

NOTE- PERFORMANCE AS PER ISO 9906 GRADE-2B

# PERFORMANCE CURVE OF 8HSTD24 @1480 R.P.M

8HSTD24/X/301954



HST RANGE

MODEL 8HSTD24

WORKING PRESS. 30 bar

SIZE 250x200-620

TEST PRESS. 45 bar

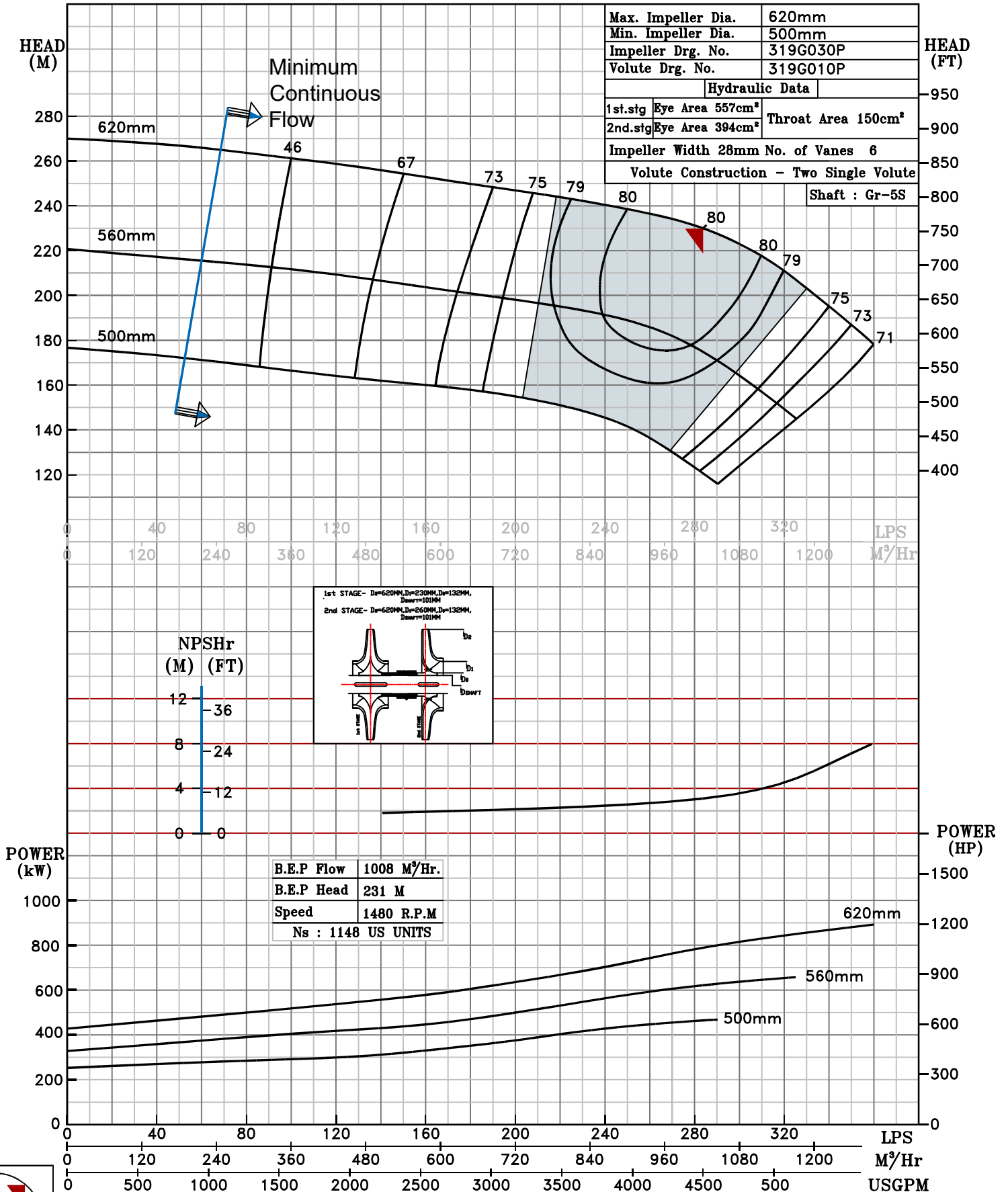
TYPE-AXIALLY SPLIT CASE TWO STAGE

SPEED 1480 rpm

DATE - 24.02.22

SHADED REGION ON THE H-Q CURVE REPRESENTS OPTIMUM SELECTION ZONE

PUMP PERFORMANCE CHARACTERISTICS COMPUTED BASED ON CLEAN COLD WATER S.G 1.0



1480 RPM





GENERAL ARRANGEMENT DRAWING FOR TWO STAGE AXIALLY SPLIT-CASE PUMP MODEL - 8HSTD24




NOTE:

## CONNECTIONS



	PUMPSense	  
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1	GLAND DRAIN NPT CHANGED FROM 1/2"NPT TO 3/4"NPT	SN	AD	11.12.23
REV.	DESCRIPTION	DRN	CHKD	DATE

TITLE		GA DRAWING FOR FOR 8HSTD24		SCALE 1:1	
DRN	AD	06.11.21	DRG NO.	REV. 1	
CHKD	SP	06.11.21	327GA11Z		
APPD	HS	06.11.21			

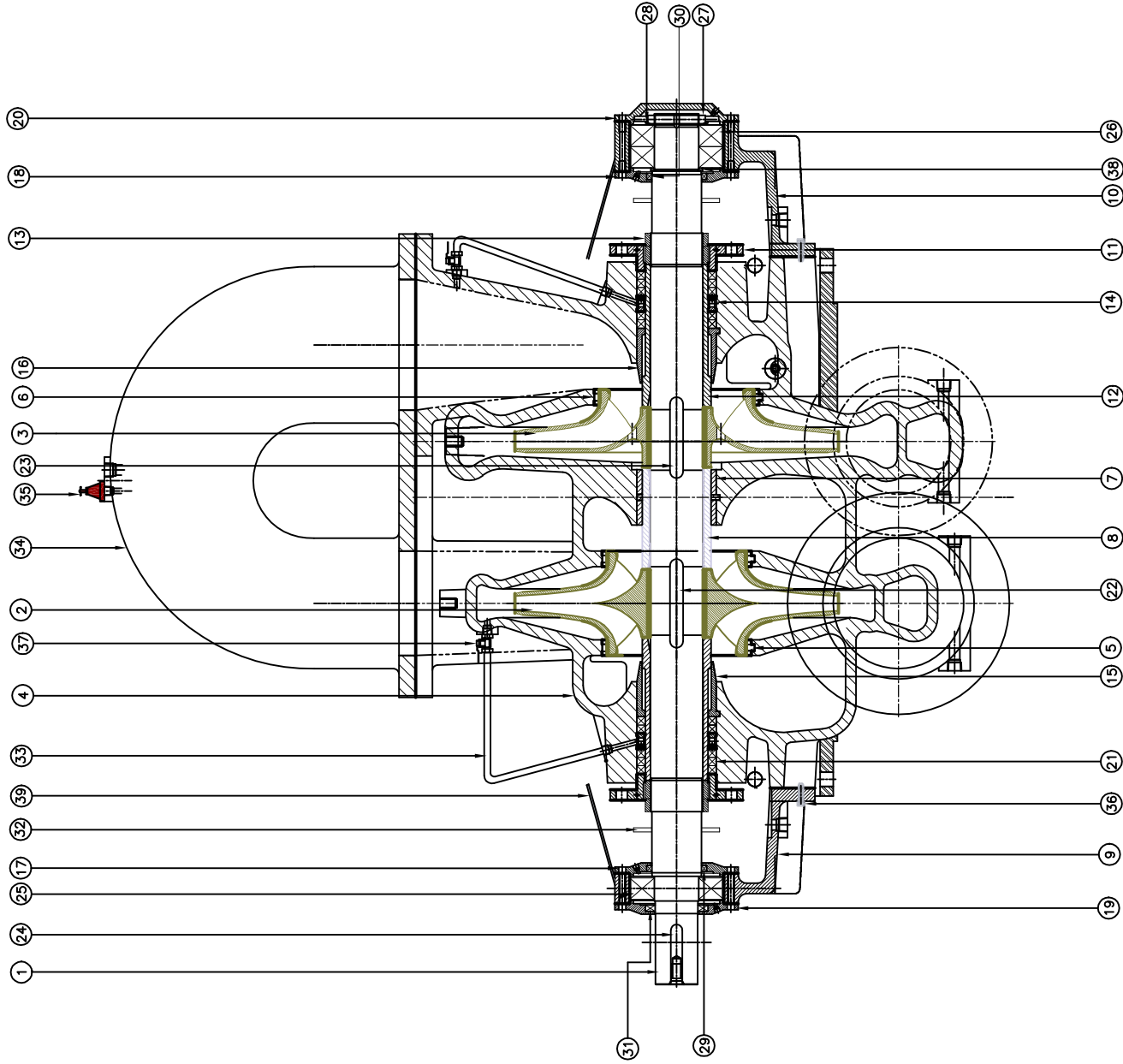
# PUMPSENSE FLUID ENGINEERING PVT LTD

Datasheet For: 8HSTD24

	PARAMETERS	UNIT	VALUE
RATED DUTY	Capacity	M <sup>3</sup> /hr	1008.0
	Total Head	Mt	231.0
	Speed	RPM	1480
	Type of Pump		Horizontal Two Stage Pump
	Liquid		Clear Water
	Specific Gravity		1
	Temperature	°C	32
	Driver		Electric Motor
	No. Off		1
PUMP DETAILS	Make		PUMPSENSE
	Model No.		8HSTD24
	Stages		Two Stage
	Cross Over Design		External Cross Over Design
	Discharge	mm	200
	Flange Rating Discharge		PN 25 - BS EN 1092-2
	Suction	mm	250
	Suction Flange Rating		PN 25 - BS EN 1092-2
	Type of Casing		Double Volute
	Type of Impeller		One Double Suction Impeller & One Single Suction Impeller
	Impeller Diameter Max	mm	620
	Impeller Diameter Min	mm	500
	Rotation		CW
PERFORMANCE DETAILS AS RATED DUTY	Efficiency	%	80
	Rated Speed	RPM	1480
	NPSHr	Mt	3
	Power Absorbed	kW	793.1
	Recommended Driver Power	kW	952
	Driver Details		4 Pole, 50 Hz, 3 Phase AC Induction Motor
	Closed Valve Head (Approx.)	Mt	270
	Head Rise to Shut-Off Head	%	17
	Working Pressure	Bar	30
MECHANICAL DATA	Test Pressure	Bar	45
	Bare Pump Weight	kg	2577
	Shaft dia. at coupling	mm	81
	N.D.E. Bearing		2 X SKF BECBP 7317
	D.E. Bearing		1 X SKF 6317 C3
	Packing Size		16 x 16 - Soft Packing
MATERIALS OF CONSTRUCTION	Casing		Ductile Iron GGG 50
	External Cross Over		Ductile Iron GGG 50
	Impeller		ASTM A743 Gr CF 8M
	Casing Wear Ring		Leaded Bronze BS 1400 LB2
	Shaft		ASTM A 276/ A 182 Type 410
	Shaft Sleeve & Nuts		Tin Bronze/ Zinc Free Bronze BS 1400 CT1
	Inter Stage Bush		Bronze SAE 660 ASTM B505
	Inter Stage Collar		ASTM A 276 Type 316
	Bearing Bracket		Cast Iron CI FG 260
	Split Gland		Leaded Gunmetal BS 1400 LG2
	Lantern Ring		Leaded Gunmetal BS 1400 LG2
	Stuffing Box		Gland Packed Fitted
	Packing		CARRARA Make Soft Packing Style R 4804
	Fastners		HTS GR. 10.9

SL.NO.	DESCRIPTION	QTY.	PART NO.
1	SHAFT	1	101
2	IMPELLER 1st STAGE (L.H.)	1	102-L
3	IMPELLER 2nd STAGE (R.H.)	1	102-R
4	CASING	1	183
5	CASING WEAR RING 1st STAGE (L.H.)	2	129-A
6	CASING WEAR RING 2nd STAGE (R.H.)	1	129-B
7	INTER STAGE BUSH	1	300
8	INTER STAGE SLEEVE	1	404
9	BEARING BRACKET (P.E)	1	254
10	BEARING BRACKET (F.E)	1	271
11	SPLIT GLAND	2	144
12	SHAFT SLEEVE	2	150
13	SLEEVE NUT (L.H & R.H)	2+2	146
14	LANTERN RING	2	149
15	STUFFING BOX BUSH (P.E)	1	260
16	STUFFING BOX BUSH (F.E)	1	292
17	BEARING END COVER INNER (P.E)	1	276
18	BEARING END COVER INNER (F.E)	1	277
19	BEARING END COVER OUTER (P.E)	1	134
20	BEARING END COVER OUTER (F.E)	1	133
21	GLAND PACKING	-	143
22	IMPELLER KEY 1st STAGE (L.H.)	1	180-A
23	IMPELLER KEY 2nd STAGE (R.H.)	1	180-B
24	COUPLING KEY	1	138
25	BEARING AT POWER END	1	272
26	BEARING AT FREE END	2	257
27	BEARING LOCK NUT	1	141
28	BEARING LOCK WASHER	1	142
29	OIL SEAL FOR END COVER INNER (P.E)	1	547
30	OIL SEAL FOR END COVER INNER (F.E)	1	548
31	OIL SEAL FOR END COVER OUTER (P.E)	1	549
32	WATER THROWER	2	145
33	WATER SEALING PIPE	2	118
34	EXTERNAL CROSS OVER	1	306
35	AIR COCK	1	114
36	DOWEL PIN FOR BEARING BRACKET	4	245
37	BALL VALVE	2	-
38	THRUST COLLAR	1	125
39	SHAFT GUARD	2	252

\*\* P.E- POWER END , F.E -FREE END.



REV.	DATE	DESCRIPTION	BY	CHK.
1		PUMPSENSE		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

TYPE OF MACHINING	~ DRESSED	FIRST ANGLE PROJECTION
V ROUGH MACHINING		
V77 MEDIUM MACHINING		
V777 FINE MACHINING		
# SPOT FACED		

TITLE	CROSS SECTION 8HSTD24 PUMP
DRAWN BY	3073400
CHECKED BY	3073400
SCALE	1:1
DATE	0