



### Application

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

### Operating conditions

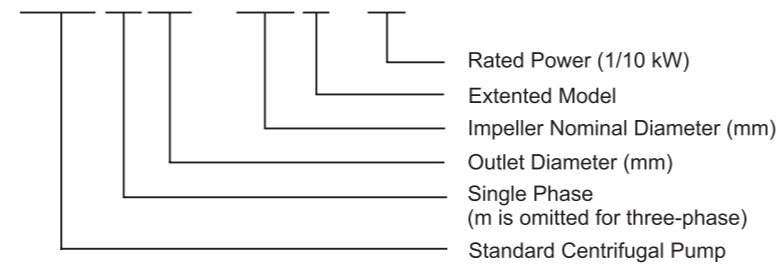
- Delivery: up to 220 m<sup>3</sup>/h
- Head: up to 95 m
- Liquid temperature:
  - Standard: -10°C to 85°C
- Maximum operating pressure: 12 bar (PN12)
  - Anti-clockwise rotation when facing pump's suction port
- Impeller: AISI304/HT200
- Mechanical seal in compliance with DIN 24960
- Lubricated by internal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

### Identification Codes

**XST m 32 – 125 K / 11**

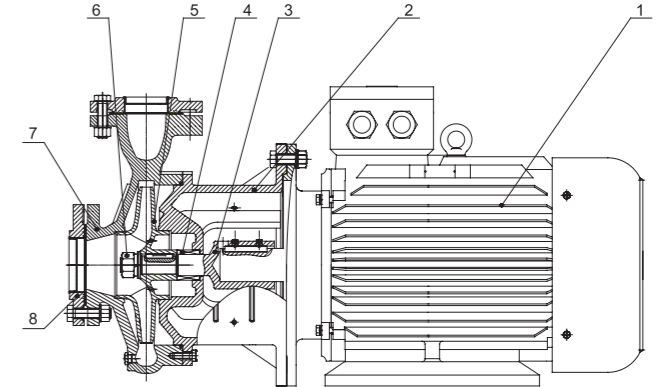


### Accessories on Request

- Galvanised iron threaded counter flanges
- Flanged tapered coupling
- Pump and motor sealing gasket

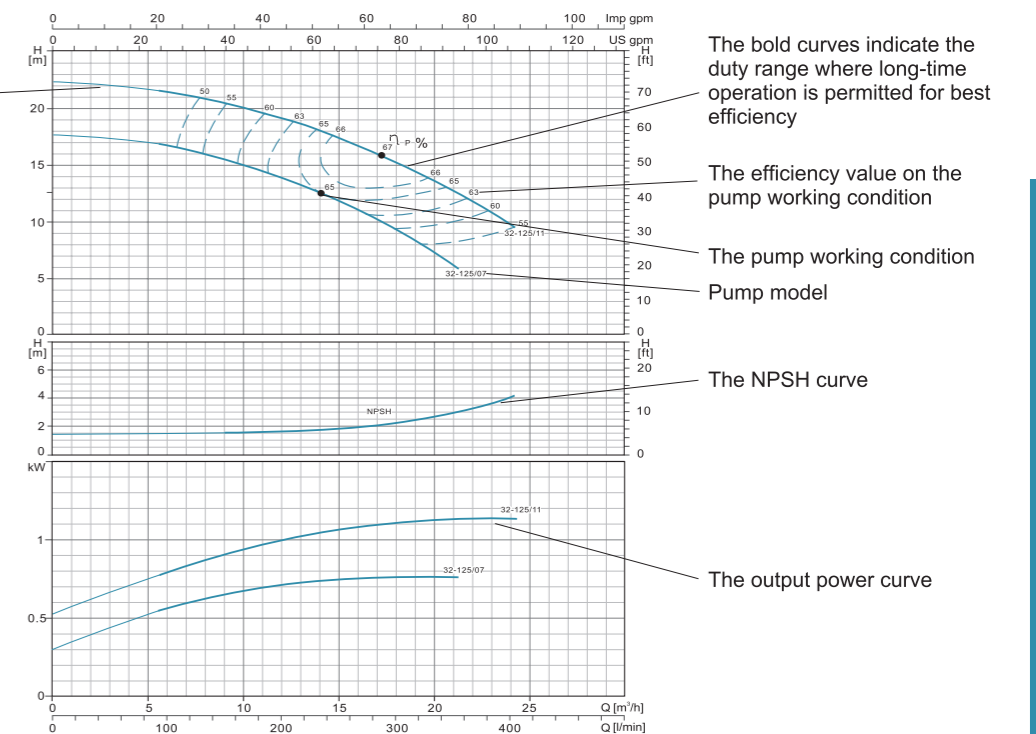
### Materials Table

No.	Part	Material
1	Motor	
2	Support	HT 200
3	Pump shaft	Steel/AISI 304
4	Mechanical seal	Carbon/Silicon carbide
5	Impeller	HT 200/Stainless Steel
6	Nut	AISI 304
7	Pump body	HT 200
8	Flange	HT 200



### 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 1mm<sup>2</sup>/s. To avoid overheating of the motor, the pump should not be use against a high head for a long time.

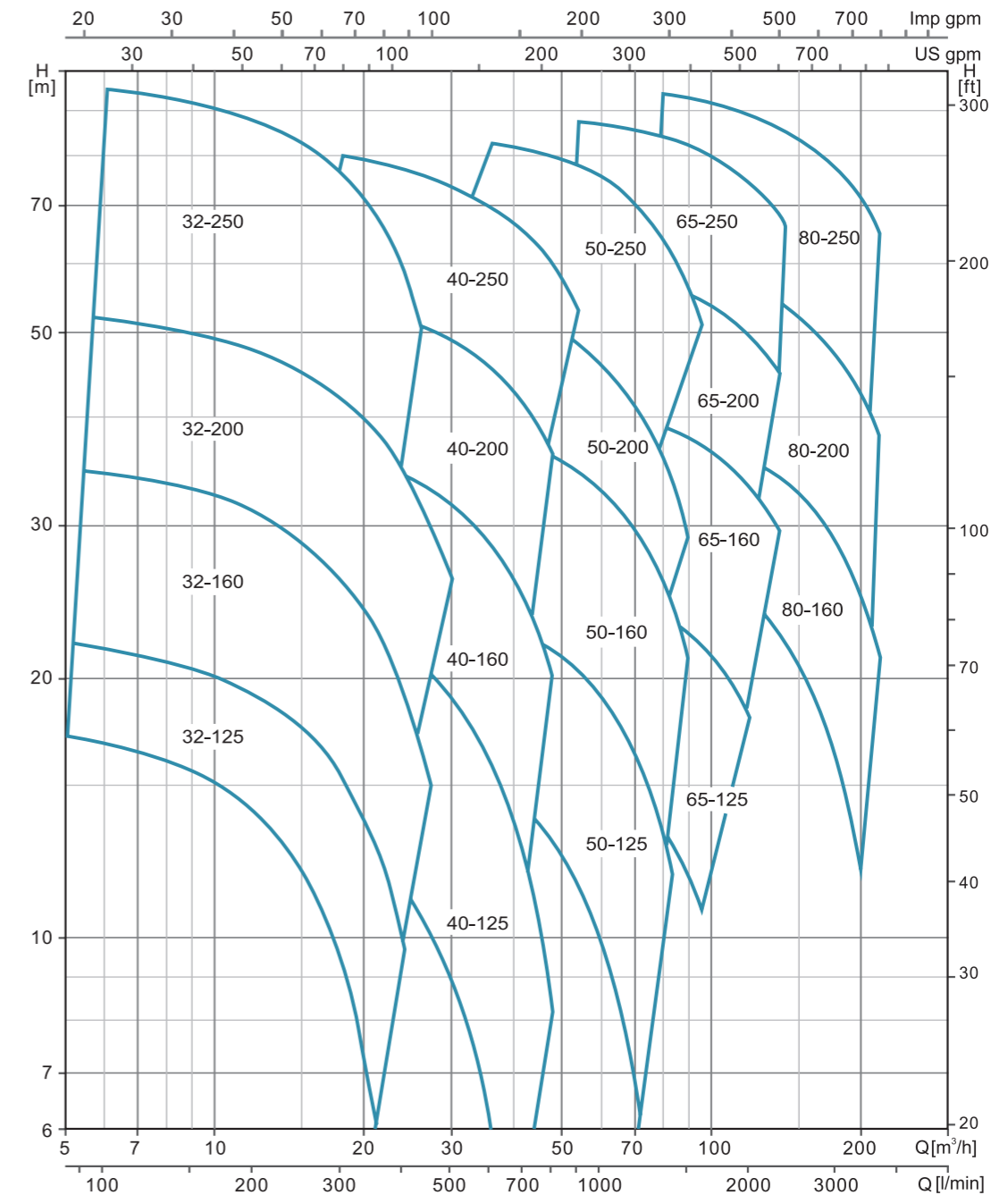
## Technical Data

PUMP TYPE	POWER		l/min m³/h	Q=DELIVERY																			
	kW	HP		0	100	150	250	300	400	450	600	700	800	900	1200	1400	1500	1800	2000	2300	3000	3500	
32-125/07★	0.75	1		17.5	16.7	15	12	9															
32-125/11★	1.1	1.5		22	21	19.7	16.5	14.5	9														
32-160/15★	1.5	2		25.4	23.7	22.5	18.5	15.8															
32-160/22★	2.2	3		31	29.6	28.5	24.5	22	15														
32-160/30★	3	4		35	34.3	34	28	25.5	19	15													
32-200/30★	3	4		44.2	43	39.8	35.2	32.2	24.6	19.8													
32-200/40★	4	5.5		54.5	52	50	45.5	41.9	35	30.3													
32-250/55★	5.5	7.5		79.5	74.7	71.8	63	56	37.5														
32-250/75★	7.5	10		99.5	95	91.8	83	76	57.8														
40-125/11	1.1	1.5		14.7				13.5	11.5	10.1	5.8												
40-125/15	1.5	2		18.1				17	15	13.9	9.6	6											
40-125/22	2.2	3		24.5				23.2	21.5	20.2	16	13	8.3										
40-160/30	3	4		31.8				29.5	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		46				43.8	41.3	40.1	35	30											
40-200/75★	7.5	10		57				53.6	51.5	50	45	41	36.5										
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		84.5				80	77.3	75.2	71	65	61										
50-125/22	2.2	3		17							15.4	14	12.8	11.5	6.5								
50-125/30	3	4		20							18.8	18	17	15.6	11								
50-125/40	4	5.5		24							23.1	23	21.5	20.3	15.8	11.8							
50-160/55	5.5	7.5		32							30.6	30	28	26.6	20.5	14.8							
50-160/75	7.5	10		40							38	37	36	34.4	29	24	21						
50-200/92★	9.2	12.5		50.5							46.8	45	43	40.9	32.5	25.7							
50-200/110★	11	15		57.5							53.5	52	50	47.5	40	33	29						
50-250/150★	15	20		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	47						
50-250/220★	22	30		86.3							83	81.5	80.8	78.7	70	61.9	57						
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	29.5				
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	71.5	69.5	64.5	61.5	54		
65-250/370	37	50		90											88.3	86.5	84	83	78	75	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	28.5	22.1	16.7		
80-160/185	18.5	25		39												38	36.8	36.7	33.8	28.8	23.5		
80-200/220	22	30		48												47.5	45.5	43.5	41	32.5	24.5		
80-200/300	30	45		60												59.5	58	57	54.5	47	40.5		
80-250/370	37	50		71.5												70.5	67.5	65.5	61.5	49.5	38.5		
80-250/450	45	61		80												80.5	78.5	76.5	73.4	63.2	51		
80-250/550	55	75		92.5												93.5	91.2	89.8	86.8	77.6	68.3		

★= Stainless steel impeller

## Characteristic Curves

XST	~2900rpm	ISO 9906 Annex A
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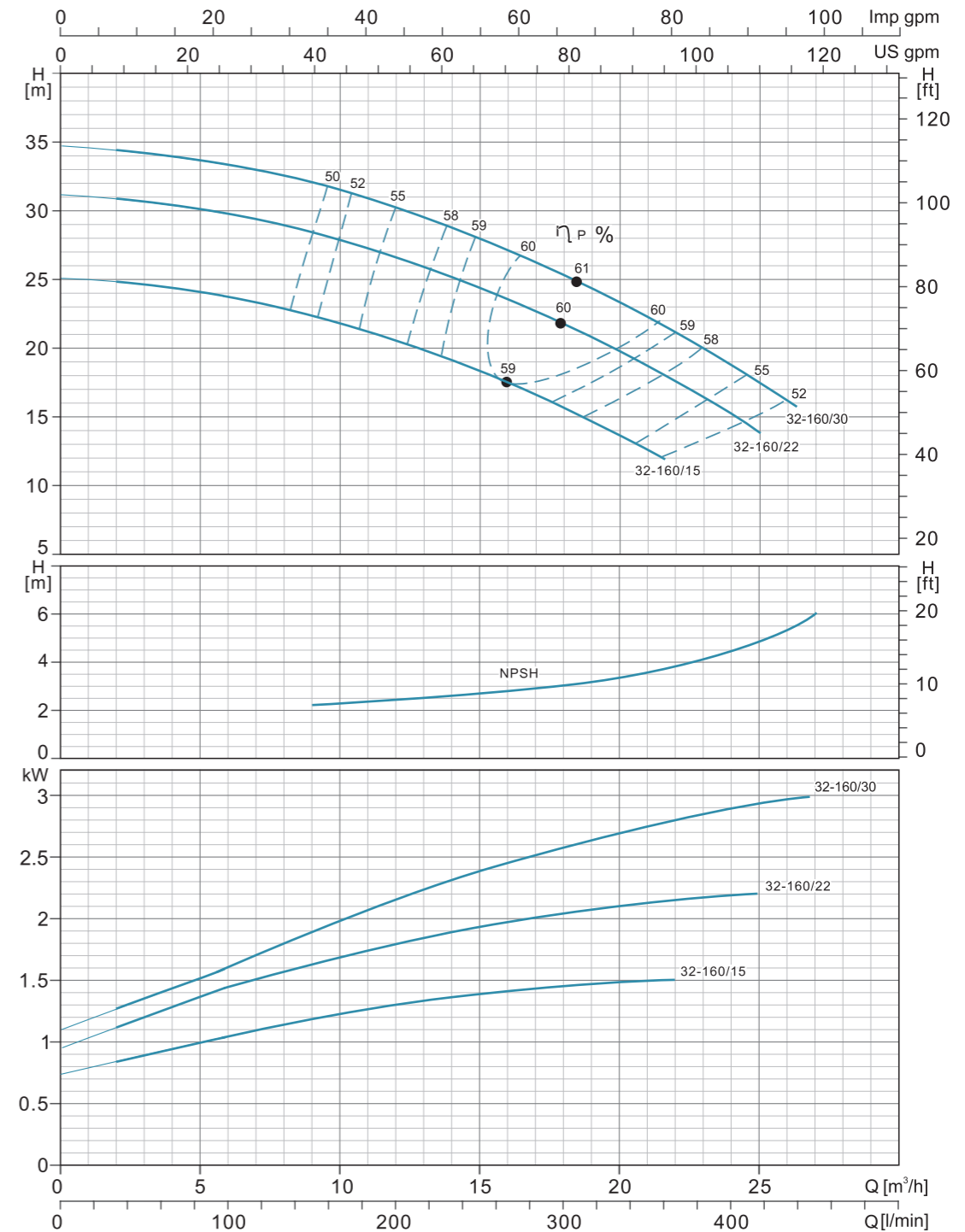
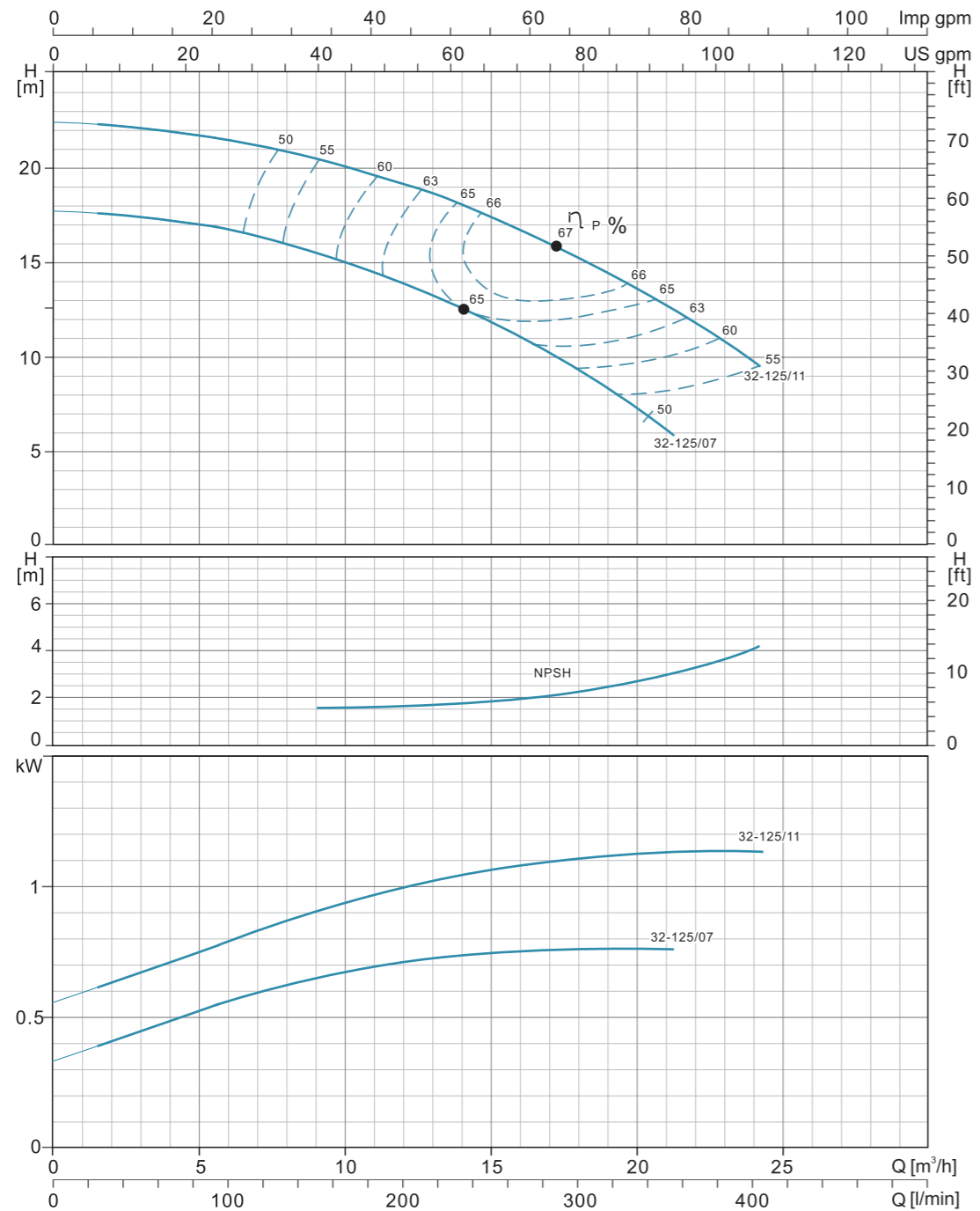


Hydraulic Performance Curves

Hydraulic Performance Curves

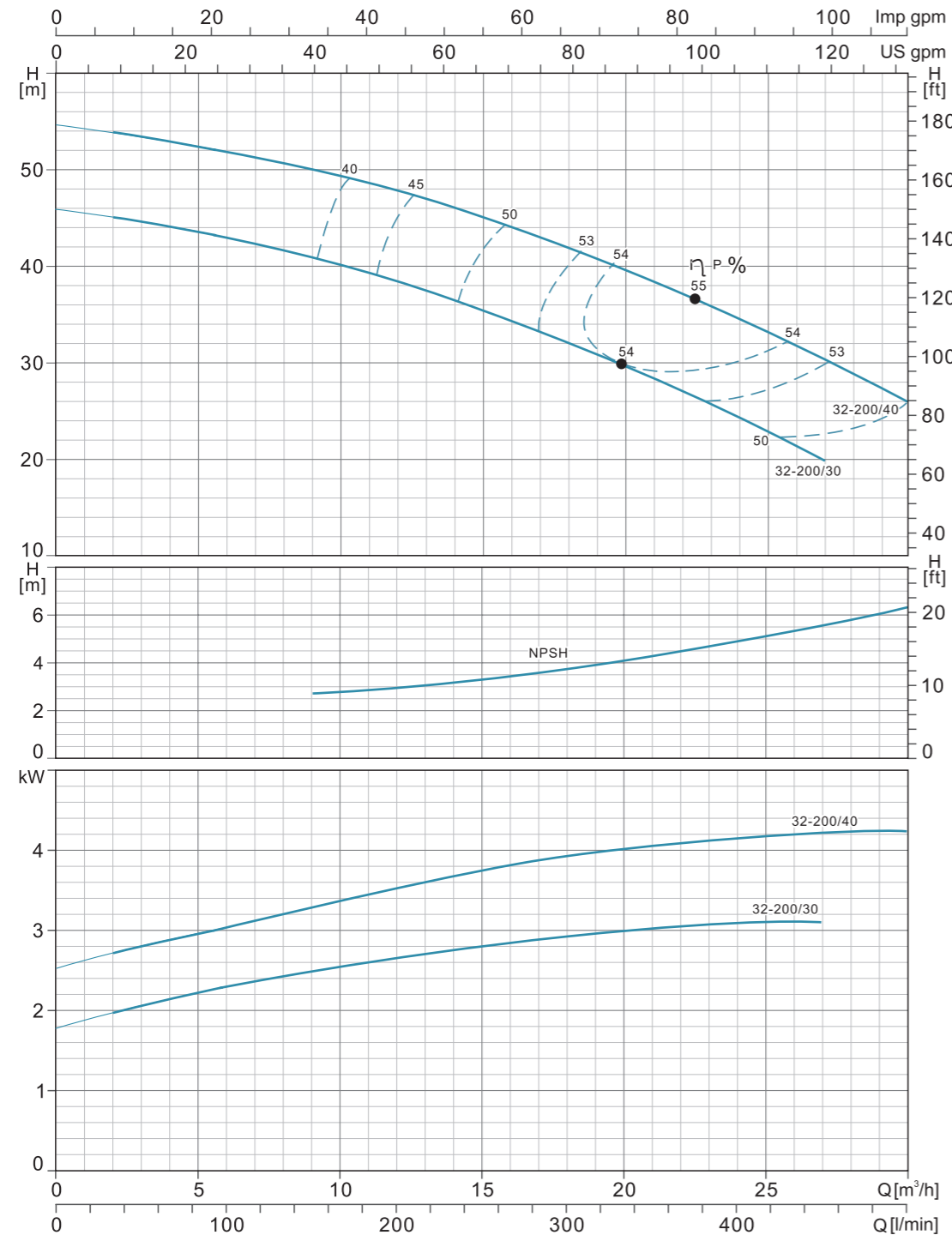
<b>XST32-125</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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<b>XST32-160</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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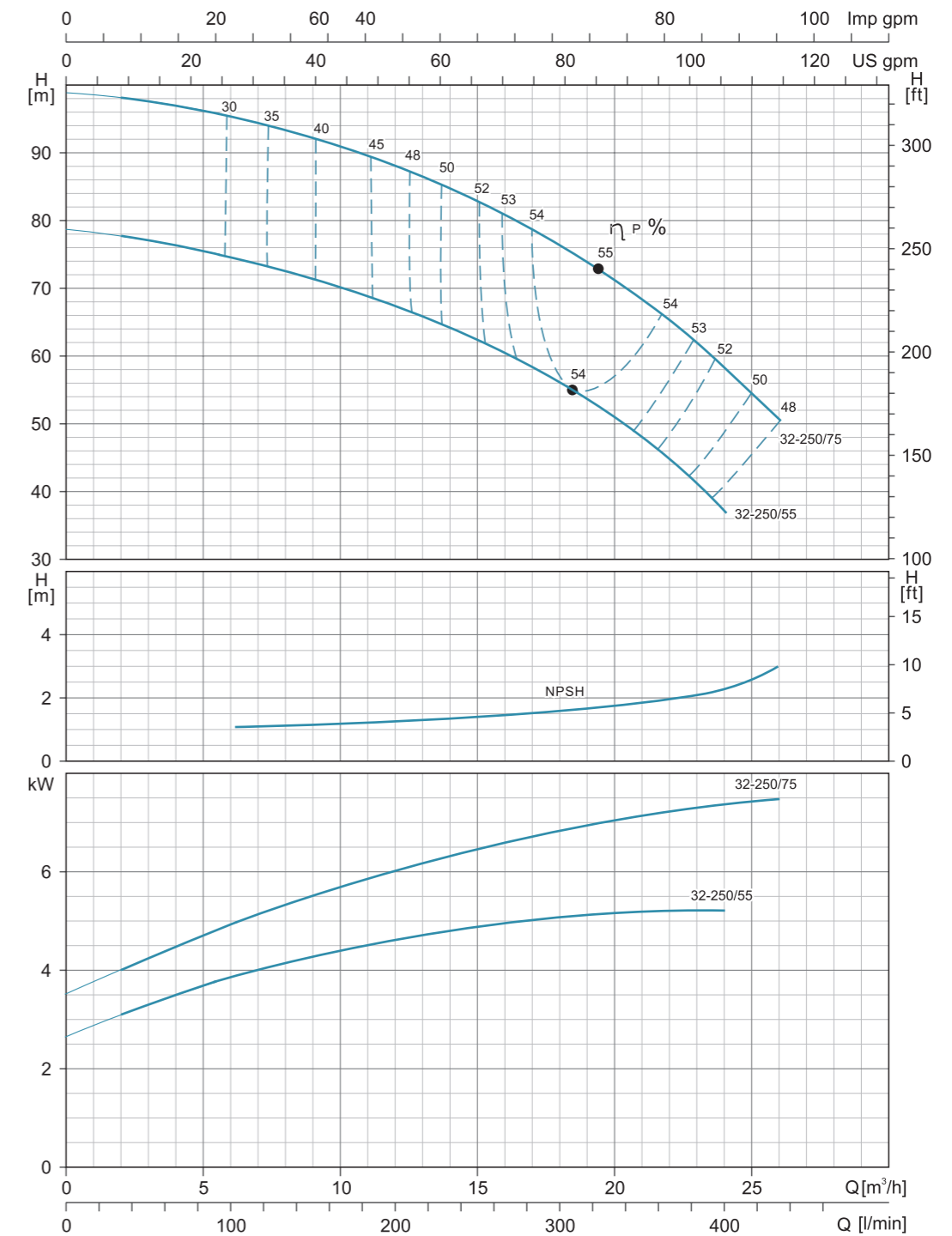
Hydraulic Performance Curves

<b>XST32-200</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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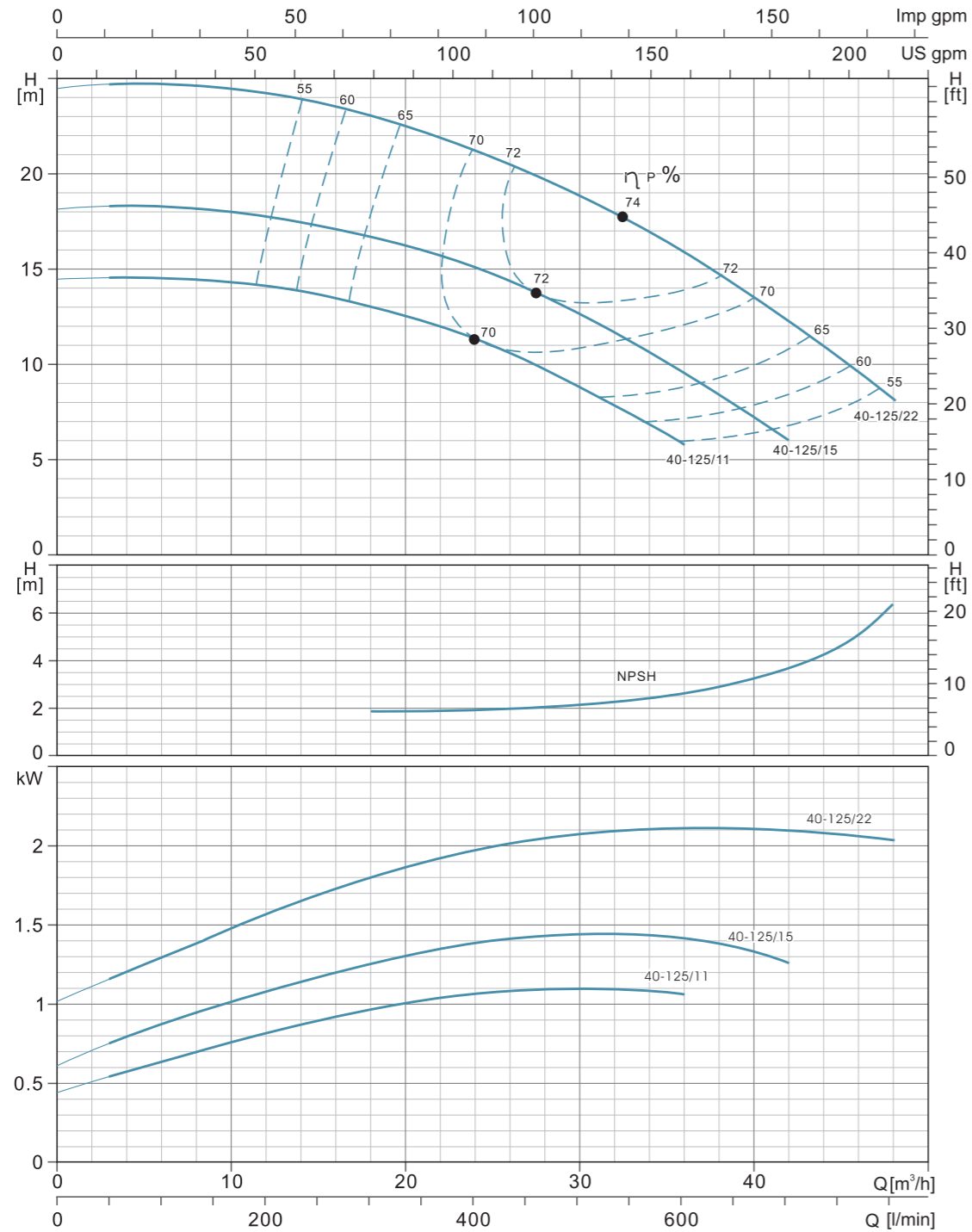
Hydraulic Performance Curves

<b>XST32-250</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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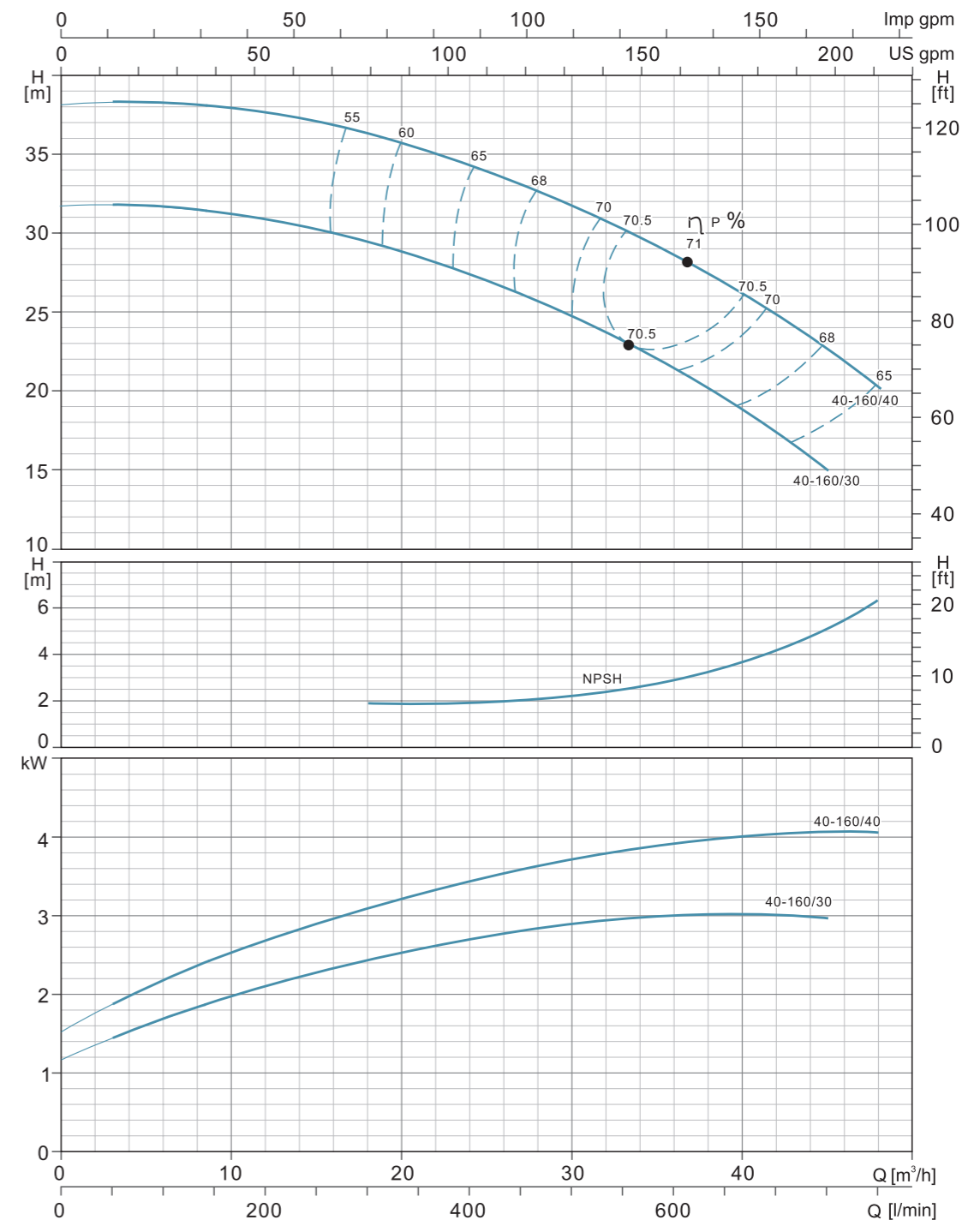
Hydraulic Performance Curves

<b>XST40-125</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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Hydraulic Performance Curves

<b>XST40-160</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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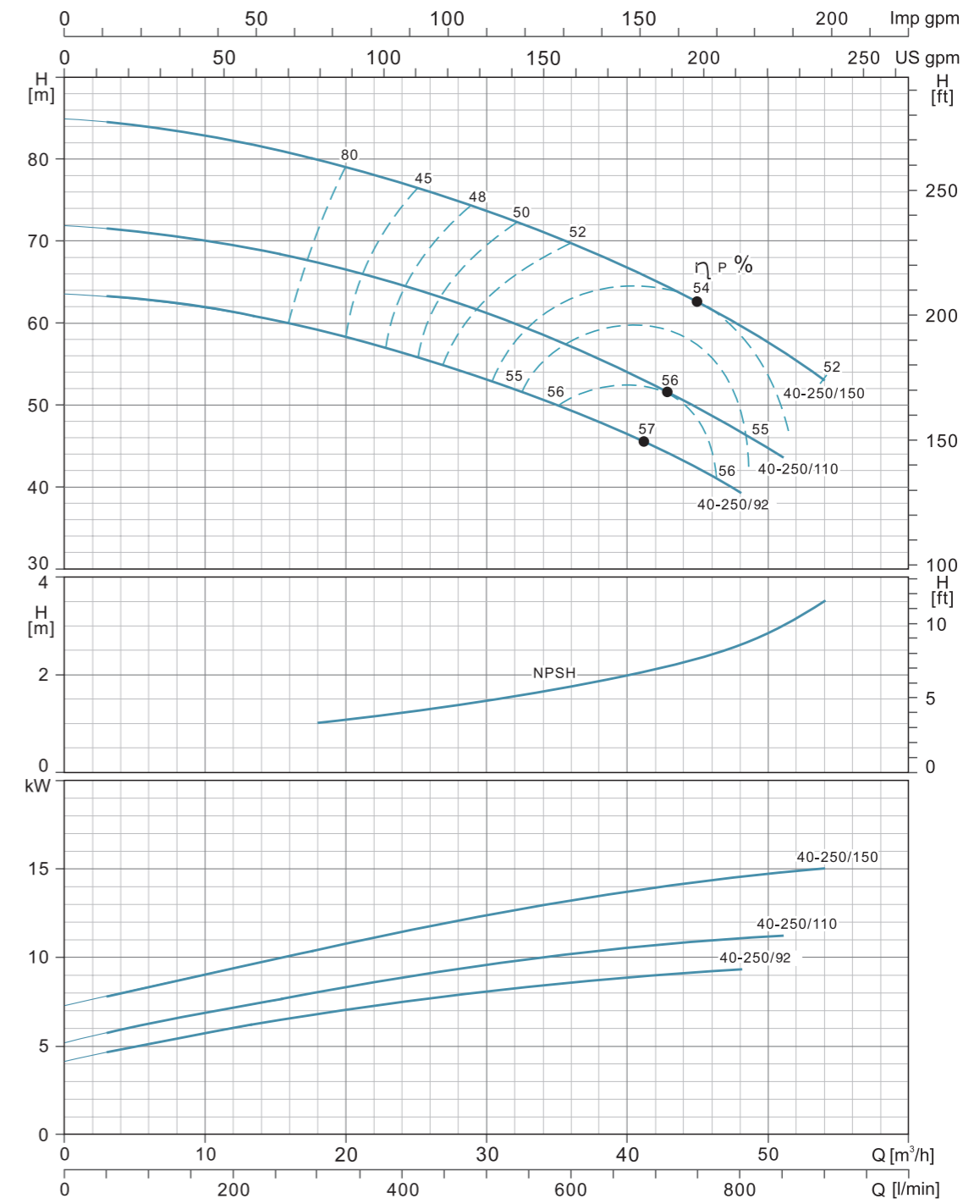
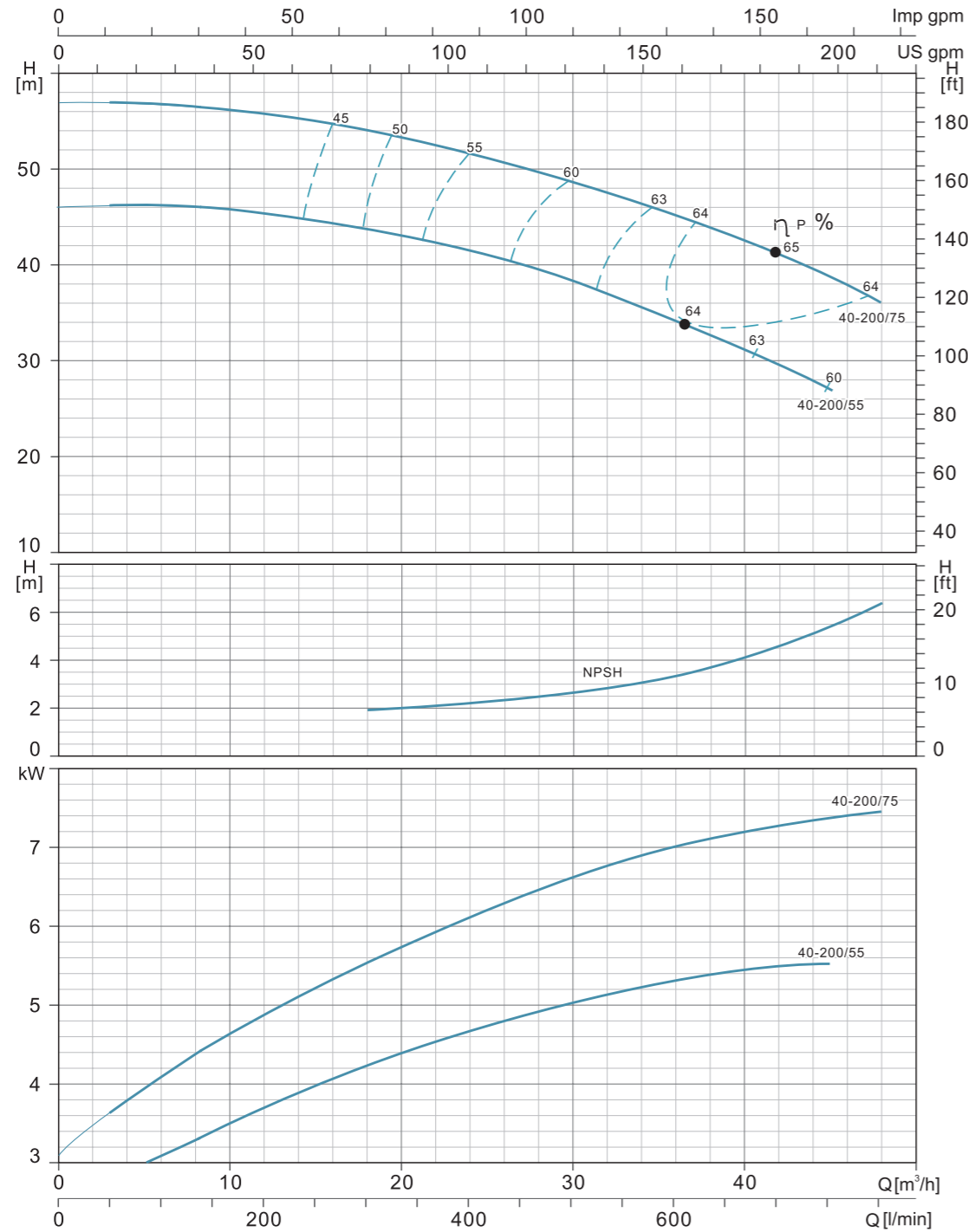


Hydraulic Performance Curves

Hydraulic Performance Curves

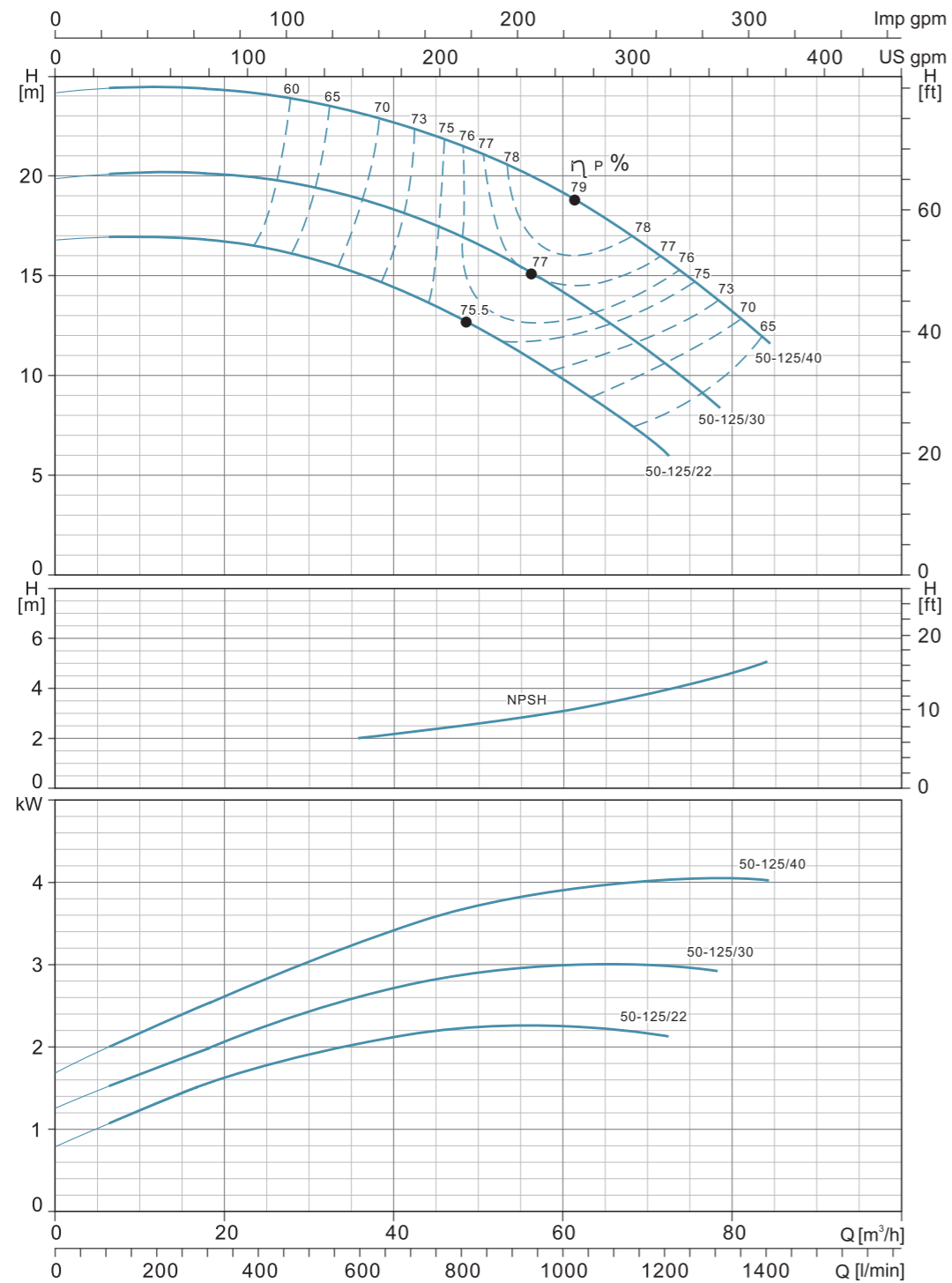
<b>XST40-200</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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<b>XST40-250</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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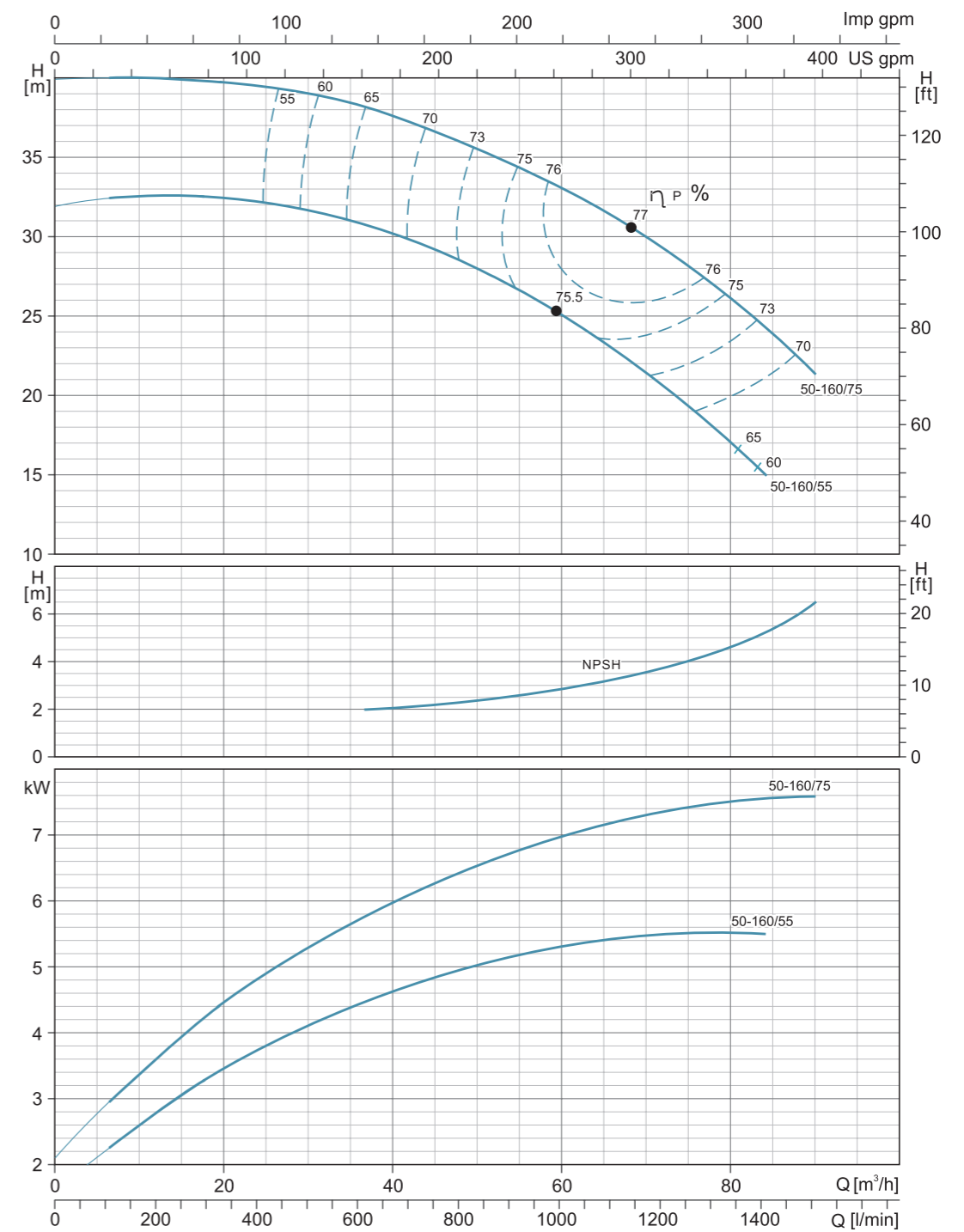
Hydraulic Performance Curves

**XST50-125**      **~2900rpm**      **ISO 9906 Annex A**



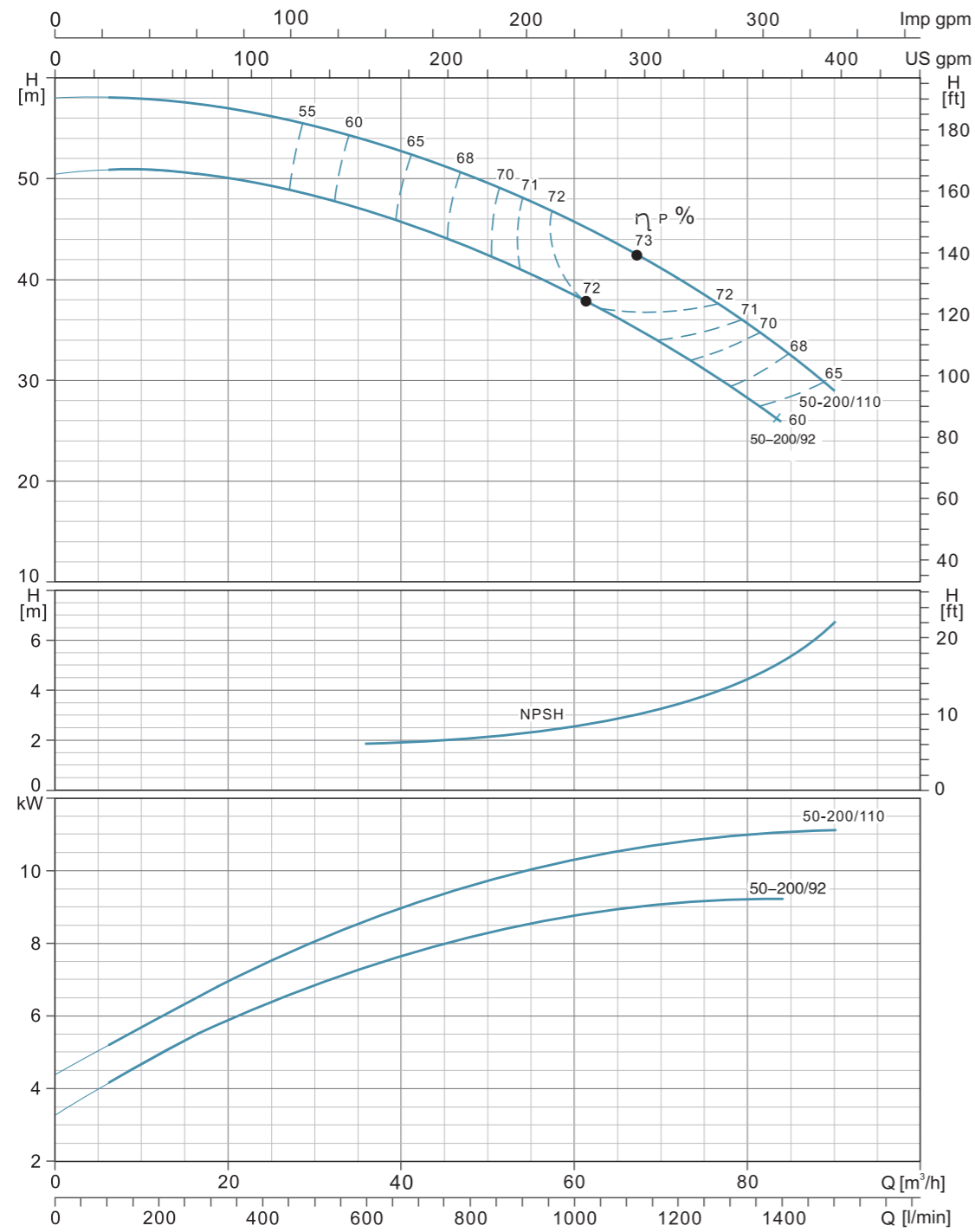
Hydraulic Performance Curves

**XST50-160**      **~2900rpm**      **ISO 9906 Annex A**



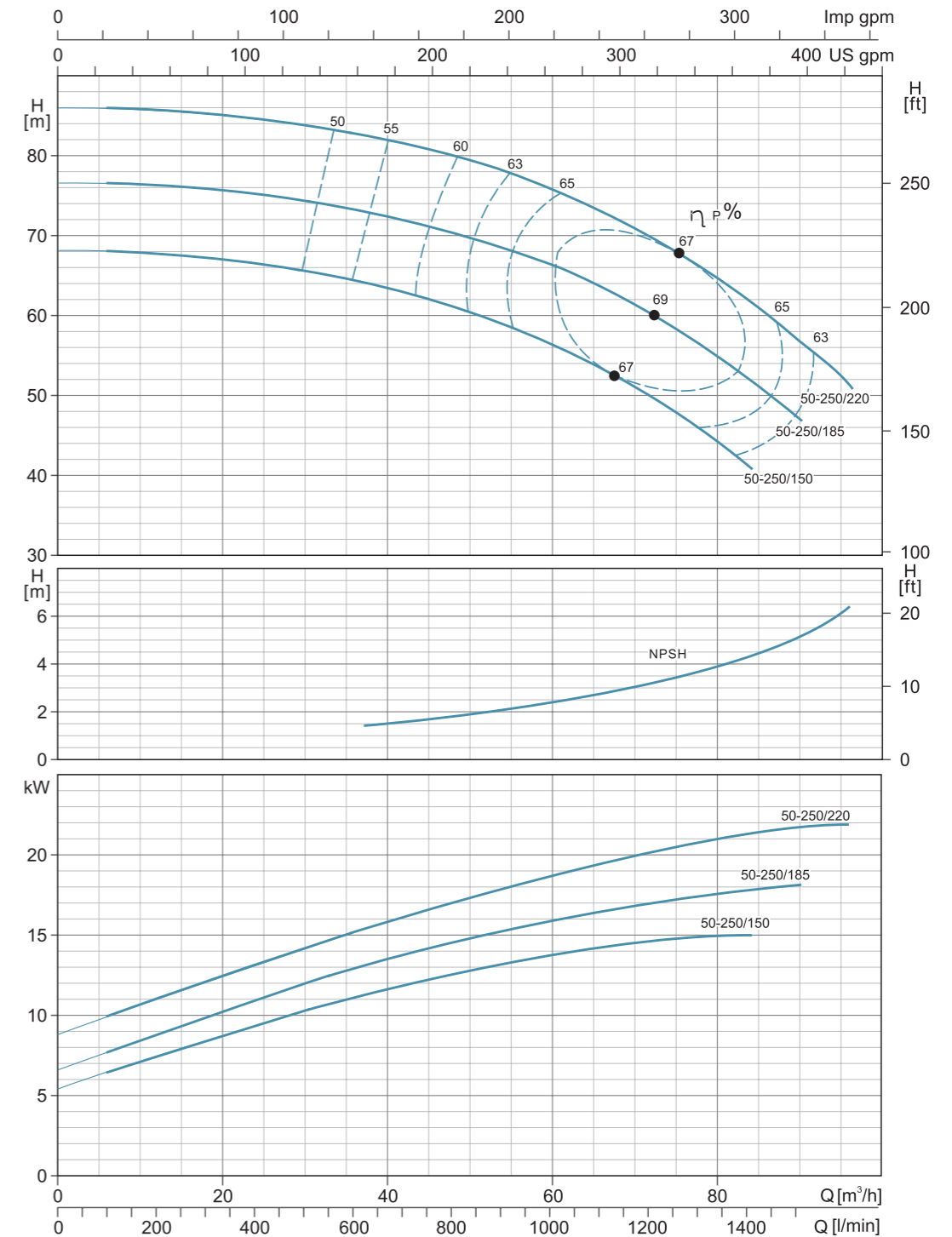
Hydraulic Performance Curves

XST50-200	~2900rpm	ISO 9906 Annex A
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Hydraulic Performance Curves

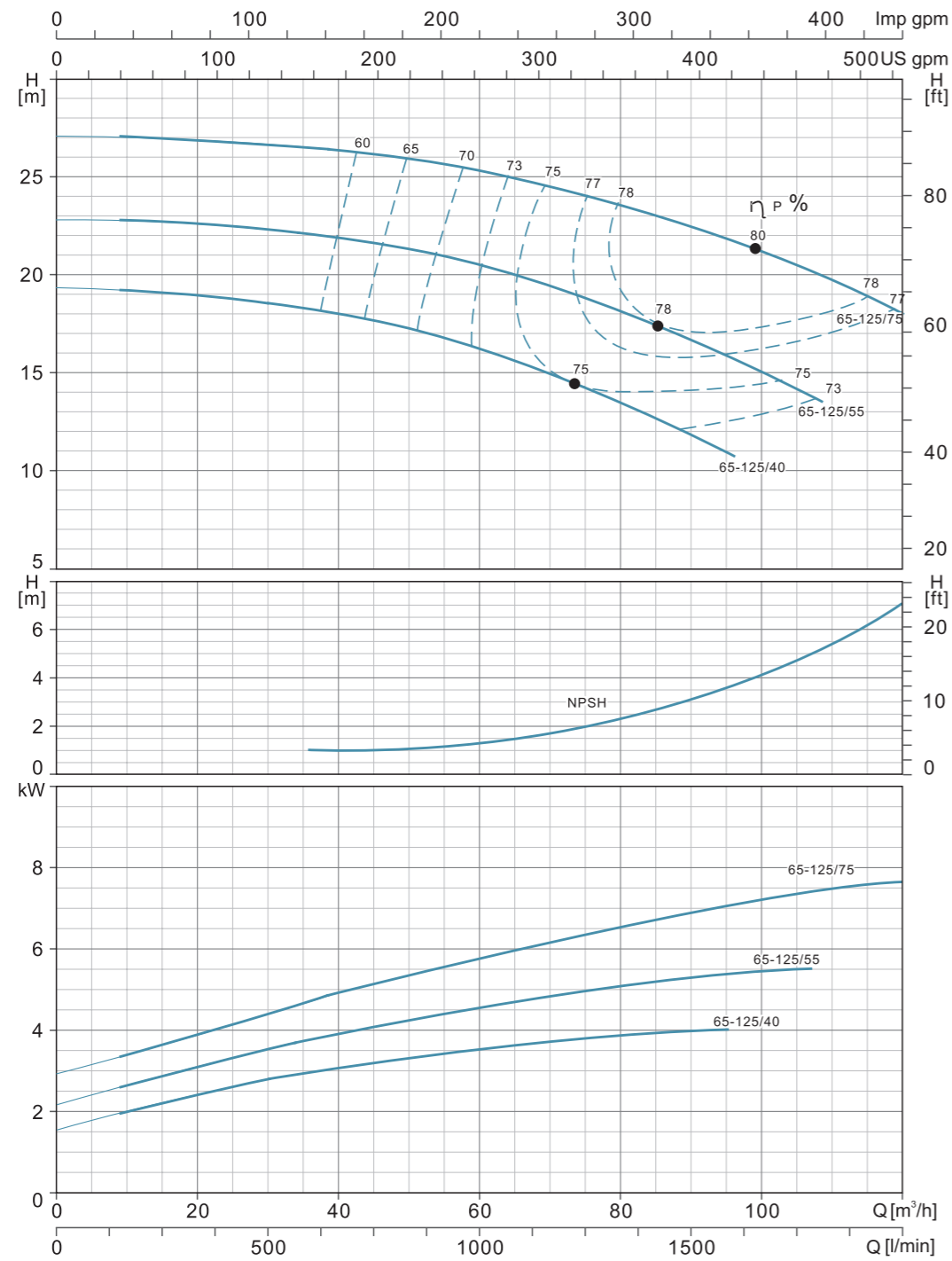
XST50-250	~2900rpm	ISO 9906 Annex A
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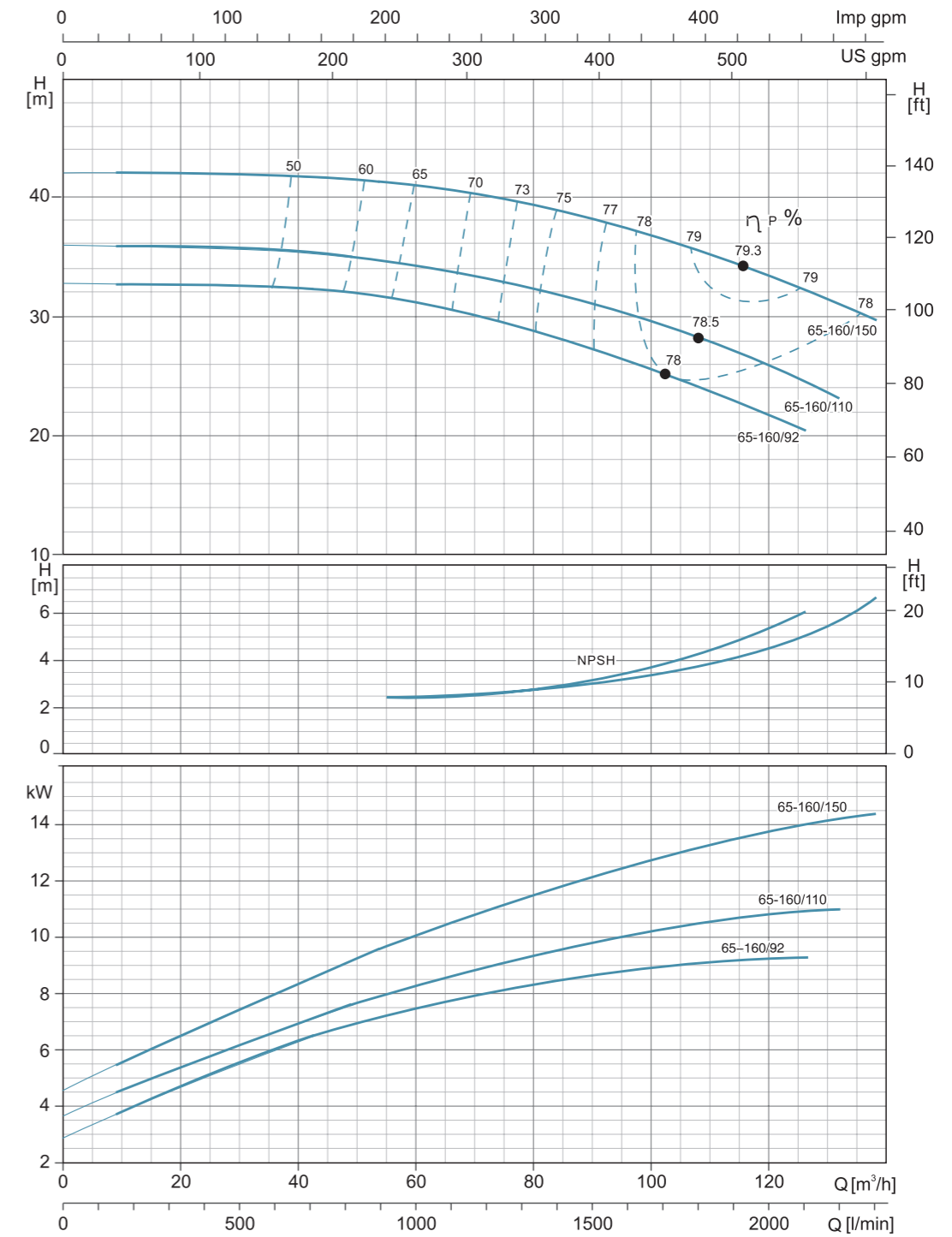
Hydraulic Performance Curves

<b>XST65-125</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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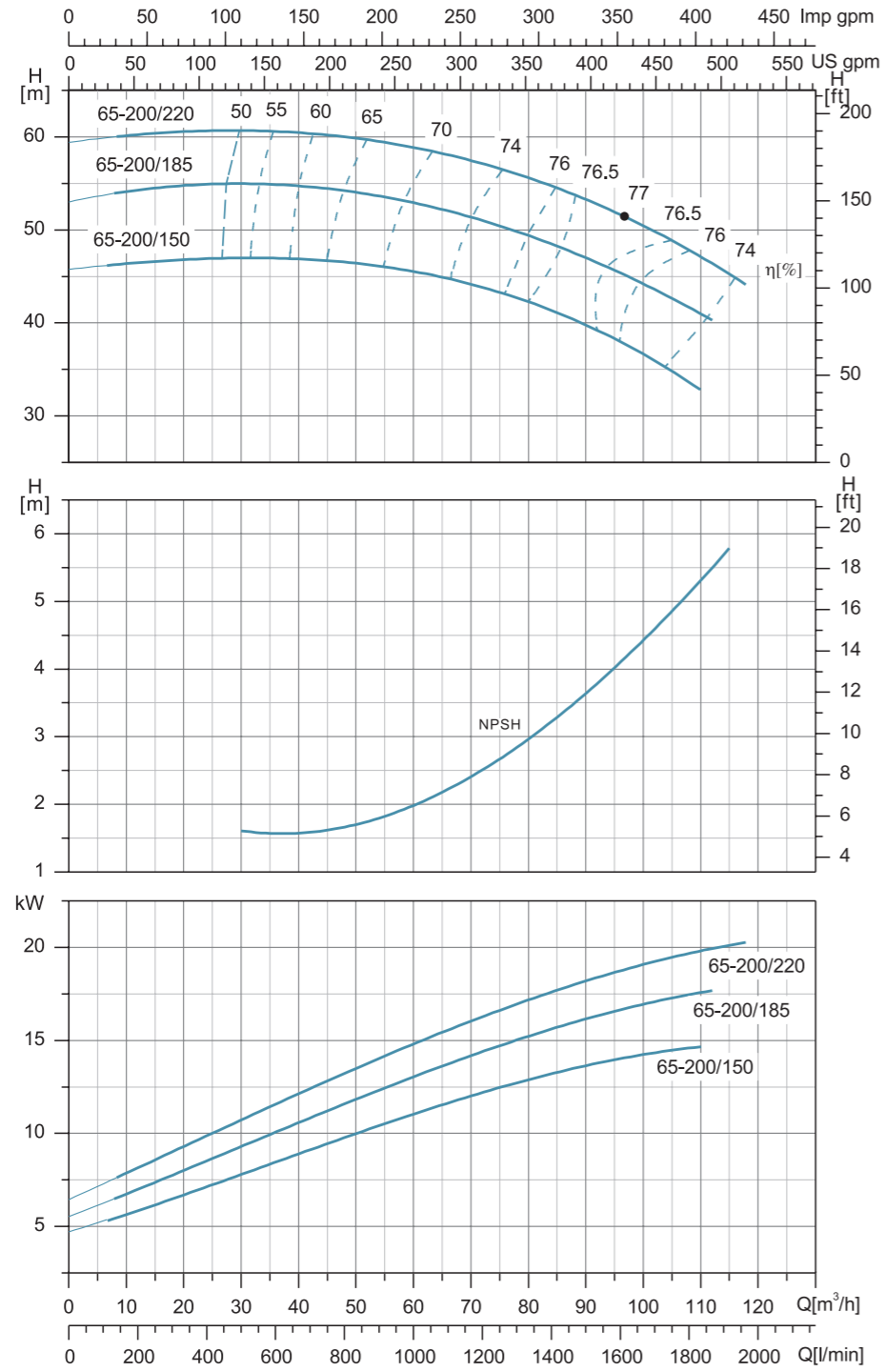
Hydraulic Performance Curves

<b>XST65-160</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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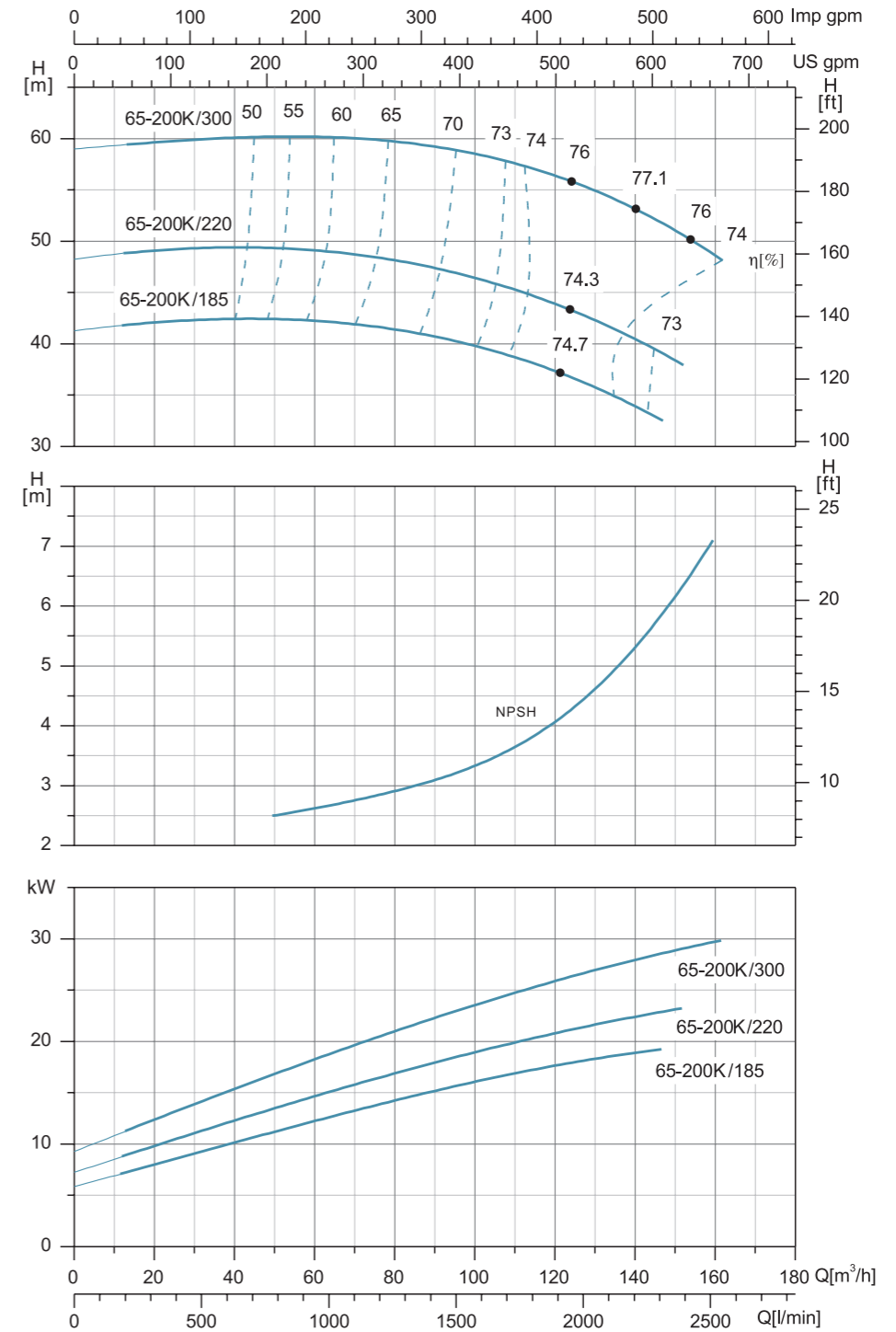
**Hydraulic Performance Curves**

<b>XST65-200</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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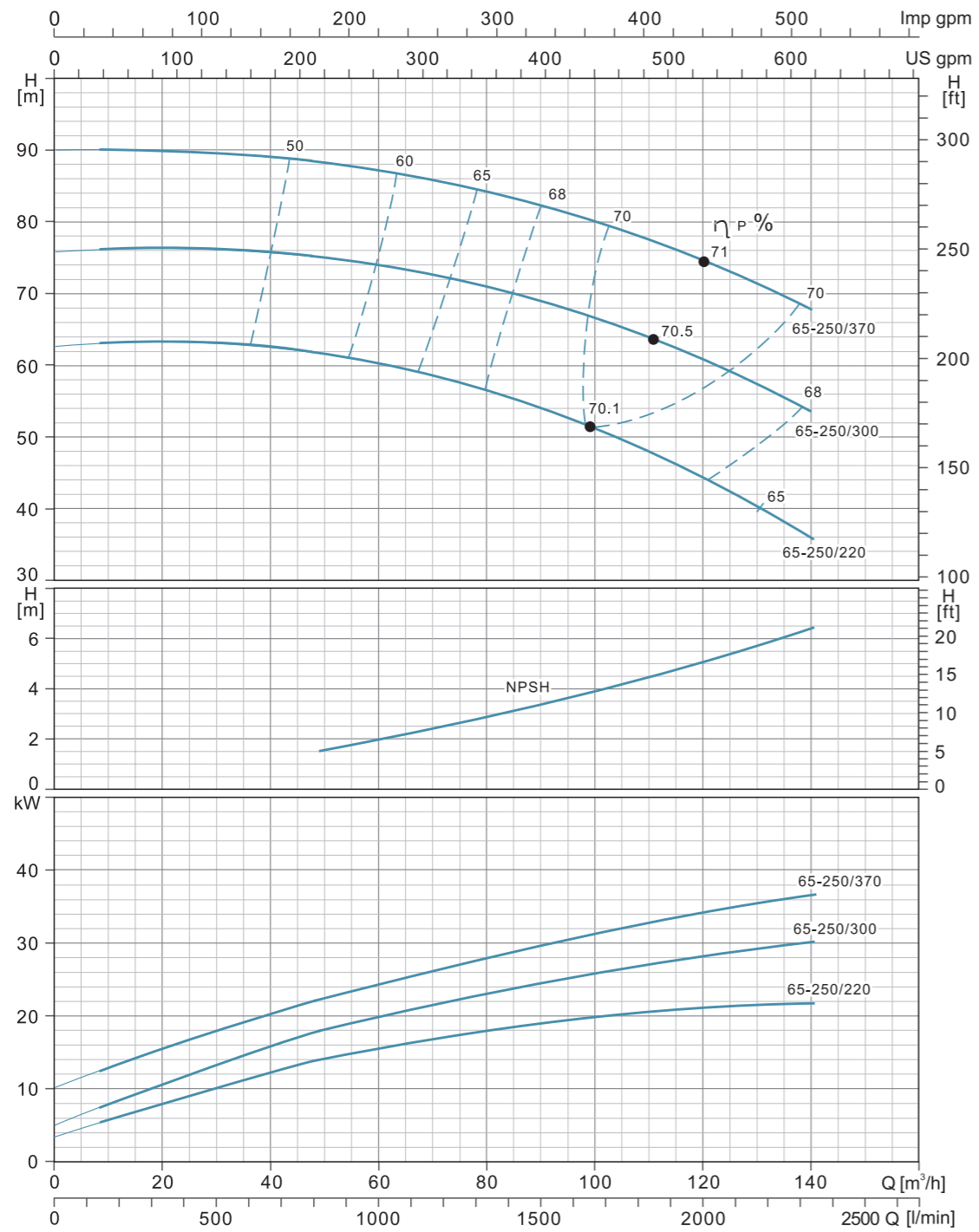
**Hydraulic Performance Curves**

<b>XST65-200K</b>	<b>~2900rpm</b>	<b>ISO 9906 Annex A</b>
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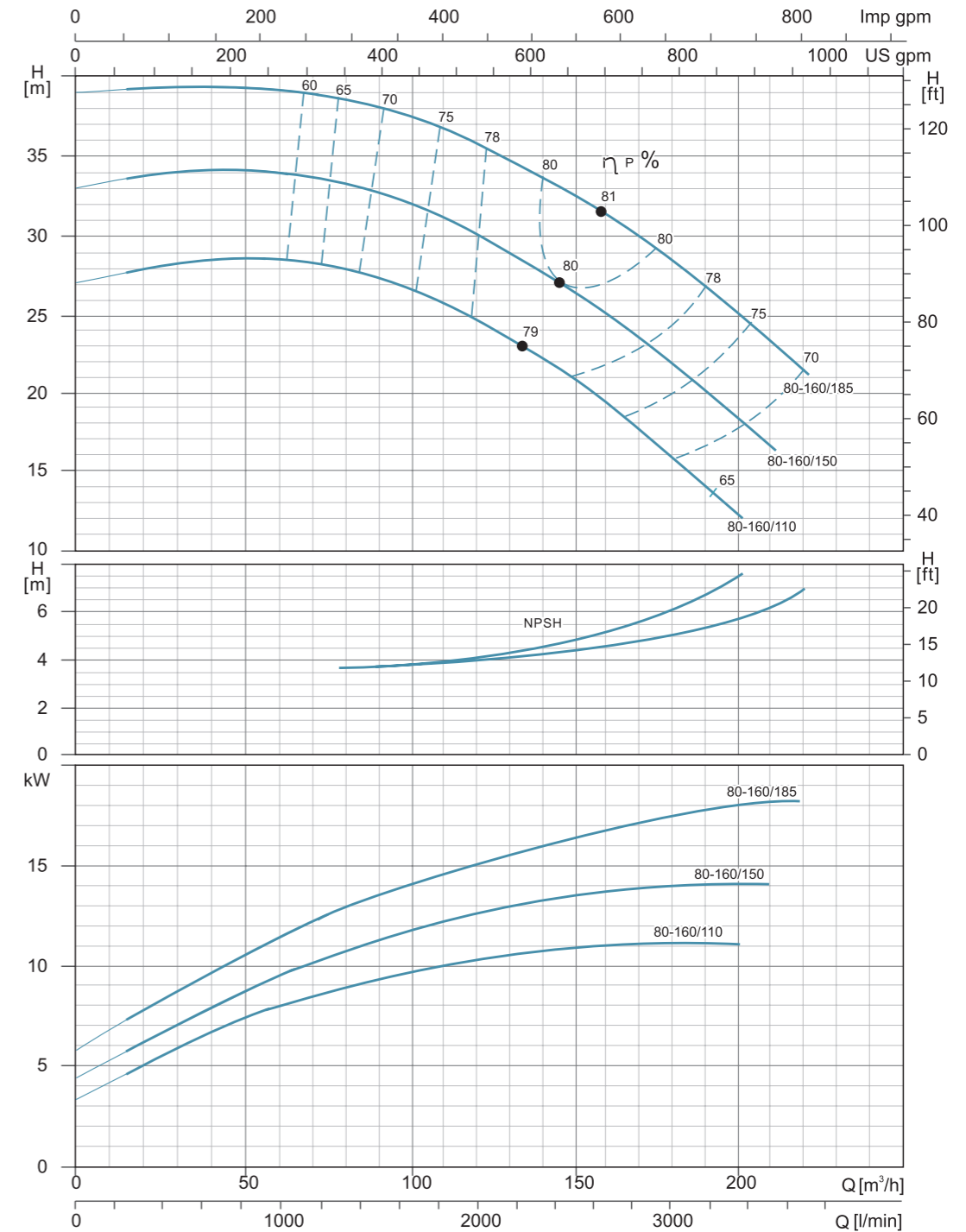
Hydraulic Performance Curves

XST65-250	~2900rpm	ISO 9906 Annex A
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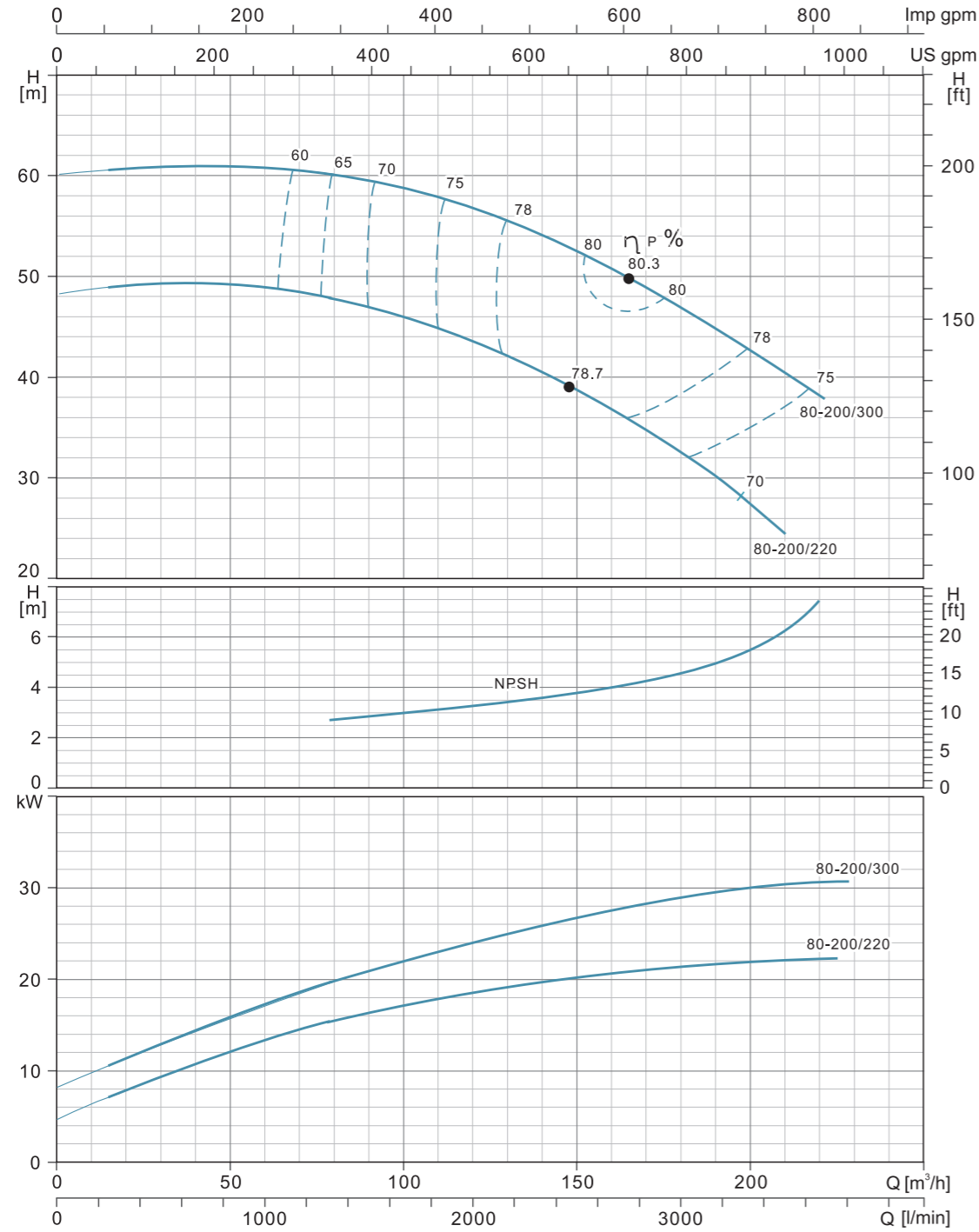
Hydraulic Performance Curves

XST80-160	~2900rpm	ISO 9906 Annex A
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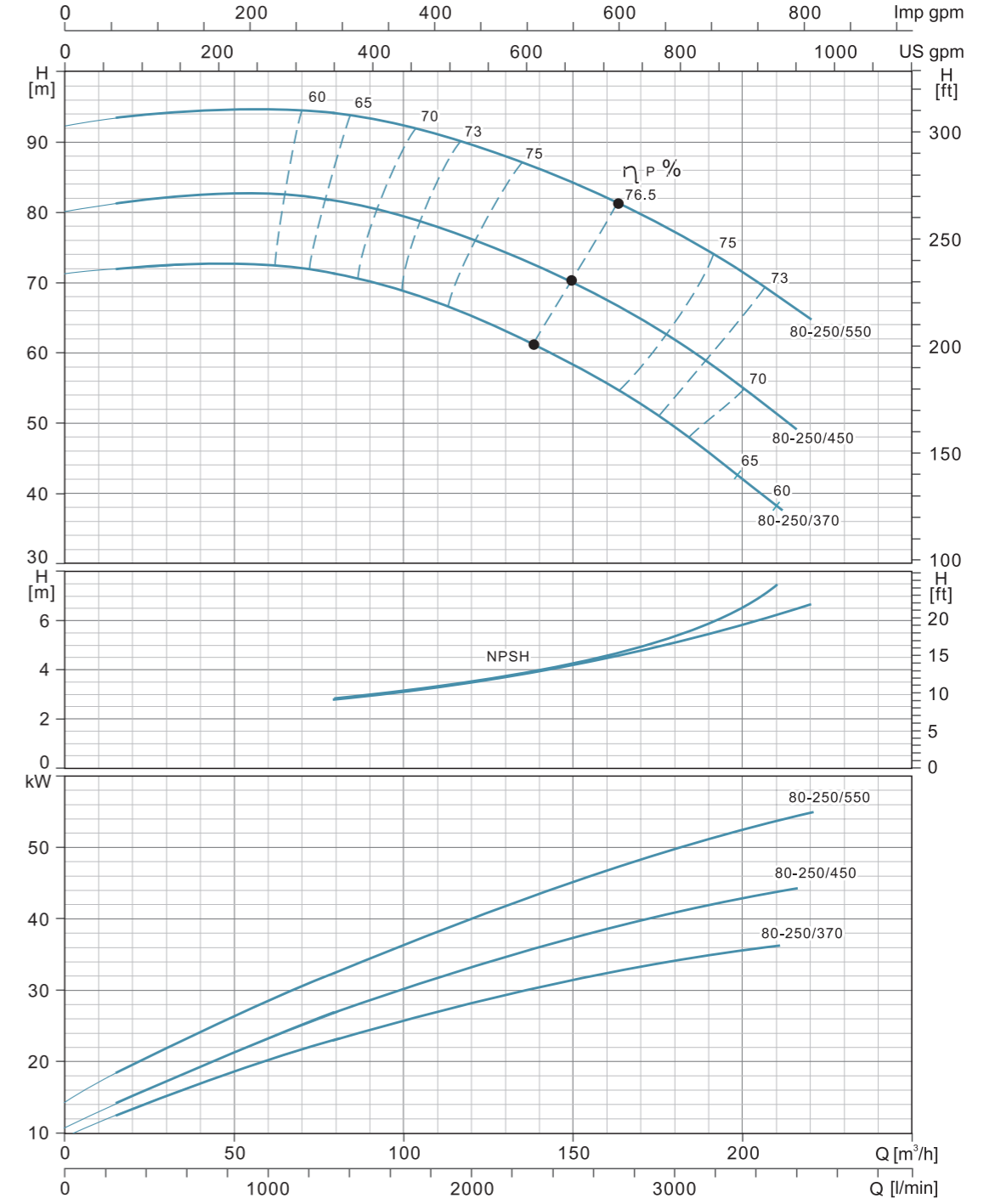
Hydraulic Performance Curves

XST80-200	~2900rpm	ISO 9906 Annex A
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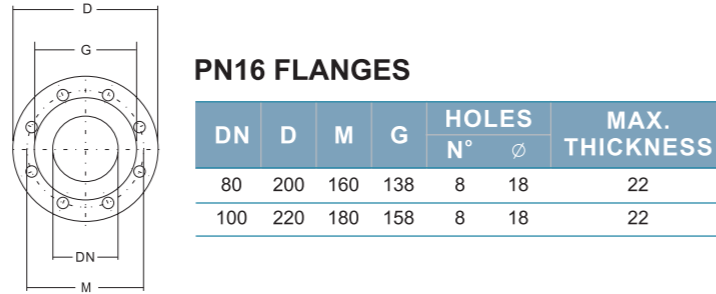
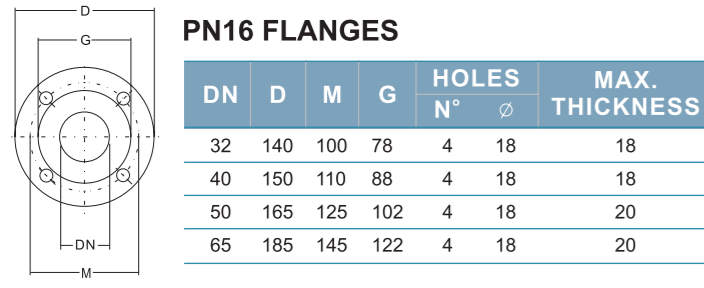


Hydraulic Performance Curves

XST80-250	~2900rpm	ISO 9906 Annex A
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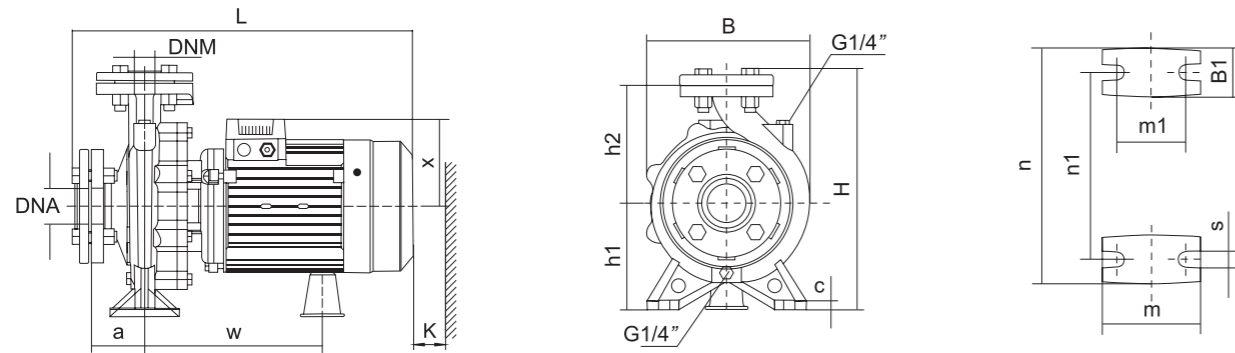


**Flange Dimensions**



**Installation Sketch**

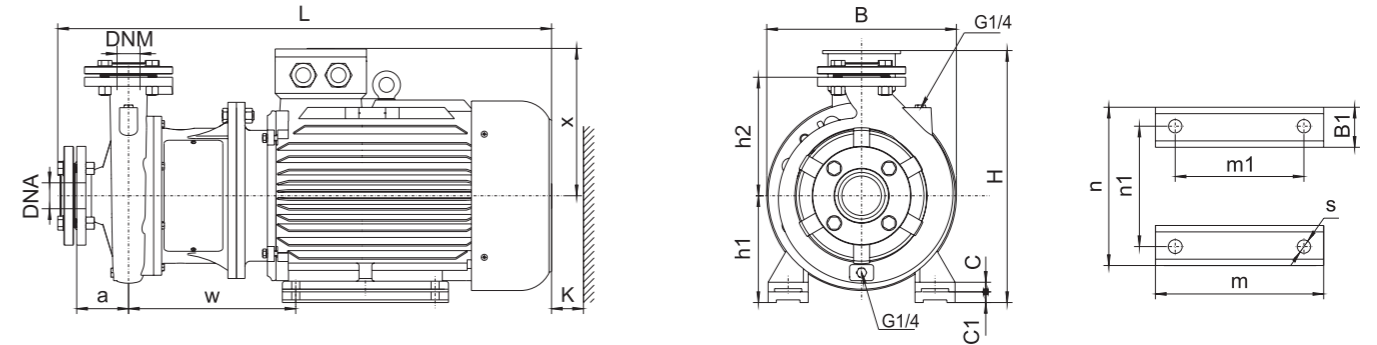
up to 7.5 kW included



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				231	123	160	50	16	132																														
32-160/15				266	141																																		
32-160/22				258	127	180	48	12	160																														
32-160/30				258	127	180	48	12	160																														
32-200/30			155	264	180	198	60	15	160	272	212	308	386	610	640	60																							
32-200/40																	272	212	308	386	610	640																	
32-250/55																	272	212	308	386	610	640																	
32-250/75																	272	212	308	386	610	640																	
40-125/11																	40	65	80	255	127	140	45		112	100	70	210	160	218	282	489	95						
40-125/15	238	127	168	48	12	132	100	70	240	190																													
40-125/22	238	127	168	48	12	132	100	70	240	190																													
40-160/30	238	127	168	48	12	132	100	70	240	190																													
40-160/40	238	127	168	48	12	132	100	70	240	190																													
40-200/55	100	259	180	180	50	160	264	212	15	275	370	553	583	105																									
40-200/75															275	370			553	583																			
50-125/22															50	65			100	262	127	160	50		132	100	70	240	190	243	322	518	110						
50-125/30																				262	127	160	50	132	100									70	240	190	243	322	518
50-125/40																				262	127	160	50	132	100									70	240	190	243	322	518
50-160/55	262	180	180	52	160	264	212	272	370	556	586																												
50-160/75	262	180	180	52	160	264	212	272	370	556	586																												
65-125/40	65	80	100	265	180	180	68	14	160	125	95	280	212	283			372	564	594																				
65-125/55																				283	372	564	594																
65-125/75																				283	372	564	594																

**Installation 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																						
50-250/185																						
50-250/220																						
50-250/185				225	70	25	-	180	304	254	355	279	440	895	110							
50-250/220				225	70	25	-	180	311	241	355	279	455	925								
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																						
65-200/150																						
65-200/185																						
65-200/220	225	70	22				-	180	311	241	355	279	455	925								
65-200K/185	225	65	20				20	180	304	254	320	254	440	920								
65-200K/220	225	65	20				20	180	311	241	355	279	355	455	950							
65-200K/300	225	70	22				25	180	369	305	395	318	18.5	505	1020							
65-250/220	225	70	22				25	180	311	241	355	279	14.5	455	956							
65-250/300	225	70	22	25	200	369	305	395	318	18.5	400	505	1026									
65-250/370	225	70	22	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																						
80-200/220																						
80-200/300																						
80-160/150				225	65	20	-	160	304	254	320	254	455	926								
80-200/220				225	70	22	25	180	180	311	241	355	279	355	461	978						
80-200/300				225	70	22	25	180	200	369	305	395	318	18.5	400	505	1050					
80-250/370				225	70	22	25	200	369	305	395	318	18.5	400	505	1050						
80-250/450				225	75	28	28	225	404	311	435	356	18.5	450	555	1098	120					
80-250/550	225	80	30	30	280	450	349	490	406	24	550	646	1192	120								



### Application

- Water supply: filtration and transfer at waterworks, regional water supply and pressure boosting in main pipe
- Industrial pressure boosting: Water system, cleaning system
- Industrial water supply: boiler feeding, cooling system, air conditioning, transportation of light acid and alkali liquid
- Water treatment: distillation systems, separators, swimming pools
- Agricultural irrigation, petrochemical industry, medicine and sanitation, etc.

### Operating Conditions

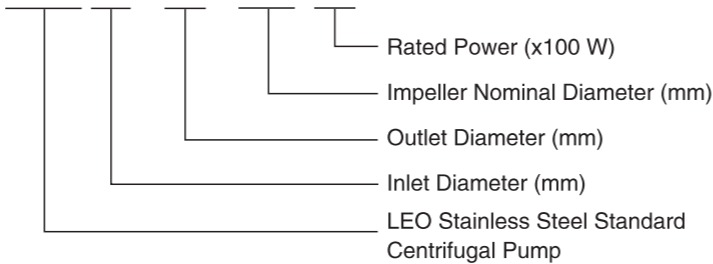
- Thin, clean, non-flammable and explosive, not containing the liquid with solid particles and fibers
- Liquid temperature: -15°C - +80°C
- Flow range: 0.7 - 132 m³/h
- Head range: 9 - 58 m
- Ambient temperature range: -15°C - + 40°C
- Max. operation: 33 bar
- Altitude: up to 1000 m

### Motor

- IE 2 motor ( IE 3 motor optional)
- Totally enclosed & fan-cooled
- Protection class: IP55
- Insulation class: F

### Identification Codes

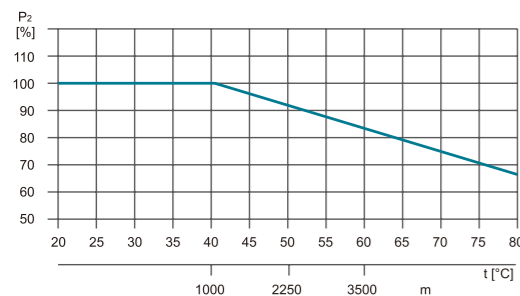
**XZS 65- 50- 160/40**



### Ambient Temperature

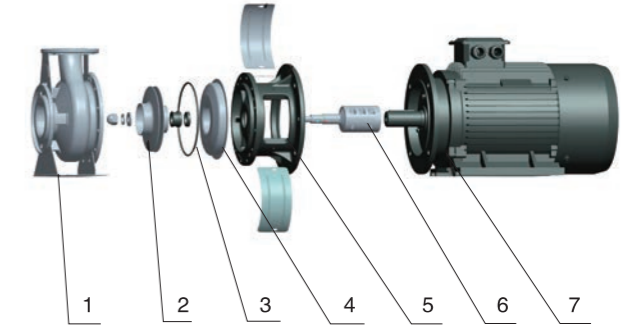
Max. Ambient temperature: +40°C. Ambient temperature above 40°C, or installation at altitude of more than 1000 m above sea level, require the use of an oversize motor. Because of low air density and poor cooling effects, the motor output power P2 will be decreased. See the picture.

For example, when the pump is installed at altitude of more than 3500 m above sea level, P2 will be decrease to 88%. When the ambient temperature is 70°C, P2 will be decreased to 78%.

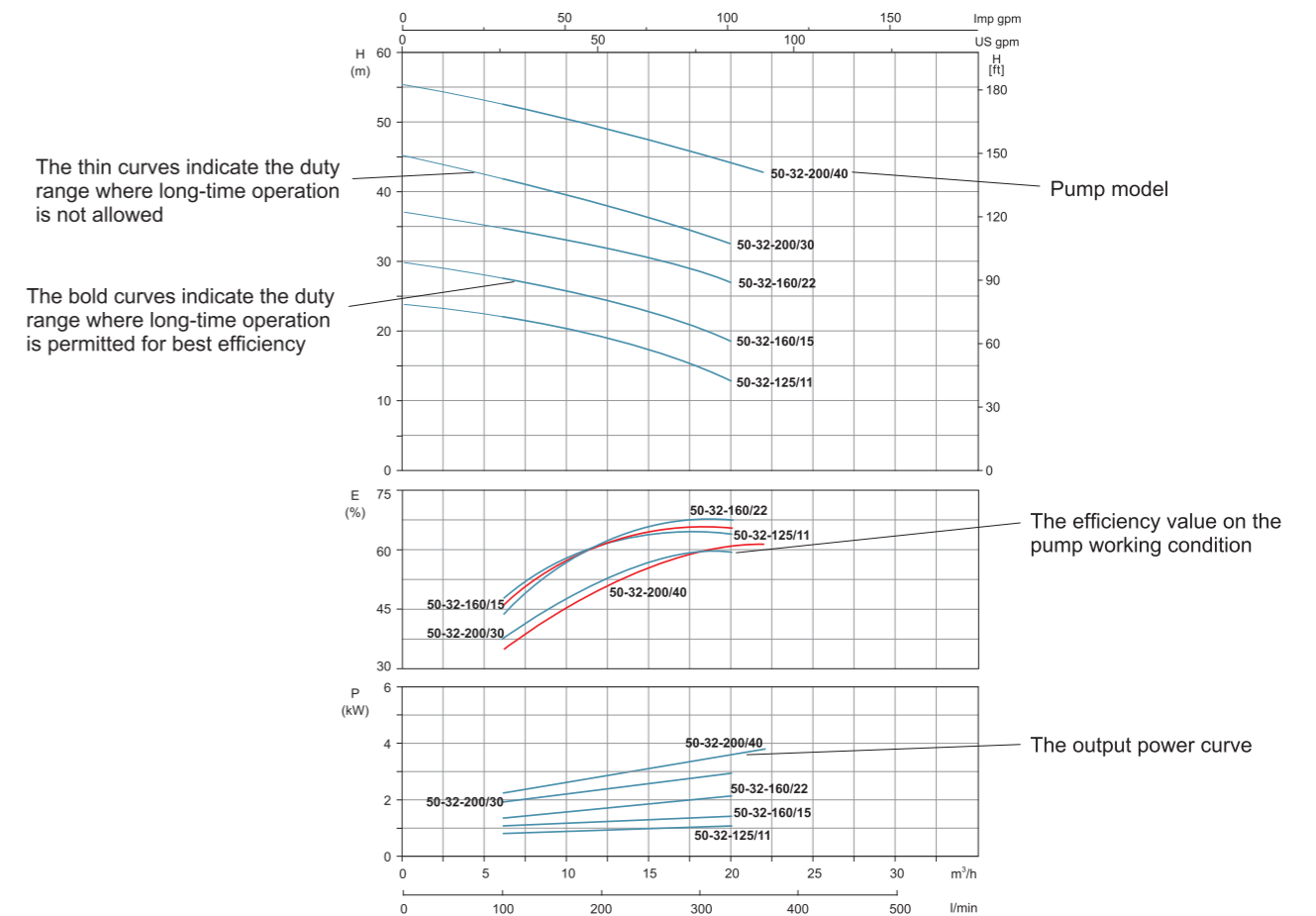


### Materials Table

No.	Part	Material
1	Pump body	AISI 304
2	Impeller	AISI 304
3	Mechanical seal	
4	Rear cover	AISI 304
5	Support	HT 200
6	Pump shaft	AISI 304/45#
7	Motor	



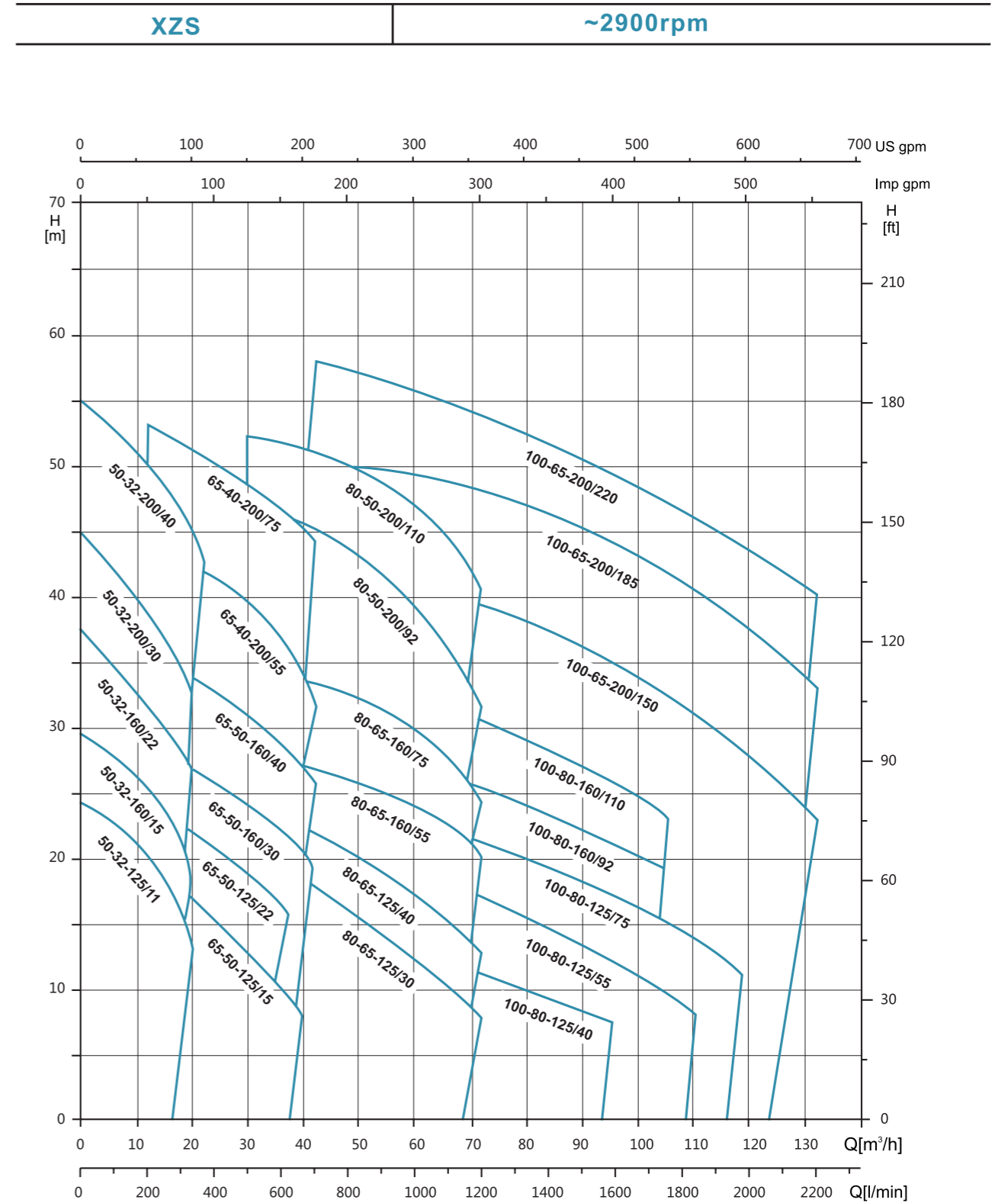
### How to Read The Curve Charts



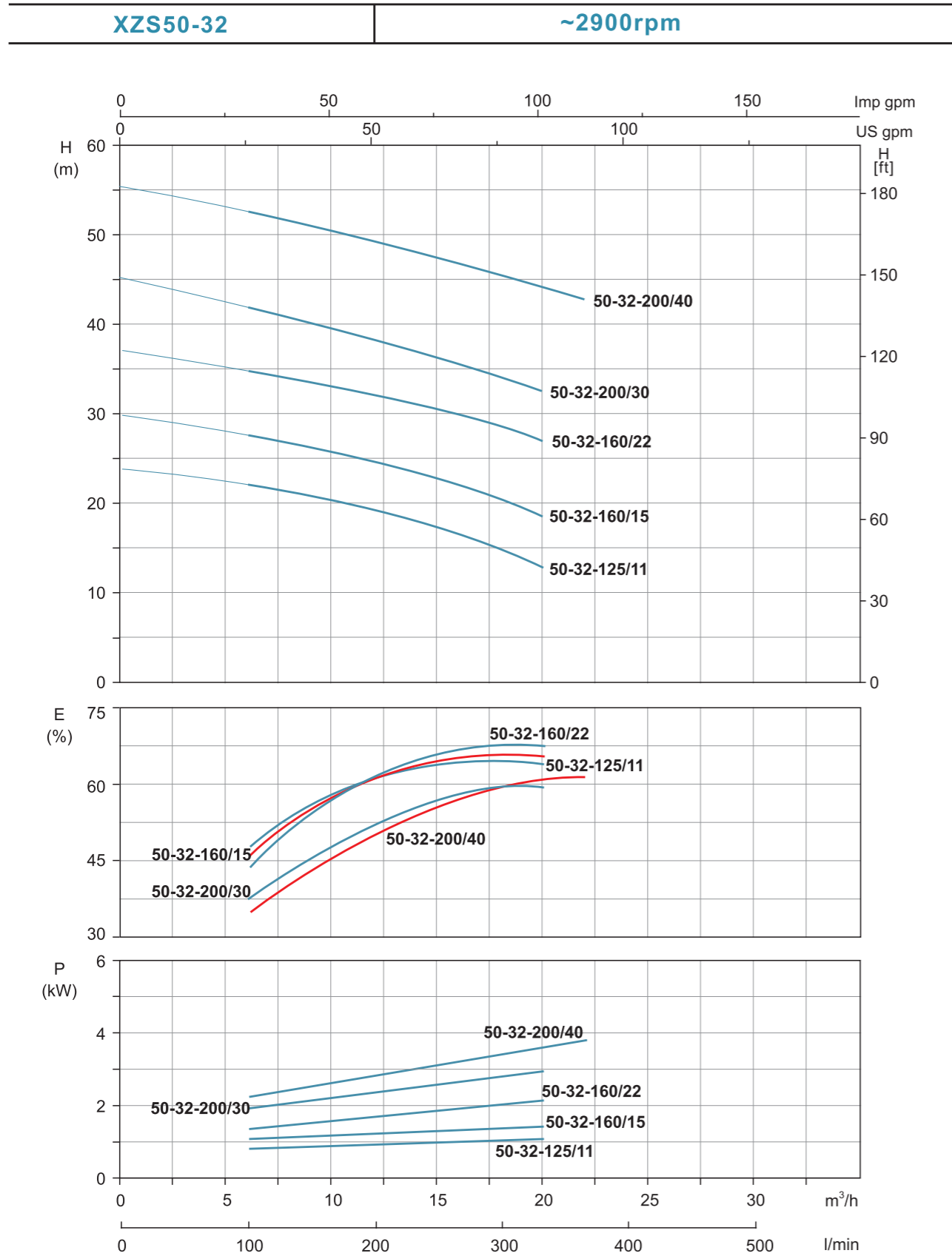
**Technical Data**

MODEL	Power		Q (m³/h)	Q=DELIVERY																				
	kW	HP		0	6	9	12	18	20	22	24	27	30	36	42	48	60	72	90	108	114	120	126	132
			Q (l/min)	0	100	150	200	300	333	360	400	450	500	600	700	800	1000	1200	1500	1800	1900	200	2100	2200
XZS50-32-125/11	1.1	1.5		24.0	21.5	20.5	19.5	16.0	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/15	1.5	2		29.5	27.0	26.0	25.0	21.0	18.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-160/22	2.2	3		37.0	33.5	32.5	32.0	28.5	27.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/30	3	4		45.0	41.0	40.0	38.0	34.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS50-32-200/40	4	5.5		55.0	51.0	50.0	49.0	46.0	45.0	43.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/15	1.5	2		20.0	-	-	19.0	18.0	17.0	16.5	15.0	14.0	12.5	10.0	-	-	-	-	-	-	-	-	-	-
XZS65-50-125/22	2.2	3		26.0	-	-	23.5	22.5	22.0	21.5	21	20.5	19.5	16.5	-	-	-	-	-	-	-	-	-	-
XZS65-50-160/30	3	4		31.0	-	-	29.0	27.5	27.0	26.5	25.5	25.0	24.0	22.0	19.0	-	-	-	-	-	-	-	-	-
XZS65-50-160/40	4	5.5		39.0	-	-	35.5	34.5	34.0	33.5	32.5	32.0	31.0	29.0	26.0	-	-	-	-	-	-	-	-	-
XZS65-40-200/55	5.5	7.5		47.0	-	-	43.0	42.5	42.0	41.5	41.0	40.5	39.0	37.0	33.0	-	-	-	-	-	-	-	-	-
XZS65-40-200/75	7.5	10		57.0	-	-	53.0	52.5	52.0	51.0	50.0	49.0	48.0	46.5	44.5	-	-	-	-	-	-	-	-	-
XZS80-65-125/30	3	4		22.5	-	-	-	-	-	-	20.0	19.5	19.0	18.5	17.5	16.0	13.0	9.0	-	-	-	-	-	-
XZS80-65-125/40	4	5.5	H (m)	25.5	-	-	-	-	-	-	23.0	22.5	22.0	21.5	20.5	20.0	17.0	13.5	-	-	-	-	-	-
XZS80-65-160/55	5.5	7.5		33.0	-	-	-	-	-	-	29.5	29.0	28.5	28.0	27.0	26.0	24.0	20.0	-	-	-	-	-	-
XZS80-65-160/75	7.5	10		39.0	-	-	-	-	-	-	36.0	35.0	34.5	34.0	33.5	32.5	29.0	24.0	-	-	-	-	-	-
XZS80-50-200/92	9.2	12.5		53.0	-	-	-	-	-	-	-	-	48.0	47.5	46.5	44.5	39.5	34.0	-	-	-	-	-	-
XZS80-50-200/110	11	15		57.5	-	-	-	-	-	-	-	-	53.0	51.0	50.5	50.0	47.0	41.0	-	-	-	-	-	-
XZS100-80-125/40	4	5.5		20.0	-	-	-	-	-	-	-	-	-	17.5	16.5	15.5	14.0	12.0	7.0	-	-	-	-	-
XZS100-80-125/55	5.5	7.5		23.0	-	-	-	-	-	-	-	-	-	21.5	20.5	20.0	18.0	16.0	12.0	7.5	-	-	-	-
XZS100-80-125/75	7.5	10		29.0	-	-	-	-	-	-	-	-	-	27.5	26.5	25.5	23.5	21.5	17.5	13.0	12.0	-	-	-
XZS100-80-160/92	9.2	12.5		33.0	-	-	-	-	-	-	-	-	-	-	31.0	30.0	28.0	26.0	23.0	-	-	-	-	-
XZS100-80-160/110	11	15		38.5	-	-	-	-	-	-	-	-	-	-	36.0	35.0	33.0	31.0	28.0	-	-	-	-	-
XZS100-65-200/150	15	20		47.0	-	-	-	-	-	-	-	-	-	-	44.0	43.0	41.0	39.0	36.0	32.0	30.0	28.0	26.0	23.0
XZS100-65-200/185	18.5	25		53.0	-	-	-	-	-	-	-	-	-	-	51.0	50.0	49.0	48.0	45.0	41.0	39.0	37.0	35.0	33.0
XZS100-65-200/220	22	30		58.0	-	-	-	-	-	-	-	-	-	-	57.0	56.0	55.0	54.0	51.0	47.0	45.5	44.0	42.0	40.0

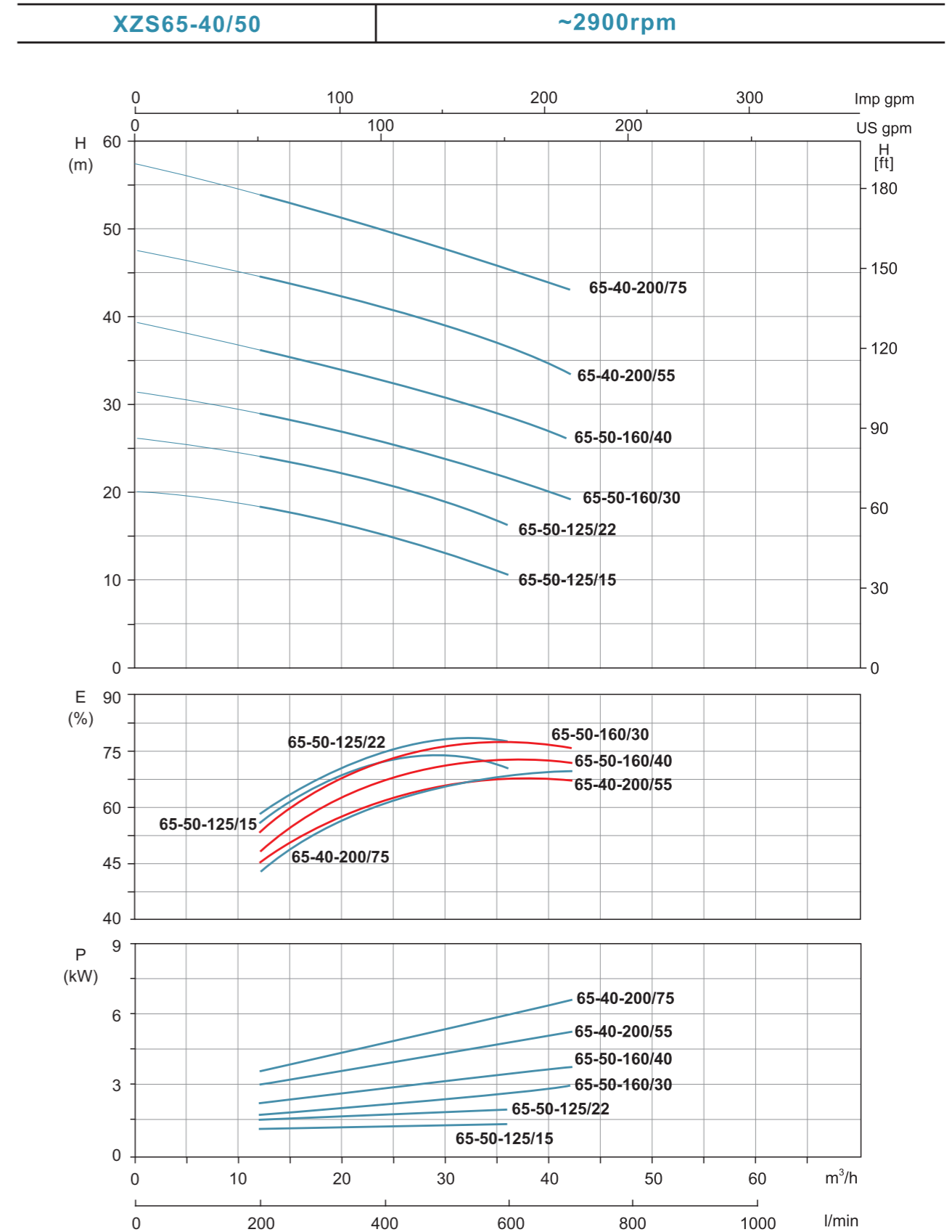
**Characteristic Curves**



Hydraulic Performance Curves

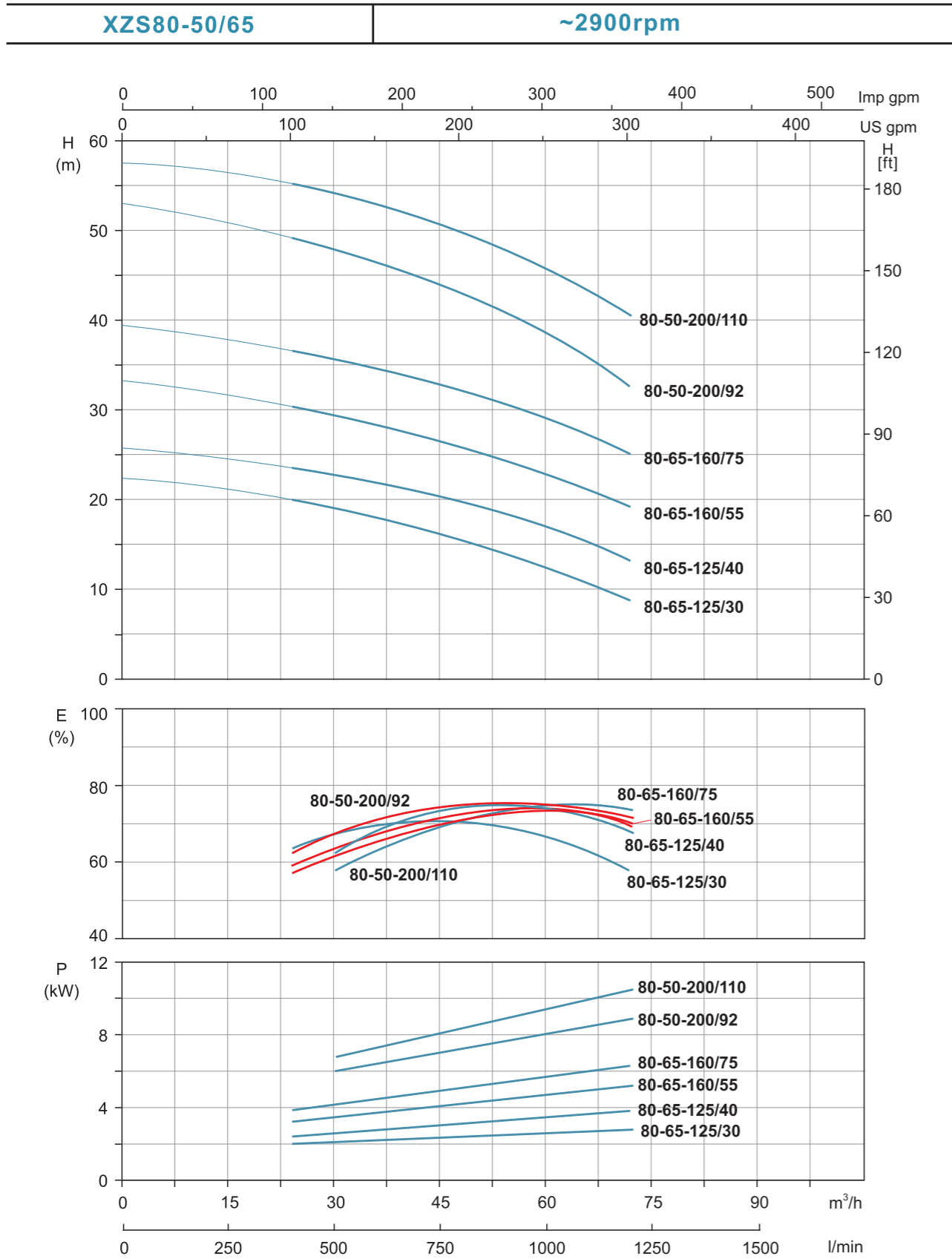


Hydraulic Performance Curves

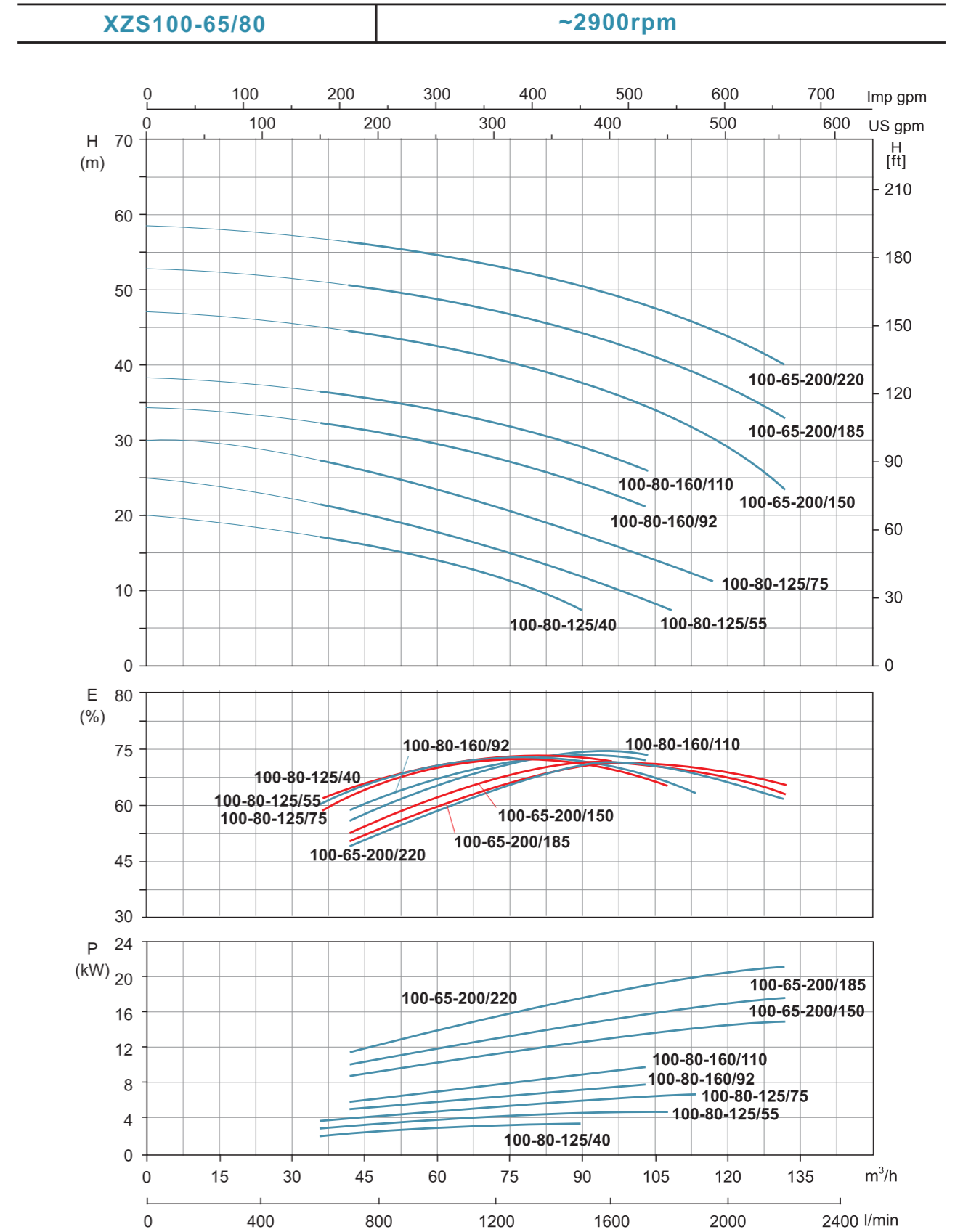




Hydraulic Performance Curves

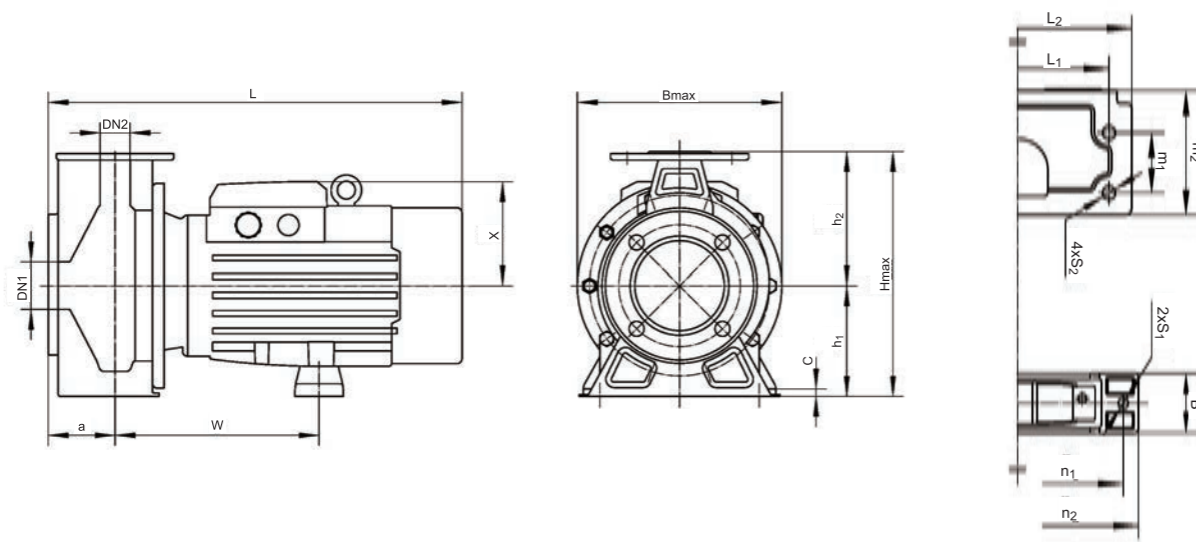


Hydraulic Performance Curves



### Installation Sketch

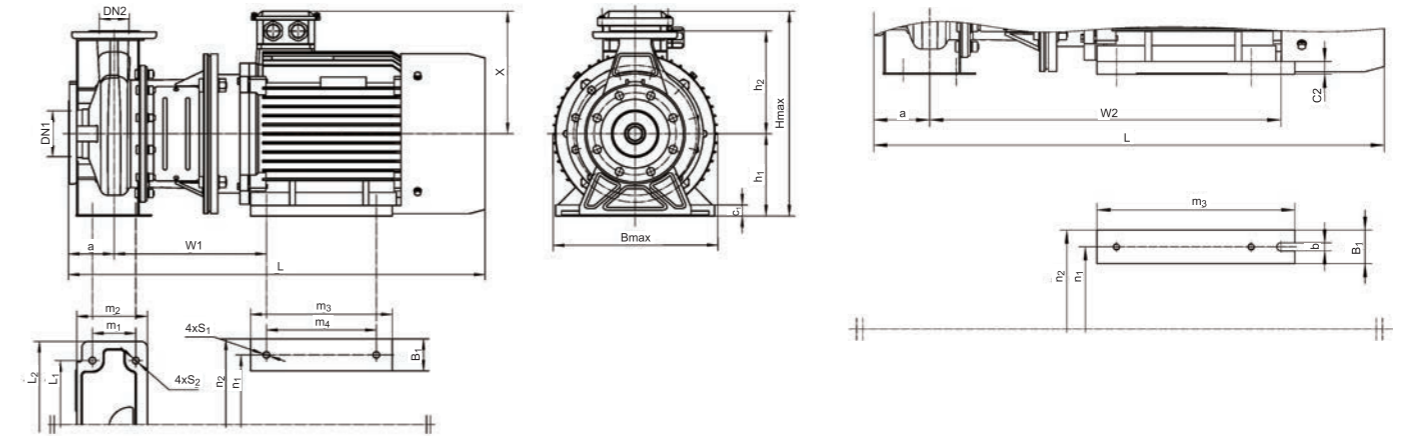
Up to 7.5 kW included



Model	DN1	DN2	a	w	L1	L2	m1	m2	n1	n2	h1	h2	2-S1	4-S2	B	C	X	Bmax	Hmax	L									
XZS50-32-125/11	50	32	80	205	140	190	70	122	205	240	112	140	2-Ø12	4-Ø15	65	12	127	240	250	475									
XZS50-32-160/15				207	190	240					132	160									244	292	477						
XZS50-32-160/22				244	124	225					260	160									180	75	15	124	295	340	492		
XZS50-32-200/30				205	160	210					121	205									240	112	140	65	12	127	240	252	475
XZS50-32-200/40				244	123	225					260	132									160	75	124	260	292	492			
XZS65-50-125/15				65	50	100					205	160									210	70	121	205	240	112	140	2-Ø12	4-Ø15
XZS65-50-125/22	244	190	240				123	225	260	132	160	75	124	260	292	492													
XZS65-50-160/30	246	212	265				146	245	280	160	180	70	142	295	340	563													
XZS65-50-160/40	254	190	240				158	225	260	132	160	75	15	124	260	292	522												
XZS65-40-200/55	256	265	150				245	280	70	142	295	340	573																
XZS65-40-200/75	258	280	95				155	225	260	160	180	75	124	260	292	522													
XZS80-65-125/30	80	65	100	254	190	240	70	158	225	260	132	160	2-Ø12	4-Ø15	75	15	124	260	292	522									
XZS80-65-125/40				256	265	150					245	280									70	142	295	340	573				
XZS80-65-160/55				258	280	95					155	225									260	160	180	75	124	260	292	522	
XZS80-65-160/75				258	280	95					155	245									280	70	142	295	340	573			
XZS100-80-125/40				100	80	100					258	280									95	155	245	280	70	142	295	340	573
XZS100-80-125/55											258	280									95	155	245	280	70	142	295	340	573
XZS100-80-125/75	258	280	95				155	245	280	70	142	295	340	573															

### Installation Sketch

From 7.5 kW



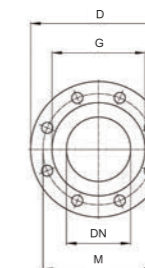
Model	DN1	DN2	a	w1	w2	L1	L2	m1	m2	m3	m4	n1	n2	h1	h2	4-S1	4-S2	B1	b	c1	c2	X	Bmax	Hmax	L
XZS80-50-200/92	80	50	314			265	70	146	210	260															816
XZS80-50-200/110					-	212								320	160	200	4-Ø14.5	65	-	20	-				420
XZS100-80-160/92																							260	350	823
XZS100-80-160/110		80	321			280			260	210	254						4-Ø14								
XZS100-65-200/150		100			581		95	155	310									60	14.5	-	20				440
XZS100-65-200/185		65			625	250	320		354			314		180	225										868
XZS100-65-200/220			334						311	241	279	355				4-Ø14.5		70	-	22	-	280	355	460	913

### Flange Dimensions



#### PN16 FLANGES

DN	D	M	G	Holes		Max. Thickness
				N	Ø	
Ø32	140	100	76	4	18	14
Ø40	150	110	84	4	18	14.5
Ø50	165	125	99	4	18	15
Ø65	185	145	118	4	18	16
Ø80	200	160	132	4	18	18



#### PN16 FLANGES

DN	D	M	G	Holes		Max. Thickness
				N	Ø	
Ø100	220	180	152	8	18	18