



0.75kw~7.5kw



9.2kw~55kw

**EST**

### Application

- Circulation and transfer of clean, chemically non-aggressive water and other liquids
- Water supply & irrigation
- Water circulation in air conditioning systems

### Operating Conditions

- Delivery: up to 220 m<sup>3</sup>/h
- Head: up to 95 m
- Liquid temperature:
  - Standard: -10°C to 85°C
  - Maximum operating pressure: 12 bar (PN12)
- Anti-clockwise rotation when facing pump's suction port
- Impeller: AISI304/HT200
- Mechanical seal in compliance with DIN 24960
- Lubricated by internal recirculating pumped liquid
- Counter flange available on request

### Motor

- Closed construction, external ventilation
- Insulation class: F
- Protection class: IP54
- Performance in compliance with CEI 2-3 (IEC 34.1)
- Max.ambient temperature: +40°C
- For model that ≥9.2kw: Equiped with IE2 motor, IE3 motor available on request.

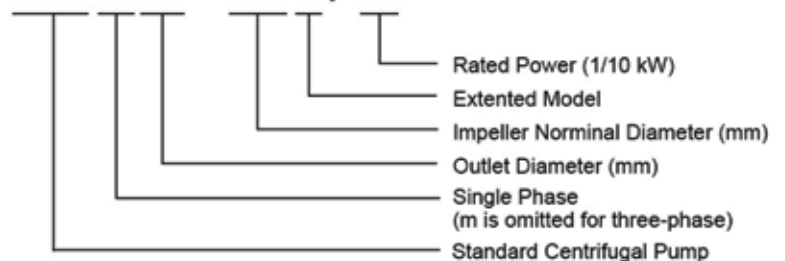
For model that ≤7.5kw, the following 4 models can equiped with IE3 motor.  
(XST40-160/30, XST40-160/40, XST50-160/55, XST50-160/75)

### Construction Features

- Single-impeller centrifugal pump featuring axial intake and radial discharge
- Inlet and outlet DN in compliance with EN 733(ex DIN 24255) and UNI 7467
- Flanges in compliance with UNI 2236 and DIN 2532 rear entry (impeller, control valve and motor can be extracted without disconnecting the pump body from the pipes)

### Identification Codes

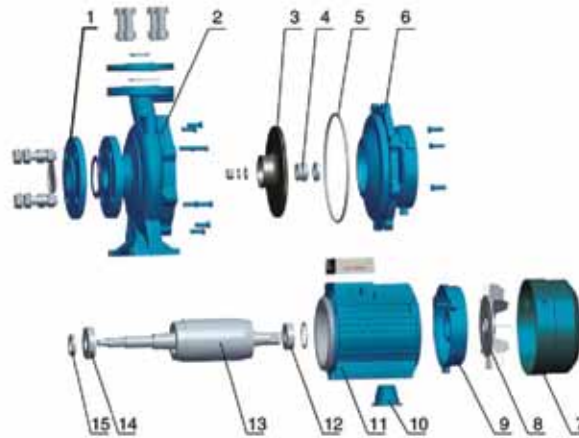
**EST m 32 – 125 K / 11**



## Materials Table

0.75kw~7.5kw

No.	Part	Material
1	Flange	HT200
2	Pump body	HT200
3	Impeller	HT200 / AISI304
4	Mechanical seal	Carbon/Silicon carbide
5	O-ring	NBR
6	Pump support	HT200
7	Fan cover	08F
8	Fan	PP
9	Rear cover	ZL102
10	Support	HT200
11	Stator	
12	Bearing	
13	Rotor	
14	Bearing	
15	Oil seal	



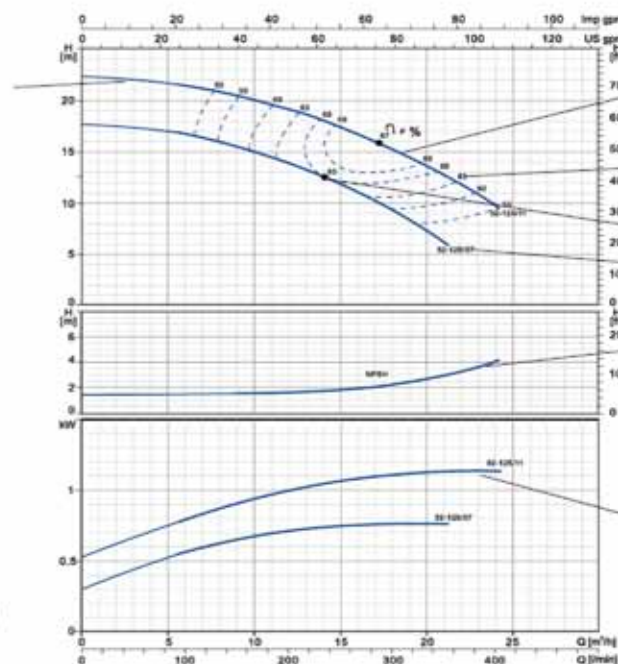
9.2kw~55kw

No.	Part	Material
1	Flange	HT200
2	Pump body	HT200
3	O-ring	NBR
4	Impeller	HT200 / AISI304
5	Mechanical seal	Carbon/Silicon carbide
6	Guarding plate	06Cr19Ni10
7	Pump support	HT200
8	Pump shaft	45/06Cr19Ni10
9	Motor	



## How to Read the Curve Charts

The thin curves indicate the duty range where long-time operation is not allowed



The bold curves indicate the duty range where long-time operation is permitted for best efficiency

The efficiency value on the pump working condition

The pump working condition

Pump model

The NPSH curve

The output power curve

## Guidelines to Performance Curves

Tolerances to ISO 9906, Annex A.

Measurements have been made with airless water at a temperature of 20°C and kinematic viscosity of 1 mm<sup>2</sup>/s.

To avoid overheating of the motor, the pump should not be used against a high head for a long time.

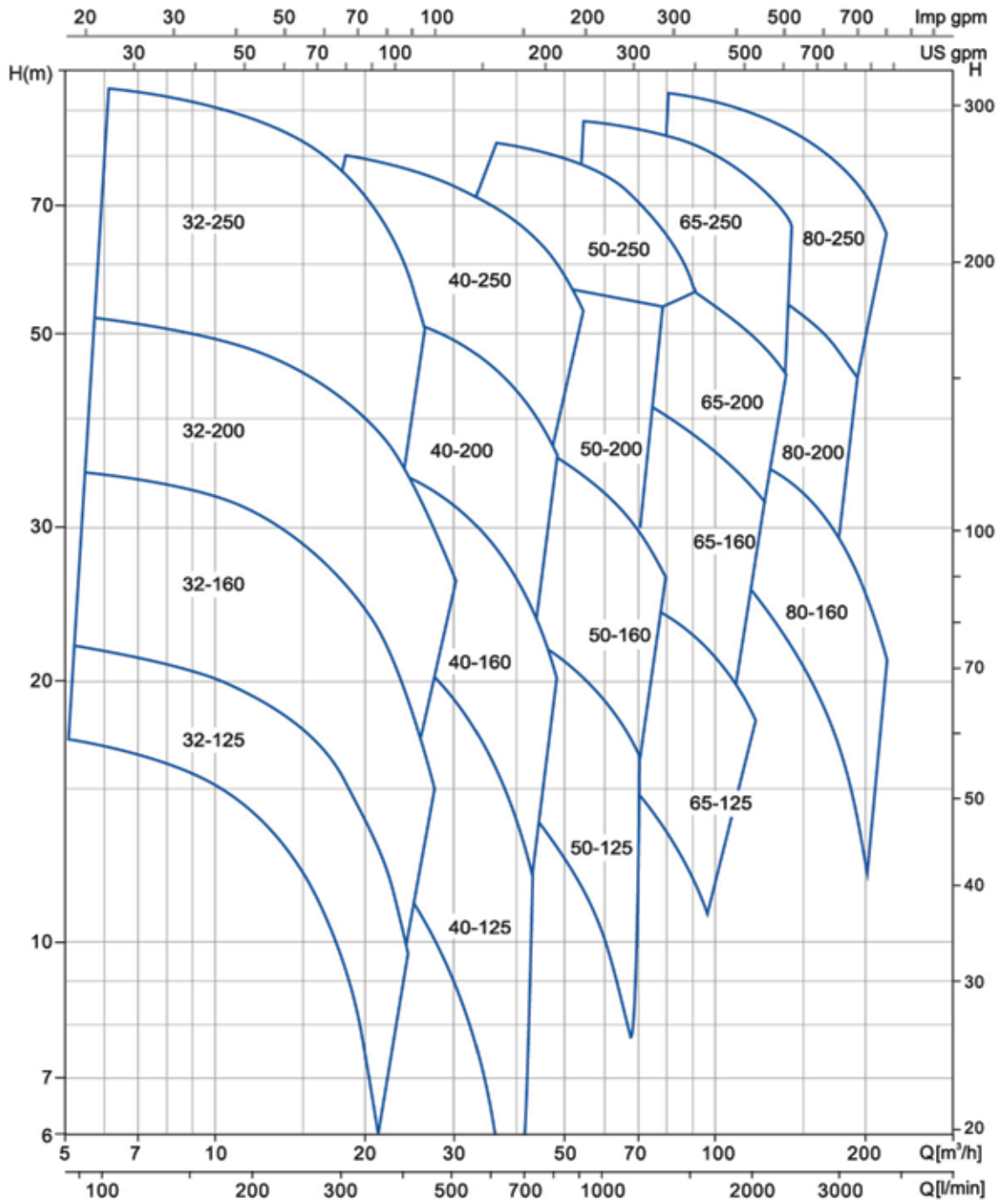
**Technical Data**

Model	Power		l/min m <sup>3</sup> /h	Q=DELIVERY																			
	kW	HP		0	100	150	250	300	400	450	600	700	800	900	1200	1400	1500	1800	2000	2300	3000	3500	
				0	6	9	15	18	24	27	36	42	48	54	72	84	90	108	120	138	180	210	
32-125/7* Δ	0.75	1		17.5	16.7	15	12	9															
32-125/11* Δ	1.1	1.5		22	21	20.2	17	15	9														
32-160/15* Δ	1.5	2		24	23.7	22.5	19.5	16.2															
32-160/22* Δ	2.2	3		31	29.6	29	25.5	22.5	15														
32-160/30* Δ	3	4		34.5	33.5	33	29	26.5	20	16.5													
32-200/30*	3	4		43.2	42	40.5	35.2	32.2	24.6	19.8													
32-200/40*	4	5.5		52	50.5	50	45	41.9	35	30.3													
32-250/55**	5.5	7.5		79	74.7	71.8	63	56	37.5														
32-250/75**	7.5	10		95	92	89	82	75	57.8														
40-125/11 Δ	1.1	1.5		14.7				13	11.5	10.1													
40-125/15 Δ	1.5	2		18.1				17	15	13.9													
40-125/22 Δ	2.2	3		24.5				23.2	21.5	20.2	16	12											
40-160/30	3	4		31.8				29	27.5	26.3	21.5	17.5											
40-160/40	4	5.5		38				36	34	33	28.5	25	20.1										
40-200/55*	5.5	7.5		44				42	40	38	32	27											
40-200/75*	7.5	10		55				52	49	48	42	37	32										
40-250/92*	9.2	12.5		64				59	56.5	55	49.5	45	39.8										
40-250/110*	11	15		72				67.5	65	63.5	57.5	52.2	47										
40-250/150*	15	20		82				79	77.3	76.5	71	66	60.5										
50-125/22 Δ	2.2	3		17						15.4	14	12.8	11.5										
50-125/30	3	4		20						18.8	18	17	15.6										
50-125/40	4	5.5		24						23.1	22.6	21.5	20.3	15.8									
50-160/55	5.5	7.5		32						30.6	30	28	26.6	20.5									
50-160/75	7.5	10		40						38	37	36	34.4	29									
50-200/92*	9.2	12.5		50.5						46.8	45	43	40.9	32.5									
50-200/110*	11	15		57.5						53.5	52	50	47.5	40									
50-250/150*	15	20	H (m)	68.5						64	63	61.5	59	50	41								
50-250/185*	18.5	25		77						73.2	72	70	68	60.5	51.5								
50-250/220*	22	30		86.3						83	81.5	80	78	70	61								
65-125/40	4	5.5		19								17.3	16.8	14.5	13	11.8							
65-125/55	5.5	7.5		23								21.3	20.9	19	17.5	16.7	13.7						
65-125/75	7.5	10		27								26	25.6	24.5	23	22.5	20	18					
65-160/92	9.2	12.5		33									31.5	30	28	27.1	24	21.5					
65-160/110	11	15		36									34.5	33	31.5	30.8	28	25.5					
65-160/150	15	20		42									41	40	38.5	37.8	35	33					
65-200/150	15	20		45.5									46	43.5	41	39.2	33						
65-200/185	18.5	25		53									53.5	51.2	48.3	47	41.5						
65-200/220	22	30		59									59.5	57.2	54	53	47	43.5					
65-200K/185	18.5	25		41.2										42	41.2	40.6	38.2	36.5	34				
65-200K/220	22	30		48											48	47.5	46	44	41				
65-200K/300	30	40		59.5											59	58.5	58	56.2	54				
65-250/220	22	30		62									61.5	58.2	56.5	54	49	45					
65-250/300	30	40		76									75	73	70	69	64	61	54				
65-250/370	37	50		90									88	86	84	82	78	74	68				
80-160/110	11	15		27												27.3	26	24.5	22.5	16			
80-160/150	15	20		32.8												32.5	31.3	30.2	28	22.1	16.7		
80-160/185	18.5	25		39												38	36.8	35.7	33.8	28.8	23.5		
80-200/220	22	30		48												47.5	46	43.5	41	32.5			
80-200/300	30	40		60												59.5	58	57	54.5	47			
80-250/370	37	50		71.5												70.5	67.5	65.5	61.5	49.5	38		
80-250/450	45	60		82												80.5	78.5	76.5	72	62	51		
80-250/550	55	75		95												93.5	91.2	89.8	86.8	77.6	68.3		

\* =AISI304 impeller      \*\* =Double AISI304 impeller  
Models marked with " Δ " have both single phase and three phase type, other models only have three phase type

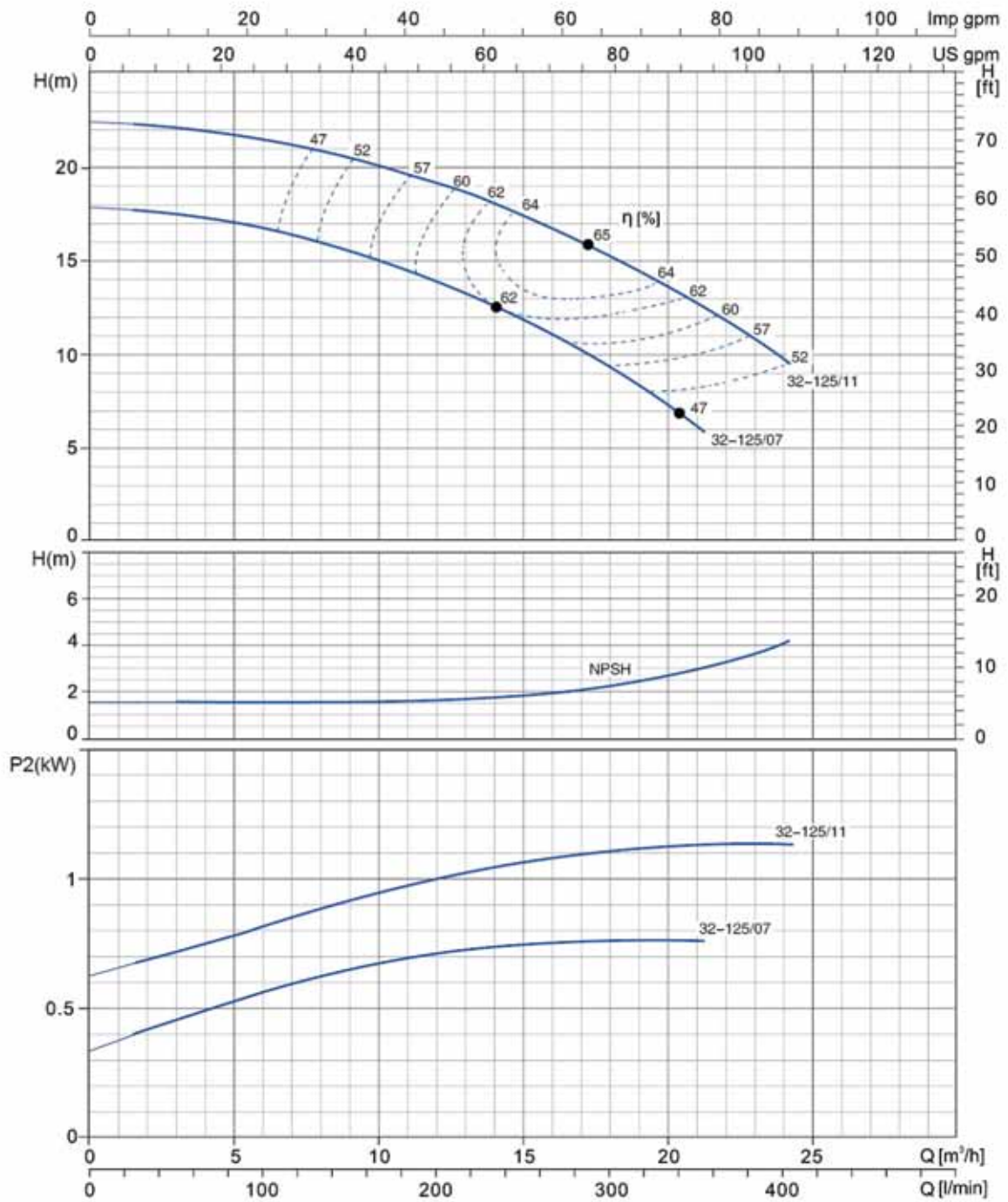
**Characteristic Curves**

<b>EST</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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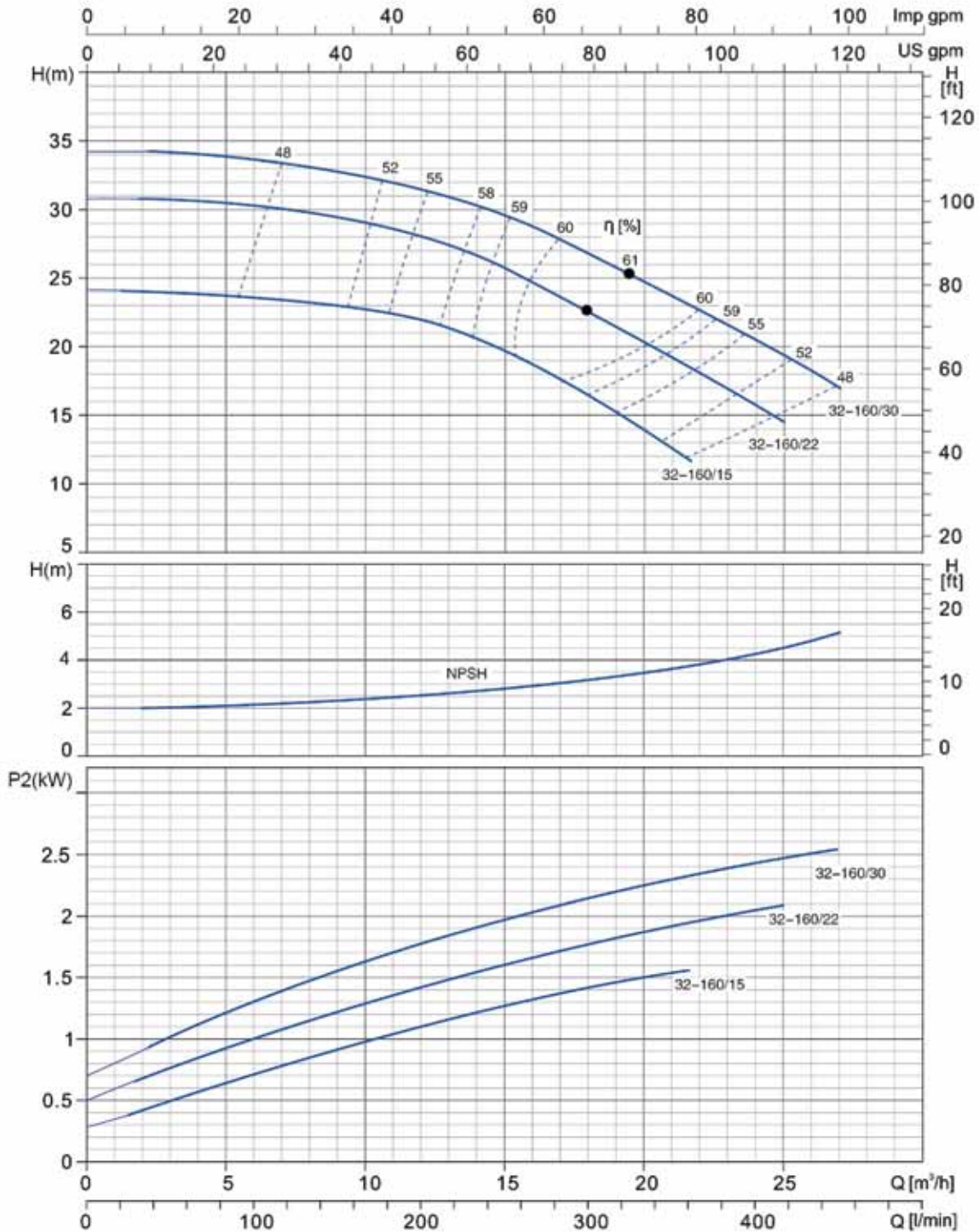
### Hydraulic Performance Curves

<b>EST 32-125</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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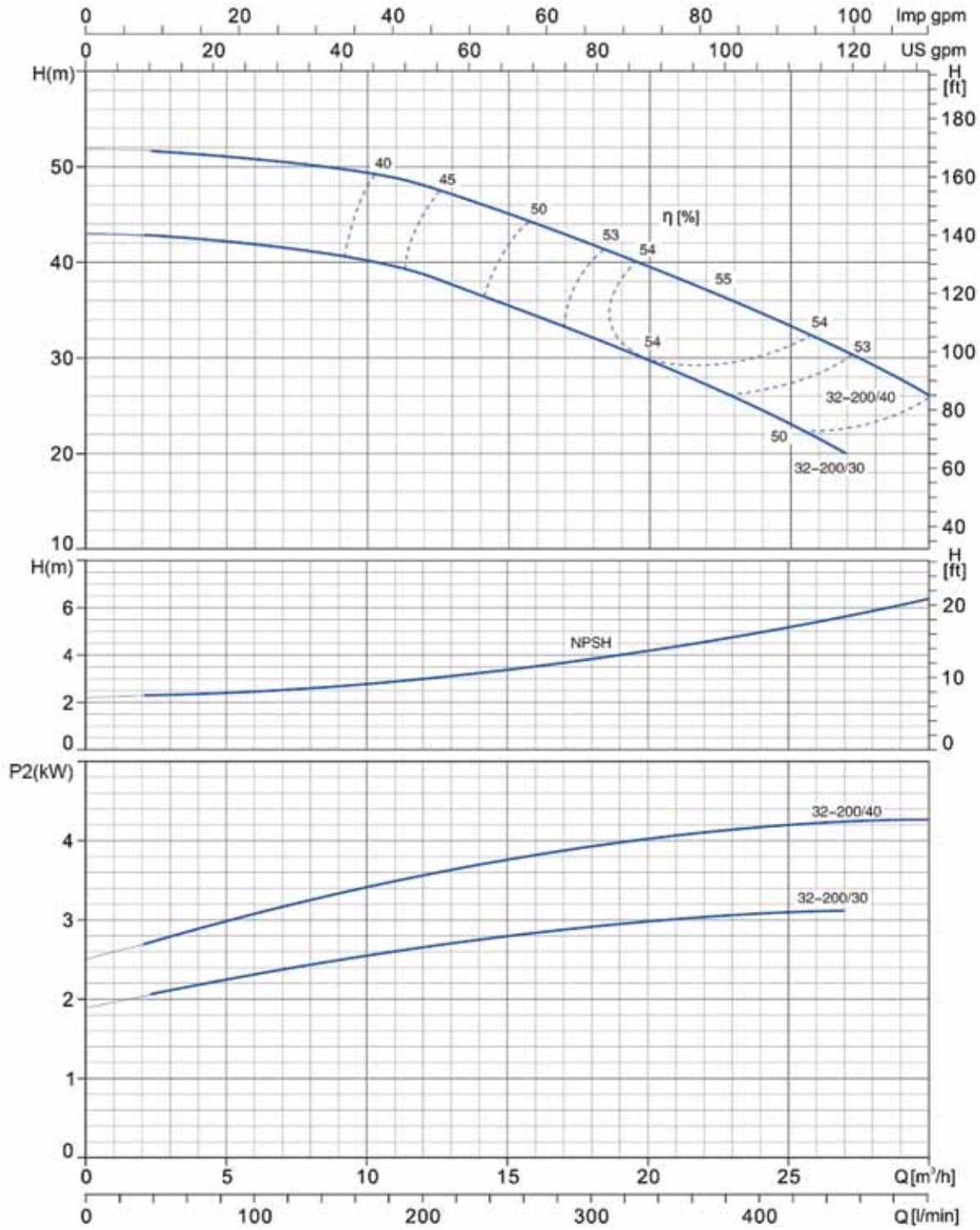
### Hydraulic Performance Curves

<b>EST 32-160</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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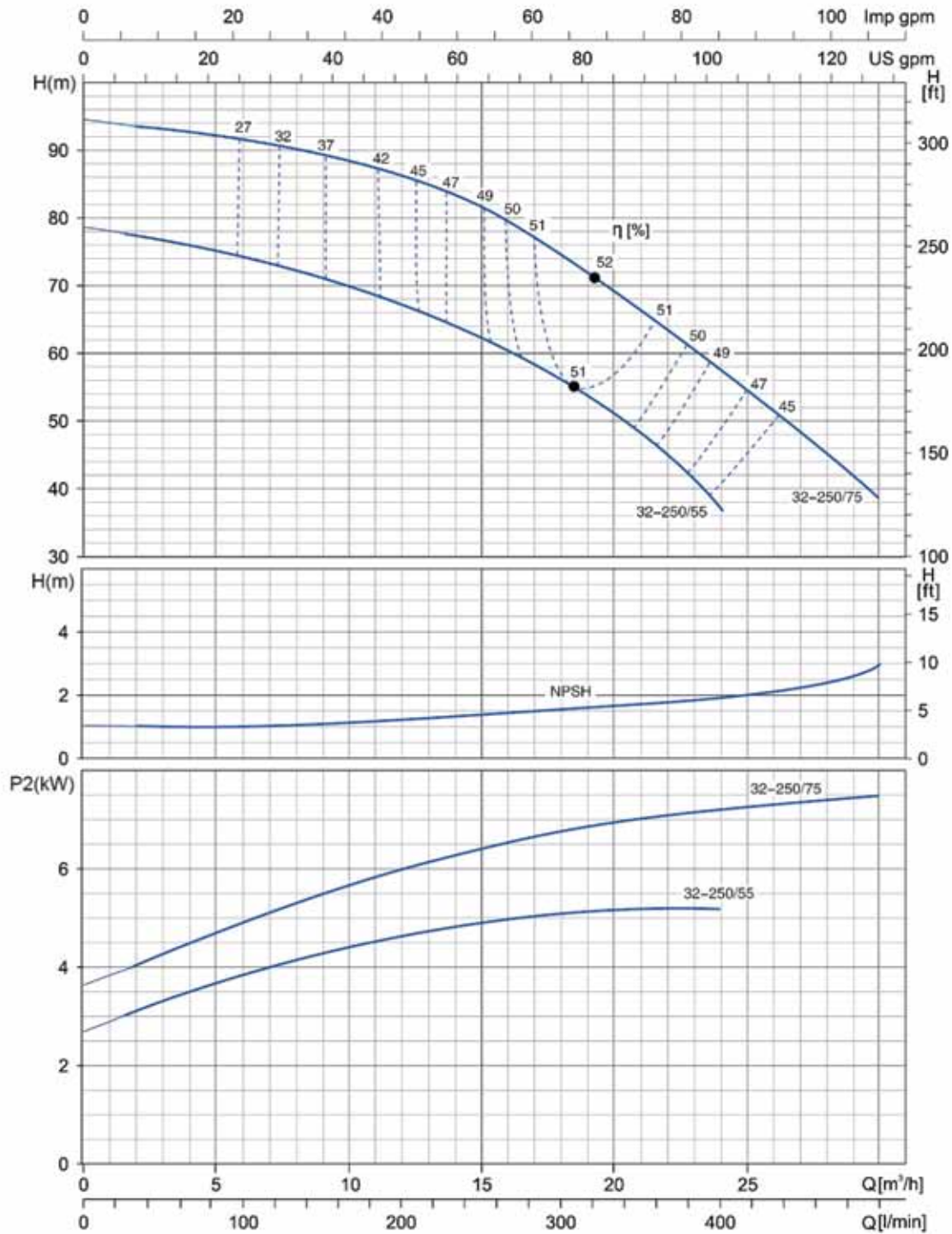
### Hydraulic Performance Curves

<b>EST 32-200</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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### Hydraulic Performance Curves

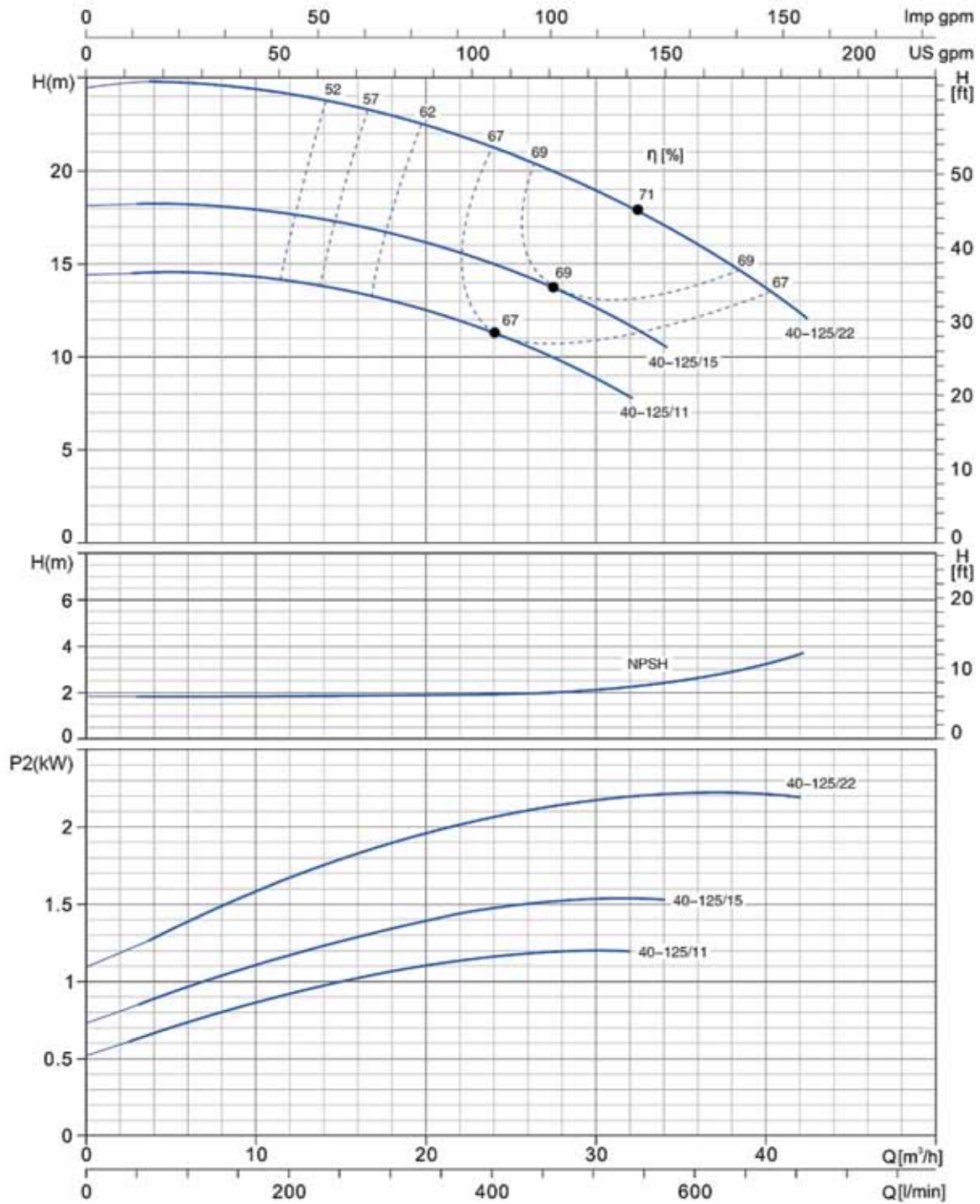
<b>EST 32-250</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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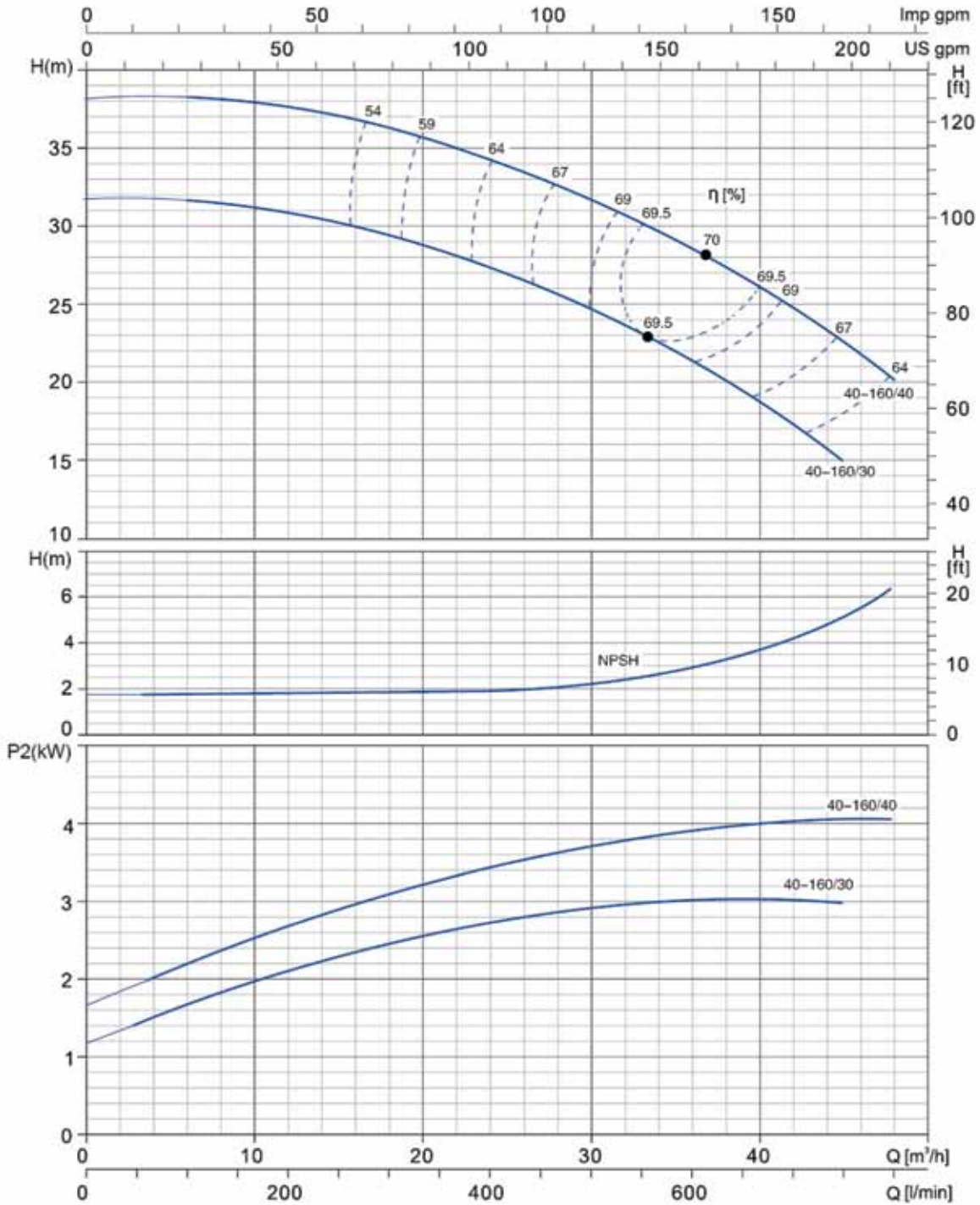
### Hydraulic Performance Curves

<b>EST 40-125</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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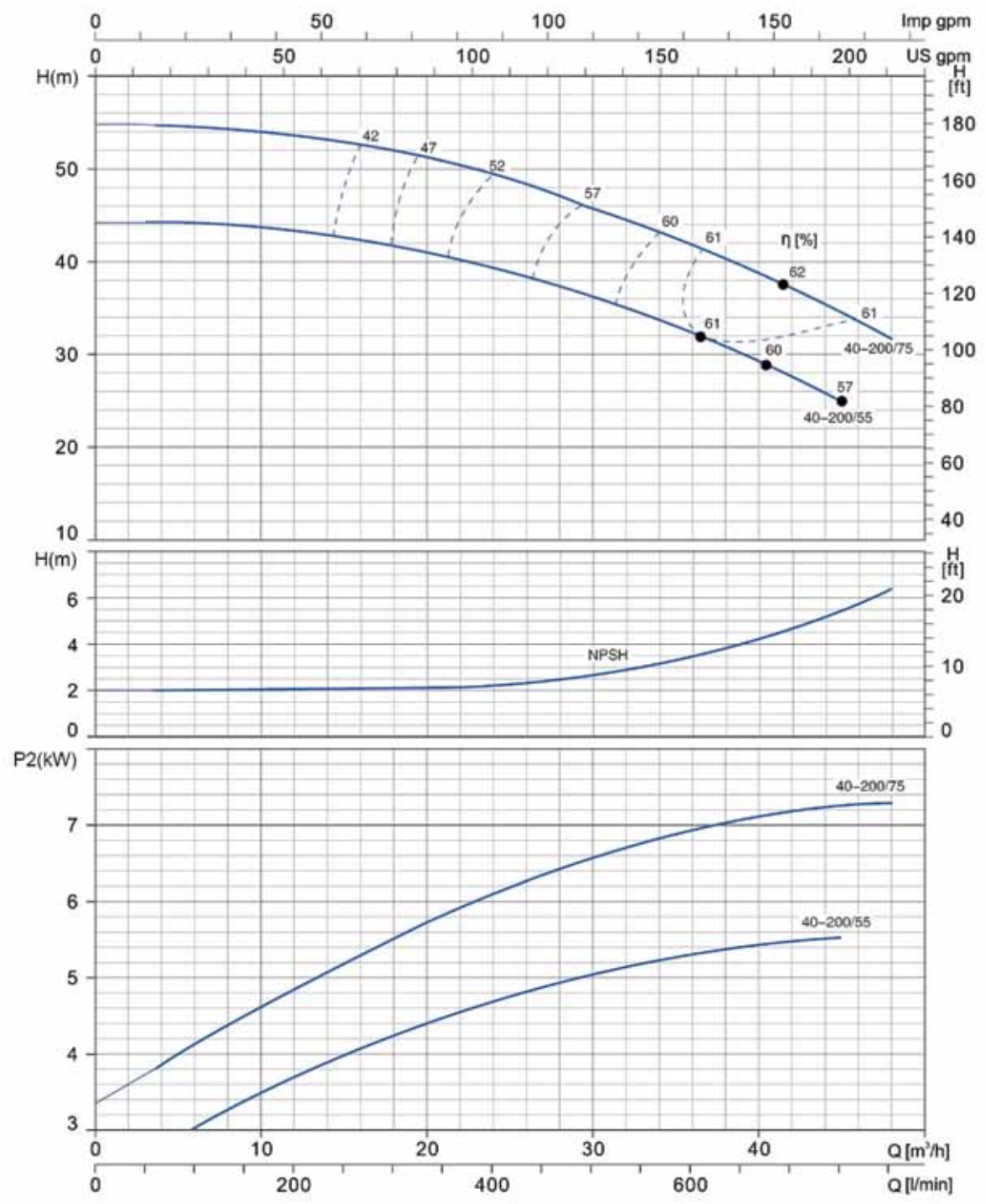
### Hydraulic Performance Curves

<b>EST 40-160</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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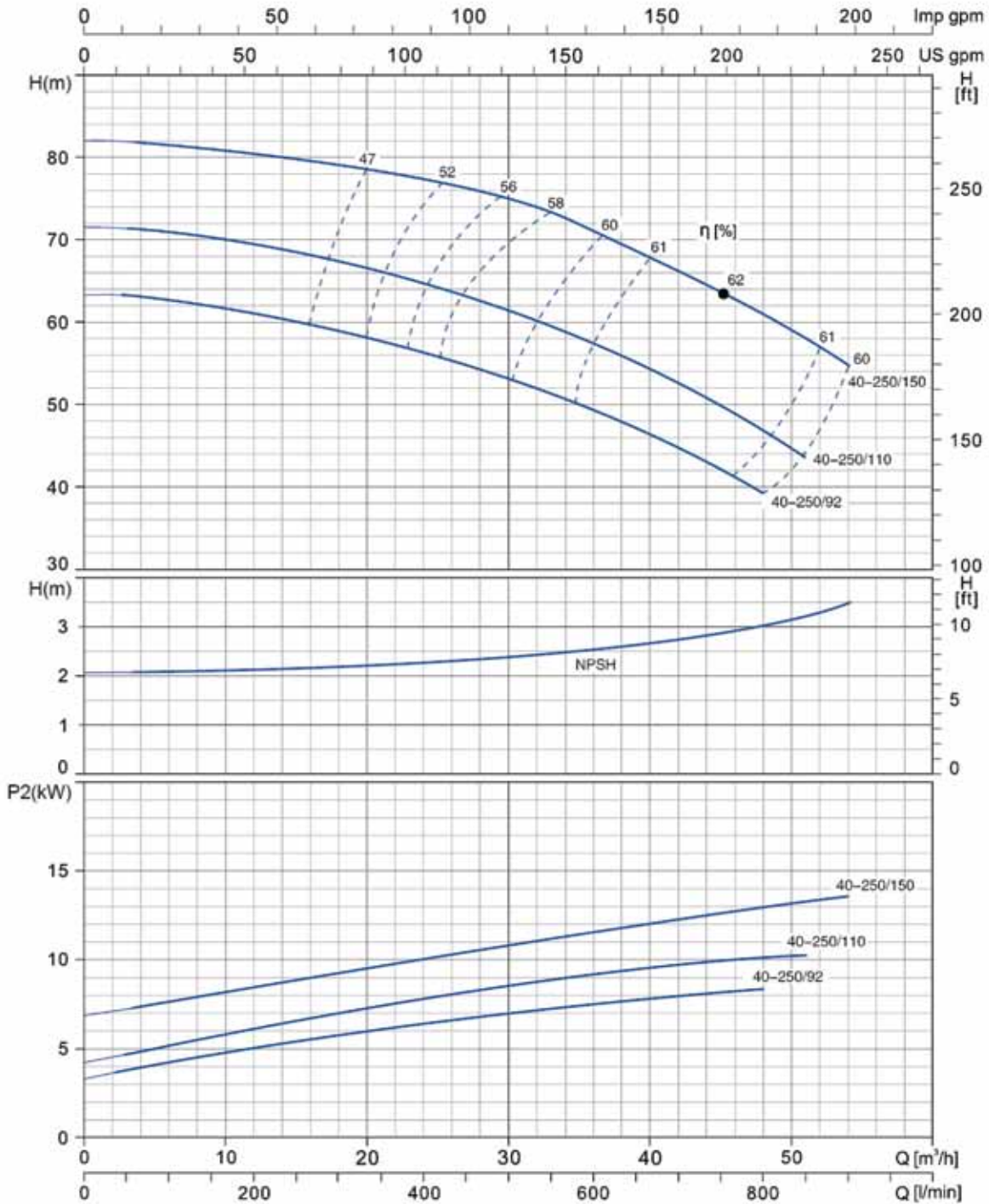
### Hydraulic Performance Curves

<b>EST 40-200</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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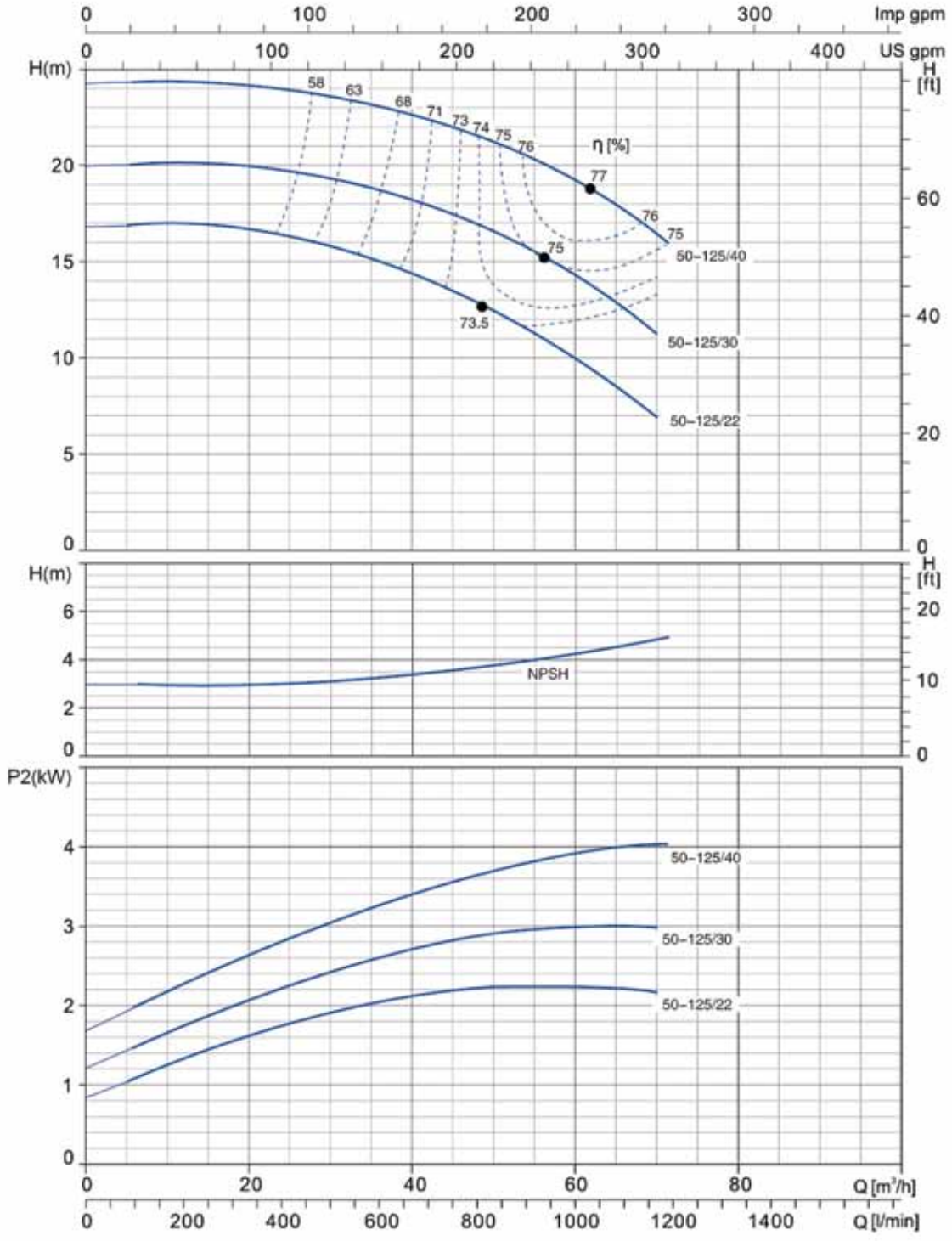
### Hydraulic Performance Curves

<b>EST 40-250</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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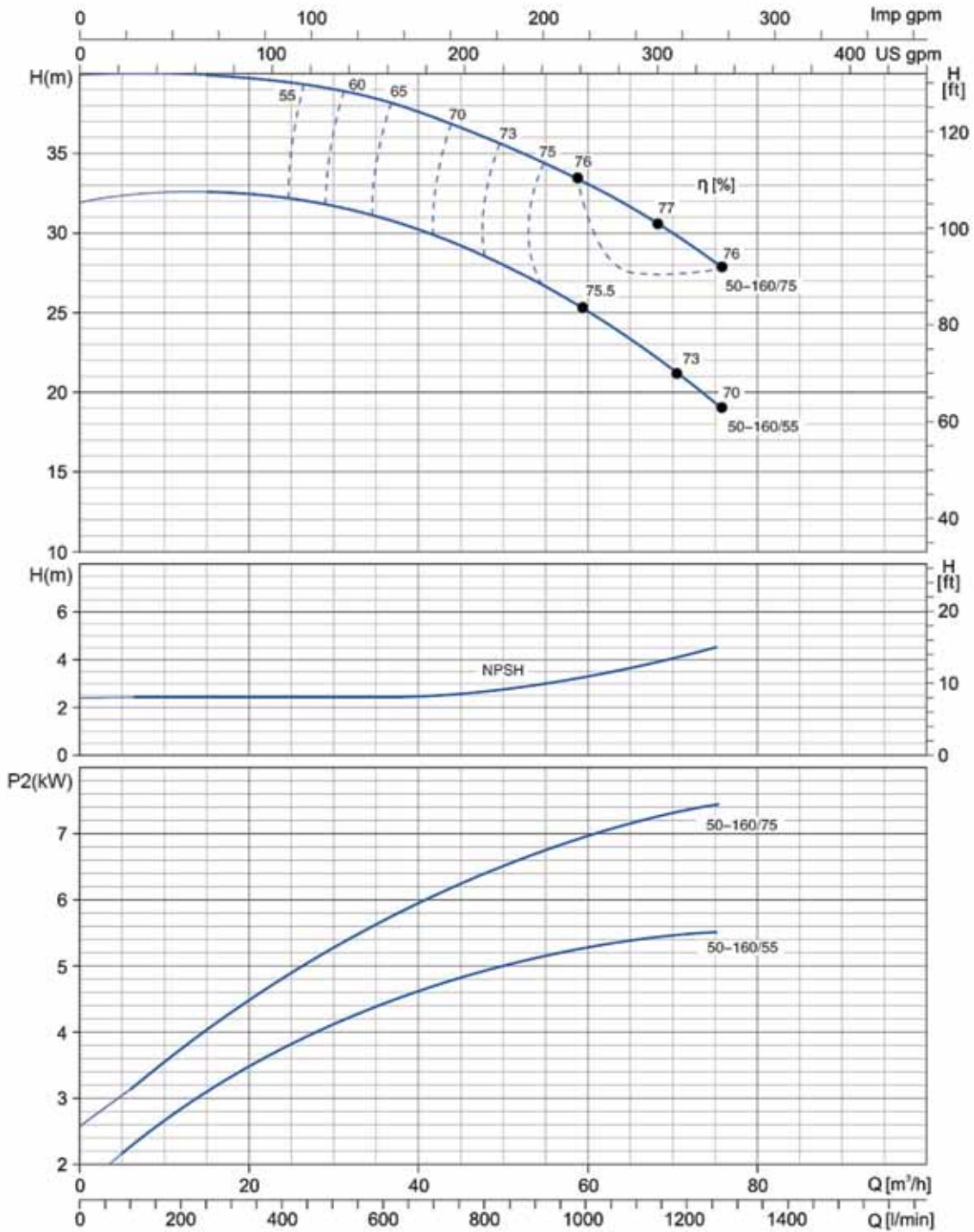
### Hydraulic Performance Curves

<b>EST 50-125</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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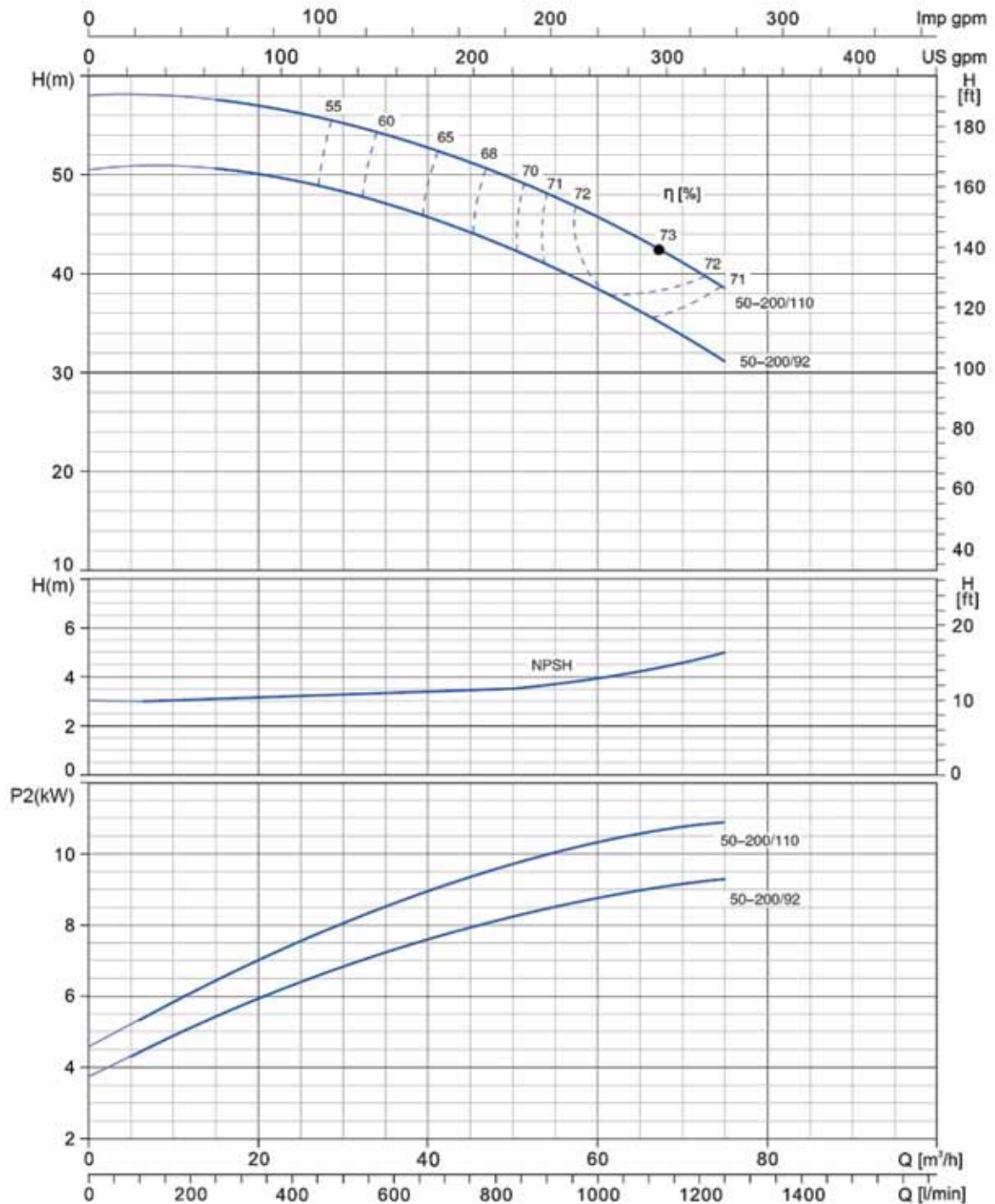
### Hydraulic Performance Curves

<b>EST 50-160</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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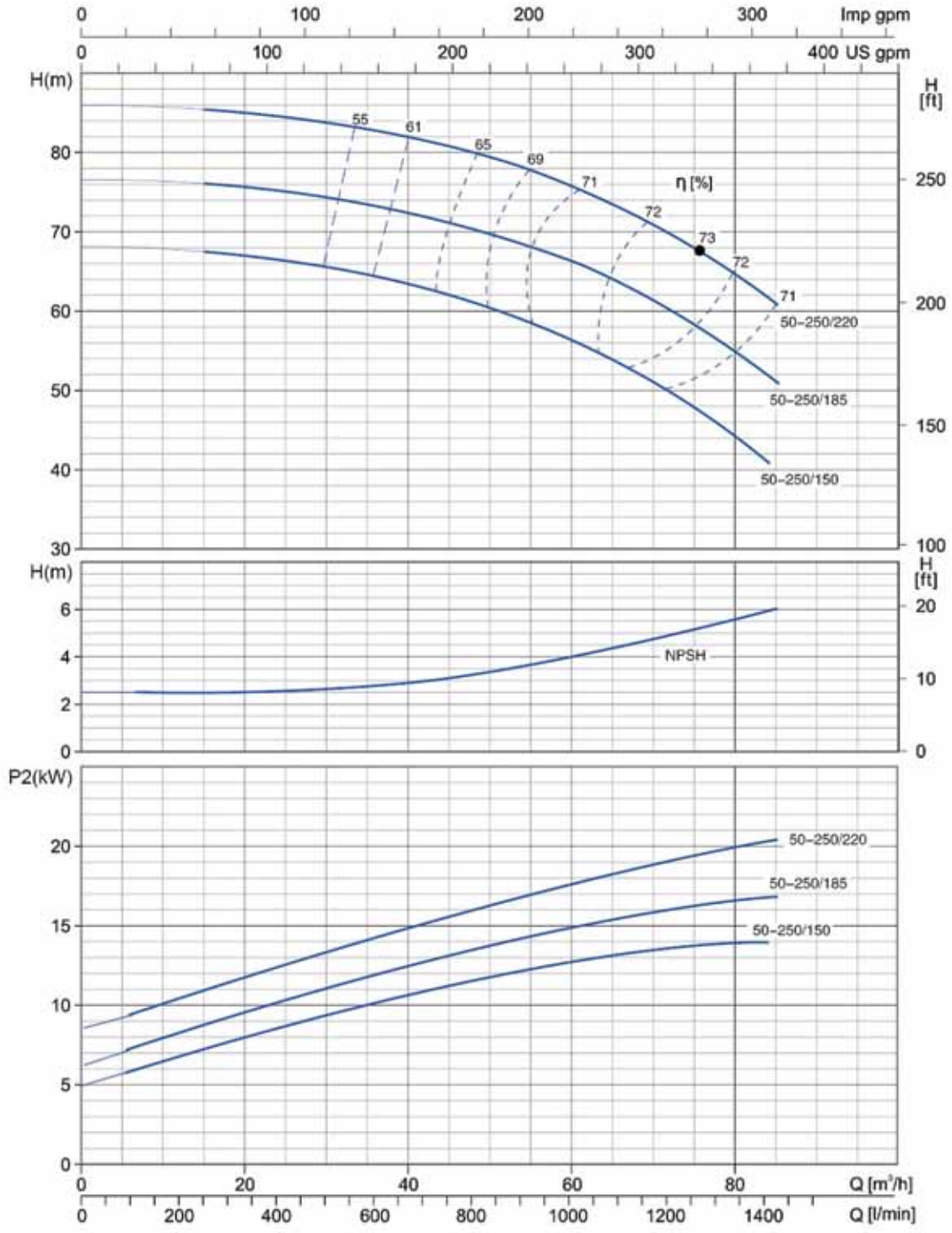
### Hydraulic Performance Curves

<b>EST 50-200</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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### Hydraulic Performance Curves

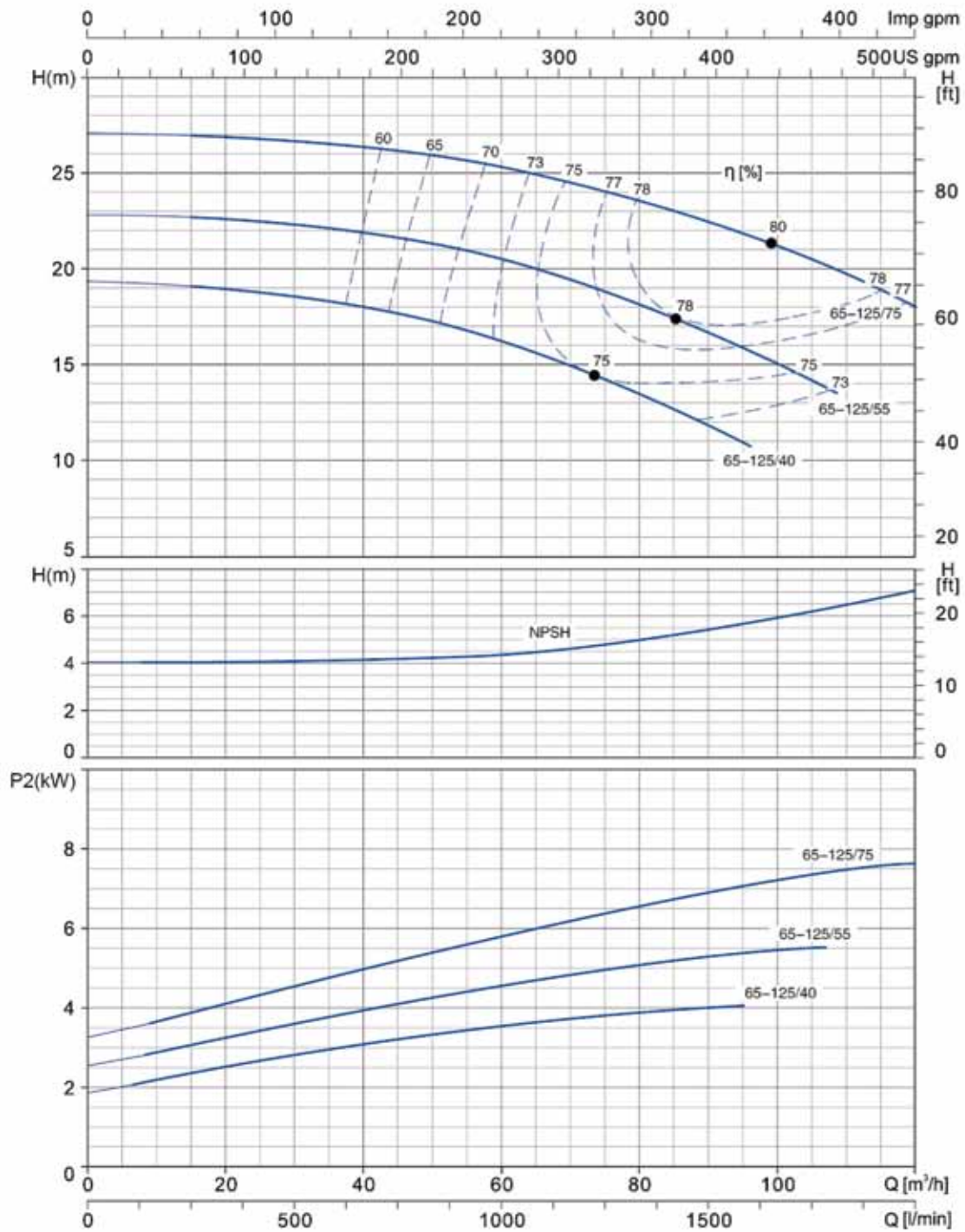
<b>EST 50-250</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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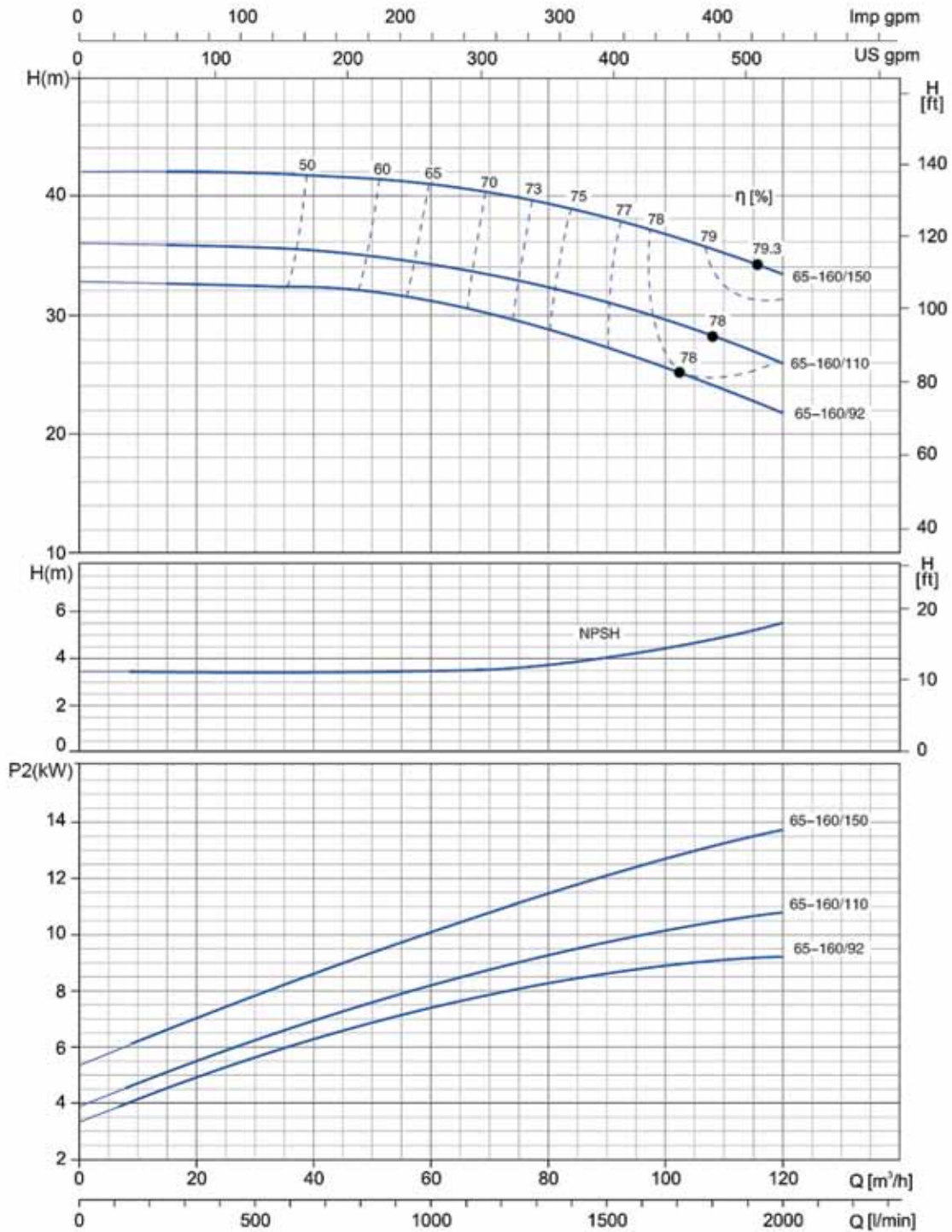
### Hydraulic Performance Curves

<b>EST 65-125</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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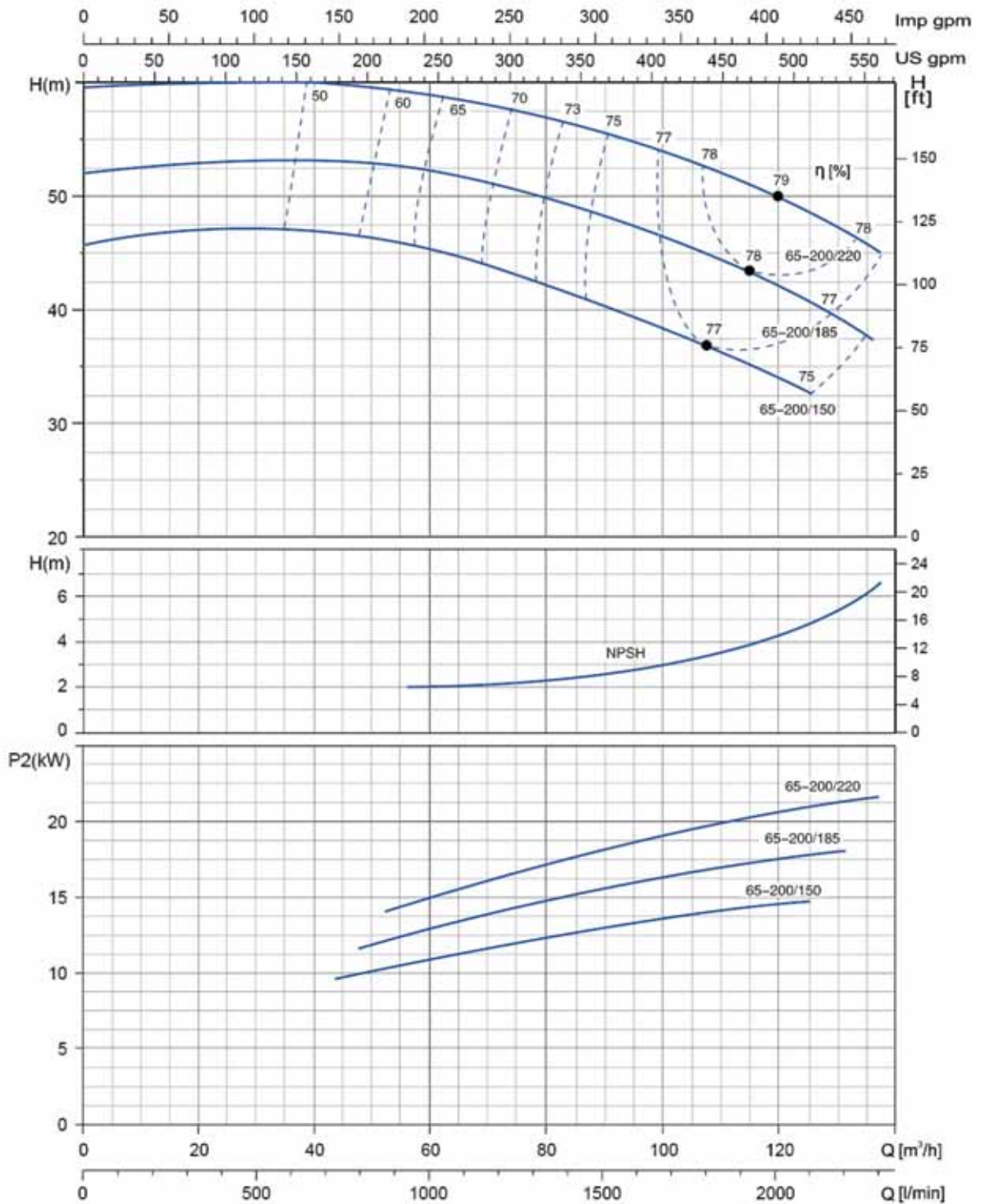
### Hydraulic Performance Curves

<b>EST 65-160</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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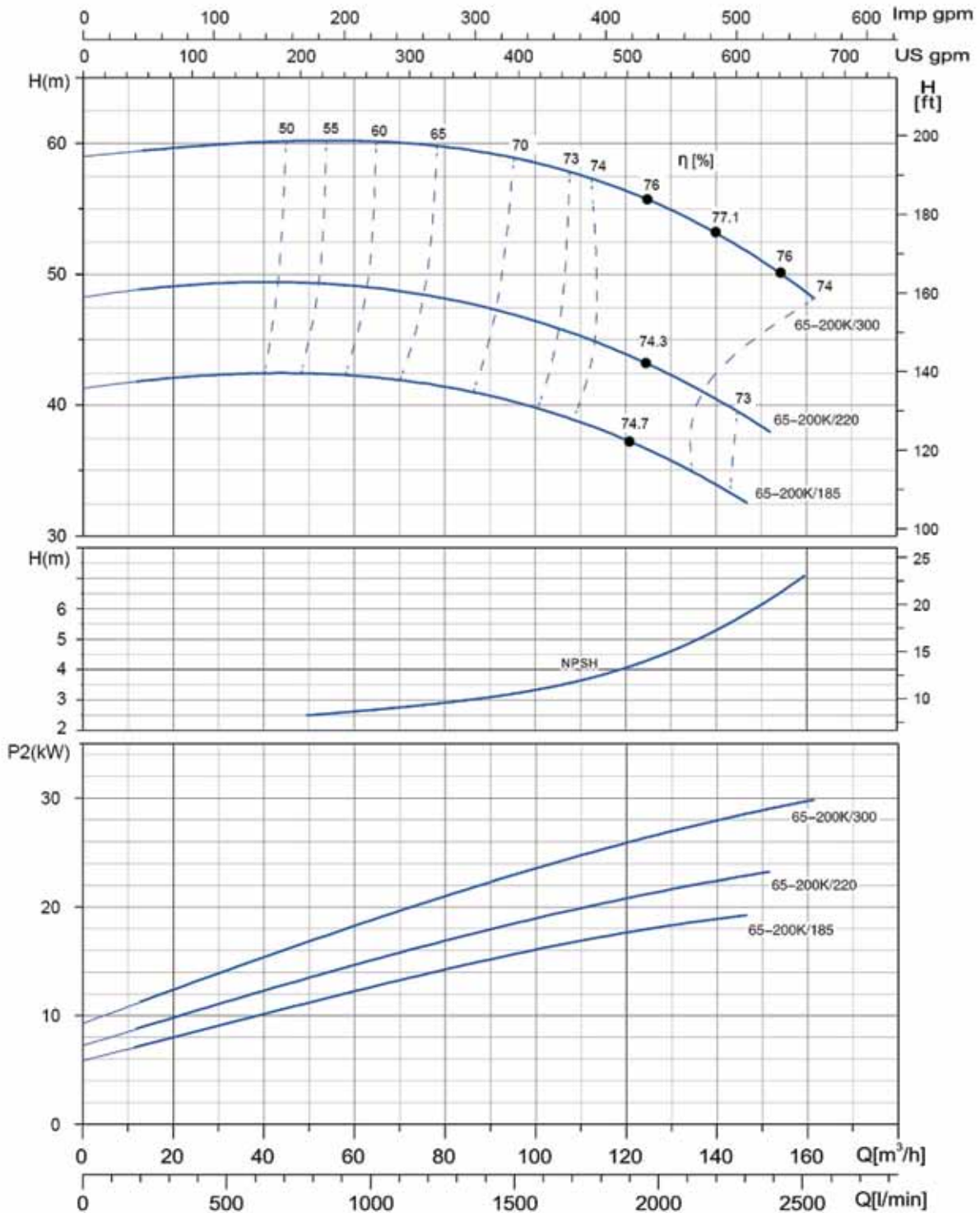
### Hydraulic Performance Curves

<b>EST 65-200</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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### Hydraulic Performance Curves

<b>EST 65-200K</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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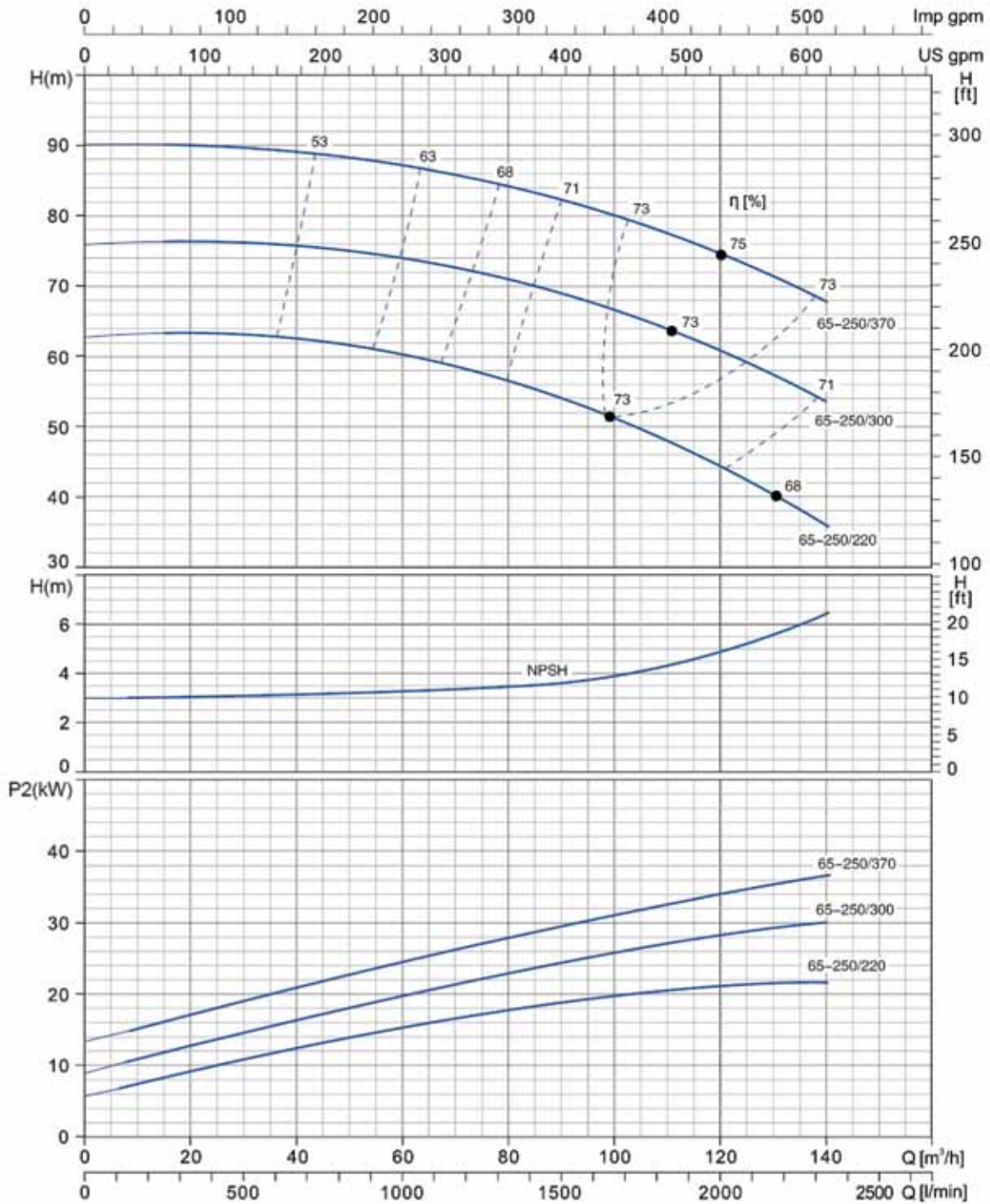


### Hydraulic Performance Curves

**EST 65-250**

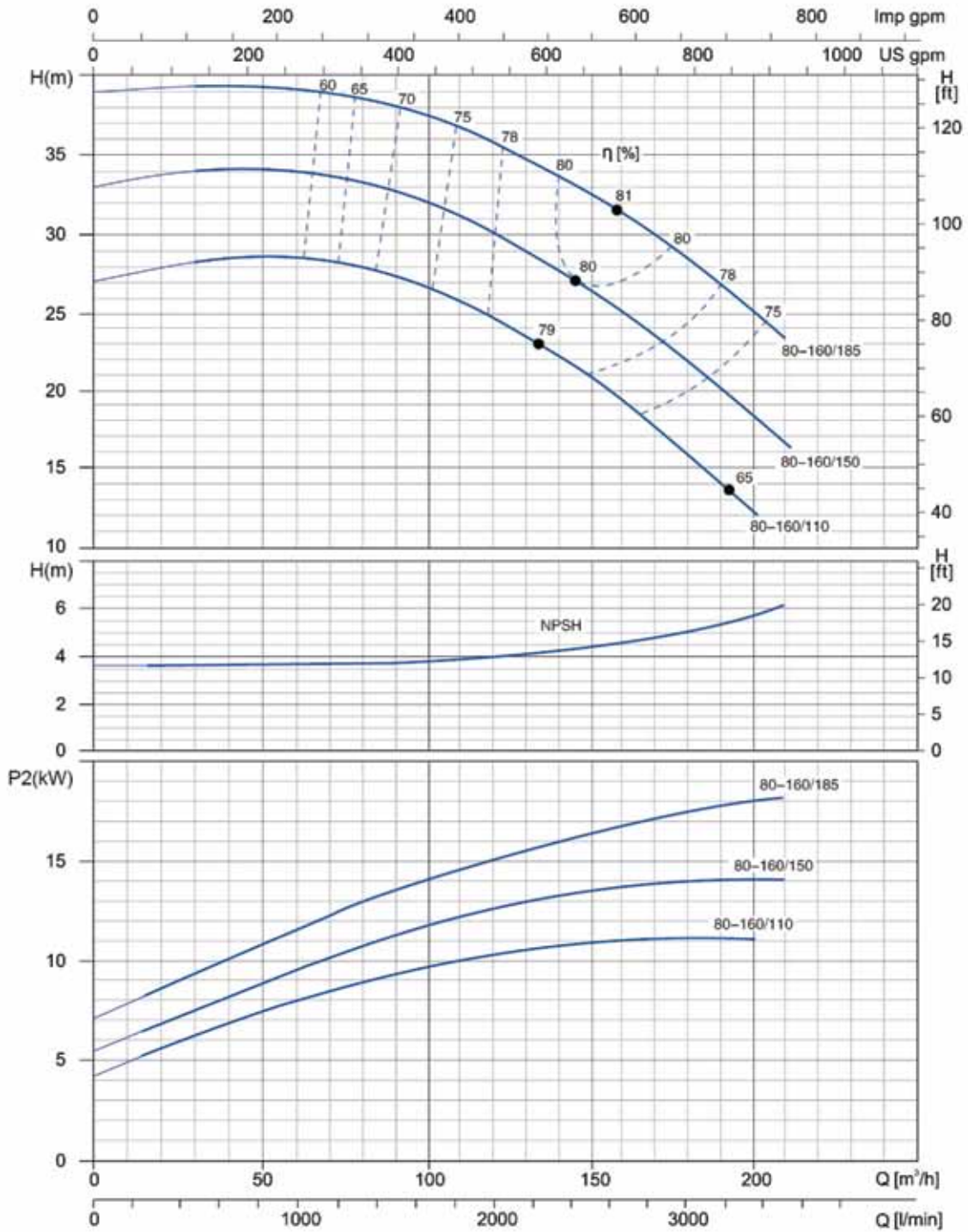
**~2900 rpm**

**ISO 9906 Annex A**



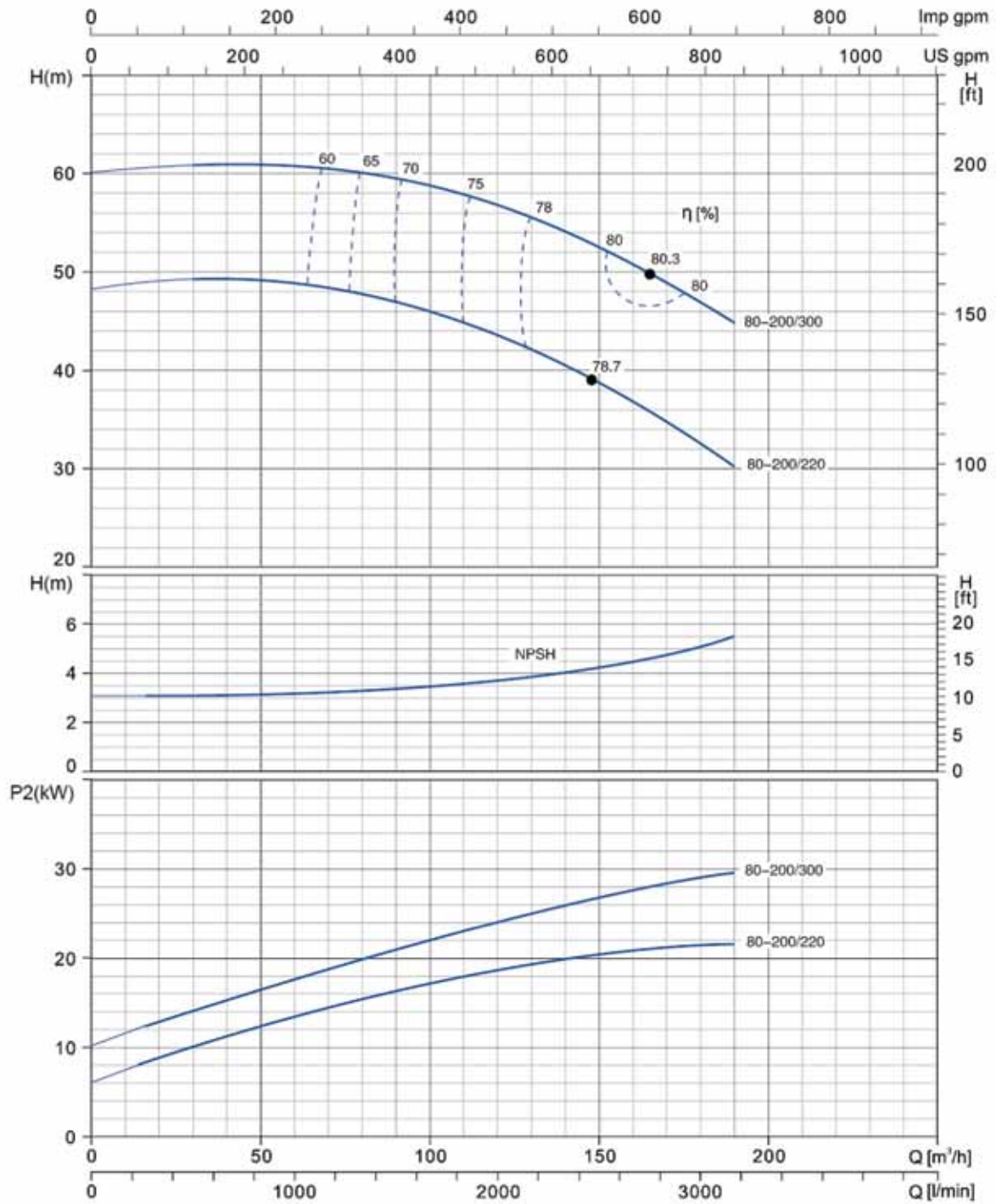
### Hydraulic Performance Curves

<b>EST 80-160</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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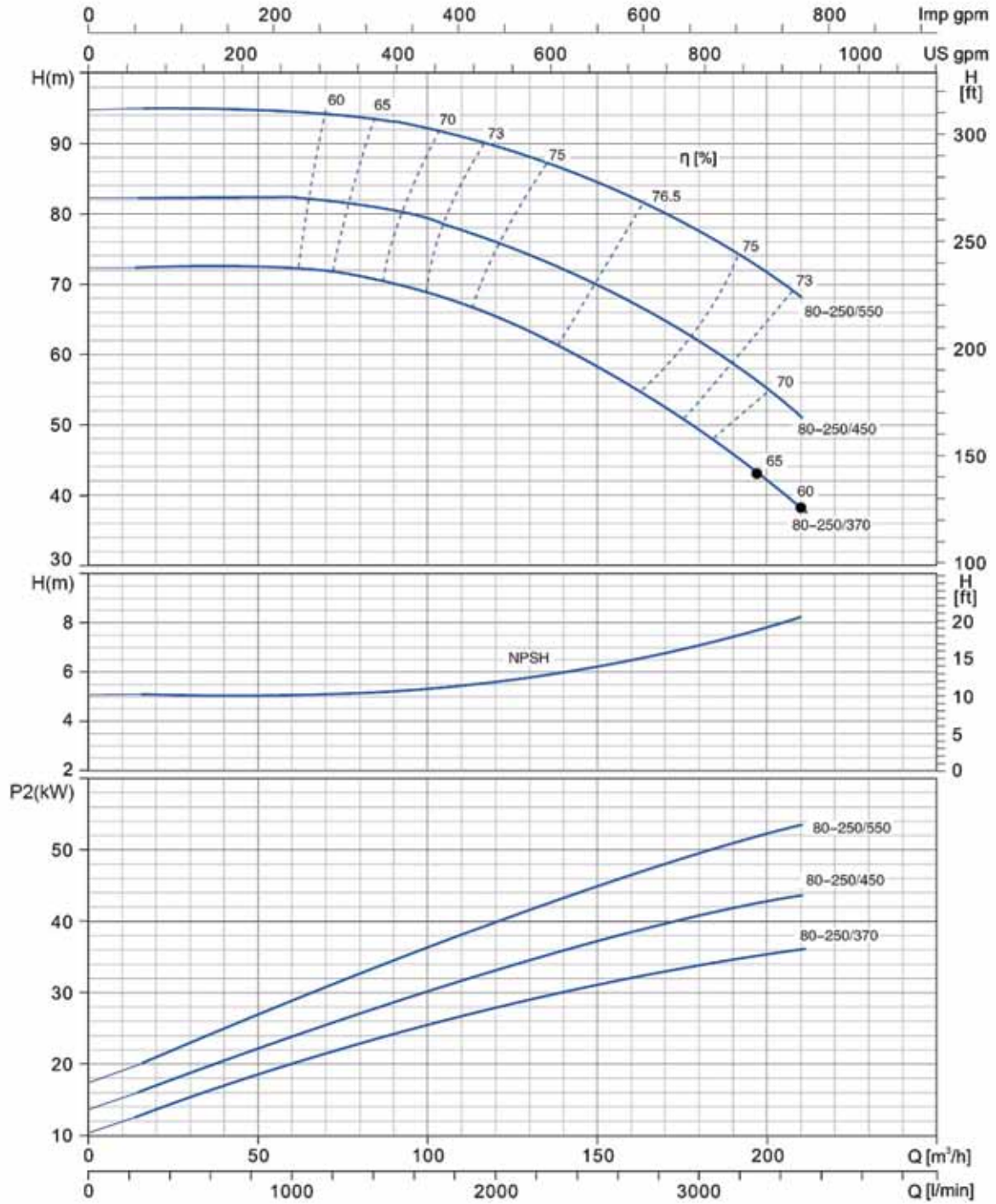
### Hydraulic Performance Curves

<b>EST 80-200</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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### Hydraulic Performance Curves

<b>EST 80-250</b>	<b>~2900 rpm</b>	<b>ISO 9906 Annex A</b>
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## Flange Dimensions



### PN16 Flanges

DN	D	M	G	Holes		Max. THICKNESS
				N°	∅	
32	140	100	78	4	18	18
40	150	110	88	4	18	18
50	165	125	102	4	18	20
65	185	145	122	4	18	20

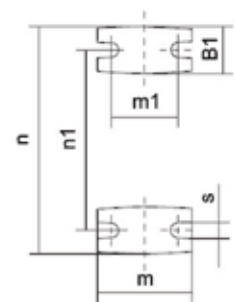
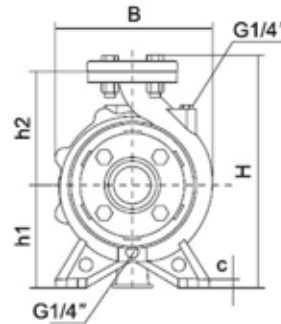
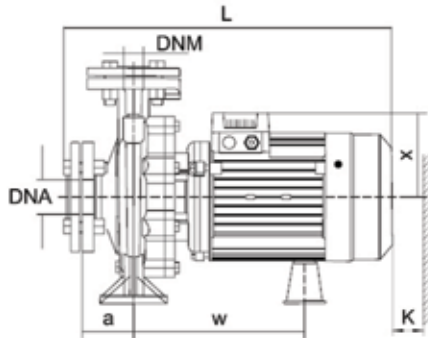


### PN16 Flanges

DN	D	M	G	Holes		Max. THICKNESS
				N°	∅	
80	200	160	135	8	18	22
100	220	180	158	8	18	22

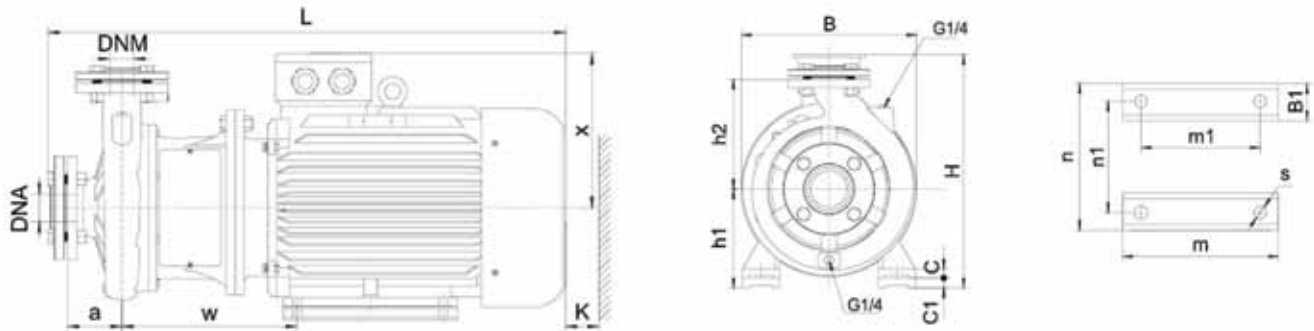
## Inatallation Sketch

up to 7.5 kW included



Model	DNM	DNA	a	w	x	h2	B1	c	h1	m	m1	n	n1	s	B	H	L	K				
32-125/7	32	50	80	223	113	140	48	12	112	100	70	190	140	15	192	281	427	85				
32-125/11																						
32-160/15																						
32-160/22				240	190	14	240	321	430			95										
32-160/30													248	369	490							
32-200/30				272	212	308	386	610	60													
32-200/40												272	212	308	386	640	60					
32-250/55				40	65	80	255	127	140									45	112	100	70	210
32-250/75																						
40-125/11																						
40-125/15	240	190	14				249	330	494	105												
40-125/22											249	330	494									
40-160/30	264	212	275				370	553	583													
40-160/40										264	212	275	370	553	583							
40-200/55	240	190	15				243	322	518							110						
40-200/75																						
50-125/22																						
50-125/30	50	100	100	262	127	160	50	132	100	70	240	190	15	243	322	518	110					
50-125/40																						
50-160/55																						
50-160/75	65	80	100	180	180	180	52	160	100	70	264	212	15	272	370	556	586	110				
65-125/40																						
65-125/55																						
65-125/75	65	80	100	265	180	180	68	14	160	125	95	280	212	15	283	372	564	594				
65-125/75																						

**Inatallation Sketch**  
From 7.5 kW



Model	DNM	DNA	a	w	x	h2	B1	C	C1	h1	m	m1	n	n1	s	B	H	L	K
40-250/92	40	65	100	310	260	225	65	20	20	180	260	210	320	254	14.5	350	440	845	110
40-250/110																			
40-250/150																			
50-200/92	50	65	100	310	260	200	65	20	-	160	260	210	320	254	14.5	350	420	845	120
50-200/110																			
50-250/150						225	20	20	180	304	254	355	279	440			895		
50-250/185																			
50-250/220																		70	25
65-160/92	65	80	100	310	260	200	65	20	-	160	260	210	320	254	14.5	350	420	845	125
65-160/110																			
65-160/150						225	20	20	180	304	254	355	279	440			895		
65-200/150																			
65-200/185																			
65-200/220				70	22	-	311	241	355	279	455	925							
65-200K/185				65	20	20	180	304	254	320	254	440	920						
65-200K/220				70	22	-	311	241	355	279	355	455	950						
65-200K/300				70	25	-	369	305	395	318	18.5	505	1020						
65-250/220				70	22	-	311	241	355	279	14.5	455	956						
65-250/300				70	25	-	200	369	305	395	318	18.5	400	505			1026		
65-250/370	70	25	-	200	369	305	395	318	18.5	400	505	1026							
80-160/110	80	100	125	315	260	225	65	20	-	160	260	210	320	254	14.5	350	420	870	130
80-160/150																			
80-160/185				250	70	22	180	311	241	355	279	355	481	978					
80-200/220																			
80-200/300																			
80-250/370				70	25	-	200	369	305	395	318	18.5	400	505			1050		
80-250/450				75	28	-	225	404	311	435	356	18.5	450	555			1098		
80-250/550				80	30	30	280	450	349	490	406	24	550	646			1192		