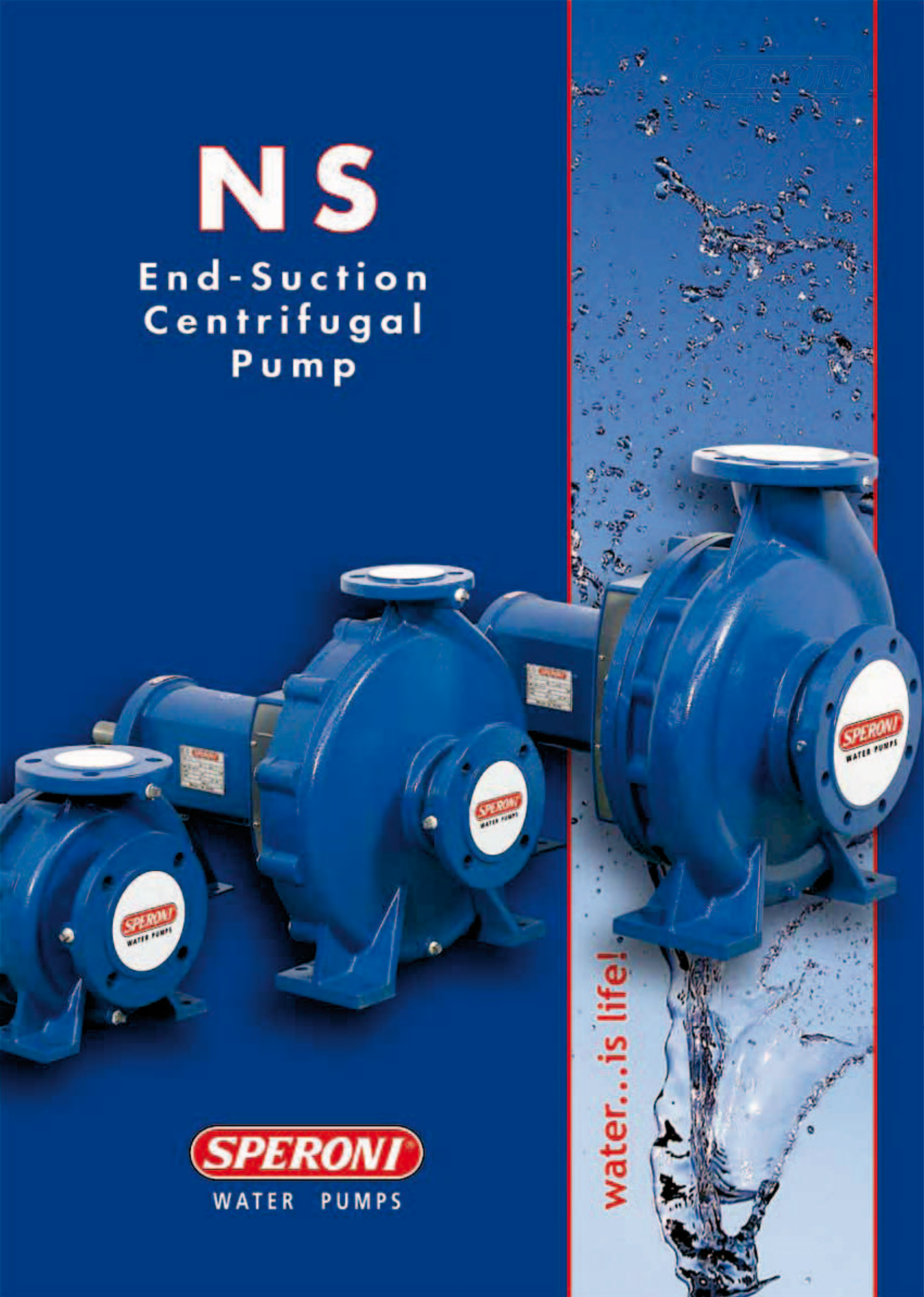
NS

End-Suction Centrifugal Pump



SPERONI®
WATER PUMPS

General Data

Technical Data

2 Pole

4 Pole

SPERONI®
WATER PUMPS

Definition of Model

NS 100-65-200/30

NS 100 — 65 — 200 / 30

- Motor power(kW)
- Nominal diameter(mm) of impeller
- Drainage diameter(mm)
- Suction diameter(mm)
- End suction centrifugal pump

Min inlet pressure

Min inlet pressure depends on NPSH +0.5m safety margin + gasified pressure. It should be re-calculated the inlet pressure if one of the following happens.

- The liquid is more warm.
- The flow exceeds the nominate value.
- Suction distance is very long or inlet pipe is very long.
- System pressure is too little.
- Inlet pressure is low.

Typical application

- Clean, thin, non-corrosive, non-flammable or non-explosive liquid without grain or fiber.
- Water supply system
- Heat, air condition system
- Booster, constant pressure water supply
- Firefighting, splitting system
- Irrigating, farming
- Industry cooling, heater circulation system
- Industry transferring, drainage system

Construction

- Non-self-priming, single stage, single suction, horizontal, axial suction and radical discharge, pump body is fixed by base.
- Use bearing cradle, which can orientate bearing, prevent from radical vibration, improve the rigidity of rotary part.
- Compacted shaft, use deep grove grease lubricated roller bearing.
- Connect pump and motor with semi-flexible coupling.
- Use standard wearable mechanical seal.
- TEFC motor, size complies to IEC standard, installation type B3.
- The dimensions is conform to ISO 2858

Specification

- Flow: Max 520m^3/h
- Head: Max 160m
- Working pressure: Max 16 bar
- Inlet pressure: Max 6 bar
- Power: Max 160kW
- Liquid temperature: -15℃ ~ 110℃
- Inlet and Outlet diameter: Inlet diameter: DN50~DN200
  Outlet diameter: DN32~DN150

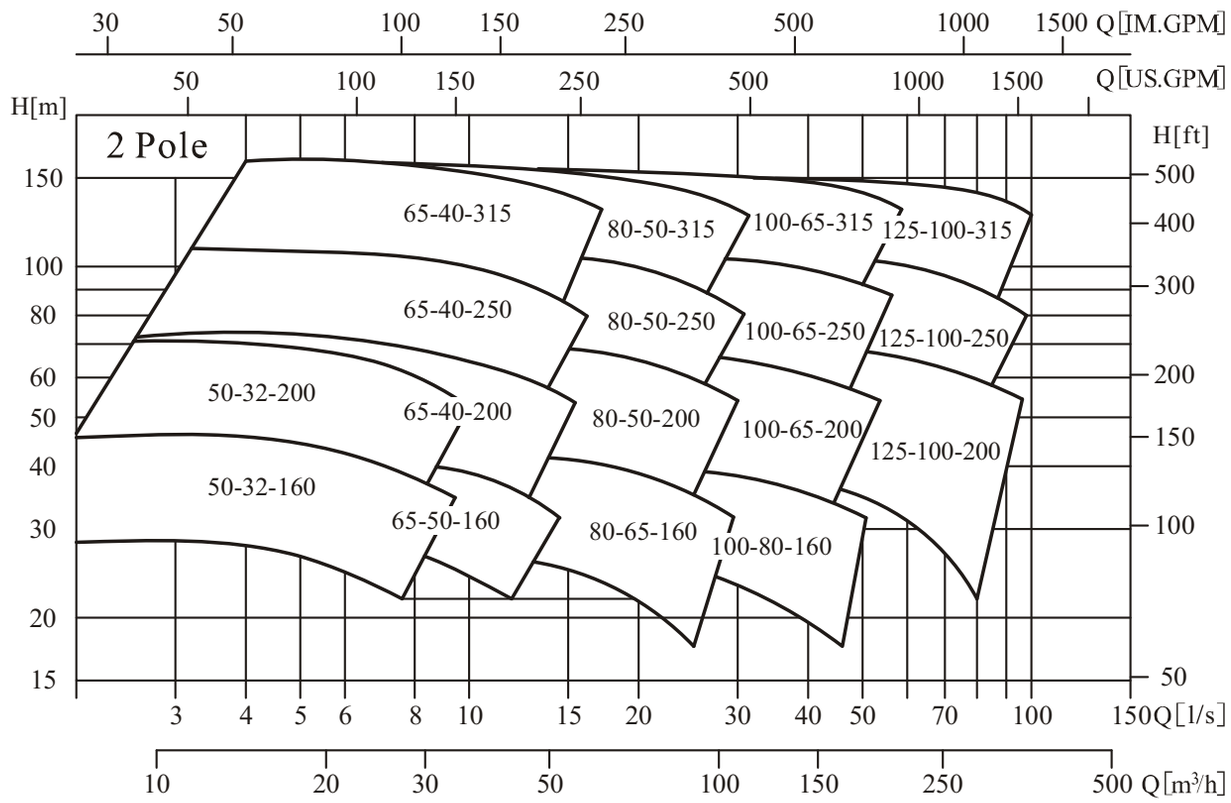
Curve conditions

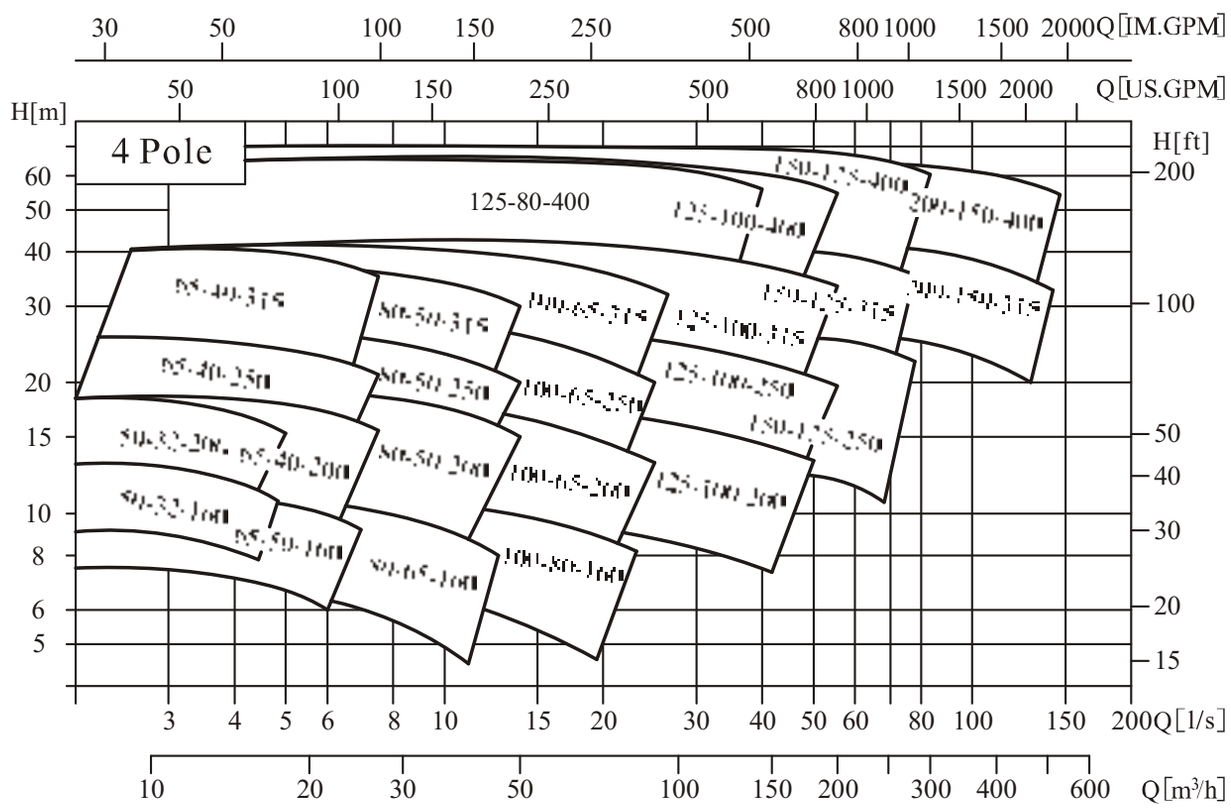
- Curves tolerance is according to ISO9906, Annex A;
- All curves are based on the measured value of constant motor speed 2900rpm, 2950rpm, 1450rpm or 1480rpm.
- The measurements were made with airless water at temperature of 20℃. The curves apply to a kinematic viscosity of 1mm^2/s(1 cst)

Features

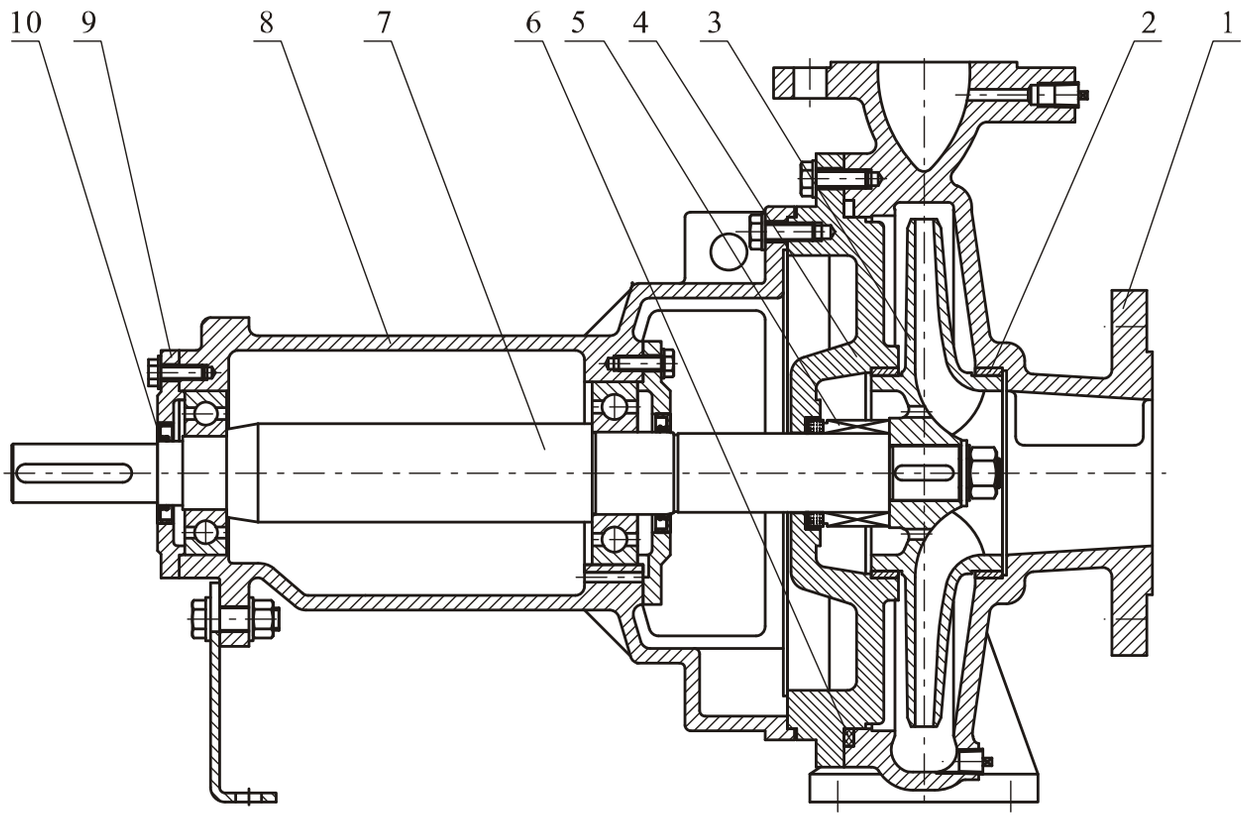
- Back-pull-out design, without having to disturb pump body and pipelines when servicing.
- All the models only use 4 kinds of pump shafts and bearing cover, make parts exchangeable.
- Impeller is optimum design, inlet is enlarged, no whirlpool, deduct the water pump NPSH efficiently, which makes pump work stable with little noise.
- Casing and casing cover use wearing neck ring structure, which makes pump easy to maintain, makes parts work longer. The replaceable seal ring, makes pump work efficiently in a long time.

Model performance drawing





Sectional drawing



Part list

No.	Name	Material	Code/AISI/ASTM
1	Casing	Cast Iron HT200	ASTM25B
2	Wear ring	Cast Iron HT200	ASTM25B
3	Impeller	Cast Iron HT200	ASTM25B
4	Casing cover	Cast Iron HT200	ASTM25B
5	Mechanical seal	Carbon/Silicon Carbide	
6	O ring	NBR	
7	Shaft	SS 2Cr13	AISI420
8	Bearing housing	Cast Iron HT200	ASTM25B
9	Bearing cover	Cast Iron HT200	ASTM25B
10	Seal	NBR	

Models

2 Pole

No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
1	50-32-160/3	12.5	28	3	2900
2	50-32-160/4		36	4	
3	50-32-160/5.5		44	5.5	
4	50-32-200/7.5		55	7.5	
5	50-32-200/11		74	11	2950
6	65-40-200/7.5	25	48	7.5	2900
7	65-40-200/11		62	11	2950
8	65-40-200/15		72	15	
9	65-40-250/18.5		84	18.5	
10	65-40-250/22		95	22	
11	65-40-250/30		105	30	
12	65-40-315/22		105	22	
13	65-40-315/30		120	30	
14	65-40-315/37		145	37	
15	65-40-315/45		165	45	
16	65-50-160/4		28	4	2900
17	65-50-160/5.5		36	5.5	
18	65-50-160/7.5		42	7.5	
19	80-50-200/11	50	44	11	2950
20	80-50-200/15		57	15	
21	80-50-200/18.5		64	18.5	
22	80-50-200/22		71	22	
23	80-50-250/30		84	30	
24	80-50-250/37		100	37	
25	80-50-315/37		105	37	
26	80-50-315/45		125	45	
27	80-50-315/55		140	55	
28	80-50-315/75		152	75	

Models

2 Pole

No.	Model	Q [m³/h]	H [m]	Motor [kW]	n [r/min]
29	80-65-160/5.5	50	22	5.5	2900
30	80-65-160/7.5		29	7.5	
31	80-65-160/11		38	11	2950
32	80-65-160/15		44	15	
33	100-65-200/18.5	100	36	18.5	2950
34	100-65-200/22		43	22	
35	100-65-200/30		56	30	
36	100-65-200/37		67	37	
37	100-65-250/45		80	45	
38	100-65-250/55		88	55	
39	100-65-250/75		108	75	
40	100-65-315/90		128	90	
41	100-65-315/110		148	110	
42	100-80-160/11		23	11	
43	100-80-160/15		30	15	
44	100-80-160/18.5		35	18.5	
45	100-80-160/22		40	22	
46	125-100-200/30	200	34	30	
47	125-100-200/37		41	37	
48	125-100-200/45		48	45	
49	125-100-200/55		55	55	
50	125-100-200/75		66	75	
51	125-100-250/75		75	75	
52	125-100-250/90		86	90	
53	125-100-250/110		100	110	
54	125-100-315/90		93	90	
55	125-100-315/110		108	110	
56	125-100-315/132		124	132	
57	125-100-315/160		144	160	

2 POLE

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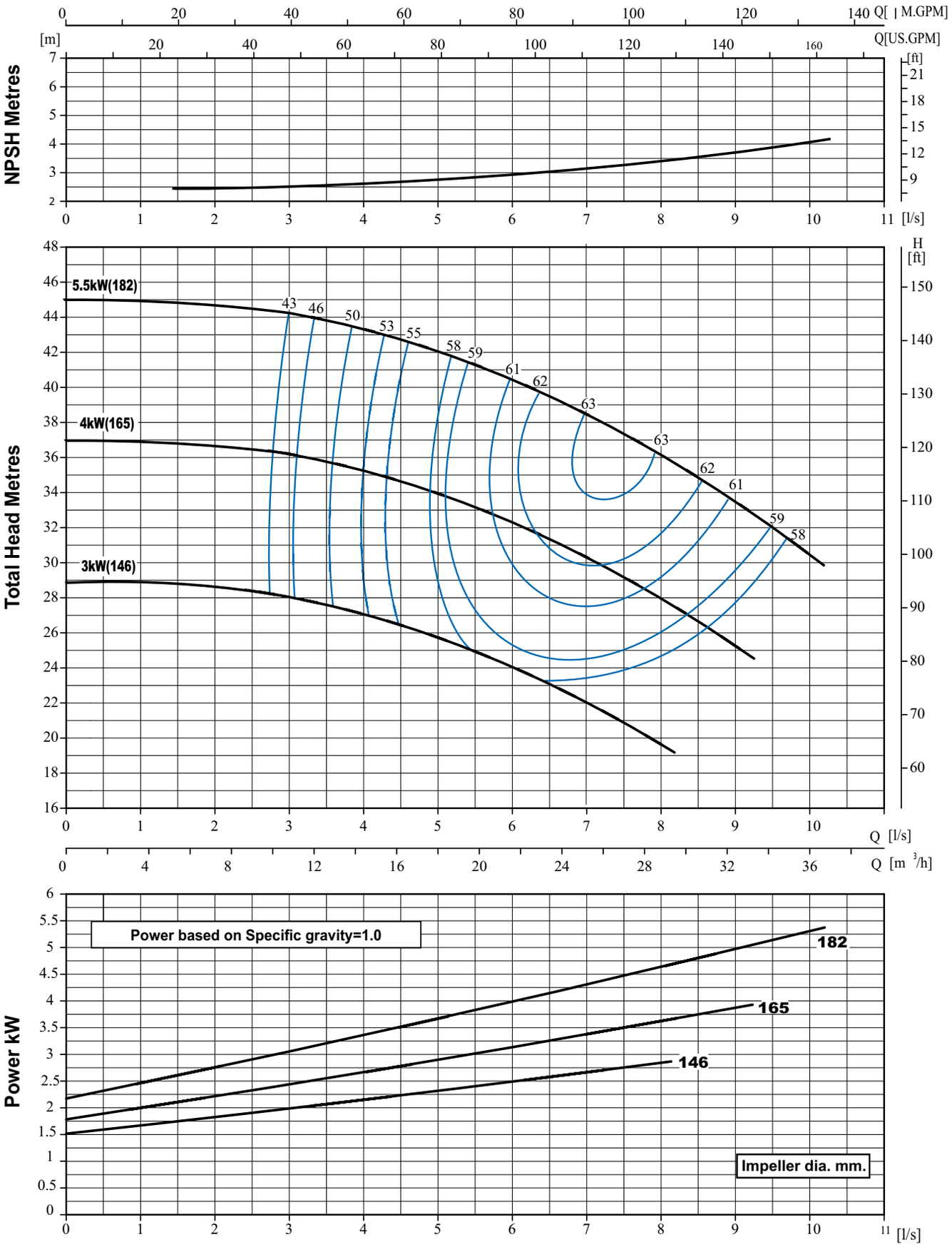
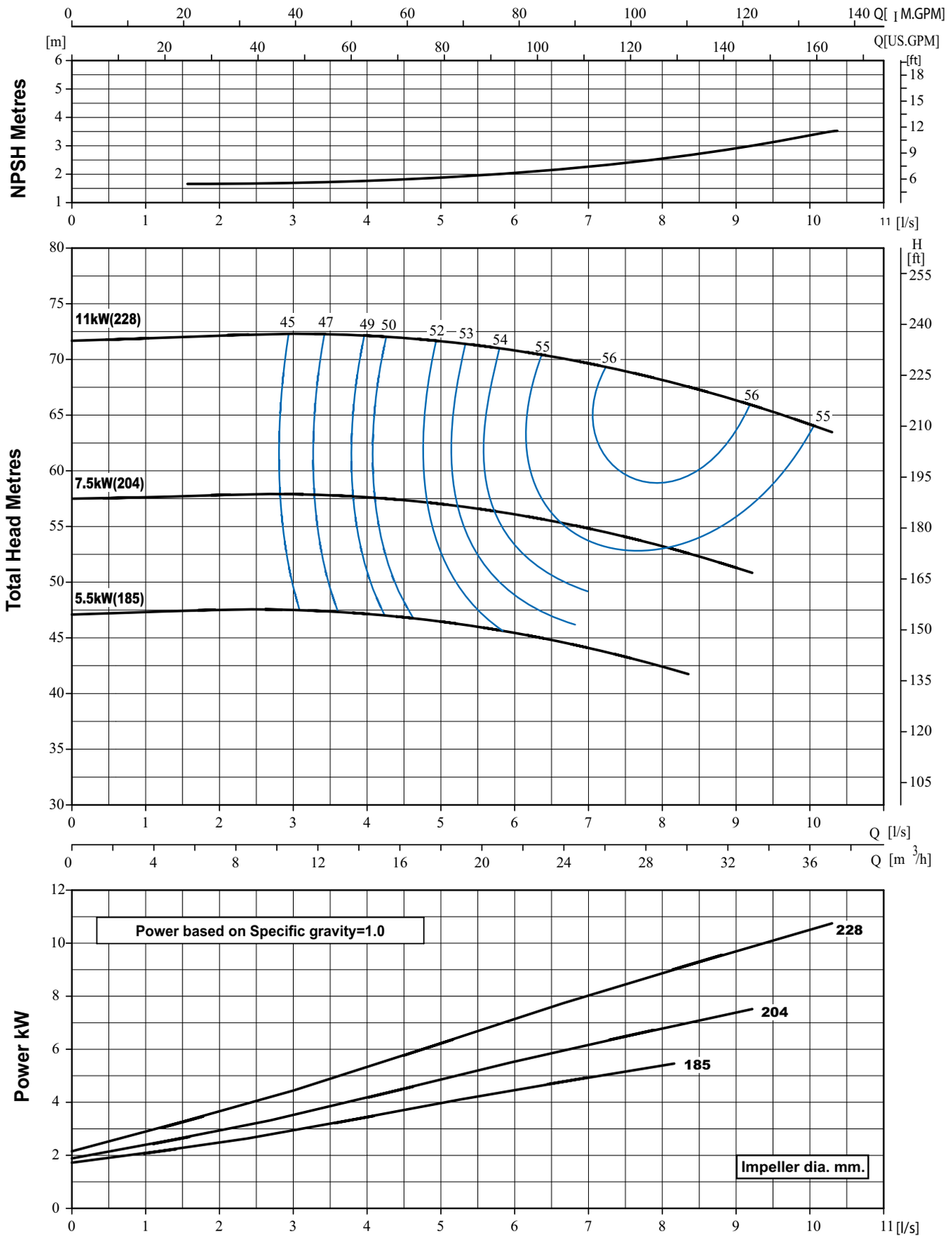


Data based on cold water

SUCTION DIAMETER	*DISCHARGE DIAMETER*	*MAX PRESSURE*	*SPEED*	*PUMP MODEL*
50	**32**	**16 bar**	**2900**	**NS 50-32-160**

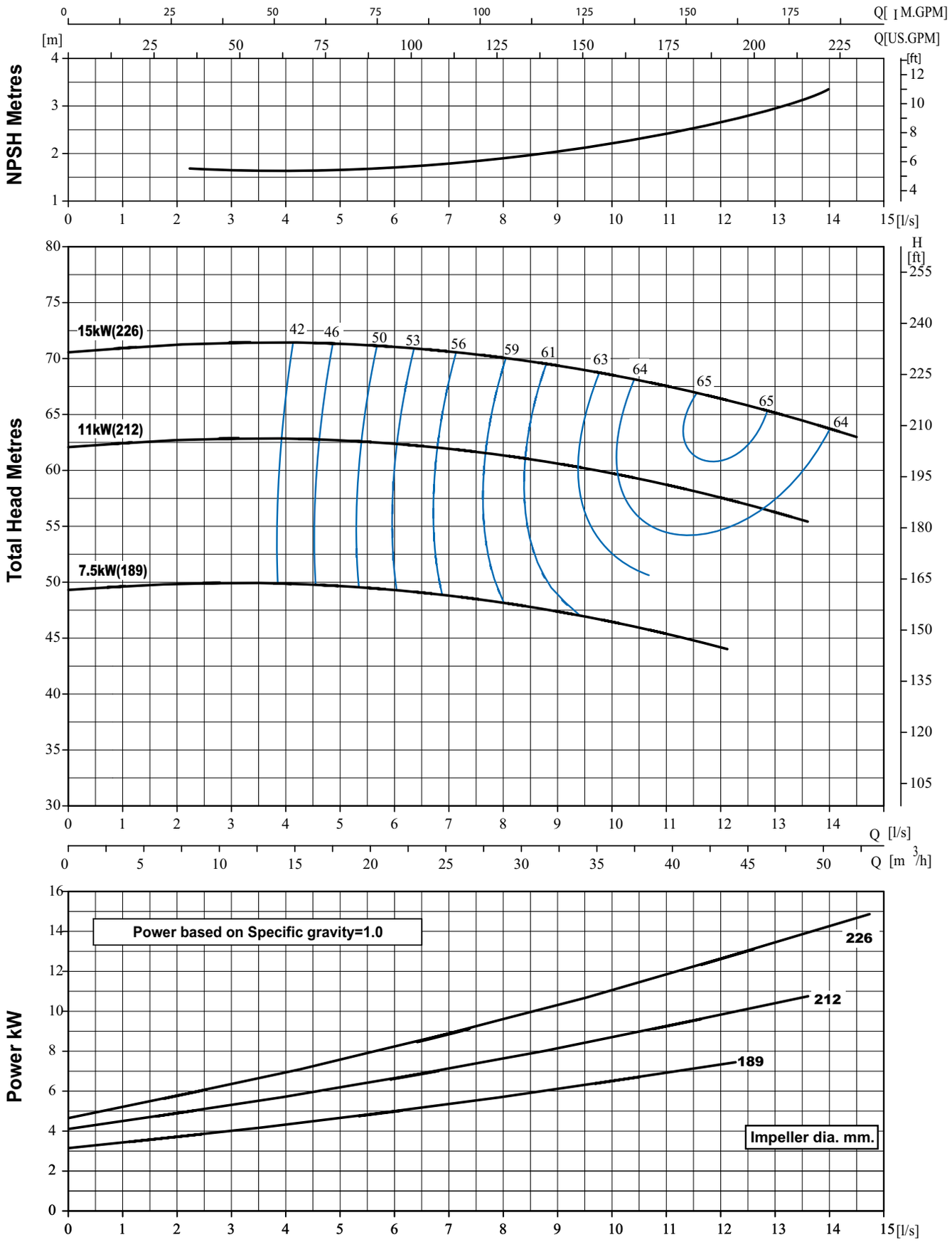


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
50	**32**	**16 bar**	**2900**	**NS 50-32-200**

2 POLE

SPERONI® WATER PUMPS

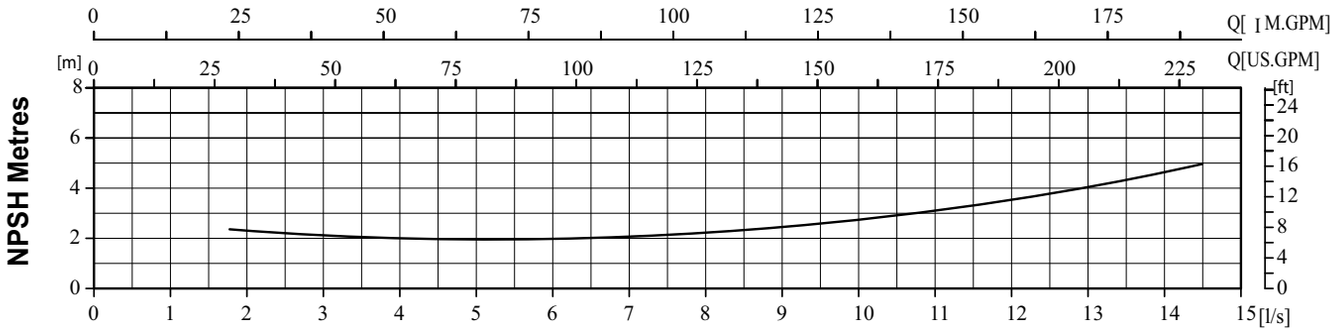


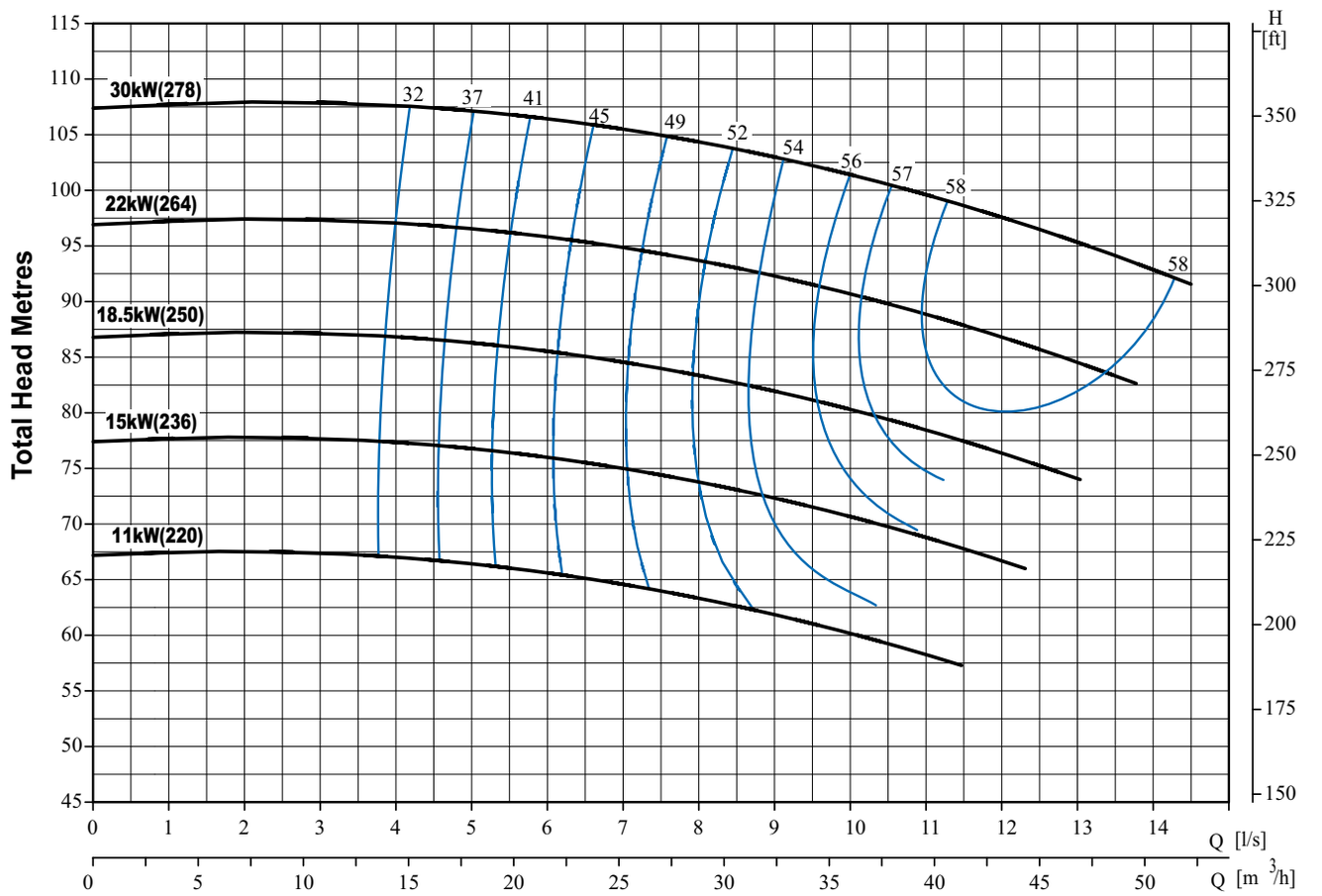
Data based on cold water

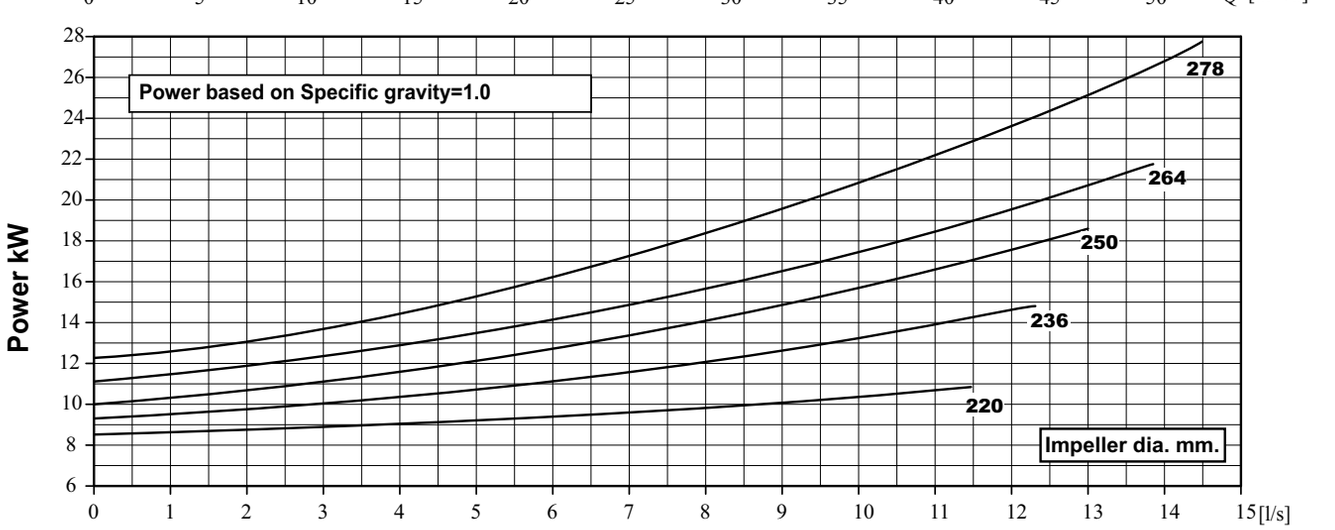
SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
65	**40**	**16 bar**	**2950**	**NS 65-40-200**

SPERONI®
WATER PUMPS

2 POLE





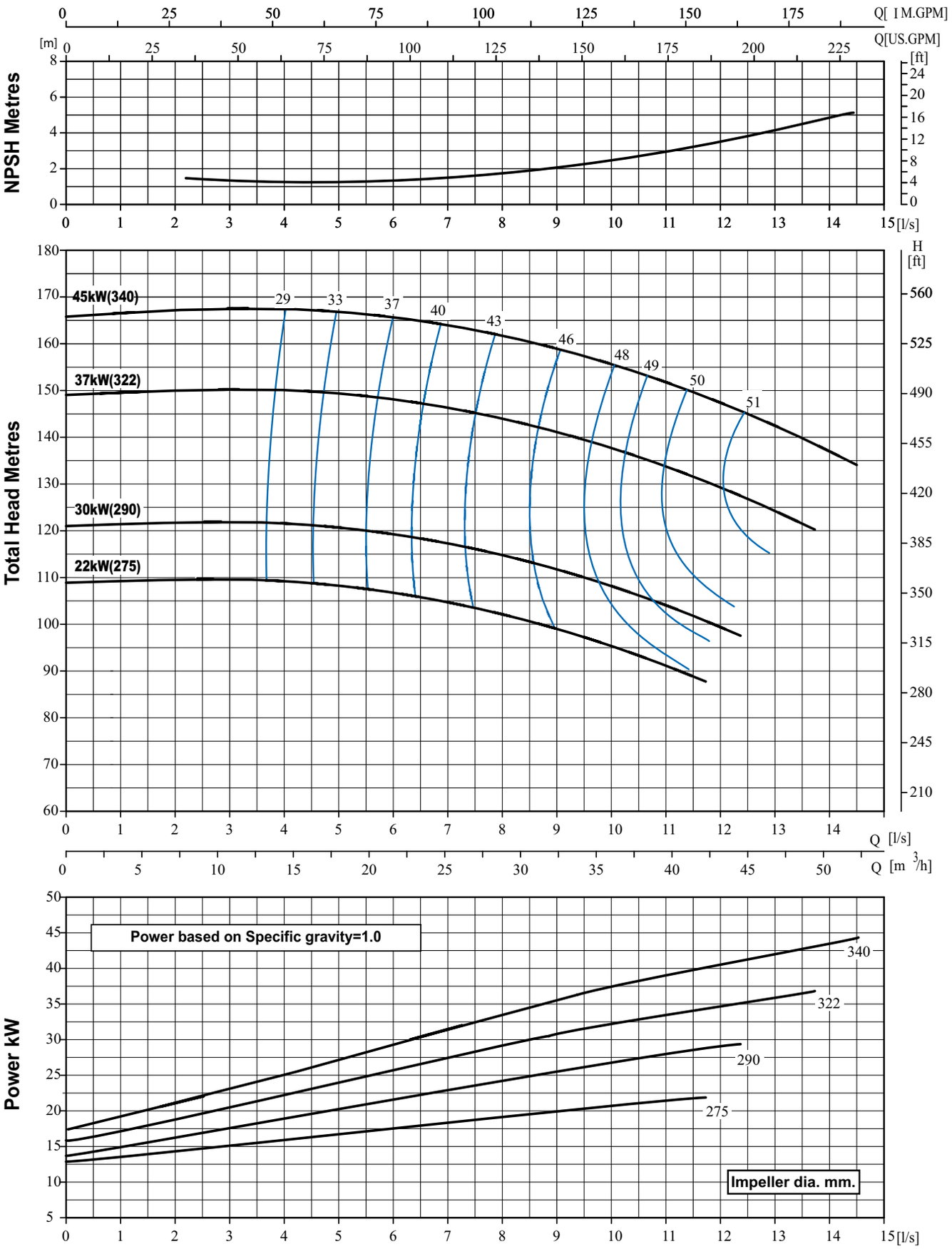


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
65	**40**	**16 bar**	**2950**	**NS 65-40-250**

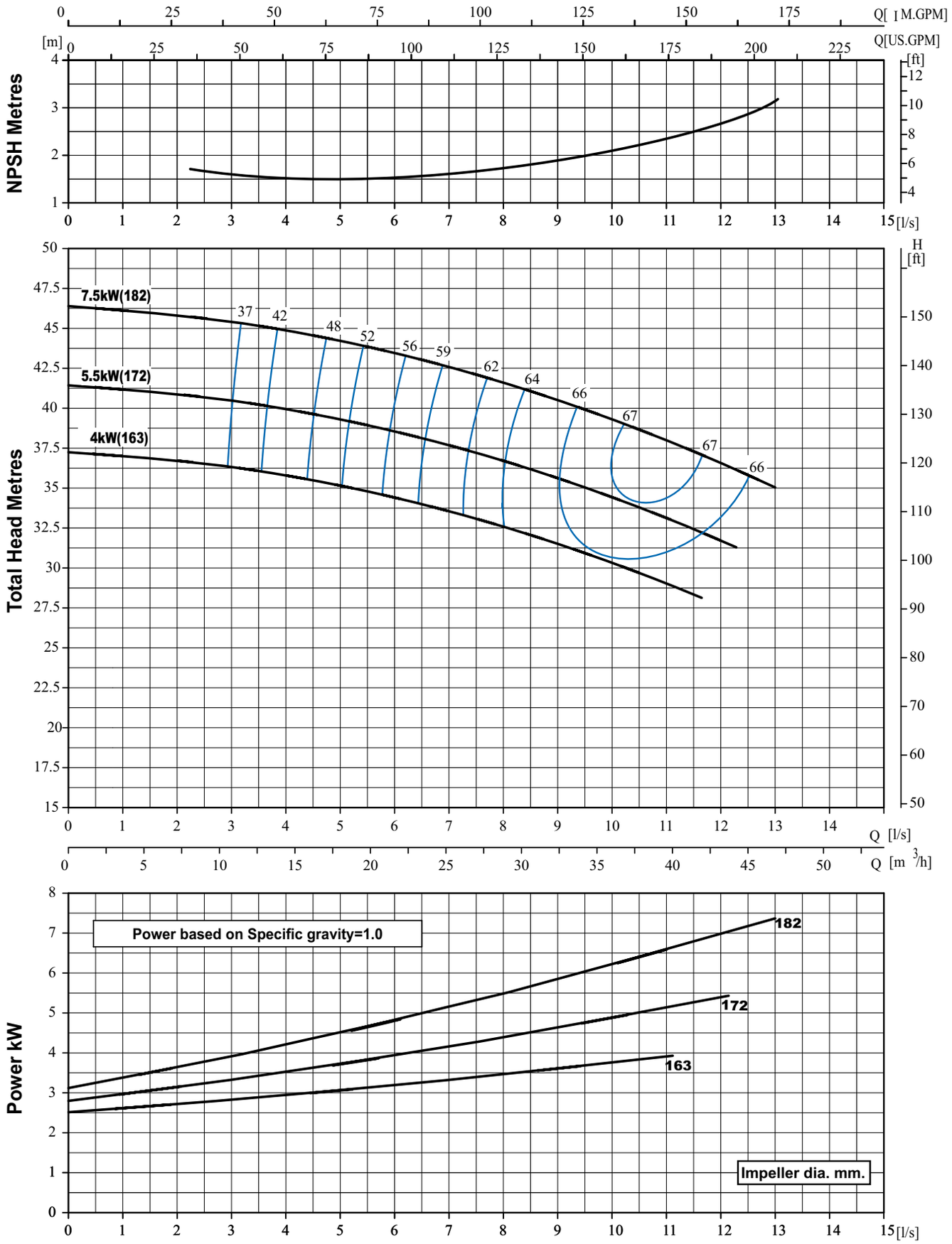
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
65	**40**	**16 bar**	**2950**	**NS 65-40-315**

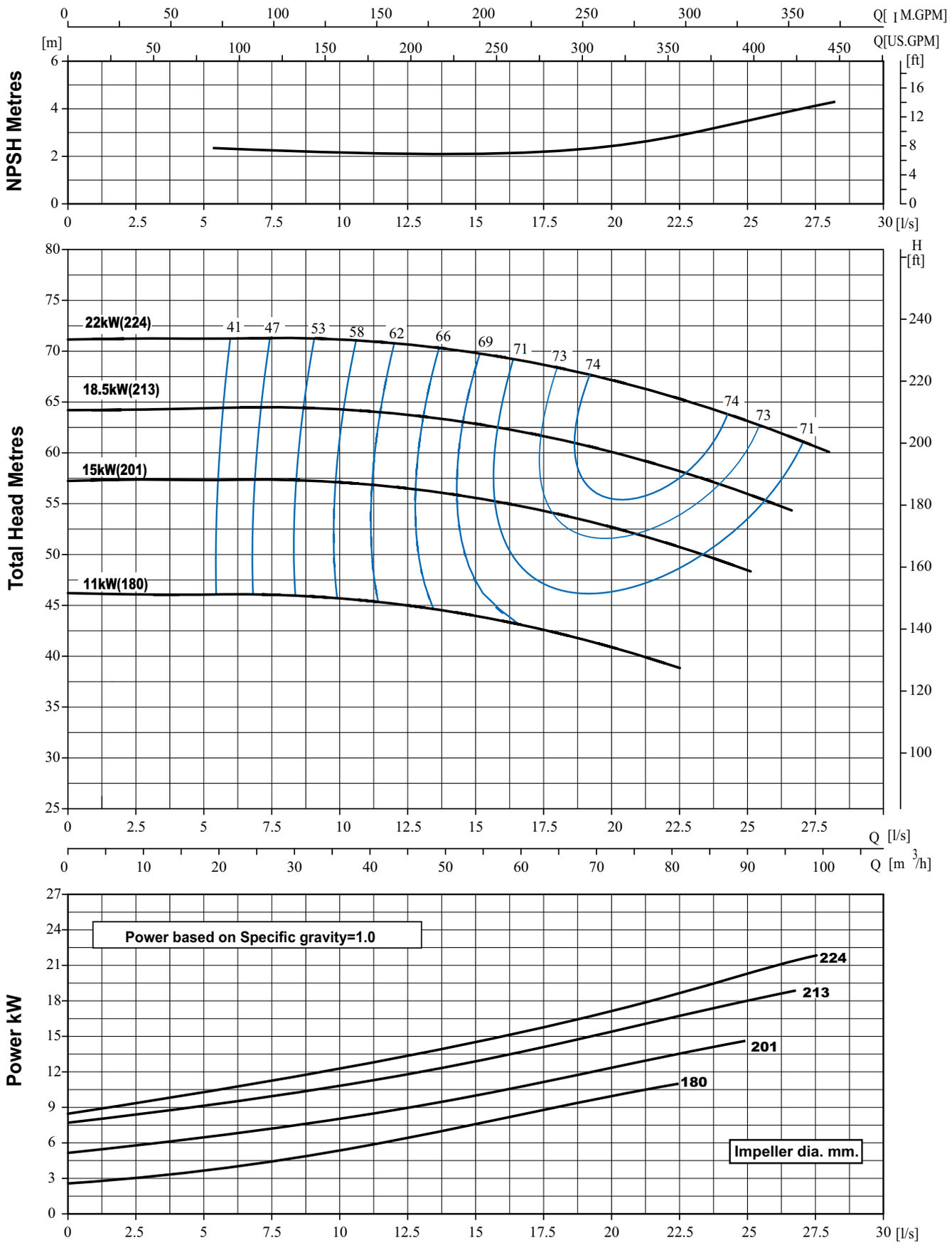


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
65	**50**	**16 bar**	**2900**	**NS 65-50-160**

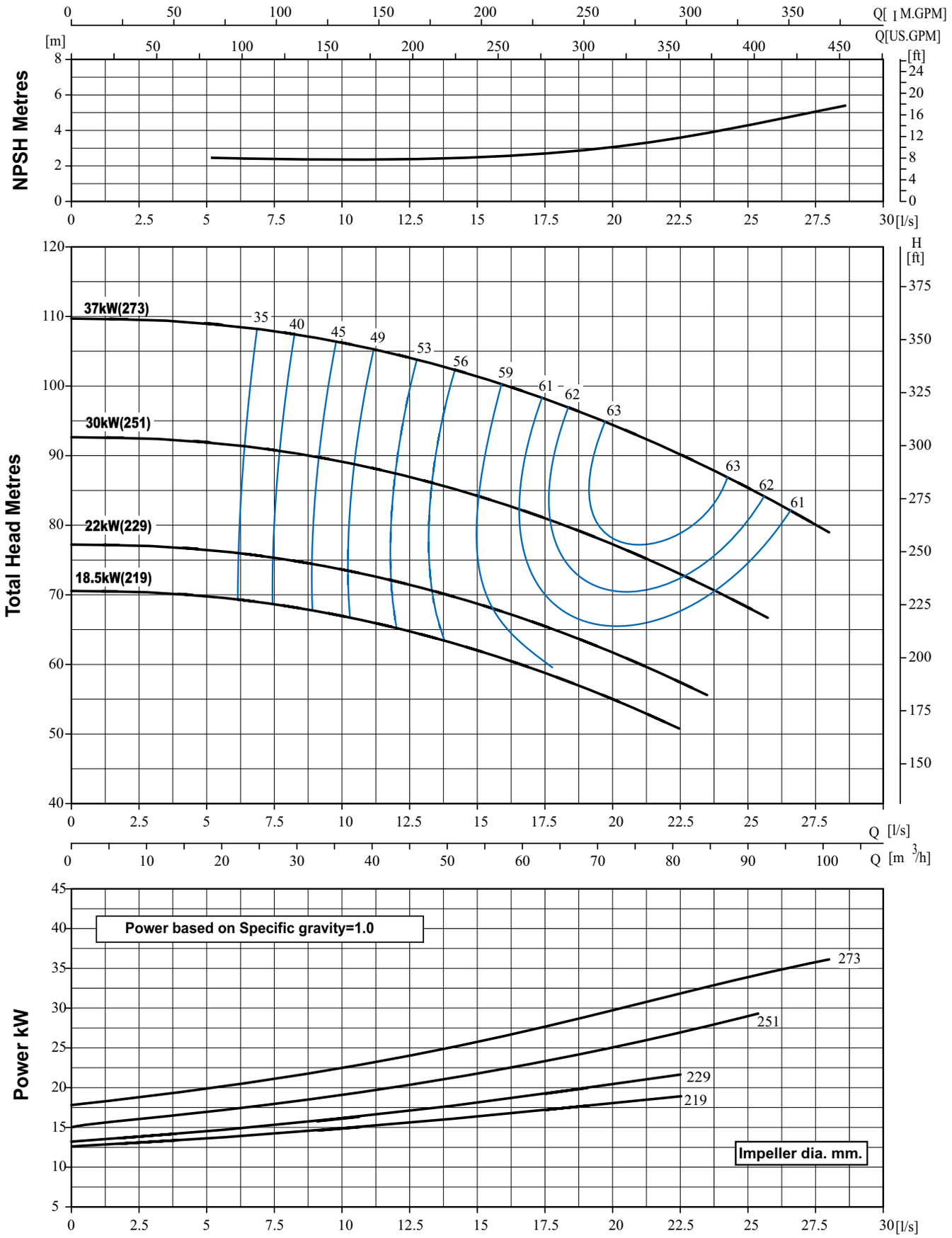
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
80	**50**	**16 bar**	**2950**	**NS 80-50-200**

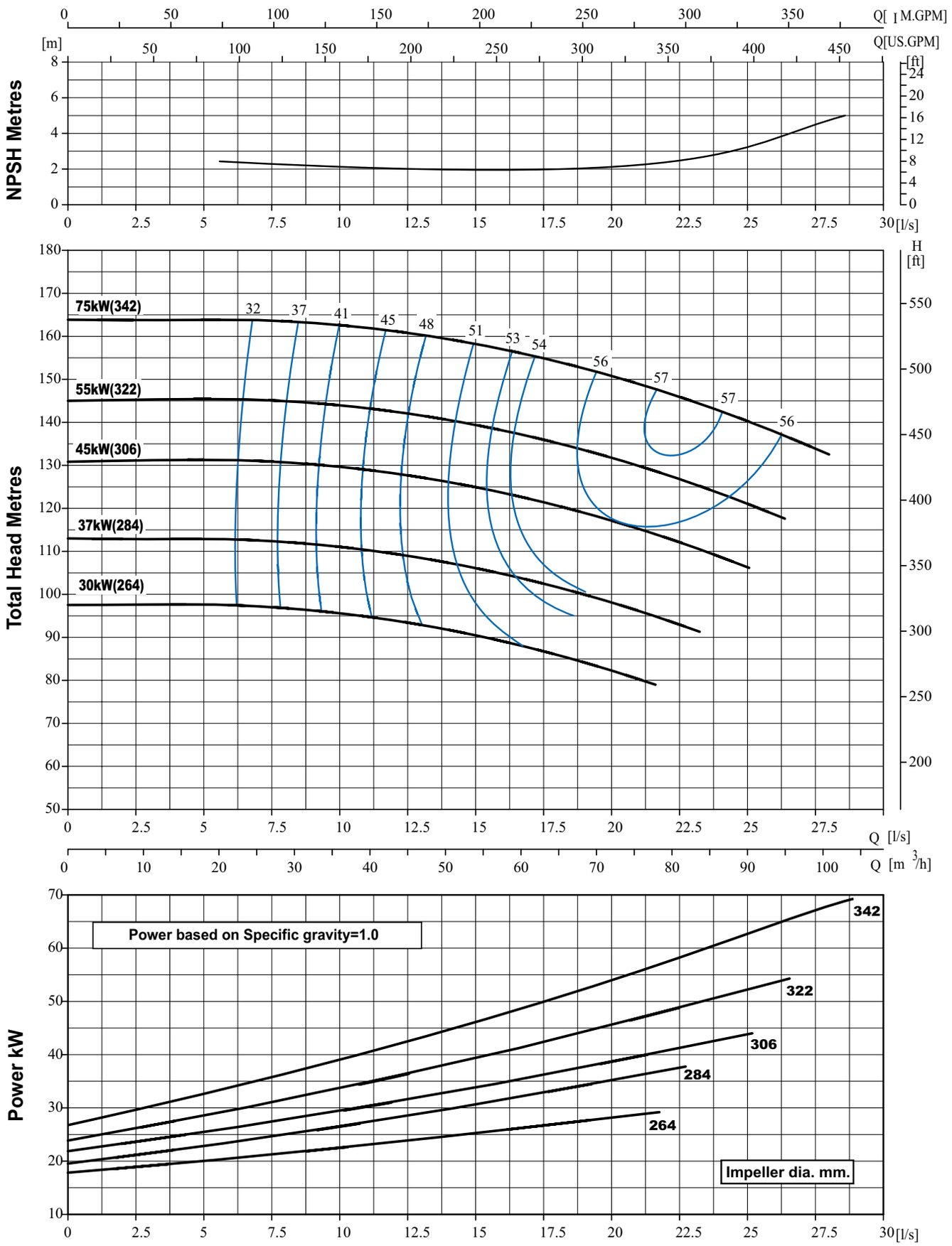


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
80	**50**	**16 bar**	**2950**	**NS 80-50-250**

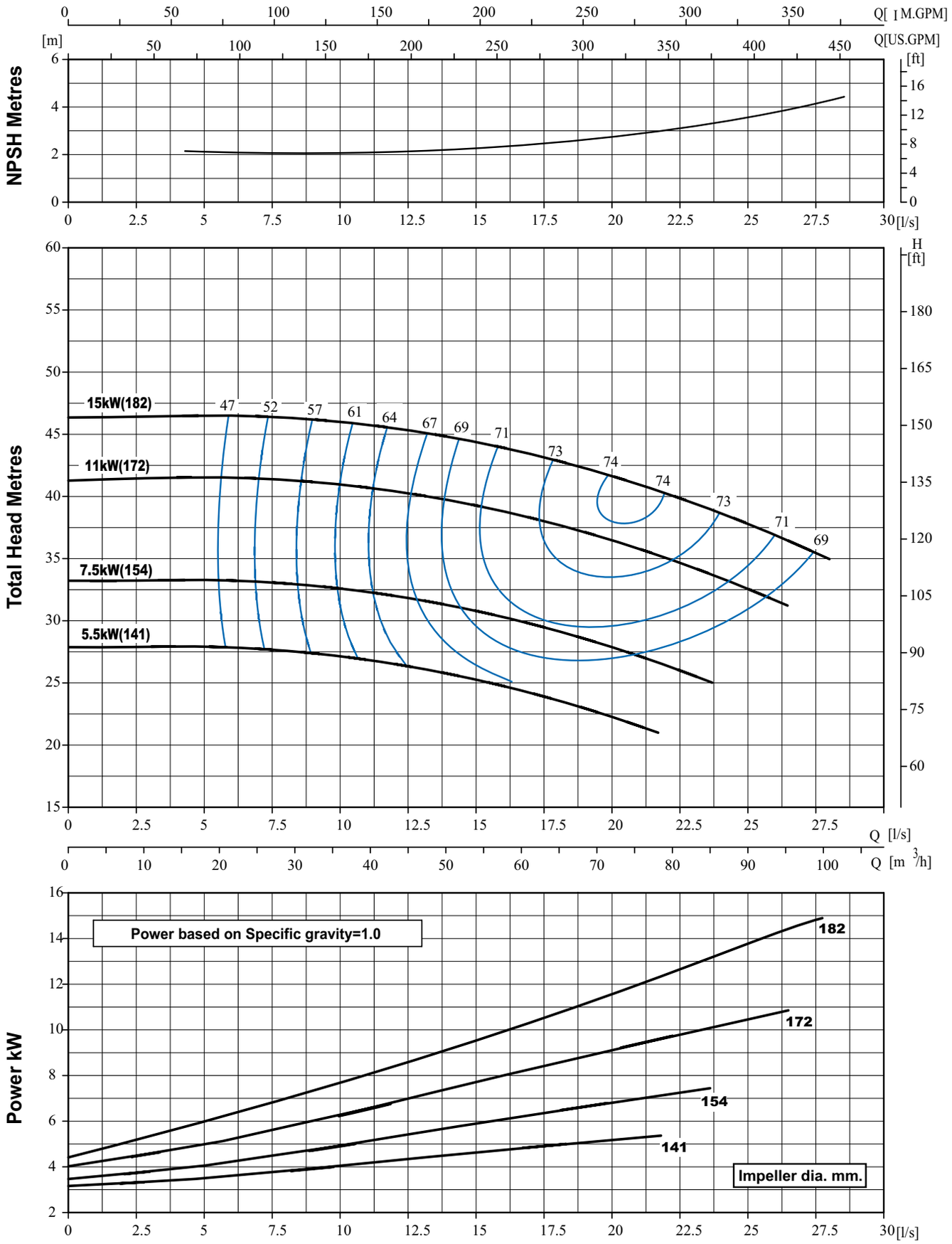
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
80	**50**	**16 bar**	**2950**	**NS 80-50-315**

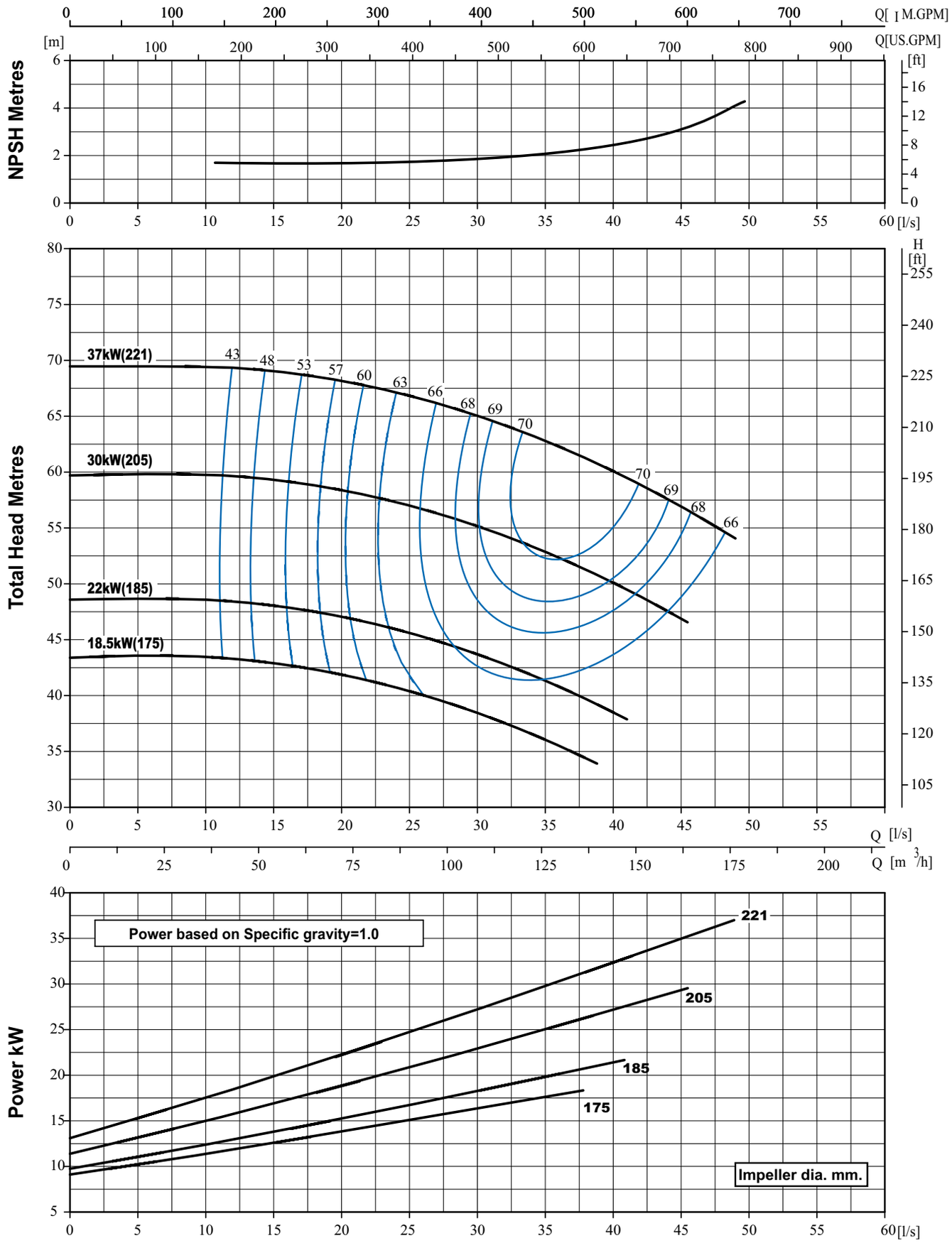


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
80	**65**	**16 bar**	**2950**	**NS 80-65-160**

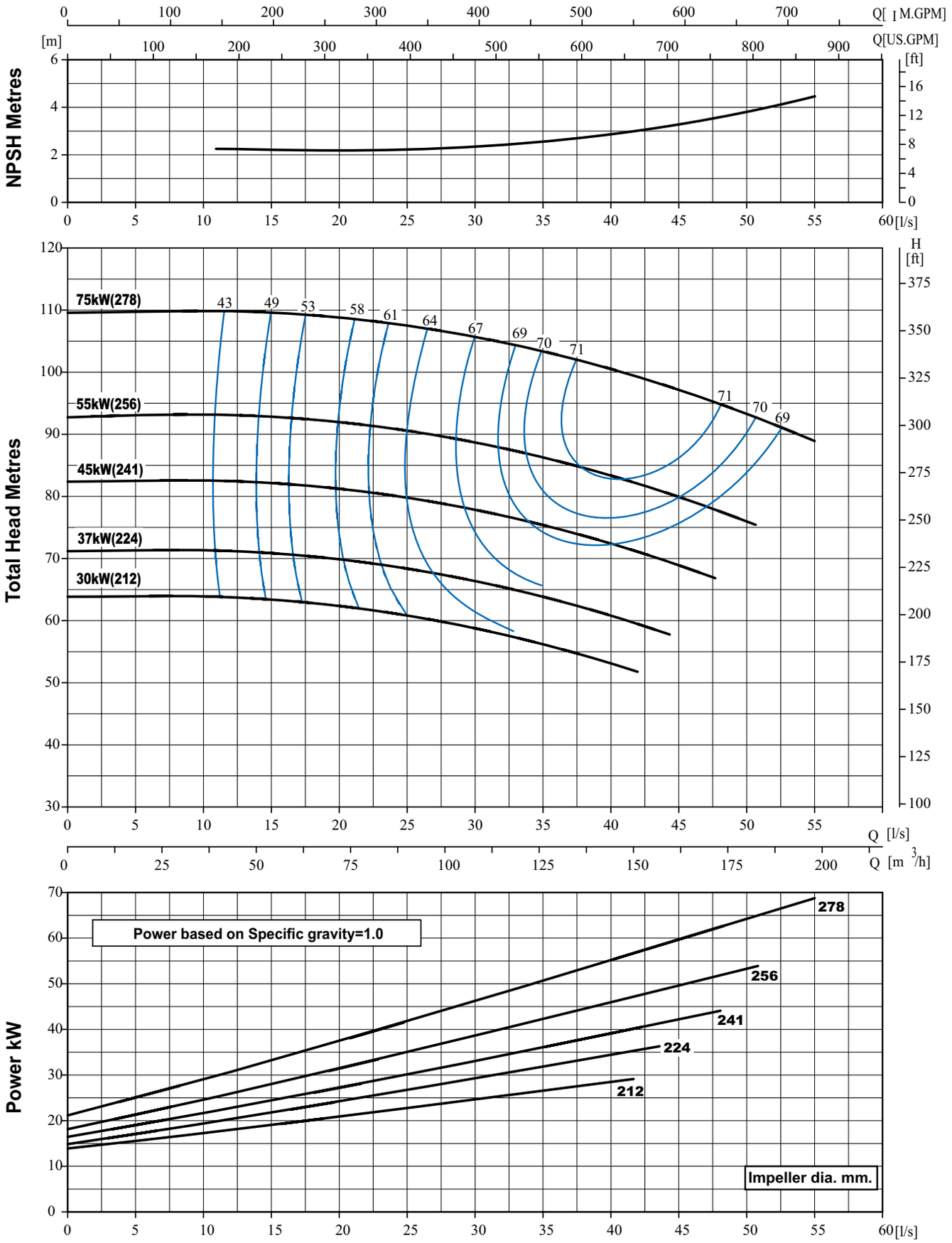
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	*DISCHARGE DIAMETER*	*MAX PRESSURE*	*SPEED*	*PUMP MODEL*
100	**65**	**16 bar**	**2950**	**NS 100-65-200**

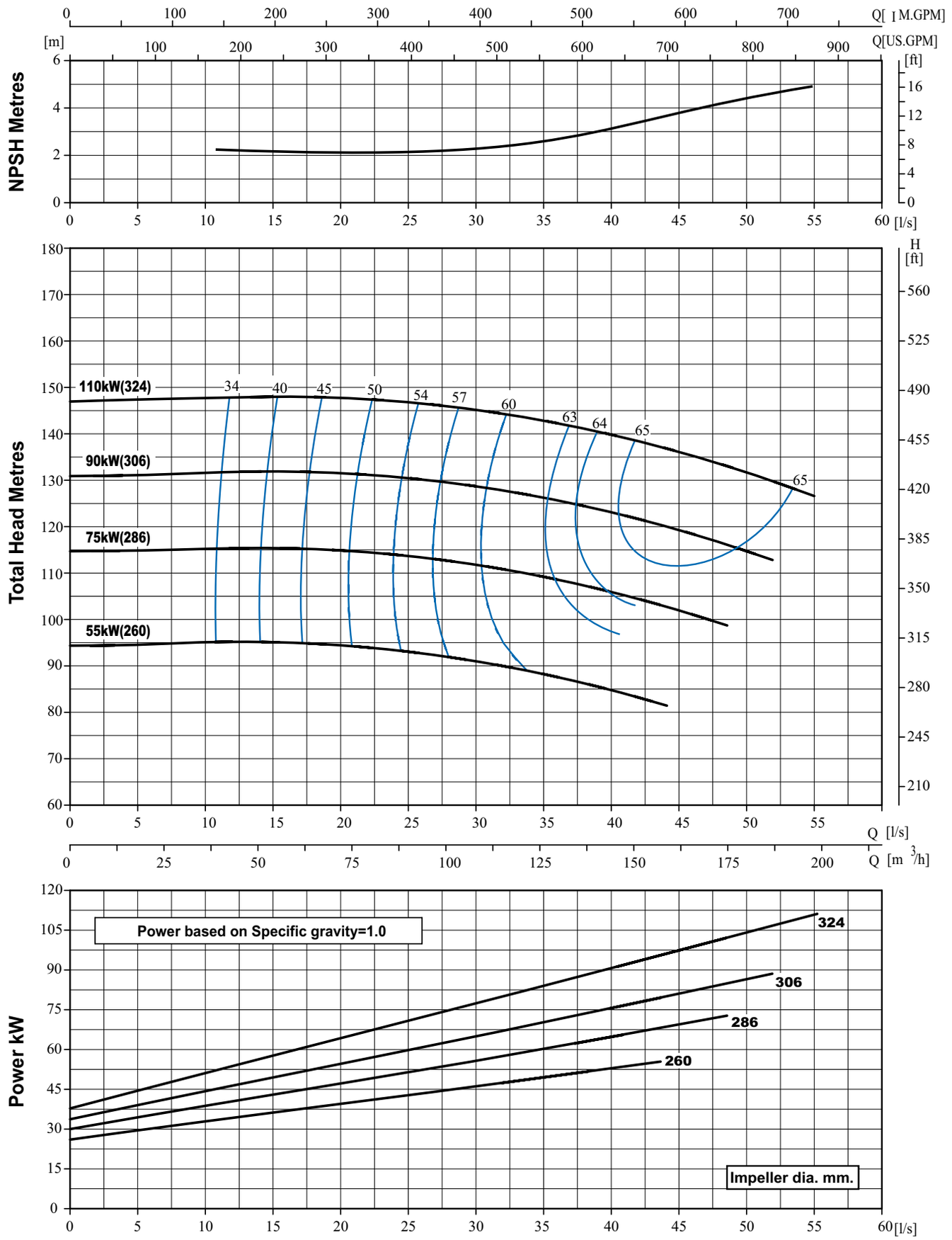


Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
100	**65**	**16 bar**	**2950**	**NS 100-65-250**

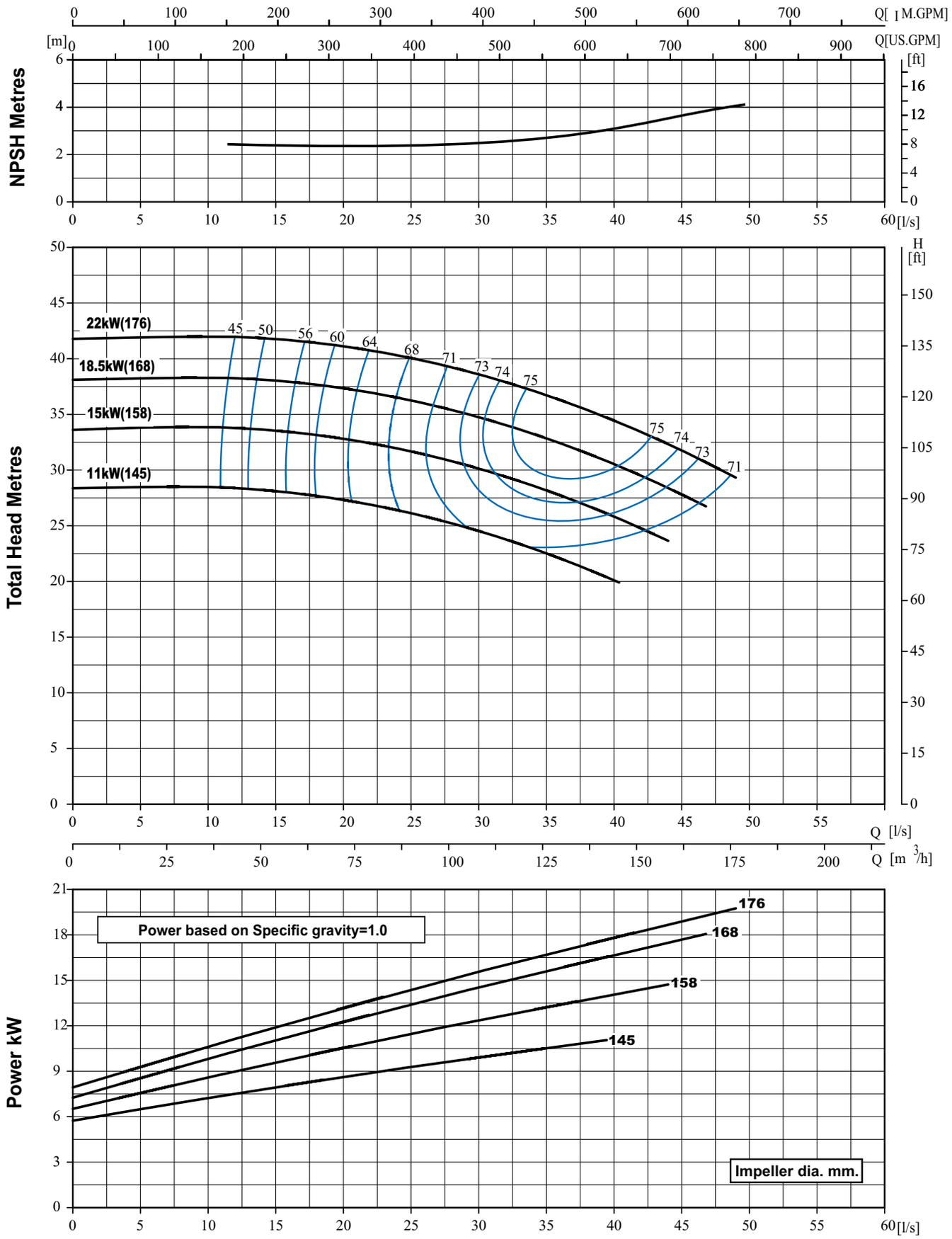
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	*DISCHARGE DIAMETER*	*MAX PRESSURE*	*SPEED*	*PUMP MODEL*
100	**65**	**16 bar**	**2950**	**NS 100-65-315**

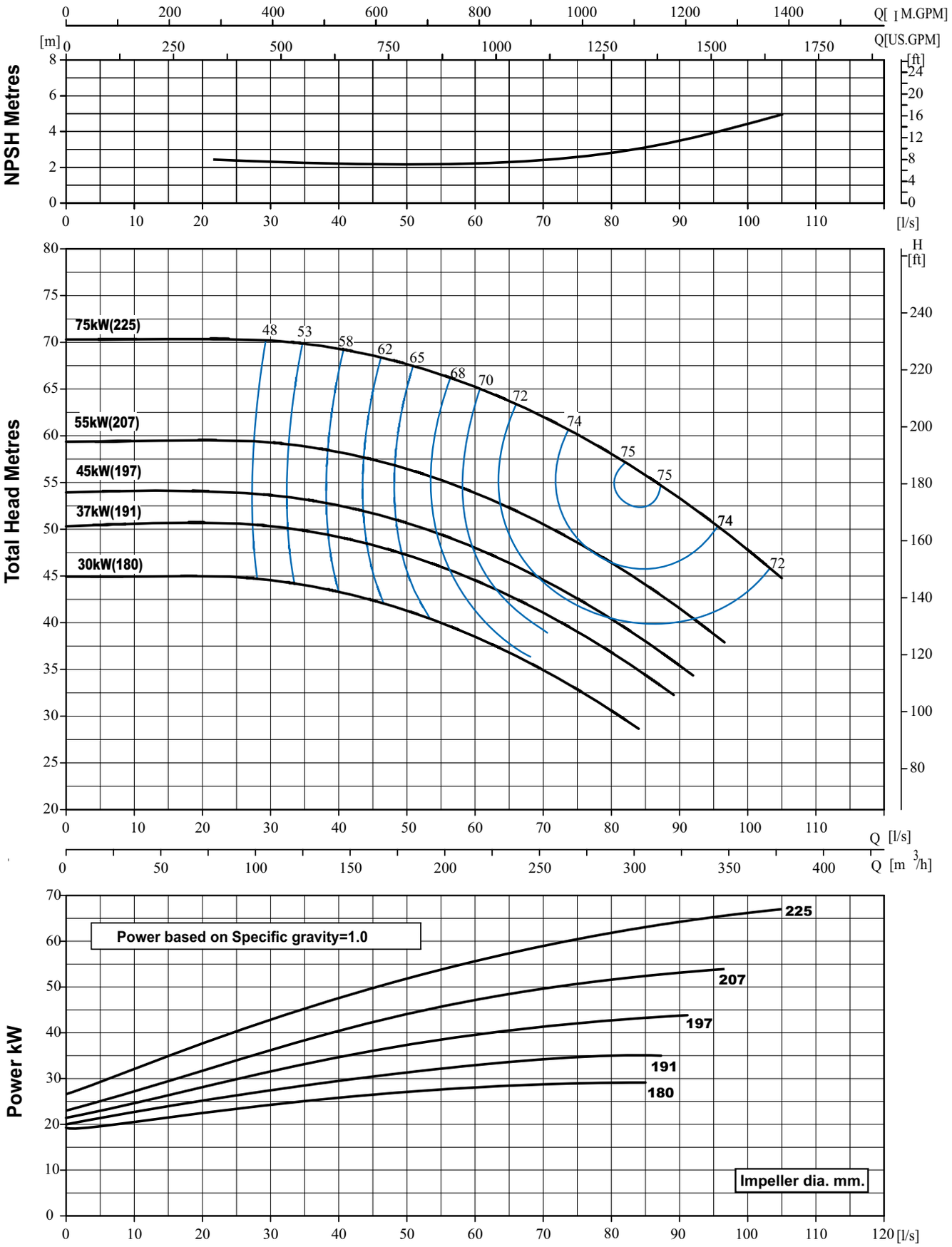


Data based on cold water

SUCTION DIAMETER	*DISCHARGE DIAMETER*	*MAX PRESSURE*	*SPEED*	*PUMP MODEL*
100	**80**	**16 bar**	**2950**	**NS 100-80-160**

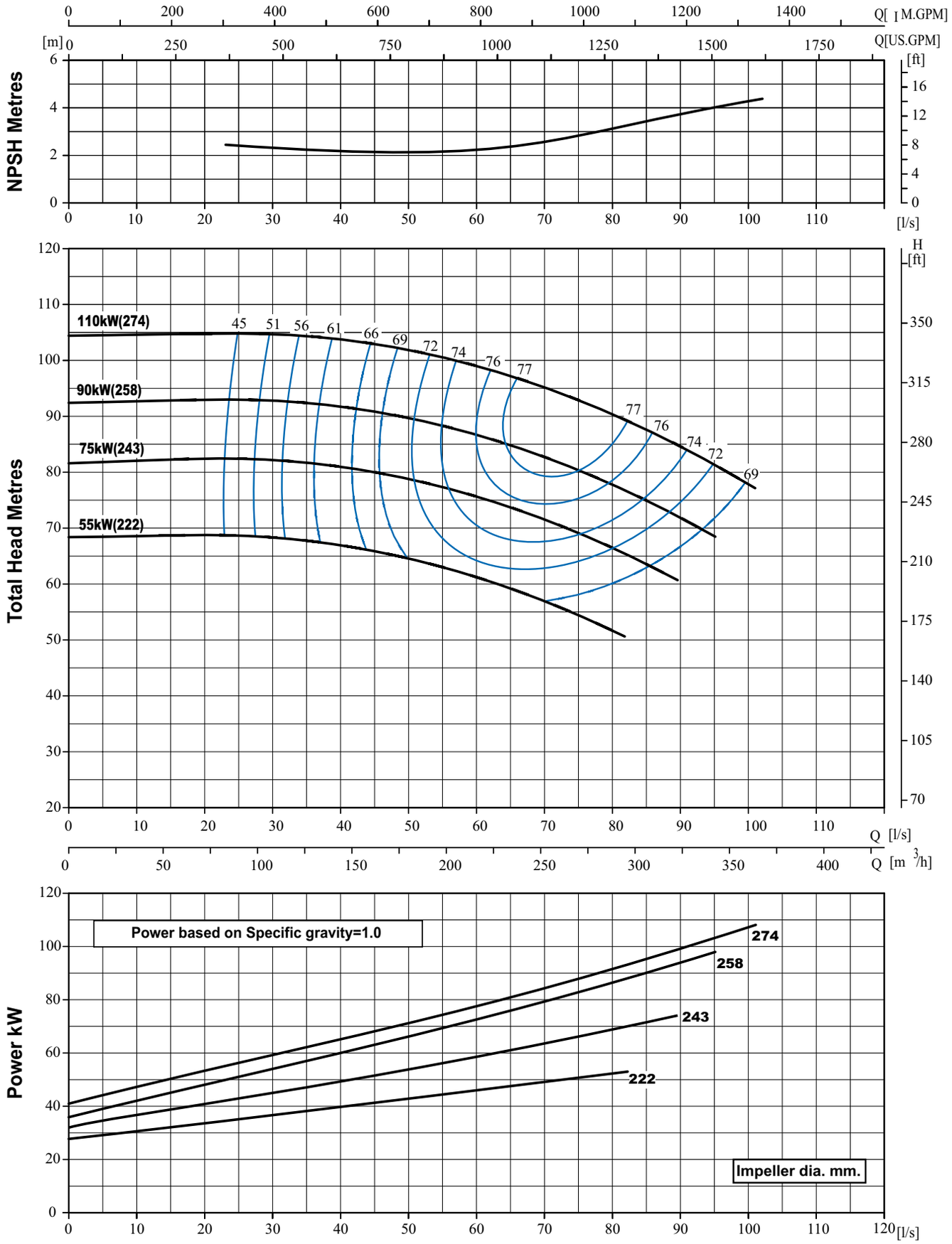
2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
125	**100**	**16 bar**	**2950**	**NS 125-100-200**

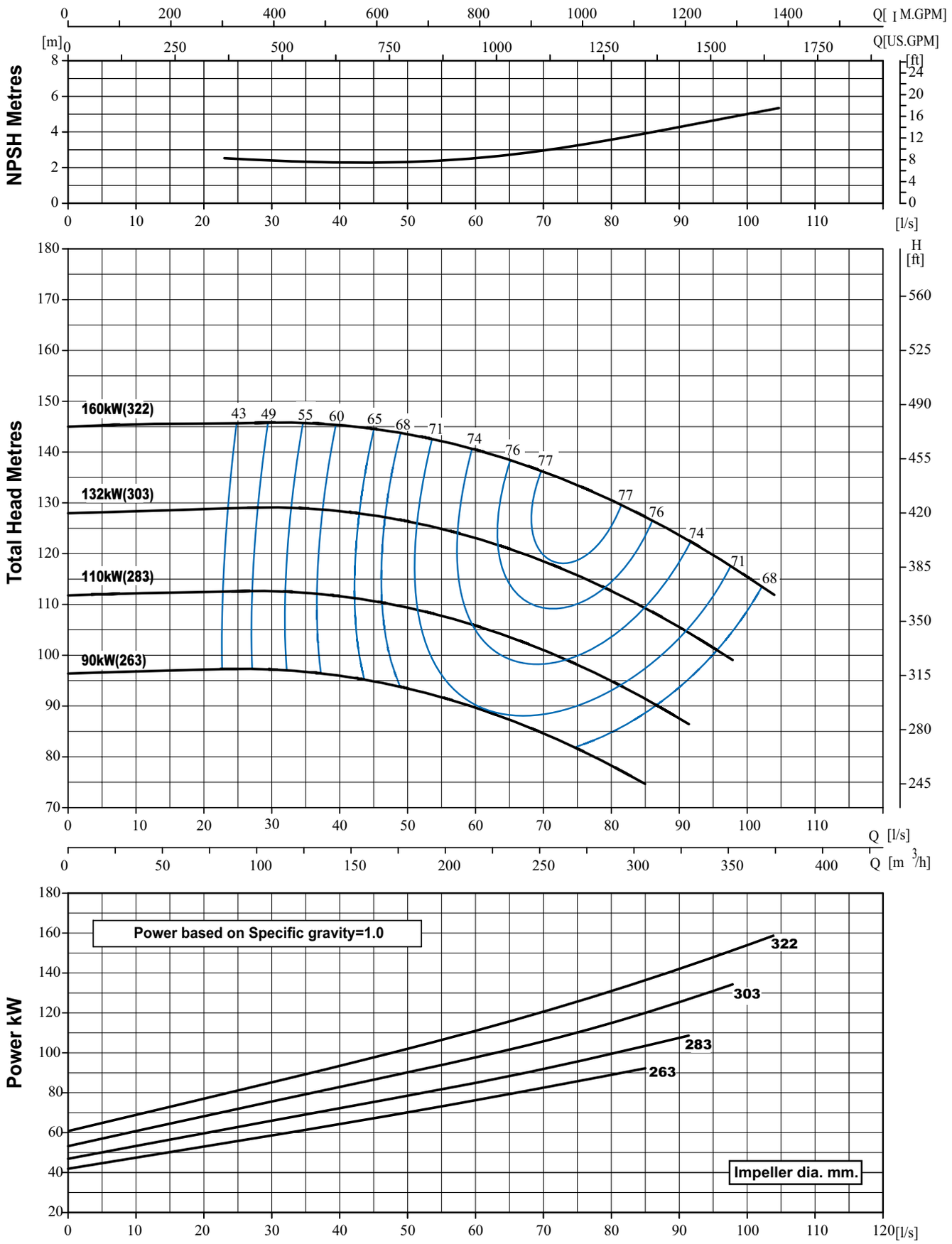


Data based on cold water

SUCTION DIAMETER	*DISCHARGE DIAMETER*	*MAX PRESSURE*	*SPEED*	*PUMP MODEL*
125	**100**	**16 bar**	**2950**	**NS 125-100-250**

2 POLE

SPERONI® WATER PUMPS



Data based on cold water

SUCTION DIAMETER	DISCHARGE DIAMETER	MAX PRESSURE	SPEED	PUMP MODEL
125	**100**	**16 bar**	**2950**	**NS 125-100-315**

Rev. 1 - 03/2010

SPERONI

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