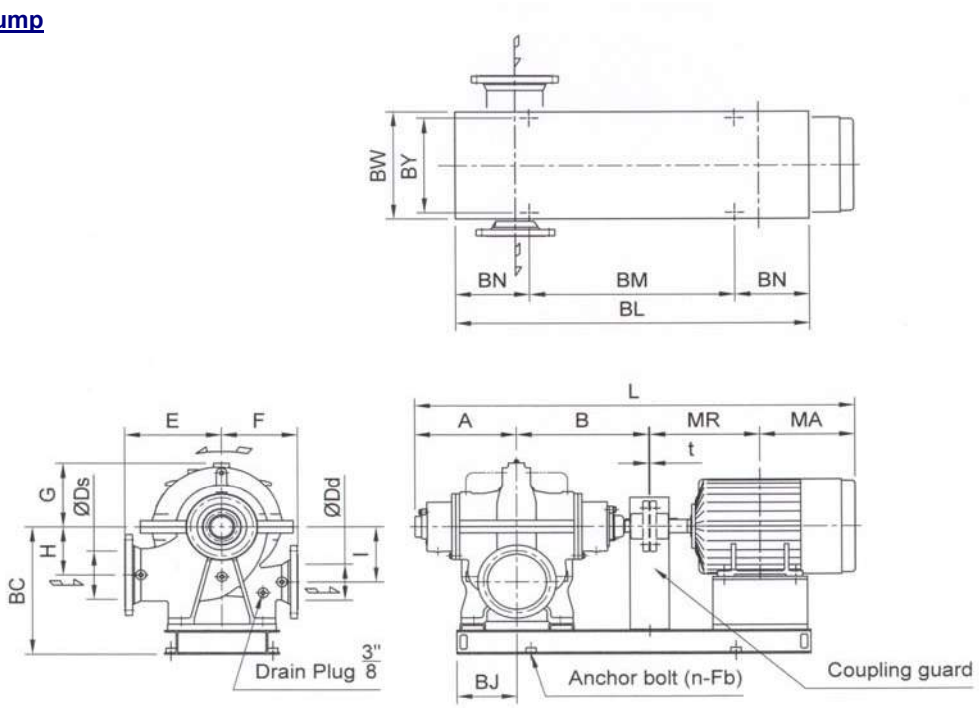
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	3.7	125	100	326	450	290	250	181	150	150	215	112M	200	182	42	411	170	930	630	150	380	330	4-M12	41	3	1161	298
	5.5											132S	239	207	65			970	670					42		1225	322
	7.5											132M	258	226	76			1000	650	175				47		1263	338
125 x 100 CNHA	7.5	125	100	326	450	300	250	195	150	160	249	132M	258	226	76	411	170	1000	650	175	380	330	4-M12	47	3	1263	372
	11											160M	323	281	120			1090	740				4-M16	58		1383	427
125 x 80 CNJA	11	125	80	326	450	330	250	226	150	190	258	160M	323	281	120	411	190	1110	760	175	400	350	4-M16	62	3	1383	440
	15											160L	345	303	158			1150	800					64		1427	480
	18.5											180M	351.5	315.5	180			1160	810					84		1446	522
150 x 150 CNFA	7.5	150	150	355	475	330	290	205	180	170	260	132M	258	226	76	471	210	1075	725	175	450	400	4-M16	72	3	1317	408
	11											160M	323	281	120			1155	805					75		1437	455
150 x 125 CNGA	11	150	125	364	505	330	260	224	190	190	283	160M	323	281	120	471	210	1180	750	215	450	400	4-M16	79	3	1476	482
	15											160L	345	303	158			1230	800					81		1520	522
	18.5											180M	351.5	315.5	180			1240	810					88		1539	551
150 x 125 CNHA	18.5	150	125	355	475	350	280	243	190	210	278	180M	351.5	315.5	180	471	210	1205	775	215	450	400	4-M16	87	3	1500	545
	22											180L	370.5	334.5	205			1245	815					89		1538	572
	30											200L	395.5	372.5	290			1285	855		500	450		97	4	1602	665
150 x 100 CNJA	30	150	100	364	505	380	290	269	190	240	340	200L	395.5	372.5	290	506	235	1340	910	215	450	400	4-M16	100	4	1641	730
	37											225S	432	379	320			1370	940		500	450		108		1684	768
	45											225M	444.5	391.5	358			1400	970					110		1709	808

Unit: mm, unless otherwise stated

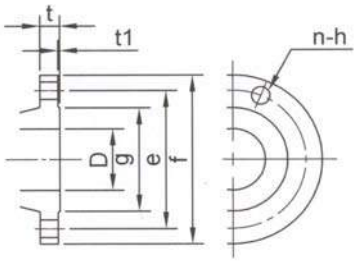
Dimensions - CNA Pump with Motor 4-Poles Drive (2/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

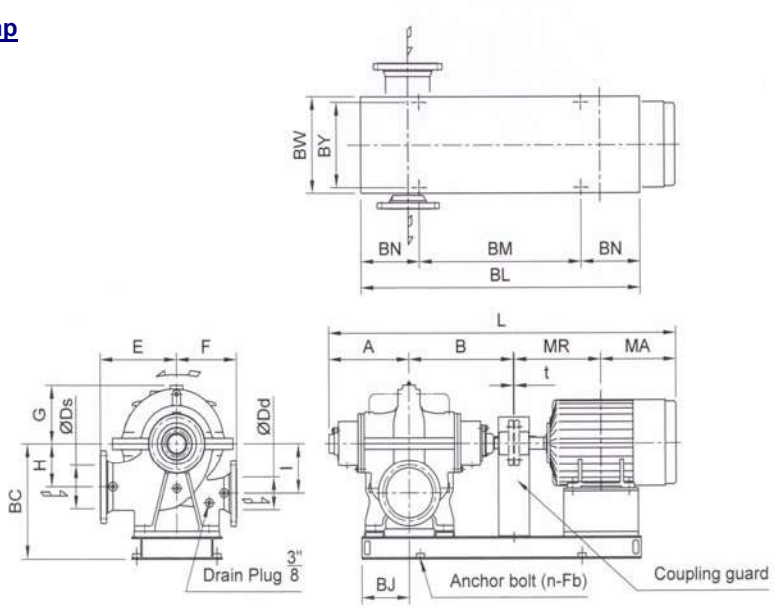
Model	Motor	Size		Pump								Motor				Common Base								Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
200 x 200 CNEA	7.5	200	200	356	475	355	300	223	190	190	278	132M	258	226	76	491	235	1095	745	175	450	400	4-M16	77	3	1318	431
	11											160M	323	281	120			1175	825					81		1438	479
	15											160L	345	303	158			1225	795	215				83		1482	519
200 x 150 CNFA	15	200	150	356	475	355	285	224	190	190	288	160L	345	303	158	491	235	1225	795	215	450	400	4-M16	83	3	1482	529
	18.5											180M	351.5	315.5	180			1235	805					94		1501	562
200 x 150 CNGA	18.5	200	150	356	475	355	285	245	200	210	319	180M	351.5	315.5	180	491	235	1235	805	215	450	400	4-M16	94	3	1501	593
	22											180L	370.5	334.5	205			1265	835					96		1539	620
	30											200L	395.5	372.5	290			1315	885					100	4	1602	709
	37											225S	432	379	320			1345	915		500	450		108		1646	747
200 x 150 CNHA	30	200	150	381	505	375	295	268	200	230	366	200L	395.5	372.5	290	506	235	1340	910	215	450	400	4-M16	101	4	1658	757
	37											225S	432	379	320			1370	940		500	450		109		1701	795
	45											225M	444.5	391.5	358			1400	970					111		1726	835
	55											250S	463.5	409	520	531		1420	990		560	500	4-M20	146		1759	1032
200 x 100 CNJA	45	200	100	410	560	420	335	309	200	270	458	225M	444.5	391.5	358	561	260	1480	1050	215	500	450	4-M16	120	4	1810	936
	55											250S	463.5	409	520	586		1500	1070		560	500	4-M20	158		1847	1136
	75											250M	482.5	428	580			1540	1110					162		1885	1200
	90											280S	544	463	700			1610	1060	275	640	580		182		1981	1340

Unit: mm, unless otherwise stated

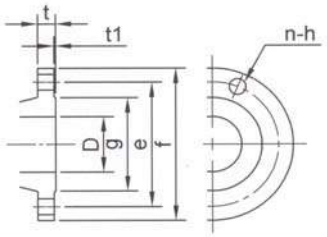
Dimensions - CNA Pump with Motor 4-Poles Drive (3/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

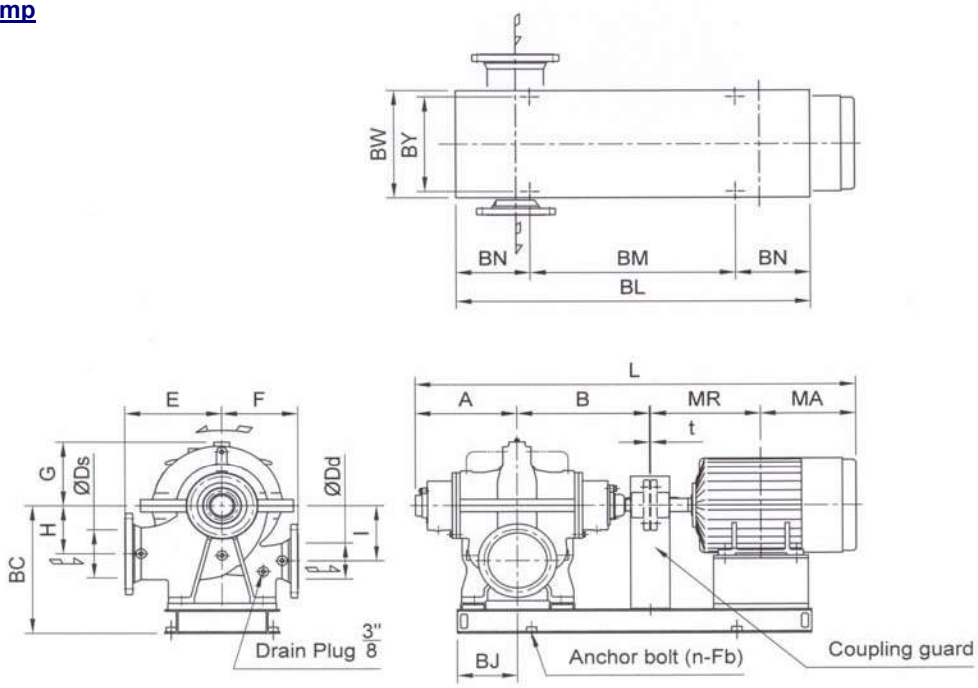
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
250 x 200 CNEA	15	250	200	366	475	395	315	243	210	210	370	160L	345	303	158	541	260	1250	820	215	500	450	4-M16	93	3	1492	621
	18.5											180M	351.5	315.5	180			1260	830					106		1511	656
	22											180L	370.5	334.5	205			1290	860					110		1549	685
250 x 200 CNFA	22	250	200	381	505	395	315	247	210	210	390	180L	370.5	334.5	205	541	260	1320	890	215	500	450	4-M16	110	3	1594	705
	30											200L	395.5	372.5	290			1370	940					112	4	1658	792
	37											225S	432	379	320			1400	970					117		1701	827
250 x 150 CNGA	37	250	150	381	505	395	315	276	220	240	427	225S	432	379	320	561	260	1400	970	215	500	450	4-M16	117	4	1701	864
	45											225M	444.5	391.5	358			1420	990					118		1726	903
	55											250S	463.5	409	520	586		1440	1010		560	500	4-M20	156		1763	1103
250 x 150 CNHA	55	250	150	420	560	430	325	299	220	260	515	250S	463.5	409	520	586	260	1500	1070	215	560	500	4-M20	158	4	1857	1193
	75											250M	482.5	428	580			1540	1110					162		1895	1257
	90											280S	544	463	700			1610	1060	275	640	580		182		1991	1397
250 x 150 CNJA	75	250	150	468	610	470	355	346	220	300	623	250M	483	428	580	636	295	1630	1080	275	580	520	4-M20	175	4	1993	1378
	90											280S	544	463	700			1690	1140		640	580		187		2089	1510
	110											280M	569.5	488.5	800			1750	2x700	175			6-M20	191		2140	1614
	132											315S	589	517	1030			1760	2x705					219		2188	1872
	150											315M	614.5	552.5	1030			1810	2x730					224		2249	1877
250 x 150 CNKA	110	250	150	467	615	505	430	407	290	345	872	280M	569.5	488.5	800	666	300	2090	2x770	275	640	580	6-M22	280	4	2144	1952
	132											315S	589	517	920			2170	2x810					300		2192	2092
	150											315M	614.5	552.5	1030			2190	2x820					305		2253	2207
	185											315M	614.5	552.5	1070			2190	2x820					310		2253	2252
	220											315AB	666	830	1450			2070	2x760		700	640		280	5	2583	2602

Unit: mm, unless otherwise stated

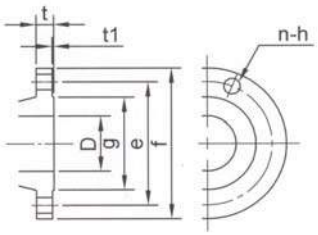
Dimensions - CNA Pump with Motor 4-Poles Drive (4/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

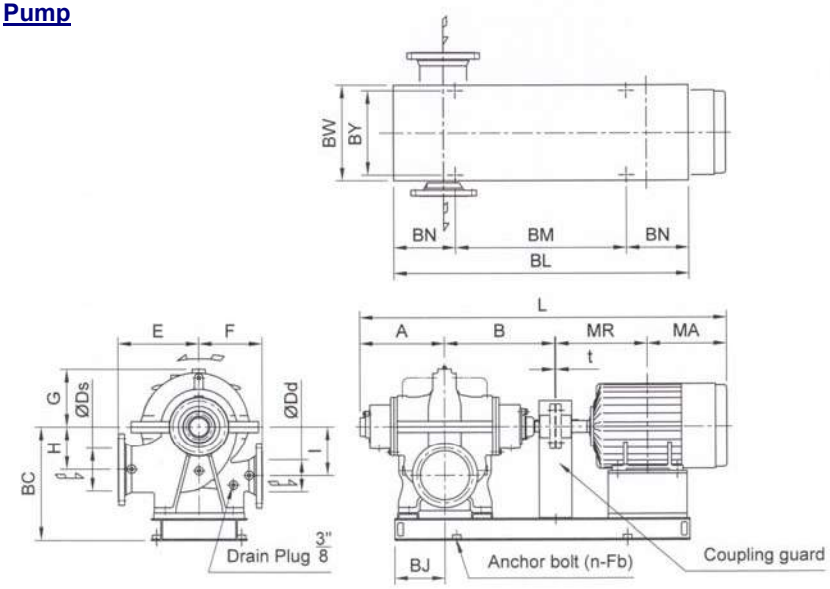
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNEA	22	300	250	401	515	445	355	274	235	235	448	180L	370.5	334.5	205	616	295	1370	940	215	600	540	4-M20	144	4	1625	797
	30											200L	395.5	372.5	290			1410	980					147		1688	885
	37											225S	432	379	320			1440	1010					152		1731	920
300 x 200 CNFA	37	300	200	420	560	445	355	280	235	235	505	225S	432	379	320	616	295	1480	1050	215	600	540	4-M20	163	4	1795	988
	45											225M	444.5	391.5	358			1510	1080					165		1820	1028
	55											250S	463.5	409	520			1530	1100					170		1857	1195
300 x 200 CNGA	55	300	200	420	565	445	355	300	250	270	535	250S	463.5	409	520	636	295	1535	1105	215	640	580	4-M20	170	4	1862	1225
	75											250M	482.5	428	580			1575	1145					174		1900	1289
	90											280S	544	463	700			1645	1095	275				186		1996	1421
300 x 200 CNHA	90	300	200	468	610	465	365	332	250	290	644	280S	544	463	700	636	295	1690	1140	275	640	580	4-M20	187	4	2089	1531
	110											280M	569.5	488.5	800			1750	2x700	175			6-M20	191		2140	1635
	132											315S	589	517	1030			1760	2x700					219		2188	1893
	150											315M	614.5	552.5	1030			1810	2x730					224		2249	1898
300 x 150 CNJA	150	300	150	467	615	520	405	384	250	335	813	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2078
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2118
	220											315AB	666	830	1450			2000	3x550		700	640	8-M20	280	5	2583	2543
	260											315CB	741	905	1660			2150	3x600					300		2733	2773
	300											315CB	741	905	1800			2150	3x600					300		2733	2913

Unit: mm, unless otherwise stated

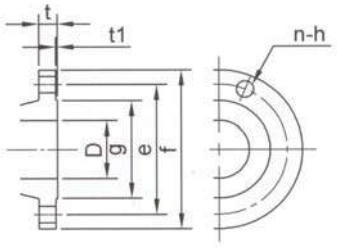
Dimensions - CNA Pump with Motor 4-Poles Drive (5/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

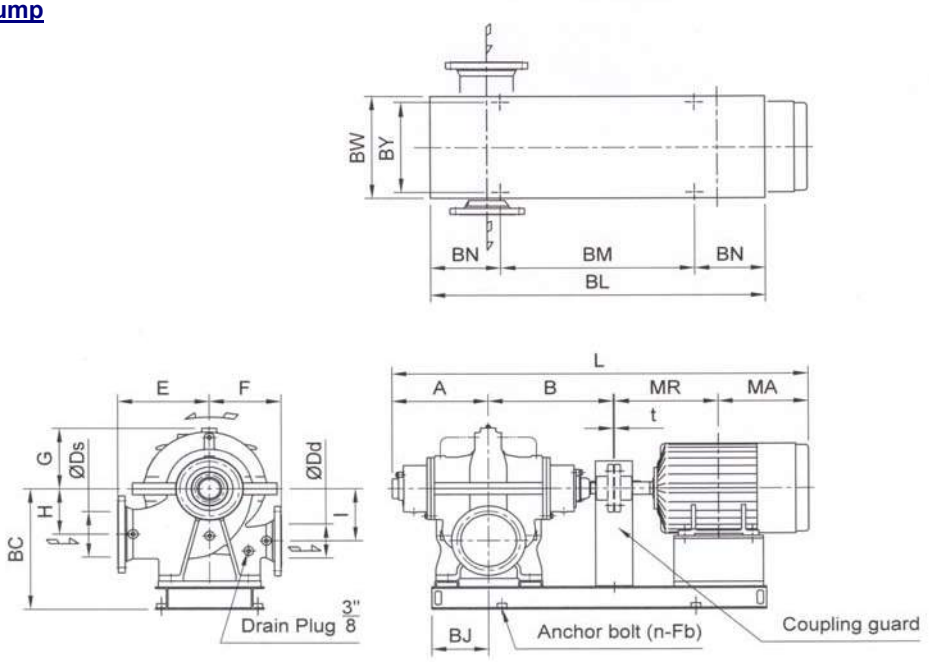
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
300 x 250 CNFA	37	300	250	440	575	495	405	306	250	260	587	225S	432	379	320	636	295	1505	1075	215	600	540	4-M20	163	4	1830	1070
	45											225M	444.5	391.5	358			1515	1085					165		1855	1110
	55											250S	463.5	409	520			1545	1115		640	580		170		1892	1277
	75											250M	482.5	428	580			1585	1155					174		1930	1341
300 x 250 CNGA	75	300	250	478	620	495	405	313	250	260	638	250M	482.5	428	580	616	295	1640	1090	275	580	520	4-M20	175	4	2013	1393
	90											280S	544	463	700			1700	1050		640	580		187		2109	1525
	110											280M	569.5	488.5	800			1760	2x705	175			6-M20	191		2160	1629
300 x 250 CNHA	110	300	250	478	620	495	405	337	275	295	632	280M	569.5	488.5	800	636	295	1760	2x705	175	640	580	6-M20	192	4	2160	1624
	132											315S	589	517	1030			1770	2x710					220		2208	1882
	150											315M	614.5	552.5	1030			1820	2x735					225		2269	1887
300 x 200 CNJA	150	300	200	467	615	525	415	379	275	320	900	315M	614.5	552.5	1030	666	300	1750	2x700	175	640	580	6-M20	235	4	2083	2165
	185											315M	614.5	552.5	1070			1750	2x700					235		2083	2205
	220											315AB	666	830	1450			2000	3x550		700	640		280	5	2583	2630
	260											315CB	741	905	1660			2150	3x600					300		2733	2860
	300											315CB	741	905	1800			2150	3x600					300		2733	3000
300 x 200 CNKA	220	300	200	505	675	570	475	436	290	380	###	315AB	666	830	1450	735	355	2120	3x590	175	790	720	8-M22	320	5	2681	2888
	260											315CB	741	905	1660			2270	3x640	175				335		2831	3113
	300											315CB	741	905	1660			2270	3x640	175				335		2831	1995
	335											315DB	841	1005	1900			2630	3x710	250		710		365		3031	2265
	370											355AB	779	970	2150	785		2520	3x700	215	840	760	8-M24	350		2934	2500
	450											400CB	990	1135	2500			2850	3x770	275	900	820		380		3310	3998

Unit: mm, unless otherwise stated

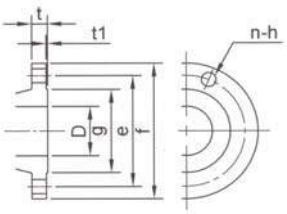
Dimensions - CNA Pump with Motor 4-Poles Drive (6/6) 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

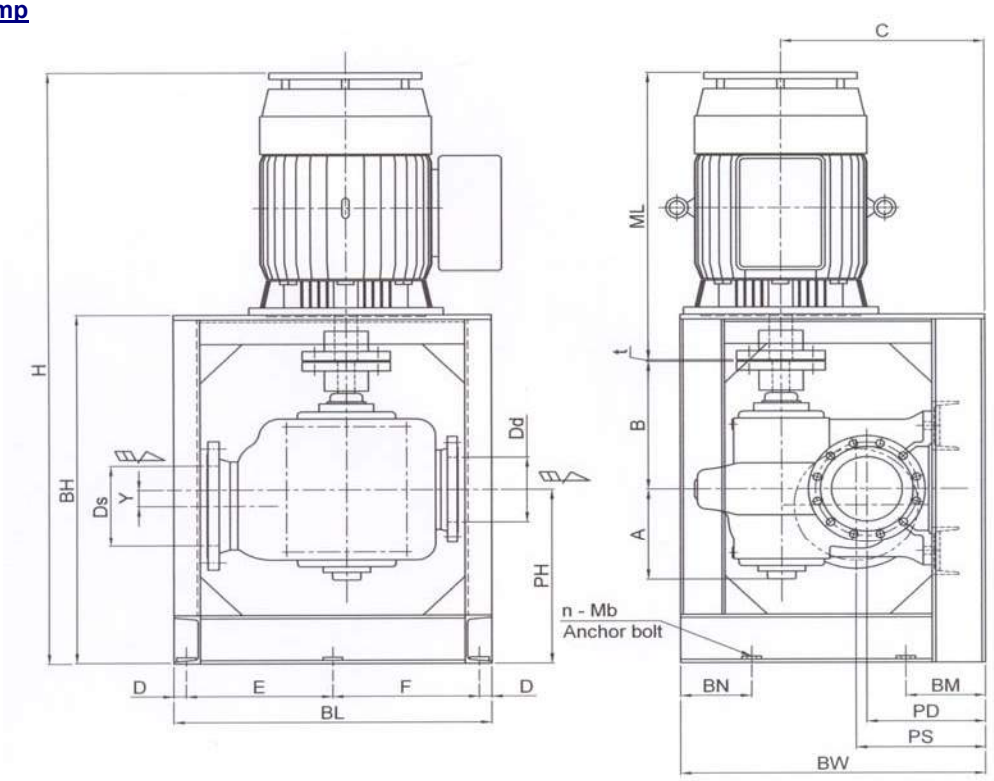
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
350 x 300 CNFA	90	350	300	481	613	560	450	345	310	310	836	280S	544	463	700	775	355	1780	2x675	215	790	720	6-M22	265	4	2105	1801
	110											280M	569.5	488.5	800			1830	2x700					275		2156	1911
	132											315S	589	517	920			1850	2x710					280		2204	2036
350 x 250 CNGA	132	350	250	481	613	560	450	350	310	303	823	315S	589	517	920	775	355	1850	2x710	215	790	720	6-M22	280	4	2204	2023
	150											315M	614.5	552.5	1030			1900	2x735					295		2265	2148
	185											315M	614.5	552.5	1070			1900	2x735					295		2265	2188
350 x 250 CNHA	185	350	250	491	645	560	440	373	315	330	885	315M	614.5	552.5	1070	775	355	1930	2x750	215	790	720	6-M22	300	4	2307	2255
	220											315AB	666	830	1450			2080	2x765	275				320	5	2637	2655
	260											315CB	741	905	1660			2230	3x600	215			8-M22	340		2787	2885
	300											315CB	741	905	1880			2230	3x600					340		2787	3105
	335											315DB	841	1005	1900			2440	3x630	275				360		2987	3145
400 x 350 CNEA	90	400	350	536	685	570	470	355	320	320	1062	280S	544	463	700	805	390	1890	2x730	215	790	720	6-M22	280	4	2232	2042
	110											280M	569.5	488.5	800			1940	2x755					290		2283	2152
	132											315S	589	517	920			1960	2x705	275				290		2331	2272
	150											315M	614.5	552.5	1030			2010	2x730					300		2392	2392
400 x 350 CNFA	150	400	350	522	670	625	510	385	305	344	1076	315M	614.5	552.5	1030	805	390	1990	2x720	275	790	720	6-M22	300	4	2363	2406
	185											315M	614.5	552.5	1070			1990	2x720					300		2363	2446
	220											315AB	666	830	1450			2150	3x600	175				320	5	2693	2846

Unit: mm, unless otherwise stated

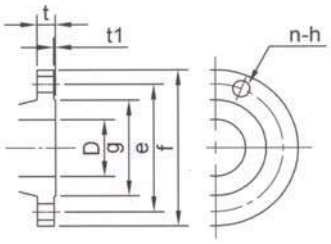
Dimensions - CSA Pump with Motor 4-Poles Drive 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

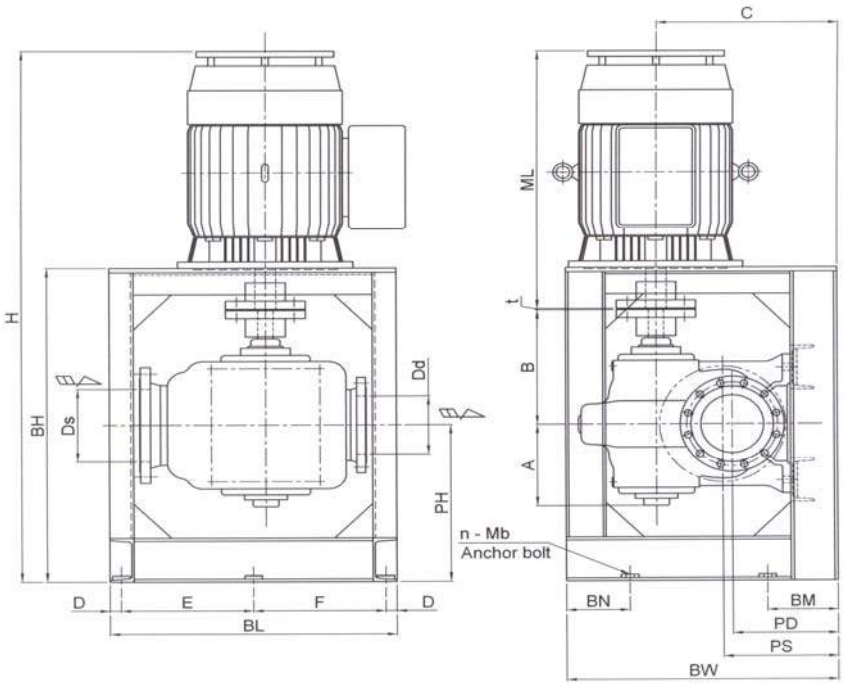
Model	Motor	Size		Pump						Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	Y	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	70	143	100LD	363	35	650	700	561	793	150	100	6-M16	62.7	3	411	95	1105	271	437	271	240
	3.7									112MD	422	48								62.7				1161				254
100 x 80 CSHA	3.7	100	80	221	250	280	220	70	165	112MD	422	48	640	690	586	753	150	100	6-M16	62.7	3	411	95	1121	251	437	261	276
	5.5									132SD	446	70				773				73.5				1144				309
	7.5									132MD	484	80								73.5				1182				319
100 x 80 CSJA	5.5	100	80	221	250	280	230	70	200	132SD	446	70	650	700	611	773	150	150	6-M16	62.1	3	411	95	1144	231	437	251	332
	7.5									132MD	484	80								62.1				1182				342
	11									160MD	604	128				803				65.2				1298				393
125 x 100 CSJA	15	125	100	247	325	350	280	80	280	160LD	648	166	760	820	741	951	200	150	6-M20	75.4	3	516	95	1490	286	510	316	521
	18.5									180MCD	667	173								75.4				1510				528
	22									180LCD	705	213								75.4				1548				568
	30									200LCD	768	290								75.4	4			1608				645

Unit: mm, unless otherwise stated

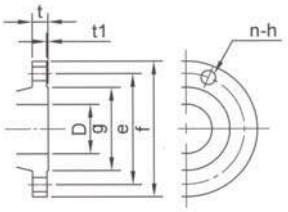
Dimensions - CNA Pump with Motor 4-Poles Drive (1/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

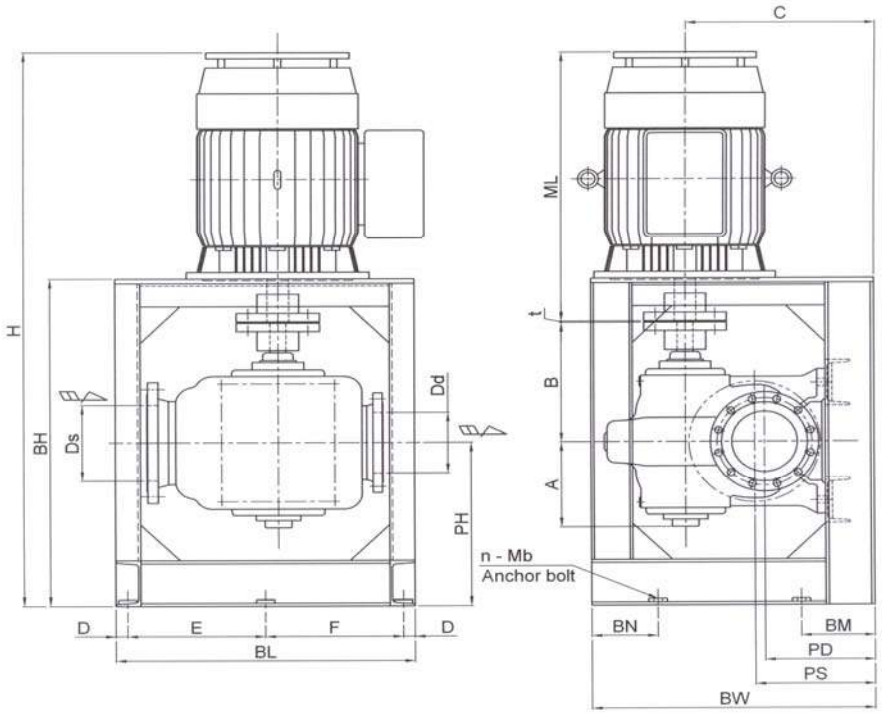
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	209	112MD	431	48	680	730	586	869	150	100	6-M16	68	3	411	95	1237	261	453	261	325
	5.5								132SD	454	70				889				69				1260				348
	7.5								132MD	492	80												1298				358
125 x 100 CNHA	7.5	125	100	231	350	300	250	242	132MD	492	80	690	740	611	889	150	150	6-M16	69	3	411	95	1298	251	453	261	391
	11								160MD	608	128				919				71				1414				441
125 x 80 CNJA	11	125	80	231	350	330	250	250	160MD	608	128	720	770	611	919	150	150	6-M20	72	3	411	95	1414	221	453	261	450
	15								160LD	652	166												1458				488
	18.5								180MCD	672	173												1478				495
150 x 150 CNFA	7.5	150	150	262	370	330	290	253	132MD	492	80	760	810	671	956	200	150	6-M16	75	3	471	95	1365	301	500	291	408
	11								160MD	608	128				986				77				1481				458
150 x 125 CNGA	11	150	125	262	395	330	260	275	160MD	608	128	720	780	696	1045	200	150	6-M20	76	3	496	95	1540	306	534	306	479
	15								160LD	652	166												1584				517
	18.5								180MCD	672	173												1604				524
150 x 125 CNHA	18.5	150	125	262	370	350	280	270	180MCD	672	173	760	820	721	1011	200	150	6-M20	77	3	496	95	1570	286	525	306	520
	22								180LCD	710	213												1608				560
	30								200LCD	770	290									4			1668				637
150 x 100 CNJA	30	150	100	271	395	380	290	330	200LCD	770	290	800	860	781	1046	200	200	6-M20	81	4	531	95	1703	291	534	341	701
	37								225SCD	816	335				1076				83				1749				748
	45								225MCD	841	378												1774				791

Unit: mm, unless otherwise stated

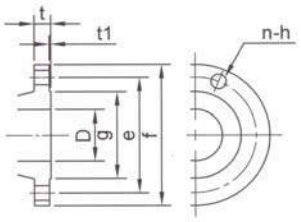
Dimensions - CNA Pump with Motor 4-Poles Drive (2/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Pump

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
100	225	185	160	2	26	8	23
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25

Dimension - Pump

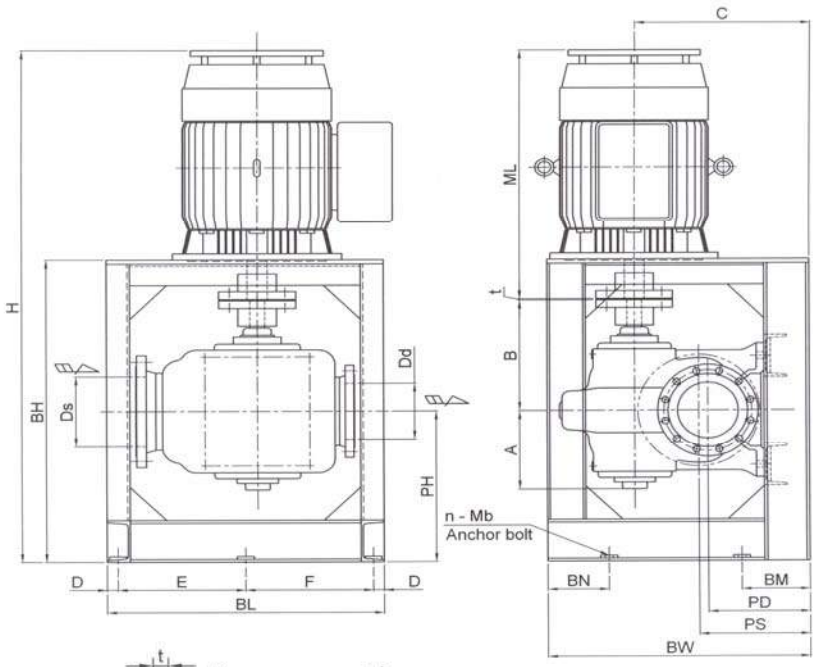
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
200 x 200 CNEA	7.5	200	200	263	370	355	300	270	132MD	492	80	785	845	716	974	200	150	6-M20	81	3	516	95	1383	326	518	326	431
	11								160MD	608	128				1004				83				1499				481
	15								160LD	652	166												1543				519
200 x 150 CNFA	15	200	150	263	370	355	285	280	160LD	652	166	770	830	716	1004	200	150	6-M20	78	3	516	95	1543	326	518	326	524
	18.5								180MCD	672	173												1563				453
200 x 150 CNGA	18.5	200	150	263	370	355	285	310	180MCD	672	173	770	830	766	1004	200	200	6-M20	78	3	516	95	1563	306	518	316	561
	22								180LCD	710	213												1601				601
	30								200LCD	770	290									4			1661				678
	37								225SCD	816	335				1034				79				1707				724
200 x 150 CNHA	30	200	150	282	395	375	295	355	200LCD	770	290	800	860	831	1054	200	200	6-M20	82	4	531	95	1711	301	542	331	727
	37								225SCD	816	335				1084				83				1757				773
	45								225MCD	841	378												1782				816
	55								250SCD	882.5	540												1824				978
200 x 100 CNJA	45	200	100	305	450	420	335	445	225MCD	841	378	935	1005	915	1207	250	200	6-M22	90	4	615	125	1905	345	610	415	913
	55								250SCD	882.5	540												1947				1075
	75								250MCD	920.5	600												1985				1135
	90								280SCD	1022	720				1237				100				2086				1265

Unit: mm, unless otherwise stated

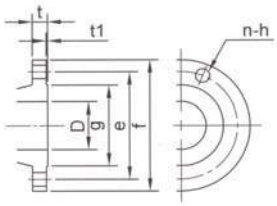
Dimensions - CNA Pump with Motor 4-Poles Drive (3/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
150	305	260	230	2	28	12	25
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27

Dimension - Pump

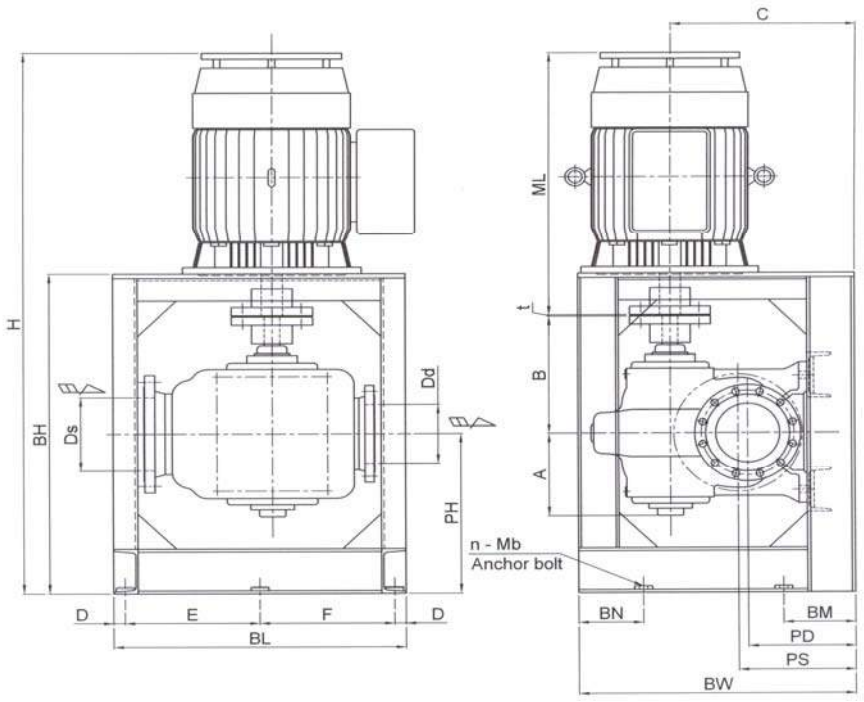
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
250 x 200 CNEA	15	250	200	273	395	395	315	360	160LD	652	166	900	960	770	1039	200	200	6-M20	83	3	570	125	1578	360	528	360	609
	18.5								180MCD	672	173												1598				533
	22								180LCD	710	213												1636				573
250 x 200 CNFA	22	250	200	282	395	395	315	380	180LCD	710	213	900	960	820	1053	200	200	6-M20	85	3	570	125	1650	360	542	360	678
	30								200LCD	770	290									4			1710				670
	37								225SCD	816	335				1083				86				1756				801
250 x 150 CNGA	37	250	150	282	395	395	315	415	225SCD	816	335	900	960	890	1084	200	200	6-M20	87	4	590	125	1757	350	542	370	837
	45								225MCD	841	378												1782				880
	55								250SCD	882.5	540												1824				955
250 x 150 CNHA	55	250	150	315	450	430	325	500	250SCD	882.5	540	935	1005	915	1217	250	200	6-M22	149	4	615	125	1957	355	620	395	1189
	75								250MCD	920.5	600												1995				1249
	90								280SCD	1022	720				1247				151				2096				1371
200 x 150 CNJA	75	250	150	350	500	470	355	605	250MCD	920.5	600	1005	1075	1020	1322	250	200	6-M22	160	4	665	125	2100	365	675	445	1365
	90								280SCD	1022	720				1352				162				2201				1487
	110								280MCD	1072	820												2251				1587
	132								315SCD	1116	1050												2295				1817
	150								315MCD	1167	1250												2346				2017
250 x 150 CNKA	110	250	150	382	530	505	430	835	280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
	185								315MCD	1167	1250																
	220																										

Unit: mm, unless otherwise stated

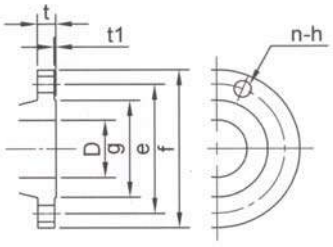
Dimensions - CNA Pump with Motor 4-Poles Drive (4/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

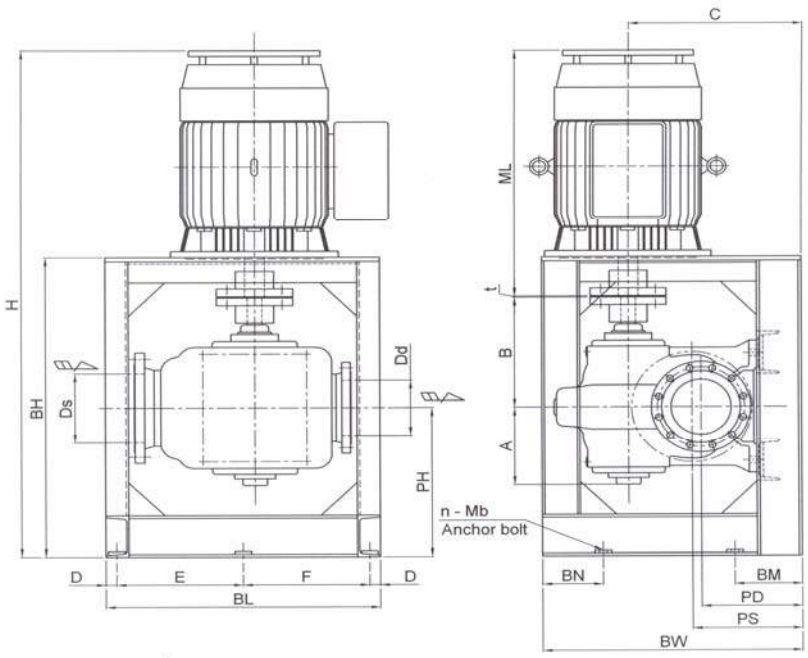
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
300 x 250 CNEA	22	300	250	302	415	445	355	435	180LCD	710	213	980	1050	895	1119	225	200	6-M22	146	4	645	125	1716	410	587	410	794
	30								200LCD	770	290												1776				725
	37								225SCD	816	335				1149				149				1822				919
300 x 200 CNFA	37	300	200	315	450	445	355	490	225SCD	816	335	980	1050	945	1217	225	200	6-M22	151	4	645	125	1890	410	620	410	976
	45								225MCD	841	378												1915				1019
	55								250SCD	882.5	540												1957				1030
300 x 200 CNGA	55	300	200	315	470	445	355	520	250SCD	882.5	540	980	1050	965	1237	225	200	6-M22	154	4	665	125	1977	395	620	415	1214
	75								250MCD	920.5	600												2015				1274
	90								280SCD	1022	720				1267				156				2116				1396
300 x 200 CNHA	90	300	200	350	500	465	365	625	280SCD	1022	720	1010	1080	1020	1352	225	200	6-M22	162	4	665	125	2201	375	675	415	1507
	110								280MCD	1072	820												2251				1445
	132								315SCD	1116	1050								163				2295				1838
	150								315MCD	1167	1250												2346				2038
300 x 150 CNJA	150	300	150	382	530	520	405	785	315MCD	1167	1250																
	185								315MCD	1167	1250																
	220																										
	260																										
	300																										

Unit: mm, unless otherwise stated

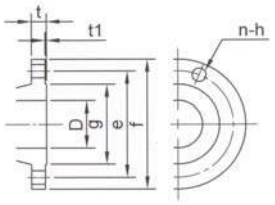
Dimensions - CNA Pump with Motor 4-Poles Drive (5/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
200	350	305	275	2	30	12	25
250	430	380	345	2	34	12	27
300	480	430	395	3	36	16	27

Dimension - Pump

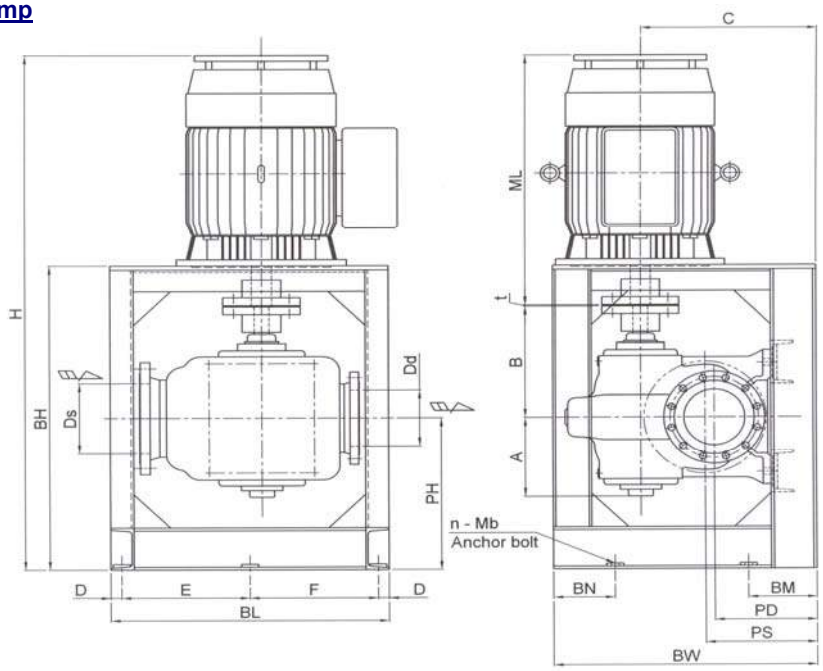
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
300 x 250 CNFA	37	300	250	335	470	495	405	570	225SCD	816	213	1080	1150	965	1257	225	200	6-M22	162	4	665	125	1930	405	640	415	945
	45								225MCD	841	290												1955				860
	55								250SCD	882.5													1997				732
	75								250MCD	920.5	335												2035				905
300 x 250 CNGA	75	300	250	360	500	495	405	620	250MCD	920.5	335	1080	1150	965	1332	225	200	6-M22	164	4	665	125	2110	405	685	415	1119
	90								280SCD	1022	378				1362				166				2211				1164
	110								280MCD	1072	540												2261				1160
300 x 250 CNHA	110	300	250	360	500	495	405	615	280MCD	1072	540	1080	1150	1045	1362	225	200	6-M22	166	4	690	125	2261	395	685	415	1321
	132								315SCD	1116	600												2305				1381
	150								315MCD	1167	720												2305				1335
300 x 200 CNJA	150	300	200	382	530	525	415	860	315MCD	1167	720																
	185								315MCD	1167	820																
	220																										
	260																										
	300																										
300 x 200 CNKA	220	300	200	415	585	570	475	1070																			
	260																										
	300																										
	335																										
	370																										
	450																										

Unit: mm, unless otherwise stated

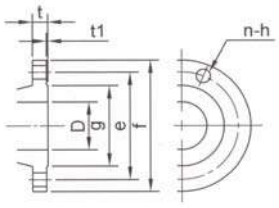
Dimensions - CNA Pump with Motor 4-Poles Drive (6/6) 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

D mm	f mm	e mm	g mm	t1 mm	t mm	n	h mm
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

Dimension - Pump

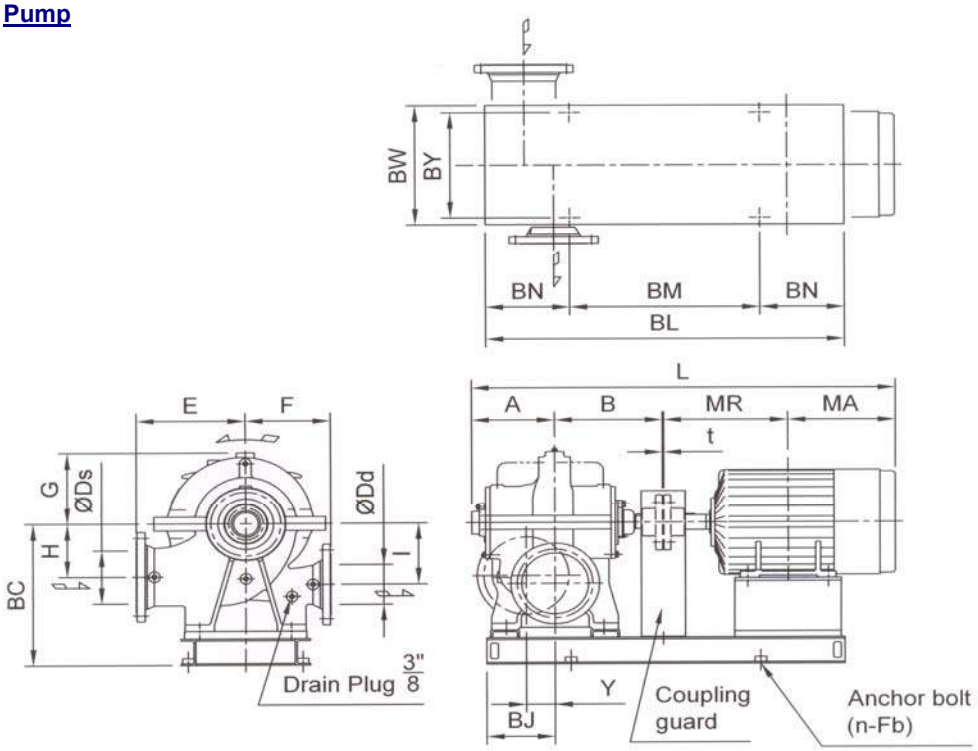
Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
350 x 300 CNFA	75	350	300	386	530			800	250MCD	921	600																
	90								280SCD	1022	720																
	110								280MCD	1072	820																
350 x 250 CNGA	110	350	250	386	530			790	280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
	185								315MBD	1167	1250																
350 x 250 CNHA	185	350	250	414	560			845	315MBD	1167	1250																
	220																										
	260																										
	300																										
	335																										
400 x 350 CNEA	90	400	350	451	600			1030	280SCD	1022	720																
	110								280MCD	1072	820																
	132								315SCD	1116	1050																
	150								315MCD	1167	1250																
400 x 350 CNFA	150	400	350	439	585			1045	315MCD	1167	1250																
	185								315MBD	1167	1250																
	220																										

Unit: mm, unless otherwise stated

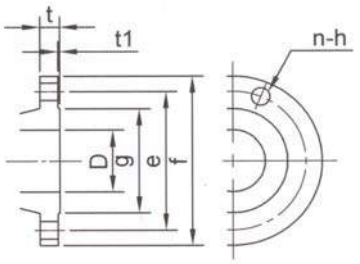
Dimensions - CSA Pump with Motor 2-Poles Drive 50 Hz

(Standard : Mechanical Seal Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

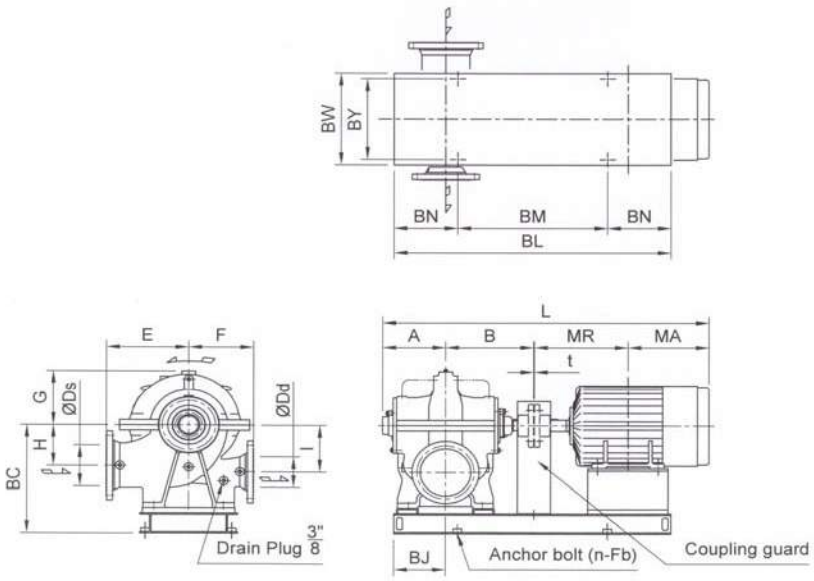
Model	Motor	Size		Pump									Motor				Common Base										Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	15	100	80	221	250	270	240	169	140	140	70	143	160M	343	259	130	445	185	950	520	215	370	310	4-M20	97	3	1076	370
	18.5												160L	368	284	146			950						97		1126	386
	22												180MA	379.5	292.5	193			1010	580		425	365		102		1146	438
	30												200LA	425.5	344.5	280			1090	660		470	410		110	4	1245	533
100 x 80 CSHA	30	100	80	221	250	280	220	185	150	160	70	165	200LA	425.5	344.5	280	445	185	1090	660	215	470	410	4-M20	110	4	1245	445
	37												200LA	425.5	344.5	301			1090						113		1245	579
	45												225MA	446.5	364.5	362	470		1110	680		520	460	4-M22	121		1286	648

Unit: mm, unless otherwise stated

Dimensions - CNA Pump with Motor 2-Poles Drive 50 Hz

(Standard : Mechanical Seal Type)

Pump



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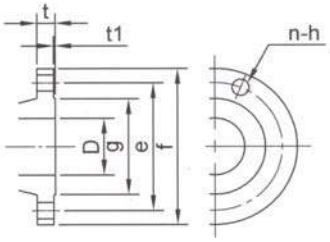


Dimension - Flange

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

Dimension - Pump

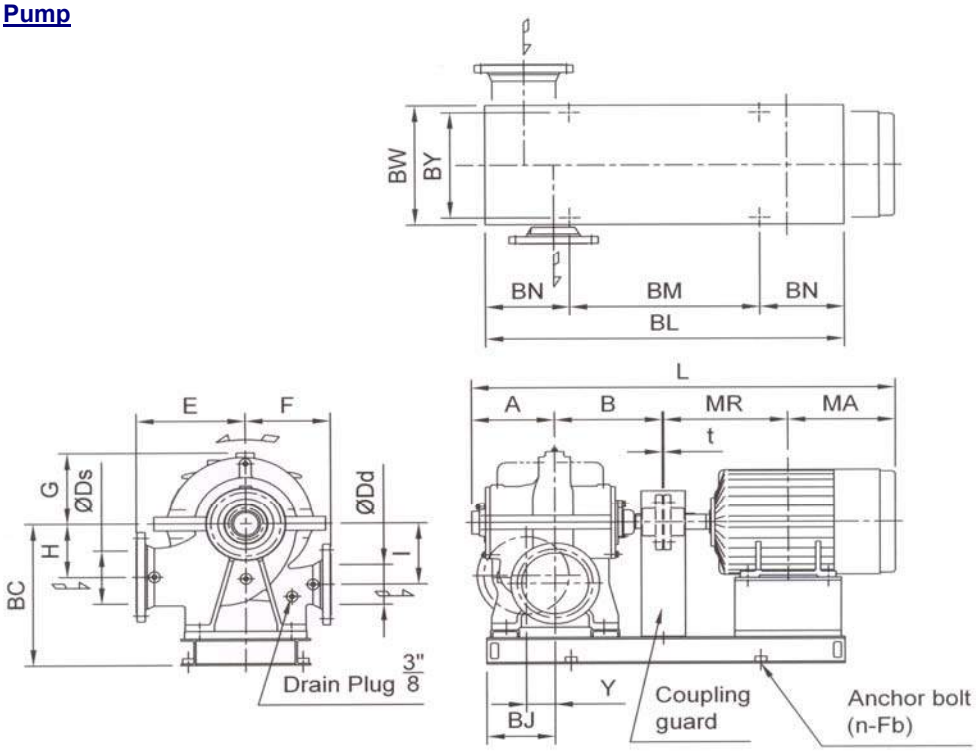
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	30	125	100	231	350	290	250	181	150	150	209	200LA	425.5	344.5	280	445	185	1190	760	215	490	430	4-M20	135	4	1355	624
	37											200LA	425.5	344.5	301			1190						135		1355	645
	45											225MA	446.5	364.5	362	470		1210	780		540	470	4-M22	146		1396	717
	55											250SA	500.5	382	472			1270	840		590	520		150		1468	831
125 x 100 CNHA	45	125	100	231	350	300	250	195	150	160	242	225MA	446.5	364.5	362	470	185	1210	780	215	540	470	4-M22	148	4	1396	752
	55											250SA	500.5	382	472			1270	840		590	520		154		1468	868
	75											250MA	520.5	400	545			1310	880					161		1506	948
	90											280SA	552.5	439.5	660			1350	920		650	580		168		1577	1070
125 x 80 CNJA	75	125	80	231	350	330	250	226	150	190	250	250MA	520.5	400	545	470	205	1330	900	215	590	520	4-M22	166	4	1506	961
	90											280SA	552.5	439.5	660			1370	940		650	580		170		1577	1080
	110											280MA	577.5	464.5	770			1420	990					176		1627	1196
150 x 150 CNFA	55	150	150	262	370	330	290	205	180	170	253	250SA	500.5	382	472	530	225	1330	840	245	590	520	4-M22	168	4	1519	893
	75											250MA	520.5	400	545			1370	880					171		1557	969
	90											280SA	552.5	439.5	660			1410	920		650	580		178		1628	1091
	110											280MA	577.5	464.5	770			1460	970					182		1678	1205
150 x 125 CNGA	90	150	125	262	395	330	260	224	190	190	275	280SA	552.5	439.5	660	530	225	1440	950	245	650	580	4-M22	180	4	1653	1115
	110											280MA	577.5	464.5	770			1490	1000					187		1703	1232
	132											315SA	601.0	485	1010			1510	865	215	705	635	6-M22	190		1747	1475
	150											315MA	626.0	511	1150			1560	915					202		1798	1627

Unit: mm, unless otherwise stated

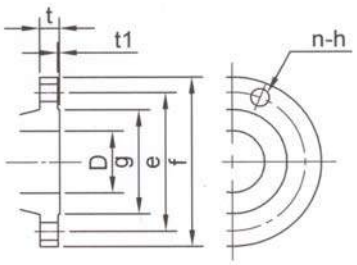
Dimensions - CSA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

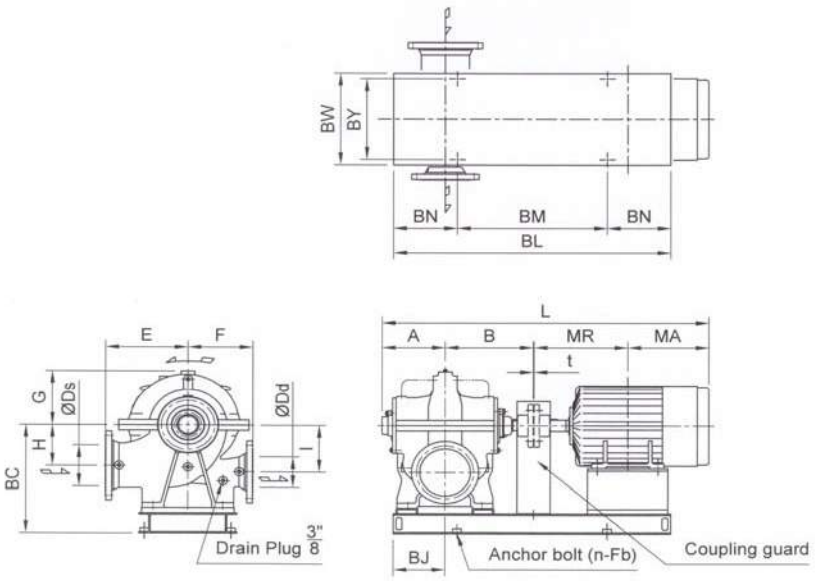
Model	Motor	Size		Pump									Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	15	100	80	221	250	270	240	169	140	140	70	143	160M	343	259	130	445	185	950	520	215	370	310	4-M20	97	3	1076	370
	18.5												160L	368	284	146			950						97		1126	386
	22												180MA	379.5	292.5	193			1010	580		425	365		102		1146	438
	30												200LA	425.5	344.5	280			1090	660		470	410		110	4	1245	533
100 x 80 CSHA	30	100	80	221	250	280	220	185	150	160	70	165	200LA	425.5	344.5	280	445	185	1090	660	215	470	410	4-M20	110	4	1245	445
	37												200LA	425.5	344.5	301			1090						113		1245	579
	45												225MA	446.5	364.5	362	470		1110	680		520	460	4-M22	121		1286	648

Unit: mm, unless otherwise stated

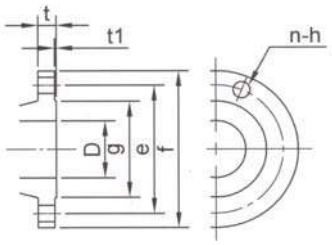
Dimensions - CNA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Mechanical Seal with Shaft Sleeve Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

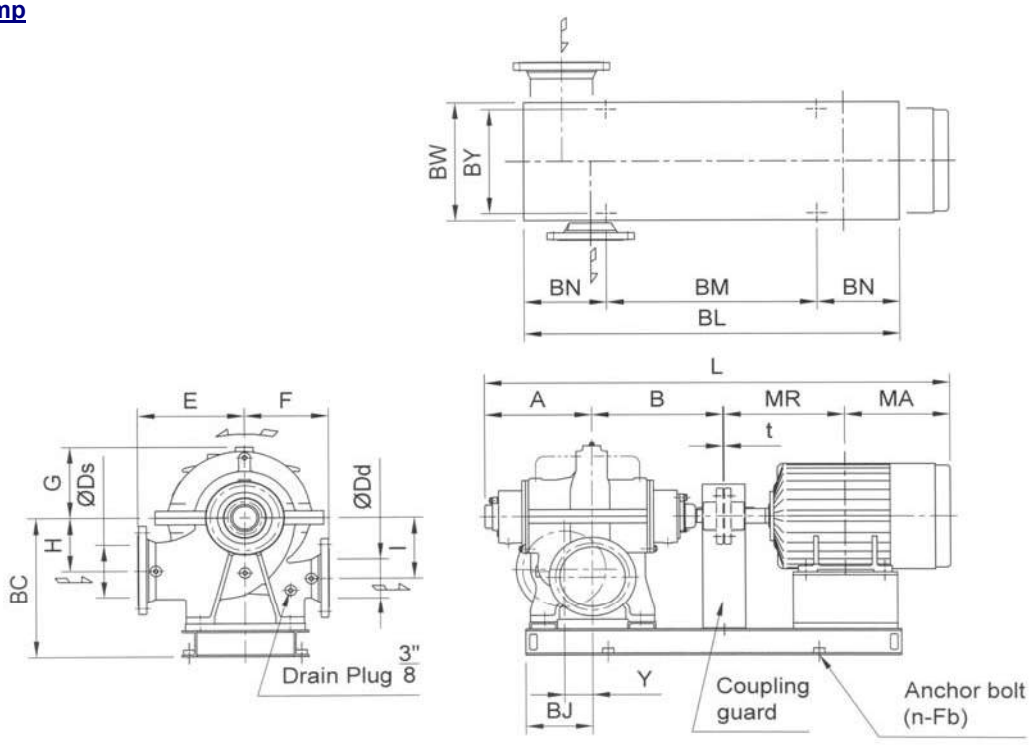
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	30	125	100	231	350	290	250	181	150	150	209	200LA	425.5	344.5	280	445	185	1190	760	215	490	430	4-M20	135	4	1355	624
	37											200LA	425.5	344.5	301			1190						135		1355	645
	45											225MA	446.5	364.5	362	470		1210	780		540	470	4-M22	146		1396	717
	55											250SA	500.5	382	472			1270	840		590	520		150		1468	831
125 x 100 CNHA	45	125	100	231	350	300	250	195	150	160	242	225MA	446.5	364.5	362	470	185	1210	780	215	540	470	4-M22	148	4	1396	752
	55											250SA	500.5	382	472			1270	840		590	520		154		1468	868
	75											250MA	520.5	400	545			1310	880					161		1506	948
	90											280SA	552.5	439.5	660			1350	920		650	580		168		1577	1070
125 x 80 CNJA	75	125	80	231	350	330	250	226	150	190	250	250MA	520.5	400	545	470	205	1330	900	215	590	520	4-M22	166	4	1506	961
	90											280SA	552.5	439.5	660			1370	940		650	580		170		1577	1080
	110											280MA	577.5	464.5	770			1420	990					176		1627	1196
150 x 150 CNFA	55	150	150	262	370	330	290	205	180	170	253	250SA	500.5	382	472	530	225	1330	840	245	590	520	4-M22	168	4	1519	893
	75											250MA	520.5	400	545			1370	880					171		1557	969
	90											280SA	552.5	439.5	660			1410	920		650	580		178		1628	1091
	110											280MA	577.5	464.5	770			1460	970					182		1678	1205
150 x 125 CNGA	90	150	125	262	395	330	260	224	190	190	275	280SA	552.5	439.5	660	530	225	1440	950	245	650	580	4-M22	180	4	1653	1115
	110											280MA	577.5	464.5	770			1490	1000					187		1703	1232
	132											315SA	601	485	1010			1510	865	215	705	635	6-M22	190		1747	1475
	150											315MA	626	511	1150			1560	915					202		1798	1627

Unit: mm, unless otherwise stated

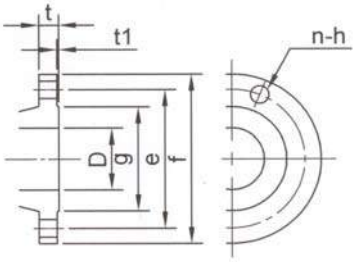
Dimensions - CSA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

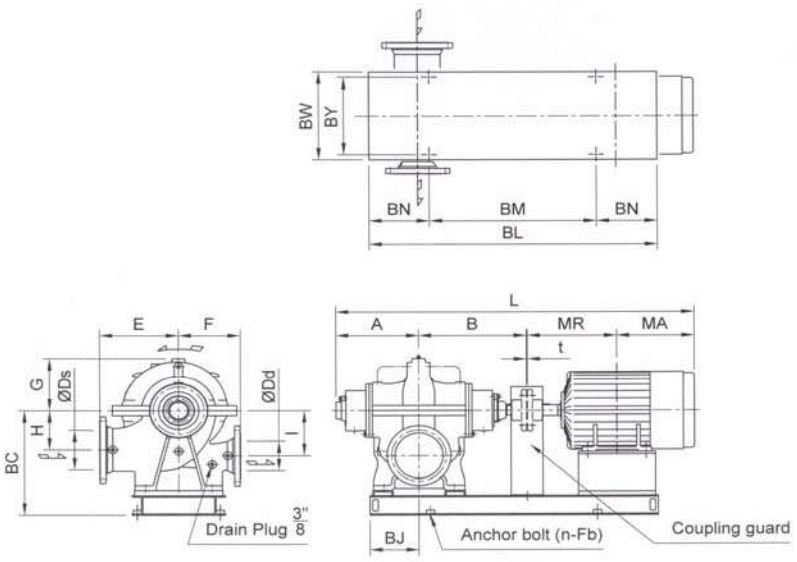
Model	Motor	Size		Pump									Motor				Common Base										Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	Y	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
100 x 80 CSGA	15	100	80	314	385	270	240	169	140	140	70	143	160M	343	259	130	445	185	1085	655	215	370	310	4-M20	102		1304	375
	18.5												160L	368	284	146			1085	655					102	3	1354	391
	22												180MA	379.5	292.5	193			1145	715		425	365		108		1374	444
	30												200LA	425.5	344.5	280			1225	795		470	410		116	4	1473	539
100 x 80 CSHA	30	100	80	314	385	280	220	185	150	160	70	165	200LA	425.5	344.5	280	445	185	1225	795	215	470	410	4-M20	116		1473	445
	37												200LA	425.5	344.5	301			1225	795					119	4	1473	585
	45												225MA	446.5	364.5	362	470		1245	815		520	460	4-M22	127		1514	654

Unit: mm, unless otherwise stated

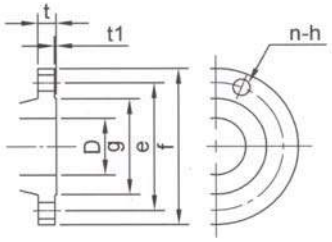
Dimensions - CNA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Gland Packing Type)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

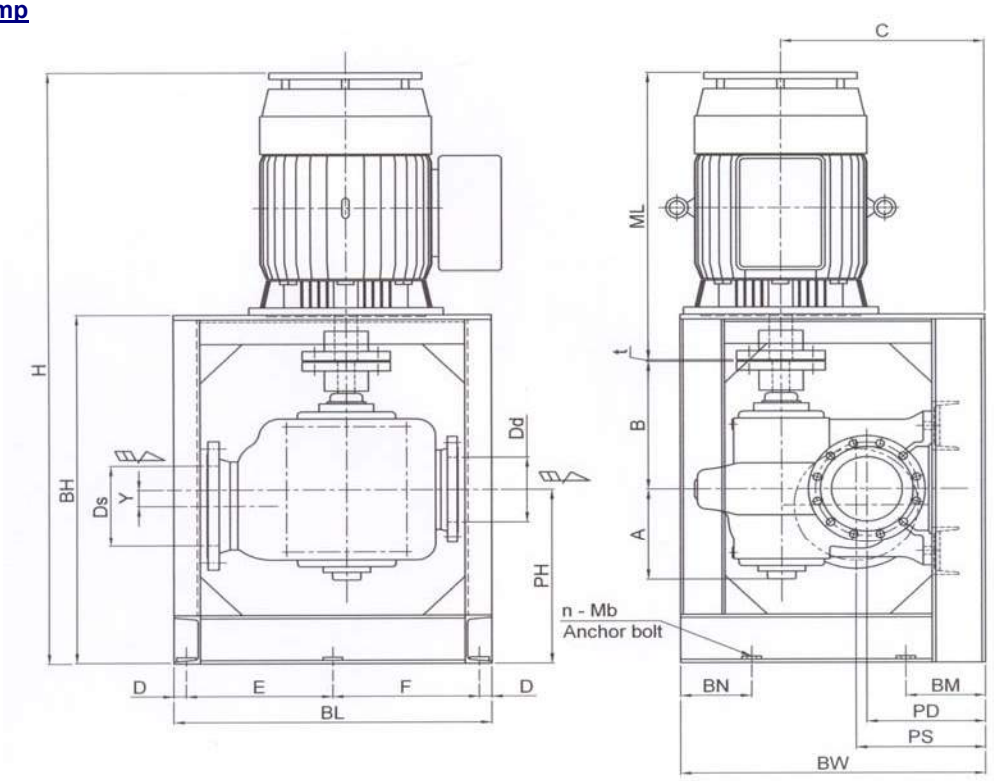
Model	Motor	Size		Pump								Motor				Common Base									Total		
	kW	Ds	Dd	A	B	E	F	G	H	I	wt kg	Frame	MR	MA	wt kg	BC	BJ	BL	BM	BN	BW	BY	n-Fb	wt kg	t	L	wt kg
125 x 100 CNGA	30	125	100	326	450	290	250	181	150	150	209	200LA	425.5	344.5	280	445	185	1290	860	215	490	430	4-M20	135	4	1550	624
	37											200LA	425.5	344.5	301			1290	860					135		1550	645
	45											225MA	446.5	364.5	362	470		1310	880		540	470	4-M22	146		1591	717
	55											250SA	500.5	382	472			1370	940		590	520		150		1663	831
125 x 100 CNHA	45	125	100	326	450	300	250	195	150	160	242	225MA	446.5	364.5	362	470	185	1310	880	215	540	470	4-M22	148	4	1591	752
	55											250SA	500.5	382	472			1370	940		590	520		154		1663	868
	75											250MA	520.5	400	545			1410	980					161		1701	948
	90											280SA	552.5	439.5	660			1450	1020		650	580		168		1772	1070
125 x 80 CNJA	75	125	80	326	450	330	250	226	150	190	250	250MA	520.5	400	545	470	205	1430	940	245	590	520	4-M22	166	4	1701	961
	90											280SA	552.5	439.5	660			1470	980		650	580		170		1772	1080
	110											280MA	577.5	464.5	770			1520	585	175				176		1822	1196
150 x 150 CNFA	55	150	150	355	475	330	290	205	180	170	253	250SA	500.5	382	472	530	225	1450	960	245	590	520	4-M22	168	4	1717	893
	75											250MA	520.5	400	545			1480	990					171		1755	969
	90											280SA	552.5	439.5	660			1520	585	175	650	580		178		1826	1091
	110											280MA	577.5	464.5	770			1570	610					182		1876	1205
150 x 125 CNGA	90	150	125	364	505	330	260	224	190	190	275	280SA	552.5	439.5	660	530	225	1550	600	175	650	580	4-M22	180	4	1865	1115
	110											280MA	577.5	464.5	770			1600	625					187		1915	1232
	132											315SA	601	485	1010			1620	635		705	635	6-M22	190		1959	1475
	150											315MA	626	511	1150			1670	660					202		2010	1627

Unit: mm, unless otherwise stated

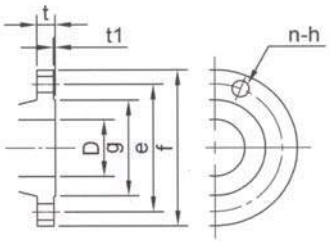
Dimensions - CSA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

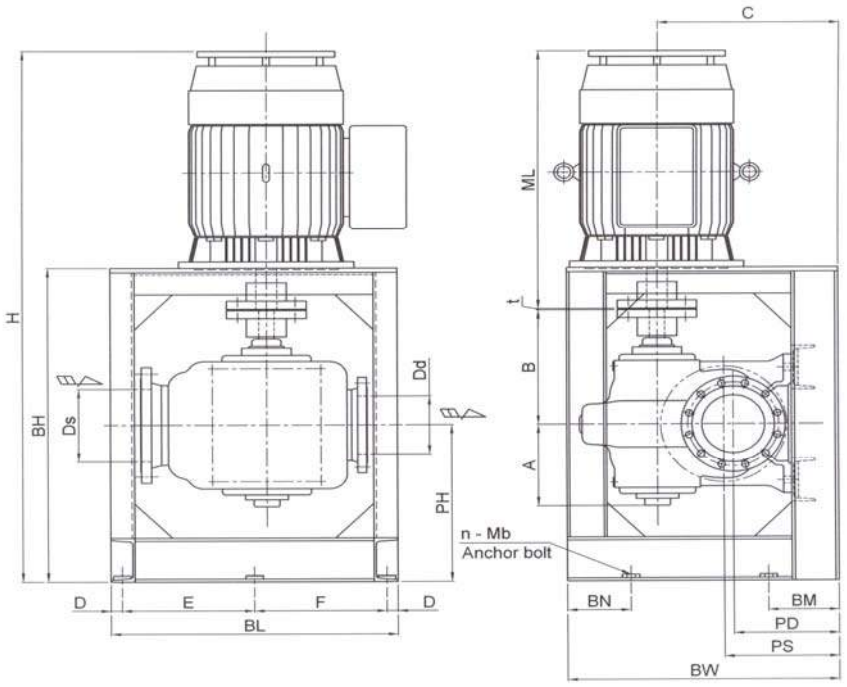
Model	Motor	Size		Pump						Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	Y	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
100 x 80 CSGA	2.2	100	80	221	250	270	240	70	143	100LD	363	35																
	3.7									112MD	422	48																
100 x 80 CSHA	3.7	100	80	221	250	280	220	70	165	112MD	422	48																
	5.5									132SD	446	70																
	7.5									132MD	484	80																
100 x 80 CSJA	5.5	100	80	221	250	280	230	70	200	132SD	446	70																
	7.5									132MD	484	80																
	11									160MD	604	128																
125 x 100 CSJA	15	125	100	247	325	350	280	80	280	160LD	648	166																
	18.5									180MCD	667	173																
	22									180LCD	705	213																
	30									200LCD	768	290																

Unit: mm, unless otherwise stated

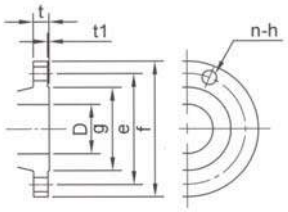
Dimensions - CNA Pump with Motor 2-Poles Drive 50 Hz

(Optional : Vertical Mount)

Pump



Flange



Dimension - Flange

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

Dimension - Pump

Model	Motor	Size		Pump					Motor			Common Base								Total							
	kW	Ds	Dd	A	B	E	F	wt kg	Frame	ML	wt kg	BC	BL	BW	BH	BM	BN	n-Mb	wt kg	t	C	D	H	PD	PH	PS	wt kg
125 x 100 CNGA	3.7	125	100	231	350	290	250	209	200LA	770	280																
	5.5								200LA	770	301																
	7.5								225MA	811	362																
125 x 100 CNHA	7.5	125	100	231	350	300	250	242	250SA	882.5	472																
	11								225MA	811	362																
125 x 80 CNJA	11	125	80	231	350	330	250	250	250SA	882.5	472																
	15								250MA	920.5	545																
	18.5								280SA	992	660																
150 x 150 CNFA	7.5	150	150	262	370	330	290	253	250MA	920.5	545																
	11								280SA	992	660																
150 x 125 CNGA	11	150	125	262	395	330	260	275	280MA	1042	770																
	15								250SA	882.5	472																
	18.5								250MA	920.5	545																
150 x 125 CNHA	18.5	150	125	262	370	350	280	270	280SA	992	660																
	22								280MA	1042	770																
	30								280SA	992	660																
150 x 100 CNJA	30	150	100	271	395	380	290	330	280MA	1042	770																
	37								315SA	1086	###																
	45								315MA	1137	###																

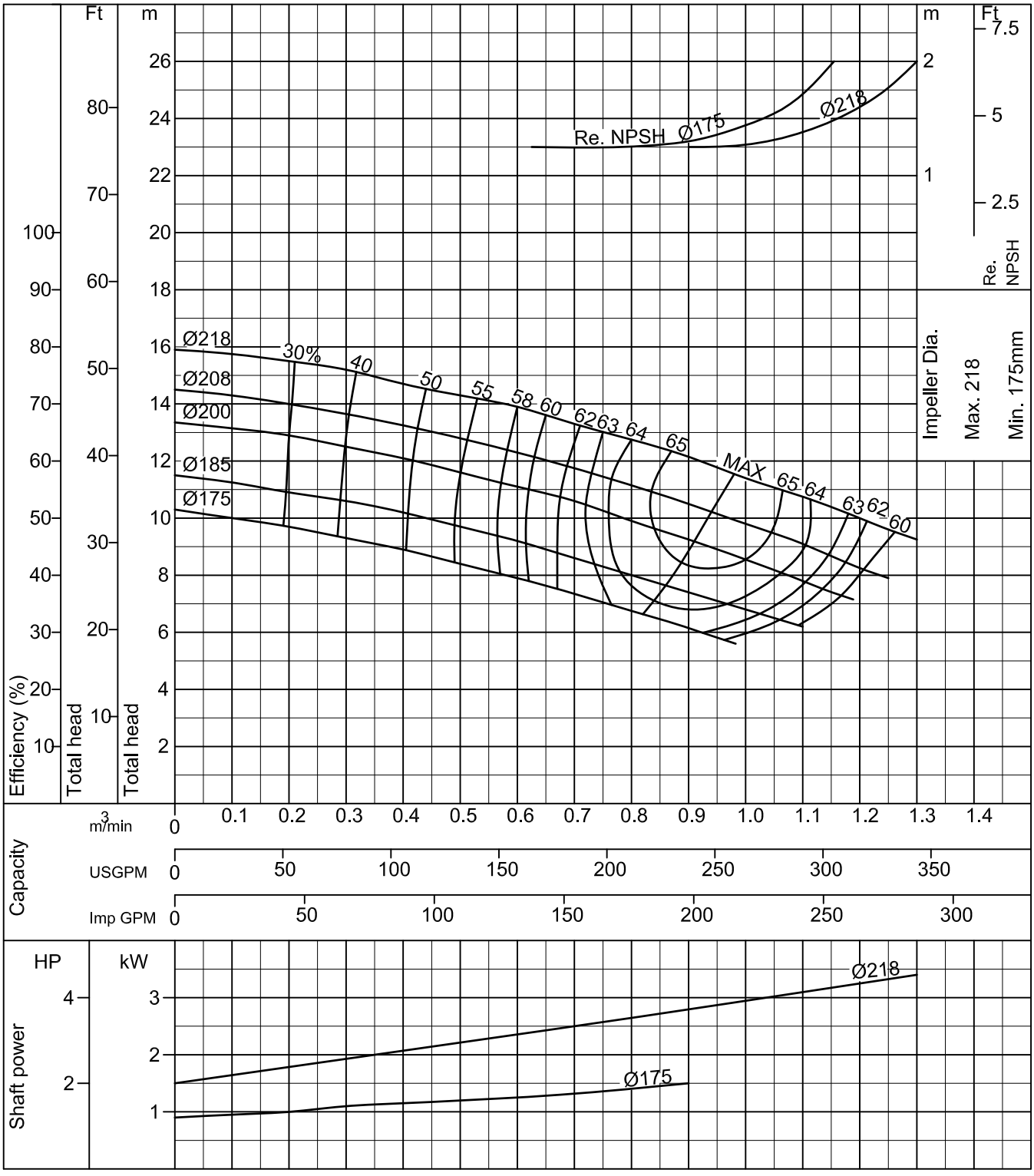
Unit: mm, unless otherwise stated

Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

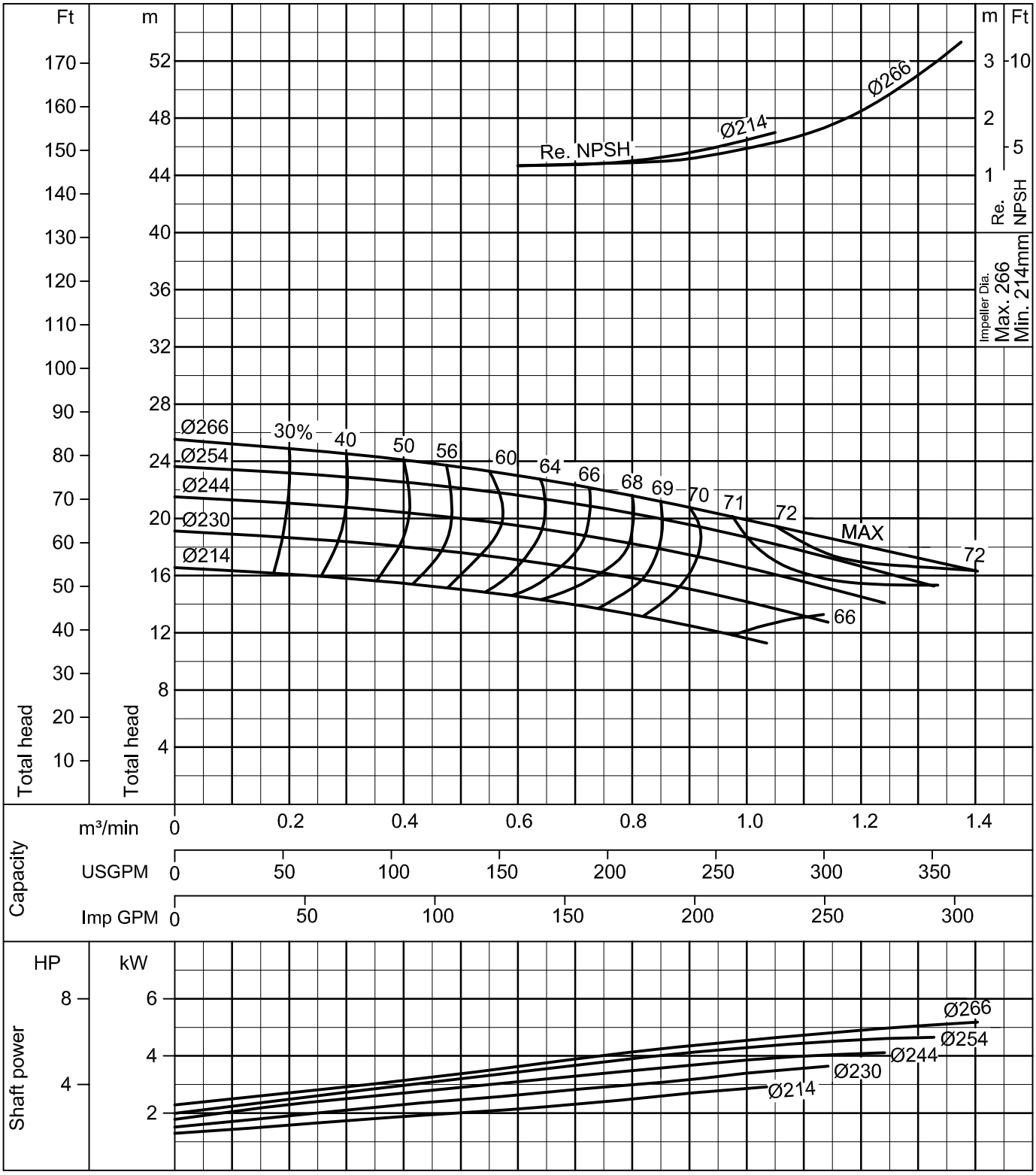
100 x 80 CSGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA

Performance Curve — 50Hz

100 x 80 CSHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

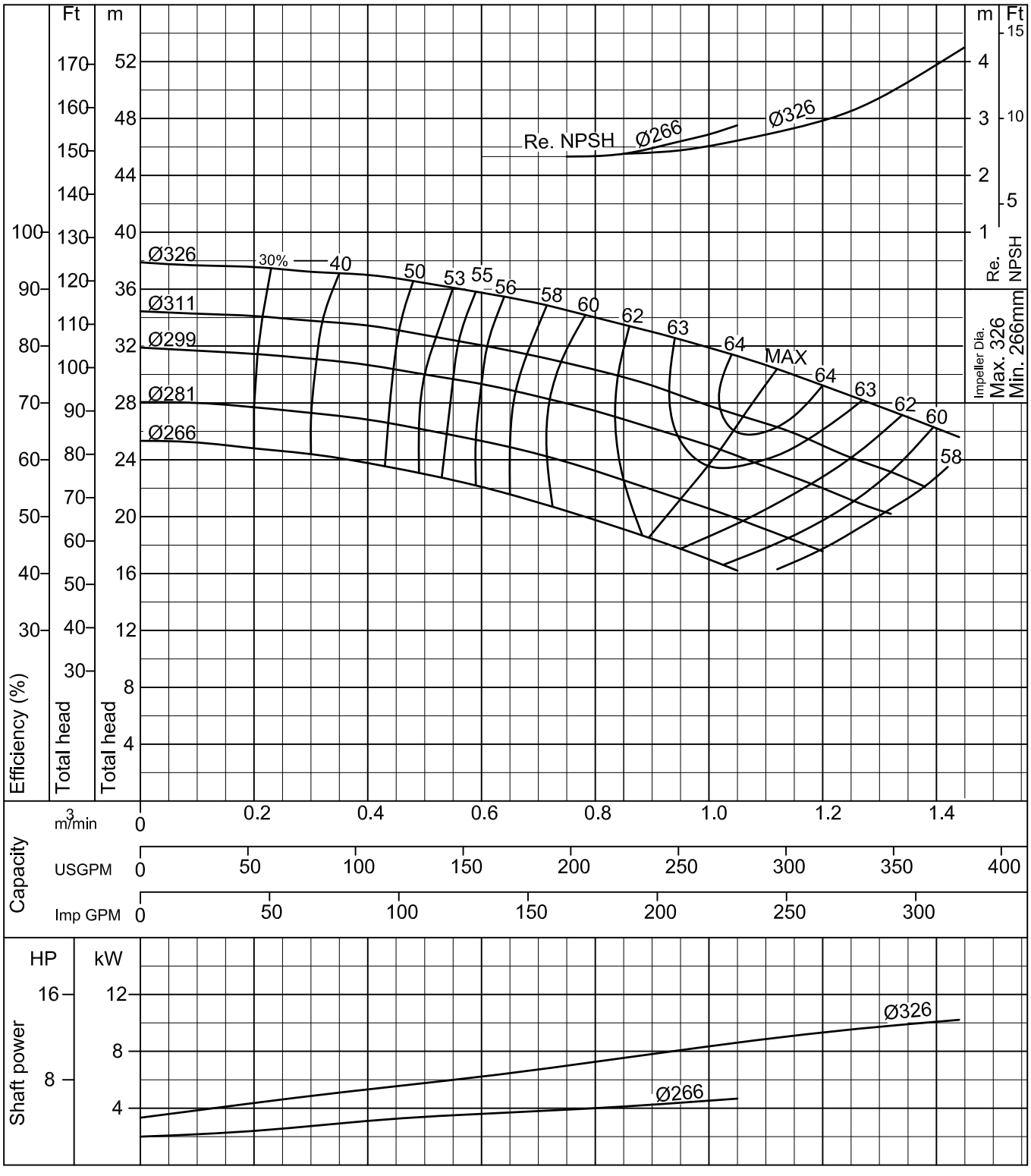


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

100 x 80 CSJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

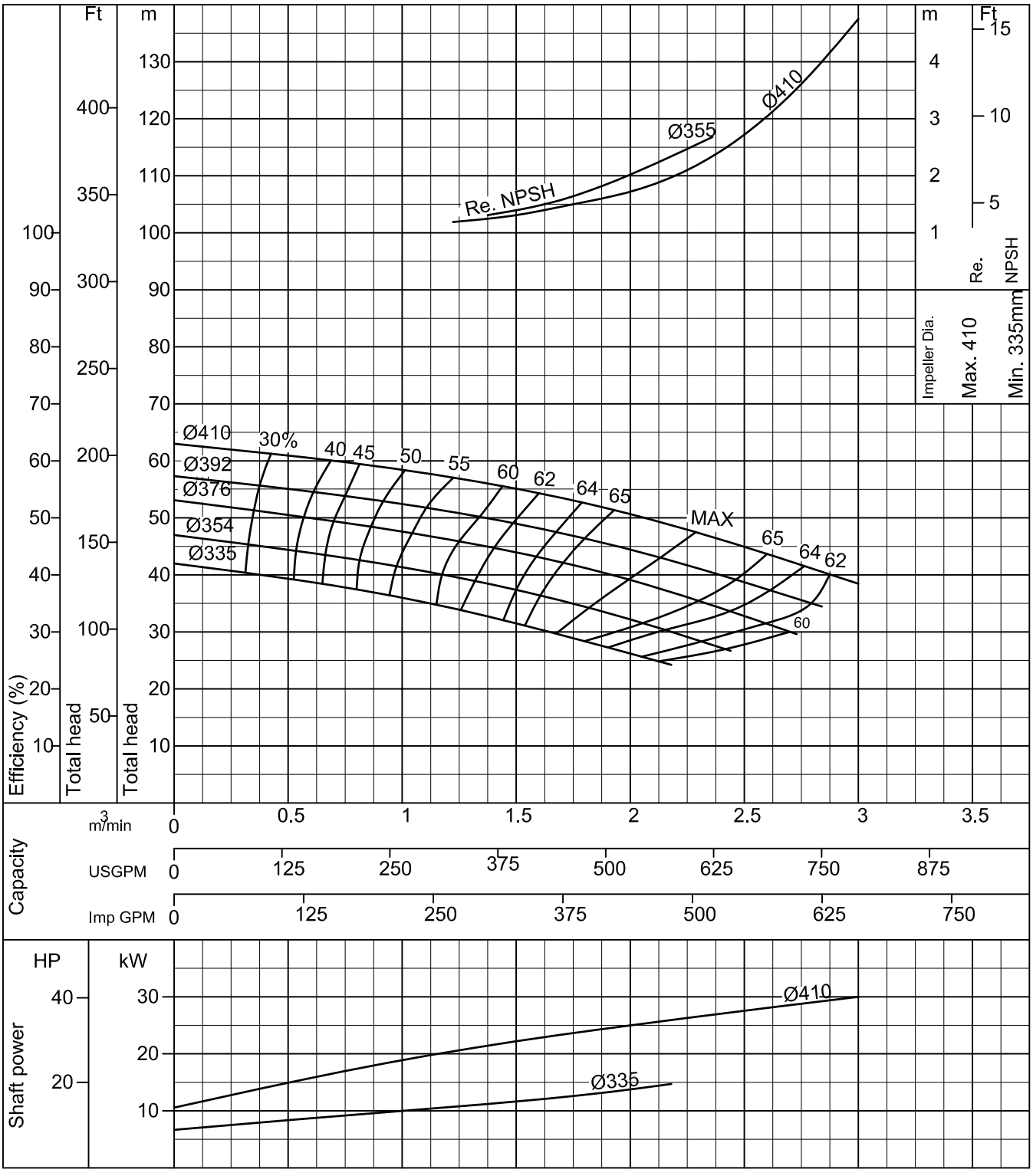


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

125 x 100 CSJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

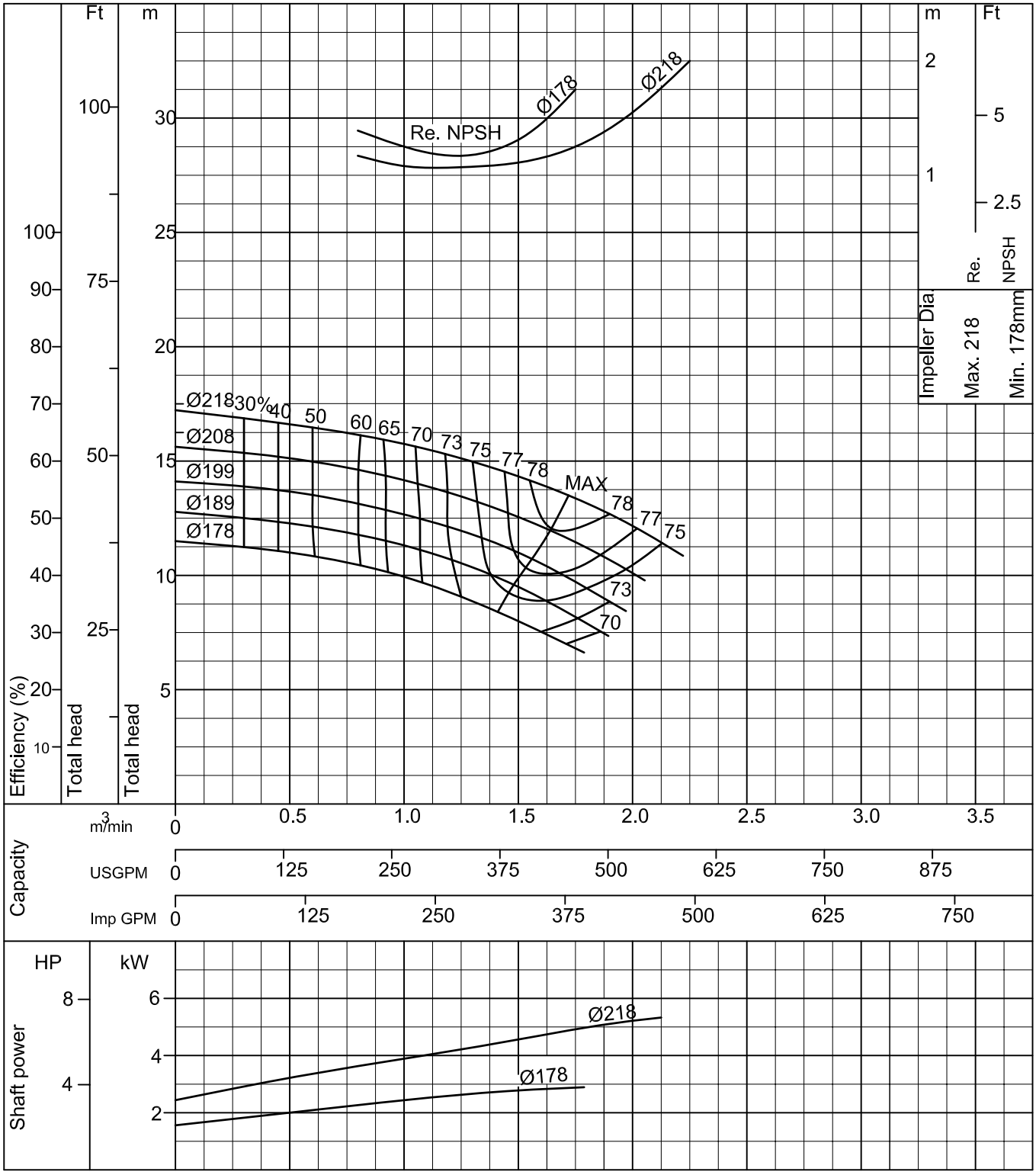


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

125 x 100 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

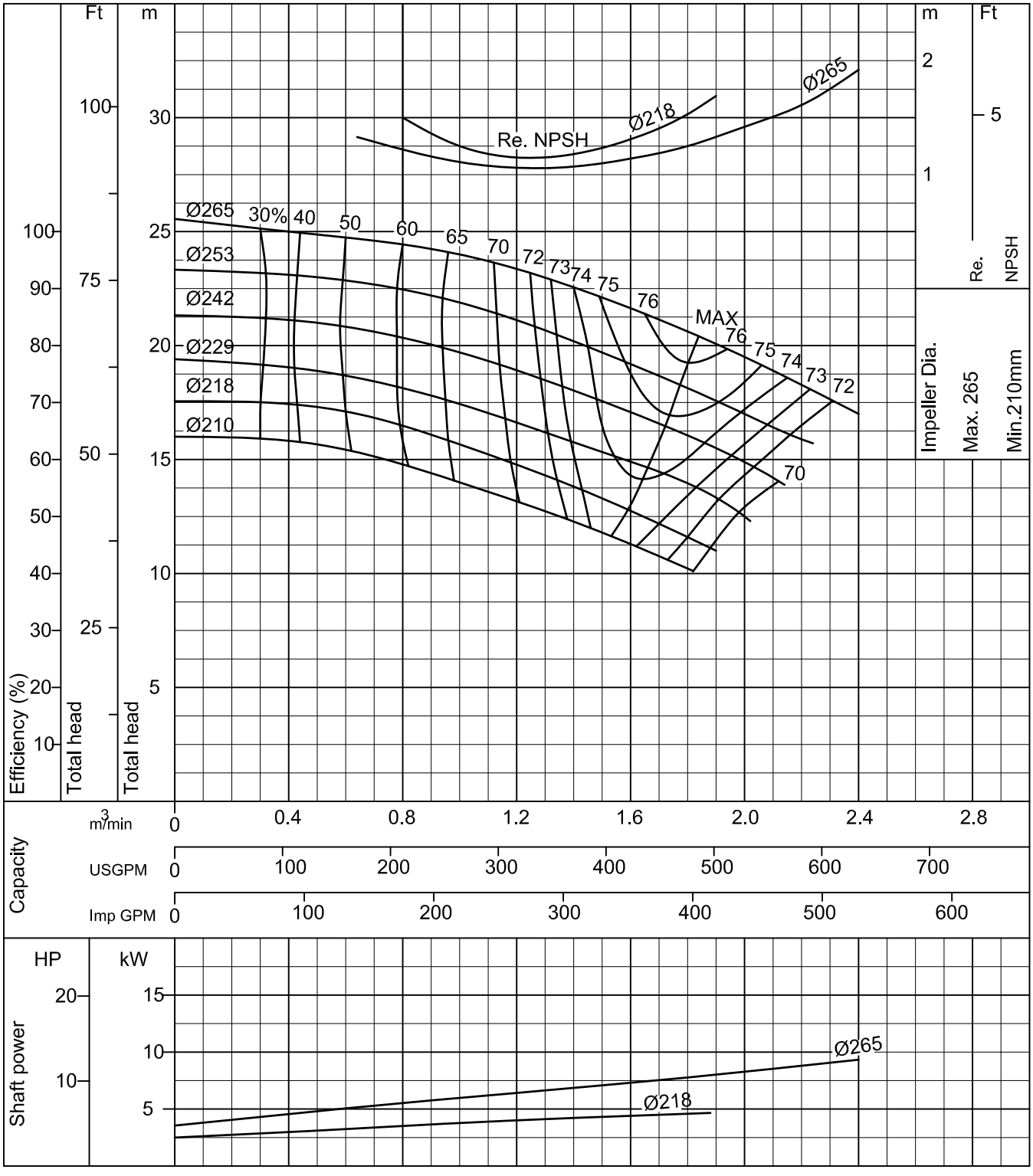


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

125 x 100 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

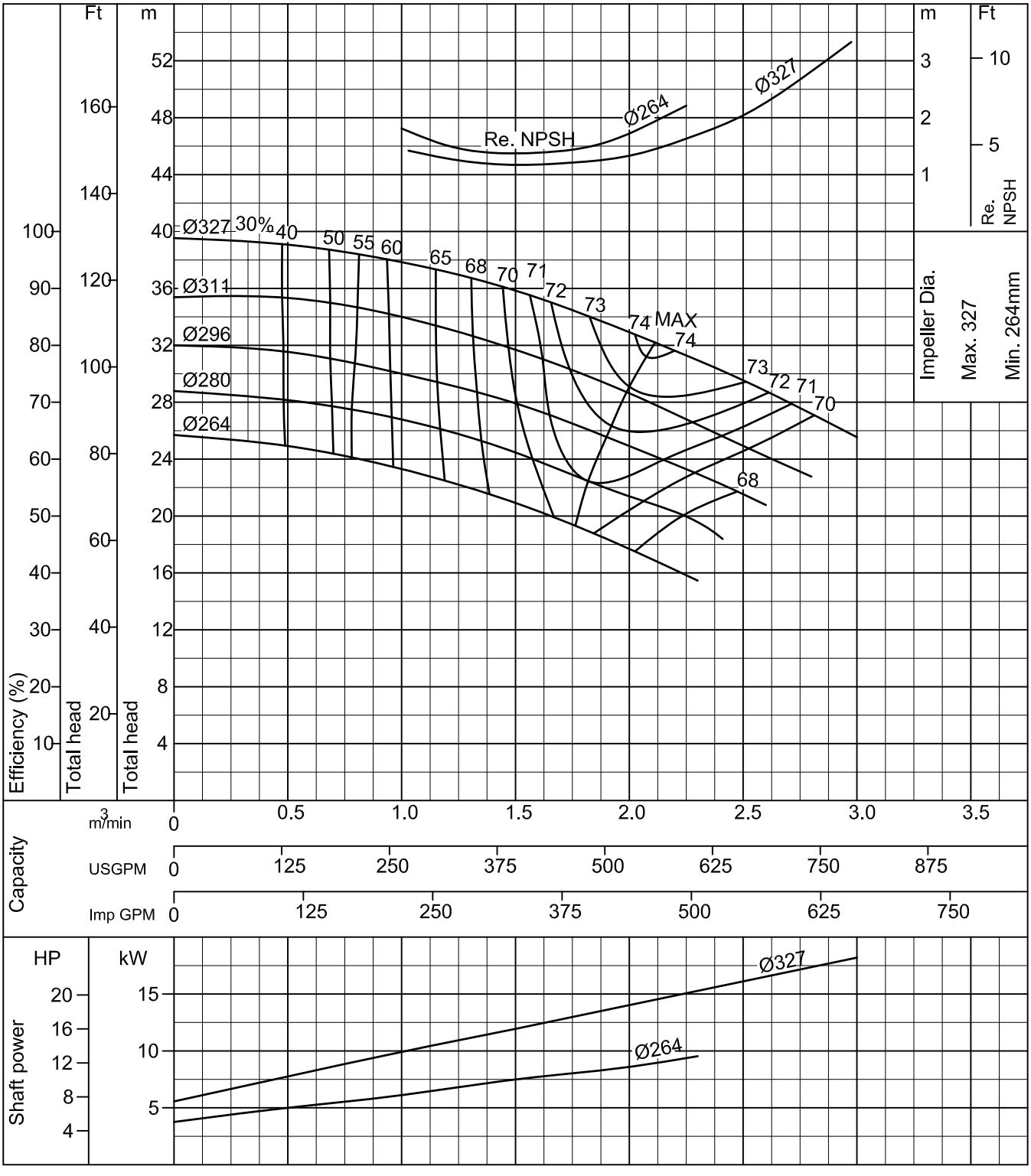


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

125 x 80 CNJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

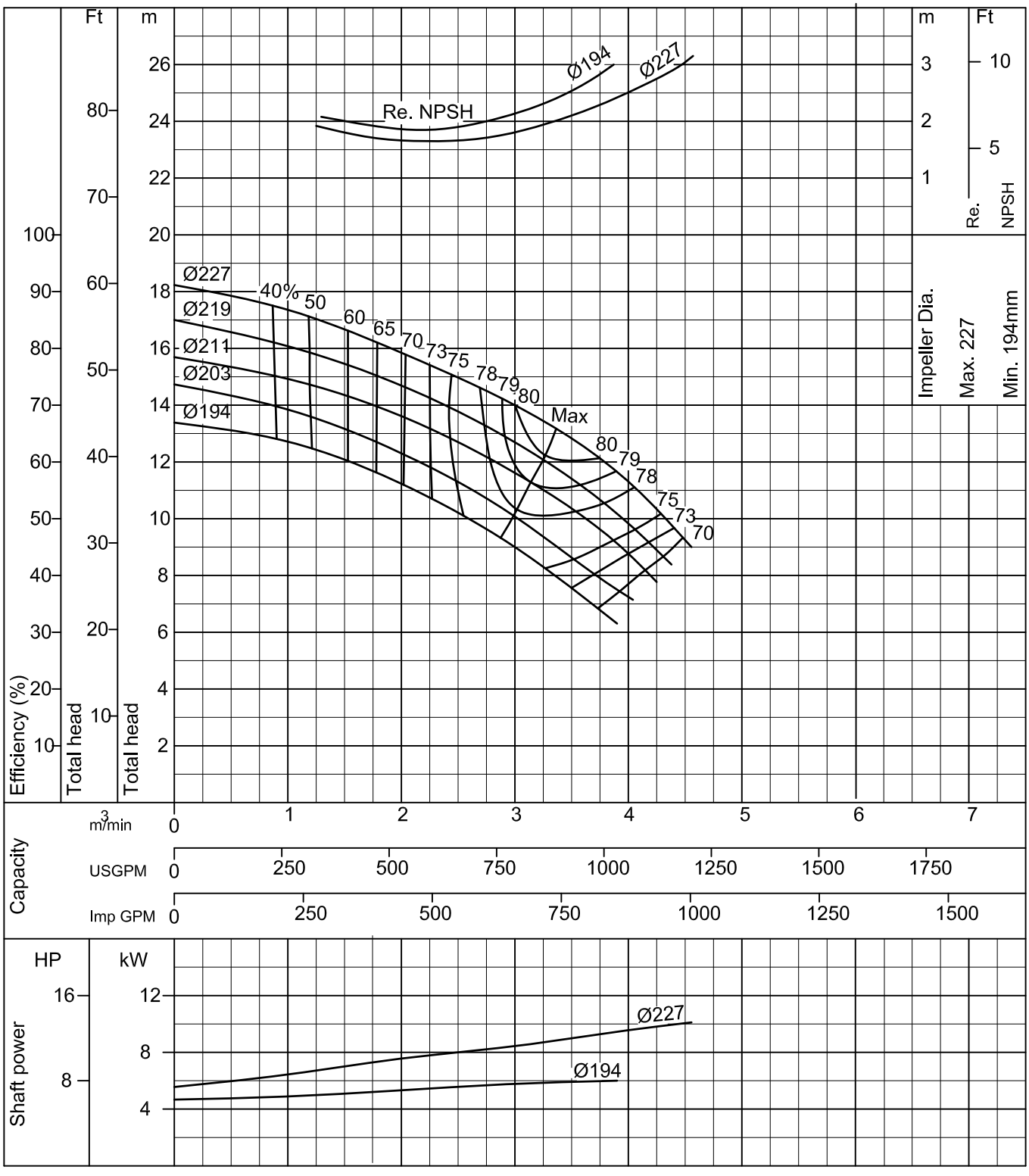


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

150 x 150 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

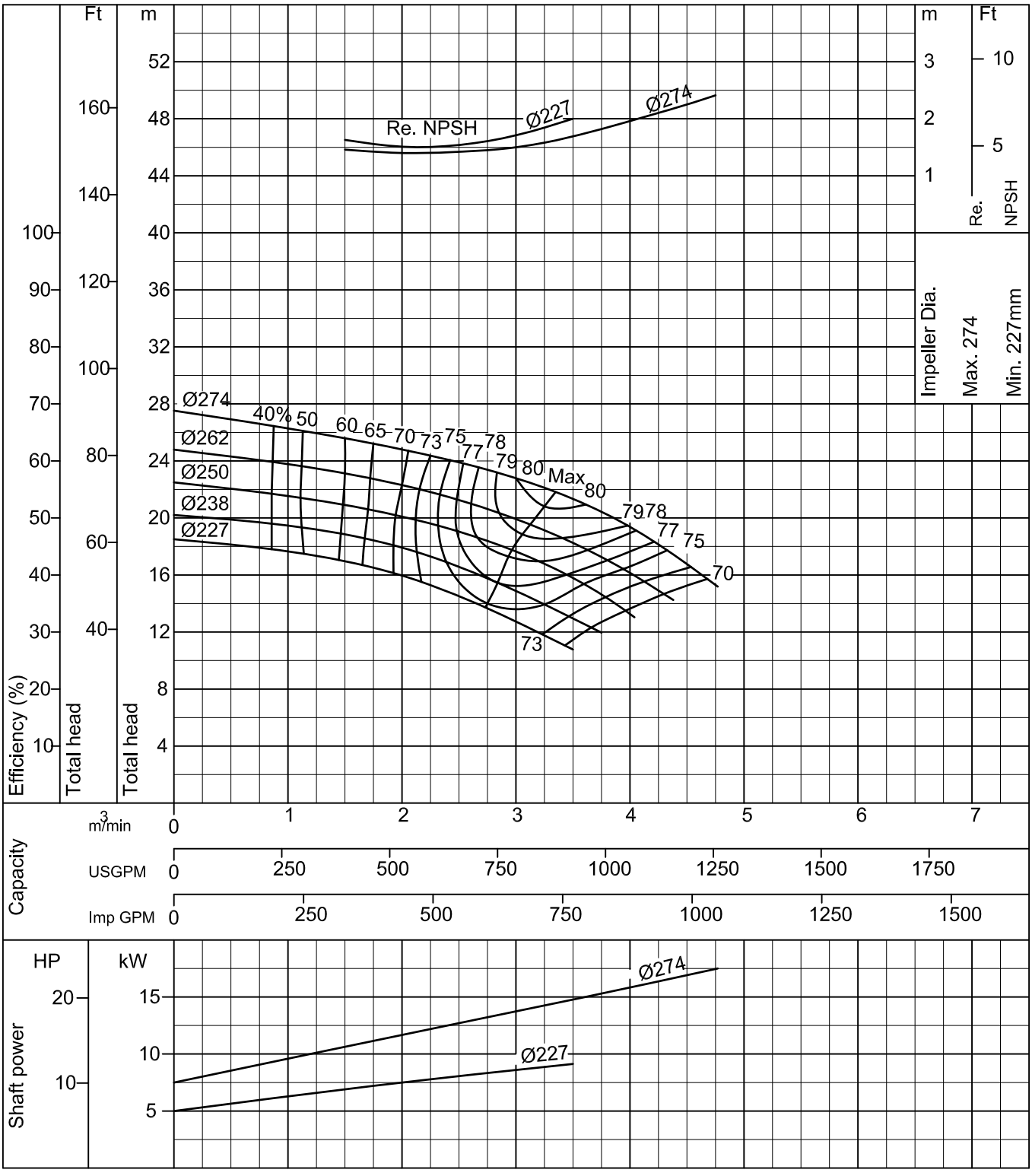


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

150 x 125 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

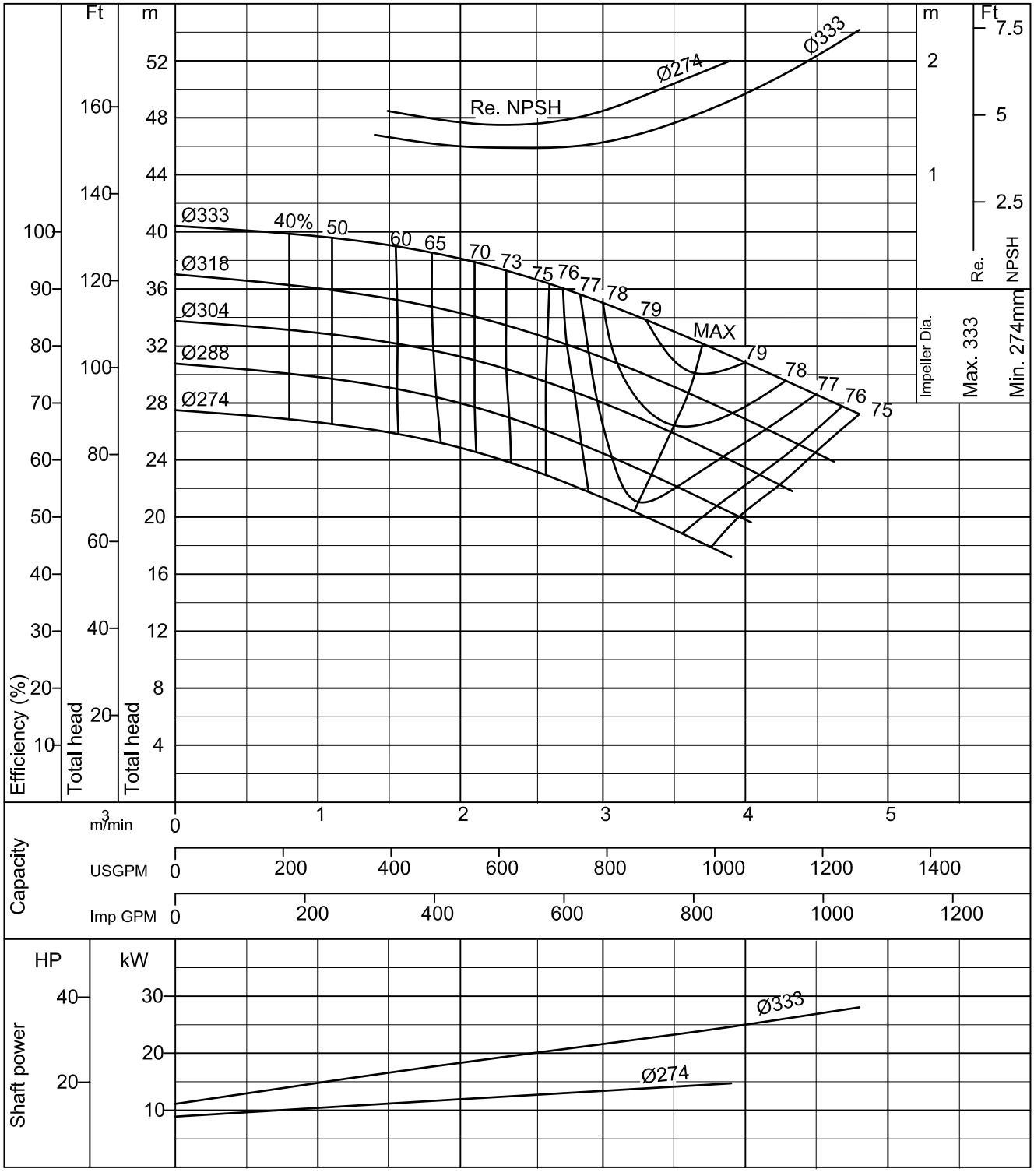


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

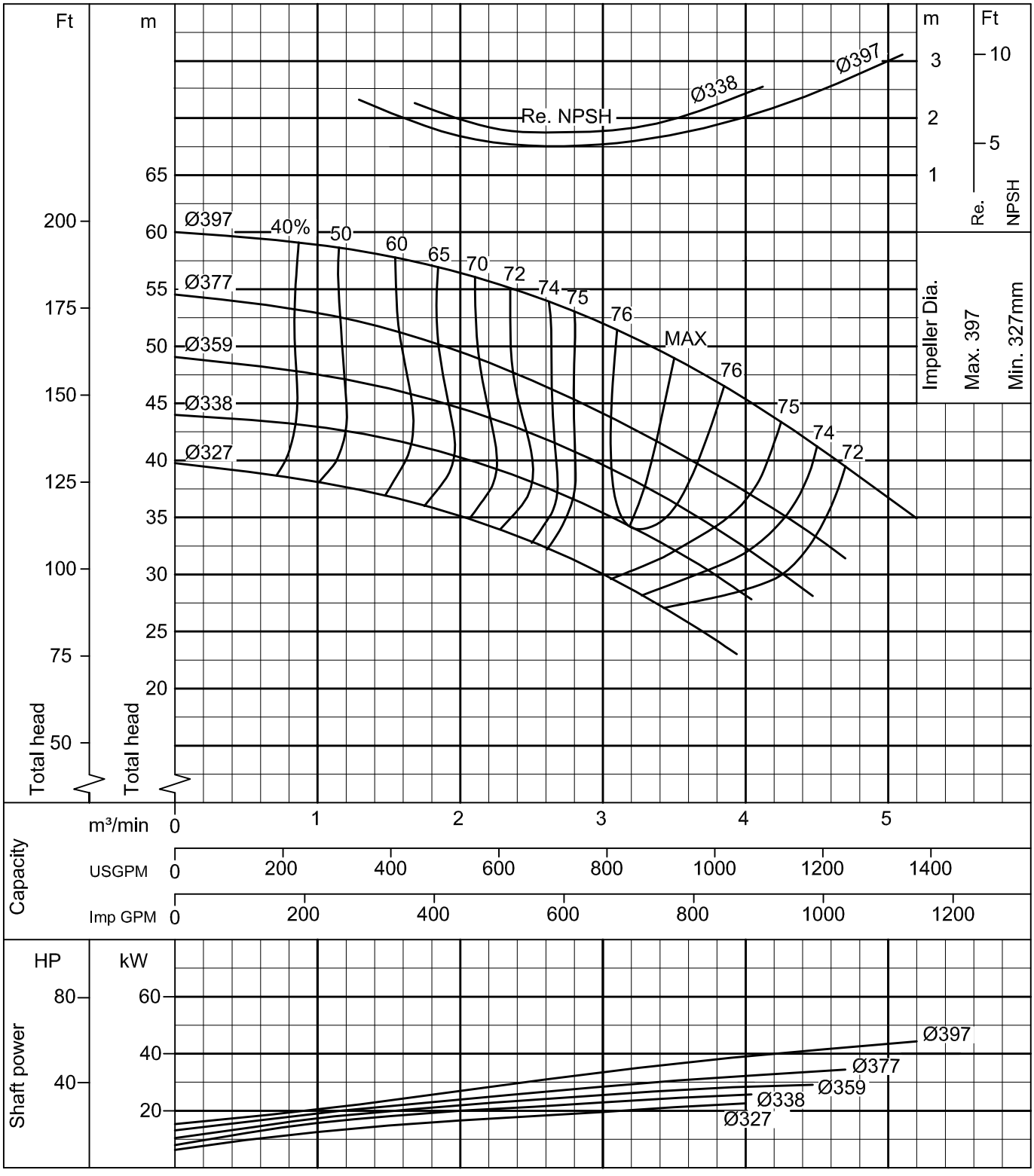
150 x 125 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

150 x 100 CNJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



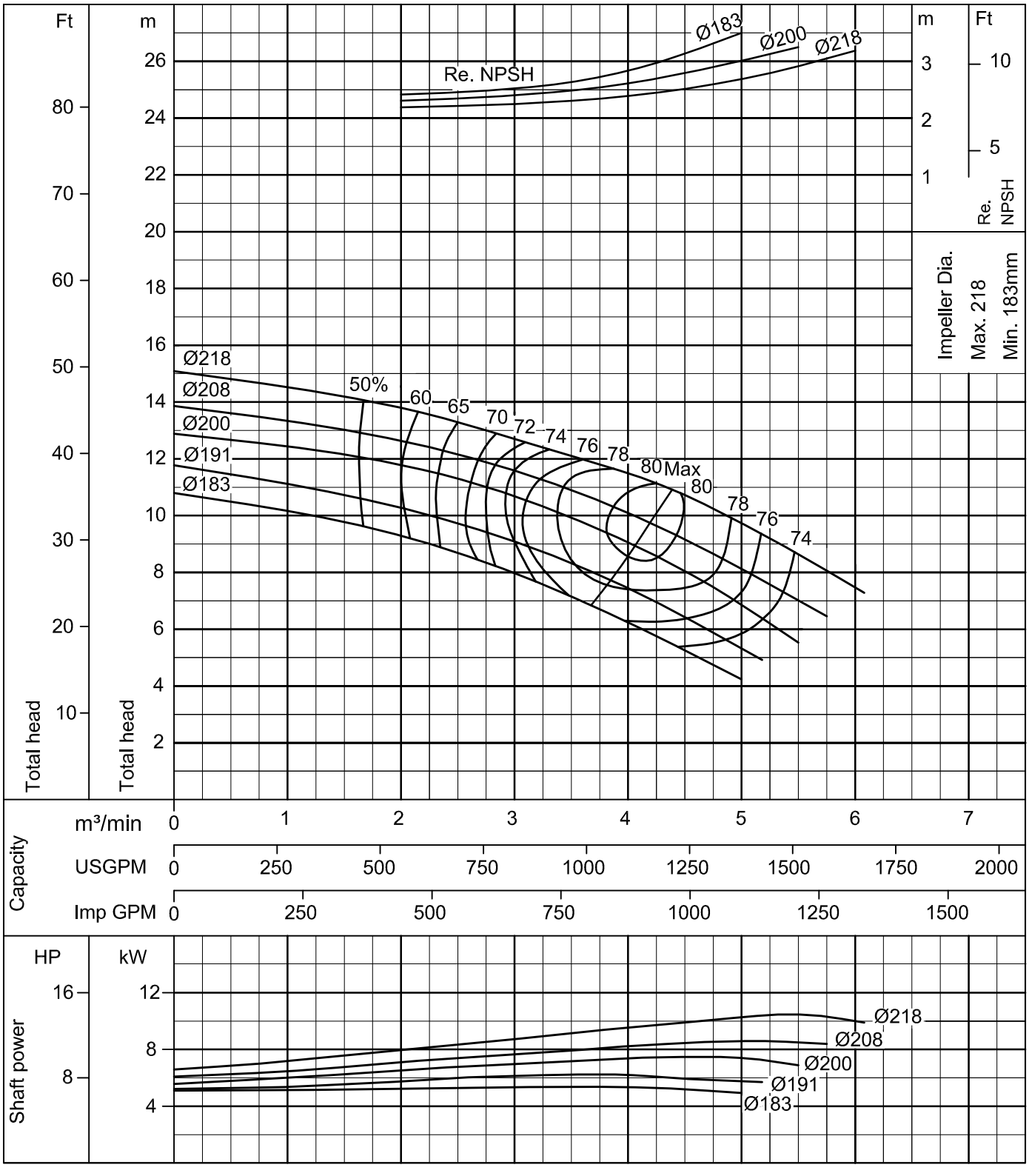
Ebara Horizontal Split Casing Pump

Model CNA

Performance Curve

50Hz

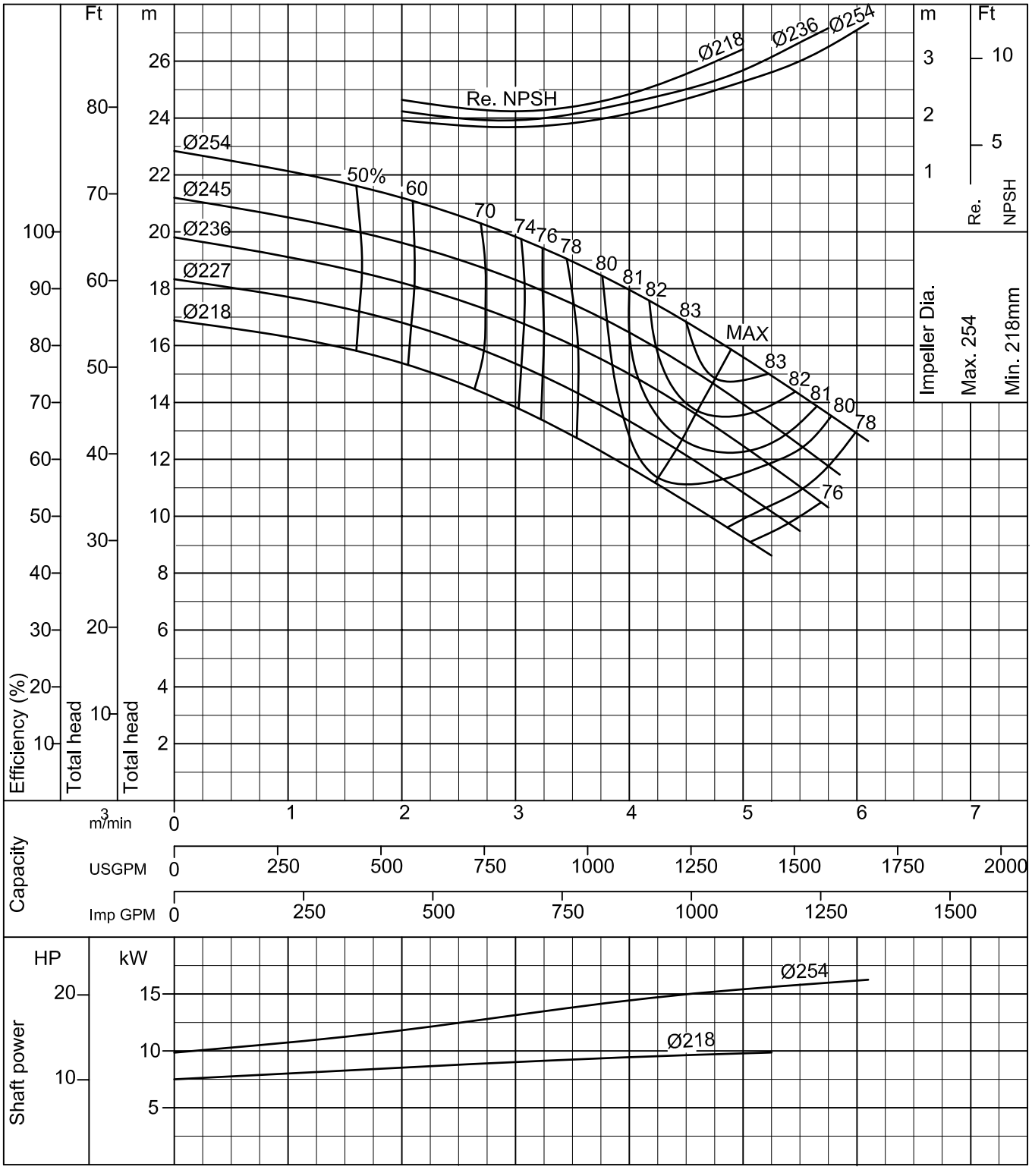
200 x 200 CNEA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

200 x 150 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

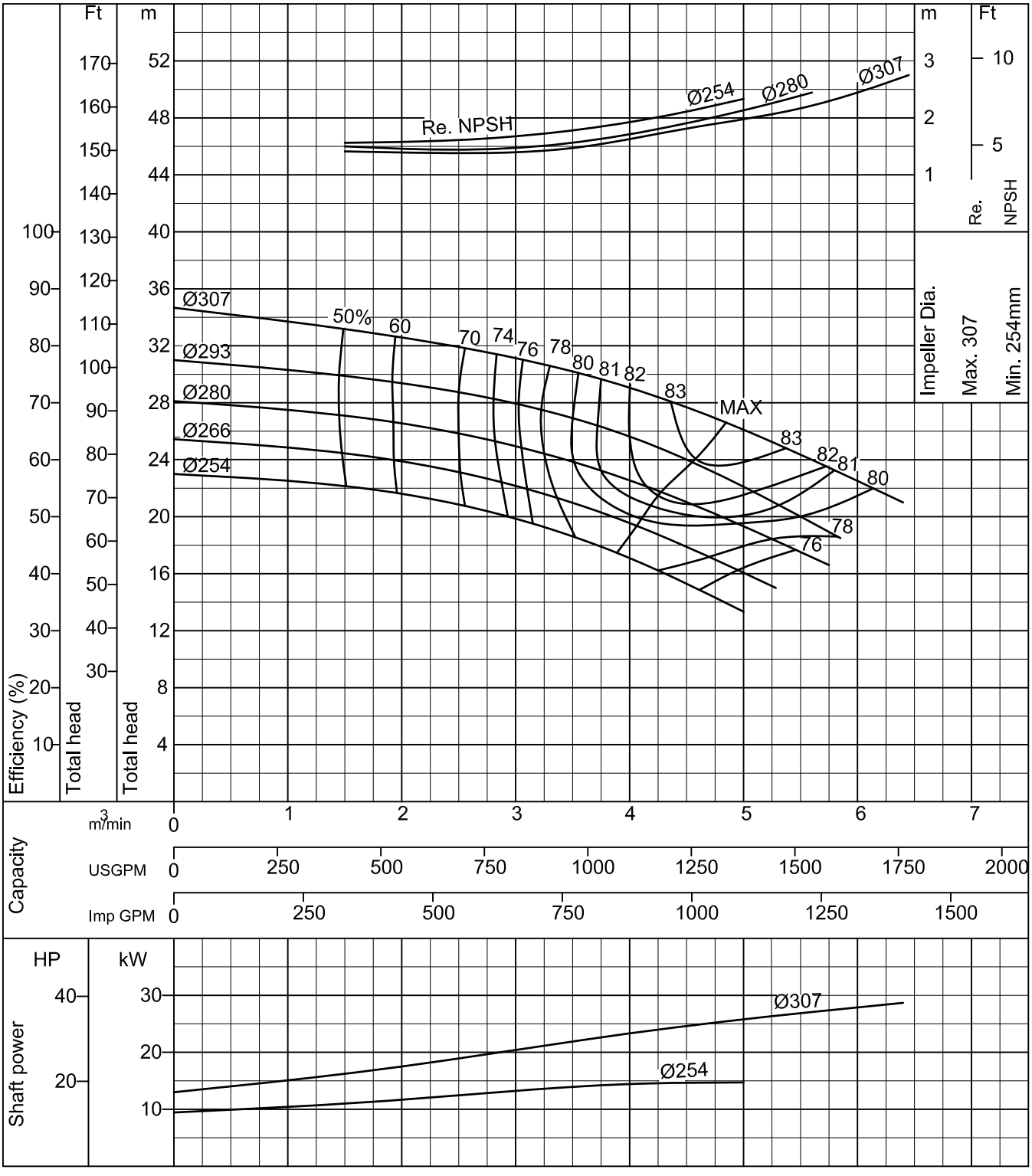


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

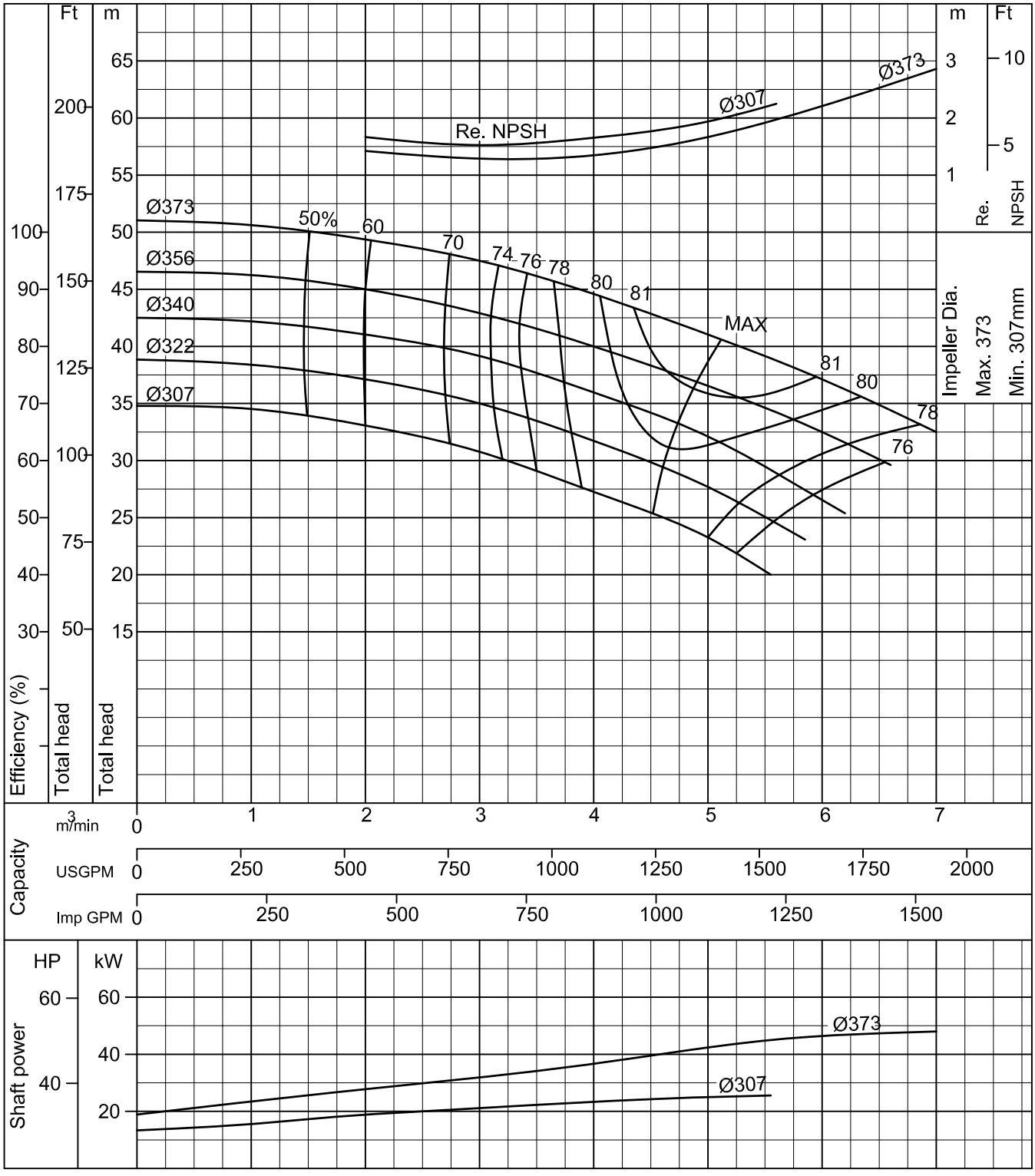
200 x 150 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

200 x 150 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



EBARA

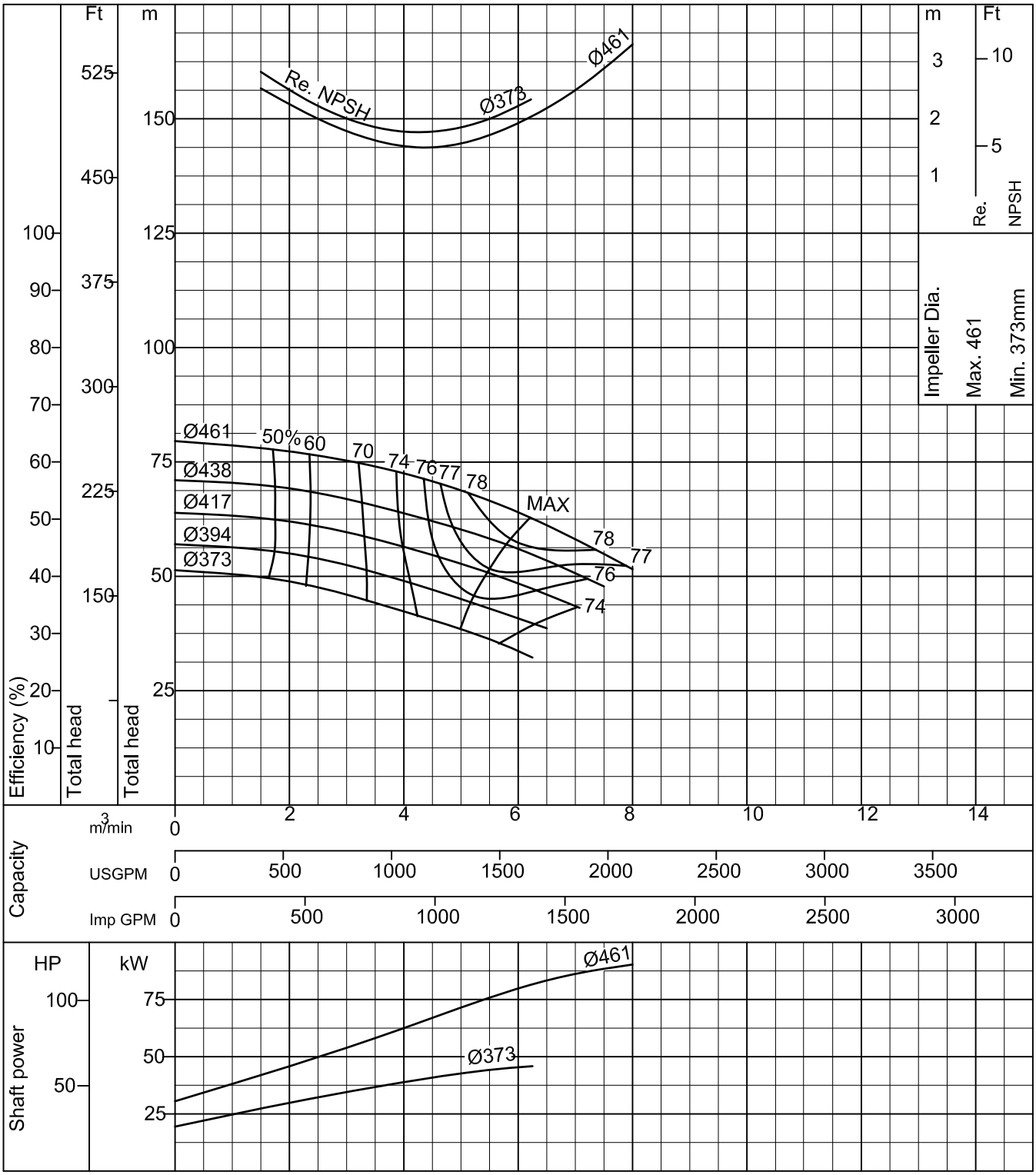
Curve No. - 4 - 5CN5615

Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

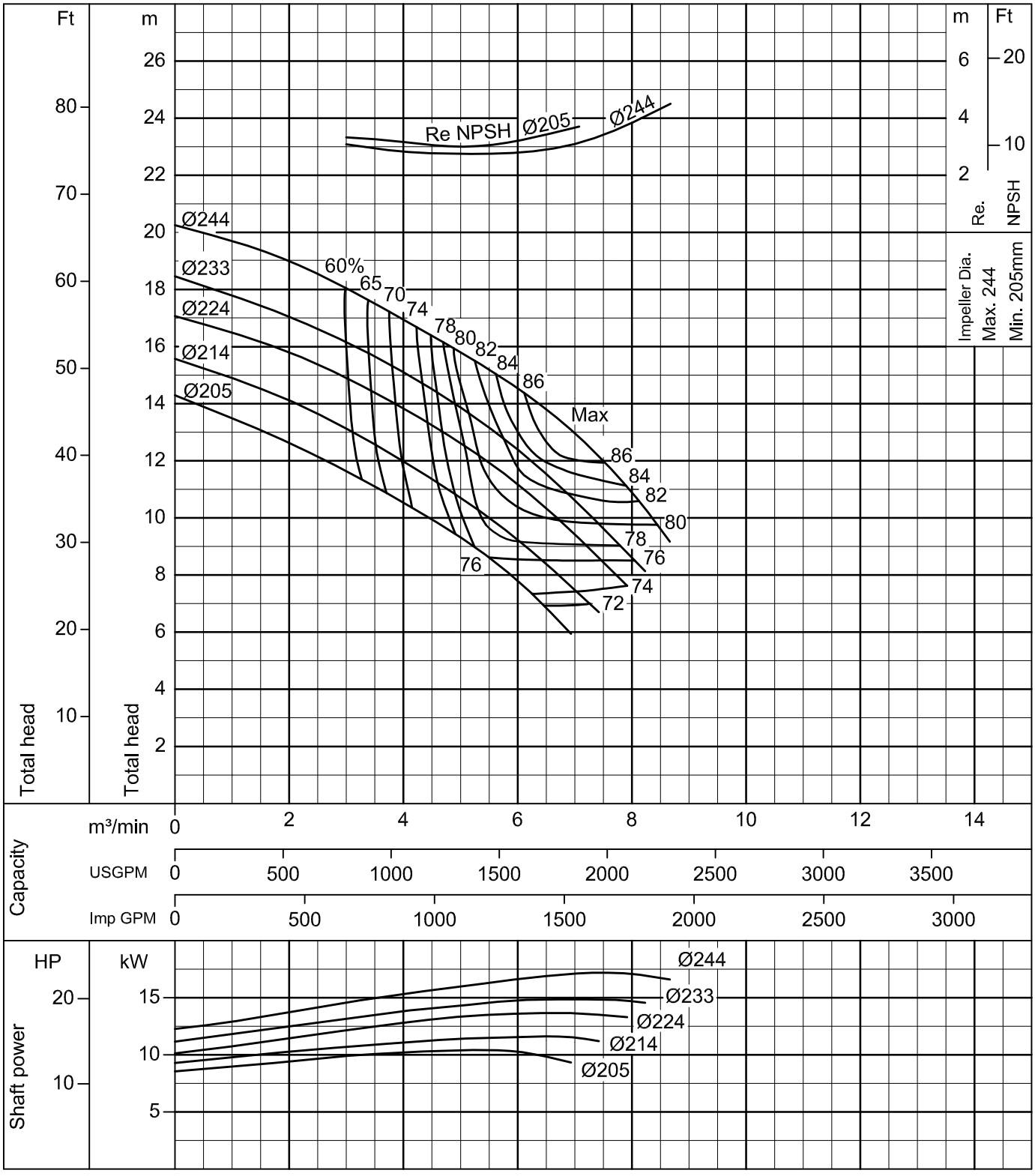
200 x 100 CNJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

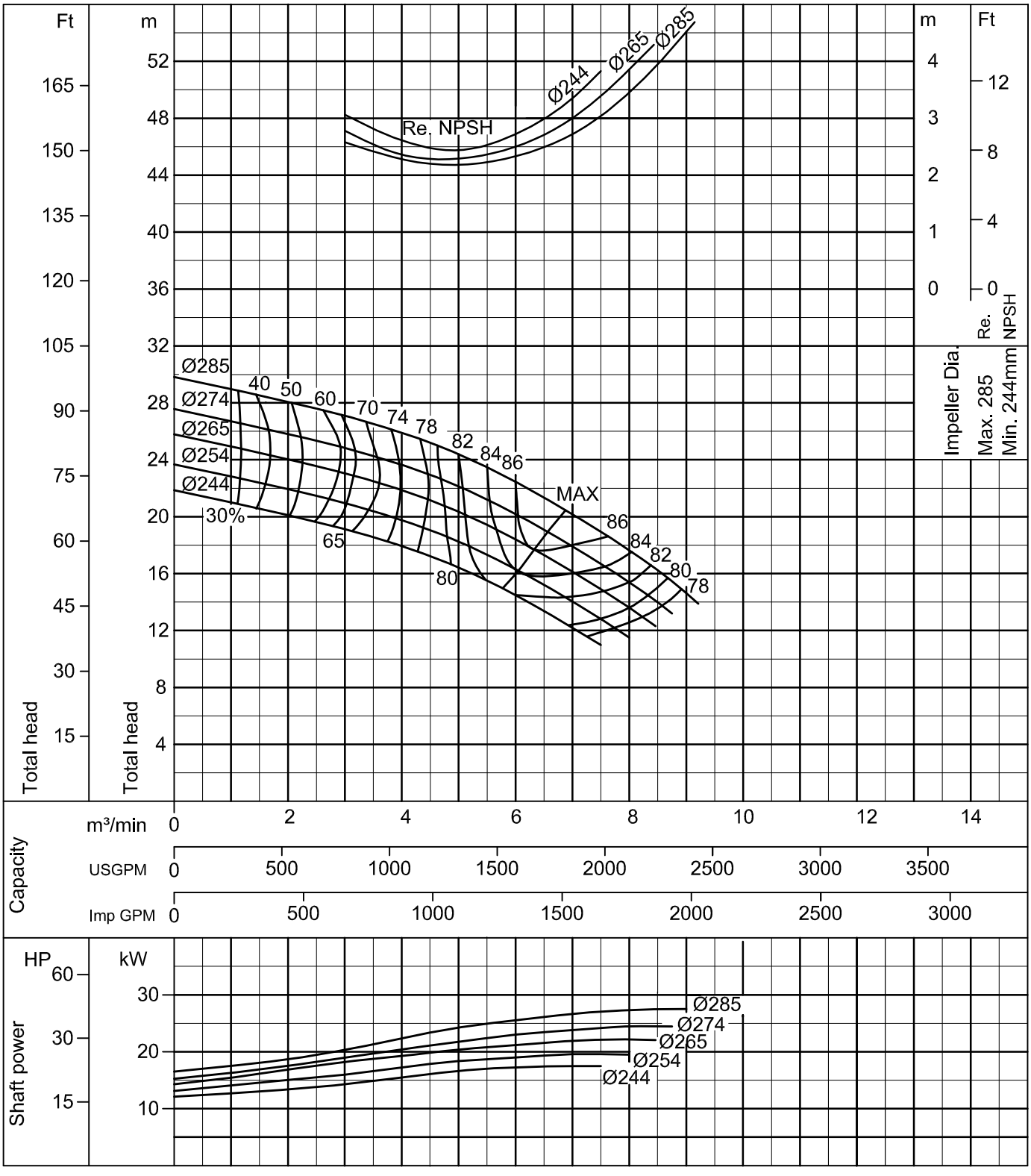
250 x 200 CNEA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

250 x 200 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

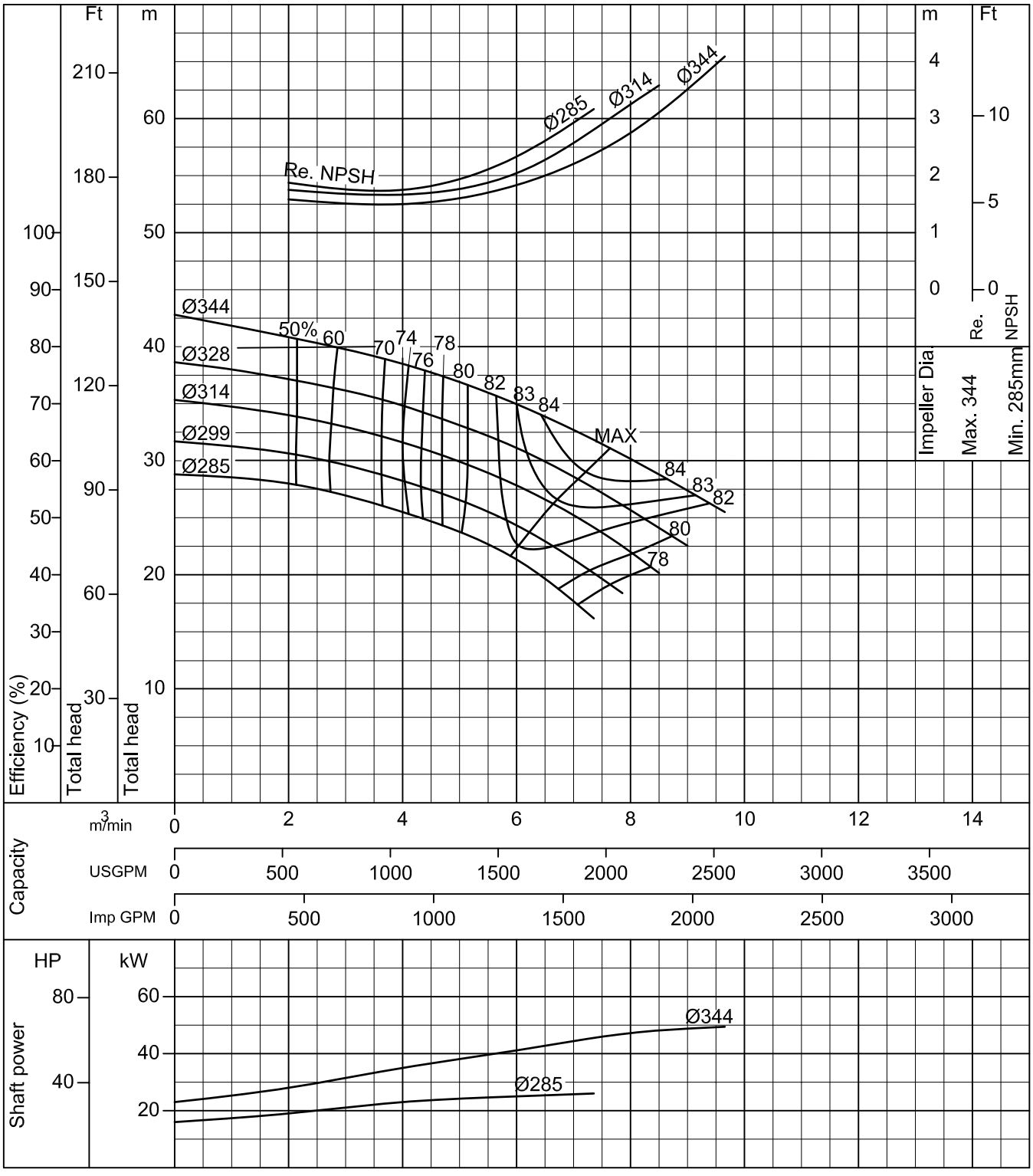


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

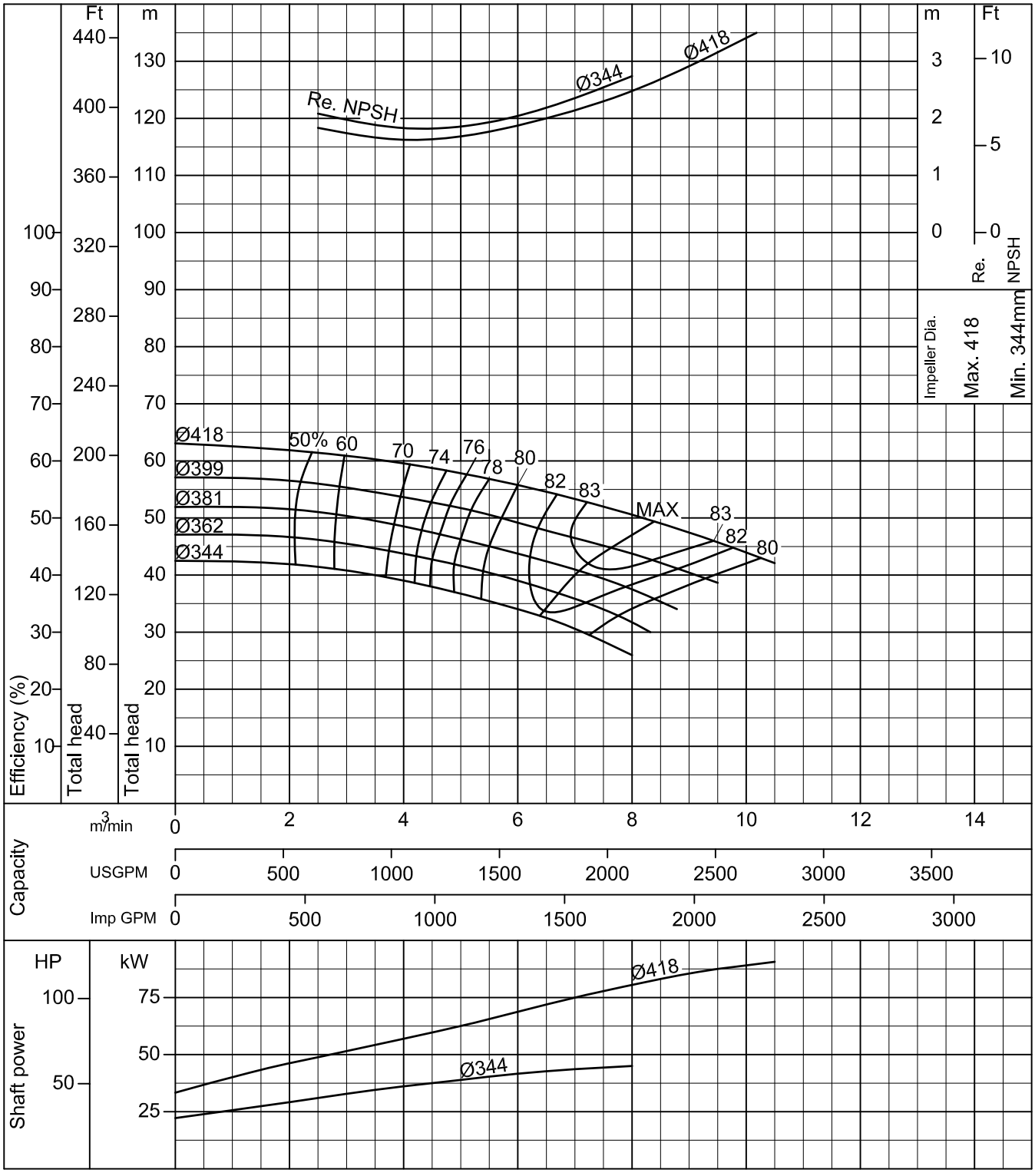
250 x 150 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

250 x 150 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

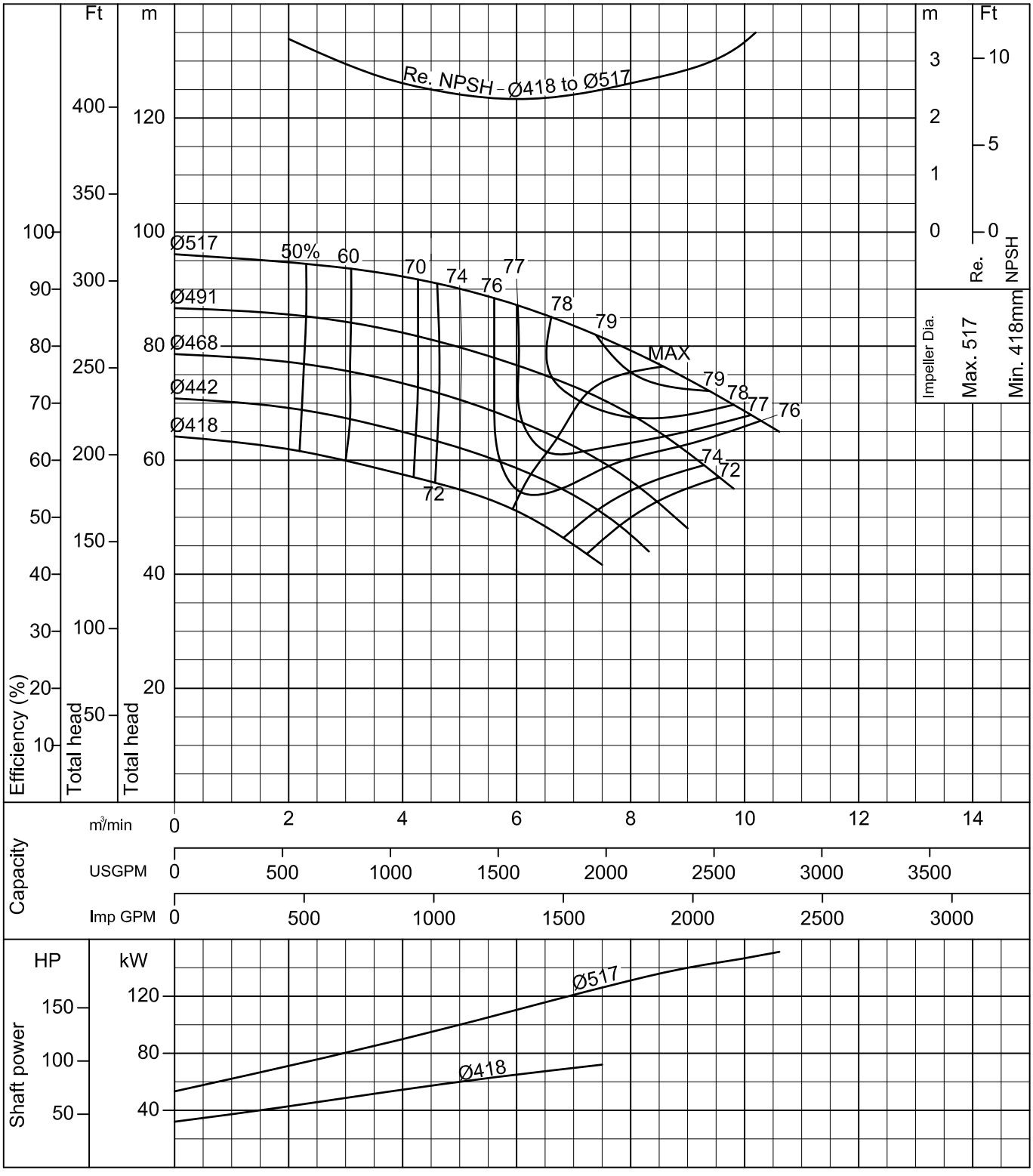


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

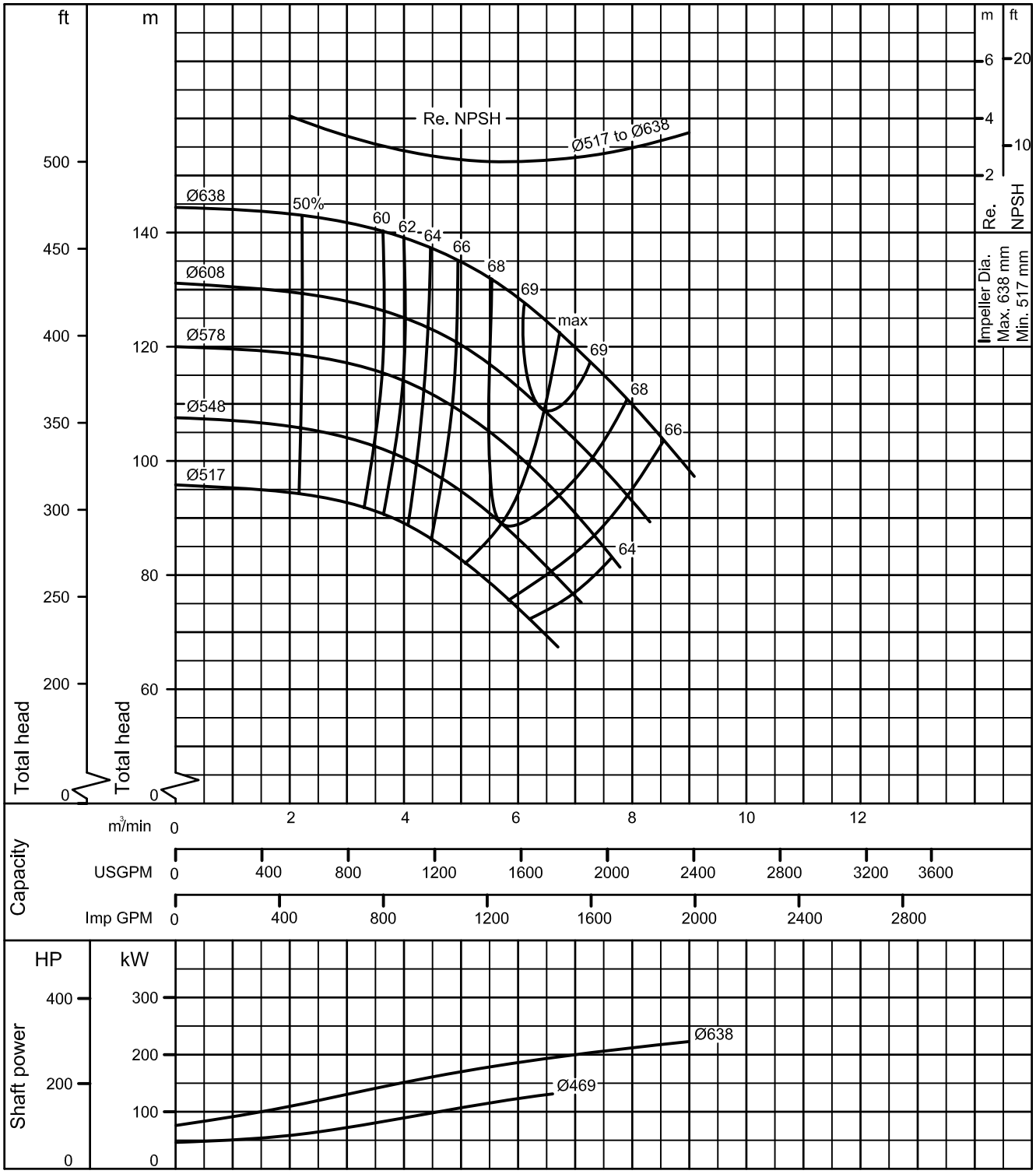
250 x 150 CNJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve

250 x 150 CNKA	According to ISO testing code 2548 Class C
50Hz (Approx. speed 1450 min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

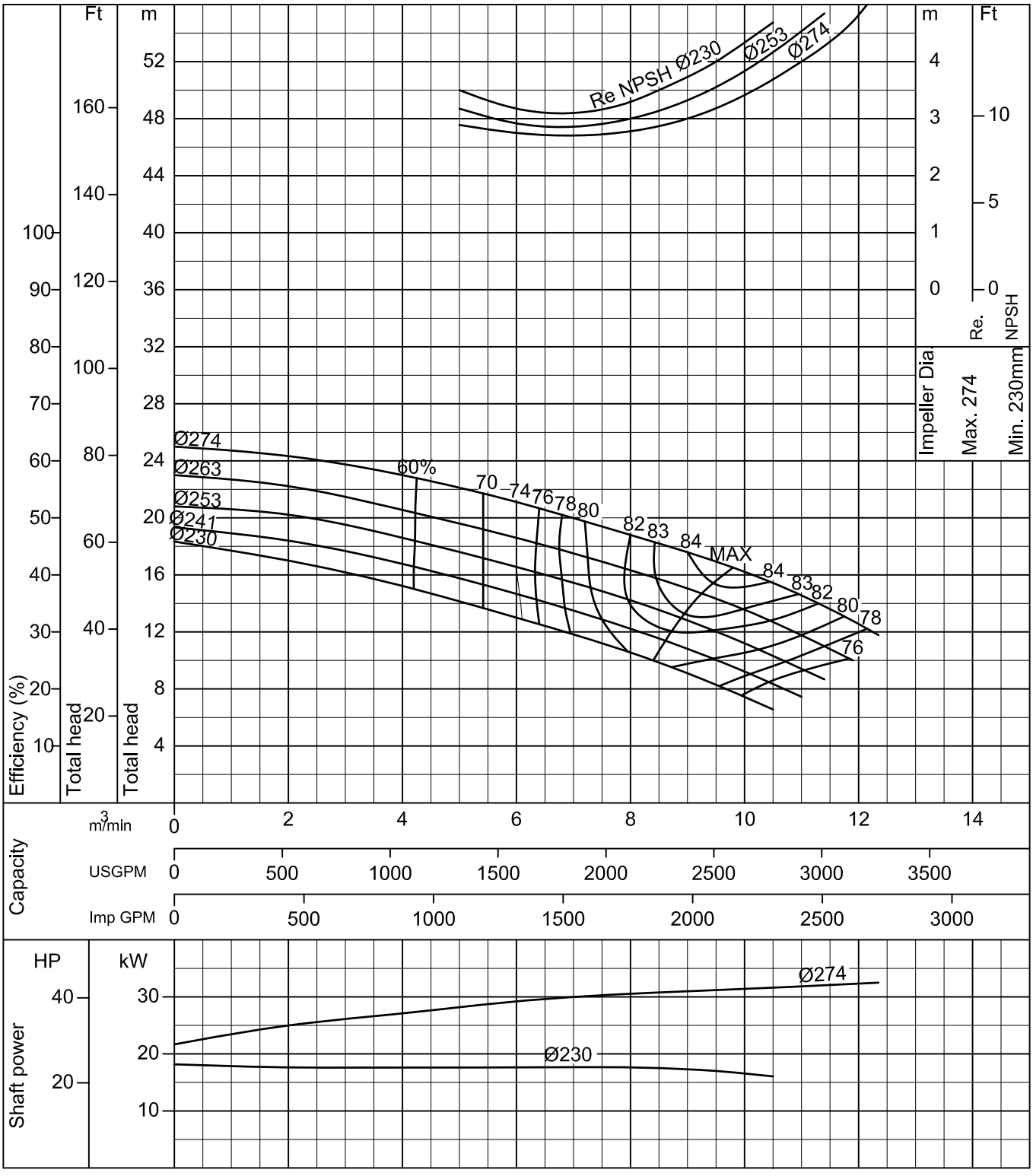


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

300 x 250 CNEA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

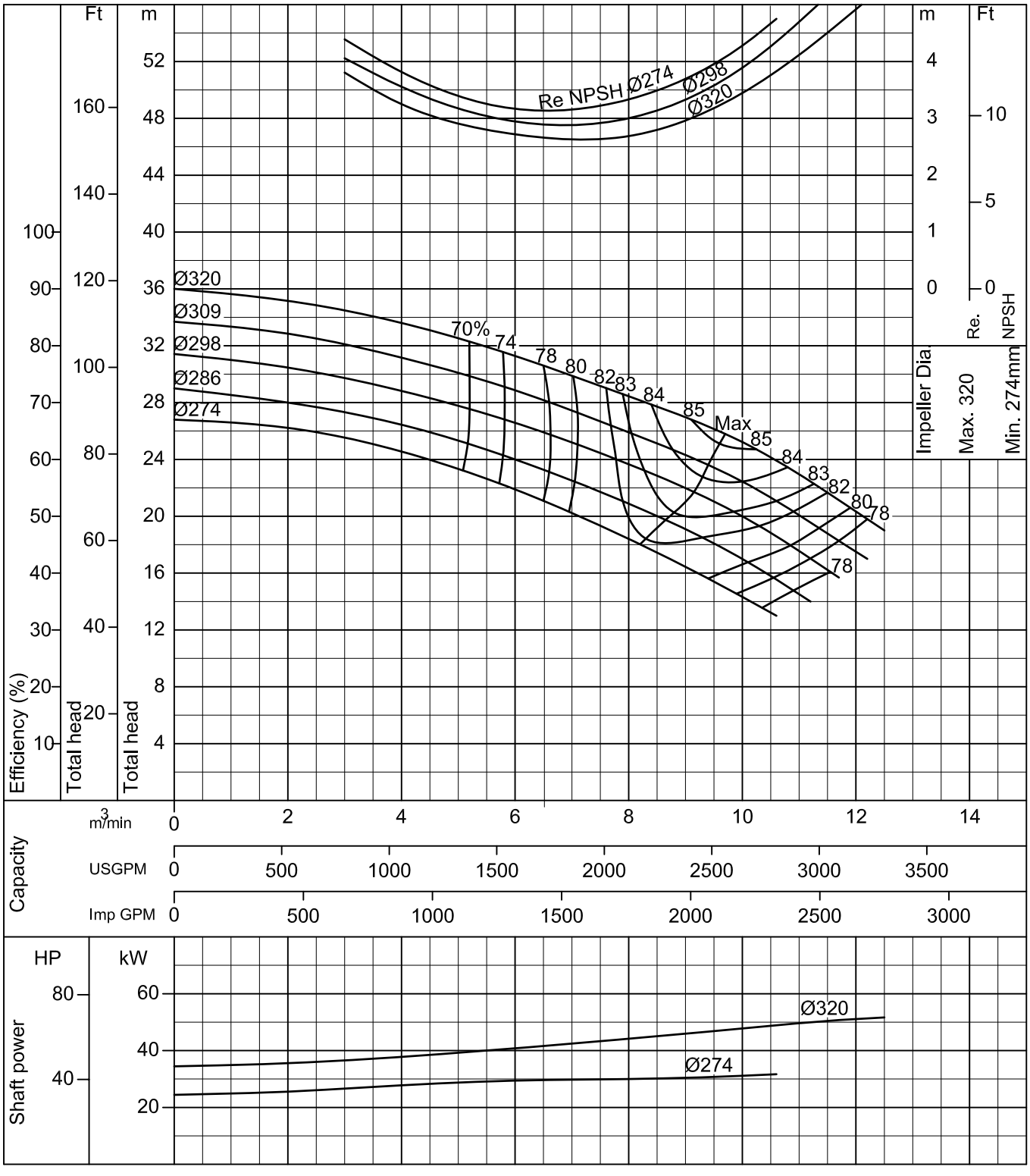


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

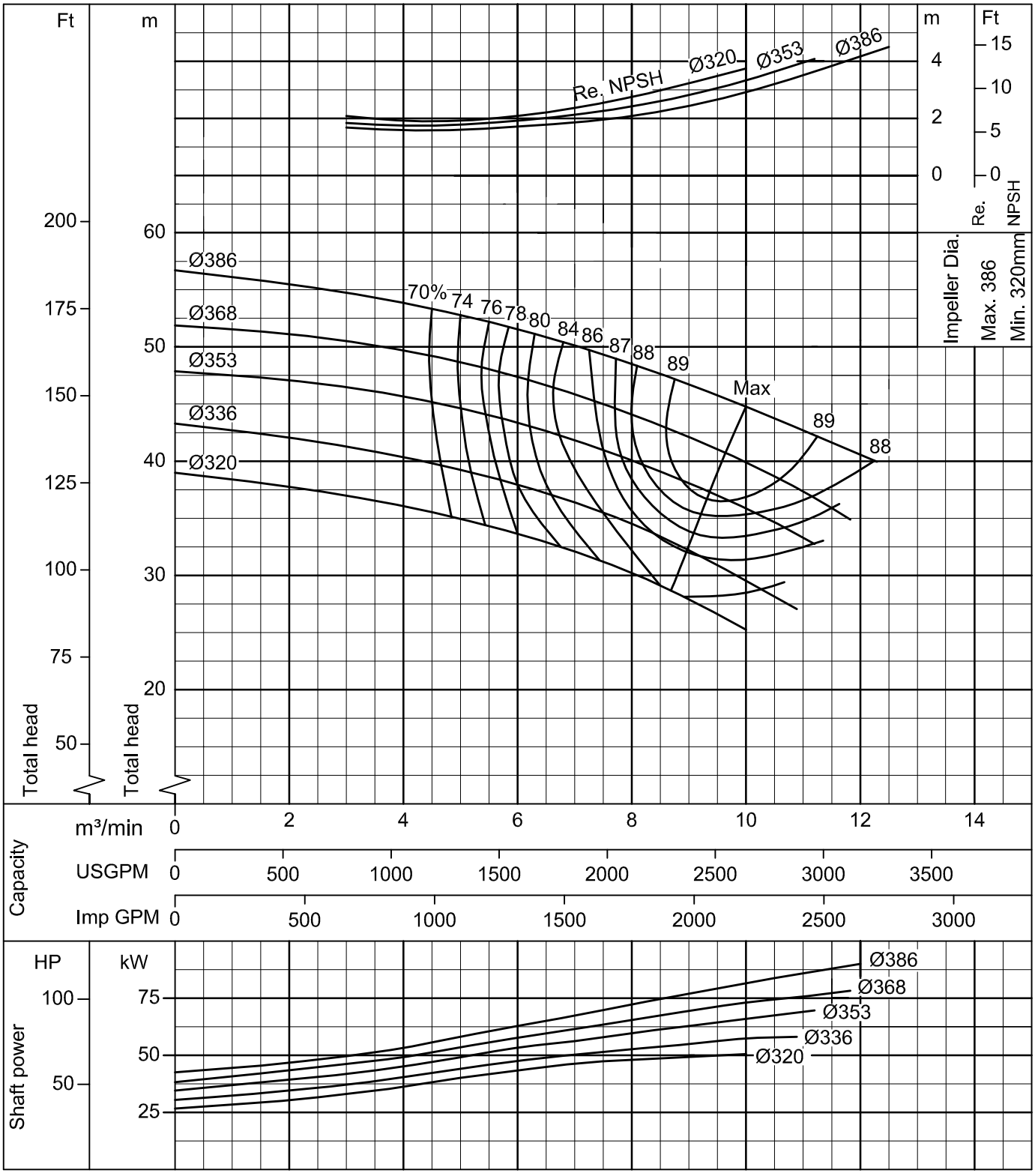
300 x 200 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

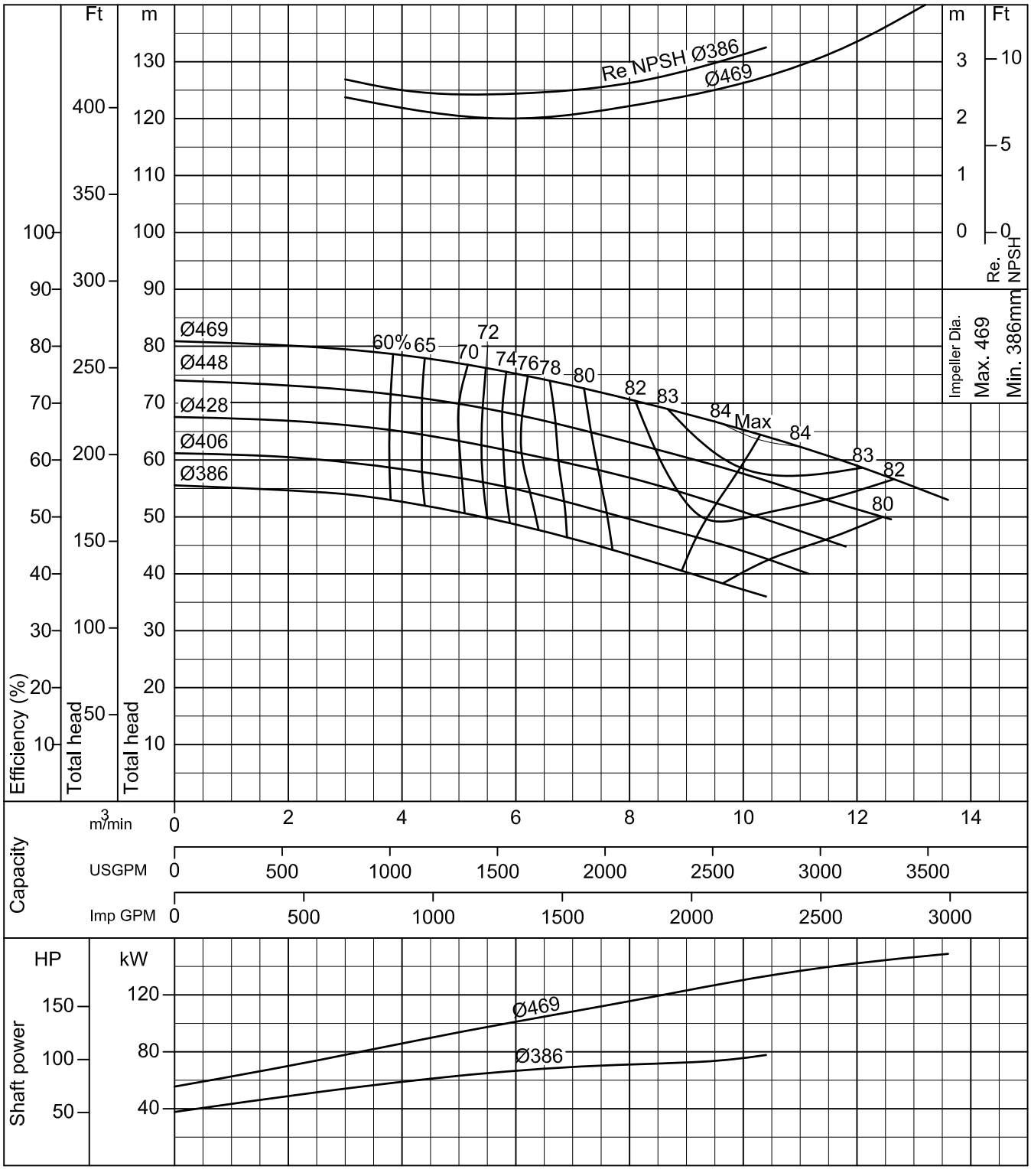
300 x 200 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

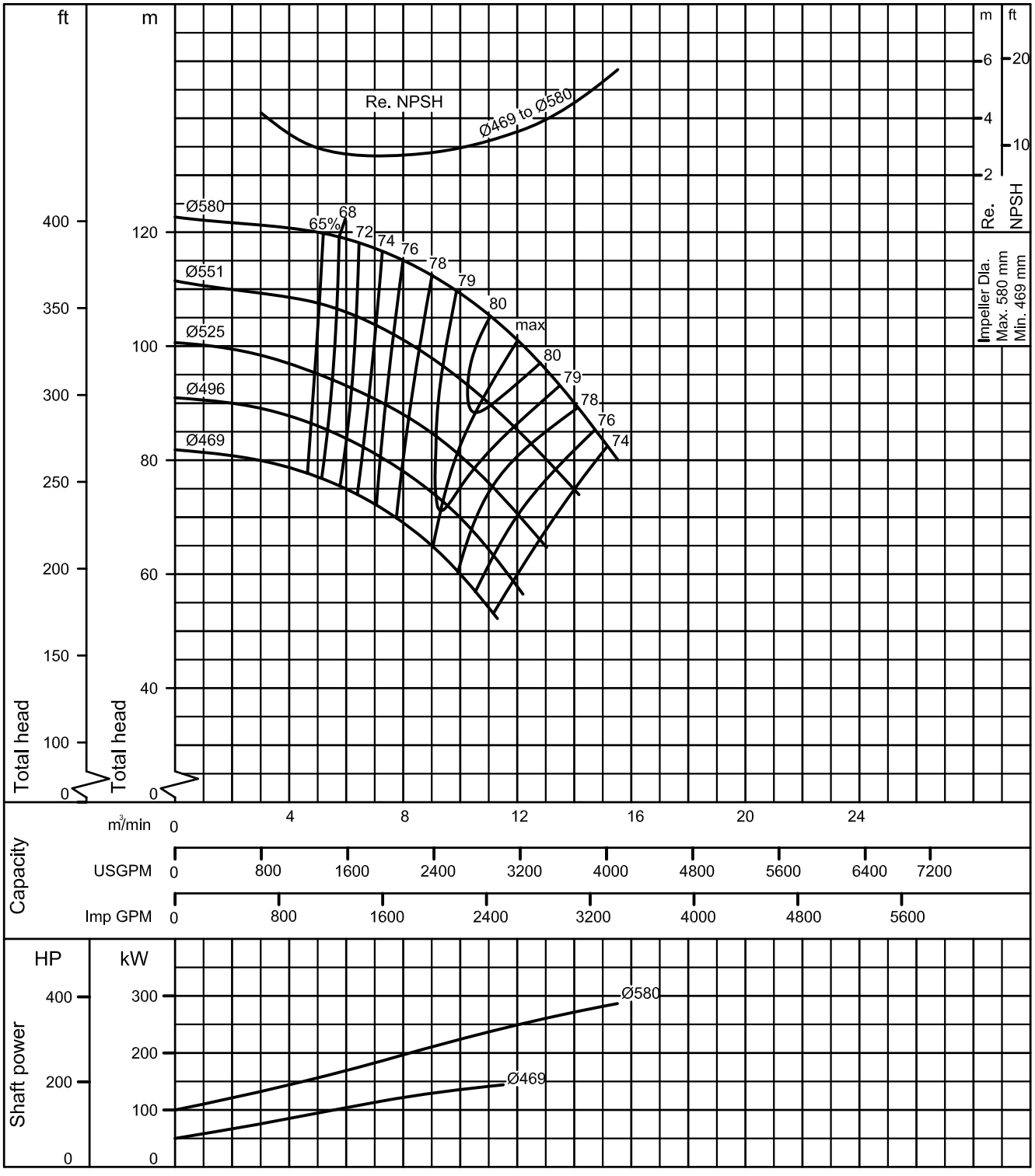
300 x 200 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve

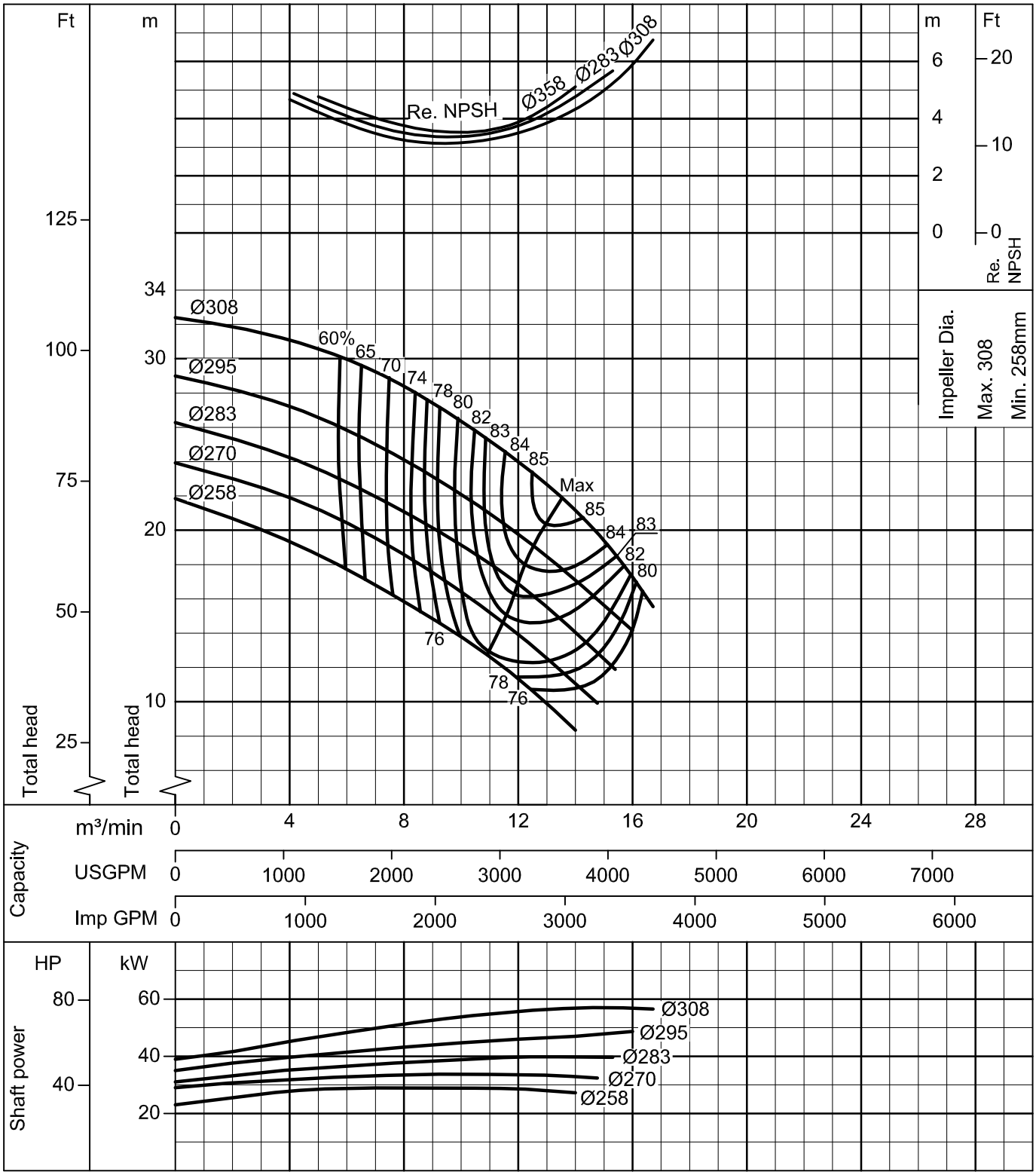
300 x 150 CNJA	According to ISO testing code 2548 Class C
50Hz (Approx. speed 1450 min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

300 x 250 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



EBARA

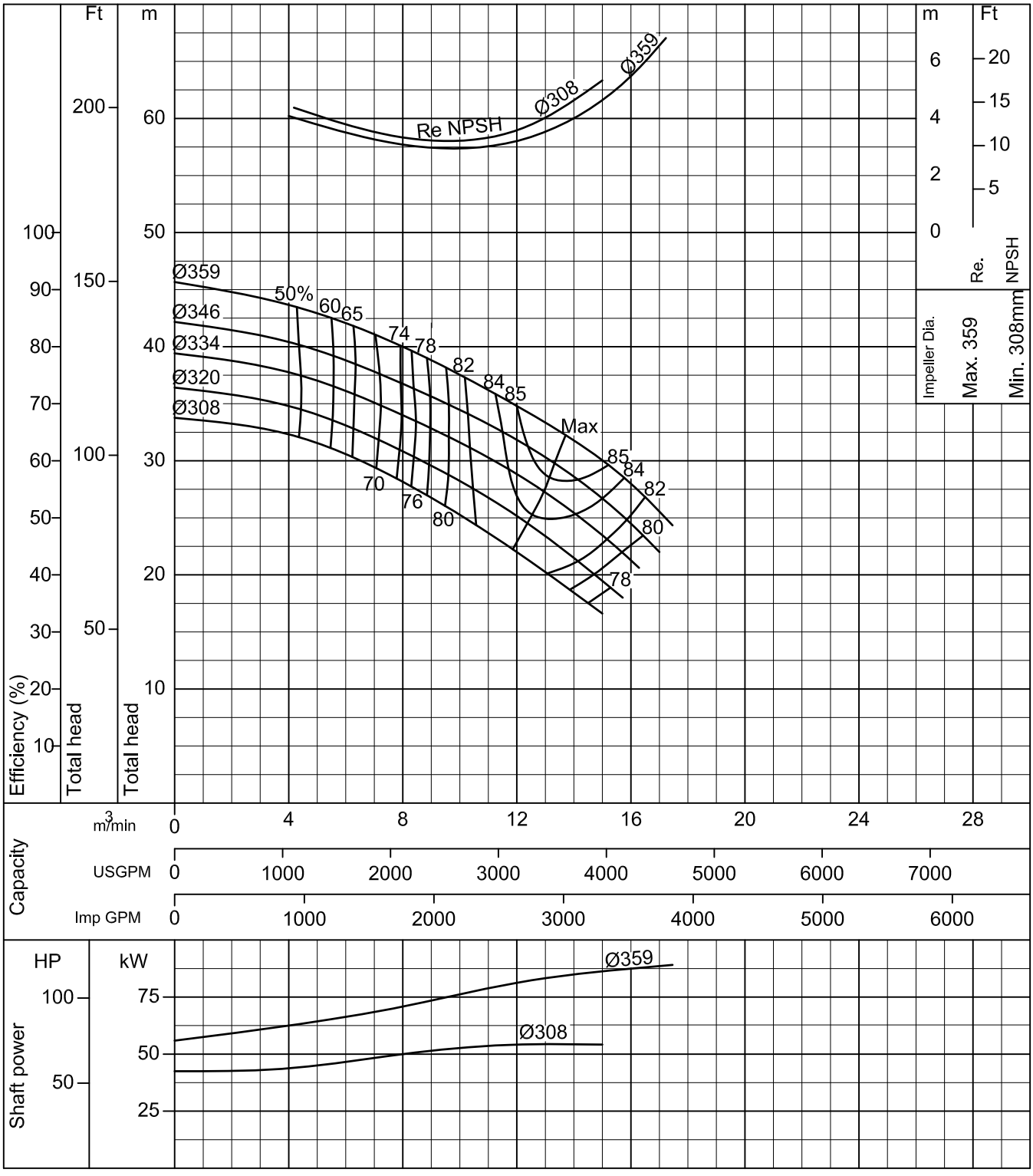
Curve No. - 4 - 5CN5628-R1

Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

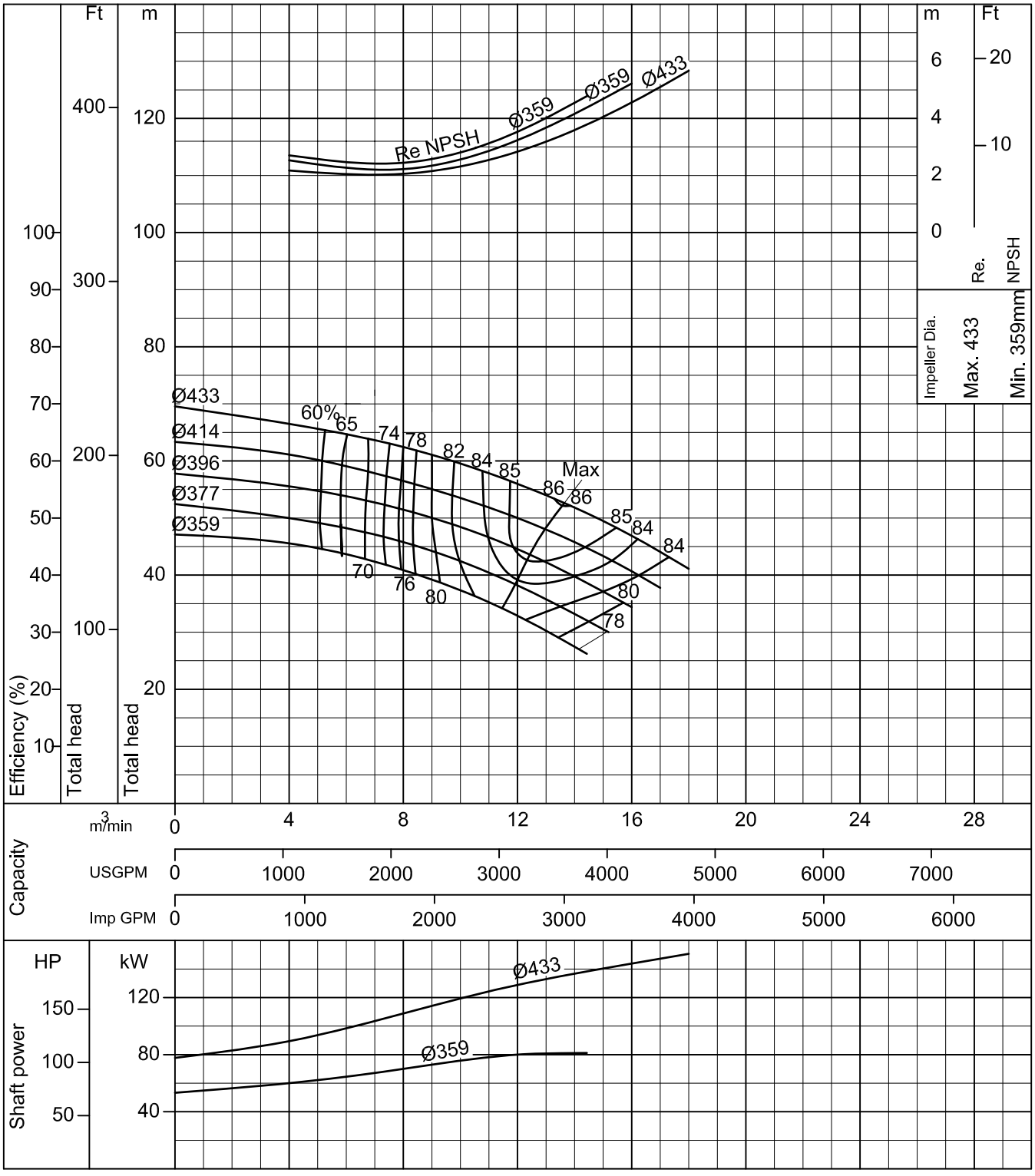
300 x 250 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

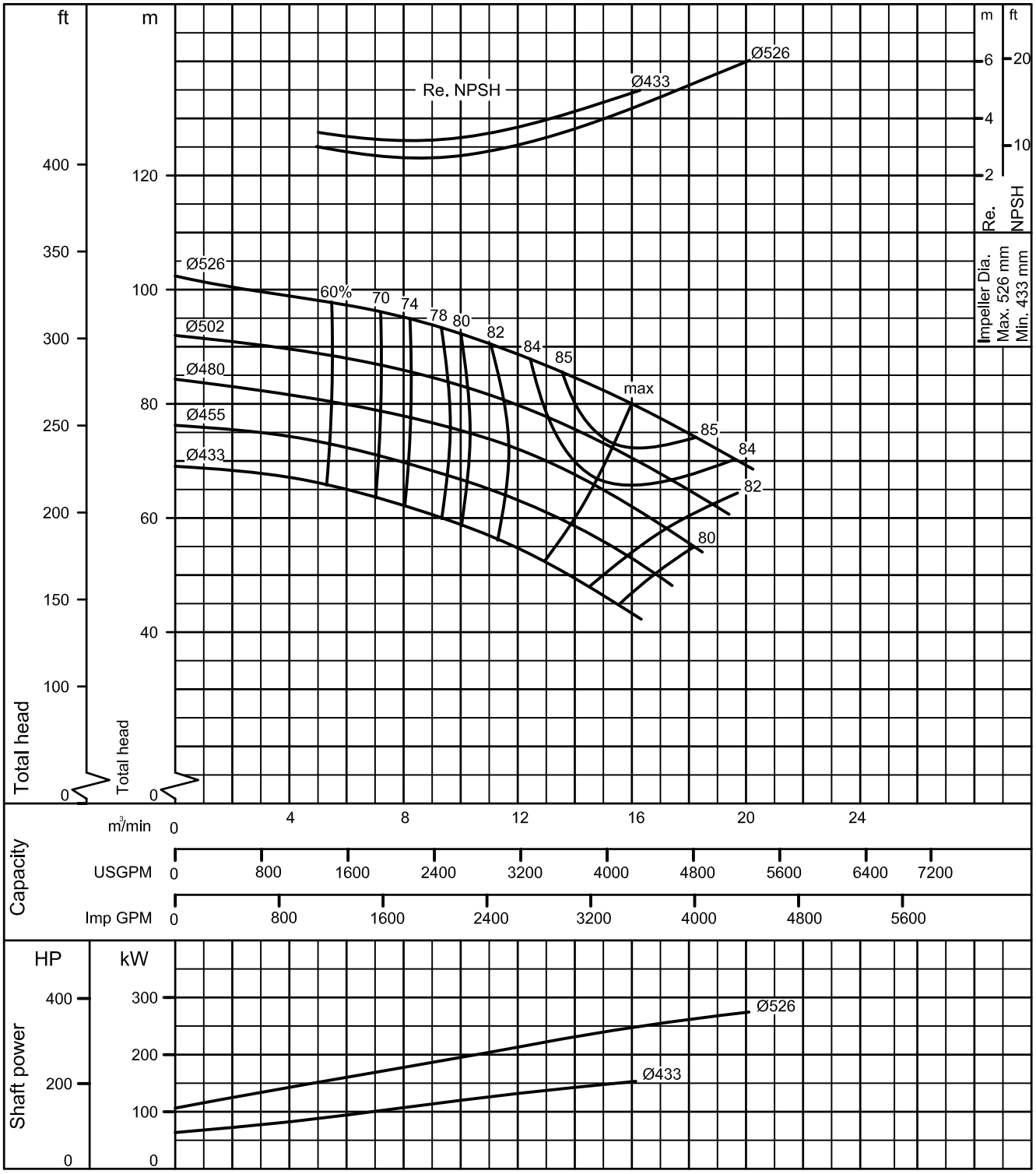
300 x 250 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve

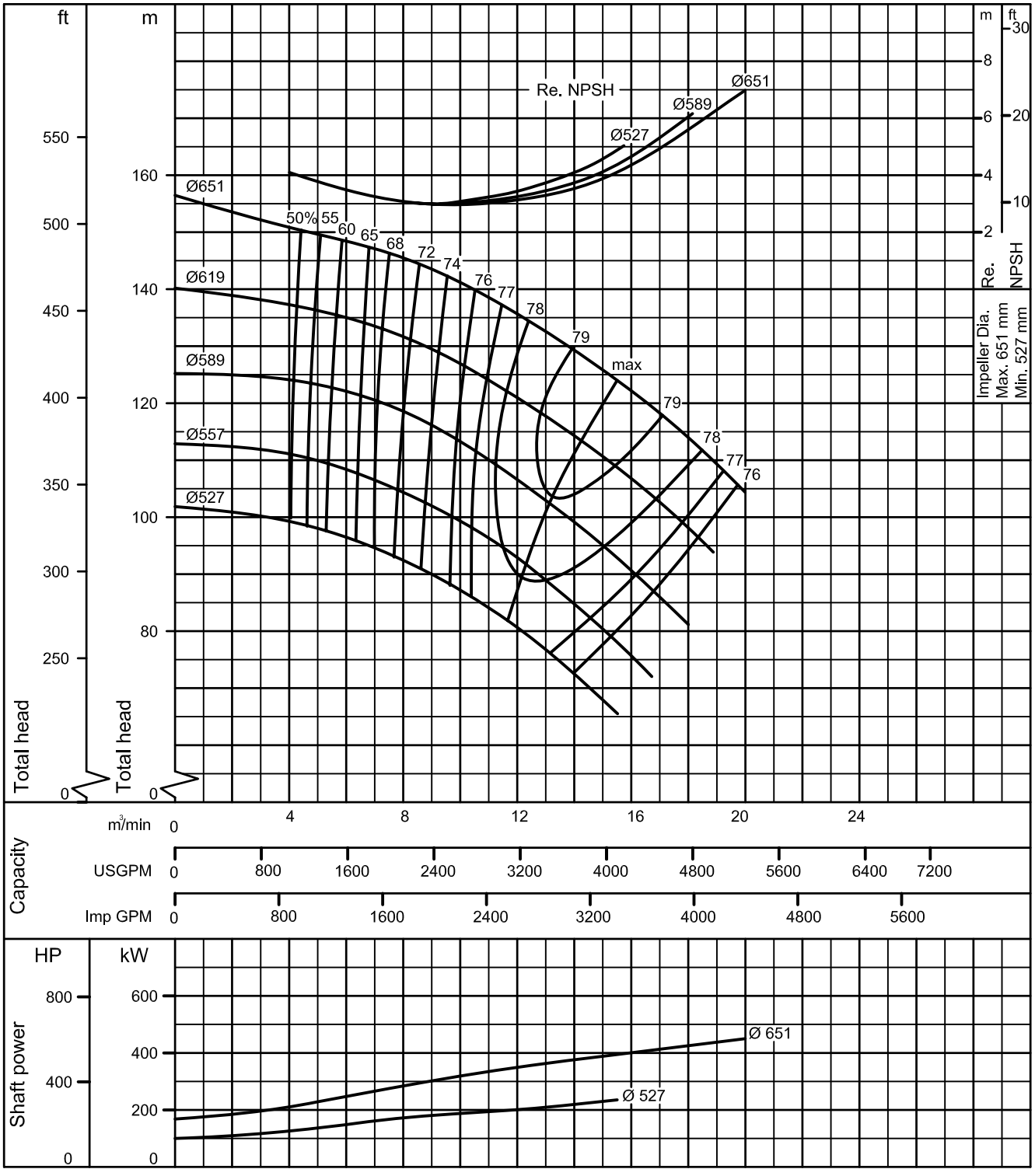
300 x 200 CNJA	According to ISO testing code 2548 Class C
50Hz (Approx. speed 1450 min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve

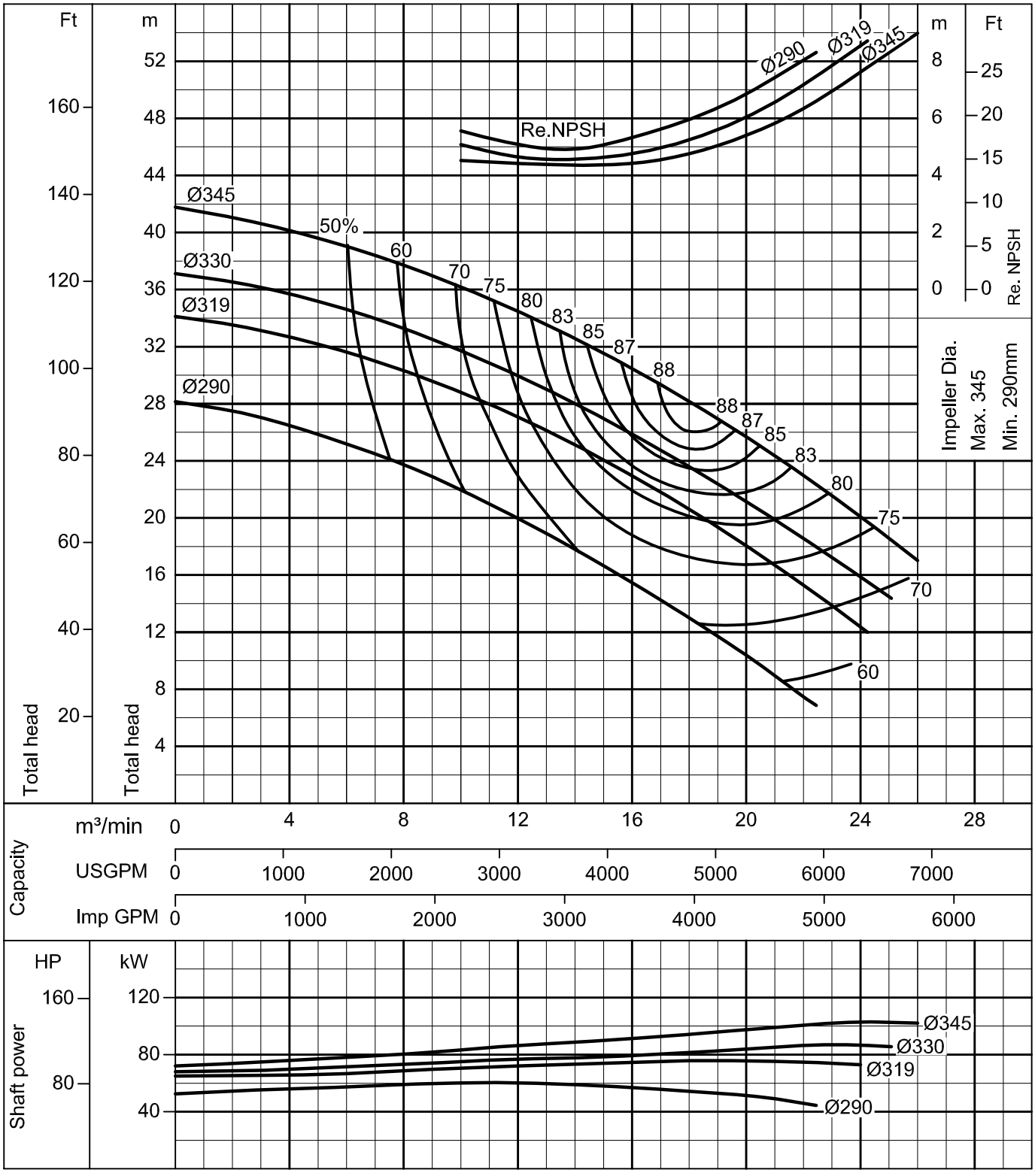
300 x 200 CNKA	According to ISO testing code 2548 Class C
50Hz (Approx. speed 1450 min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

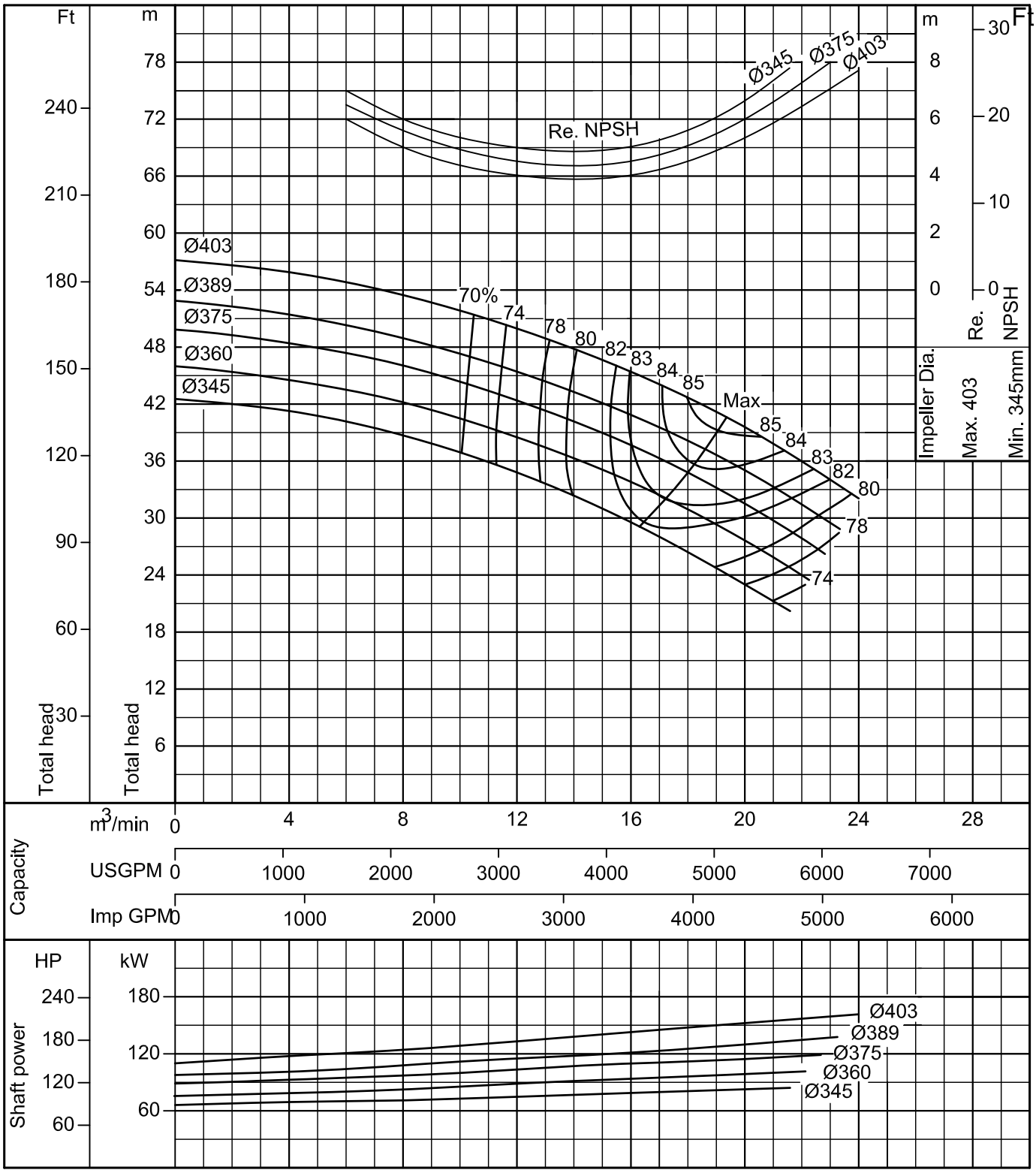
350 x 300 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

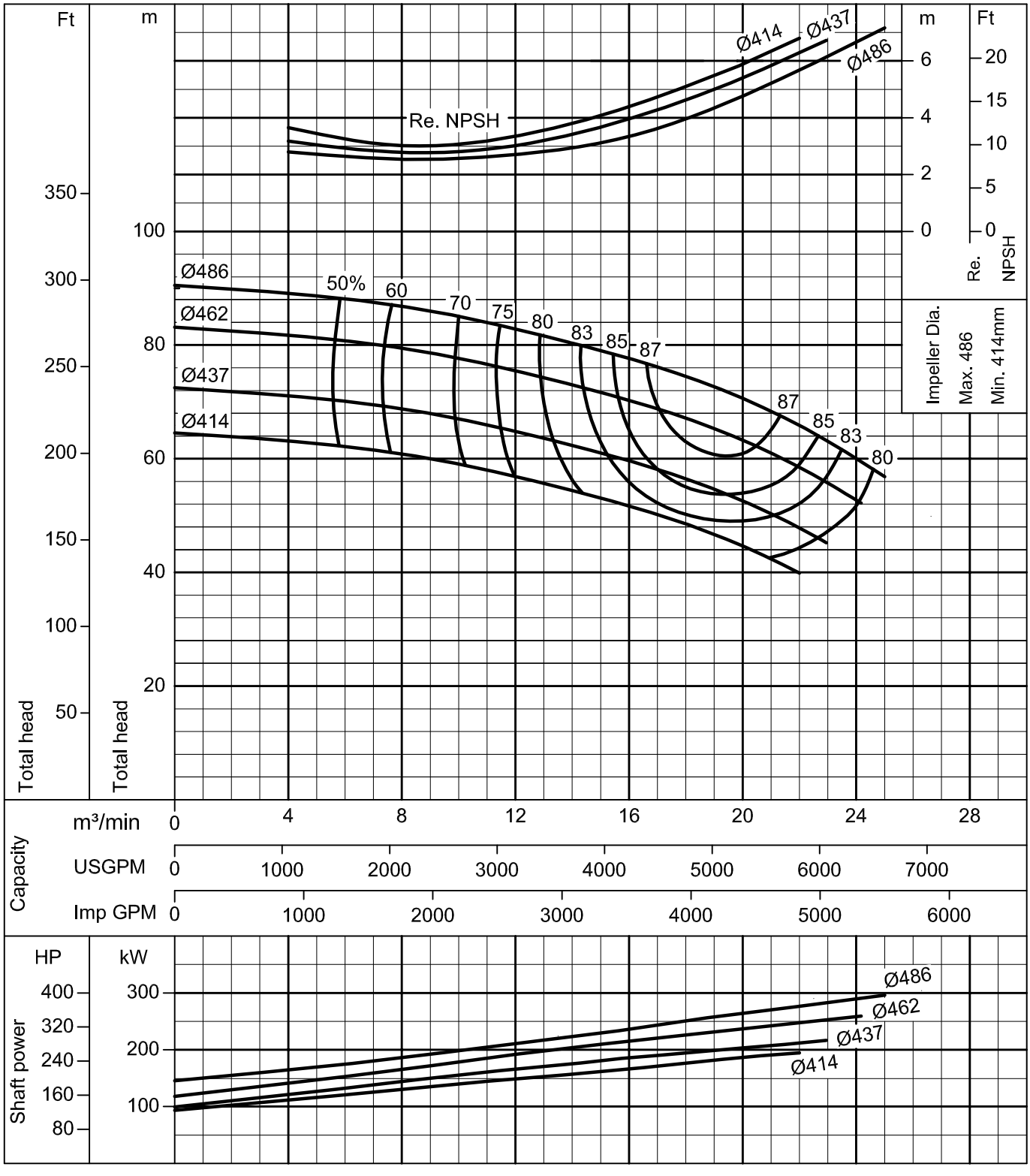
350 x 250 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

350 x 250 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



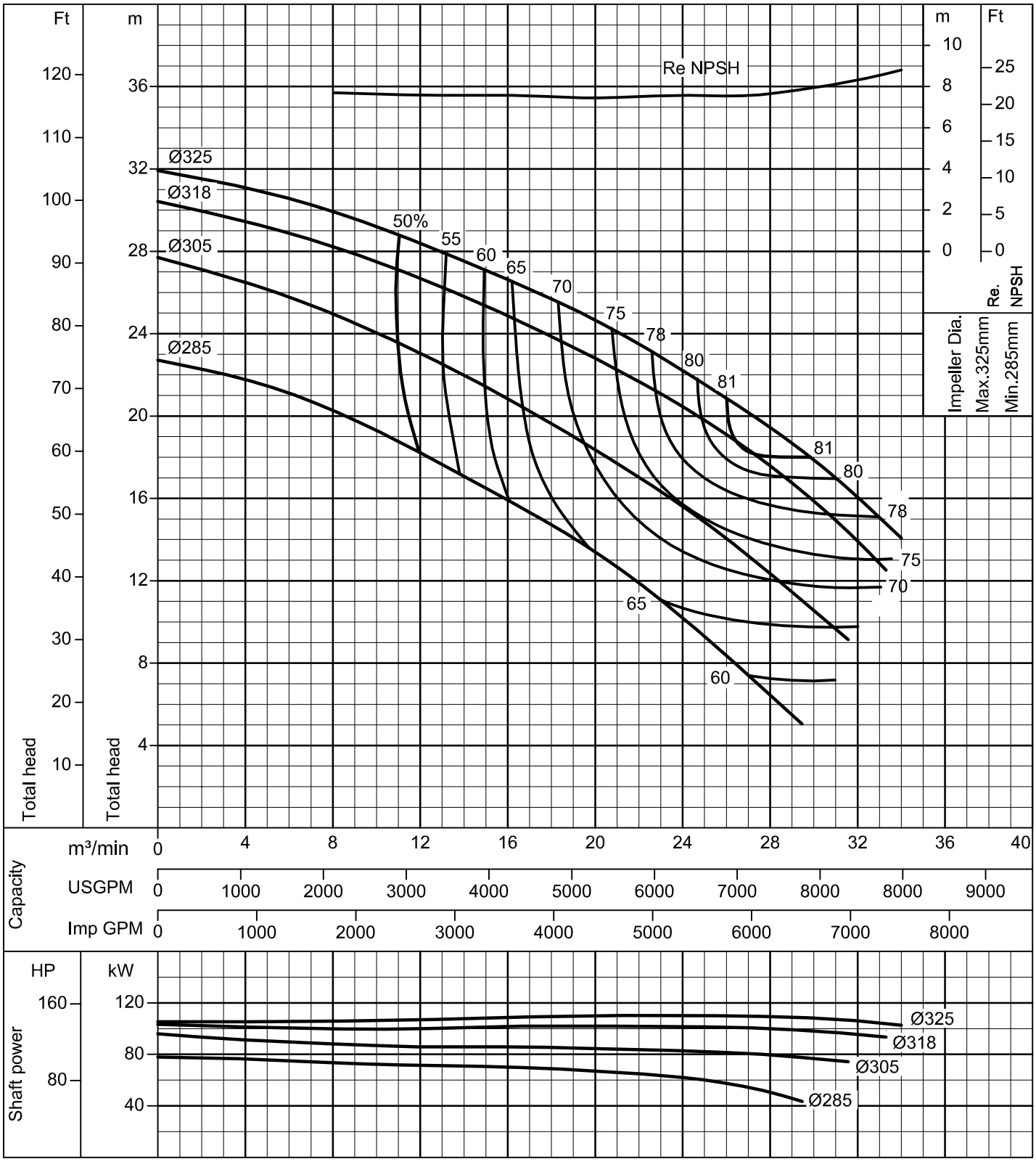
Ebara Horizontal Split Casing Pump

Model CNA

Performance Curve

50Hz

400 x 350 CNEA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



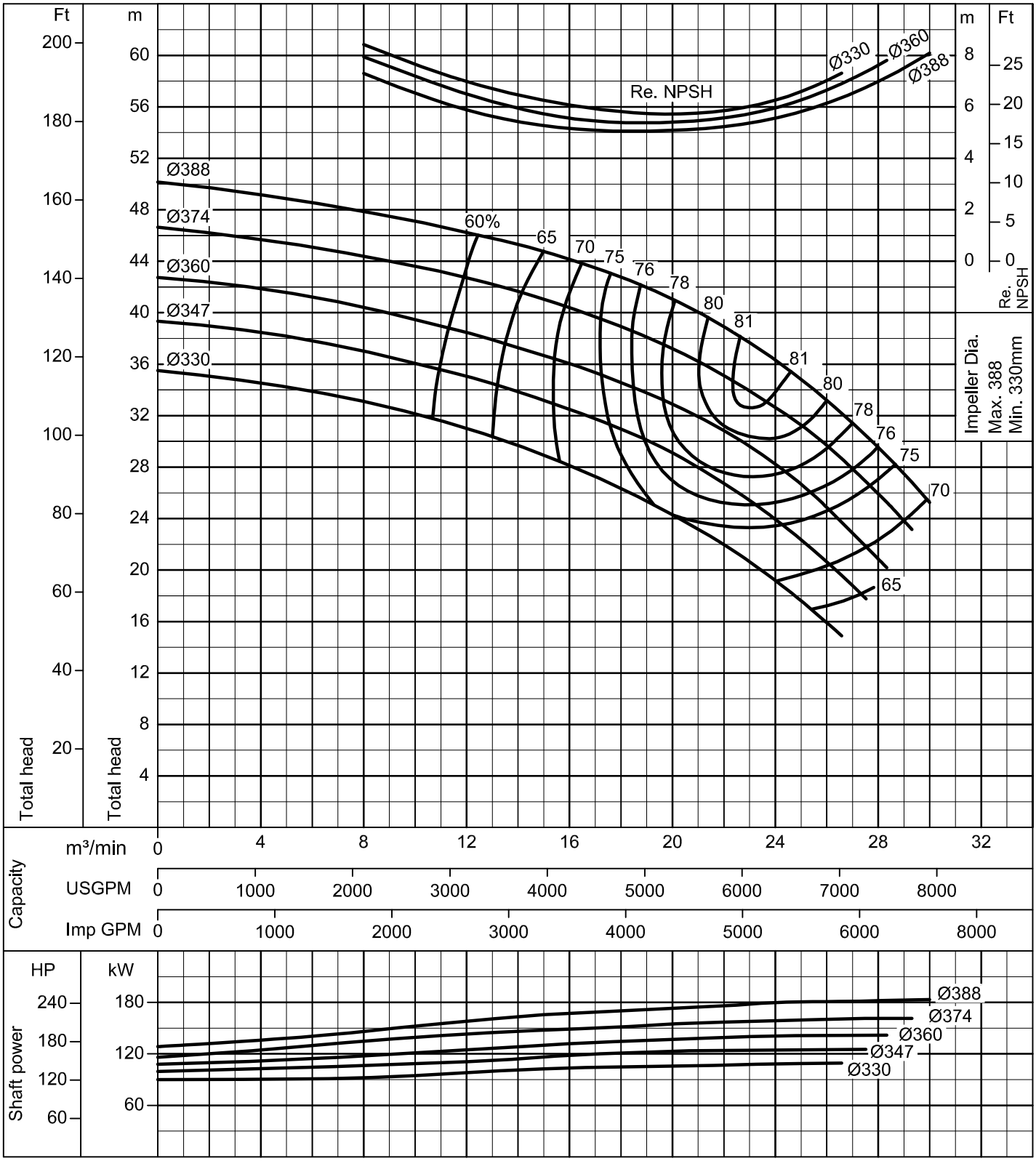
EBARA

Curve No. - 4 - 5CN5636-R1

Ebara Horizontal Split Casing Pump — Model CNA

Performance Curve — 50Hz

400 x 350 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 1450min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



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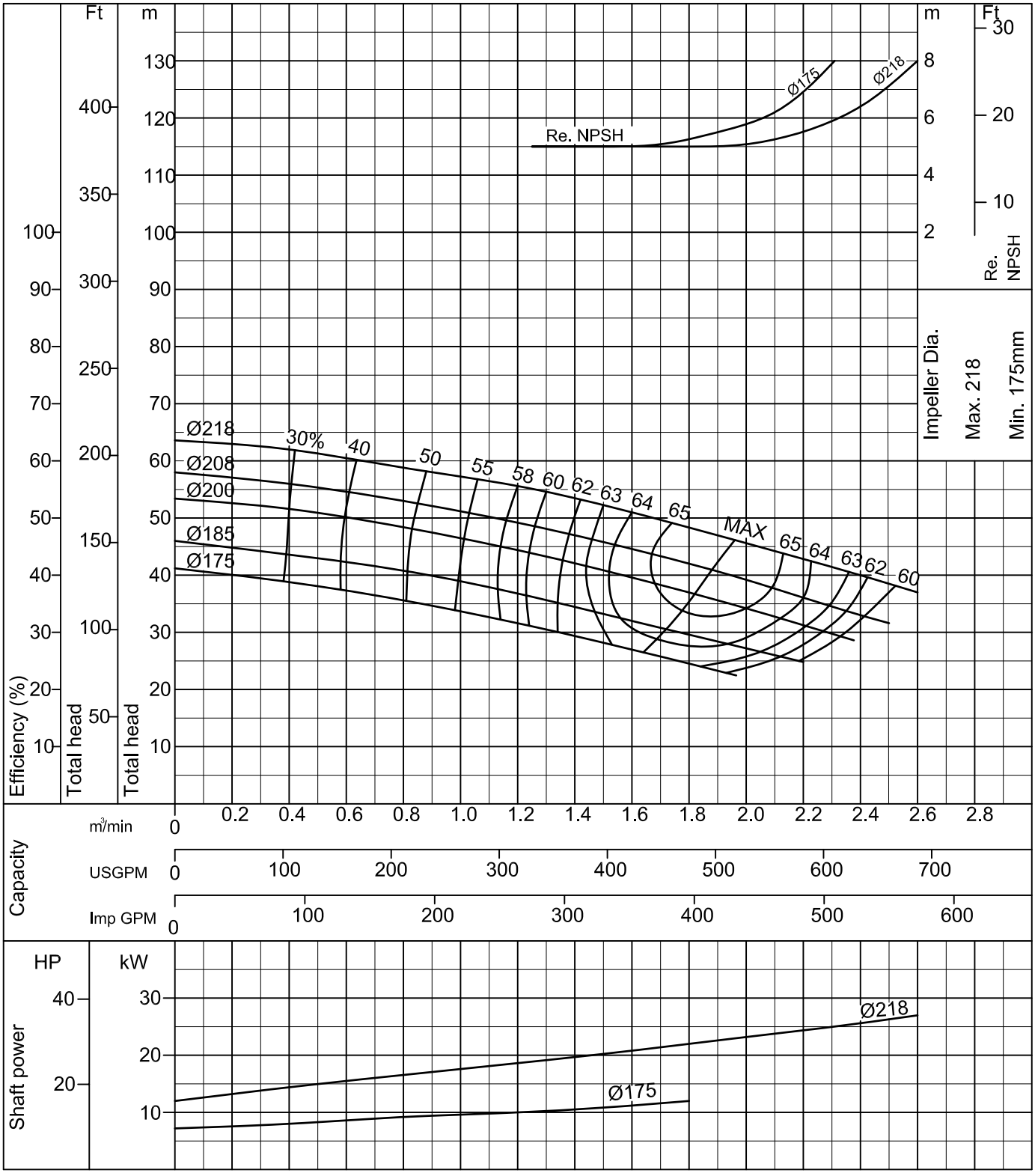
Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

100 x 80 CSGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

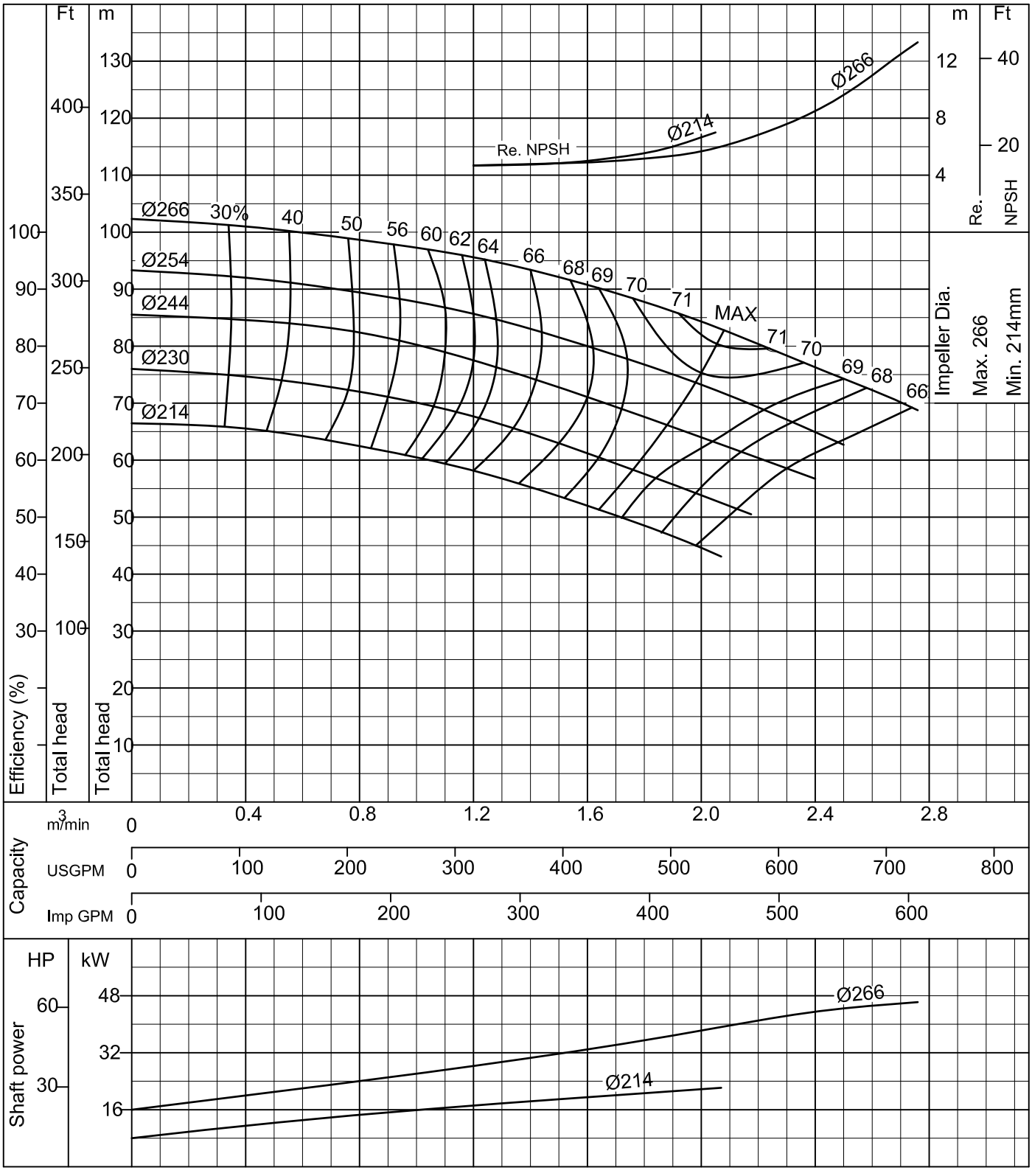


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

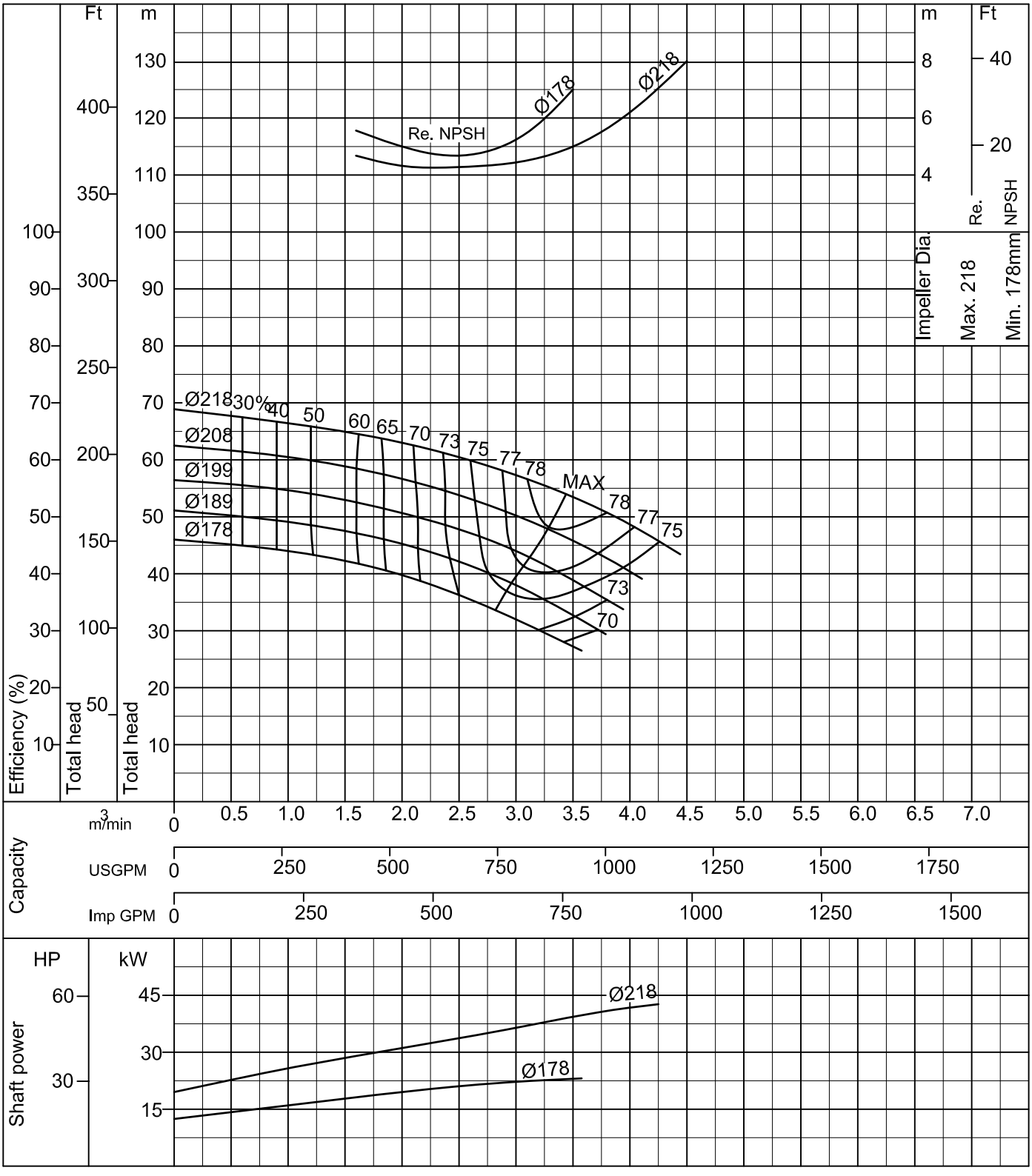
100 x 80 CSHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

125 x 100 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

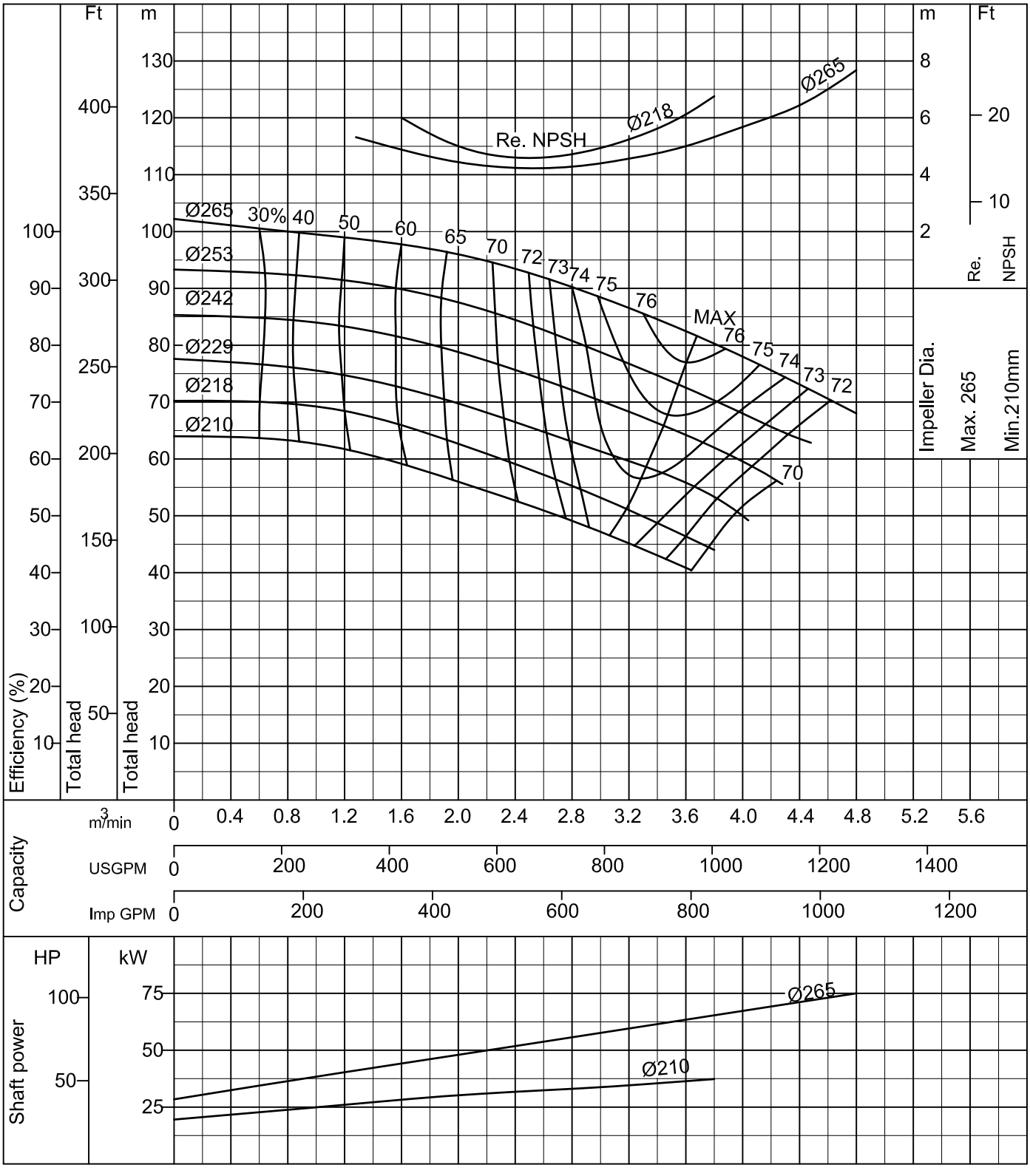


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

125 x 100 CNHA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

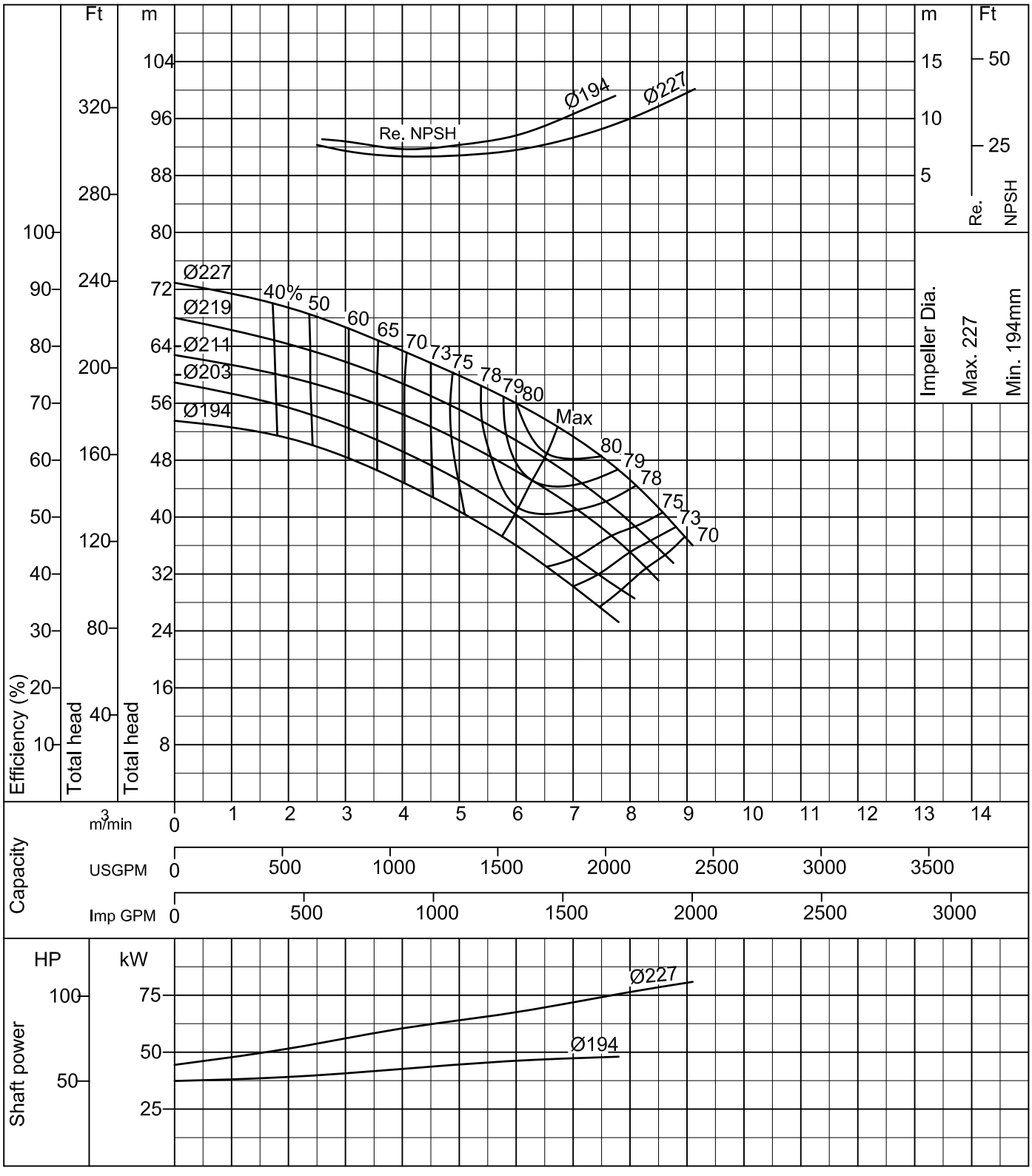


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

150 x 150 CNFA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt

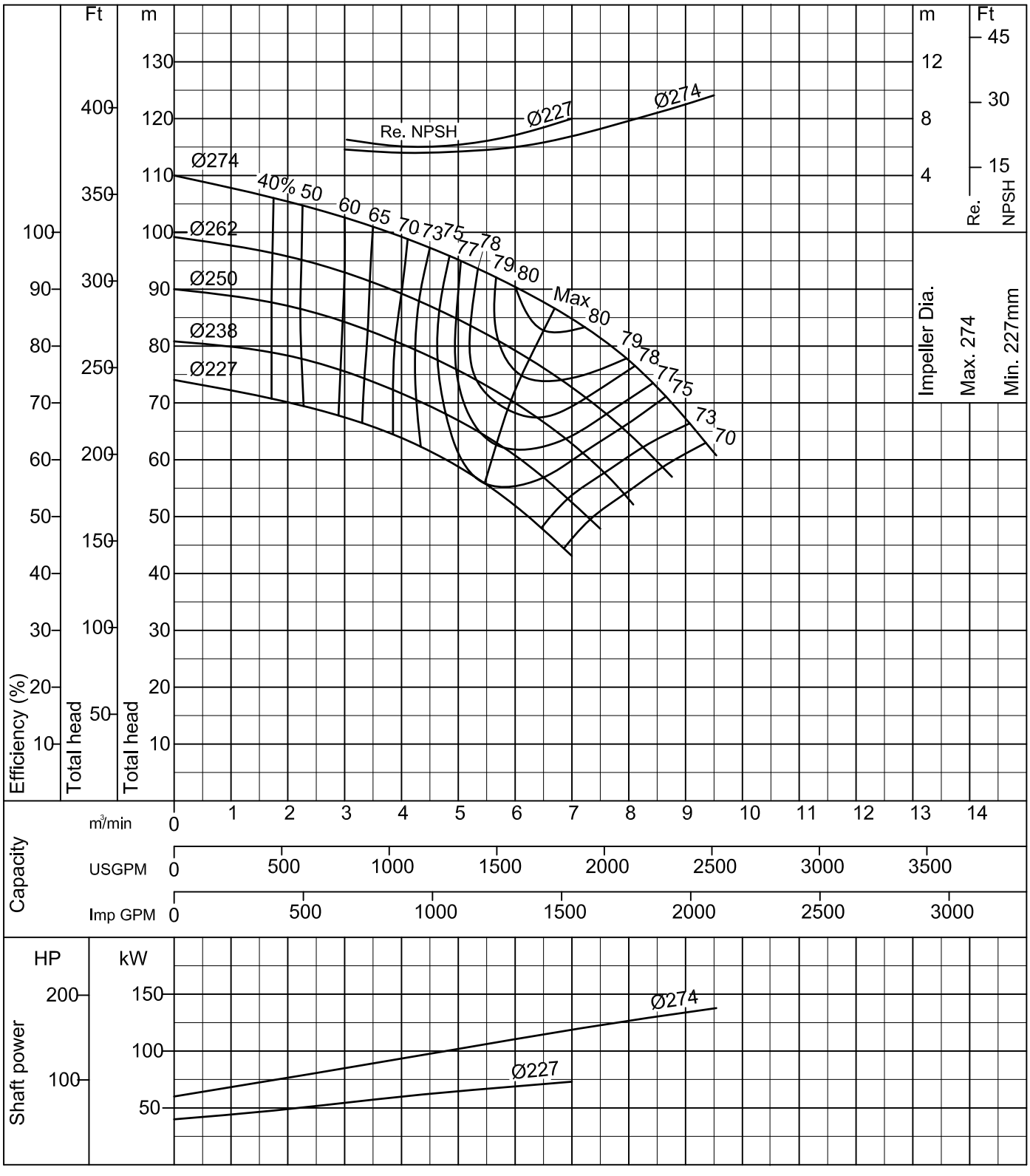


Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve

50Hz

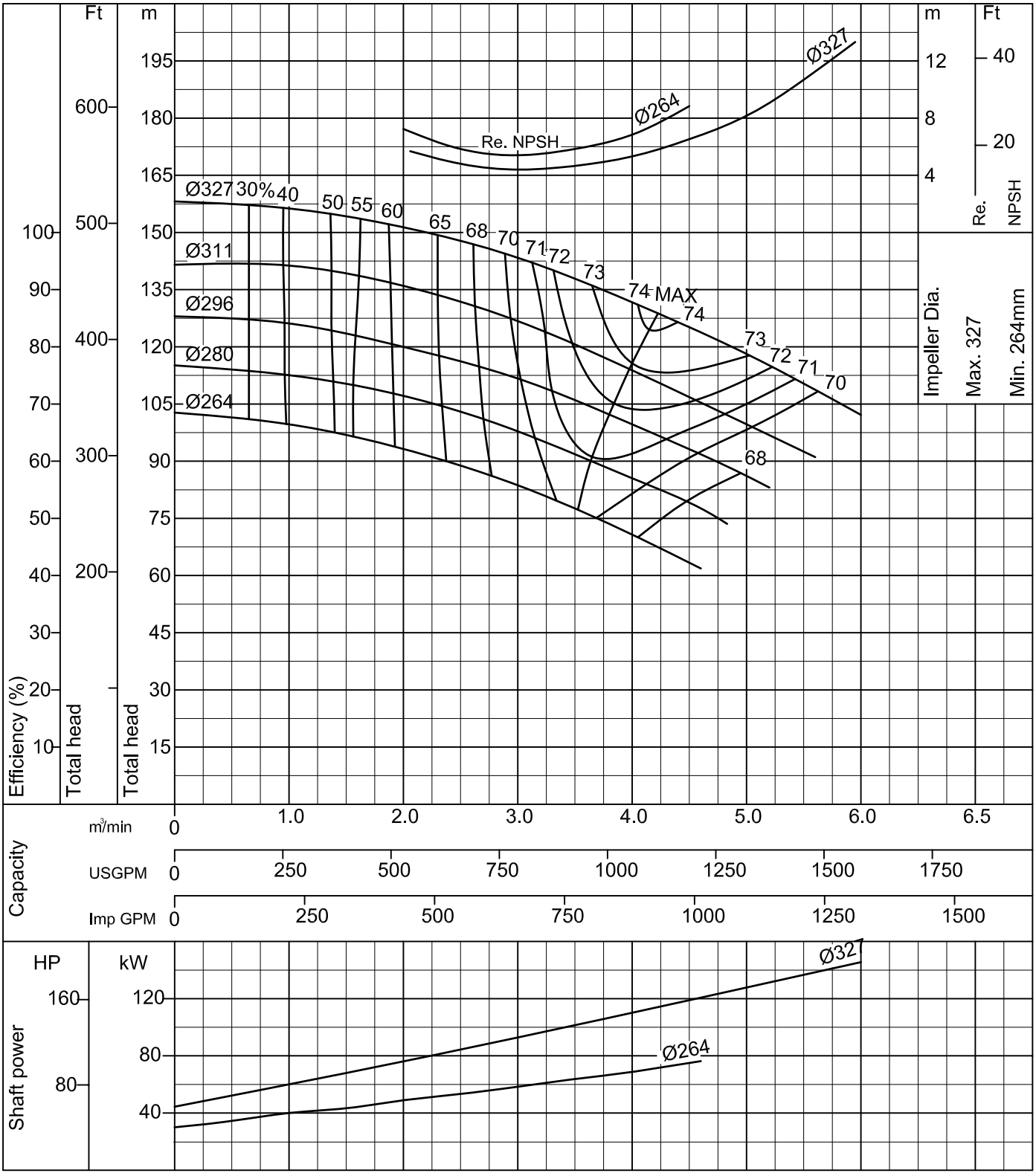
150 x 125 CNGA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



Ebara Horizontal Split Casing Pump — Model CSA/CNA

Performance Curve — 50Hz

125 x 80 CNJA	According to JIS testing code B8301, B8302
50Hz (Approx. speed 2900min^{-1})	S.G.= 1.0 Vis.= 1.0 cSt



EBARA

Curve No. - 2 - 5CN5605

All specifications are subject to change without notice

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