

Project	Project ID	Created by	Created on	Last update
			2017-01-17	

NP 3102 SH 3~ 258

Performance curve



Pump

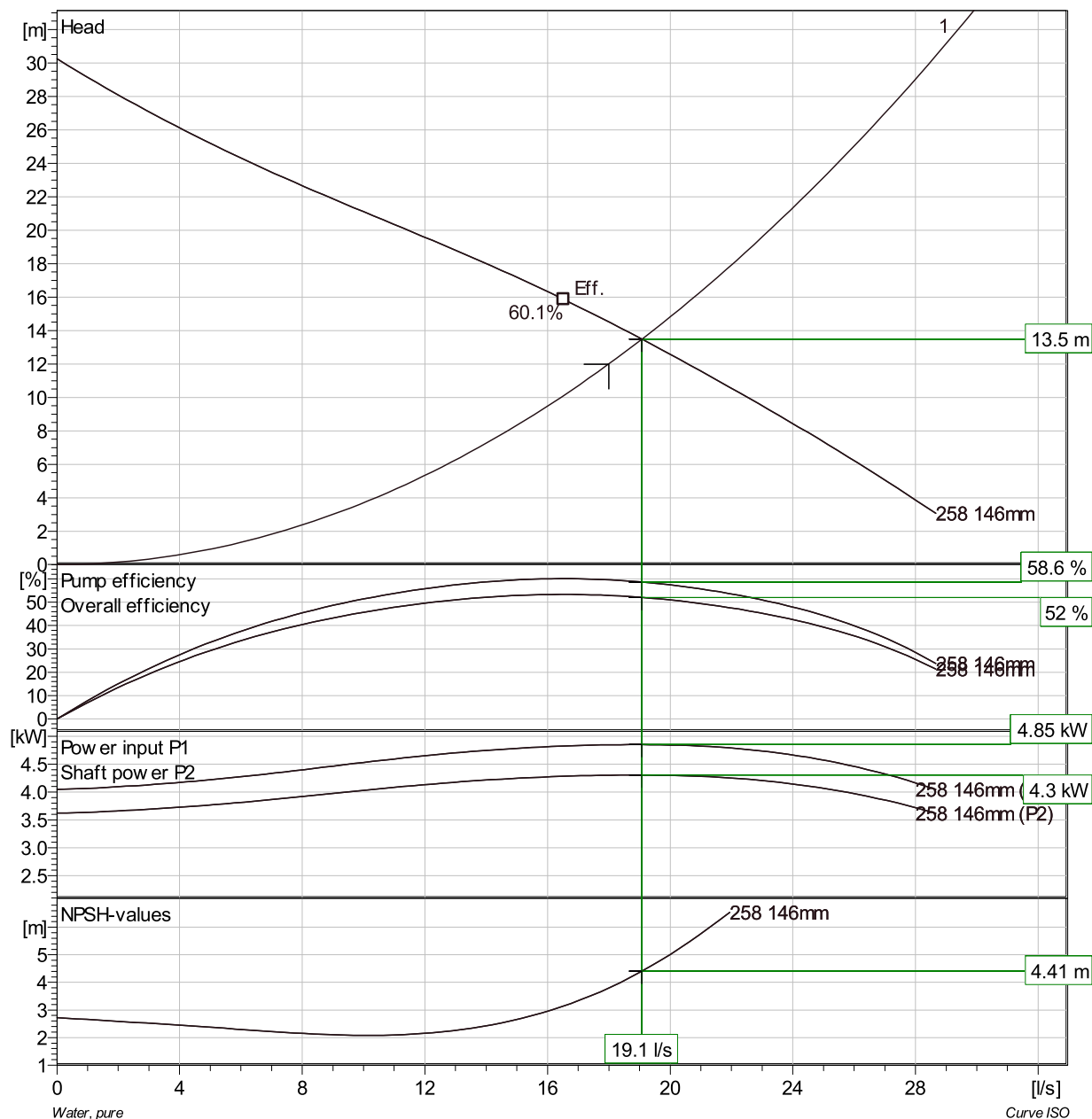
Discharge Flange Diameter 80 mm
Inlet diameter 80 mm
Impeller diameter 146 mm
Number of blades 2

Motor

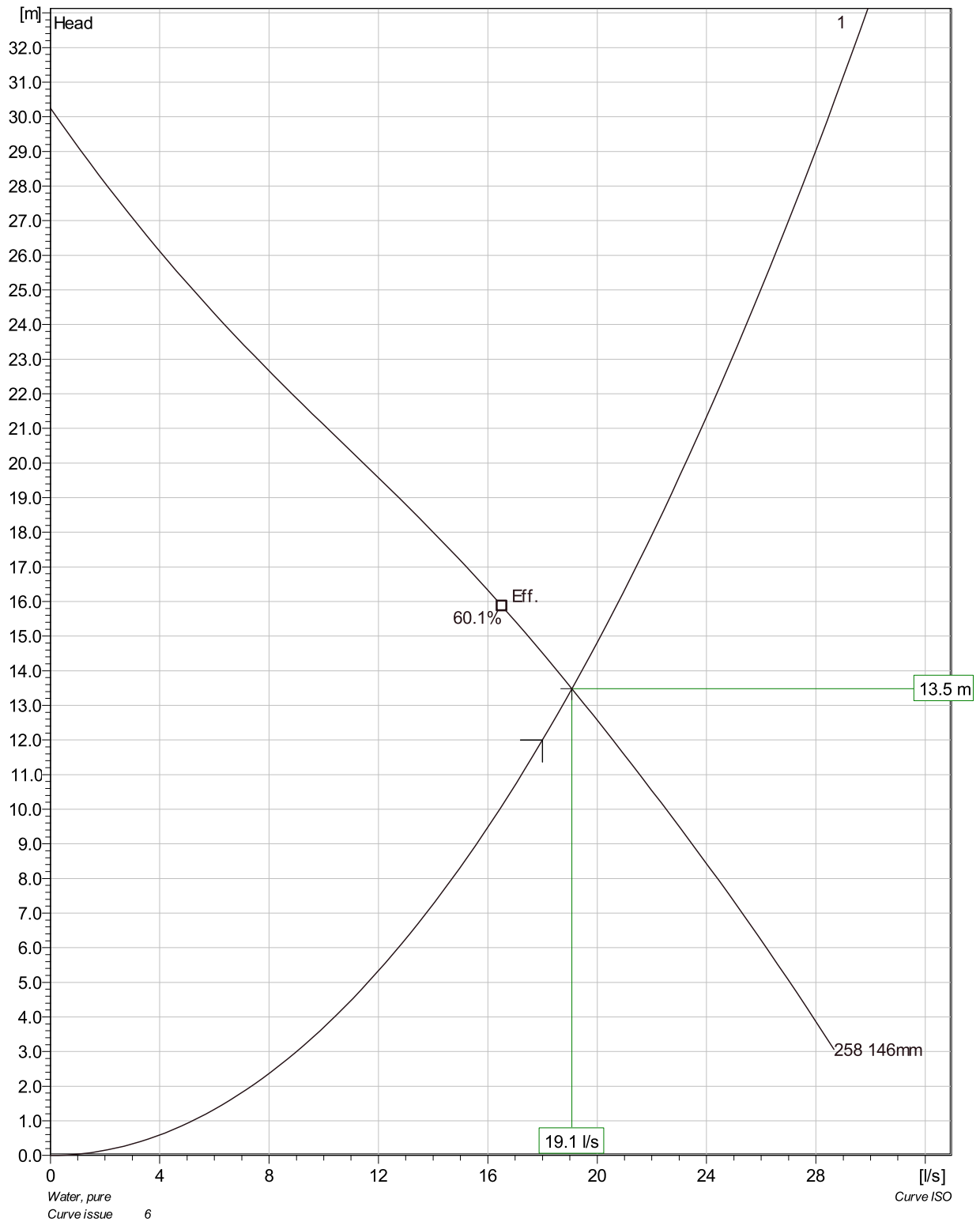
Motor # N3102.820 18-10-2AS-W IE3 4.5KW
Stator variant 62
Frequency 50 Hz
Rated voltage 400 V
Number of poles 2
Phases 3~
Rated power 4.5 kW
Rated current 8.6 A
Starting current 65 A
Rated speed 3000 1/min
IE3 Rating is based on Y connection

Power factor
1/1 Load 0.85
3/4 Load 0.80
1/2 Load 0.69

Pump efficiency
1/1 Load 89.1 %
3/4 Load 89.2 %
1/2 Load 87.6 %



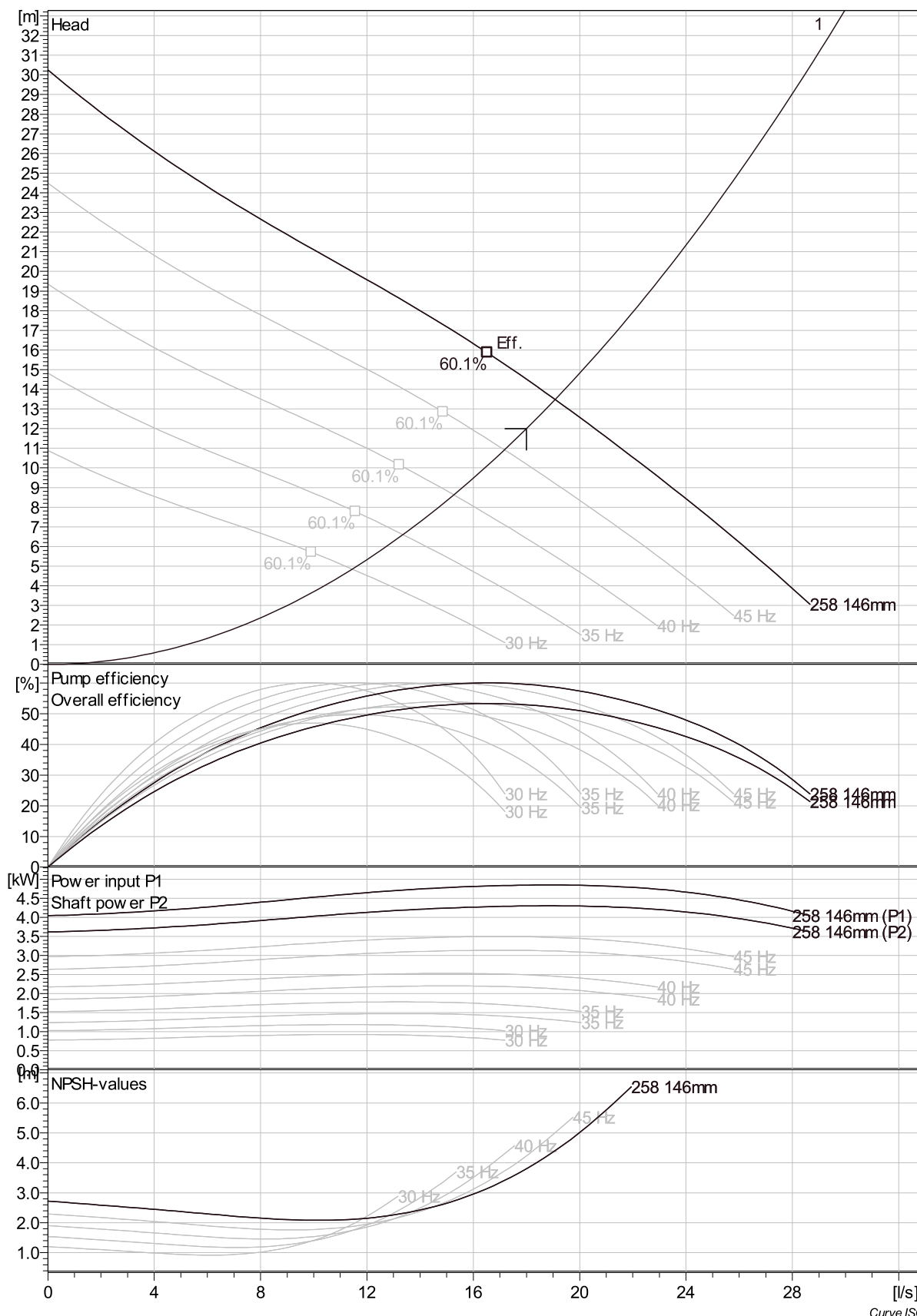
NP 3102 SH 3~ 258 Duty Analysis



Pumps running /System	Individual pump			Total			Pump eff.	Specific energy	NPSH _{re}
	Flow	Head	Shaft power	Flow	Head	Shaft power			
1	19.1 l/s	13.5 m	4.3 kW	19.1 l/s	13.5 m	4.3 kW	58.6 %	0.0706 kWh/m ³	4.41 m

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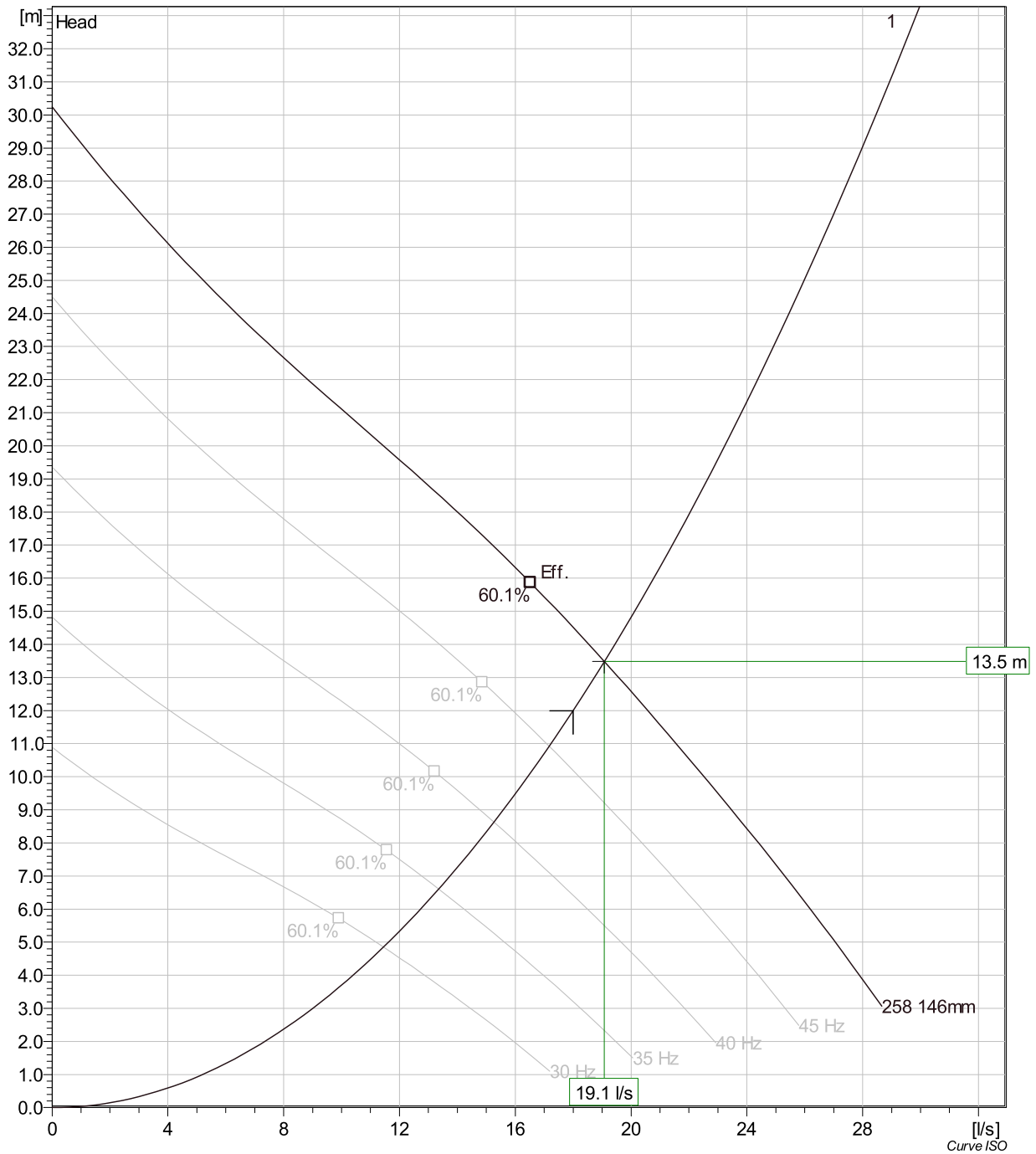
NP 3102 SH 3~ 258 VFD Curve



Curve ISO

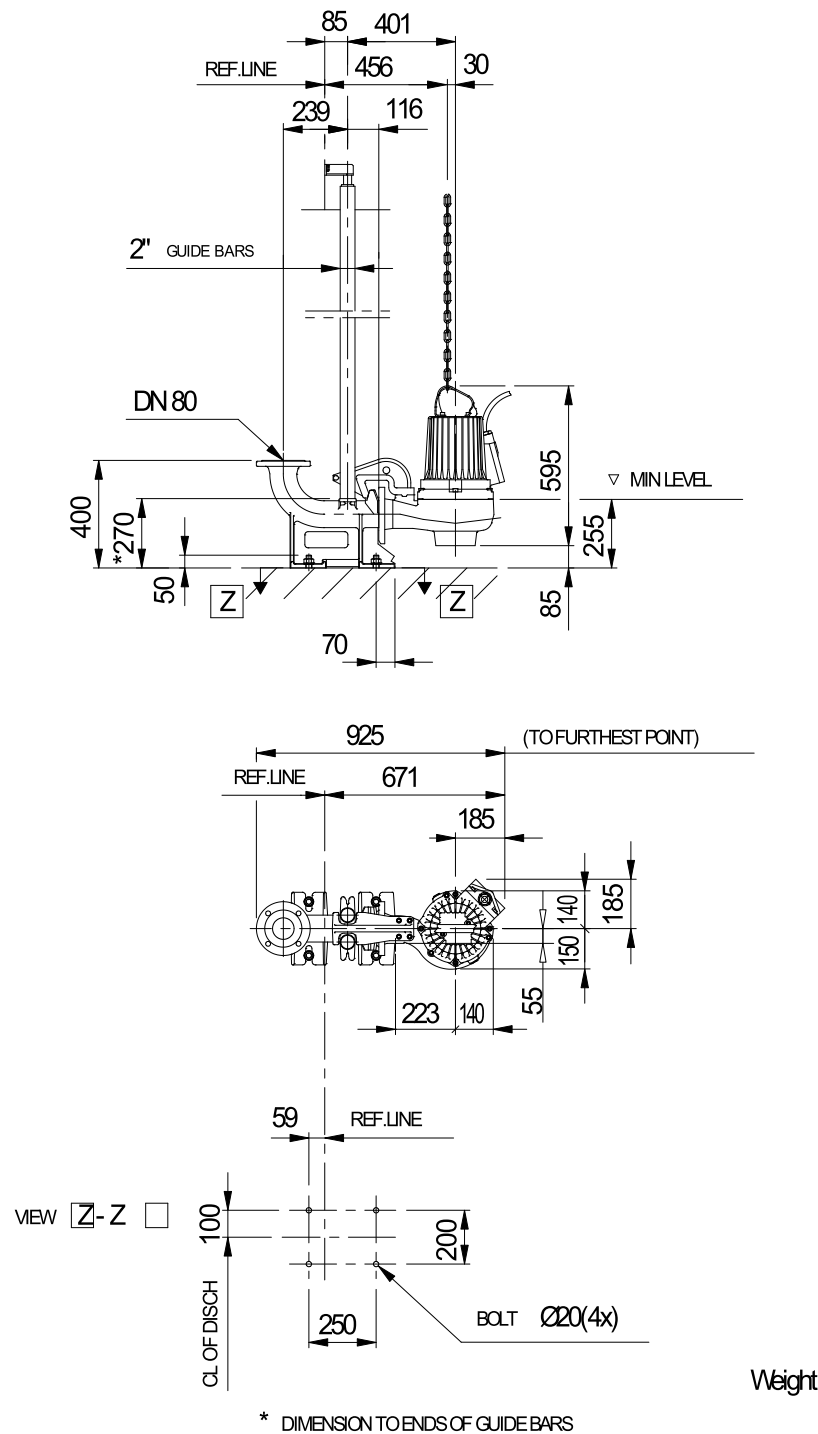
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NP 3102 SH 3~ 258 VFD Analysis



Pumps running /System	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Pump eff.	Specific energy	NPSHre
1	50 Hz	19.1 l/s	13.5 m	4.3 kW	19.1 l/s	13.5 m	4.3 kW	58.6 %	0.0706 kWh/m ³	4.41 m
1	45 Hz	17.2 l/s	10.9 m	3.14 kW	17.2 l/s	10.9 m	3.14 kW	58.6 %	0.0566 kWh/m ³	3.72 m
1	40 Hz	15.3 l/s	8.63 m	2.2 kW	15.3 l/s	8.63 m	2.2 kW	58.6 %	0.0461 kWh/m ³	3.08 m
1	35 Hz	13.4 l/s	6.61 m	1.48 kW	13.4 l/s	6.61 m	1.48 kW	58.6 %	0.0371 kWh/m ³	2.49 m
1	30 Hz	11.4 l/s	4.85 m	0.93 kW	11.4 l/s	4.85 m	0.93 kW	58.6 %	0.0288 kWh/m ³	1.95 m

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Dimensional drwg
CP,NP 3102 HT,SH

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