

NP 3153 LT 3~ 413

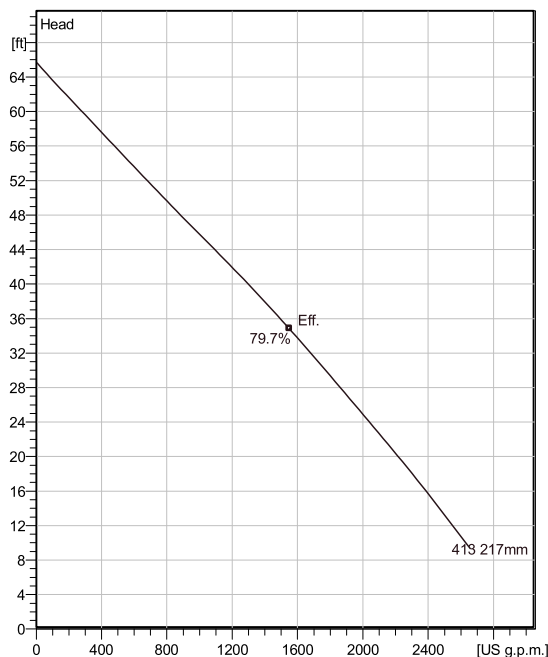
Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Modular based design with high adaptation grade.



Technical specification



Curves according to: Water, pure Water, pure [100%], 39.2 °F, 62.42 lb/ft³, 1.6891E-5 ft²/s



Nominal (mean) data shown. Under- and over-performance from this data should be expected due to standard manufacturing tolerances. Please consult your local Flygt representative for performance guarantees.

Configuration

Motor number N3153.185 21-18-4AA-W 20hp	Installation type P - Semi permanent, Wet
Impeller diameter 217 mm	Discharge diameter 8 inch

Configuration

Pump information

Impeller diameter 217 mm
Discharge diameter 8 inch
Inlet diameter 200 mm
Maximum operating speed 1755 rpm
Number of blades 2

Material

Impeller Hard-Iron TM
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Max. fluid temperature 40 °C
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Created on	9/19/2023
Last update	9/19/2023

NP 3153 LT 3~ 413

Technical specification



Motor - General

Motor number N3153.185 21-18-4AA-W 20hp	Phases 3~	Rated speed 1755 rpm	Rated power 20 hp
ATEX approved No	Number of poles 4	Rated current 26 A	Stator variant 5
Frequency 60 Hz	Rated voltage 460 V	Insulation class H	Type of Duty S1
Version code 185			

Motor - Technical

Power factor - 1/1 Load 0.83	Motor efficiency - 1/1 Load 87.5 %	Total moment of inertia 2.02 lb ft ²	Starts per hour max. 30
Power factor - 3/4 Load 0.77	Motor efficiency - 3/4 Load 89.0 %	Starting current, direct starting 148 A	
Power factor - 1/2 Load 0.66	Motor efficiency - 1/2 Load 89.0 %	Starting current, star-delta 49.3 A	

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NP 3153 LT 3~ 413

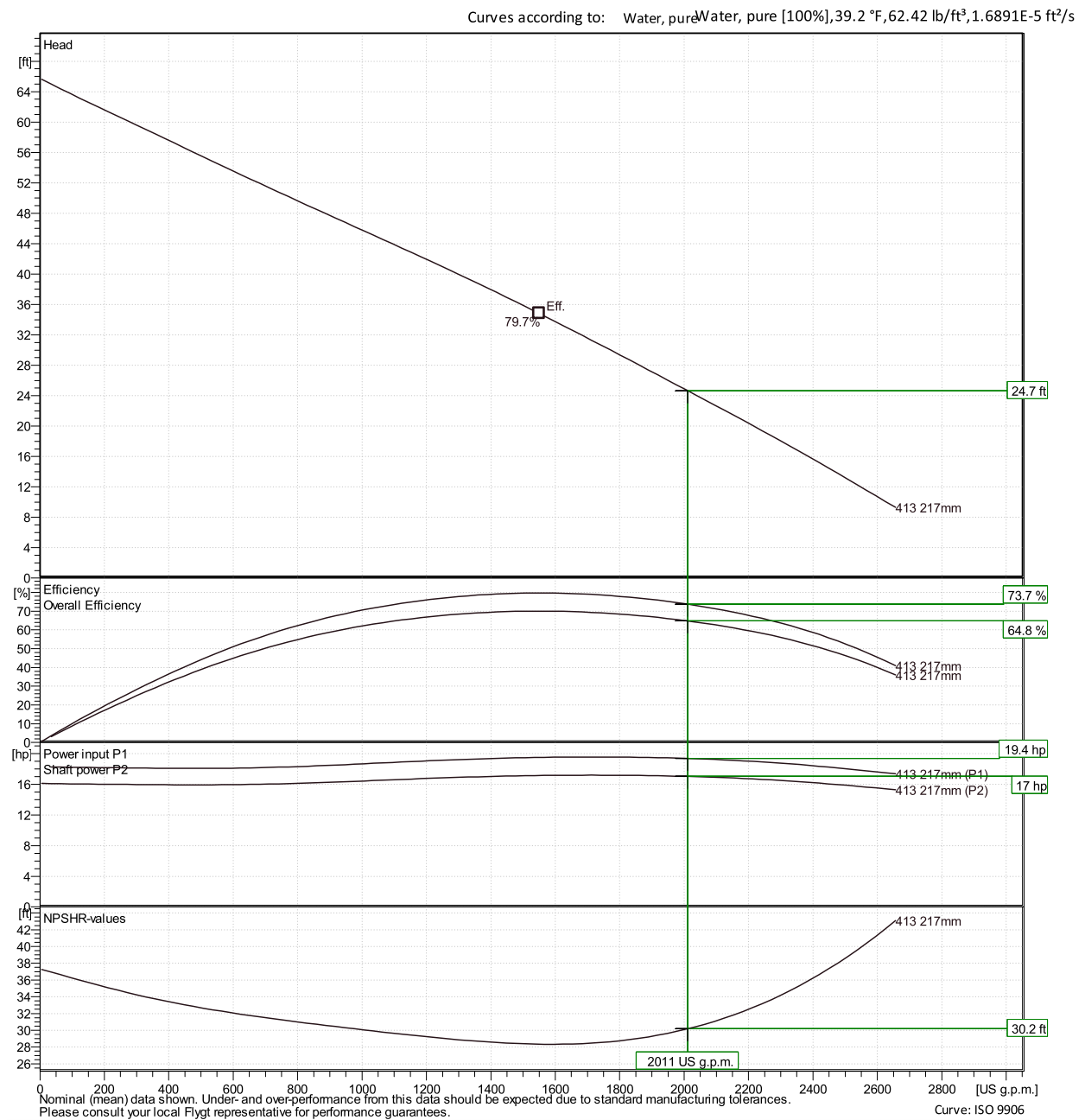
Performance curve



Duty point

Flow
2010 US g.p.m.

Head
24.7 ft



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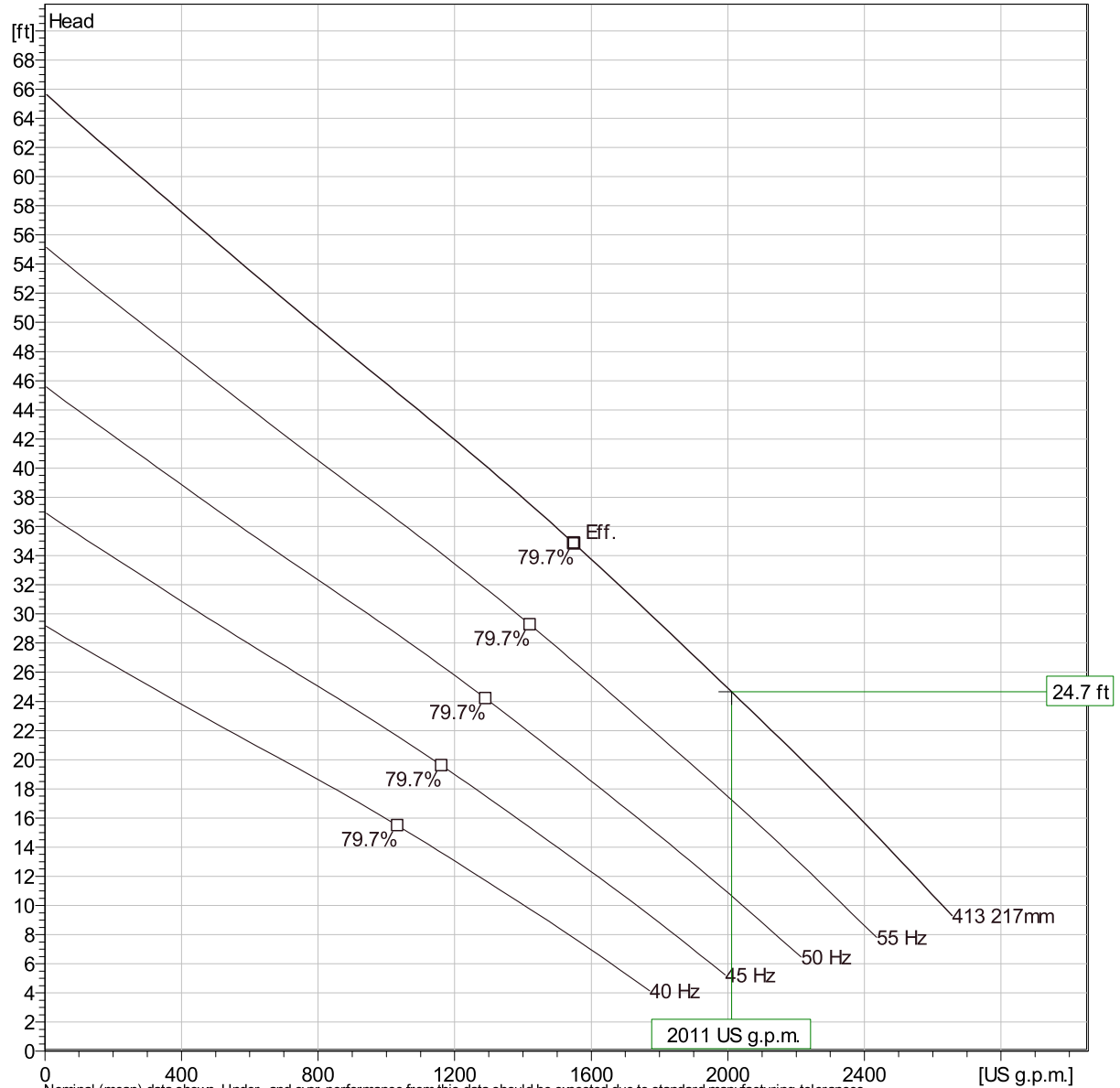
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NP 3153 LT 3~ 413

Duty Analysis



Curves according to: Water, pure [100%] ; 39.2°F; 62.42lb/ft³; 1.6891E-5ft²/s



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Please consult your local Flygt representative for performance guarantees.

Operating characteristics

Pumps / Systems	Flow US g.p.m.	Head ft	Shaft power hp	Flow US g.p.m.	Head ft	Shaft power hp	Hydr.eff.	Spec. Energy kWh/US MG	NPSHre ft
1	2010	24.7	17	2010	24.7	17	73.7 %	120	30.2

Project

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Kendra Brown

Created on

9/19/2023

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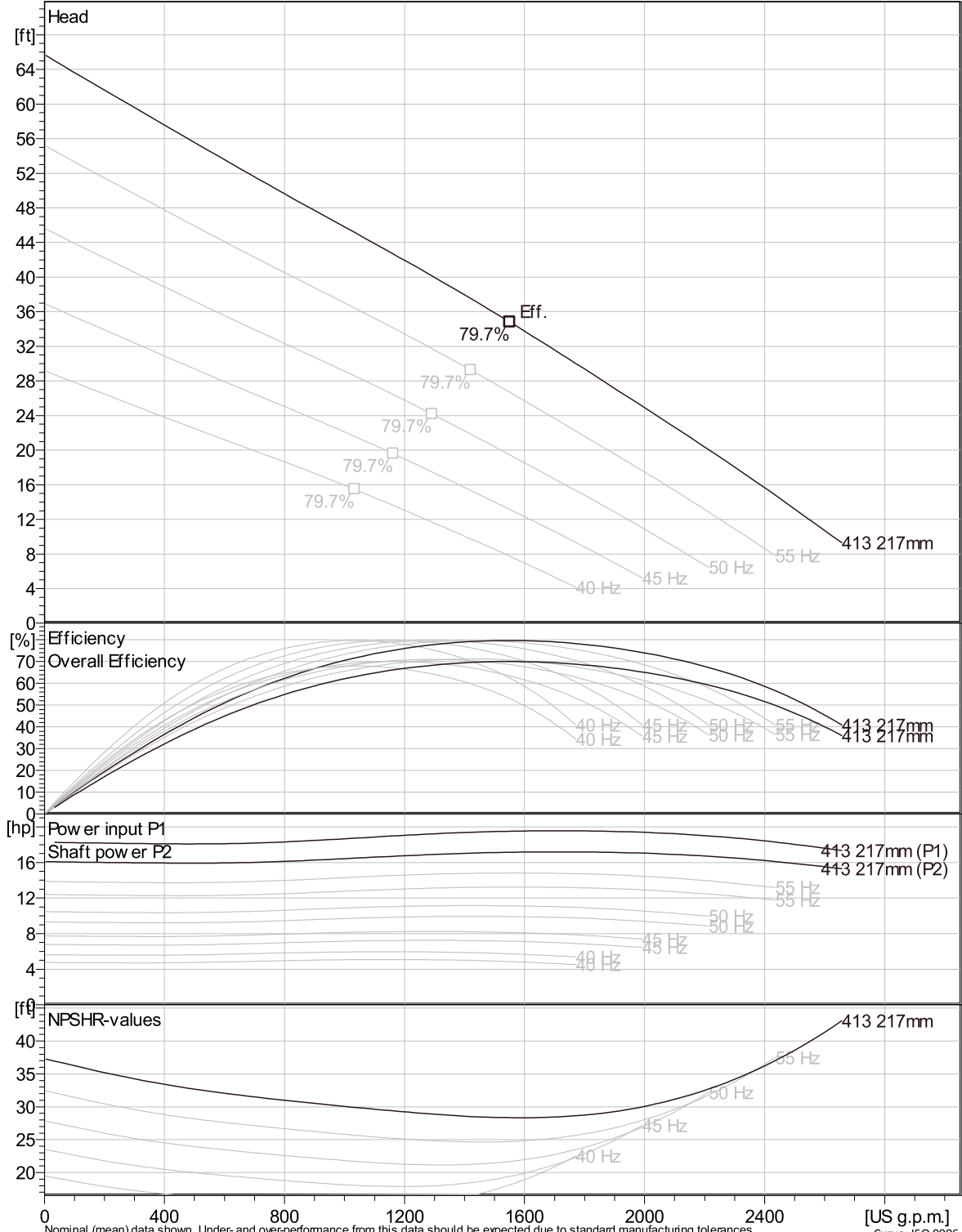
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NP 3153 LT 3~ 413

VFD Curve



Curves according to: Water, pure, 39.2 °F, 62.42 lb/ft³, 1.6891E-5 ft²/s



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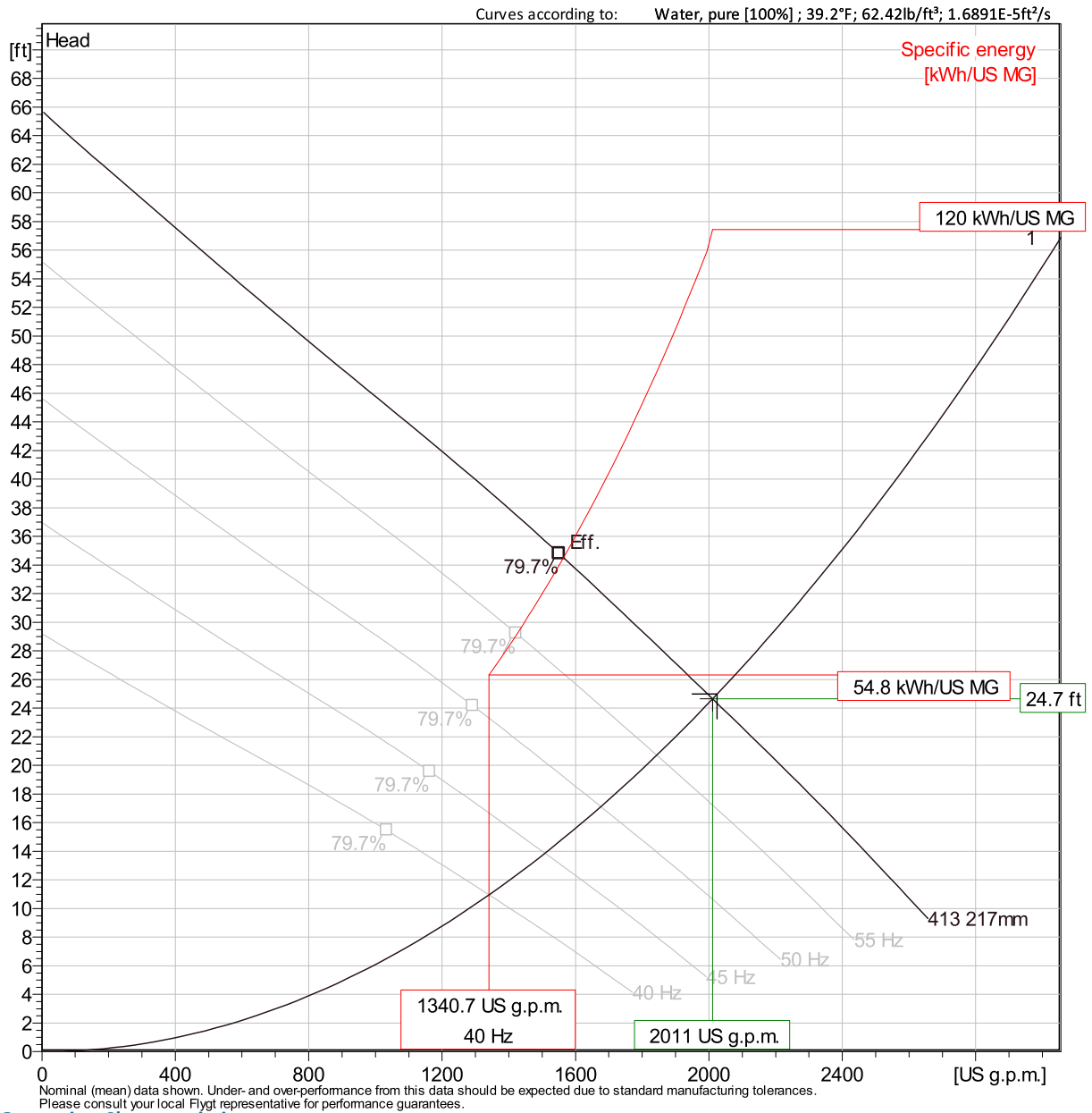
Curve: ISO 9906

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NP 3153 LT 3~ 413

VFD Analysis



Operating Characteristics

Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr. eff.	Specific energy	NPSHre
		US g.p.m.	ft	hp	US g.p.m.	ft	hp		kWh/US MG	ft
1	60 Hz	2010	24.7	17	2010	24.7	17	73.7 %	120	30.2
1	55 Hz	1840	20.7	13.1	1840	20.7	13.1	73.7 %	98.9	26.3
1	50 Hz	1680	17.1	9.85	1680	17.1	9.85	73.7 %	81.9	22.5
1	45 Hz	1510	13.9	7.18	1510	13.9	7.18	73.7 %	67.3	19

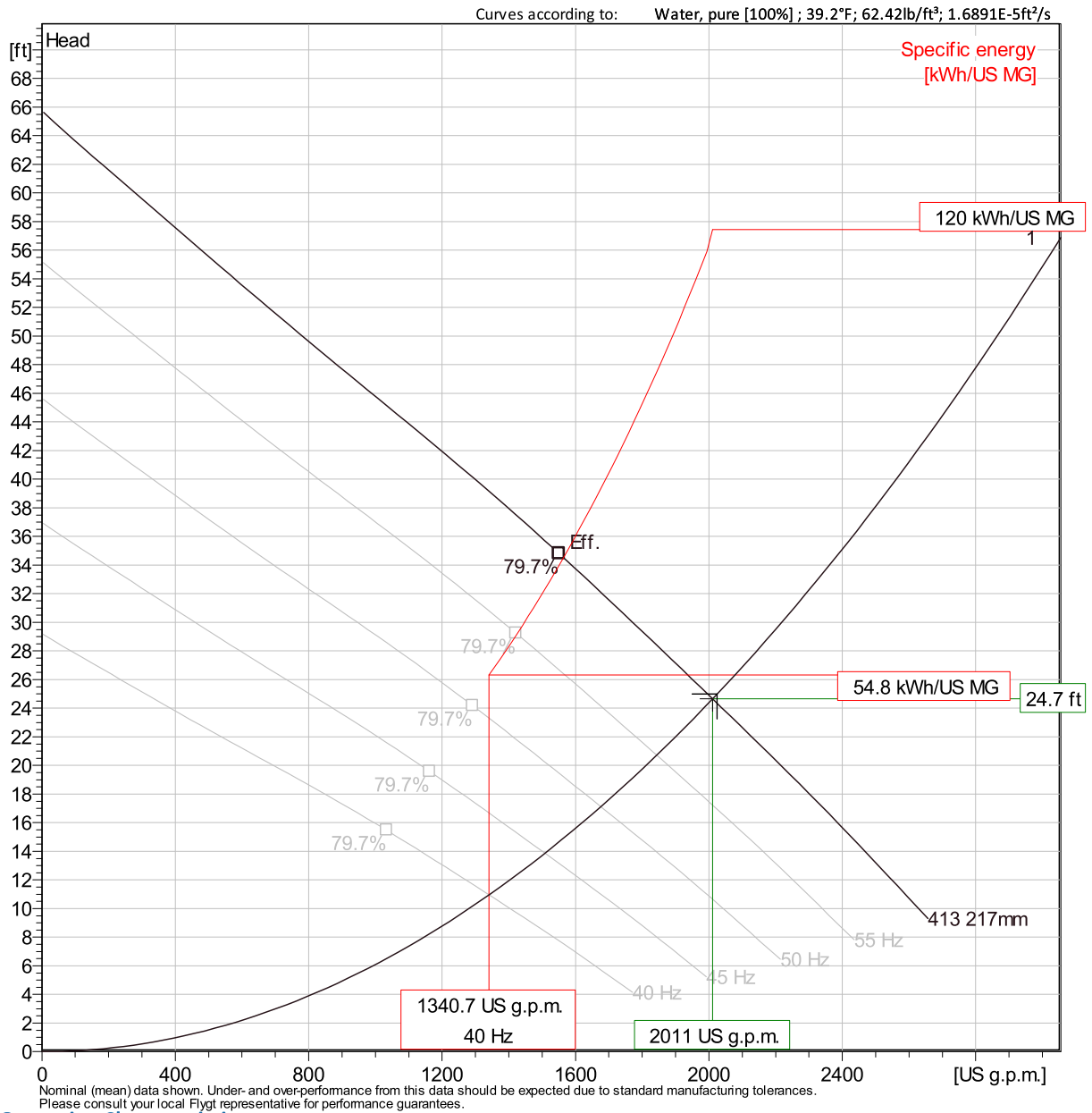
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VFD Analysis



Operating Characteristics

Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr. eff.	Specific energy	NPSHre
		US g.p.m.	ft	hp	US g.p.m.	ft	hp		kWh/US MG	ft
1	40 Hz	1340	11	5.04	1340	11	5.04	73.7 %	54.8	15.8

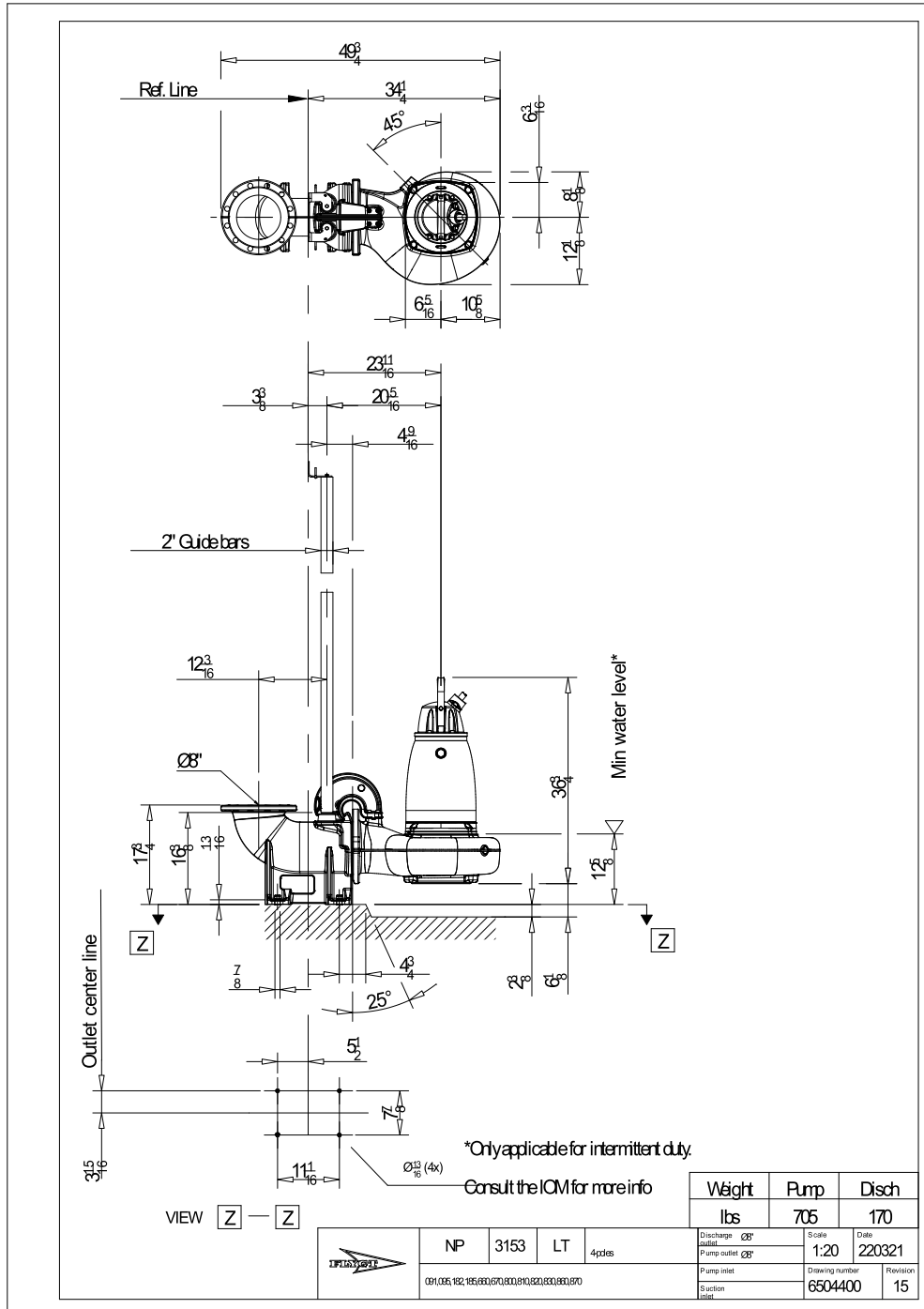
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Dimensional drawing



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