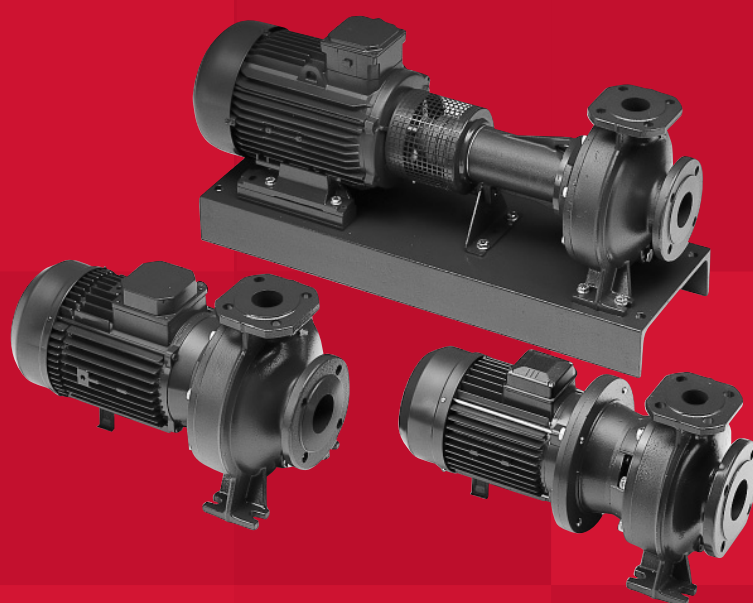


FN Series

Technical Guide

Centrifugal electropumps
in compliance with EN733

50 Hz



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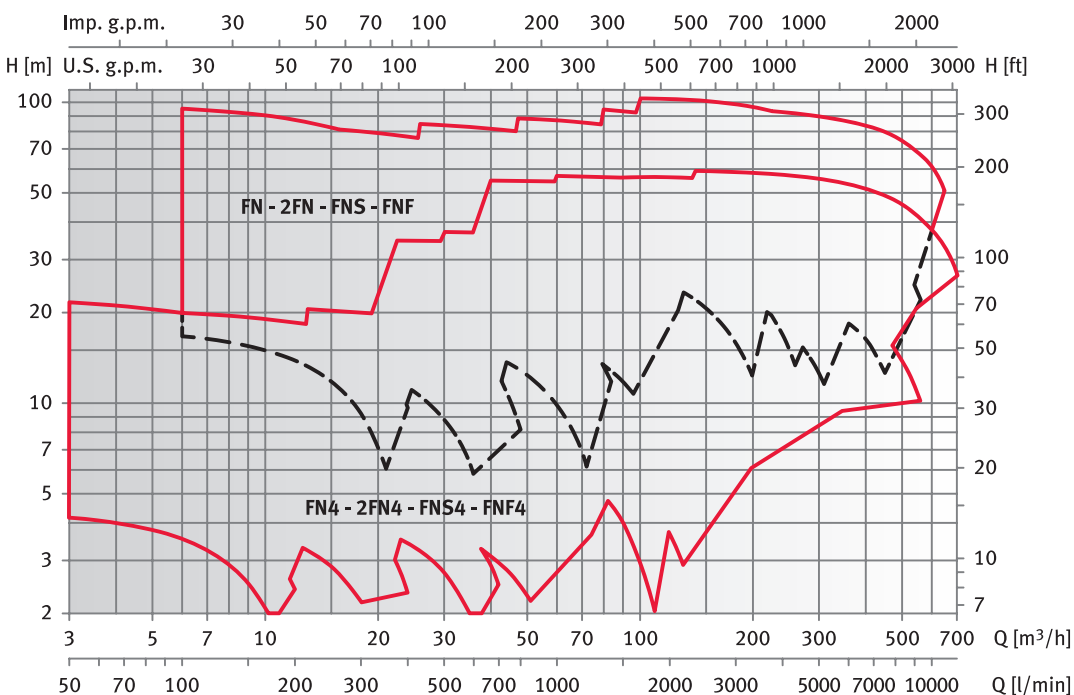
Centrifugal electropumps manufactured to standard EN733 FN series

The FN pump is a cast-iron monoblock, centrifugal pump with axial aspiration and radial impulsion.

Market sectors: Civil, agricultural, industrial.

- >> Handling of clean, chemically non-aggressive water and liquids.
- >> Water supply and pressure boosting.
- >> Irrigation.
- >> Water circulation in air conditioning systems.
- >> Washing systems.
- >> Industry.
- >> Agriculture.
- >> Swimming pools.

Field of application → FN and 2900 rpm



Curves obtained in accordance with ISO9906 annex A.

Specifications

→ The **FN** pump is a monoblock centrifugal pump with standardised dimensions in accordance with the EN 733 standard.

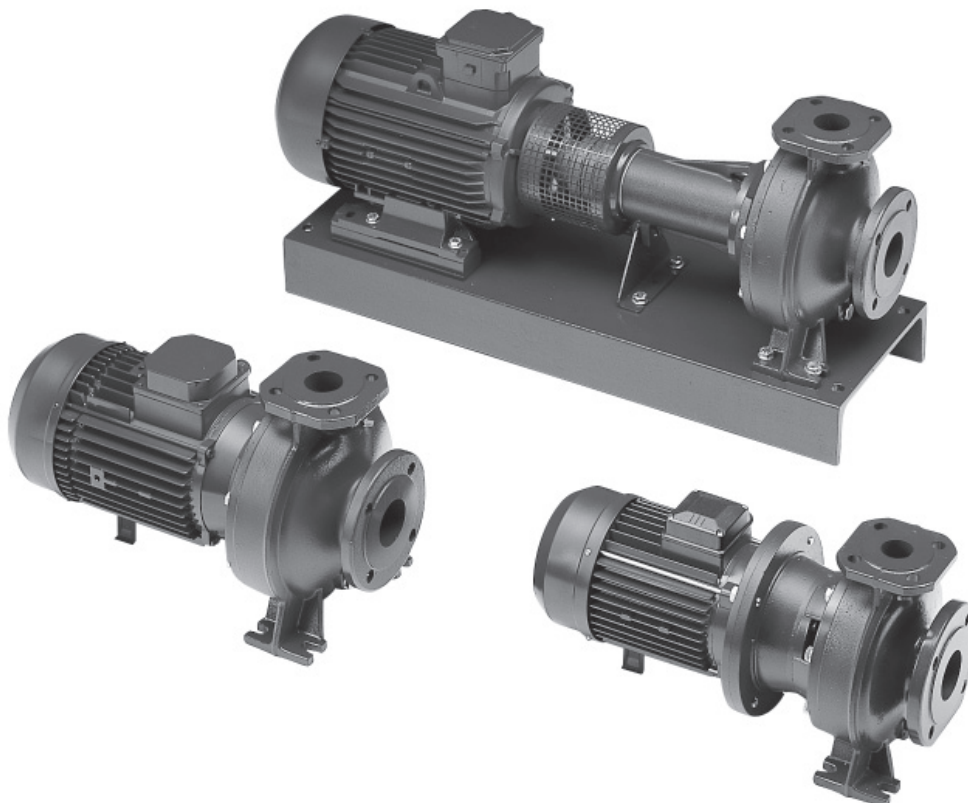
Technical data

- Delivery up to 650 m³/h, 2 poles. 700 m³/h, 4 poles.
- Head over 100 m, 2 poles. 60 m, 4 poles.
- Temperature of pumped liquid:
 - 20°C to +85°C for **FN**32, 40, 50, 65, 80 standard version.
 - 30°C to +120°C for **FN**100, 125, 150 standard version (65-315, 80-315 and 80-400 included).
 - Upon request, up to +140°C for **FN**100, 125, 150.
- Maximum operating pressure:
 - 12 bar (PN 12) up to **FN**80.
 - PN 16 flanges for **FN**100, 125, 150.
 - Maximum pressure in pump casing 12 bar for temperatures up to 120°C, 10 bar for temperatures ranging from 120°C to 140°C.
- Wear rings made of AISI 316L stainless on impeller front and rear wear plates up to **FN**80 (65-315, 80-315 and 80-400 excluded).
- Mechanical seal according to EN12756 (ex DIN 24960).
- Mechanical seal lubricated by internal recirculation of pumped liquid to seal housing for **FN**32, 40, 50, 65, 80 (65-315, 80-315 and 80-400 excluded).
- Mechanical seal locking pin slot for **FN**32, 40, 50, 65, 80 (65-315, 80-315 and 80-400 excluded).
- Counter-clockwise rotation when looking at pump from the suction port side.

- Impeller: made of AISI 316L stainless steel, laser technology welded for sizes 32, 40, 50, 65-125, cast iron for sizes 65-160, 65-200, 65-250, 65-315, 80, 100, 125, 150.
- Bronze impeller available on request (for models normally equipped with cast iron impeller).

Electrical and motor specifications

- Squirrel cage in short circuit, aluminium casing, enclosed construction with external ventilation.
- The surface motors have efficiency values that fall within the range normally referred to as efficiency class 2
- IP55 protection.
- Class F insulation.
- Performances according to EN 60034-1.
- Continuous duty.
- Maximum ambient temperature +40°C.
- Standard voltage:
 - Single-phase version: 220-240 V, 50 Hz.
 - Three-phase version: 230/400 V, 50 Hz for powers up to 4 kW; 400/690 V, 50 Hz for powers above 4 kW.



Construction characteristics

- Cast iron centrifugal pump with end suction and radial discharge ports.
- Hydraulic sizes and nominal diameter (DN) of suction and discharge ports according to EN 733 (ex DIN 24255).
- Flanges according to EN 1092-2 and DIN 2532.
- Back pull-out design (impeller, adaptor and motor can be extracted without disconnecting the pump body from the pipes).

Motor-pump coupling

Three different types of motor/pump couplings are available:

- **FN** Clouse-coupled by means of an adaptor bracket with an impeller keyed directly to the motor shaft extension.
- **FNS** with a bracket, adaptor and rigid coupling keyed to the standard motor shaft extension.
- **FNF** with bracket, support, flexible coupling and aligning and anchoring base.
- Bare shaft pump and version with spacer coupling are also available upon request.

Coating

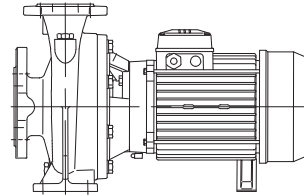
- Type of paint: epoxy-base cationic enamel suitable for contact with drinking water (BS 6920). For FN32, 40, 50, 65, 80 (80-315 and 80-400 excluded).
- Application process: cataphoresis, through immersion in cataphoretic vat and polymerisation in 180°C furnace.
- Paint thickness: 20±2µm .

Accessories on request

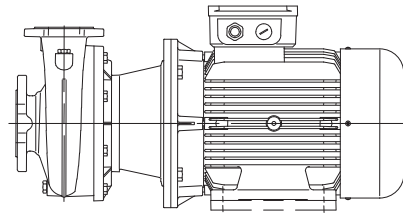
- AISI 316 stainless steel or galvanised iron counterflanges.
- Intermediate flange with pressure gauge connection.
- Pump and motor shims.

Optional features

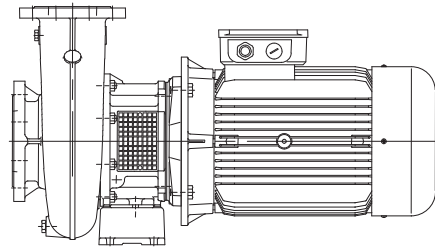
- Different voltages and frequencies.
- Special materials for the mechanical seal and gaskets.
- Model with air valve.
- Mechanical seal with anti-rotation lockpin.
- Model with external fluxing of the mechanical seal.
- Tropicalized motors.
- Version with Hydrovar® control system.
- **FNF** with flexible coupling with spacer.
- Diesel engines.
- Version with bronze impeller.
- Efficiency class 1 motors.



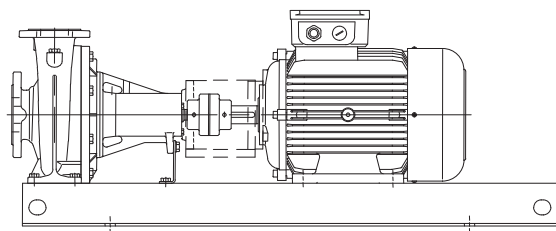
FN - FN4



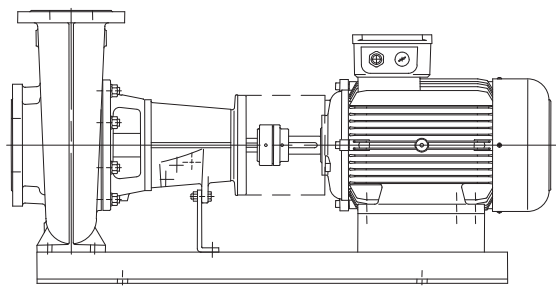
FNS



FNS4

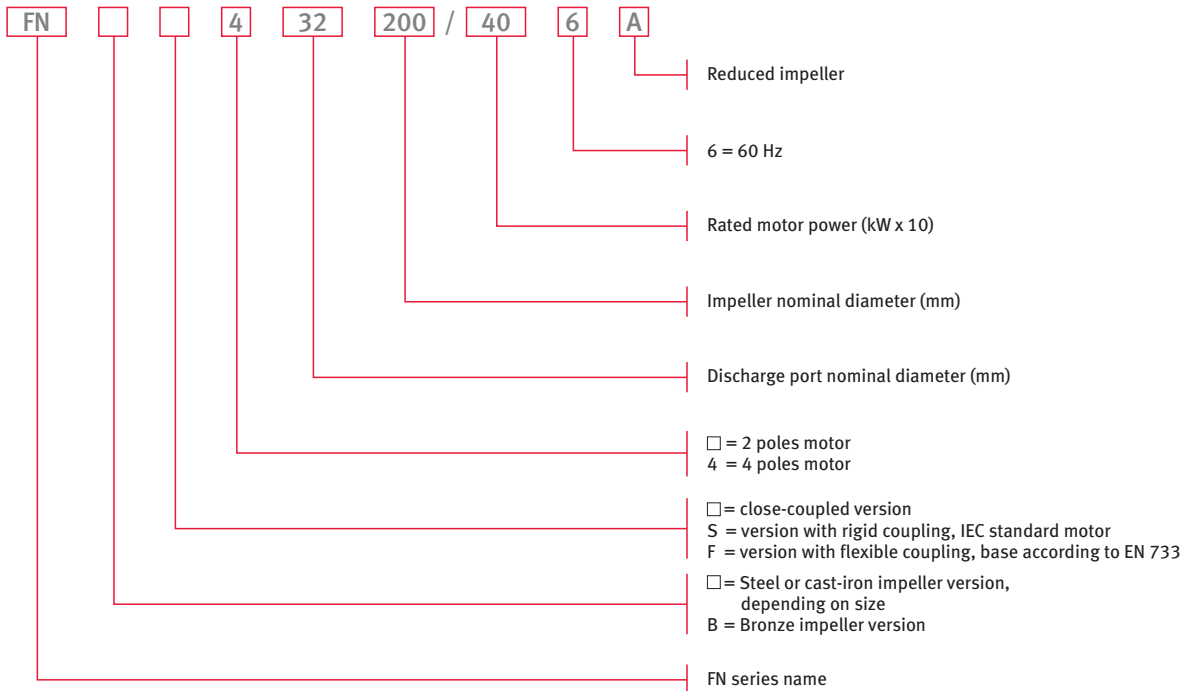


FNF



FNF4

Identification data FN



Nominal data

Pump plate

1: Electropump type
2: Flow range
3: Height range
4: Type of motor
5: Speed
6: Year of manufacture
7: Code
8: Serial number
9: Maximum operating temperature
10: Minimum height
11: Maximum height
12: Nominal rating

Legend

- 1. Electropump type
- 2. Flow range
- 3. Height range
- 4. Type of motor
- 5. Speed
- 6. Year of manufacture
- 7. Code
- 8. Serial number
- 9. Maximum operating temperature
- 10. Minimum height
- 11. Maximum height
- 12. Nominal rating
- 13. Depth

Electropump plate

1: Electropump type
2: Flow range
3: Height range
4: Type of motor
5: Speed
6: Year of manufacture
7: Code
8: Serial number
9: Maximum operating temperature
10: Minimum height
11: Maximum height
12: Nominal rating
13: Depth

2 Poles

SIZE	kW	FNM	FN	FNS	FNF
32 125/07	0.75	•	•	•	•
32 125/11	1.1	•	•	•	•
32 160/15	1.5	•	•	•	•
32 160/22	2.2	•	•	•	•
32 200/30	3		•	•	•
32 200/40	4		•	•	•
32 250/55	5.5		•		
32 250/75	7.5		•		
40 125/11	1.1	•	•	•	•
40 125/15	1.5	•	•	•	•
40 125/22	2.2	•	•	•	•
40 160/30	3		•	•	•
40 160/40	4		•	•	•
40 200/55	5.5		•	•	•
40 200/75	7.5		•	•	•
40 250/92	9.2		•		
40 250/110A	11			•	•
40 250/110	11		•	•	•
40 250/150	15		•	•	•
50 125/22	2.2	•	•	•	•
50 125/30	3		•	•	•
50 125/40	4		•	•	•
50 160/55	5.5		•	•	•
50 160/75	7.5		•	•	•
50 200/92	9.2		•		
50 200/110A	11			•	•
50 200/110	11		•	•	•
50 250/150	15		•	•	•
50 250/185	18.5		•	•	•
50 250/220	22		•	•	•
65 125/40	4		•	•	•
65 125/55	5.5		•	•	•
65 125/75	7.5		•	•	•
65 160/92	9.2		•		
65 160/110A	11			•	•
65 160/110	11		•	•	•
65 160/150	15		•	•	•
65 200/150	15		•	•	•
65 200/185	18.5		•	•	•
65 200/220	22		•	•	•
65 250/220	22		•	•	•
65 250/300	30			•	•
65 250/370	37			•	•

• Available

SIZE	kW	FNM	FN	FNS	FNF
80 160/110			•	•	•
80 160/150			•	•	•
80 160/185			•	•	•
80 200/220			•	•	•
80 200/300				•	•
80 250/370				•	•
80 250/450				•	•
80 250/550				•	•
100 160/185					•
100 160/220				•	•
100 160/300				•	•
100 200/185					•
100 200/300				•	•
100 200/370				•	•
100 200/450					•
100 250/300					•
100 250/450					•
100 250/550					•
100 250/750					•
100 250/900					•
125 200/300					•
125 200/450					•
125 200/550					•
125 270/750					•
125 270/900					•
125 270/1100					•
125 270/1320					•

• Available

Legend

- FN: Close-coupled version with adapter, and impeller keyed directly to the motor shaft extension.
- FN M: FN version with single-phase motor.
- FNS: Coupled by means of adapter, bracket and rigid coupling keyed to the standard motor shaft extension.
- FNF: Coupled by means of adapter, support, flexible coupling, and aligning and anchoring base.

4 Poles

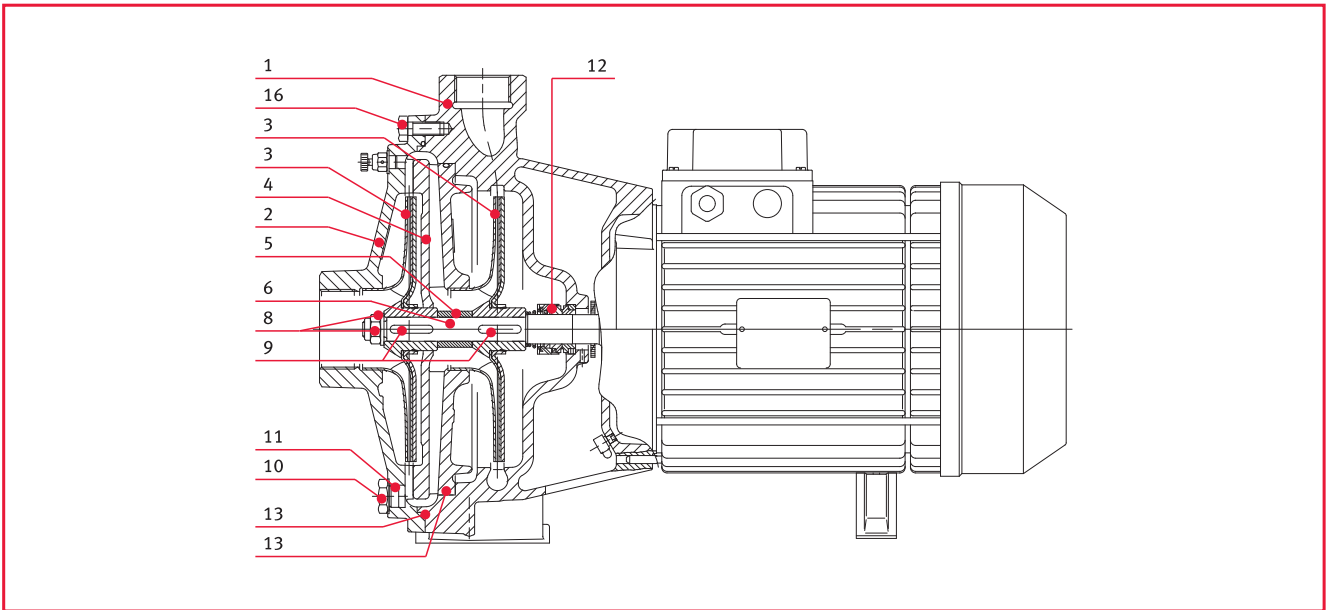
SIZE	kW	FN4	FNS4	FN4
32 125/02A	0.25	•		•
32 125/02	0.25	•		•
32 160/02	0.25	•		•
32 160/03	0.37	•		•
32 200/03	0.37	•		•
32 200/05	0.55	•		•
32 250/07	0.75	•		•
32 250/11	1.1	•		•
40 125/02A	0.25	•		•
40 125/02	0.25	•		•
40 125/03	0.37	•		•
40 160/03	0.37	•		•
40 160/05	0.5	•		•
40 200/07	0.75	•	•	•
40 200/11	1.1	•	•	•
40 250/11	1.1	•	•	•
40 250/15	1.5	•	•	•
40 250/22	2.2	•	•	•
50 125/03A	0.37	•		•
50 125/03	0.37	•		•
50 125/05	0.5	•		•
50 160/07	0.75	•	•	•
50 160/11	1.1	•	•	•
50 200/11	1.1	•	•	•
50 200/15	1.5	•	•	•
50 250/22A	2.2	•	•	•
50 250/22	2.2	•	•	•
50 250/30	3	•	•	•
65 125/05	0.5	•	•	•
65 125/07	0.75	•	•	•
65 125/11	1.1	•	•	•
65 160/11	1.1	•	•	•
65 160/15	1.5	•	•	•
65 160/22	2.2	•	•	•
65 200/15	1.5	•	•	•
65 200/22	2.2	•	•	•
65 200/30	3	•	•	•
65 250/30	3	•	•	•
65 250/40	4	•	•	•
65 250/55	5.5	•	•	•
65 315/40	4			•
65 315/55	5.5			•
65 315/75	7.5		•	•
65 315/110A	11			•
65 315/110	11		•	•
80 160/15	1.5	•	•	•
80 160/22	2.2	•	•	•
80 200/30	3	•	•	•
80 200/40	4	•	•	•
80 250/40	4	•	•	•
80 250/55	5.5	•	•	•
80 250/75	7.5	•	•	•
80 315/55	5.5			•

• Available

SIZE	kW	FN4	FNS4	FN4
80 315/75	7.5			•
80 315/110	11		•	•
80 315/150	15		•	•
80 400/185	18.5			•
80 400/220	22			•
80 400/300	30			•
100 160/22	2.2			•
100 160/30	3		•	•
100 160/40	4			•
100 200/22	2.2			•
100 200/40	4		•	•
100 200/55	5.5		•	•
100 250/40	4			•
100 250/55	5.5			•
100 250/75	7.5		•	•
100 250/110	11		•	•
100 315/150	15		•	•
100 315/185	18.5		•	•
100 315/220	22		•	•
100 400/300	30			•
100 400/450	45			•
125 200/40	4			•
125 200/55	5.5		•	•
125 200/75	7.5		•	•
125 250/75	7.5			•
125 250/110	11		•	•
125 250/150	15		•	•
125 250/185	18.5		•	•
125 270/75	7.5			•
125 270/110	11			•
125 270/150	15			•
125 315/185	18.5			•
125 315/220	22		•	•
125 315/300	30		•	•
125 315/370	37			•
125 400/220	22			•
125 400/300	30			•
125 400/450	45			•
125 400/550	55			•
150 250/150	15		•	•
150 250/185	18.5		•	•
150 250/220	22		•	•
150 250/300	30		•	•
150 315/300	30		•	•
150 315/370	37			•
150 315/450	45			•
150 315/550	55			•
150 400/300	30			•
150 400/370	37			•
150 400/450	45			•
150 400/550	55			•
150 400/750	75			•
150 400/900	90			•

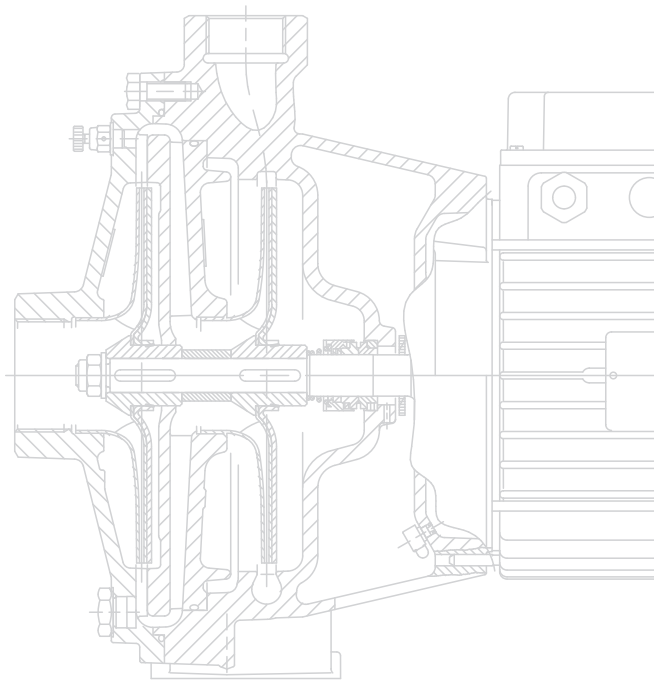
• Available

2FN - 2FN4 series



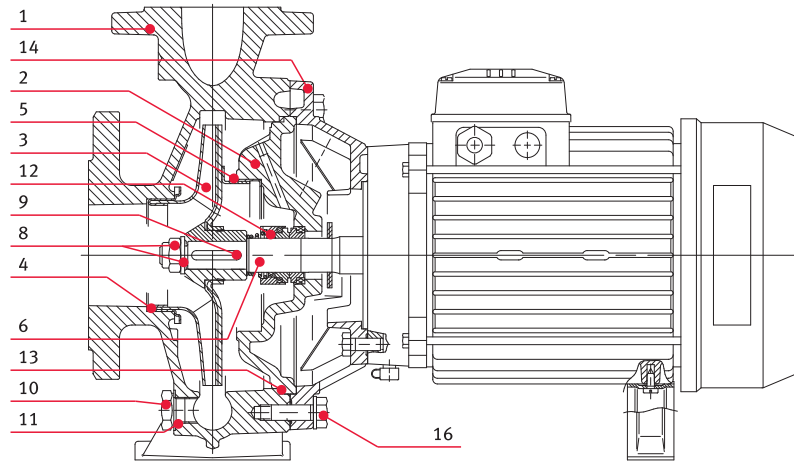
VERSIONS

2 POLES	4 POLES
2FN32 250/55	2FN4 32 250/07
2FN32 250/75	2FN4 32 250/11



REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Suction flange	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
4	Diffuser	Cast iron	EN 1561-GJL-200(JL1030)	ASTM Class 25
5	Impeller spacer	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
6	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
16	Pump body fastening bolts and screws	Galvanized steel		

FN - FN4 series



2 POLES VERSION

FN32 125/07	FN50 125/22
FN32 125/11	FN50 125/30
FN32 160/15	FN50 125/40
FN32 160/22	FN50 160/55
FN32 200/30	FN50 160/75
FN32 200/40	FN50 200/92
FN40 125/11	FN50 200/110
FN40 125/15	FN65 125/40
FN40 125/22	FN65 125/55
FN40 160/30	FN65 125/75
FN40 160/40	FN65 160/92
FN40 200/55	FN65 160/110
FN40 200/75	FN80 160/110
FN40 250/92	
FN40 250/110	

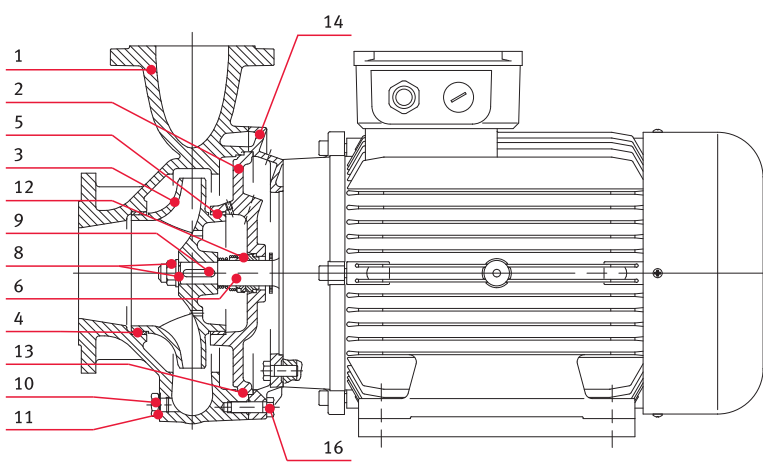
4 POLES VERSION

FN4 32 200/05	FN4 65 125/05	FN4 80 160/15
FN4 40 160/05	FN4 65 125/07	FN4 80 160/22
FN4 40 200/07	FN4 65 125/11	FN4 80 200/30
FN4 40 200/11	FN4 65 160/11	FN4 80 200/40
FN4 40 250/11	FN4 65 160/15	FN4 80 250/40
FN4 40 250/15	FN4 65 160/22	FN4 80 250/55
FN4 40 250/22	FN4 65 200/15	FN4 80 250/75
FN4 50 125/05	FN4 65 200/22	
FN4 50 160/07	FN4 65 200/30	
FN4 50 160/11	FN4 65 250/30	
FN4 50 200/11	FN4 65 250/40	
FN4 50 200/15	FN4 65 250/55	
FN4 50 250/22A		
FN4 50 250/22		
FN4 50 250/30		

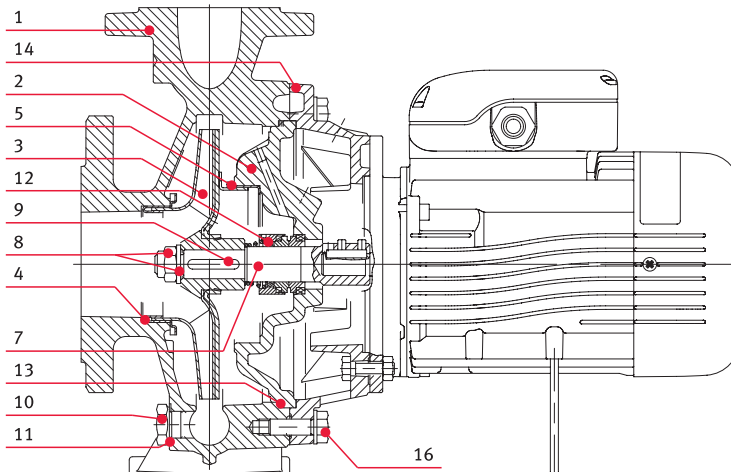
REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200(JL1030)	ASTM Class 25
2	Seal housing	Cast iron	EN 1561-GJL-200(JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller	Cast iron	EN 1561-GJL-200(JL1030)	ASTM Class 25
	Impeller	Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Wear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Counterwear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
6	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
7	Shaft rigid coupling	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316L
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
14	Adapter*	Aluminium	EN 1706-AC-AISI11Cu2 (Fe) (AC46100)	
	Adapter	Cast iron	EN 1561-GJL-200(JL1030)	
16	Pump body fastening bolts and screws	Galvanized steel		

* For 32/40-125 2/4 poles, 32/40-160 2/4 poles versions

FN - FN4 series



2 POLES VERSION	
FN40 250/150	
FN50 250/150	
FN50 250/185	
FN50 250/220	
FN65 160/150	
FN65 200/150	
FN65 200/185	
FN65 200/220	
FN65 250/220	
FN80 160/150	
FN80 160/185	
FN80 200/220	

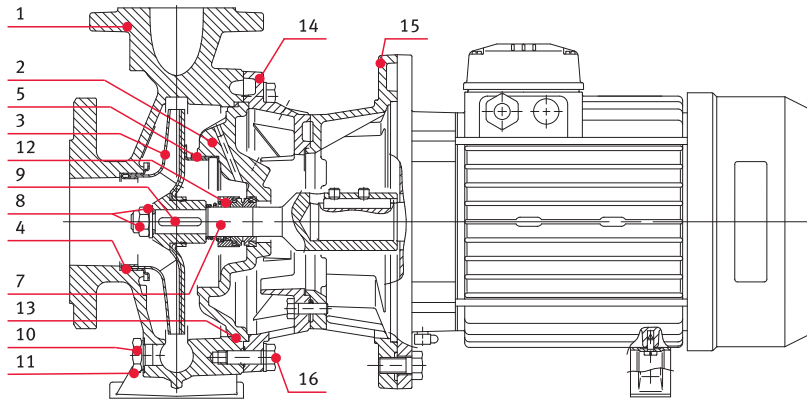


4 POLES VERSION	
FN4 32 125/02A	
FN4 32 125/02	
FN4 32 160/02	
FN4 32 160/03	
FN4 32 200/03	
FN4 40 125/02A	
FN4 40 125/02	
FN4 40 125/03	
FN4 40 160/03	
FN4 50 125/03A	
FN4 50 125/03	

REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Seal housing	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
	Impeller	Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Wear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Counterwear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
6	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
7	Shaft rigid coupling	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
14	Adapter*	Aluminium	EN 1706-AC-AISI1 1Cu2 (Fe) (AC46100)	
	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	
16	Pump body fastening bolts and screws	Galvanized steel		

* For 32/40-125 2/4 poles, 32/40-160 2/4 poles version

FNS - FNS4 series



2 POLES VERSION

FNS32 125/07	FNS50 125/22
FNS32 125/11	FNS50 125/30
FNS32 160/15	FNS50 125/40
FNS32 160/22	FNS50 160/55
FNS32 200/30	FNS50 160/75
FNS32 200/40	FNS65 125/40
FNS40 125/11	FNS65 125/55
FNS40 125/15	FNS65 125/75
FNS40 125/22	
FNS40 160/30	
FNS40 160/40	
FNS40 200/55	
FNS40 200/75	

4 POLES VERSION

FNS4 40 200/07	FNS4 65 125/05	FNS4 80 160/15
FNS4 40 200/11	FNS4 65 125/07	FNS4 80 160/22
FNS4 40 250/11	FNS4 65 125/11	FNS4 80 200/30
FNS4 40 250/15	FNS4 65 160/11	FNS4 80 200/40
FNS4 40 250/22	FNS4 65 160/15	FNS4 80 250/40
FNS4 50 160/07	FNS4 65 160/22	FNS4 80 250/55
FNS4 50 160/11	FNS4 65 200/15	FNS4 80 250/75
FNS4 50 200/11	FNS4 65 200/22	
FNS4 50 200/15	FNS4 65 200/30	
FNS4 50 250/22A	FNS4 65 250/30	
FNS4 50 250/22	FNS4 65 250/40	
FNS4 50 250/30	FNS4 65 250/55	

REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Seal housing	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
	Impeller	Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Wear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Counterwear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
7	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
14	Adapter*	Aluminium	EN 1706-AC-AISI1 1Cu2 (Fe) (AC46100)	
	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
15	Adapter-motor connector	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
16	Pump body fastening bolts and screws	Galvanized steel		

* For 32/40-125 2/4 poles, 32/40-160 2/4 poles version

FNS series

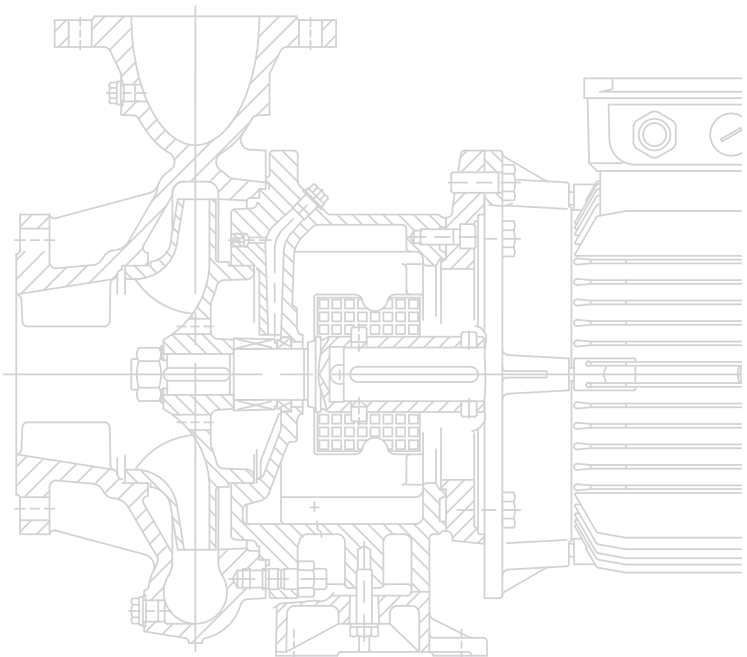
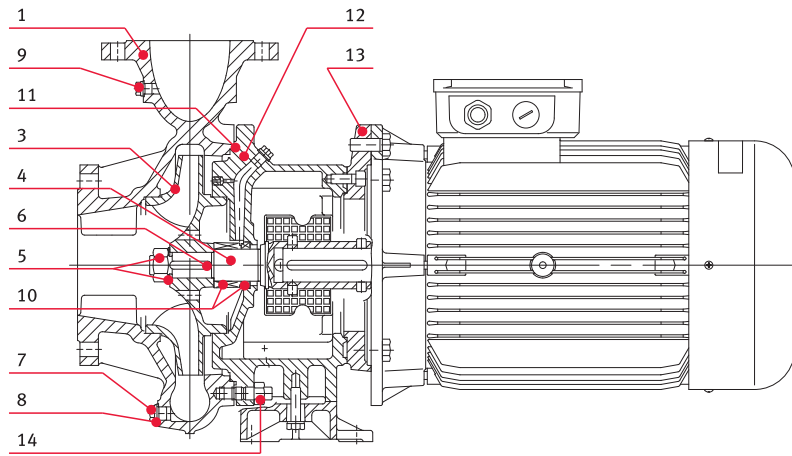
2 POLES VERSION	
FNS40 250/110A	FNS65 160/110A
FNS40 250/110	FNS65 160/110
FNS40 250/150	FNS65 160/150
FNS50 200/110A	FNS65 200/150
FNS50 200/110	FNS65 200/185
FNS50 250/150	FNS65 200/220
FNS50 250/185	FNS65 250/220
FNS50 250/220	FNS80 160/110
	FNS80 160/150
	FNS80 160/185
	FNS80 200/220

4 POLES VERSION	
FNS65 250/300	
FNS65 250/370	
FNS80 200/300	
FNS80 250/370	
FNS80 250/450	
FNS80 250/55	

REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Seal housing	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
	Impeller	Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Wear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Counterwear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
7	Shaft rigid coupling	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
14	Adapter*	Aluminium	EN 1706-AC-AISi1 1Cu2 (Fe) (AC46100)	
	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
15	Adapter-motor connector	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
16	Pump body fastening bolts and screws	Galvanized steel		

* For 32/40-125 2/4 poles, 32/40-160 2/4 poles version

FNS - FNS4 series

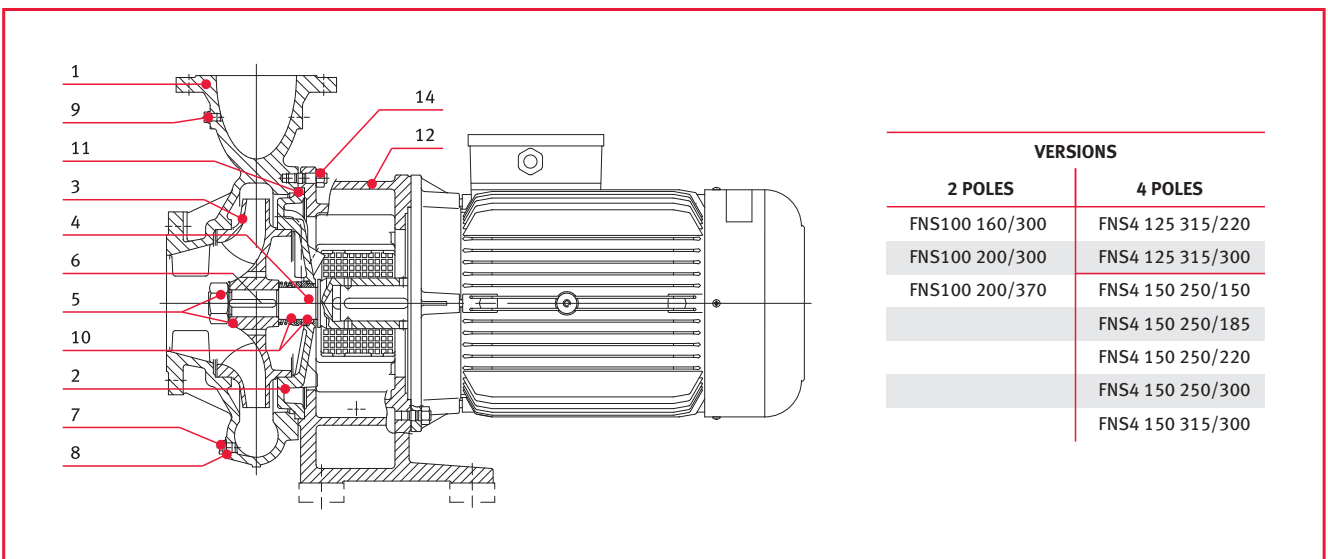
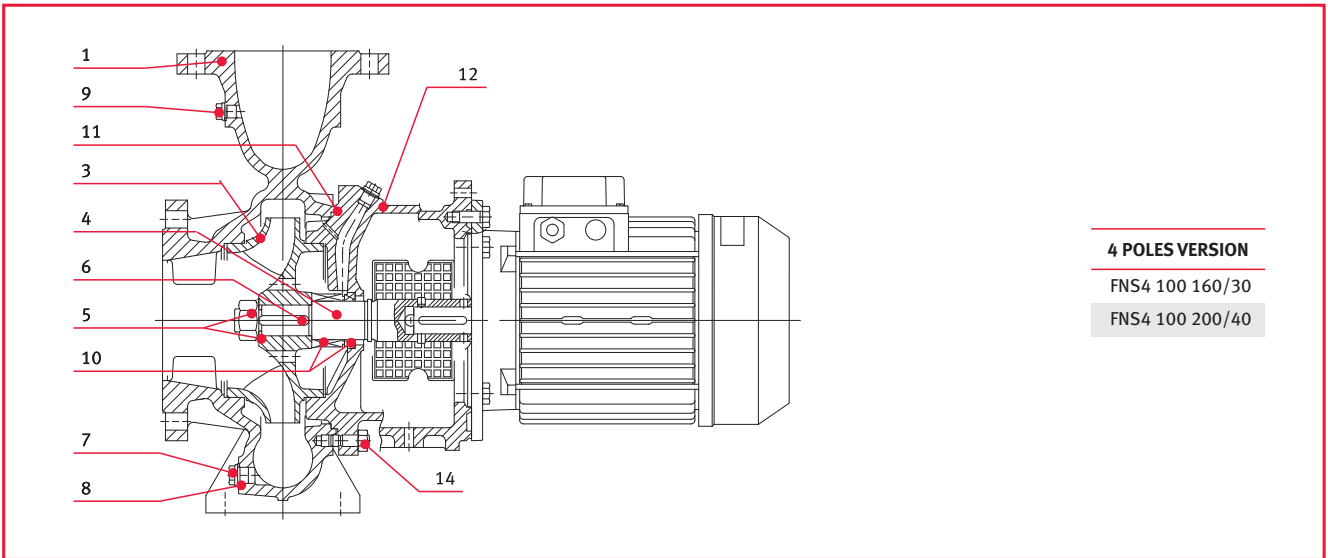


VERSIONS

2 POLES	4 POLES
FNS100 160/220	FNS4 65 315/75
	FNS4 65 315/110
	FNS4 80 315/110
	FNS4 80 315/150
	FNS4 100 200/55
	FNS4 100 250/75
	FNS4 100 250/110
	FNS4 100 315/150
	FNS4 100 315/185
	FNS4 100 315/220
	FNS4 125 200/55
	FNS4 125 200/75
	FNS4 125 250/110
	FNS4 125 250/150
	FNS4 125 250/185

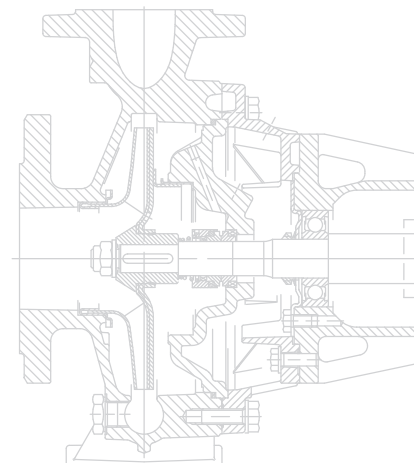
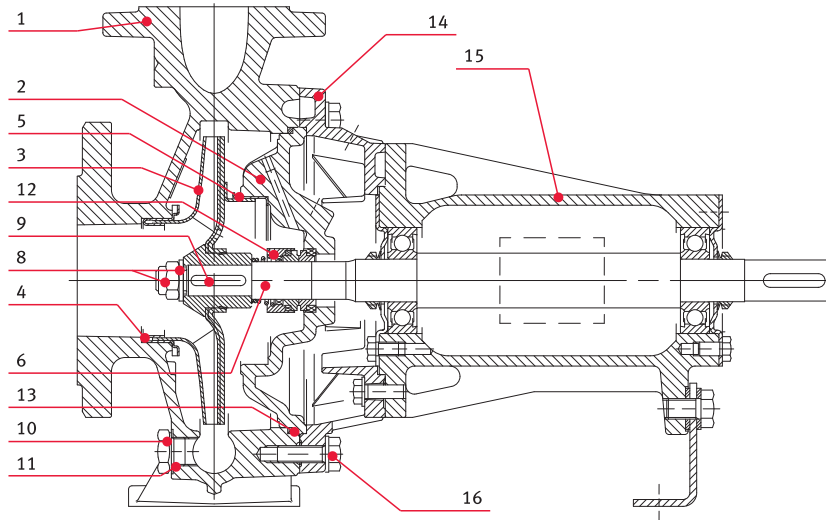
REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
2	Seal housing	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
3	Impeller	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
		Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Rigid coupling	Stainless steel	EN 10088-1-X20Cr13 (1.4021)	AISI 420
5	Impeller lock nut and washer	Steel		
6	Tab	Steel	EN 10083-1-C45E (1.1191)	
7	Fill and drain plugs	Steel		
8	Fill and drain plugs seals	Asbestos-free synthetic fiber AFM34 ®		
9	Plugs for gauge connectors	Steel		
10	Mechanical seal	Silicon carbide/Carbon/EPDM (standard version)		
11	Elastomers	EPDM (standard version)		
12	Adapter	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
13	Adapter-motor connector	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
14	Pump body fastening bolts and screws	Steel		

FNS - FNS4 series



REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
2	Seal housing	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
3	Impeller	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
		Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Rigid coupling	Stainless steel	EN 10088-1-X20Cr13 (1.4021)	AISI 420
5	Impeller lock nut and washer	Steel		
6	Tab	Steel	EN 10083-1-C45E (1.1191)	
7	Fill and drain plugs	Steel		
8	Fill and drain plugs seals	Asbestos-free synthetic fiber AFM34 ®		
9	Plugs for gauge connectors	Steel		
10	Mechanical seal	Silicon carbide/Carbon/EPDM (standard version)		
11	Elastomers	EPDM (standard version)		
12	Adapter	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
13	Adapter-motor connector	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
14	Pump body fastening bolts and screws	Steel		

FNF bare shaft series



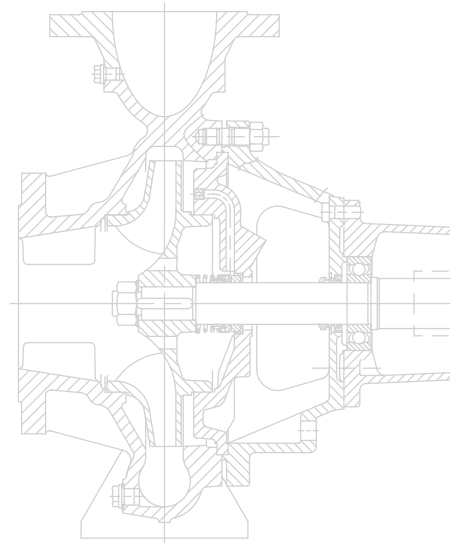
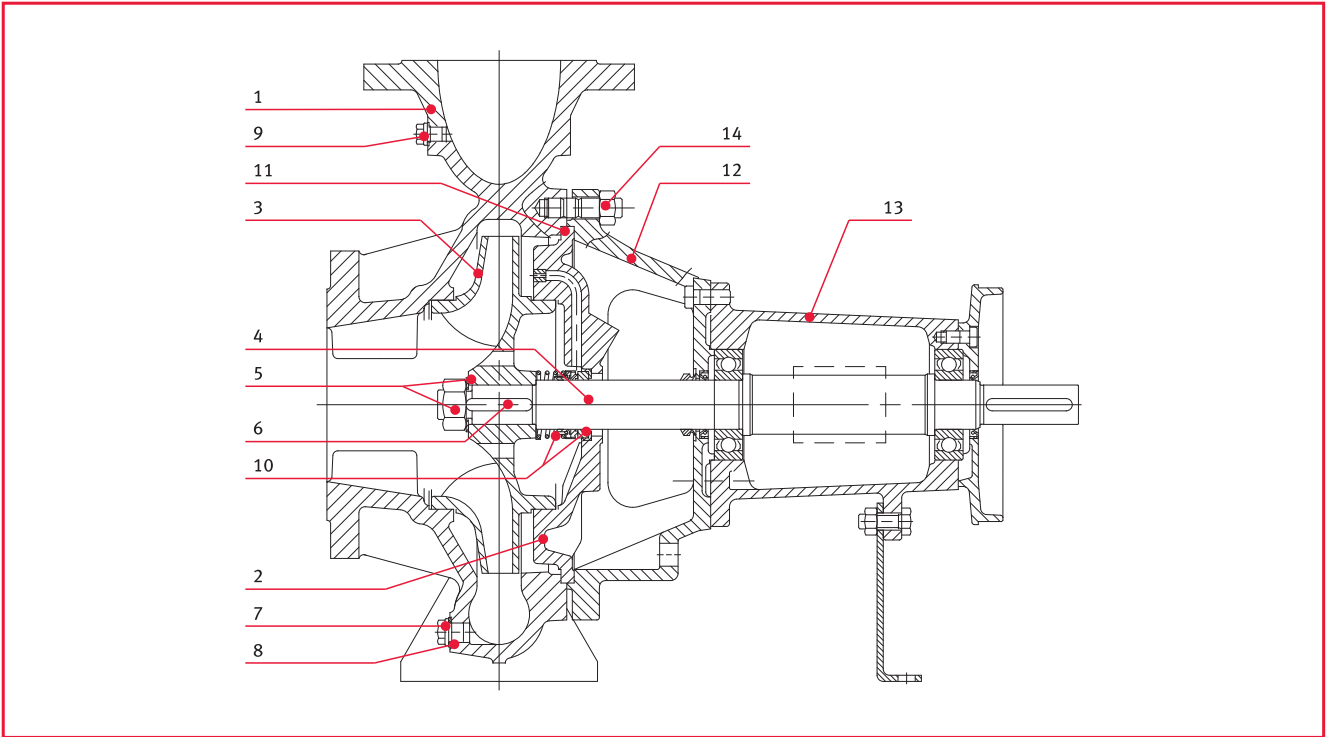
VERSIONS

FNF 32 125	FNF 65 125
FNF 32 160	FNF 65 160
FNF 32 200	FNF 65 200
FNF 40 125	FNF 65 250
FNF 40 160	FNF 80 160
FNF 40 200	FNF 80 200
FNF 40 250	FNF 80 250
FNF 50 125	
FNF 50 160	
FNF 50 200	
FNF 50 250	

REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
2	Seal housing	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
3	Impeller	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Impeller	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
	Impeller	Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Wear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Counterwear ring	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
6	Shaft extension	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
8	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
9	Tab	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	
11	Fill and drain plugs seals	Aluminium	EN 573-AW-AI99,5 (AW1050A)	
12	Mechanical seal	Ceramic/Carbon/NBR (standard version)		
13	Elastomers	NBR (standard version)		
14	Adapter*	Aluminium	EN 1706-AC-AISI1 1Cu2 (Fe) (AC46100)	
	Adapter	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
15	Transmission support body	Cast iron	EN 1561-GJL-200 (JL1030)	ASTM Class 25
16	Pump body fastening bolts and screws	Galvanized steel		

* For 32/40-125 2/4 poles, 32/40-160 2/4 poles version

FNF bare shaft series



VERSIONS

FNF 65 315	FNF 125 200
FNF 80 315	FNF 125 250
FNF 80 400	FNF 125 270
FNF 100 160	FNF 125 315
FNF 100 200	FNF 125 400
FNF 100 250	FNF 150 250
FNF 100 315	FNF 150 315
FNF 100 400	FNF 150 400

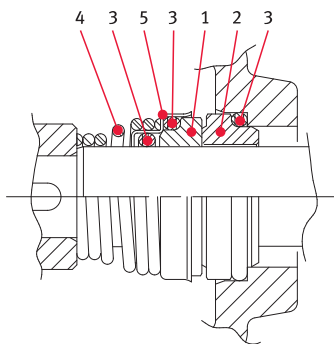
REF. No	DESCRIPTION	MATERIAL	REF. STANDARDS EUROPA	REF. STANDARDS USA
1	Pump body	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
2	Seal housing	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
3	Impeller	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
		Bronze	EN 1982-CuSn10-C (CC480K)	UNS C90700
4	Shaft extension	Stainless steel	EN 10088-1-X20Cr13 (1.4021)	AISI 420
5	Impeller lock nut and washer	Steel		
6	Tab	Steel	EN 10083-1-C45E (1.1191)	
7	Fill and drain plugs	Steel		
8	Fill and drain plugs seals	Asbestos-free synthetic fiber AFM34 ®		
9	Plugs for gauge connectors	Steel		
10	Mechanical seal	Silicon carbide/Carbon/EPDM (standard version)		
11	Elastomers	EPDM (standard version)		
12	Adapter	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
13	Support body	Cast iron	EN 1561-GJL-250 (JL1040)	ASTM Class 35
14	Pump body fastening bolts and screws	Steel		

FN mechanical seal, according to EN 12756

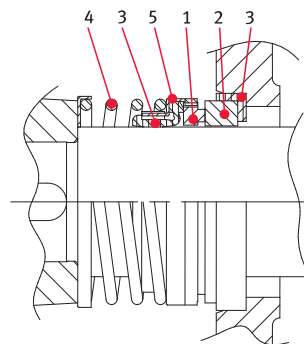
→ Mechanical seal mounting dimensions according to EN 12756 (ex DIN 24960) and ISO 3069. (A version with anti-rotation lockpin and/or external flushing are available on request).

Series FN 32 ÷ 80 (*)

Series FN 100 ÷ 150 (**)



* 65-315, 80-315 and 80-400 excluded.



** 65-315, 80-315 and 80-400 included.

List of materials

POSITION 1-2	POSITION 3	POSITION 4-5
B : Resin impregnated carbon	E: EPDM	G: AISI 316
Q1: Silicon carbide	P: NBR	
V : Ceramic	V: FPM	

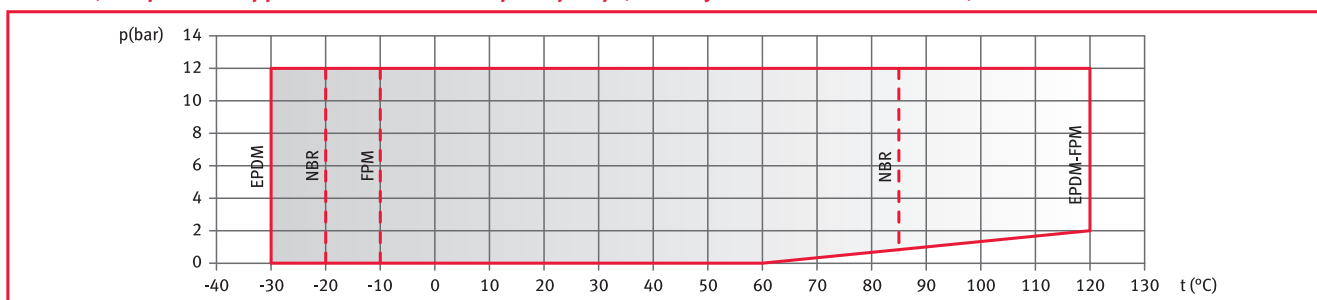
FN, FNS and FNF 32 ÷ 80 seal type

TYPE	POSITION 1 Rotating Assembly	POSITION 2 Fixed Assembly	POSITION 3 Elastomers	POSITION 4 Springs	POSITION 5 Other Components	TEMPERATURE (° C)
STANDARD MECHANICAL SEAL						
VBPGG	V	B	P	G	G	-20 + 85
OTHER TYPES OF MECHANICAL SEAL						
VBVGG	V	B	V	G	G	-20 + 120
Q ₁ BVGG	Q ₁	B	V	G	G	-20 + 120
Q ₁ Q ₁ VGG	Q ₁	Q ₁	V	G	G	-20 + 120
VBEGG	V	B	E	G	G	-30 + 120
Q ₁ BEGG	Q ₁	B	E	G	G	-30 + 120
Q ₁ Q ₁ EGG	Q ₁	Q ₁	E	G	G	-30 + 120

FNS and FNF 100 ÷ 150 seal type

TYPE	POSITION 1 Rotating Assembly	POSITION 2 Fixed Assembly	POSITION 3 Elastomers	POSITION 4 Springs	POSITION 5 Other Components	TEMPERATURE (° C)
STANDARD MECHANICAL SEAL						
Q ₁ BEGG	Q ₁	B	E	G	G	-30 + 120
OTHER TYPES OF MECHANICAL SEAL						
Q ₁ BVGG	Q ₁	B	V	G	G	-10 + 120
Q ₁ Q ₁ VGG	Q ₁	Q ₁	V	G	G	-10 + 120

Pressure/Temperature application limits for complete pump (with any of the seals listed above)



Motors

- Squirrel cage motor in short circuit (TEFC), aluminium casing, enclosed construction with external ventilation.
- The surface motors have efficiency values that fall within the range normally referred to as efficiency class 2.
- The motors are fan cooled according to EN 60034-6.
- The terminal box is made of aluminium.
- The cable gland has standard passage dimensions according to EN 50262 (metric size).

→ The standard protection is IP 55.

→ Insulation class F.

→ Standard voltage:

Single-phase version: 220-240 V 50 Hz with incorporated automatic-reset overload protection up to 1,5 kW.

Three-phase version: 220-240/380-415 V 50 Hz for powers up to 4 kW. 380-415/660-690 V 50 Hz for powers above 4 kW, overload protection to be provided by the user.

FN series, single-phase 50 Hz, 2 poles motors

MOTOR TYPE			INPUT CURRENT In (A) 220-240 V	CAPACITOR		DATA FOR 230 V 50 Hz VOLTAGE					
kW	SIZE IEC	CONSTRUCTION DESIGN		μF	V	min ⁻¹	Is/In	η %	cosφ	Cn Nm	Cs/Cn
0.75	90	B14	5.02-5.39	30	450	2875	5.10	70.6	0.91	2.49	0.71
1.1	90	B14	7.07-6.81	30	450	2800	3.80	73.8	0.95	3.75	0.47
1.5	90	B14	9.32-8.63	40	450	2780	3.45	75.5	0.97	5.15	0.47
2.2	90	B14	13.3-12.6	50	450	2785	3.45	76.9	0.97	7.54	0.36

FN series, three-phase 50 Hz, 2 poles motors

MOTOR TYPE			INPUT CURRENT In (A) THREE-PHASE				DATA FOR 400 V 50 Hz VOLTAGE					
kW	SIZE IEC	CONSTRUCTION DESIGN	Δ		Y		min ⁻¹	Is/In	η %	cosφ	Tn Nm	Ts/Tn
			220-240 V	380-415 V	380-415 V	660-690 V						
0.75	80	B14	3.74	2.16			2915	8.23	77.7	0.65	2.45	5.2
1.1	80	B14	4.52	2.61			2875	6.78	78.9	0.77	3.65	3.49
1.5	90	B14	5.98	3.45			2875	7.04	80.1	0.78	4.98	3.83
2.2	90	B14	8.71	5.03			2860	7.32	81.1	0.78	7.34	4.12
3	100	B14	10.4	6.01			2860	6.38	84.3	0.85	10	2.77
4	112	B14			8.09	4.67	2890	7.7	85.3	0.84	13.2	2.8
5.5	132	B14			10.1	5.83	2900	9.62	87	0.9	18.1	3.91
7.5	132	B14			13.7	7.91	2900	9.73	88.1	0.9	24.7	3.99
9.2	132	B14			16.8	9.7	2930	9.15	89.7	0.88	30	4.31
11	160	B14			20	11.5	2925	8.98	89.7	0.88	35.9	3.43
15	160	B34			26.7	15.4	2940	8.72	89.7	0.9	48.7	3.49
18.5	160	B34			32.8	18.9	2945	9.49	90.7	0.9	60	3.27
22	180	B34			38.7	22.3	2940	9.16	91.3	0.9	71.4	3.2

FNS and FNF series, three-phase 50 Hz, 2 poles motors

kW	MOTOR TYPE			INPUT CURRENT I _n (A)				DATA FOR 400 V 50 Hz VOLTAGE					
	SIZE	CONSTRUCTION		THREE-PHASE				min ⁻¹	I _s /I _n	η %	cosφ	T _n	
		IEC	FNS	FNF	Δ	Y	Δ					Y	Nm
				220-240 V	380-415 V	380-415 V	660-690 V						
0.75	80	B5		3.50	2.02			2855	5.81	74.3	0.72	2.51	3.76
0.75	80		B3	3.72	2.15			2915	8.23	77.7	0.65	2.45	5.2
1.1	80	B5	B3	4.52	2.61			2875	6.78	78.9	0.77	3.65	3.49
1.5	90	B5		5.98	3.45			2875	7.04	80.1	0.78	4.98	3.83
1.5	90		B3	5.66	3.27			2875	6.36	79.2	0.84	4.98	2.4
2.2	90	B5		8.71	5.03			2860	7.32	81.1	0.78	7.34	4.12
2.2	90		B3	7.81	4.51			2860	6.63	82.1	0.86	7.34	2.91
3	100	B5		10.4	6.01			2860	6.38	84.3	0.85	10	2.77
3	100		B3	10.4	6.01			2885	6.96	84.4	0.85	9.92	3.09
4	112	B5				8.09	4.67	2890	7.7	85.3	0.84	13.2	2.8
4	112		B3			7.43	4.29	2900	8.29	87	0.89	13.2	3.35
5.5	132	B5				10.1	5.83	2900	9.62	87	0.9	18.1	3.91
5.5	132		B3			10.3	5.95	2910	7.11	87.1	0.89	18	3.08
7.5	132	B5				13.7	7.91	2900	9.73	88.1	0.9	24.7	3.99
7.5	132		B3			13.9	8.03	2920	7.76	88.3	0.88	24.5	2.97
11	160	B35	B3			20.1	11.6	2935	7.58	88.5	0.89	35.8	2.91
15	160	B35	B3			26.7	15.4	2940	8.72	89.7	0.9	48.7	3.49
18.5	160	B35	B3			32.8	18.9	2945	9.49	90.7	0.9	60	3.27
22	180	B35				38.7	22.3	2940	9.16	91.3	0.9	71.4	3.2
22	180		B3			41.7	24.1	2930	7.1	90.8	0.84	72	2.5
30	200	B35	B3			54	31.2	2950	6.8	92.5	0.87	97	2.4
37	200	B35	B3			65	37.5	2950	7.2	92.9	0.88	120	2.5
45	225	B35	B3			80	46	2960	6.7	92.9	0.88	145	2.4
55	250	B35	B3			99	57	2955	6.7	93	0.87	178	2.4
75	280		B3			133	77	2960	6.8	93.8	0.87	242	2.3
90	280		B3			157	91	2960	7.2	94.2	0.88	290	2.3
110	315		B3			196	113	2970	6.2	94.2	0.86	353	2
132	315		B3			235	136	2970	6	94.3	0.86	424	2

FN series, three-phase 50 Hz, 4 poles motors

MOTOR TYPE			INPUT CURRENT I _n (A)				DATA FOR 400 V 50 Hz VOLTAGE						
kW	SIZE IEC	CONSTRUCTION DESIGN	THREE-PHASE				min ⁻¹	I _s /I _n	η %	cosφ	T _n Nm	T _s /T _n	
			Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V							
0.25	71	B5	1.71	0.99			1390	3.58	62	0.59	1.71	3.16	
0.37	71	B5	2.53	1.46			1370	3.39	61.4	0.6	2.57	3.4	
0.55	80	B14	3.03	1.75			1390	3.95	68.2	0.67	3.77	2.45	
0.75	80	B5	4.04	2.33			1395	4.06	70.1	0.66	5.13	2.73	
1.1	90	B5	4.42	2.55			1415	4.48	78.2	0.8	7.42	2.14	
1.5	90	B5	5.84	3.37			1415	5.1	81	0.79	10.1	2.43	
2.2	100	B5	8.16	4.71			1420	5.52	83.1	0.81	14.8	2.36	
3	100	B5	11.1	6.38			1425	6.13	84.1	0.81	20.1	2.69	
4	112	B5				8.39	4.84	1440	6.47	85.5	0.81	26.5	2.69
5.5	132	B14				11.4	6.58	1450	5.71	87.2	0.8	36.2	2.56
7.5	132	B14				15.3	8.83	1445	6.14	88	0.81	49.5	2.93

FNS and FNF 50 Hz, 4 poles motors

MOTOR TYPE				INPUT CURRENT I _n (A)				DATA FOR 400 V 50 Hz VOLTAGE						
kW	SIZE IEC	CONSTRUCTION		THREE-PHASE				min ⁻¹	I _s /I _n	η %	cosφ	T _n Nm	T _s /T _n	
		FNS	FNF	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V							
0.25	71		B3	1.71	0.99			1390	3.58	62	0.59	1.71	3.16	
0.37	71		B3	2.53	1.46			1370	3.39	61.4	0.6	2.57	3.4	
0.55	80	B5	B3	3.03	1.75			1390	3.95	68.2	0.67	3.77	2.45	
0.75	80	B5	B3	4.04	2.33			1395	4.06	70.1	0.66	5.13	2.73	
1.1	90	B5	B3	4.42	2.55			1415	4.48	78.2	0.8	7.42	2.14	
1.5	90	B5	B3	5.84	3.37			1415	5.1	81	0.79	10.1	2.43	
2.2	100	B5	B3	8.16	4.71			1420	5.52	83.1	0.81	14.8	2.36	
3	100	B5	B3	11.1	6.38			1425	6.13	84.1	0.81	20.1	2.69	
4	112	B5	B3				8.39	4.84	1440	6.47	85.5	0.81	26.5	2.69
5.5	132	B5	B3				11.4	6.58	1450	5.71	87.2	0.8	36.2	2.56
7.5	132	B5	B3				15.3	8.83	1445	6.14	88	0.81	49.5	2.93
11	160	B5	B3				22.5	13	1460	5.2	88.6	0.8	72	2
15	160	B5	B3				30	17.3	1460	5.9	89.8	0.8	98	2.3
18.5	160	B5	B3				37	21.4	1465	6.2	90.2	0.8	120	2.3
22	160	B5	B3				42	24.2	1465	6.3	90.8	0.83	143	2.4
30	200	B5	B3				58	33.5	1465	6.6	91.6	0.82	195	2.4
37	200		B3				68	39.3	1470	6.5	93.1	0.85	240	2.3
45	225		B3				80	46.2	1475	6.5	93.4	0.87	291	2.4
55	250		B3				97	56	1475	6.4	93.7	0.88	356	2.3
75	280		B3				135	78	1480	7	93.7	0.86	483	2.5
90	280		B3				157	91	1480	7.1	94.5	0.88	580	2.7

Motor noise

- The tables show the mean sound pressure (Lp) measured at 1 meter distance in free field according to the A curve (according to ISO standard 1680).
- The noise values are measured with idling 50 Hz motor with a tolerance of 3 dB (A).

Motor noise, FN and FNS 50 Hz, 2 poles

POWER	MOTOR TYPE	NOISE
kW	SIZE IEC	LpA dB
0.75	90	<70
1.1	90	<70
1.5	90	<70
2.2	90	<70
3	100	<70
4	112	<70
5.5	132	<70
7.5	132	<70
9.2	132	73
11	160	73
15	160	75
18.5	160	75
22	180	75
30	200	80
37	200	80
45	225	84
55	250	84

Motor noise, FNF 50 Hz, 2 poles

POWER	MOTOR TYPE	NOISE
kW	SIZE IEC	LpA dB
0.75	80	<70
1.1	80	<70
1.5	90	<70
2.2	90	<70
3	100	<70
4	112	<70
5.5	132	73
7.5	132	73
11	160	75
15	160	75
18.5	160	75
22	180	78
30	200	80
37	200	80
45	225	84
55	250	84
75	280	84
90	280	84
110	315	83
132	315	83

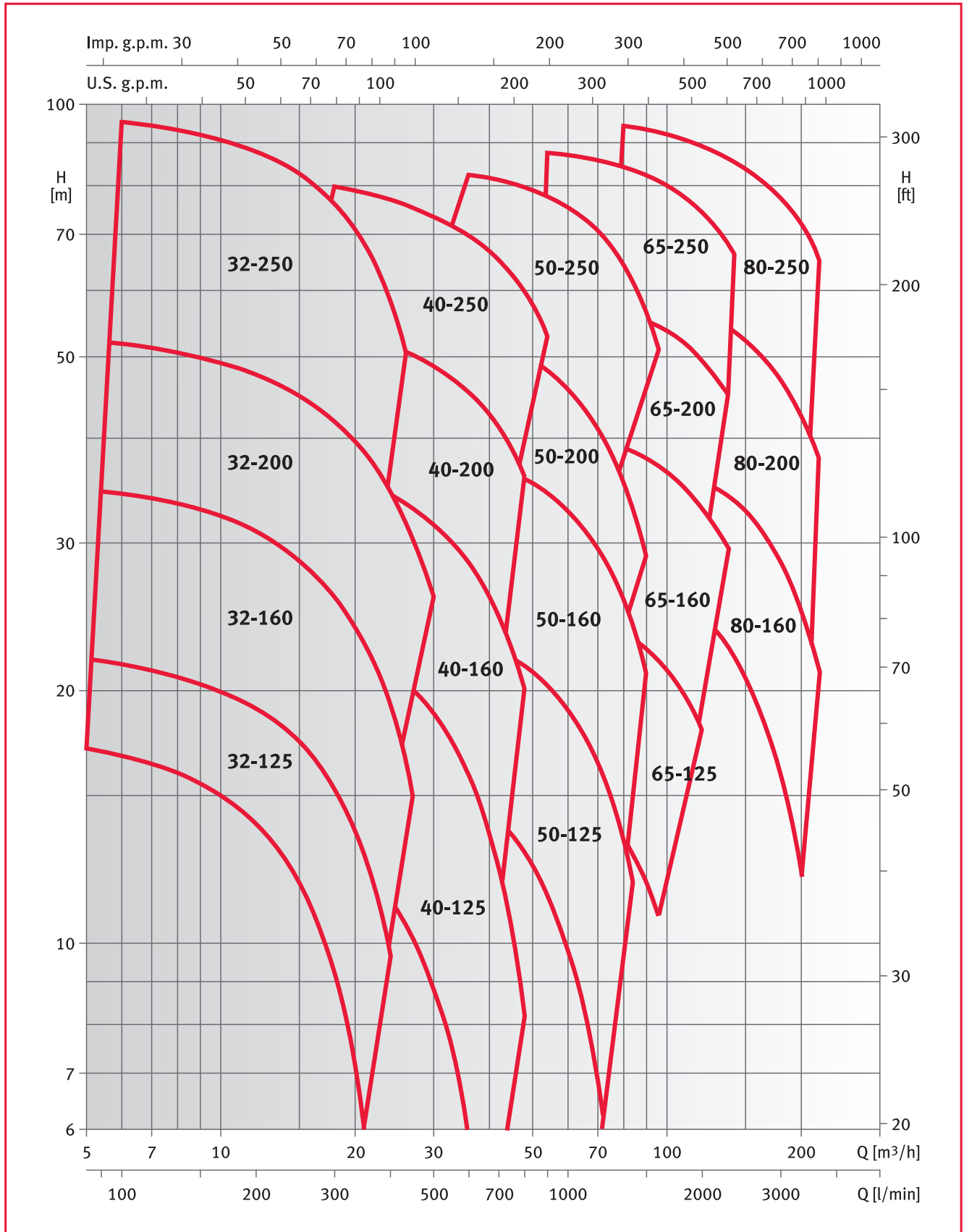
Motor noise, FN4 and FNS4 50 Hz, 4 poles

POWER	MOTOR TYPE	NOISE
kW	SIZE IEC	LpA dB
0.25	71	<70
0.37	71	<70
0.55	90R	<70
0.75	90R	<70
1.1	90	<70
1.5	90	<70
2.2	100	<70
3	100	<70
4	112	<70
5.5	132	<70
7.5	132	<70
11	160	<70
15	160	<70
18.5	180	<70
22	180	<70
30	200	<70

Motor noise, FNF 50 Hz, 4 poles

POWER	MOTOR TYPE	NOISE
kW	SIZE IEC	LpA dB
0.55	80	<70
0.75	80	<70
1.1	90	<70
1.5	90	<70
2.2	100	<70
3	100	<70
4	112	<70
5.5	132	<70
7.5	132	<70
11	160	<70
15	160	<70
18.5	180	<70
22	180	<70
30	200	<70
37	225	74
45	225	74
55	250	74
75	280	77
90	280	77

FN, 2FN, FNS and FNF series



The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

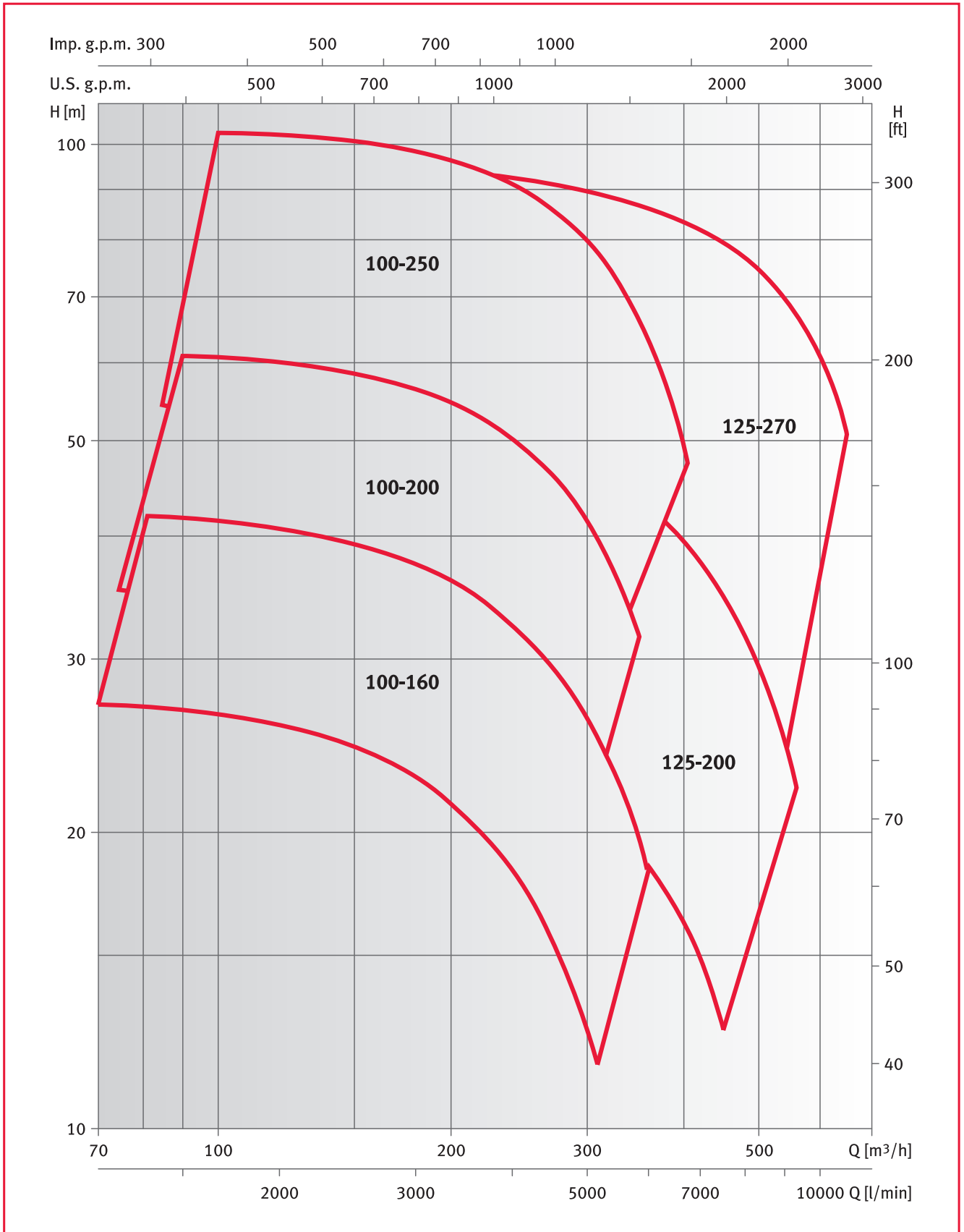
FN, 2FN, FNS and FNF series

PUMP TYPE	P2		l/min m³/h	0	100	150	250	300	400	450	600	700	800	900	1200	1400	1500
	kW	HP		0	6	9	15	18	24	27	36	42	48	54	72	84	90
32-125/07*	0.75	1		16.9		14.6	11	8.7									
32-125/11*	1.1	1.5		21.9		19.6	16.3	14.2	9								
32-160/15*	1.5	2		27.3		24.5	20.5	17.8	11								
32-160/22*	2.2	3		34.7		32	28	25.3	18.8	15							
32-200/30	3	4		44.2		39.8	35.2	32.2	24.6	19.8							
32-200/40	4	5.5		54.4		50	45	41.9	34.6	30.3							
32-250/55	5.5	7.5		79	74.7	71	62	56	37								
32-250/75	7.5	10		99	95.3	92	83	76	58								
40-125/11*	1.1	1.5		14.5				13	11.3	10.1	5.8						
40-125/15*	1.5	2		18.1				16.7	15	13.9	9.6	6					
40-125/22*	2.2	3		24.5				23	21	20.1	15.8	12.3	8.2				
40-160/30	3	4		31.5				29.4	27.5	26.1	21.5	17.4					
40-160/40	4	5.5		38				36.2	34	33	28.5	24.5	20.1				
40-200/55	5.5	7.5		46.5				44	41.5	40.2	34.5	29.5					
40-200/75	7.5	10		57				54	52	50	45.5	41	36.1				
40-250/**	**	**		64				59	56	55	49	45	39.5				
40-250/110	11	15		72				67.5	65	63	57	52	47				
40-250/150	15	20		85				80	77	75	70	65	60				
50-125/22*	2.2	3		17							15.1	14	12.8	11.4	6.2		
50-125/30	3	4		20							18.8	18	16.9	15.6	10.5		
50-125/40	4	5.5		24							23.1	22.5	21.5	20.3	15.8	11.8	
50-160/55	5.5	7.5		32							30.6	29.5	28	26.6	20.5	14.8	
50-160/75	7.5	10		40							38	37	36	34.4	29	24	21
50-200/**	**	**		50.5							46.8	45	43	40.9	32.5	25.7	
50-200/110	11	15		58							54	53	50	48.3	40	33	29
50-250/150	15	20		68							64	63	61	59	50	41	
50-250/185	18.5	25		77							73	72	70	68	60	52	47
50-250/220	22	30		86							82.5	81	80	78	70	61	57

PUMP TYPE	P2		l/min m³/h	0	800	900	1200	1400	1500	1800	2000	2300	3000	3000
	kW	HP		0	48	54	72	84	90	108	120	138	180	180
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/**	**	**		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		45.5	43	41	40.2	36.5	34			
65-200/185	18.5	25		52		52	51	49	48	44.5	42			
65-200/220	22	30		59		59.5	58	56	55	52	49.5	44.5		
65-250/220	22	30		62		61	58	56	54	48.5	44			
65-250/300	30	40		76		74.5	73	71	69	64	61	54		
65-250/370	37	50		90		88	86	84	83	78	75	68		
80-160/110	11	15		27					27.3	26	24.5	22.5	16	
80-160/150	15	20		33					32.5	31	30	28	22	16.5
80-160/185	18.5	25		39					38	36.5	35.5	34	28.5	23.3
80-200/220	22	30		48					47	45	43.5	41	32.5	24.5
80-200/300	30	40		60					59.5	58	57	54.5	47	40.5
80-250/370	37	50		71					70	67	65	61	49	38
80-250/450	45	61		80					80.5	78	76	73	62	51
80-250/550	55	75		92					93	91	90	87	77	68

* Single-phase version (FNM) also available
 ** /92 = 9.2 kW - 12.5 HP FN. ** /110 = 11 kW - 15 HP FNS
 Performances according to ISO 9906 – Annex A

FNS and FNF series



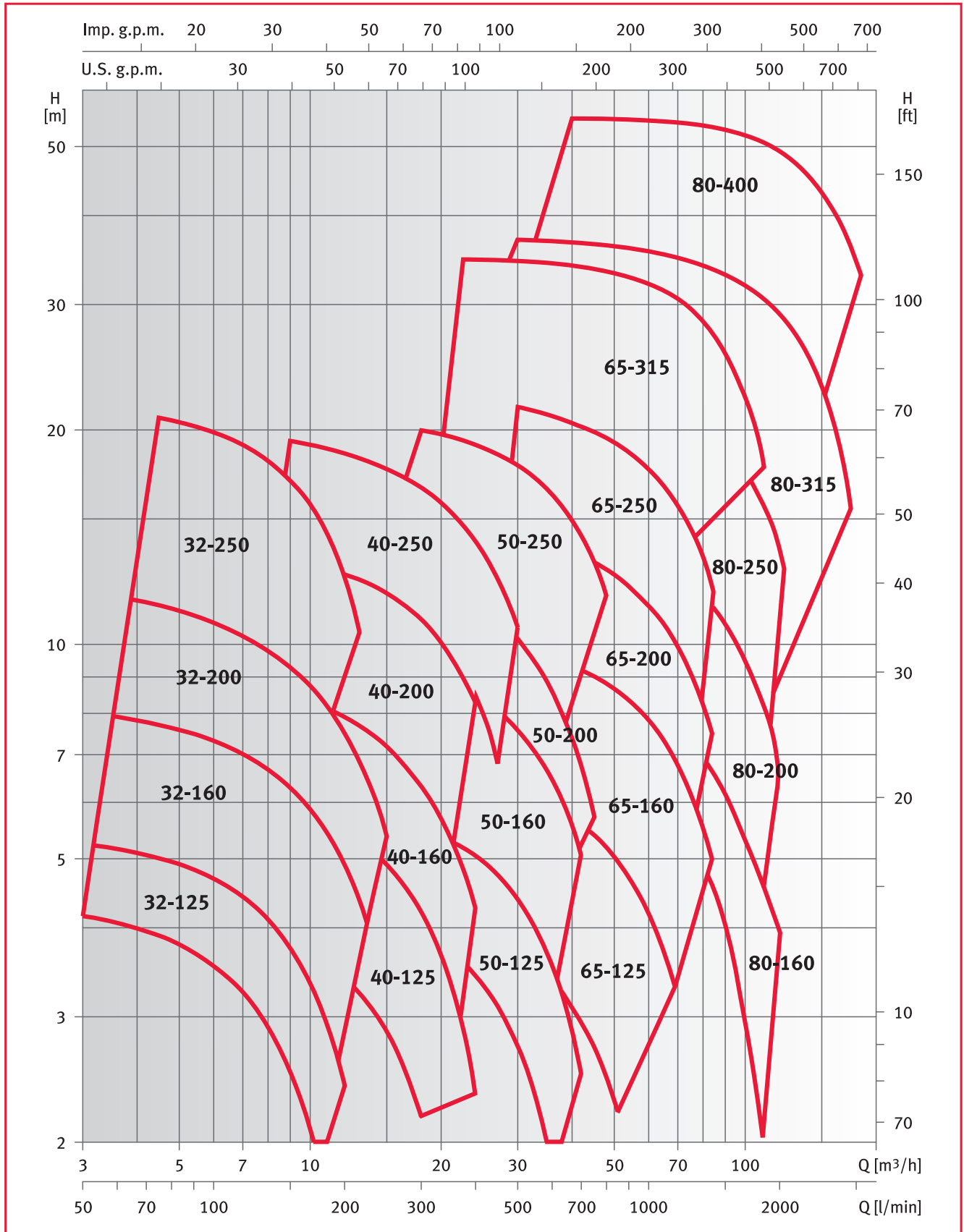
The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS and FNF series

PUMP TYPE	P2		l/min m³/h	0	1333	1500	1667	2000	2500	200	4167	5000	5833	6667	8333	9167	10000	10833
	kW	HP		0	79.98	90	100	120	150	3333	250	300	350	400	500	550	600	650
100-160/185	18.5	25		26.7	26.8	26.6	26	25.8	24.5	21.4	17.4	12.6						
100-160/220	22	30		33	33	32.7	32.4	31.6	30	26.6	22.2	16.8						
100-160/300	30	40		42.3	42	42	42	41	39	36	31.5	26	19.6					
100-200/185	18.5	25		36.4		34.5	34	32.4	29.5	23.2	15.2							
100-200/300	30	40		49		48.5	48	47	45	40	33.2	24.6						
100-200/370	37	50		56		55.6	55	54	52	48	41	33.2						
100-200/450	45	60		61		61	61	60	59	55	49	41	31.6					
100-250/300	30	40		54.6			53.3	52	48	41	29.5	14.9						
100-250/450	45	60		68.8			68.1	67	65	58	49	36.3						
100-250/550	55	75		78.5			78.1	77	75	70	62	49	34					
100-250/750	75	100		91.8			91.7	91	89	85	78	68	54					
100-250/900	90	120		103			102.8	102	101	97	90	80	66	49				
125-200/300	30	40		32.4				30.5	29.1	26.5	23.9	21.4	19	16.2				
125-200/450	45	60		47				45.5	44	42	39.2	36.2	32.9	29.4	21			
125-200/550	55	75		57.3				55.7	55	53	50	47	44	39.5	29.5	23.5		
125-270/750	75	100		64.9					64.6	63	60	57	54	50	40	34.1		
125-270/900	90	120		75.1					74.5	73	71	68	65	61	51	46	36.7	
125-270/1100	110	150		87.6					86.7	85	83	80	77	74	64	56	47	
125-270/1320	132	180		96.8					96.1	94	92	90	87	83	75	69	61	50.7

Performances according to ISO 9906 – Annex A

FN4, 2FNS4, FNS4 and FNF4 series



The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, 2FNS4, FNS4 and FNF4 series

PUMP TYPE	P2		l/min	0	75	100	150	175	200	300	400	450	500	600	700	750
	kW	HP	m ³ /h	0	4.5	6	9	10.5	12	18	24	27	30	36	42	45
32-125/02A*	0.25	0.33		4.4	3.9	3.5	2.5	1.8								
32-125/02*	0.25	0.33		5.5	5	4.7	3.8	3.1	2.4							
32-160/02*	0.25	0.33		6.5	5.8	5.4	4.3	3.6	2.8							
32-160/03*	0.37	0.5		8.5	7.7	7.3	6	5.7	4.9							
32-200/03*	0.37	0.5		9.9	8.7	8.1	6.7	5.9	5							
32-200/05*	0.55	0.75		12.5	11.3	10.7	9.3	8.4	7.5							
32-250/07	0.75	1		19.4	17.7	16.7	13.8	11.7	9							
32-250/11	1.1	1.5		22.5	20.8	19.9	17	15	12.5							
40-125/02A*	0.25	0.33		4			3.8	3.6	3.4	2.2						
40-125/02*	0.25	0.33		5.1			4.7	4.5	4.3	3.1						
40-125/03*	0.37	0.5		6.3			5.8	5.6	5.4	4.2	2.3					
40-160/03*	0.37	0.5		7.4			6.7	6.4	6.1	4.6						
40-160/05*	0.55	0.75		9.1			8.4	8.2	7.9	6.3	4.3					
40-200/07	0.75	1		11.6			10.8	10.5	10.2	8.4						
40-200/11	1.1	1.5		14.1			13.2	12.9	12.6	10.8	8.3					
40-250/11	1.1	1.5		15			13.7	13.3	13	11.2	8.5	6.8				
40-250/15	1.5	2		17.5			16.2	15.8	15.5	13.5	10.8	9.2				
40-250/22	2.2	3		21			19.3	19	18.5	16.6	14	12.4	10.6			
50-125/03A*	0.37	0.5		4.3						3.9	3.4	3.1	2.7	1.8		
50-125/03*	0.37	0.5		5						4.4	3.9	3.6	3.3	2.4		
50-125/05*	0.55	0.75		6						5.5	5.1	4.7	4.4	3.5	2.5	
50-160/07	0.75	1		7.9						7.4	6.8	6.3	5.8	4.7		
50-160/11	1.1	1.5		9.7						9.1	8.5	8.1	7.6	6.5	5.1	
50-200/11	1.1	1.5		12.1						10.8	9.9	9.2	8.6	7.1	5.2	
50-200/15	1.5	2		13.9						12.6	11.6	10.9	10.2	8.6	6.7	5.7
50-250/22A	2.2	3		16.5						15.6	14.6	14	13.2	11.4	9.1	
50-250/22	2.2	3		18.6						17.4	16.5	15.9	15.2	13.4	10.1	9.8
50-250/30	3	4		21.1						20	19	18.5	17.8	16.2	14.2	13

* FN4 version only

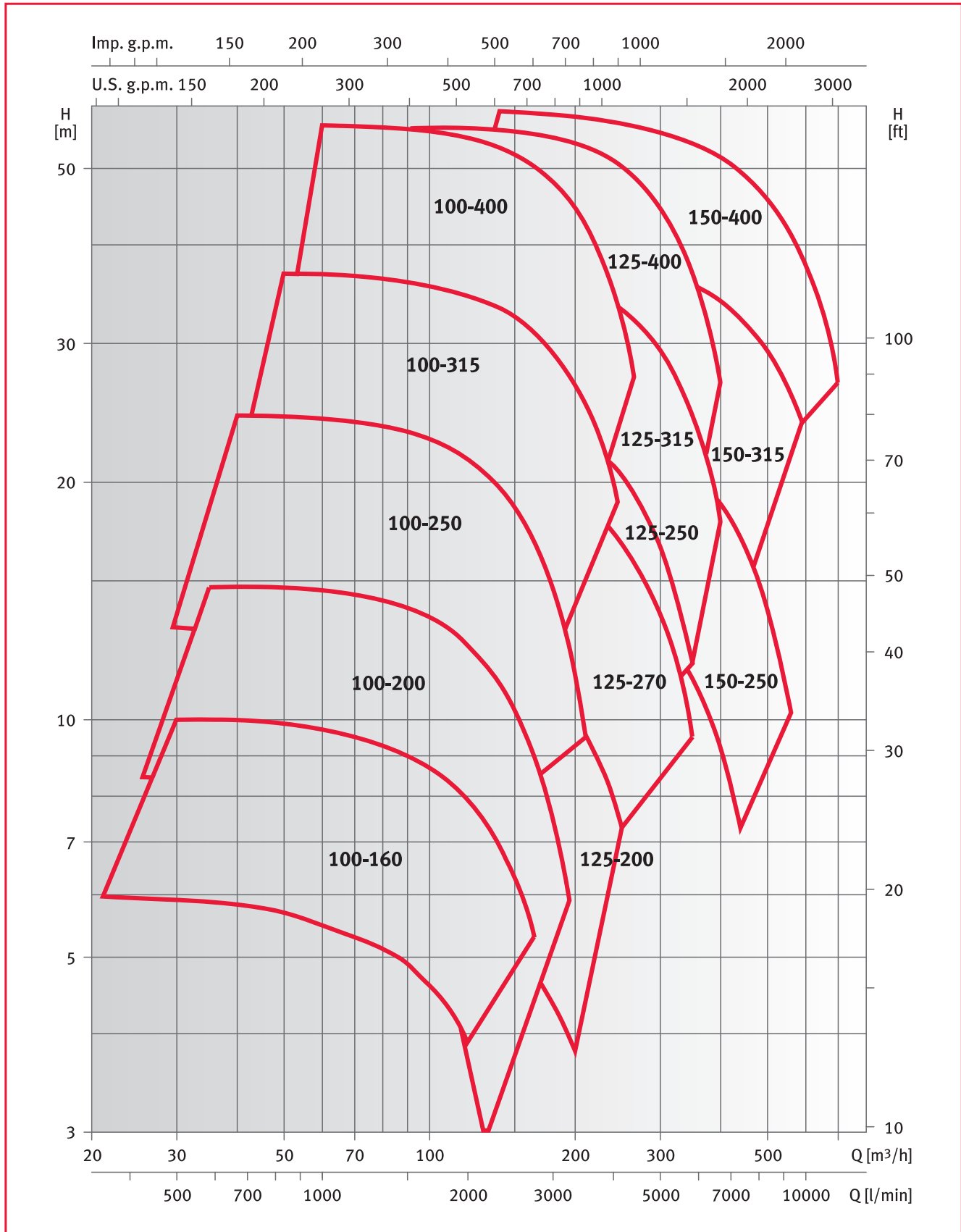
Performances according to ISO 9906 – Annex A

FN4, 2FNS4, FNS4 and FNF4 series

PUMP TYPE	P2		l/min m ³ /h	0	400	450	500	600	700	750	1000	1200	1400	1600	1800	2333	2500
	kW	HP		0	24	27	30	36	42	45	60	72	84	96	108	140	150
65-125/05	0.55	0.75		4.6	4.1	4	3.8	3.4	2.9	2.7							
65-125/07	0.75	1		5.6	5.2	5	4.9	4.5	4.2	3.9	2.6						
65-125/11	1.1	1.5		6.6	6.3	6.2	6.1	5.9	5.6	5	4.2						
65-160/11	1.1	1.5		8			7.3	7	6.6	6.3	4.8	3.4					
65-160/15	1.5	2		9			8.3	8	7.6	7.4	6	4.6					
65-160/22	2.2	3		10.3			9.8	9.5	9.2	9	7.8	6.5	5				
65-200/15	1.5	2		10			9.6	9.1	8.5	8.2	6.4	4.6					
65-200/22	2.2	3		12.4			12.2	11.8	11.3	11	9.3	7.6					
65-200/30	3	4		14.4			14.3	13.8	13.4	13.1	11.3	9.6	7.5				
65-250/30	3	4		15.4		14.8	14.6	13.9	13.1	12.6	9.7	6.7					
65-250/40	4	5.5		19		18.6	18.3	17.8	17.2	16.9	14.4	11.7					
65-250/55	5.5	7.5		22.3		21.5	21.3	20.9	20.3	19.9	17.7	15.1	12				
65-315/40	4	5.5		18.6	18.3	18.1	17.9	17.3	16.7	16.2	13.3						
65-315/55	5.5	7.5		22.1	21.8	21.7	21.6	21.2	20.6	20.2	17.3	14					
65-315/75	7.5	10		26.5	26.2	26.1	26	25.6	25.2	24.9	23	20.8	17.6				
65-315/110A	11	15		30.6	30.5	30.4	30.3	30	29.7	29.5	27.9	25.8	22.8	18.6			
65-315/110	11	15		34.8	34.7	34.6	34.5	34.2	33.9	33.7	32.1	30.2	27.4	23.7	18.7		
80-160/15	1.5	2		7.2						7.1	6.4	5.5	4.6	3.5			
80-160/22	2.2	3		8.5						8.6	8	7.4	6.6	5.7	5		
80-200/30	3	4		11.2						11	10.1	9.2	8	6.6			
80-200/40	4	5.5		13.8						13.8	13.3	12.4	11.3	10	9		
80-250/40	4	5.5		16.5						16	14.8	13.2	11.4	9			
80-250/55	5.5	7.5		19.8						19.5	18.4	17.2	15.5	13.5	11.1		
80-250/75	7.5	10		23.6						23.5	22.5	21.3	19.9	18.1	16		
80-315/55	5.5	7.5		19.7			19.5	19.4	19.2	19.1	18.1	16.8	15	12.8	10.1		
80-315/75	7.5	10		24.6			24.4	24.3	24.1	23.9	23	21.9	20.4	18.6	16.3		
80-315/110	11	15		29.9			29.7	29.6	29.5	29.4	28.8	28.1	27	25.5	23.6	16.5	13.5
80-315/150	15	20		36.8			37	36.8	36.6	36.4	35.6	34.7	33.6	32.4	30.9	25.3	23
80-400/185	18.5	25		40.3					39.7	39.7	39.1	38.4	37.3	35.9	34.1	27.3	24.5
80-400/220	22	30		45.1					44.7	44.6	44.2	43.6	42.6	41.4	39.8	33.4	30.7
80-400/300	30	40		55.1					54.7	54.7	54.4	54	53.3	52.2	50.9	45.4	43.2

Performances according to ISO 9906 – Annex A

FNS4 and FNF4 series



The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 series

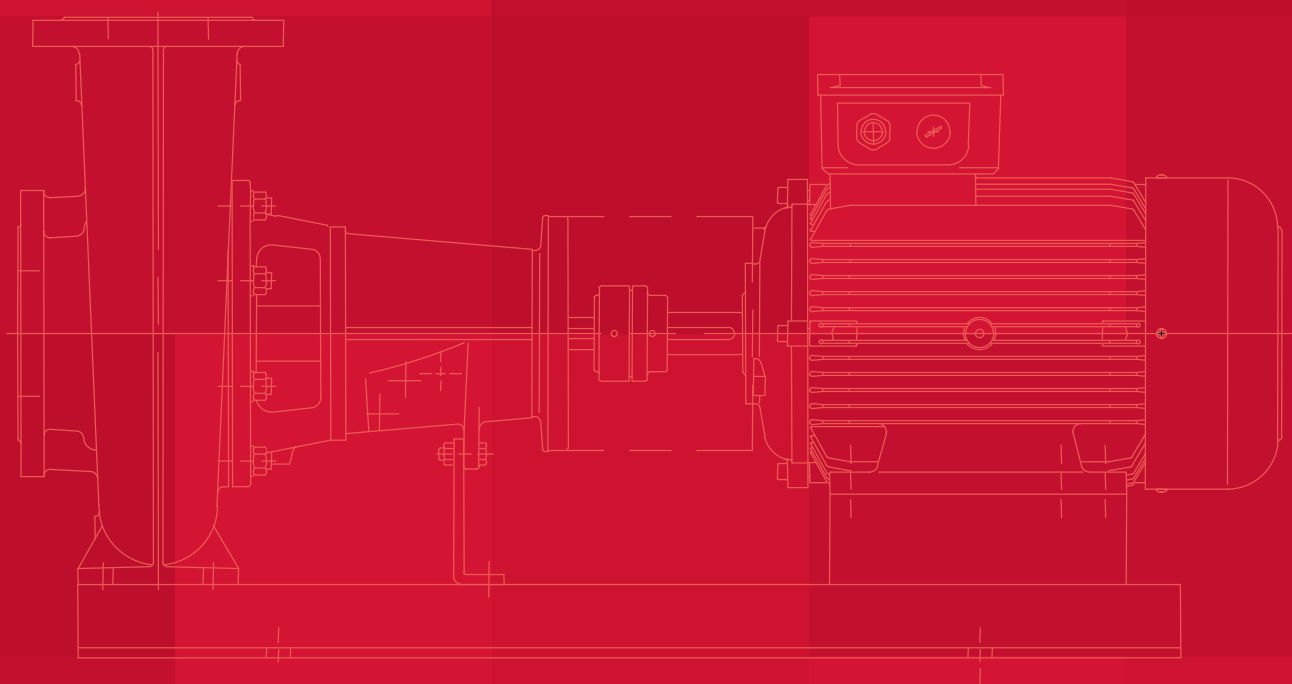
PUMP TYPE	P2		l/min m³/h	0	500	583	667	833	1000	1500	1667	1833	2333	2500	3333	4167	5000	6667	8333	10000	
	kW	HP		0	30	15	35	50	60	90	100	110	140	150	200	250	300	400	500	600	
100-160/22	2.2	3		5.9	5.9	5.9	5.8	5.7	5.5	4.9	4.6	4.3									
100-160/30	3	4		8.2	8.2	8.1	8.1	8	7.9	7.2	6.9	6.5	5.1								
100-160/40	4	5.5		10	10	10	10	9.9	9.7	9	8.7	8.3	6.9	6.3							
100-200/22				8.5		8.3	8.2	7.9	7.5	5.9	5.2	4.5									
100-200/40	4	5.5		11.8		11.8	11.8	11.6	11.4	10.3	9.7	9.1	6.8	5.9							
100-200/55	5.5	7.5		14.8		14.7	14.7	14.7	14.5	13.8	13.5	13	11.1	10.3							
100-250/40	4	5.5		12.9			12.9	12.6	12.1	10.1	9.2	8.2									
100-250/55	5.5	7.5		15.9			15.9	15.7	15.5	14.1	13.4	12.5	9.2	7.9							
100-250/75	7.5	10		19.5			19.5	19.4	19.2	18.1	17.6	16.9	14	12.7							
100-250/110	11	15		24.3			24.3	24.2	24.1	23.1	22.7	22.1	19.7	18.6	11.4						
100-315/150	15	20		29.9				29.7	29.5	28.6	28.1	27.5	25	24	16.8						
100-315/185	18.5	25						34.4	34.2	33.3	32.8	32.2	30	29	22.4						
100-315/220	22	30		37				36.8	36.7	35.9	35.5	35.1	33.2	32.4	26.6						
100-400/300	30	40		46.4					46	46	45	44	42	40	29.6						
100-400/450	45	60		57.1					56.7	56	56	55	53	52	45	32.1					
125-200/40	4	5.5		7.9					7.4	6.7	6.5	6.2	5.4	5.2	3.8						
125-200/55	5.5	7.5		11.4					10.8	10.2	10	9.7	8.9	8.6	6.9						
125-200/75	7.5	10		14.1					13.6	13.1	12.9	12.7	11.9	11.6	9.6						
125-250/75	7.5	10		15.4					15.3	15	14.8	14.6	13.6	13.1							
125-250/110	11	15		19.4					19.3	19.1	19	18.9	18.1	17.8	15.3	11.7					
125-250/150	15	20		23.2					23.3	23.1	23	22.9	22	22	19.8	16.5	12.3				
125-250/185	18.5	25		25.6					25.5	25.5	25.4	25.3	24.9	24.7	23	20.3	16.5				
125-270/75	7.5	10		14.4					14.4	13.9	13.7	13.5	12.6	12.2	10.1	7.3					
125-270/110	11	15		18					18.1	17.8	17.7	17.5	16.8	16.5	14.5	11.8	8.3				
125-270/150	15	20		22.6					22.6	22.3	22.1	21.9	21.2	21	19.2	16.7	13.6				
125-315/185	18.5	25		27.3							26.9	26.7	25.9	25.6	23.3	19.7	14.9				
125-315/220	22	30		30							29.7	29.6	28.9	28.6	26.5	23.2	18.4				
125-315/300	30	40		35.6							35.4	35.3	34.8	34.6	32.9	30.1	26.1				
125-315/370	37	50		38.2							38	37.9	37.4	37.2	35.7	33.1	29.4	17.8			
125-400/220	22	60		33.4						32.8	32.5	32.1	30.5	29.7	24.7	17.3					
125-400/300	30	40		41						41	40.5	40.3	39.2	38.6	34.4	27.5	18.3				
125-400/450	45	60		51.4						51	50.9	50.8	50.1	49.8	47	42.2	34.8				
125-400/550	55	75		56.5						56.3	56.3	56.2	55.9	55.7	53.8	50.3	44.7	26.7			
150-250/150	15	20		17.5										16.8	15.9	14.7	13.2	9.2			
150-250/185	18.5	25		21.3										20.8	20	18.9	17.5	13.8	8.7		
150-250/220	22	30		24										23.6	23	22	20.8	17.1	12		
150-250/300	30	40		25.5										25	24.5	23.5	22	18.8	13.8		
150-315/300	30	40		30.2										29.7	29	27.9	26.4	22.3			
150-315/370	37	50		33.6										33.5	32.7	31.7	30.4	26.7	21.4		
150-315/450	45	60		37.7										37.6	36.9	35.9	34.7	31.3	26.5		
150-315/550	55	75		40										40	39.3	38.4	37.2	33.9	29.4		
150-400/300	30	40		32.9									32	31.7	30.2	28.2	25.5	18.6			
150-400/370	37	50		38.3									37.5	37.3	36	34	31.4	24.3			
150-400/450	45	60		42.8									42.2	42	41	39	36.6	30	21.2		
150-400/550	55	75		48.2									47.7	48	46	45	42	36.8	29.2		
150-400/750	75	100		55.4										55	55	54	53	51	47	41	32.2
150-400/900	90	120		59.5										59	59	58	57	56	52	46	37.7

Performances according to ISO 9906 – Annex A

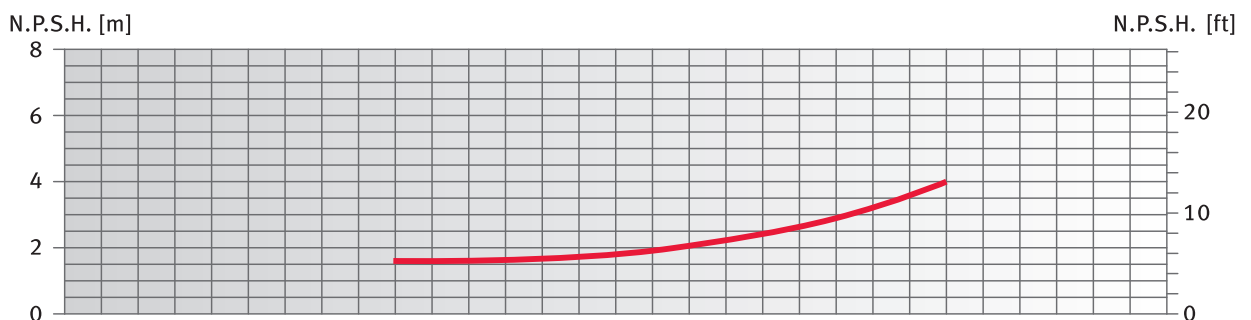
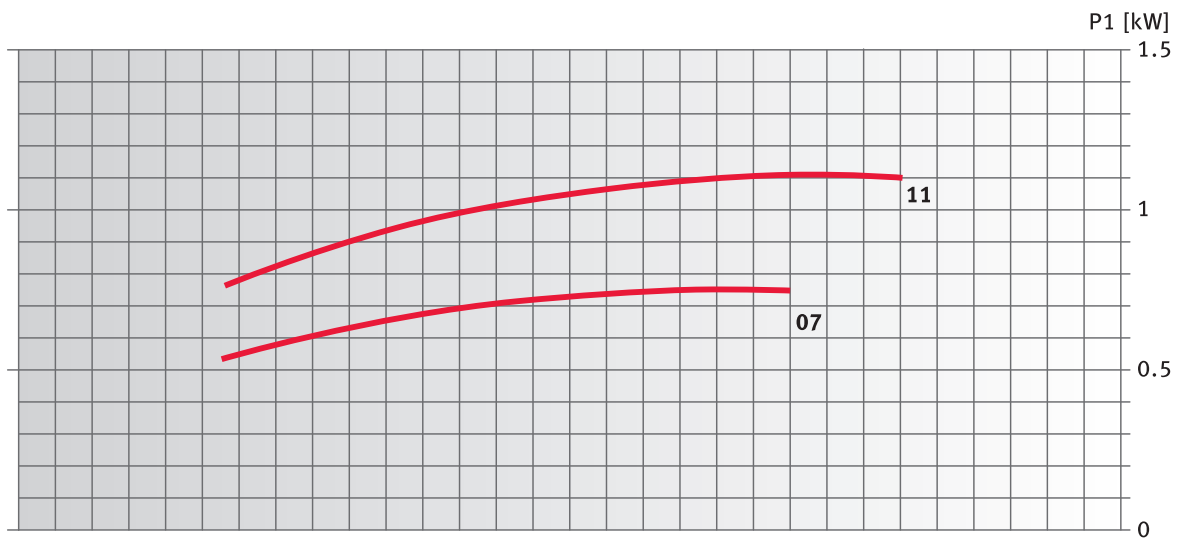
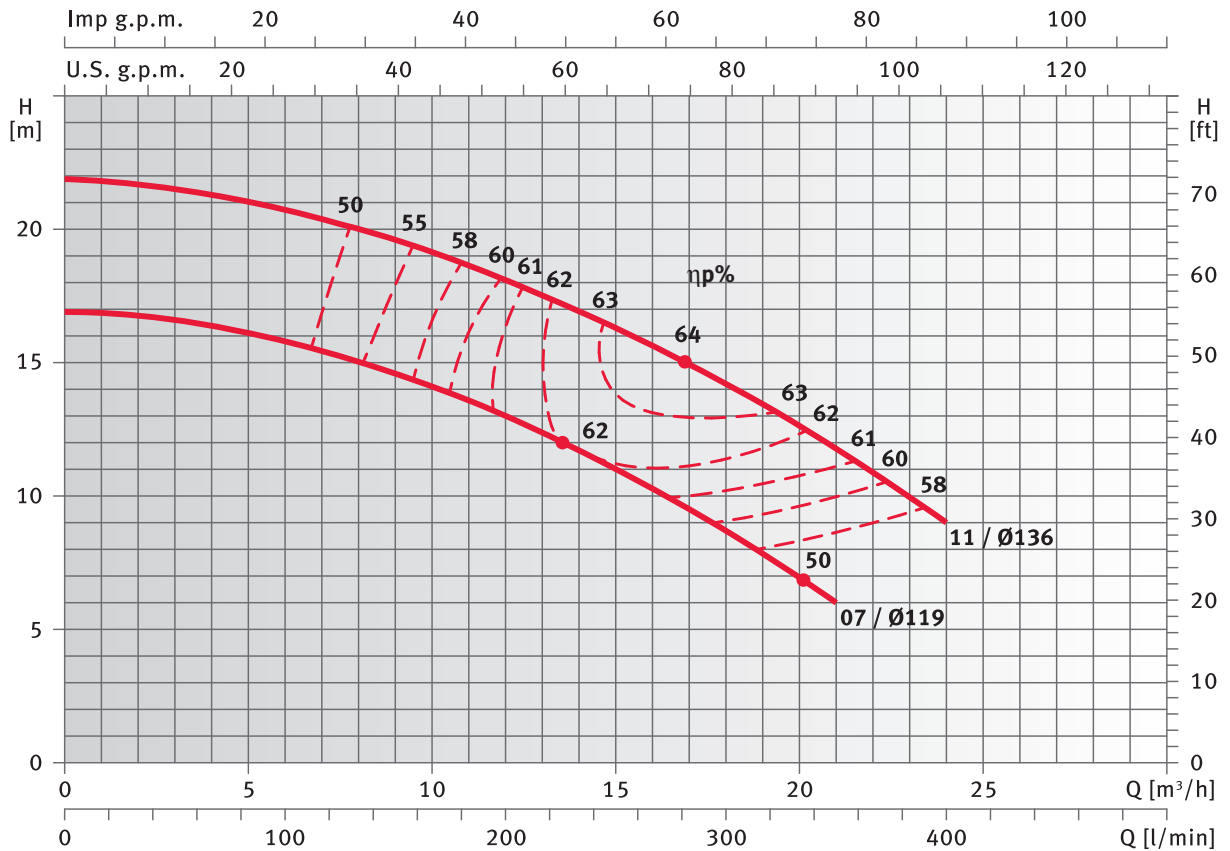
FN Serie

Operating curves

50 Hz

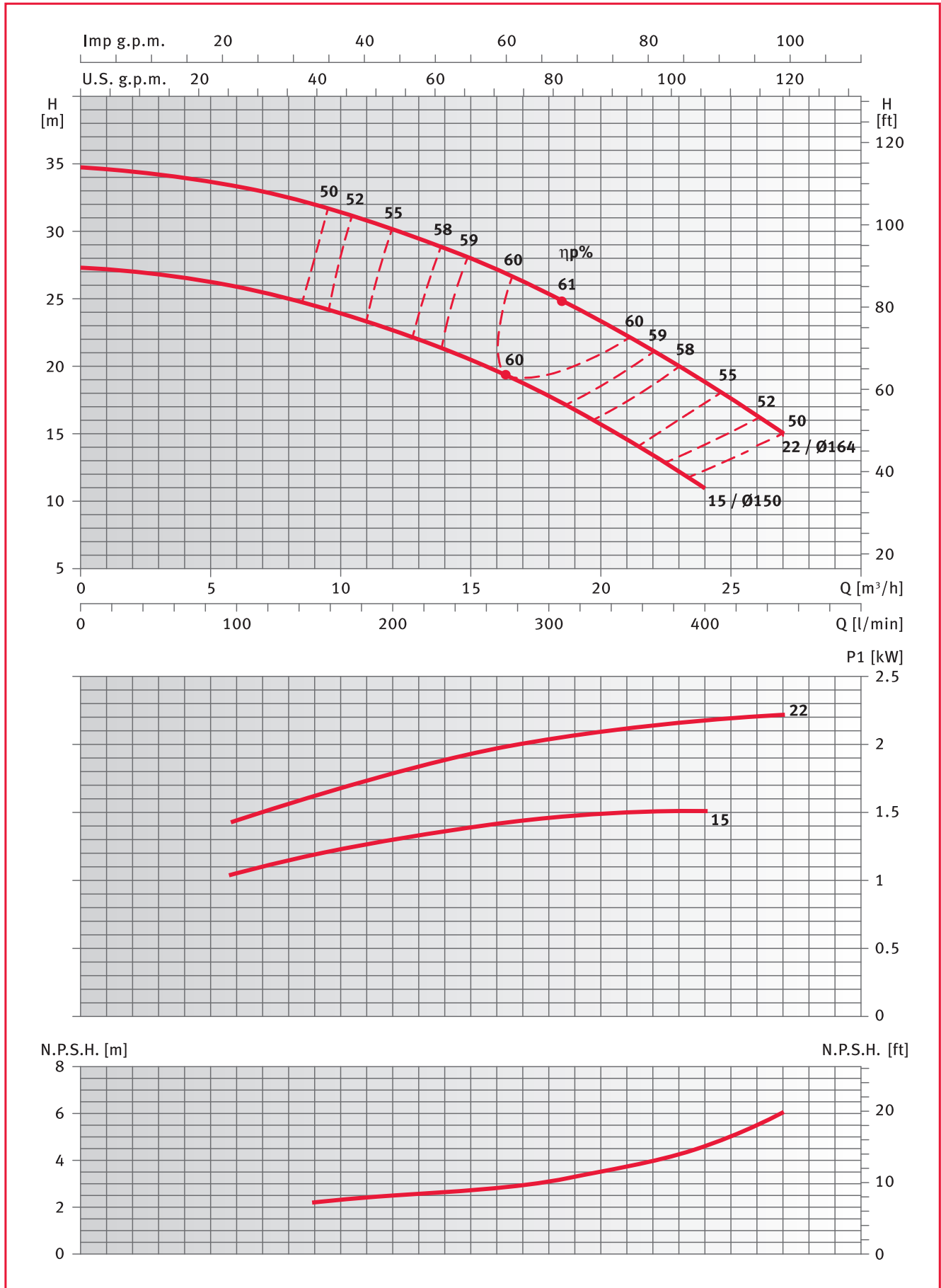


FN, FNS and FNF 32 - 125 series



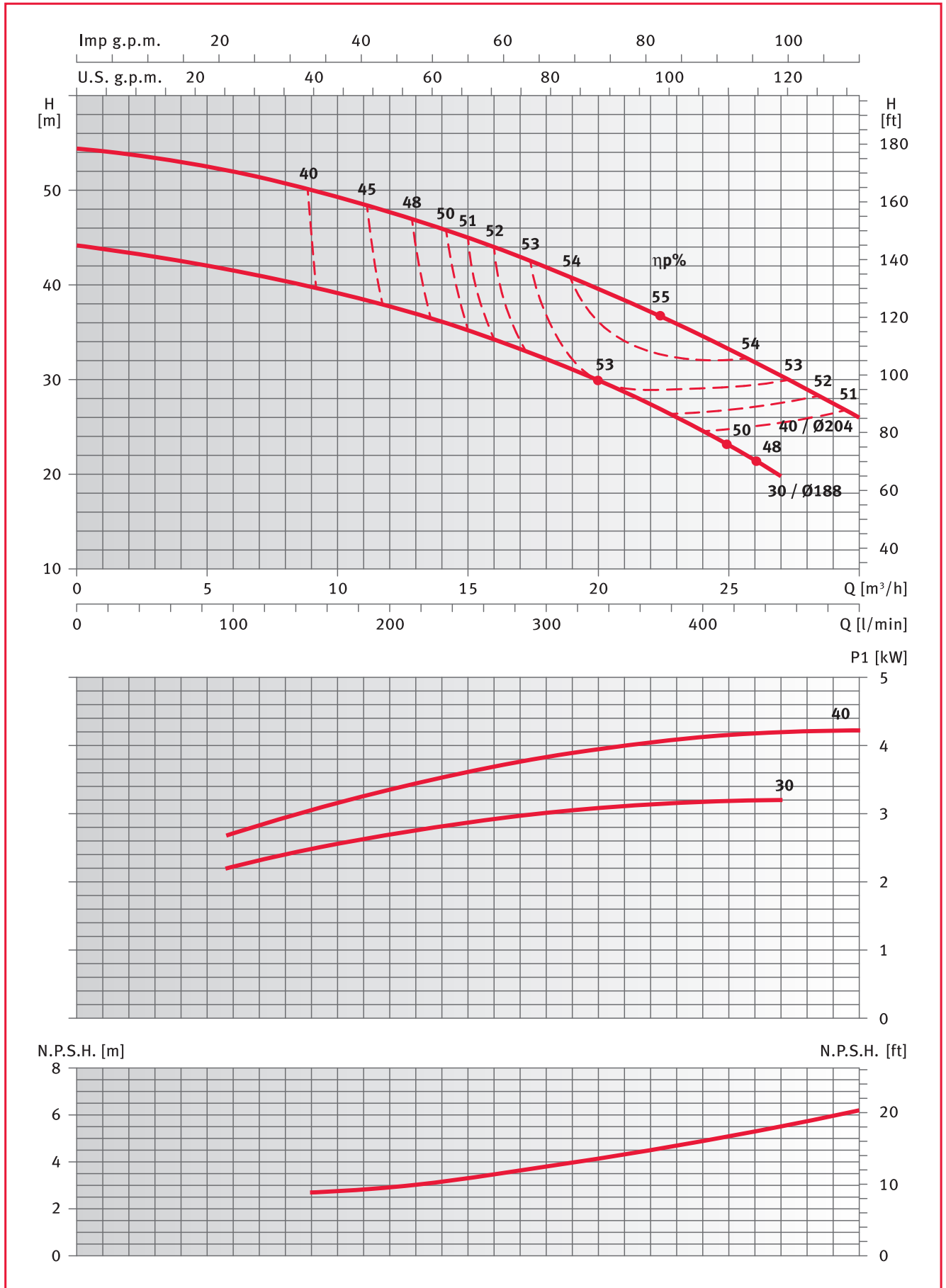
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 32 - 160 series



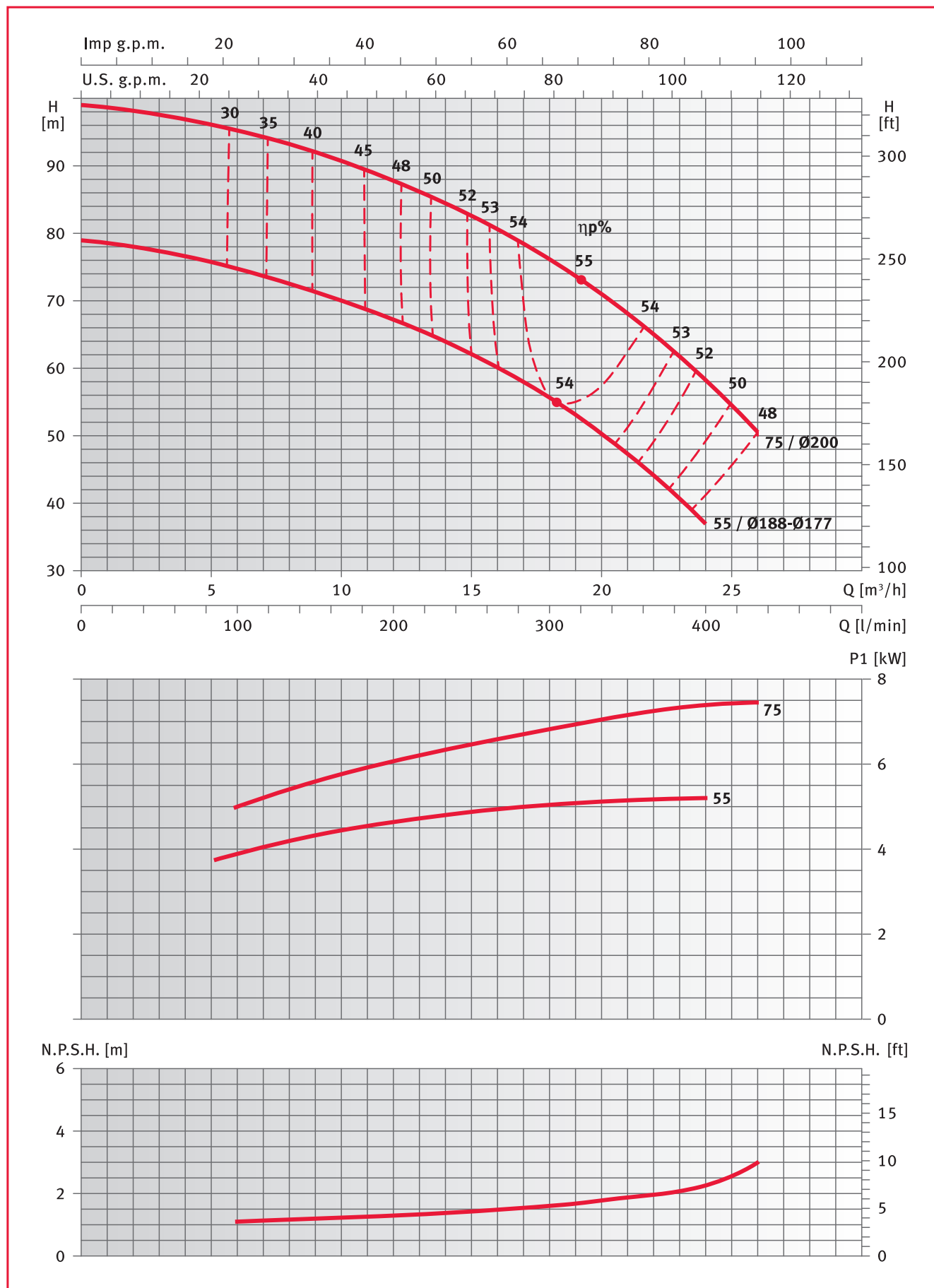
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 32 - 200 series



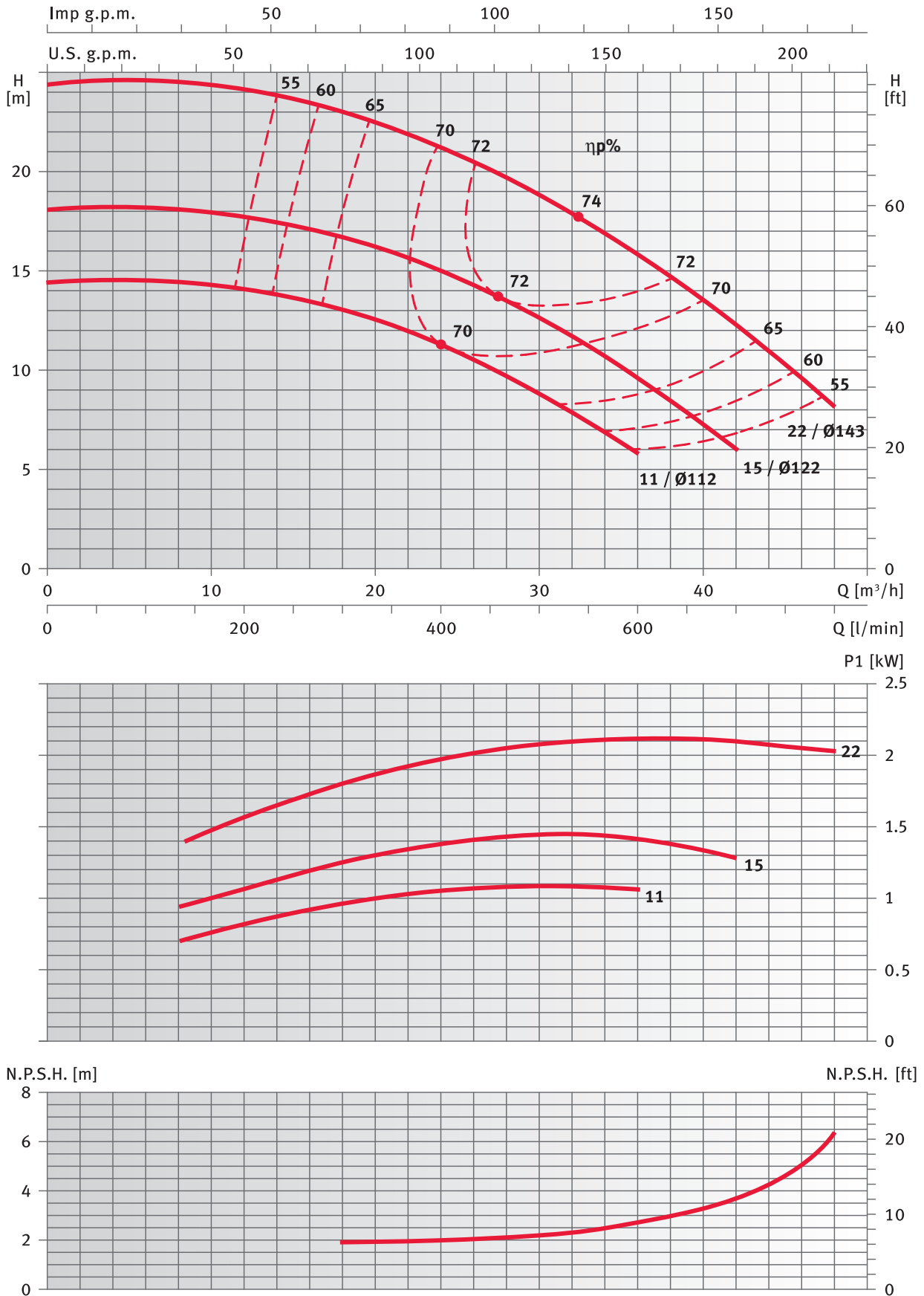
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

2FN 32 - 250 series



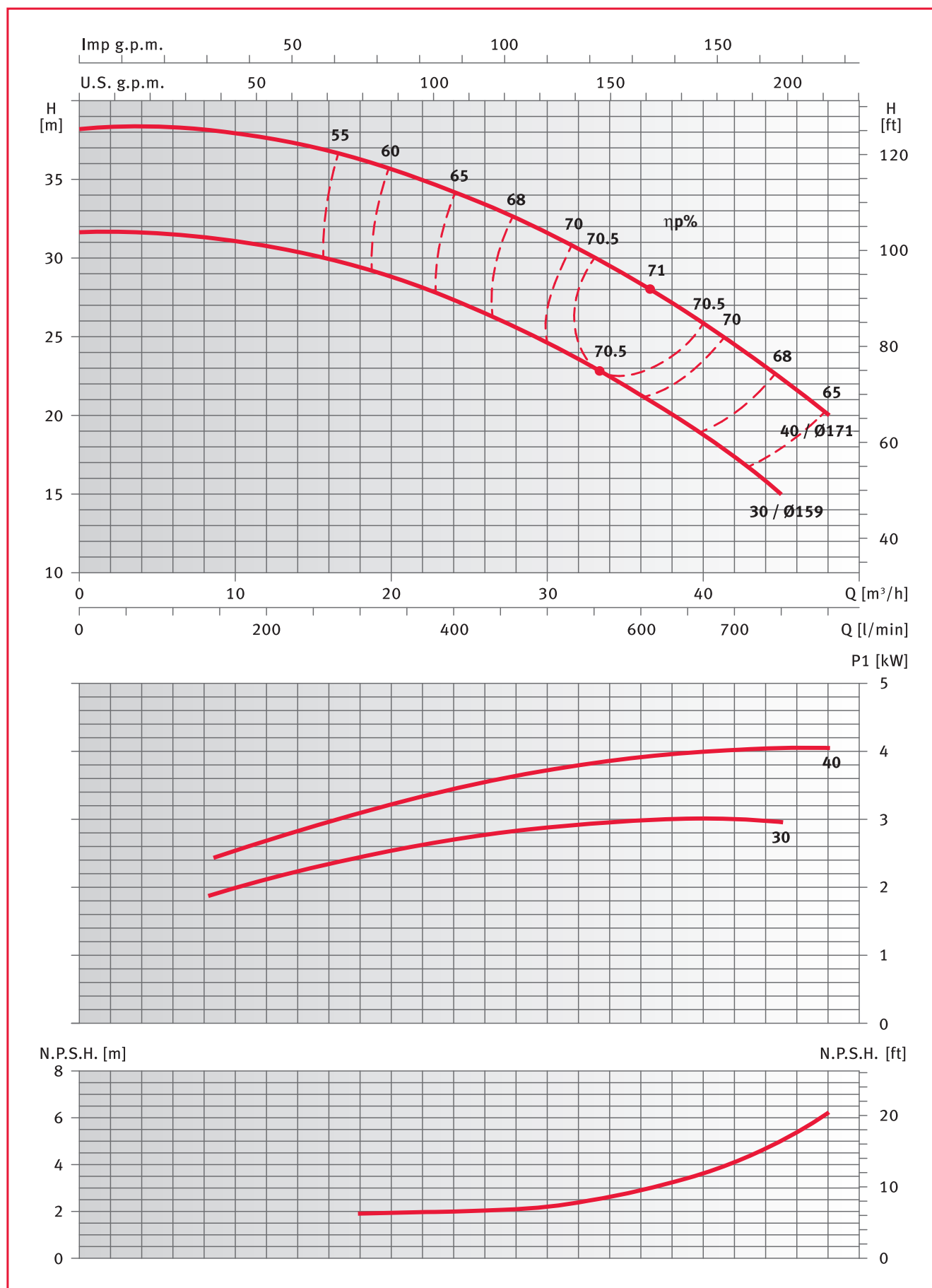
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 40 - 125 series



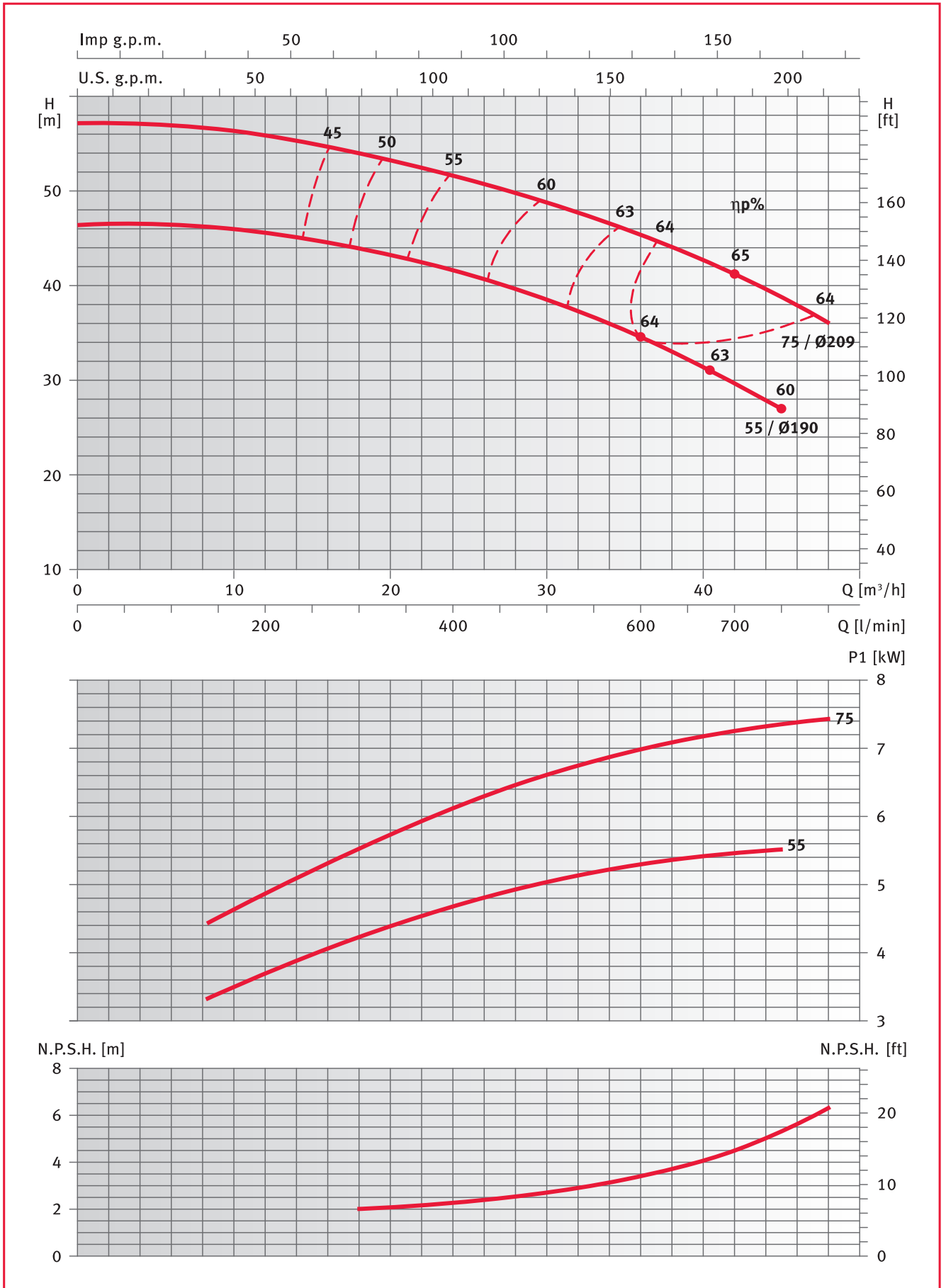
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 40 - 160 series



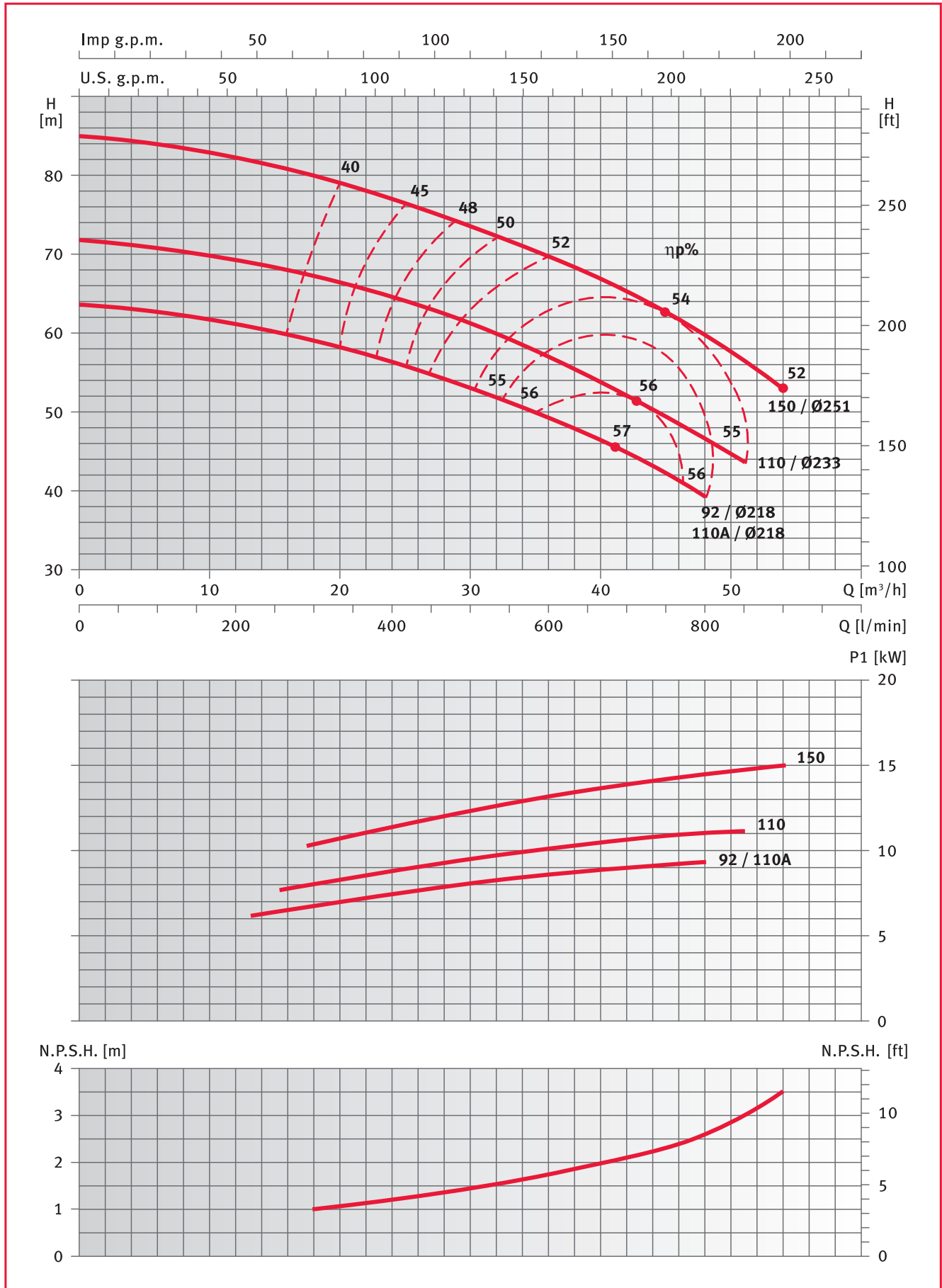
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 40 - 200 series



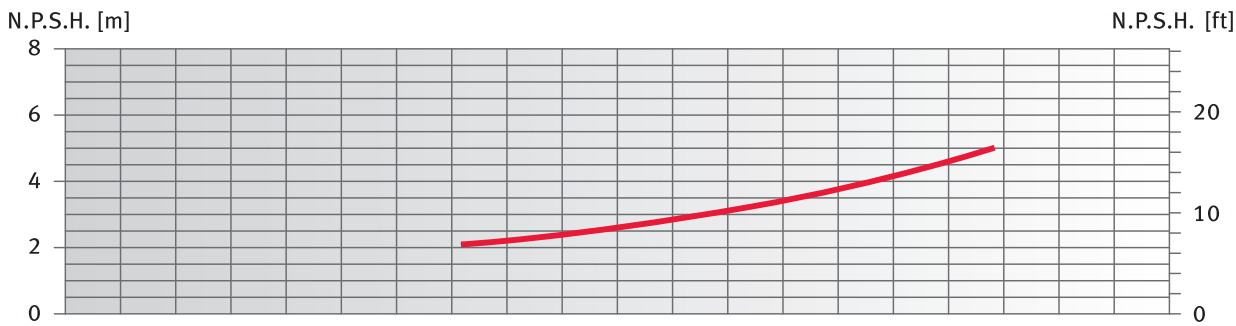
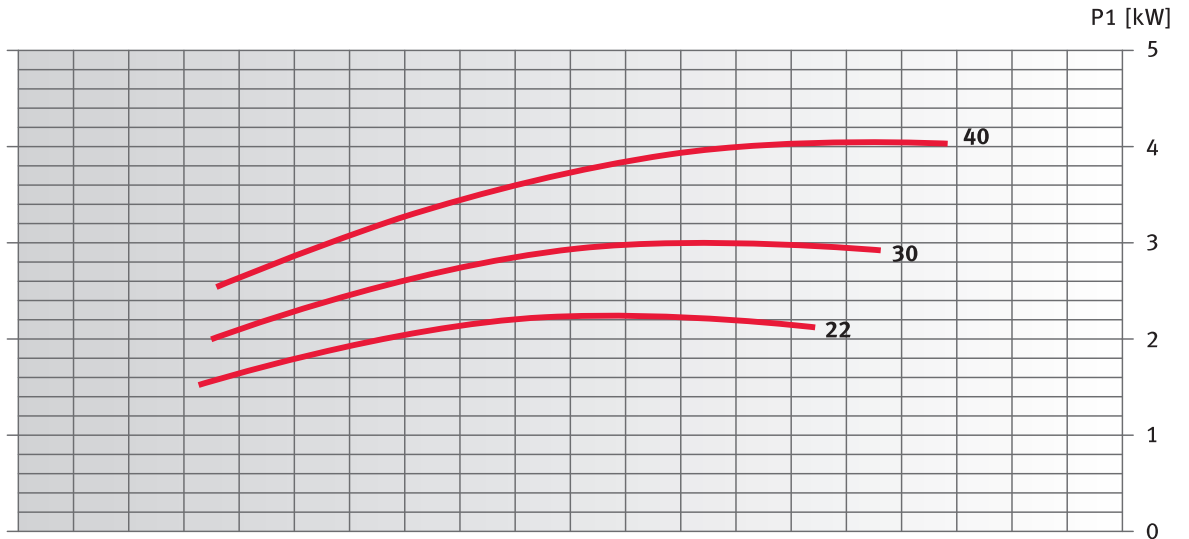
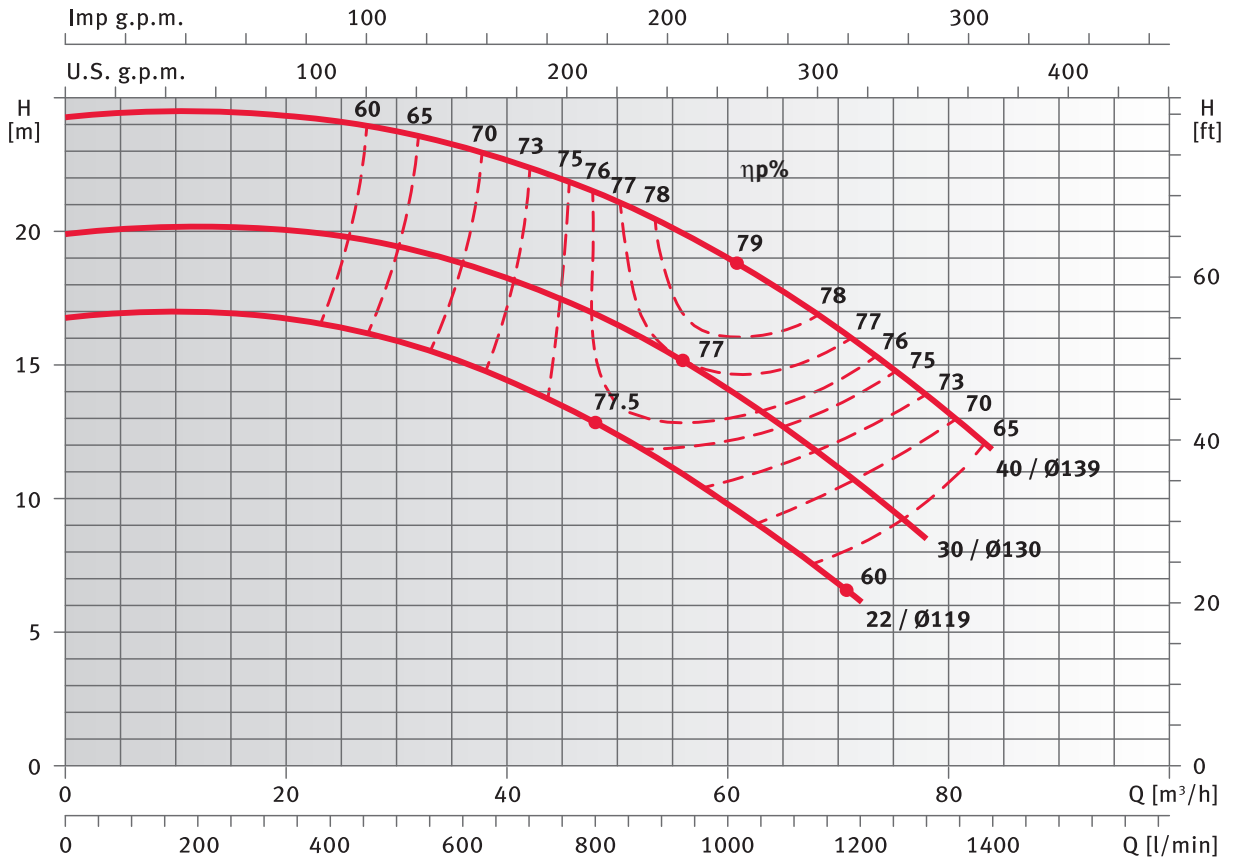
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 40 - 250 series



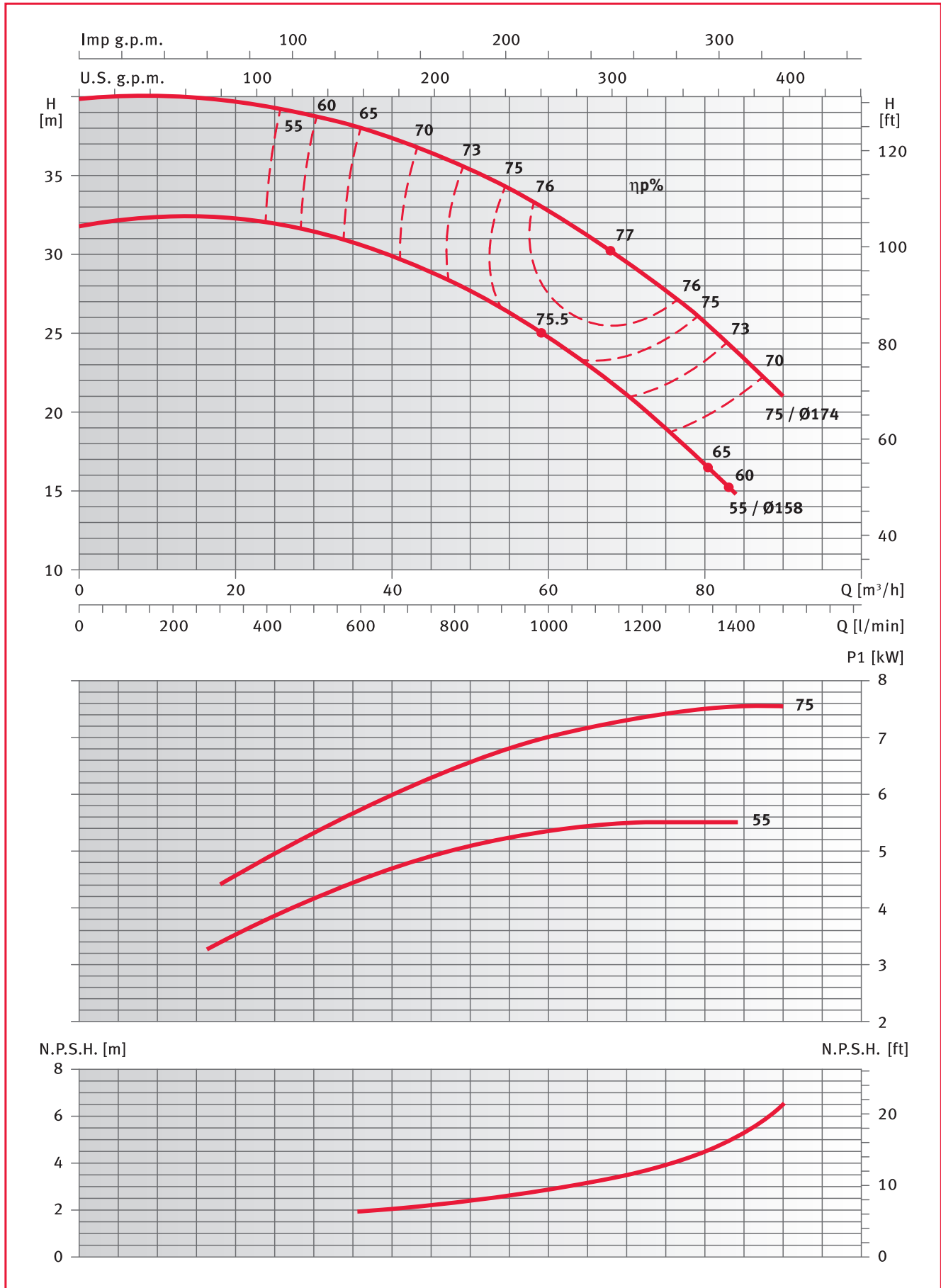
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 50 - 125 series



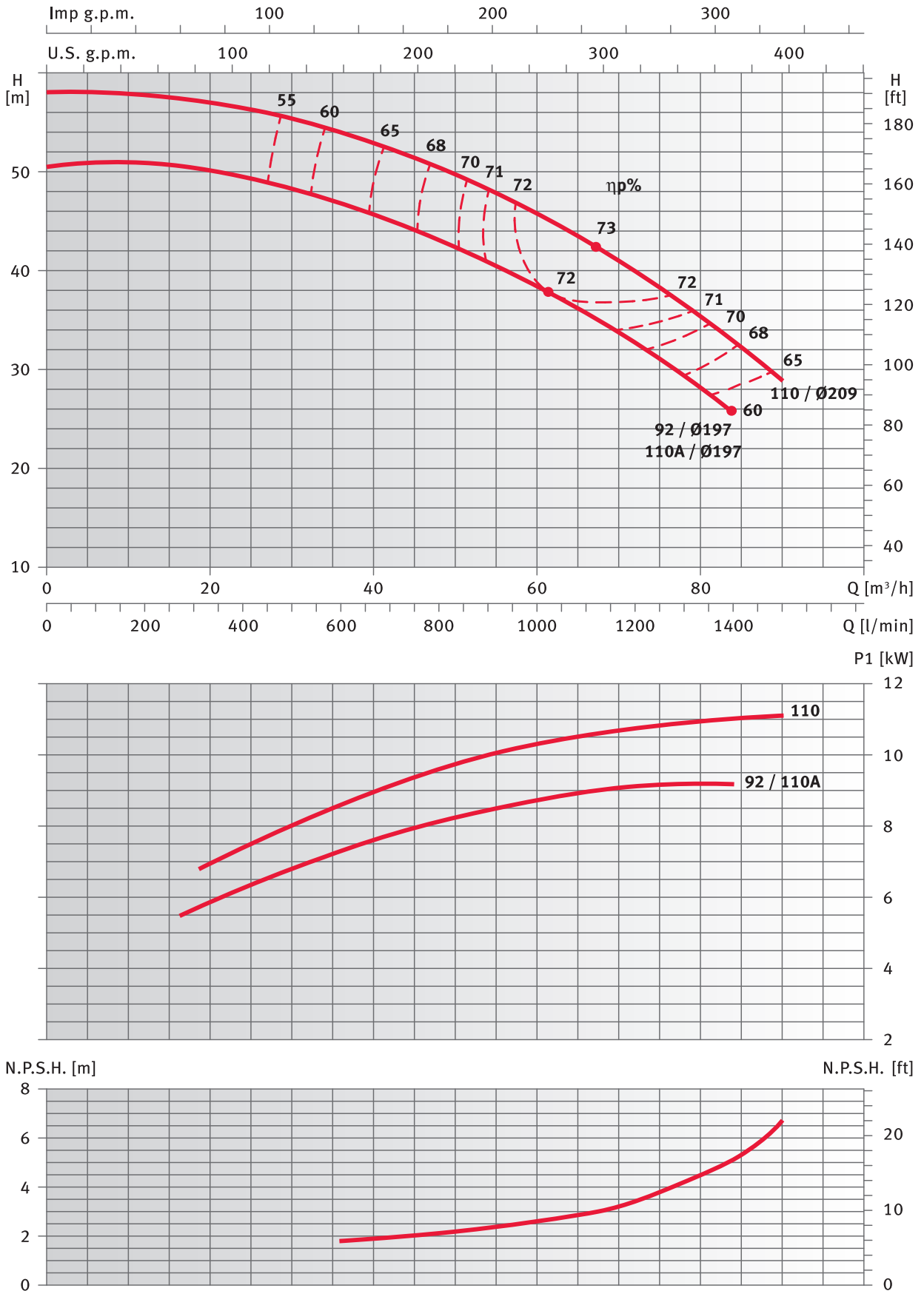
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 50 - 160 series



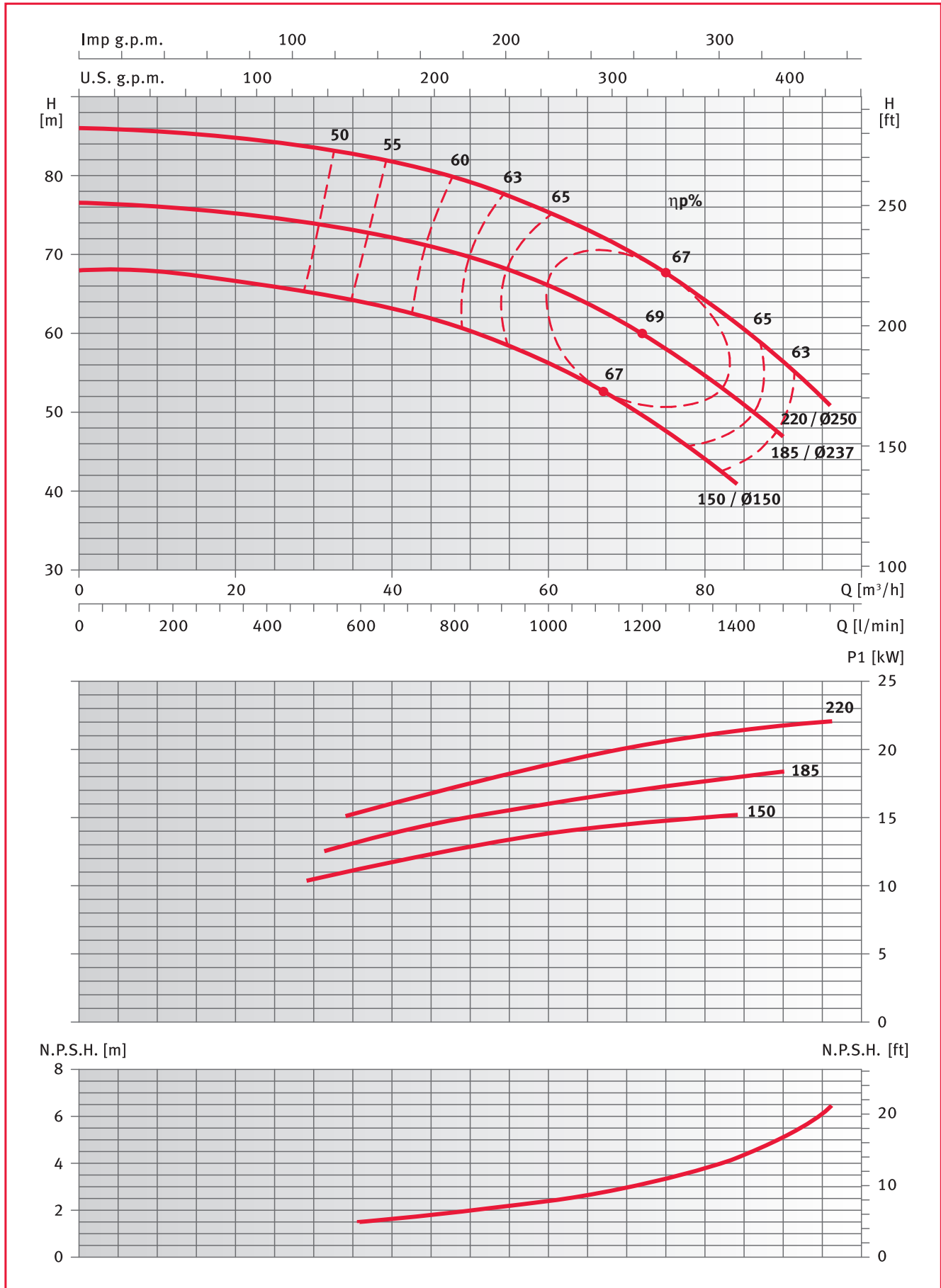
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 50 - 200 series



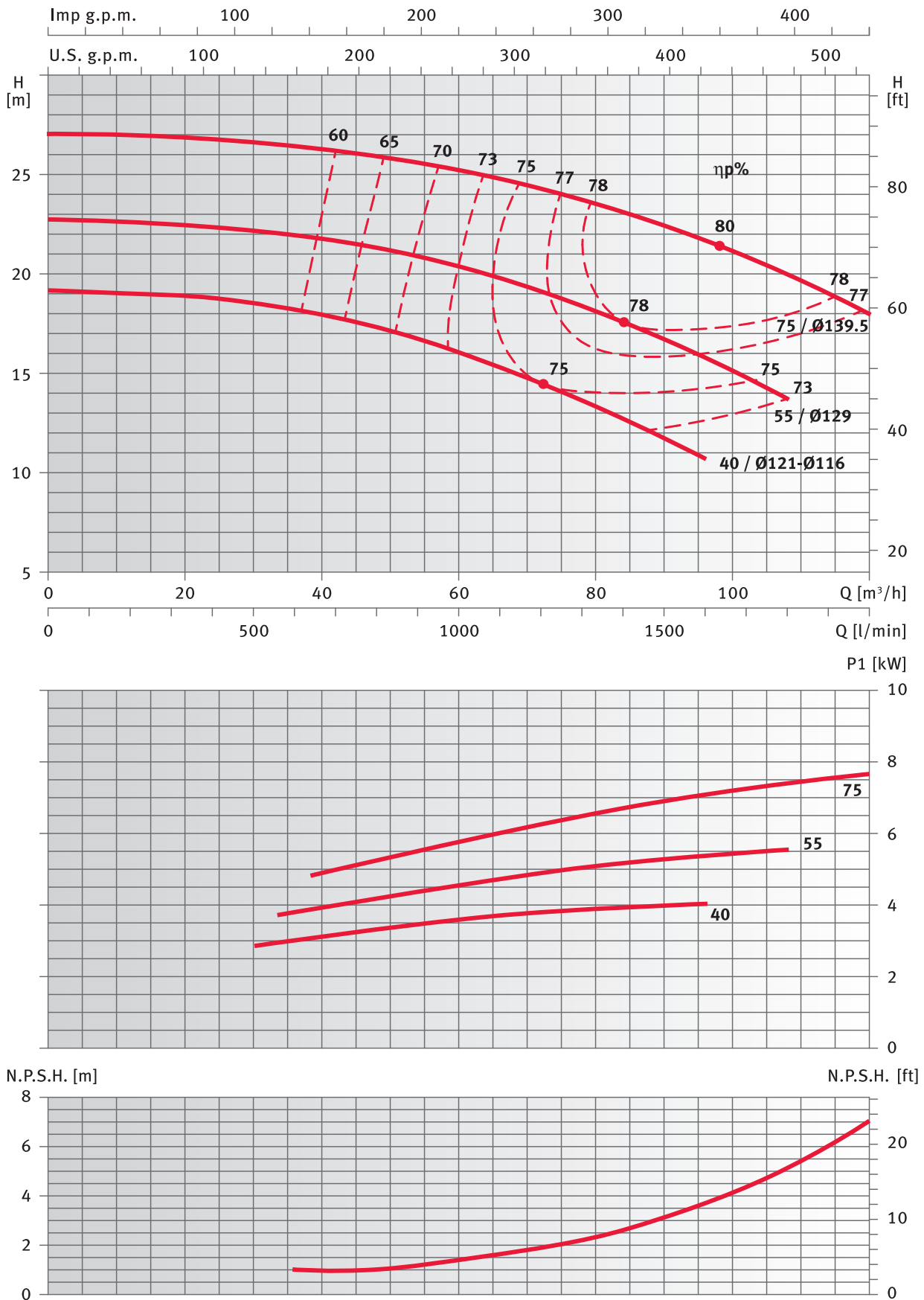
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 50 - 250 series



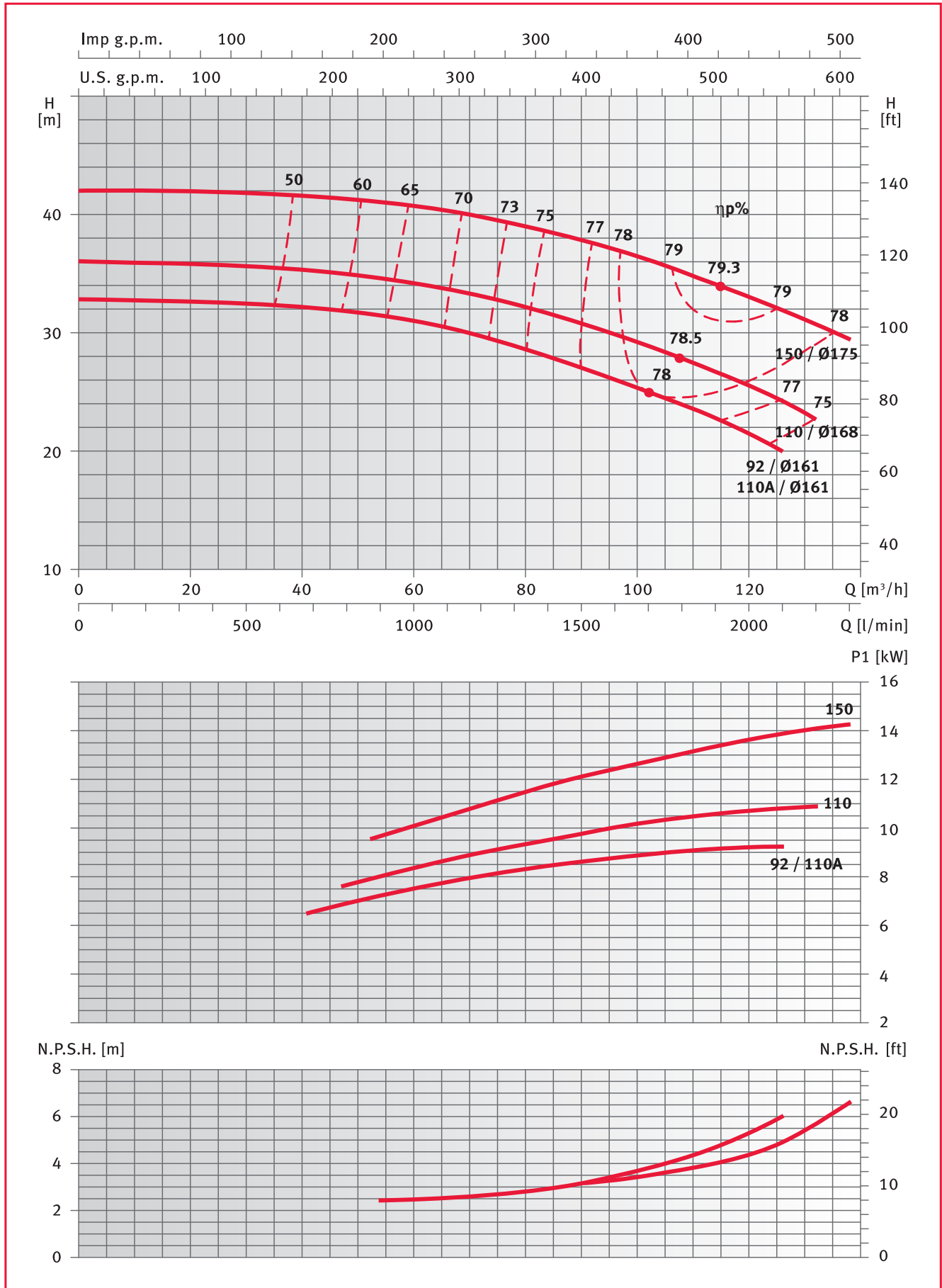
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 65 - 125 series



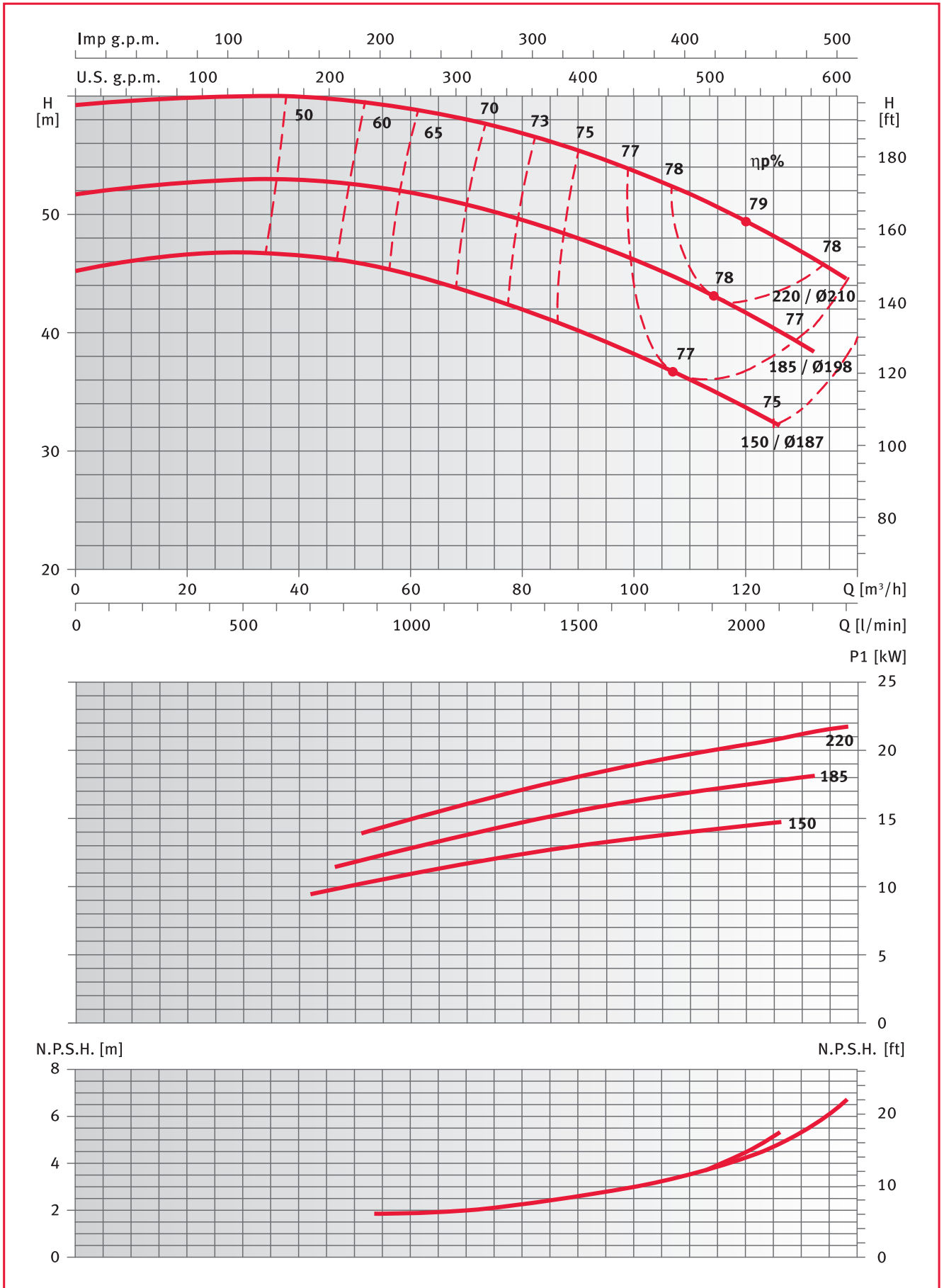
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 65 - 160 series



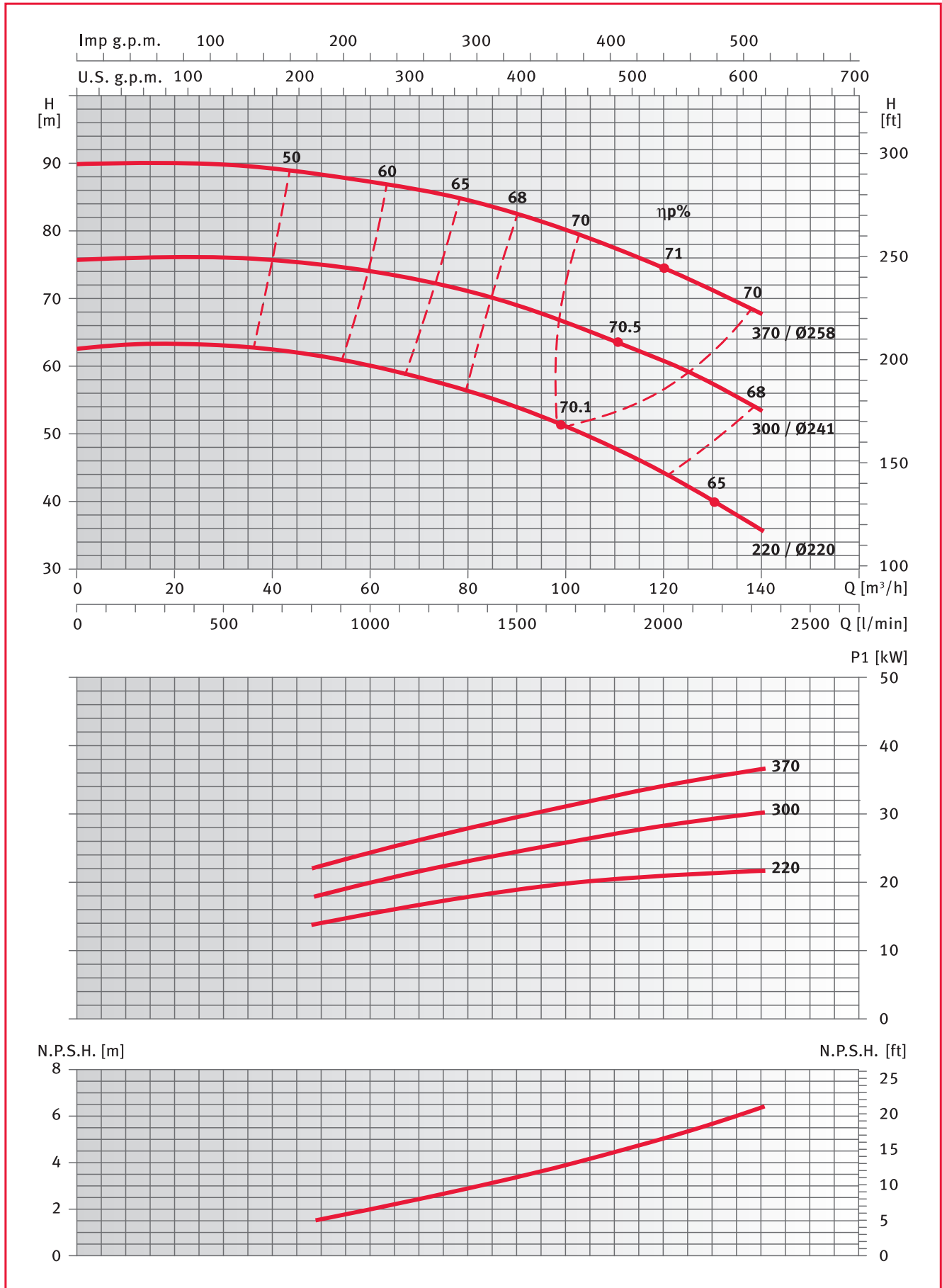
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 65 - 200 series



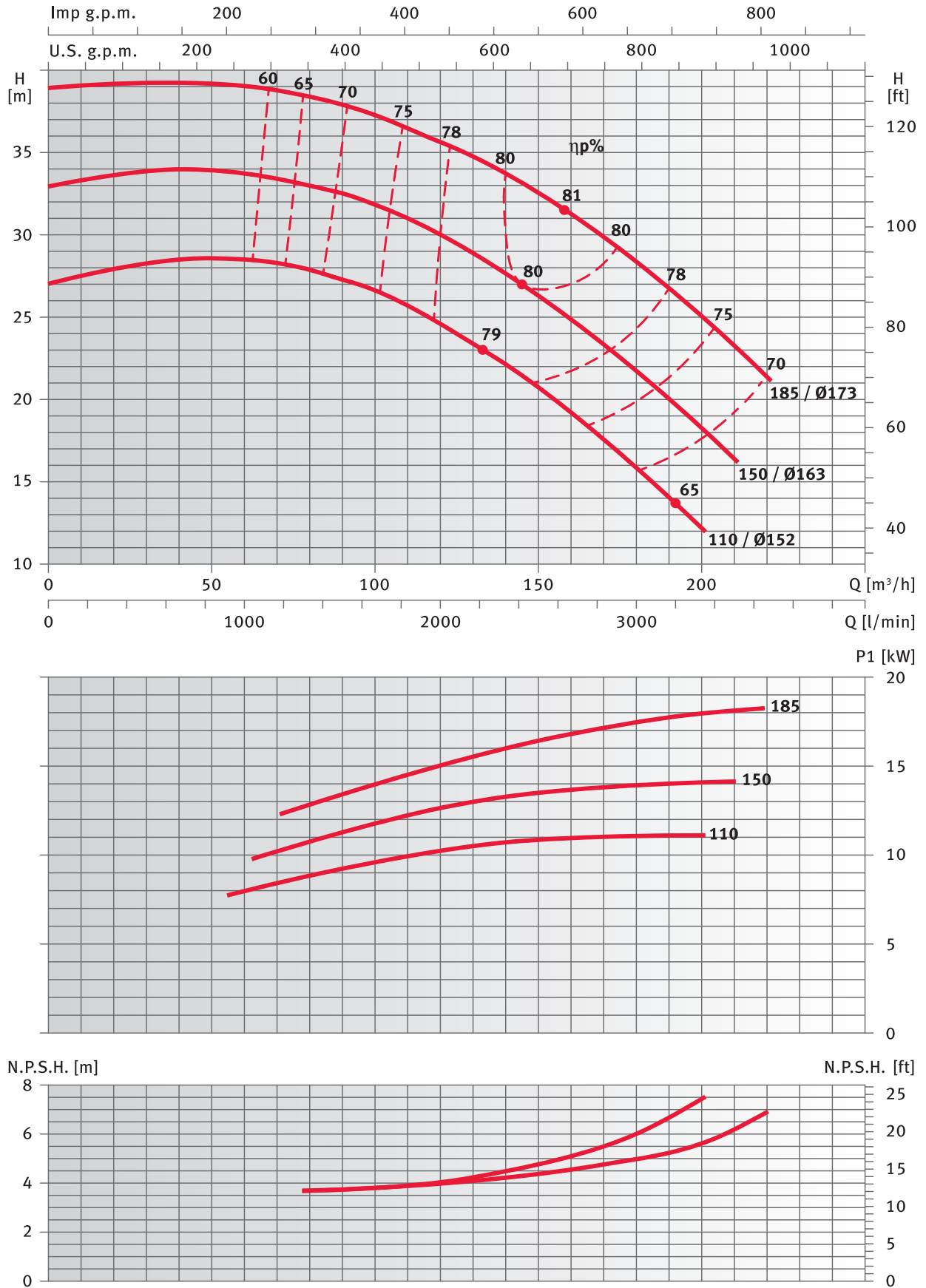
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 65 - 250 series



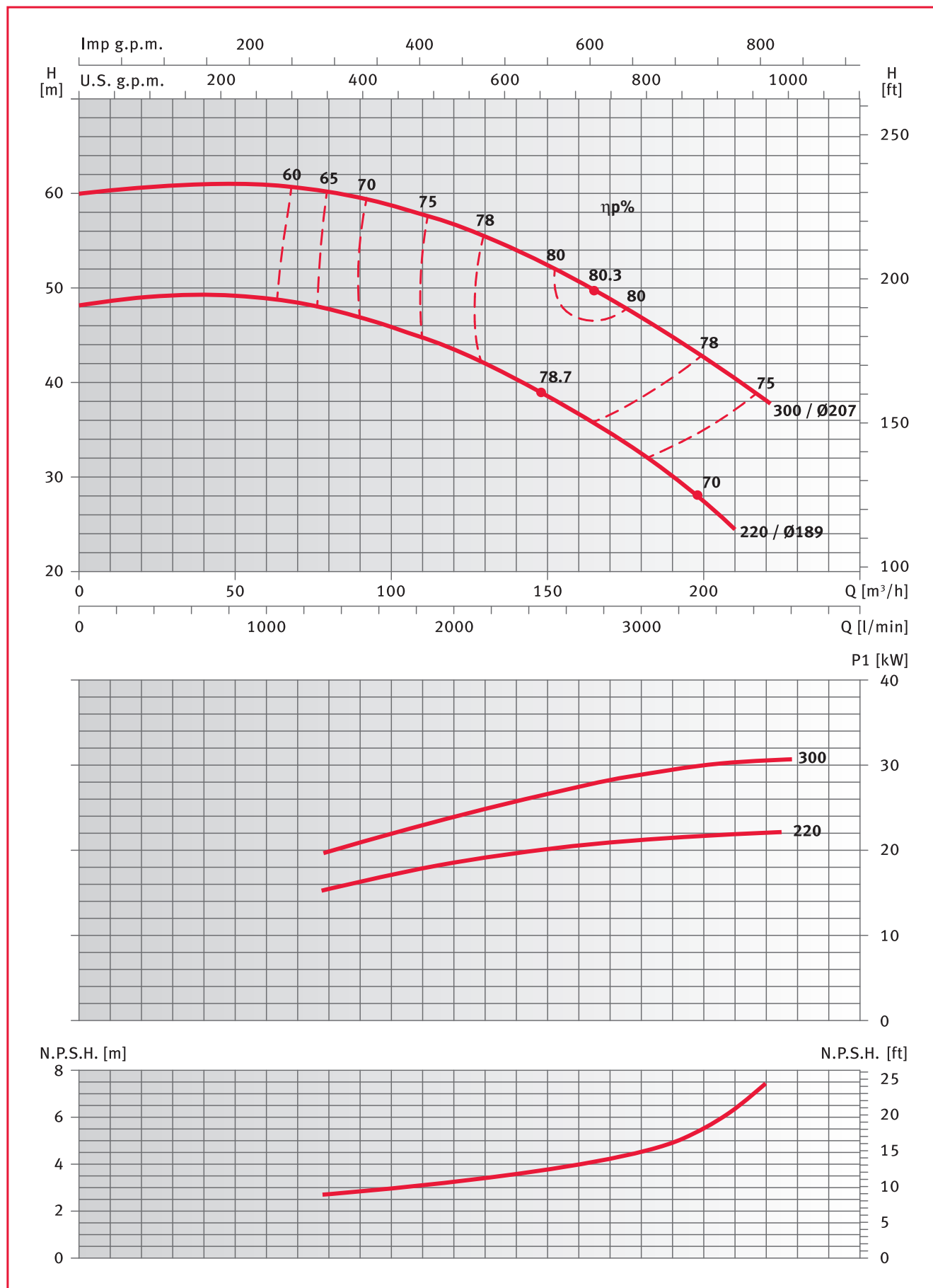
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 80 - 160 series



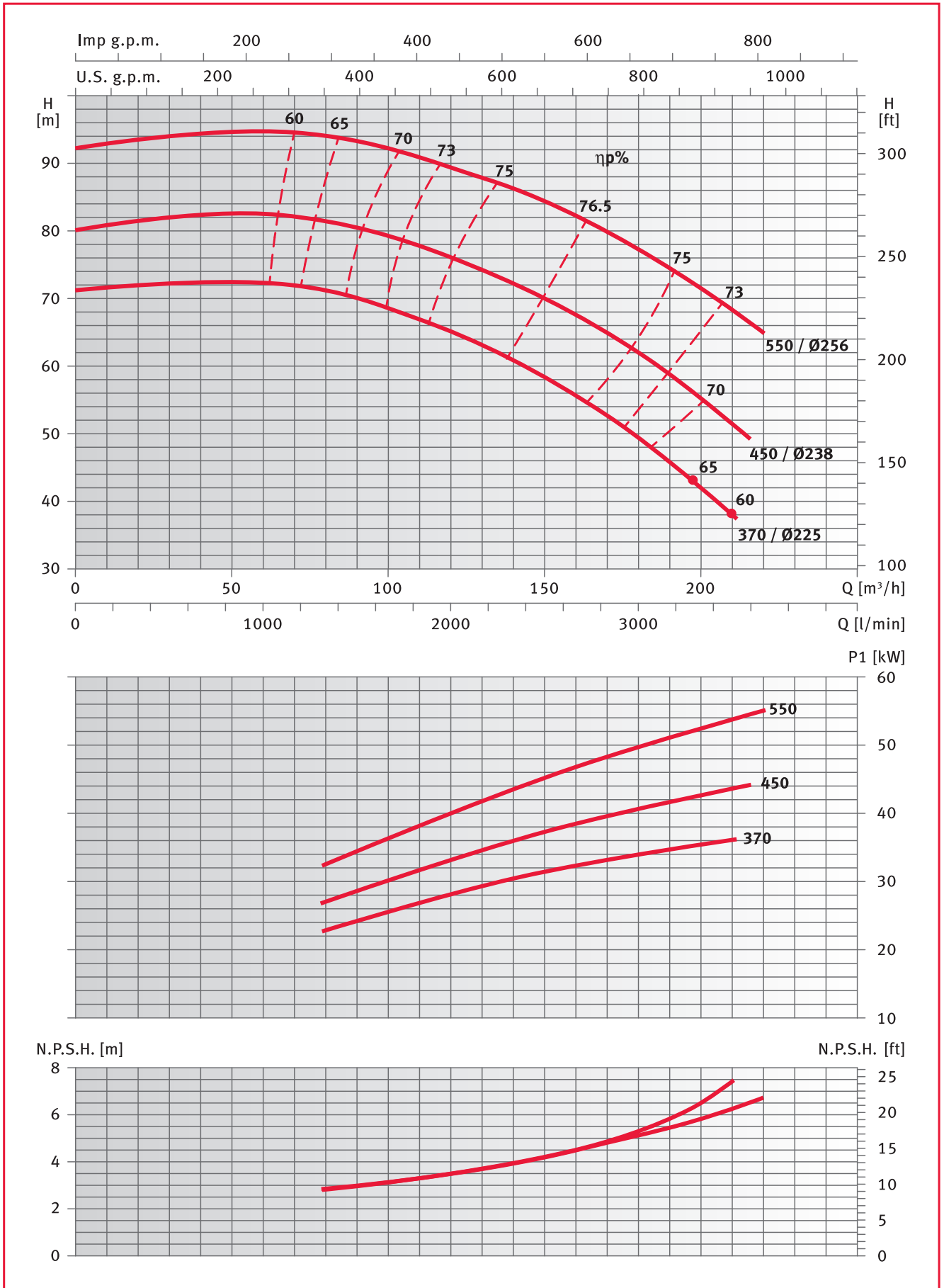
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN, FNS and FNF 80 - 200 series



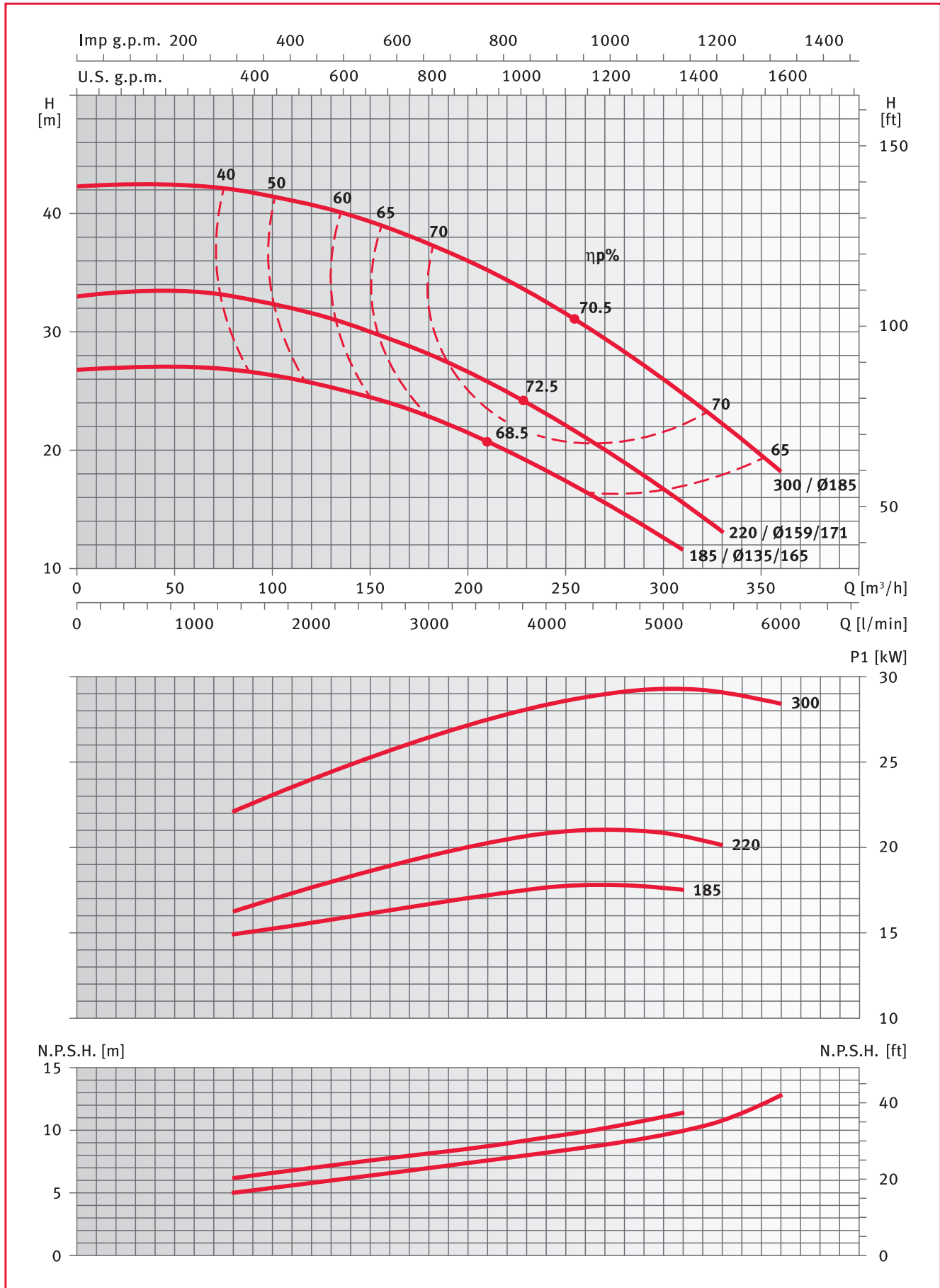
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS and FNF 80 - 250 series



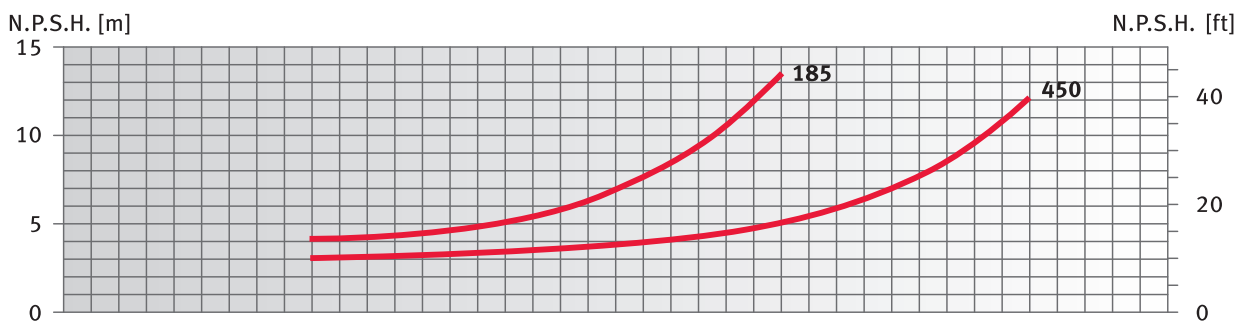
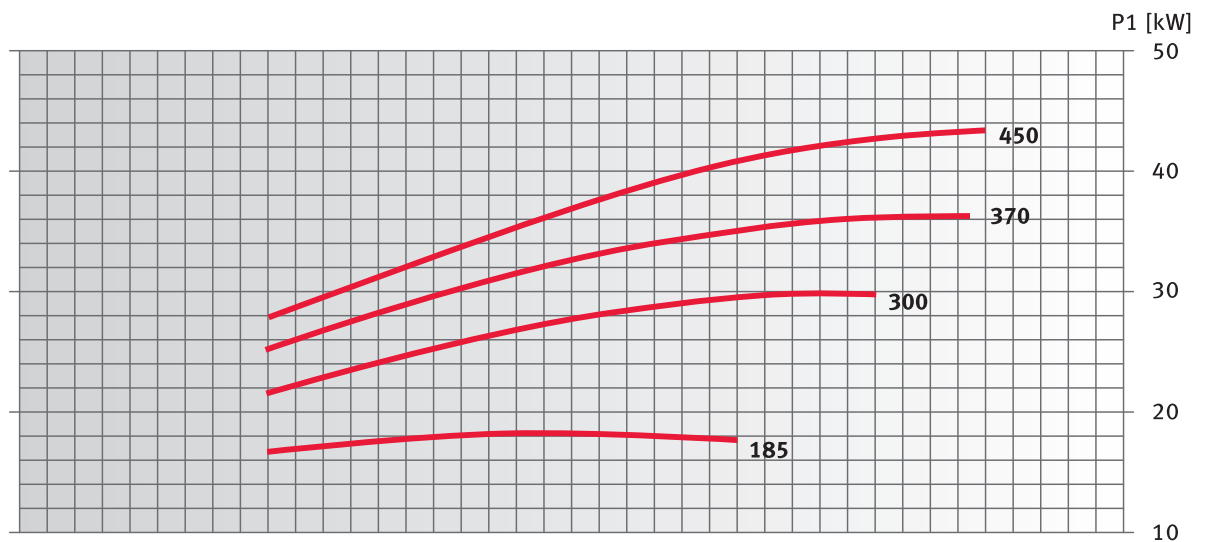
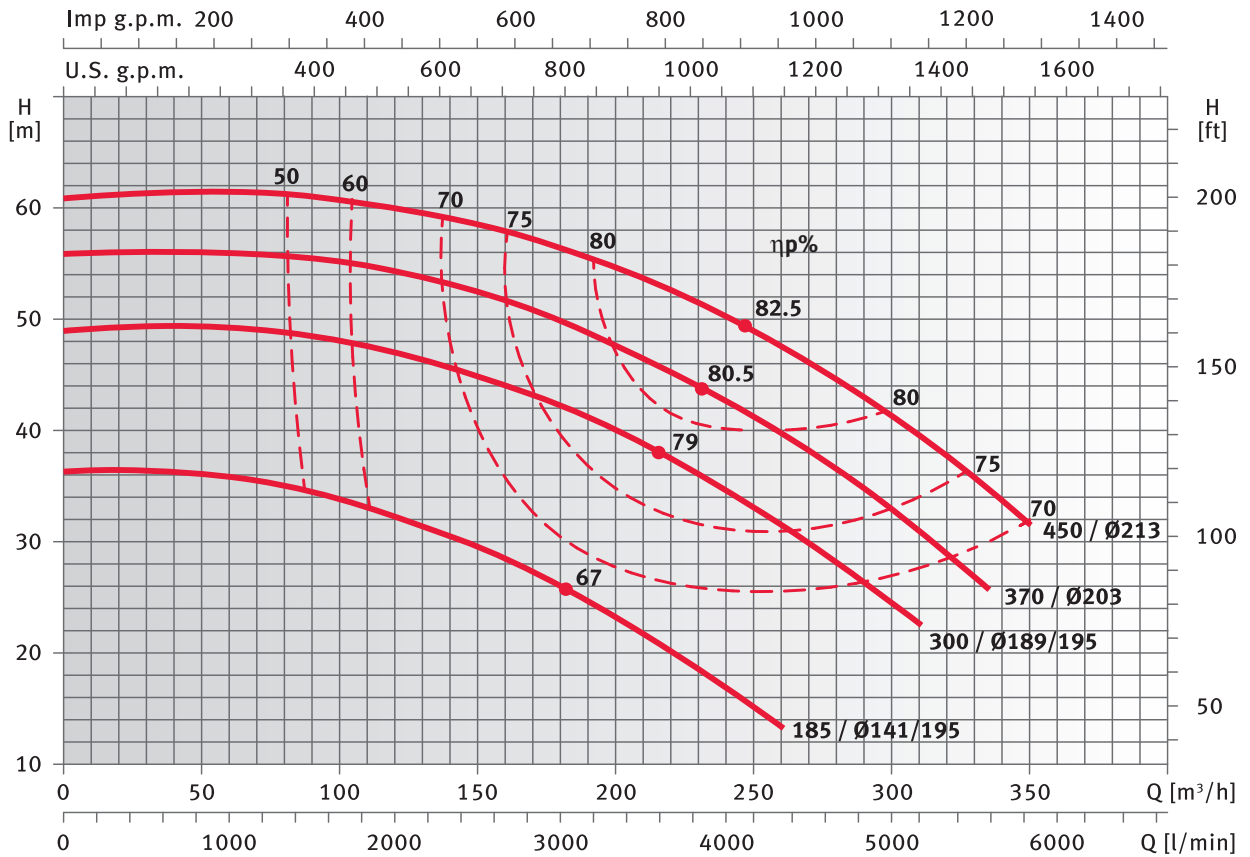
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS and FNF 100 - 160 series



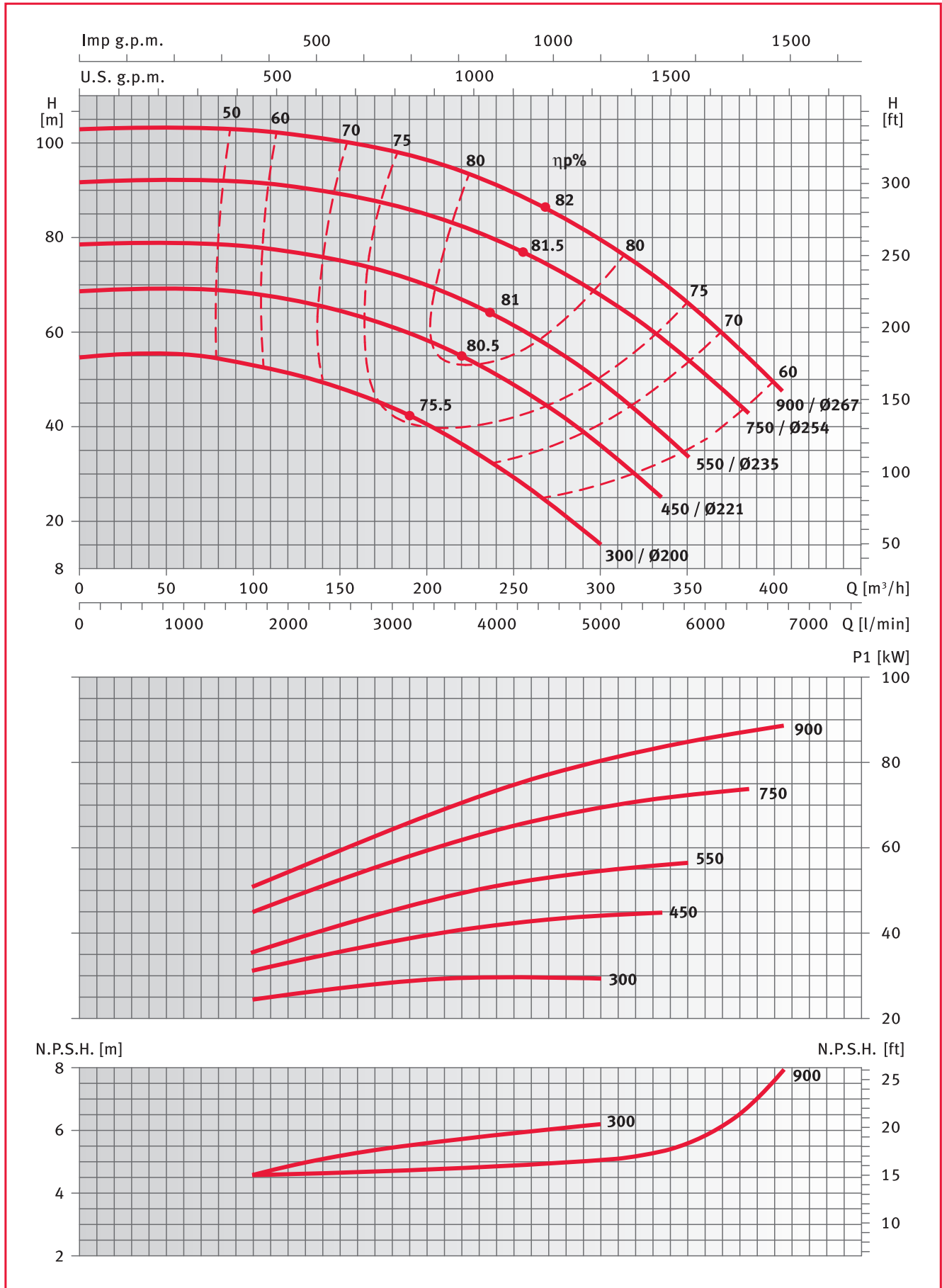
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS and FNF 100 - 200 series



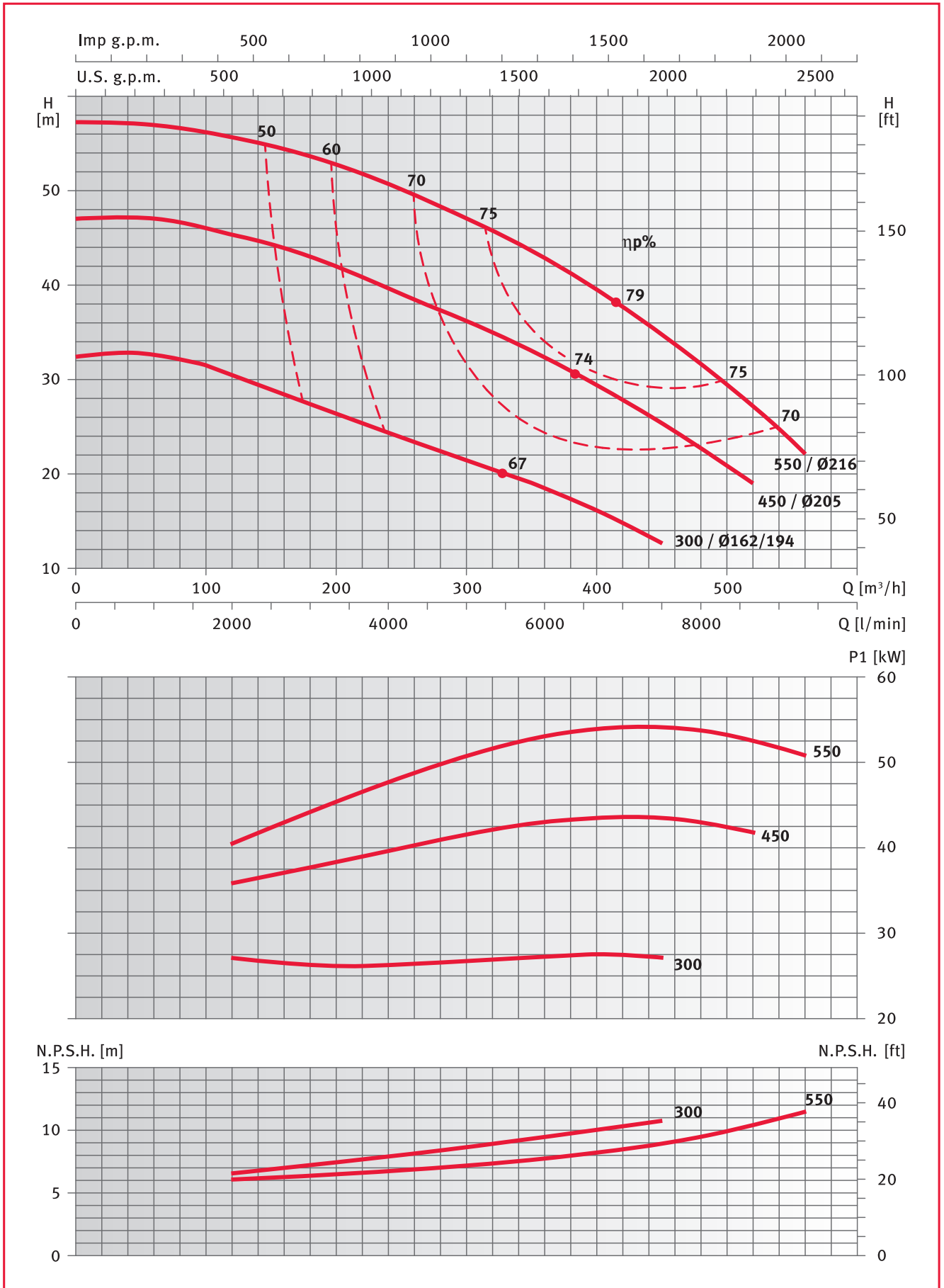
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNF 100 - 250 series



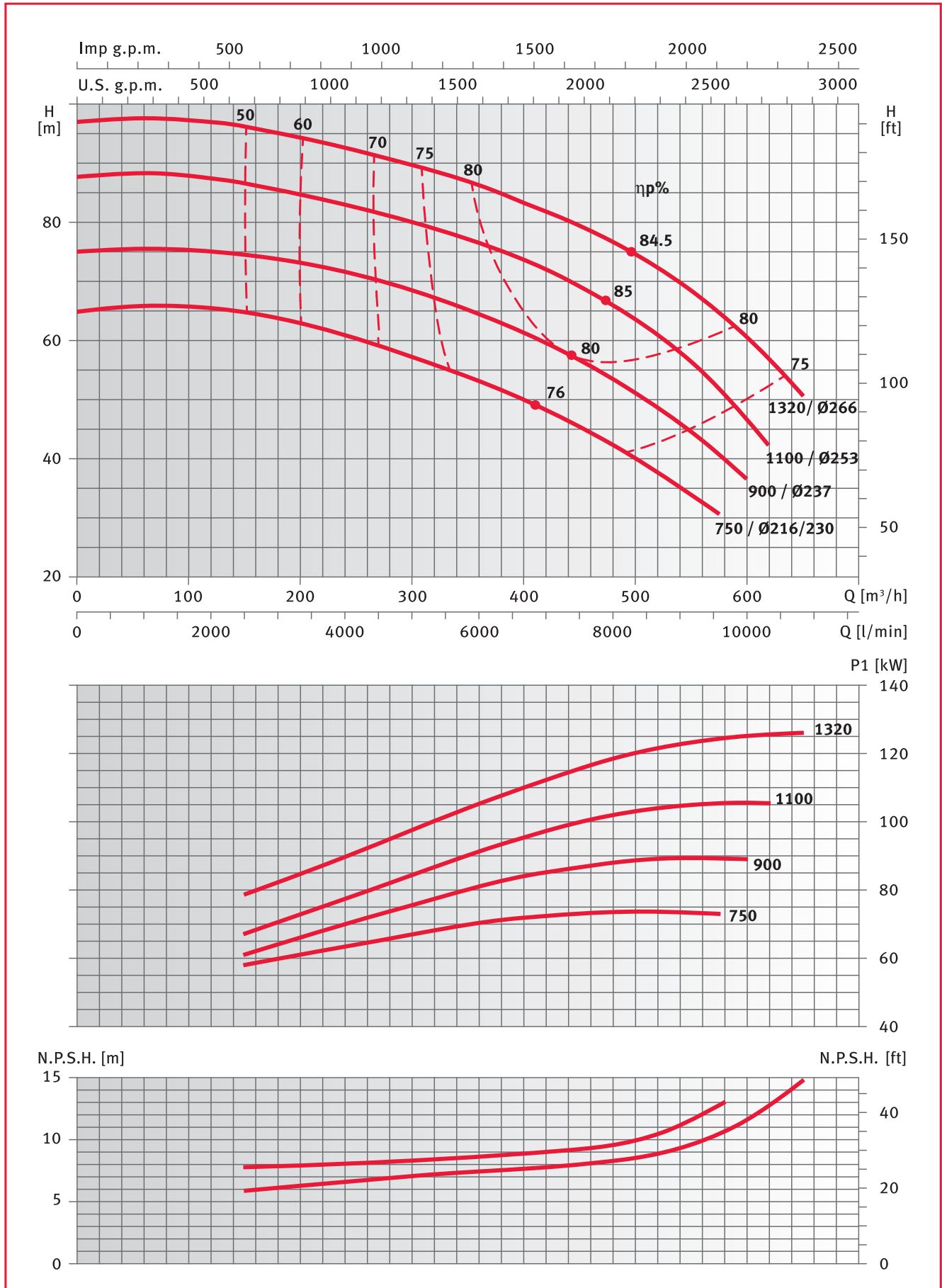
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN 125 - 200 series



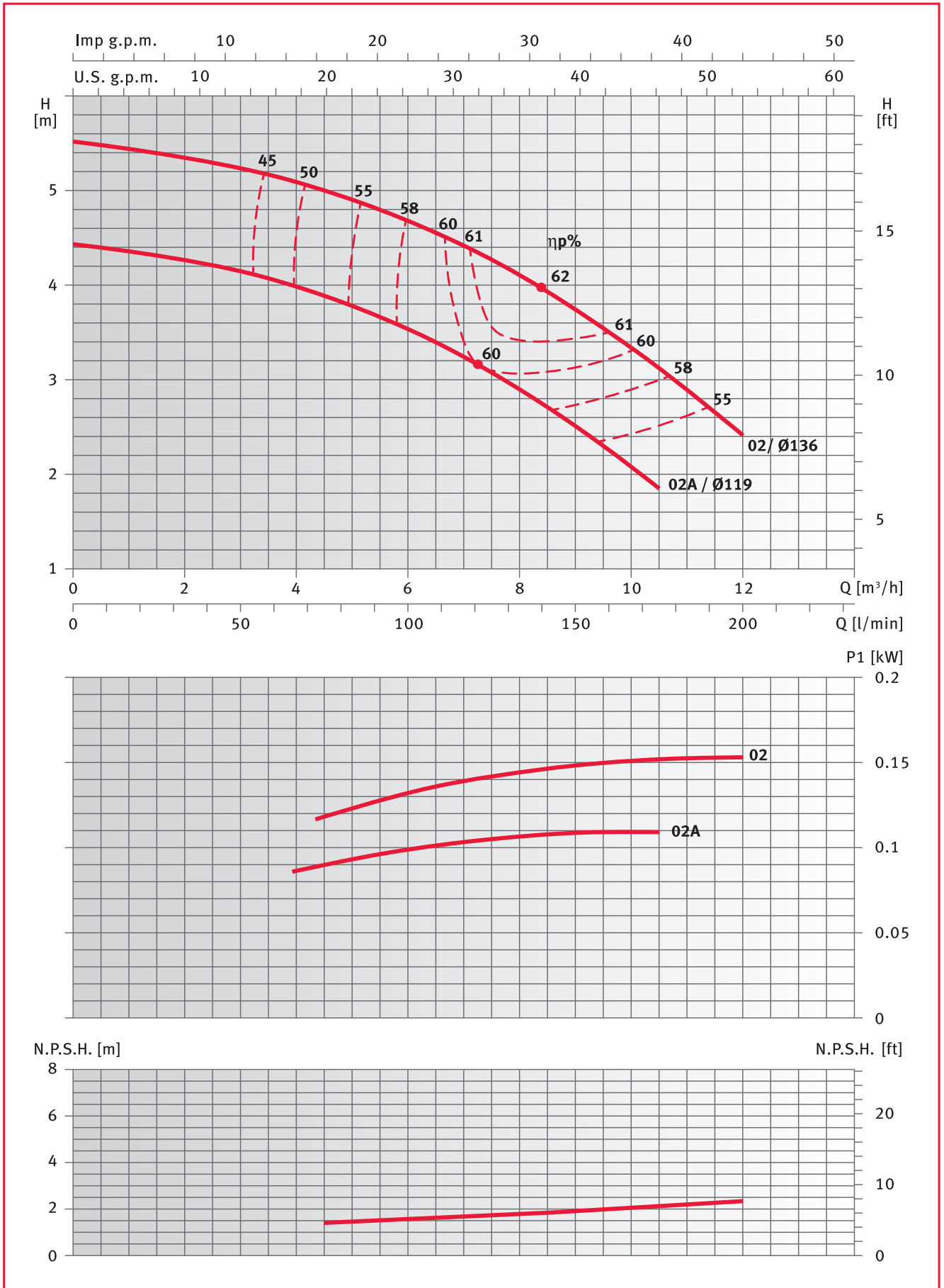
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN 125 - 270 series



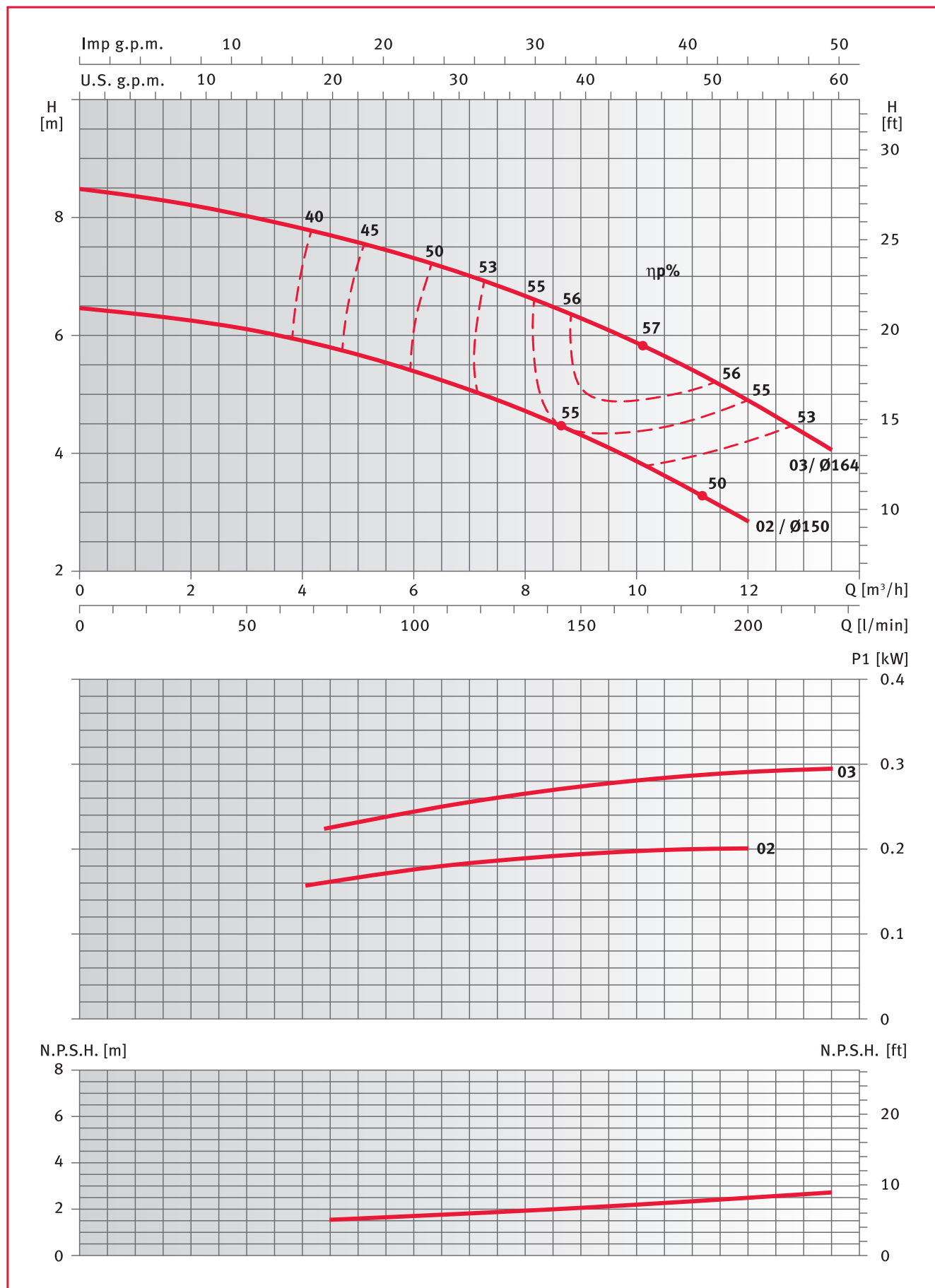
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FNF4 32 - 125 series



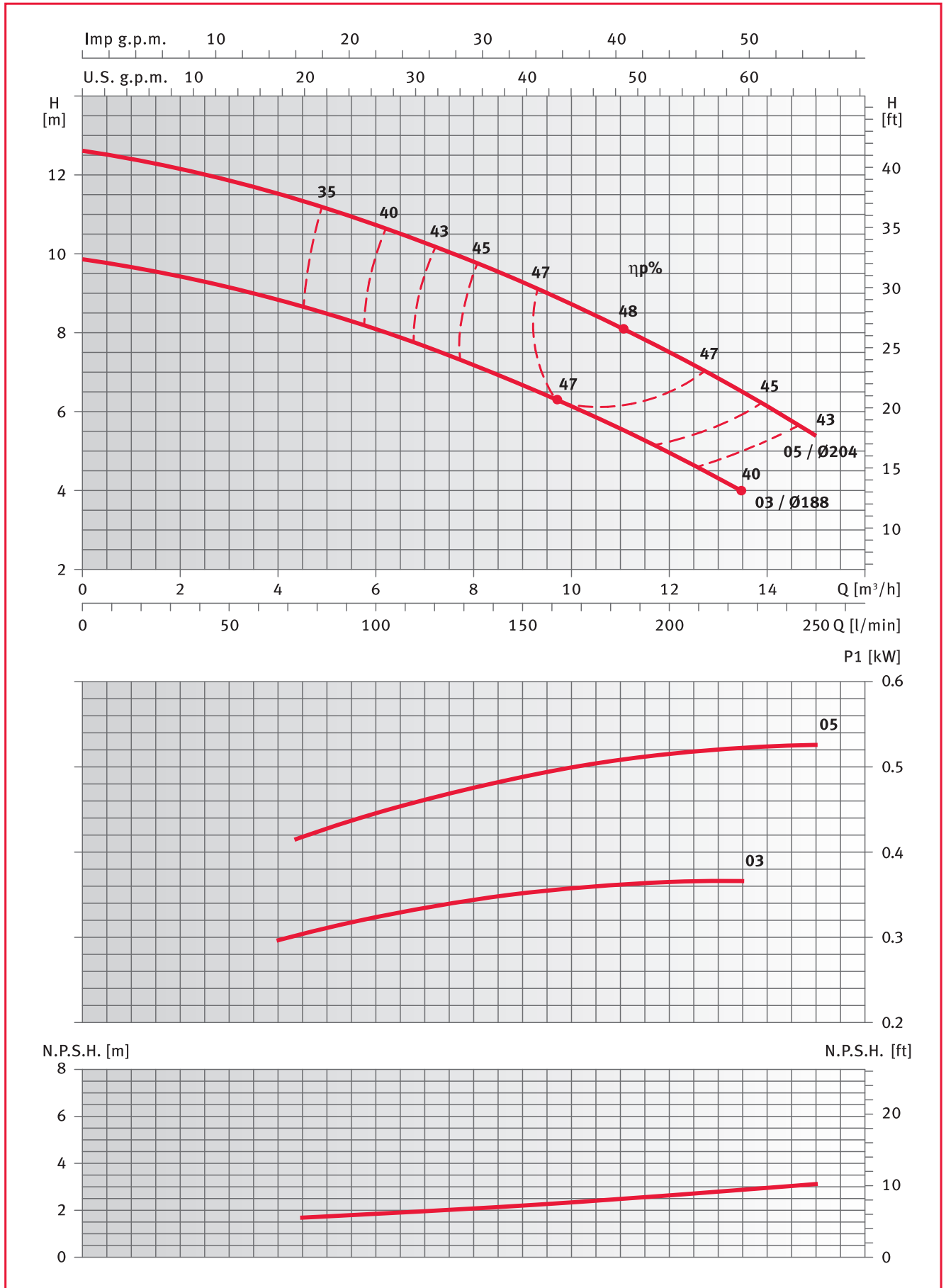
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FN4 32 - 160 series



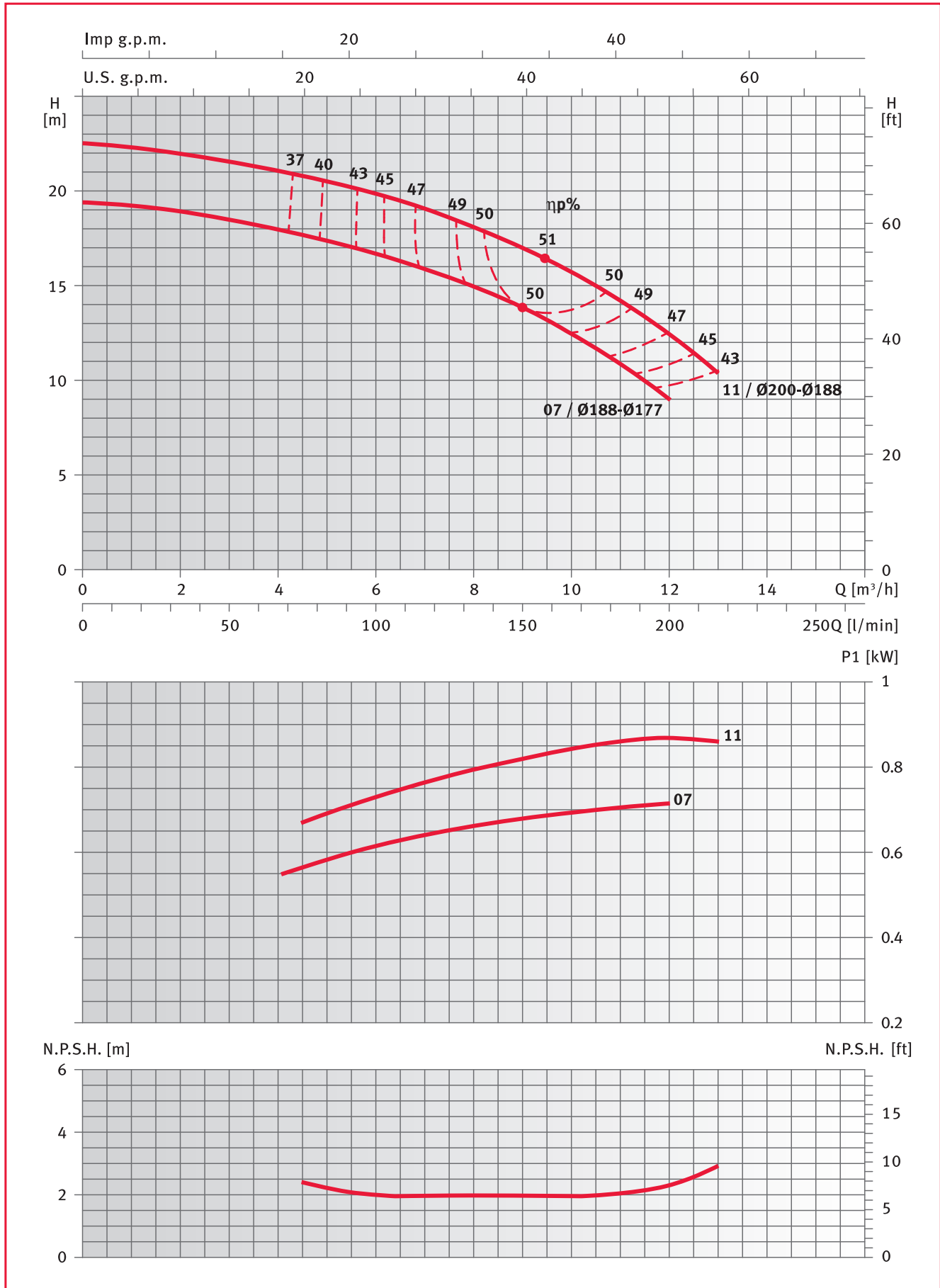
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FNF4 32 - 200 series



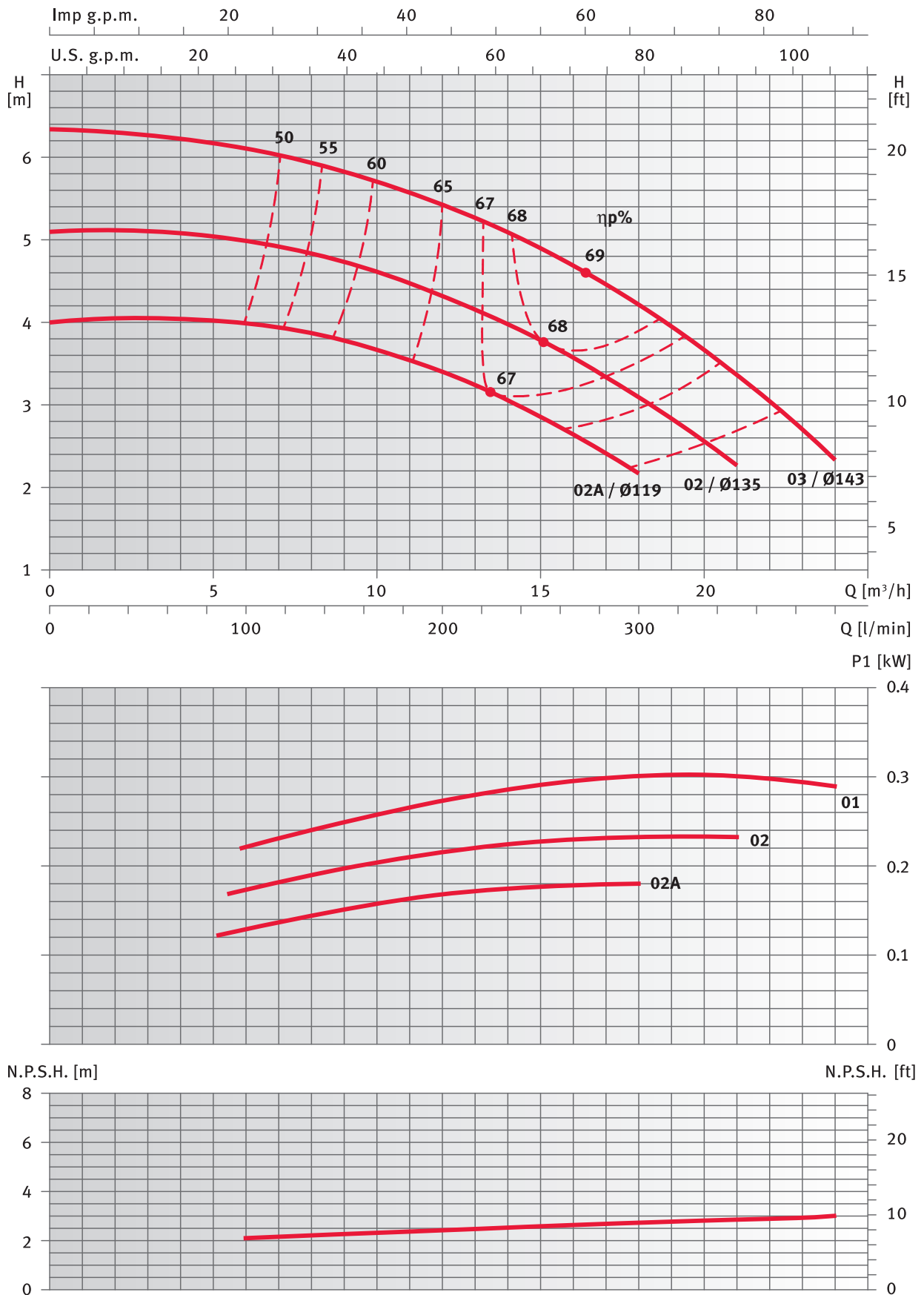
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

2FN4 32 - 250 series



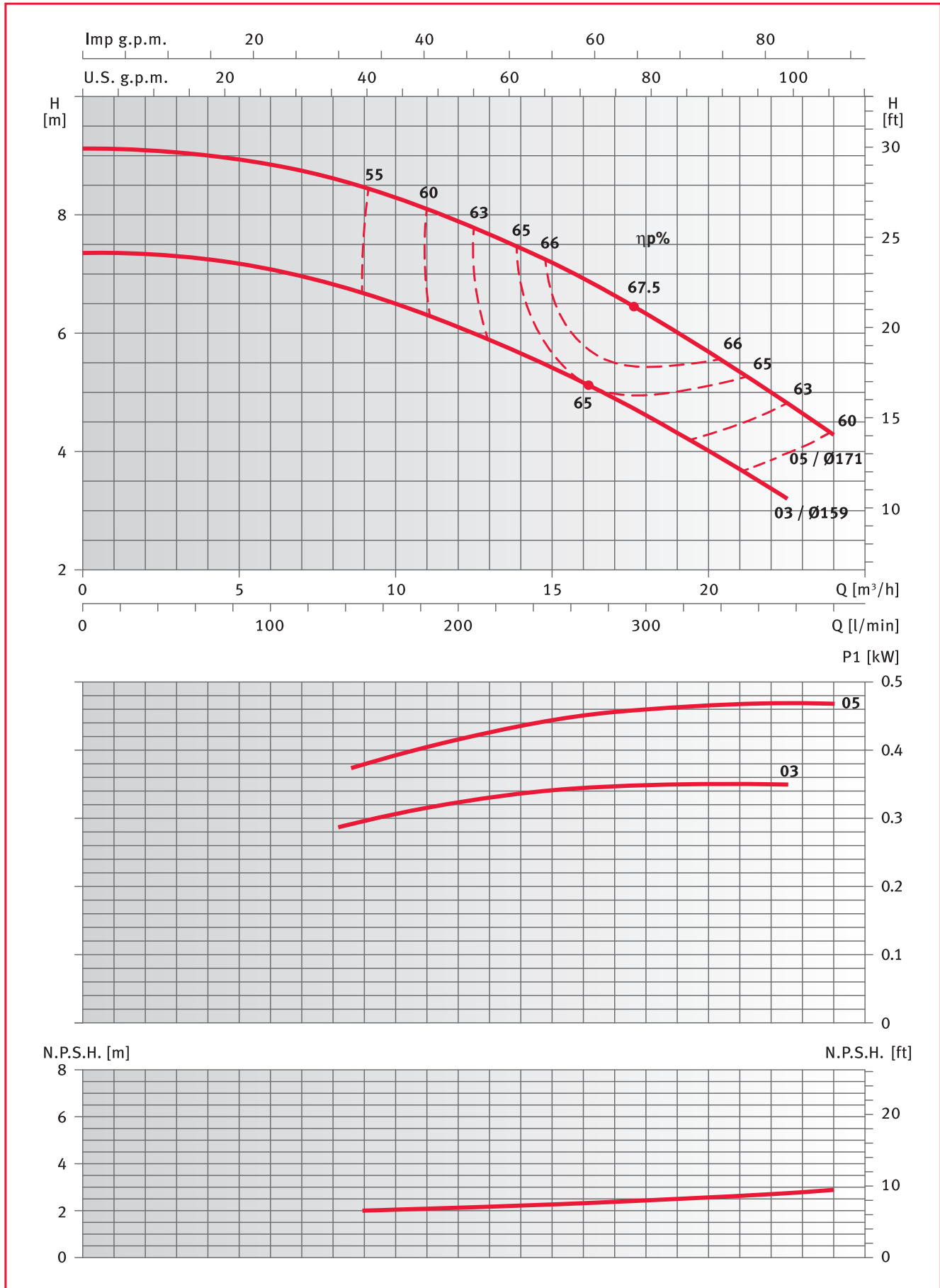
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FNF4 40 - 125 series



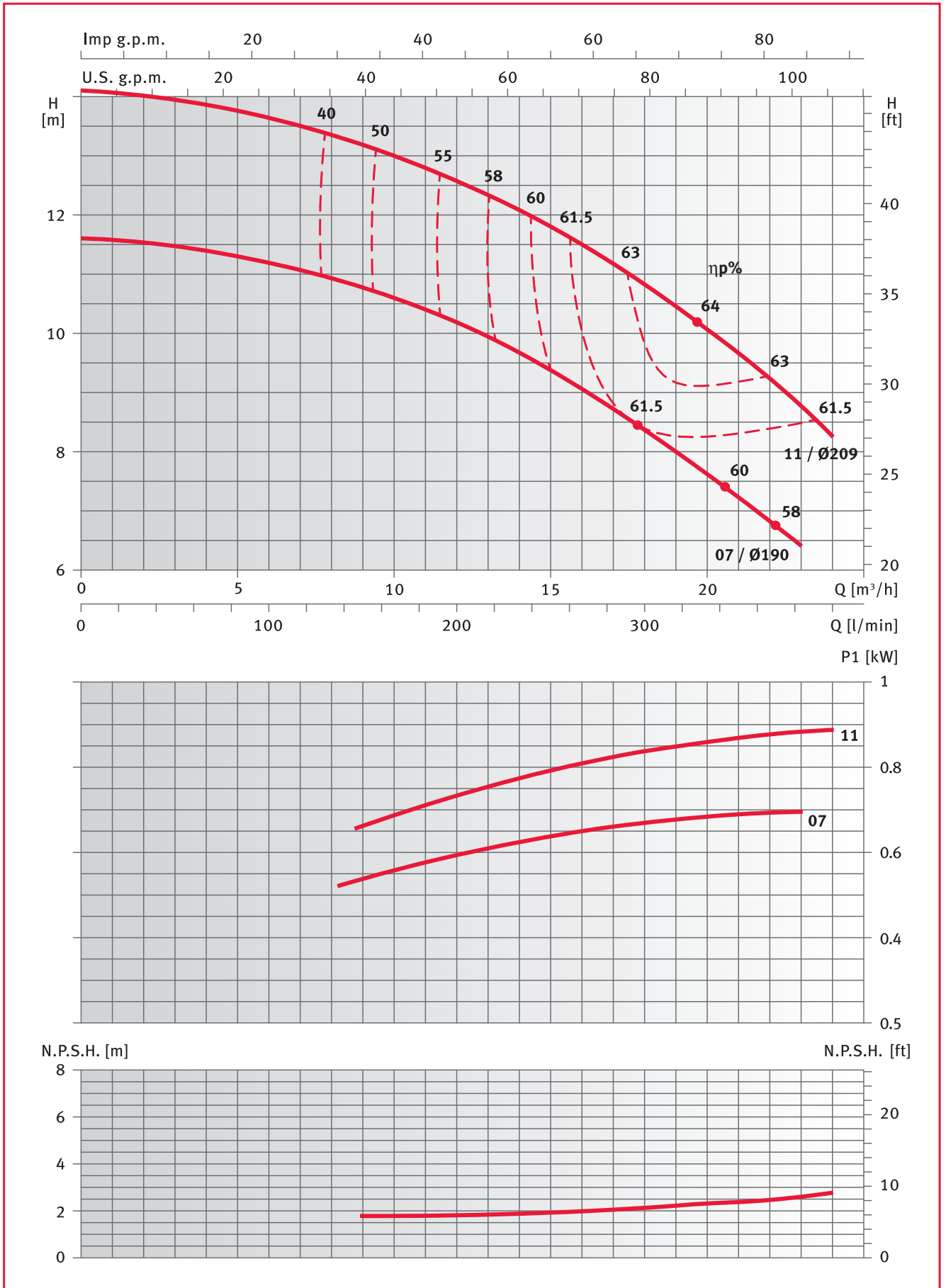
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FN4 40 - 160 series



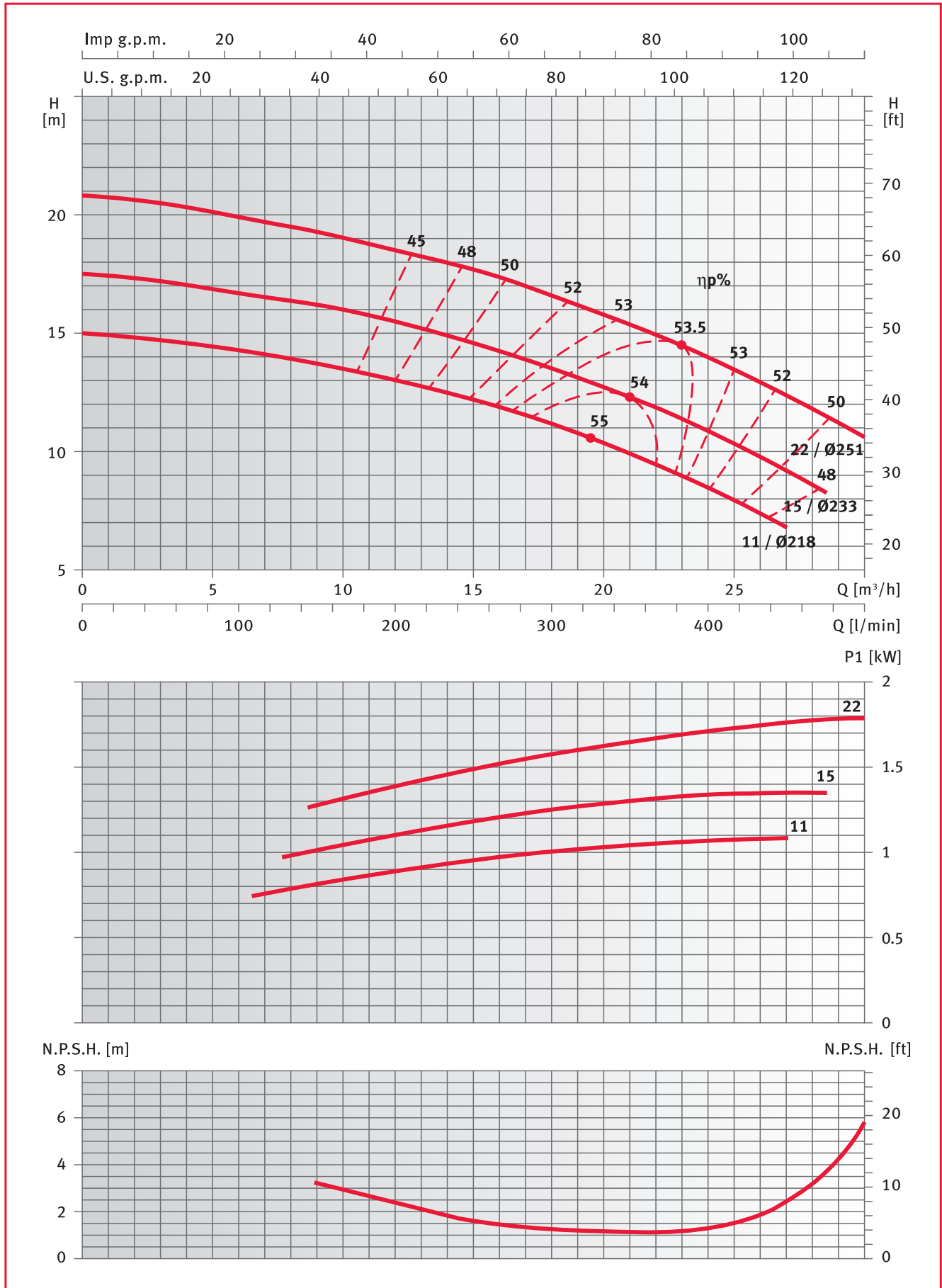
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 40 - 200 series



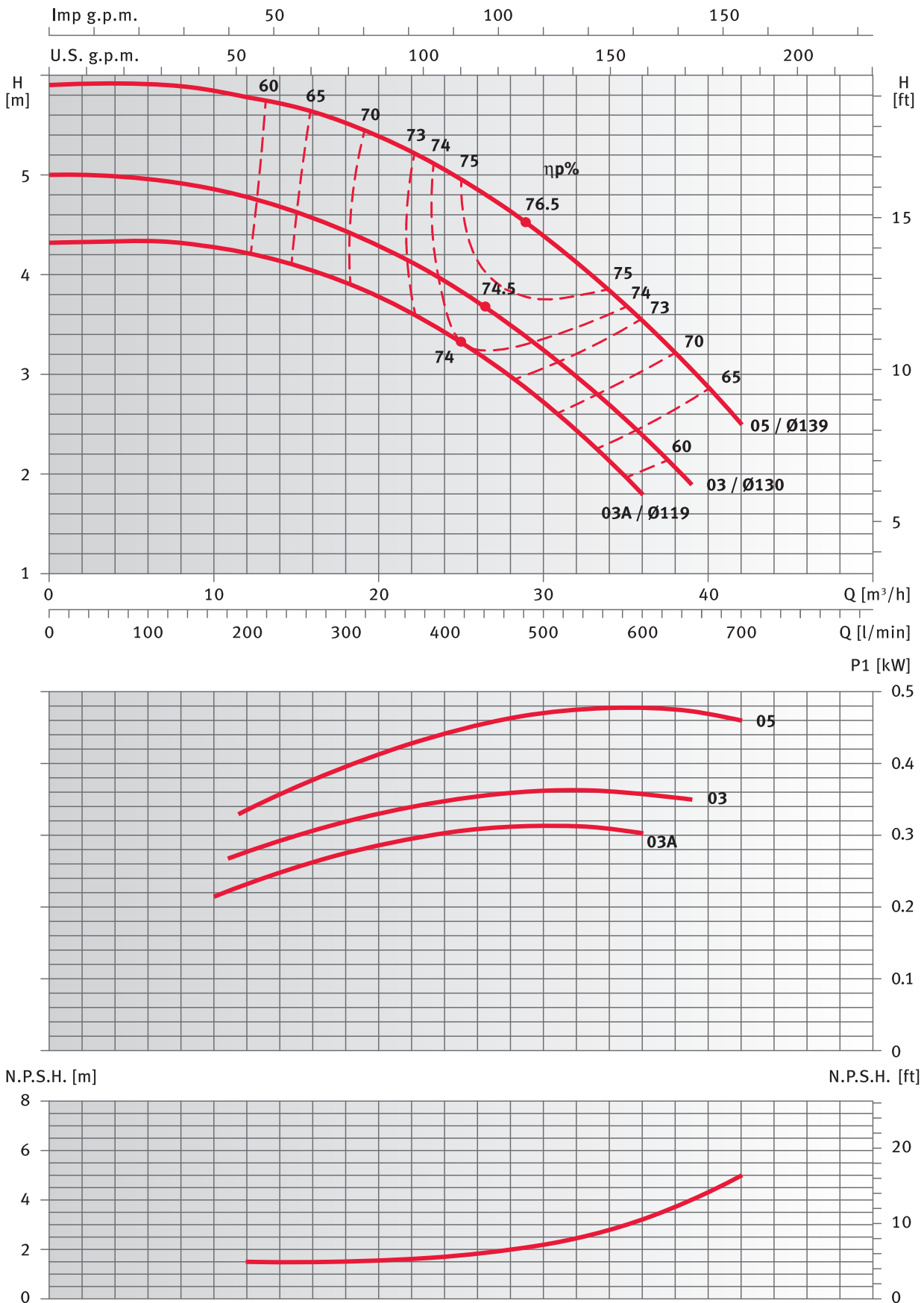
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 40 - 250 series



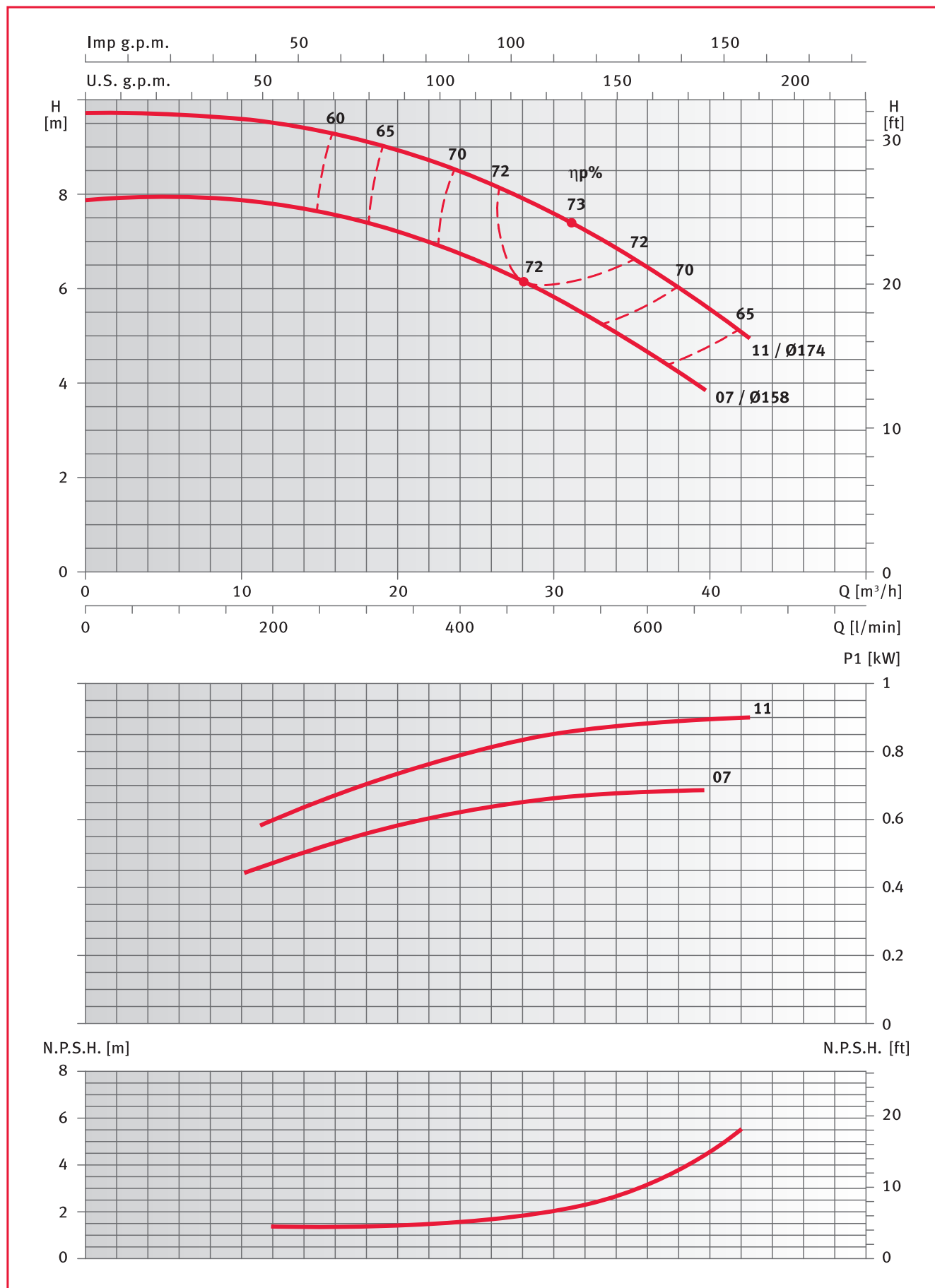
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 and FNF4 50 - 125 series



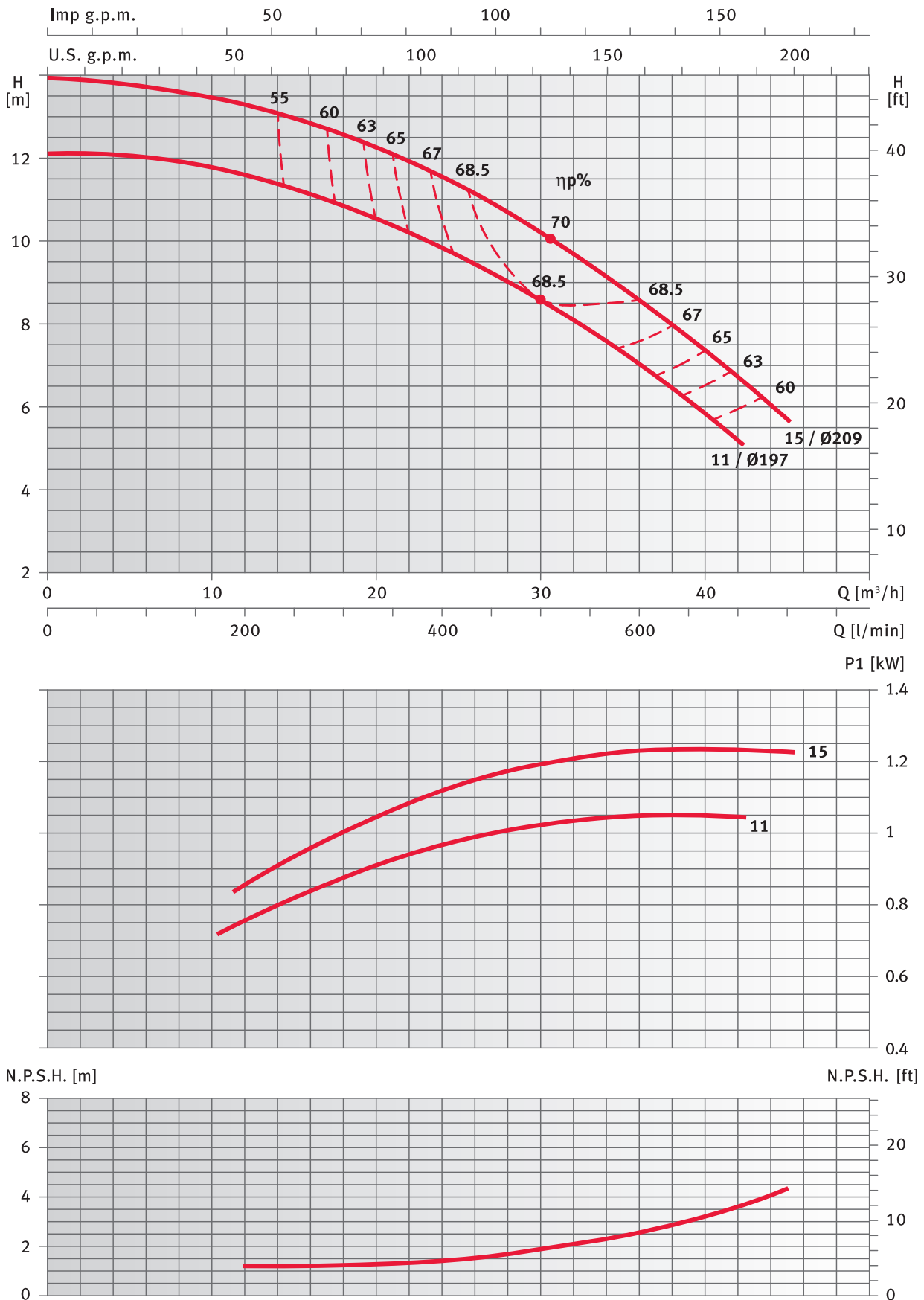
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 50 - 160 series



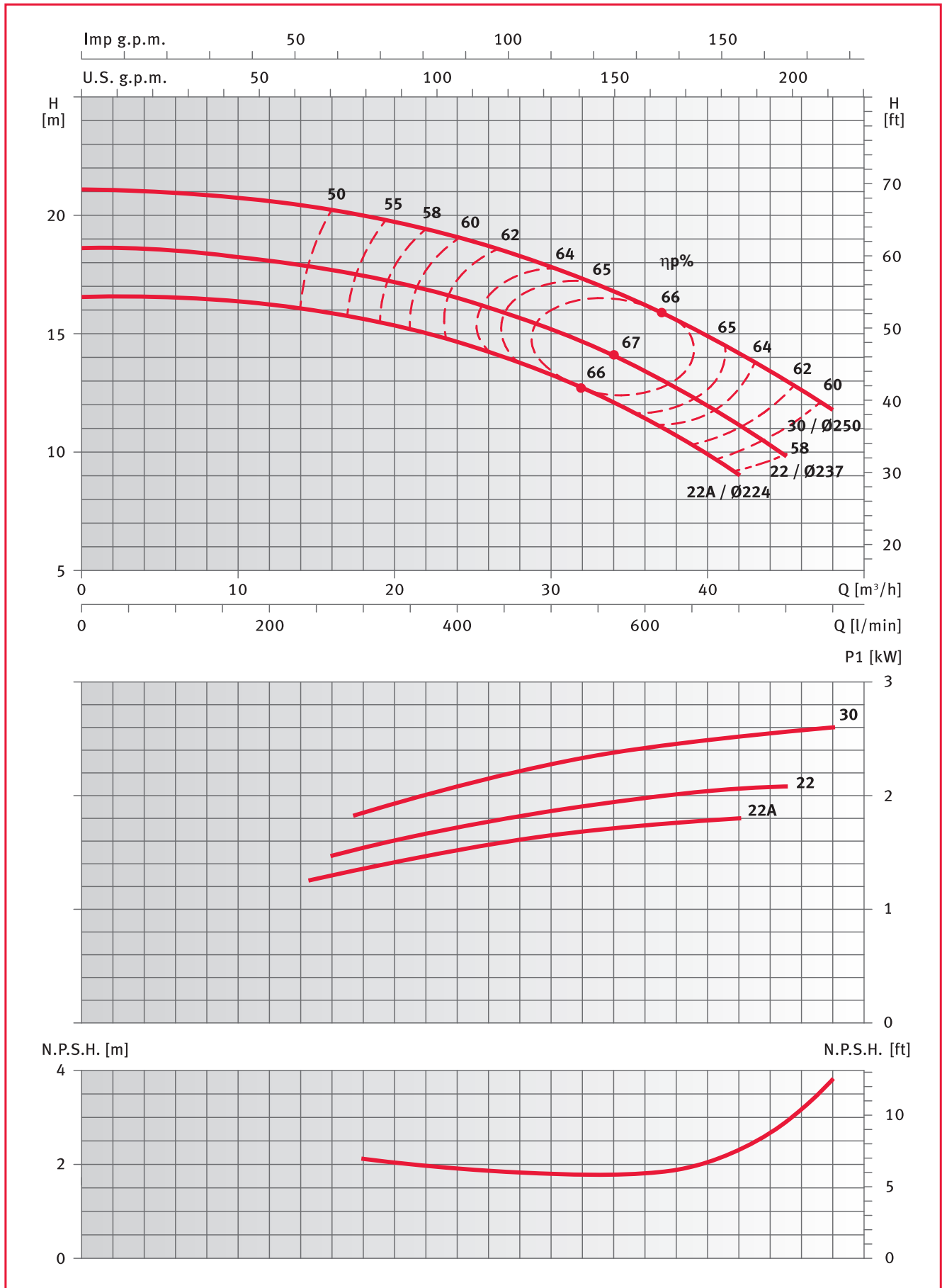
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 50 - 200 series



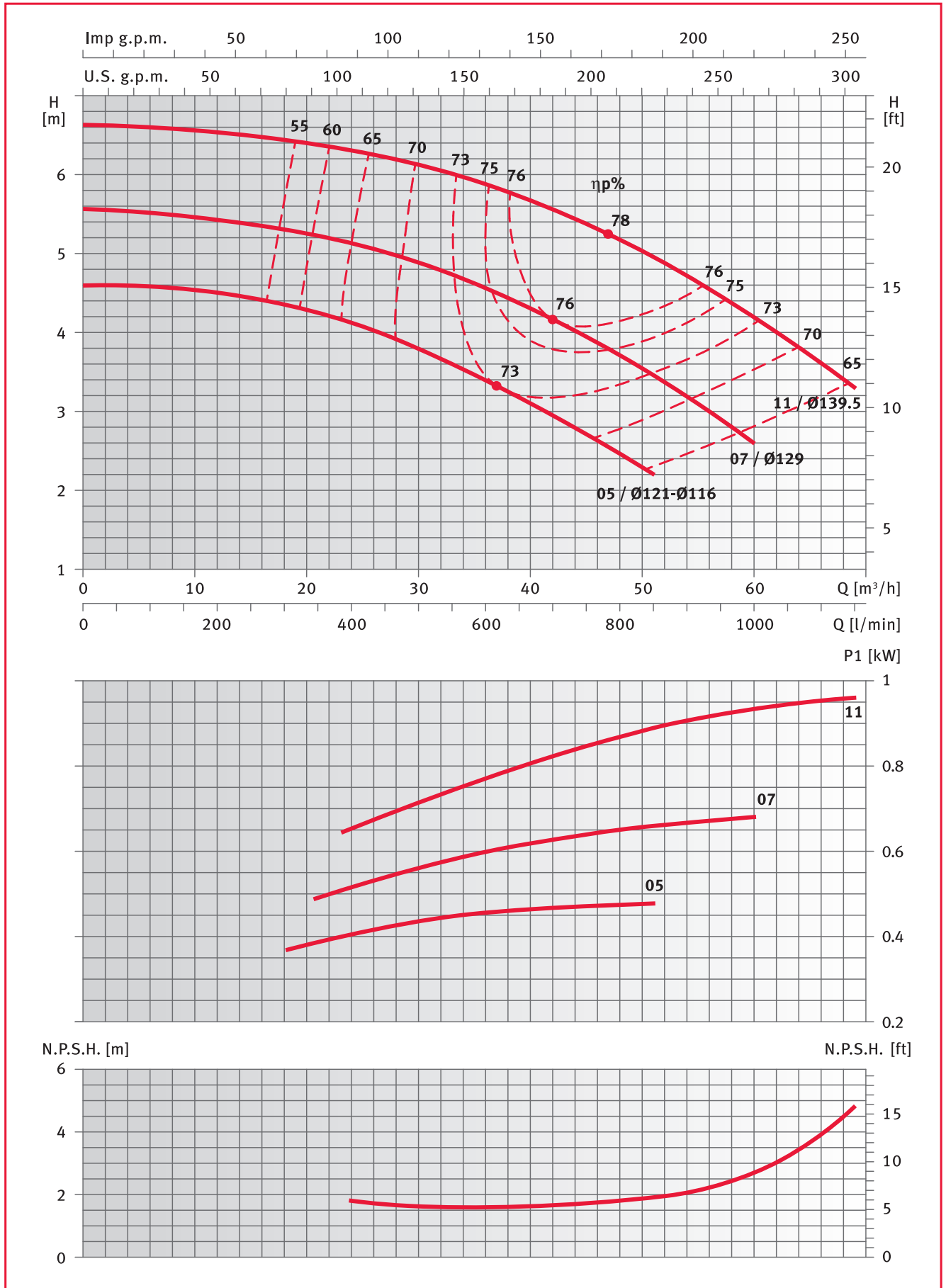
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 50 - 250 series



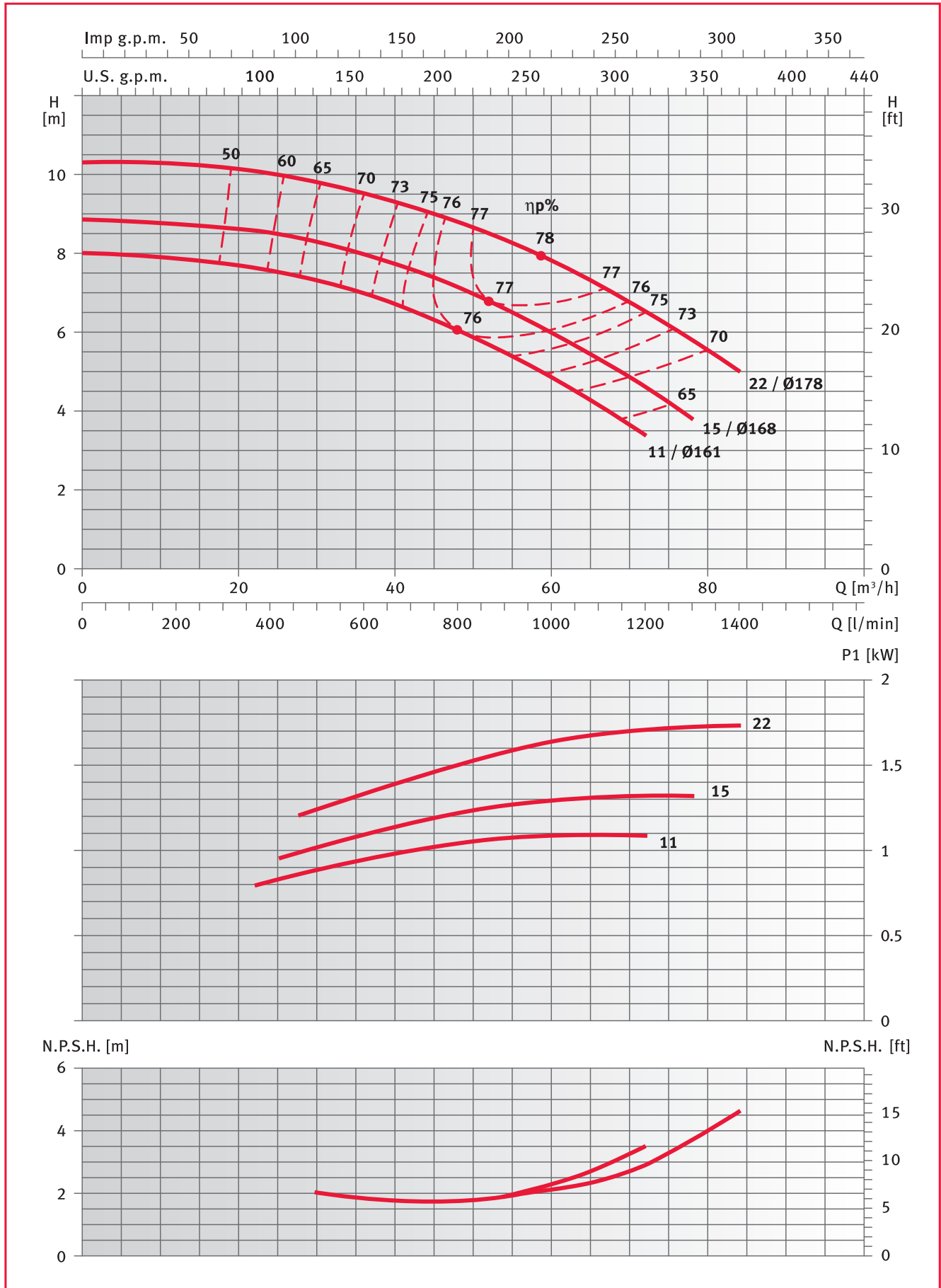
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 65 - 125 series



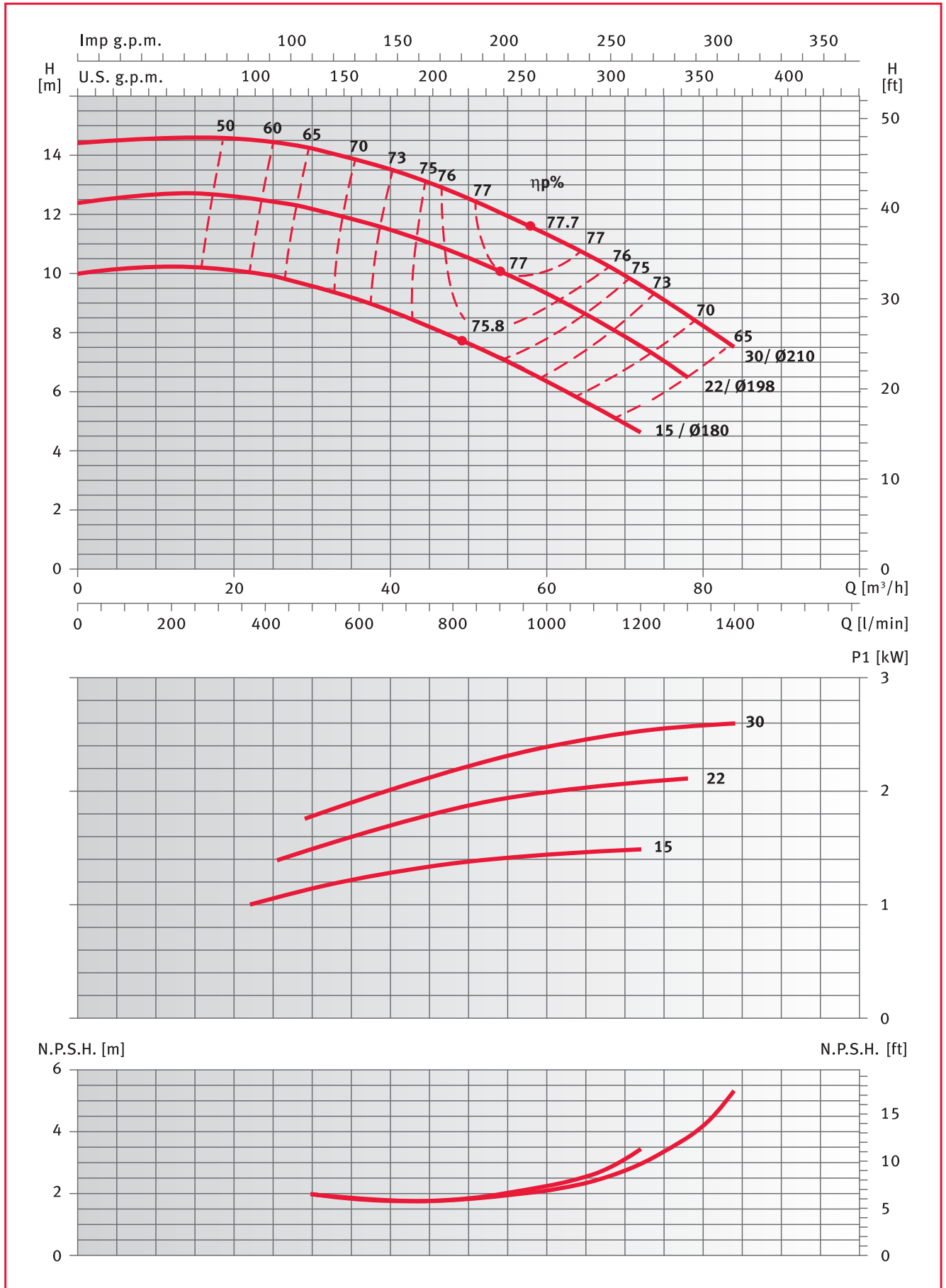
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 65 - 160 series



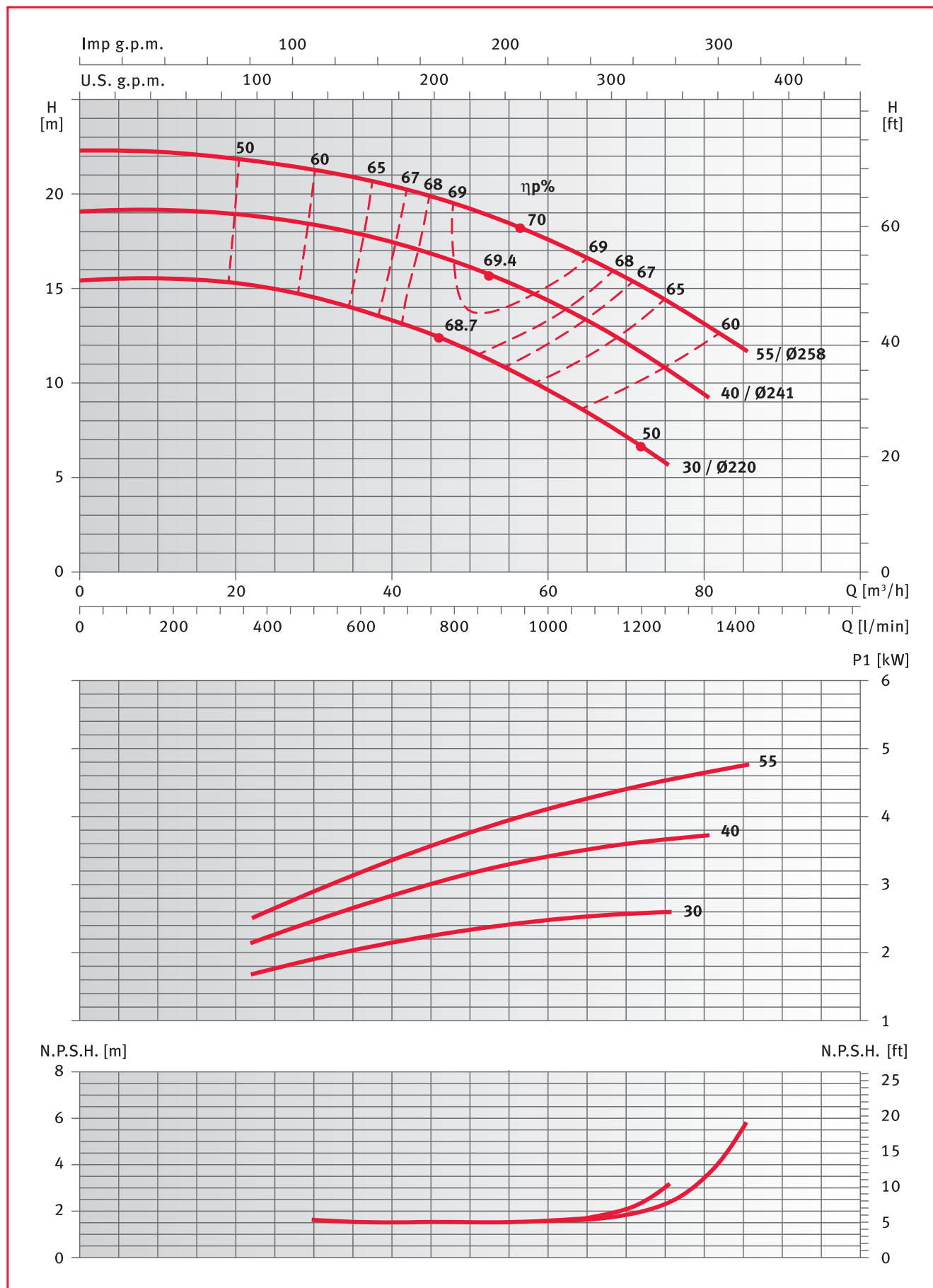
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 65 - 200 series



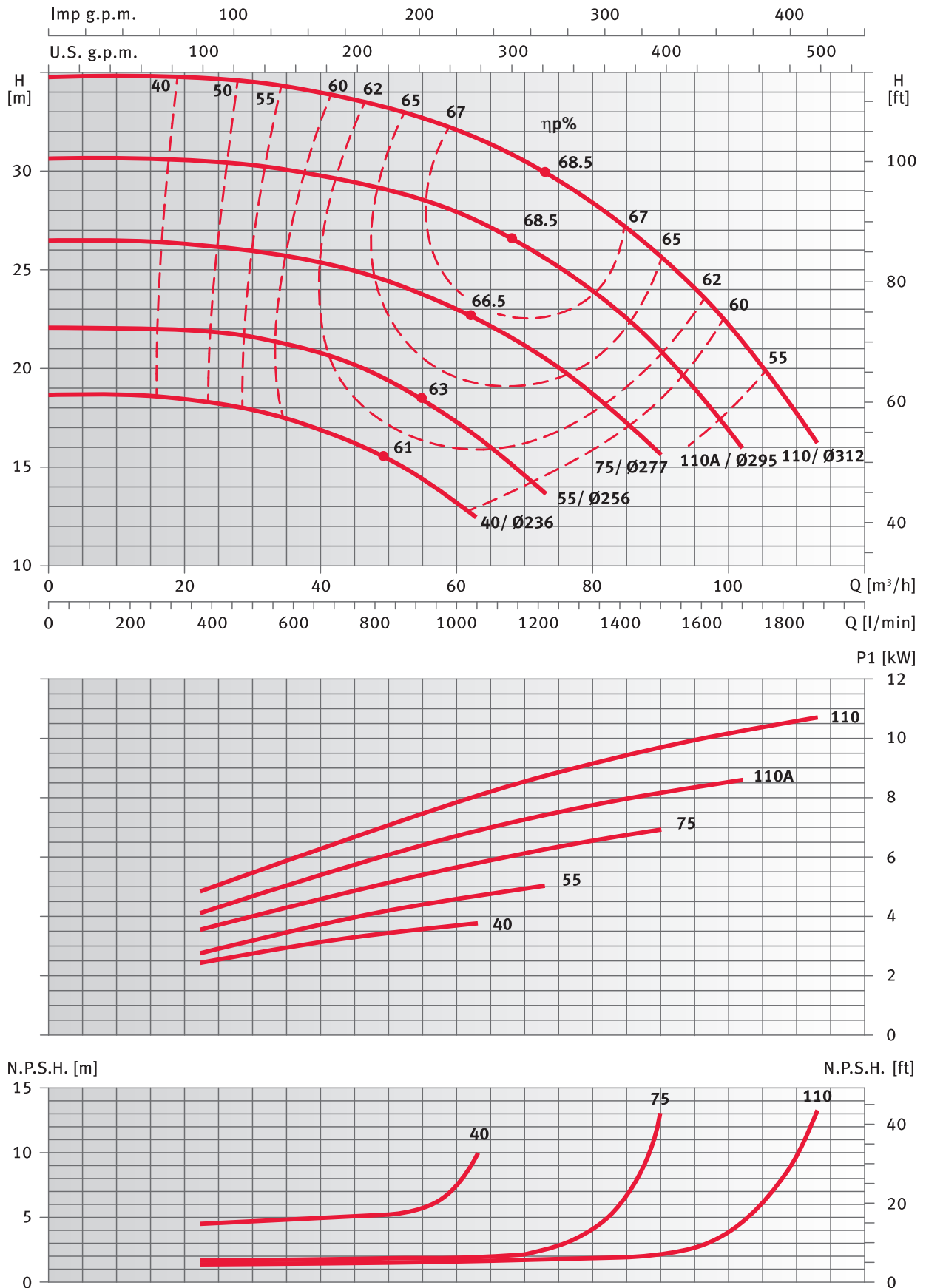
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 65 - 250 series



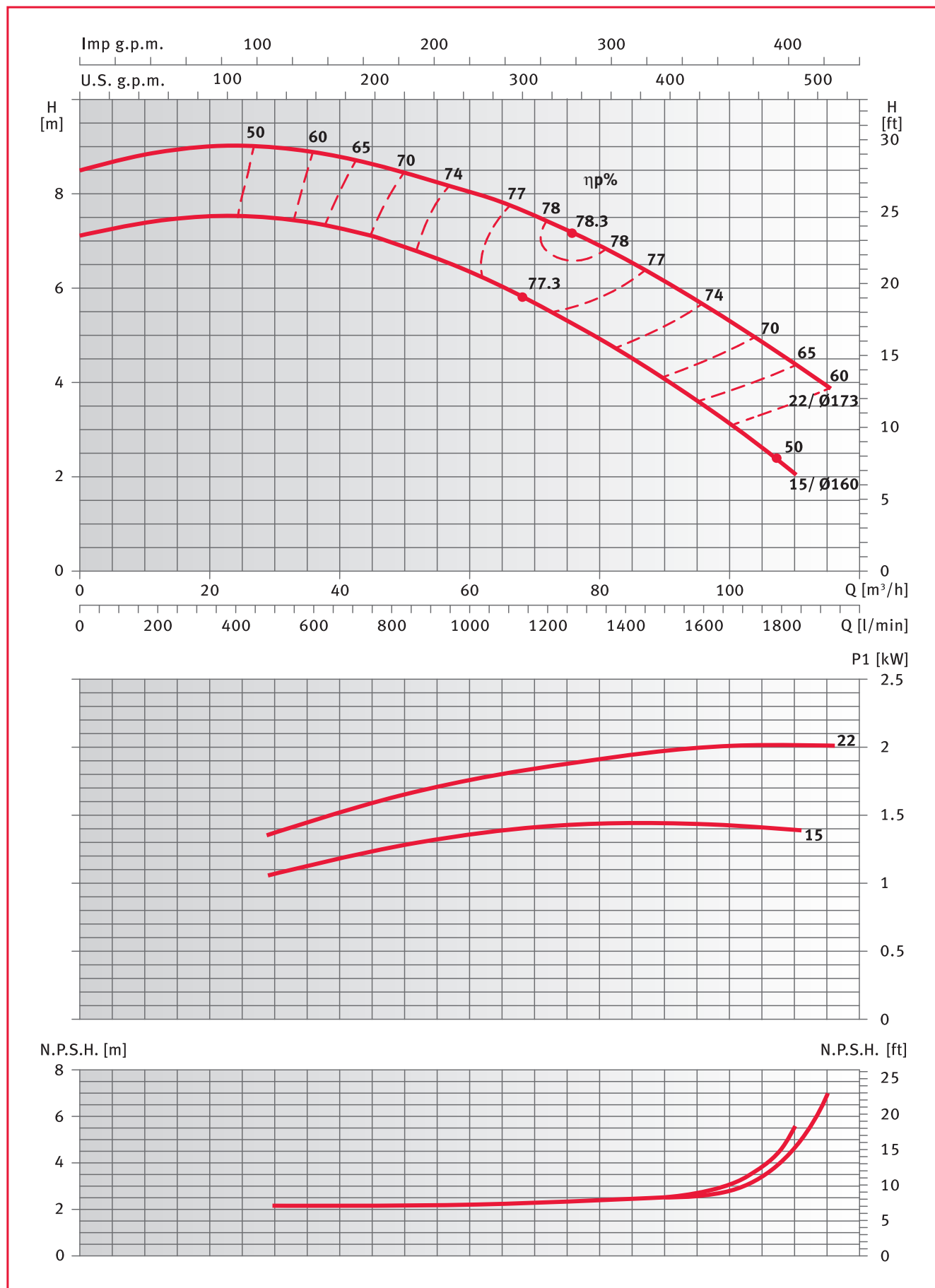
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 65 - 315 series



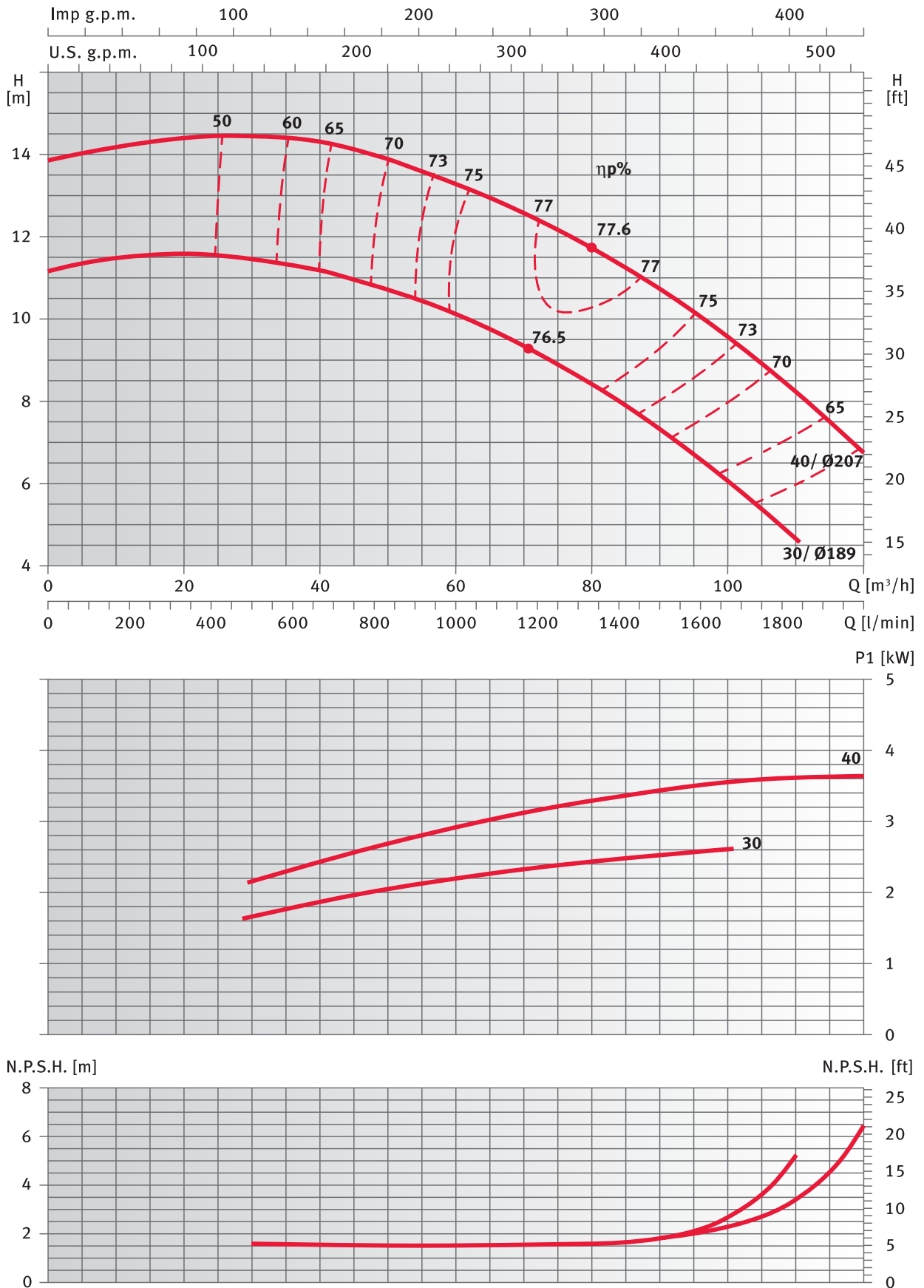
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS4 and FNF4 80 - 160 series



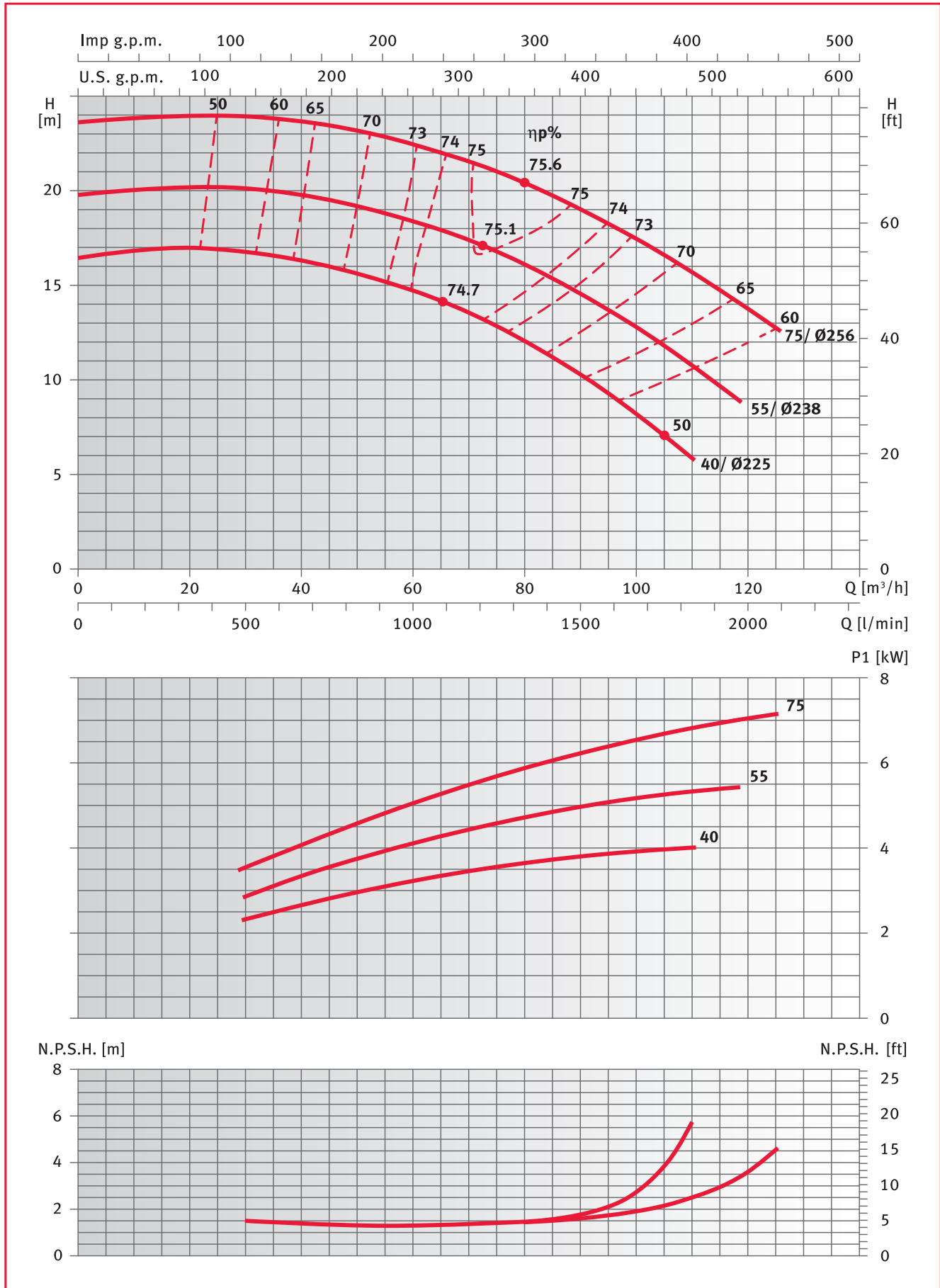
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS and FNF4 80 - 200 series



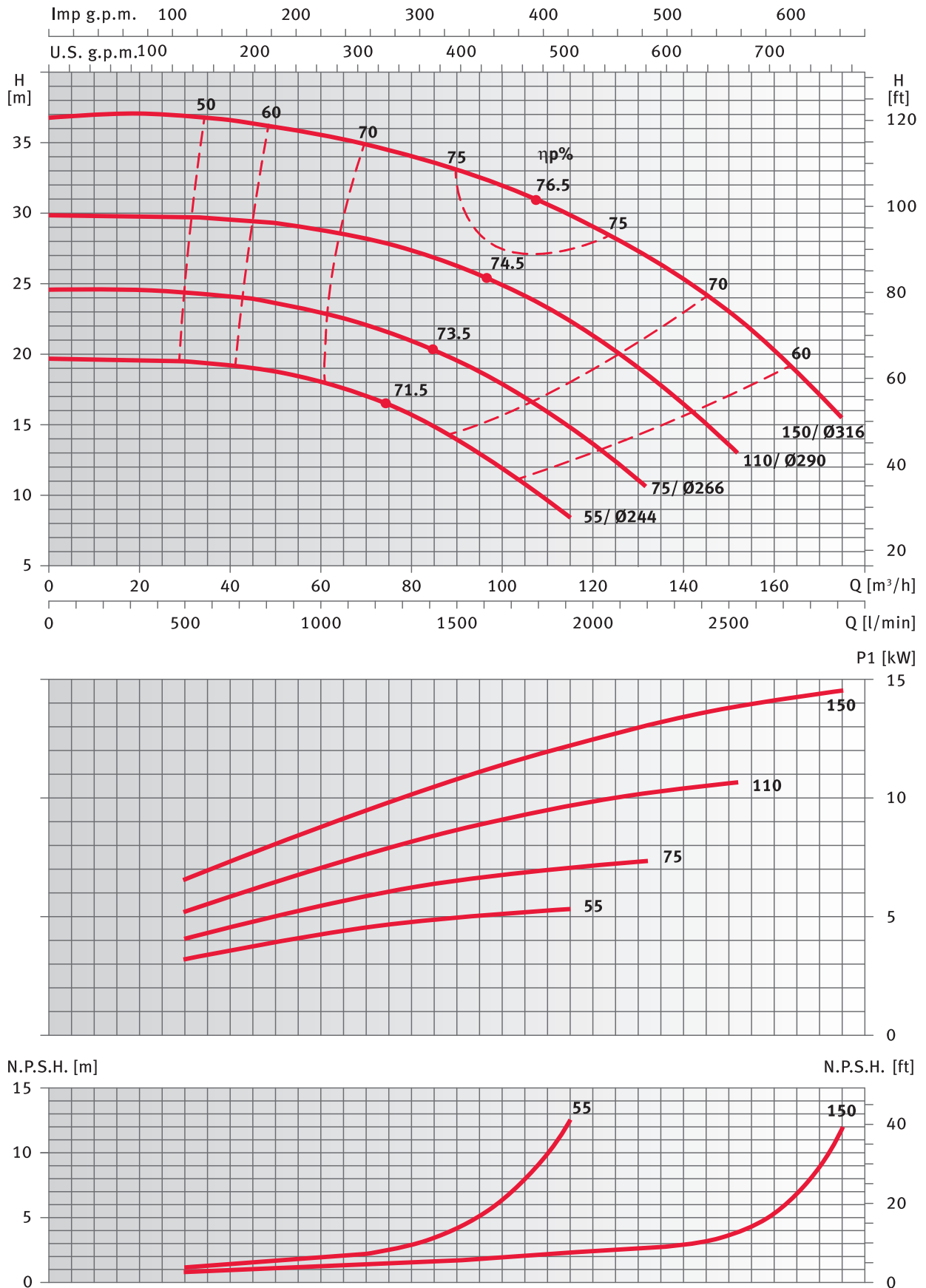
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4, FNS and FNF4 80 - 250 series



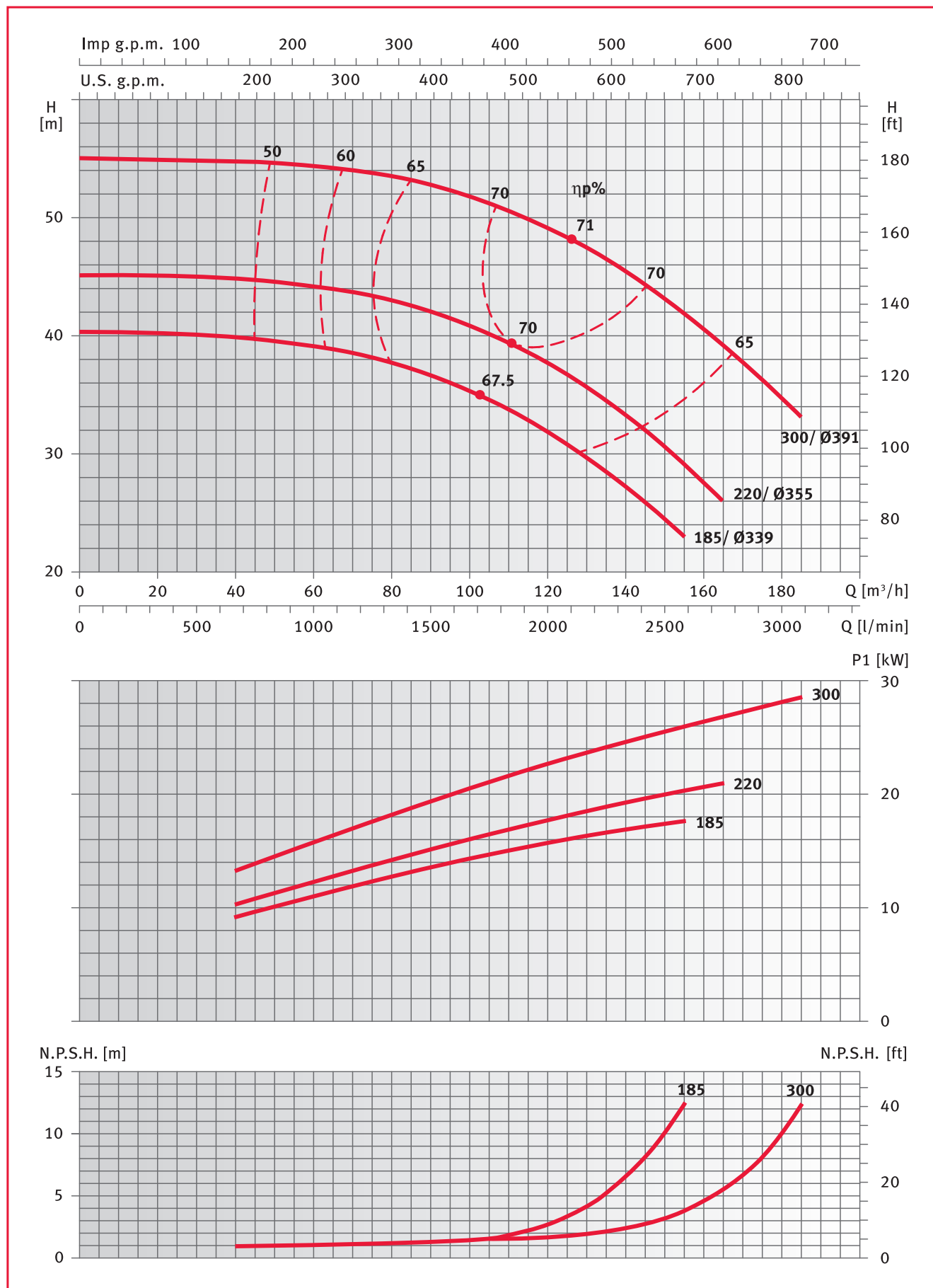
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 80 - 315 series



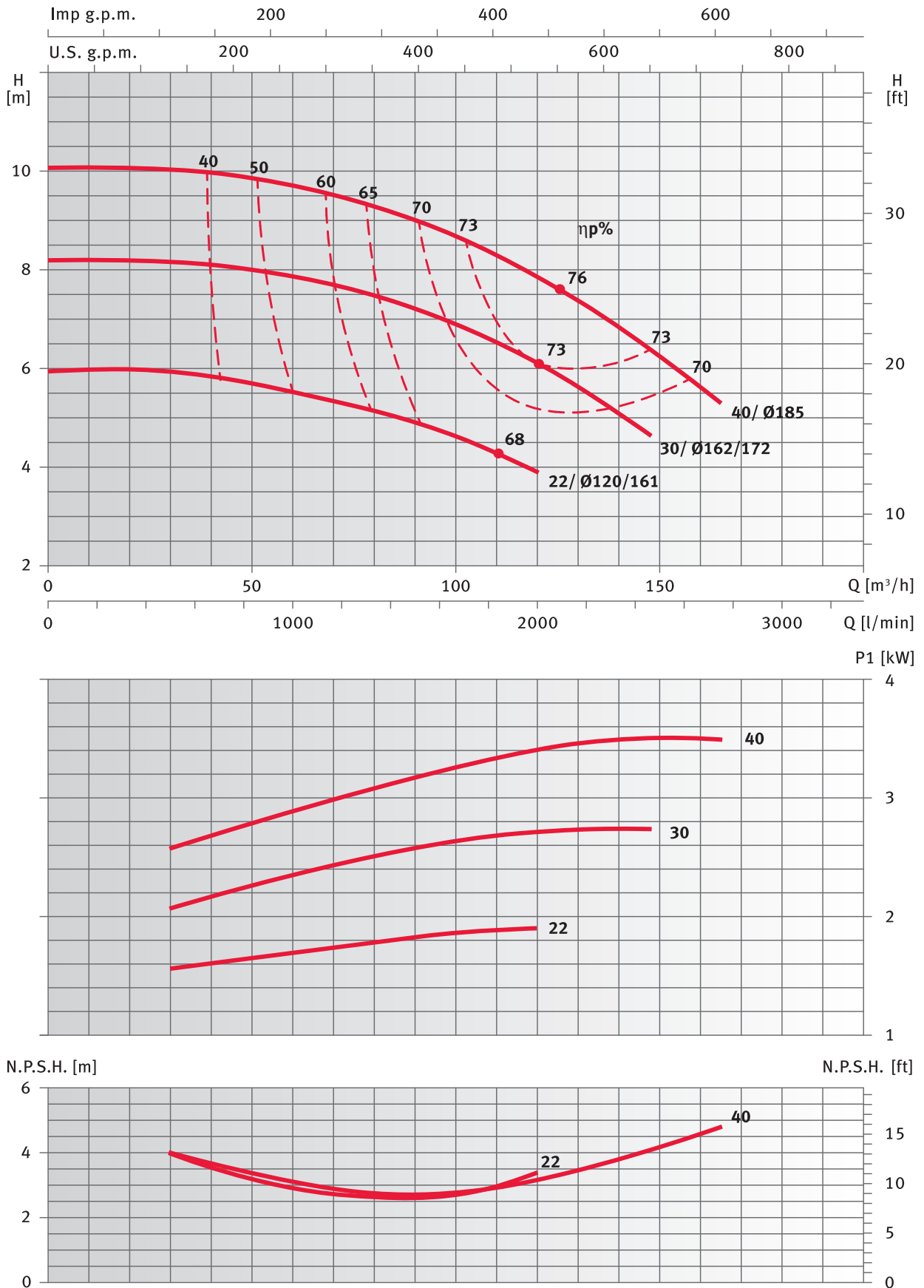
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNF4 80 - 400 series



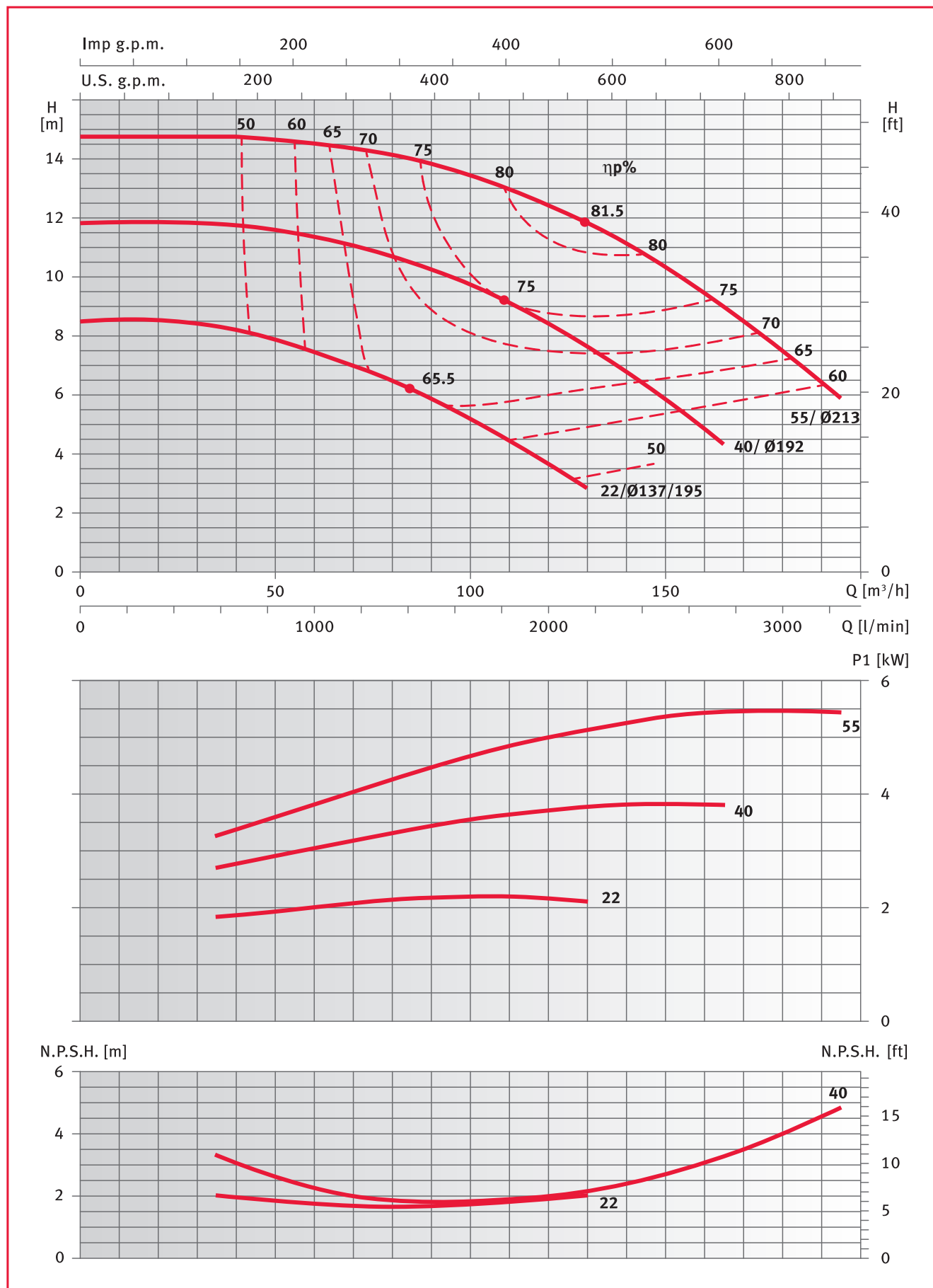
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 100 - 160 series



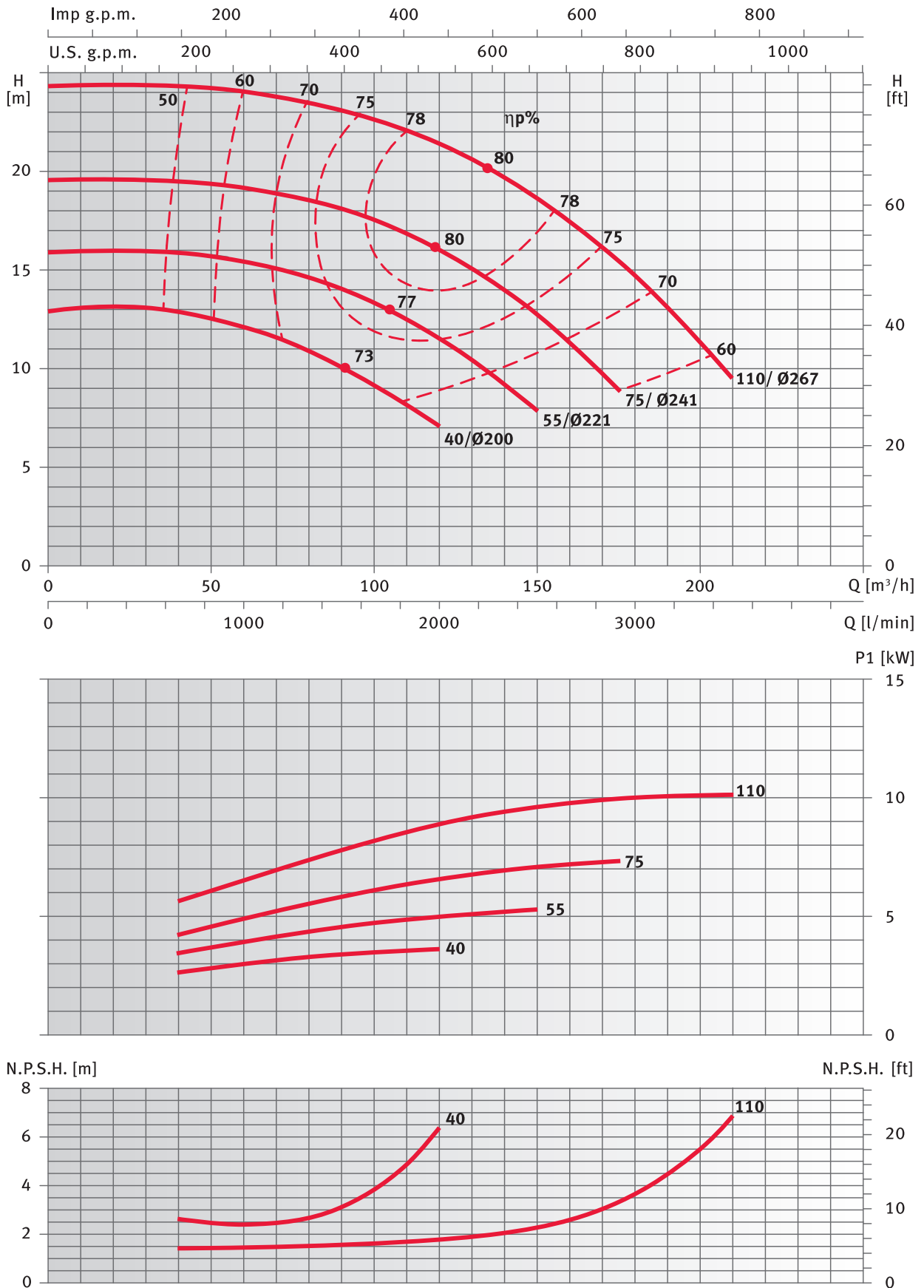
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 100 - 200 series



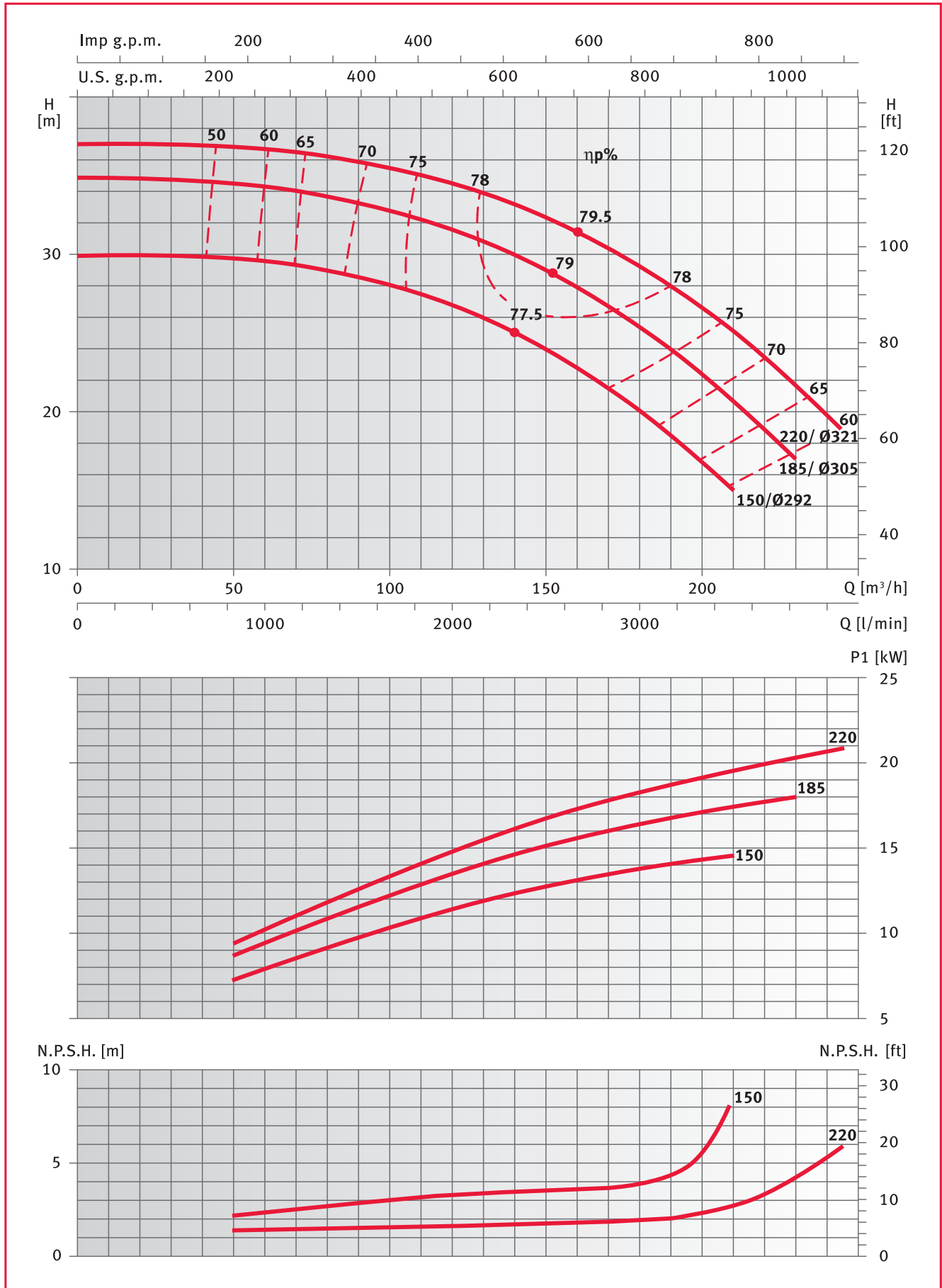
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 100 - 250 series



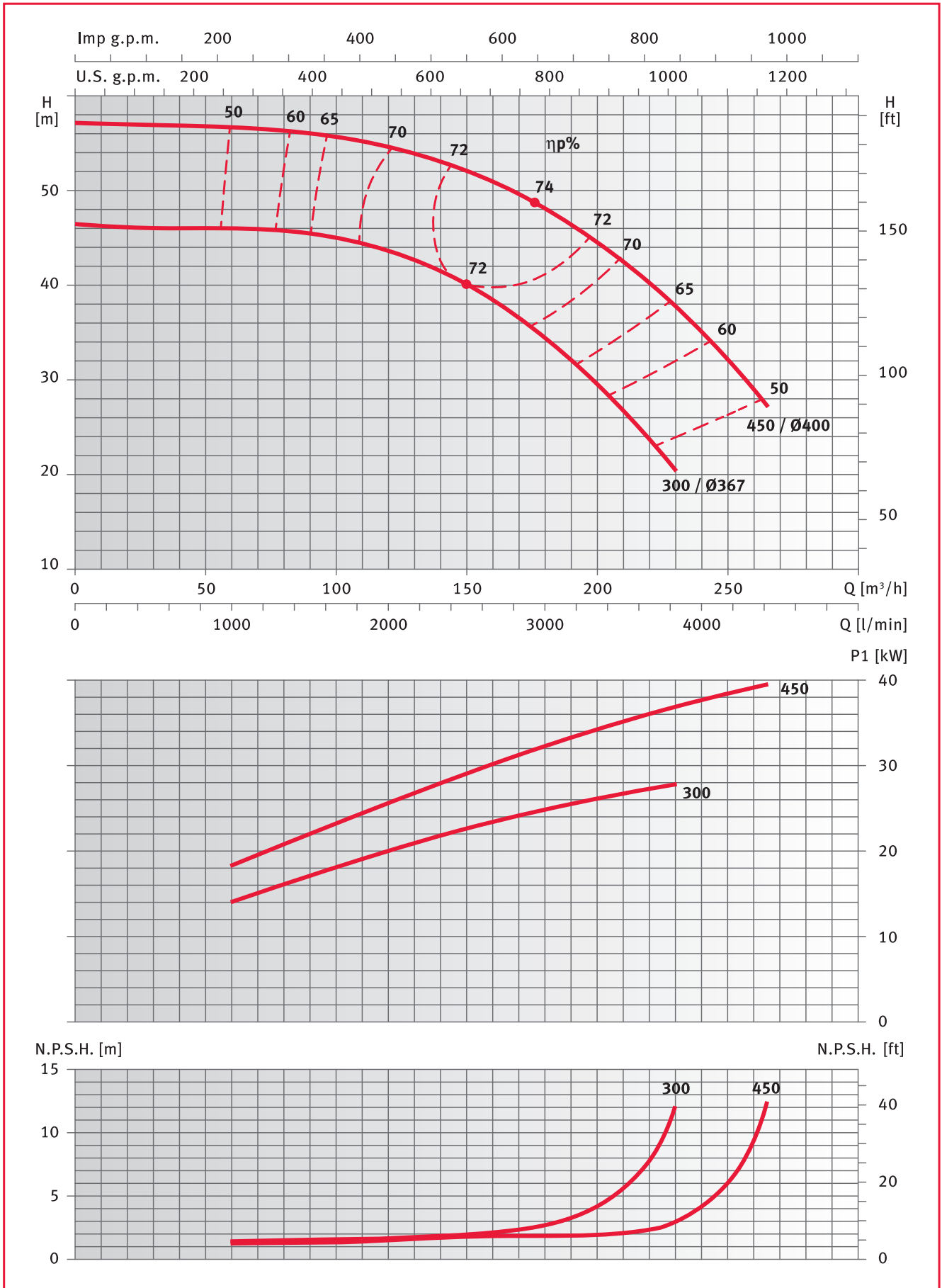
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 100 - 315 series



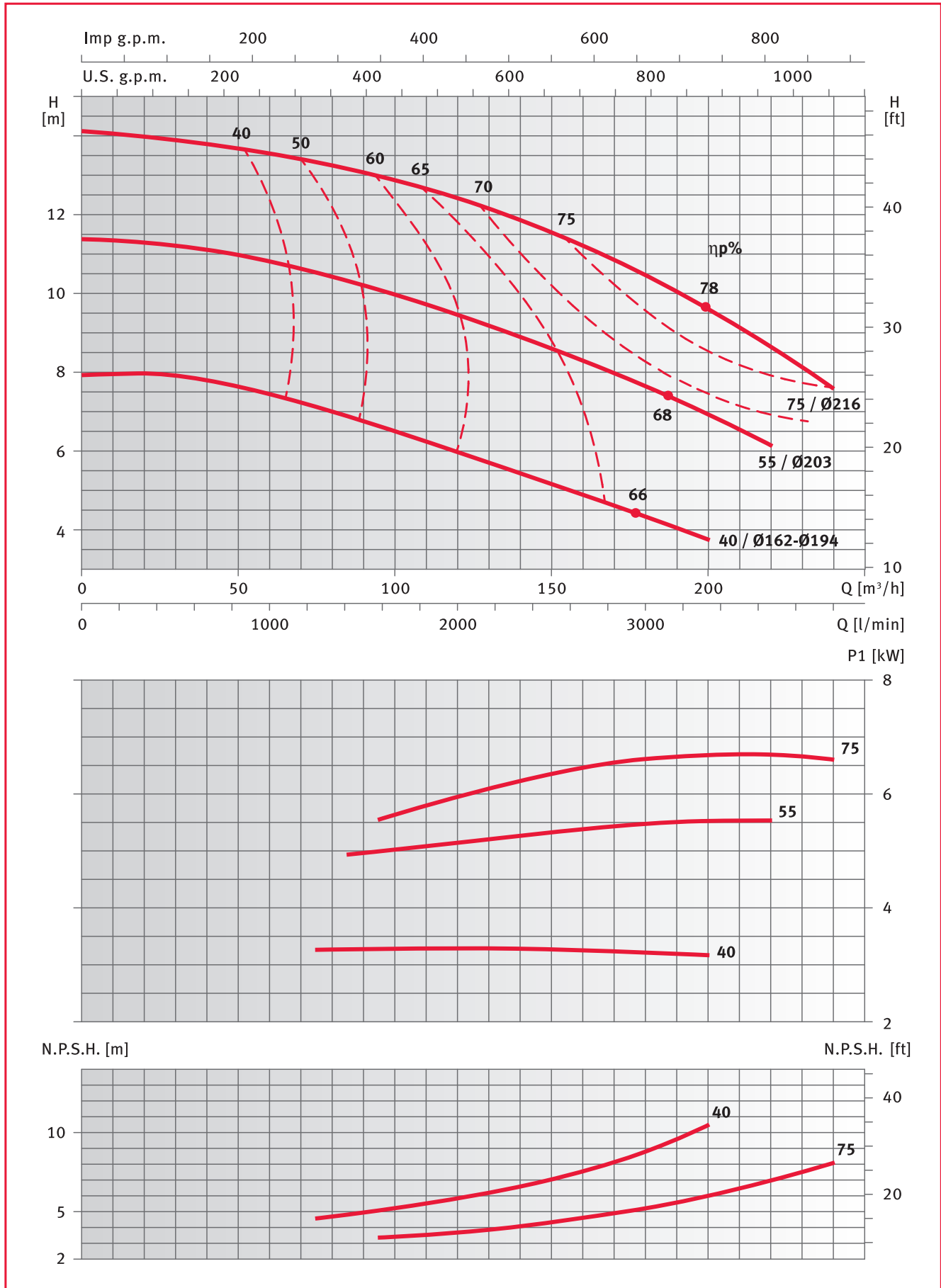
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 100 - 400 series



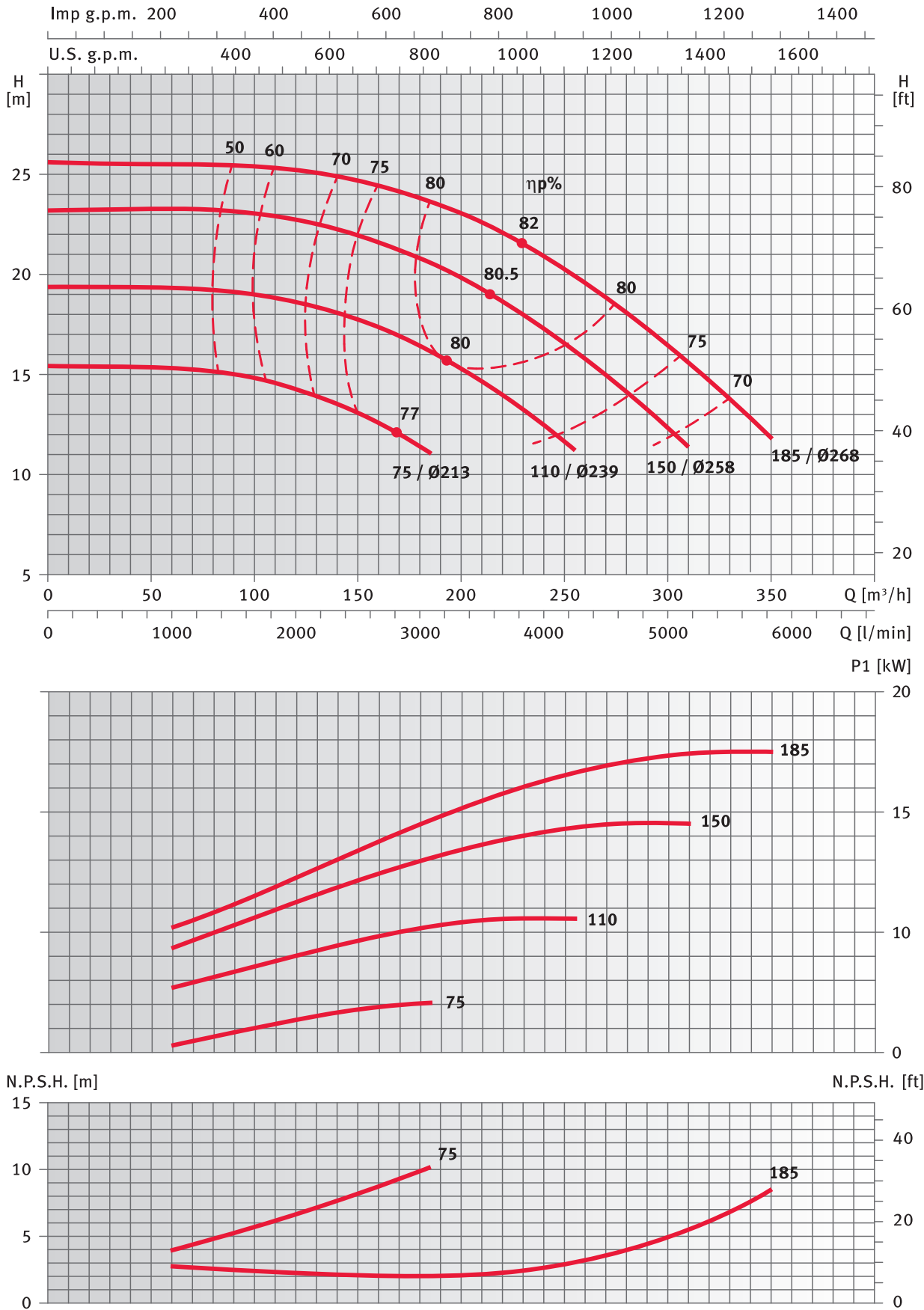
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 125 - 200 series



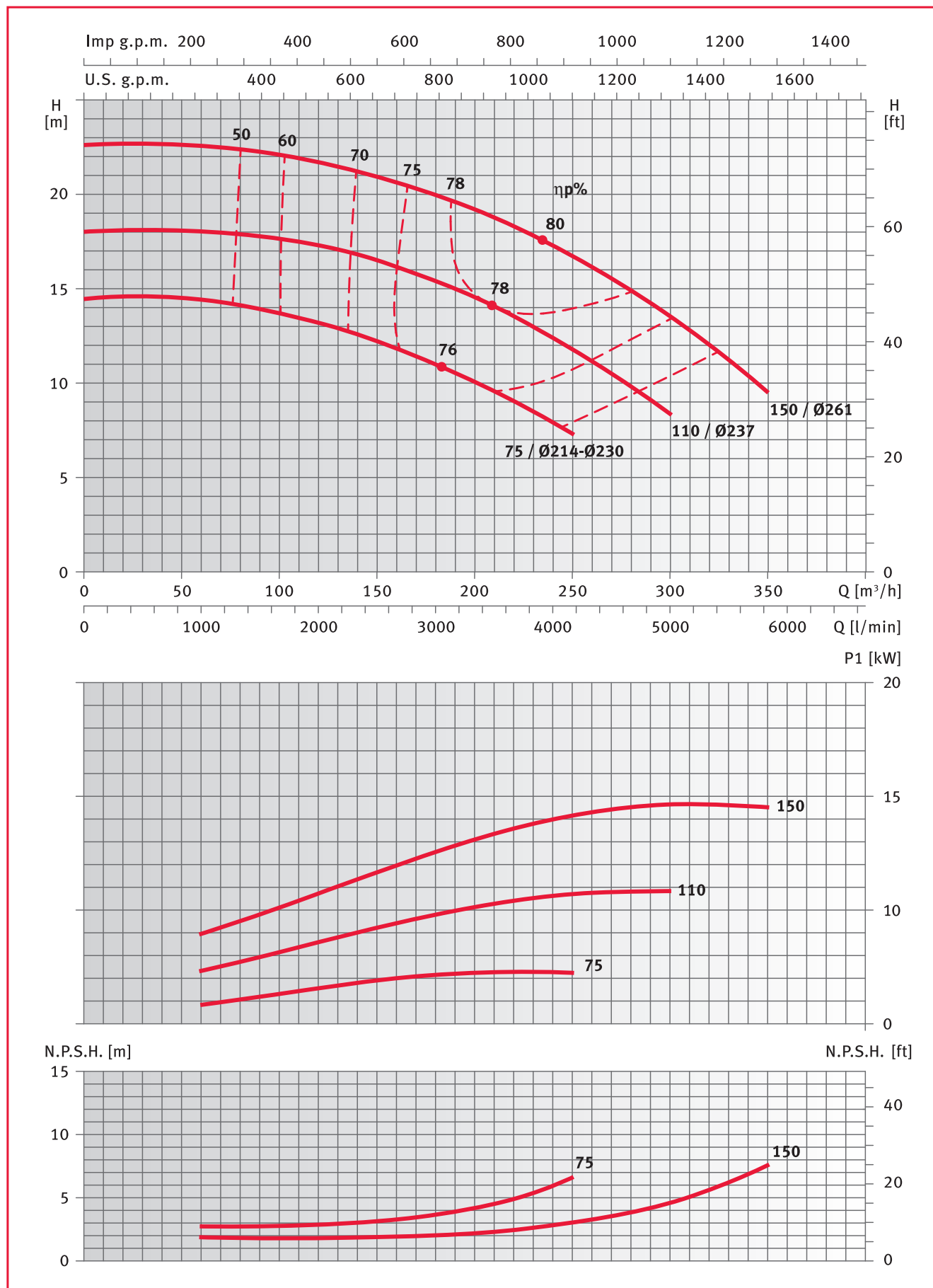
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 125 - 250 series



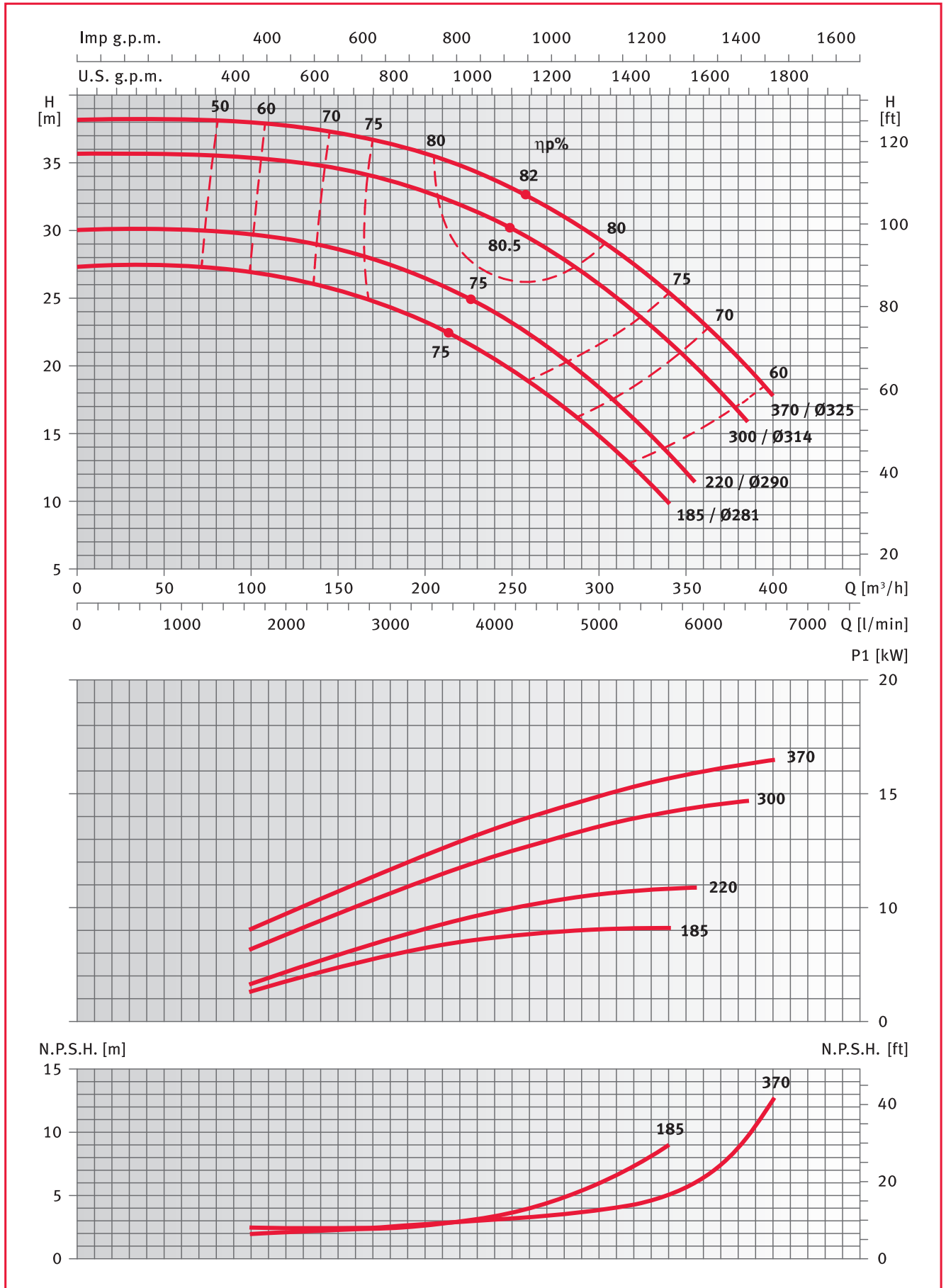
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 125 - 270 series



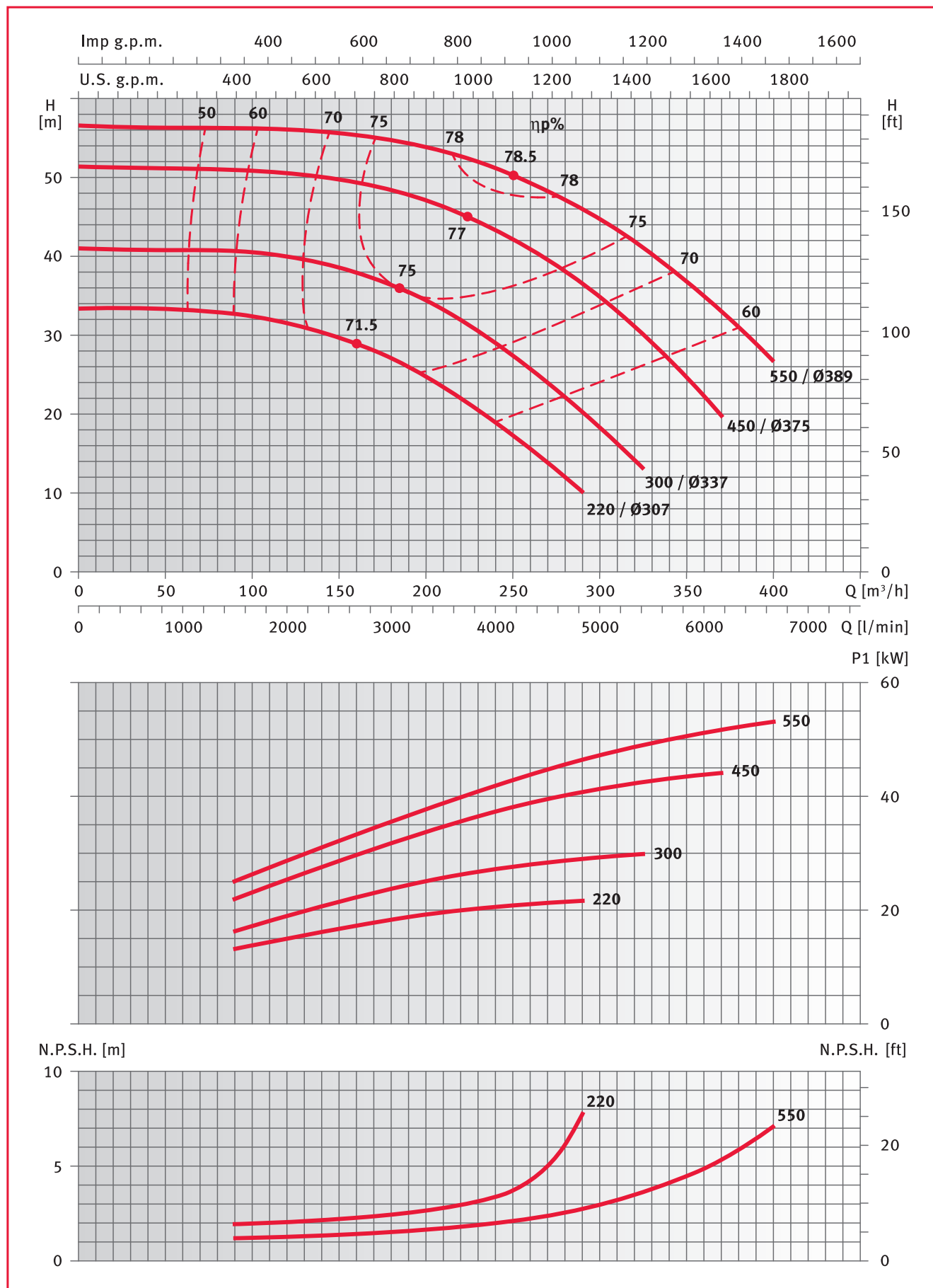
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 125 - 315 series



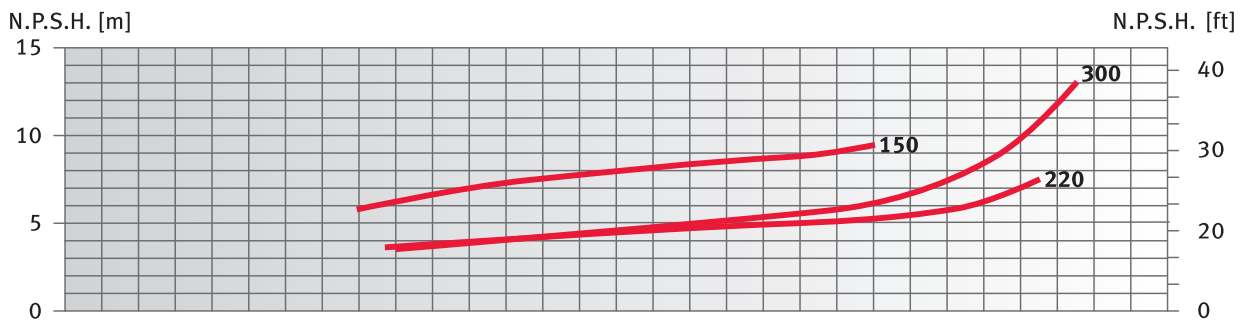
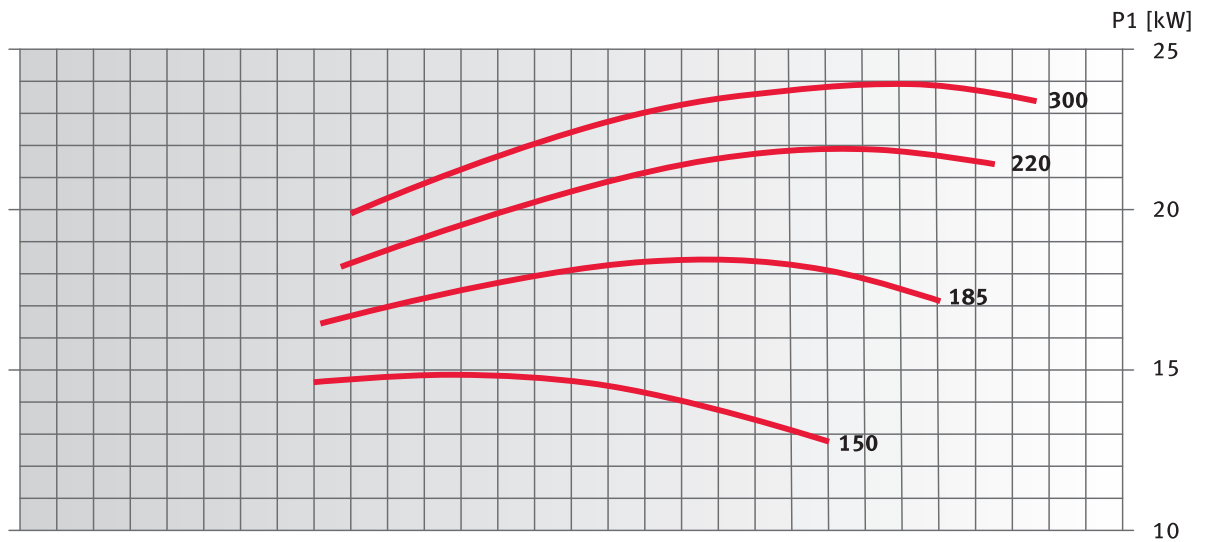
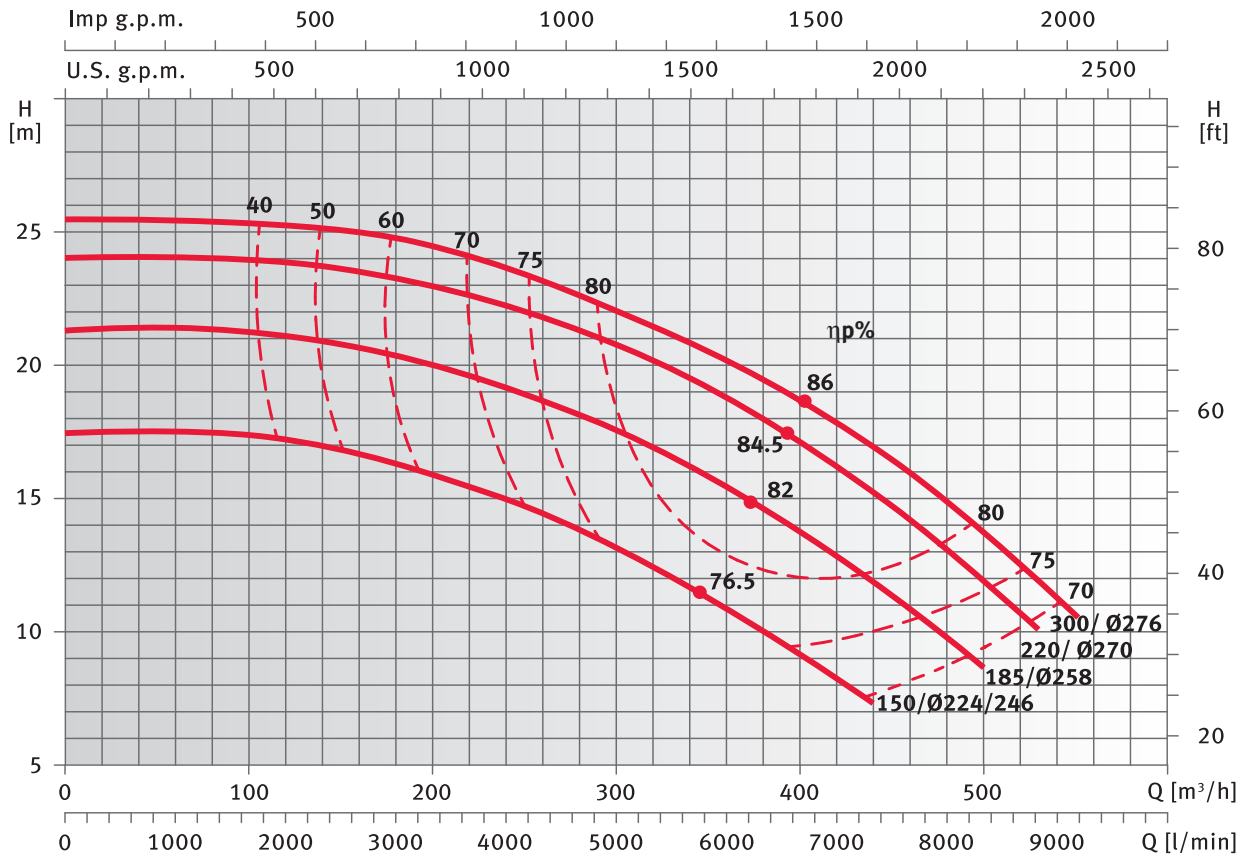
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 125 - 400 series



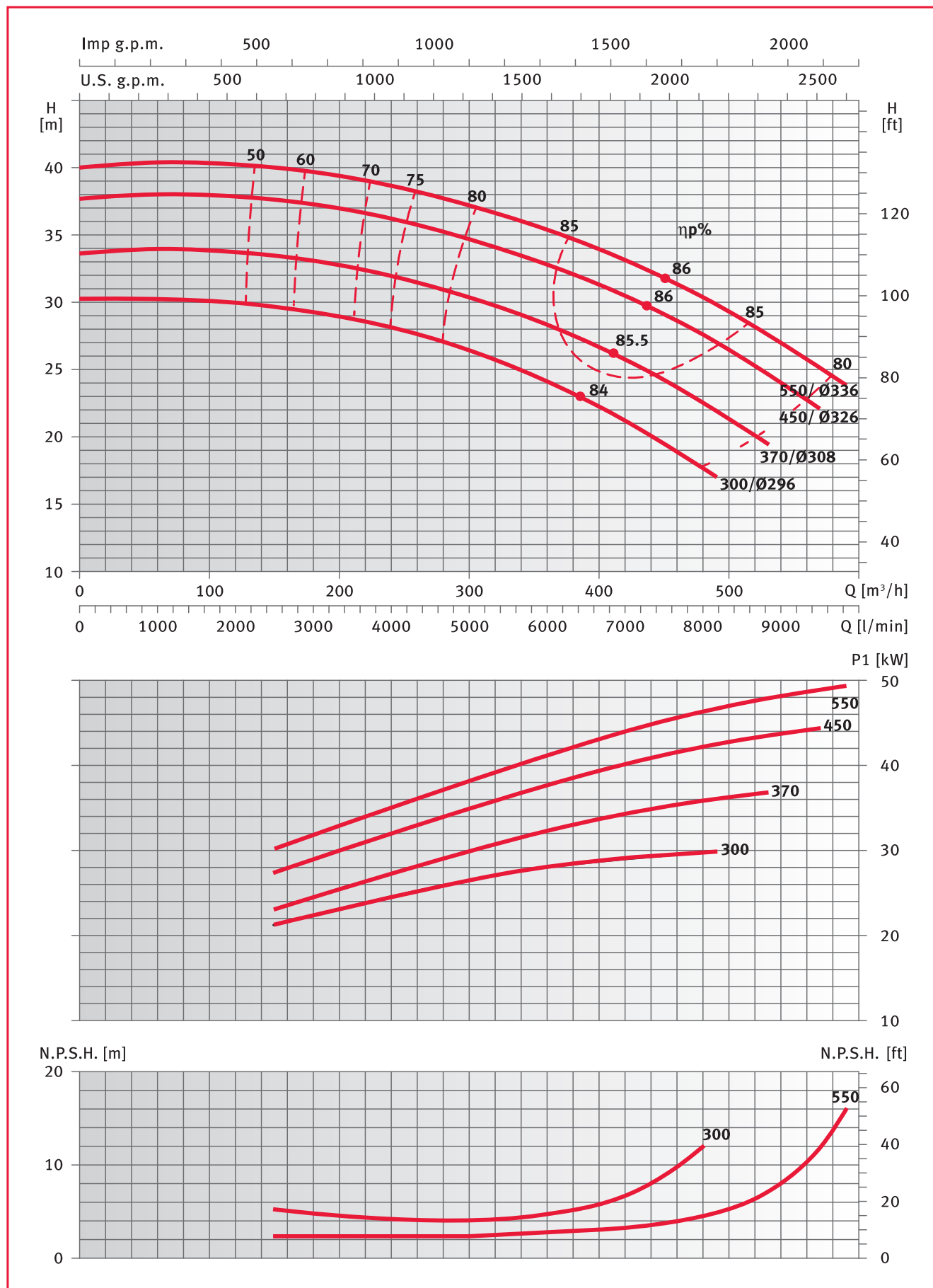
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 150 - 250 series



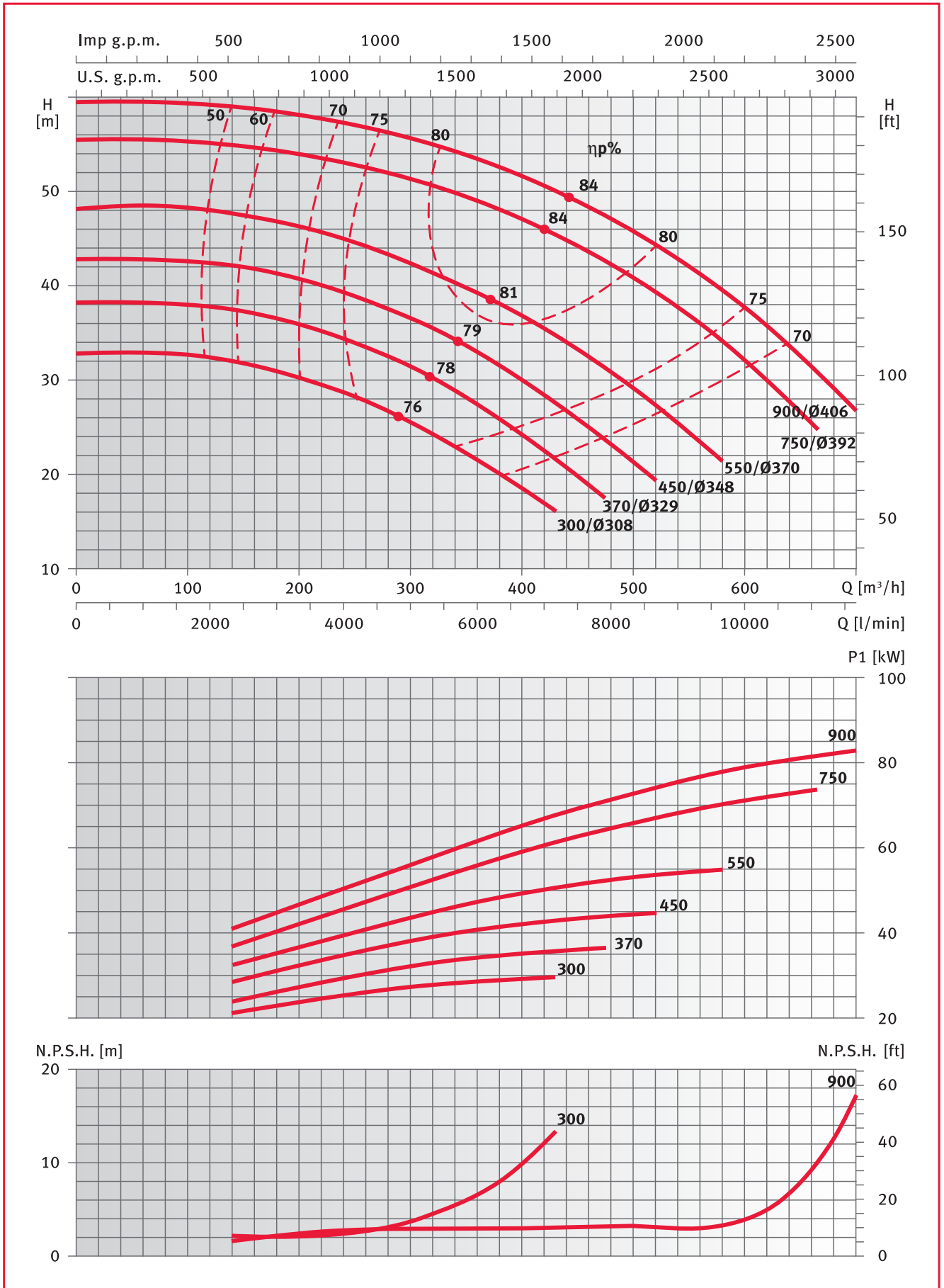
The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m. The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FNS4 and FNF4 150 - 315 series



The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN4 150 - 400 series

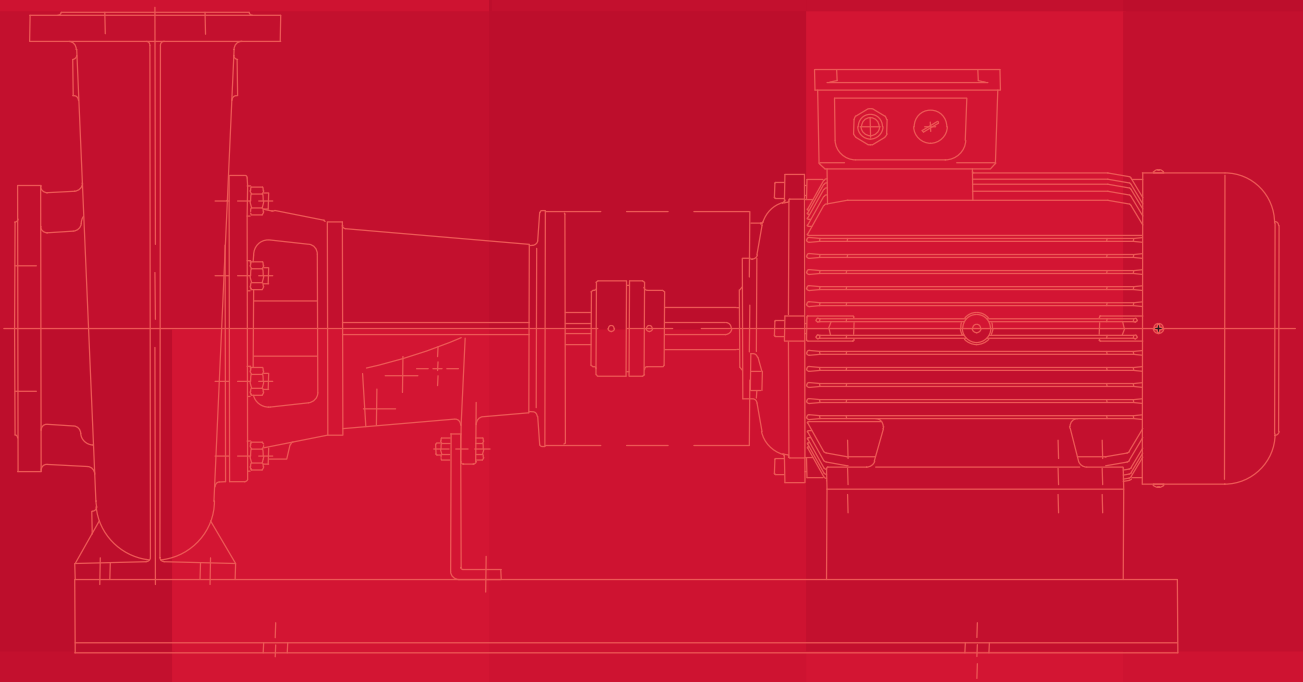


The NPSH values are laboratory values: for practical use we suggest increasing these values by 0,5 m.
 The performances are valid for liquids with density $\rho = 1,0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

FN Serie

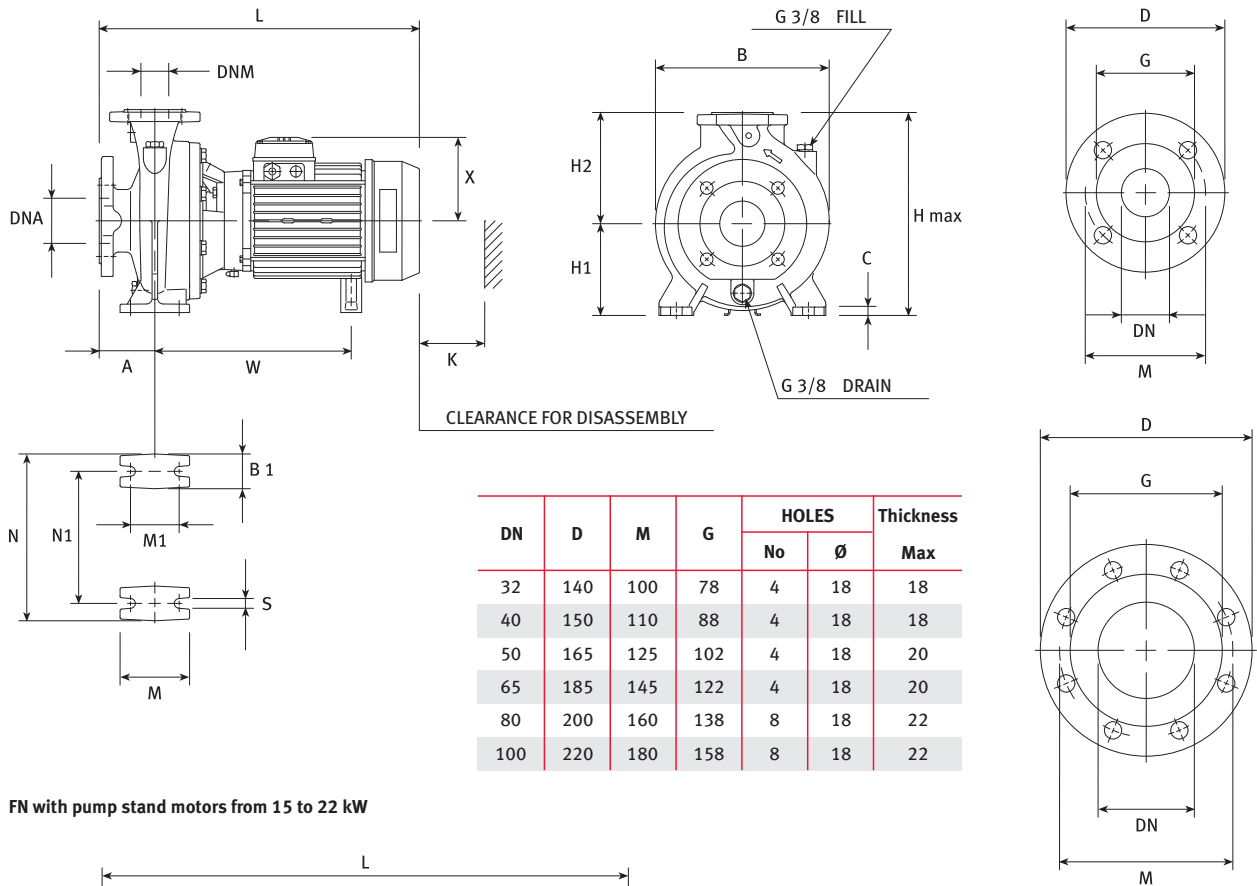
Dimensions, weights
and accessories

50 Hz

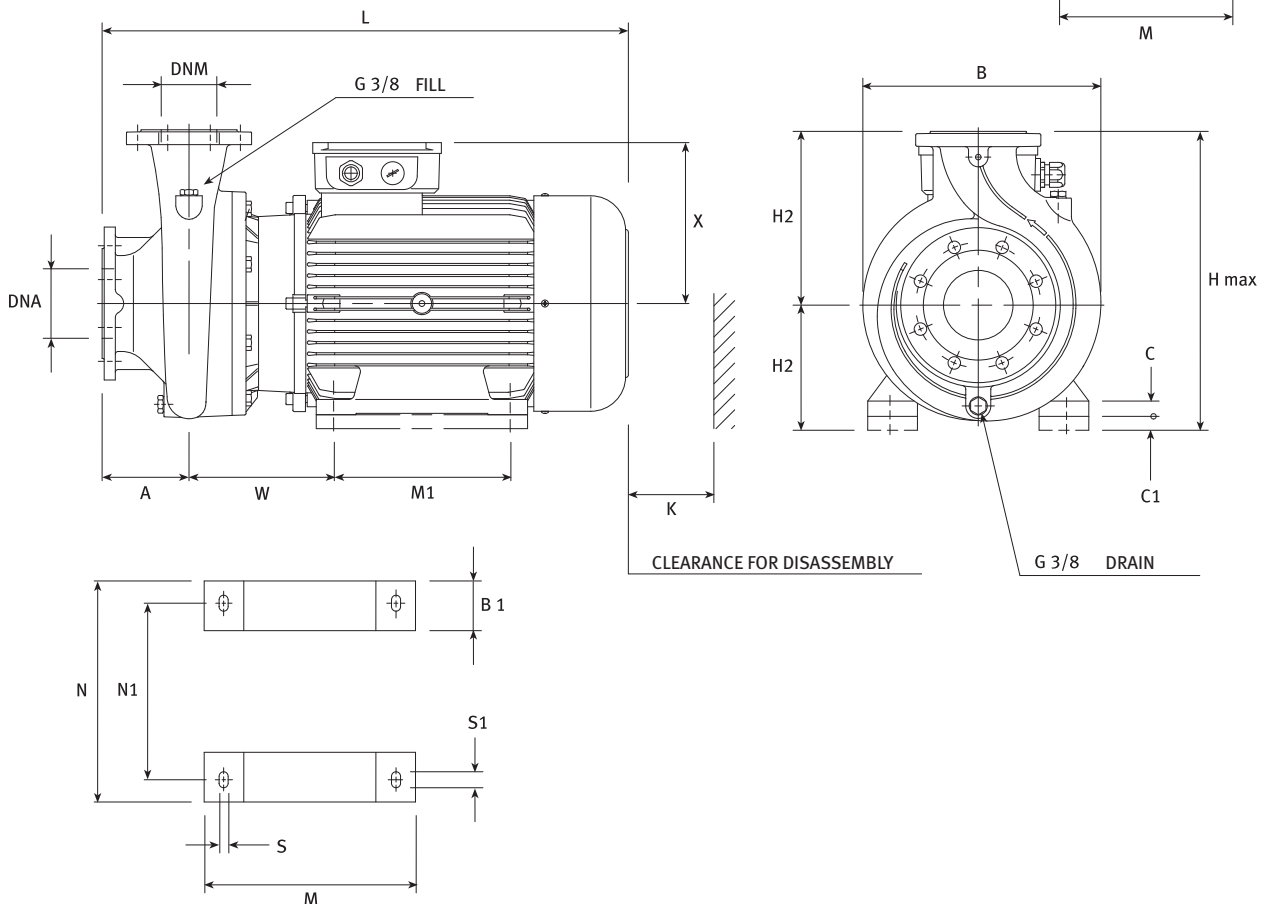


FN series

FN with pump stand motors up to 11 kW



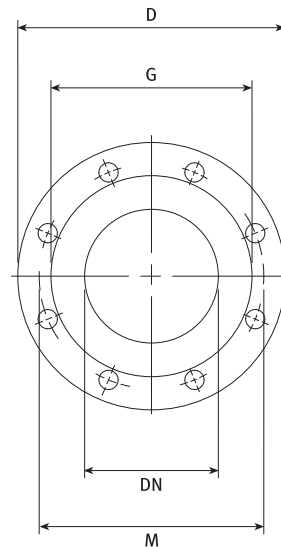
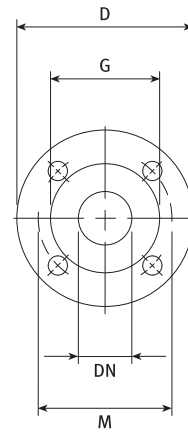
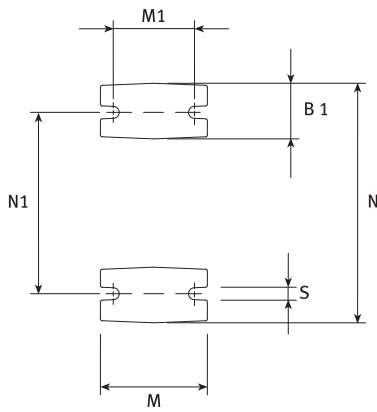
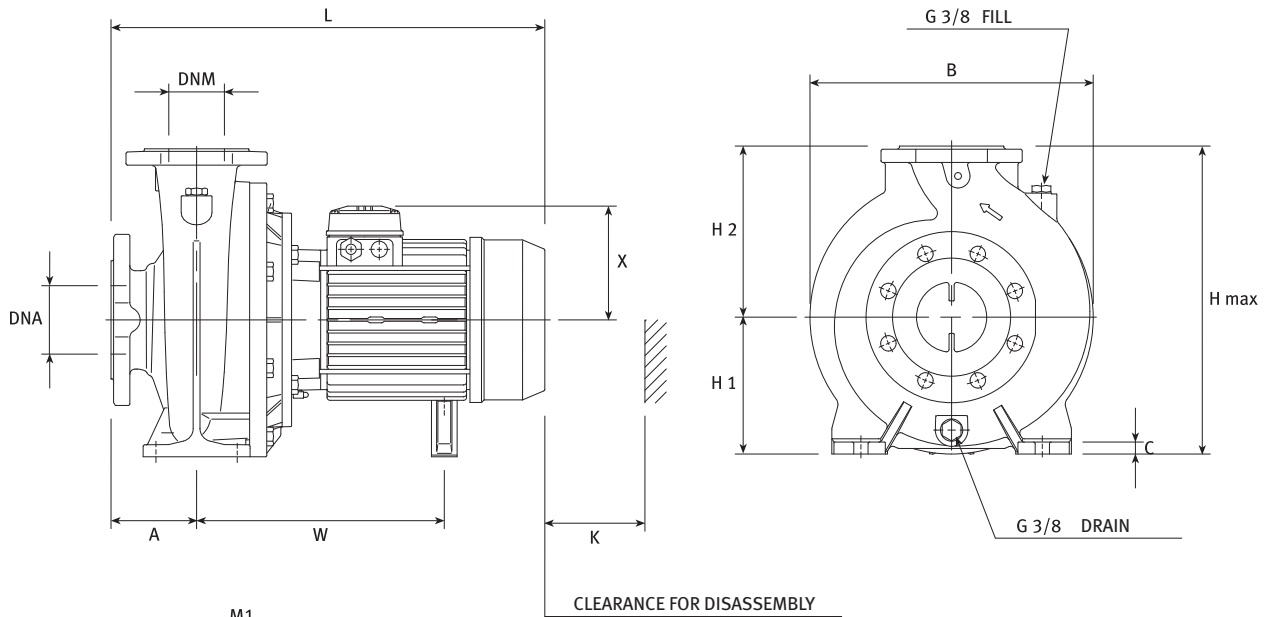
FN with pump stand motors from 15 to 22 kW



FN series

PUMP TYPE	DIMENSIONS (mm)																B	H max	L	K	WEIGHT kg
	PUMP						STAND														
	DNM	DNA	A	H2	W	X	B1	C	C1	H1	M	M1	N	N1	S	S1					
FN 32-125/07	32	50	80	140	235	137	50	12		112	100	70	190	140	14		233	252	467	86	26.1
FN 32-125/11	32	50	80	140	235	137	50	12		112	100	70	190	140	14		233	252	430	86	27.7
FN 32-160/15	32	50	80	160	235	181	50	12		132	100	70	240	190	14		235	292	440	86	27
FN 32-160/22	32	50	80	160	235	181	50	12		132	100	70	240	190	14		235	292	495	86	32
FN 32-200/30	32	50	80	180	283	152	50	12		160	100	70	240	190	14		285	340	485	86	43.3
FN 32-200/40	32	50	80	180	290	152	50	12		160	100	70	240	190	14		285	340	515	86	37.7
FN 40-125/11	40	65	80	140	235	137	50	12		112	100	70	210	160	14		233	252	430	88	29.7
FN 40-125/15	40	65	80	140	235	181	50	12		112	100	70	210	160	14		233	252	440	88	27
FN 40-125/22	40	65	80	140	235	181	50	12		112	100	70	210	160	14		233	252	495	88	31
FN 40-160/30	40	65	80	160	283	152	50	12		132	100	70	240	190	14		250	292	484	88	36.3
FN 40-160/40	40	65	80	160	290	180	50	12		132	100	70	240	190	14		250	292	515	88	30.7
FN 40-200/55	40	65	100	180	311	193	50	12		160	100	70	265	212	14		285	340	535	88	51.5
FN 40-200/75	40	65	100	180	311	193	50	12		160	100	70	265	212	14		285	340	599	88	56
FN 40-250/92	40	65	100	225	278	194	65	14		180	125	95	320	250	14		335	405	604	107	91
FN 40-250/110	40	65	100	225	278	230	65	14		180	125	95	320	250	14		335	405	707	107	89
FN 40-250/150	40	65	100	225	208	230	50	22	20	180	260	210	318	254	13	23	335	424	730	107	123
FN 50-125/22	50	65	100	160	235	181	50	12		132	100	70	240	190	14		255	292	515	92	35
FN 50-125/30	50	65	100	160	285	152	50	12		132	100	70	240	190	14		255	292	504	92	39.3
FN 50-125/40	50	65	100	160	292	180	50	12		132	100	70	240	190	14		255	292	535	92	33.7
FN 50-160/55	50	65	100	180	313	193	50	12		160	100	70	265	212	14		285	340	535	92	60.5
FN 50-160/75	50	65	100	180	313	193	50	12		160	100	70	265	212	14		285	340	599	92	64
FN 50-200/92	50	65	100	200	280	194	50	12		160	100	70	265	212	14		305	360	604	92	81
FN 50-200/110	50	65	100	200	280	230	50	12		160	100	70	265	212	14		305	360	707	92	76
FN 50-250/150	50	65	100	225	208	230	50	22		180	260	210	318	254	13	23	340	424	730	107	119
FN 50-250/185	50	65	100	225	208	230	50	22	20	180	304	254	318	254	13	23	340	424	730	107	118
FN 50-250/220	50	65	100	225	208	280	50	22	20	180	304	254	318	254	13	23	340	424	790	107	193
FN 65-125/40	65	80	100	180	292	180	65	14		160	125	95	280	212	14		285	340	535	105	52.7
FN 65-125/55	65	80	100	180	313	193	65	14		160	125	95	280	212	14		285	340	535	105	64.5
FN 65-125/75	65	80	100	180	313	193	65	14		160	125	95	280	212	14		285	340	599	105	68
FN 65-160/92	65	80	100	200	278	194	65	14		160	125	95	280	212	14		331	360	604	112	95
FN 65-160/110	65	80	100	200	278	230	65	14		160	125	95	280	212	14		331	360	491	112	93
FN 65-160/150	65	80	100	200	208	230	50	22		160	260	210	318	254	13	23	331	404	514	112	123
FN 65-200/150	65	80	100	225	208	230	50	22	20	180	260	210	318	254	13	23	335	424	514	112	123
FN 65-200/185	65	80	100	225	208	230	50	22	20	180	304	254	318	254	13	23	335	424	730	112	122
FN 65-200/220	65	80	100	225	208	280	50	22	20	180	304	254	318	254	13	23	335	424	790	112	197
FN 65-250/220	65	80	100	250	208	280	50	22	40	200	304	254	318	254	13	23	332	450	790	112	203
FN 80-160/110	80	100	125	225	278	230	65	14		180	125	95	320	250	14		332	405	516	129	99
FN 80-160/150	80	100	125	225	208	230	50	22	20	180	260	210	318	254	13	23	332	424	539	129	129
FN 80-160/185	80	100	125	225	208	230	50	22	20	180	304	254	318	254	13	23	332	424	755	129	128
FN 80-200/220	80	100	125	250	208	280	50	22	20	180	304	254	318	254	13	23	332	430	815	129	203

FN4 series

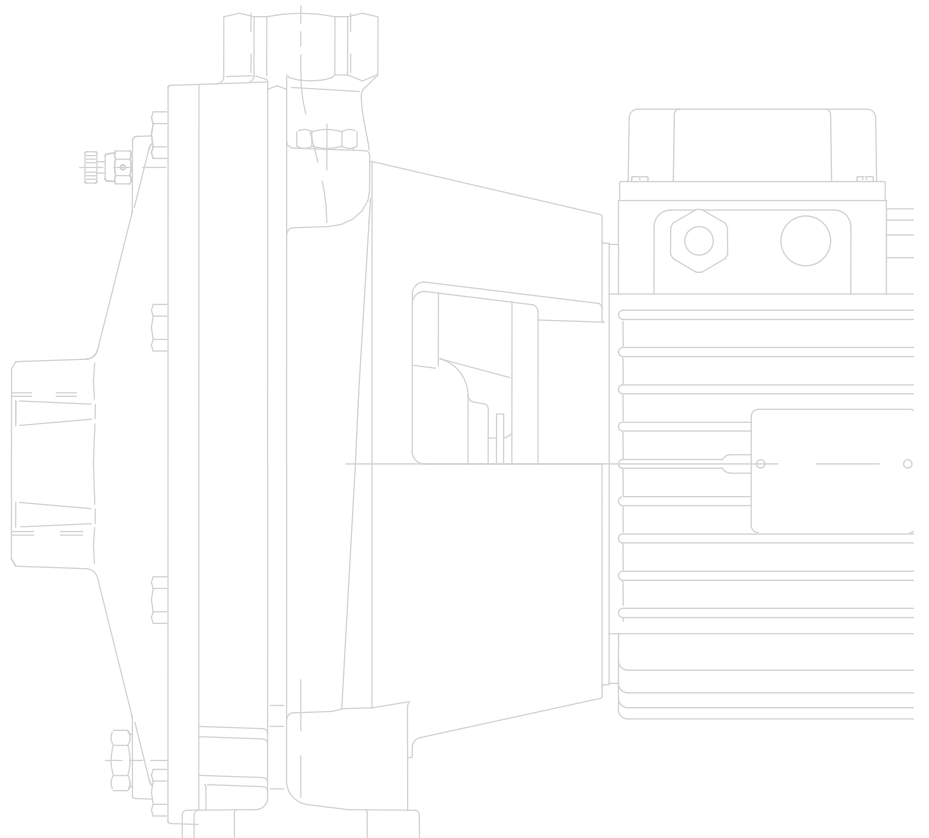
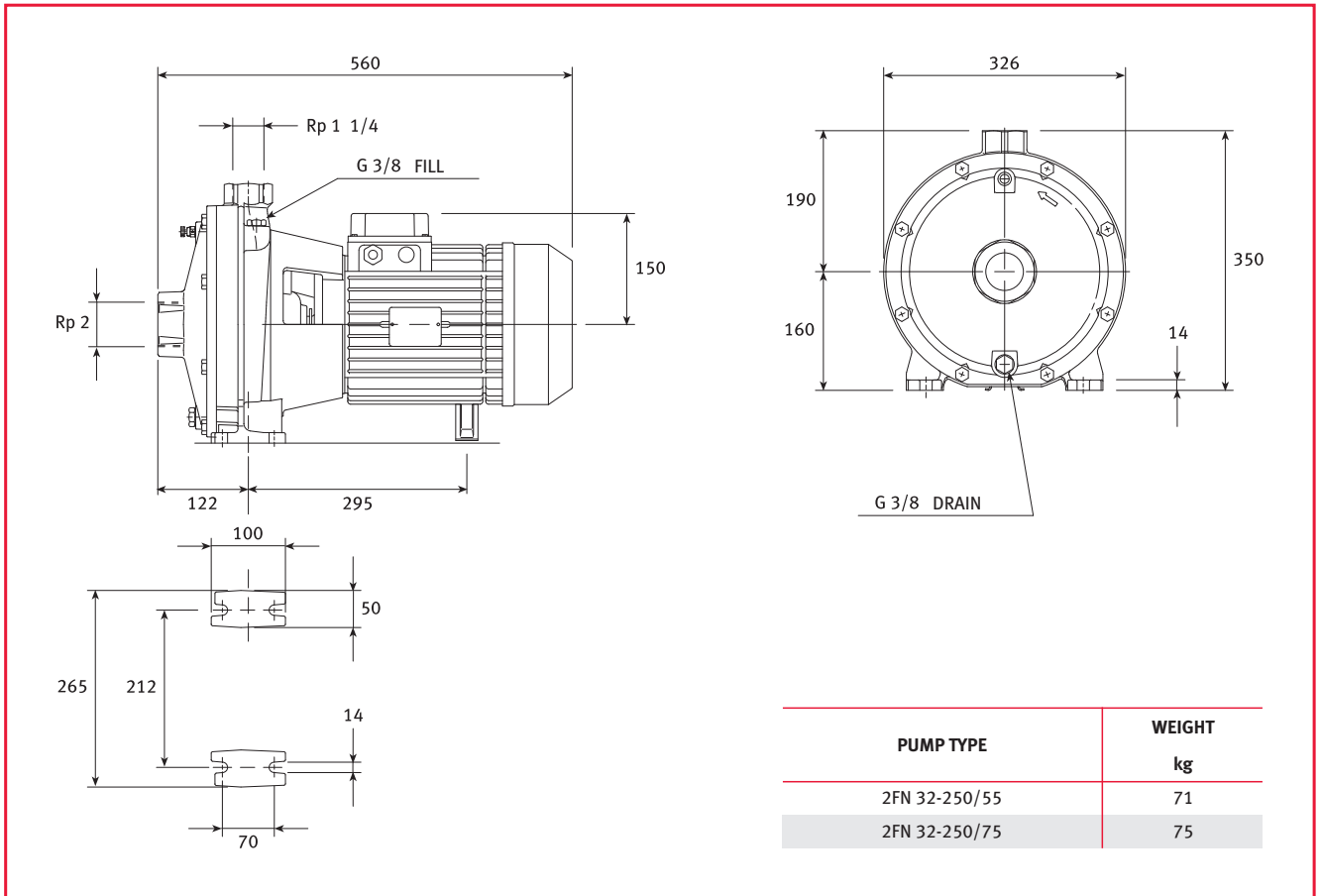


DN	D	M	G	HOLES		Thickness
				No	Ø	Max
32	140	100	78	4	18	18
40	150	110	88	4	18	18
50	165	125	102	4	18	20
65	185	145	122	4	18	20
80	200	160	138	8	18	22
100	220	180	158	8	18	22

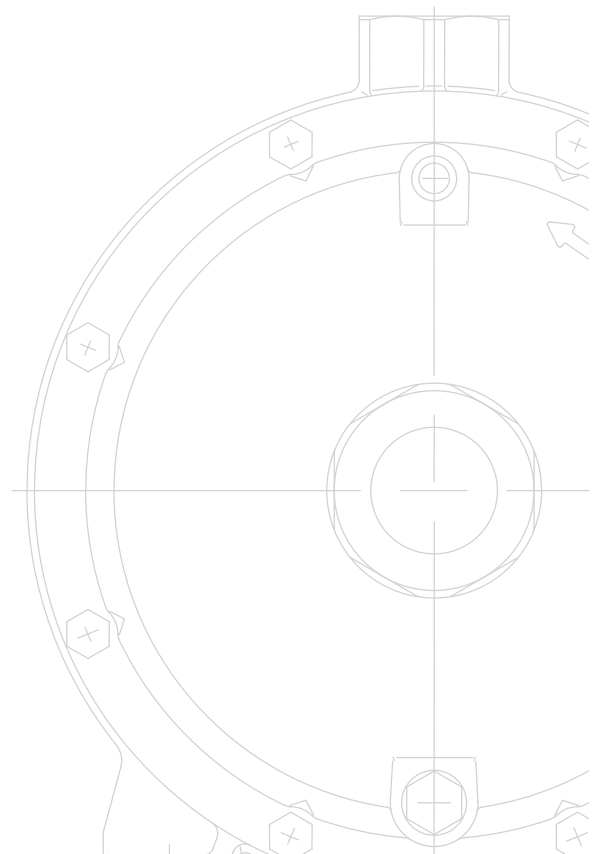
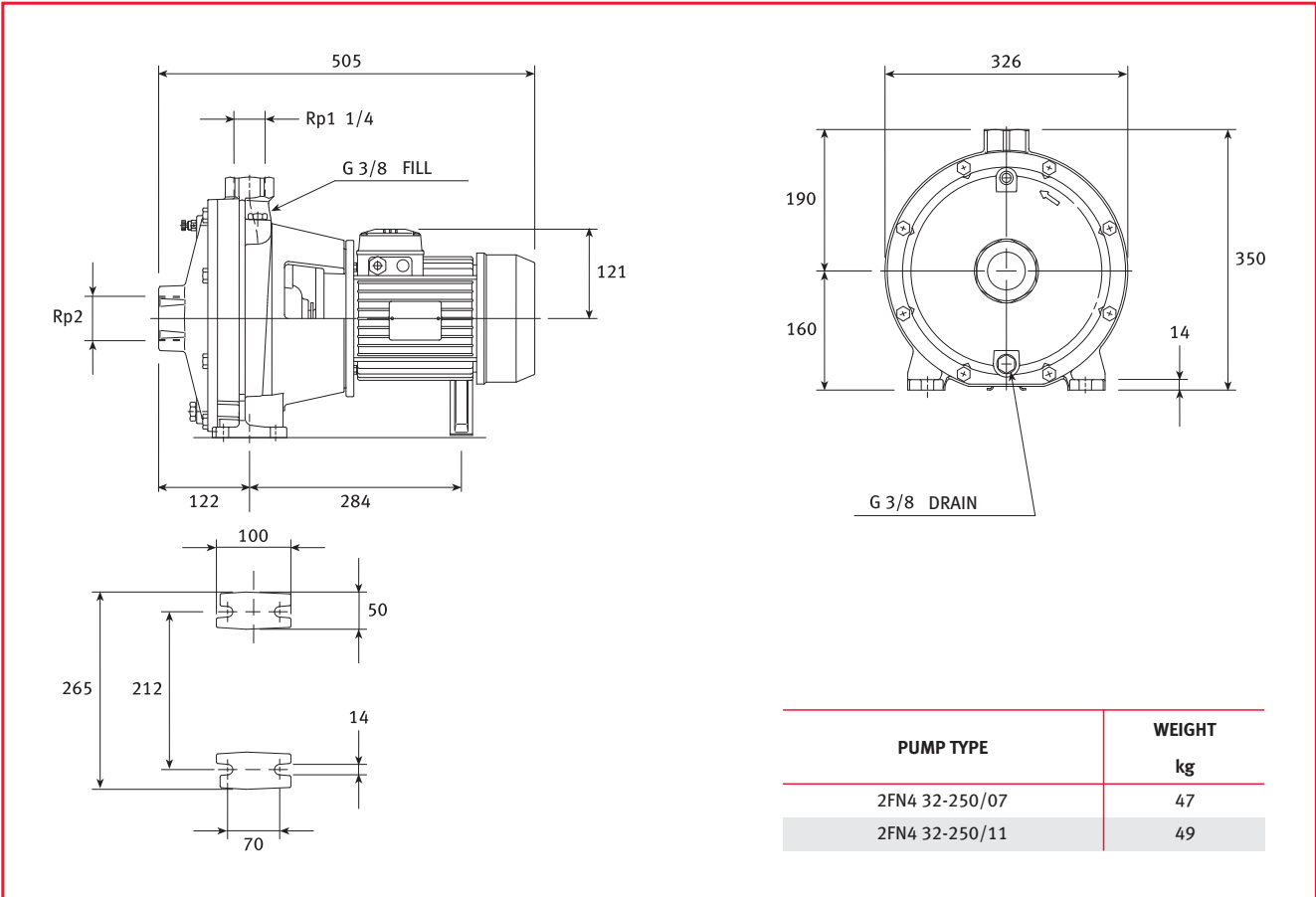
FN4 series

PUMP TYPE	DIMENSIONS (mm)														B	H max	L	K	WEIGHT kg
	PUMP						STAND												
	DNM	DNA	A	H2	W	X	B1	C	H1	M	M1	N	N1	S					
FN4 32-125/02A	32	50	80	140	215	121	50	12	112	100	70	190	140	14	233	252	411	86	25
FN4 32-125/02	32	50	80	140	215	121	50	12	112	100	70	190	140	14	233	252	411	86	25
FN4 32-160/02	32	50	80	160	215	121	50	12	132	100	70	240	190	14	235	292	411	86	26
FN4 32-160/03	32	50	80	160	215	117	50	12	132	100	70	240	190	14	235	292	426	86	26
FN4 32-200/03	32	50	80	180	215	117	50	12	160	100	70	240	190	14	285	340	426	86	35
FN4 32-200/05	32	50	80	180	235	117	50	12	160	100	70	240	190	14	285	340	436	86	38
FN4 40-125/02A	40	65	80	140	215	121	50	12	112	100	70	210	160	14	233	252	411	88	25
FN4 40-125/02	40	65	80	140	215	121	50	12	112	100	70	210	160	14	233	252	411	88	25
FN4 40-125/03	40	65	80	140	215	117	50	12	112	100	70	210	160	14	233	252	426	88	25
FN4 40-160/03	40	65	80	160	215	117	50	12	132	100	70	240	190	14	250	292	426	88	27
FN4 40-160/05	40	65	80	160	235	117	50	12	132	100	70	240	190	14	250	292	436	88	29
FN4 40-200/07	40	65	100	180	235	137	50	12	160	100	70	265	212	14	285	340	487	88	39
FN4 40-200/11	40	65	100	180	283	137	50	12	160	100	70	265	212	14	285	340	468	88	42
FN4 40-250/11	40	65	100	225	283	137	65	14	180	125	95	320	250	14	335	405	468	107	52
FN4 40-250/15	40	65	100	225	283	181	65	14	180	125	95	320	250	14	335	405	478	107	55
FN4 40-250/22	40	65	100	225	290	181	65	14	180	125	95	320	250	14	335	405	559	107	60
FN4 50-125/03A	50	65	100	160	217	117	50	12	132	100	70	240	190	14	255	292	456	92	29
FN4 50-125/03	50	65	100	160	217	117	50	12	132	100	70	240	190	14	255	292	456	92	29
FN4 50-125/05	50	65	100	160	237	117	50	12	132	100	70	240	190	14	255	292	458	92	32
FN4 50-160/07	50	65	100	180	237	137	50	12	160	100	70	265	212	14	285	340	489	92	42
FN4 50-160/11	50	65	100	180	285	137	50	12	160	100	70	265	212	14	285	340	468	92	45
FN4 50-200/11	50	65	100	200	285	137	50	12	160	100	70	265	212	14	305	360	468	92	45
FN4 50-200/15	50	65	100	200	285	181	50	12	160	100	70	265	212	14	305	360	478	92	48
FN4 50-250/22A	50	65	100	225	290	181	65	14	180	125	95	320	250	14	340	405	559	107	60
FN4 50-250/22	50	65	100	225	290	181	65	14	180	125	95	320	250	14	340	405	559	107	60
FN4 50-250/30	50	65	100	225	290	152	65	14	180	125	95	320	250	14	340	405	530	107	63
FN4 65-125/05	65	80	100	180	237	117	65	14	160	125	95	280	212	14	285	340	458	105	46
FN4 65-125/07	65	80	100	180	237	137	65	14	160	125	95	280	212	14	285	340	489	105	46
FN4 65-125/11	65	80	100	180	265	137	65	14	160	125	95	280	212	14	285	340	468	105	49
FN4 65-160/11	65	80	100	200	283	137	65	14	160	125	95	280	212	14	331	360	468	112	56
FN4 65-160/15	65	80	100	200	283	181	65	14	160	125	95	280	212	14	331	360	478	112	59
FN4 65-160/22	65	80	100	200	290	181	65	14	160	125	95	280	212	14	331	360	559	112	64
FN4 65-200/15	65	80	100	225	283	181	65	14	180	125	95	320	250	14	335	405	478	112	59
FN4 65-200/22	65	80	100	225	290	181	65	14	180	125	95	320	250	14	335	405	559	112	64
FN4 65-200/30	65	80	100	225	290	152	65	14	180	125	95	320	250	14	335	405	530	112	66
FN4 65-250/30	65	80	100	250	290	152	80	16	200	160	120	360	280	18	360	450	530	112	75
FN4 65-250/40	65	80	100	250	311	180	80	16	200	160	120	360	280	18	360	450	558	112	105
FN4 65-250/55	65	80	100	250	259	193	80	16	200	160	120	360	280	18	360	450	548	112	111
FN4 80-160/15	80	100	125	225	283	181	65	14	180	125	95	320	250	14	332	405	503	129	64
FN4 80-160/22	80	100	125	225	290	181	65	14	180	125	95	320	250	14	332	405	584	129	69
FN4 80-200/30	80	100	125	250	290	152	65	14	180	125	95	345	280	14	345	430	555	129	80
FN4 80-200/40	80	100	125	250	311	180	65	14	180	125	95	345	280	14	345	430	583	129	103
FN4 80-250/40	80	100	125	280	311	180	80	16	200	160	120	400	315	18	400	480	583	129	100
FN4 80-250/55	80	100	125	280	259	193	80	16	200	160	120	400	315	18	400	480	573	129	106
FN4 80-250/75	80	100	125	280	278	193	80	16	200	160	120	400	315	18	400	480	675	129	116

2FN series

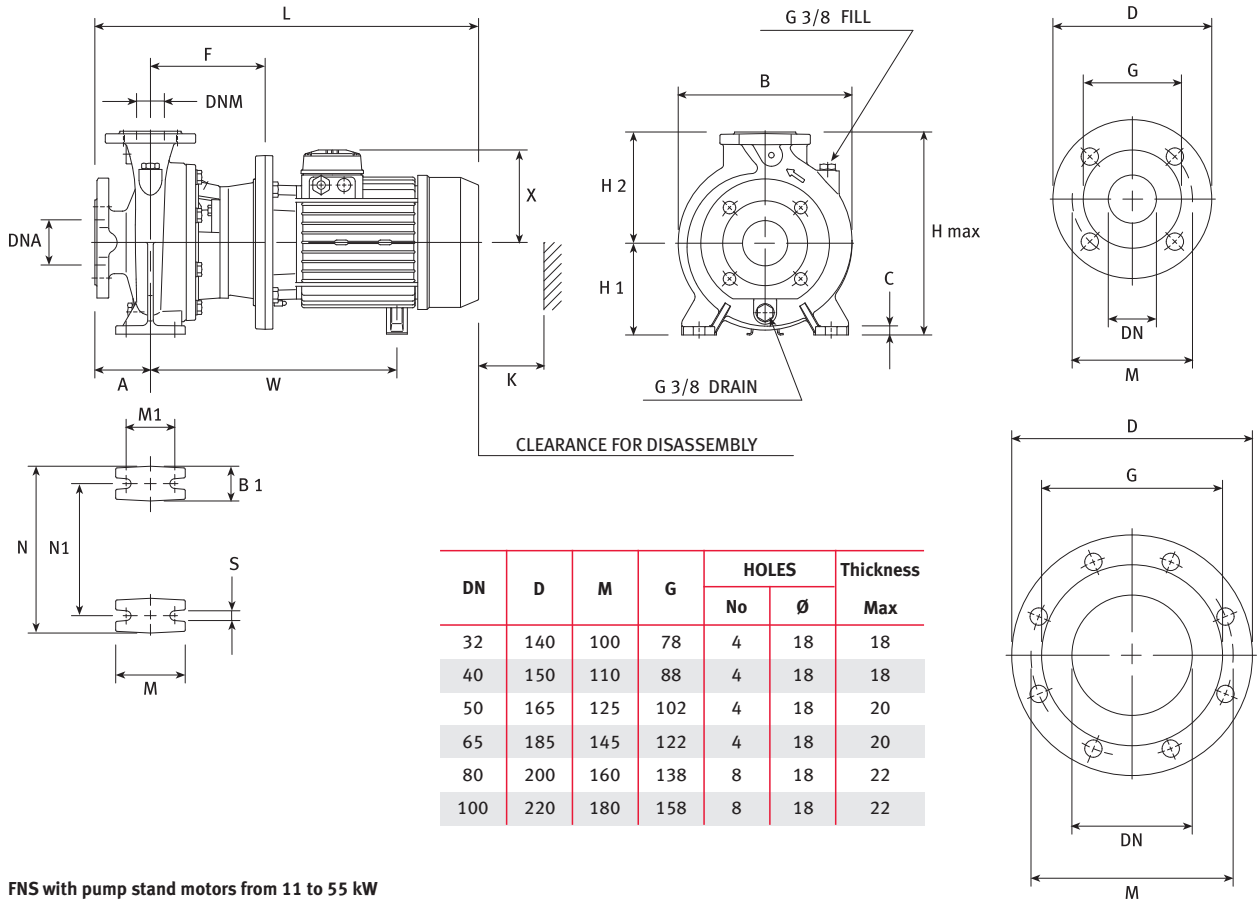


2FN4 series

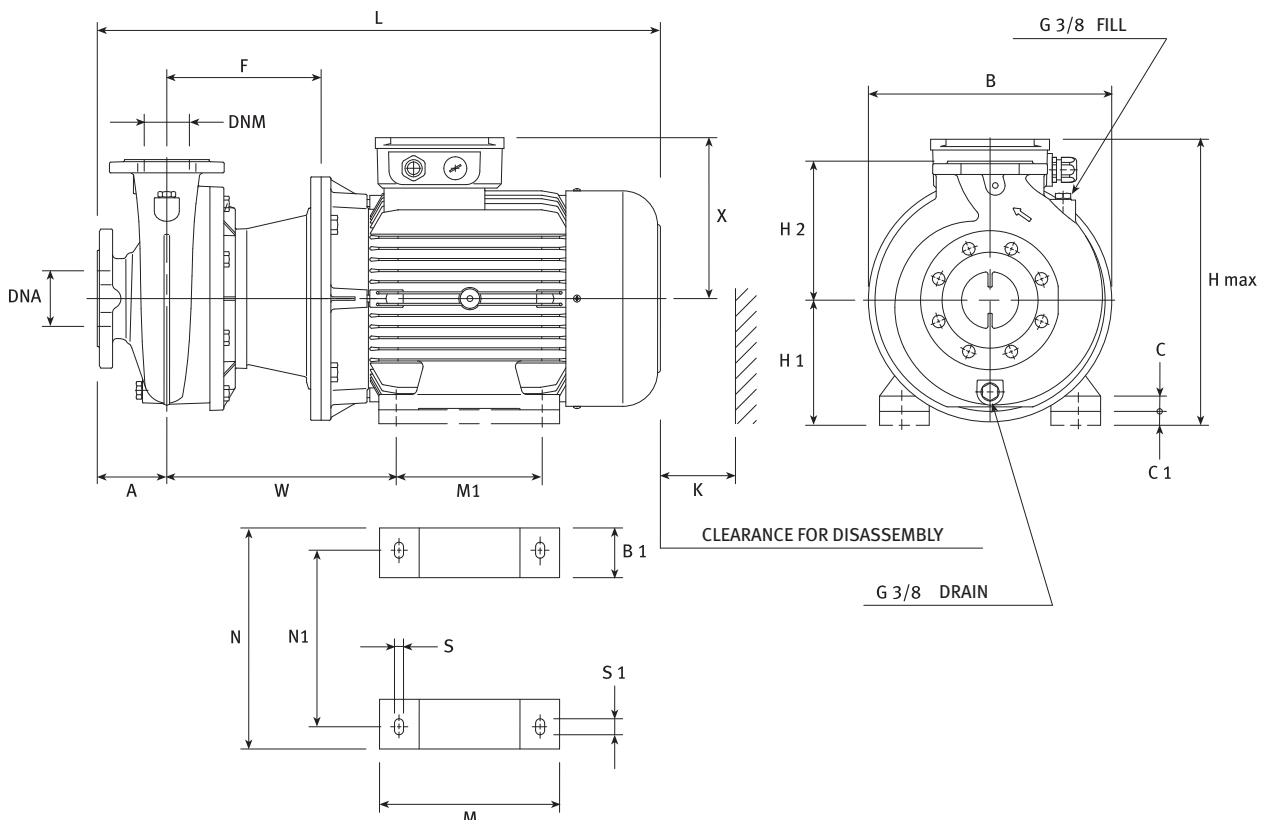


FNS series

FNS with pump stand motors up to 7.5 kW



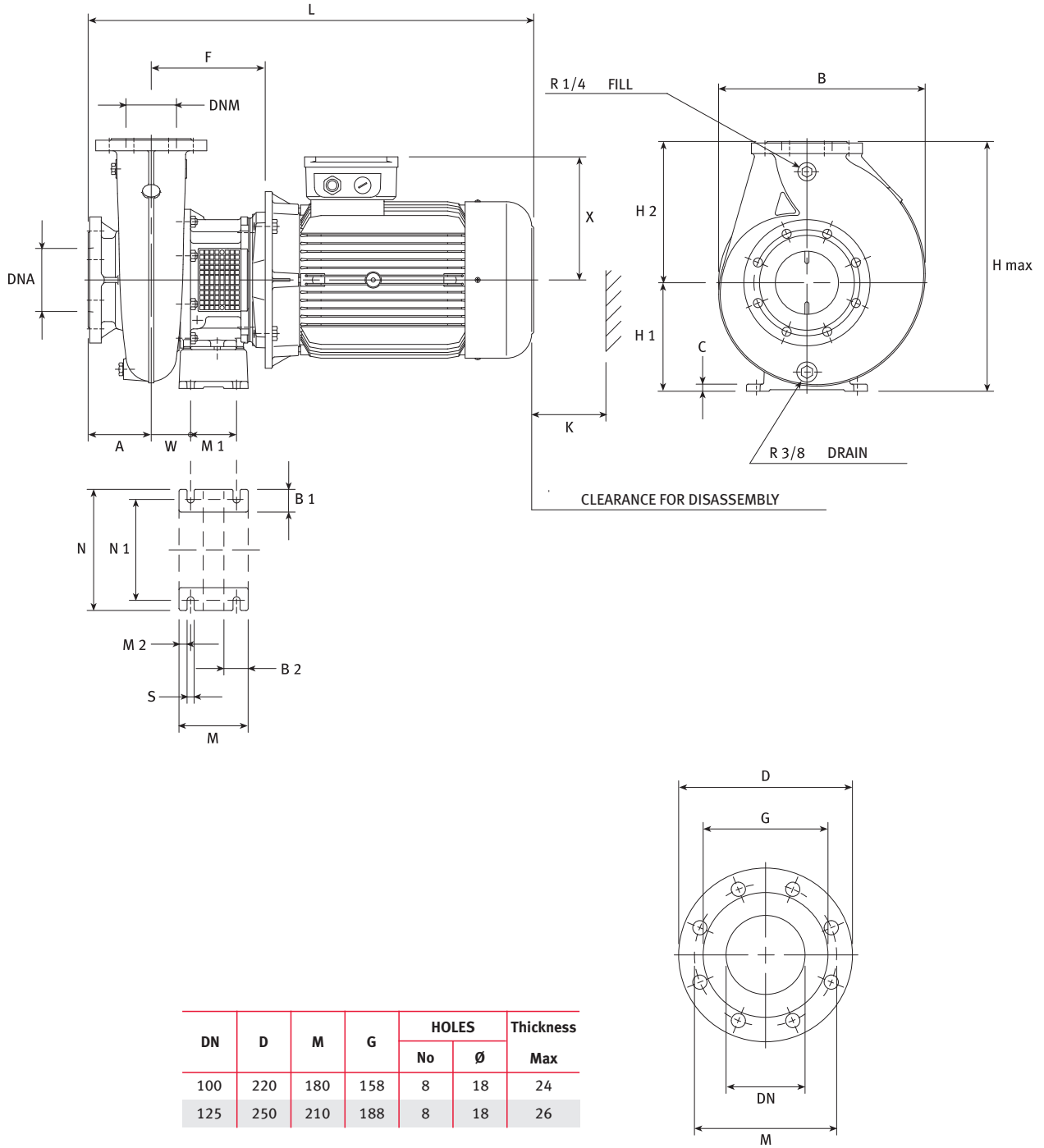
FNS with pump stand motors from 11 to 55 kW



FNS series

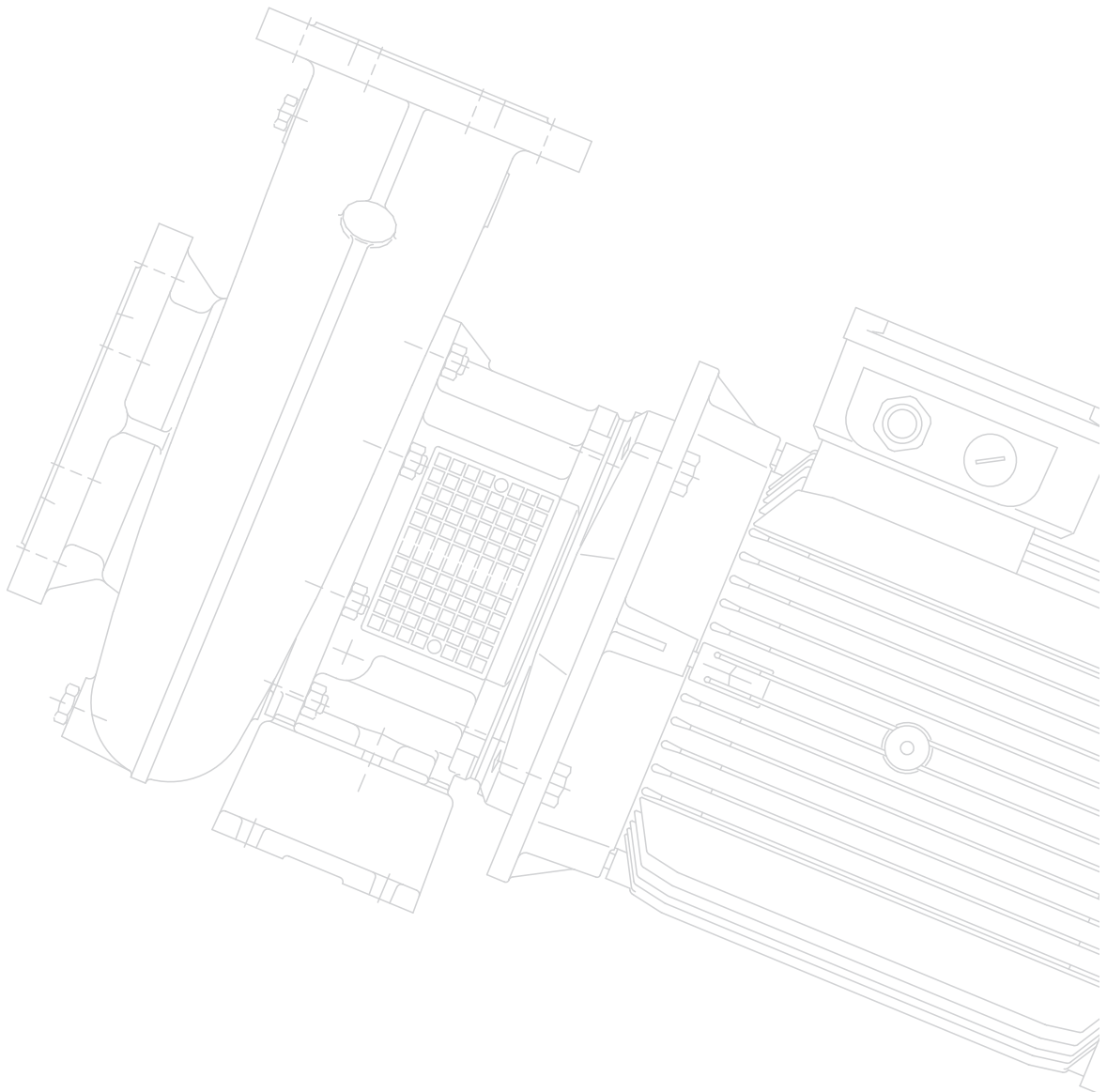
PUMP TYPE	DIMENSIONS (mm)																	B	H max	L	K	WEIGHT kg
	PUMP							STAND														
	DNM	DNA	A	F	H2	W	X	B1	C	C1	H1	M	M1	N	N1	S	S1					
FNS 32-125/07	32	50	80	155	140	265	137	50	12		112	100	70	190	140	14		233	252	485	86	31.1
FNS 32-125/11	32	50	80	155	140	290	137	50	12		112	100	70	190	140	14		233	252	485	86	33.7
FNS 32-160/15	32	50	80	155	160	290	181	50	12		132	100	70	240	190	14		235	292	495	86	31
FNS 32-160/22	32	50	80	155	160	290	181	50	12		132	100	70	240	190	14		235	292	550	86	35
FNS 32-200/30	32	50	80	165	180	355	152	50	12		160	100	70	240	190	14		285	340	571	86	51.3
FNS 32-200/40	32	50	80	165	180	355	180	50	12		160	100	70	240	190	14		285	340	580	86	50.7
FNS 40-125/11	40	65	80	155	140	290	137	50	12		112	100	70	210	160	14		233	252	485	88	33.7
FNS 40-125/15	40	65	80	155	140	290	181	50	12		112	100	70	210	160	14		233	252	495	88	32
FNS 40-125/22	40	65	80	155	140	290	181	50	12		112	100	70	210	160	14		233	252	550	88	37
FNS 40-160/30	40	65	80	165	160	355	152	50	12		132	100	70	240	190	14		250	292	571	88	44.3
FNS 40-160/40	40	65	80	165	160	355	180	50	12		132	100	70	240	190	14		250	292	580	88	33.7
FNS 40-200/55	40	65	100	192	180	424	193	50	12		160	100	70	265	212	14		300	340	648	88	65.5
FNS 40-200/75	40	65	100	192	180	424	193	50	12		160	100	70	265	212	14		300	340	712	88	69
FNS 40-250/110A	40	65	100	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	913	107	109
FNS 40-250/110	40	65	100	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	913	107	109
FNS 40-250/150	40	65	100	222	225	330	181	50	22	20	180	260	210	318	254	13	23	350	424	852	107	129
FNS 50-125/22	50	65	100	157	160	292	181	50	12		132	100	70	240	190	14		255	292	572	92	41
FNS 50-125/30	50	65	100	167	160	357	152	50	12		132	100	70	240	190	14		255	292	593	92	48.3
FNS 50-125/40	50	65	100	167	160	357	180	50	12		132	100	70	240	190	14		255	292	602	92	44.7
FNS 50-160/55	50	65	100	194	180	426	193	50	12		160	100	70	265	212	14		300	340	650	92	68.5
FNS 50-160/75	50	65	100	194	180	426	193	50	12		160	100	70	265	212	14		300	340	714	92	72
FNS 50-200/110A	50	65	100	224	200	332	230	50	22	20	180	260	210	318	254	13	23	350	424	915	92	101
FNS 50-200/110	50	65	100	224	200	332	230	50	22	20	180	260	210	318	254	13	23	350	424	915	92	101
FNS 50-250/150	50	65	100	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	852	107	129
FNS 50-250/185	50	65	100	222	225	330	230	50	22	20	180	304	254	318	254	13	23	350	424	852	107	128
FNS 50-250/220	50	65	100	222	225	330	280	50	22	20	180	304	254	318	254	13	23	350	424	912	107	203
FNS 65-125/40	65	80	100	167	180	357	180	65	14		160	125	95	280	212	14		285	340	602	105	58.7
FNS 65-125/55	65	80	100	194	180	426	193	65	14		160	125	95	280	212	14		300	340	650	105	72.5
FNS 65-125/75	65	80	100	194	180	426	193	65	14		160	125	95	280	212	14		300	340	714	105	76
FNS 65-160/110A	65	80	100	222	200	330	230	50	22	20	180	260	210	318	254	13	23	350	424	913	112	113
FNS 65-160/110	65	80	100	222	200	330	230	50	22	20	180	260	210	318	254	13	23	350	424	913	112	113
FNS 65-160/150	65	80	100	222	200	330	230	50	22	20	180	260	210	318	254	13	23	350	424	852	112	133
FNS 65-200/150	65	80	100	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	852	112	133
FNS 65-200/185	65	80	100	222	225	330	230	50	22	20	180	304	254	318	254	13	23	350	424	852	112	132
FNS 65-200/220	65	80	100	222	225	330	280	50	22	20	180	304	254	318	254	14	23	350	424	912	112	207
FNS 65-250/220	65	80	100	222	250	330	280	50	22	40	200	304	254	318	254	13	23	350	450	912	112	201
FNS 65-250/300	65	80	100	222	250	361	305	60	24		200	345	305	360	318	18	18	400	478	988	112	295
FNS 65-250/370	65	80	100	228	250	361	305	60	24		200	345	305	360	318	18	18	400	478	988	112	322
FNS 80-160/110	80	100	125	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	938	129	114
FNS 80-160/150	80	100	125	222	225	330	230	50	22	20	180	260	210	318	254	13	23	350	424	877	129	134
FNS 80-160/185	80	100	125	222	225	330	230	50	22	20	180	304	254	318	254	13	23	350	424	877	129	139
FNS 80-200/220	80	100	125	222	250	330	280	50	22	20	180	304	254	318	254	13	23	350	430	937	129	207
FNS 80-200/300	80	100	125	228	250	361	305	60	24		200	345	305	360	318	18	18	400	478	1013	129	294
FNS 80-250/370	80	100	125	228	280	361	305	60	24		200	345	305	360	318	18	18	400	480	1013	129	317
FNS 80-250/450	80	100	125	228	280	377	335	76	28		225	360	311	405	356	18	18	450	523	1043	129	309
FNS 80-250/550	80	100	125	258	280	426	298	90	28		250	406	349	465	406	22	22	550	548	1073	129	311

FNS series

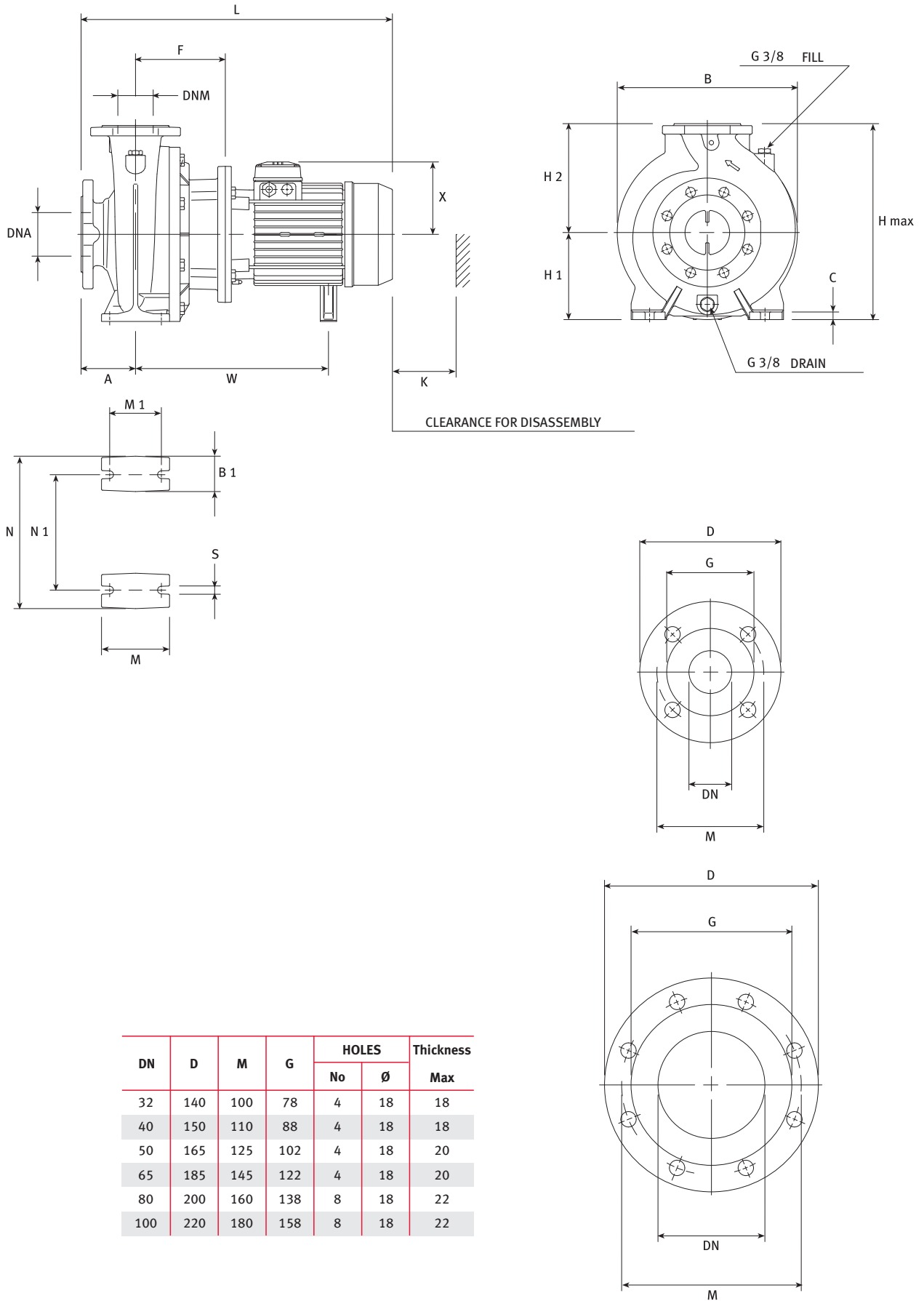


FNS series

PUMP TYPE	DIMENSIONS (MM)																	B	H max	L	K	WEIGHT kg
	PUMP							STAND														
	DNM	DNA	A	F	H2	W	X	B1	B2	C	H1	M	M1	M2	N	N1	S					
FNS 100-160/220	100	125	125	226	280	78	280	45	48	14	215	137	91	23	240	200	14	411	495	941	143	280
FNS 100-160/300	100	125	125	231	280	91	305		65	20	250	300	235	33	300	250	18	435	530	1016	143	443
FNS 100-200/300	100	125	125	231	280	91	305		65	20	250	300	235	33	300	250	18	405	530	1016	153	435
FNS 100-200/370	100	125	125	231	280	91	305		65	20	250	300	235	33	300	250	18	405	530	1016	153	464



FNS4 series



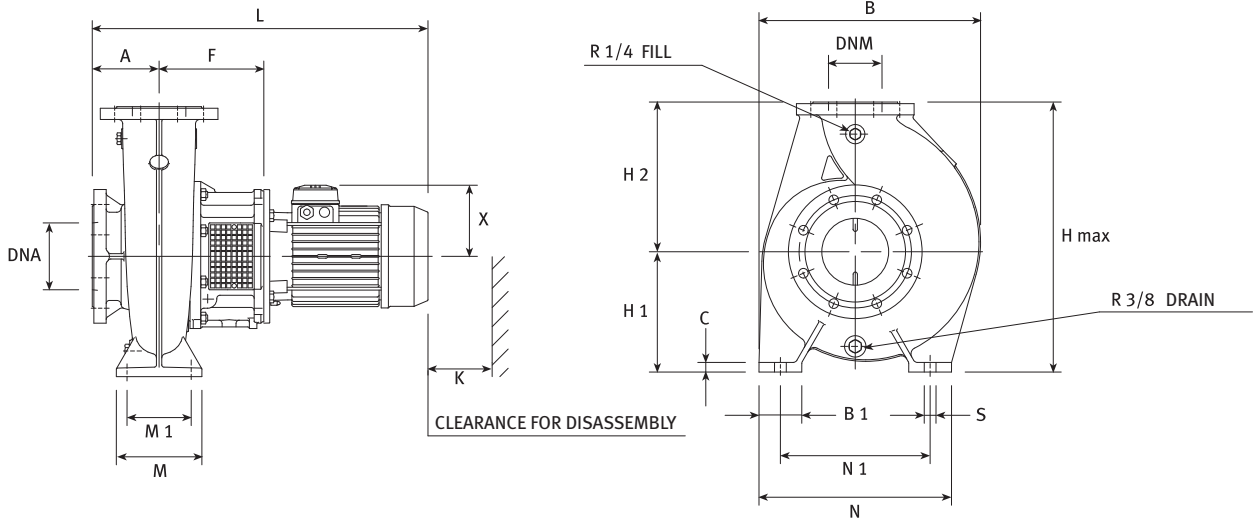
FNS4 series

PUMP TYPE	DIMENSIONS (mm)															B	H max	L	K	WEIGHT kg
	DNM	DNA	PUMP					STAND												
			A	F	H2	W	X	B1	C	H1	M	M1	N	N1	S					
FNS4 40-200/07	40	65	100	155	180	290	137	50	12	160	100	70	265	212	14	285	340	542	88	44
FNS4 40-200/11	40	65	100	155	180	338	137	50	12	160	100	70	265	212	14	285	340	523	88	47
FNS4 40-250/11	40	65	100	155	225	338	137	65	14	180	125	95	320	250	14	335	405	523	107	57
FNS4 40-250/15	40	65	100	155	225	338	181	65	14	180	125	95	320	250	14	335	405	533	107	60
FNS4 40-250/22	40	65	100	165	225	355	181	65	14	180	125	95	320	250	14	335	405	624	107	66
FNS4 50-160/07	50	65	100	157	180	392	137	50	12	160	100	70	265	212	14	285	340	544	92	47
FNS4 50-160/11	50	65	100	157	180	340	137	50	12	160	100	70	265	212	14	285	340	523	92	50
FNS4 50-200/11	50	65	100	157	200	340	137	50	12	160	100	70	265	212	14	305	360	523	92	50
FNS4 50-200/15	50	65	100	157	200	340	181	50	12	160	100	70	265	212	14	305	360	533	92	53
FNS4 50-250/22A	50	65	100	165	225	355	181	65	14	180	125	95	320	250	14	340	405	624	107	66
FNS4 50-250/22	50	65	100	165	225	355	181	65	14	180	125	95	320	250	14	340	405	624	107	66
FNS4 50-250/30	50	65	100	165	225	355	152	65	14	180	125	95	320	250	14	340	405	595	107	69
FNS4 65-125/05	65	80	100	157	180	292	117	65	14	160	125	95	280	212	14	285	340	513	105	51
FNS4 65-125/07	65	80	100	157	180	292	117	65	14	160	125	95	280	212	14	285	340	544	105	53
FNS4 65-125/11	65	80	100	157	180	340	137	65	14	160	125	95	280	212	14	285	340	526	105	54
FNS4 65-160/11	65	80	100	155	200	338	137	65	14	160	125	95	280	212	14	331	360	526	112	61
FNS4 65-160/15	65	80	100	155	200	338	181	65	14	160	125	95	280	212	14	331	360	533	112	64
FNS4 65-160/22	65	80	100	165	200	355	181	65	14	160	125	95	280	212	14	331	360	624	112	70
FNS4 65-200/15	65	80	100	155	225	338	181	65	14	180	125	95	320	250	14	335	405	533	112	64
FNS4 65-200/22	65	80	100	165	225	355	181	65	14	180	125	95	320	250	14	335	405	624	112	70
FNS4 65-200/30	65	80	100	165	225	355	152	65	14	180	125	95	320	250	14	335	405	595	112	73
FNS4 65-250/30	65	80	100	165	250	355	152	80	16	200	160	120	360	280	18	360	450	595	112	79
FNS4 65-250/40	65	80	100	165	250	376	180	80	16	200	160	120	360	280	18	360	450	523	112	101
FNS4 65-250/55	65	80	100	192	250	351	193	80	16	200	160	120	360	280	18	360	450	640	112	104
FNS4 80-160/15	80	100	125	155	225	338	230	65	14	180	125	95	320	250	14	332	405	558	129	71
FNS4 80-160/22	80	100	125	165	225	355	280	65	14	180	125	95	320	250	14	332	405	649	129	76
FNS4 80-200/30	80	100	125	165	250	355	305	65	14	180	125	95	345	280	14	345	430	620	129	82
FNS4 80-200/40	80	100	125	165	250	376	180	65	14	180	125	95	345	280	14	345	430	648	129	104
FNS4 80-250/40	80	100	125	165	280	376	180	80	16	200	160	120	400	315	18	400	480	648	129	110
FNS4 80-250/55	80	100	125	192	280	351	193	80	16	200	160	120	400	315	18	400	480	665	129	113
FNS4 80-250/75	80	100	125	192	280	370	193	80	16	200	160	120	400	315	18	400	480	767	129	116

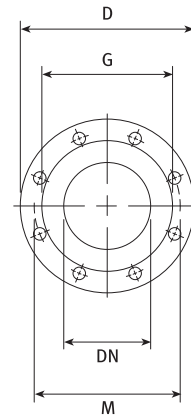
NOTE: for models FNS4 65-315 and FNS4 80-315 consult the following pages.

FNS4 series

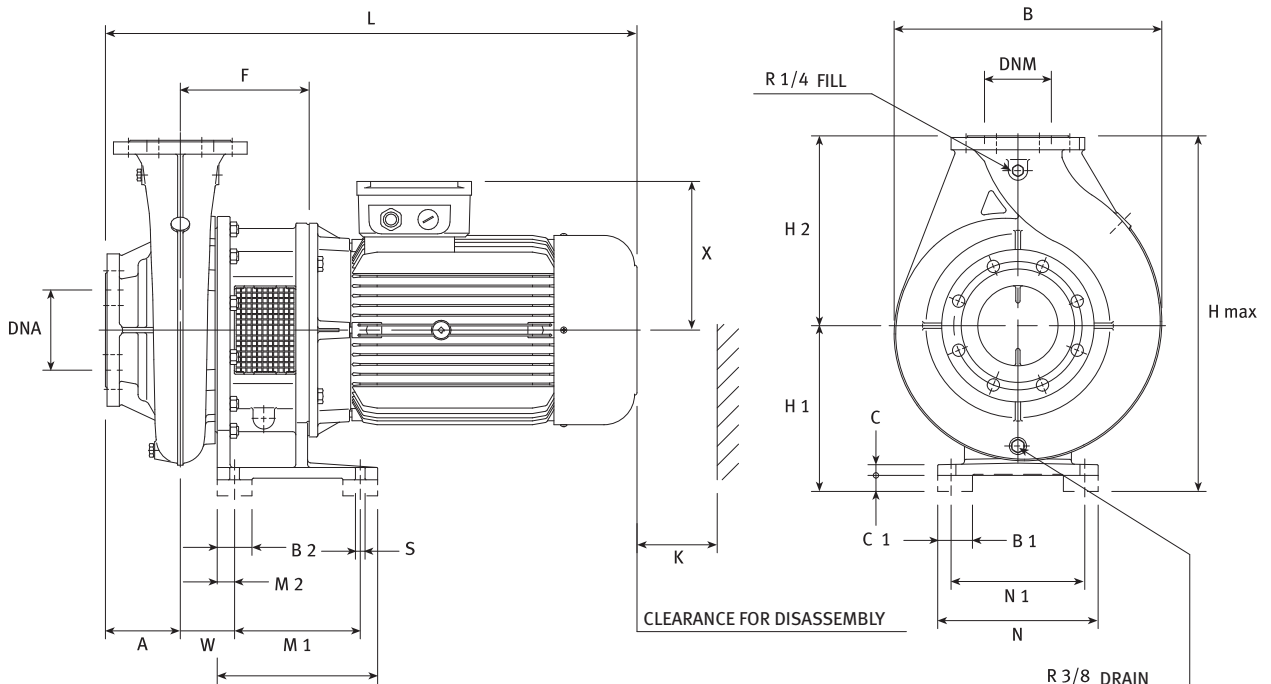
FNS4 with pump stand motors 3 ÷ 4 kW



DN	D	M	G	HOLES		Thickness Max
				No	Ø	
65	185	145	122	4	18	20
80	200	160	138	8	18	22
100	220	180	158	8	18	24
125	250	210	188	8	18	26
150	285	240	212	8	22	26
200	340	295	268	8	22	26



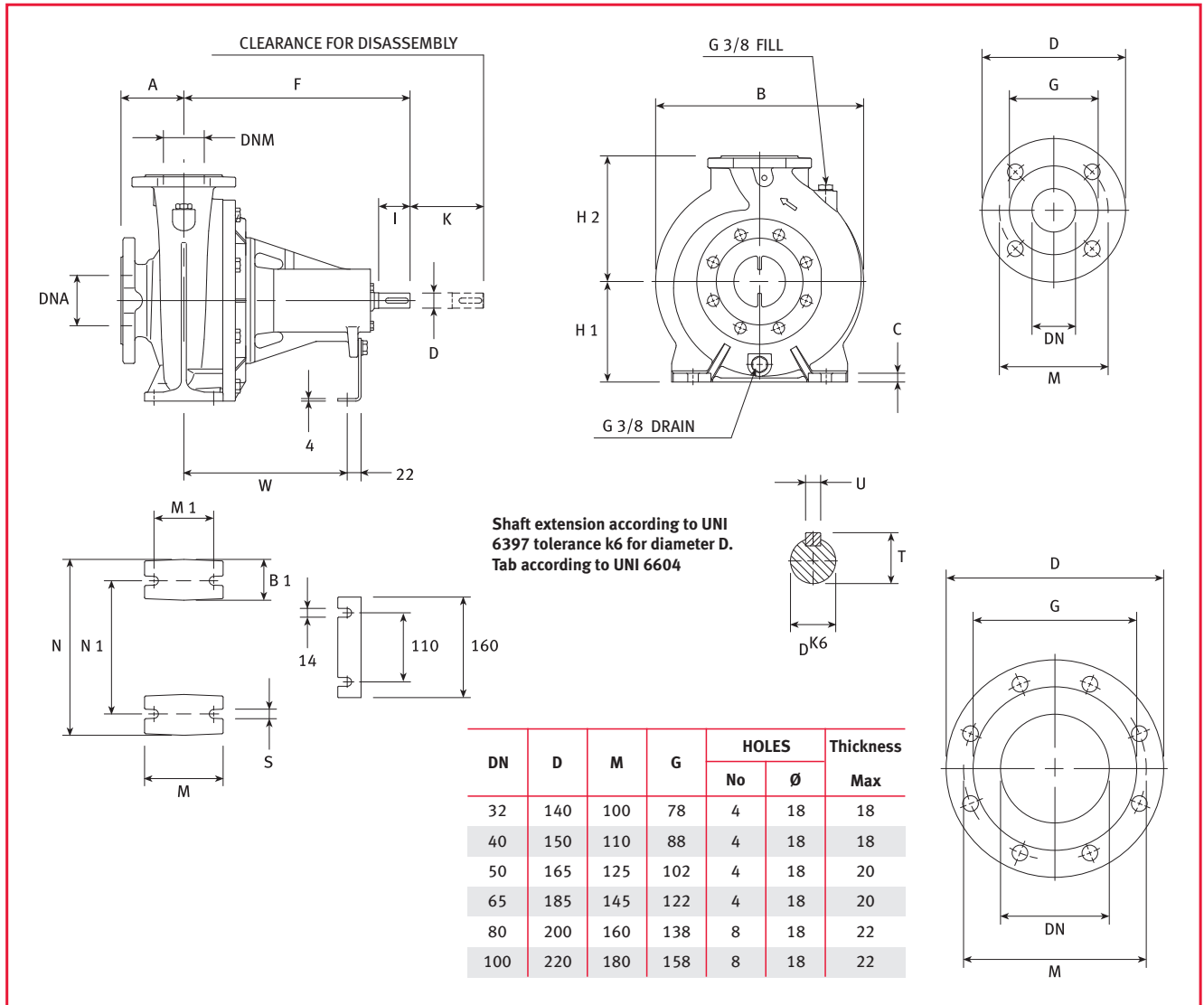
FNS4 with adapter stand motors 5.5 ÷ 30 kW



FNS4 series

PUMP TYPE	DIMENSIONS (mm)																			B	H max	L	K	WEIGHT kg
	PUMP								STAND															
	DNM	DNA	A	F	H2	W	X	B1	B2	C	C1	H1	M	M1	M2	N	N1	S						
FNS4 65-315/75	65	80	125	196	280	83	137	45	48	14		250	137	89	24	240	200	14	434	530	771	160	168	
FNS4 65-315/110	65	80	125	226	280	83	137	45	48	14		250	137	89	24	240	200	14	434	530	992	160	212	
FNS4 80-315/110	80	100	125	226	315	83	137	45	48	14		250	137	89	24	240	200	14	450	565	992	160	218	
FNS4 80-315/150	80	100	125	226	315	83	181	45	48	14		250	137	89	24	240	200	14	450	565	931	160	238	
FNS4 100-160/30	100	125	125	196	280		152	80		16		225	160	120		360	280	19	415	505	651	143	110	
FNS4 100-200/40	100	125	125	196	280		180	80		18		200	160	120		360	280	19	385	480	679	153	106	
FNS4 100-200/55	100	125	125	196	280	78	193	45	48	14		215	137	91	23	240	200	14	373	495	669	153	131	
FNS4 100-250/75	100	125	140	226	280	78	193	45	48	14		220	165	131	15	240	200	14	416	500	786	150	171	
FNS4 100-250/110	100	125	140	226	280	78	230	45	48	14		220	165	131	15	240	200	14	416	500	1007	150	215	
FNS4 100-315/150	100	125	140	226	315	83	230	45	48	14		250	137	89	24	240	200	14	486	565	946	160	247	
FNS4 100-315/185	100	125	140	226	315	83	230	45	48	14		250	137	89	24	240	200	14	486	565	902	160	282	
FNS4 100-315/220	100	125	140	226	315	83	280	45	48	14		250	137	89	24	240	200	14	486	565	1037	160	292	
FNS4 125-200/55	125	150	140	211	315	91	193	45	48	14		235	137	91	23	240	200	14	469	550	699	160	162	
FNS4 125-200/75	125	150	140	211	315	91	193	45	48	14		235	137	91	23	240	200	14	469	550	801	160	175	
FNS4 125-250/110	125	150	140	226	355	78	230	45	48	14		250	137	91	23	240	200	14	493	605	1007	158	217	
FNS4 125-250/150	125	150	140	226	355	78	230	45	48	14		250	137	91	23	240	200	14	493	605	946	158	237	
FNS4 125-250/185	125	150	140	226	355	78	230	45	48	14		250	137	91	23	240	200	14	493	605	902	158	273	
FNS4 125-315/220	125	150	140	241	355	102	280		65	20		280	300	235	33	300	250	18	501	635	1052	171	344	
FNS4 125-315/300	125	150	140	241	355	102	305		65	20		280	300	235	33	300	250	18	501	635	1041	171	429	
FNS4 150-250/150	150	200	160	241	375	107	230		70	20	30	280	305	235	35	305	250	18	543	655	981	181	300	
FNS4 150-250/185	150	200	160	241	375	107	230		70	20	30	280	305	235	35	305	250	18	543	655	937	181	335	
FNS4 150-250/220	150	200	160	241	375	107	280		70	20	30	280	305	235	35	305	250	18	543	655	1072	181	345	
FNS4 150-250/300	150	200	160	241	375	107	305		70	20	30	280	305	235	35	305	250	18	543	655	1061	181	430	
FNS4 150-315/300	150	200	160	241	400	102	305		65	20		280	300	235	35	300	250	18	567	680	1061	186	448	

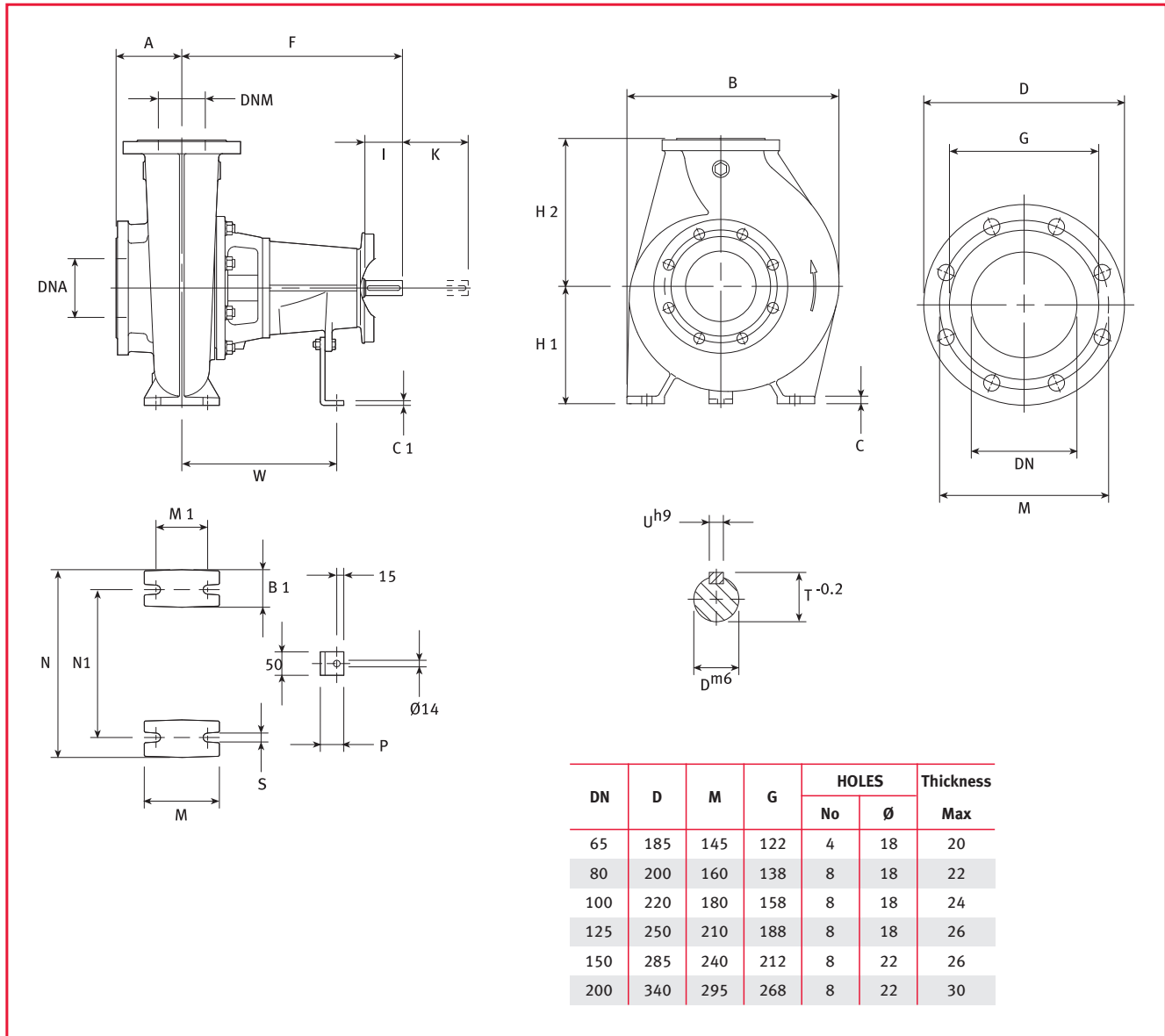
FNF series bare shaft



PUMP	DIMENSIONS (mm)																		B	K	WEIGHT kg
	PUMP						STAND						SHAFT								
	TYPE	DNM	DNA	A	F	H1	H2	B1	C	M	M1	N	N1	S	W	D	I	T			
FNF 32-125	32	50	80	360	112	140	50	12	100	70	190	140	14	260	24	50	27	8	233	86	27
FNF 32-160	32	50	80	360	132	160	50	12	100	70	240	190	14	260	24	50	27	8	235	86	30
FNF 32-200	32	50	80	360	160	180	50	12	100	70	240	190	14	260	24	50	27	8	285	86	34
FNF 40-125	40	65	80	360	112	140	50	12	100	70	210	160	14	260	24	50	27	8	233	88	27
FNF 40-160	40	65	80	360	132	160	50	12	100	70	240	190	14	260	24	50	27	8	250	88	29
FNF 40-200	40	65	100	360	160	180	50	12	100	70	265	212	14	260	24	50	27	8	285	88	37
FNF 40-250	40	65	100	360	180	225	65	14	125	95	320	250	14	260	24	50	27	8	335	100	57
FNF 50-125	50	65	100	360	132	160	50	12	100	70	240	190	14	260	24	50	27	8	255	92	31
FNF 50-160	50	65	100	360	160	180	50	12	100	70	265	212	14	260	24	50	27	8	285	92	39
FNF 50-200	50	65	100	360	160	200	50	12	100	70	265	212	14	260	24	50	27	8	305	92	43
FNF 50-250	50	65	100	360	180	225	65	14	125	95	320	250	14	260	24	50	27	8	340	100	57
FNF 65-125	65	80	100	360	160	180	65	14	125	95	280	212	14	260	24	50	27	8	285	100	33
FNF 65-160	65	80	100	360	160	200	65	14	125	95	280	212	14	260	24	50	27	8	331	100	55
FNF 65-200	65	80	100	360	180	225	65	14	125	95	320	250	14	260	24	50	27	8	335	112	61
FNF 65-250	65	80	100	470	200	250	80	16	160	120	360	280	18	340	32	80	35	10	360	112	78
FNF 80-160	80	100	125	360	180	225	65	14	125	95	320	250	14	260	24	50	27	8	332	129	73
FNF 80-200	80	100	125	470	180	250	65	14	125	95	345	280	14	340	32	80	35	10	345	129	80
FNF 80-250	80	100	125	470	200	280	80	16	160	120	400	315	18	340	32	80	35	10	400	129	89

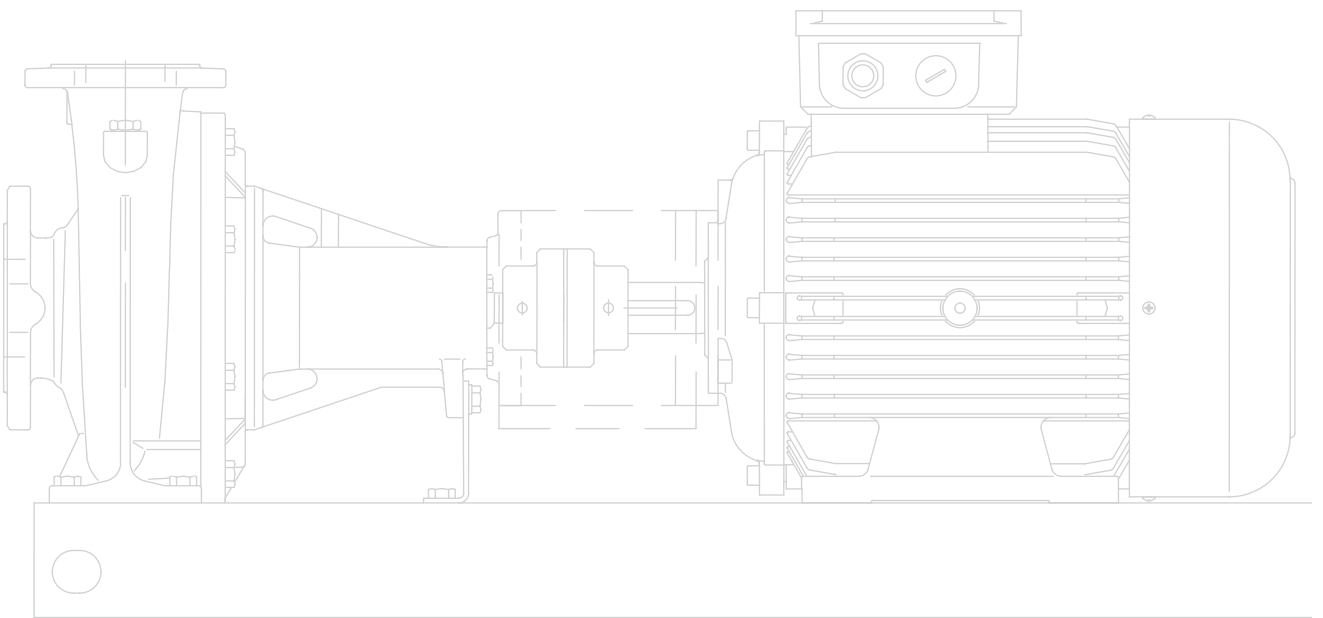
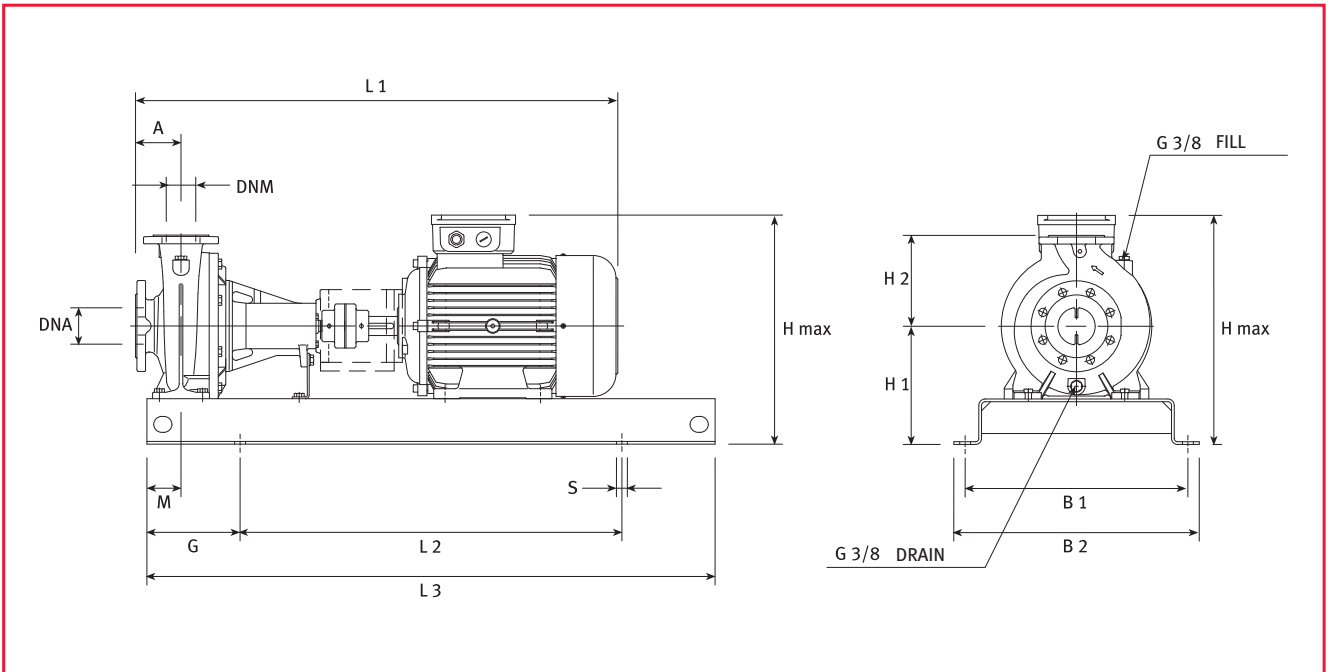
NOTE: for model FNS4 65-315 and consult table on following page.

FNF series bare shaft



PUMP	DIMENSIONS (mm)																			WEIGHT kg			
	PUMP									STAND						SHAFT							
TYPE	DNM	DNA	A	F	H1	H2	K	B	B1	C	C1	M	M1	N	N1	S	P	W	D	I	T	U	
FNF 65-315	65	80	125	470	225	280	140	434	80	14	5	160	120	400	315	18	39	330	32	80	35	10	100
FNF 80-315	80	100	125	470	250	315	140	451	80	16	5	160	120	400	315	18	39	330	32	80	35	10	116
FNF 80-400	80	100	125	530	280	355	140	486	80	20	6	160	120	435	355	18	41	360	42	110	45	12	153
FNF 100-160	100	125	125	470	225	280	140	415	80	16	5	160	120	360	280	18	39	330	32	80	35	10	67
FNF 100-200	100	125	125	470	200	280	140	385	80	18	5	160	120	360	280	18	39	330	32	80	35	10	79
FNF 100-250	100	125	140	470	225	280	140	425	80	18	5	160	120	400	315	18	39	330	32	80	35	10	94
FNF 100-315	100	125	140	470	250	315	140	472	80	18	5	160	120	400	315	18	39	330	32	80	35	10	118
FNF 100-400	100	125	140	530	280	355	140	529	100	20	6	200	150	500	400	22	41	360	42	110	45	12	162
FNF 125-200	125	150	140	530	250	315	140	463	80	18	6	160	120	400	315	18	41	360	42	110	45	12	113
FNF 125-250	125	150	140	470	250	355	140	474	80	18	5	160	120	400	315	18	39	330	32	80	35	10	115
FNF 125-270	125	150	140	530	250	355	140	474	80	18	6	160	120	400	315	18	41	360	42	110	45	12	132
FNF 125-315	125	150	140	530	280	355	140	520	100	20	6	200	150	500	400	22	41	360	42	110	45	12	143
FNF 125-400	125	150	140	530	315	400	140	550	100	20	6	200	150	500	400	22	41	360	42	110	45	12	173
FNF 150-250	150	200	160	535	280	375	140	550	100	20	6	200	150	500	400	22	41	360	42	110	45	12	147
FNF 150-315	150	200	160	530	280	400	140	587	100	20	6	200	150	550	450	22	41	360	42	110	45	12	166
FNF 150-400	150	200	160	530	315	400	140	603	100	20	6	200	150	550	450	22	41	360	42	110	45	12	195

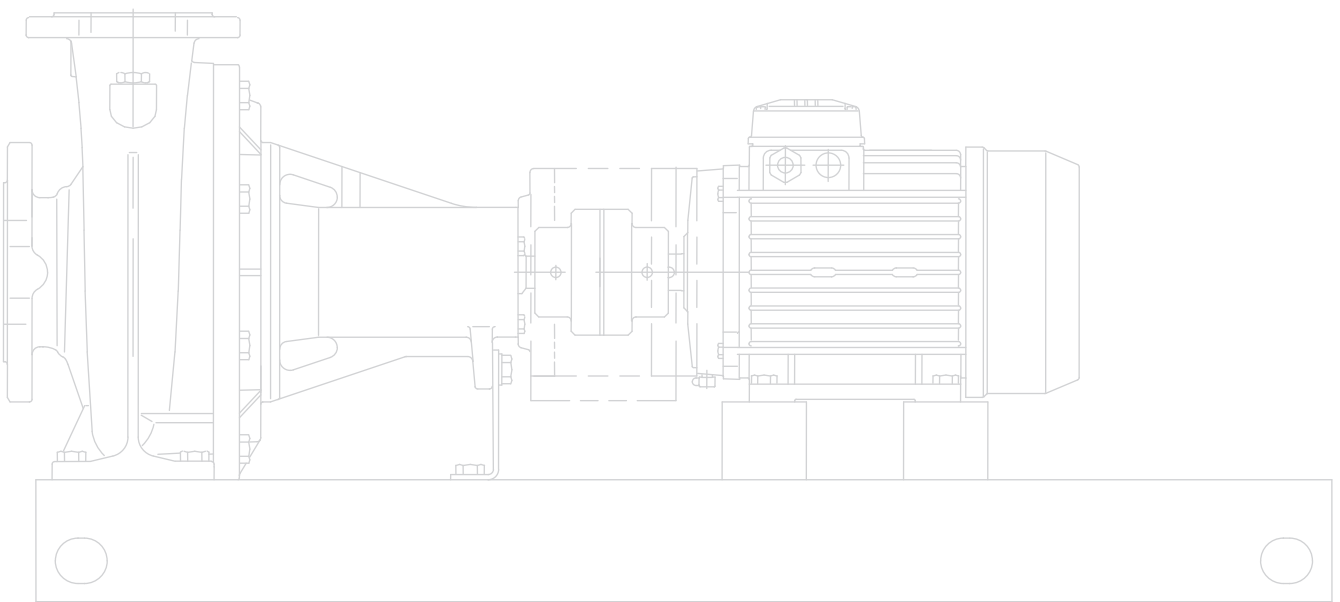
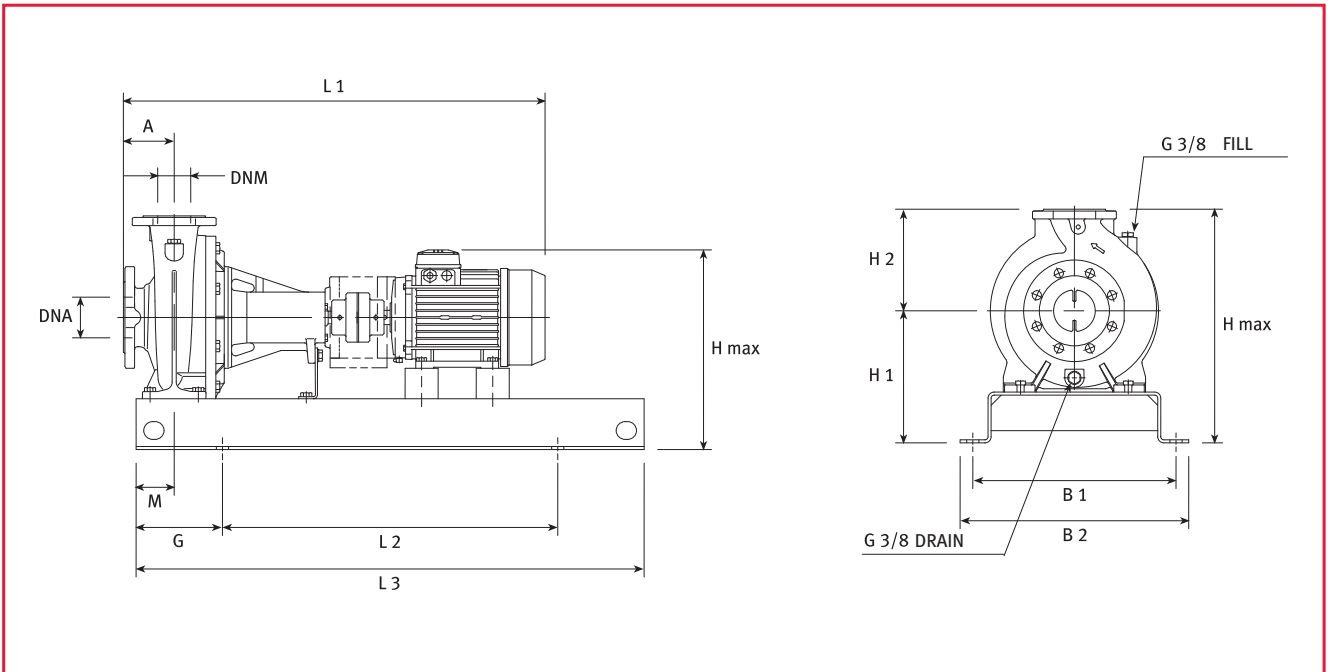
FNF series mounted on base



FNF series mounted on base

PUMP TYPE	DIMENSIONS (mm)													WEIGHT kg	COUPLING TYPE	
	DNM	DNA	A	B1	B2	L1	L2	L3	G	M	H1	H2	H max			S
FNF 32-125/07	32	50	80	400	450	744	530	850	120	60	202	140	342	M10	67	A2
FNF 32-125/11	32	50	80	400	450	744	530	850	120	60	202	140	342	M10	69	A2
FNF 32-160/15	32	50	80	400	450	773	530	850	120	60	222	160	382	M10	71	A3
FNF 32-160/22	32	50	80	400	450	773	530	850	120	60	222	160	382	M10	73	A3
FNF 32-200/30	32	50	80	400	450	809	530	850	120	60	250	180	430	M10	92	B1
FNF 32-200/40	32	50	80	400	450	832	530	850	120	60	250	180	430	M10	96	B1
FNF 40-125/11	40	65	80	400	450	744	530	850	120	60	202	140	342	M10	72	A2
FNF 40-125/15	40	65	80	400	450	773	530	850	120	60	202	140	342	M10	74	A3
FNF 40-125/22	40	65	80	400	450	773	530	850	120	60	202	140	342	M10	77	A3
FNF 40-160/30	40	65	80	400	450	809	530	850	120	60	222	160	382	M10	91	B1
FNF 40-160/40	40	65	80	400	450	832	530	850	120	60	222	160	382	M10	97	B1
FNF 40-200/55	40	65	100	400	450	909	530	850	120	60	250	180	444	M10	112	C1
FNF 40-200/75	40	65	100	400	450	909	530	850	120	60	250	180	444	M10	120	C1
FNF 40-250/110A	40	65	100	500	550	1061	850	1090	120	75	270	225	514	M14	178	C2
FNF 40-250/110	40	65	100	500	550	1061	850	1090	120	75	270	225	514	M14	178	C2
FNF 40-250/150	40	65	100	500	550	1061	850	1090	120	75	270	225	514	M14	188	C2
FNF 50-125/22	50	65	100	400	450	793	530	850	120	60	222	160	382	M10	85	A3
FNF 50-125/30	50	65	100	400	450	829	530	850	120	60	222	160	382	M10	92	B1
FNF 50-125/40	50	65	100	400	450	852	530	850	120	60	222	160	382	M10	97	B1
FNF 50-160/55	50	65	100	400	450	909	530	850	120	60	250	180	444	M10	111	C1
FNF 50-160/75	50	65	100	400	450	909	530	850	120	60	250	180	444	M10	115	C1
FNF 50-200/110A	50	65	100	500	550	1061	850	1090	120	60	250	200	494	M14	173	C2
FNF 50-200/110	50	65	100	500	550	1061	850	1090	120	60	250	200	494	M14	173	C2
FNF 50-250/150	50	65	100	500	550	1061	850	1090	120	75	270	225	514	M14	179	C2
FNF 50-250/185	50	65	100	500	550	1105	850	1090	120	75	270	225	514	M14	199	C2
FNF 50-250/220	50	65	100	500	550	1111	850	1090	120	75	270	225	528	M14	219	D1
FNF 65-125/40	65	80	100	400	450	852	530	850	120	75	250	180	430	M10	135	B1
FNF 65-125/55	65	80	100	400	450	909	530	850	120	75	250	180	444	M10	141	C1
FNF 65-125/75	65	80	100	400	450	909	530	850	120	75	250	180	444	M10	147	C1
FNF 65-160/110A	65	80	100	500	550	1061	850	1090	120	75	250	200	494	M14	164	C2
FNF 65-160/110	65	80	100	500	550	1061	850	1090	120	75	250	200	494	M14	164	C2
FNF 65-160/150	65	80	100	500	550	1061	850	1090	120	75	250	200	494	M14	180	C2
FNF 65-200/150	65	80	100	500	550	1061	850	1090	120	75	270	225	514	M14	187	C2
FNF 65-200/185	65	80	100	500	550	1105	850	1090	120	75	270	225	514	M14	197	C2
FNF 65-200/220	65	80	100	500	550	1111	850	1090	120	75	270	225	528	M14	215	D1
FNF 65-250/220	65	80	100	650	700	1221	1110	1350	120	90	305	250	558	M18	223	D2
FNF 65-250/300	65	80	100	650	700	1296	1110	1350	120	90	305	250	578	M18	300	E1
FNF 65-250/370	65	80	100	650	700	1296	1110	1350	120	90	305	250	578	M18	315	E1
FNF 80-160/110	80	100	125	500	550	1086	850	1090	120	75	270	225	514	M14	202	C2
FNF 80-160/150	80	100	125	500	550	1086	850	1090	120	75	270	225	514	M14	212	C2
FNF 80-160/185	80	100	125	500	550	1130	850	1090	120	75	270	225	514	M14	233	C2
FNF 80-200/220	80	100	125	650	700	1246	1110	1350	120	75	275	250	528	M18	245	D2
FNF 80-200/300	80	100	125	650	700	1321	1110	1350	120	75	305	250	578	M18	285	E1
FNF 80-250/370	80	100	125	650	700	1321	1110	1350	120	90	305	280	578	M18	305	E1
FNF 80-250/450	80	100	125	650	700	1398	1110	1350	120	90	360	280	653	M18	365	E1
FNF 80-250/550	80	100	125	710	765	1428	1290	1500	130	90	385	280	678	M24	400	F1

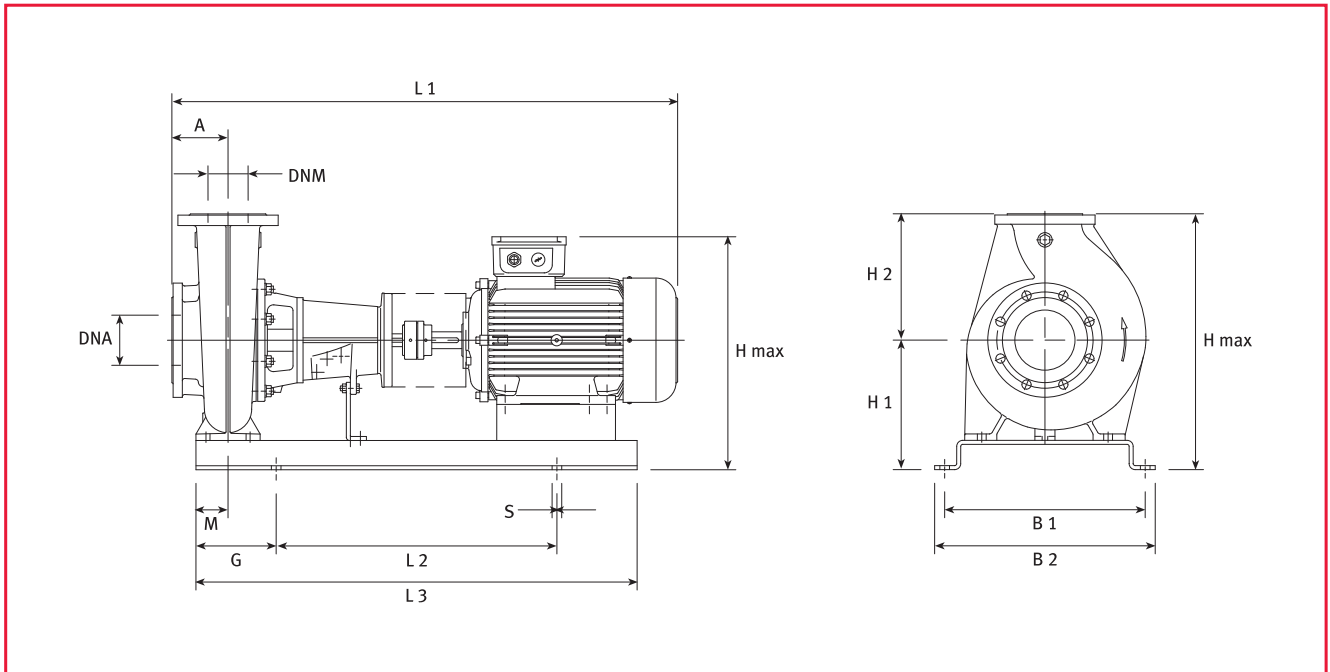
FNF4 series mounted on base



FNF4 series mounted on base

PUMP TYPE	DIMENSIONS (mm)													WEIGHT kg	COUPLING TYPE	
	DNM	DNA	PUMP			STAND							S			
			A	B1	B2	L1	L2	L3	G	M	H1	H2	H max			
FNF4 32-125/02A	32	50	80	400	450	702	565	805	120	60	202	140	342	M10	74	A1
FNF4 32-125/02	32	50	80	400	450	702	565	805	120	60	202	140	342	M10	74	A1
FNF4 32-160/02	32	50	80	400	450	702	565	805	120	60	222	160	382	M10	76	A1
FNF4 32-160/03	32	50	80	400	450	702	565	805	120	60	222	160	382	M10	78	A1
FNF4 32-200/03	32	50	80	400	450	702	565	805	120	60	250	180	430	M10	80	A1
FNF4 32-200/05	32	50	80	400	450	744	565	805	120	60	250	180	430	M10	82	A2
FNF4 40-125/02A	40	65	80	400	450	702	565	805	120	60	202	140	342	M10	61	A1
FNF4 40-125/02	40	65	80	400	450	702	565	805	120	60	202	140	342	M10	61	A1
FNF4 40-125/03	40	65	80	400	450	702	565	805	120	60	202	140	342	M10	64	A1
FNF4 40-160/03	40	65	80	400	450	702	565	805	120	60	222	160	382	M10	65	A1
FNF4 40-160/05	40	65	80	400	450	744	565	805	120	60	222	160	382	M10	66	A2
FNF4 40-200/07	40	65	100	400	450	764	565	805	120	60	250	180	430	M10	73	A2
FNF4 40-200/11	40	65	100	400	450	793	565	805	120	60	250	180	430	M10	76	A3
FNF4 40-250/11	40	65	100	400	450	793	565	805	120	75	270	225	495	M10	103	A3
FNF4 40-250/15	40	65	100	400	450	793	565	805	120	75	270	225	495	M10	106	A3
FNF4 40-250/22	40	65	100	400	450	829	565	805	120	75	270	225	495	M10	119	B1
FNF4 50-125/03A	50	65	100	400	450	722	565	805	120	60	222	160	382	M10	64	A1
FNF4 50-125/03	50	65	100	400	450	722	565	805	120	60	222	160	382	M10	64	A1
FNF4 50-125/05	50	65	100	400	450	764	565	805	120	60	222	160	382	M10	66	A2
FNF4 50-160/07	50	65	100	400	450	764	565	805	120	60	250	180	430	M10	73	A2
FNF4 50-160/11	50	65	100	400	450	793	565	805	120	60	250	180	430	M10	76	A3
FNF4 50-200/11	50	65	100	400	450	793	565	805	120	60	250	200	450	M10	87	A3
FNF4 50-200/15	50	65	100	400	450	793	565	805	120	60	250	200	450	M10	90	A3
FNF4 50-250/22A	50	65	100	400	450	829	565	805	120	75	270	225	495	M10	121	B1
FNF4 50-250/22	50	65	100	400	450	829	565	805	120	75	270	225	495	M10	121	B1
FNF4 50-250/30	50	65	100	400	450	829	565	805	120	75	270	225	495	M10	125	B1
FNF4 65-125/05	65	80	100	400	450	764	565	805	120	75	250	180	430	M10	90	A2
FNF4 65-125/07	65	80	100	400	450	764	565	805	120	75	250	180	430	M10	91	A2
FNF4 65-125/11	65	80	100	400	450	793	565	805	120	75	250	180	430	M10	95	A3
FNF4 65-160/11	65	80	100	400	450	793	565	805	120	75	250	200	450	M10	100	A3
FNF4 65-160/15	65	80	100	400	450	793	565	805	120	75	250	200	450	M10	110	A3
FNF4 65-160/22	65	80	100	400	450	829	565	805	120	75	250	200	450	M10	119	B1
FNF4 65-200/15	65	80	100	400	450	793	565	805	120	75	270	225	495	M10	112	A3
FNF4 65-200/22	65	80	100	400	450	829	565	805	120	75	270	225	495	M10	123	B1
FNF4 65-200/30	65	80	100	400	450	829	565	805	120	75	270	225	495	M10	126	B1
FNF4 65-250/30	65	80	100	500	550	939	970	1090	120	90	300	250	540	M14	150	C3
FNF4 65-250/40	65	80	100	500	550	962	970	1090	120	90	300	250	540	M14	162	C3
FNF4 65-250/55	65	80	100	500	550	1019	970	1090	120	90	300	250	540	M14	180	C4
FNF4 80-160/15	80	100	125	400	450	818	565	805	120	75	270	225	495	M10	130	A3
FNF4 80-160/22	80	100	125	400	450	854	565	805	120	75	270	225	495	M10	136	B1
FNF4 80-200/30	80	100	125	500	550	964	970	1090	120	75	270	250	520	M14	155	C3
FNF4 80-200/40	80	100	125	500	550	987	970	1090	120	75	270	250	520	M14	159	C3
FNF4 80-250/40	80	100	125	500	550	987	970	1090	120	90	300	280	570	M14	165	C3
FNF4 80-250/55	80	100	125	500	550	1044	970	1090	120	90	300	280	570	M14	180	C4
FNF4 80-250/75	80	100	125	500	550	1082	970	1090	120	90	300	280	570	M14	193	C4

FNF and FNF4 series mounted on base



Series FNF mounted on base

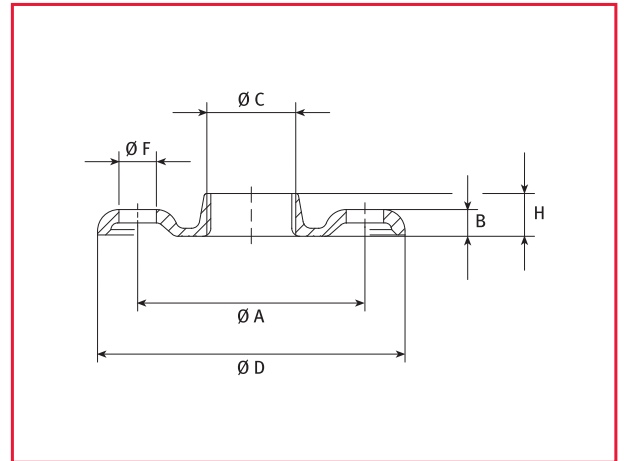
PUMP	DIMENSIONS (mm)													WEIGHT	COUPLING	
	TYPE	DNM	DNA	A	B1	B2	L1	L2	L3	G	M	H1	H2			H max
FNF 100-160/185	100	125	125	500	550	1240	700	1100	200	90	298	280	578	M20	243	C5
FNF 100-160/220	100	125	125	500	550	1246	830	1270	220	90	298	280	578	M20	228	D2
FNF 100-160/300	100	125	125	500	550	1321	830	1270	220	90	298	280	578	M20	260	E1
FNF 100-200/185	100	125	125	500	550	1240	700	1100	200	90	273	280	553	M20	250	C5
FNF 100-200/300	100	125	125	500	550	1321	830	1270	220	90	273	280	553	M20	265	E1
FNF 100-200/370	100	125	125	500	550	1321	830	1270	220	90	273	280	553	M20	283	E1
FNF 100-200/450	100	125	125	610	670	1398	940	1420	240	90	318	280	616	M24	394	E1
FNF 100-250/300	100	125	140	500	550	1336	830	1270	200	90	298	280	578	M20	287	E1
FNF 100-250/450	100	125	140	500	550	1413	830	1270	220	90	298	280	596	M20	360	E1
FNF 100-250/550	100	125	140	710	765	1443	1290	1500	130	90	641	280	641	M24	427	F1
FNF 100-250/750	100	125	140	680	740	1573	1050	1570	260	90	373	280	733	M24	561	G1
FNF 100-250/900	100	125	140	680	740	1573	1050	1570	260	90	373	280	733	M24	604	G1
FNF 125-200/300	125	150	140	500	550	1396	830	1270	220	90	323	315	638	M20	312	E2
FNF 125-200/450	125	150	140	710	765	1473	1290	1500	130	90	638	638	638	M24	431	E2
FNF 125-200/550	125	150	140	710	765	1503	1290	1500	130	90	658	658	658	M24	437	F2
FNF 125-270/750	125	150	140	700	750	1633	600+600	1600	200	90	423	355	783	M20	650	G2
FNF 125-270/900	125	150	140	700	750	1633	600+600	1600	200	90	423	355	783	M20	693	G2
FNF 125-270/1100	125	150	140	820	870	1776	600+600	1600	200	90	478	355	928	M20	1053	G2
FNF 125-270/1320	125	150	140	820	870	1776	600+600	1600	200	90	478	355	928	M20	1058	G2

FNF4 series mounted on base

PUMP TYPE	DIMENSIONS (mm)													S	WEIGHT kg	COUPLING TYPE
	DNM	DNA	A	B1	B2	L1	L2	L3	G	M	H1	H2	H max			
FNF4 65-315/40	65	80	125	500	550	988	970	1090	120	90	288	280	568	M14	188	C3
FNF4 65-315/55	65	80	125	500	550	1044	970	1090	120	90	288	280	568	M14	198	C4
FNF4 65-315/75	65	80	125	500	550	1082	970	1090	120	90	288	280	568	M14	211	C4
FNF4 65-315/110A	65	80	125	500	550	1246	970	1090	120	90	288	280	568	M14	235	C5
FNF4 65-315/110	65	80	125	500	550	1246	970	1090	120	90	288	280	568	M14	235	C5
FNF4 80-315/55	80	100	125	500	550	1044	970	1090	120	90	293	315	608	M14	200	C4
FNF4 80-315/75	80	100	125	500	550	1082	970	1090	120	90	313	315	628	M14	229	C4
FNF4 80-315/110	80	100	125	500	550	1246	970	1090	120	90	313	315	628	M14	256	C5
FNF4 80-315/150	80	100	125	650	700	1246	1110	1350	120	90	313	315	628	M18	270	C5
FNF4 80-400/185	80	100	125	650	700	1306	1110	1350	120	90	343	355	698	M18	327	D3
FNF4 80-400/220	80	100	125	650	700	1381	1110	1350	120	90	343	355	698	M18	349	D3
FNF4 80-400/300	80	100	125	650	700	1381	1110	1350	120	90	343	355	698	M18	374	E2
FNF4 100-160/22	100	125	125	500	550	965	970	1090	120	90	288	280	568	M14	144	C3
FNF4 100-160/30	100	125	125	500	550	965	970	1090	120	90	288	280	568	M14	147	C3
FNF4 100-160/40	100	125	125	500	550	988	970	1090	120	90	288	280	568	M14	155	C3
FNF4 100-200/22	100	125	125	500	550	965	970	1090	120	90	243	280	523	M14	137	C3
FNF4 100-200/40	100	125	125	500	550	988	970	1090	120	90	263	280	543	M14	164	C3
FNF4 100-200/55	100	125	125	500	550	1044	970	1090	120	90	263	280	543	M14	175	C4
FNF4 100-250/40	100	125	140	500	550	1003	970	1090	120	90	288	280	568	M14	182	C3
FNF4 100-250/55	100	125	140	500	550	1059	970	1090	120	90	288	280	568	M14	192	C4
FNF4 100-250/75	100	125	140	500	550	1097	970	1090	120	90	288	280	568	M14	205	C4
FNF4 100-250/110	100	125	140	500	550	1261	970	1090	120	90	288	280	568	M14	229	C5
FNF4 100-315/150	100	125	140	650	700	1261	1110	1350	120	90	313	315	628	M18	272	C5
FNF4 100-315/185	100	125	140	500	550	1261	700	1100	200	90	313	315	628	M20	285	D2
FNF4 100-315/220	100	125	140	650	700	1336	1110	1350	120	90	313	315	628	M18	308	D2
FNF4 100-400/300	100	125	140	650	700	1396	1110	1350	120	110	363	355	718	M18	426	E2
FNF4 100-400/450	100	125	140	500	550	1503	970	1090	120	110	363	355	718	M14	511	F2
FNF4 125-200/40	125	150	140	500	550	1063	970	1090	120	90	313	315	628	M14	203	C6
FNF4 125-200/55	125	150	140	500	550	1119	970	1090	120	90	313	315	628	M14	216	C7
FNF4 125-200/75	125	150	140	500	550	1157	970	1090	120	90	313	315	628	M14	229	C7
FNF4 125-250/75	125	150	140	500	550	1097	970	1090	120	90	313	355	668	M14	228	C4
FNF4 125-250/110	125	150	140	650	700	1261	1110	1350	120	90	313	355	668	M18	255	C5
FNF4 125-250/150	125	150	140	650	700	1261	1110	1350	120	90	313	355	668	M18	269	C5
FNF4 125-250/185	125	150	140	650	700	1261	1110	1350	120	90	313	355	668	M18	278	D2
FNF4 125-270/75	125	150	140	650	700	1157	1110	1350	120	90	313	355	668	M18	248	C7
FNF4 125-270/110	125	150	140	650	700	1321	1110	1350	120	90	313	355	668	M18	277	C8
FNF4 125-270/150	125	150	140	650	700	1321	1110	1350	120	90	313	355	668	M18	291	C8
FNF4 125-315/185	125	150	140	650	700	1321	1110	1350	120	110	363	355	718	M18	360	D3
FNF4 125-315/220	125	150	140	650	700	1396	1110	1350	120	110	363	355	718	M18	382	D3
FNF4 125-315/300	125	150	140	650	700	1396	1110	1350	120	110	363	355	718	M18	407	E2
FNF4 125-315/370	125	150	140	650	700	1503	1110	1350	120	110	363	355	718	M18	469	F2
FNF4 125-400/220	125	150	140	650	700	1396	1110	1350	120	110	378	400	778	M18	376	D3
FNF4 125-400/300	125	150	140	650	700	1396	1110	1350	120	110	378	400	778	M18	403	E2
FNF4 125-400/450	125	150	140	650	700	1503	1110	1350	120	110	398	400	798	M18	535	F2
FNF4 125-400/550	125	150	140	650	700	1504	1110	1350	120	110	398	400	798	M18	562	G2
FNF4 150-250/150	150	200	160	650	700	1346	1110	1350	120	110	363	375	738	M18	355	C8
FNF4 150-250/185	150	200	160	650	700	1346	1110	1350	120	110	363	375	738	M18	364	D3
FNF4 150-250/220	150	200	160	650	700	121	1110	1350	120	110	363	375	738	M18	386	D3
FNF4 150-250/300	150	200	160	610	670	1421	940	1420	240	110	363	375	738	M24	411	E2
FNF4 150-315/300	150	200	160	650	700	1416	1110	1350	120	110	363	400	763	M18	430	E2
FNF4 150-315/370	150	200	160	650	700	1523	1110	1350	120	110	363	400	763	M18	492	F2
FNF4 150-315/450	150	200	160	650	700	1523	1110	1350	120	110	363	400	763	M18	515	F2
FNF4 150-315/550	150	200	160	650	700	1524	1110	1350	120	110	363	400	763	M18	531	G2
FNF4 150-400/300	150	200	160	650	700	1416	1110	1350	120	110	398	450	848	M18	467	E2
FNF4 150-400/370	150	200	160	650	700	1523	1110	1350	120	110	398	450	848	M18	534	F2
FNF4 150-400/450	150	200	160	650	700	1523	1110	1350	120	110	398	450	848	M18	557	F2
FNF4 150-400/550	150	200	160	710	710	1524	1290	1500	130	110	398	450	848	M24	600	G2
FNF4 150-400/750	150	200	160	680	740	1653	1050	1570	260	110	398	450	858	M24	699	H1
FNF4 150-400/900	150	200	160	680	740	1653	1050	1570	260	110	398	450	858	M24	770	H1

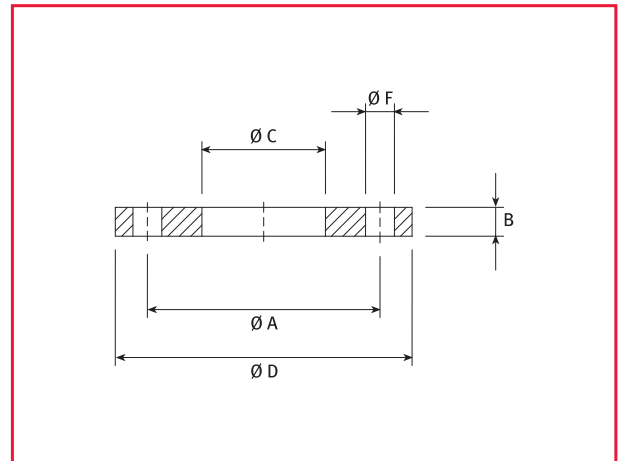
Dimensions of round threaded counterflanges according to EN 1092-1

DN	Ø C	DIMENSIONS (mm)				HOLES		PN
		Ø A	B	Ø D	H	Ø F	N°	
32	Rp 1 ^{1/4}	100	13	140	16	18	4	16
40	Rp 1 ^{1/2}	110	14	150	19	18	4	16
50	Rp 2	125	16	165	24	18	4	16
65	Rp 2 ^{1/2}	145	16	185	23	18	4	16
80	Rp 3	160	17	200	27	18	8	16
100	Rp 4	180	18	220	31	18	8	16



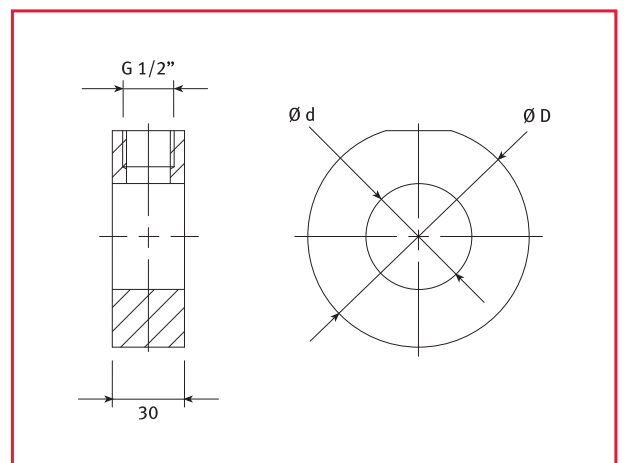
Dimensions of round weld-on counterflanges according to EN 1092-1

DN	Ø C	DIMENSIONS (mm)			HOLES		PN
		Ø A	B	Ø D	Ø F	N°	
65	77	145	18	185	18	4	16
80	90	160	20	200	18	8	16
100	115.5	180	22	220	18	8	16
125	141.5	210	22	250	18	8	16
150	170.5	240	24	285	22	8	16
200	221.5	295	24	340	22	8	10



AISI 304 flange with gauge connector

DENOMINATION	DIMENSIONS (mm)	
	d	D
25	29	70
32	36	82
40	44	92
50	54	107
65	69	127
80	85	142
100	105	162



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