

SERIES
BMI





INTRODUCTION

This catalog describes all pump models of the BMI series and their accessories and optional parts manufactured by IMBIL and includes technical information on construction techniques, applications, operating principles, design, special features and attributes of the line, in addition to dimensional drawings and characteristic curves of each size.

ADDITIONAL INFORMATION

If you have any questions regarding our products and services, IMBIL and its representatives are always at your service to provide you with any further information and technical assistance.

NOTES

We reserve the right to make any modifications that we deem necessary or required to our products at any time without entailing any obligations of any nature.



APPLICATIONS

The pumps from the BMI line are indicated for the pumping of paper and pulp mass, applications in the textile, chemical and petrochemical industries, siderurgy, food and drinks industries, and sugar and ethanol mills, amongst other applications that need open impellers with good efficiency.

PROJECT CHARACTERISTICS

The BMI pumps are horizontal shaft, single stage pumps with horizontal suction and vertical discharge, with “Back Pull Out” construction, allowing the disassembly from the back for eventual maintenance and repair, without affecting the alignment and fixation of the piping.

Spiral volute, casted in one single piece, with the fixation supports incorporated.

The shaft sealing is ensured by a gasket in the Standard execution or optionally by a mechanical seal.

The shaft has a protective sleeve in the stuffing box packing region, without contact with the pumped liquid.

The impeller is open, single flow radial and has back blades that compensate for the axial up thrust and to impede the deposition of solids in the upper part.

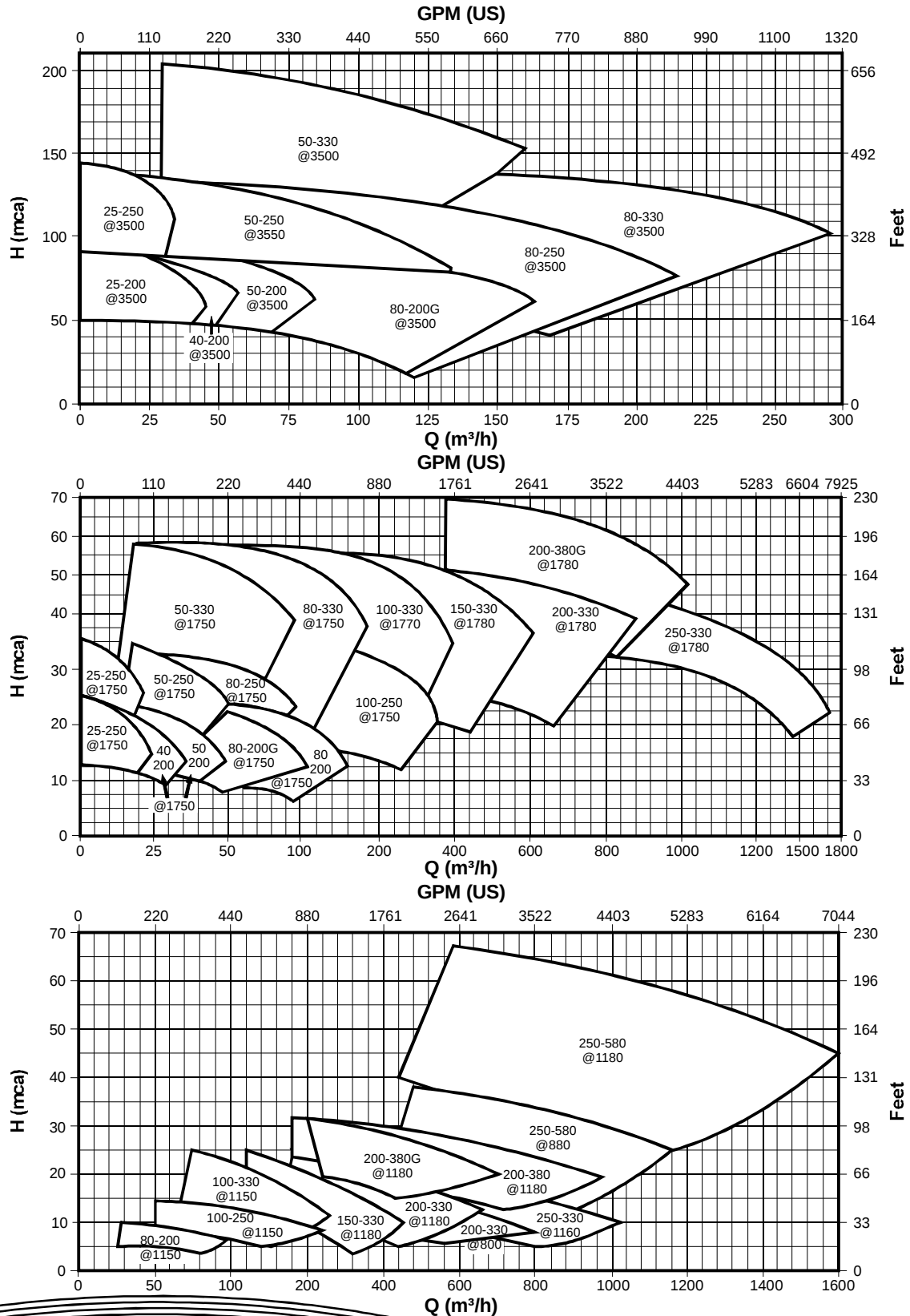
The bearing housing has a reinforced construction that assures high rigidity to the set and provide a it longer life to the bearing.

A very important characteristic of the bearing housing is that it was designed in a modular form, that is, it is interchangeable between several pump sizes.

The adjustment of the clearance between the impeller and the volute is made through a simple regulation at the bearing, which allows maintaining the same performance throughout the pump's life without losing efficiency, flow and pressure due to natural wearing of the impeller and housing.

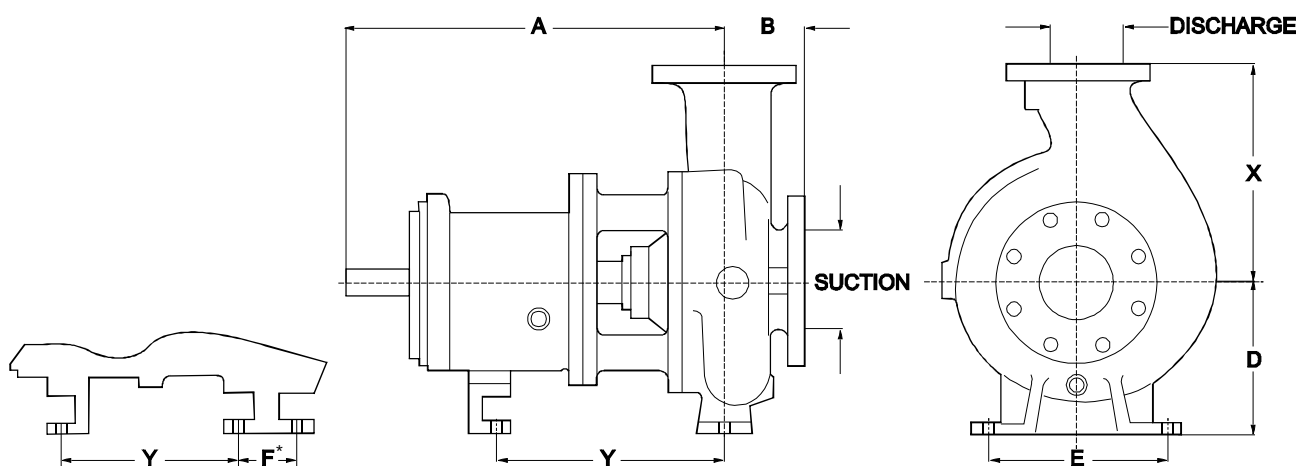


APPLICATION CHART





OUTLINE DIMENSIONS



Model	Diameter Discharge	Diameter Suction	X	A	B	D	Y	E	Weight (KG)	Diameter Max. Solids
25-200	25	40	165	343	102	133	184	152	45	8,75
40-200	25	80							49	11,11
50-200	50	80	242	495	102	210	318	248	91	12,7
80-200	80	100	280						100	28,6
80-200G	80	100	280						100	17,5
25-250	25	50	216						91	11,11
50-250	50	80	242						104	9,52
80-250	80	100	280						120	15,87
100-250	100	150	342	495	102	254	318	248	138	25,4
50-330	50	80	292						125	9,52
80-330	80	100	318						150	15,87
100-330	100	150	343						184	25,4
150-330	150	250	406	708	152	368	476	406	254	--
200-330	200	250	457						304	25,4
200-380	200	250	483						336	28,6
200-380G	200	250	483						322	20,6
250-330	250	295	537	708	255	509	561	520	--	--
250-580	250	315	635	837,5	211,5				600	45

The dimensions of flanges are according to standard ANSI 16.5 150lbs RF.

*The dimension F (127mm) is only for model 250-580



ADVANTAGES OF THE PROJECT

The original characteristics of flow and pressure are maintained throughout the pump's life through a simple adjustment that controls the impeller clearance. This adjustment avoids the constant exchange of the wear parts.

Reinforced bearing to reduce vibrations and increase the set stability

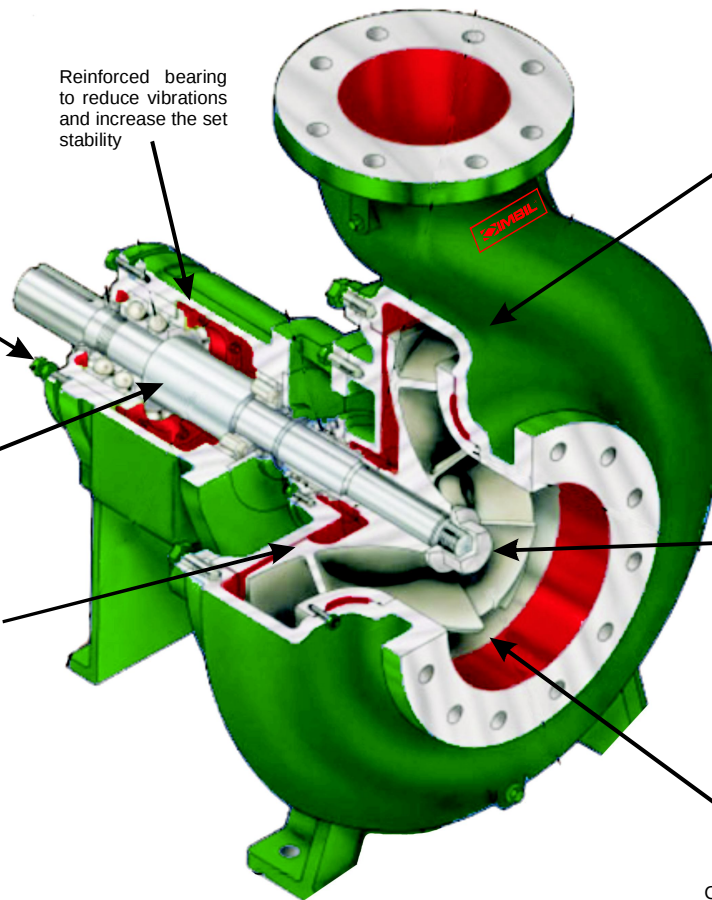
Volute designed in the "Back pull-out" conception to facilitate maintenance

Rigid shaft, developed for minimum deflection, least than 0.05mm.

Impeller with back blades to reduce axial up thrust and reduce the pressure over the gasket box.

Impeller fixed at the shaft through a thread, without a fixation nut, which allows the impeller entrance to be free, granting a smooth flow, avoiding adherences, braiding and clogging.

Open impeller with large passage, ideal for the pumping of viscous fluids, paper mass with high concentrations and fluids with solids in suspension





INTERCHANGEABILITY BETWEEN PUMPS

An advantage of the design of BMI line pumps is the modular interchangeability, that is, there are several parts that are common to several pump sizes. Therefore, when the user has several sizes of pumps in operation, the spare parts stock is reduced since the same part fits more than one model.

In the table below we present the interchangeability of parts between the several sizes:

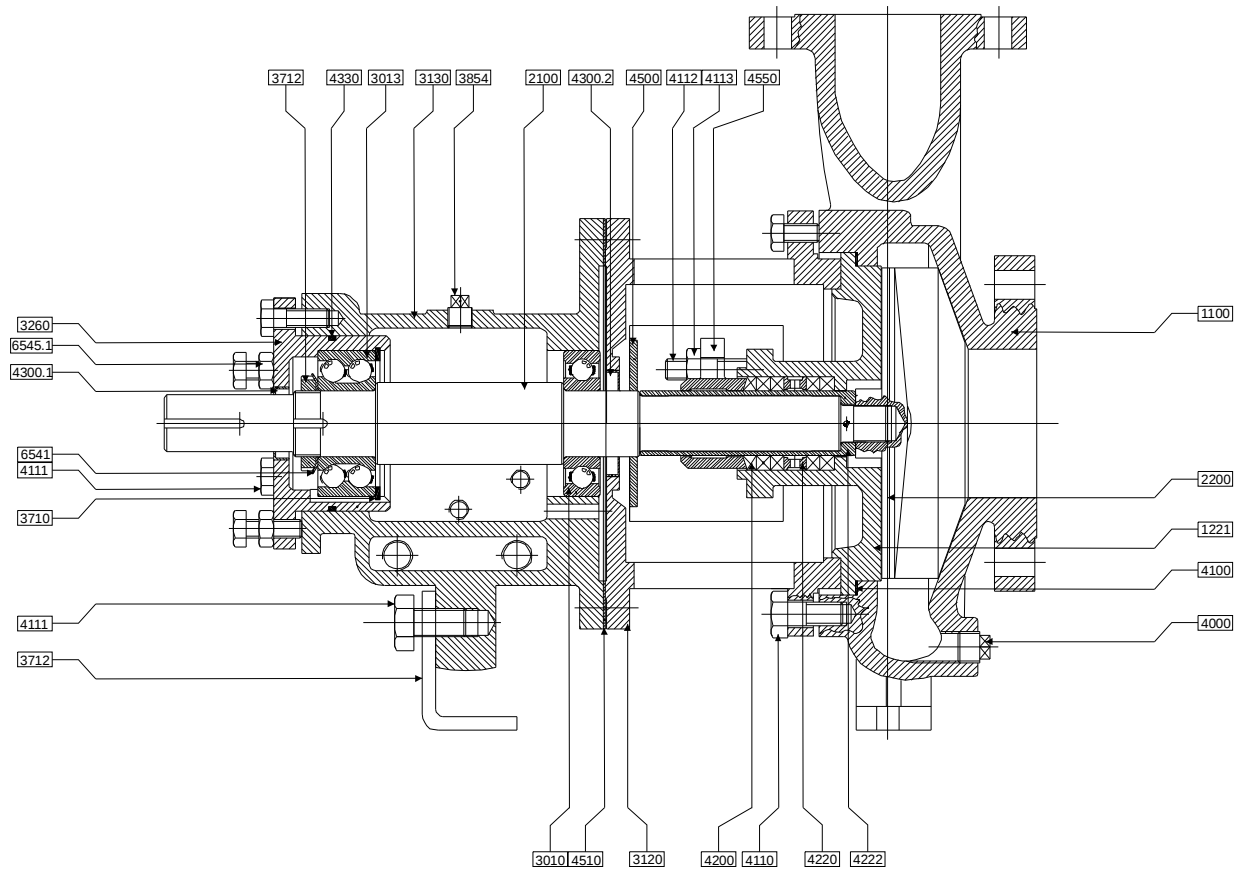
	SHAFT AND BEARING HOUSING	RING OF ADAPTATION	PACKING BOX	IMPELLER	VOLUTE
MODEL					
BMI 25-200	BMI 25-200	BMI 25-200	BMI 25-200	BMI 25-200	BMI 25-200
BMI 40-200				BMI 40-200	BMI 40-200

	SHAFT AND BEARING HOUSING	BRACKET	PACKING BOX	IMPELLER	VOLUTE
MODEL					
BMI 50-200	BMI 50-200	BMI 50-200	BMI 50-200	BMI 50-200	BMI 50-200
BMI 80-200				BMI 80-200	BMI 80-200
BMI 80-200G				BMI 80-200G	BMI 80-200G
BMI 25-250		BMI 25-250	BMI 25-250	BMI 25-250	BMI 25-250
BMI 50-250				BMI 50-250	BMI 50-250
BMI 80-250				BMI 80-250	BMI 80-250
BMI 100-250				BMI 100-250	BMI 100-250
BMI 50-330		BMI 50-330	BMI 50-330	BMI 50-330	BMI 50-330
BMI 80-330				BMI 80-330	BMI 80-330
BMI 100-330				BMI 100-330	BMI 100-330

	SHAFT AND BEARING HOUSING	BRACKET	PACKING BOX	IMPELLER	VOLUTE
MODEL					
BMI 150-330	BMI 150-330	BMI 150-330	BMI 150-330	BMI 150-330	BMI 150-330
BMI 200-330				BMI 200-330	BMI 200-330
BMI 250-330				BMI 250-330	BMI 250-330
BMI 200-380		BMI 200-380	BMI 200-380	BMI 200-380	BMI 200-380
BMI 200-380G				BMI 200-380G	BMI 200-380G
BMI 250-330		BMI 150-330	BMI 150-330	BMI 250-330	BMI 250-330



PART LIST

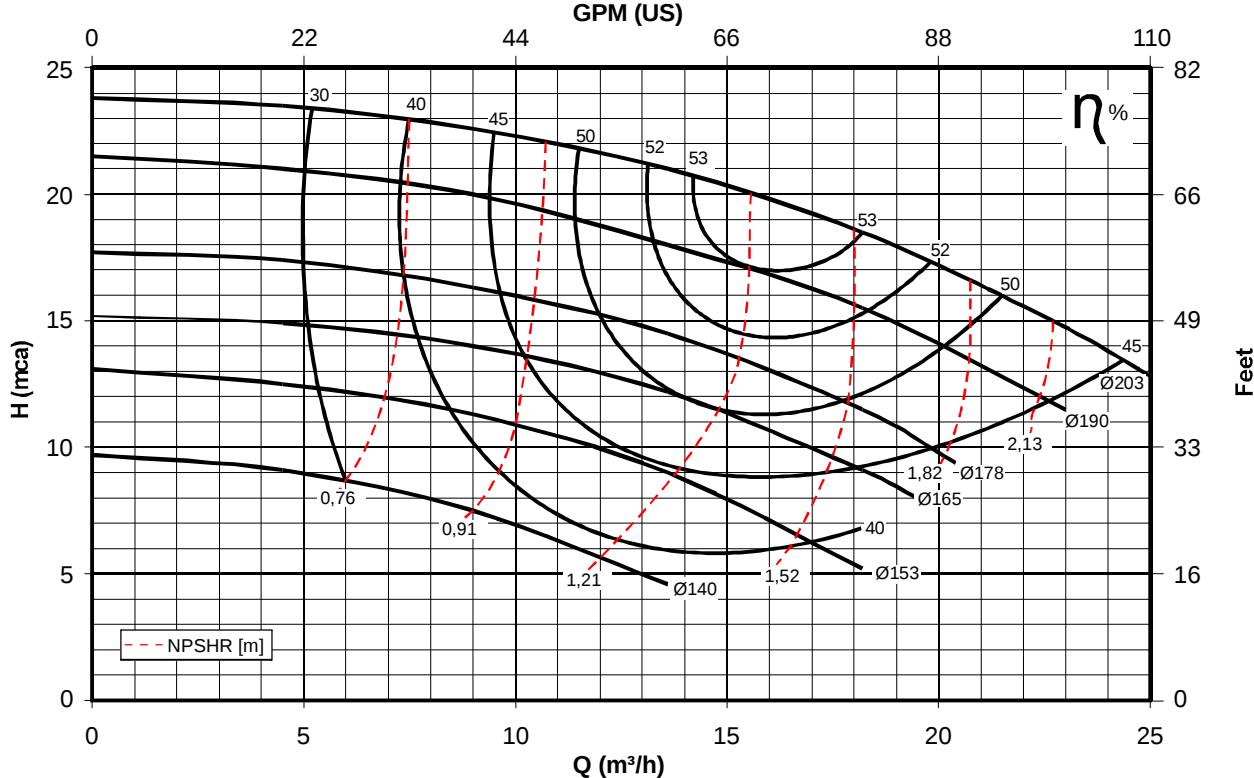


4110	SCREW		
4100	SEALING BOX JOINT		
4000	PLUG		
3854	RESPIRE	6545.1	AGREEMENT SCREW NUT
3712	BEARING NUT	6541	LUCKWASH
3710	RETAINING RING	4550	PACKING GLAD
3260	BEARING HOUSING COUVER	4510	JOINT
3170	SUPORT FEET	4330	O'RING
3130	BEARING BOX	4300.2	LIP SEAL
3120	BRACKET	4300.1	LIP SEAL
3013	AXIAL BEARING	4222	SHAFT SLEEVE
3010	RADIAL BEARING	4220	PADLOCK RING
2200	IMPELLER	4200	PACKING
2100	SHAFT	4113	PACKING GLAD NUT
1221	PACKING BOX	4112	PACKING GLAD STUD
1100	VOLUTE	4111	LOCKOUT SCREW
Number Ref.	Description	Number Ref.	Description



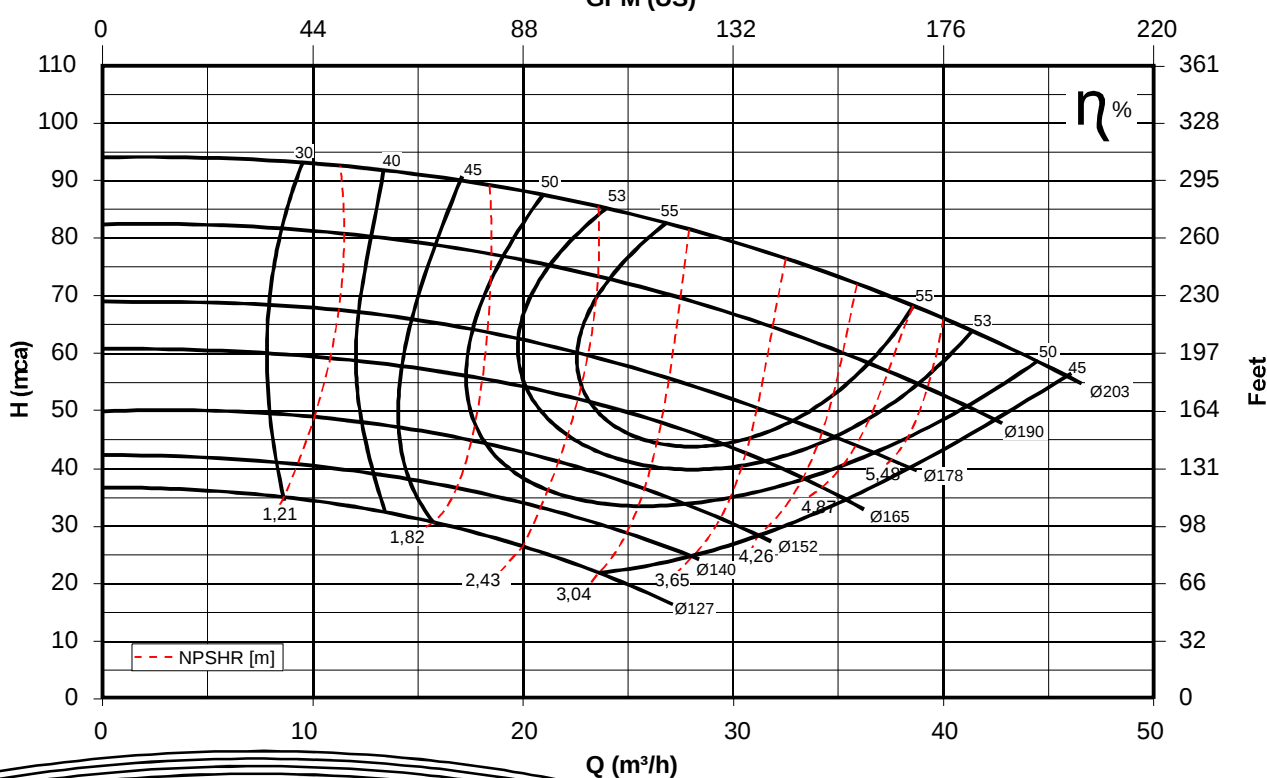
BMI 25-200

1750 RPM



BMI 25-200

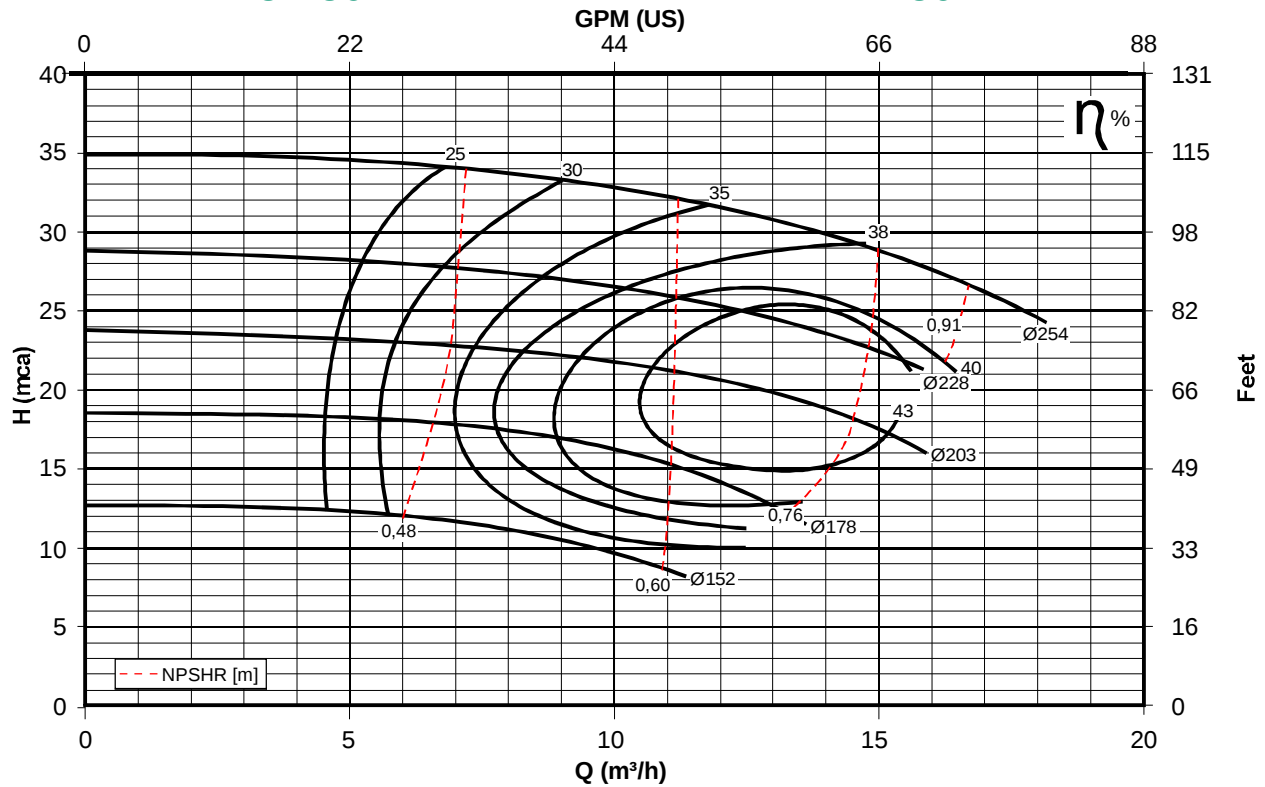
3500 RPM





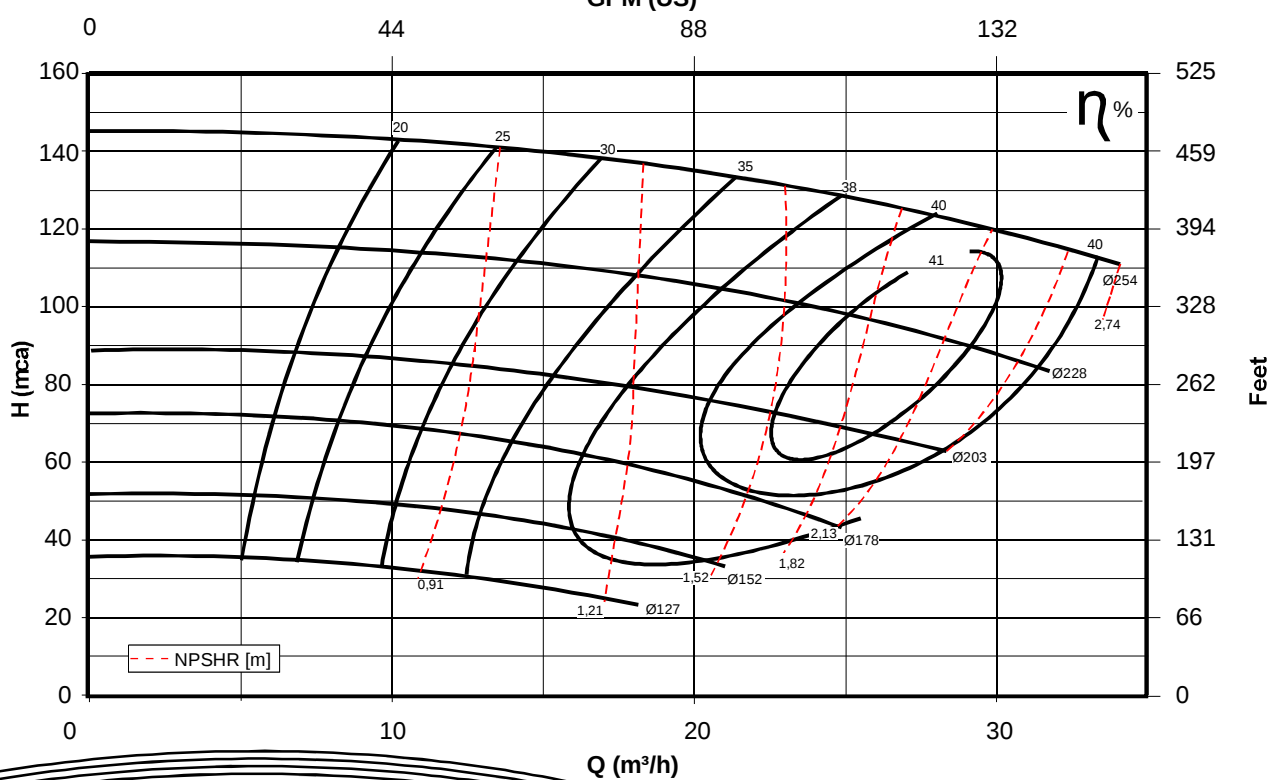
BMI 25-250

1750 RPM



BMI 25-250

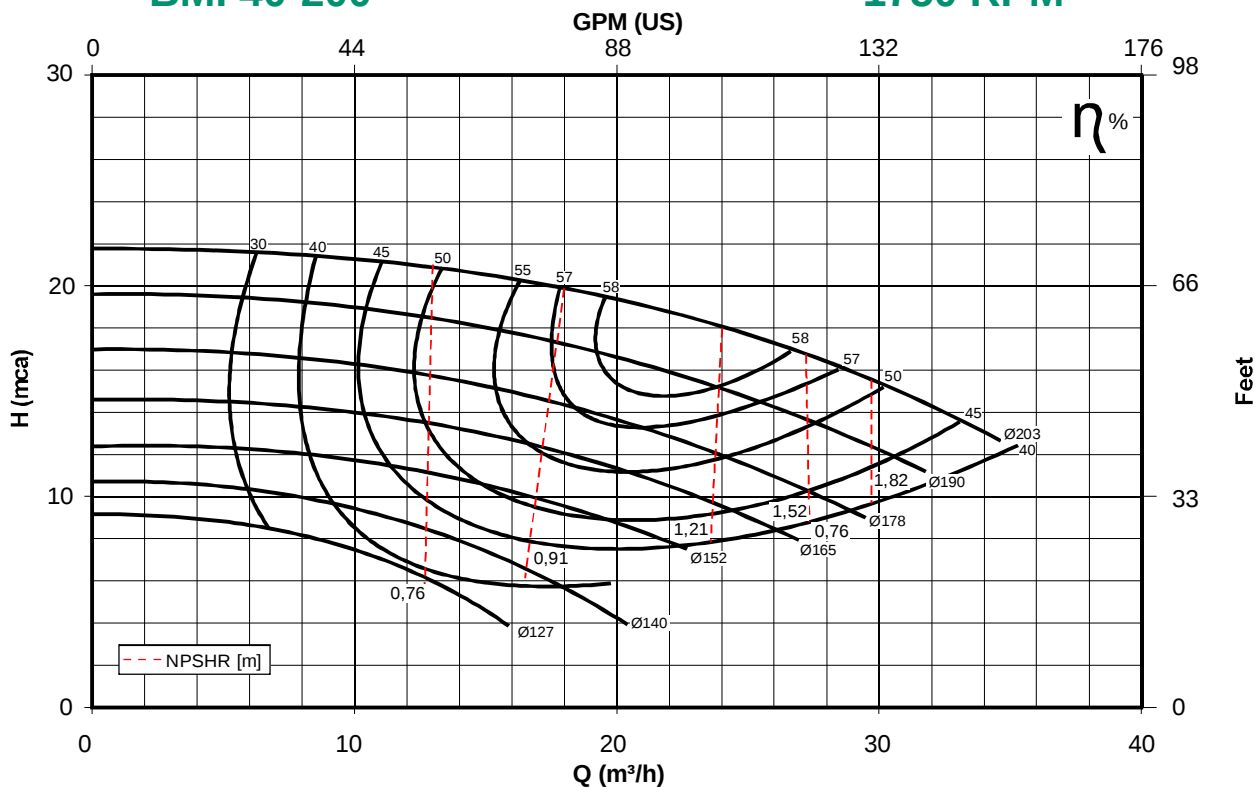
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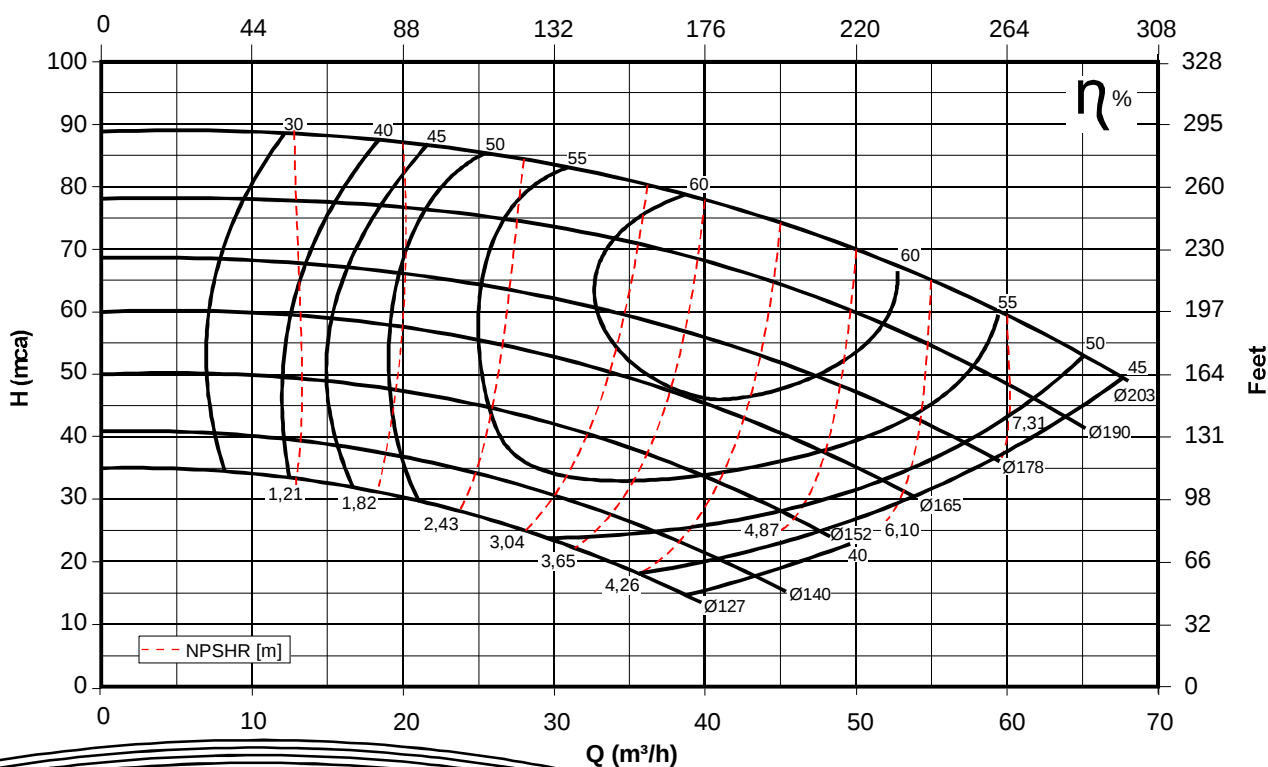
BMI 40-200

1750 RPM



BMI 40-200

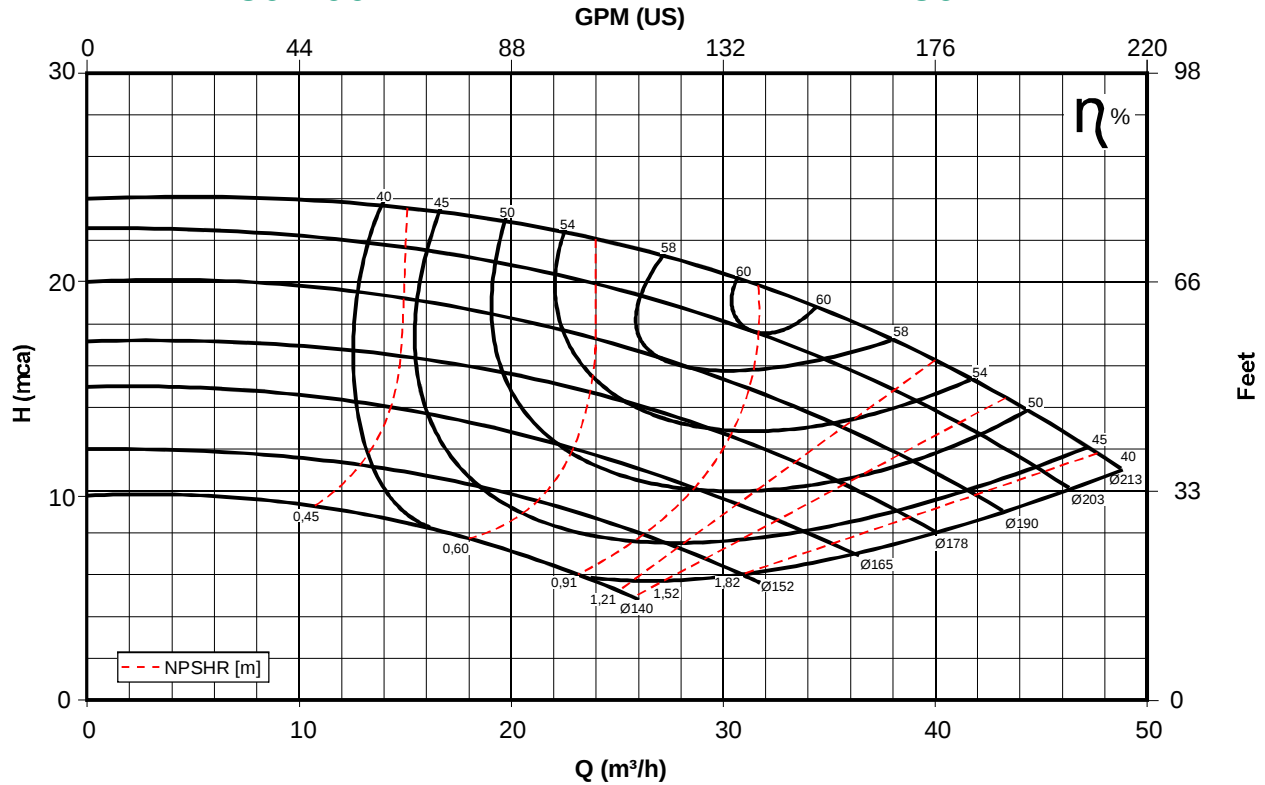
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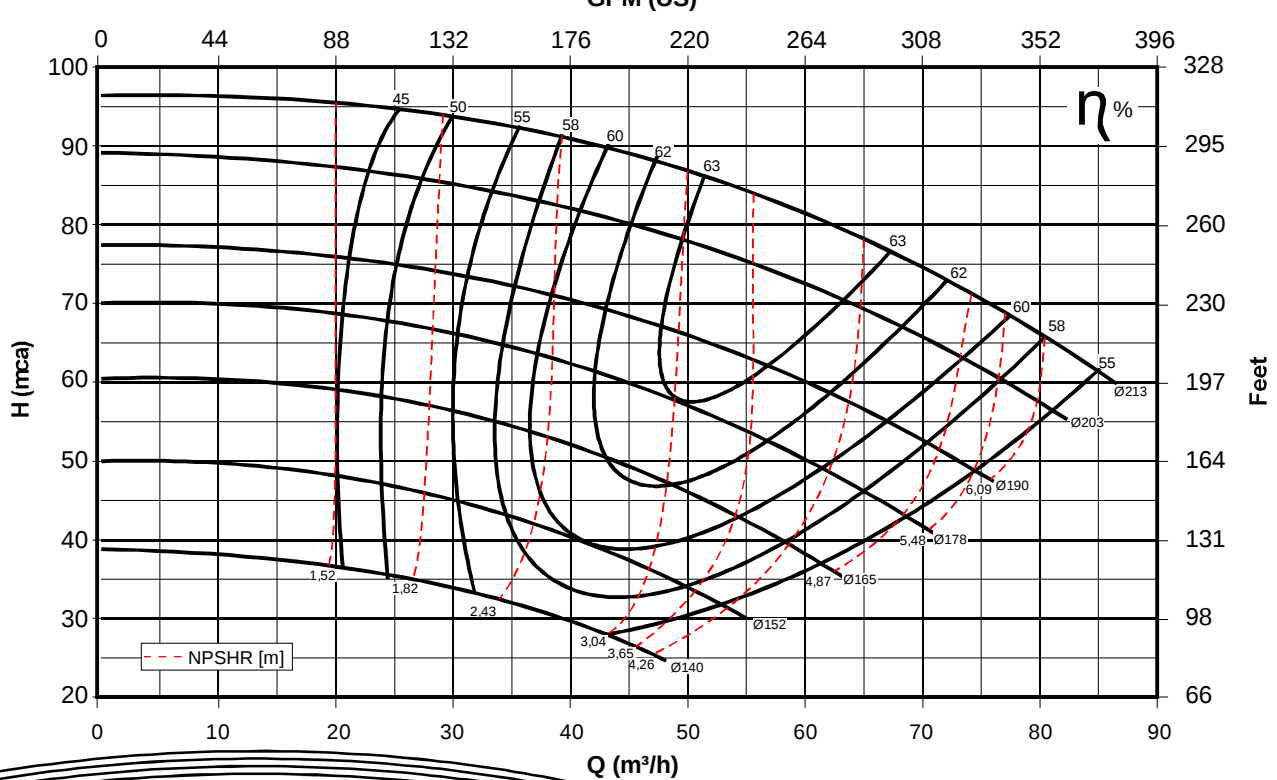
BMI 50-200

1750 RPM



BMI 50-200

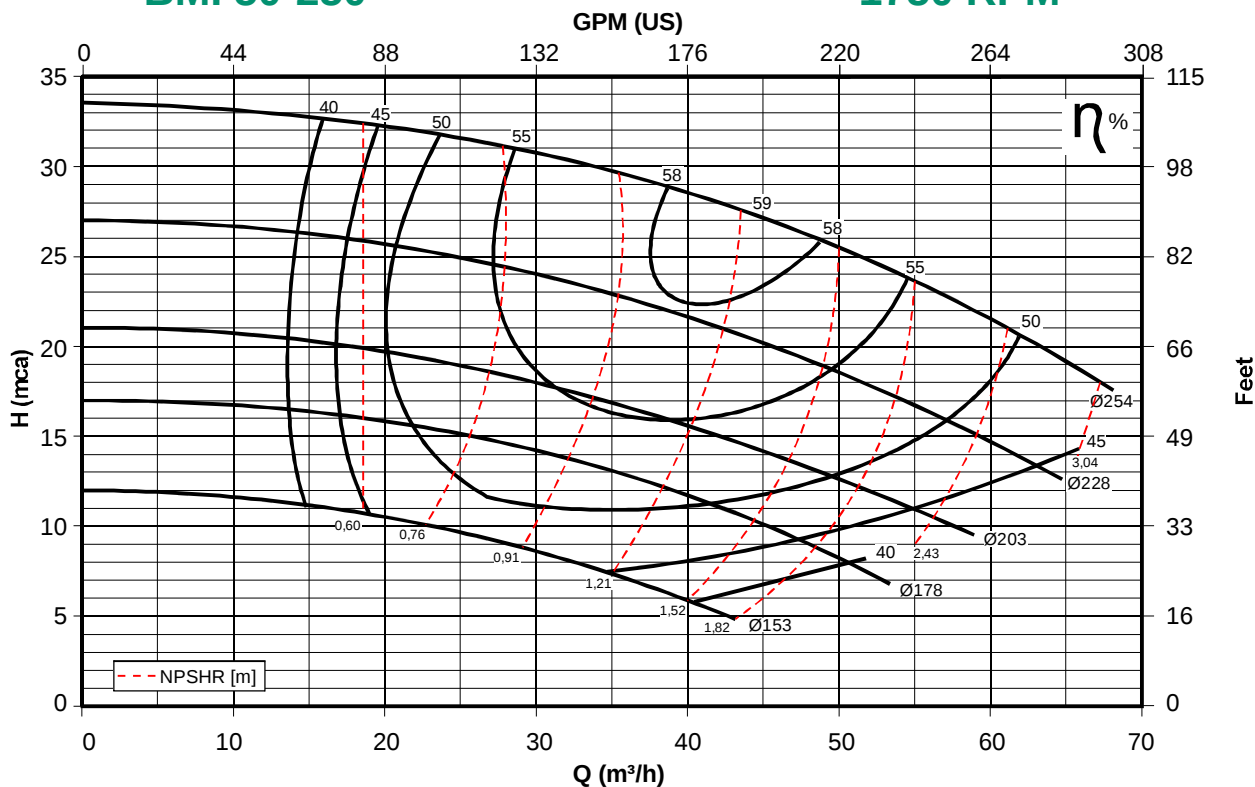
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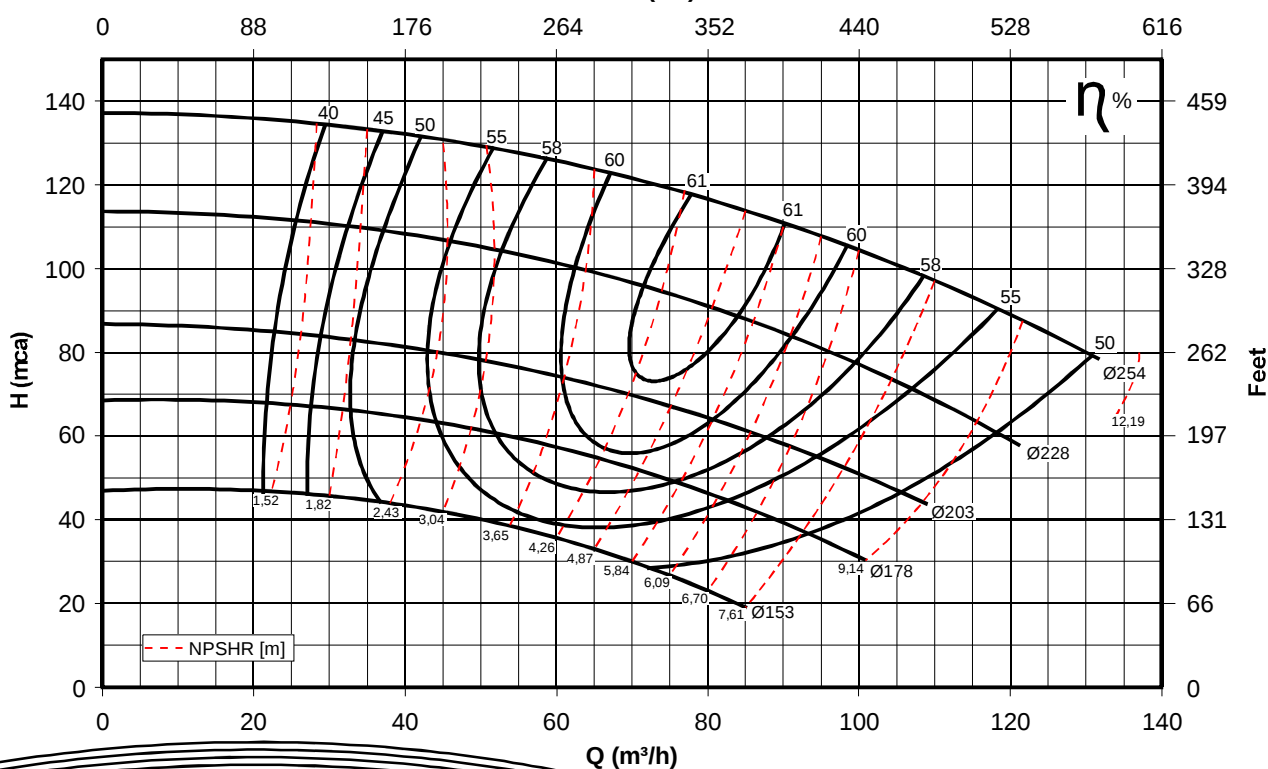
BMI 50-250

1750 RPM



BMI 50-250

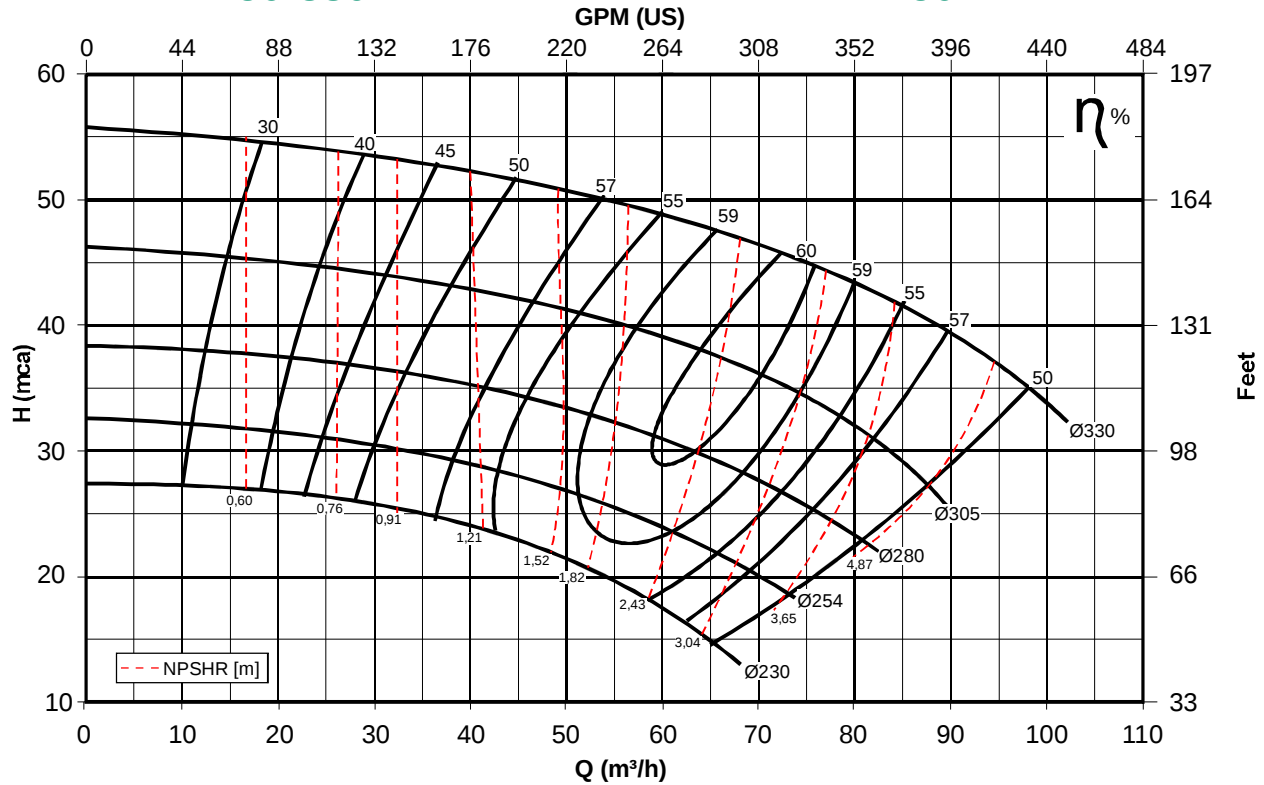
3550 RPM





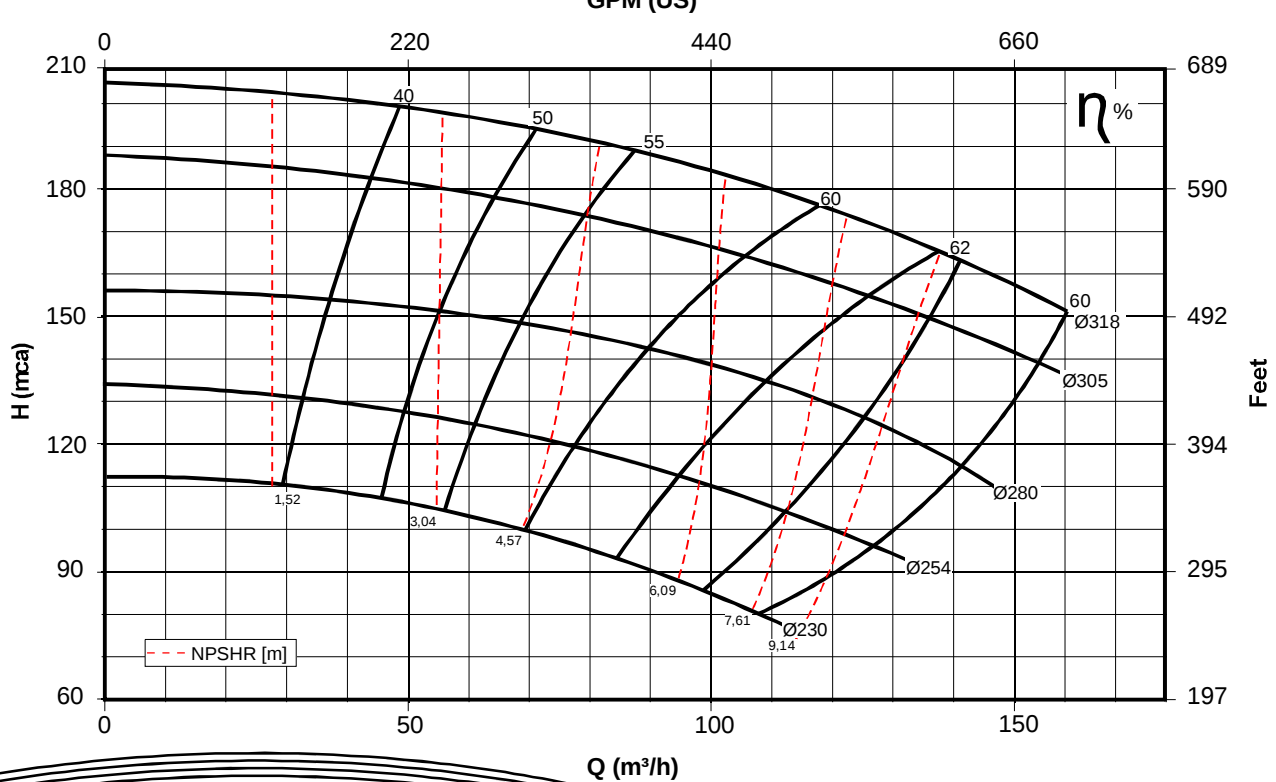
BMI 50-330

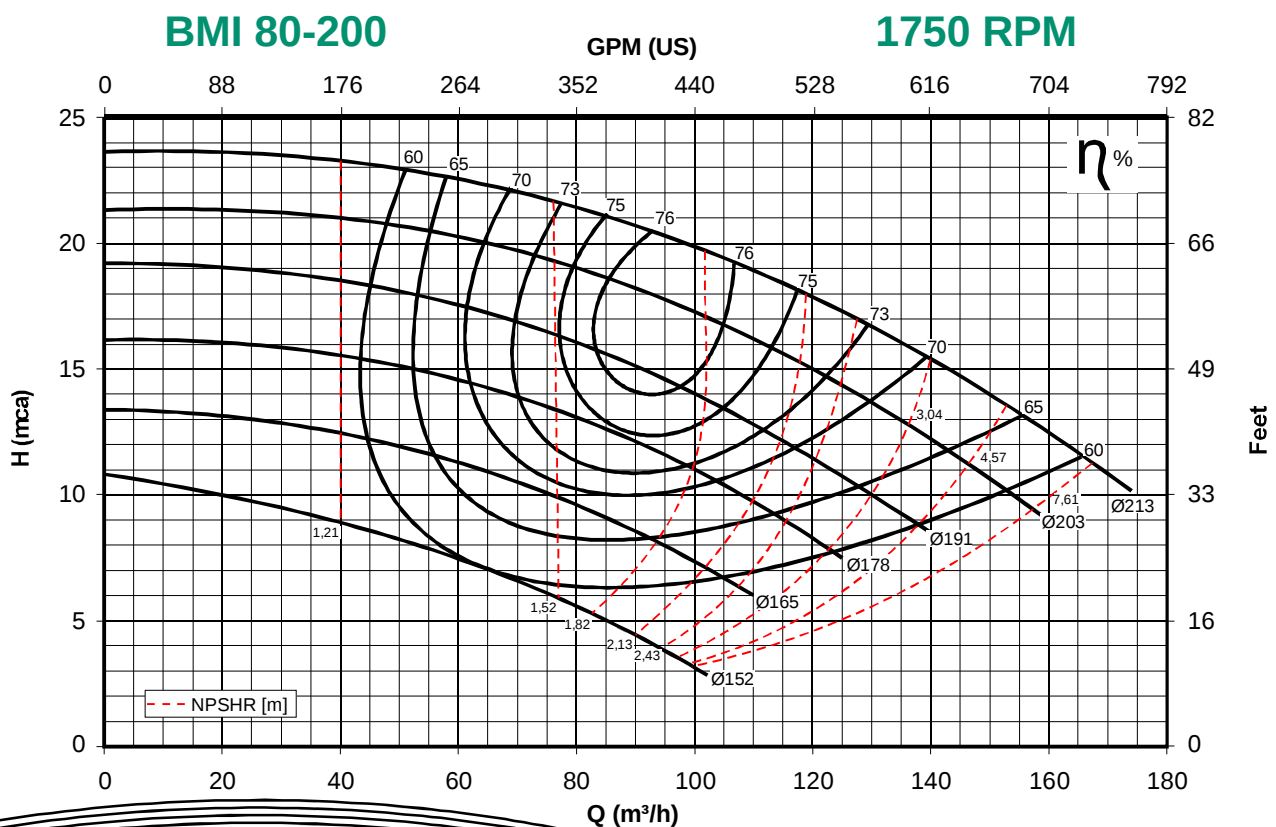
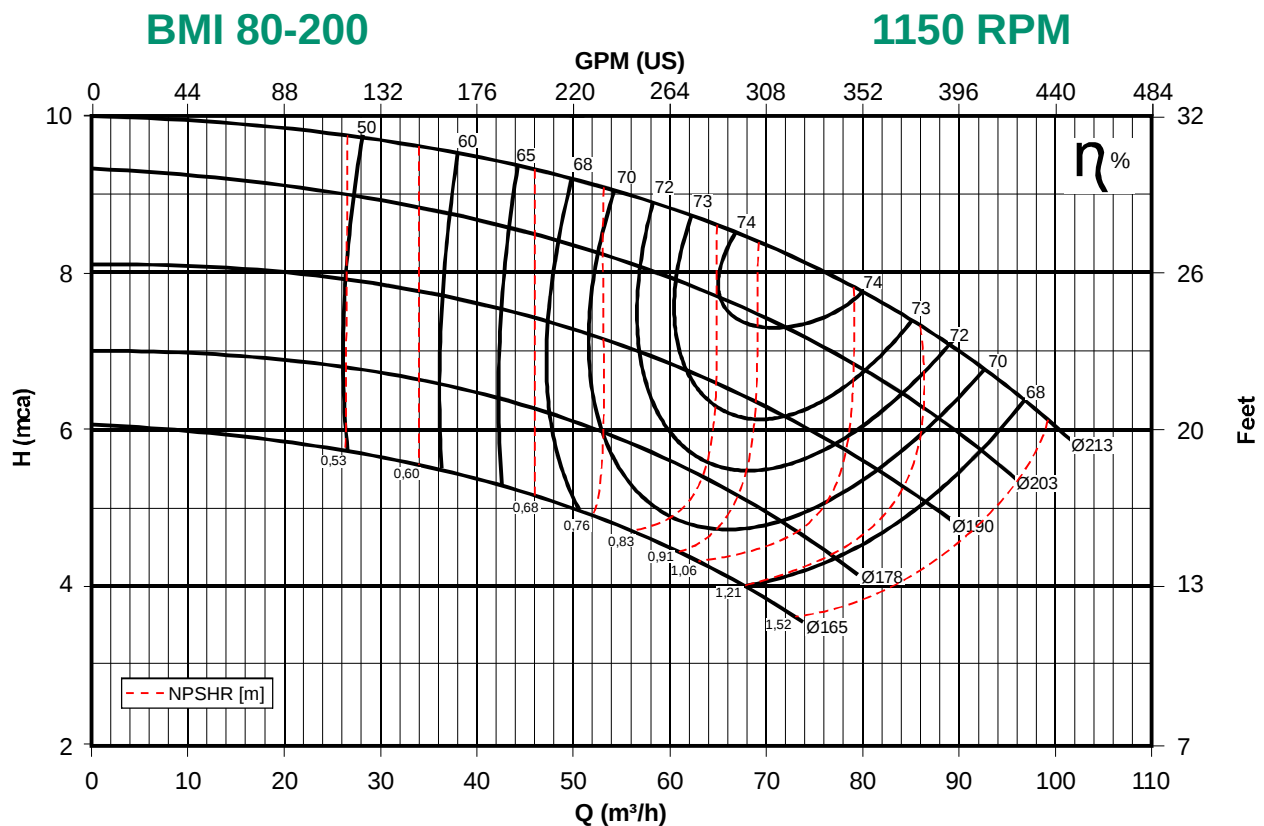
1750 RPM



BMI 50-330

3500 RPM

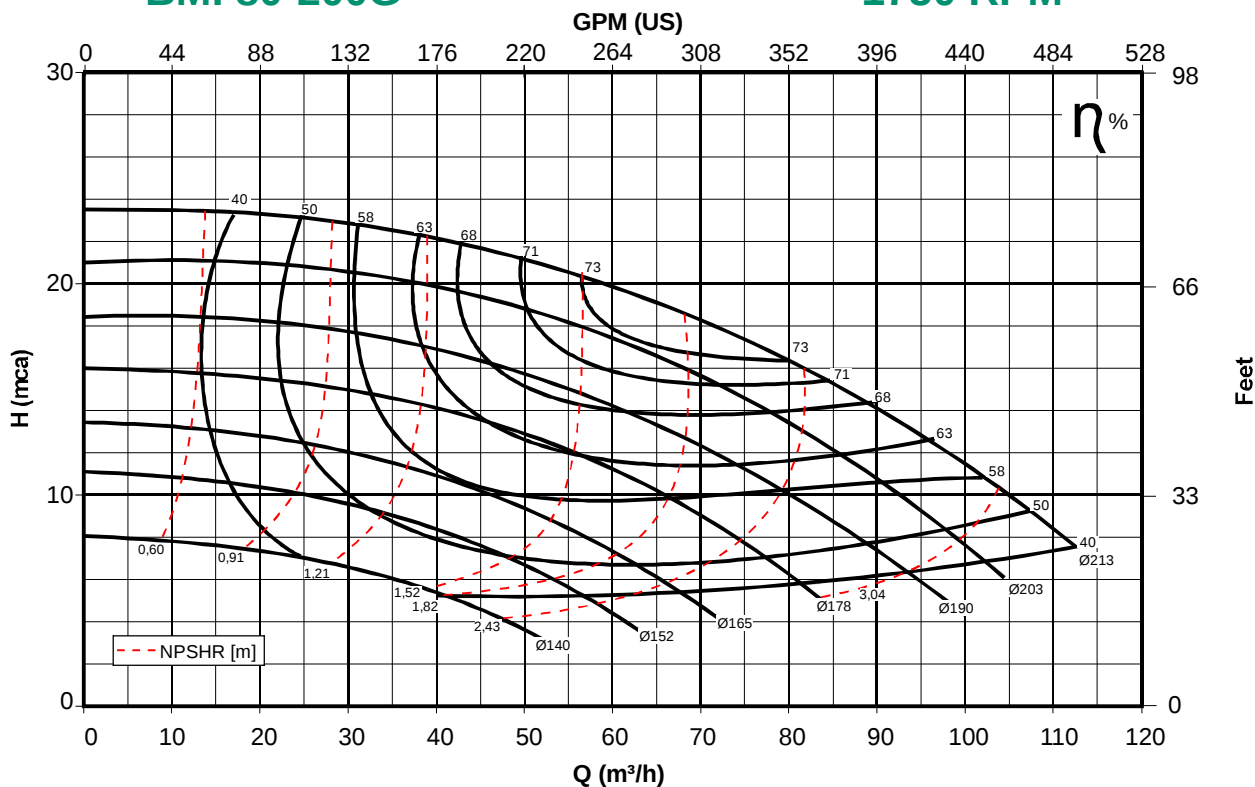






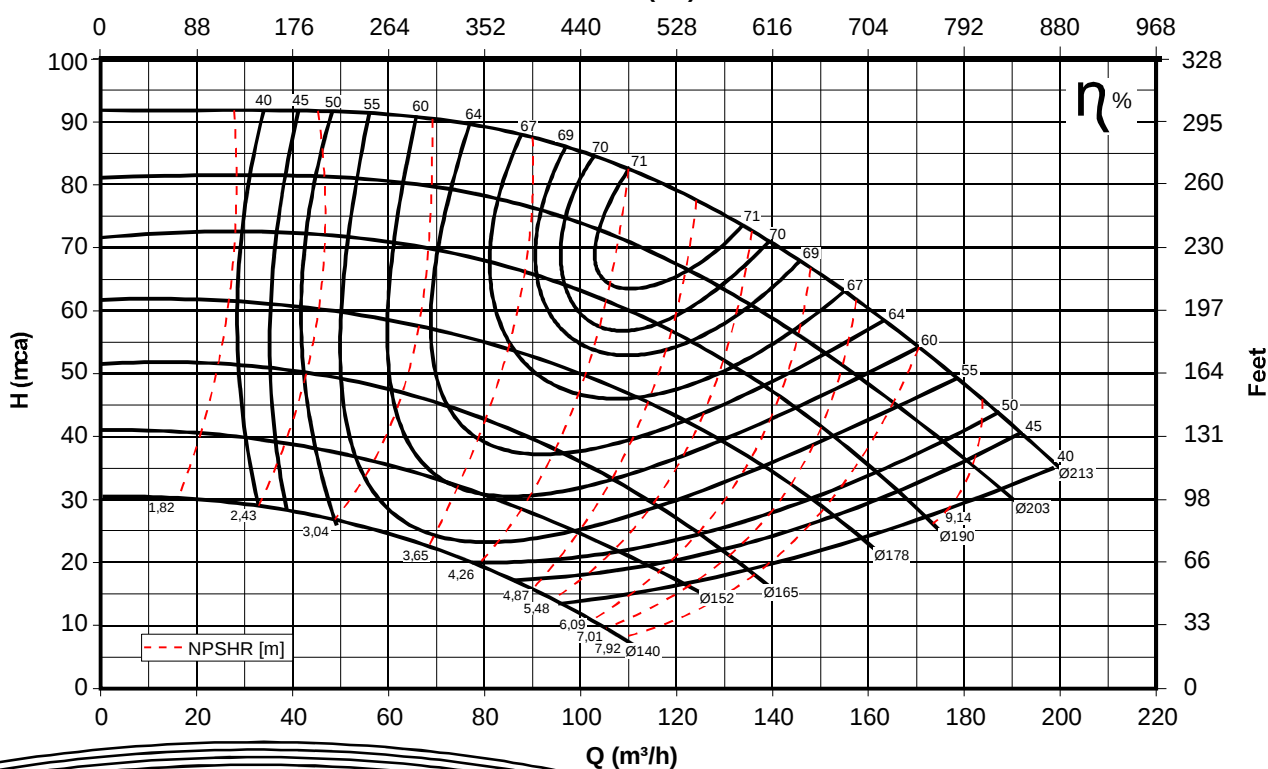
BMI 80-200G

1750 RPM



BMI 80-200G

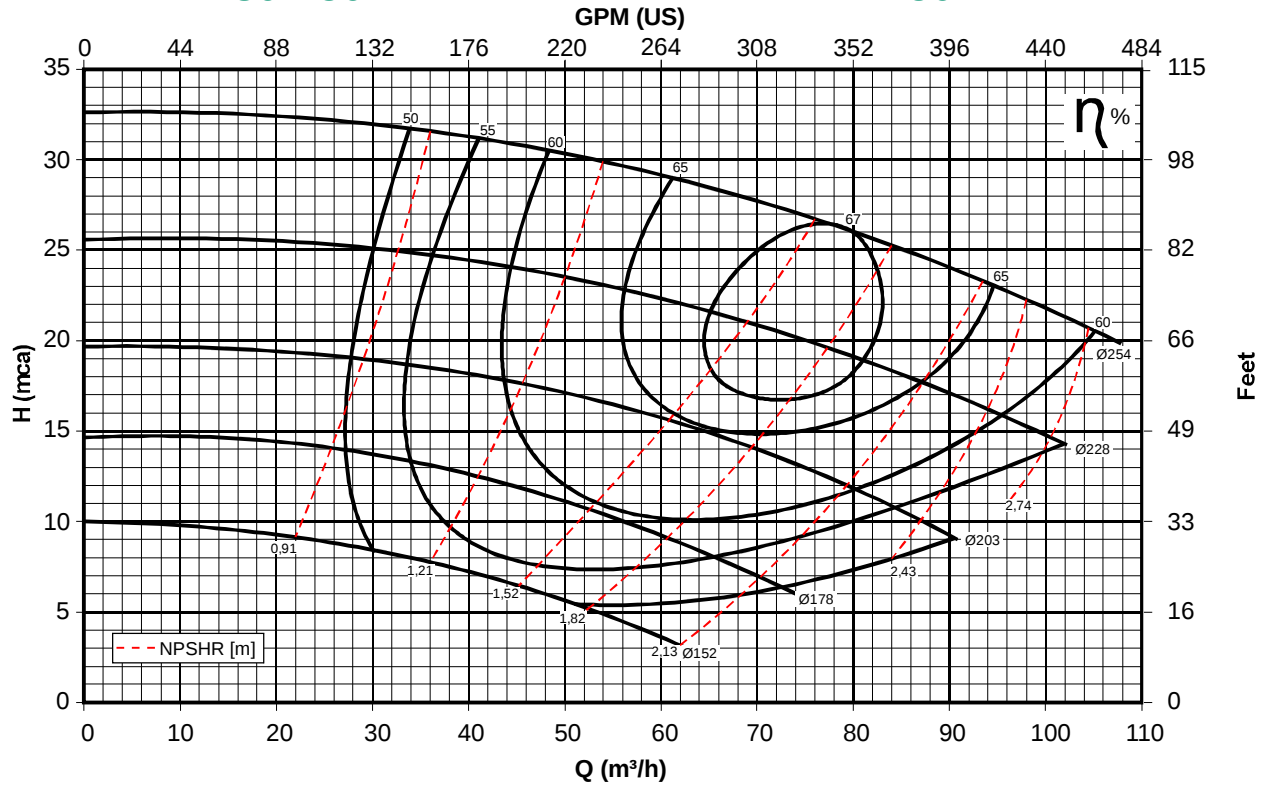
3500 RPM





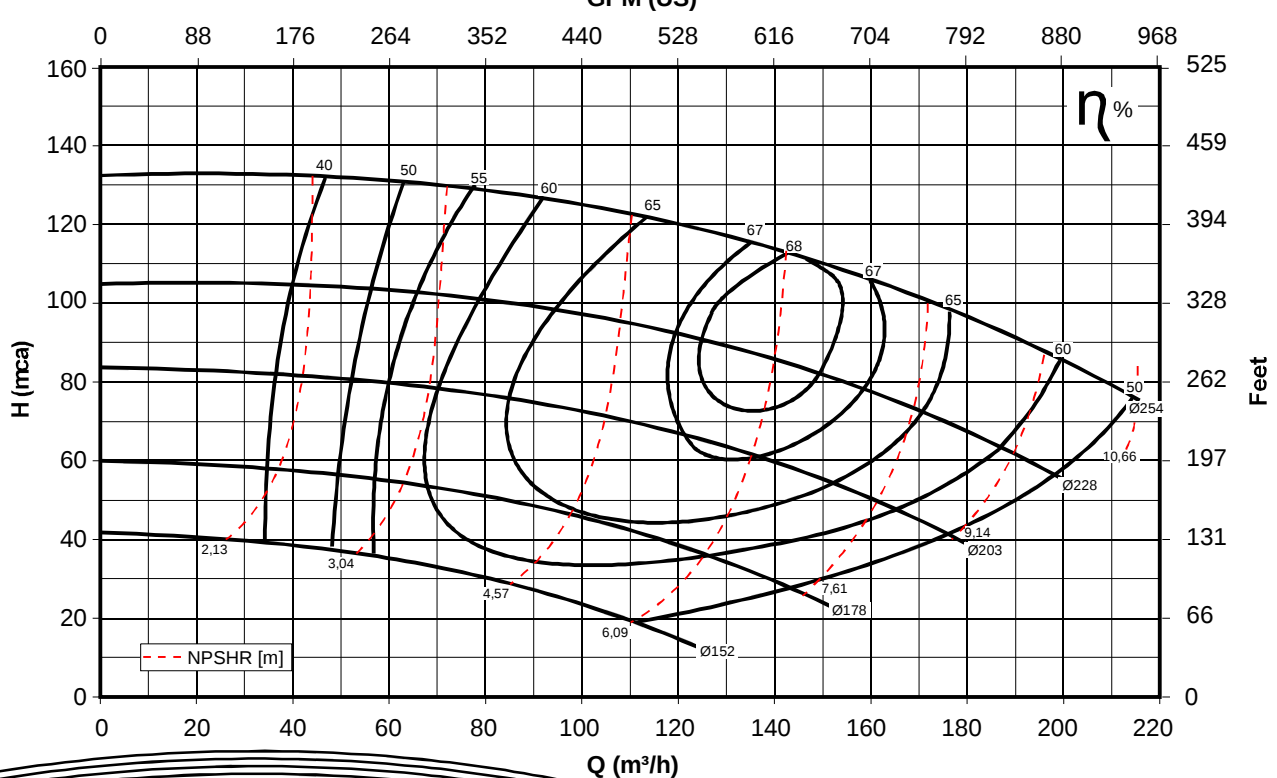
BMI 80-250

1750 RPM



BMI 80-250

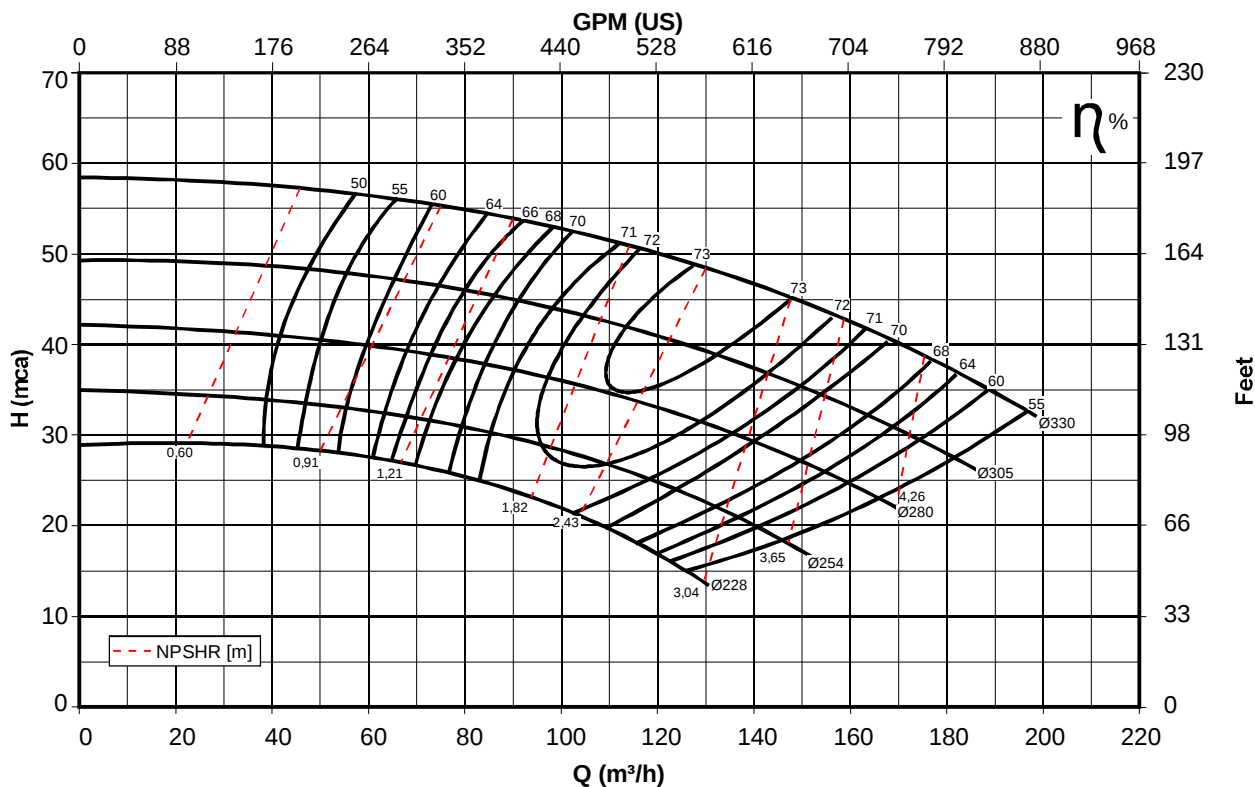
3500 RPM





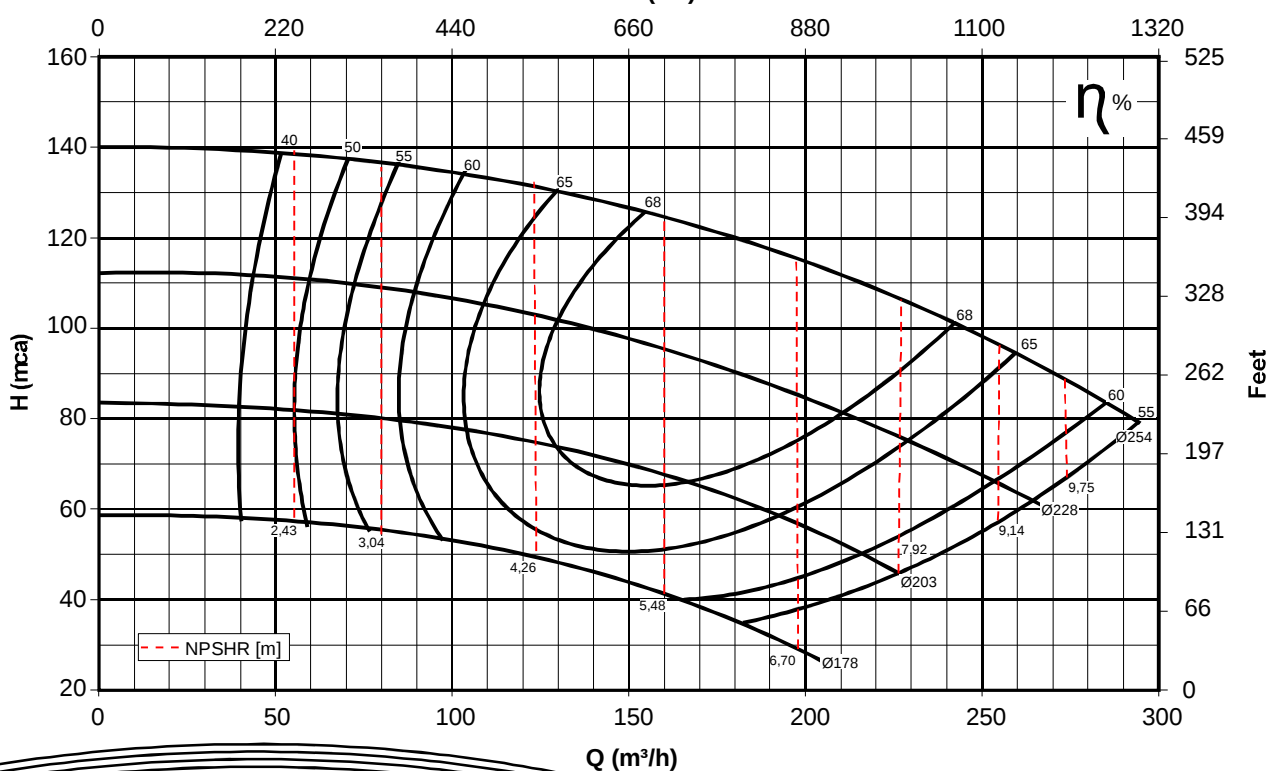
BMI 80-330

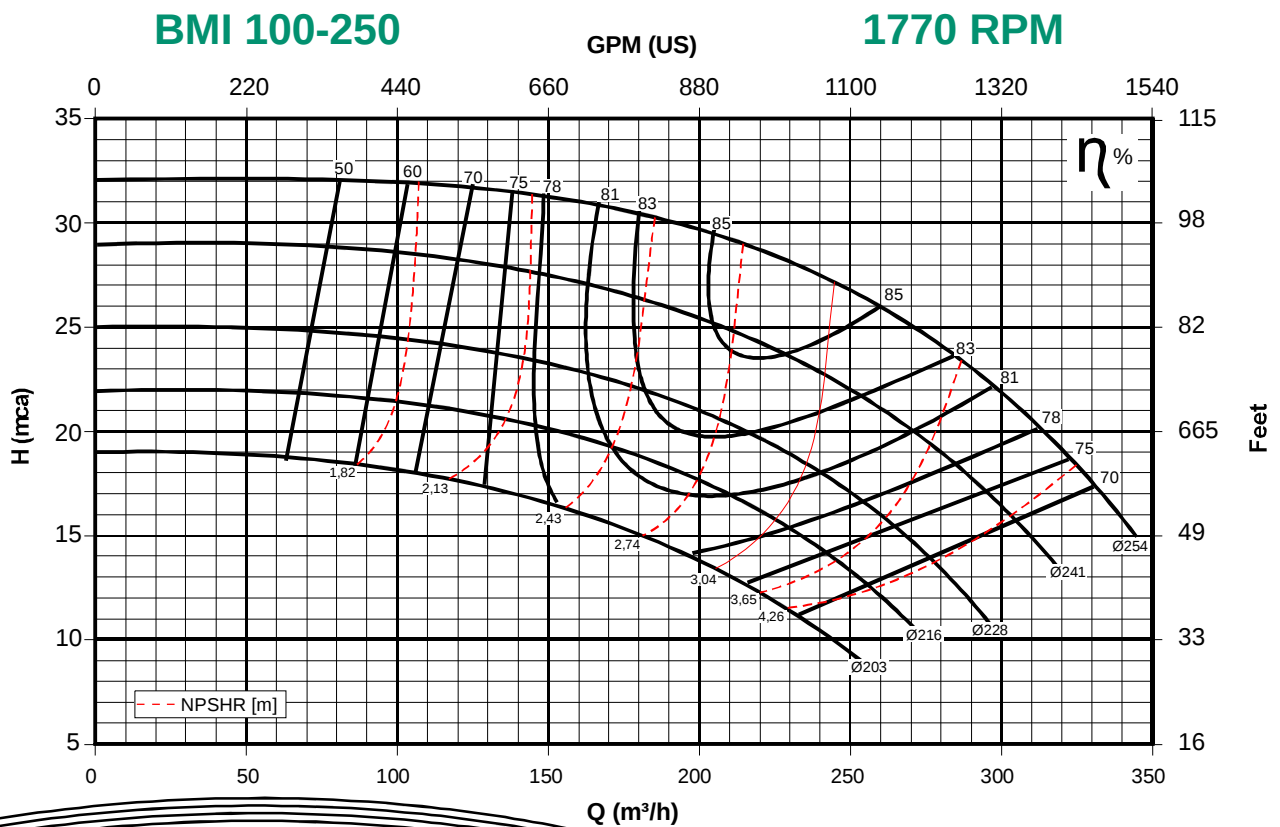
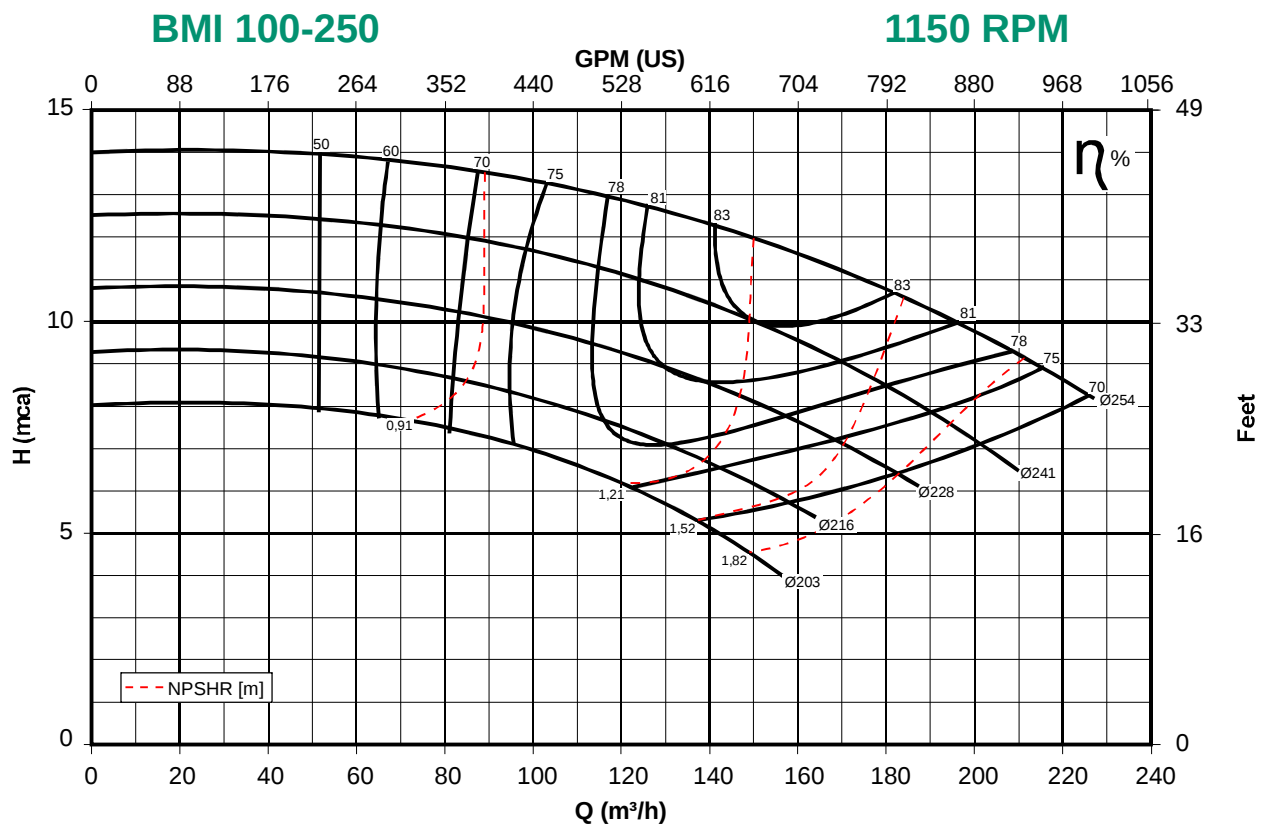
1750 RPM



BMI 80-330

3500 RPM

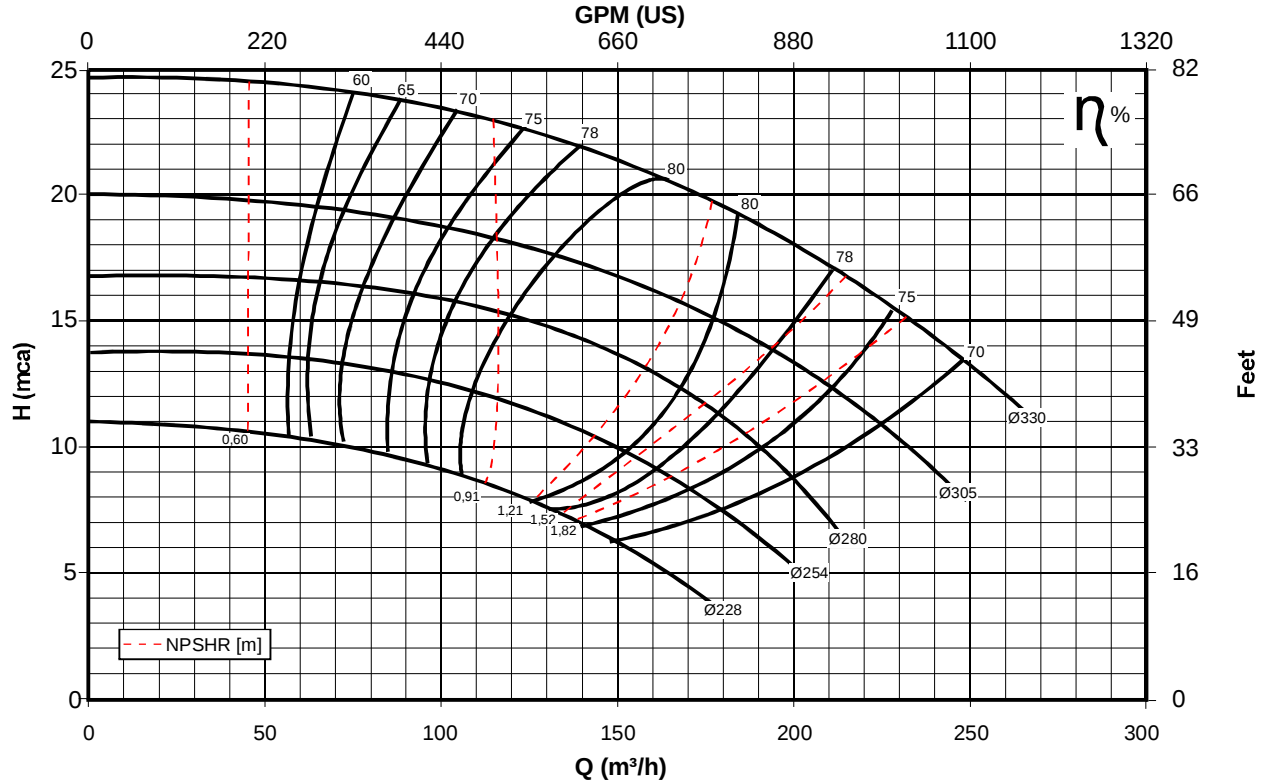






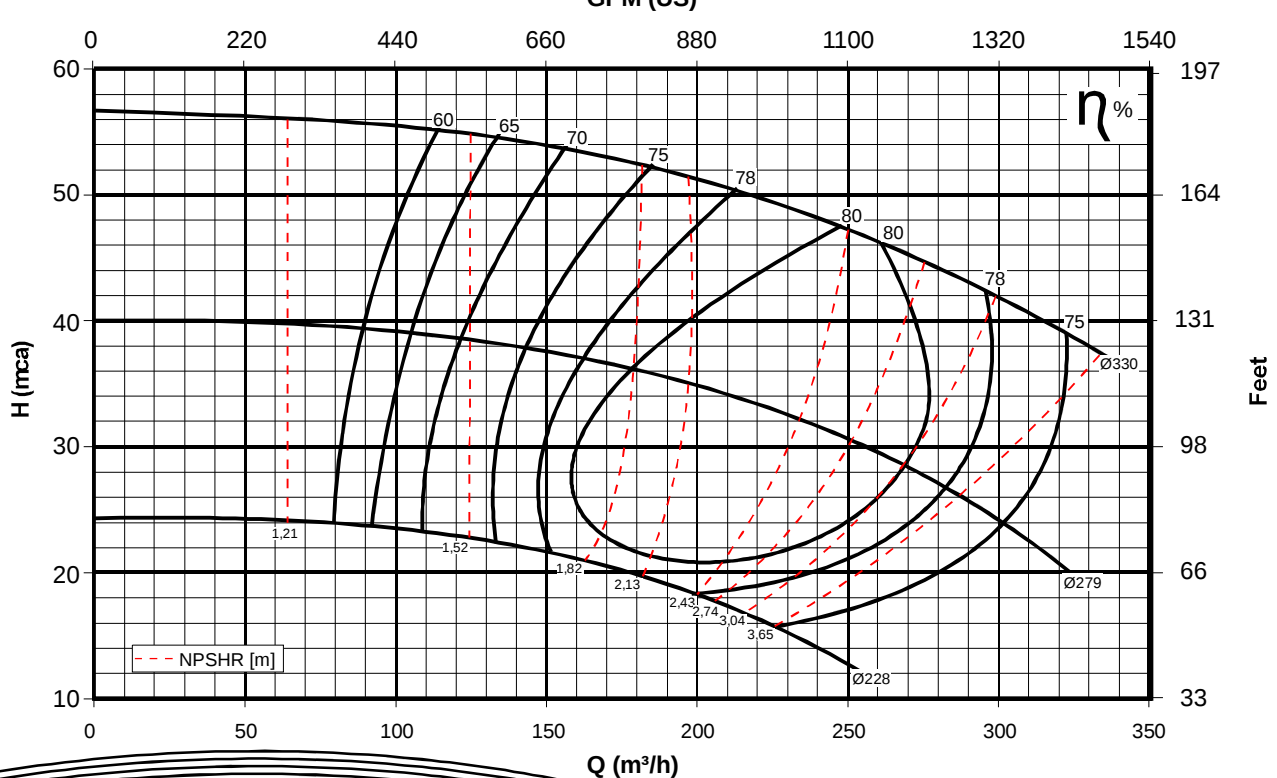
BMI 100-330

1150 RPM



BMI 100-330

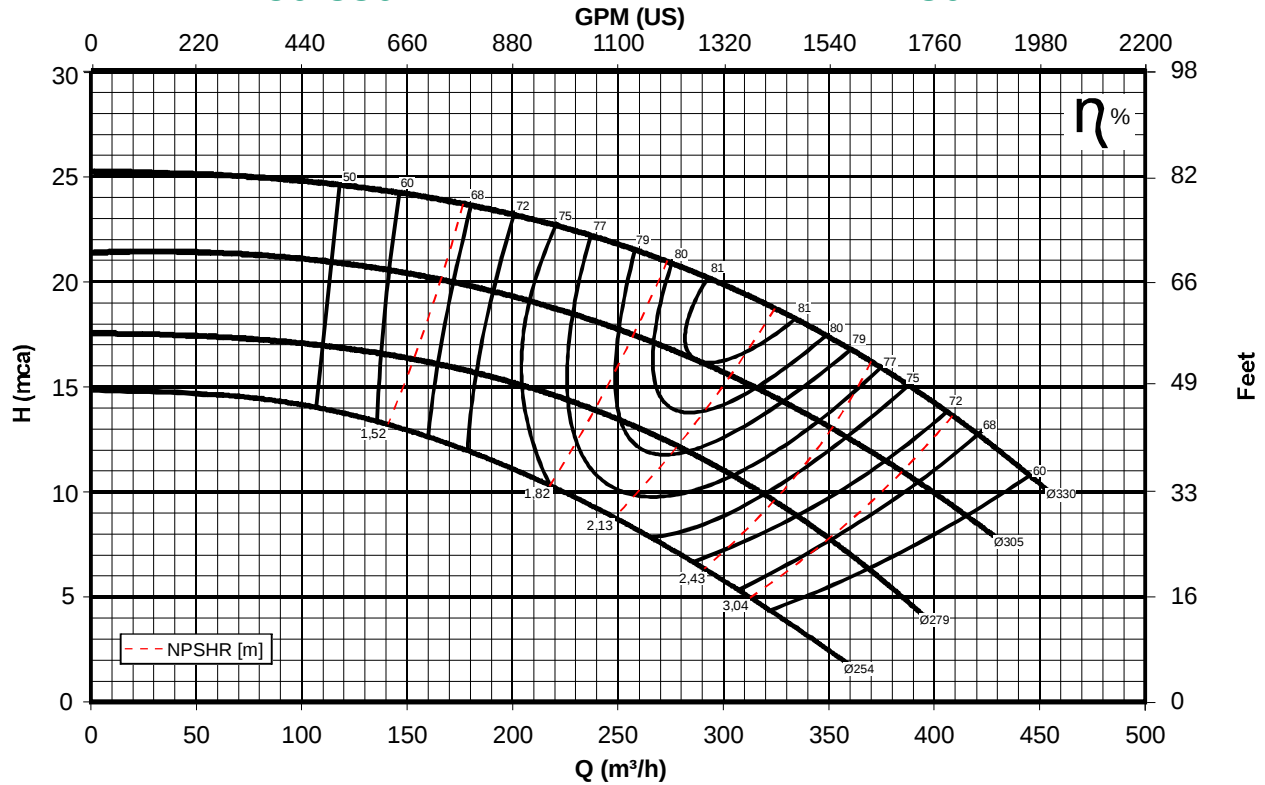
1770 RPM





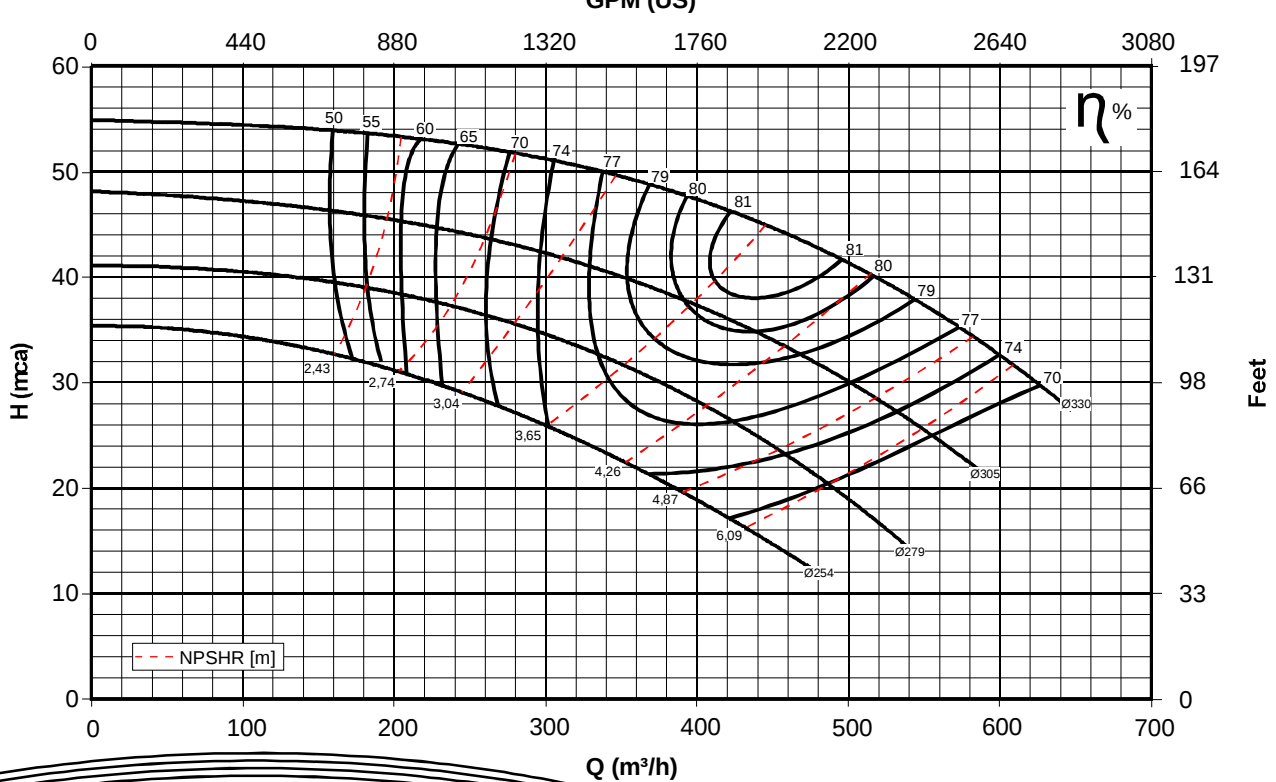
BMI 150-330

1180 RPM



BMI 150-330

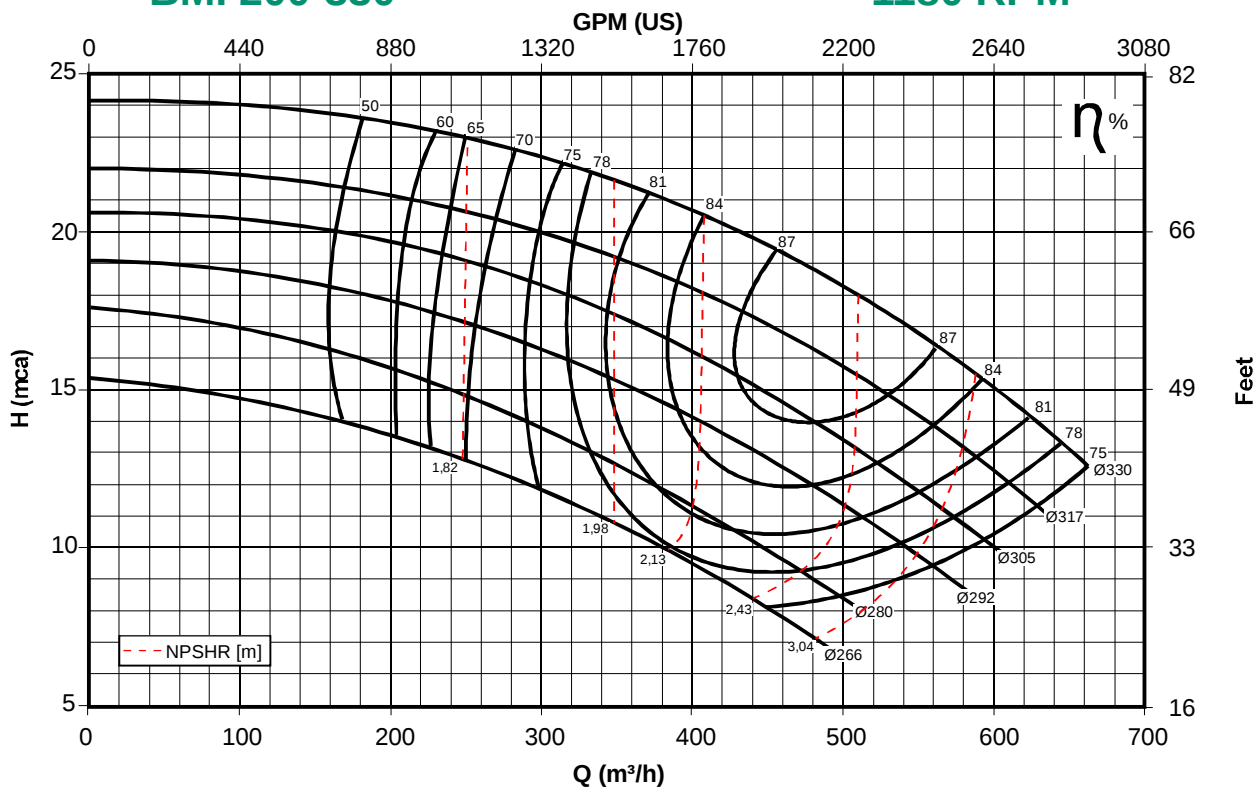
1780 RPM





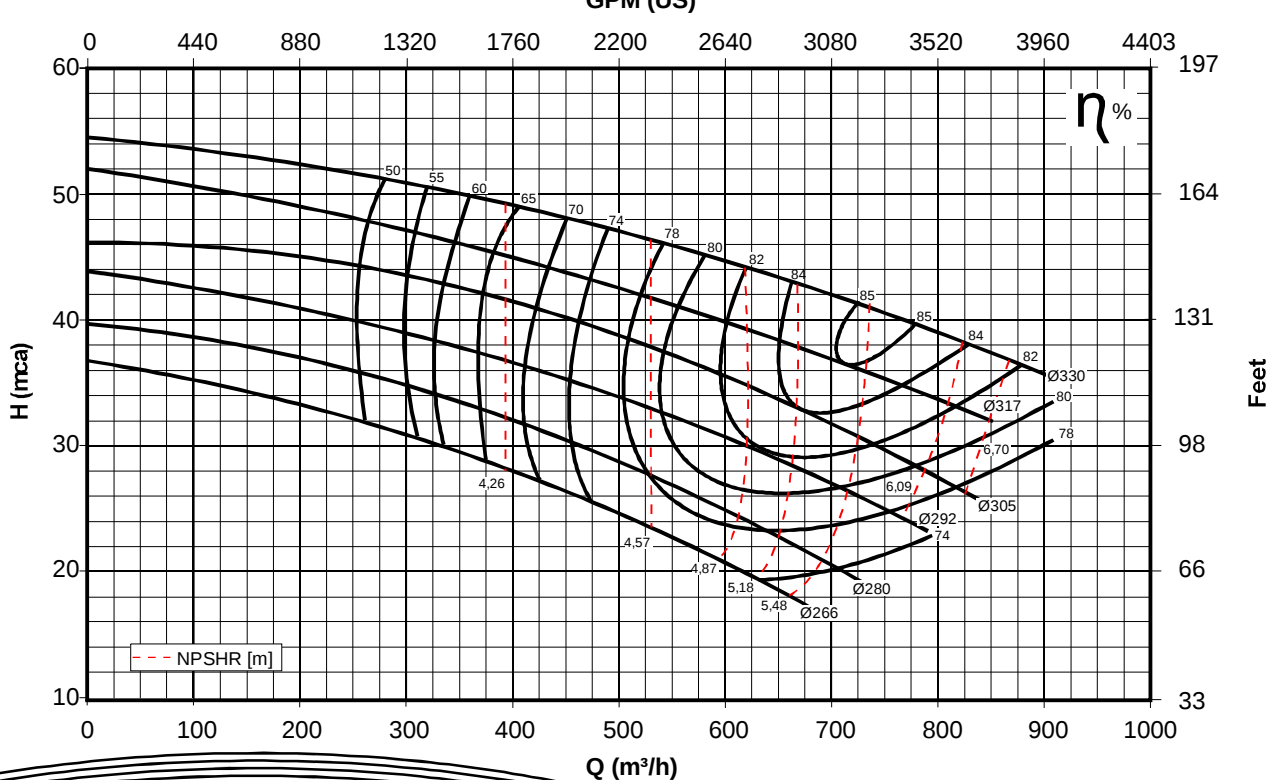
BMI 200-330

1180 RPM



BMI 200-330

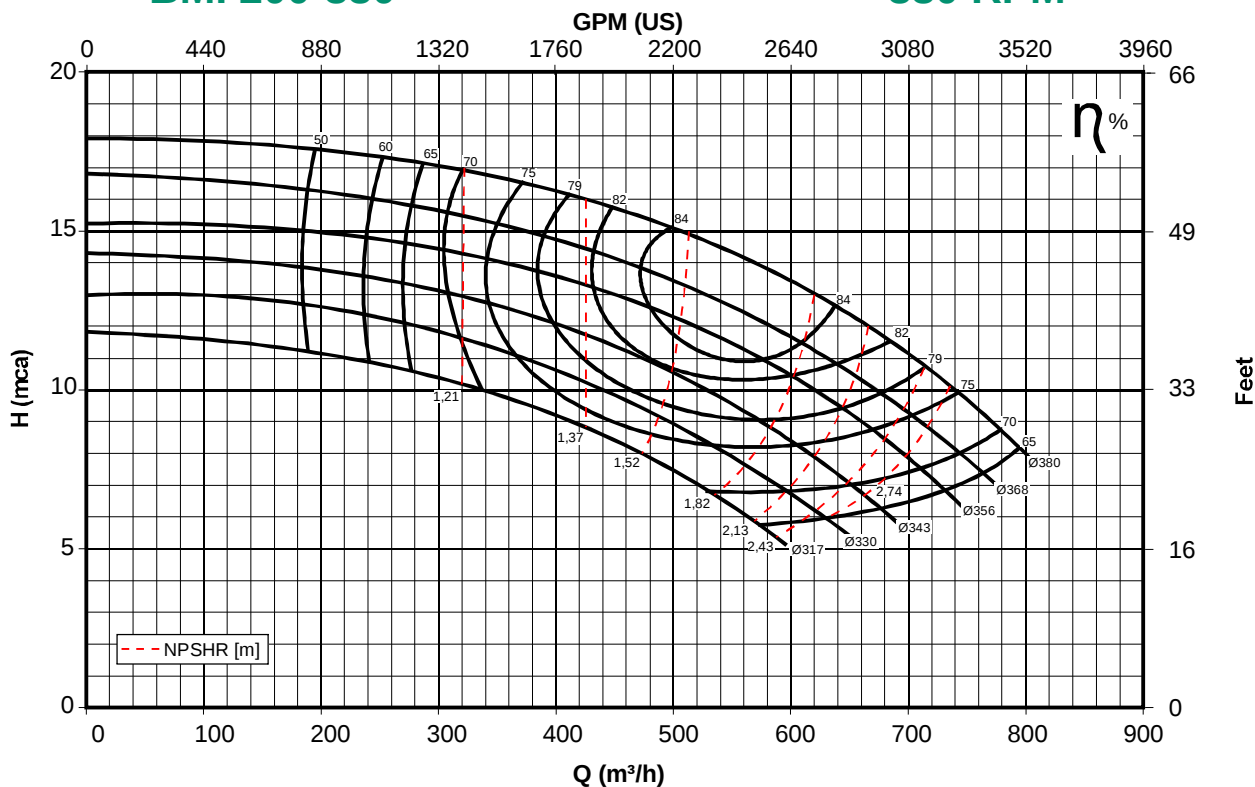
1780 RPM





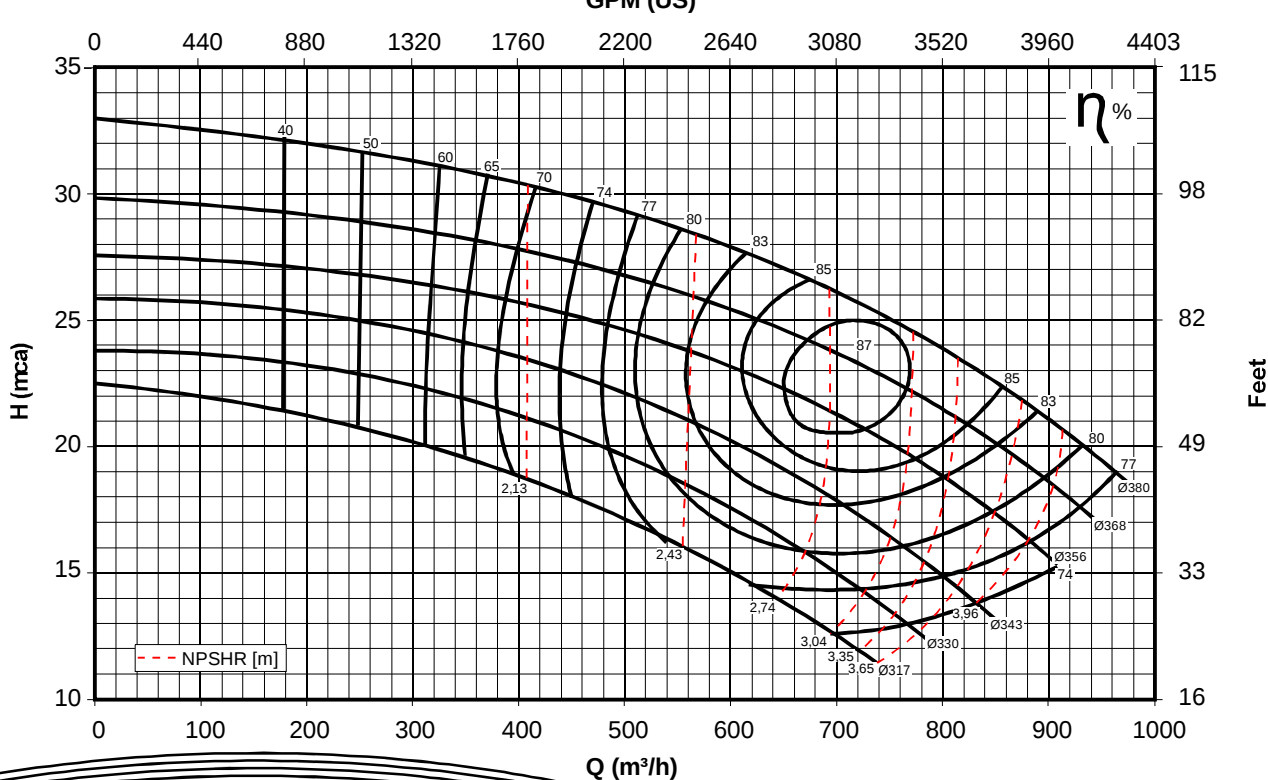
BMI 200-380

880 RPM



BMI 200-380

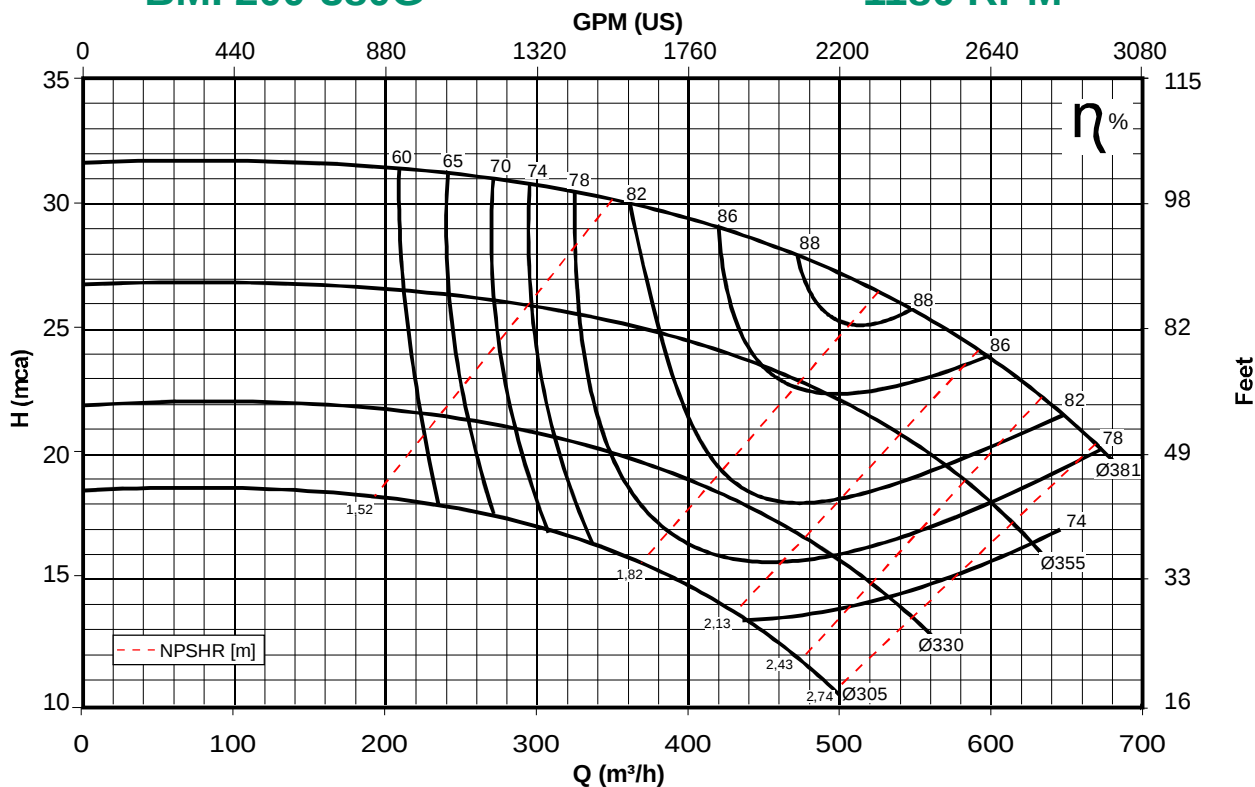
1180 RPM





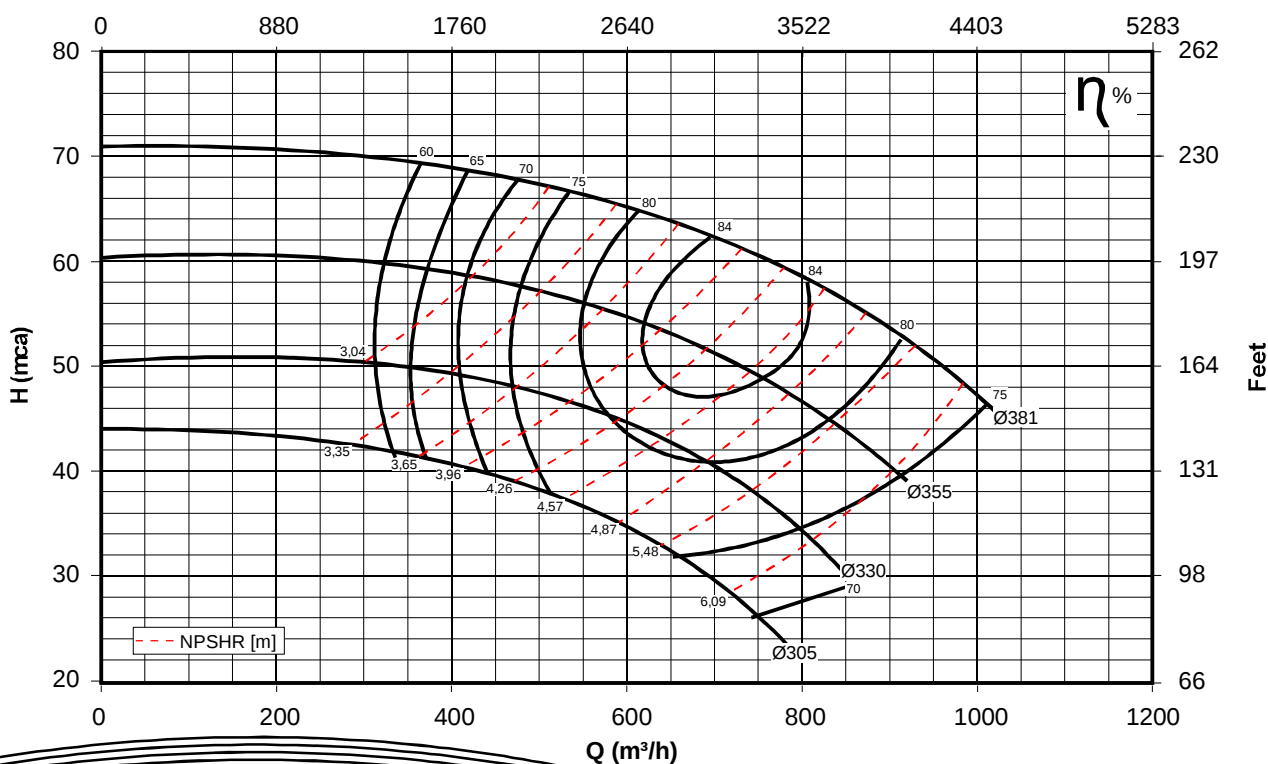
BMI 200-380G

1180 RPM



BMI 200-380G

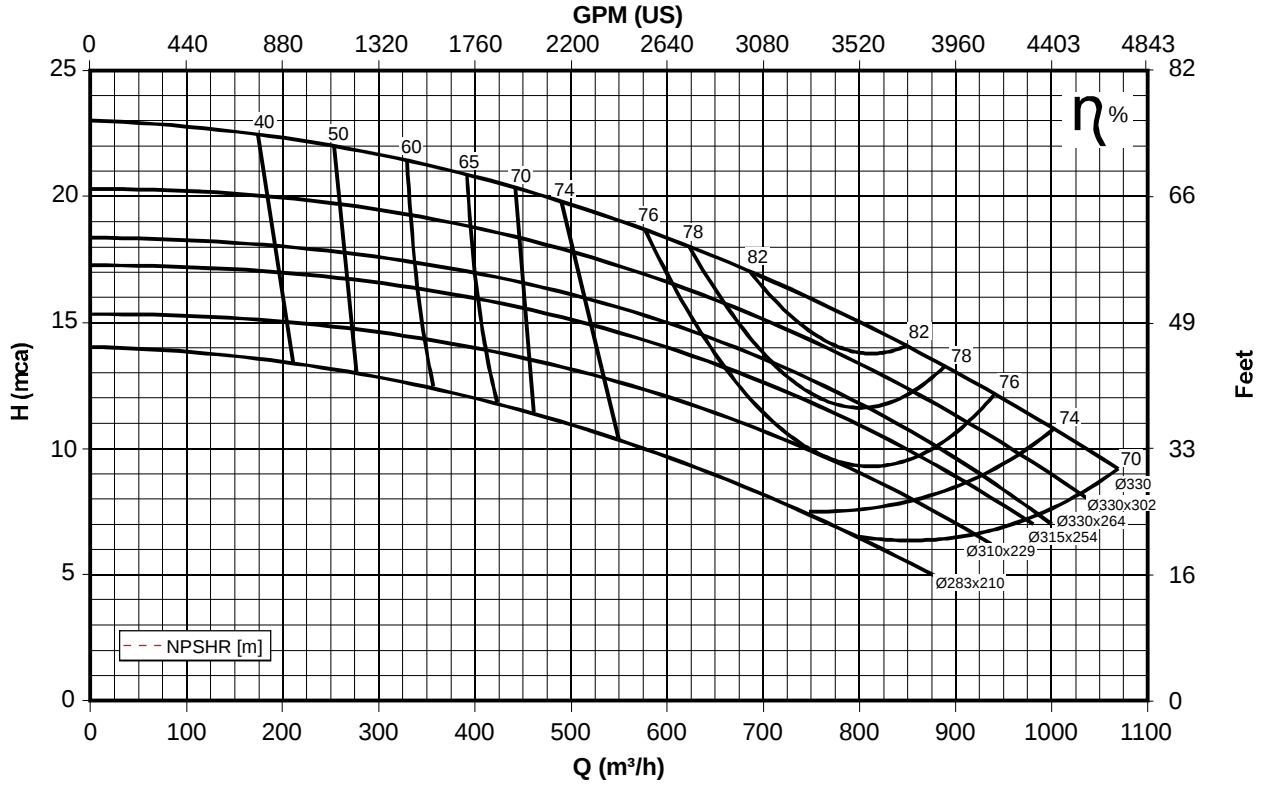
1780 RPM





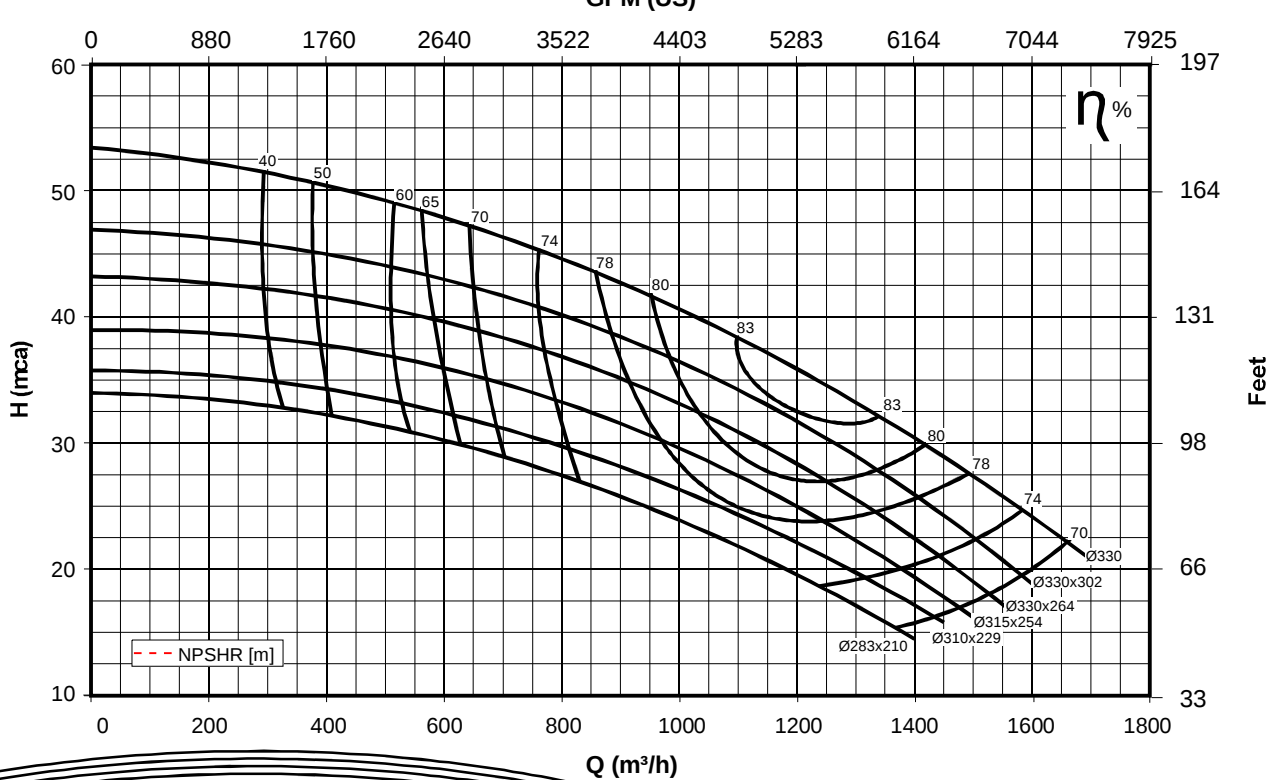
BMI 250-330

1160 RPM



BMI 250-330

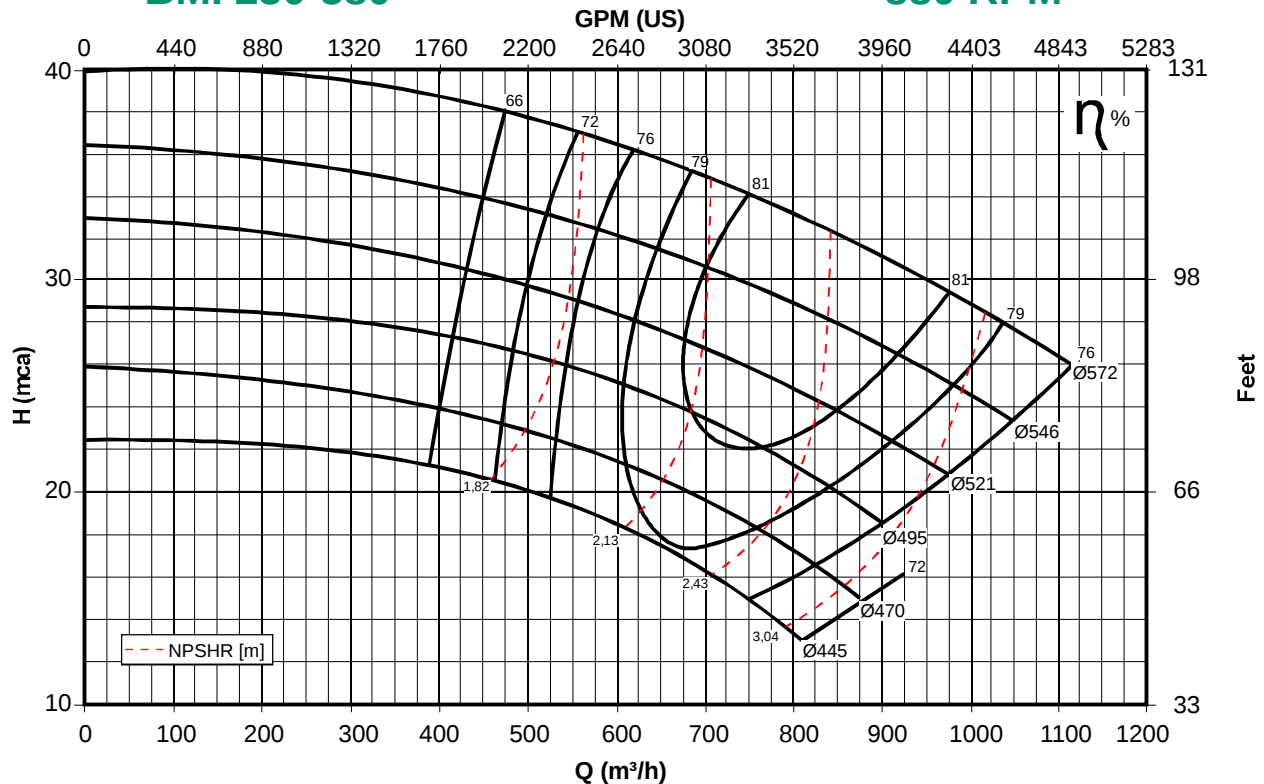
1750 RPM





BMI 250-580

880 RPM



BMI 250-580

1180 RPM

