



CURVE BOOK

**END-SUCTION CENTRIFUGAL PUMPS
TO EN733 (DIN 24255)**





WE HAVE ALL THE TICKS

- ☒ **FOUNDED IN 1932**
- ☒ **LEADING PROVIDER OF TOP QUALITY PRODUCTS**
- ☒ **LOCAL MANUFACTURE**
- ☒ **ACCREDITED PUMP REPAIR/SERVICE WORKSHOP**
- ☒ **TAILOR MADE PUMPING SOLUTIONS**
- ☒ **STATE OF ART TRAINING CENTRE**
- ☒ **CBS: QUALITY MANAGEMENT SYSTEM**
- ☒ **BEE ACCREDITED**
- ☒ **DEEP APPLICATION KNOWLEDGE**



Version 1 - NT, NSHD, NB & DV Curve Book: Rapid Allweiler Pumps

Whilst all care has been taken to ensure the accuracy of the information contained in this brochure was correct at the time of printing, please be advised we cannot be held responsible for any errors contained within and or changes that may have taken place. Dimensions contained within are for reference purpose only and should not be used for construction; certified drawings are available upon request. For confirmation of any information contained herewith please contact a member of our technical sales team.

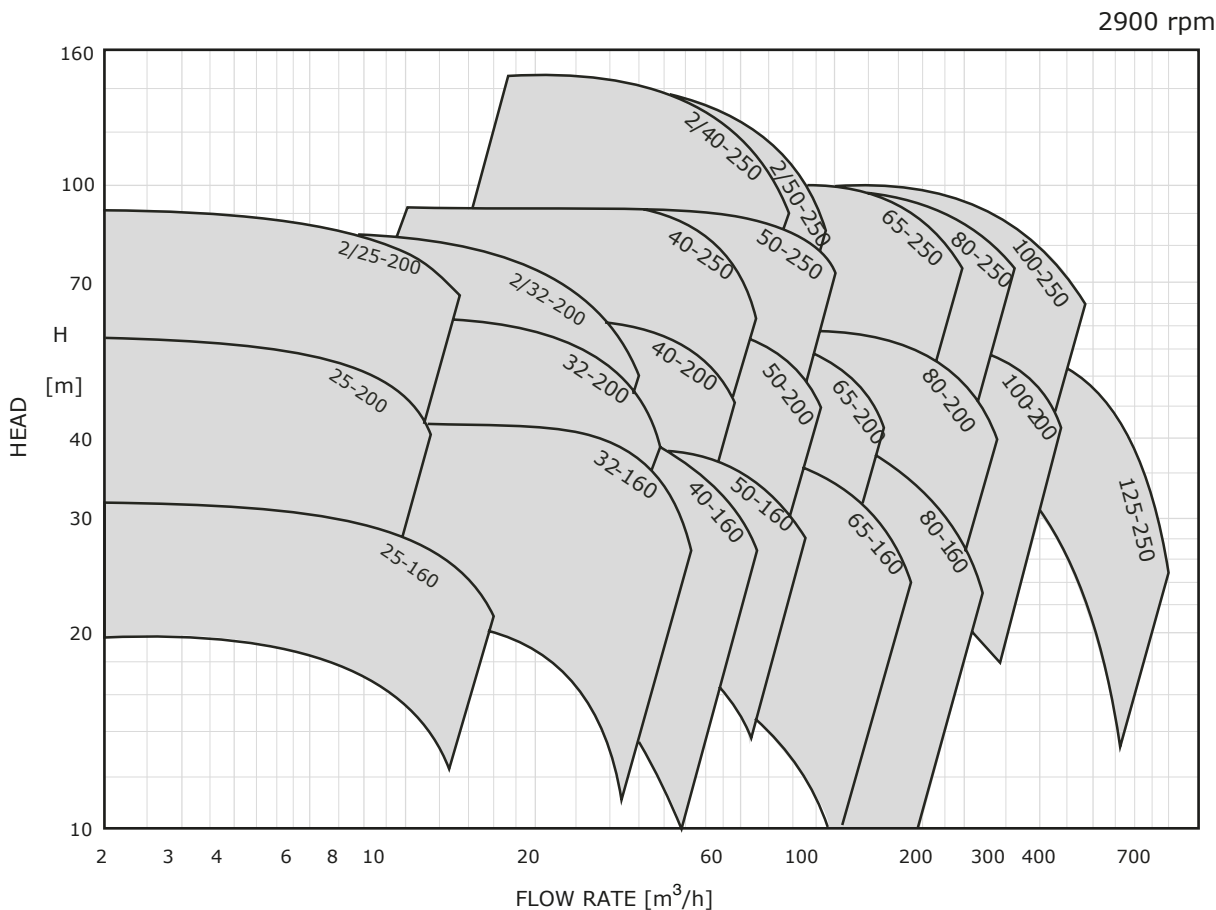
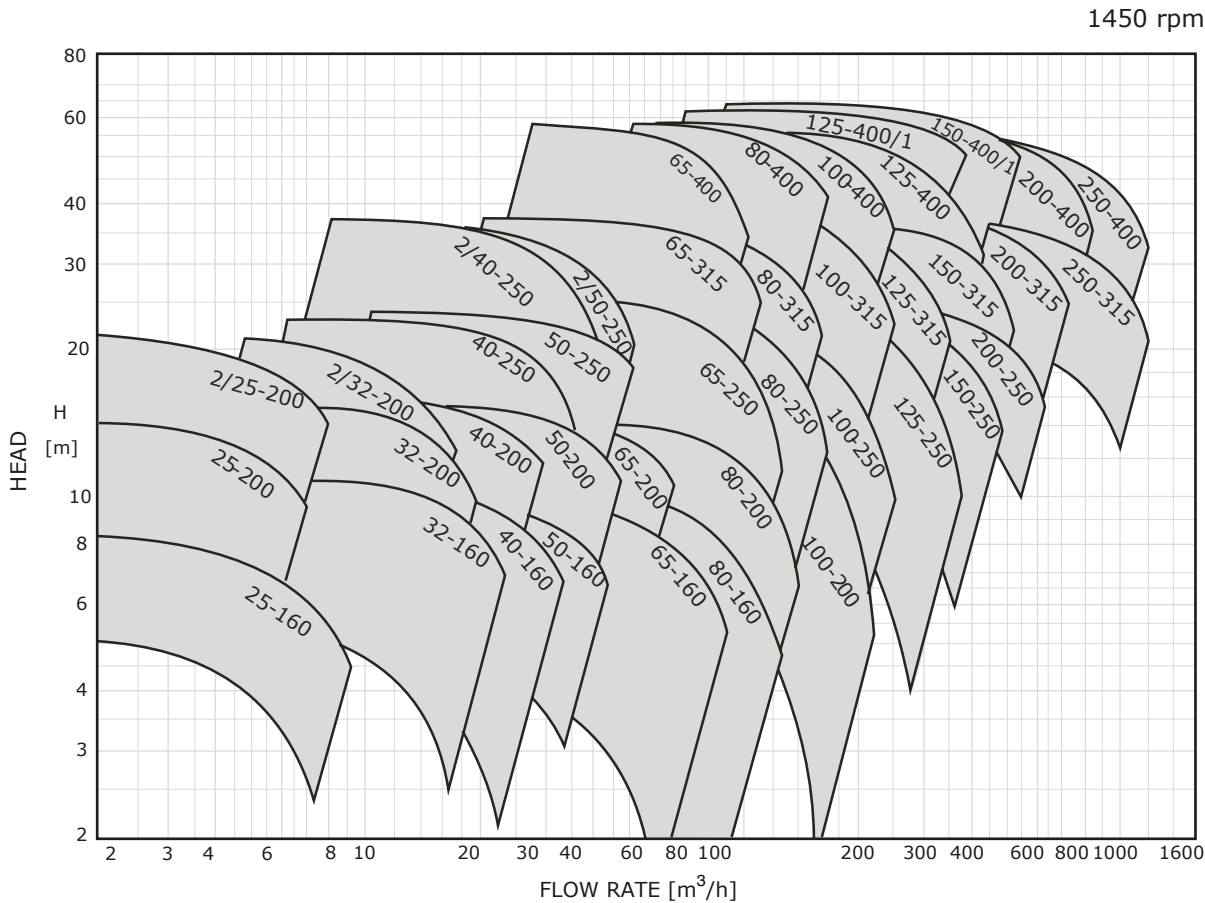
COLFAX
Fluid Handling

ALLWEILER 

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS

TOMBSTONE CURVES



Size	Pg. no.	
	1450	2900
25-160	2	42
25-200	3	43
2/25-200	4	44
32-160	5	45
32-200	6	46
2/32-200	7	47
40-160	8	48
40-200	9	49
40-250	10	50
2/40-250	11	51
50-160	12	52
50-200	13	53
50-250	14	54
2/50-250	15	55
65-160	16	56
65-200	17	57
65-250	18	58
65-315	19	
65-400	20	
80-160	21	59
80-200	22	60
80-250	23	61
80-315	24	
80-400	25	
100-200	26	62
100-250	27	63
100-315	28	
100-400	29	
125-250	30	64
125-315	31	
125-400	32	
125-400/1	33	
150-250	34	
150-315	35	
150-400/1	36	
200-250	37	
200-315	38	
200-400	39	
250-315	40	
250-400	41	

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

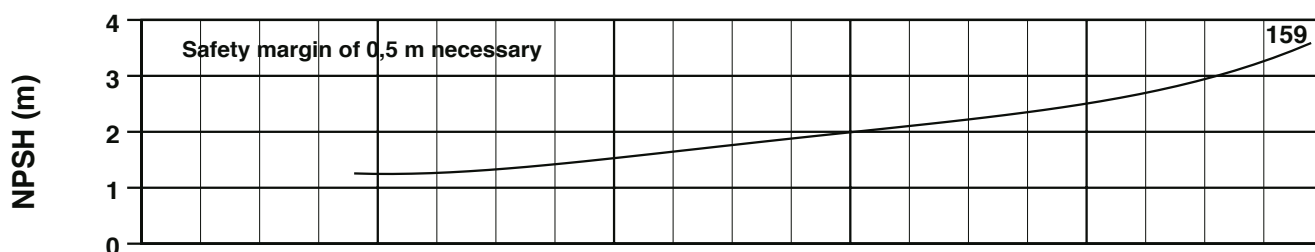
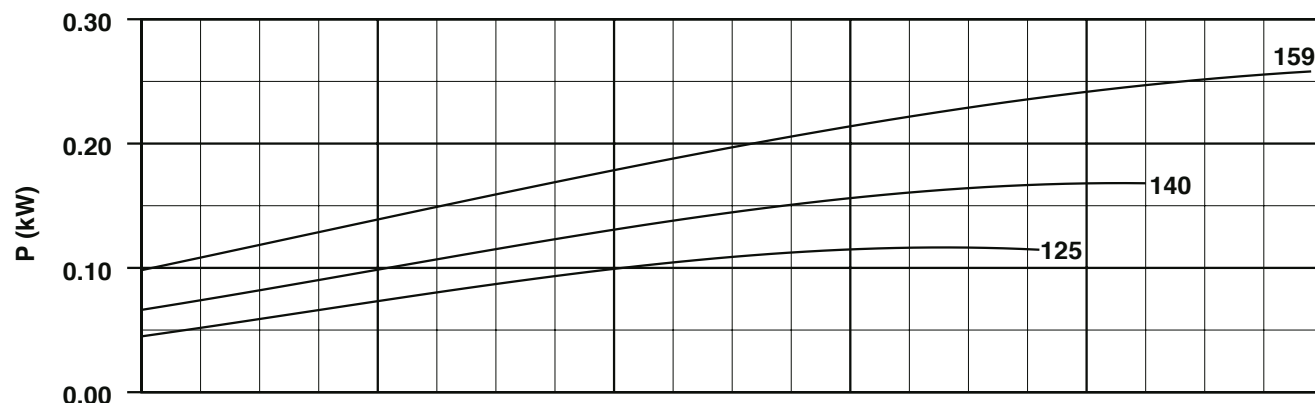
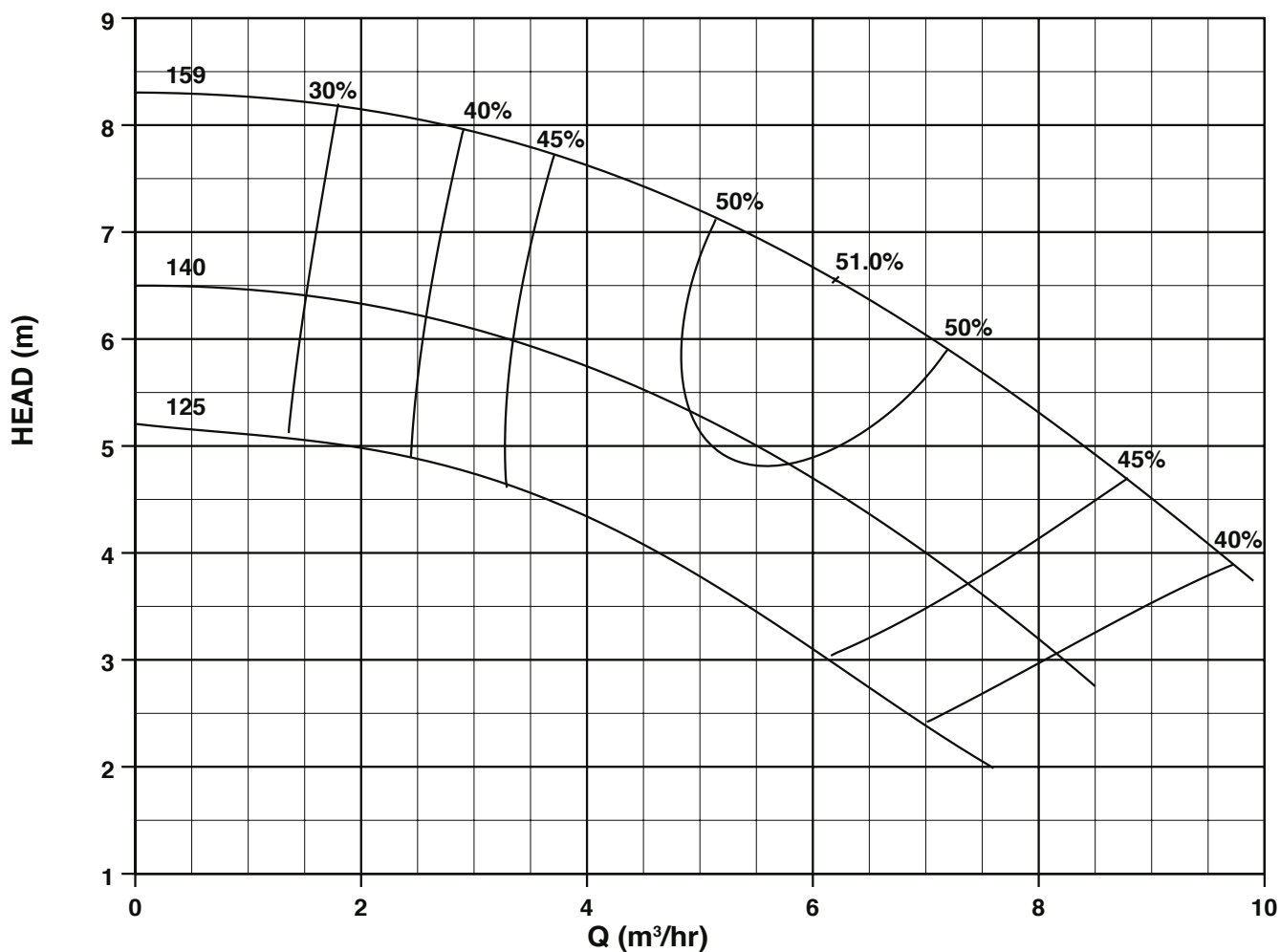
Suction Diameter
25mm

Discharge Diameter
25mm

DIN 24 255
NT 25-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

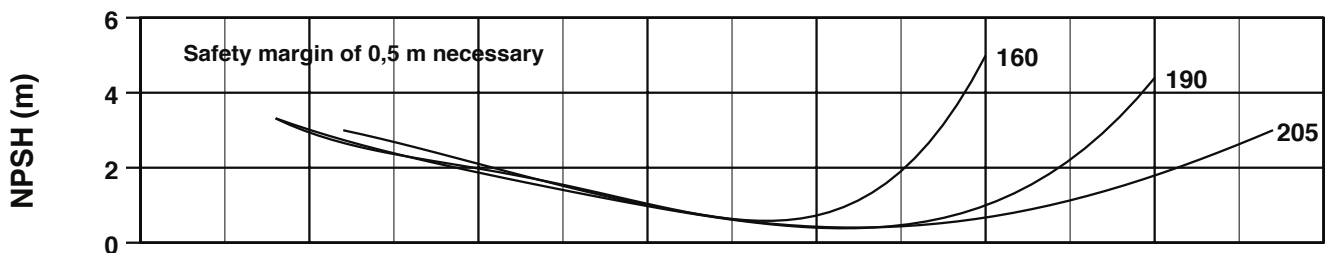
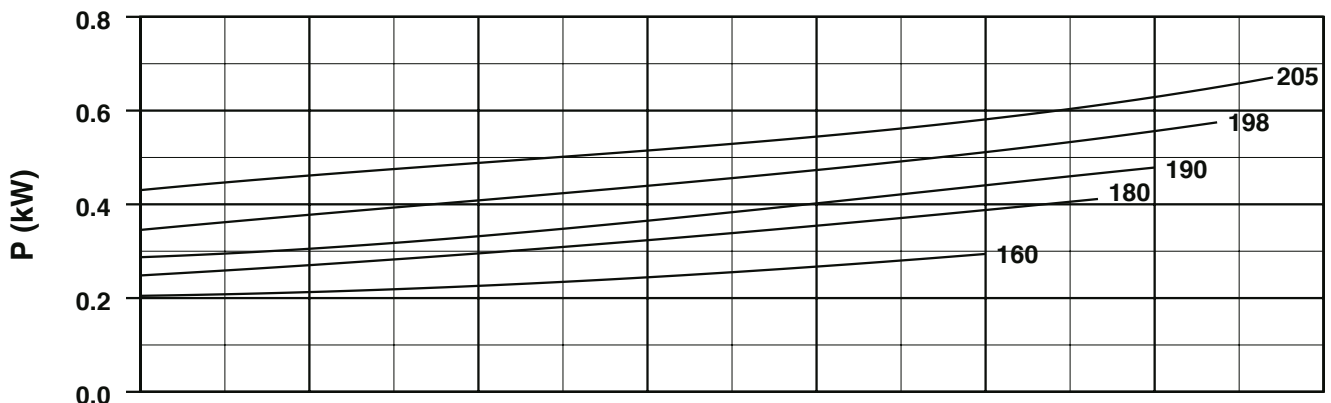
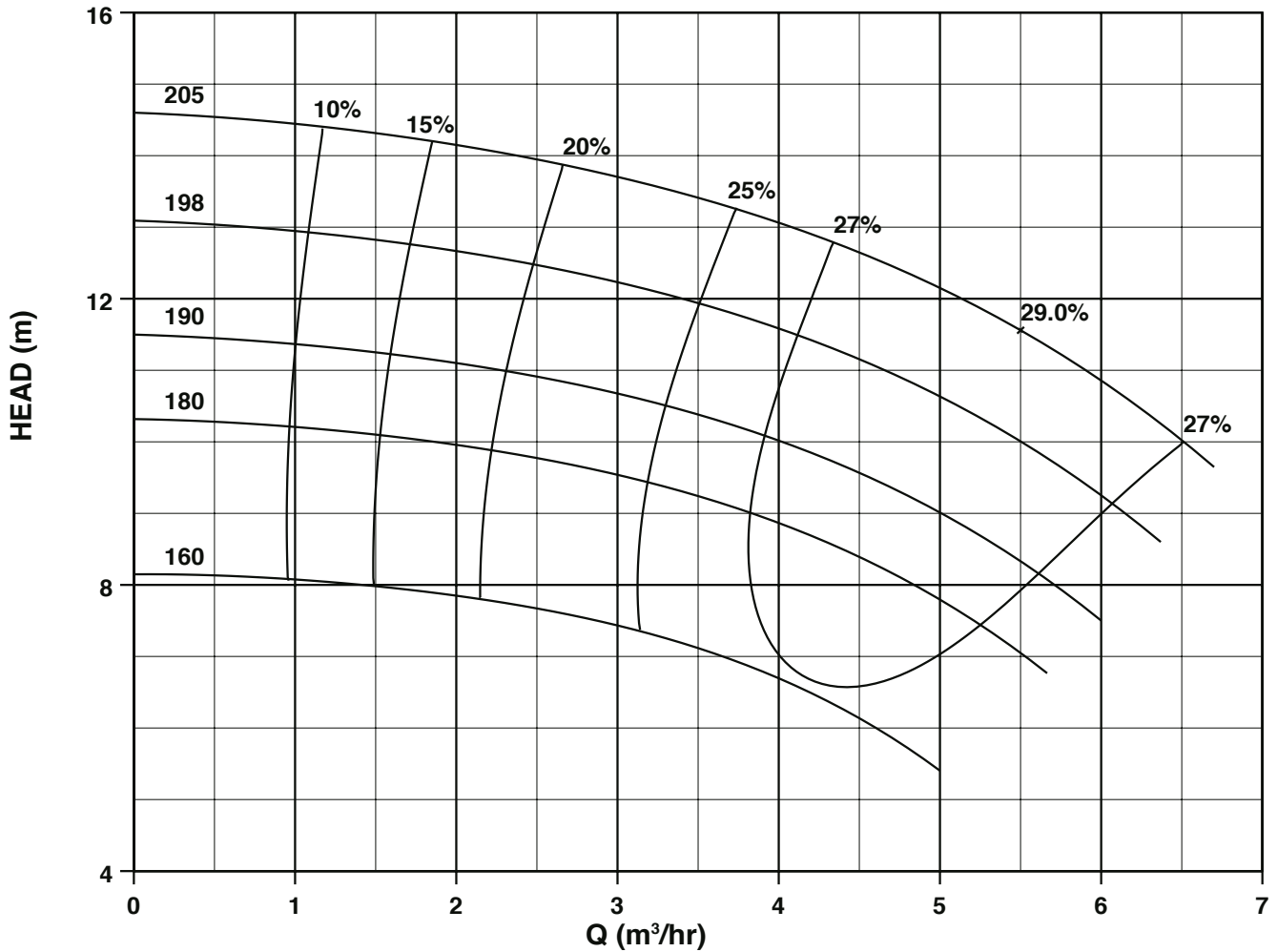
Suction Diameter
40mm

Discharge Diameter
25mm

DIN 24 255
NT 25-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

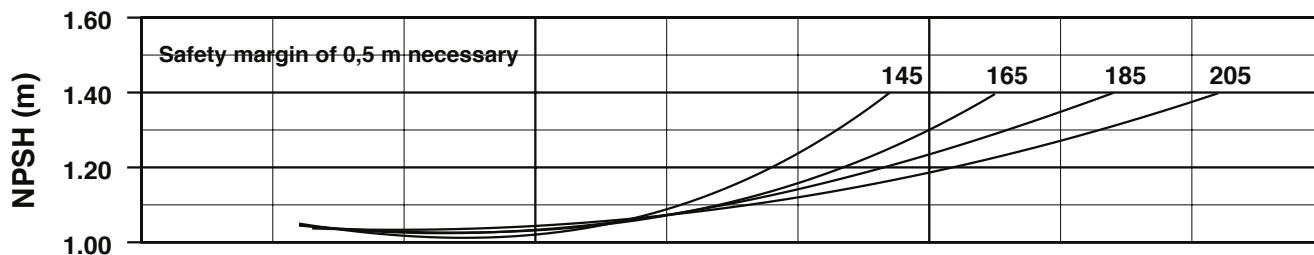
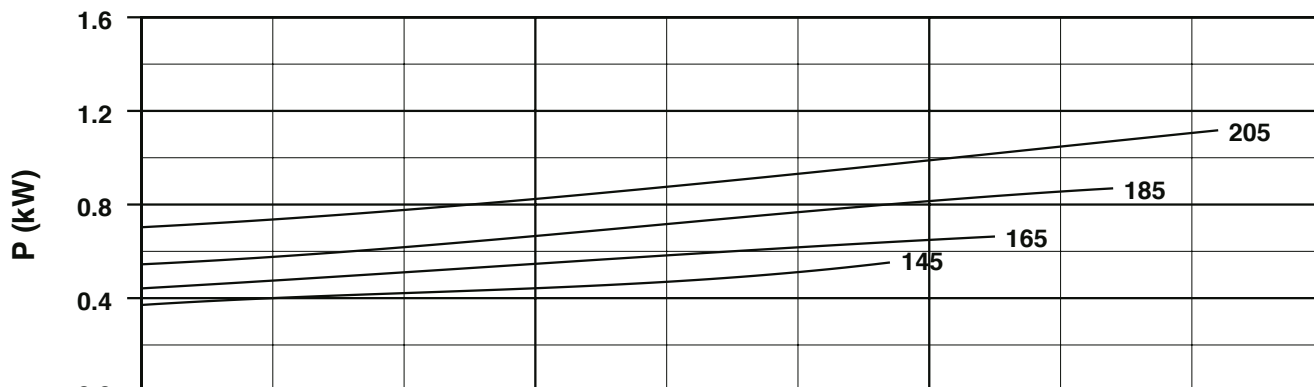
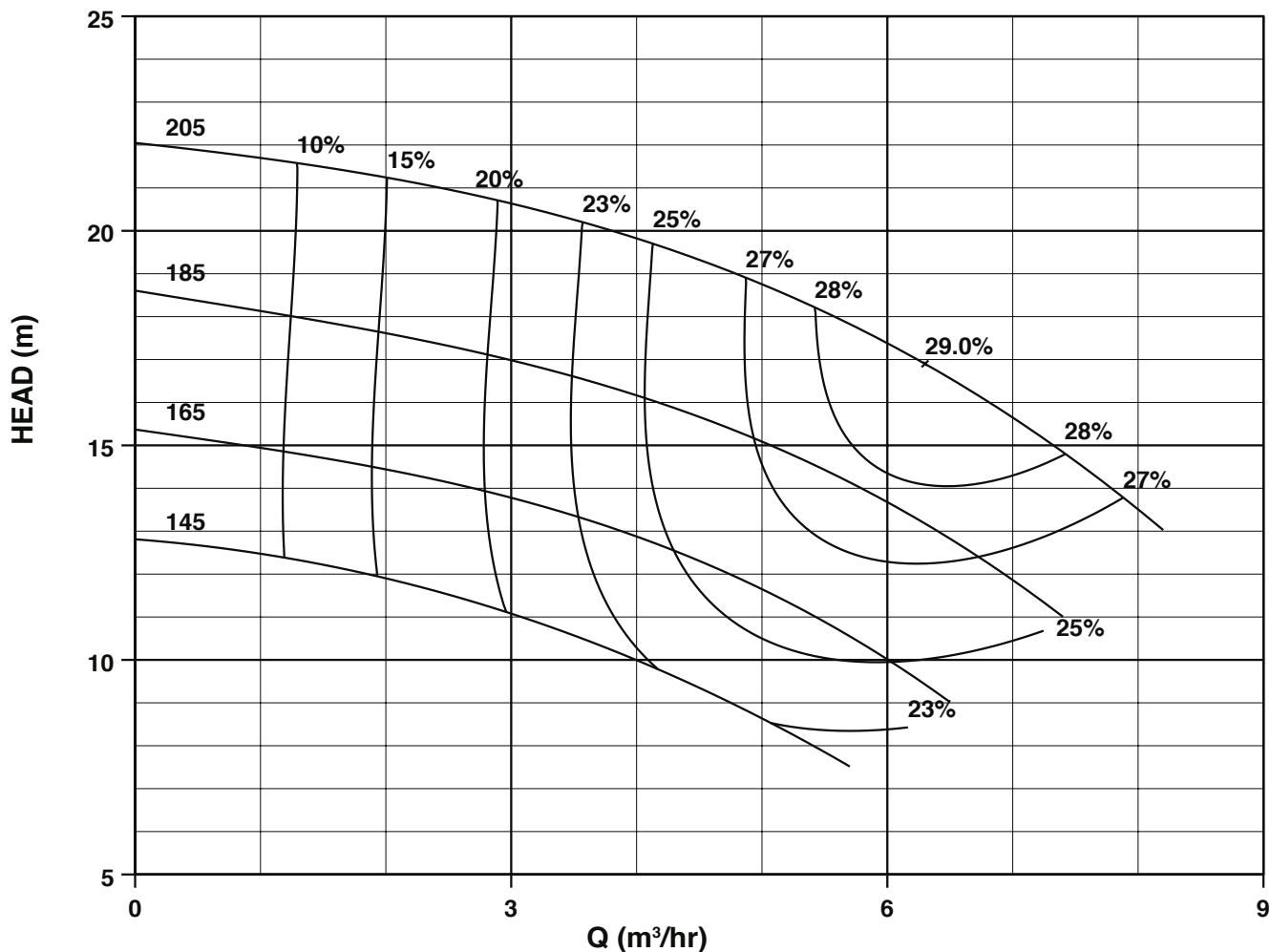
Suction Diameter
40mm

Discharge Diameter
25mm

DIN 24 255
NT 2/25-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



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END-SUCTION CENTRIFUGAL PUMPS



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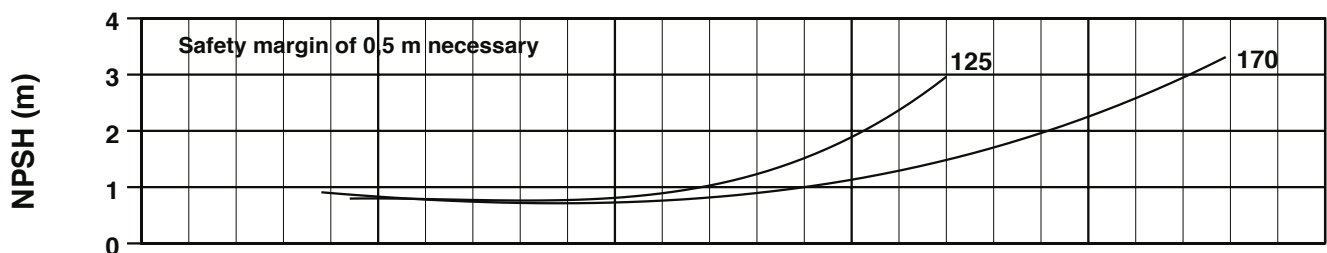
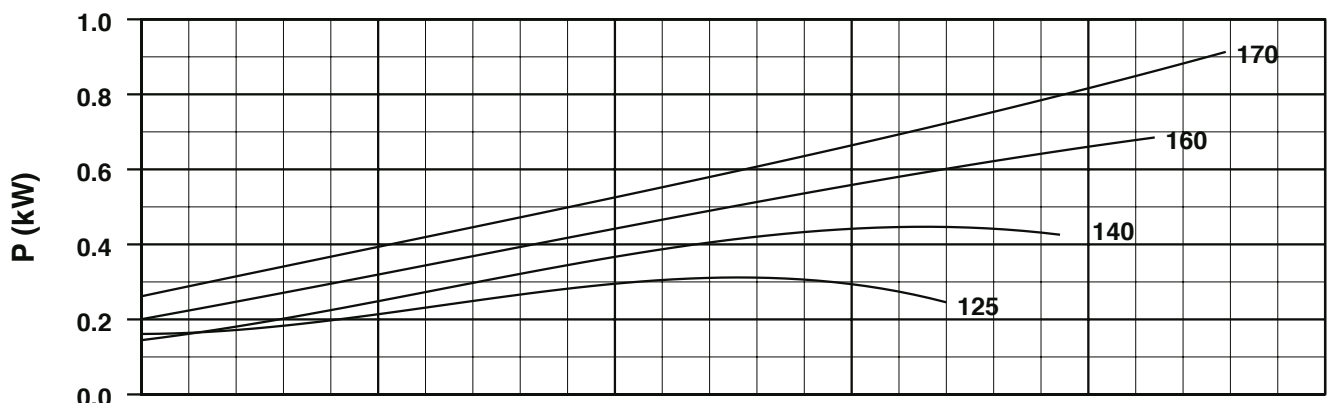
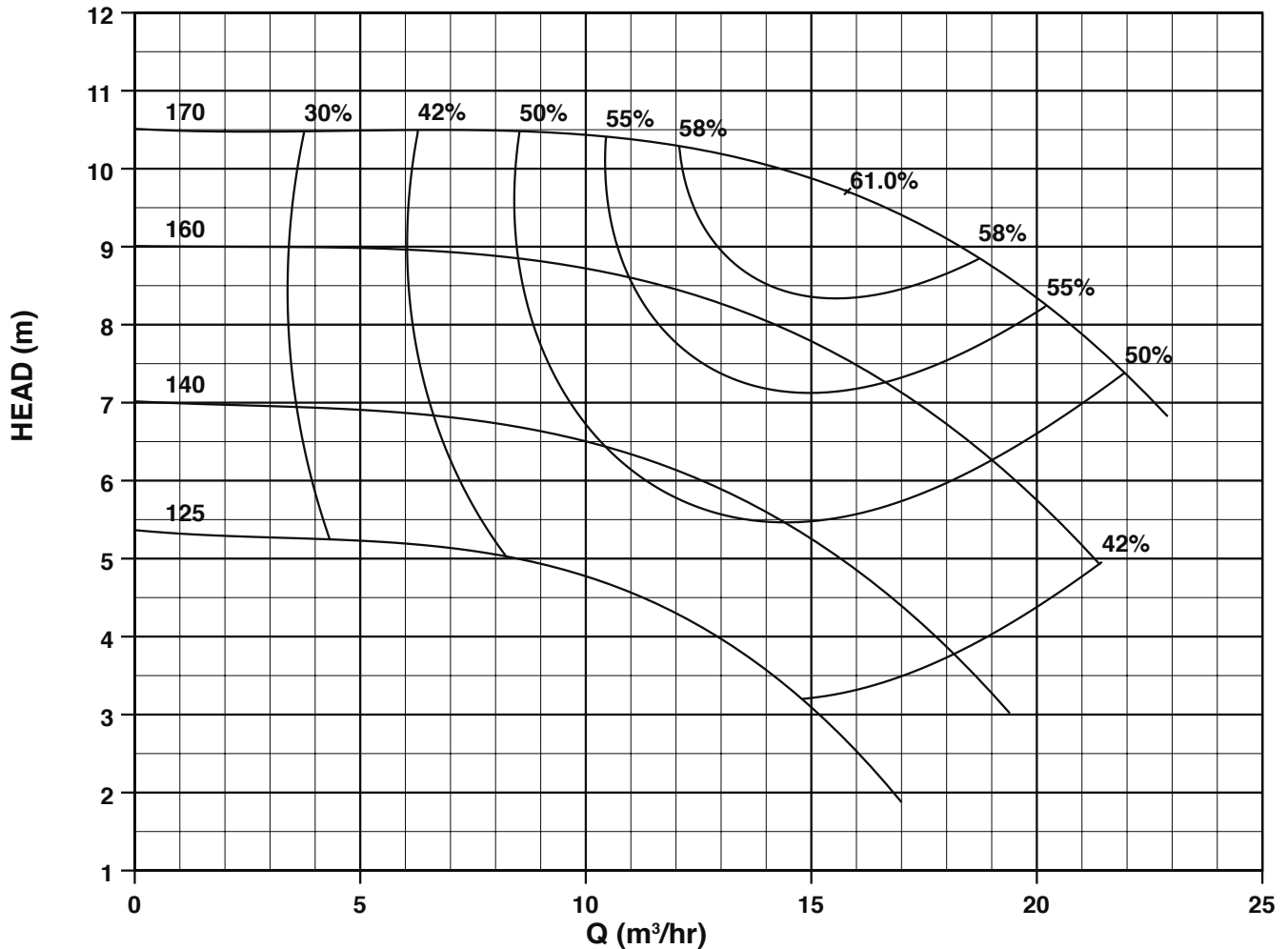
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT 32-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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Issue Date
OCTOBER 2005

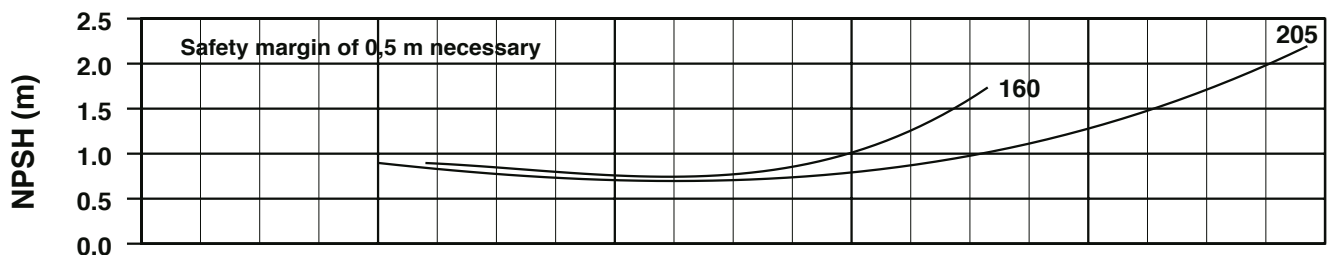
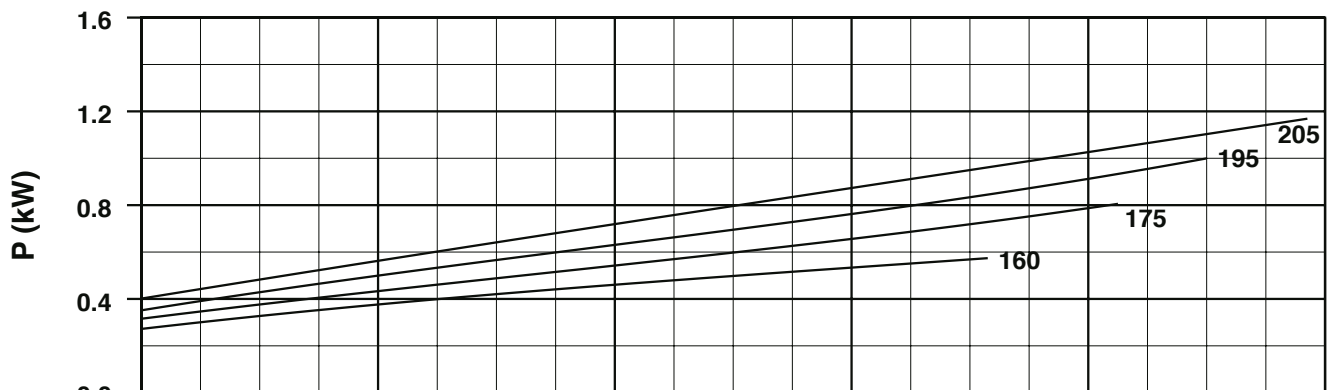
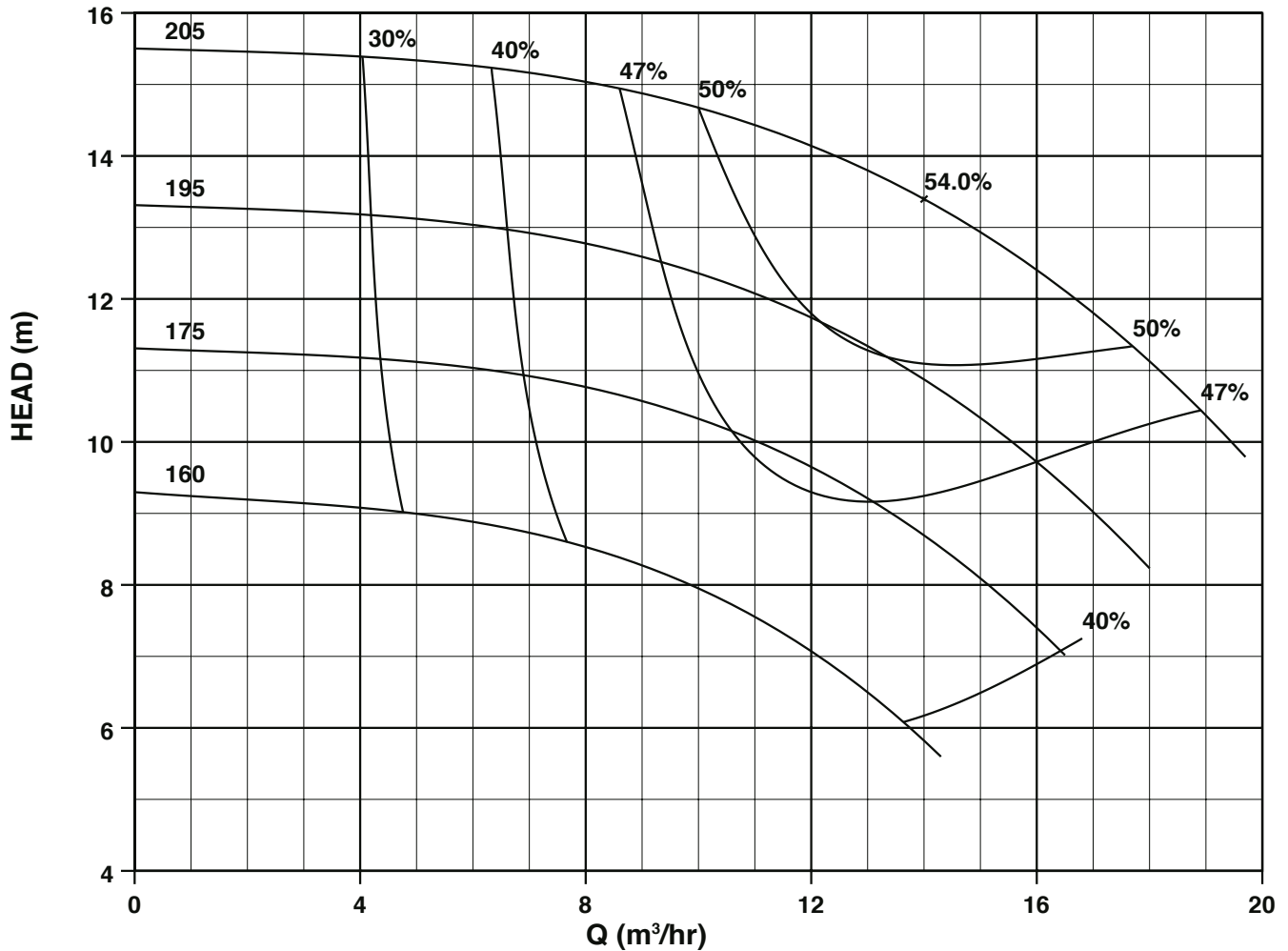
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT 32-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
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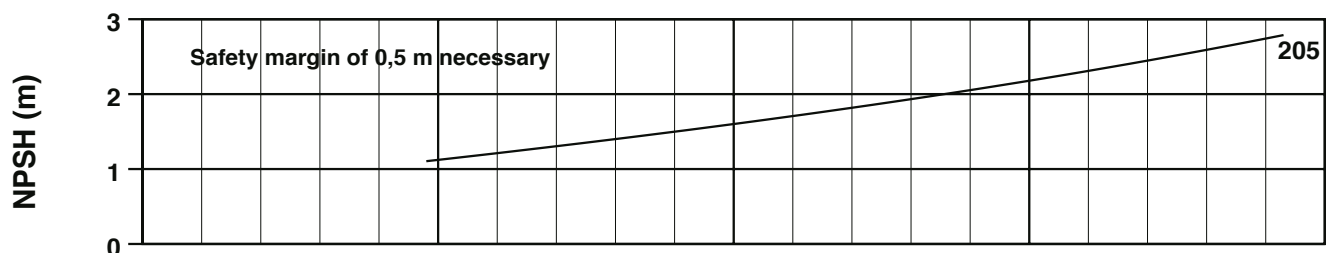
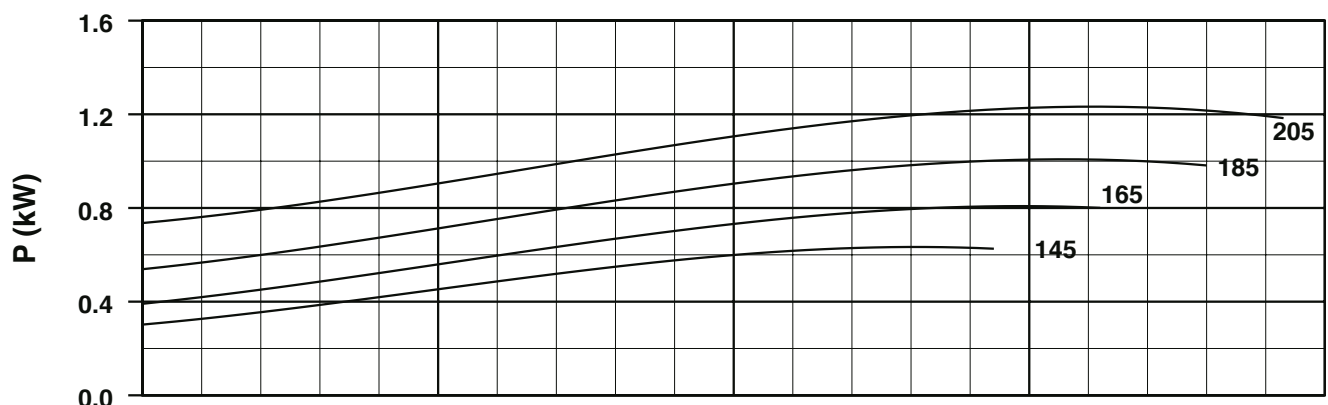
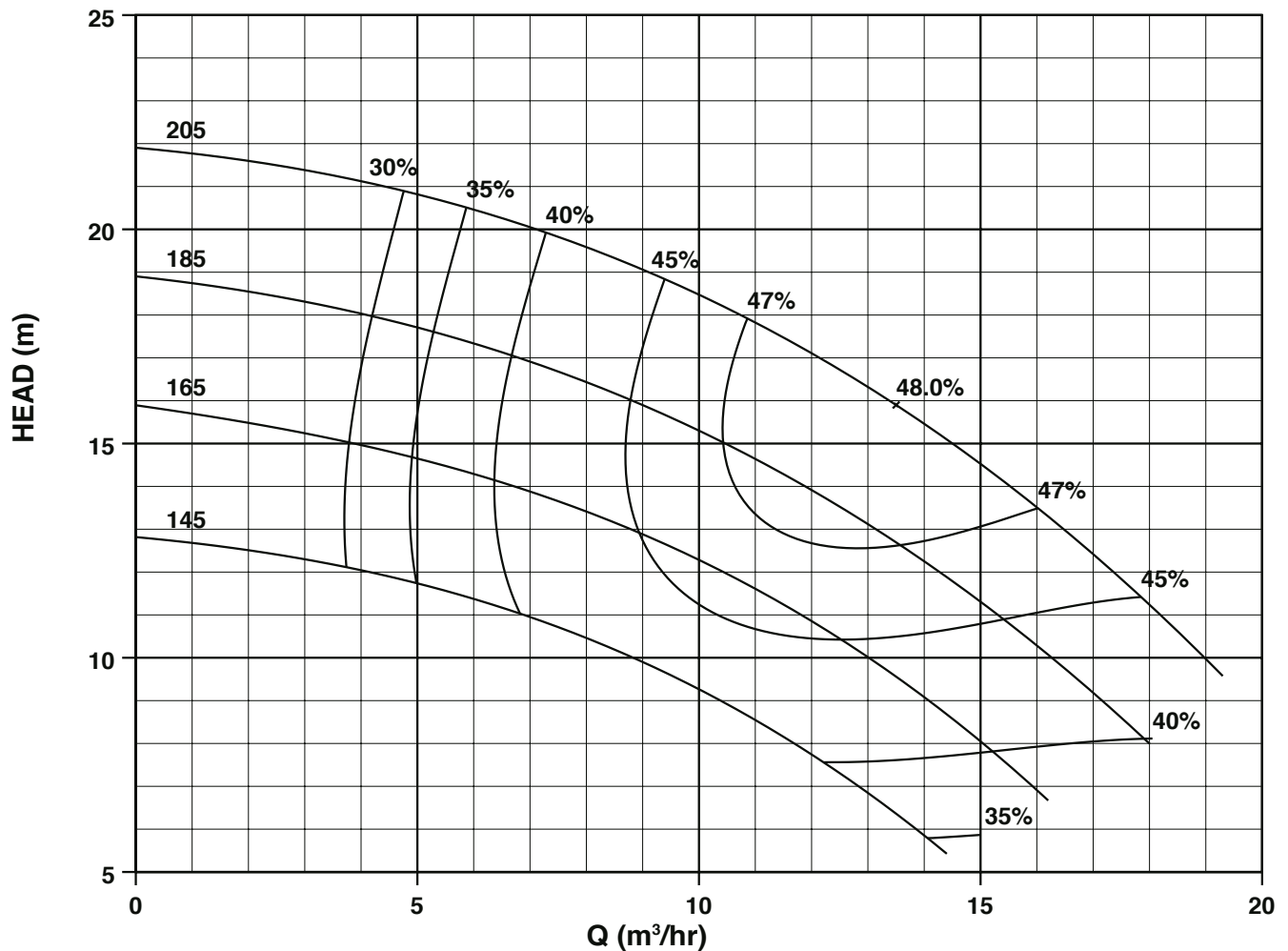
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT/NS 2/32-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
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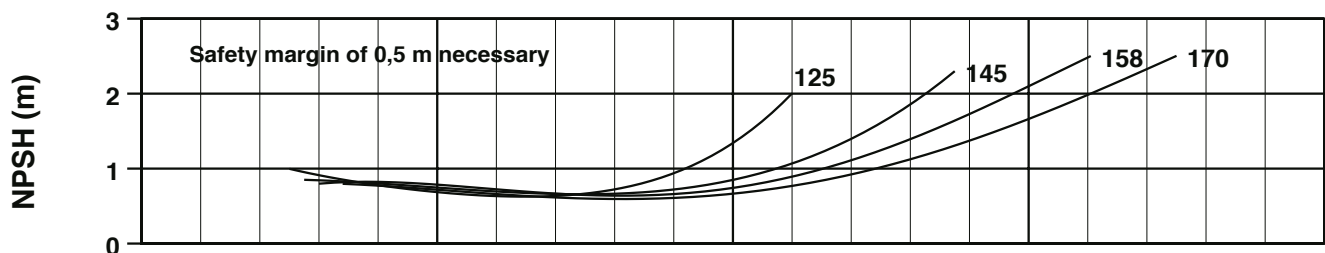
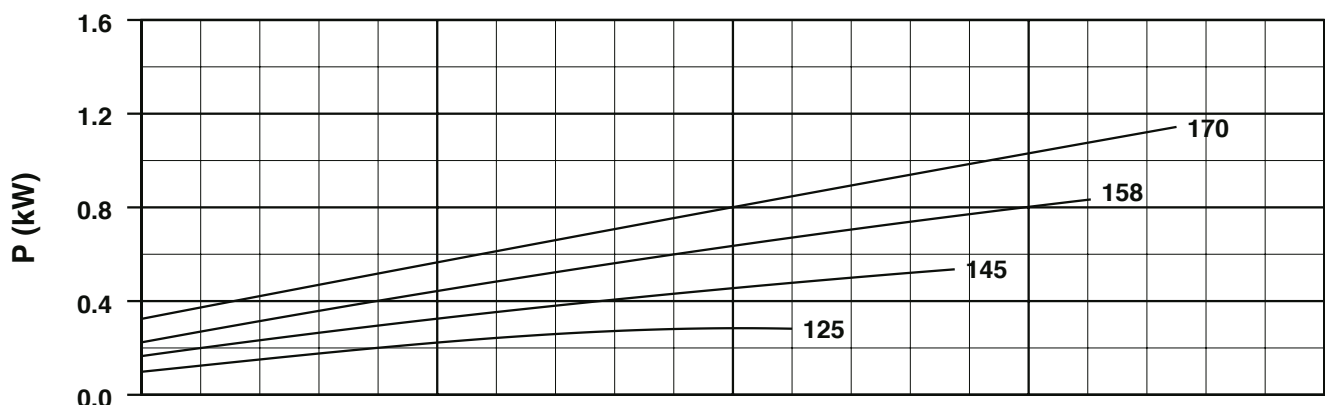
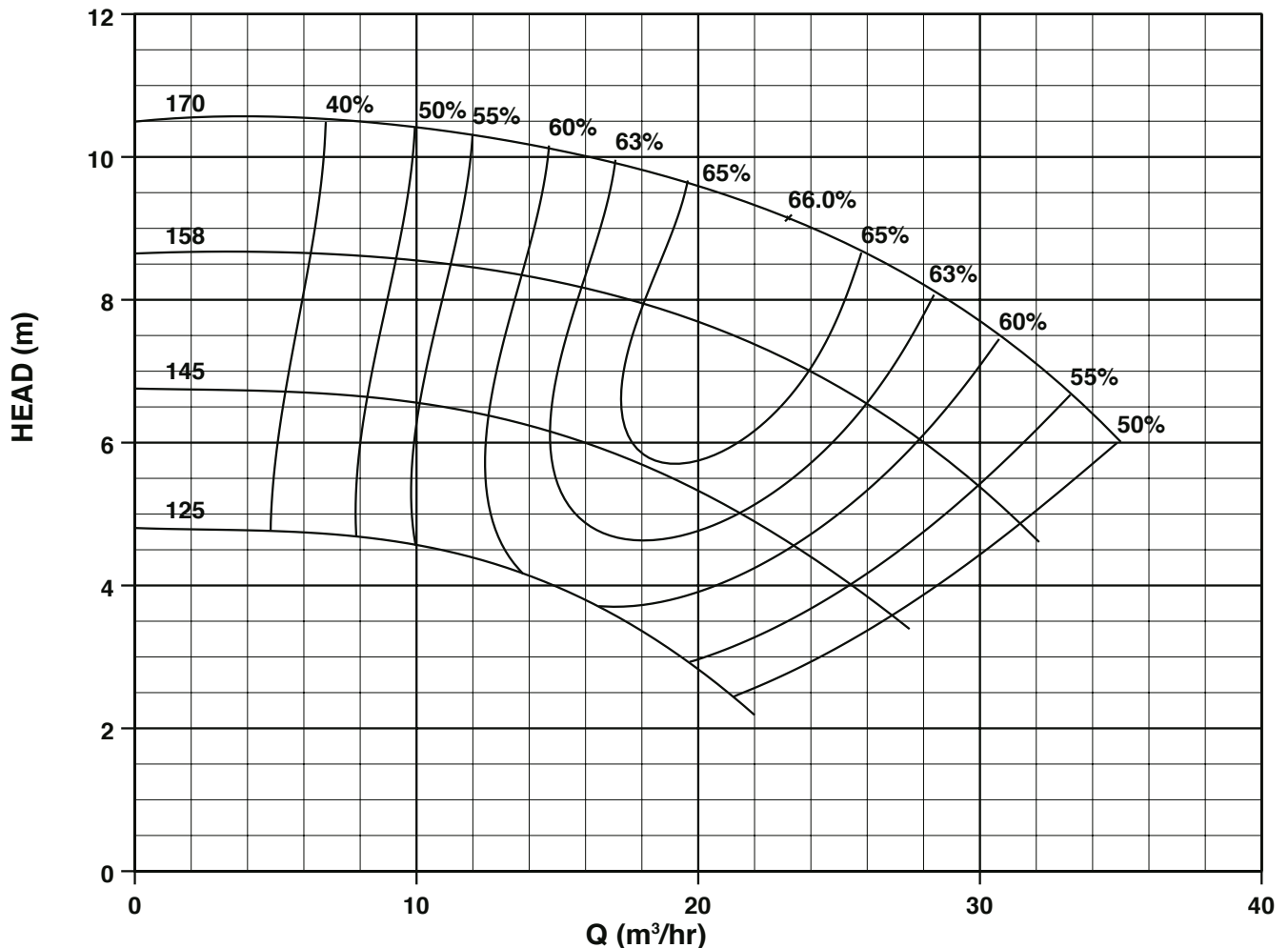
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

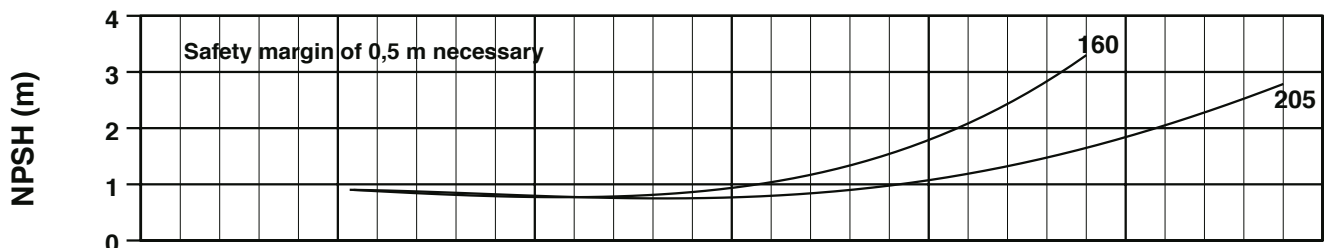
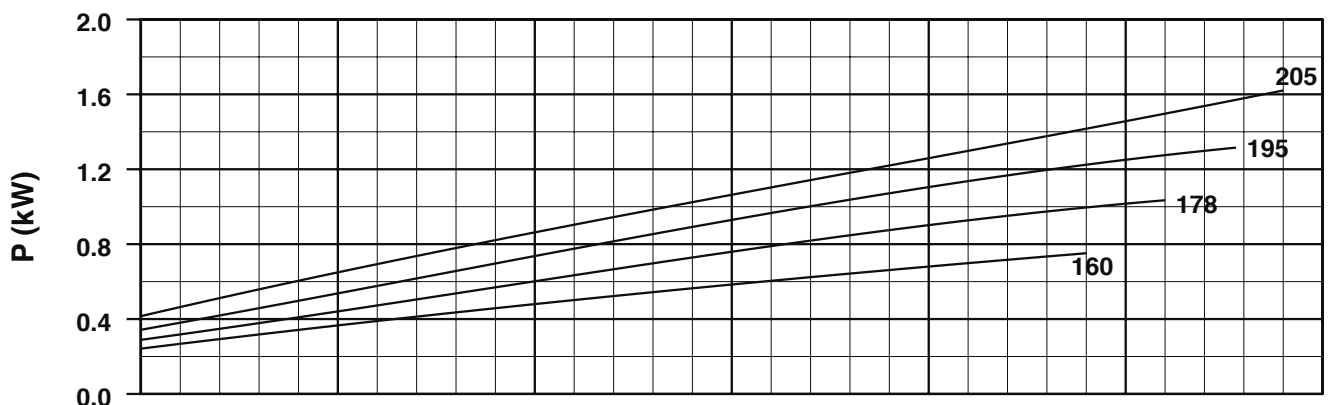
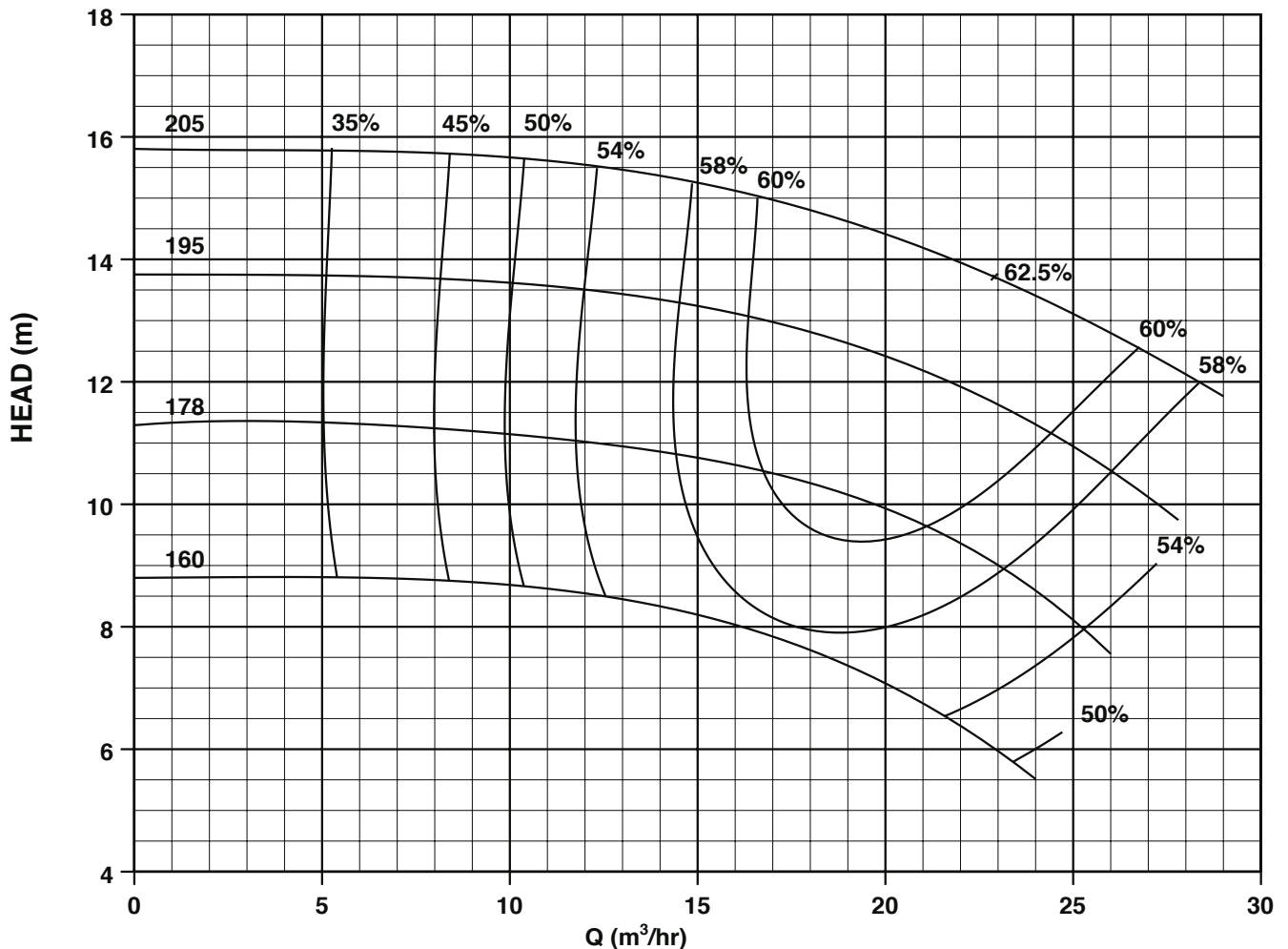
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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OCTOBER 2005

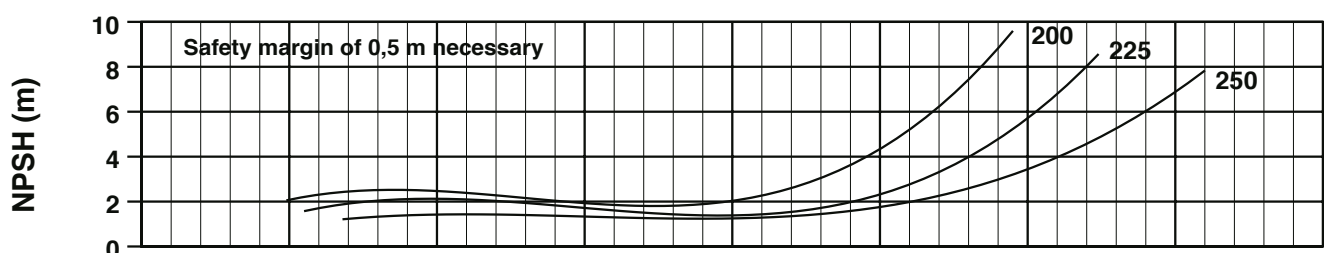
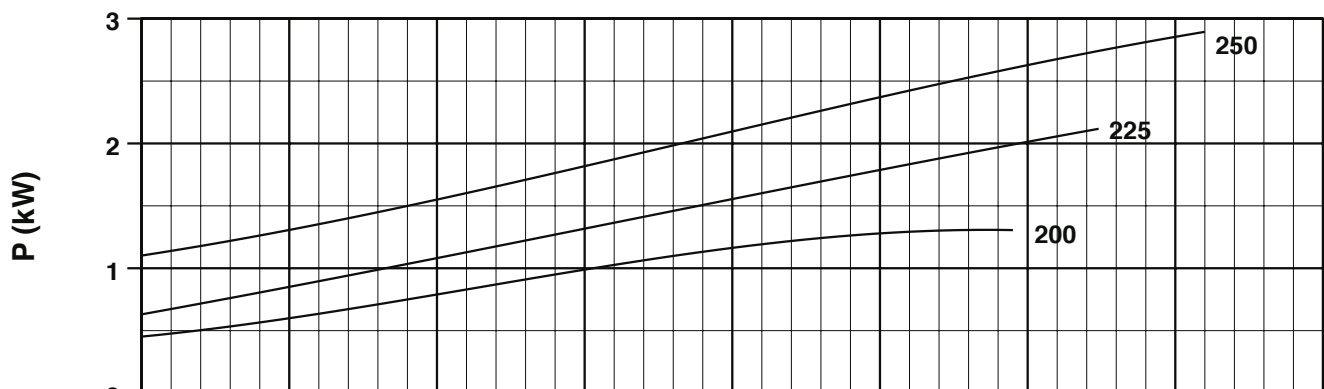
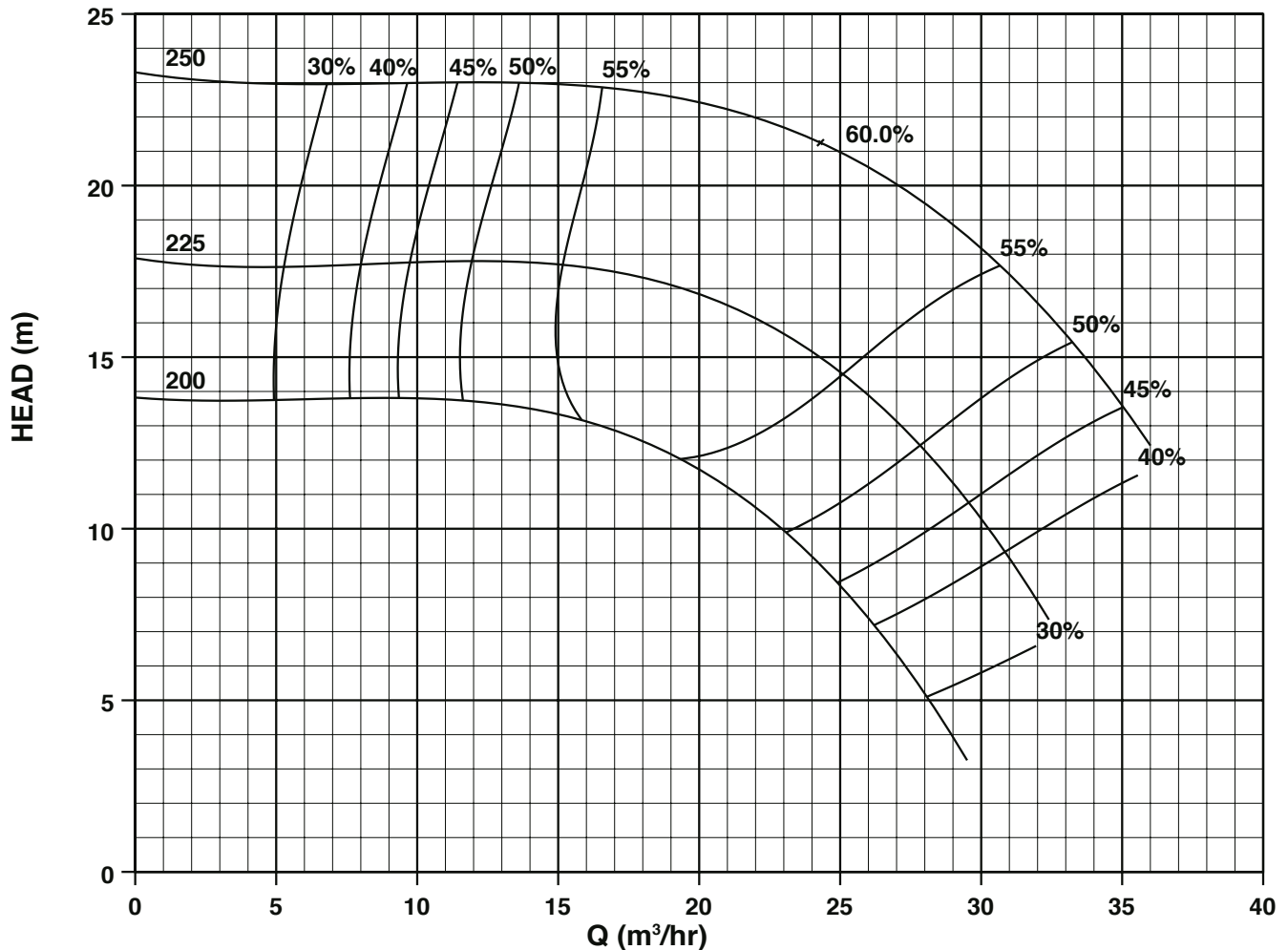
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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Issue Date
OCTOBER 2005

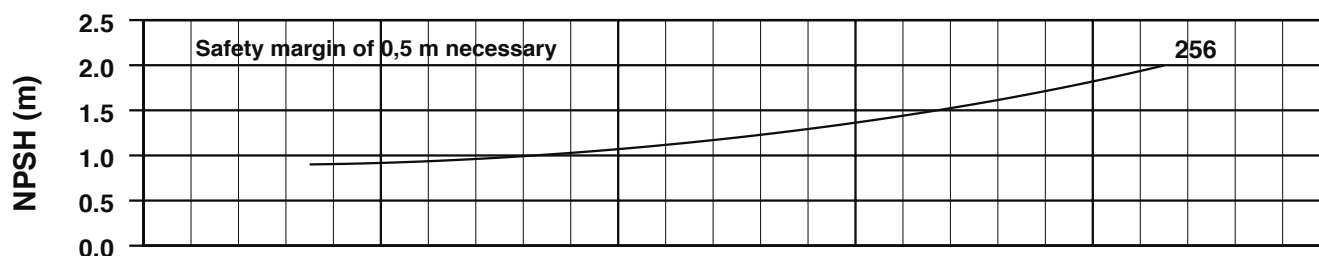
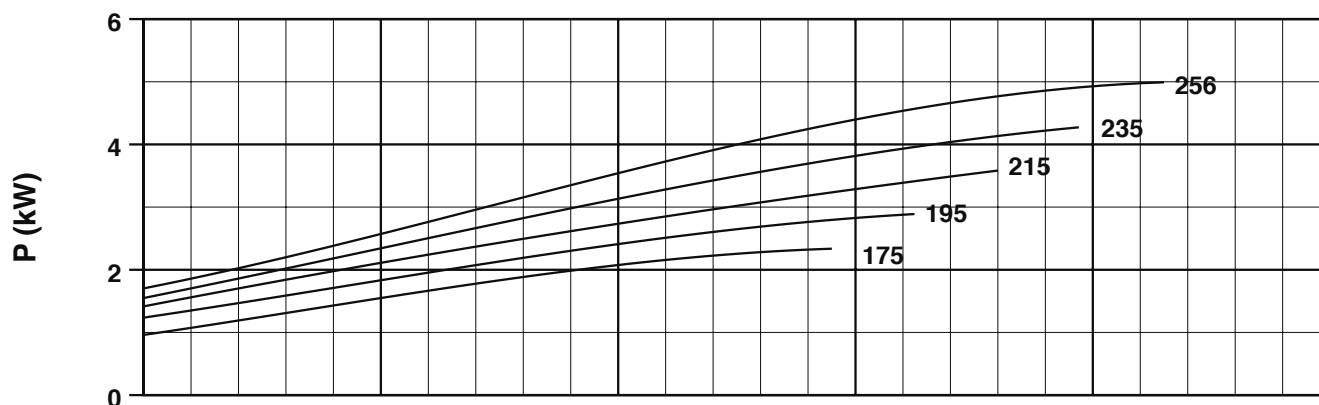
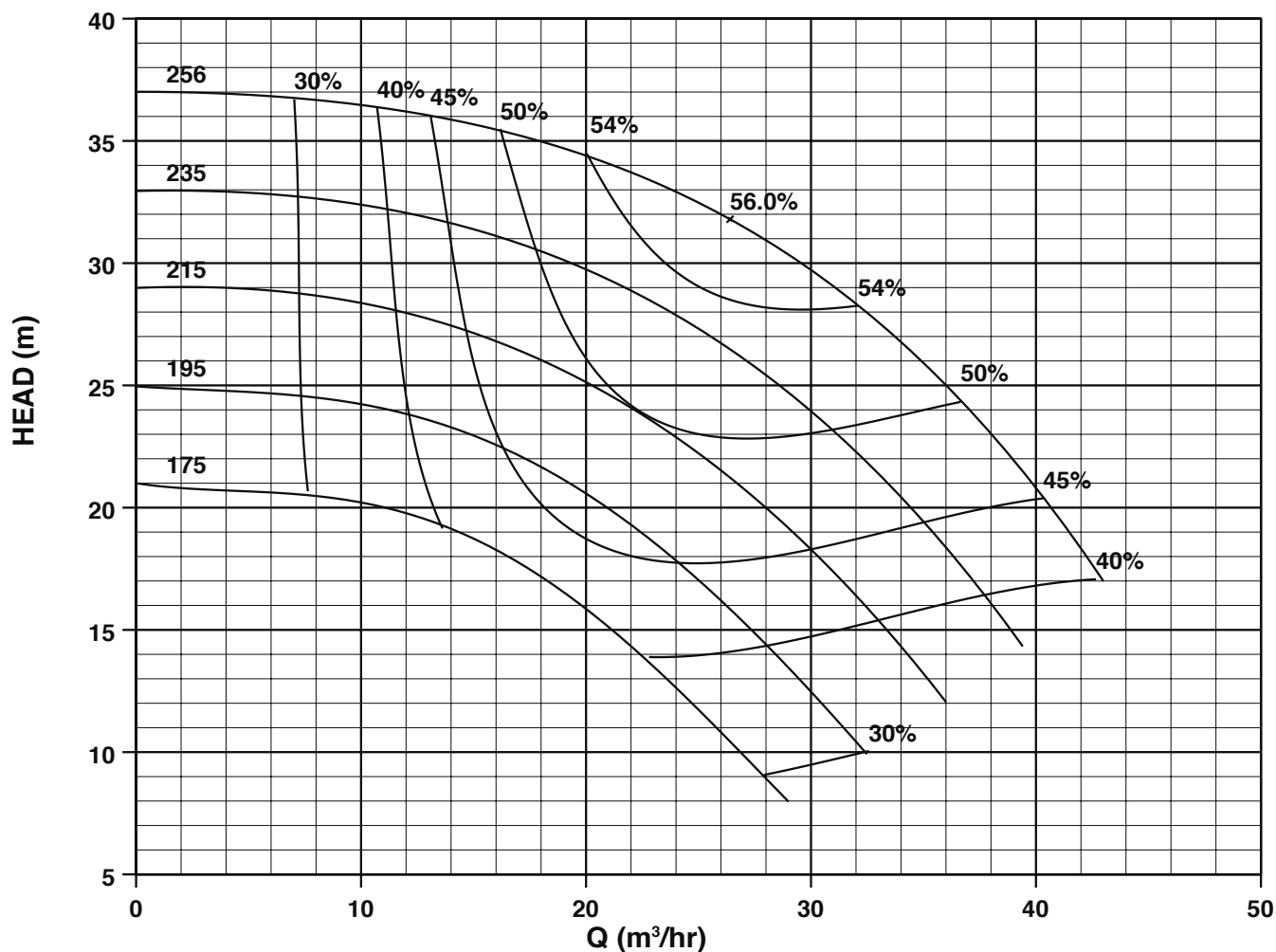
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 2/40-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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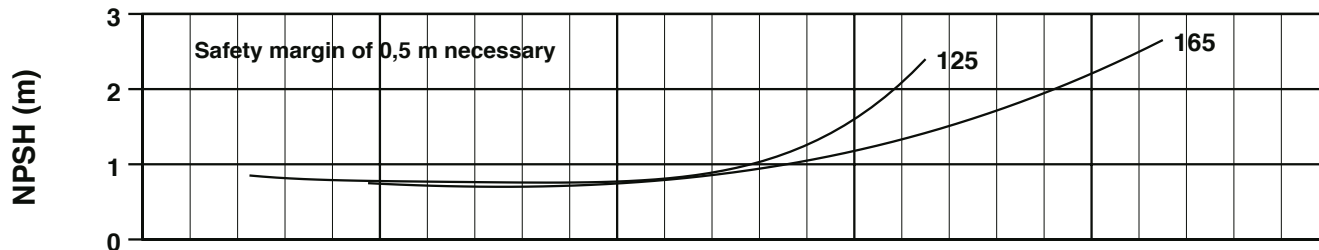
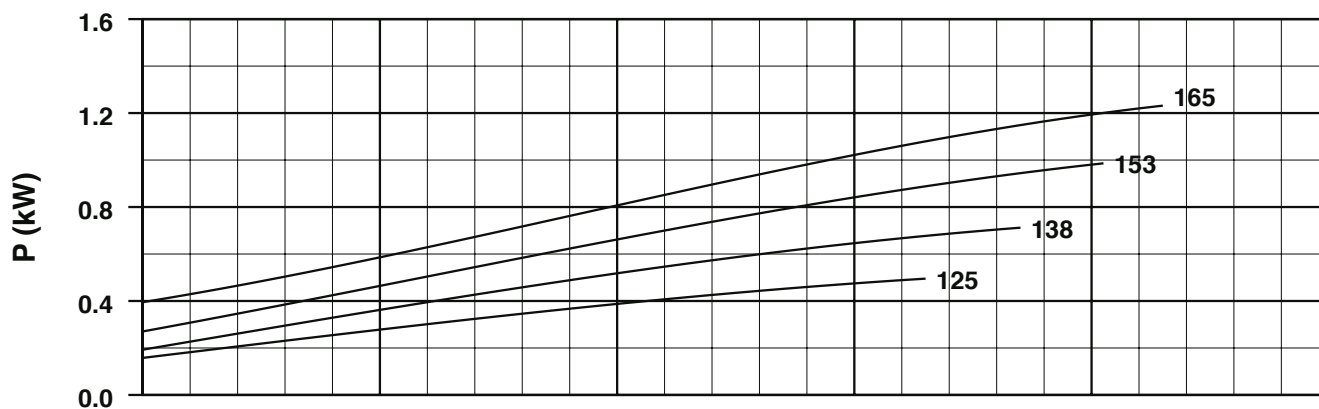
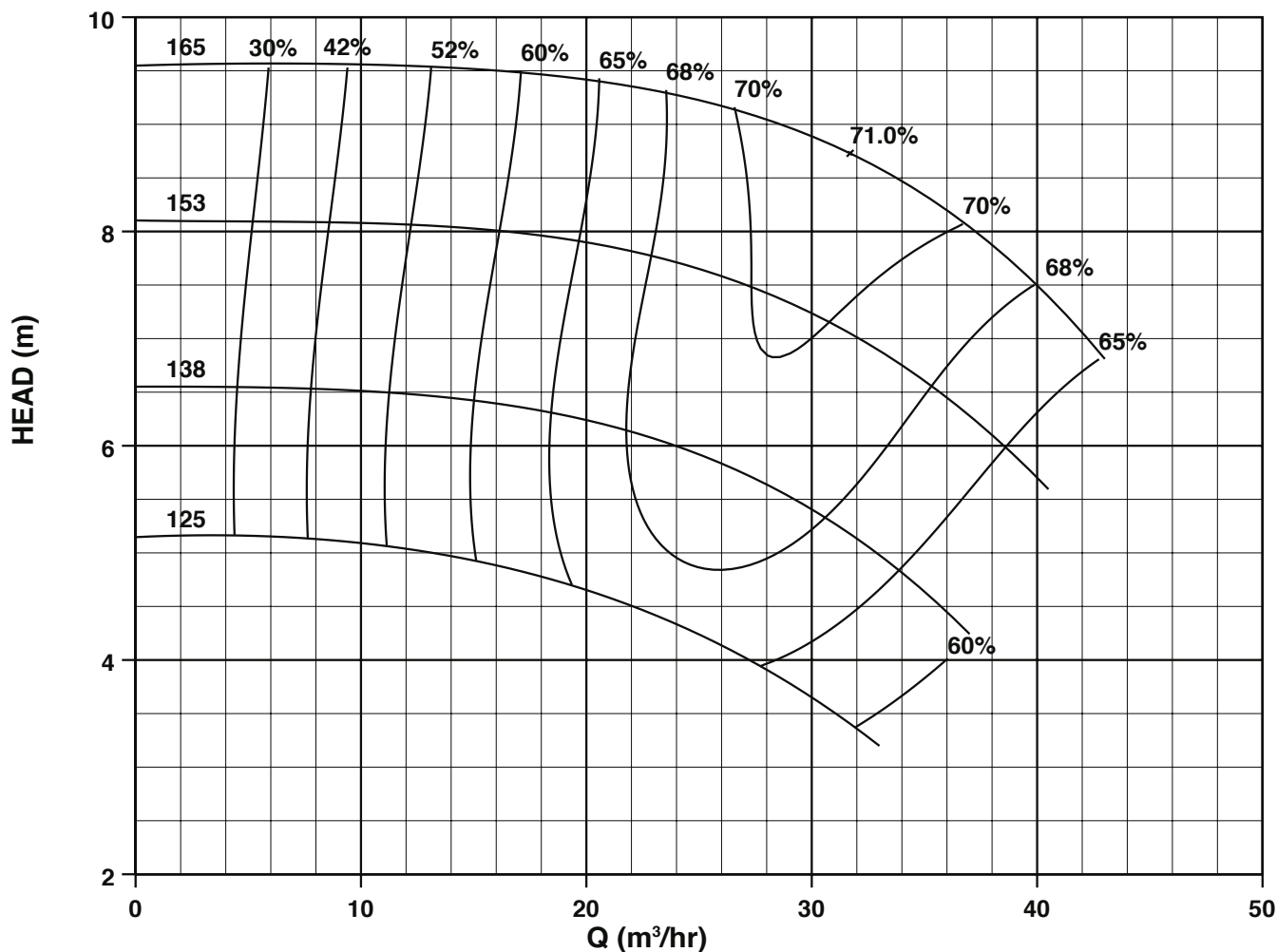
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

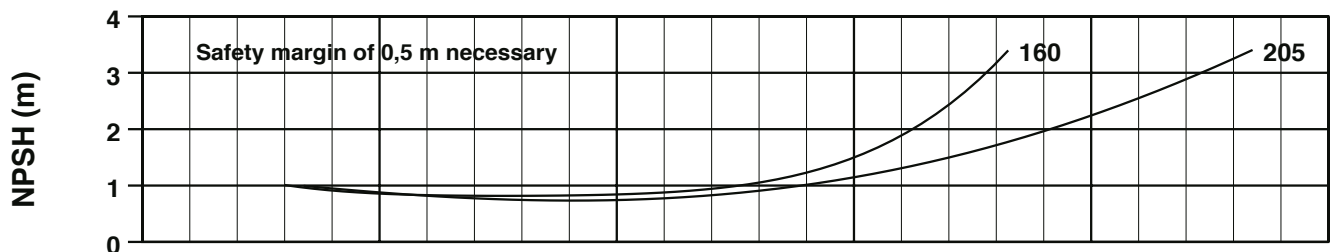
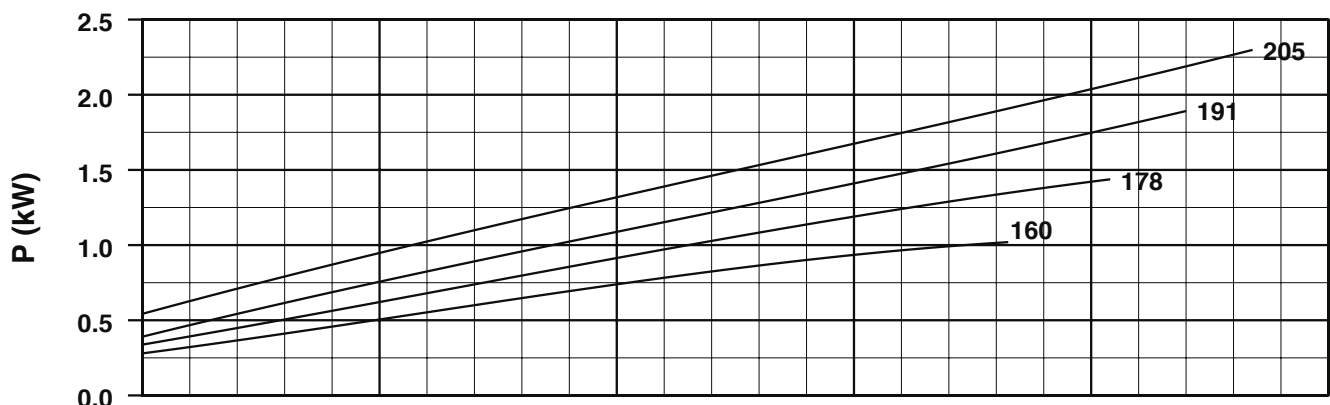
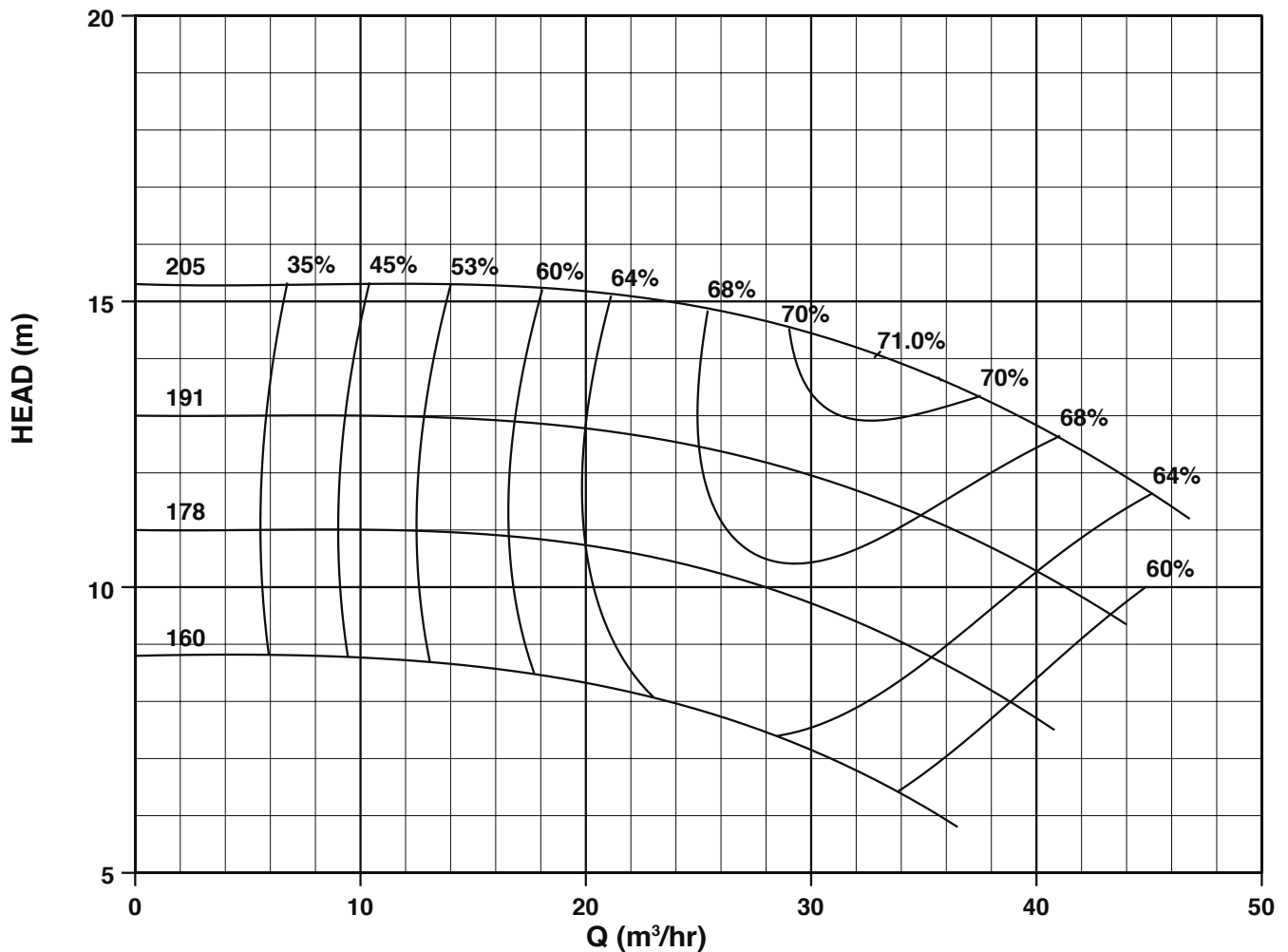
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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Issue Date
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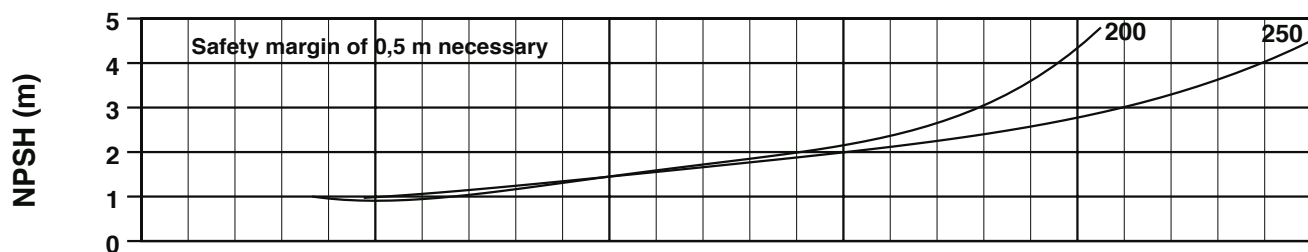
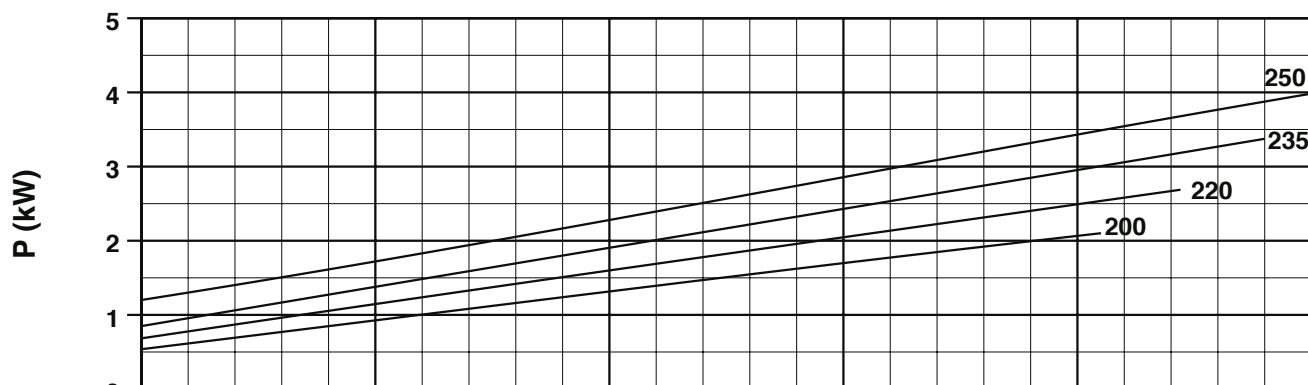
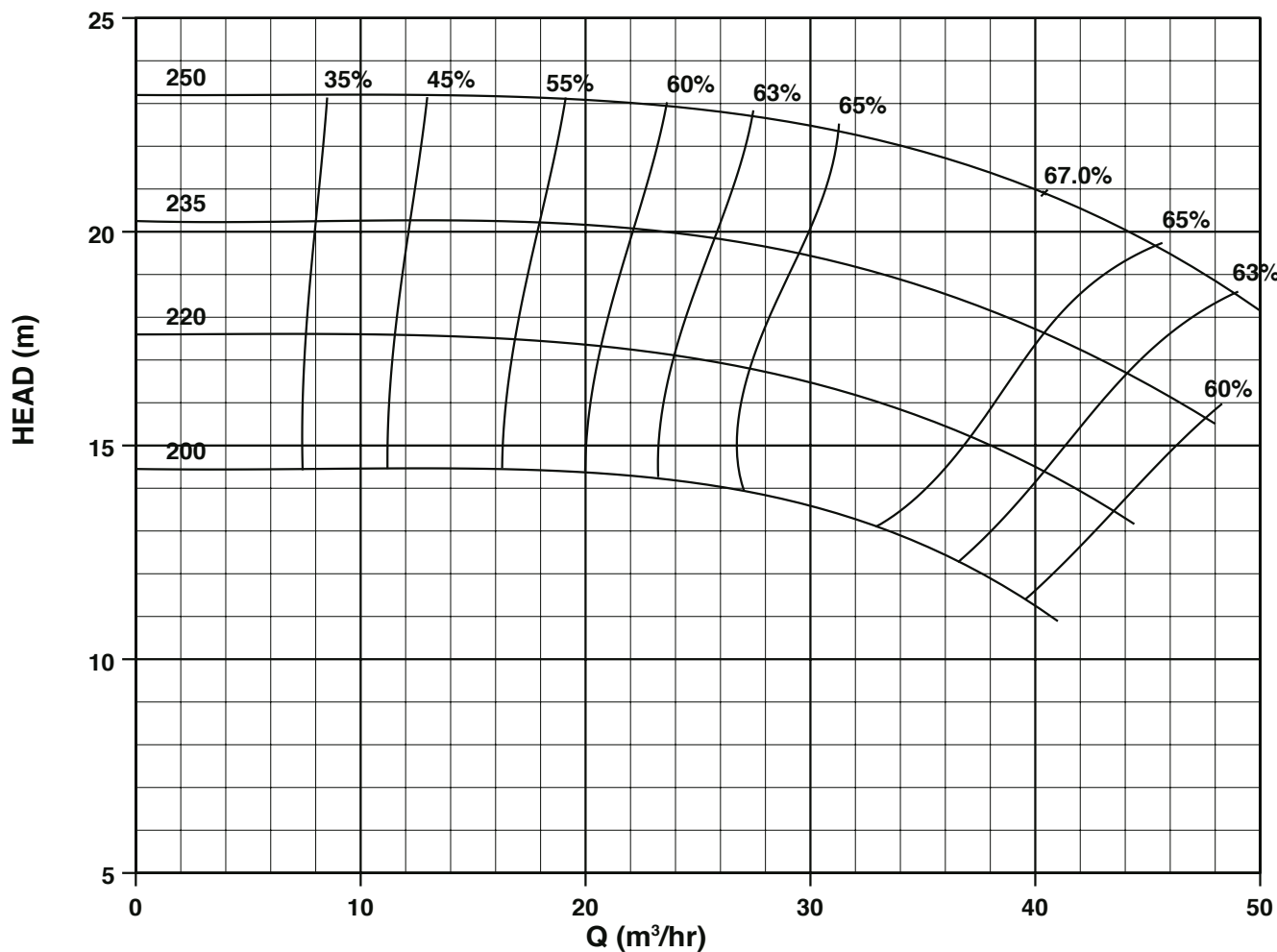
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

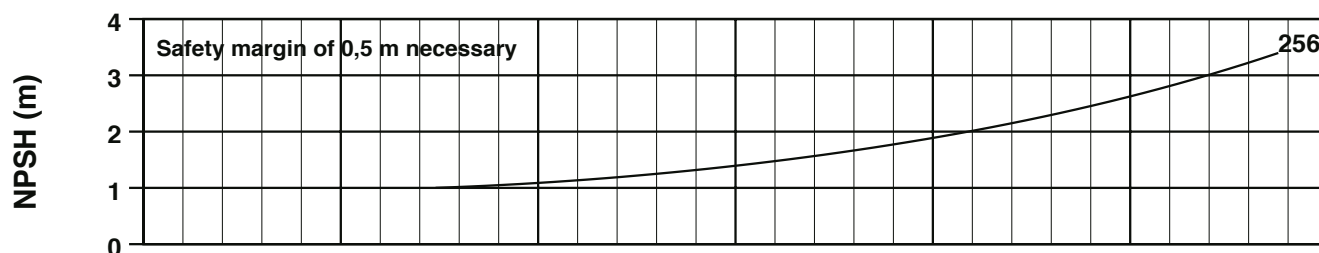
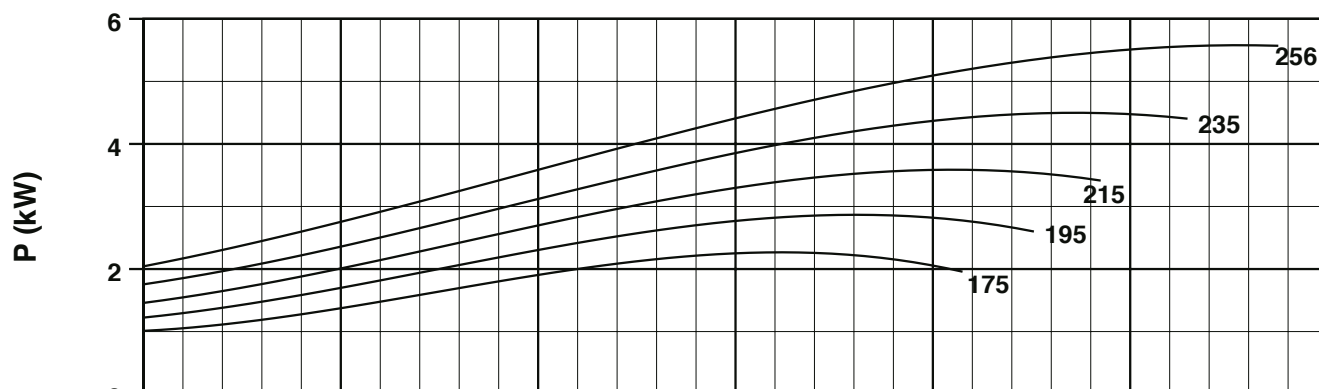
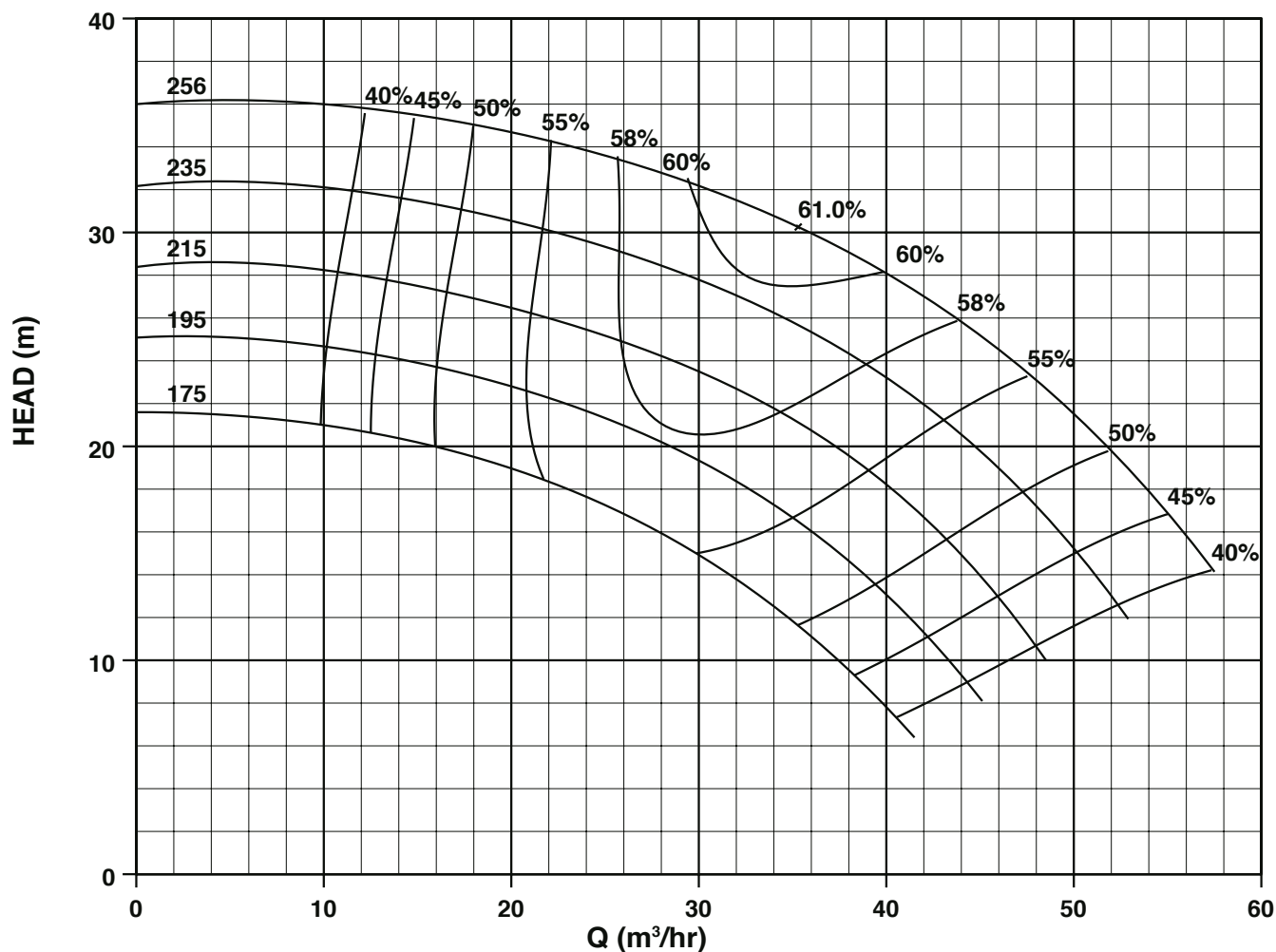
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 2/50-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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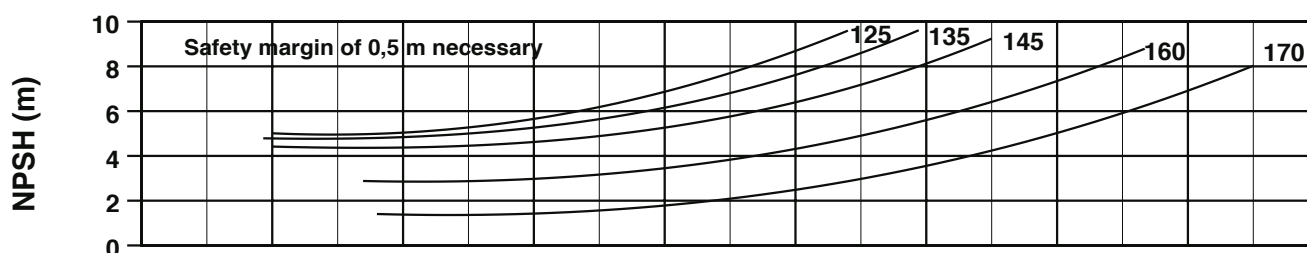
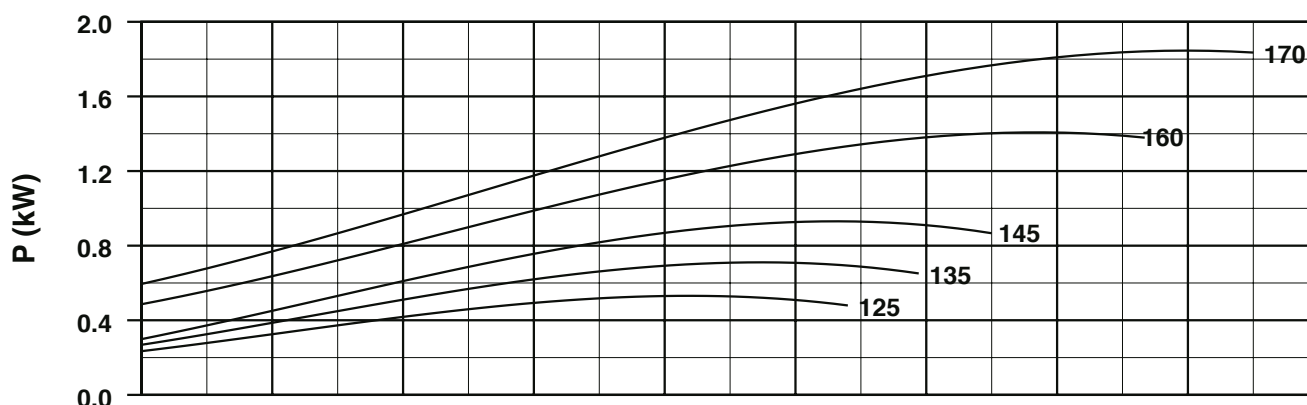
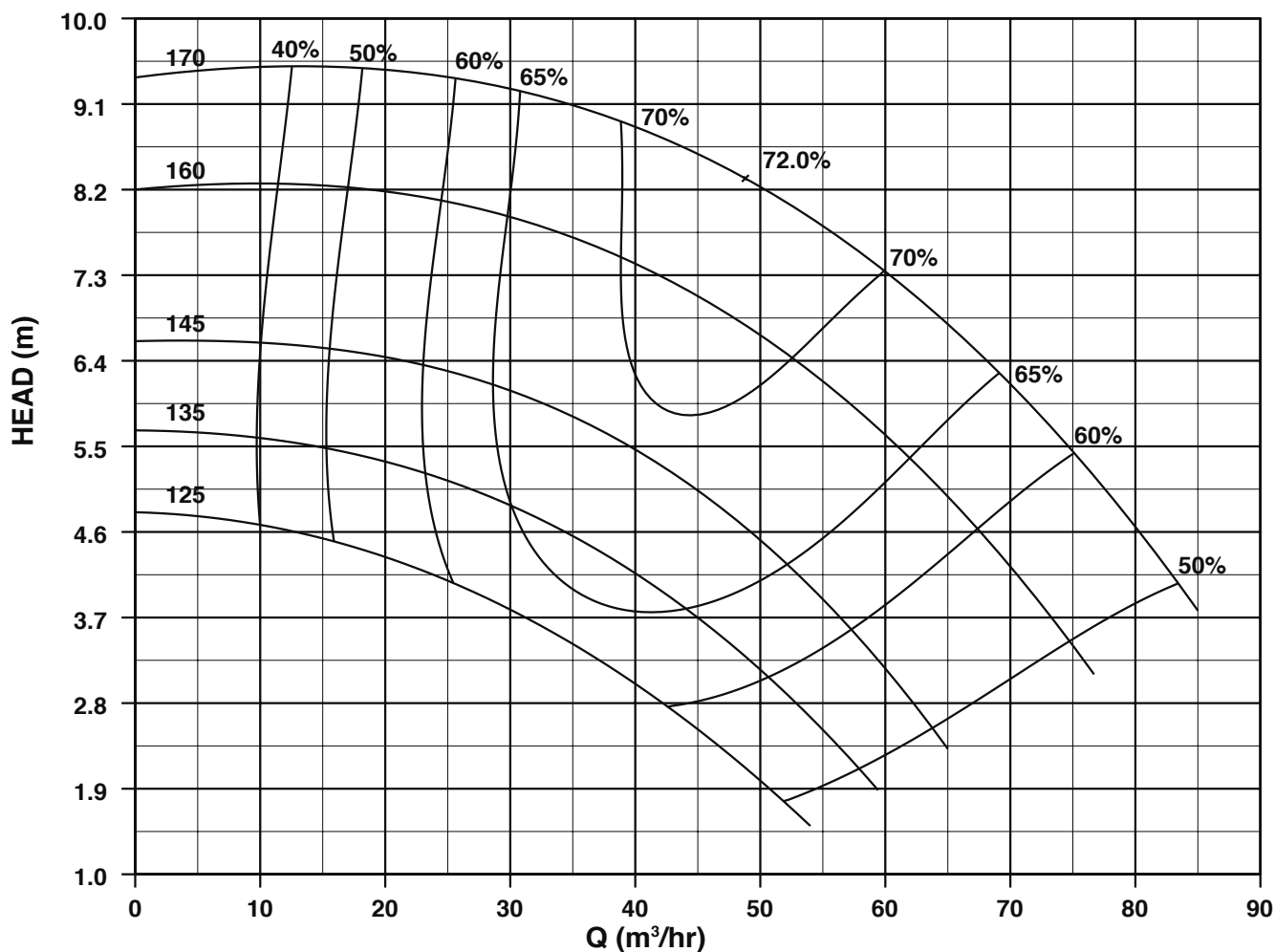
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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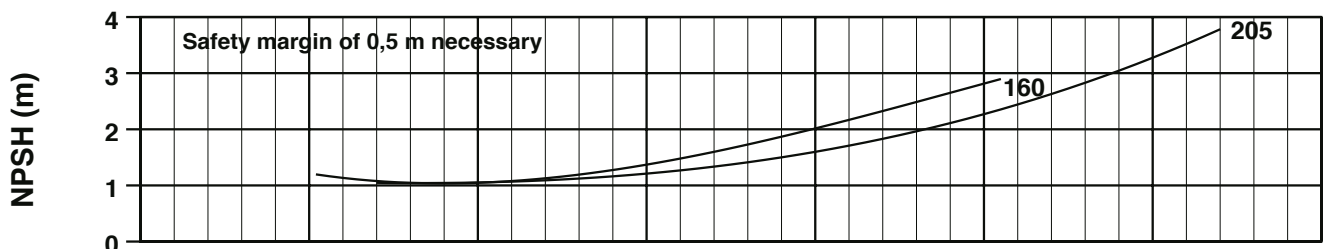
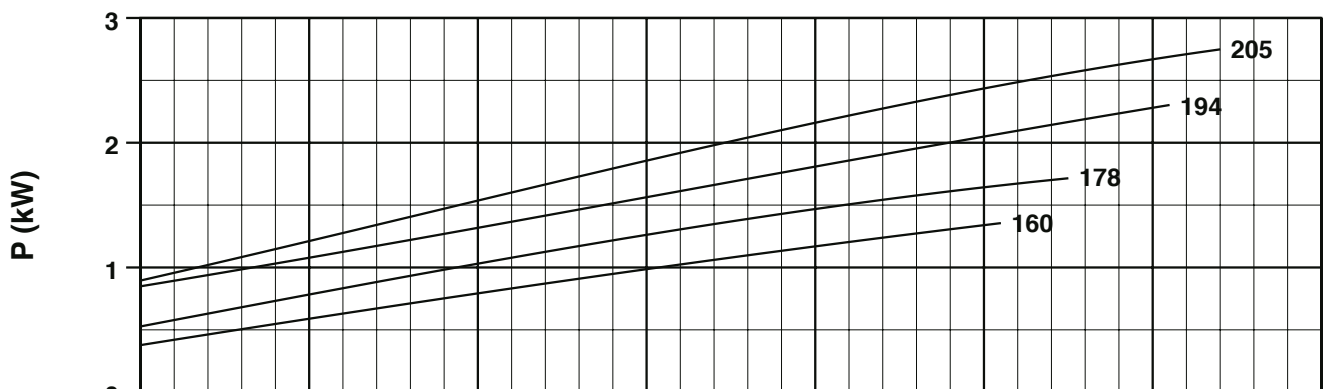
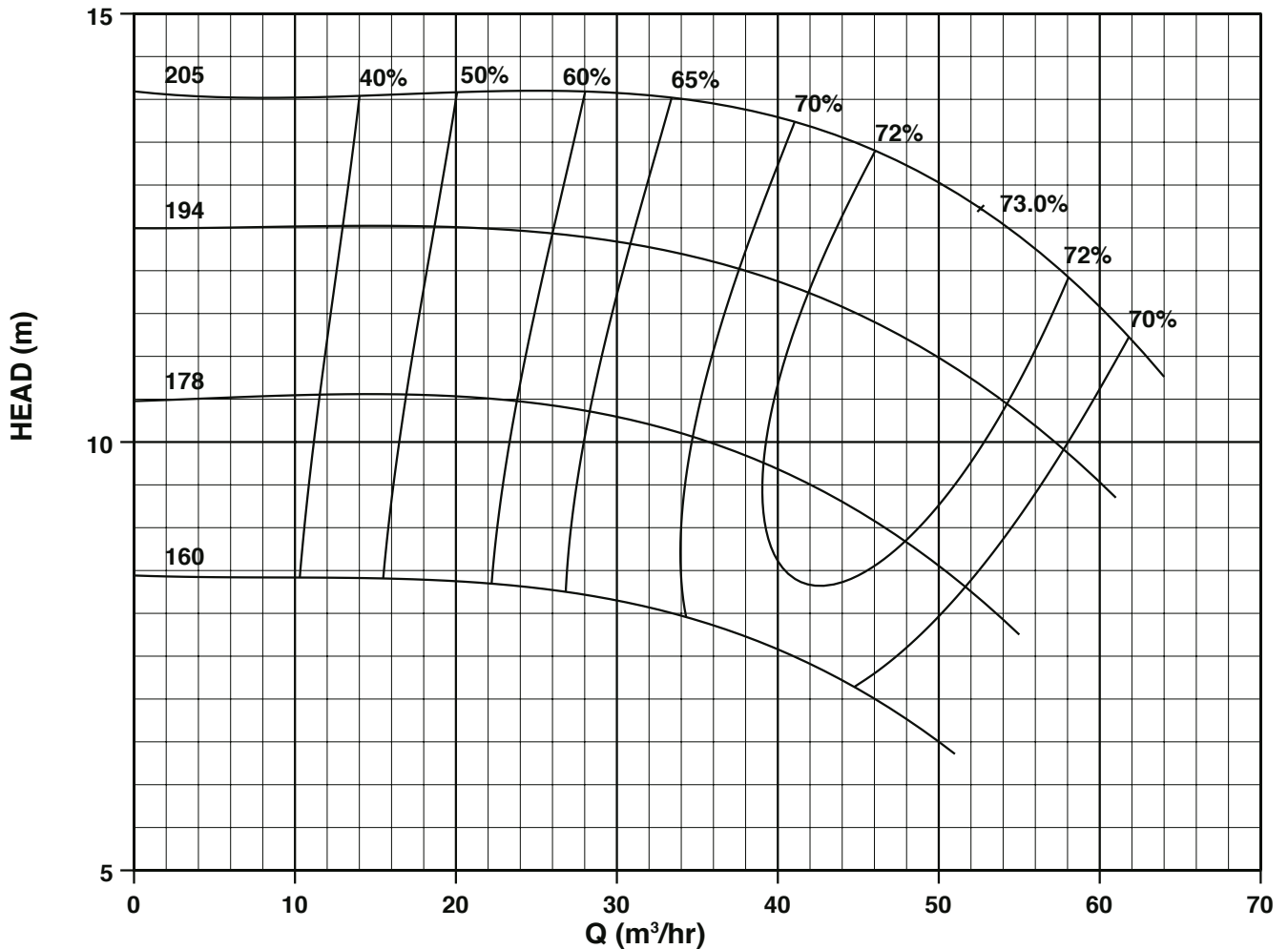
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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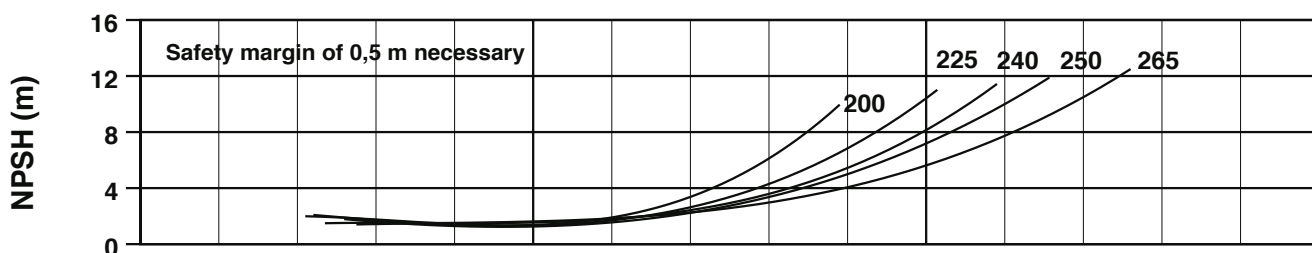
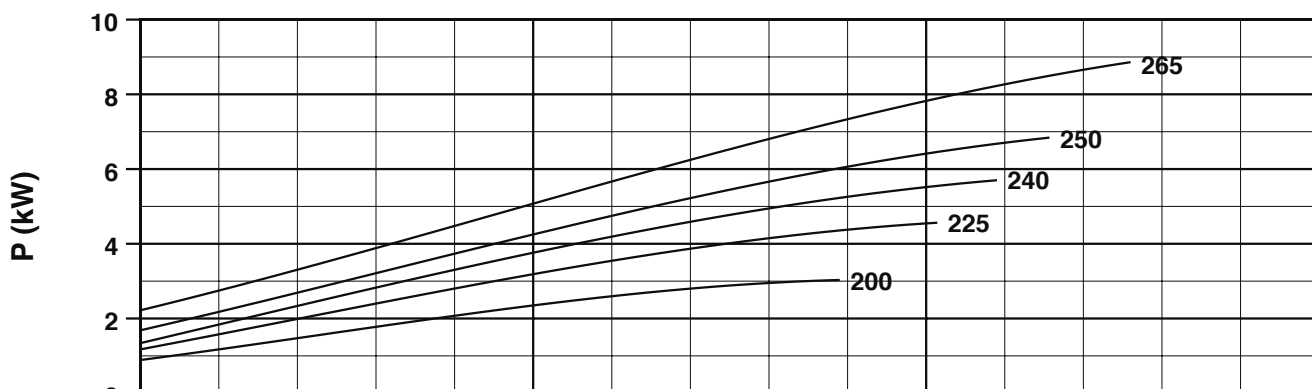
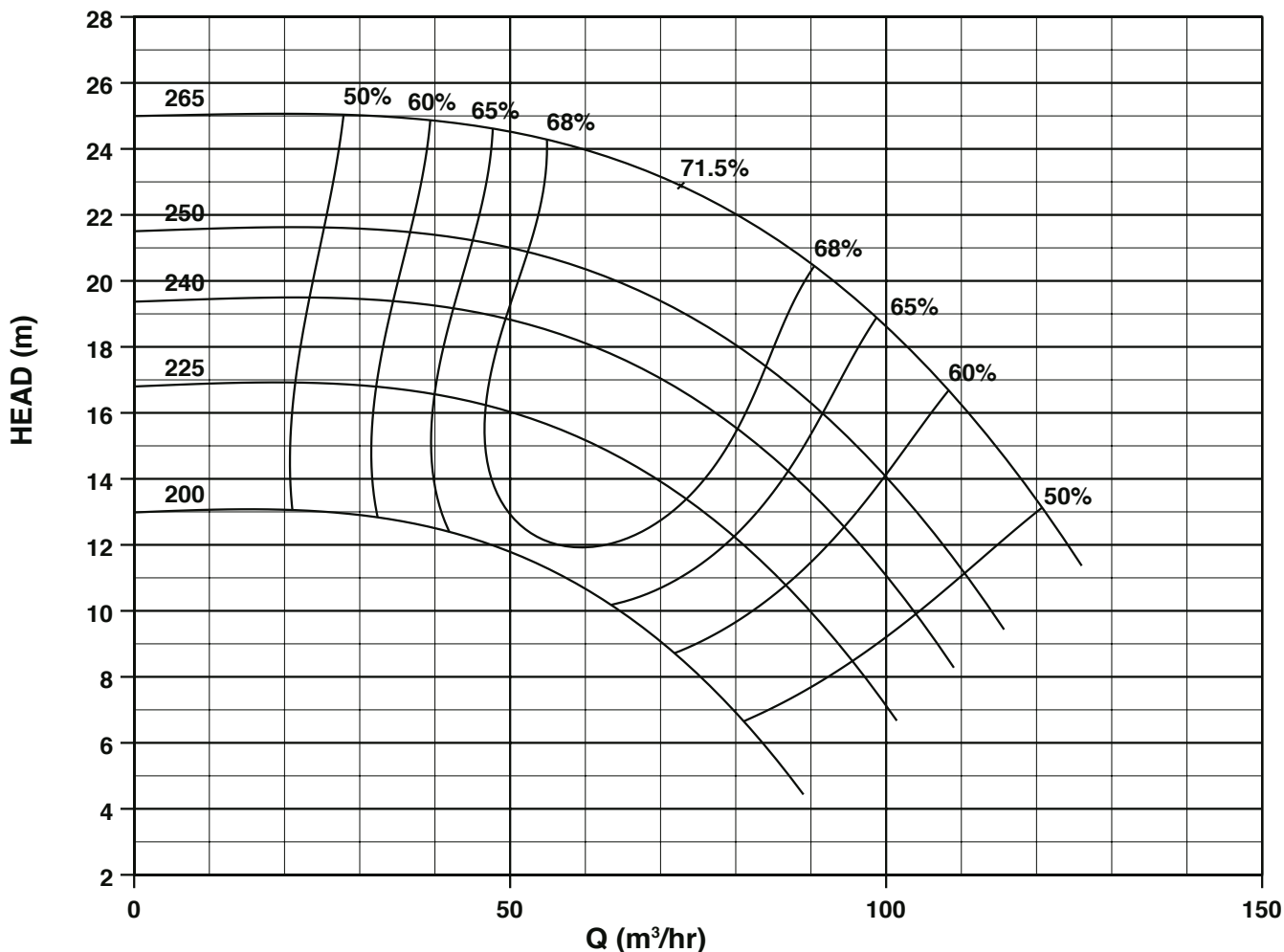
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



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Issue Date
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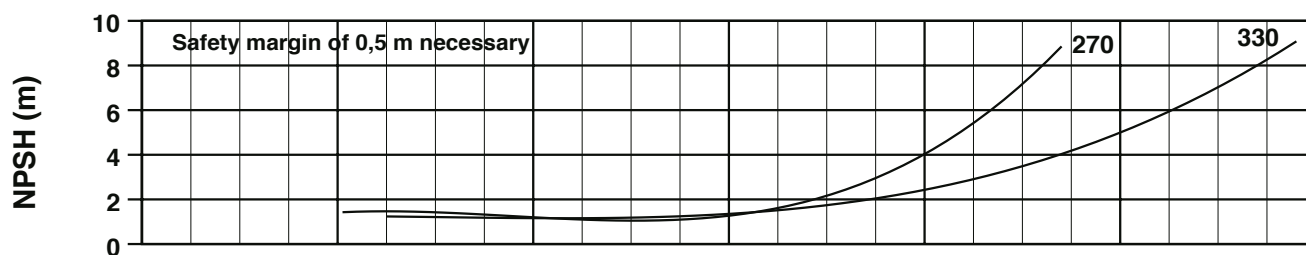
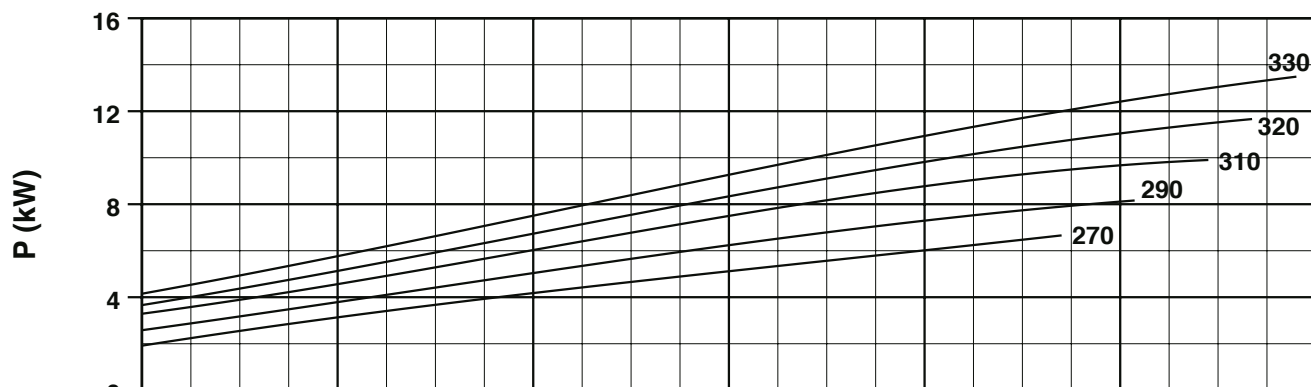
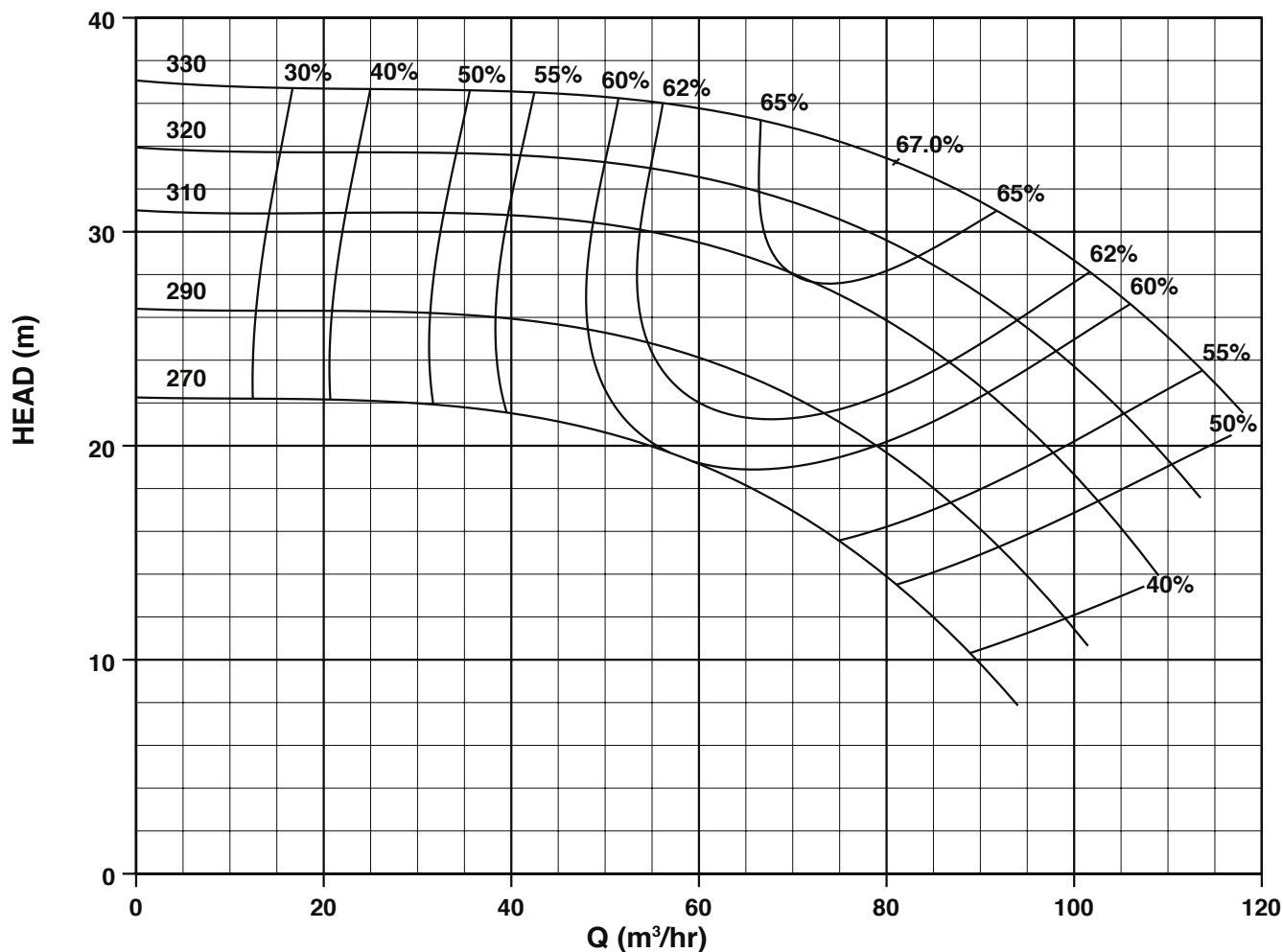
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

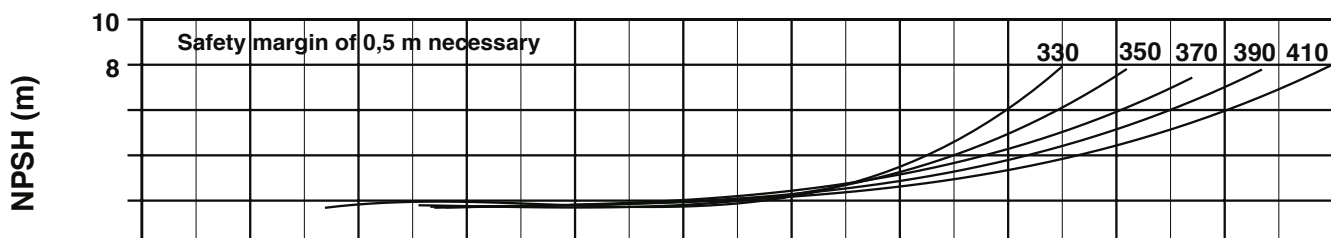
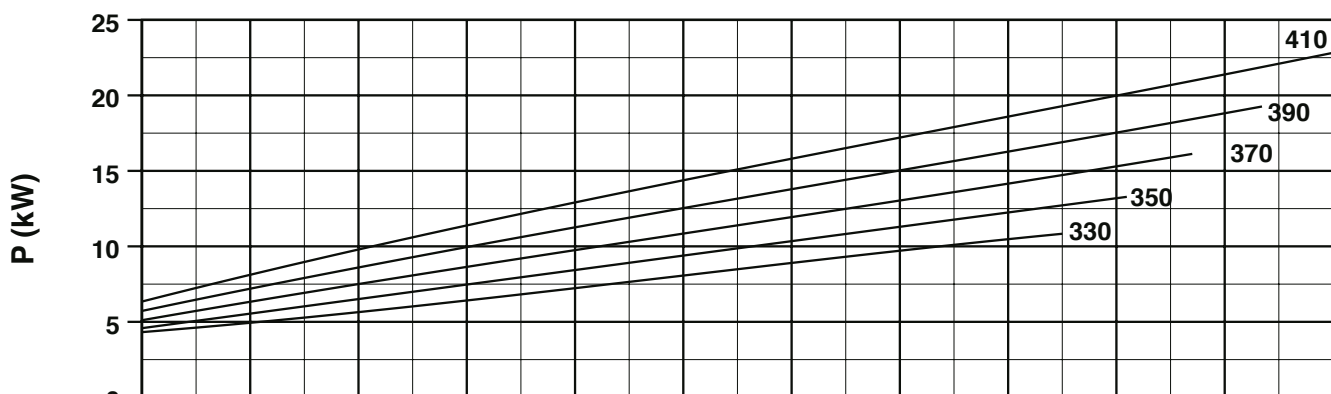
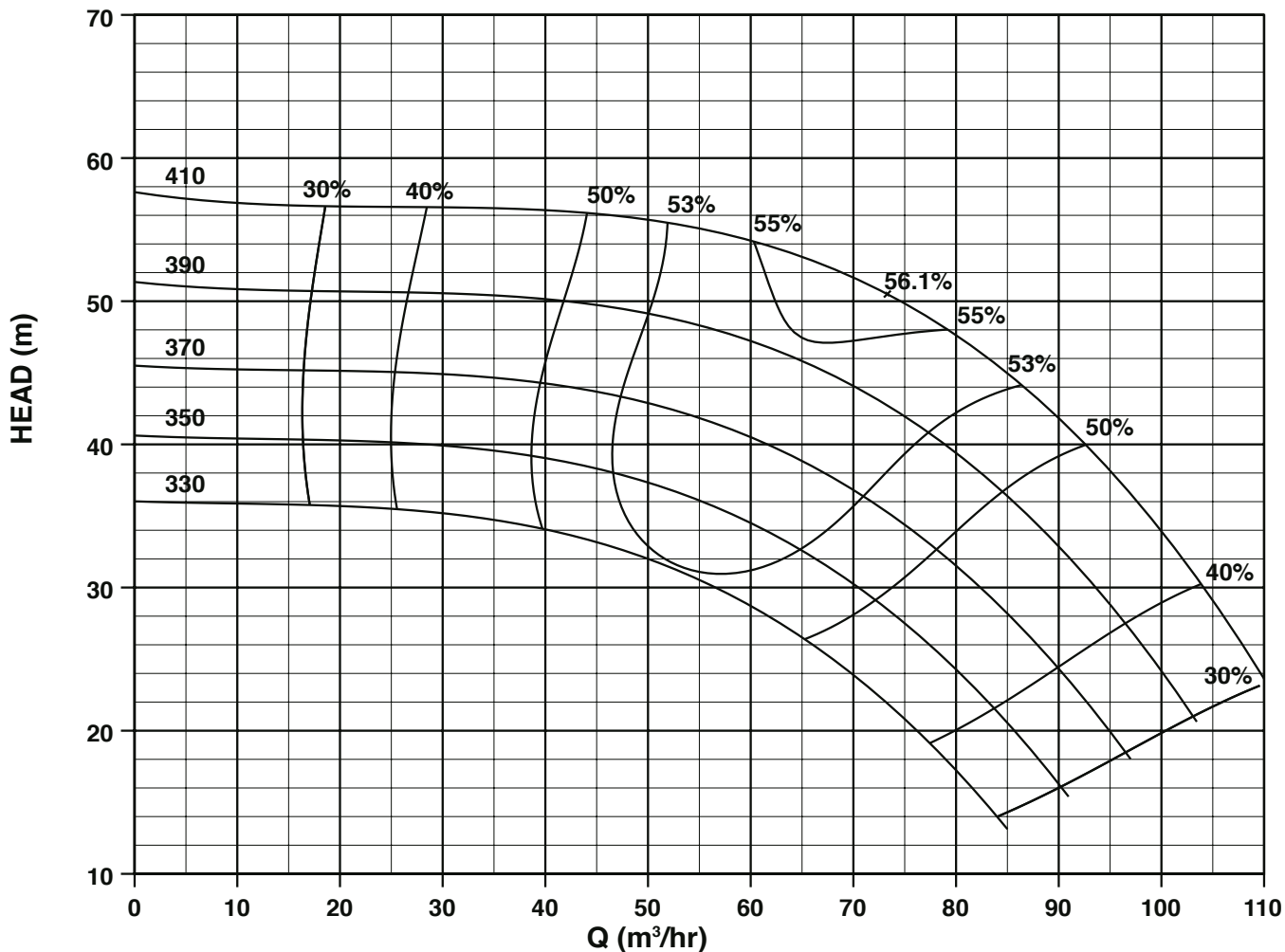
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

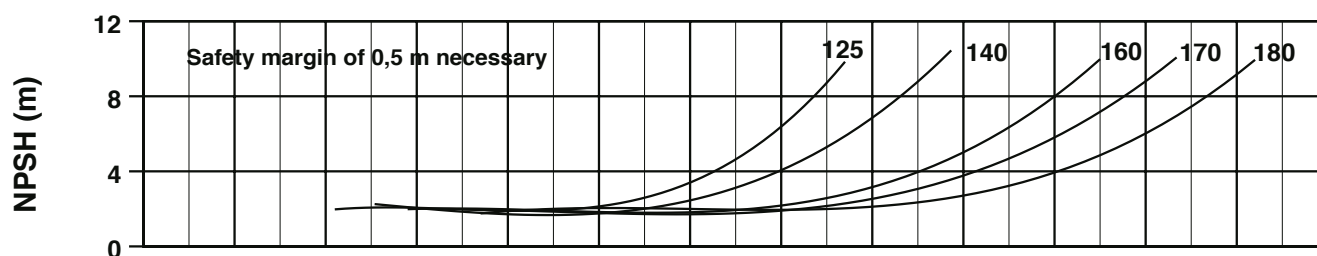
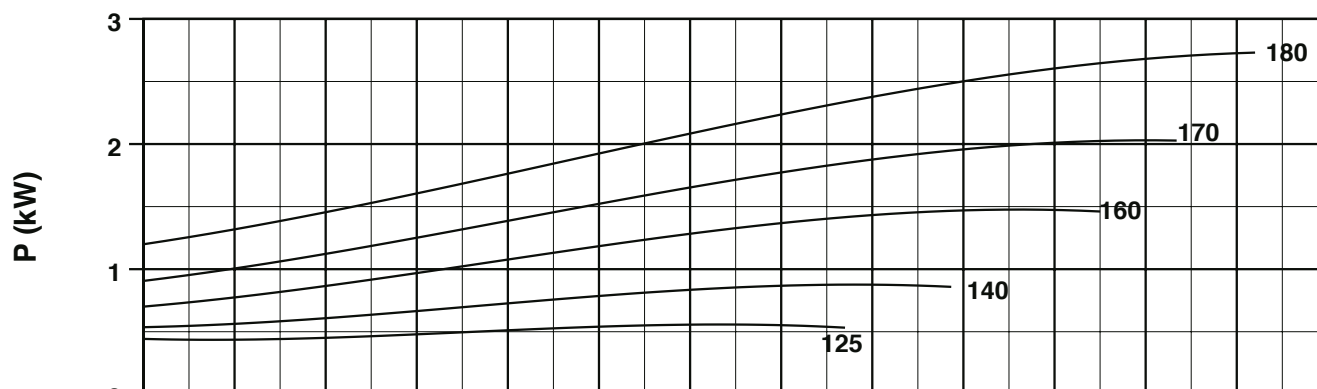
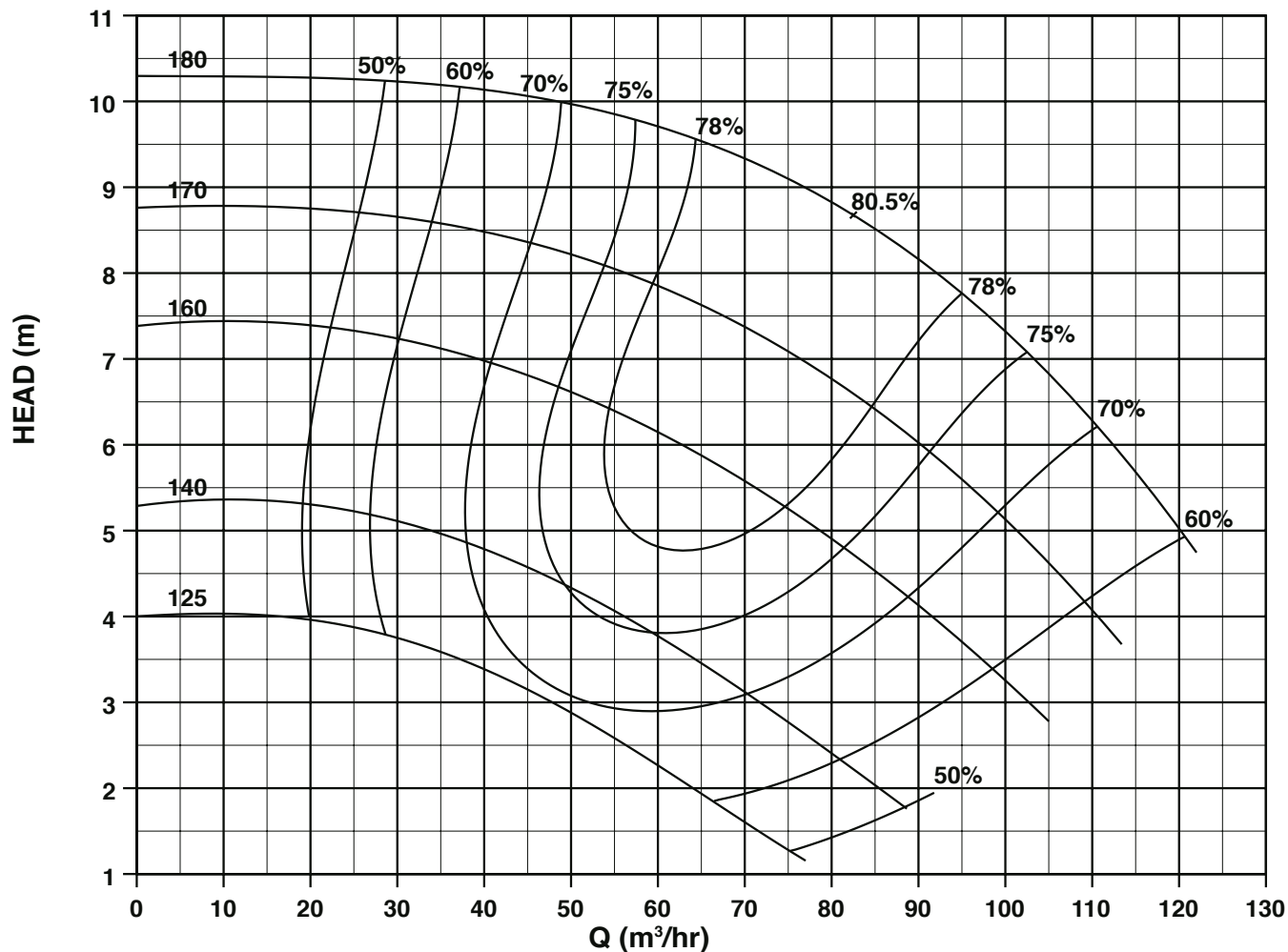
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

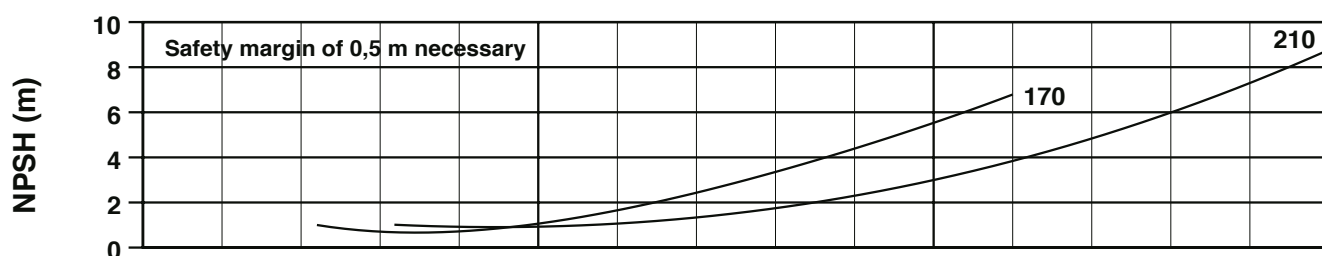
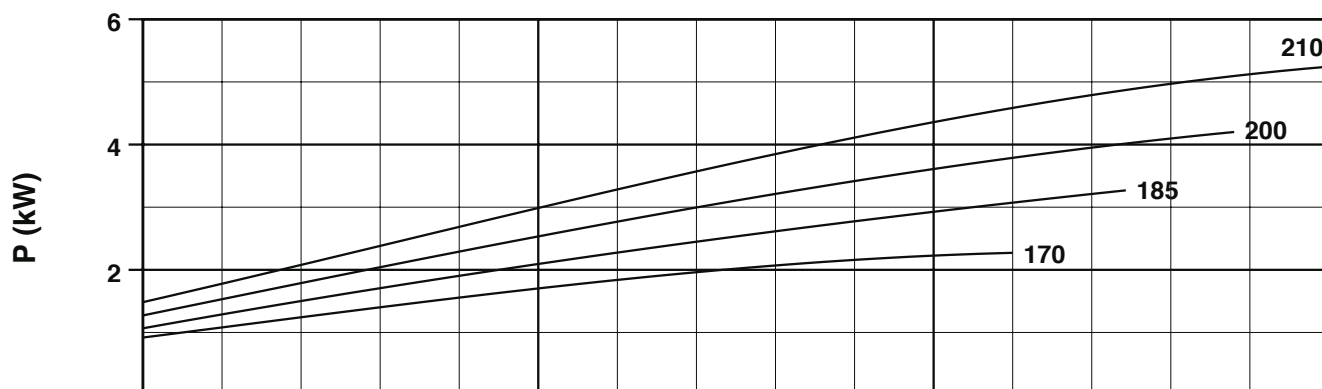
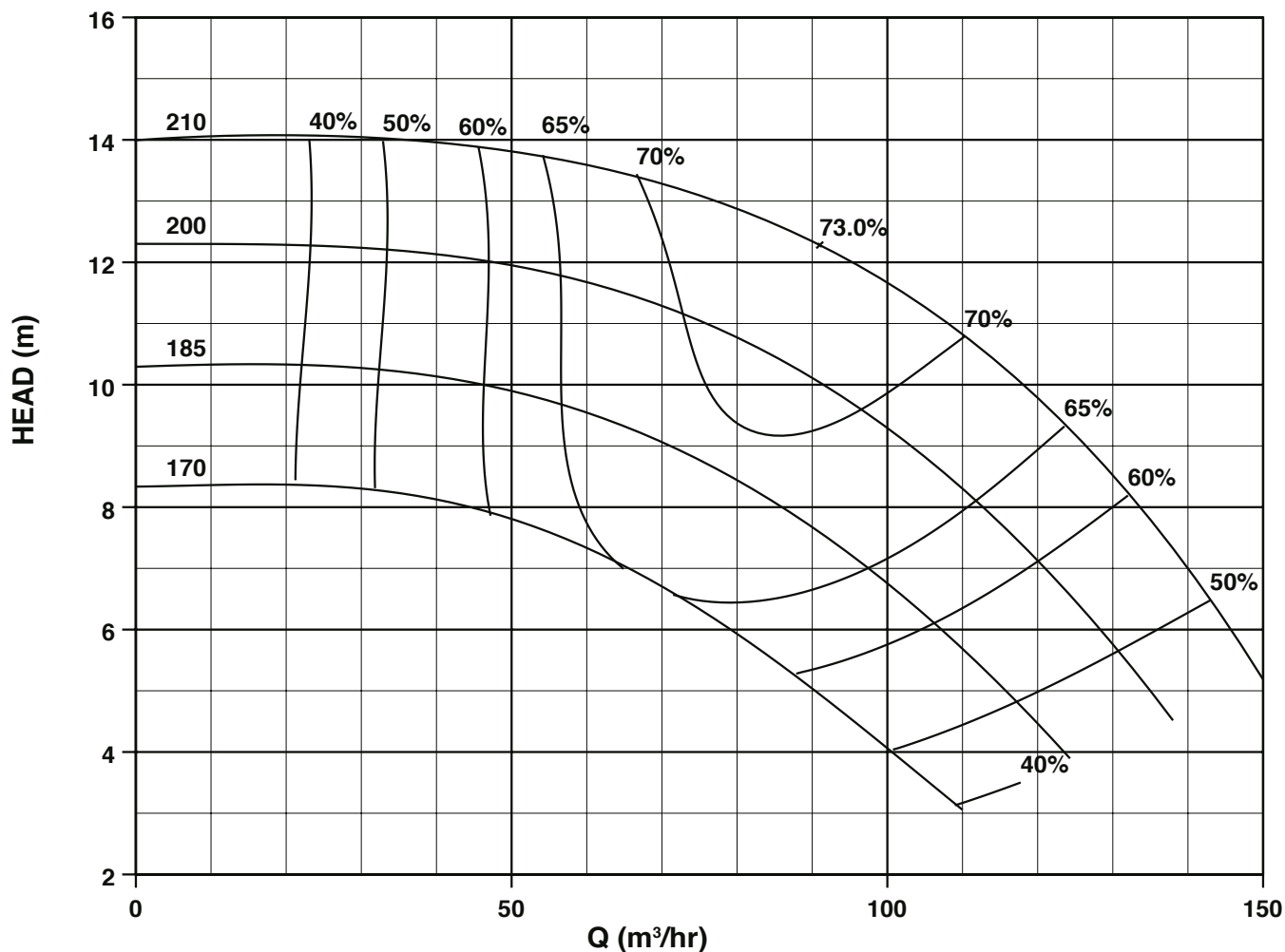
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

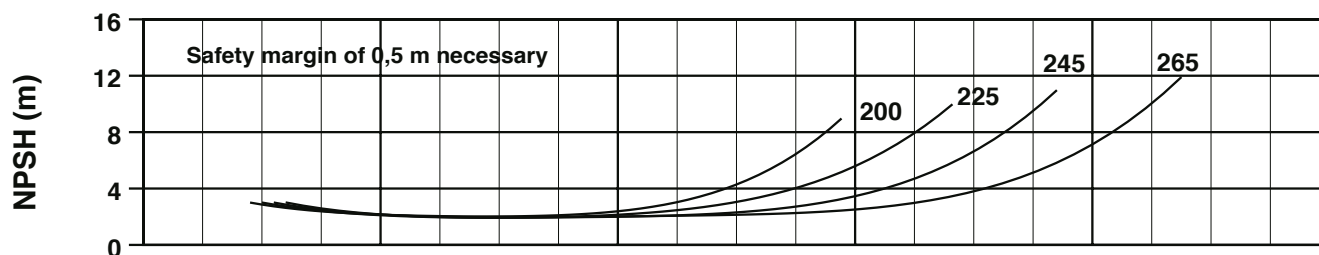
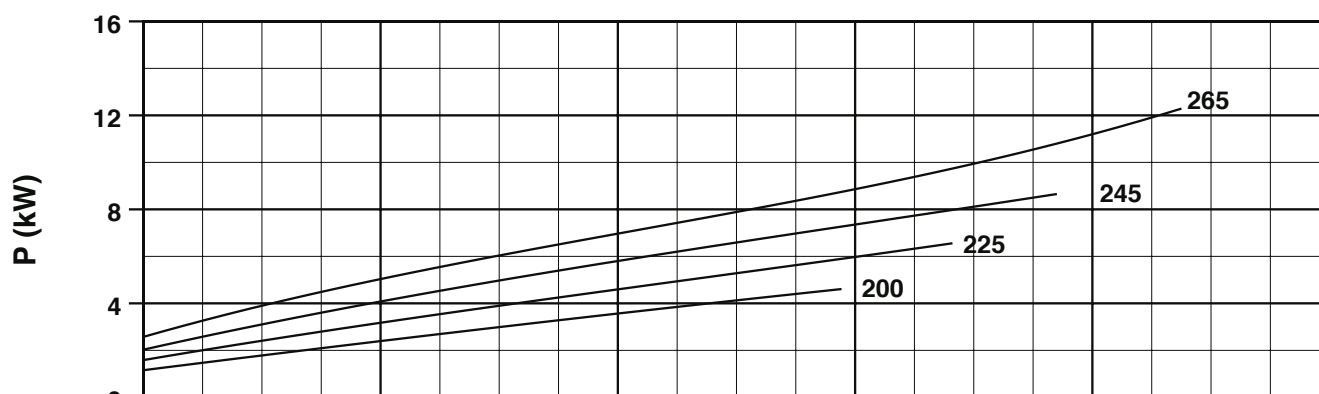
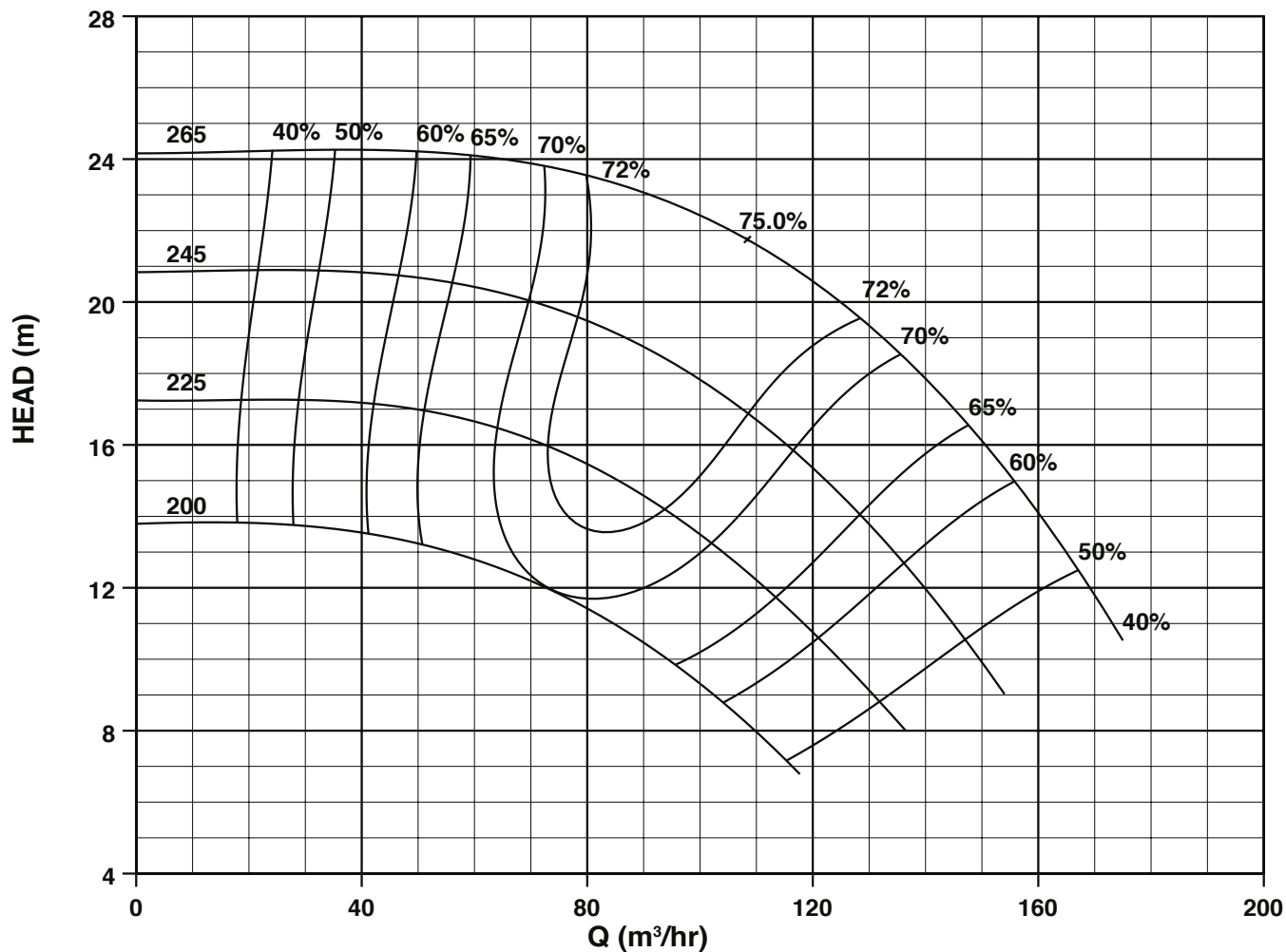
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

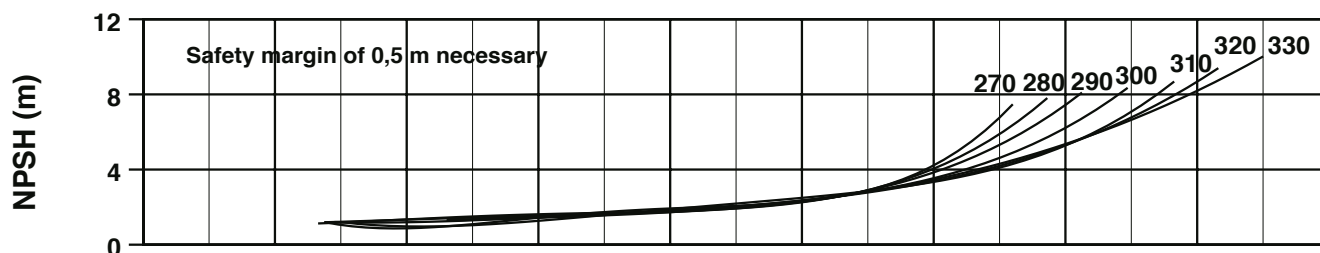
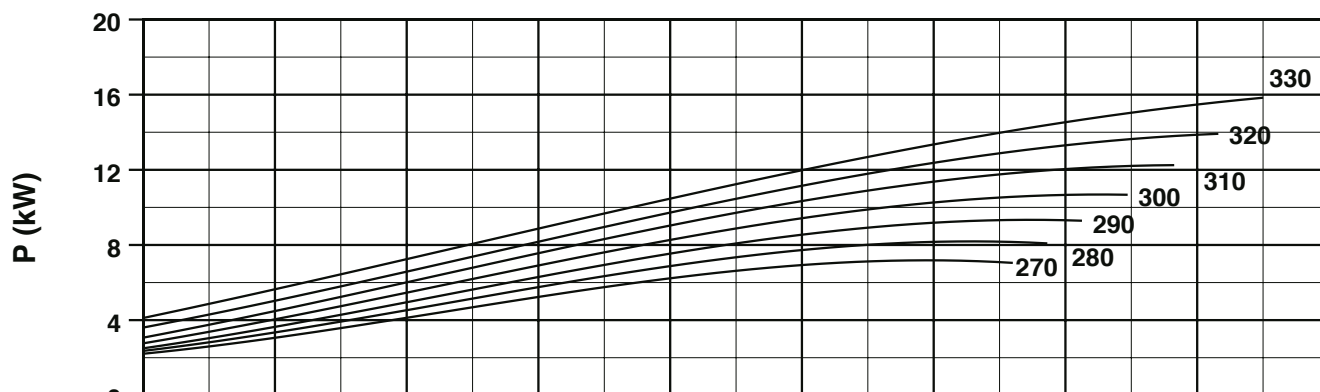
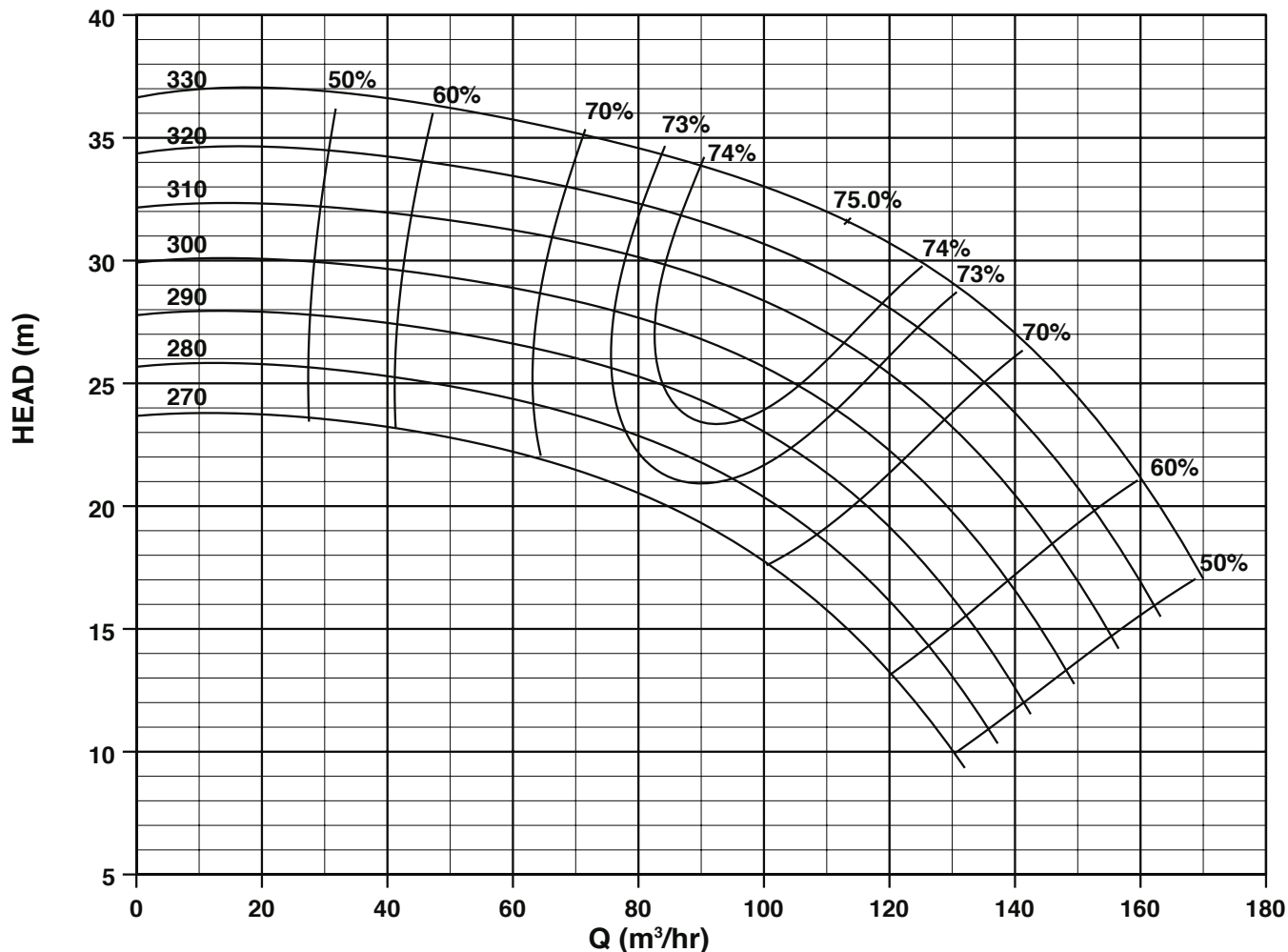
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

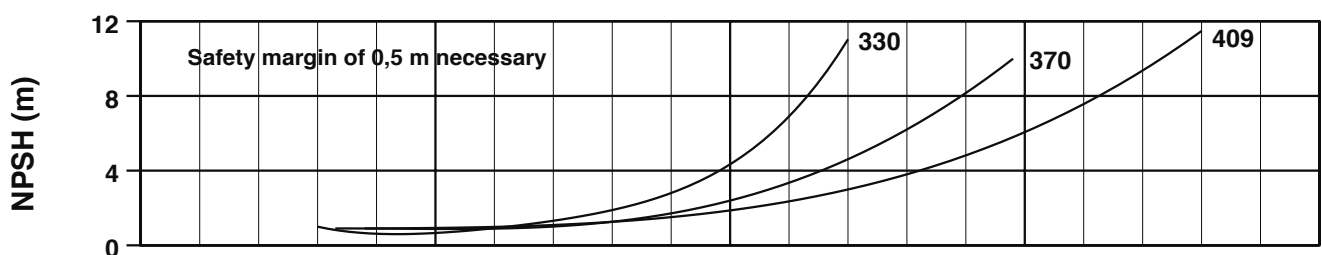
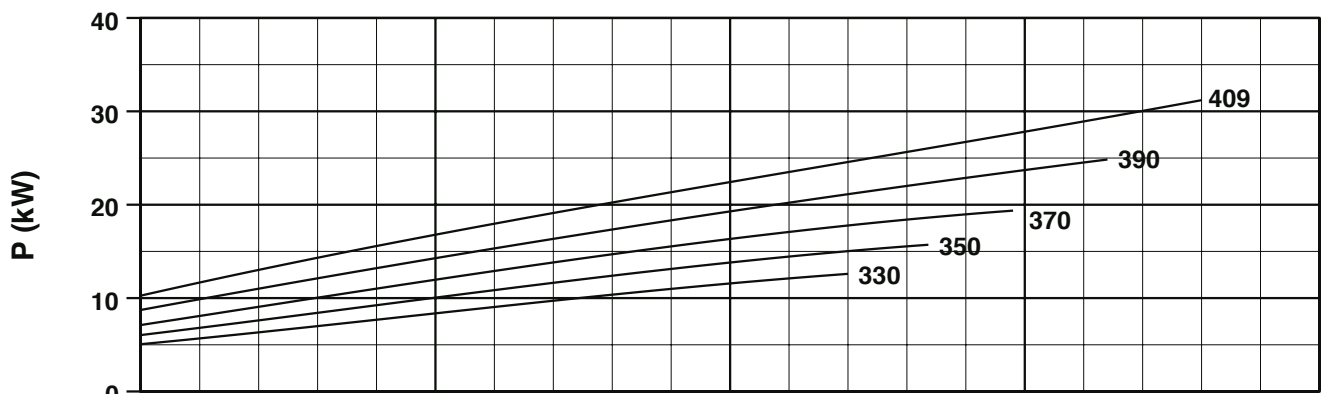
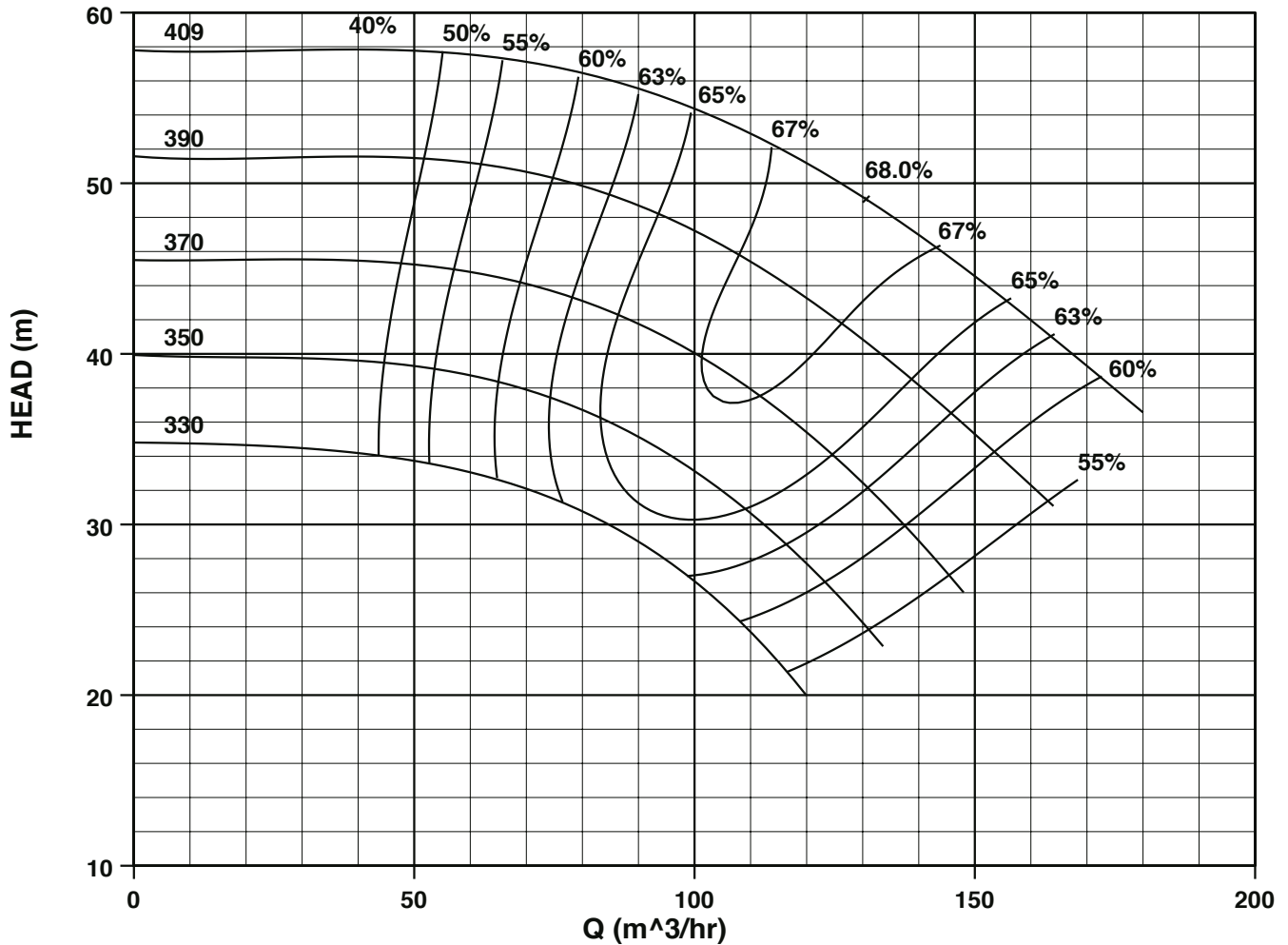
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

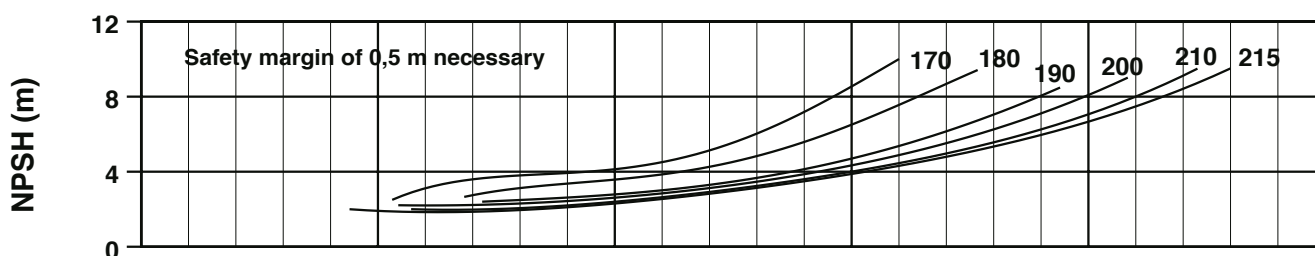
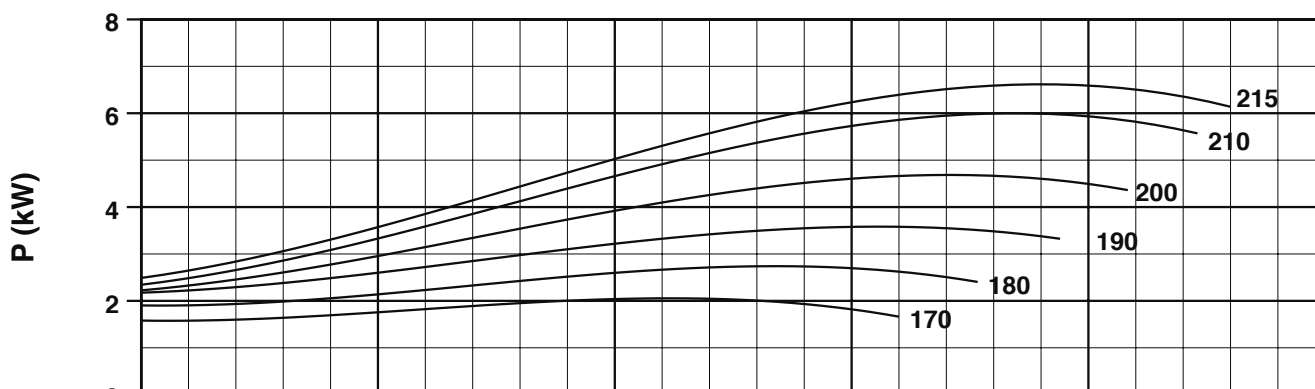
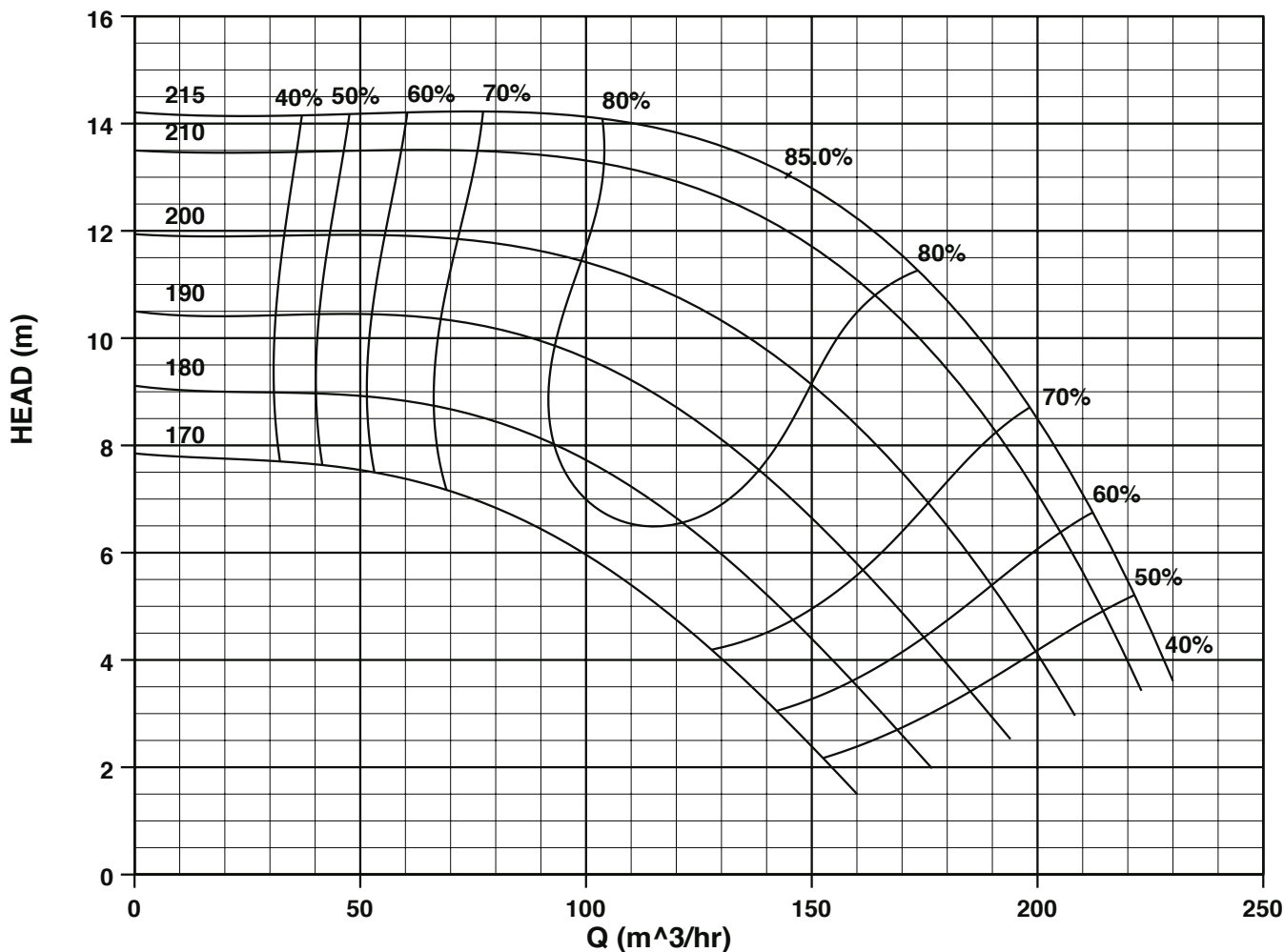
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

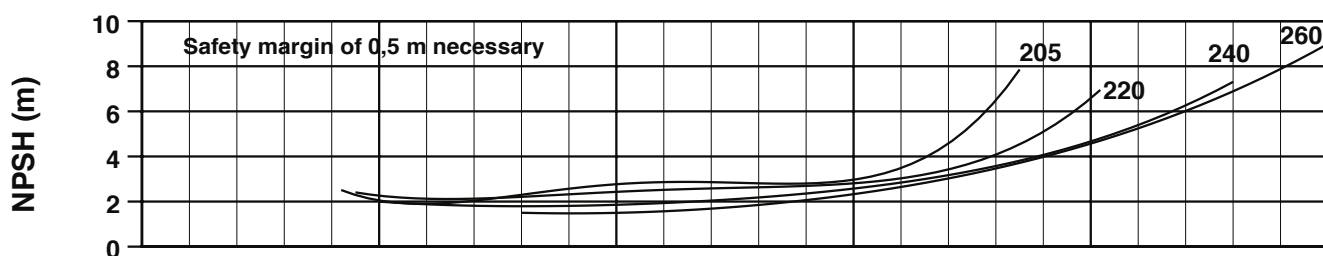
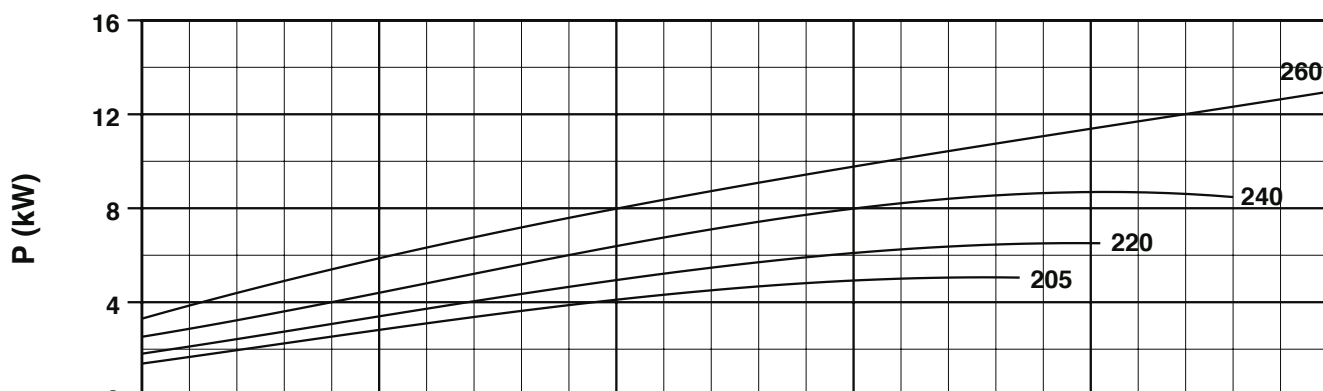
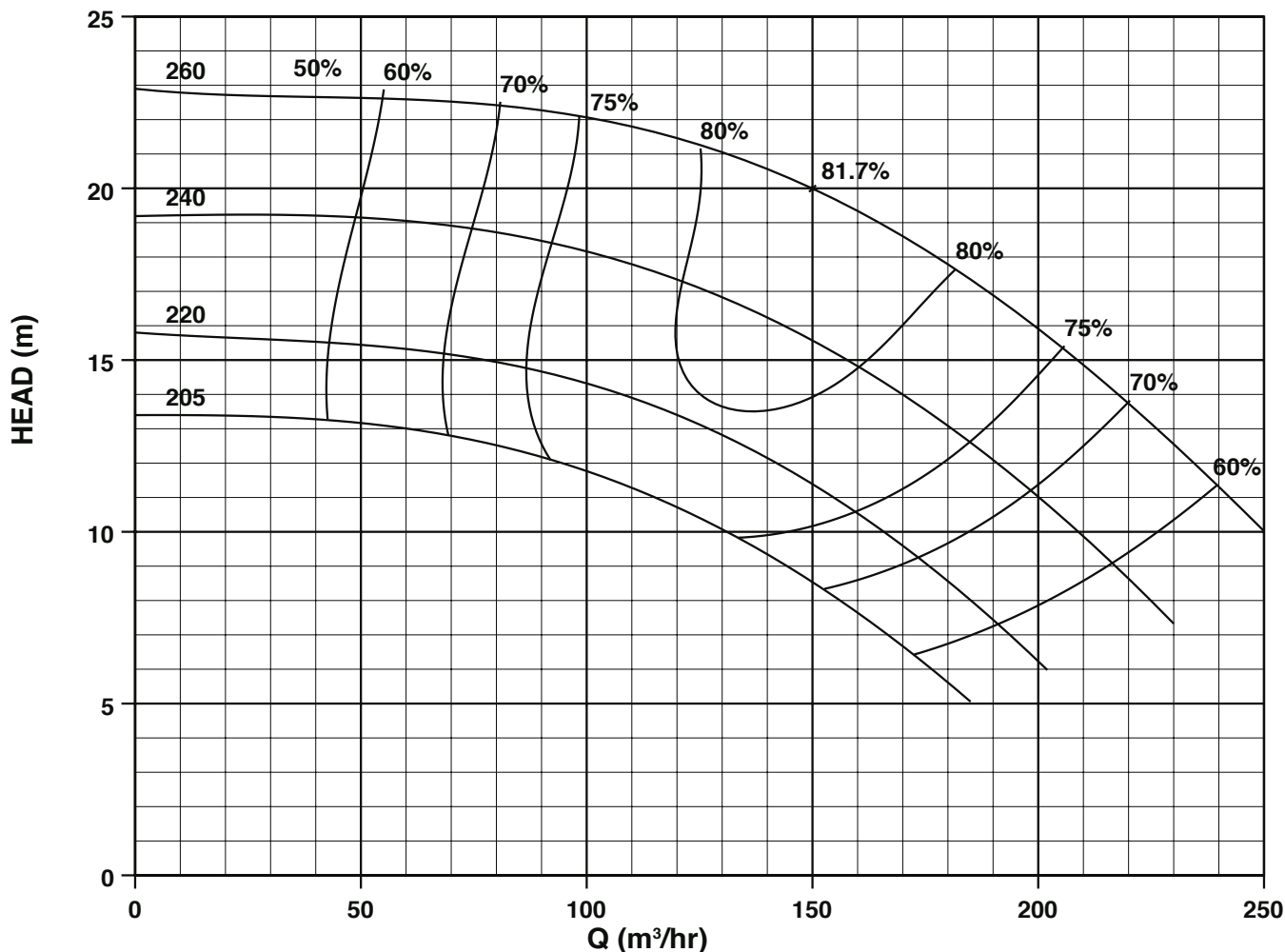
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

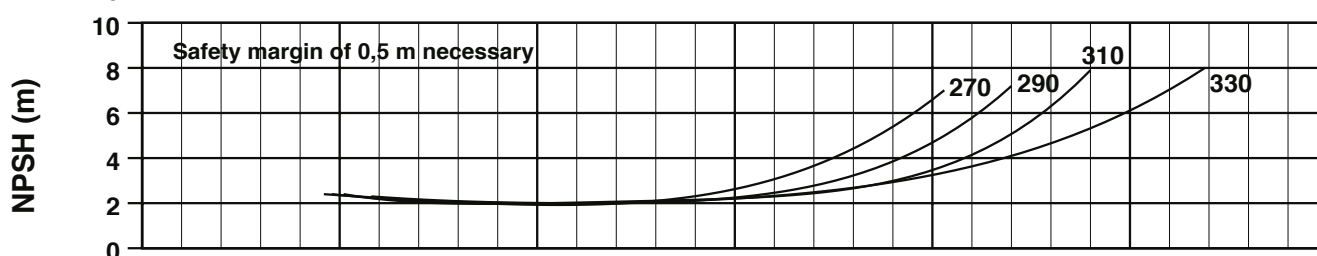
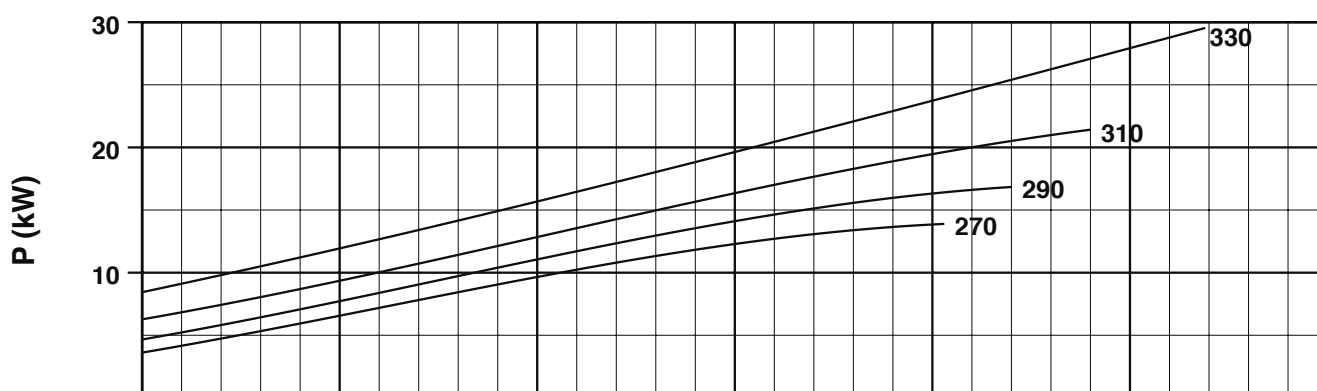
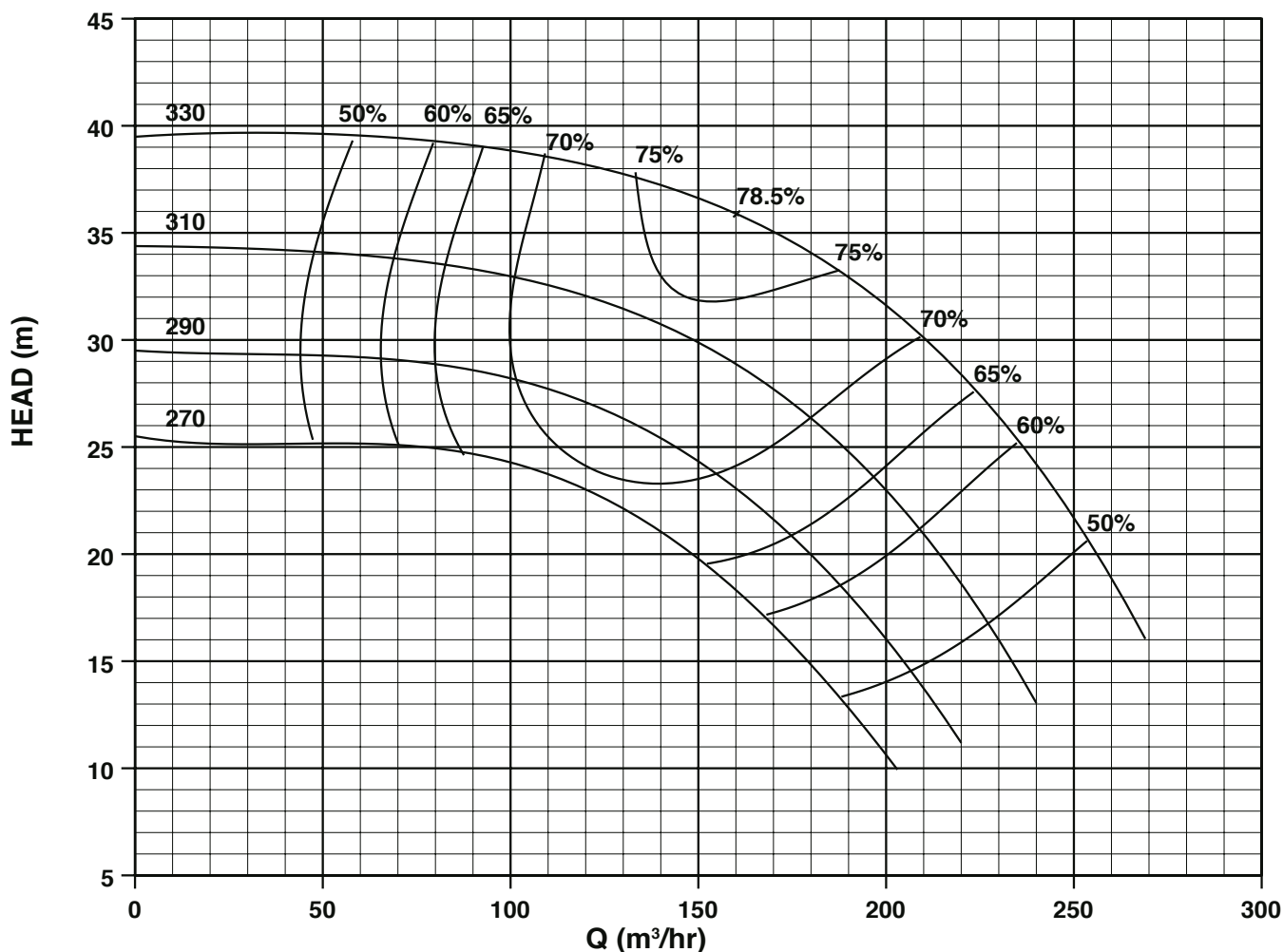
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

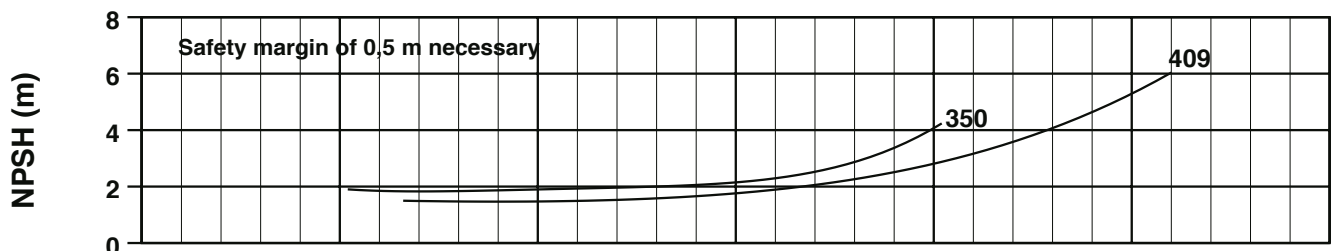
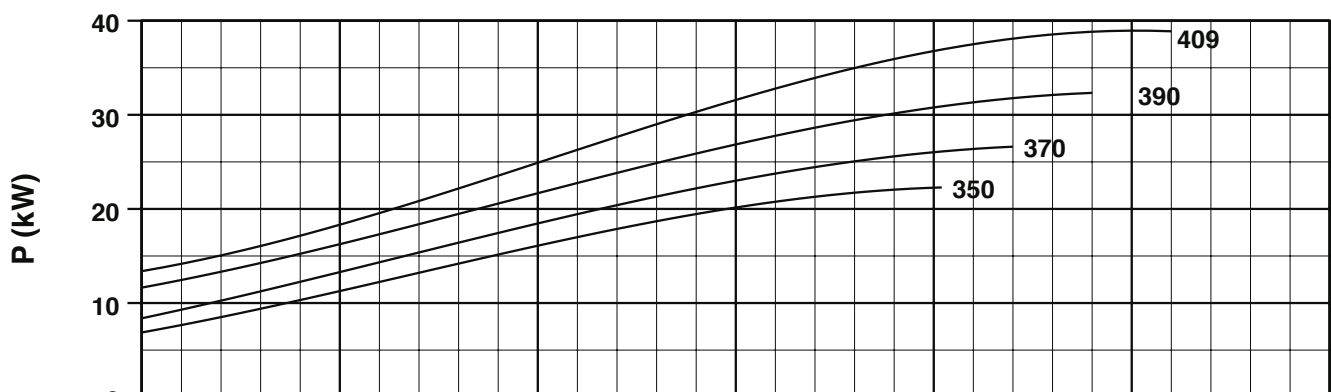
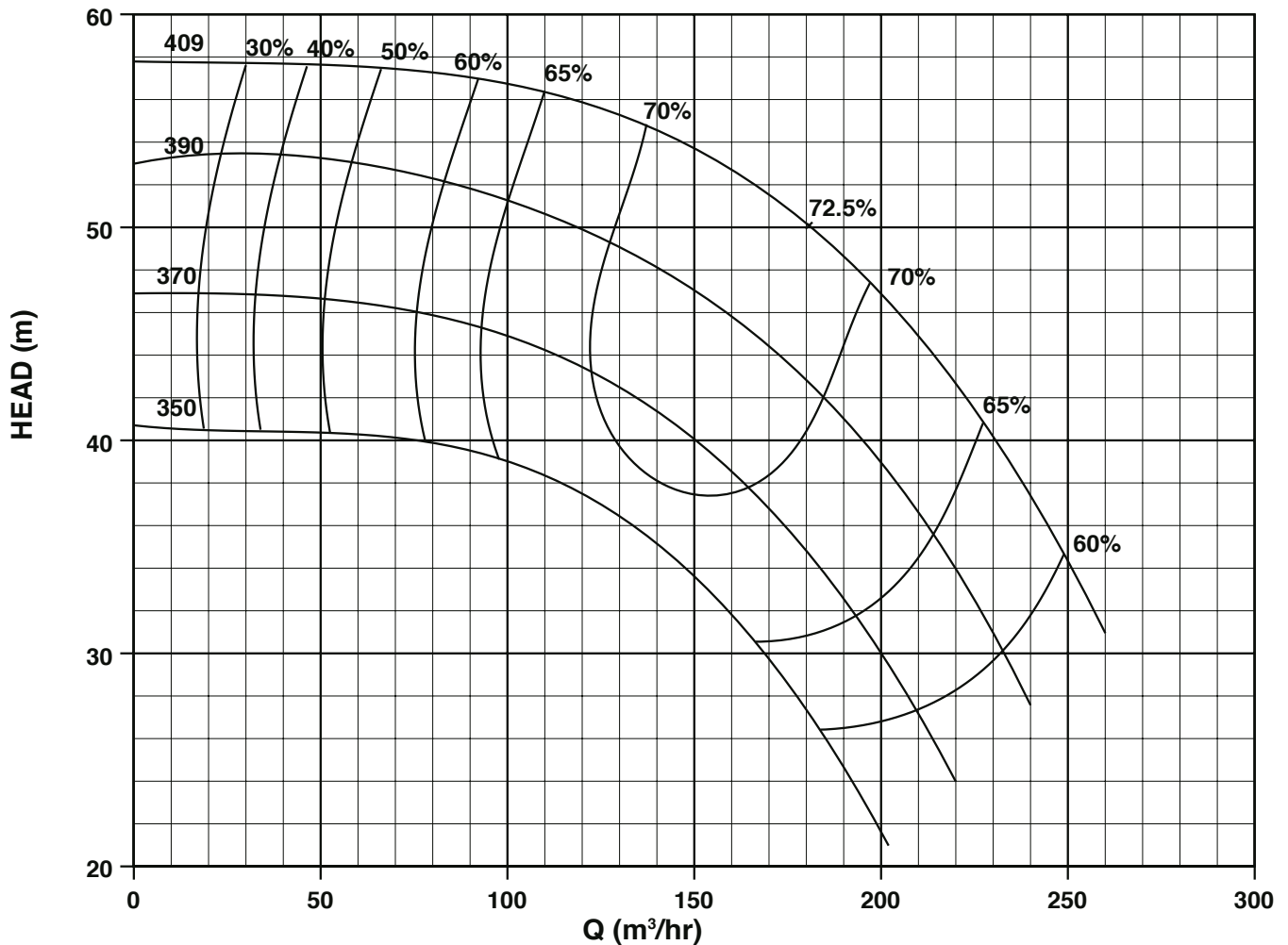
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

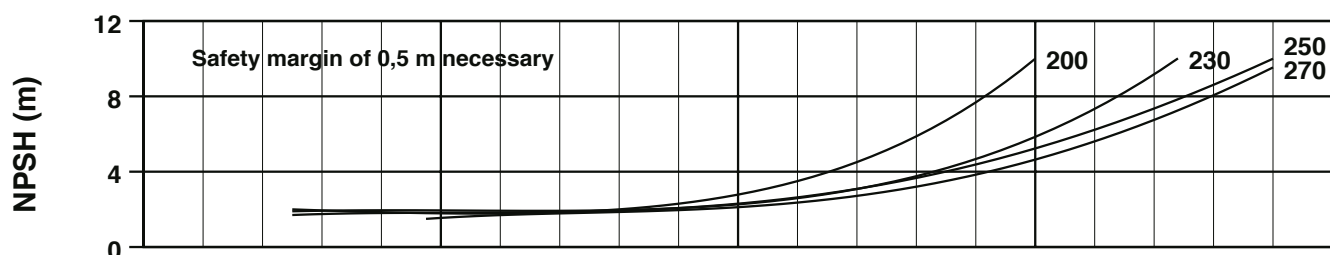
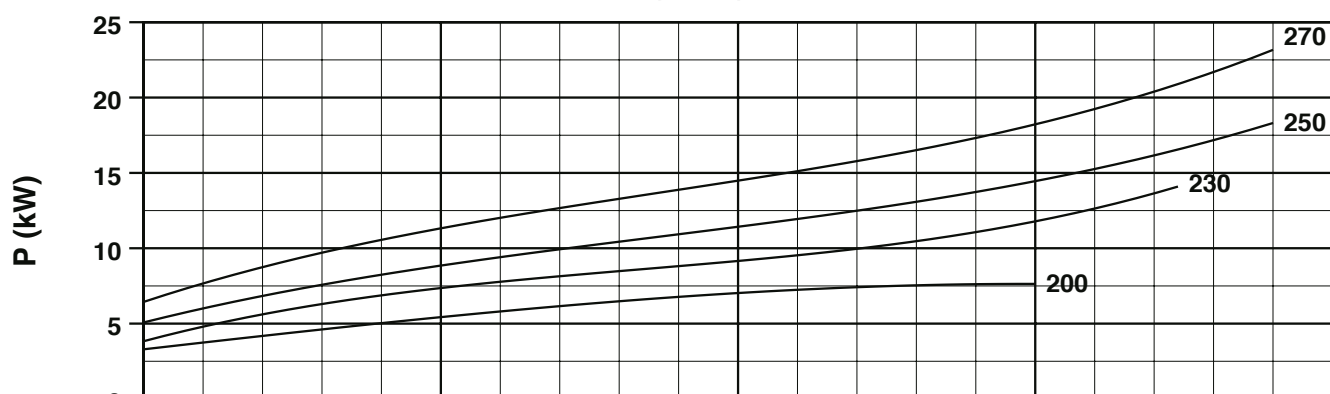
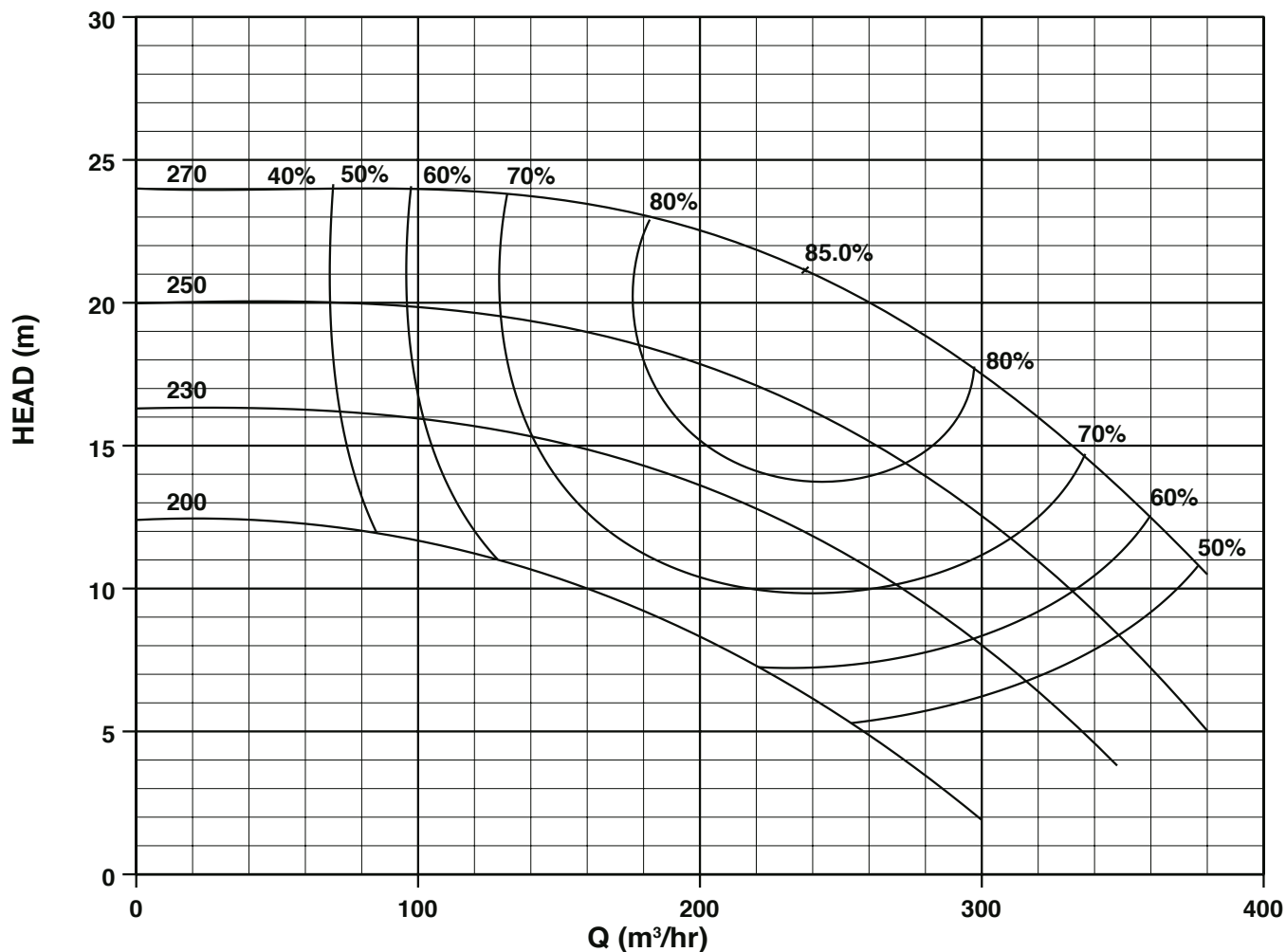
Suction Diameter
150mm

Discharge Diameter
125mm

DIN 24 255
NT/NS 125-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

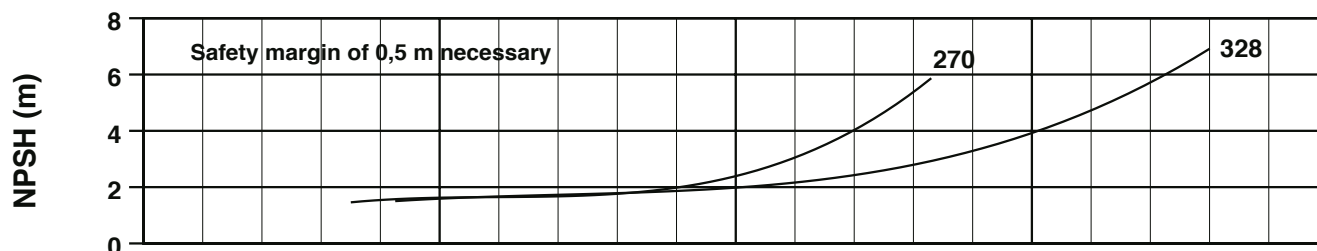
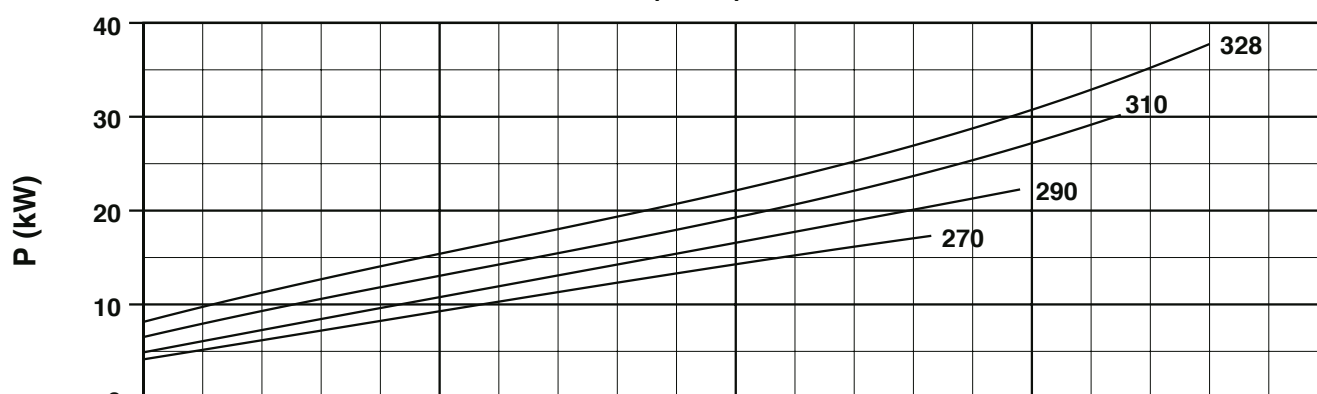
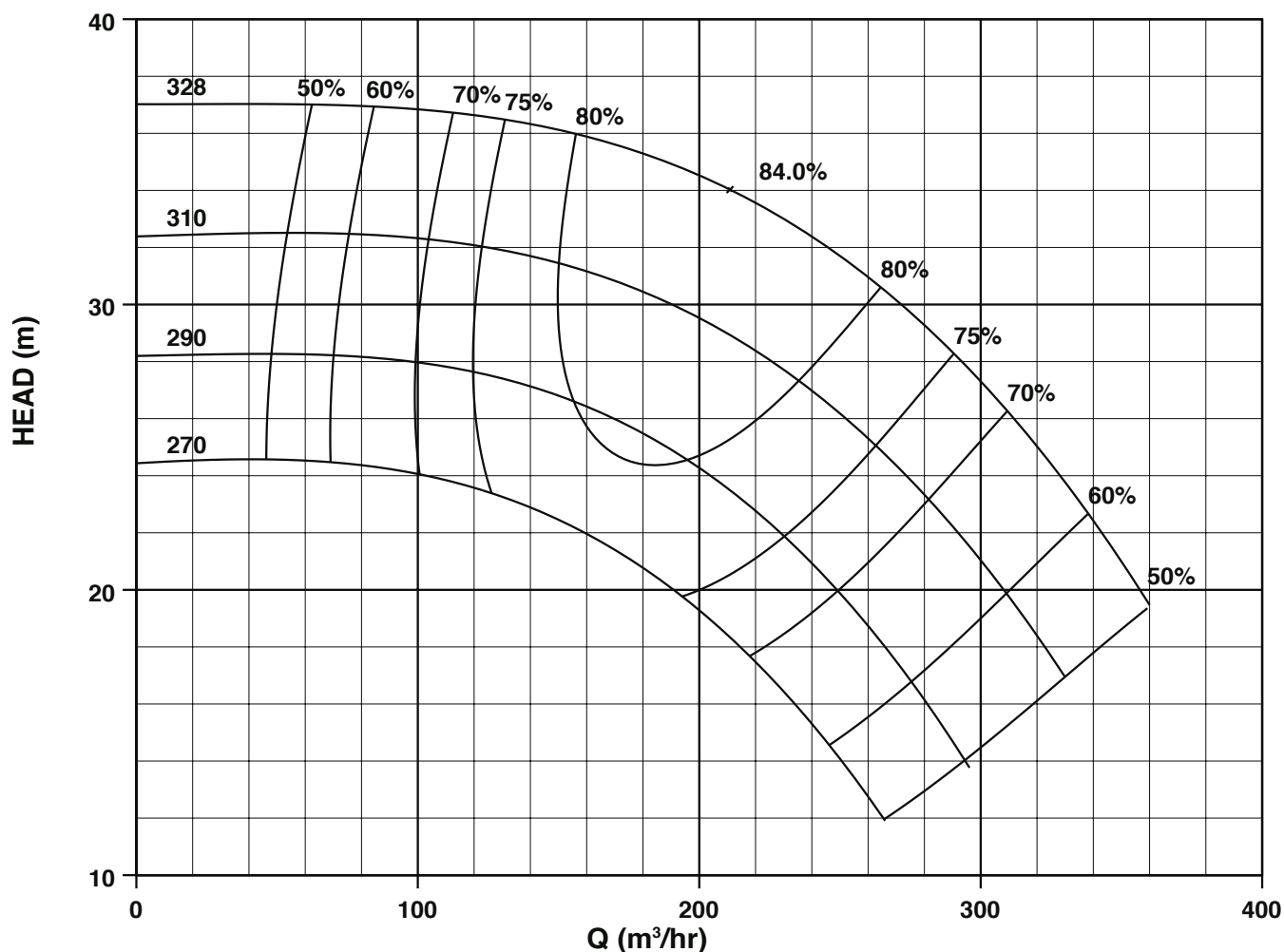
Suction Diameter
150mm

Discharge Diameter
125mm

DIN 24 255
NT/NS 125-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

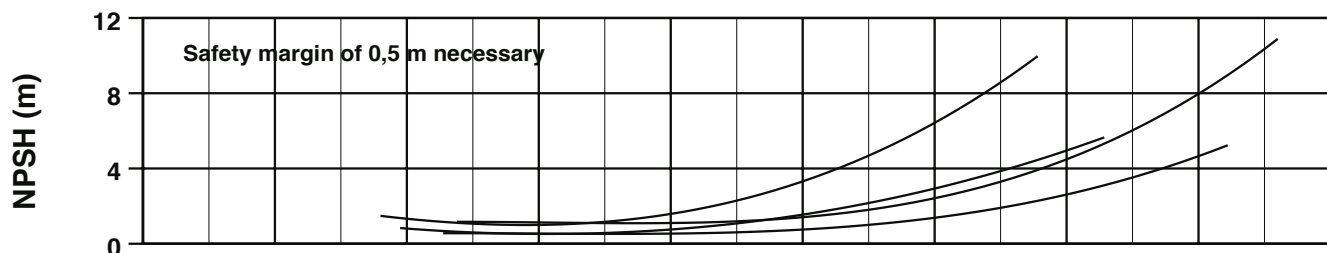
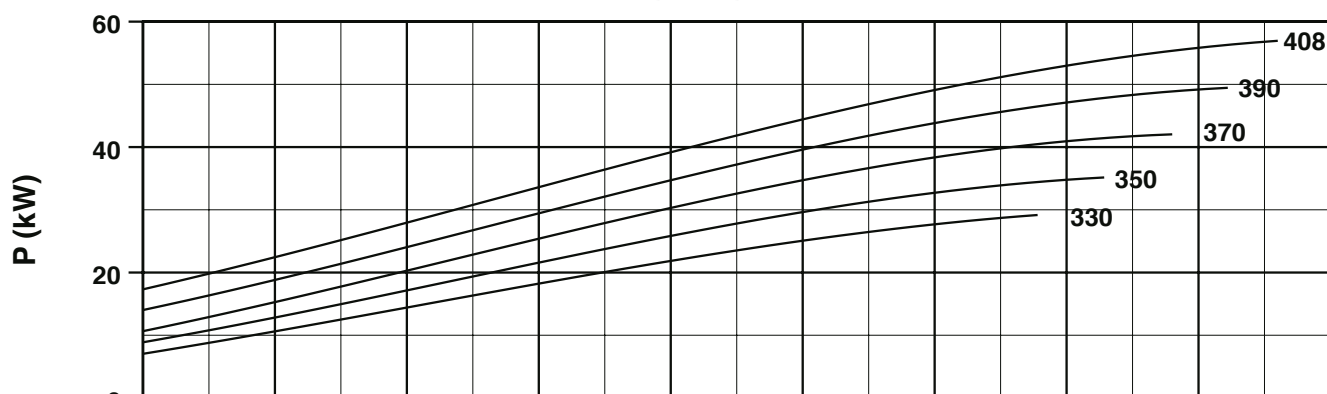
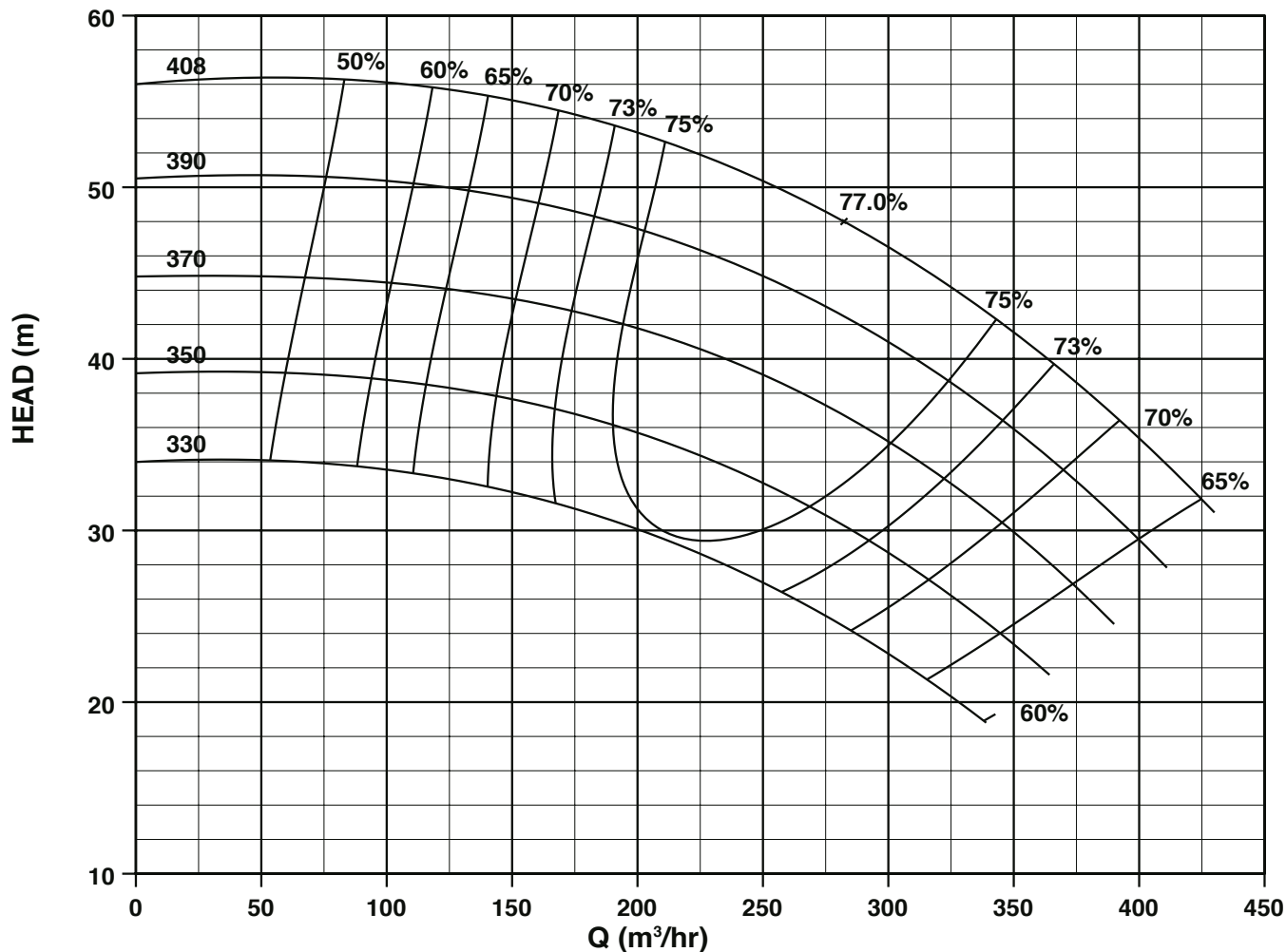
Suction Diameter
150mm

Discharge Diameter
125mm

DIN 24 255
NT/NS 125-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 1988

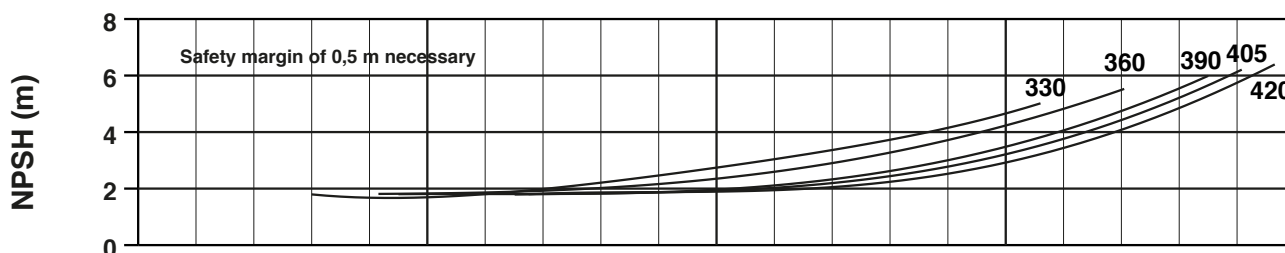
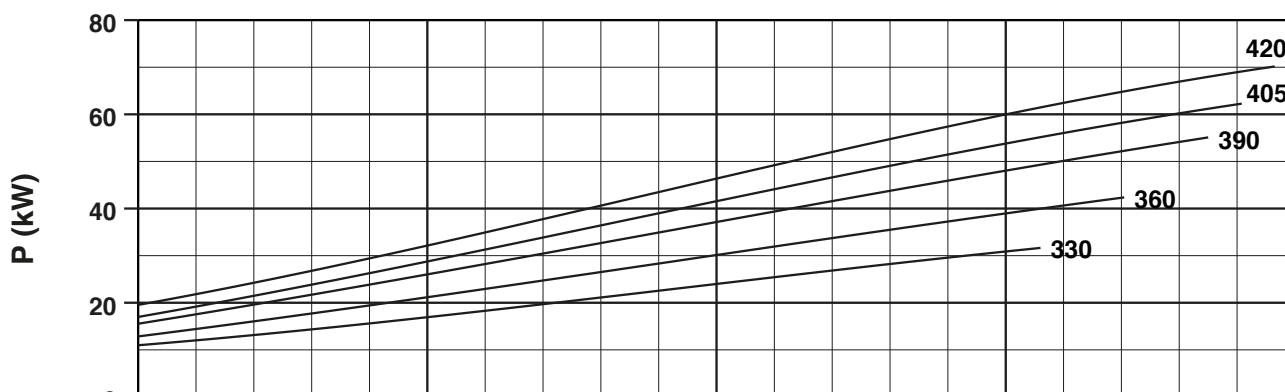
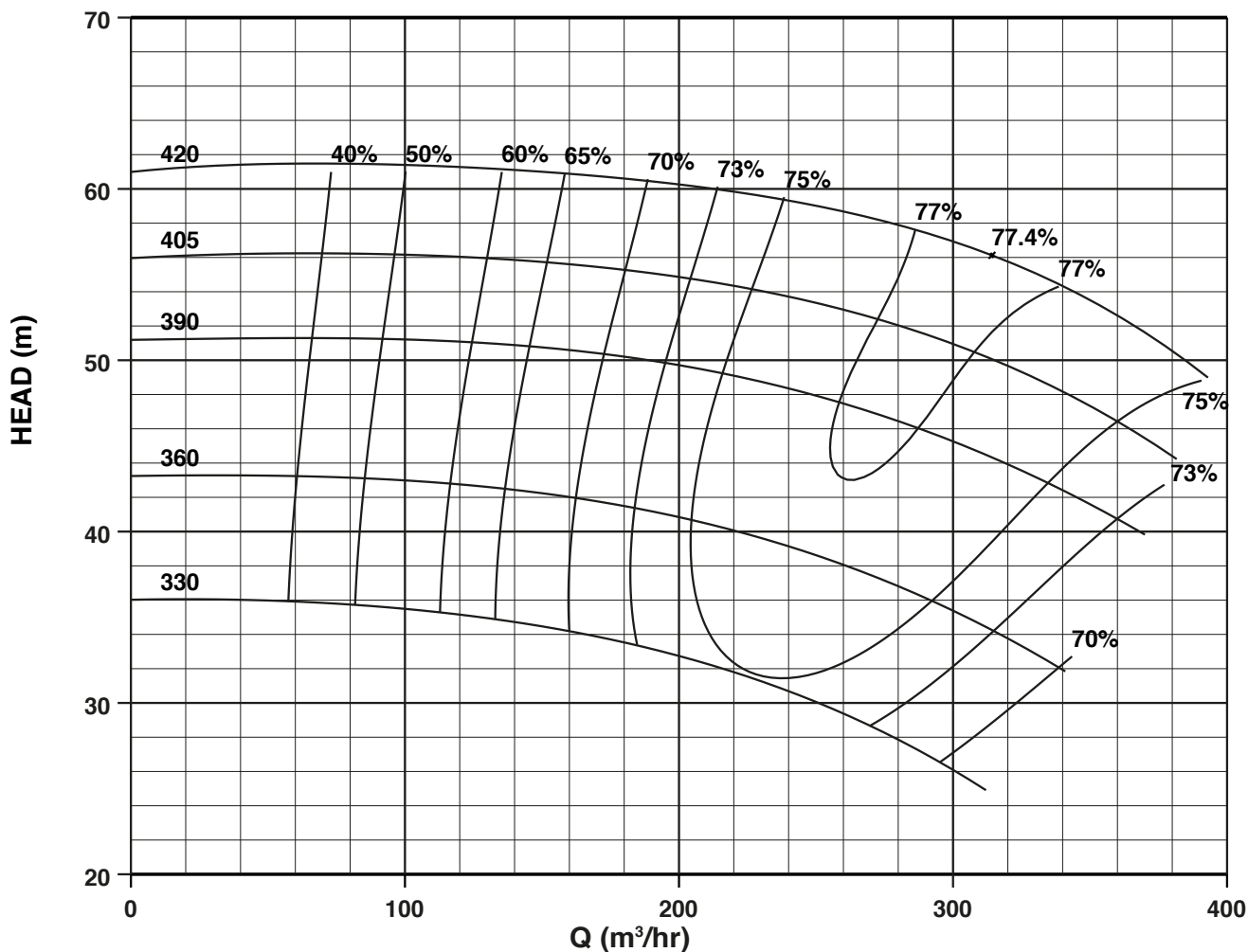
Suction Diameter
150mm

Discharge Diameter
125mm

DIN 24 255
NT/NS 125-400/1

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

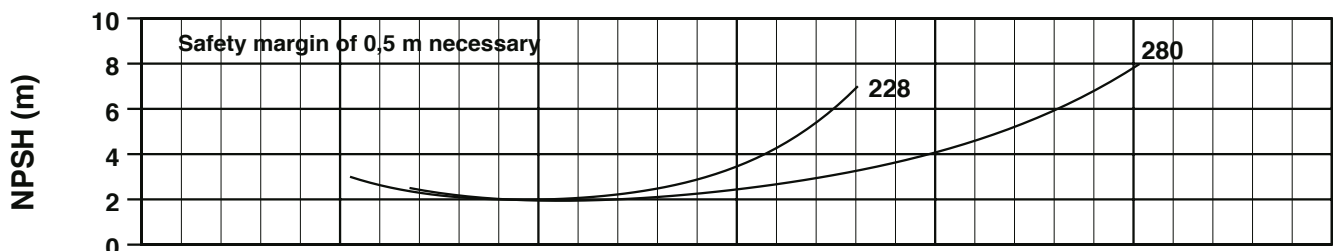
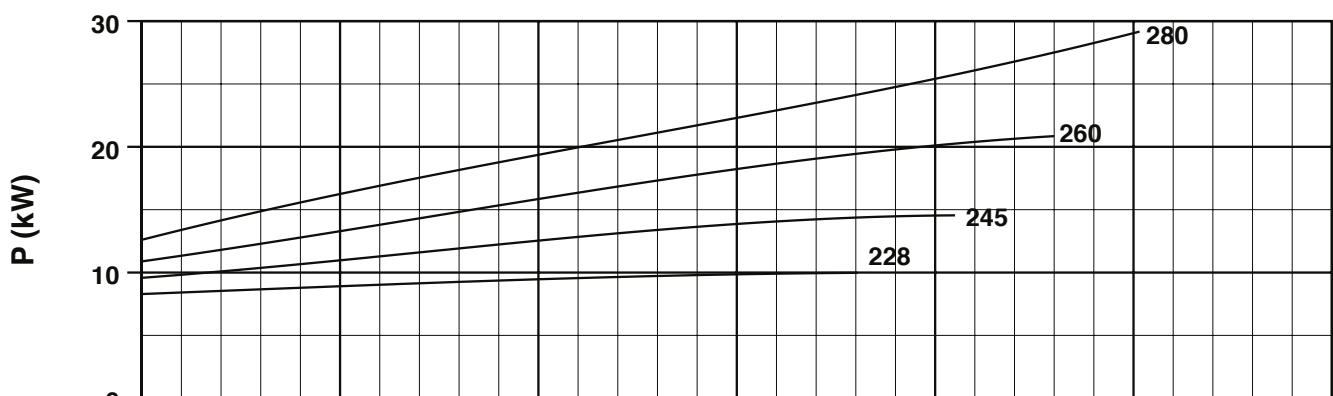
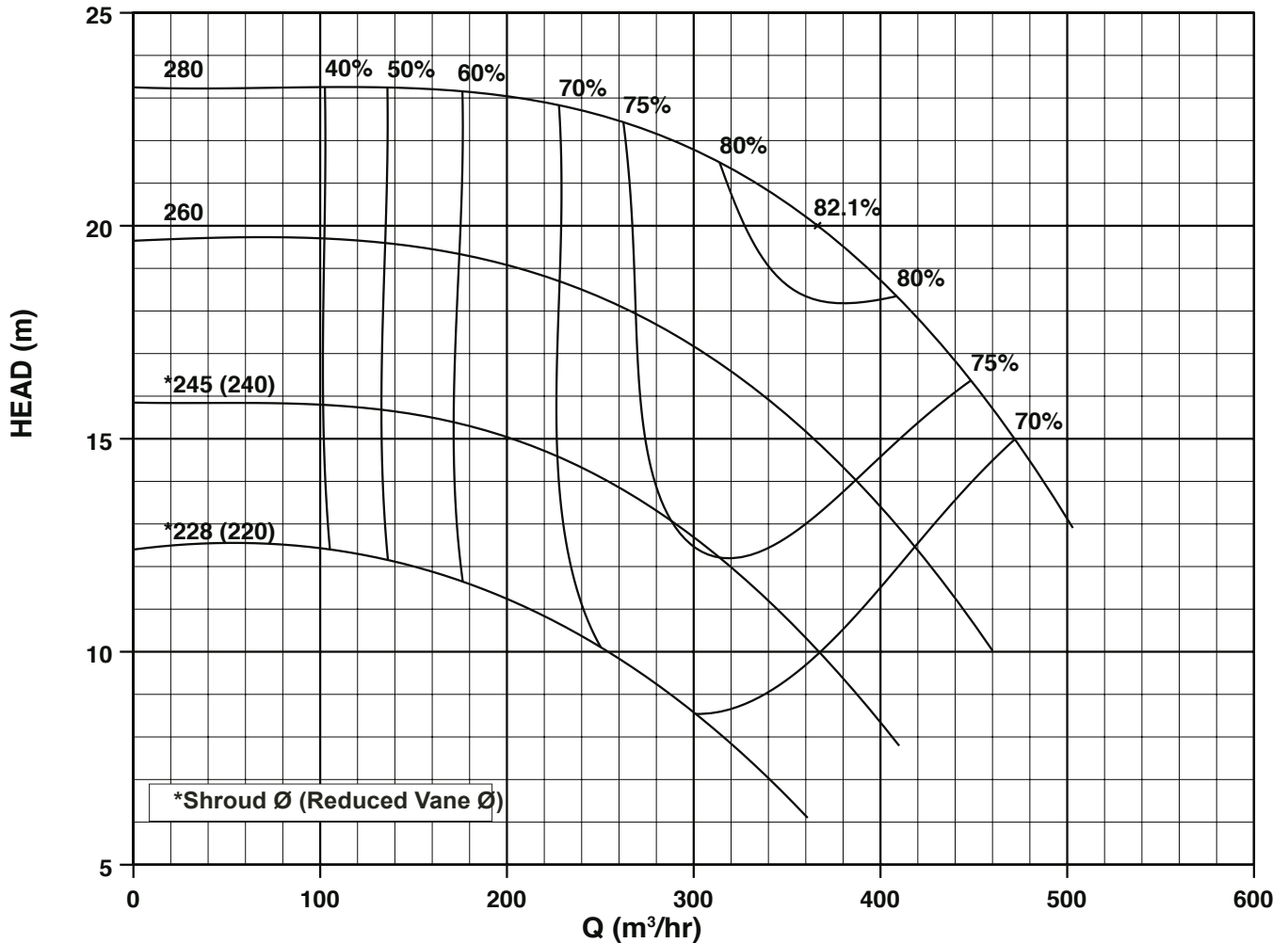
Suction Diameter
200mm

Discharge Diameter
150mm

DIN 24 255
NT/NS 150-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

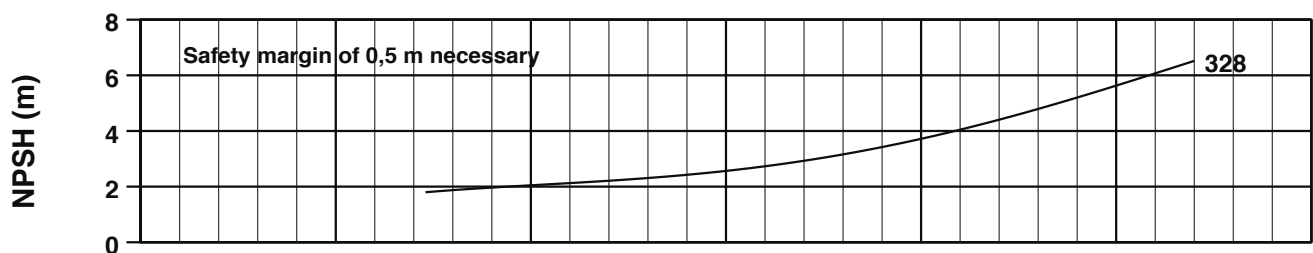
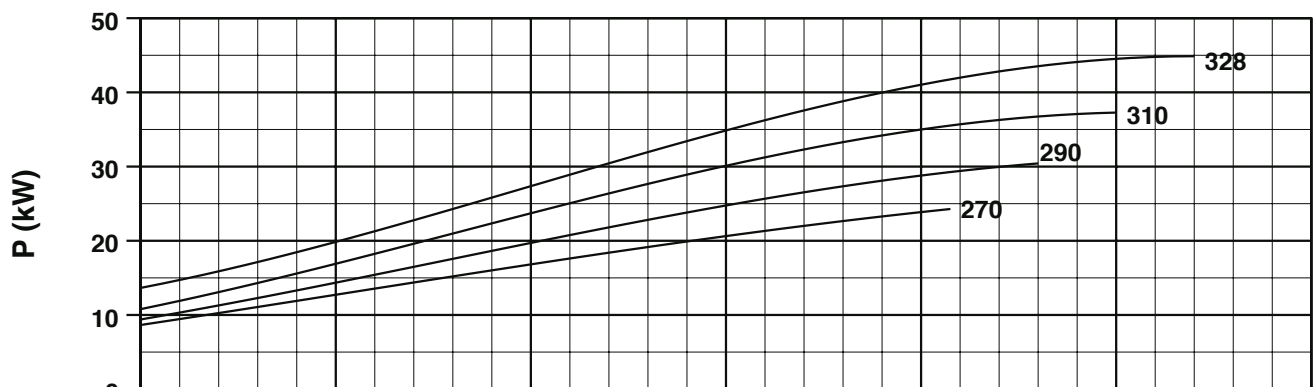
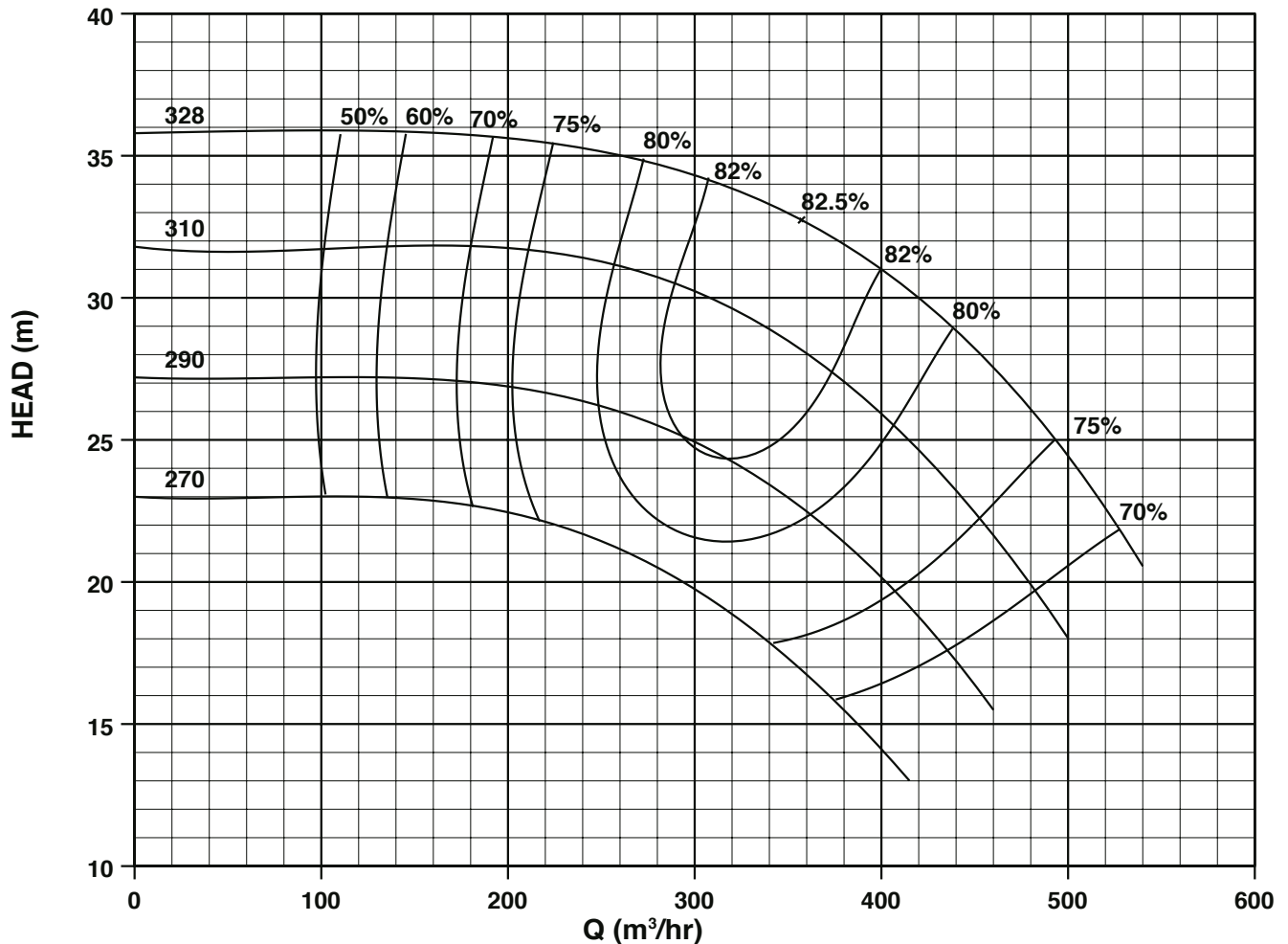
Suction Diameter
200mm

Discharge Diameter
150mm

DIN 24 255
NT/NS 150-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

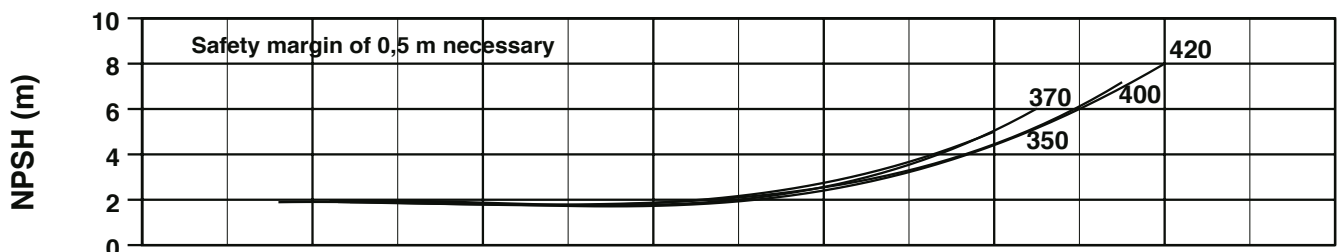
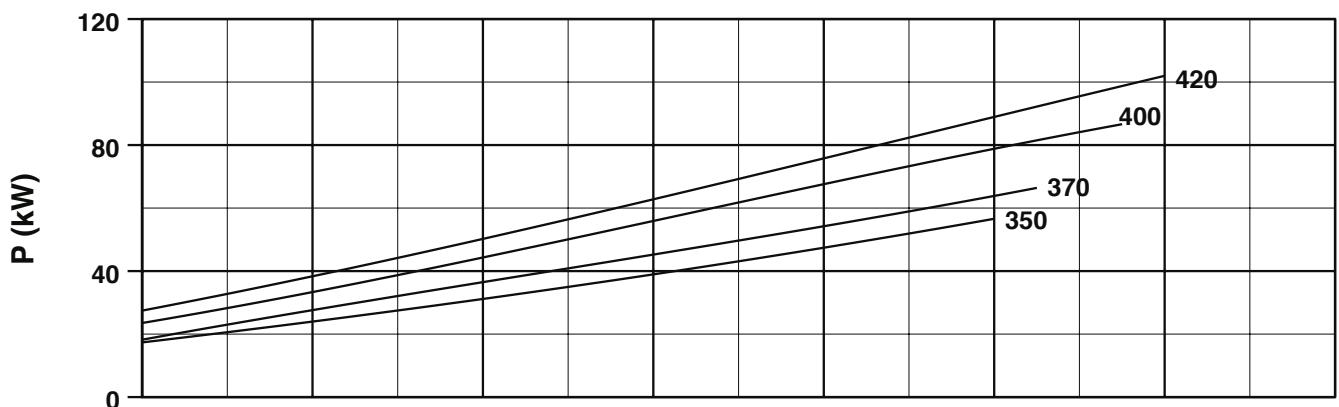
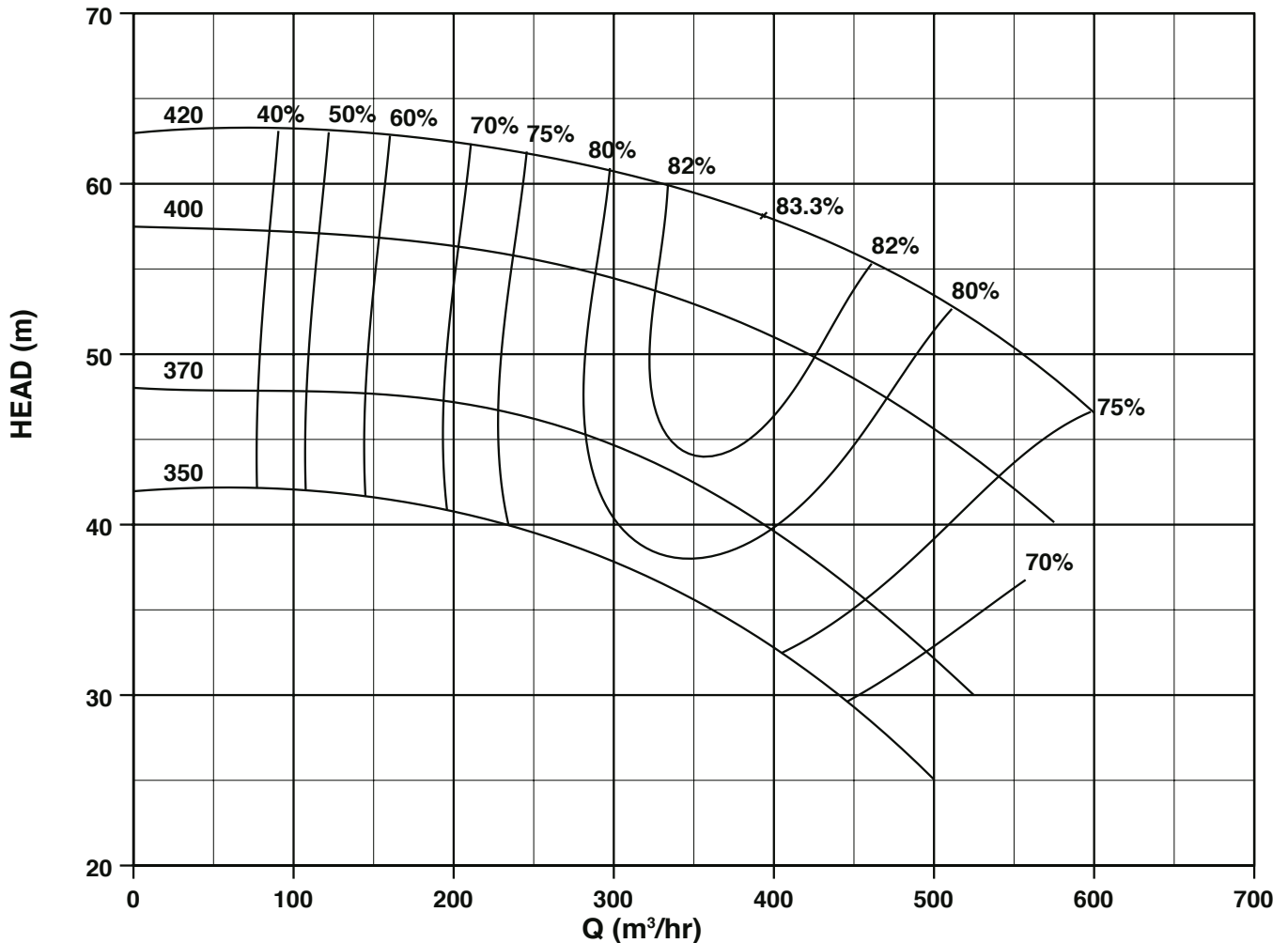
Suction Diameter
200mm

Discharge Diameter
150mm

DIN 24 255
NT/NS 150-400/1

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

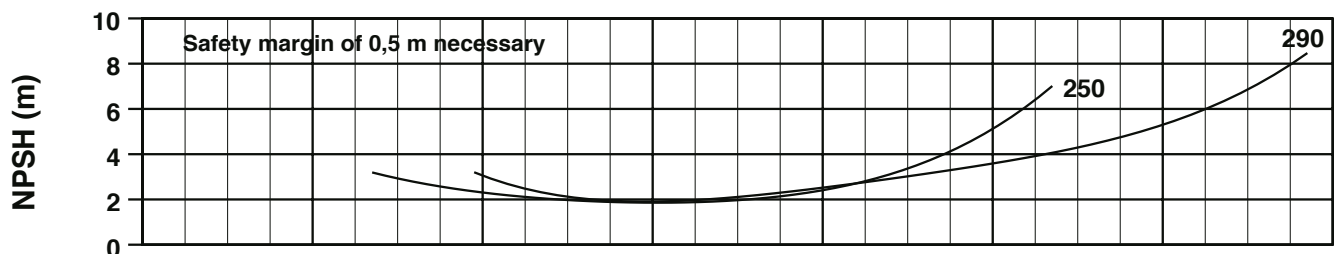
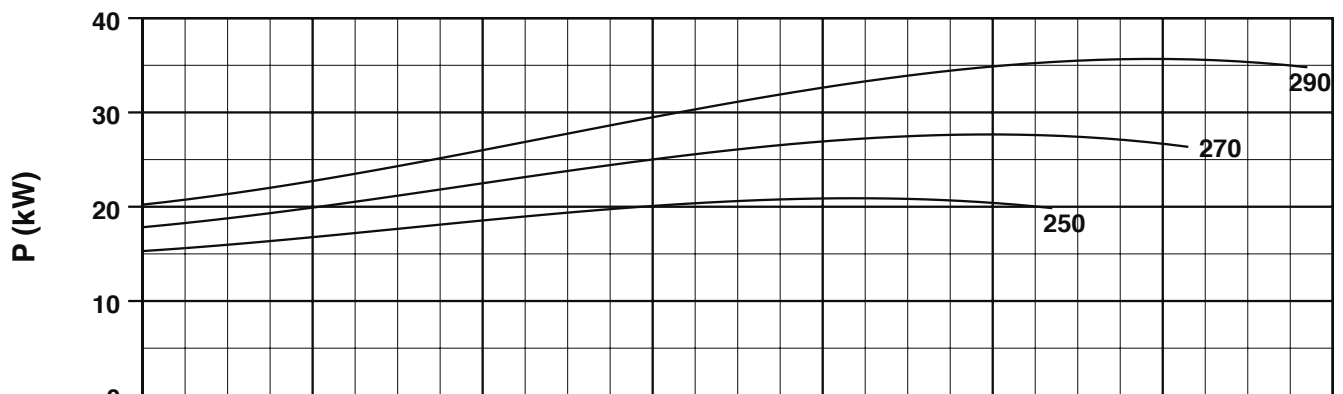
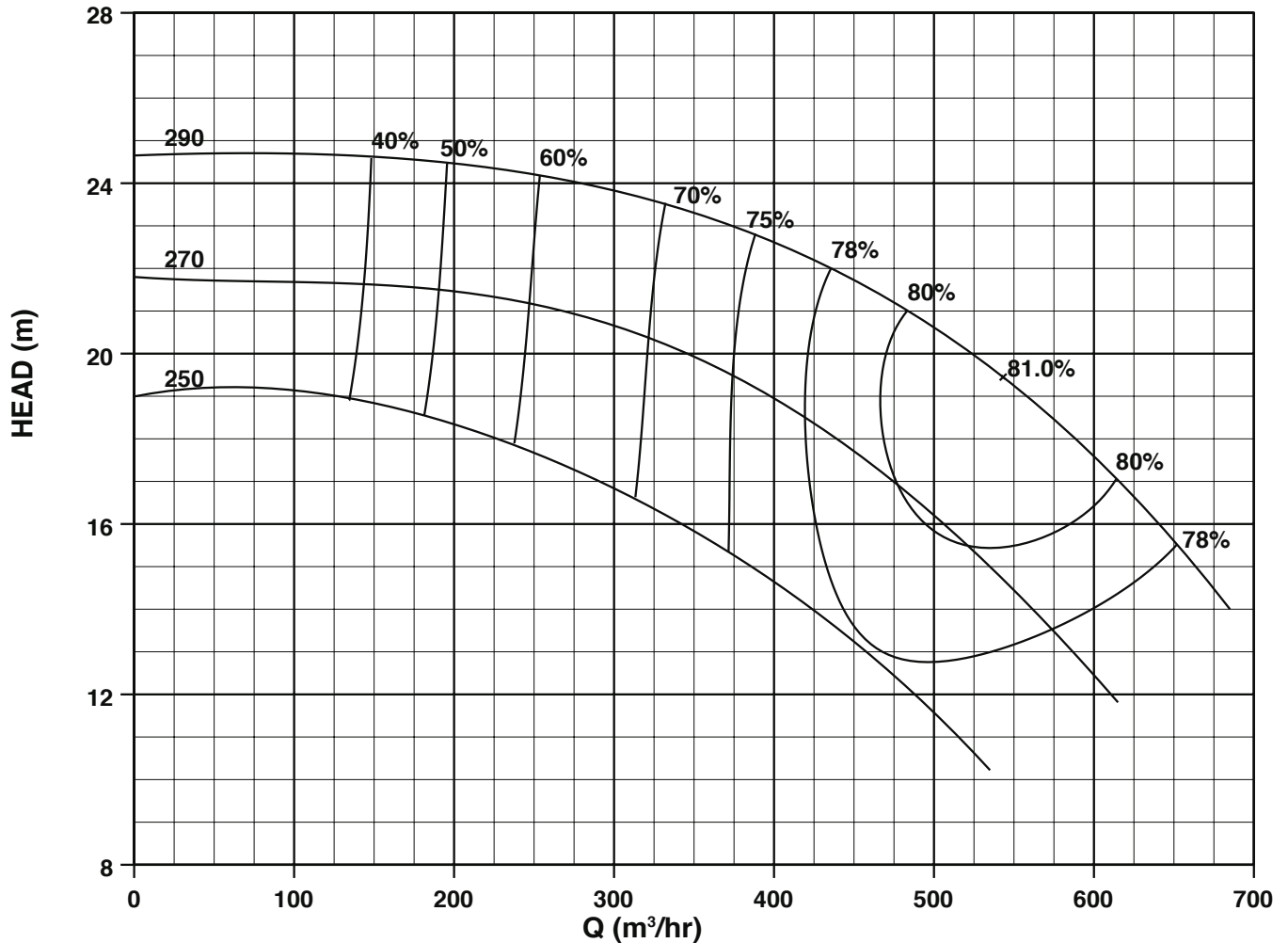
Suction Diameter
200mm

Discharge Diameter
200mm

DIN 24 255
NT/NS 200-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

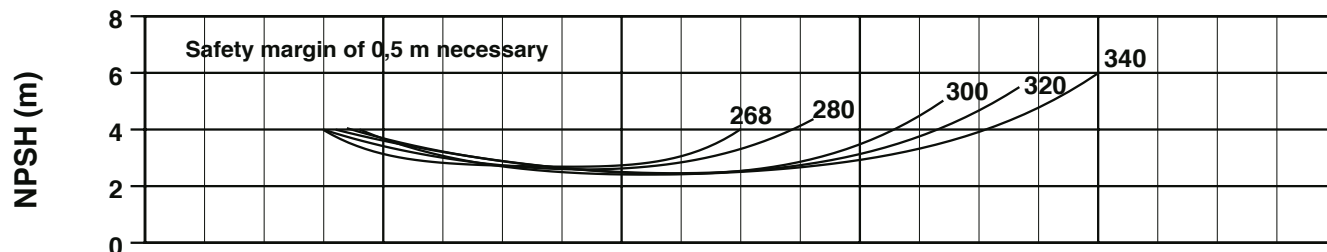
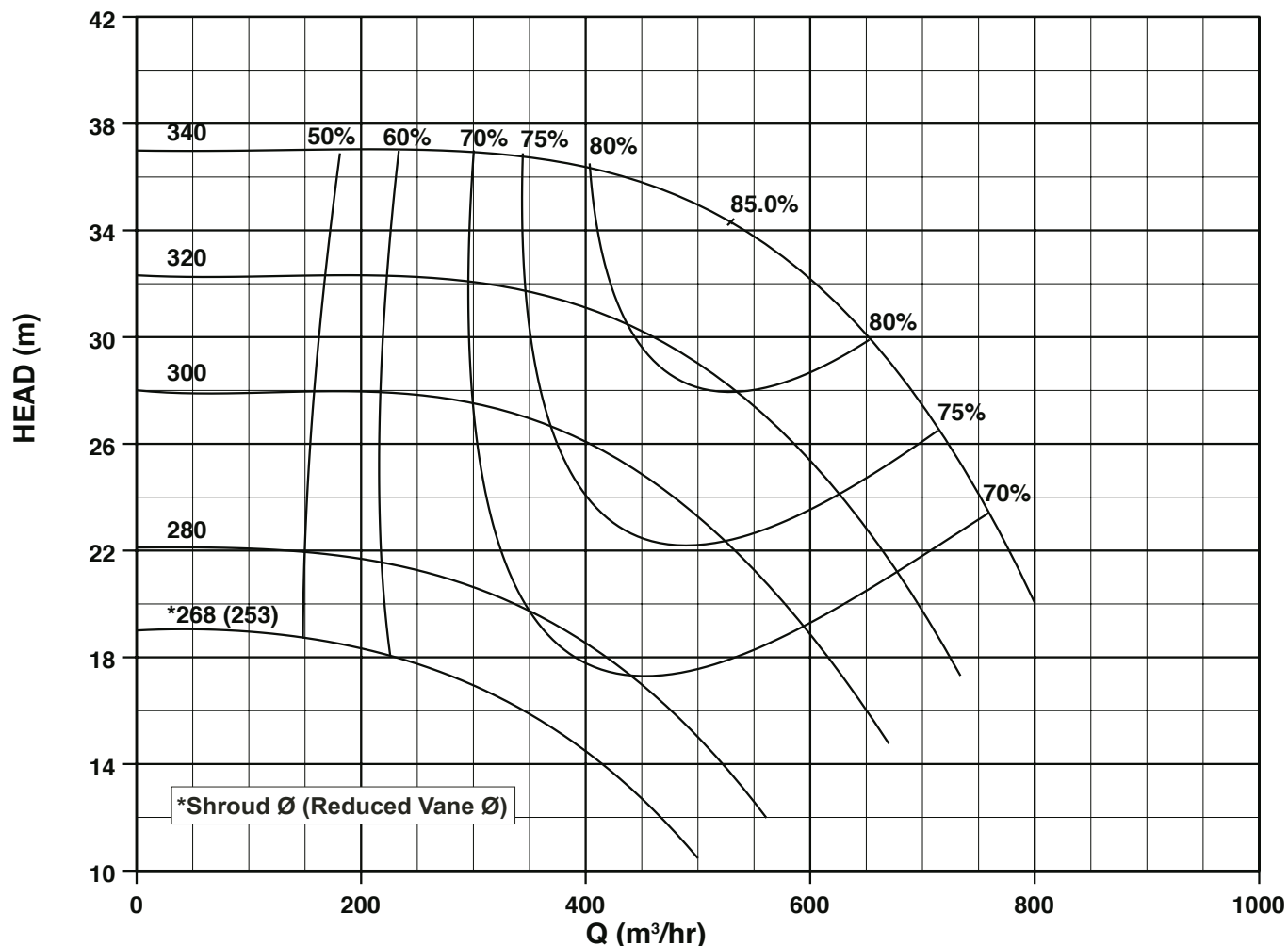
Suction Diameter
250mm

Discharge Diameter
200mm

DIN 24 255
NT/NS 200-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

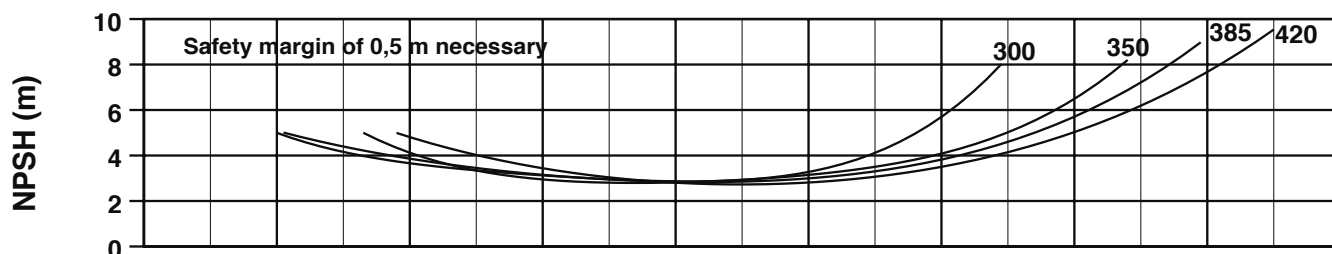
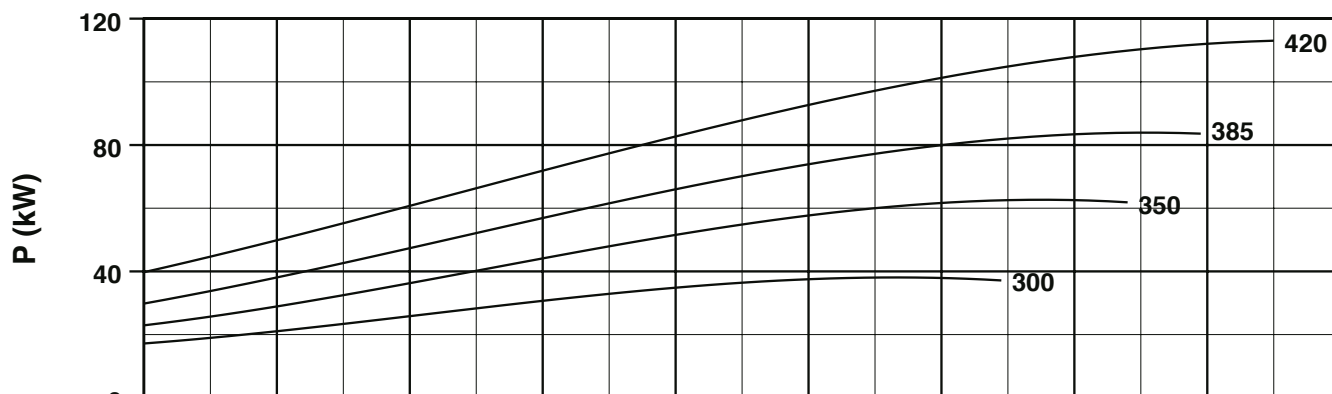
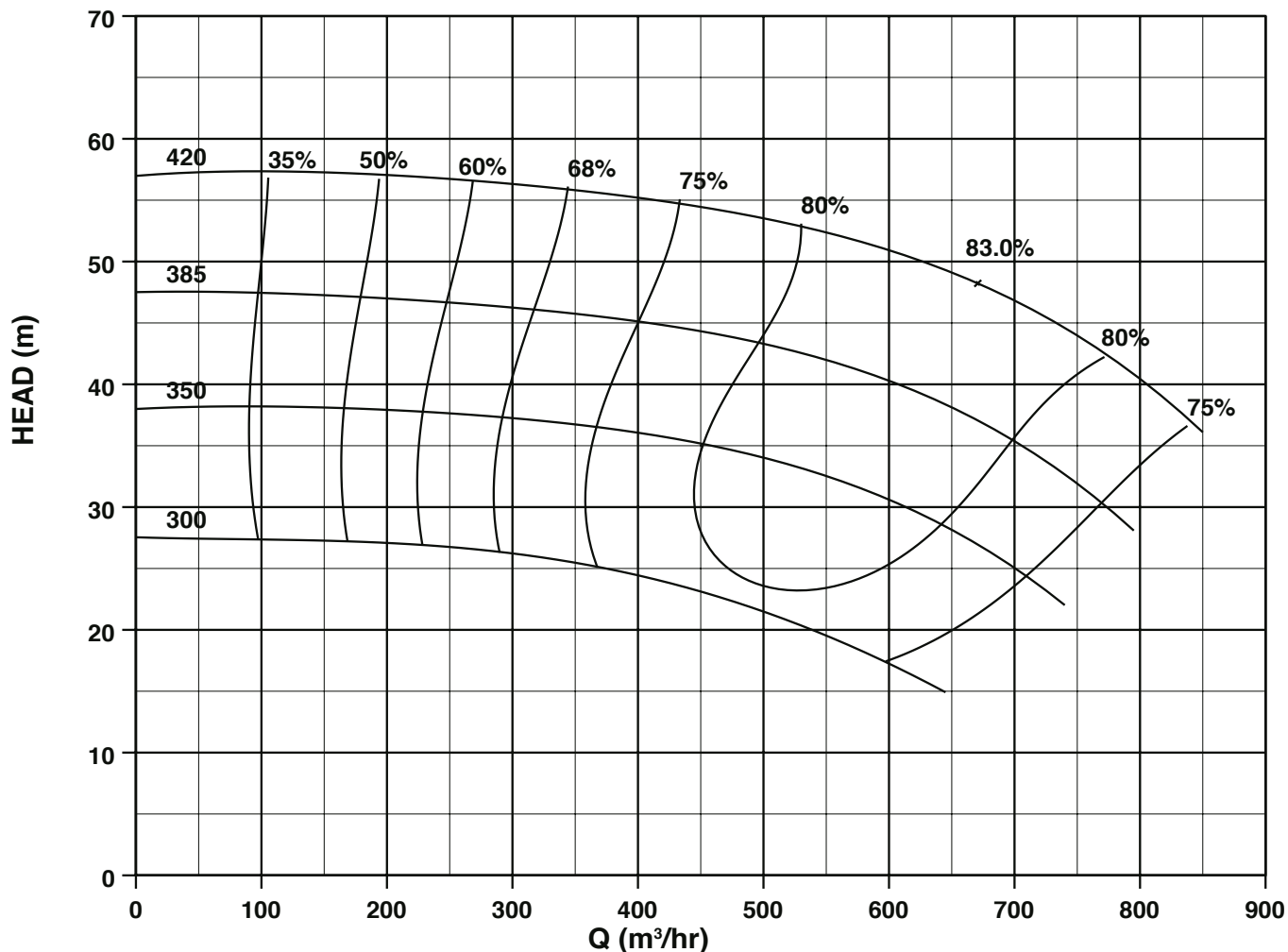
Suction Diameter
250mm

Discharge Diameter
200mm

DIN 24 255
NT/NS 200-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

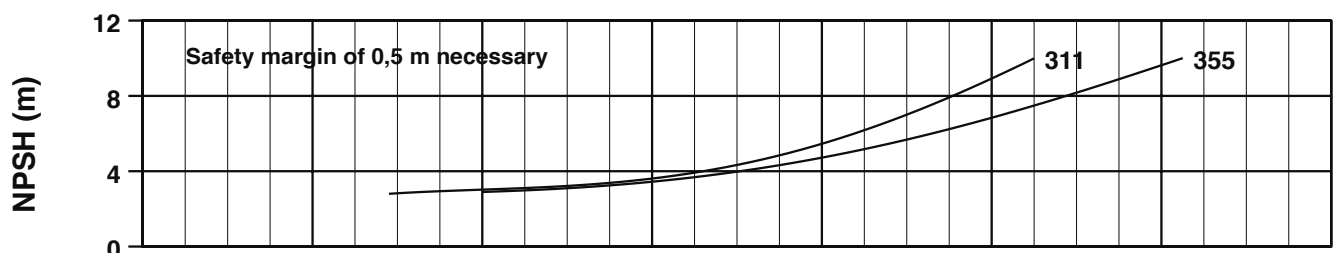
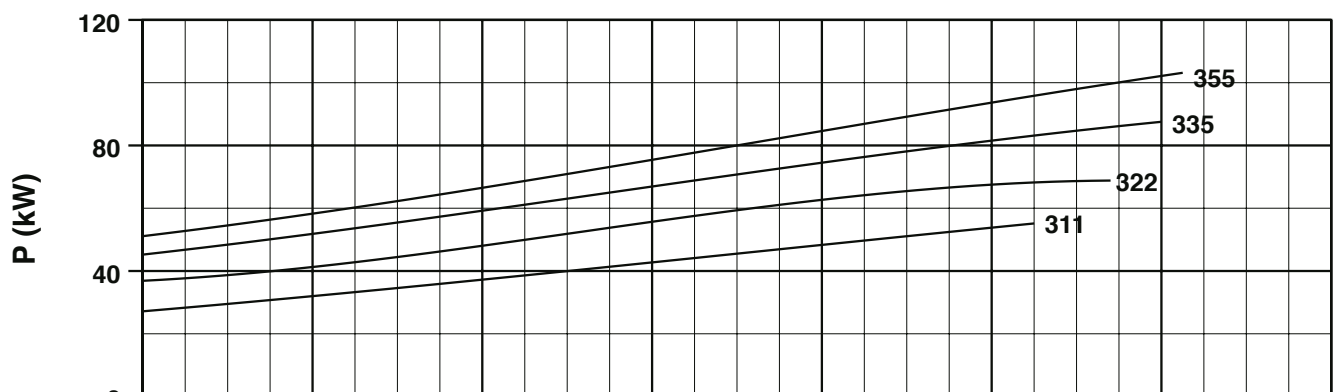
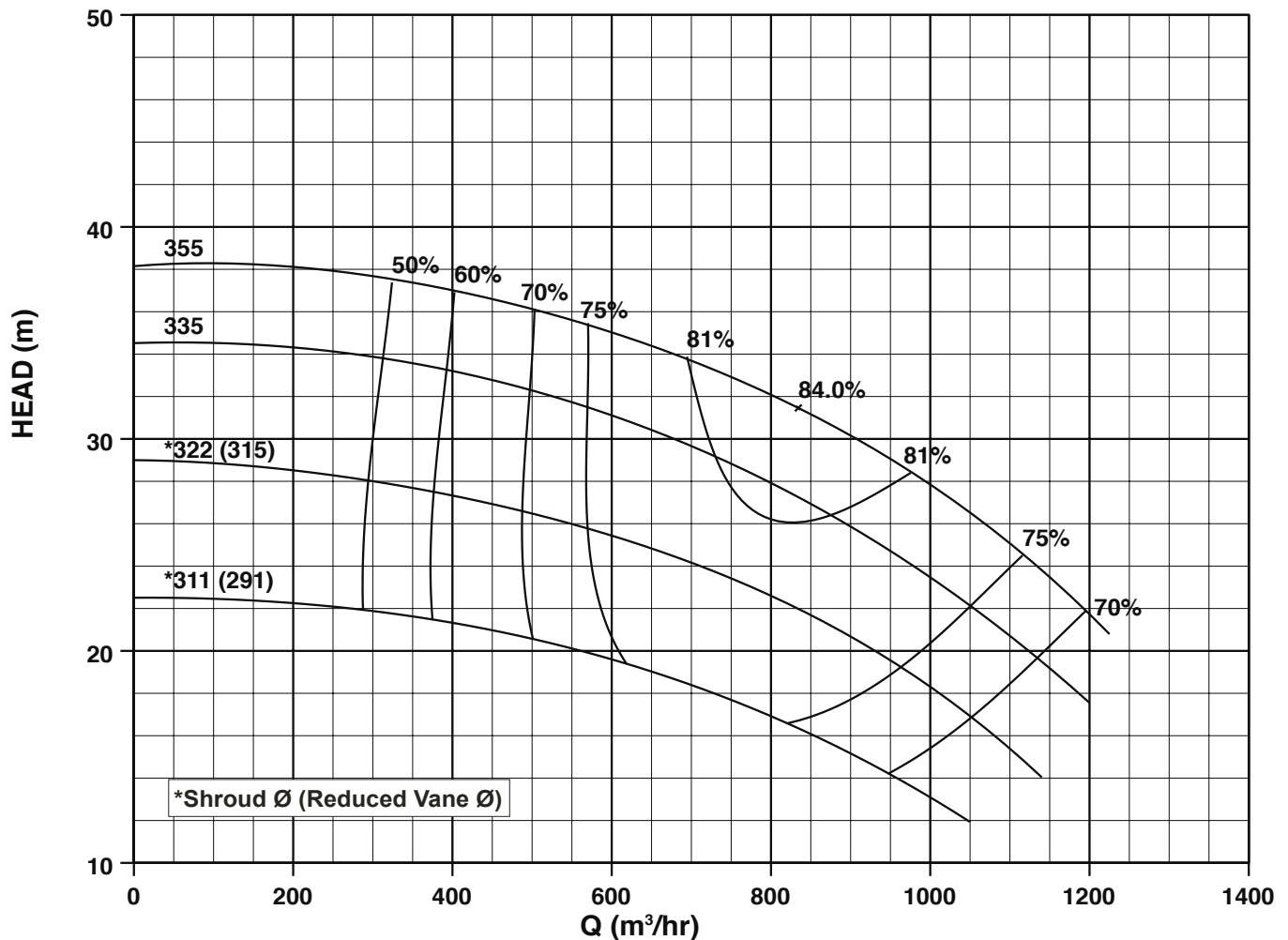
Suction Diameter
300mm

Discharge Diameter
250mm

DIN 24 255
NT/NS 250-315

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

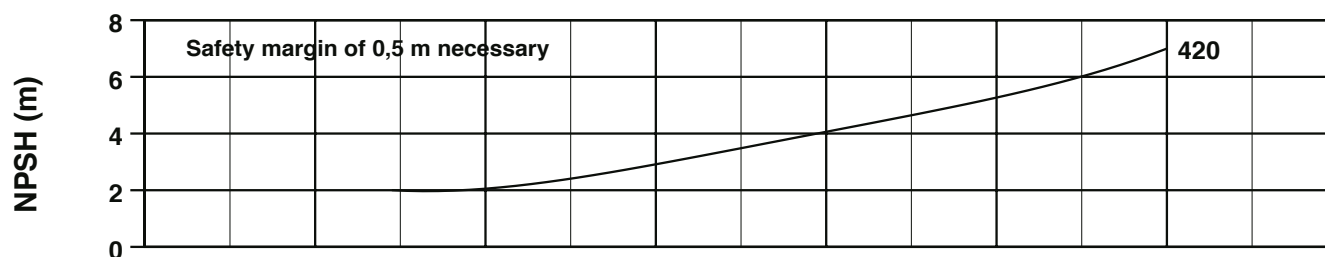
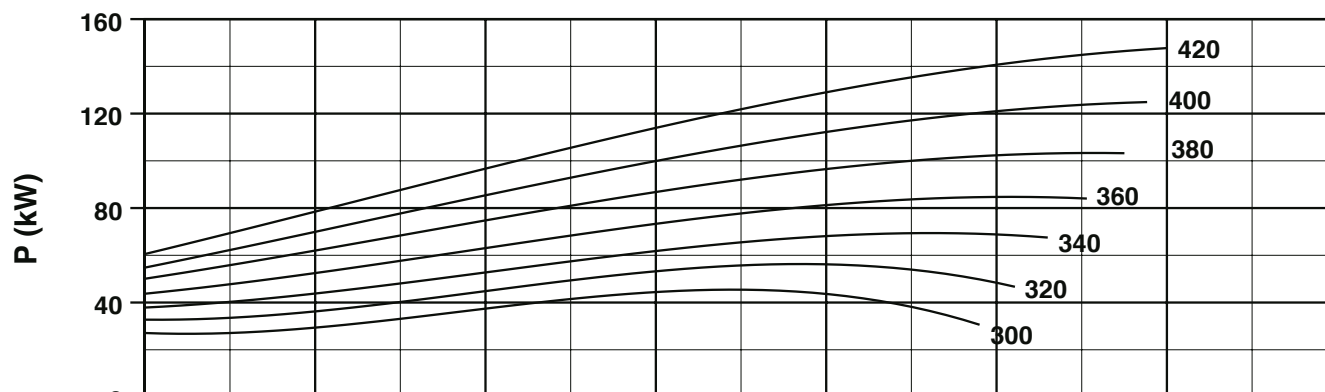
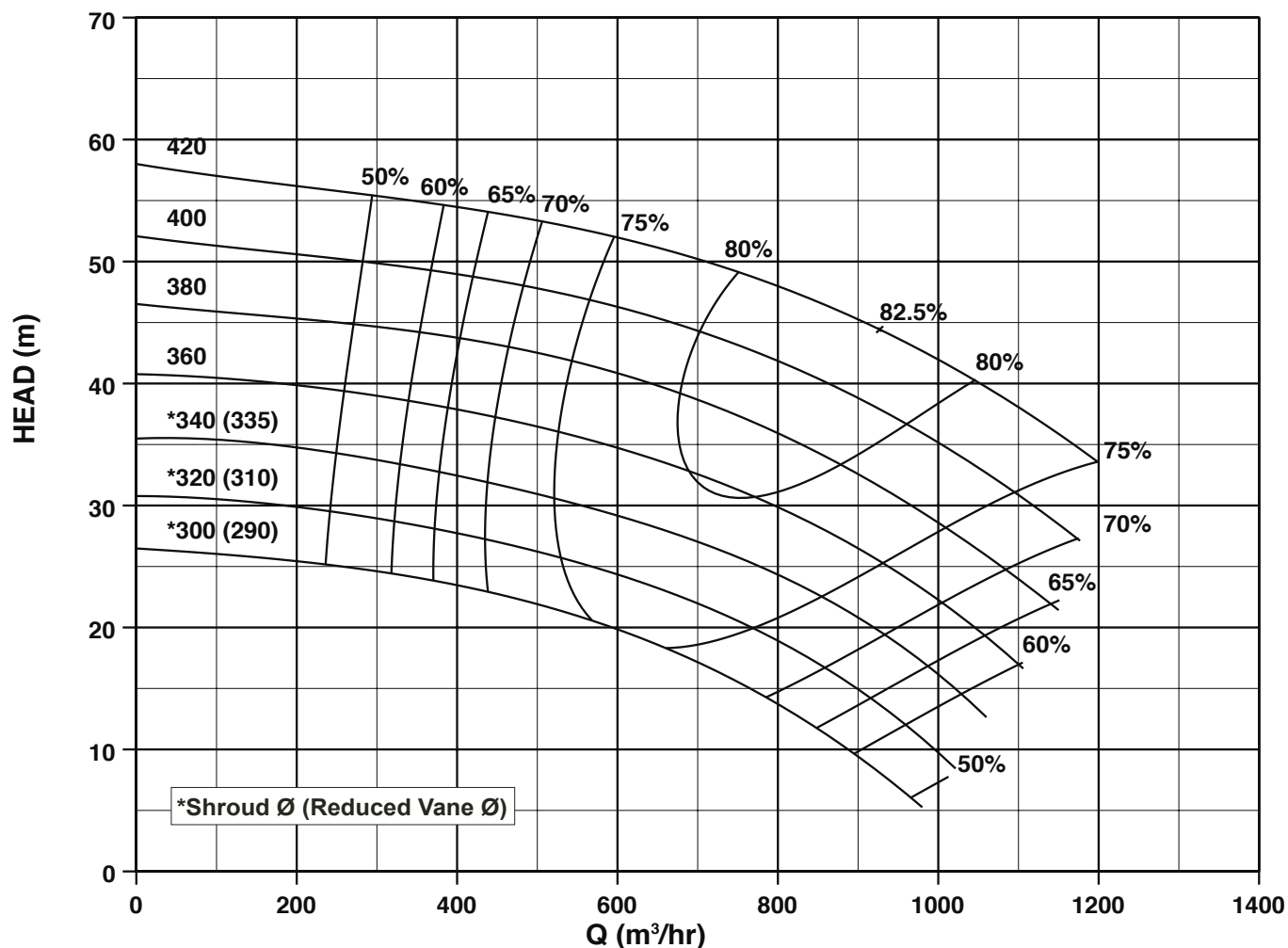
Suction Diameter
300mm

Discharge Diameter
250mm

DIN 24 255
NT/NS 250-400

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

1450 rpm



1450

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

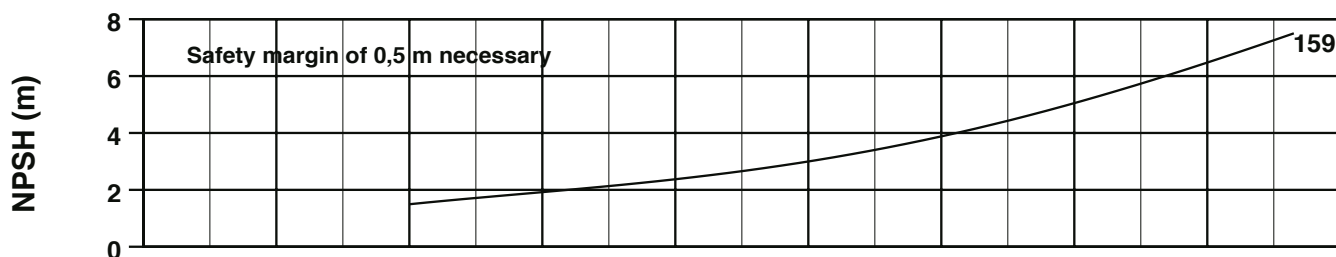
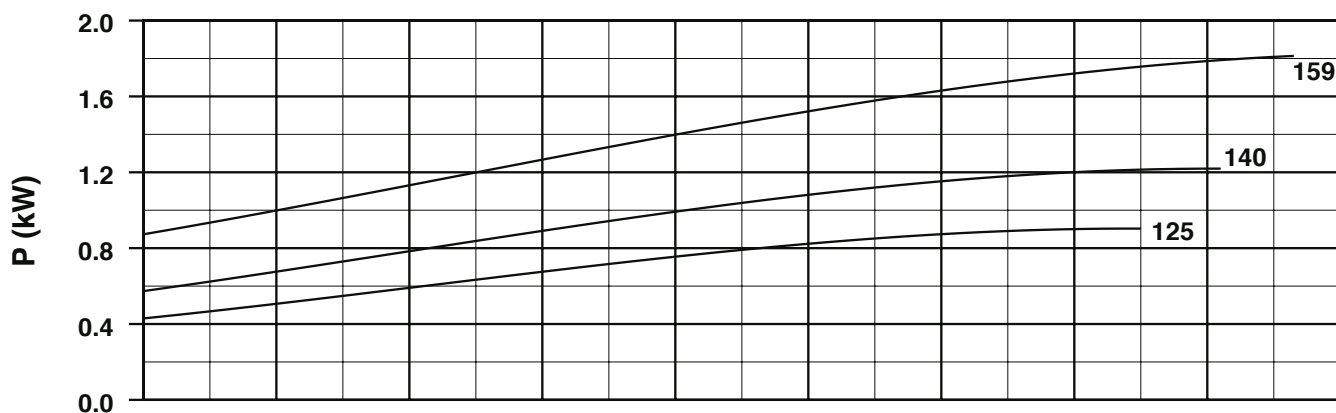
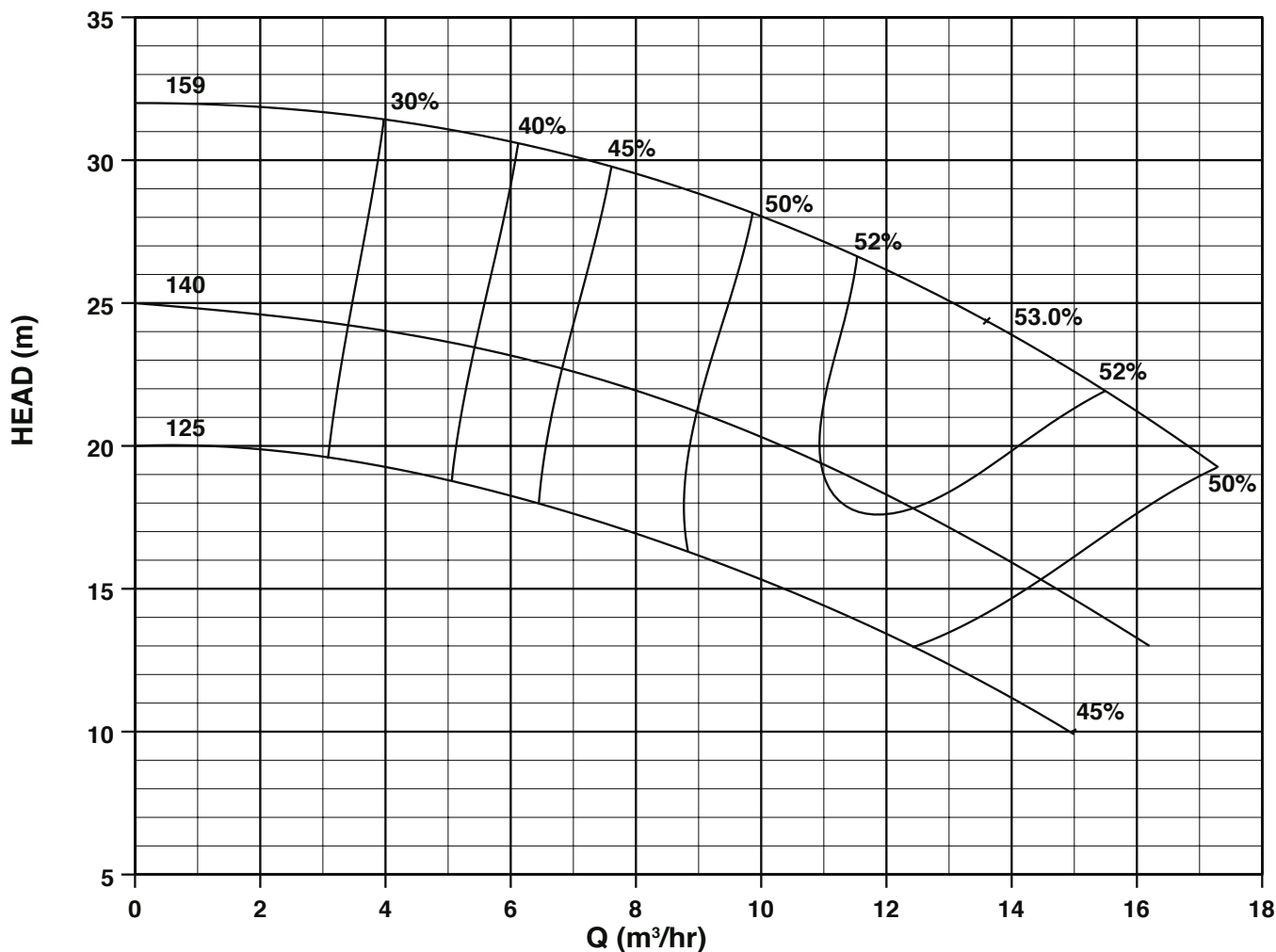
Suction Diameter
25mm

Discharge Diameter
25mm

DIN 24 255
NT 25-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

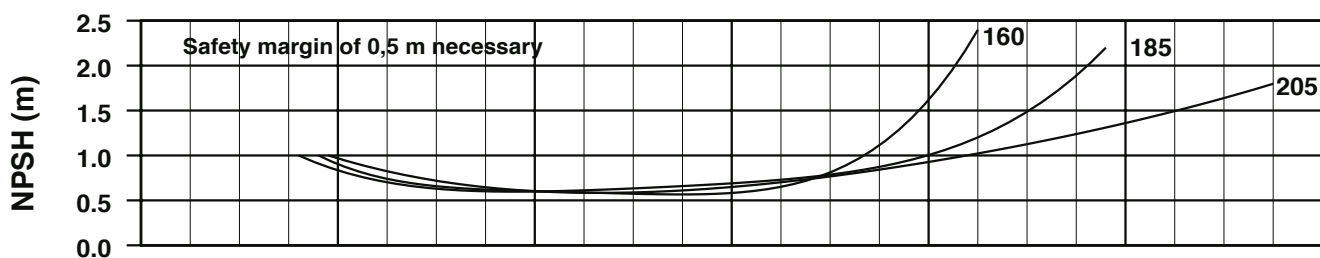
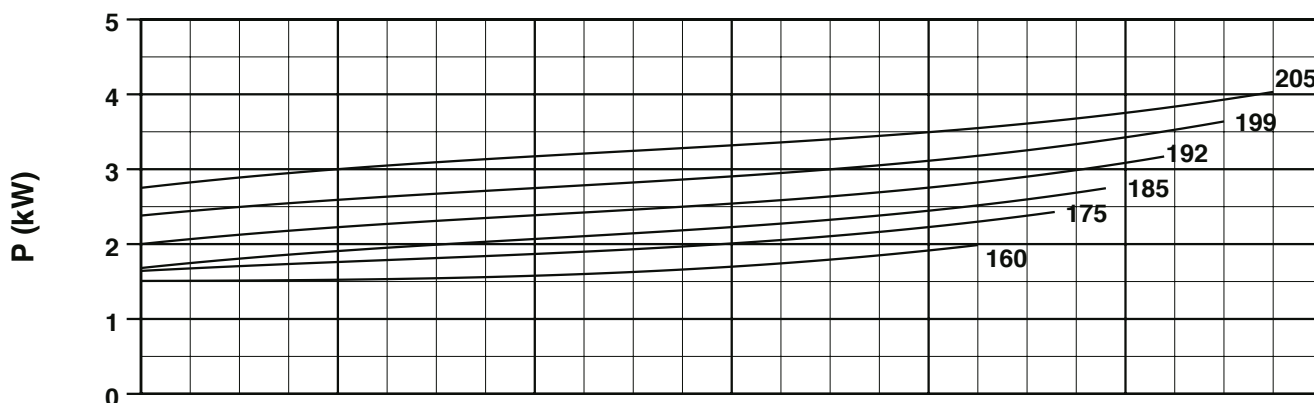
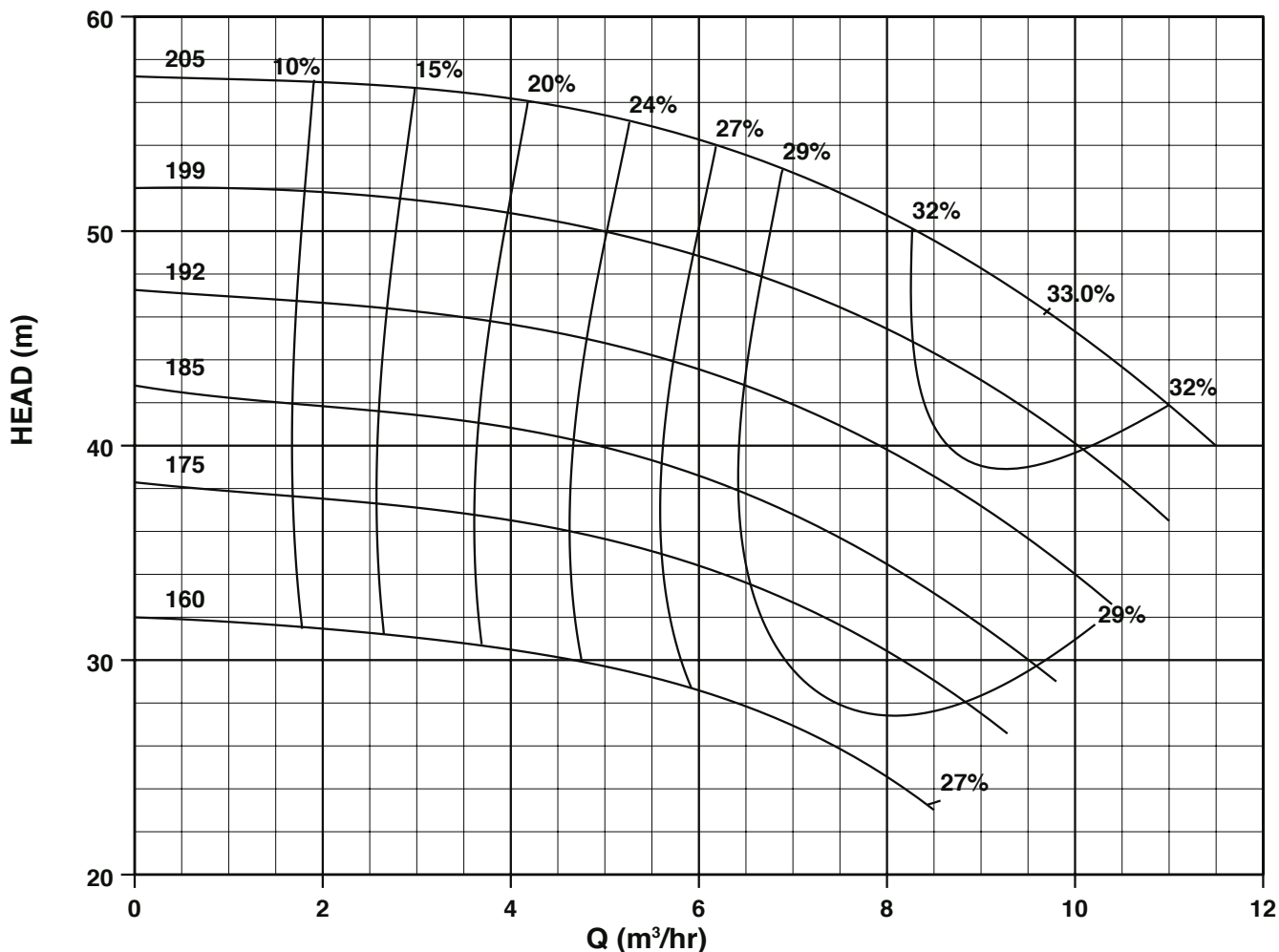
Suction Diameter
40mm

Discharge Diameter
25mm

DIN 24 255
NT 25-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

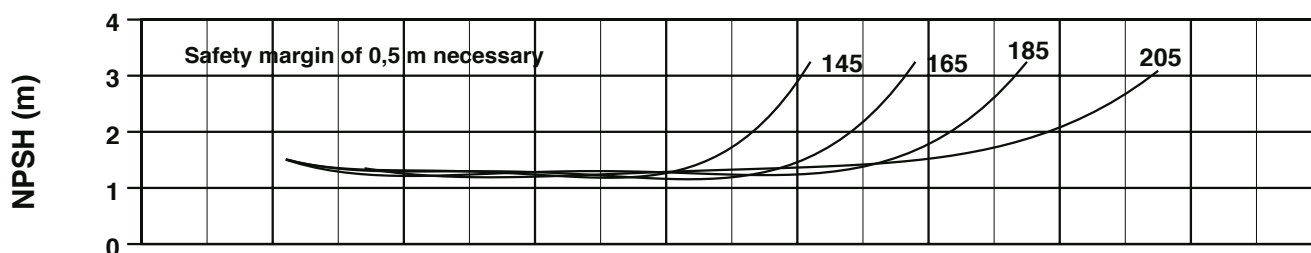
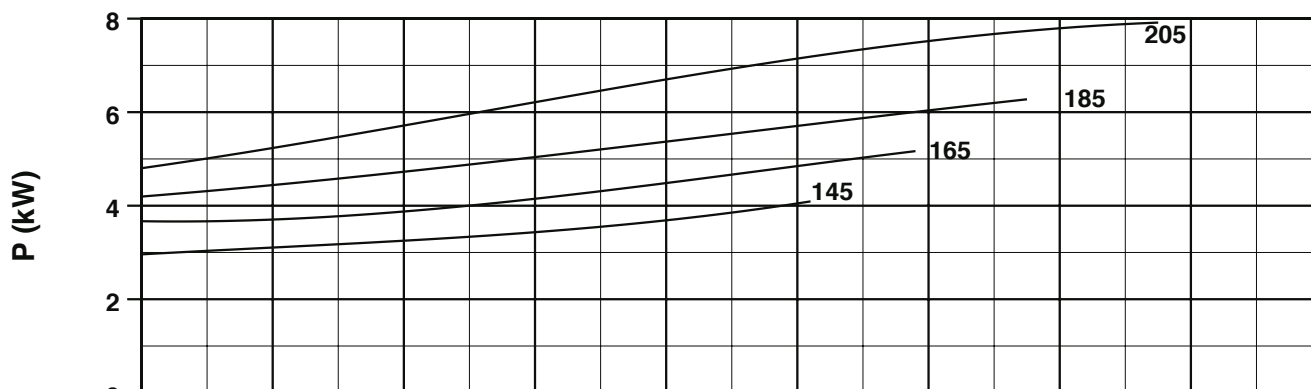
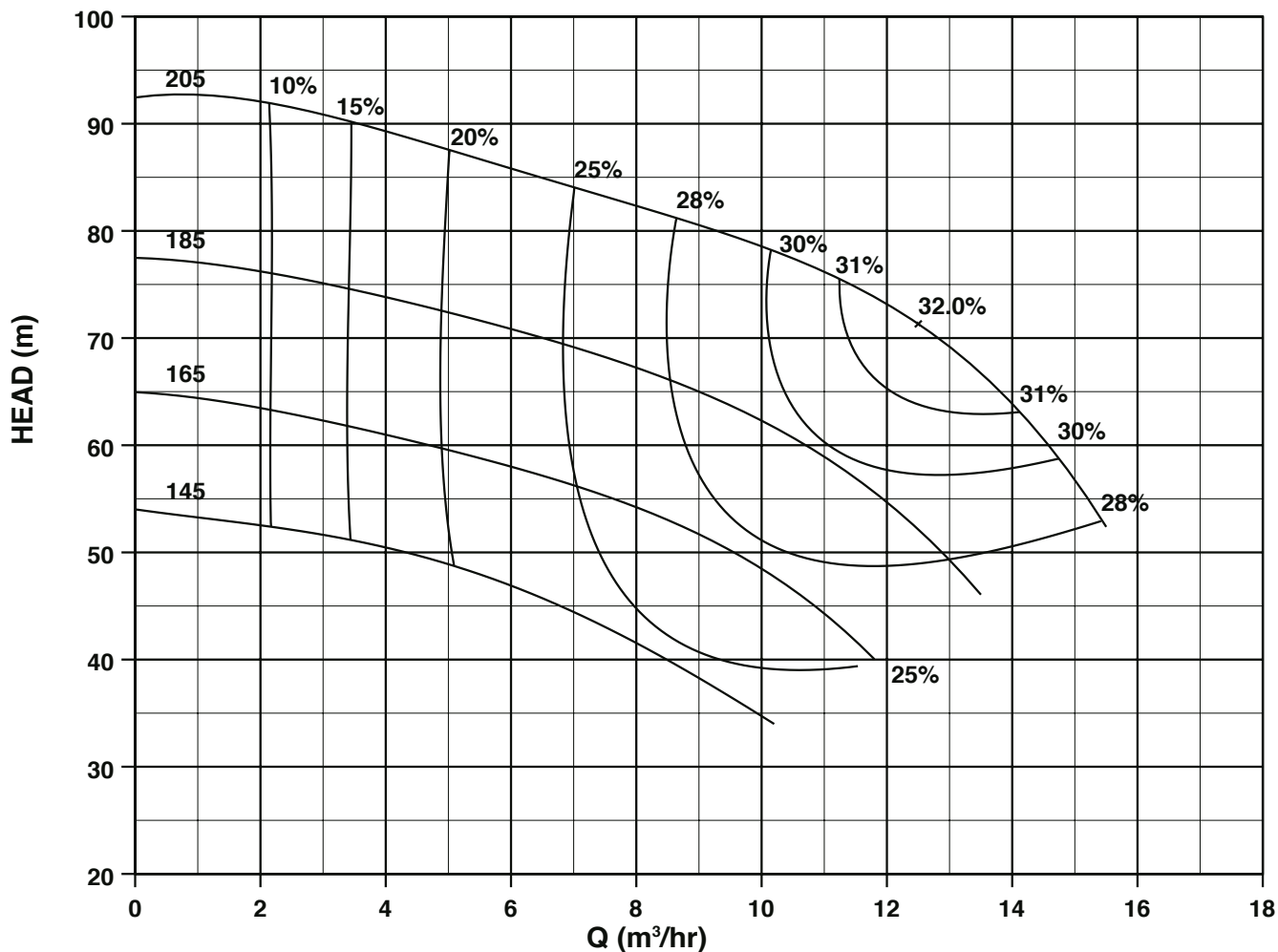
Suction Diameter
40mm

Discharge Diameter
25mm

DIN 24 255
NT/NS 2/25-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

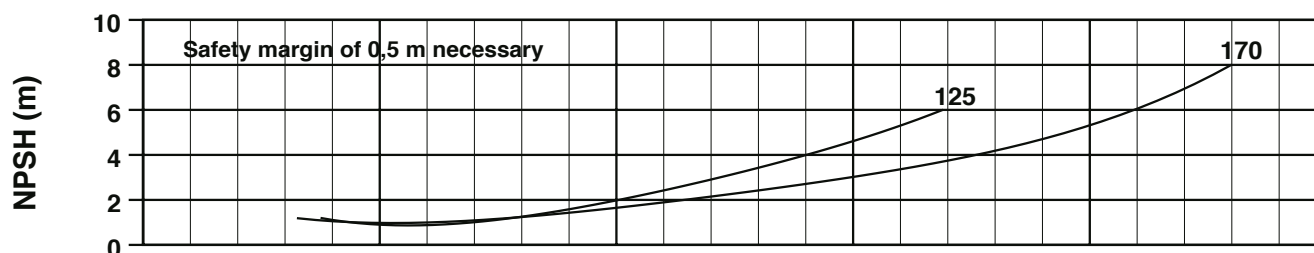
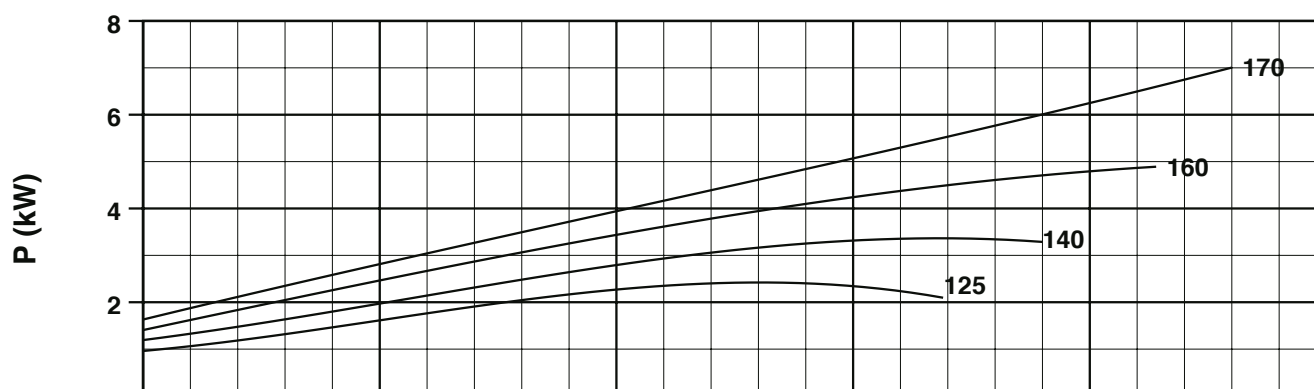
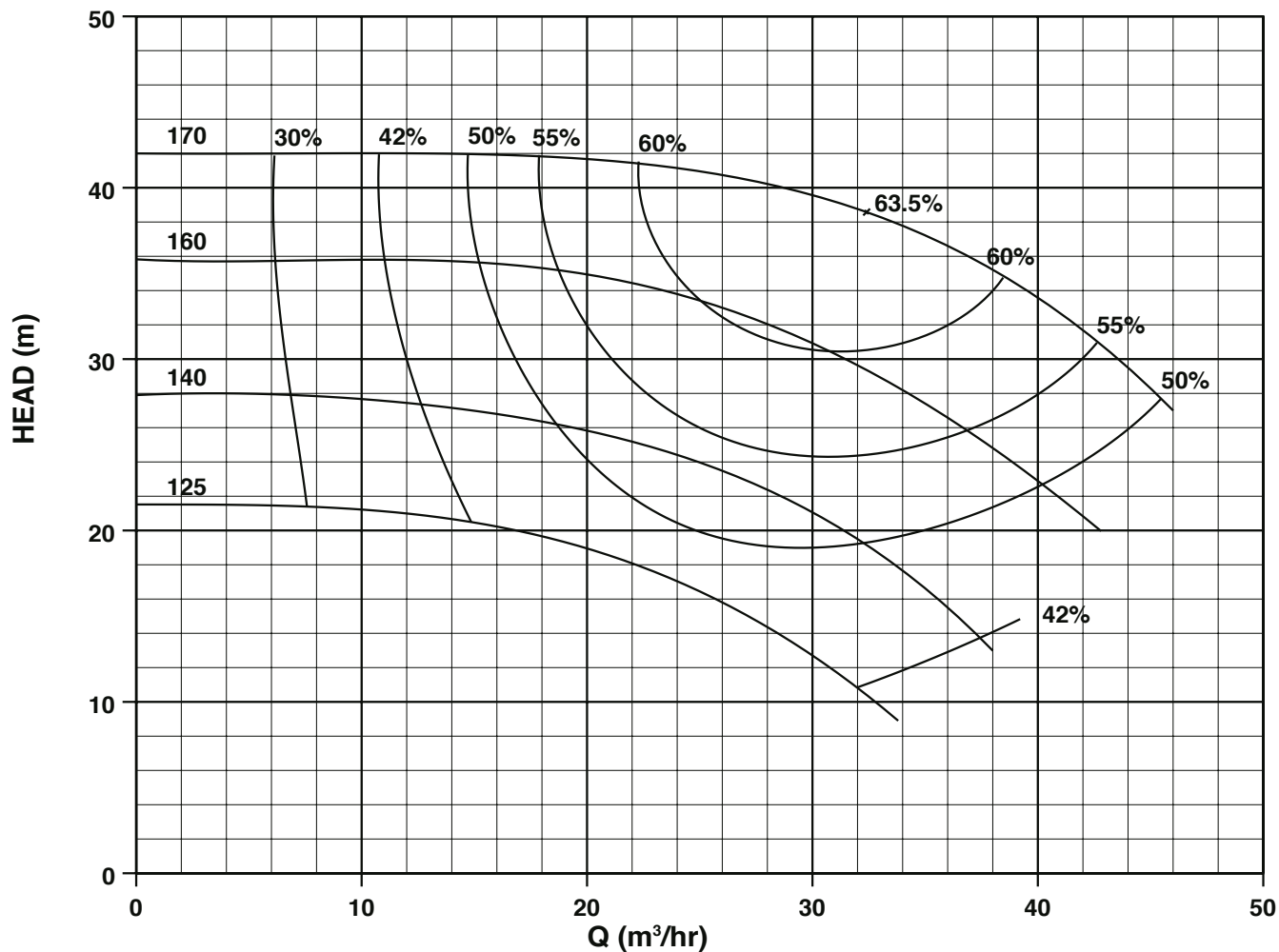
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT/NS 32-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

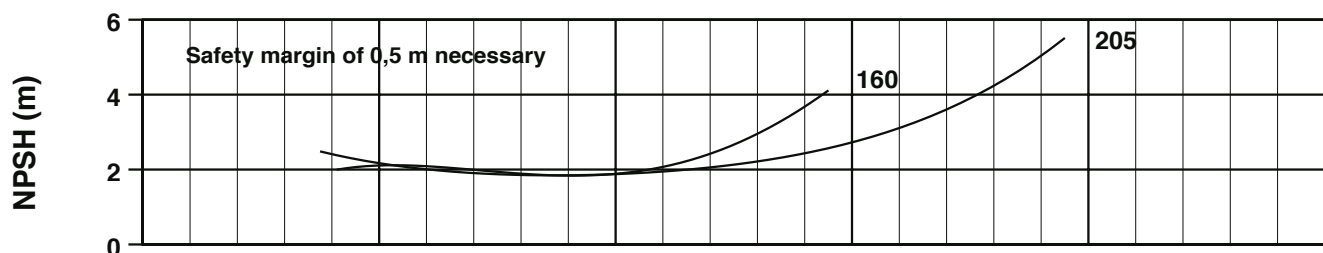
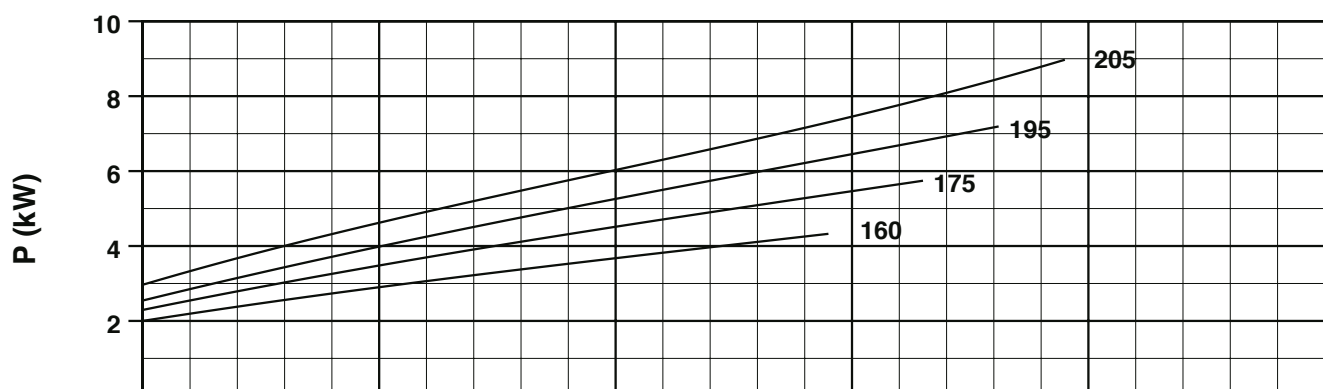
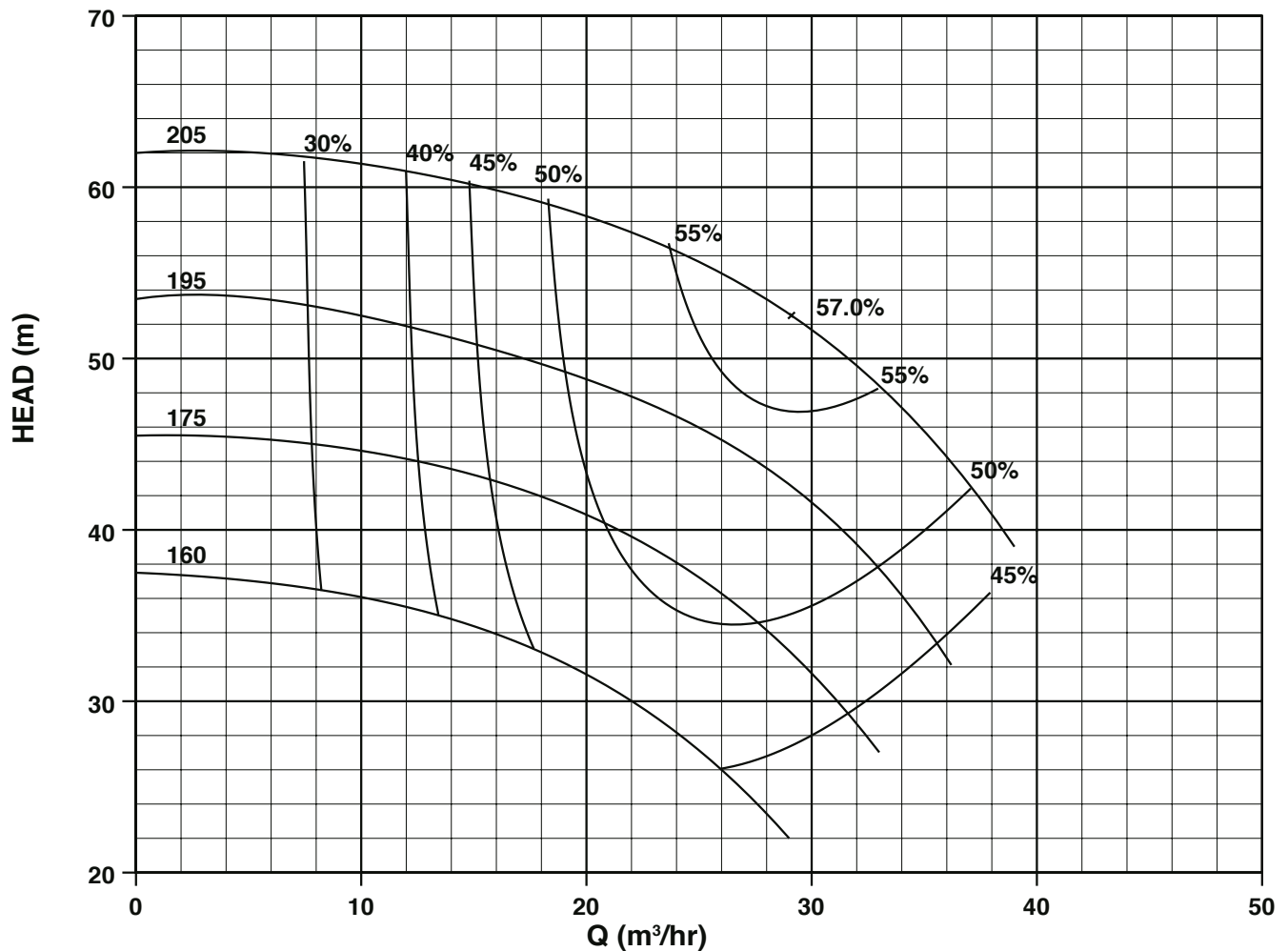
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT/NS 32-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

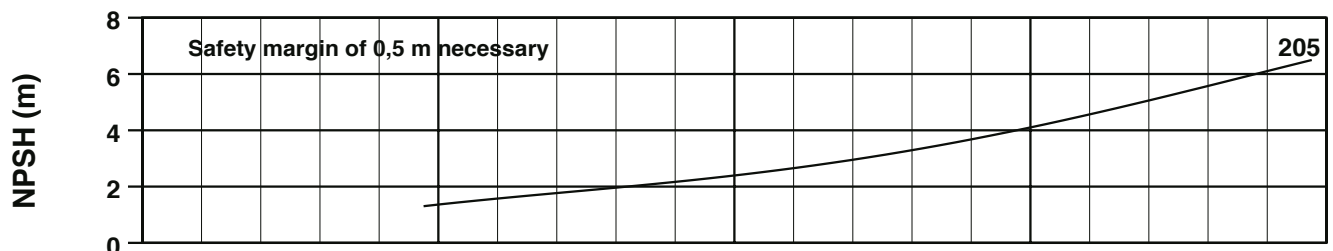
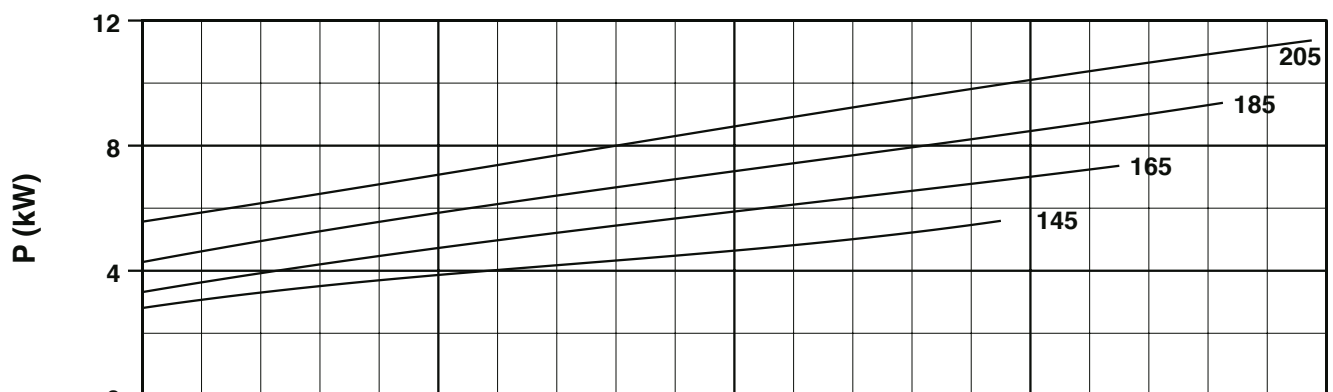
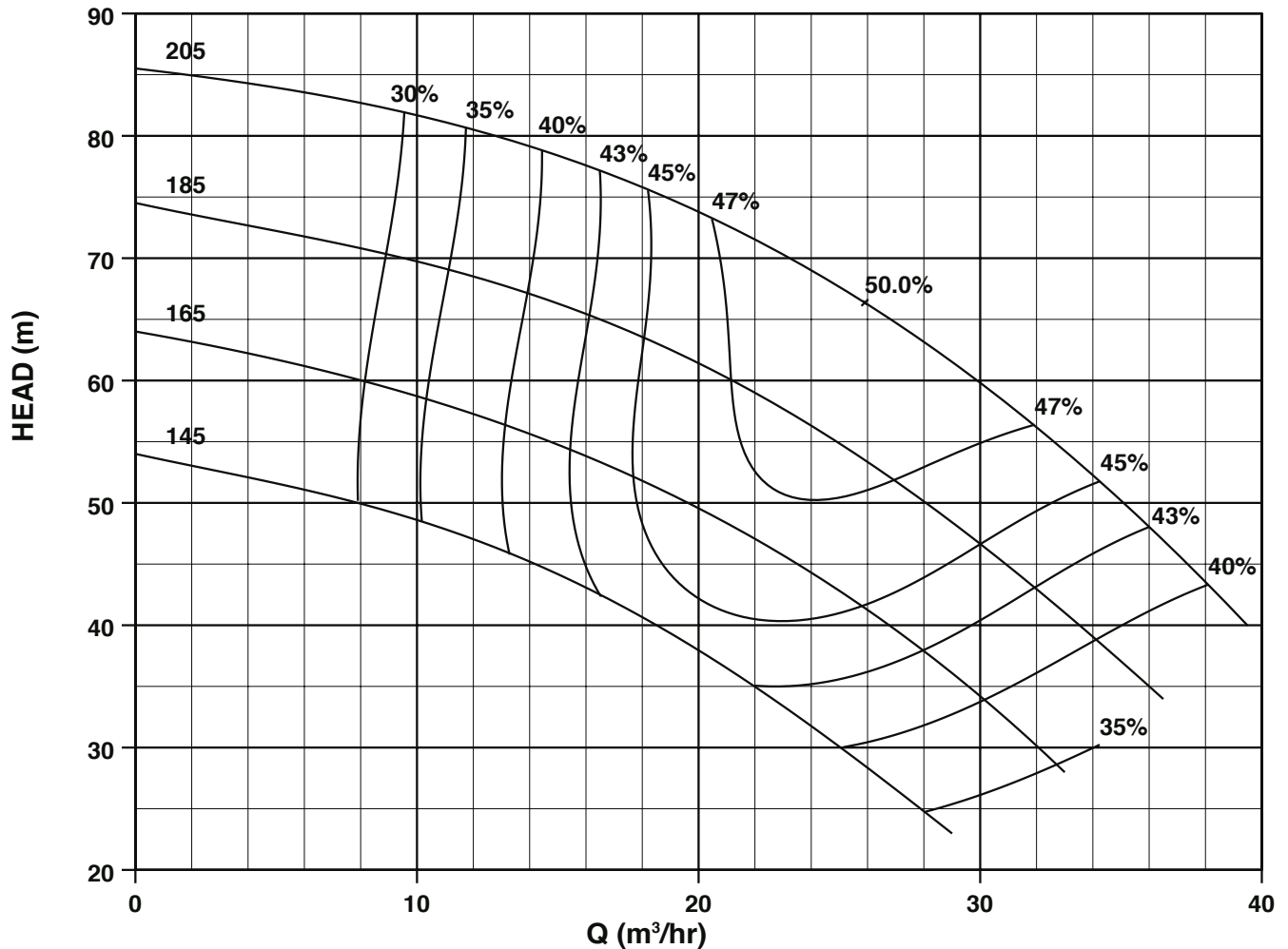
Suction Diameter
50mm

Discharge Diameter
32mm

DIN 24 255
NT/NS 2/32-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

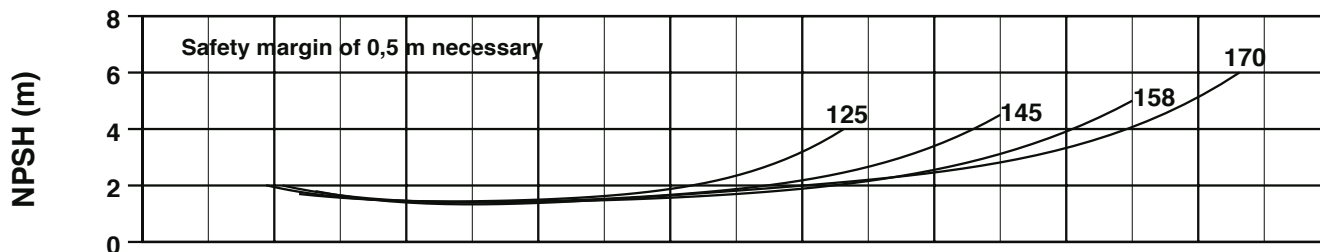
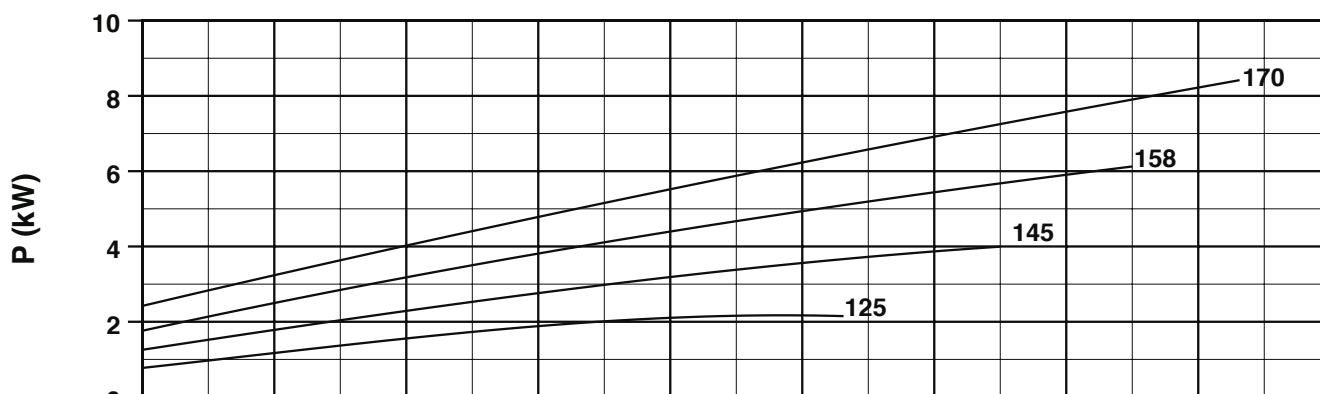
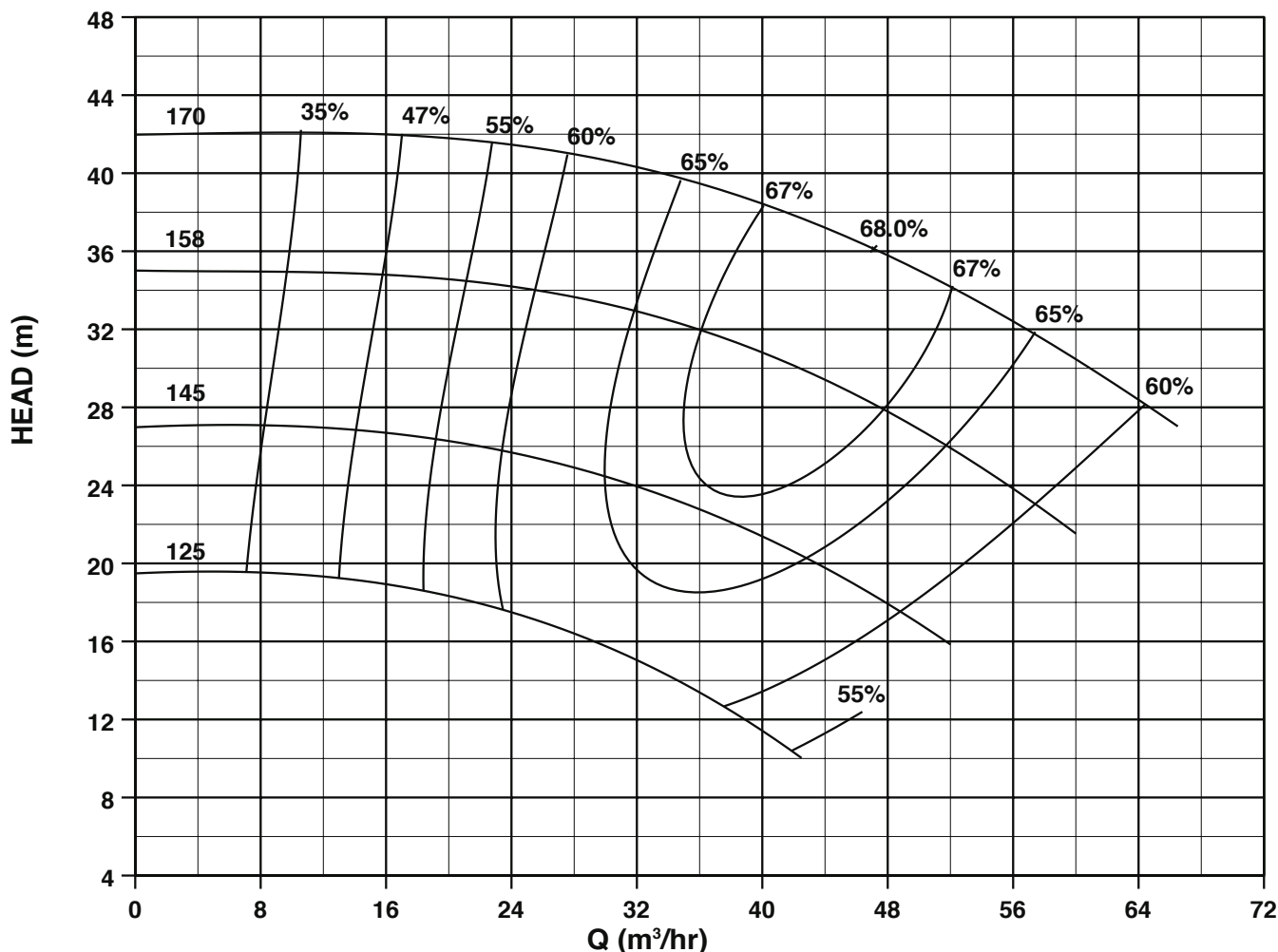
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

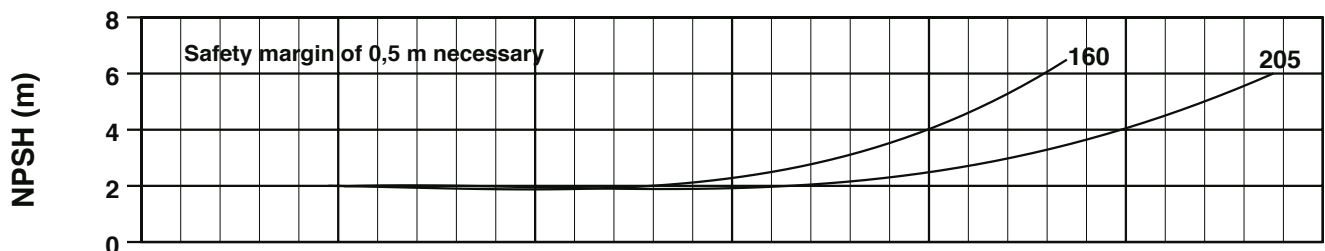
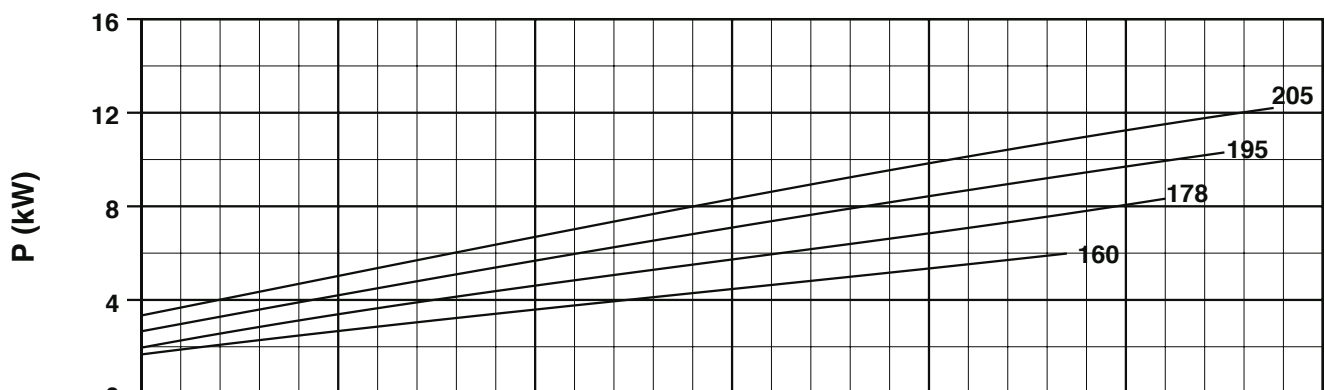
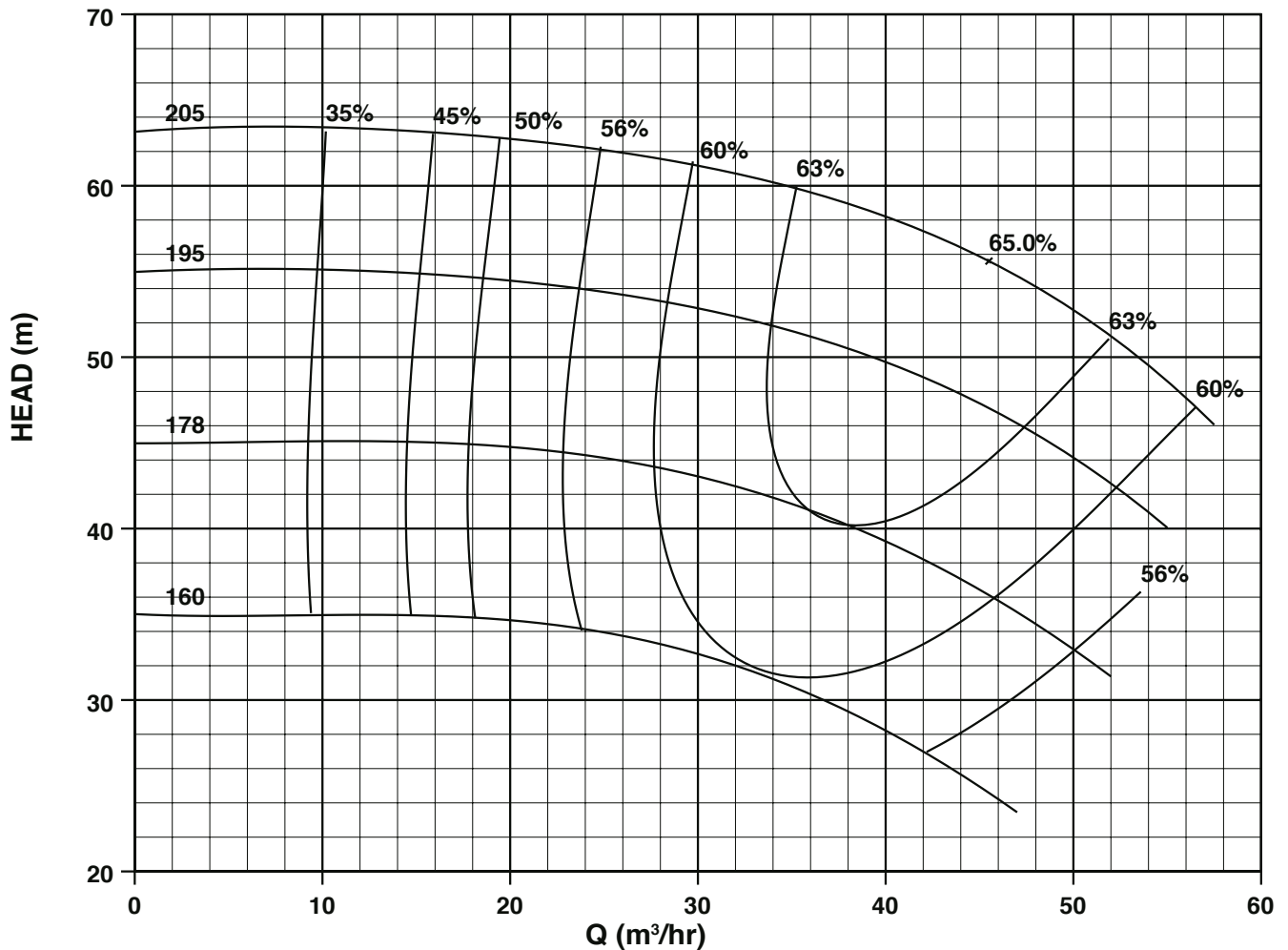
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

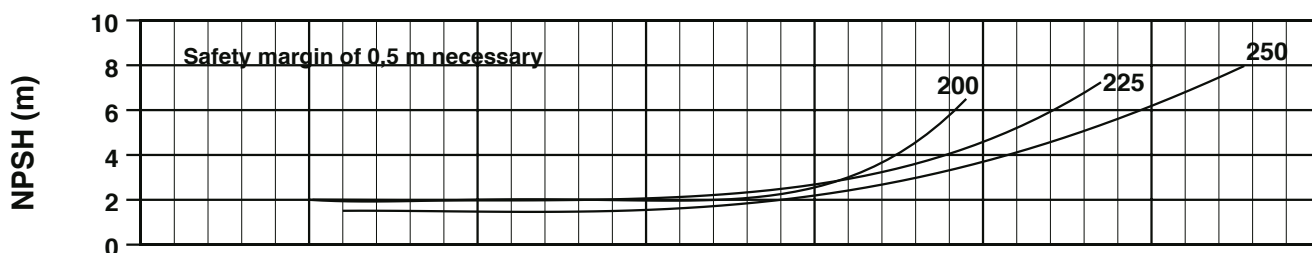
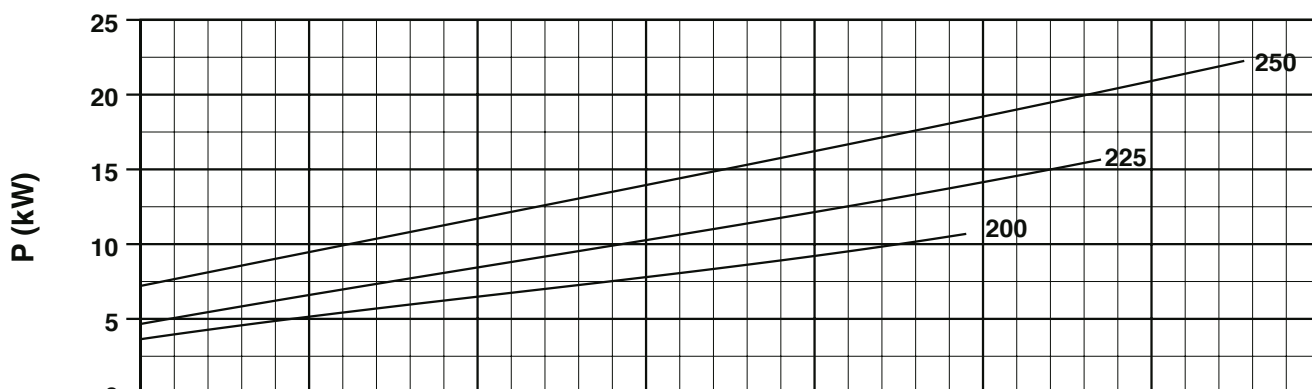
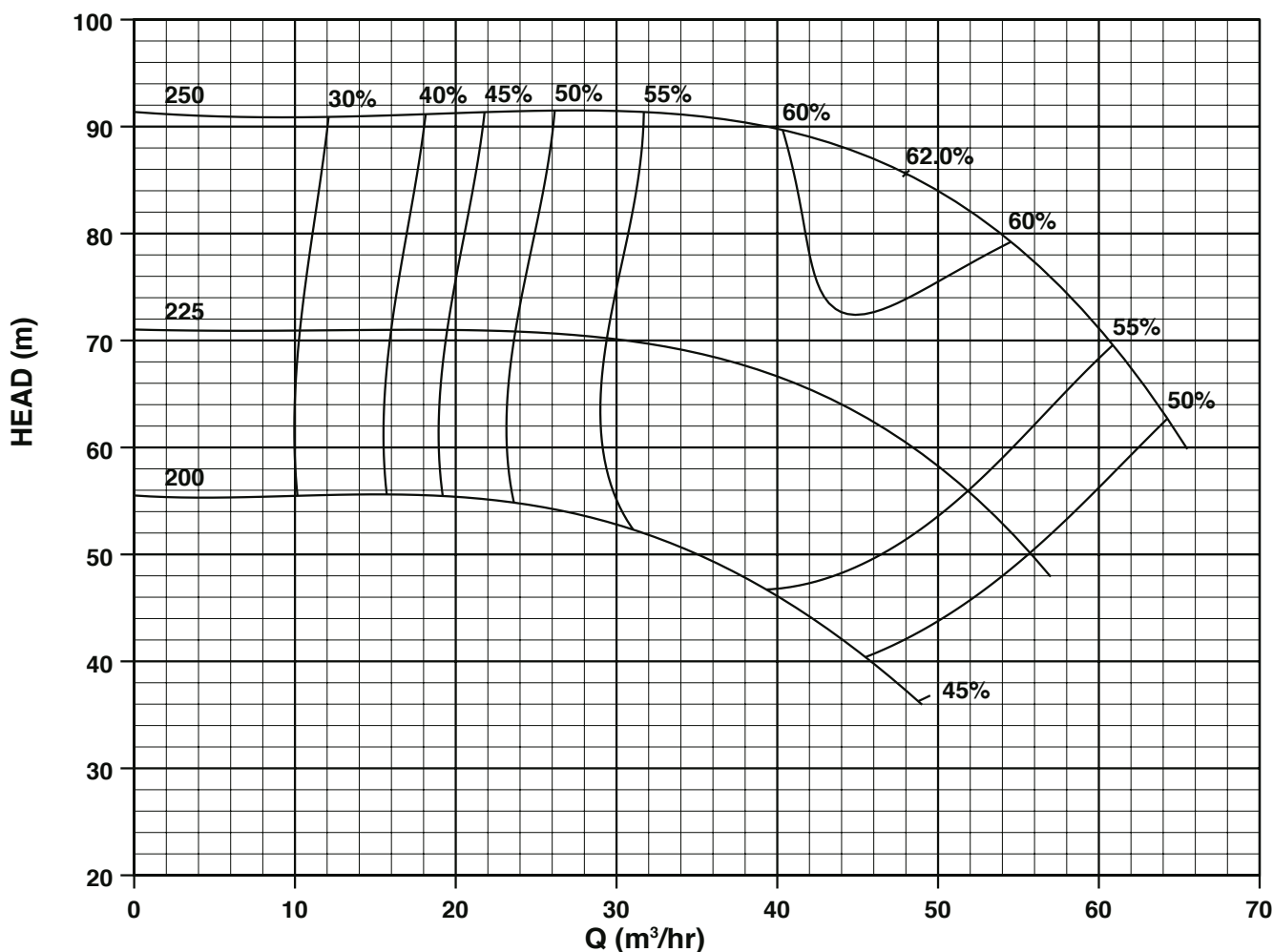
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 40-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

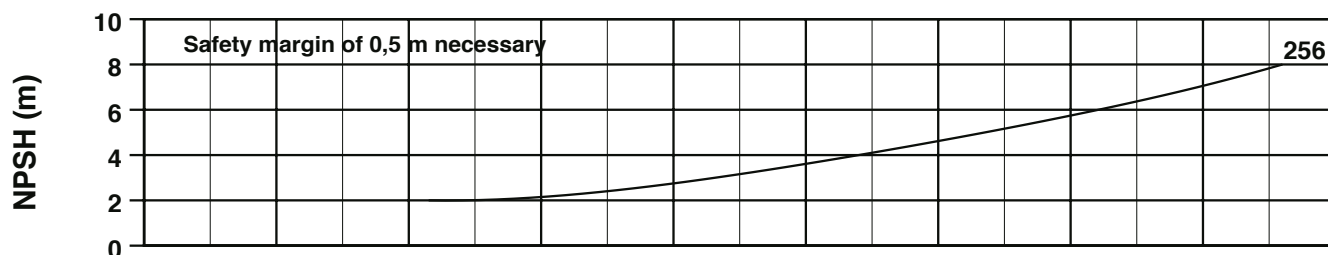
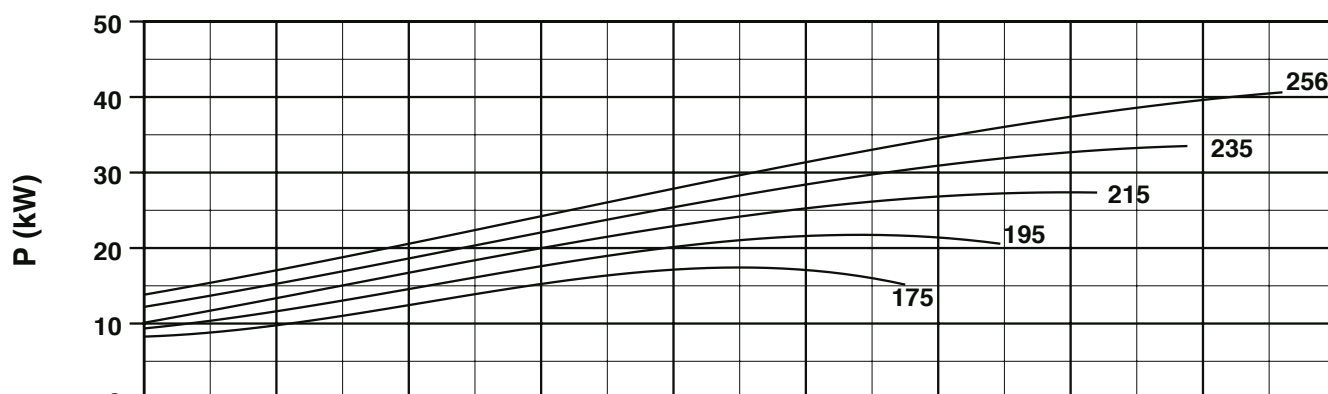
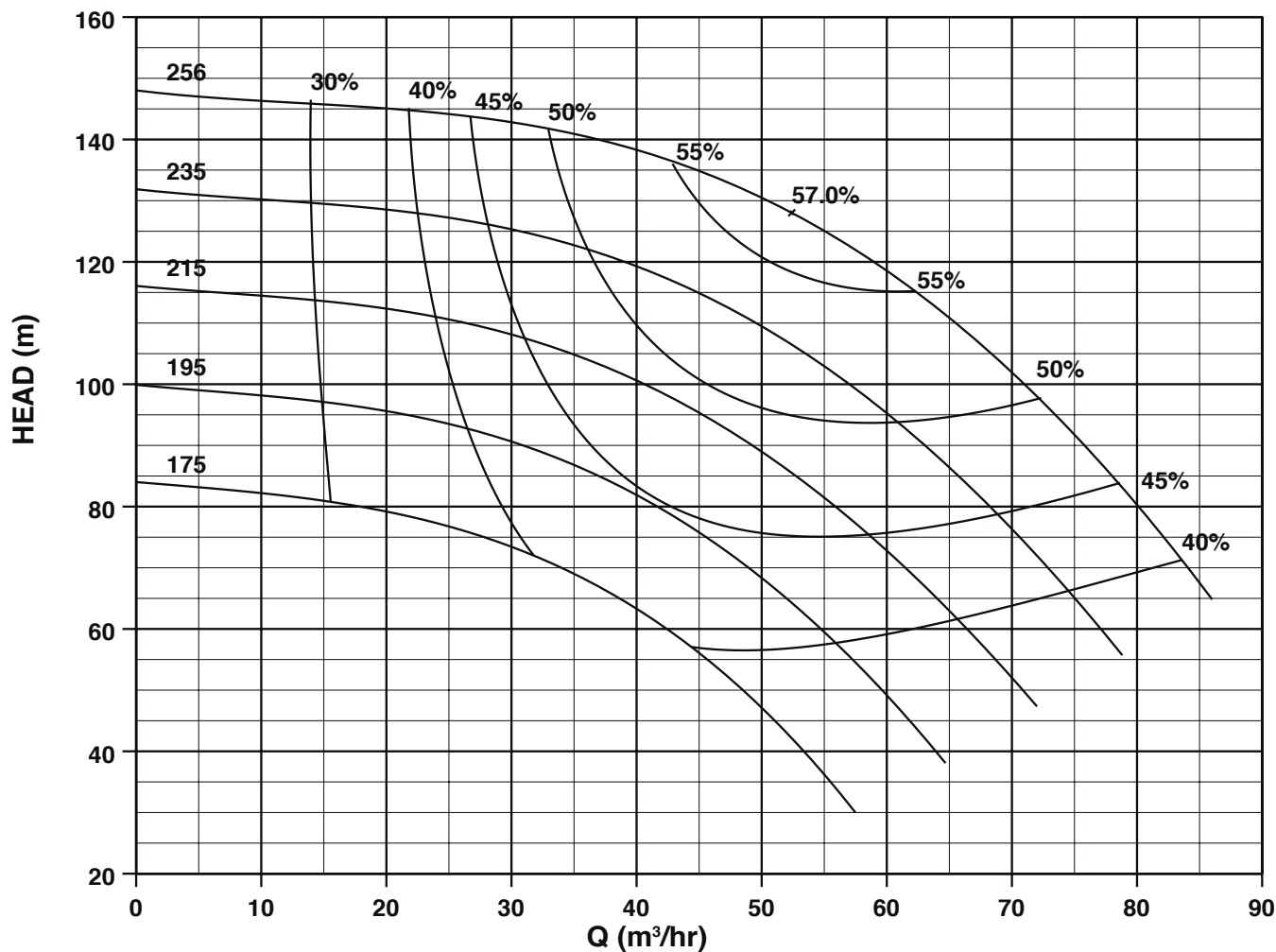
Suction Diameter
65mm

Discharge Diameter
40mm

DIN 24 255
NT/NS 2/40-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

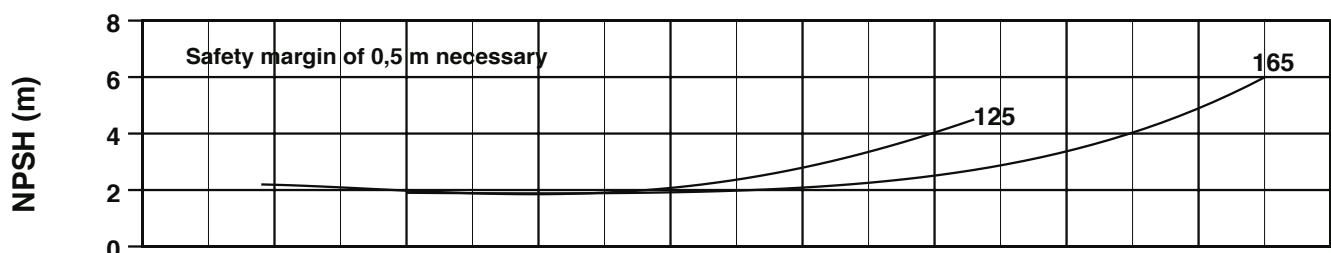
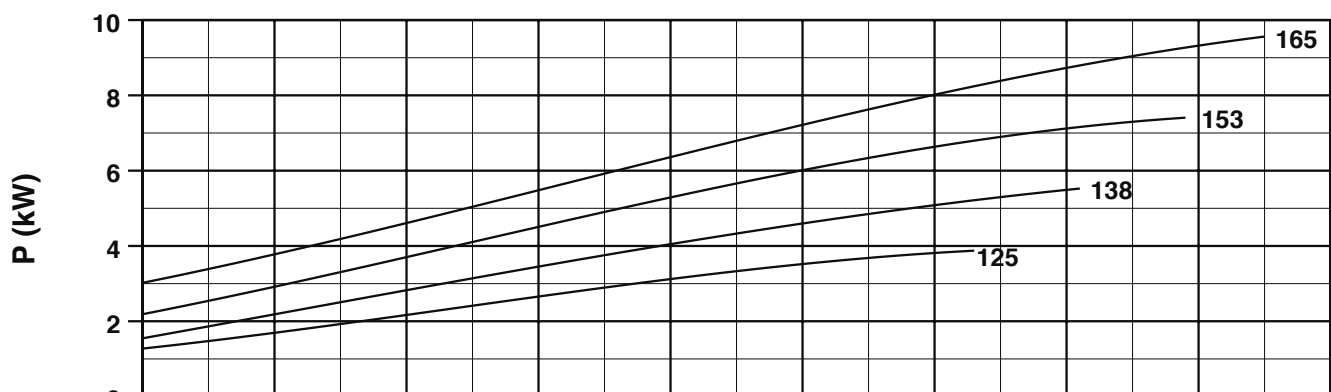
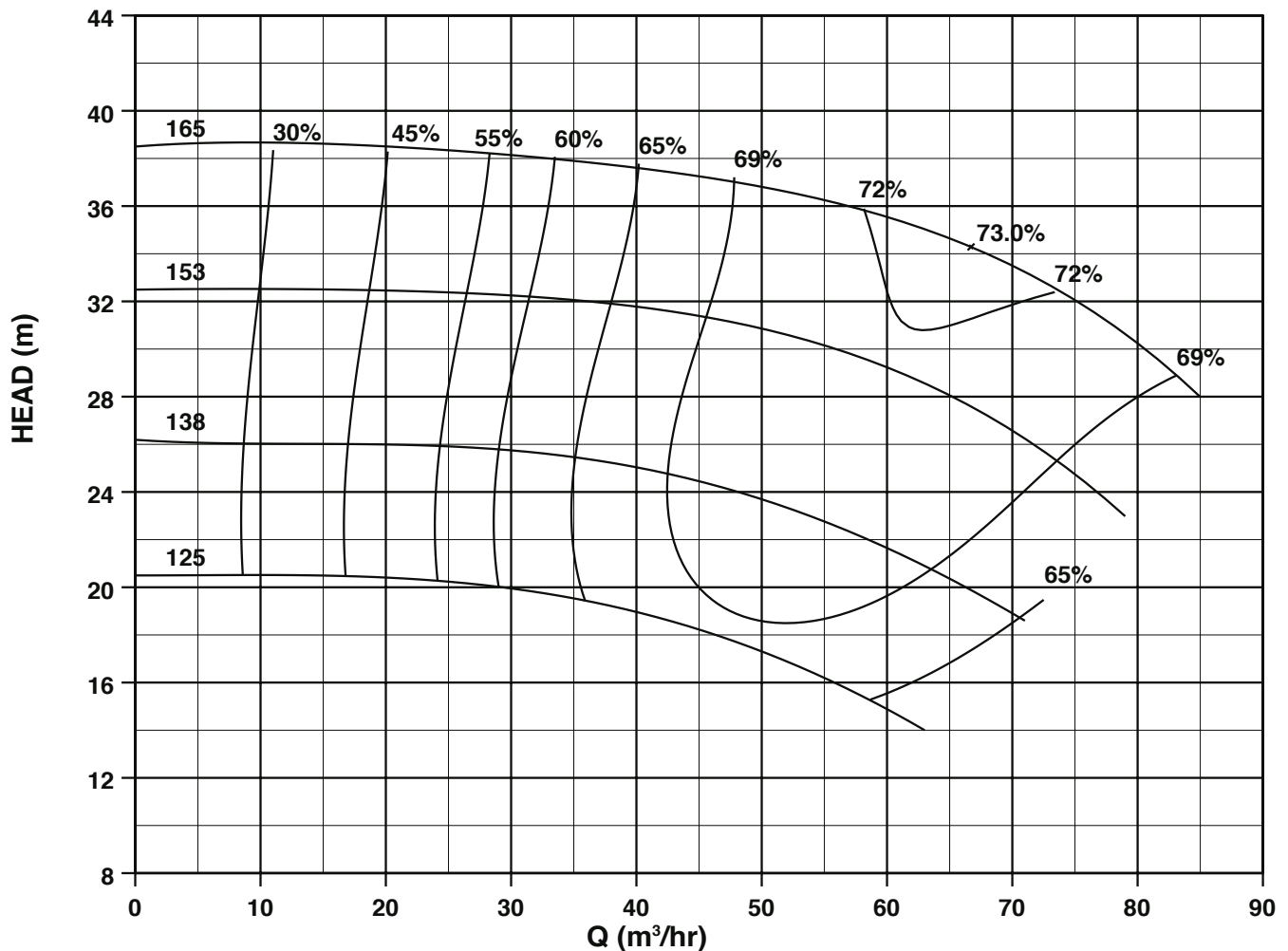
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

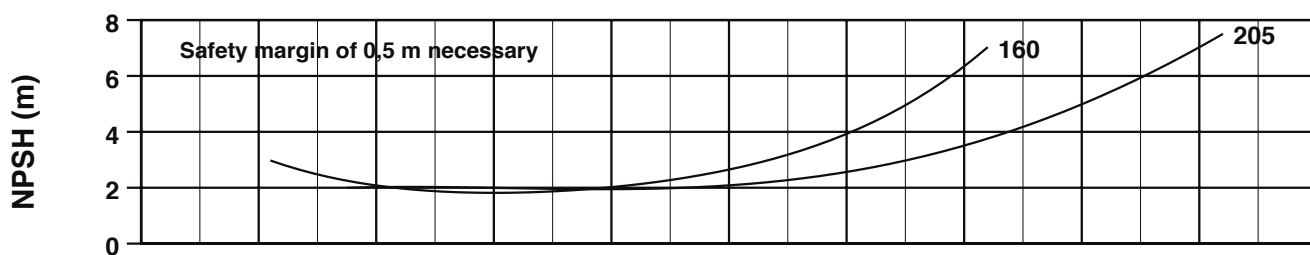
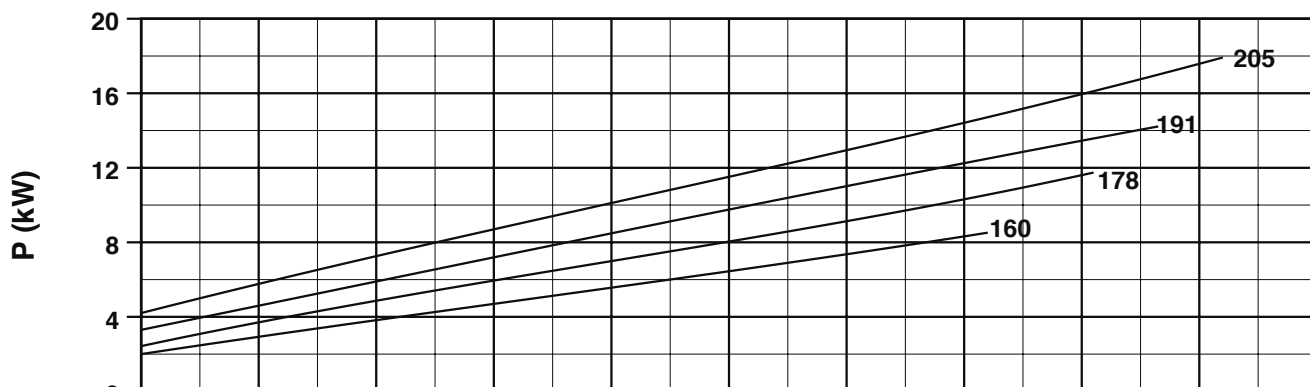
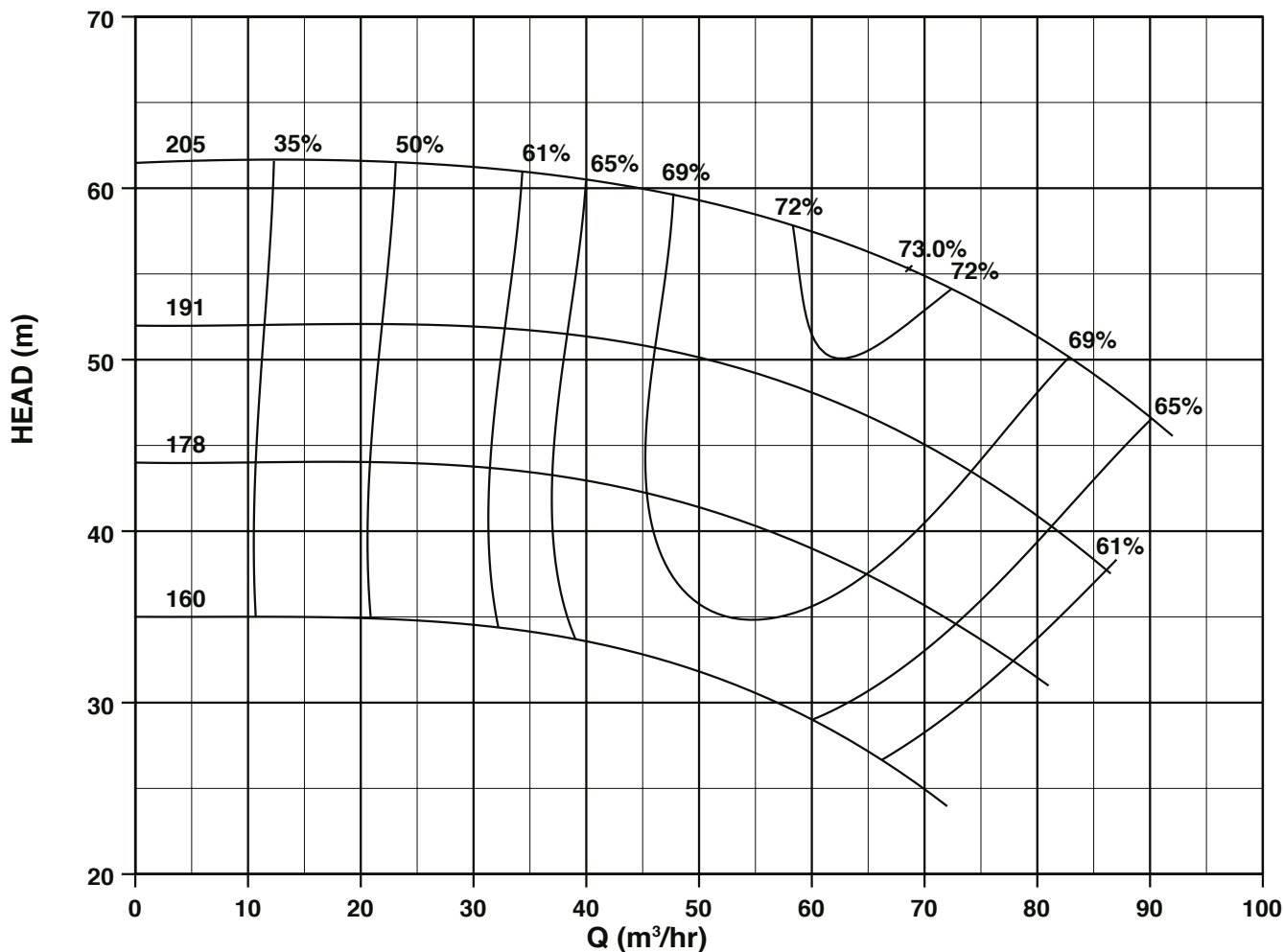
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

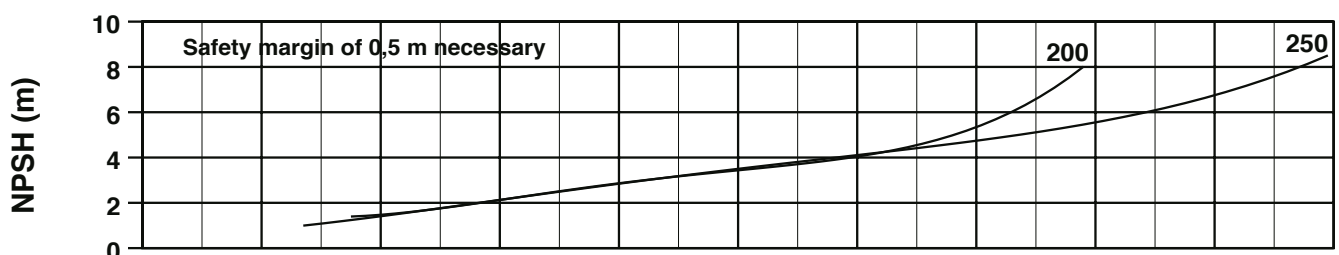
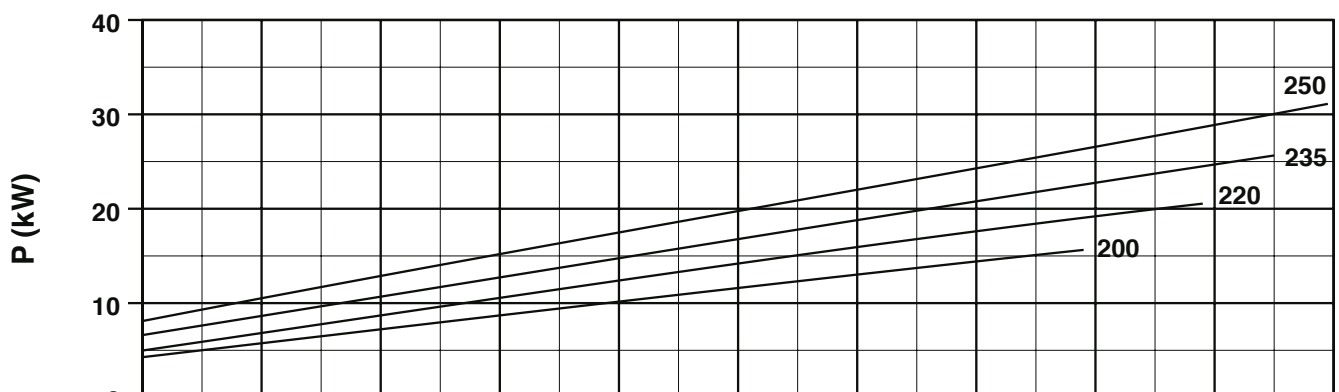
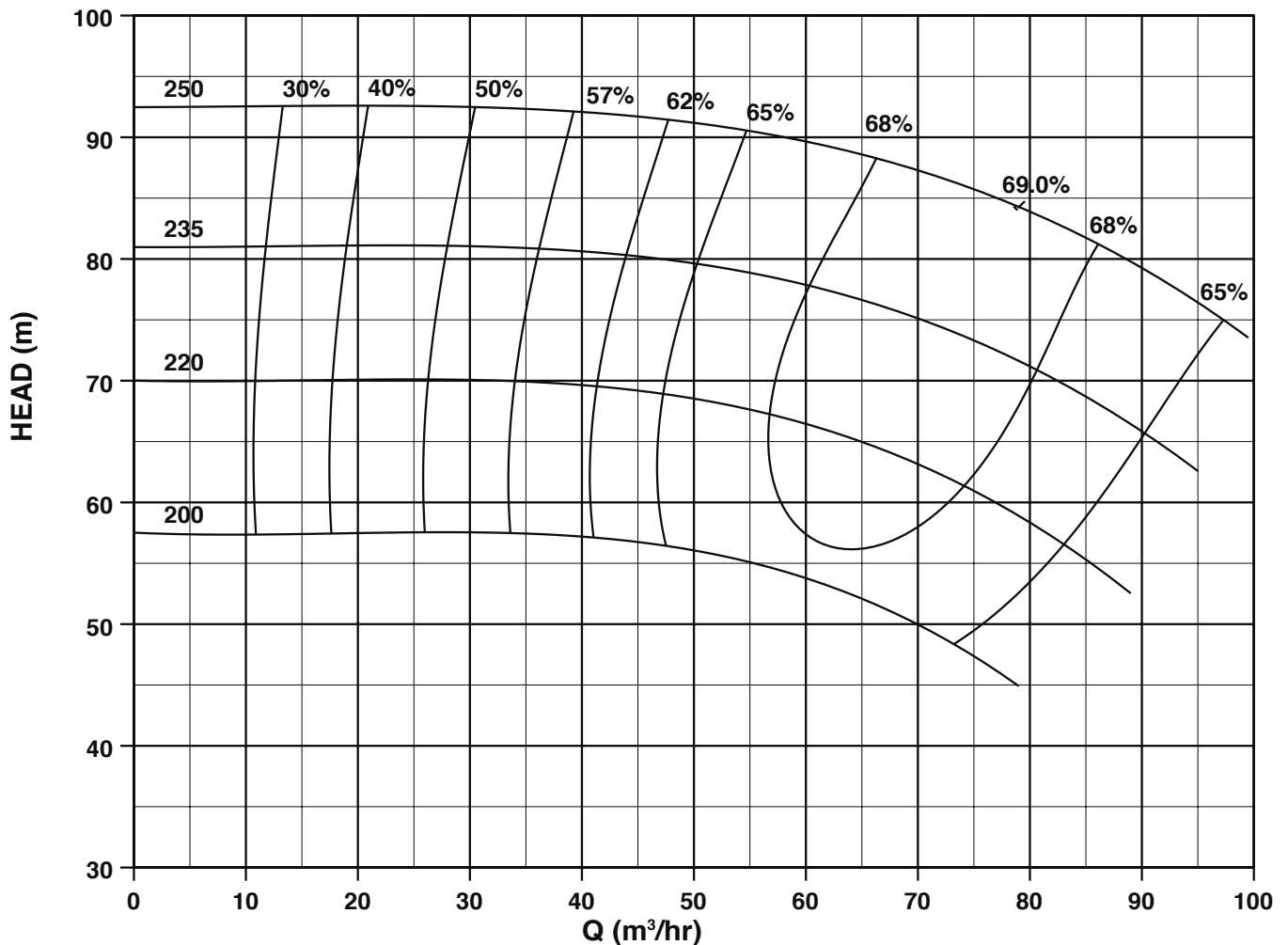
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 50-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

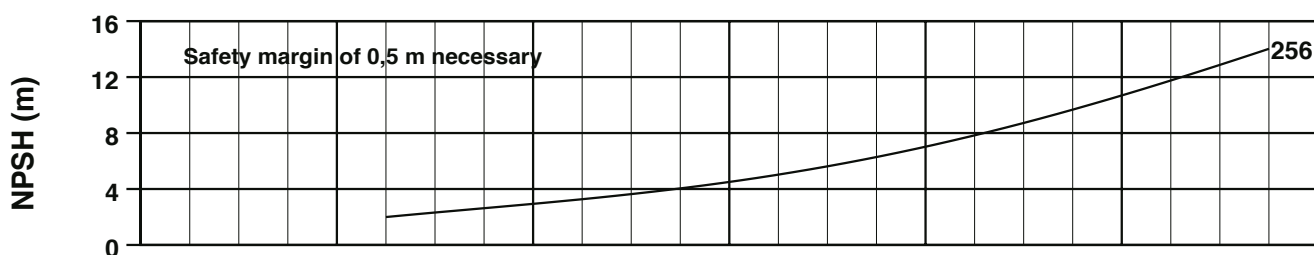
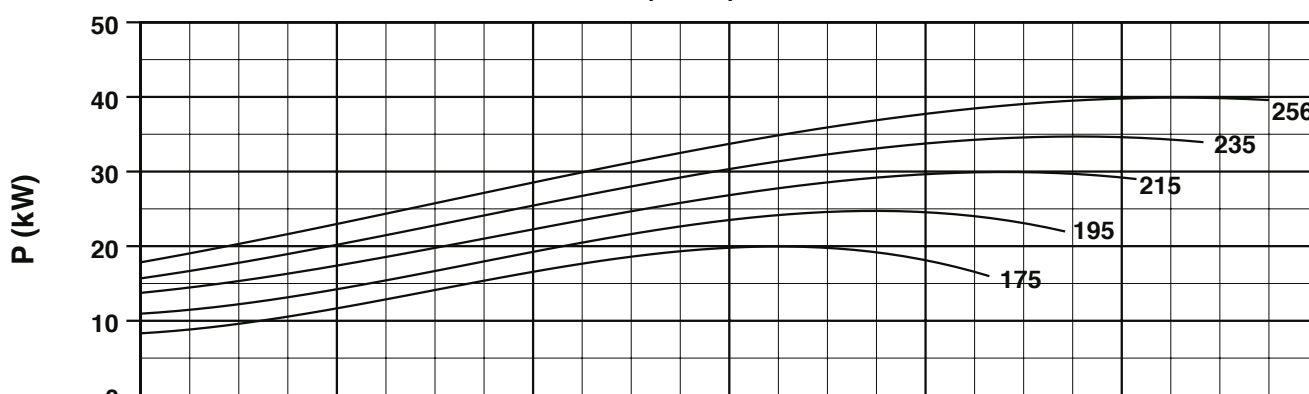
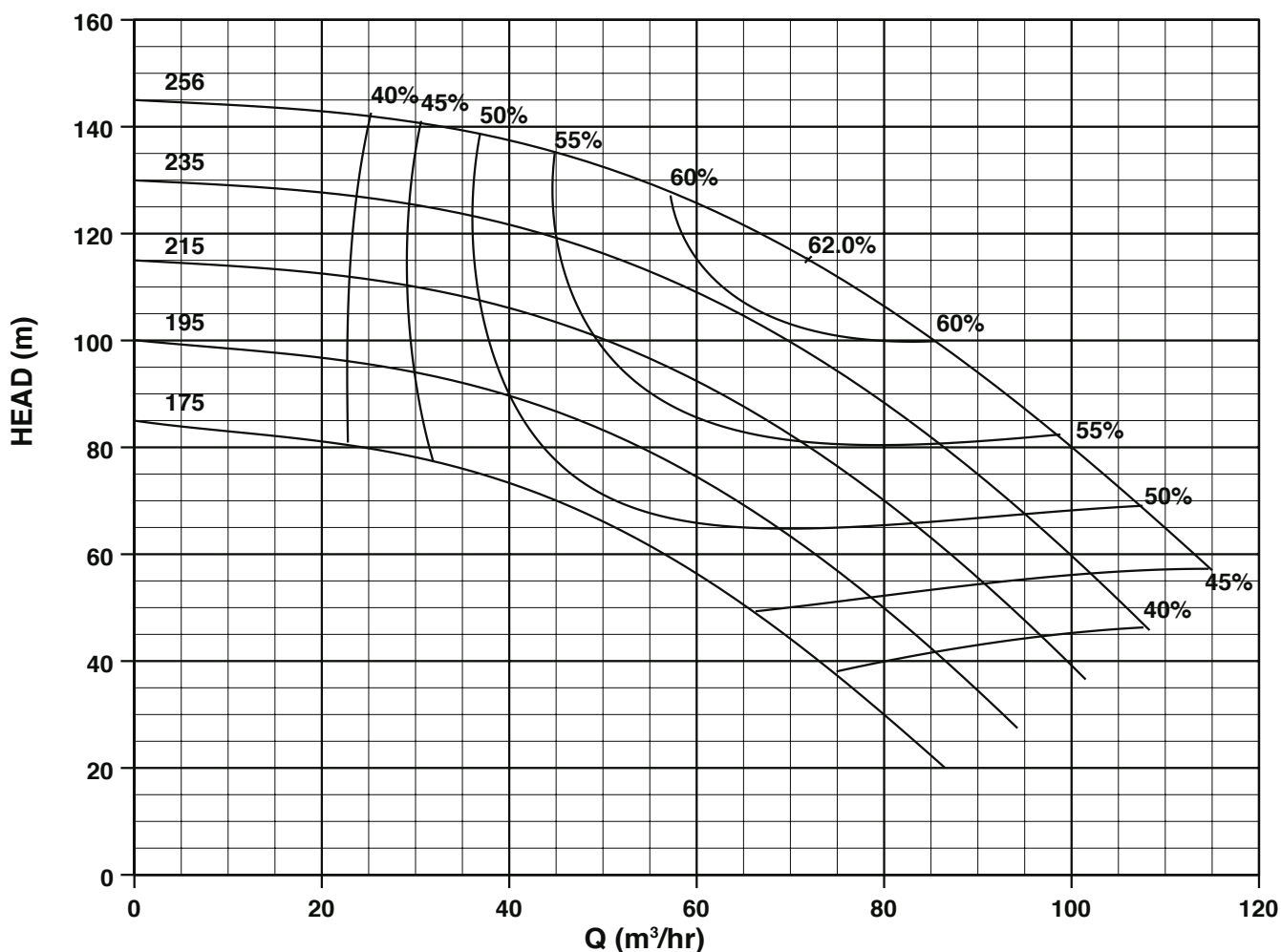
Suction Diameter
65mm

Discharge Diameter
50mm

DIN 24 255
NT/NS 2/50-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

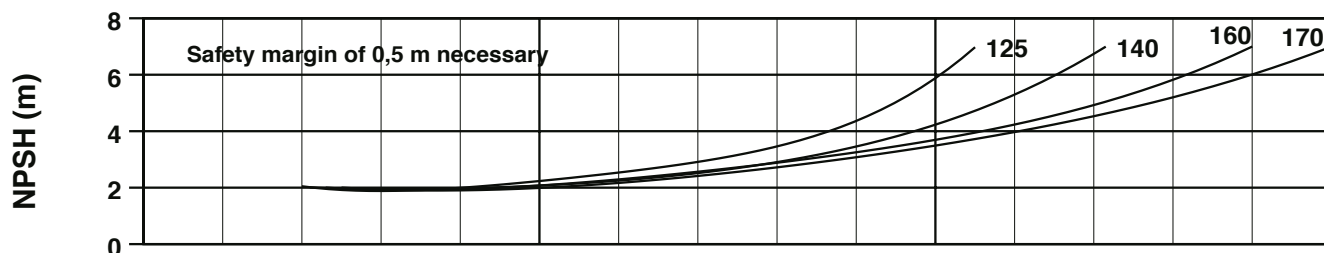
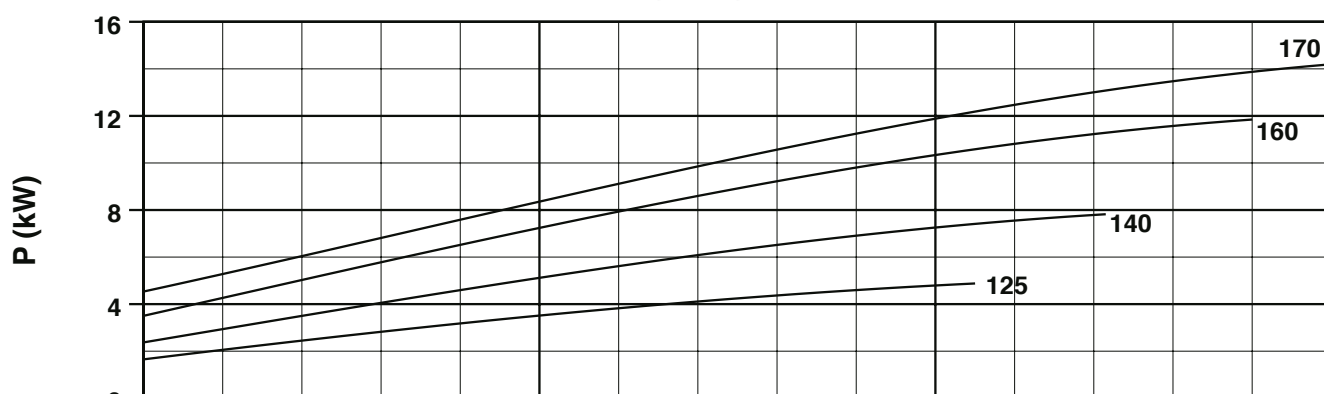
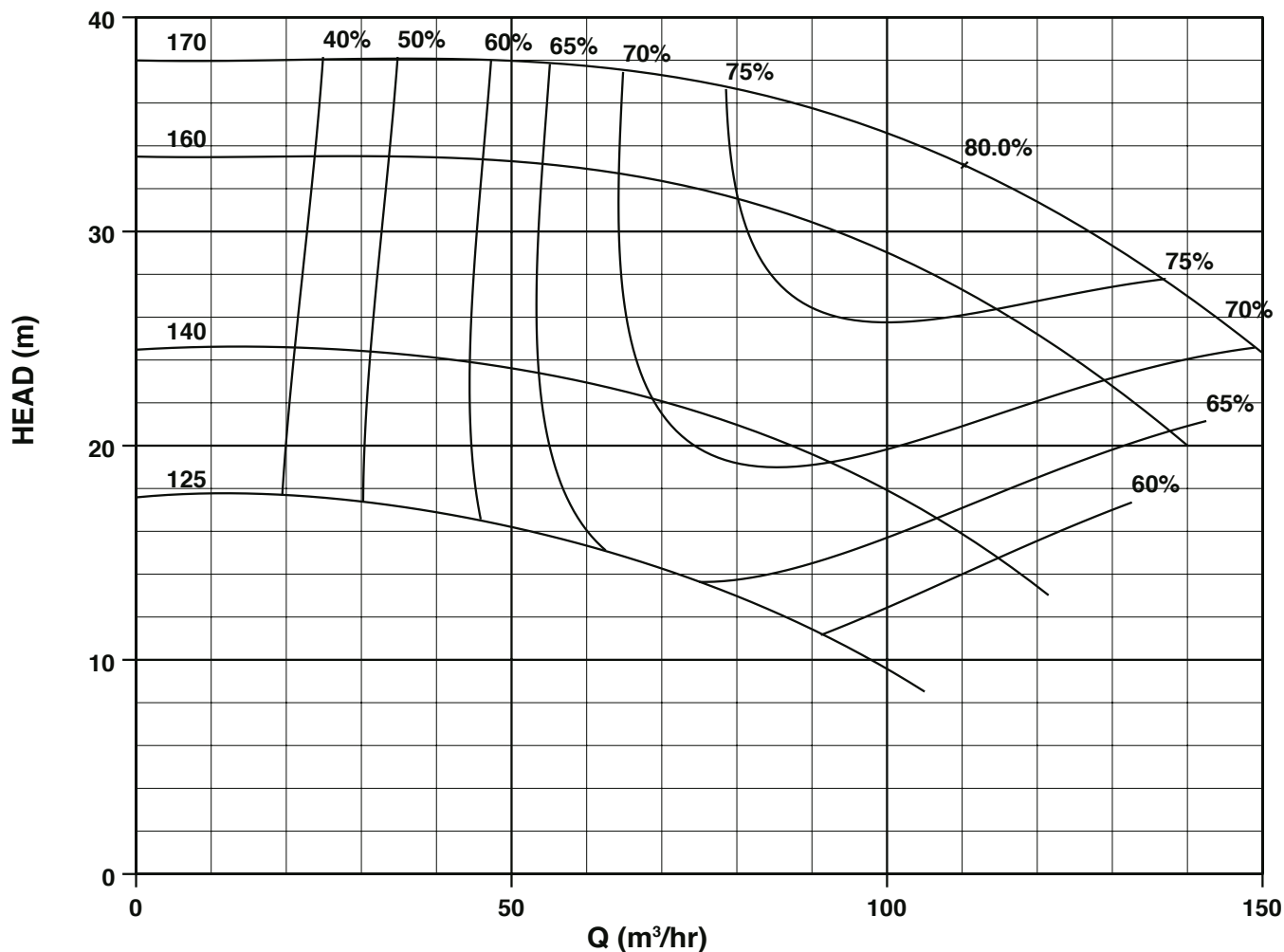
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

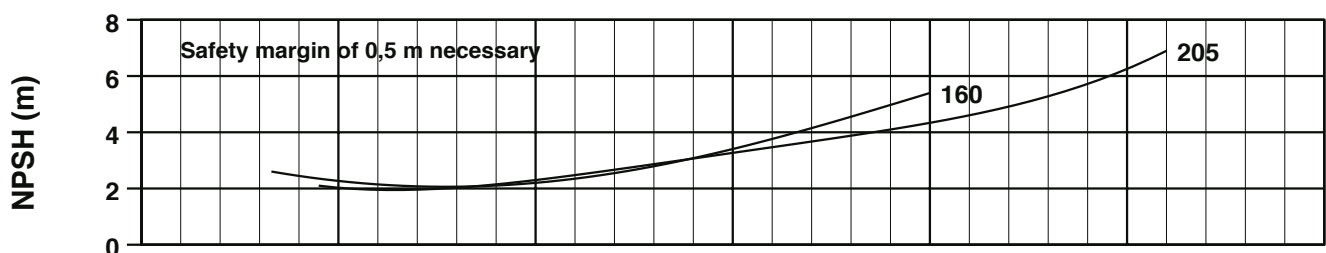
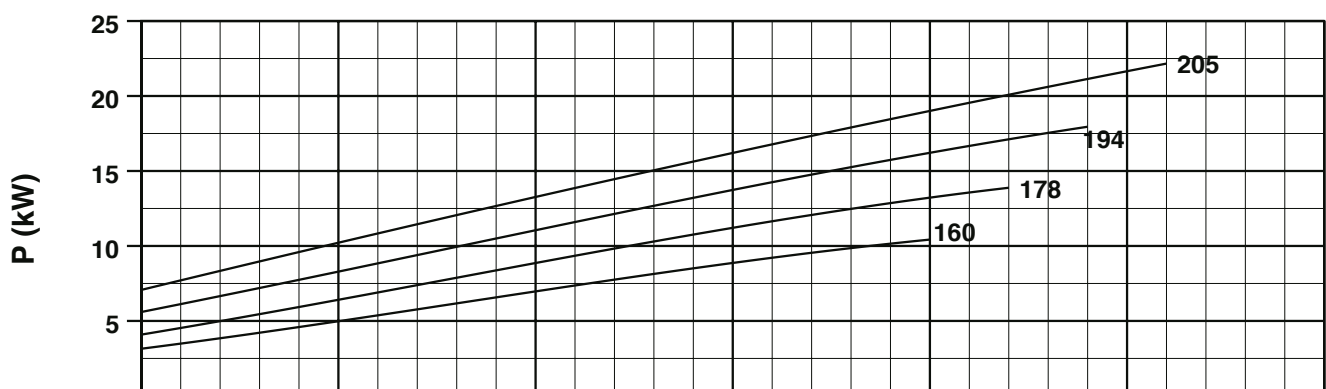
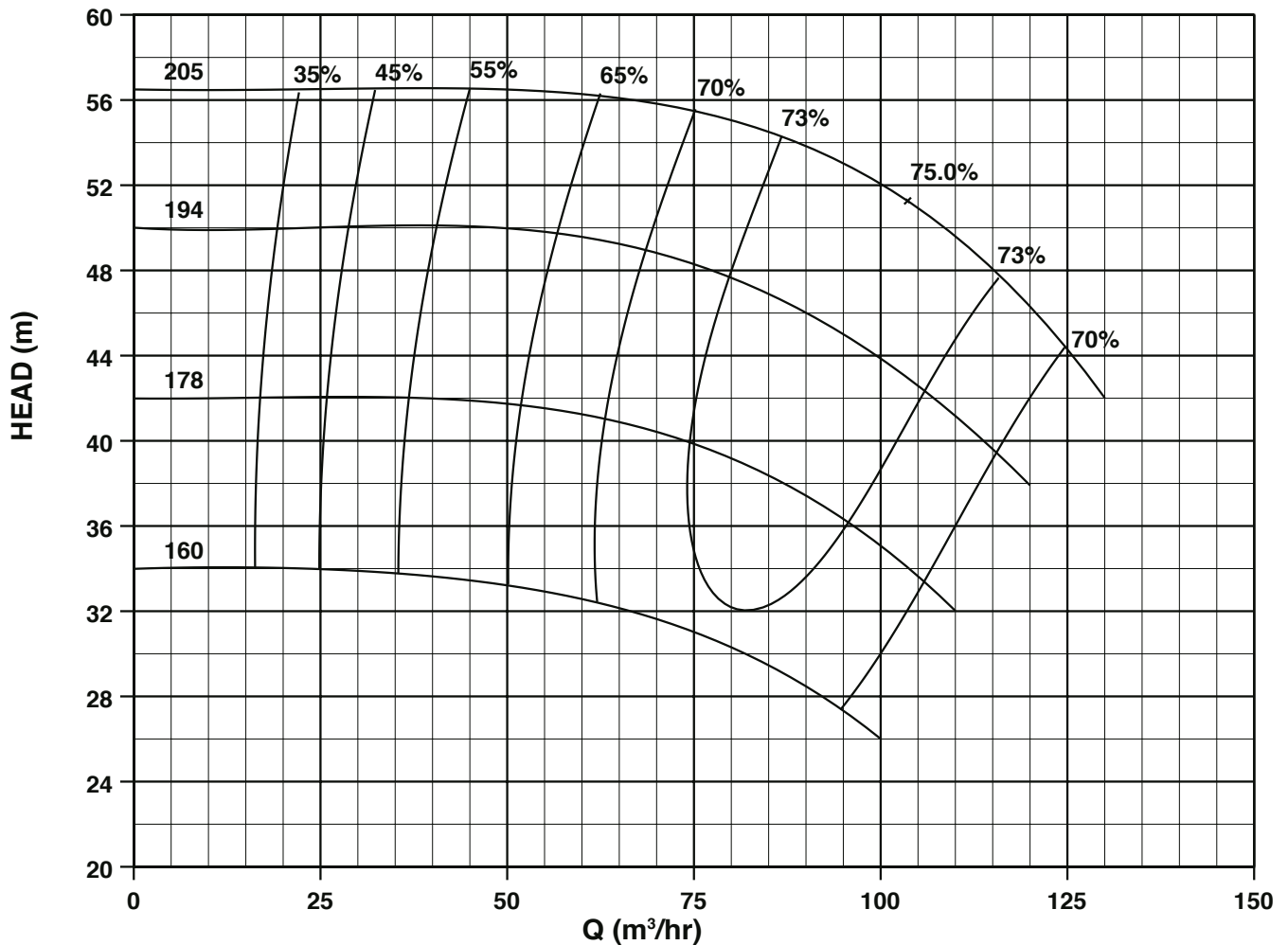
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

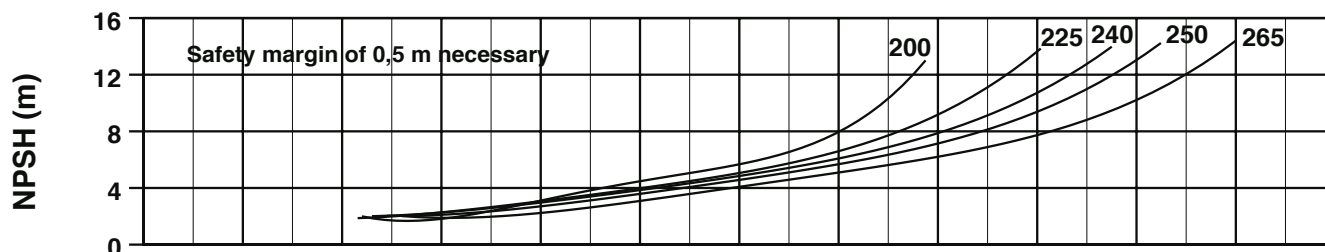
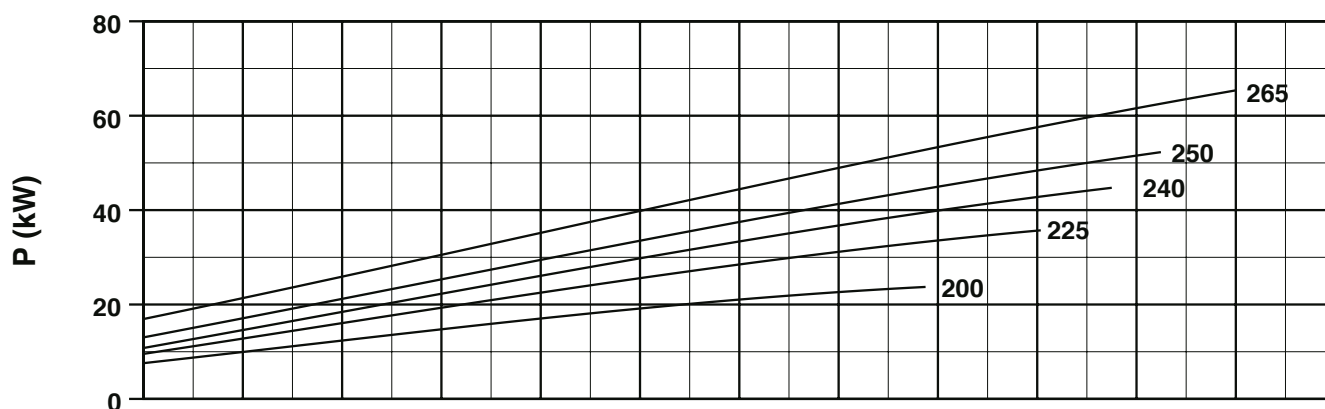
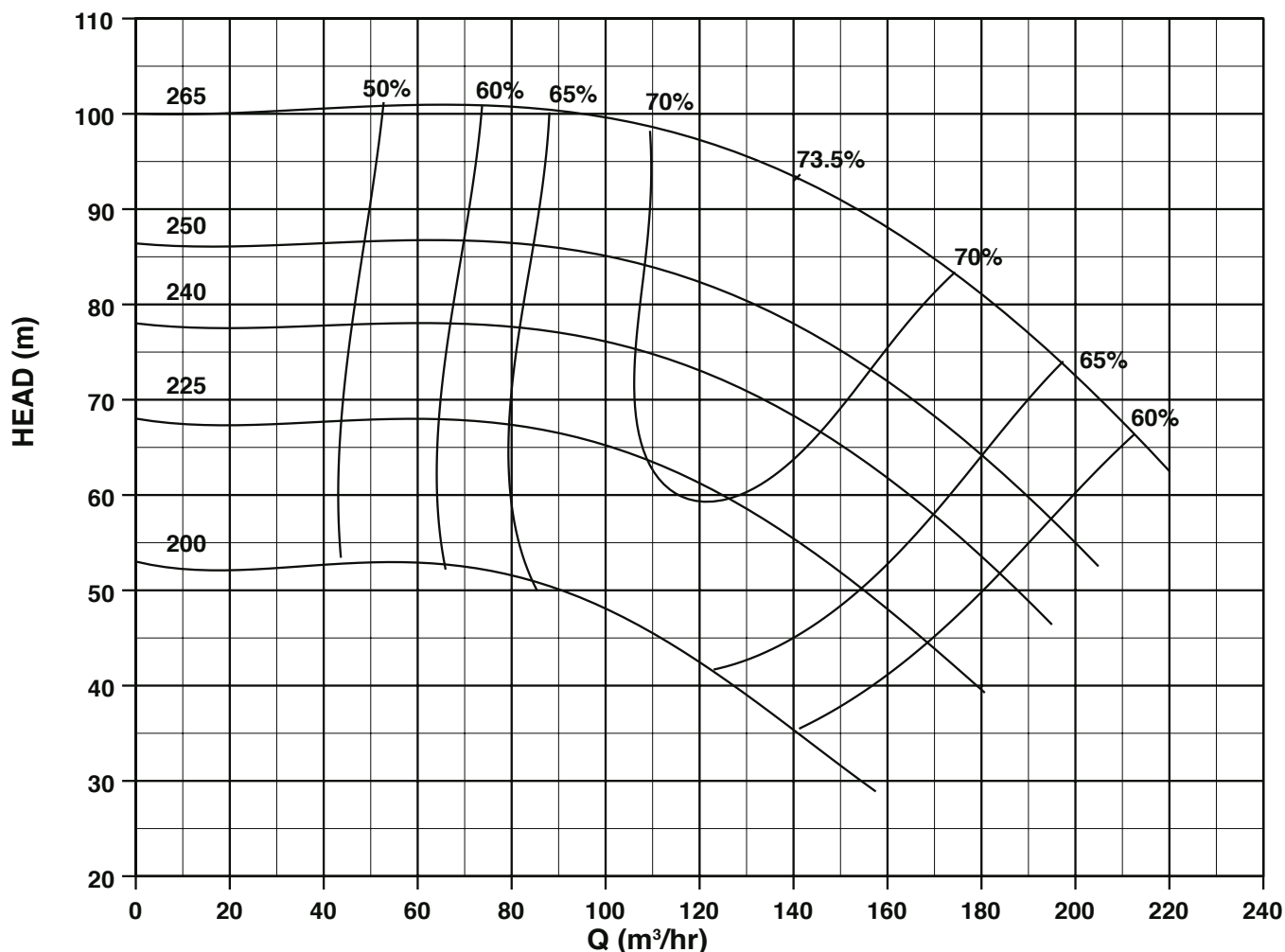
Suction Diameter
80mm

Discharge Diameter
65mm

DIN 24 255
NT/NS 65-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

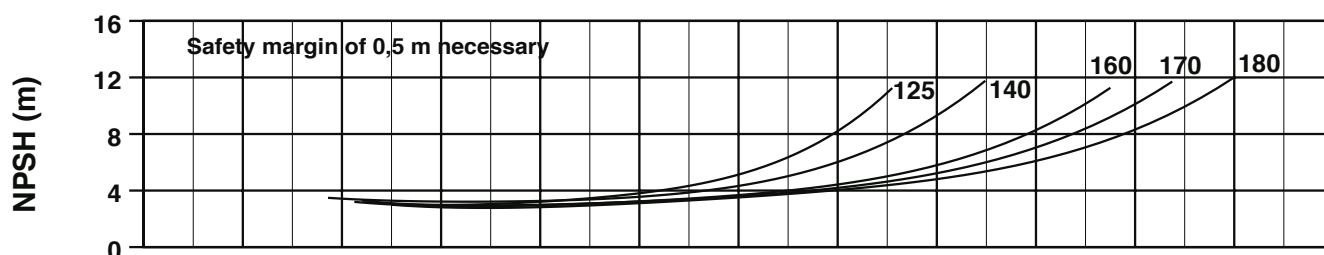
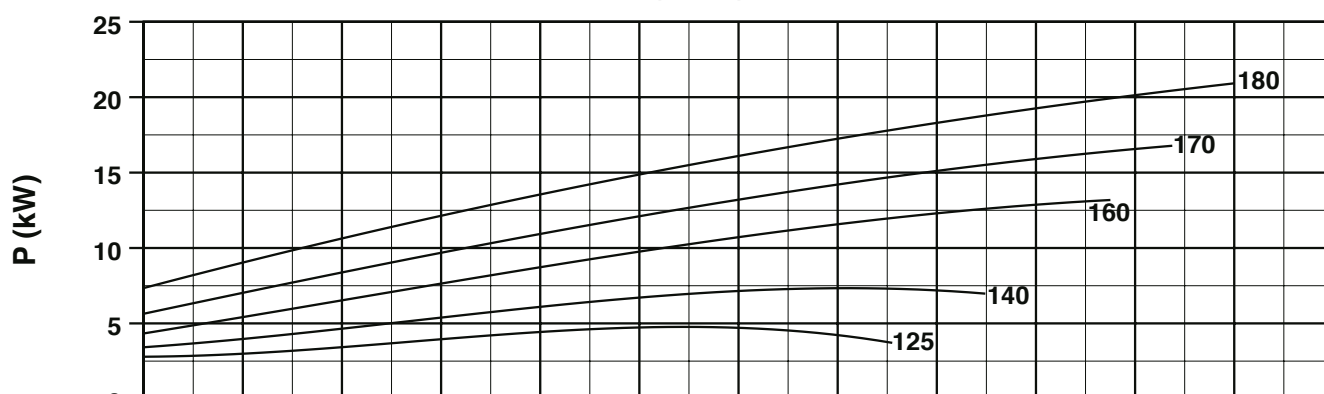
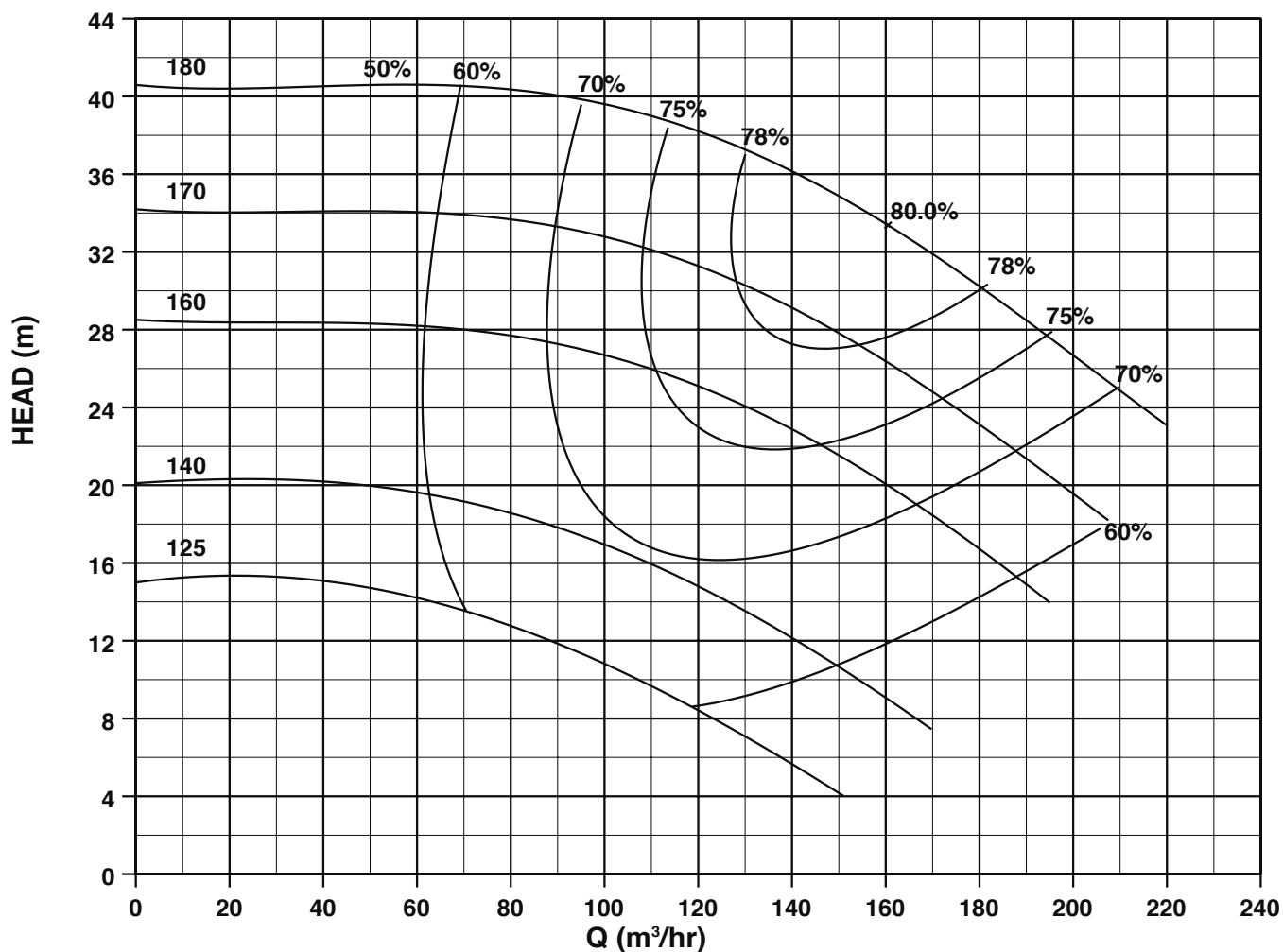
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-160

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

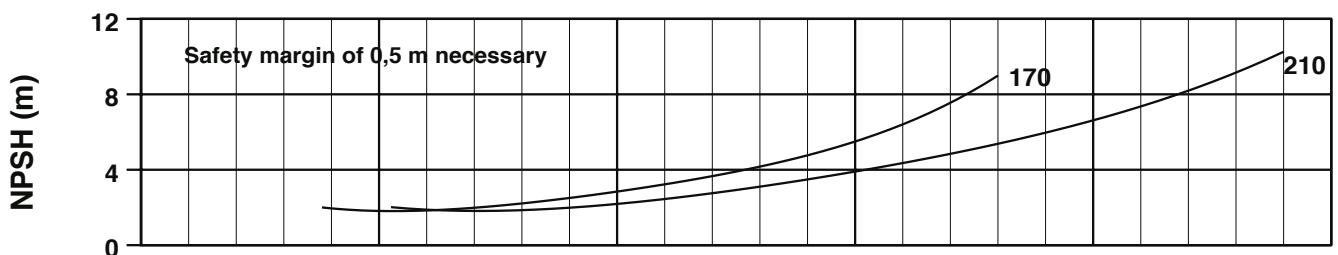
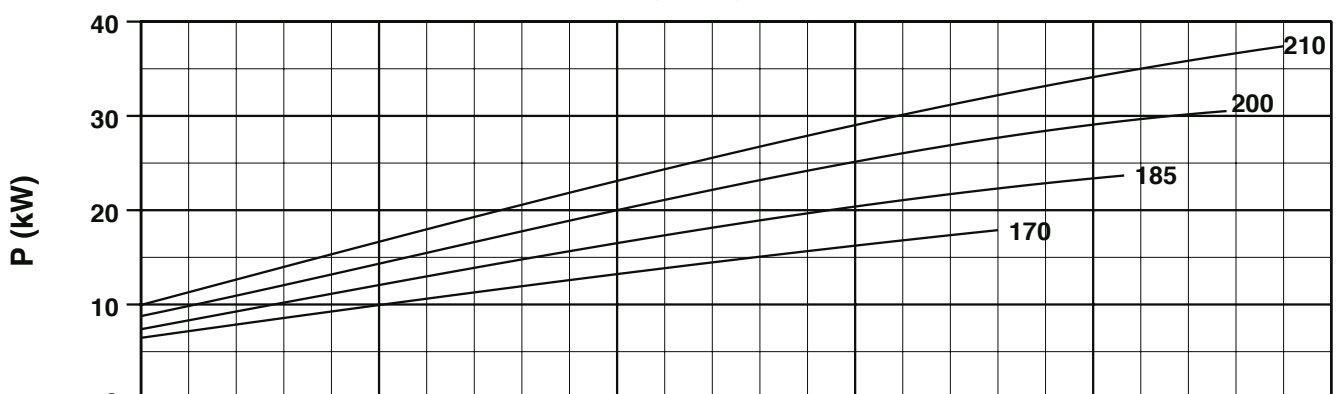
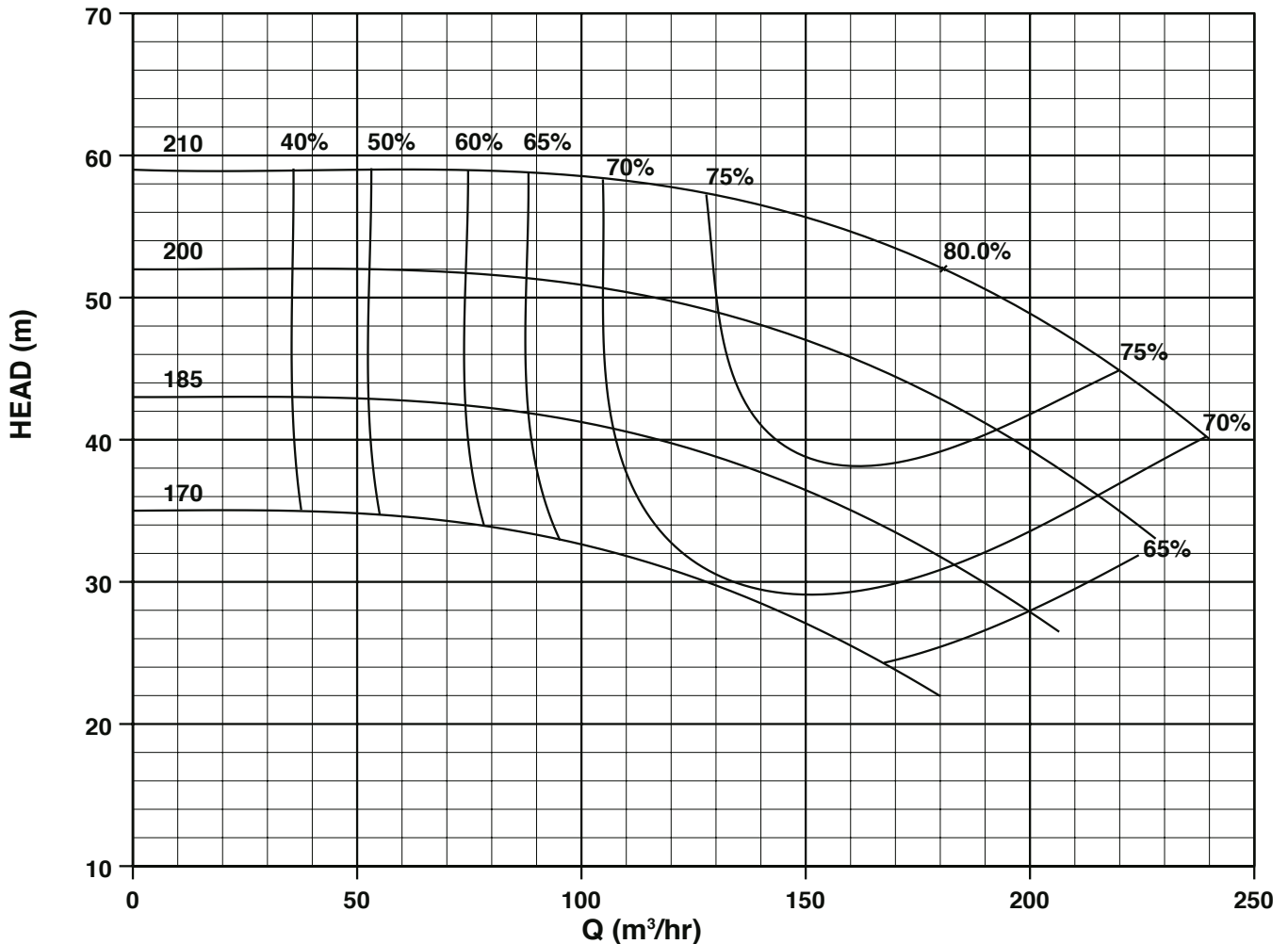
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

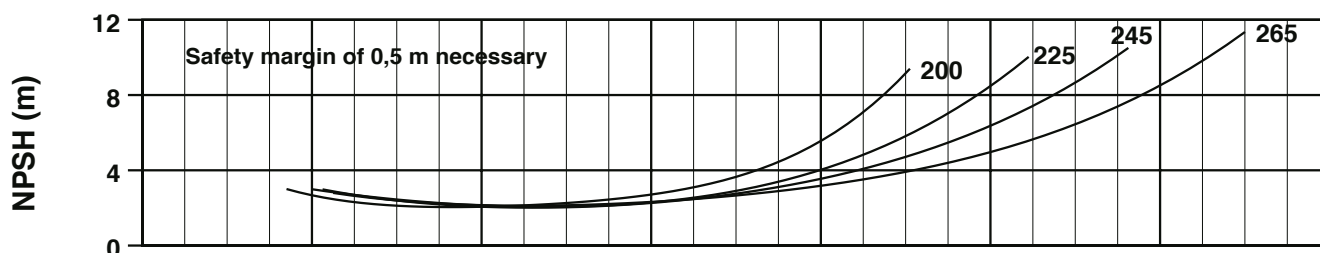
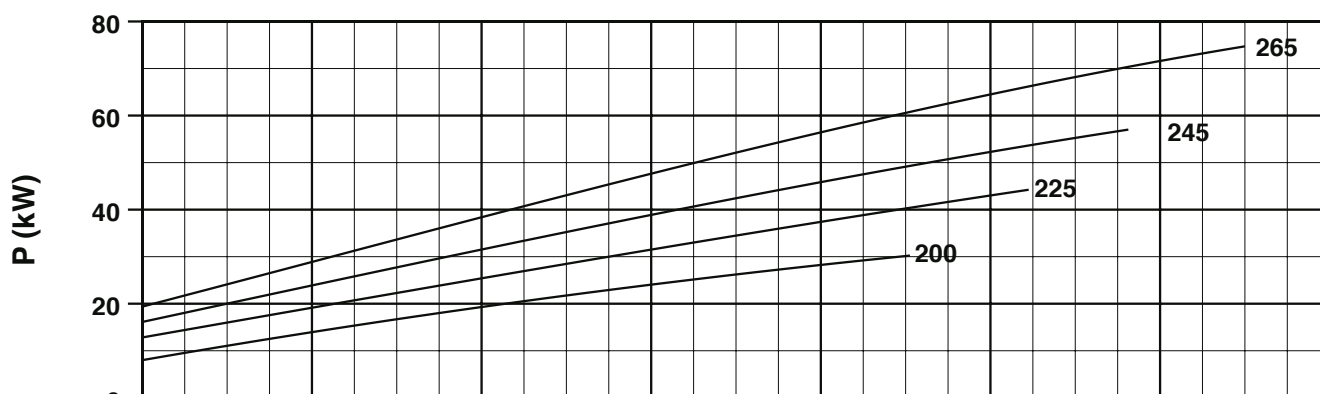
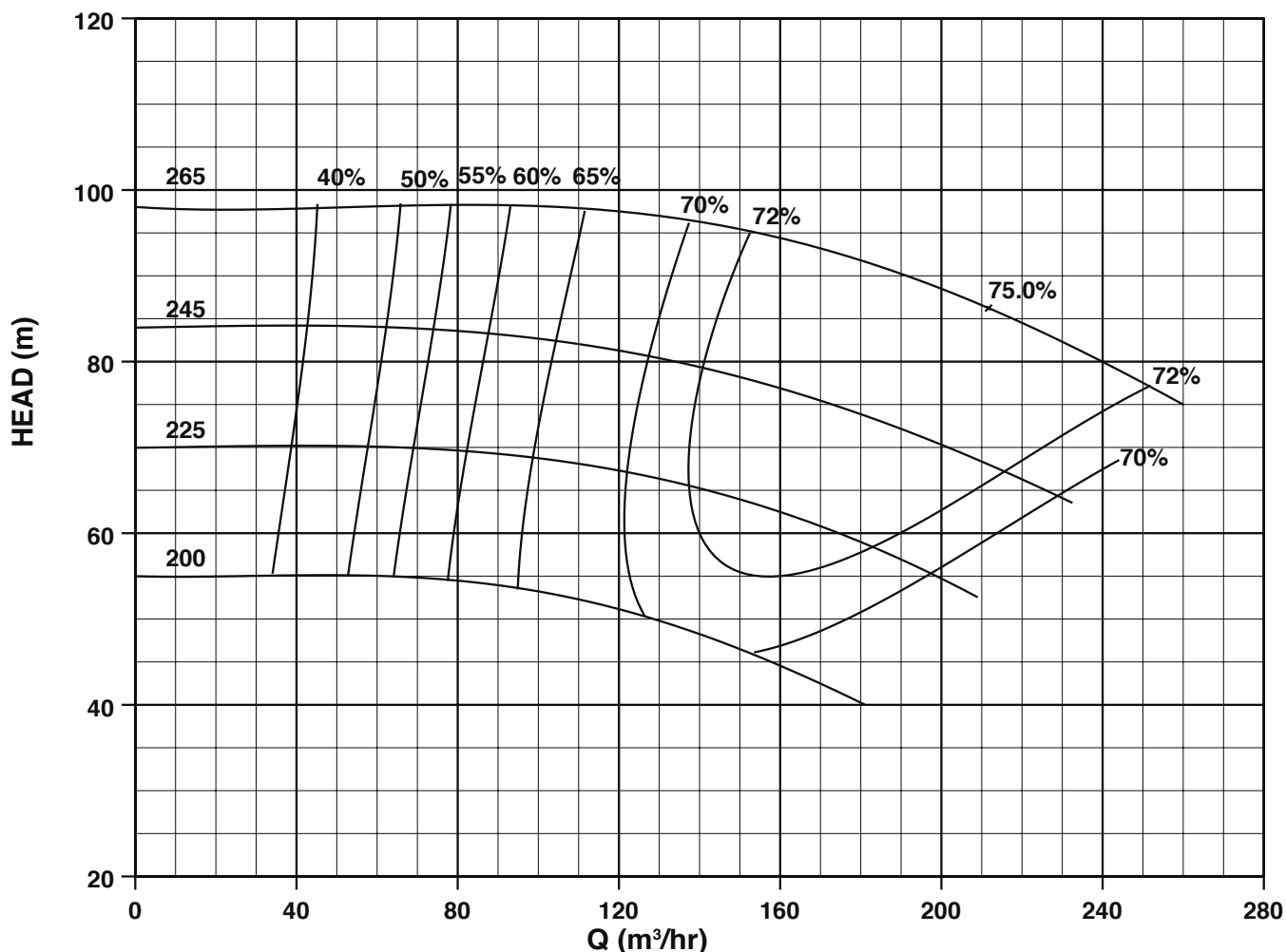
Suction Diameter
100mm

Discharge Diameter
80mm

DIN 24 255
NT/NS 80-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

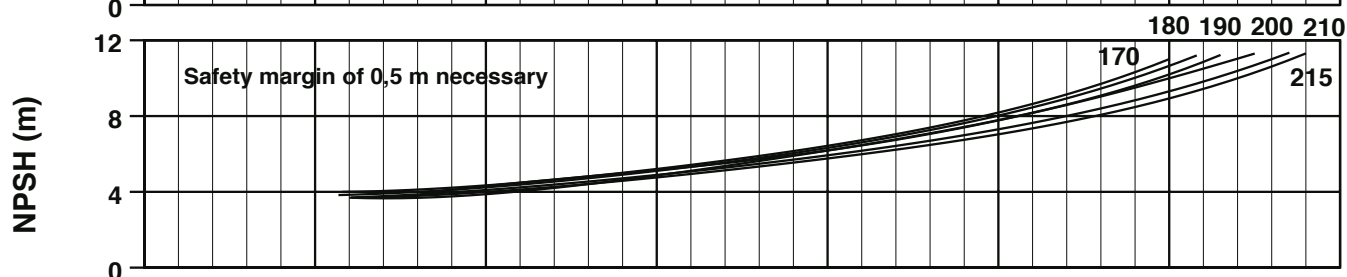
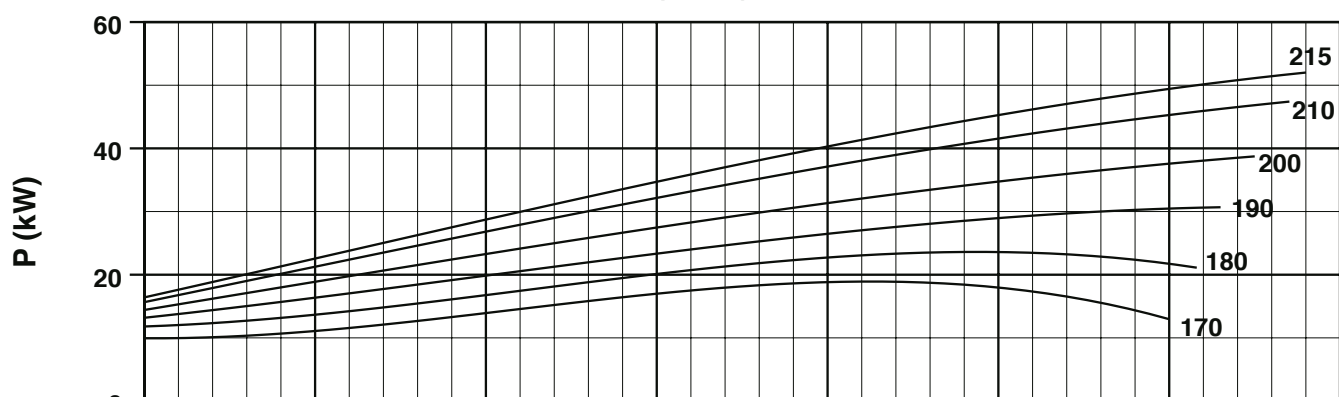
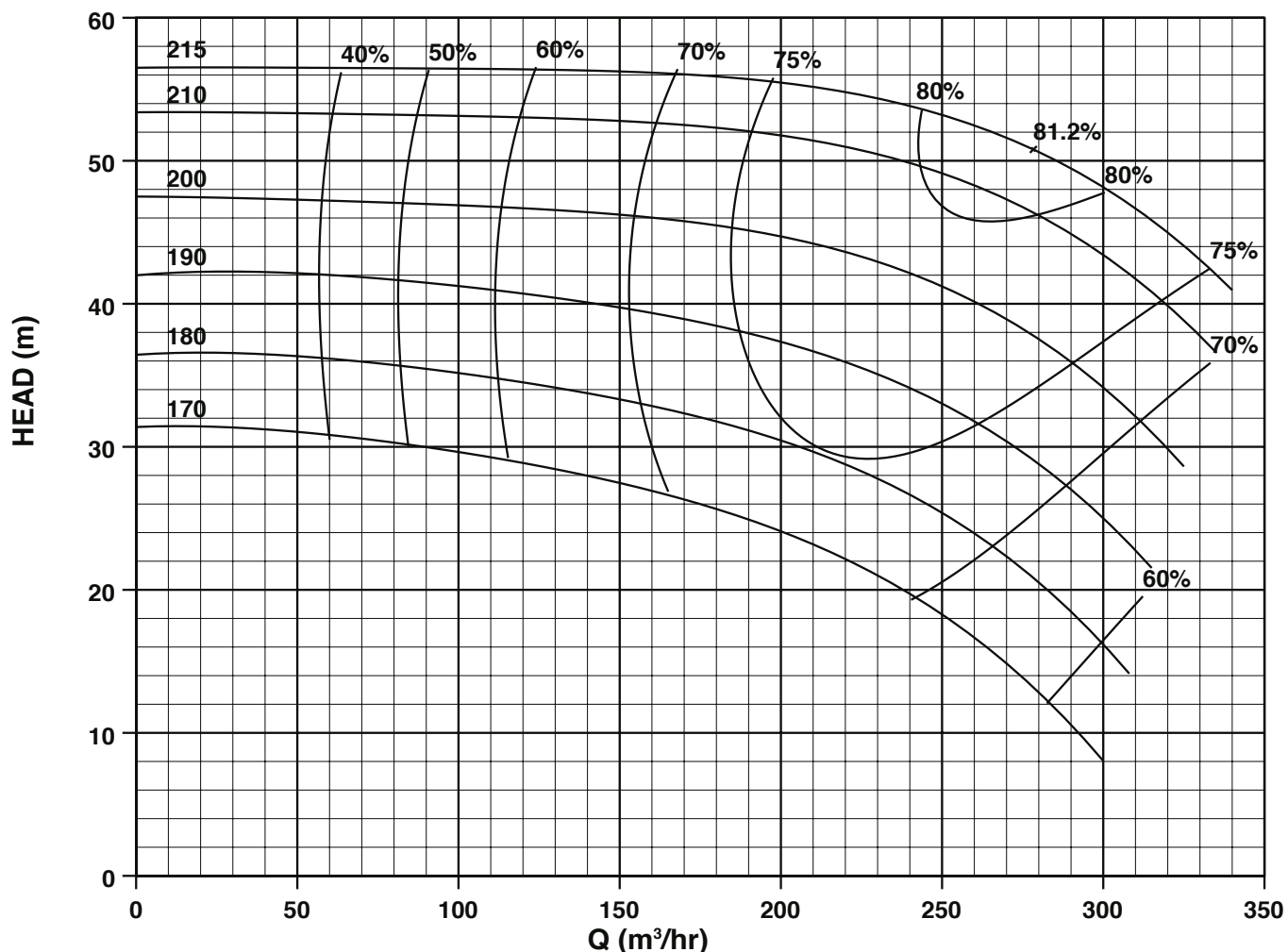
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-200

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

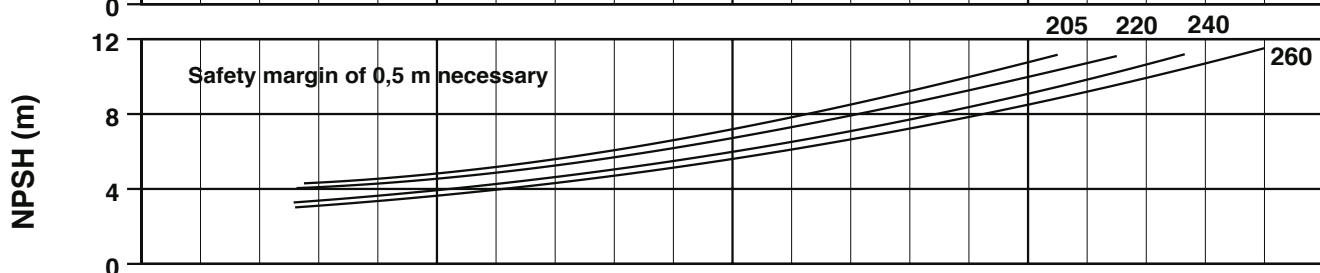
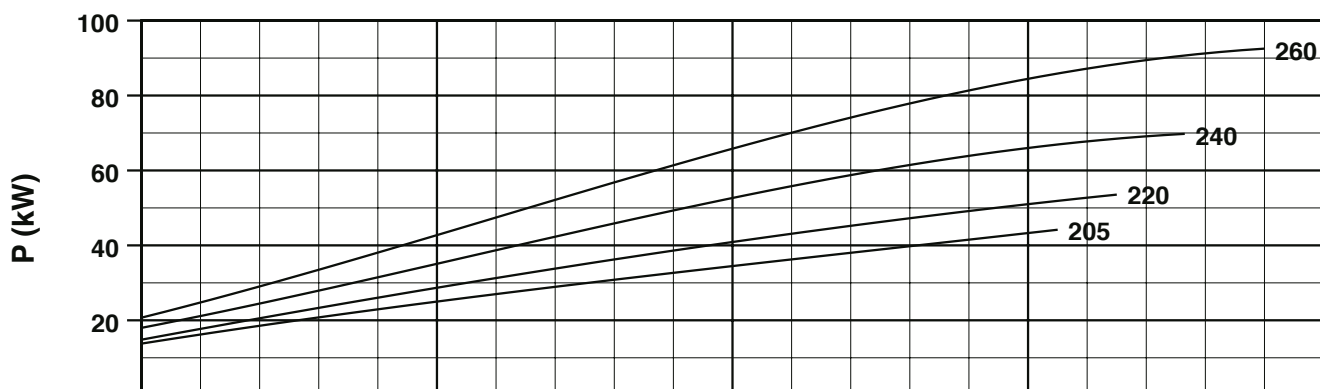
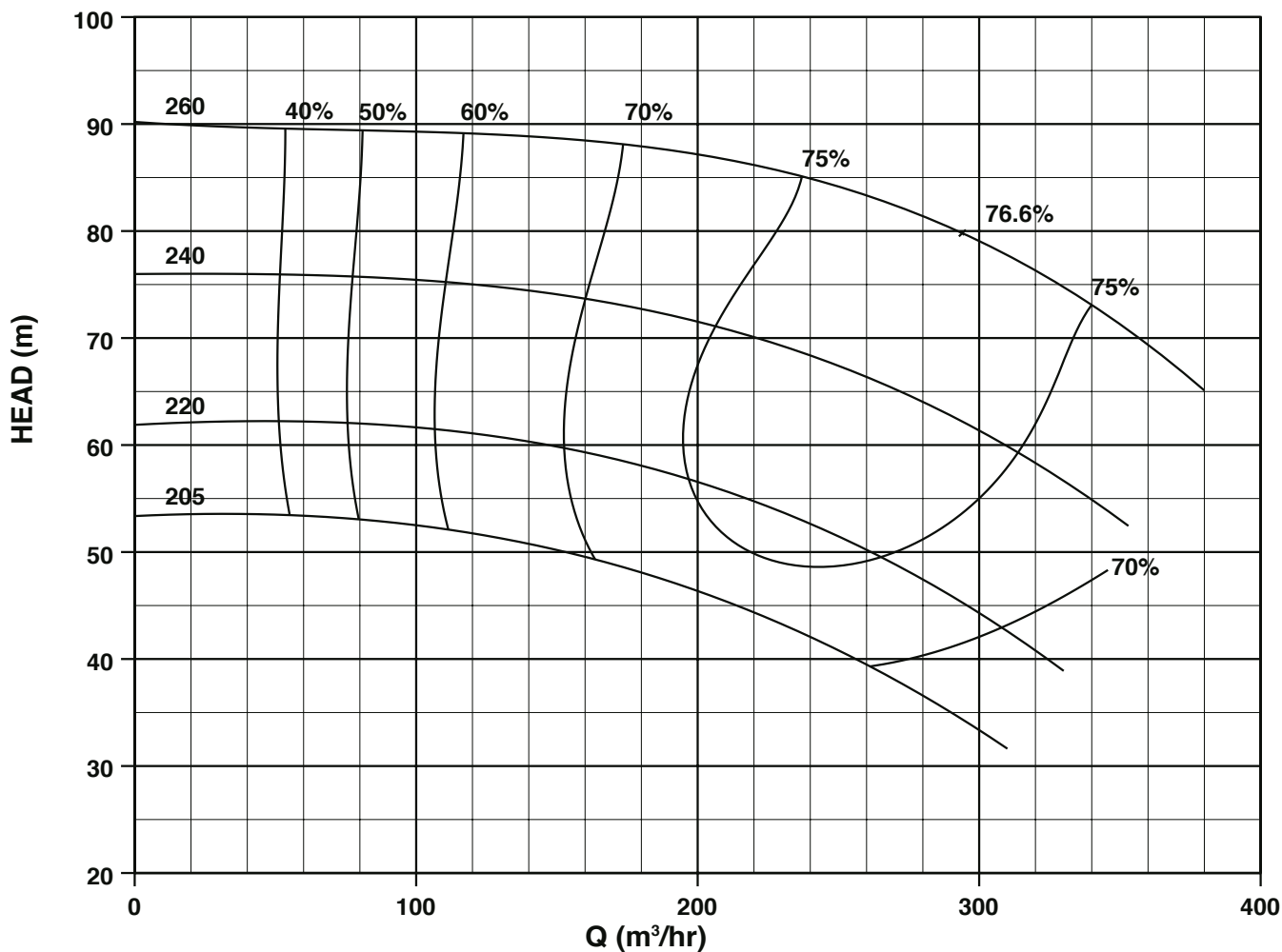
Suction Diameter
125mm

Discharge Diameter
100mm

DIN 24 255
NT/NS 100-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm



2900

EN733 (DIN 24255)

END-SUCTION CENTRIFUGAL PUMPS



CHARACTERISTIC CURVE

Issue Date
OCTOBER 2005

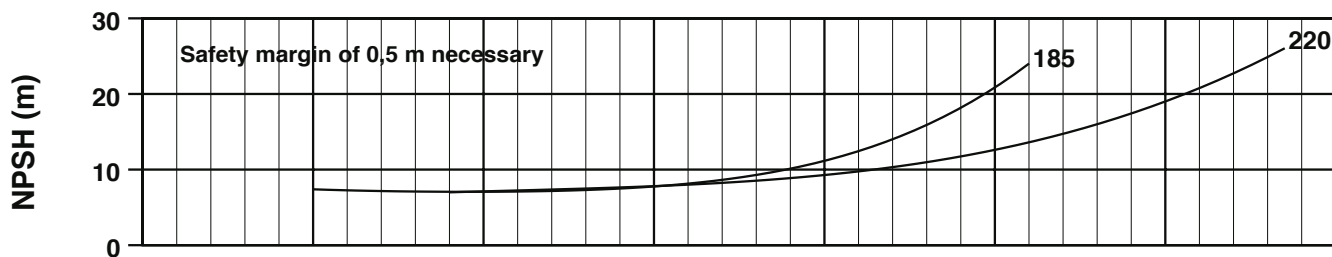
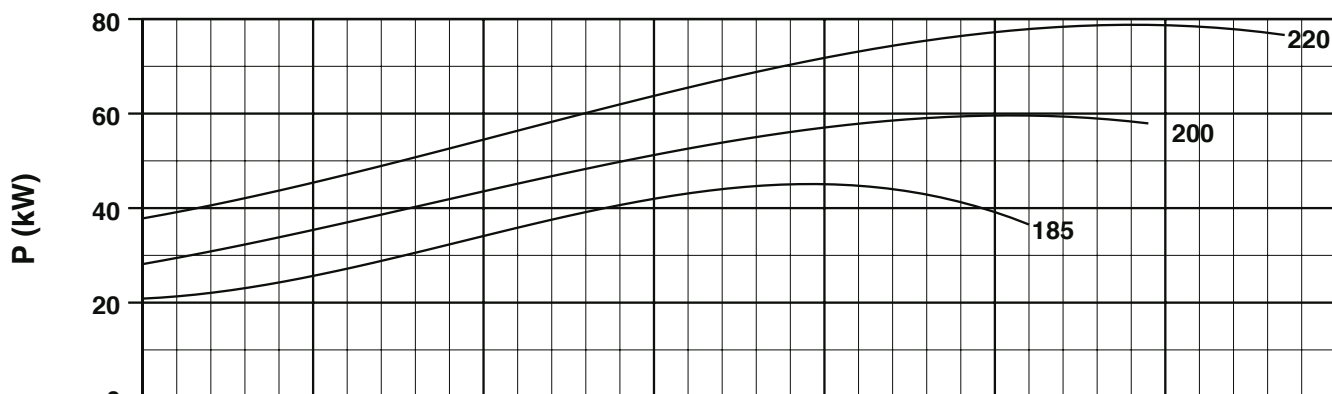
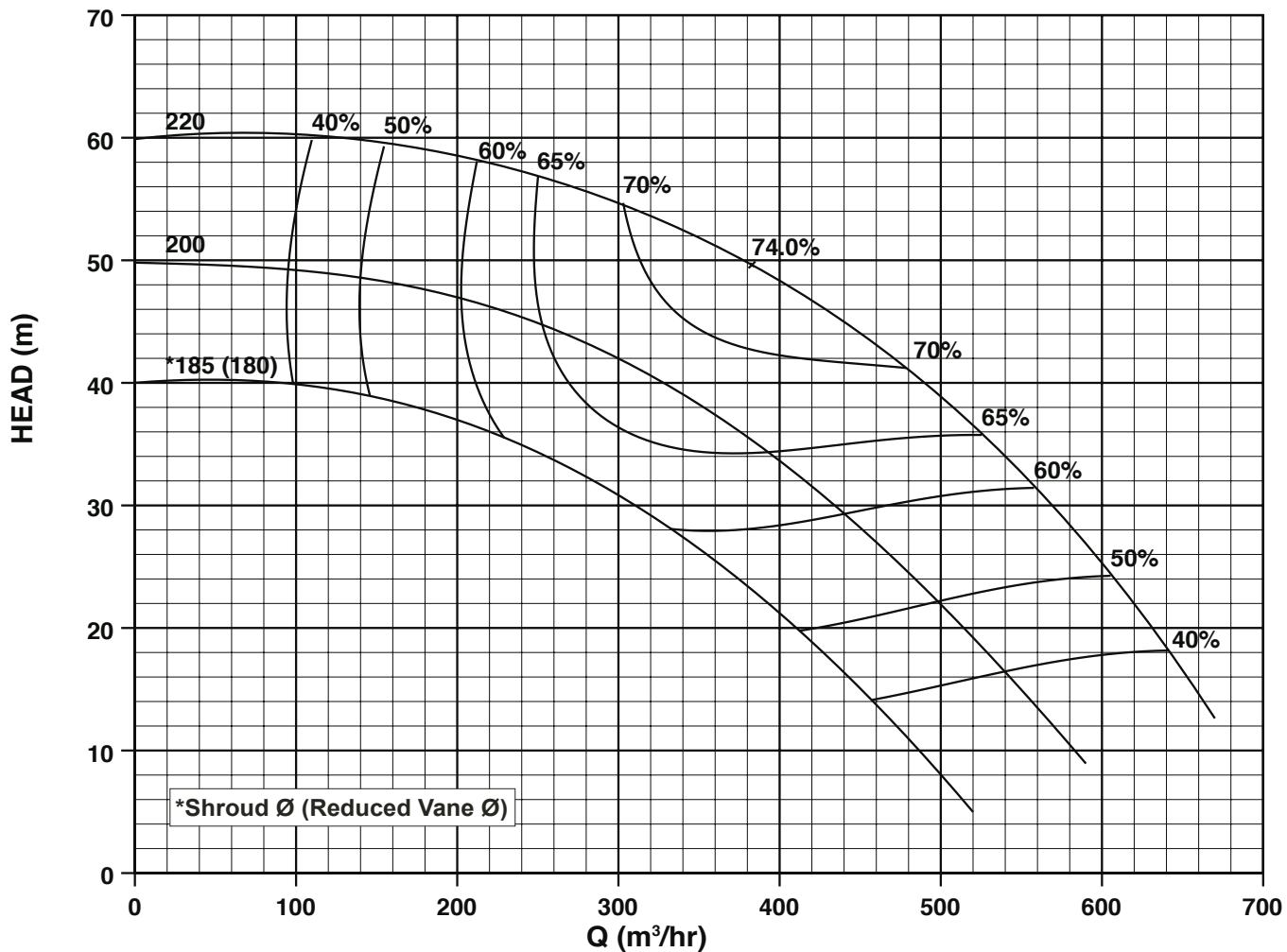
Suction Diameter
150mm

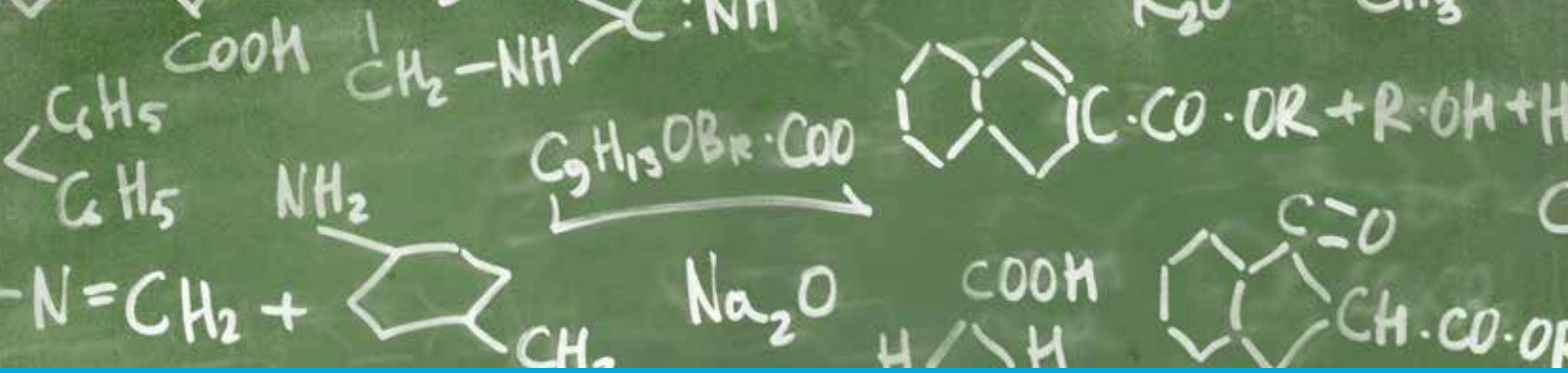
Discharge Diameter
125mm

DIN 24 255
NT/NS 125-250

Based on water density 1000 kg/m³ and viscosity 1 cSt.
Head, capacity and efficiency according to ISO Standard 2548: 1973 Annex B

2900 rpm





BASIC FORMULAS

H= Head(m)

Q = Flow(m³/h)

Capacity

$$\text{l/sec} \times 3.6 = \text{m}^3/\text{h}$$

$$\text{m}^3/\text{h} \div 3.6 = \text{l/sec}$$

$$\text{Imp gpm} \times 0.2271 = \text{m}^3/\text{h} \quad \text{m}^3/\text{h} \times 4.403 = \text{Imp gpm}$$

$$\text{US gpm} \div 0.246 = \text{l/min} \quad \text{l/min} \times 0.246 = \text{US gpm}$$

$$10000 \text{ kg/hr} = \frac{10\text{m}^3\text{h}}{\text{Density(SG)}}$$

Head/Pressure

$$\text{Ft} \div 3.28 = \text{m}$$

$$\text{m} \times 3.28048 = \text{Ft}$$

$$\text{Bar} \times 100 = \text{kpa}$$

$$\text{m} \times 9.805 = \text{kpa}$$

$$\text{kpa} \times 0.102 = \text{m}$$

$$\text{m} \times 0.098 = \text{Bar}$$

$$\text{Bar} \times 10.19 = \text{m}$$

$$\text{m} \times 1.45 = \text{psi}$$

$$\text{psi} \times 6.895 = \text{kpa}$$

Power

$$\text{hp} \times 0.746 = \text{kw}$$

$$\text{kw} \times 1.340483 = \text{hp}$$

$$\text{kw abs} = \frac{Q \times H \times \text{SG}}{367 \times \text{Eff}(\%)}$$

$$\text{kw} = \frac{\text{Amps} \times \text{Volts} \times \text{Power Factor} \times 1.732}{1000}$$

$$\text{RPM} = \frac{\text{Hz} \times 120}{\text{No of Poles}}$$

$$\text{Hz} = \frac{\text{RPM} \times \text{No Of Poles}}{120}$$

$$\text{Velocity m/sec} = \frac{Q \times 353.63}{(\text{Pipe Dia})^2}$$

Efficiency

$$\text{EFF}(\%) = \frac{Q \times H \times \text{SG}}{367 \times \text{kw(abs)}}$$

Eff = Pump Eff%

Density = SG

Temperature

$$\text{Deg.C} = (\text{deg.F}-32) \times 0.556$$

$$\text{Deg.F} = (1.8 \times \text{deg.C}) + 32$$

Peripheral Speed

$$\text{Peripheral Speed(Impeller)} = \frac{\text{imp.dia.}(\text{mm}) \times \pi \times \text{N(Rpm)}}{60 \times 1000}$$

Viscosity

vis Viscous Liquid

w Water

Given: Qvis in m³/h kinematic viscosity v in mm²/s

Hvis in m pvis in kg/dm³

$$\text{Qw} = \frac{\text{Qvis}}{\text{CQ}}$$

$$\text{Hw} = \frac{\text{Hvis}}{\text{CH}}$$

$$\text{Qw} = \text{C\%} \times \text{\%w}$$

$$\text{Pvis} = \frac{\text{Qvis} \times \text{Hvis} \times \text{Pvis}}{367 \times \text{Eff}(\%) \text{ vis}}$$

Centrifugal and Axial Flow Pump Affinity Laws:

Speed changes & impeller diameter remains the same:

$$\text{Q1/Q2} = \text{N1/N2}$$

$$\text{H1/H2} = (\text{N1/N2})^2$$

$$\text{P1/P2} = (\text{N1/N2})^3$$

Impeller diameter changes and speed remains the same:

$$\text{Q1/Q2} = \text{D1/D2}$$

$$\text{H1/H2} = (\text{D1/D2})^2$$

$$\text{P1/P2} = (\text{D1/D2})^3$$



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