AlphaDynamic PUMPS

We Make The Difference

NDROO SERIES
NSX/NSN

Horizontal single-stage centrifugal pump **50Hz**

hydroo®





INDEX

Description and features	06
Definition of model	07
Sectional drawings and materials	09
Product range	11
NSX, NSN 32	12
NSX, NSN 40	16
NSX, NSN 50	20
NSX, NSN 65	24
NSX, NSN 80	28
Dimensions NSX, NSN	31
Installation & Safety Guidelines	38

NSX
NSN

Horizontal single-stage stainless-steel centrifugal pump



Description

Horizontal single-stage centrifugal pumps manufactured in stainless steel.

Standard totally enclosed, fan-cooled motors with insulation class F and IP55 protection.

Single-phase motors up to 2.2 kW.

The standard versions are suitable for intelligent pumping of clean water within a temperature range from –20 °C to 100 °C.

Performance range

Flow rate: Q up to 240 m³/h
Head: H up to 120 m
Temperature: T up to 100 °C
Speed: n 2900 rpm or 3500 rpm
Power: P up to 37 kW

Standard materials

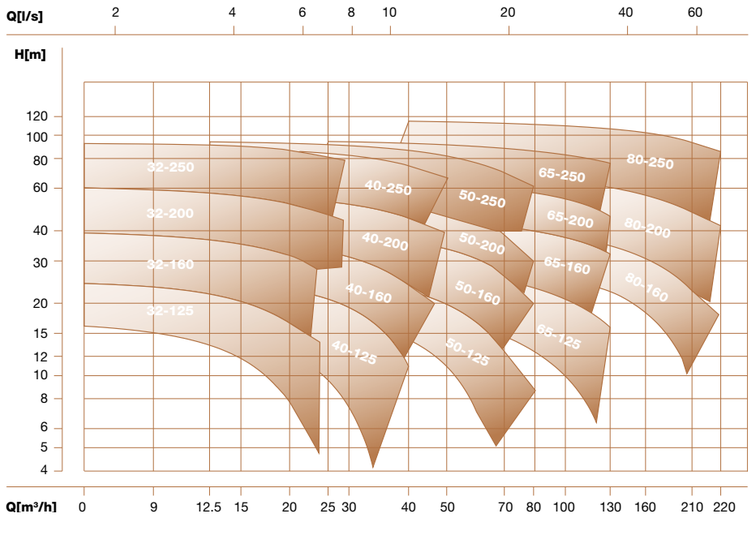
All parts in contact with the liquid are made of AISI 304 stainless steel. Standard mechanical seals are manufactured in carbon/silicon carbide.

Other specifications are available upon request.

Applications:

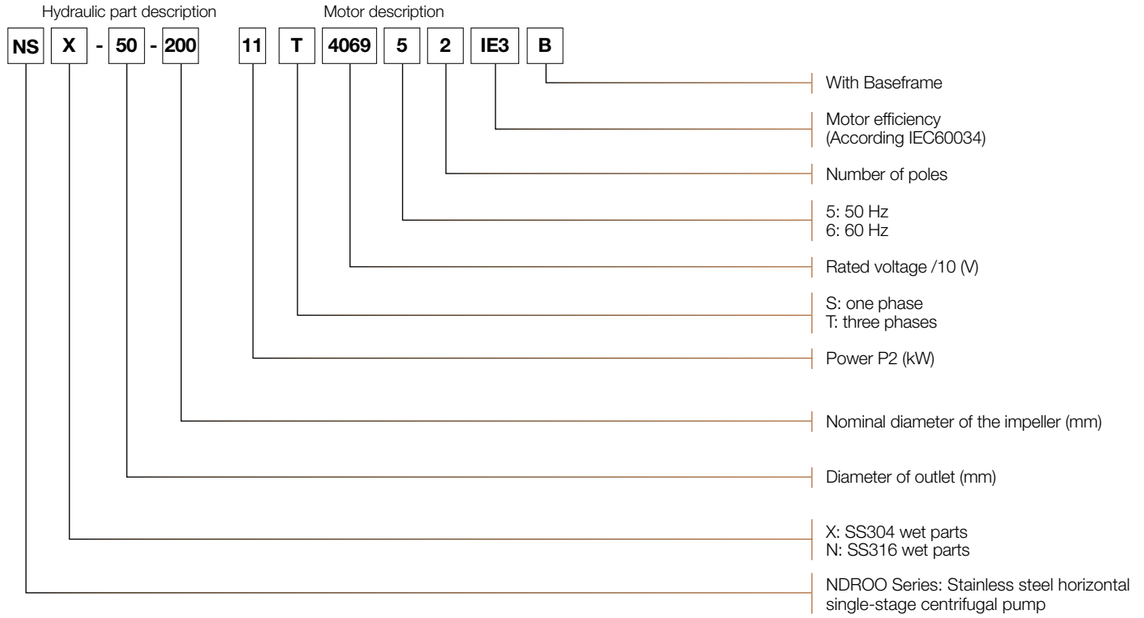
- **Cooling water**
- **Water supply and distribution**
- **Drainage**
- **General industrial services**

Performance curves



H_00244A

Definition of model



H_00032A

Introduction

The NDROO horizontal single-stage stainless-steel pumps are designed to provide a high-end solution for the most demanding pumping installations. This pump range is manufactured using pressing technologies and laser welding to achieve a corrosion-resistant pump casing.

These pumps are engineered to offer a lightweight solution in compliance with EN733, featuring high efficiency, energy savings, low noise levels, corrosion resistance, and durable, reliable operation.

Motor

– TEFC motor, 2-pole.

– Protection class: IP55.

– Insulation class: F.

– Standard voltage, 50 Hz:
1 × 220 V
3 × 380 V

Applications

The NDROO range is suitable for a wide variety of applications. NDROO is designed for handling water and any mildly chemically aggressive liquids in irrigation, HVAC, and industrial applications. The wide fluid temperature range allows NDROO to be a reliable solution for the most demanding pumping conditions. The main applications include:

– Water supply, filtration, pressure boosting, and water transfer.

– Industrial pressurization in cleaning systems and spraying systems.

– Transfer of industrial liquids in boiler feed, condensate water, cooling and heating systems, air conditioning, machine tools, and pumping of light acids and alkalis.

– Water treatment systems, distilled water, separators, and swimming pools.

– Irrigation systems, fertilizer pumping, sanitary and medical installations.

Curves

The following conditions apply to the performance curves shown below:

1. Curve tolerance complies with ISO 9906 Annex A.

2. All curves are based on measurements taken with a 3 × 380 V, 50 Hz motor operating at a constant speed of 2900 rpm or 2950 rpm.

3. The test medium is clear water at 20 °C, free of solid impurities.

4. The pumps must not operate if the flow rate is outside the minimum or maximum values specified in the curves.

5. Motor power must be adjusted if the viscosity or density of the medium differs from that of water.

Minimum inlet pressure NPSH

Cavitation may occur when the pressure at the pump inlet is lower than the vapor pressure of the liquid under given suction conditions. To prevent this phenomenon, a minimum pressure must be ensured at the pump inlet. Use the following calculation to guarantee optimal suction operating conditions:

H=Pb x 10.2-NPSH-Hf-Hv-Hs

Pb - Atmospheric pressure (bar). In a closed system, Pb refers to the system pressure (bar).

NPSH - Net Positive Suction Head (m). It can be read at the maximum flow point shown on the NPSH curve.

Hf - Suction pipe friction loss (m). Corresponds to the maximum possible value according to pipe size and flow.

Hv - Vapor pressure head (m). Depends on the liquid temperature and its vapor pressure.

Hs - Safety margin (m). Minimum recommended value: 0.5 m.

If the calculated value H is positive, the pump can operate below the maximum suction lift. If the calculated value H is negative, a minimum inlet pressure (positive suction head) is required.

The above calculation is not normally required. The value H should be calculated under the following conditions:

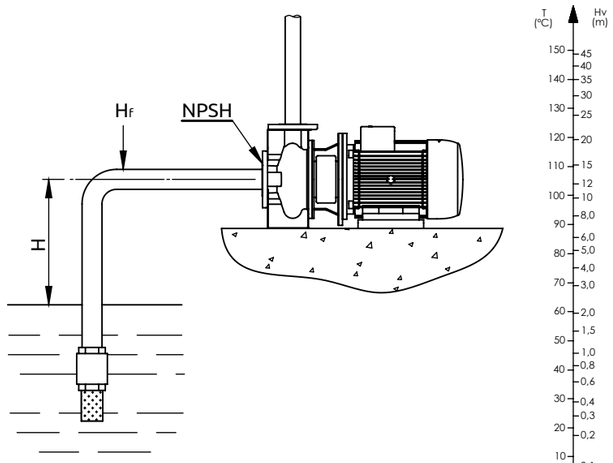
1. The liquid temperature is comparatively high.

2. The liquid flow rate exceeds the rated value.

3. The suction head is relatively large or the inlet pipe is long.

4. The system pressure is too low.

5. Poor inlet conditions.



H_00010

Installation requirements

The NDROO pump uses a direct-coupling shaft connection. The pump consists of the pump casing, the shaft, and a standard motor.

- The pump must be installed in a ventilated location and protected from frost.

- The installation must ensure that the pump is not subjected to stress caused by pipe tension.

- If the pump is installed outdoors, a suitable external cover must be used to prevent electrical components from coming into contact with water or condensation.

- Sufficient space must be left around the pump set to facilitate inspection and maintenance.

- The electrical wiring device must ensure protection against phase loss, unstable voltage, current leakage, and overload, preventing damage to the pump.

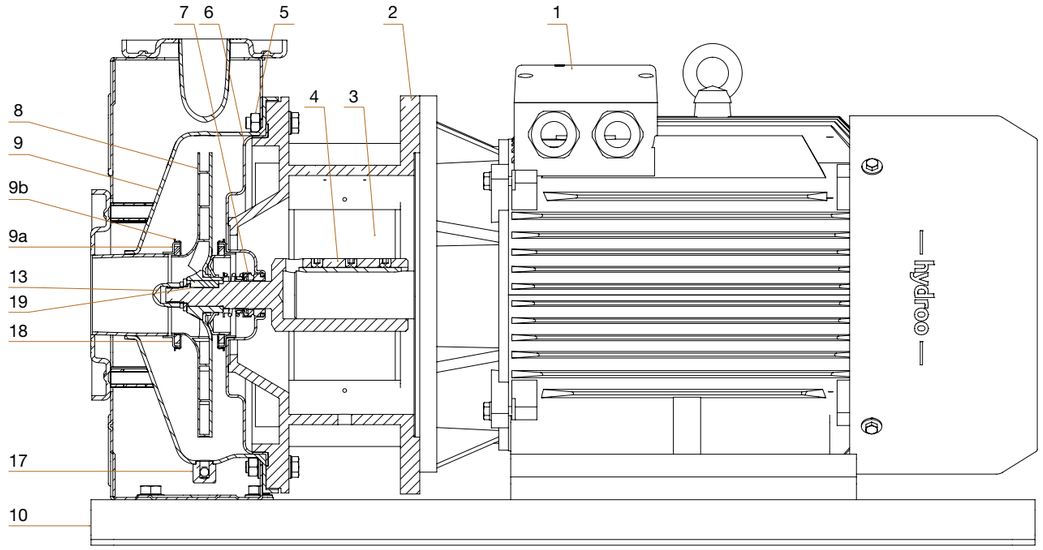
- The pump must be installed horizontally on the base. The horizontal direction corresponds to the pump inlet, and the vertical direction corresponds to the outlet.

- The flange connection dimensions comply with the relevant provisions of PN 16 according to GB/T 17241.6 or ISO 7005-2 / DIN 2501.

Operating condition

- Clean, non-viscous, non-flammable and non-explosive liquid, free of solid particles and fibers.
- Liquid temperature: -20 ºC to +100 ºC.
- Ambient temperature: up to +40 ºC.
- Altitude: up to 1000 m.
- Maximum system pressure: 10 bar.

Installation diagram



H_00003

Material

NSX

Nº	Description	Material	DIN/EN	AISI/ASTM
1	Motor	Cast Iron / Aluminum	-	-
2	Pump head	Grey cast Iron	EN 1561 EN-GJL-200	ASTM 25B
3	Coupling guard	Stainless steel	EN 10088 1.4301	AISI 304
4	Shaft	Carbon Steel / Stainless steel	EN 10083-2 C45 (1.0503) / EN 10088 1.4301	ASTM 1045 / AISI 304
5	O ring	EPDM	-	-
6	Lining	Stainless steel	EN 10088 1.4301	AISI 304
7	Back neck ring	PPS+40%GF	-	-
8	Back neck ring cover	Stainless steel	EN 10088 1.4301	AISI 304
9	Mechanical seal	Silicon carbide/ graphite	-	-
10	Impeller	Stainless steel	EN 10088 1.4301	-
11	Casing	Stainless steel	EN 10088 1.4301	-
12	Front neck ring	PPS+40%GF	-	-
13	Front neck ring cover	Stainless steel	EN 10088 1.4301	-
14	Impeller locknut and washer	Stainless steel	EN 10088 1.4401	AISI 316
15	Drainage set screw	Stainless steel	EN 10088 1.4401	AISI 316
16	Shaft key	Stainless steel	EN 10088 1.4301	AISI 304

H_00013A

NSN

Nº	Description	Material	DIN/EN	AISI/ASTM
1	Motor	Cast Iron / Aluminum	-	-
2	Pump head	Grey cast Iron	EN 1561 EN-GJL-200	ASTM 25B
3	Coupling guard	Stainless steel	EN 10088 1.4301	AISI 304
4	Shaft	Carbon Steel / Stainless steel	EN 10083-2 C45 (1.0503) / EN 10088 1.4401	ASTM 1045 / AISI 316
5	O ring	EPDM	-	-
6	Lining	Stainless steel	EN 10088 1.4401	AISI 316
7	Back neck ring	PPS+40%GF	-	-
8	Back neck ring cover	Stainless steel	EN 10088 1.4401	AISI 316
9	Mechanical seal	Silicon carbide/ graphite	-	-
10	Impeller	Stainless steel	EN 10088 1.4401	AISI 316
11	Casing	Stainless steel	EN 10088 1.4401	AISI 316
12	Front neck ring	PPS+40%GF	-	-
13	Front neck ring cover	Stainless steel	EN 10088 1.4401	AISI 316
14	Impeller locknut and washer	Stainless steel	EN 10088 1.4401	AISI 316
15	Drainage set screw	Stainless steel	EN 10088 1.4401	AISI 316
16	Shaft key	Stainless steel	EN 10088 1.4401	AISI 316

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Material

Mechanical seal materials available list

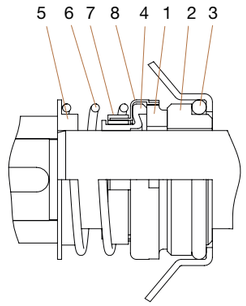
Position 1-2		Position 3-4		Position 5-8	
B	Carbon, resin-impregnated	P	Nitrile rubber (NBR)	F	CrNi steel (304)
Q1	Silicon Carbide (SiC)	E	Ethylene propylene rubber (EPDM)	G	CrNiMo steel (316)
U	Tungsten carbides	V	Fluoro rubber (FPM/FKM)	M	High-nickel alloy
		K	FFKM (black)		
		T	PTFE (Teflon)		
		S	Silicon rubber (MVQ)		

H_00007_A

Mechanical seal available temperature limits

Standard mechanical seal						
Type	Position					Temperature (° C)
	1	2	3	4	5-8	
	Rotating part	Stationary part	Elastomer	Spring	Other parts	
BQ1EFF	B	Q1	E	F	F	-15 +110
BQ1EGG	B	Q1	E	G	G	-15 +110

H_00008_A



H_00014_A

Motor specifications 50 Hz

Motor		
Type	Type Electric - TEFC	
	Single Phase	Three Phase
Efficiency level (Reg. 640/2009)	IE2/IE3	IE3
No. of Poles	2	2
Rotation speed [min-1]	≈ 2900	≈ 2900
Duty type	S1	S1
Insulation class	F	F
Protections degree (CEI EN 60034-5)	IP 55	IP 55
Bearing	Sealed ball bearings	Sealed ball bearings
Power rating (kW) / (HP)	0.75 ÷ 2.2 / 1 ÷ 3.0	0.75 ÷ 75 / 1 ÷ 100
Frequency (Hz)	50	50
Voltage	230 ±5%	230/400 ±5% (up to 4.0 kW)400/690 ±5% (5.5 kW and above)
Over load protection	Built-in thermal overcurren switch	Built-in thermal overcurren switch
Casing material	Aluminum	Aluminum (up to 18,5 kW) Cast Iron (22 kW and above)
Dimensions of cable entry	M20x1.5	M20x1.5, M25x1.5, M32x1.5, M40x1.5, M50x1.5, M63x1.5
Flange mount (IEC motor)	IMB35	IMB35

H_00015_A

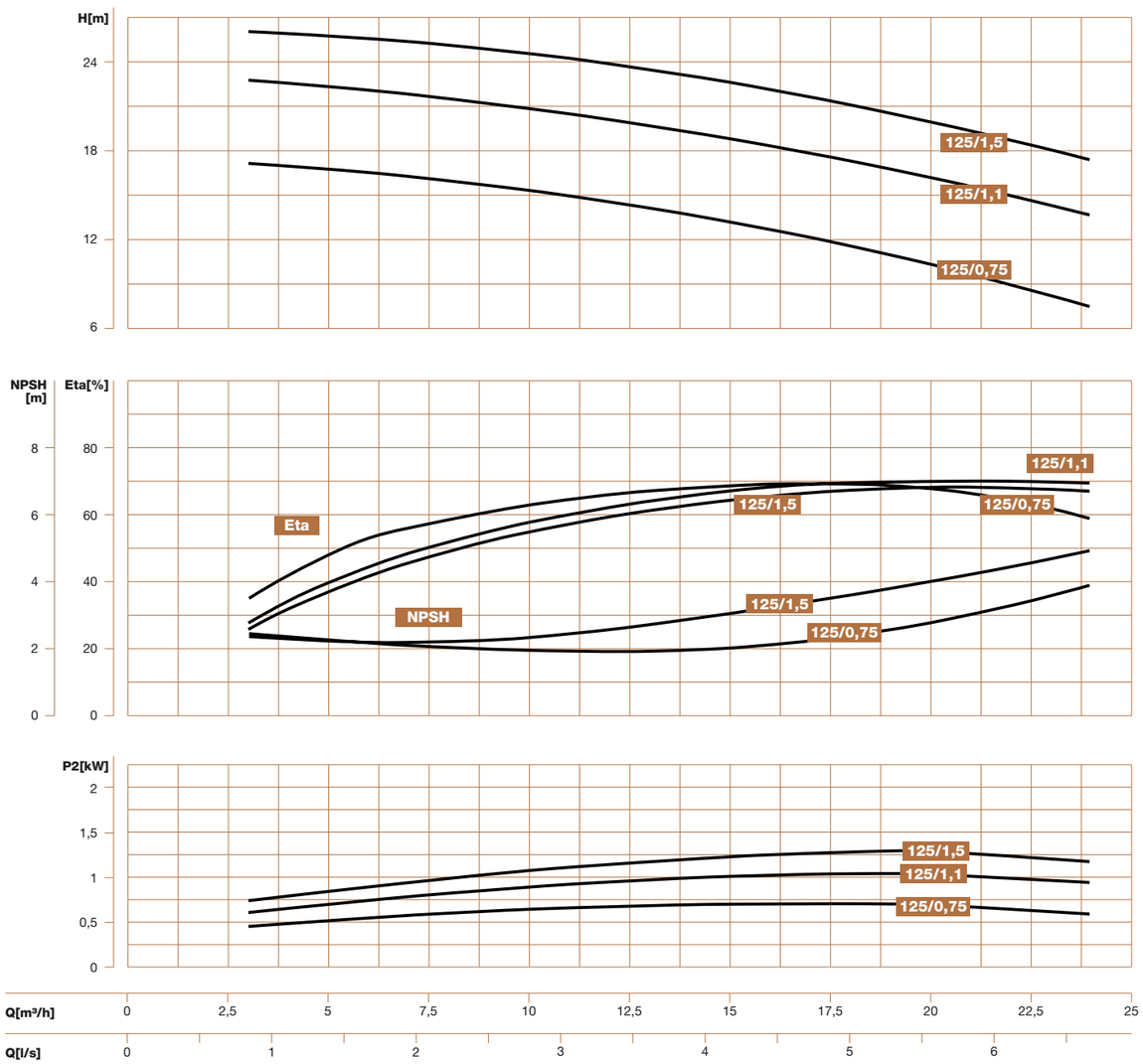
Product range

N°	Model	Q (m³/h)	H (m)	η [%]	NPSH[m]	Motor Power [kW]	Flow rate [m³/h]	n (r/min)
1	NSX, NSN 32-125/0.75	12.5	13.5	69	2	0.75	3-20	2900
2	NSX, NSN 32-125/1.1	12.5	18.5	68	2.5	1.1	3-20	
3	NSX, NSN 32-125/1.5	12.5	22	65	3	1.5	3-20	
4	NSX, NSN 32-160/2.2	12.5	30	62.5	2.3	2.2	3-20	
5	NSX, NSN 32-160/3	12.5	37	60	2.3	3	3-20	
6	NSX, NSN 32-200/4	12.5	49	55	2.2	4	3-20	
7	NSX, NSN 32-200/5.5	12.5	58	50	2.2	5.5	3-20	
8	NSX, NSN 32-250/7.5	12.5	77	46	2.5	7.5	3-20	2950
9	NSX, NSN 32-250/9.2	12.5	85	44.5	2.5	9.2	3-20	
10	NSX, NSN 32-250/11	12.5	92	43	2.5	11	3-20	
11	NSX, NSN 40-125/1.1	25	9	63	2.8	1.1	6 -32.5	2900
12	NSX, NSN 40-125/1.5	25	14	68.5	2.8	1.5	6 -35	
13	NSX, NSN 40-125/2.2	25	21	76	2.8	2.2	6 -40	
14	NSX, NSN 40-160/3	25	27	72	2.6	3	6 -40	
15	NSX, NSN 40-160/4	25	33	71	2.6	4	6 -40	
16	NSX, NSN 40-200/5.5	25	41	66	2.3	5.5	6 -40	
17	NSX, NSN 40-200/7.5	25	53.5	66	2.3	7.5	6 -40	2950
18	NSX, NSN 40-250/9.2	25	61	58.5	2.5	9.2	6 -40	
19	NSX, NSN 40-250/11	25	70	57	2.7	11	6 -40	
20	NSX, NSN 40-250/15	25	85	57	2.7	15	6 -40	
21	NSX, NSN 50-125/2.2	50	11	70	3.6	2.2	12.5 -65	2900
22	NSX, NSN 50-125/3	50	14.5	72	3.4	3	12.5 -70	
23	NSX, NSN 50-125/4	50	20	76.5	3.3	4	12.5 -70	
24	NSX, NSN 50-160/5.5	50	27	77	3.5	5.5	12.5 -70	
25	NSX, NSN 50-160/7.5	50	34	75	3.1	7.5	12.5 -70	2950
26	NSX, NSN 50-200/9.2	50	43	73	3.8	9.2	12.5 -70	
27	NSX, NSN 50-200/11	50	50	73	3.8	11	12.5 -70	
28	NSX, NSN 50-250/15	50	61.5	67	3.3	15	12.5 -70	
29	NSX, NSN 50-250/18.5	50	72.5	64	3.3	18.5	12.5-70	2950
30	NSX, NSN 50-250/22	50	83	65	3.3	22	12.5-70	
31	NSX, NSN 65-125/4	100	10	73	6.1	4	25-125	2900
32	NSX, NSN 65-125/5.5	100	15	79	5.1	5.5	25-130	
33	NSX, NSN 65-125/7.5	100	21	85.5	4.1	7.5	25-130	2950
34	NSX, NSN 65-160/11	100	29.5	84	4.3	11	25-130	
35	NSX, NSN 65-160/15	100	38	84.5	3.9	15	25-130	
36	NSX, NSN 65-200/18.5	100	48	81	4.5	18.5	25-130	
37	NSX, NSN 65-200/22	100	55	81	4.5	22	25-130	
38	NSX, NSN 65-250/30	100	73	77.5	4.6	30	25-130	
39	NSX, NSN 65-250/37	100	84	78	4.8	37	25-130	
40	NSX, NSN 80-160/11	160	18.5	76.5	4.5	11	40-200	
41	NSX, NSN 80-160/15	160	26	80	4.2	15	40-210	
42	NSX, NSN 80-160/18.5	160	31	80.5	3.9	18.5	40-210	
43	NSX, NSN 80-200/22	160	36	82	3.9	22	40-210	
44	NSX, NSN 80-200/30	160	48.5	84	3.9	30	40-210	
45	NSX, NSN 80-200/37	160	57	84	3.9	37	40-210	
46	NSX, NSN 80-250/45	160	70	81	3.9	45	40-210	
47	NSX, NSN 80-250/55	160	86	83	3.9	55	40-210	
48	NSX, NSN 80-250/75	160	104	80	3.9	75	40-210	

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NSX, NSN 32

NSX, NSN 32-125



H_00247A

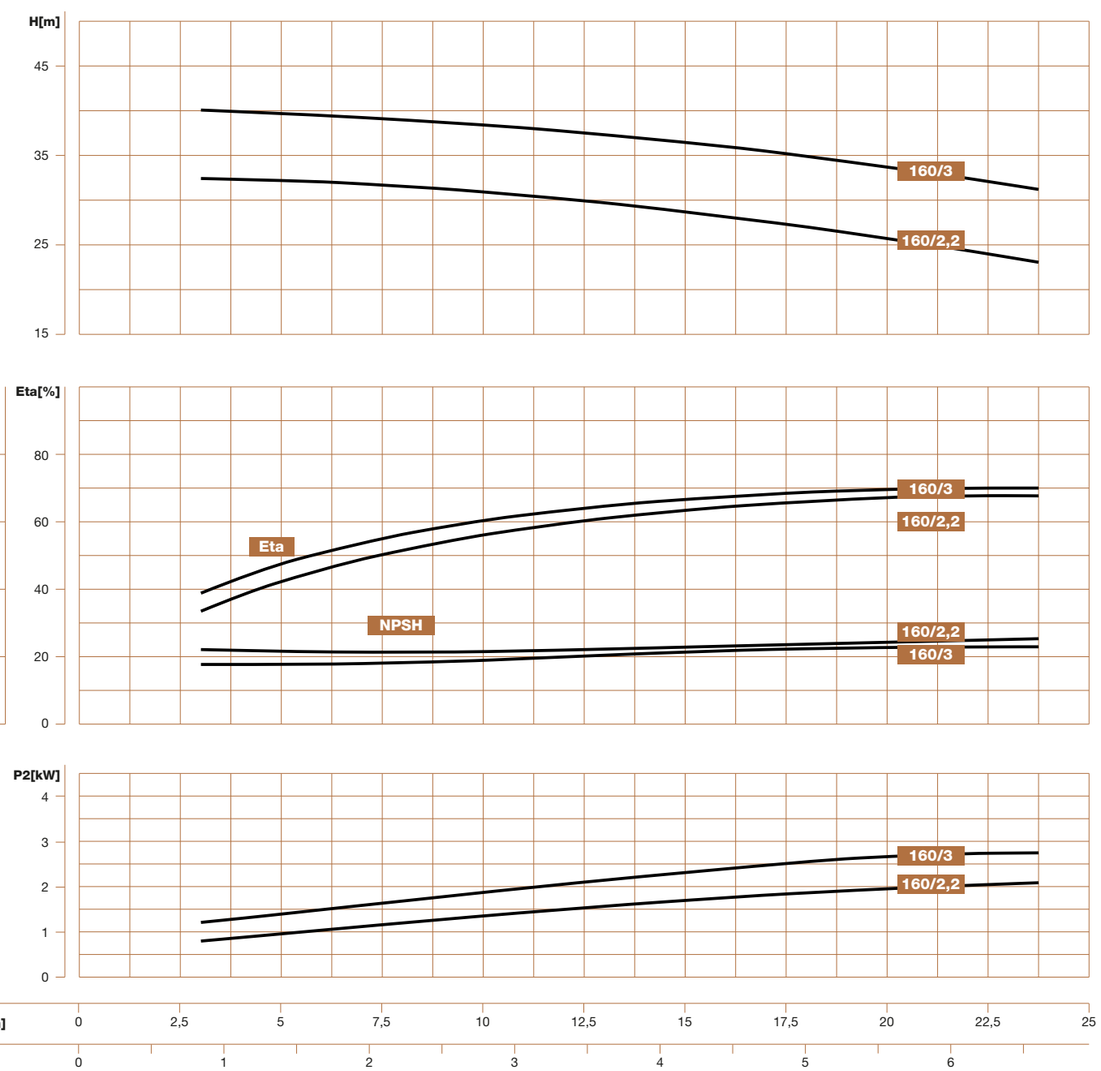
Performance table

Model	P2 (kW)	Q (m³/h)	3	5	7.5	10	12.5	15	17.5	20
NSX, NSN 32-125/0.75	0.75	H (m)	16.7	16.4	15.7	14.8	13.5	11.9	9.9	7.6
NSX, NSN 32-125/1.1	1.1		21.9	21.5	20.8	19.8	18.5	17.1	15.3	13.2
NSX, NSN 32-125/1.5	1.5		24.7	24.5	24.0	23.2	22.0	20.5	18.7	16.6

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NSX, NSN 32

NSX, NSN 32-160



H_00248A

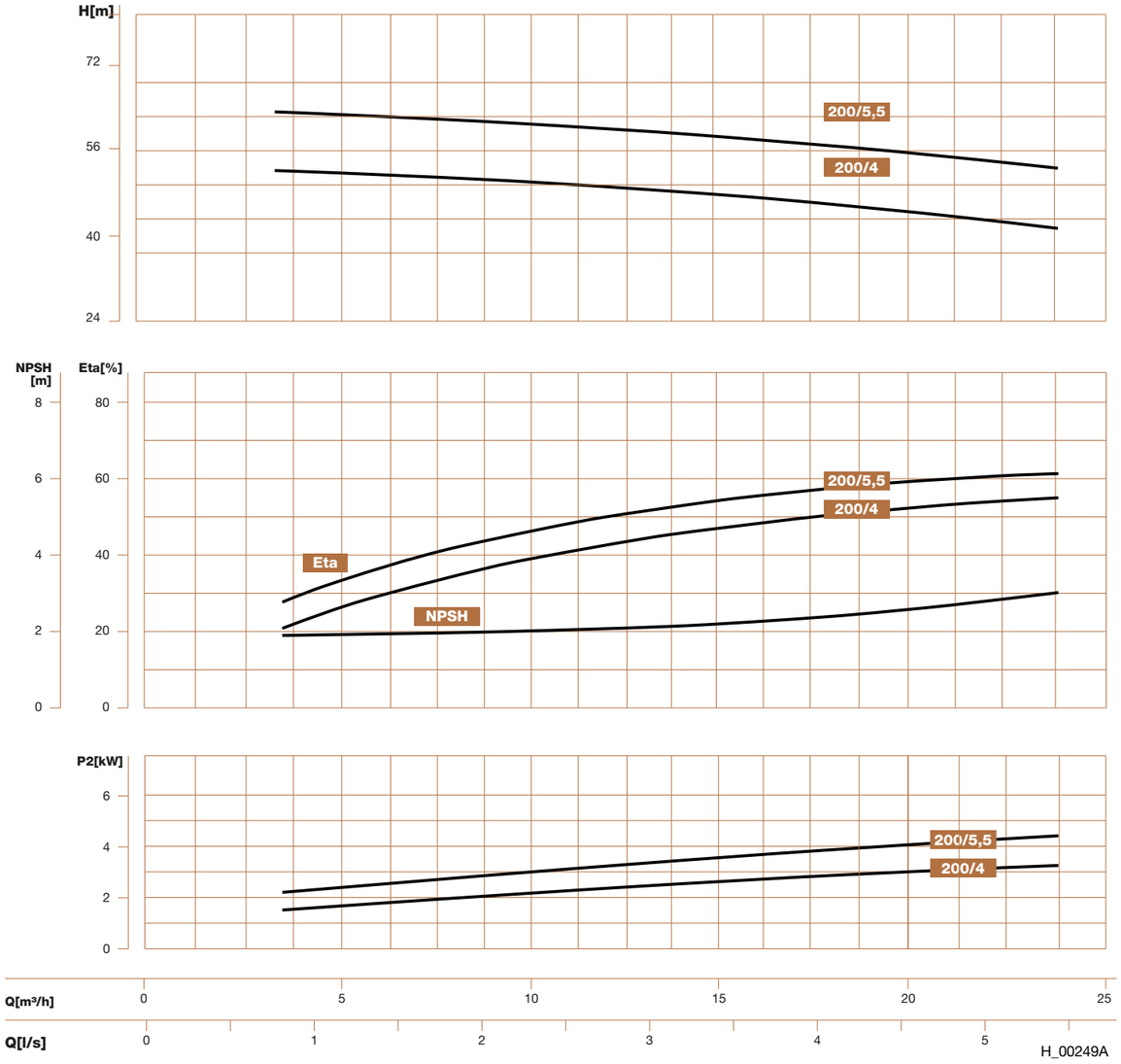
Performance table

Model	P2 (kW)	Q (m³/h)	3	5	7.5	10	12.5	15	17.5	20
NSX, NSN 32-160/2.2	2.2	H (m)	33.0	32.7	32.0	31.0	30.0	28.0	26.2	24.1
NSX, NSN 32-160/3	3		40.2	39.8	39.1	38.2	37.0	35.5	33.8	31.8

H_00276

NSX, NSN 32

NSX, NSN 32-200



H_00249A

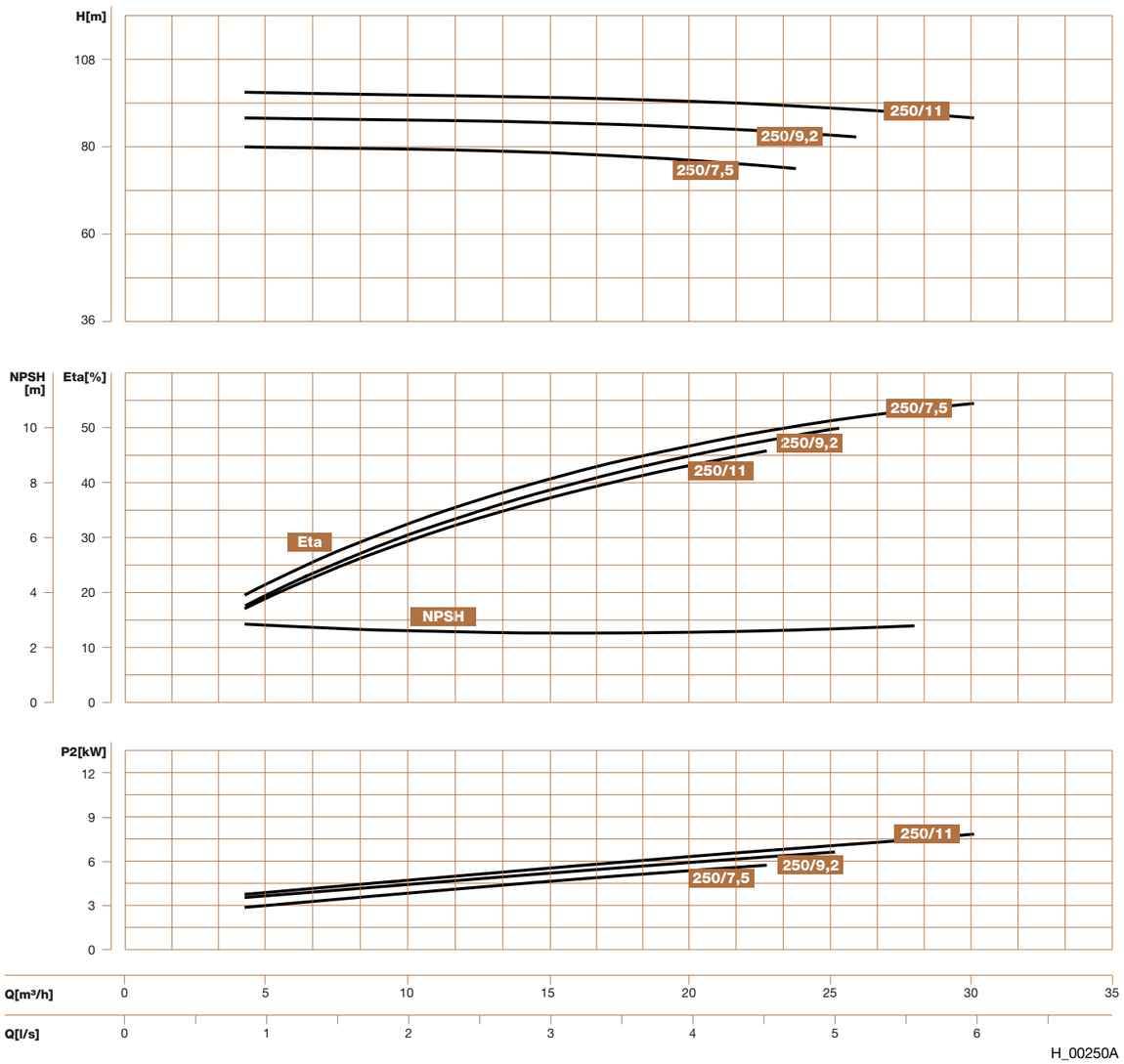
Performance table

Model	P2 (kW)	Q (m³/h)	3	5	7.5	10	12.5	15	17.5	20
NSX, NSN 32-200/4	4	H (m)	52.6	52.1	51.3	50.3	49.0	47.4	45.4	43.0
NSX, NSN 32-200/5.5	5.5		61.9	61.3	60.4	59.3	58.0	56.4	54.5	52.3

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NSX, NSN 32

NSX, NSN 32-250



H_00250A

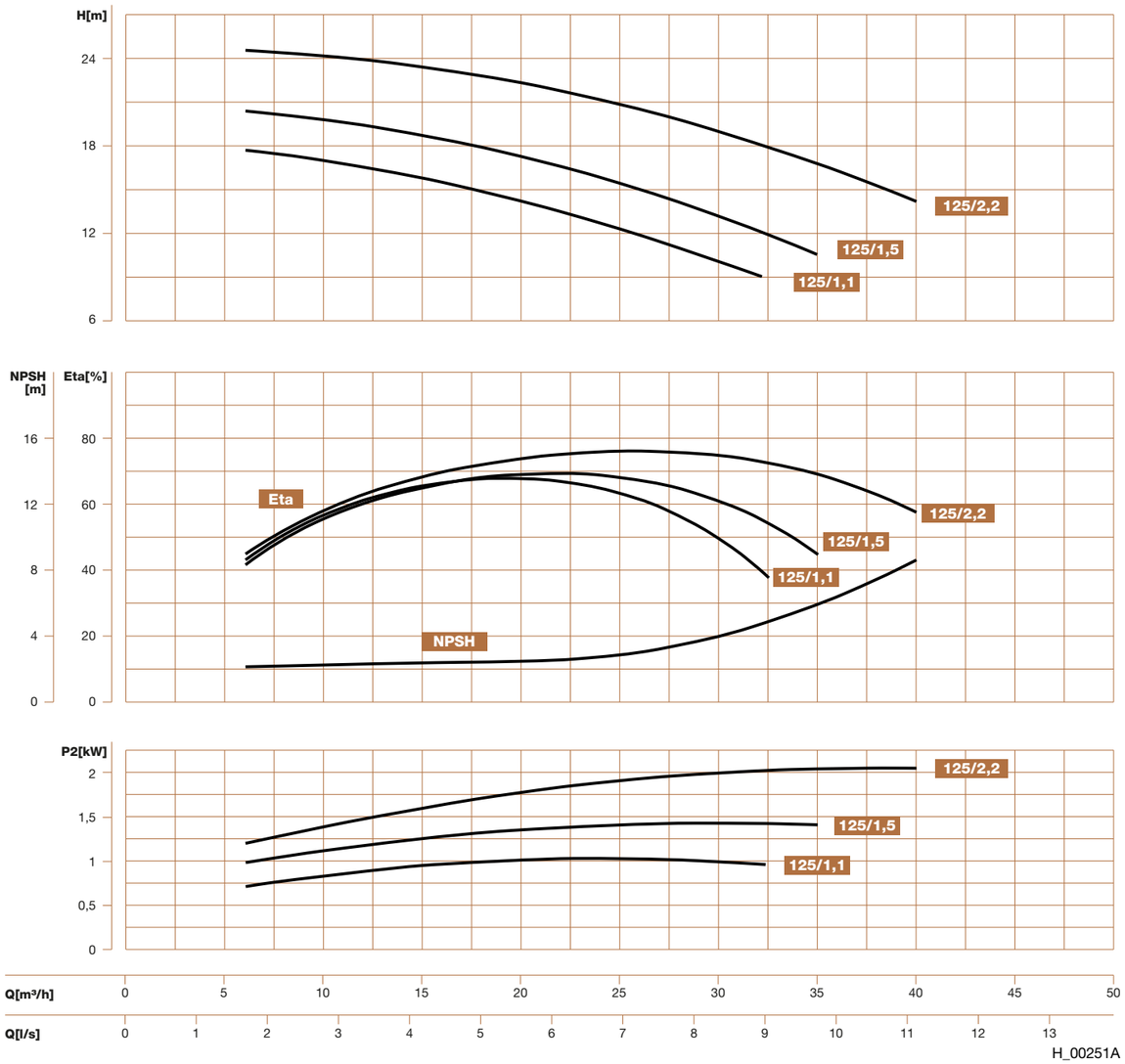
Performance table

Model	P2 (kW)	Q (m³/h)	3	5	7.5	10	12.5	15	17.5	20
NSX, NSN 32-250/7.5	7.5	H (m)	78.9	78.6	78.3	77.8	77.0	75.8	74.1	71.9
NSX, NSN 32-250/9.2	9.2		88.3	87.7	86.8	85.0	85.0	83.9	82.5	80.9
NSX, NSN 32-250/11	11		93.8	93.4	93.1	92.0	92.0	91.0	89.6	87.7

H_00276

NSX, NSN 40

NSX, NSN 40-125



H_00251A

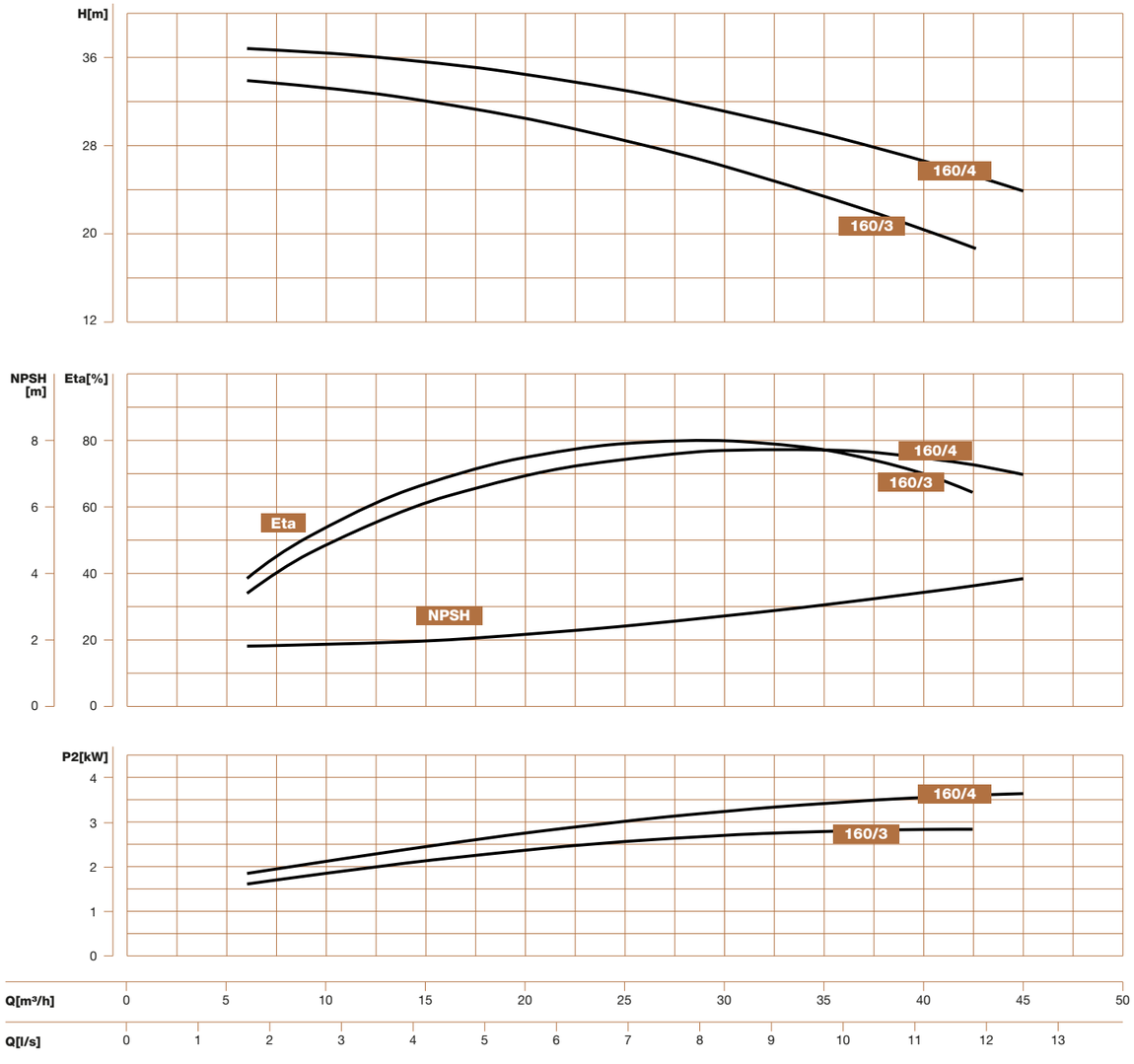
Performance table

Model	P2 (kW)	Q (m³/h)	6	10	15	20	25	30	32.5	35	40
NSX, NSN 40-125/1.1	1.1	H (m)	15.8	15.2	13.9	11.8	9.0	5.8	4.2	–	–
NSX, NSN 40-125/1.5	1.5		20.0	19.5	18.4	16.6	14.0	10.7	8.8	6.6	–
NSX, NSN 40-125/2.2	2.2		25.2	24.9	24.2	22.9	21.0	18.4	16.8	15.0	11.0

H_00276

NSX, NSN 40

NSX, NSN 40-160



H_00252A

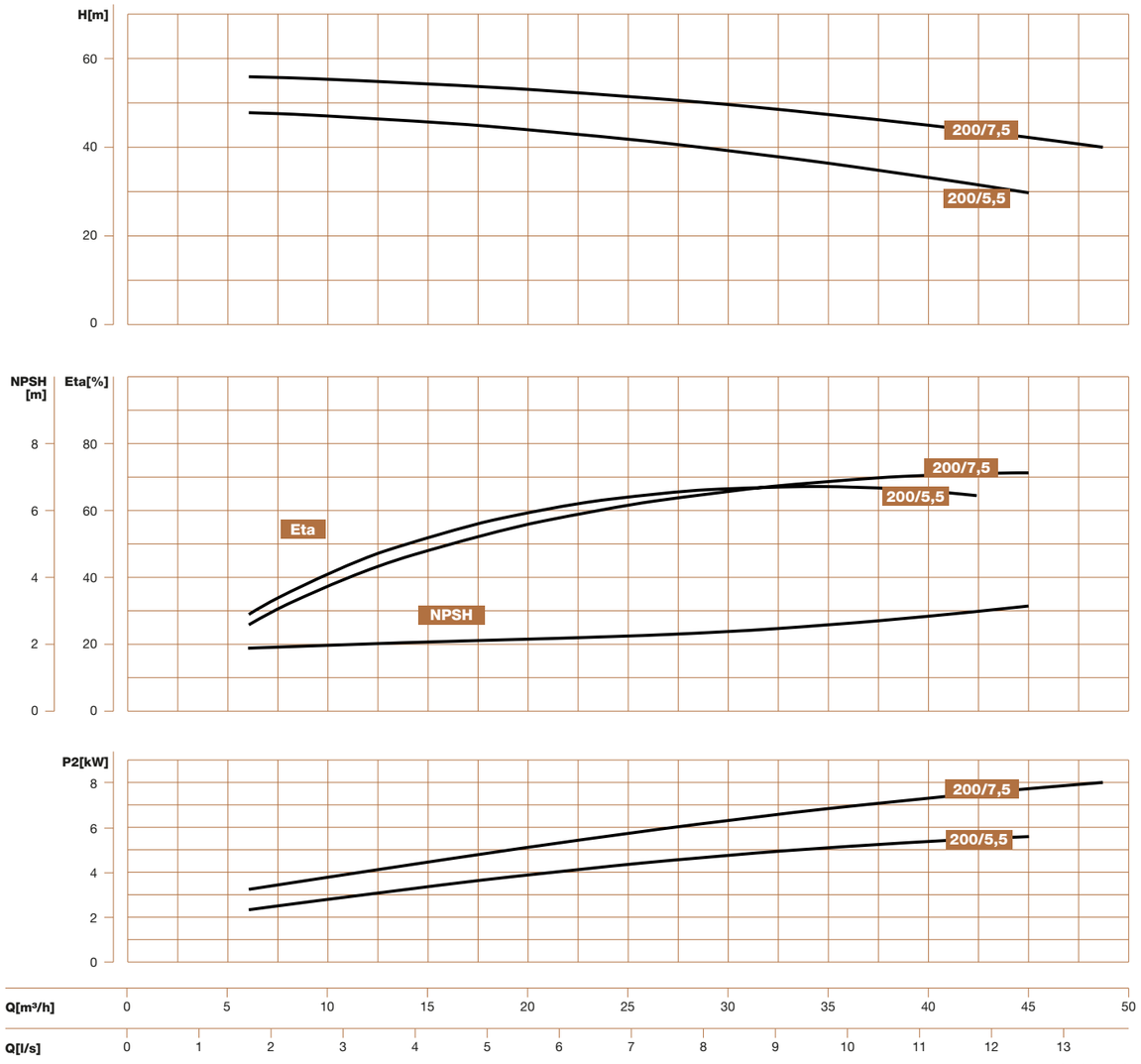
Performance table

Model	P2 (kW)	Q (m³/h)	6	10	15	20	25	30	35	40
NSX, NSN 40-160/3	3	H (m)	32.5	32.2	31.1	29.4	27.0	24.2	20.8	16.9
NSX, NSN 40-160/4	4		37.1	36.9	36.2	34.9	33.0	30.5	27.5	24.0

H_00276

NSX, NSN 40

NSX, NSN 40-200



H_00253A

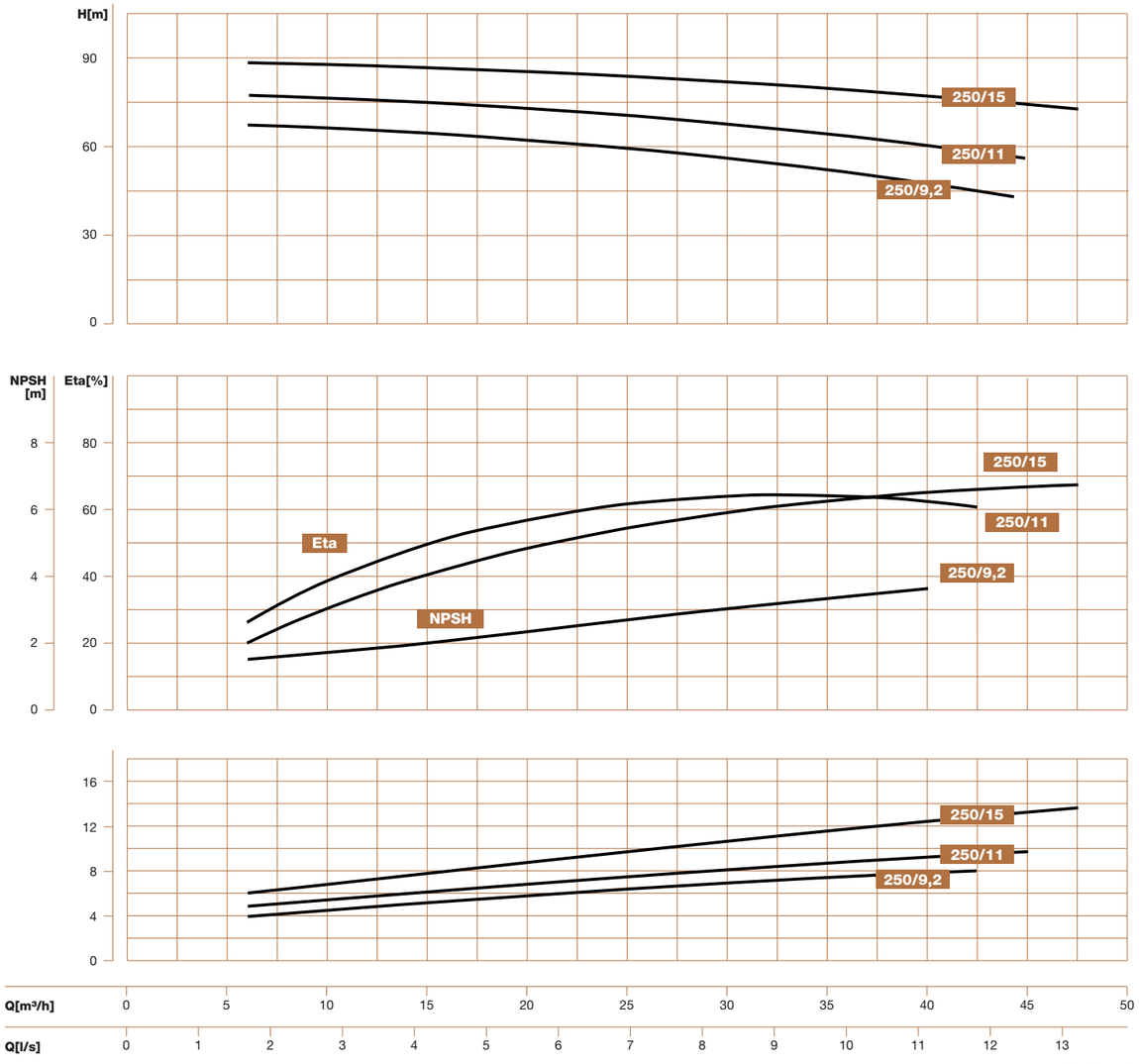
Performance table

Model	P2 (kW)	Q (m³/h)	6	10	15	20	25	30	35	40
NSX, NSN 40-200/5.5	5.5	H (m)	46.4	45.9	44.8	43.2	41.0	38.2	35.0	31.4
NSX, NSN 40-200/7.5	7.5		57.7	57.3	56.5	55.2	53.5	51.4	48.8	45.8

H_00276

NSX, NSN 40

NSX, NSN 40-250



H_00254A

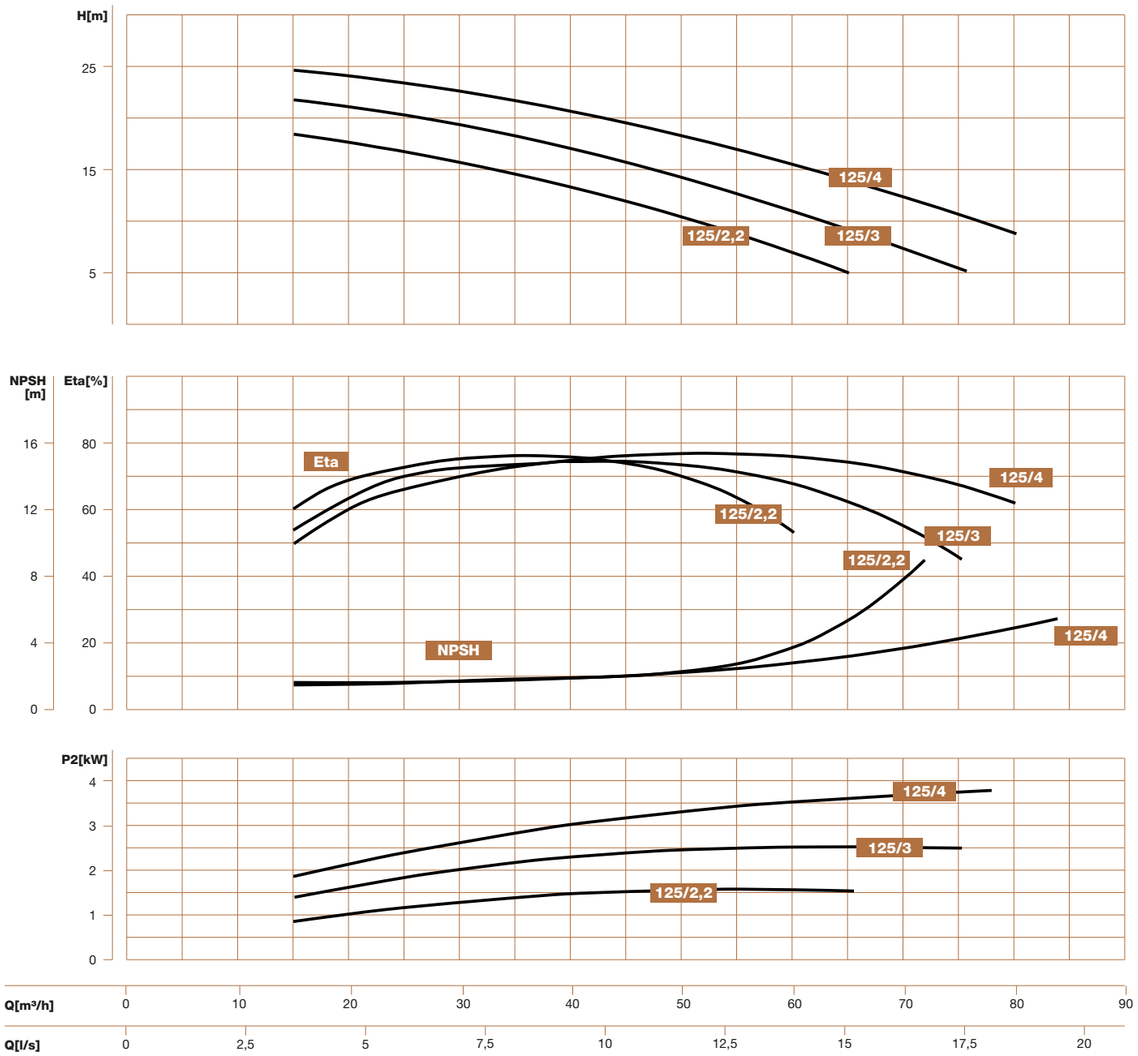
Performance table

Model	P2 (kW)	Q (m³/h)	6	10	15	20	25	30	35	40
NSX, NSN 40-250/9.2	9.2	H (m)	67.7	67.1	65.7	63.6	61.0	57.2	52.9	47.6
NSX, NSN 40-250/11	11		76.1	75.6	74.3	72.5	70.0	66.9	63.1	58.5
NSX, NSN 40-250/15	15		90.1	89.5	88.5	87.0	85.0	82.5	79.4	75.8

H_00276

NSX, NSN 50

NSX, NSN 50-125



H_00255A

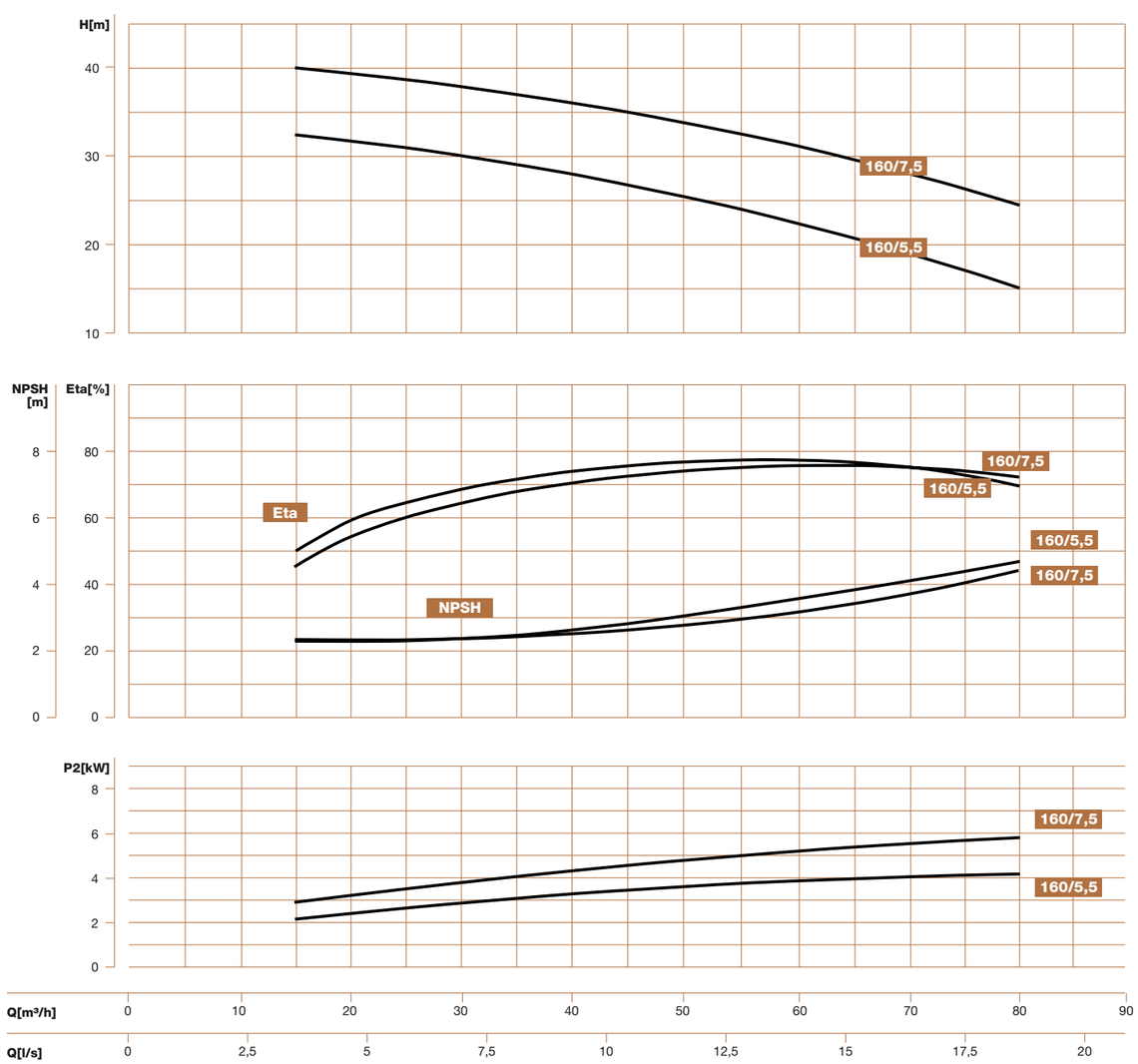
Performance table

Model	P2 (kW)	Q (m³/h)	12.5	20	30	40	50	60	65	70
NSX, NSN 50-125/2.2	2.2	H (m)	19.4	18.5	16.7	14.2	11.0	6.9	–	–
NSX, NSN 50-125/3	3		22.5	21.9	20.4	18.1	14.5	11.2	9.0	6.8
NSX, NSN 50-125/4	4		26.5	26.1	24.8	22.7	20.0	16.6	14.7	12.7

H_00276

NSX, NSN 50

NSX, NSN 50-160



H_00256A

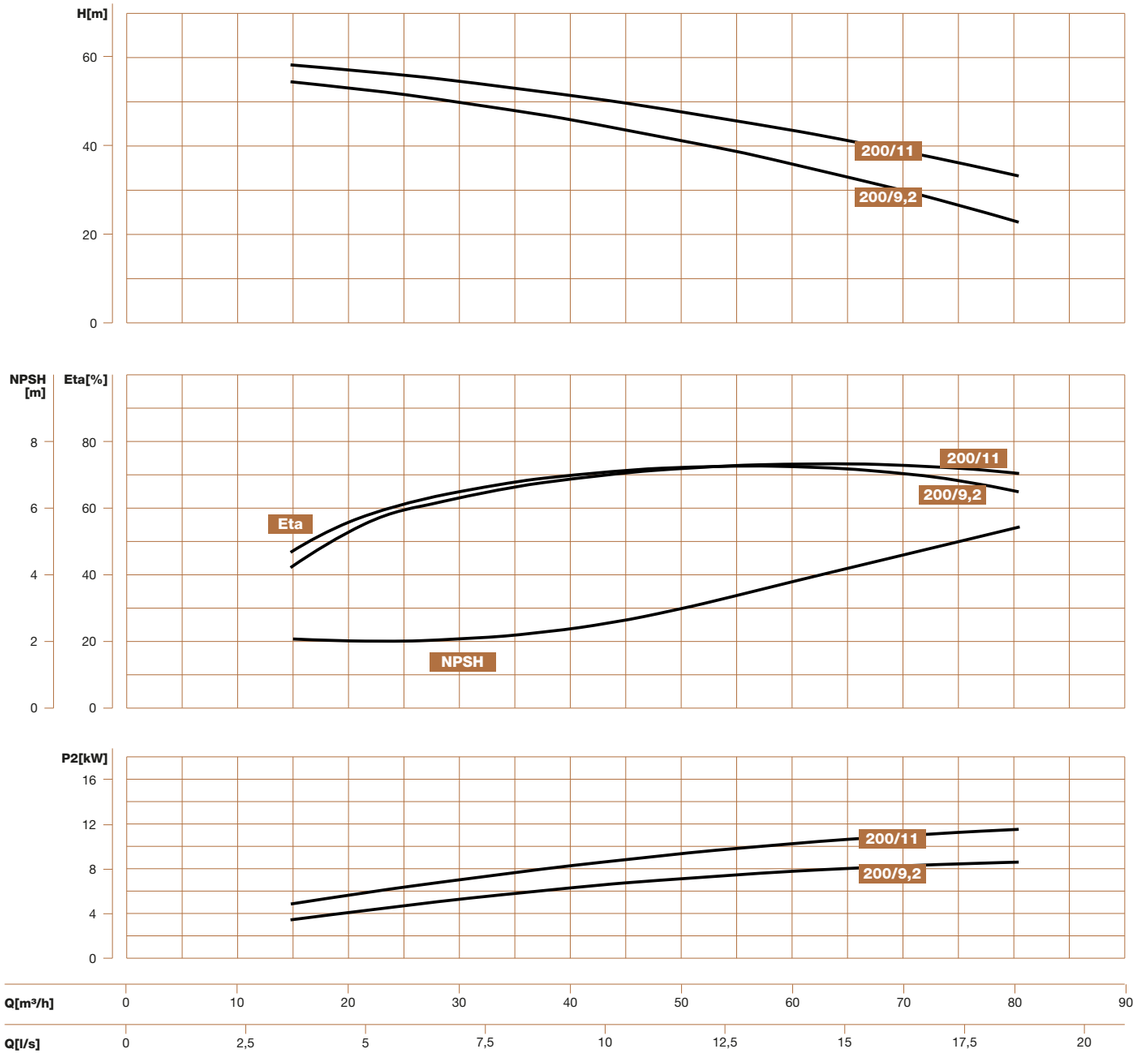
Performance table

Model	P2 (kW)	Q (m³/h)	12.5	20	30	40	50	60	65	70
NSX, NSN 50-160/5.5	5.5	H (m)	34.6	33.8	32.2	29.9	27.0	23.4	21.3	19.0
NSX, NSN 50-160/7.5	7.5		40.8	40.0	38.5	36.6	34.0	30.8	28.9	26.7

H_00276

NSX, NSN 50

NSX, NSN 50-200



H_00257A

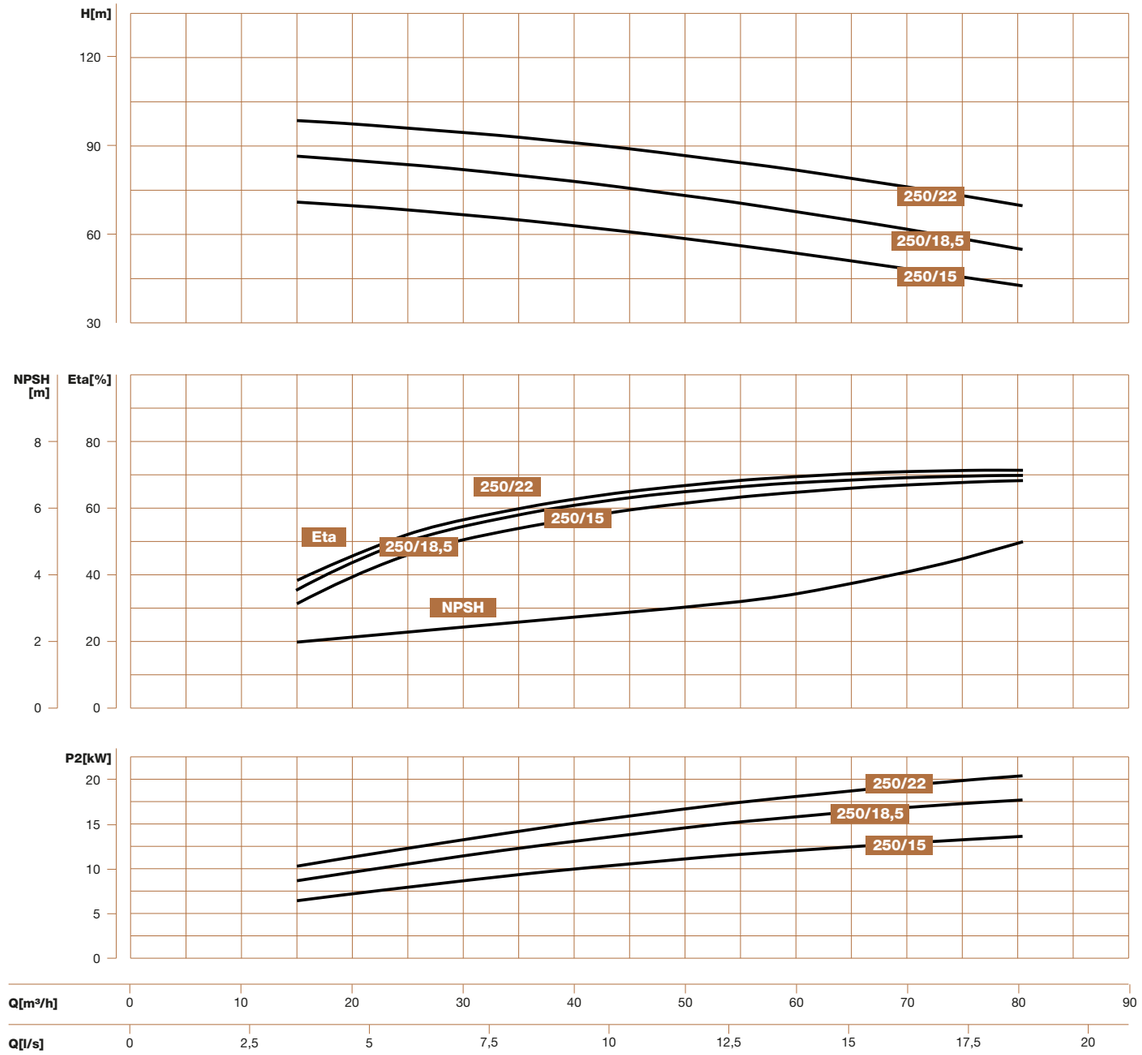
Performance table

Model	P2 (kW)	Q (m³/h)	12.5	20	30	40	50	60	65	70
NSX, NSN 50-200/9.2	9.2	H (m)	55.5	54.2	51.4	47.7	43.0	37.3	34	30.5
NSX, NSN 50-200/11	11		60.9	59.8	57.4	54.1	50.0	45.0	42.2	39.2

H_00276

NSX, NSN 50

NSX, NSN 50-250



H_00258A

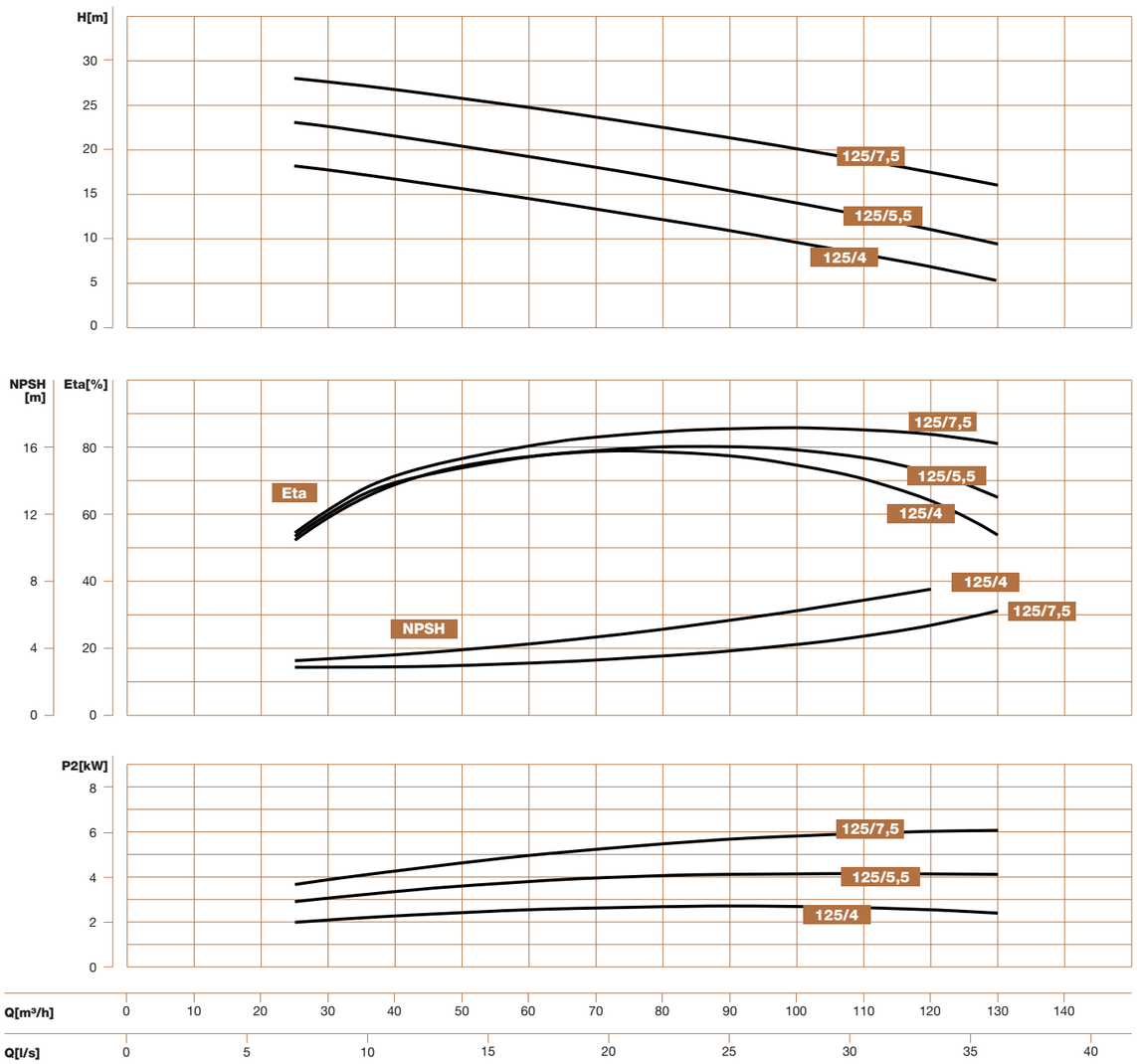
Performance table

Model	P2 (kW)	Q (m³/h)	12.5	20	30	40	50	60	65	70
NSX, NSN 50-250/15	15	H (m)	73.4	72.0	69.4	65.7	61.5	55.6	52.7	49.8
NSX, NSN 50-250/18.5	18.5		85.9	84.5	81.6	77.6	72.5	66.4	63.1	59.5
NSX, NSN 50-250/22	22		94.9	93.6	91.1	87.6	83.0	77.3	74.2	70.8

H_00276

NSX, NSN 65

NSX, NSN 65-125



H_00259A

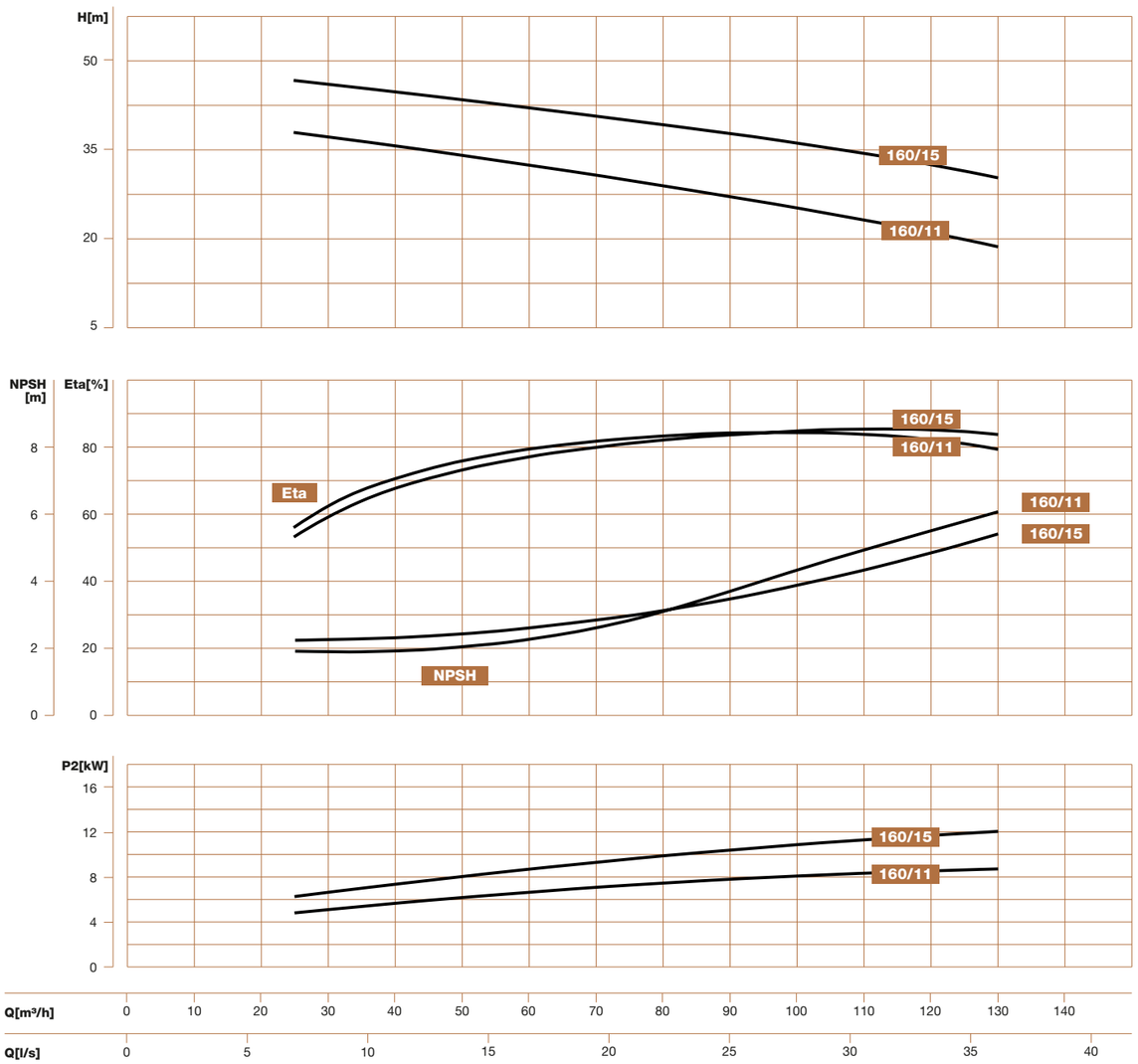
Performance table

Model	P2 (kW)	Q (m^3/h)	25	30	40	50	60	70	80	90	100	110	120	130
NSX, NSN 65-125/4	4	H (m)	19.9	19.6	18.7	17.5	16.2	14.7	13.2	11.7	10.0	8.3	6.4	–
NSX, NSN 65-125/5.5	5.5		24.8	24.4	23.5	22.4	21.1	19.7	18.2	16.6	15.0	13.3	11.4	9.4
NSX, NSN 65-125/7.5	7.5		29.4	29.2	28.4	27.5	26.4	25.2	23.9	22.5	21.0	19.5	17.8	16.0

H_00276

NSX, NSN 65

NSX, NSN 65-160



H_00260A

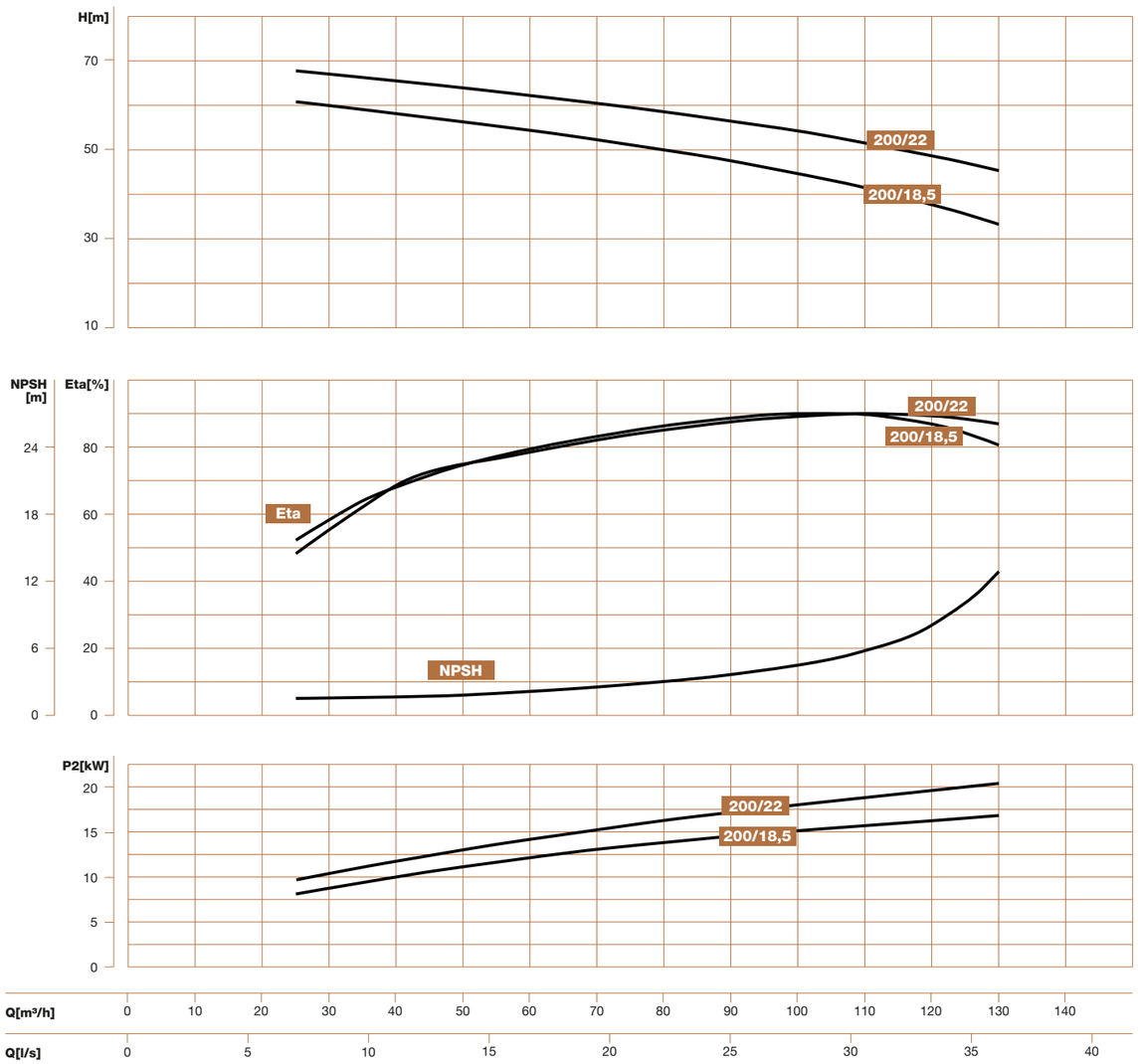
Performance table

Model	P2 (kW)	Q (m^3/h)	25	30	40	50	60	70	80	90	100	110	120	130
NSX, NSN 65-160/11	11	H (m)	40.9	40.4	39.2	37.8	36.3	34.7	33.0	31.3	29.5	27.6	25.5	23.2
NSX, NSN 65-160/15	15		47.5	47.1	46.0	44.8	43.6	42.2	40.9	39.5	38.0	36.4	34.6	32.4

H_00276

NSX, NSN 65

NSX, NSN 65-200



H_00261A

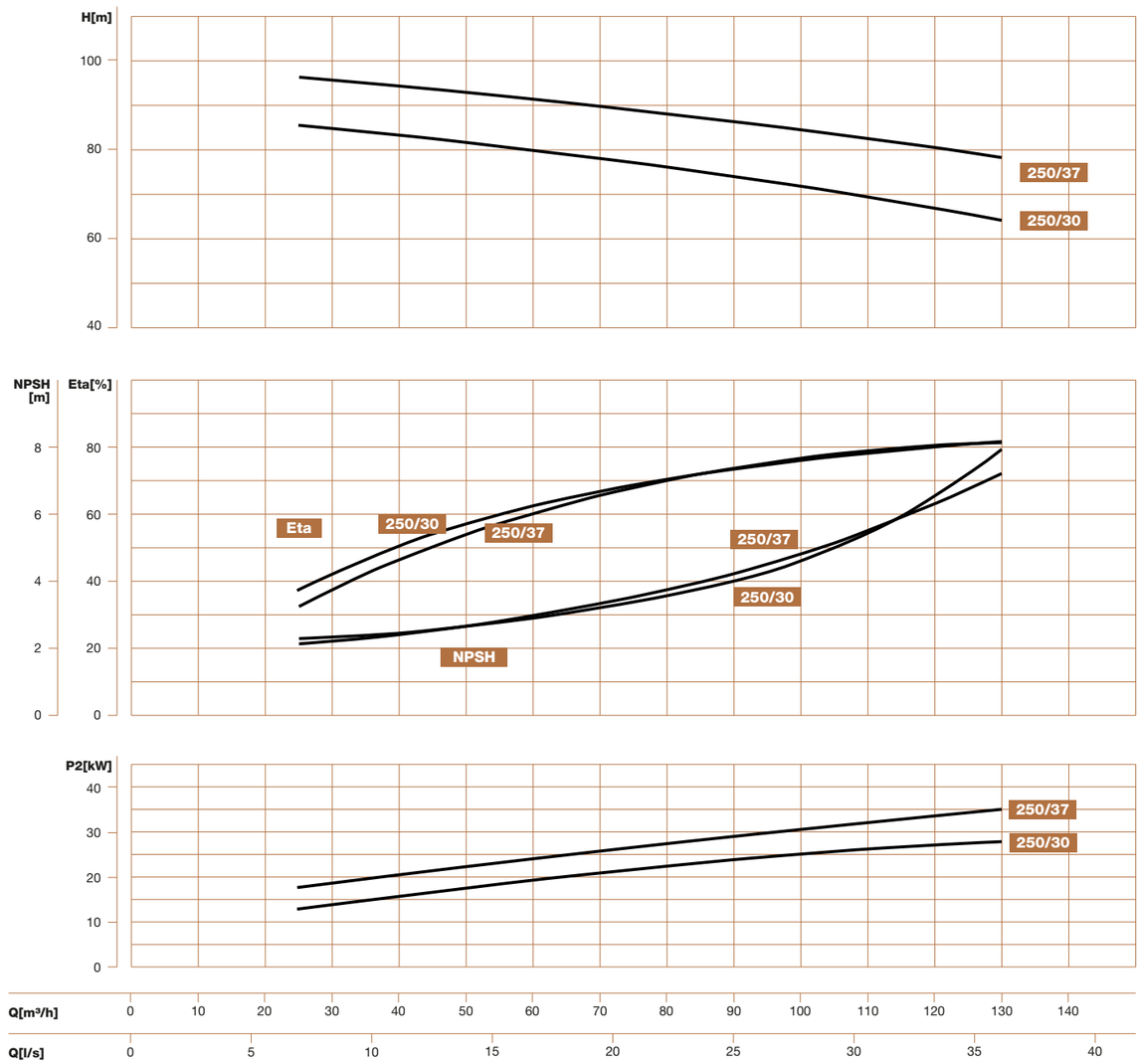
Performance table

Model	P2 (kW)	Q (m^3/h)	25	30	40	50	60	70	80	90	100	110	120	130
NSX, NSN 65-200/18.5	18.5	H (m)	61.7	61.1	59.7	58.1	56.3	54.5	52.5	50.2	48.0	44.8	41.3	37
NSX, NSN 65-200/22	22		66.9	66.4	65.1	63.7	62.2	60.6	58.9	57.0	55.0	52.7	49.9	46.6

H_00276

NSX, NSN 65

NSX, NSN 65-250



H_00262A

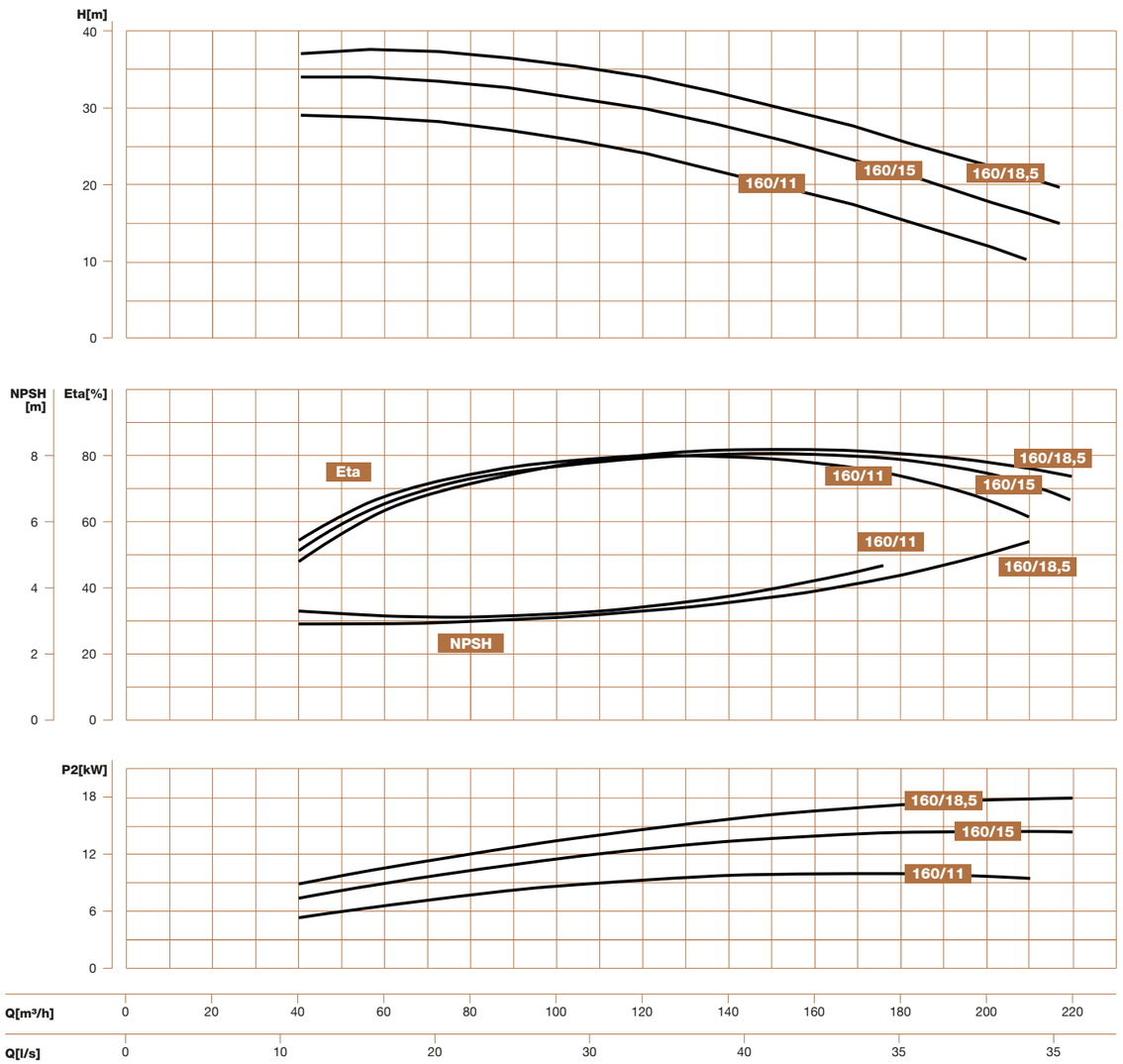
Performance table

Model	P2 (kW)	Q (m^3/h)	25	30	40	50	60	70	80	90	100	110	120	130
NSX, NSN 65-250/30	30	H (m)	86.4	85.8	84.5	83.1	81.4	79.6	77.7	75.6	73.0	70.9	68.2	65.3
NSX, NSN 65-250/37	37		95.3	94.9	93.7	92.4	90.9	89.4	87.7	85.9	84.0	82	79.9	77.5

H_00276

NSX, NSN 80

NSX, NSN 80-160



H_00263A

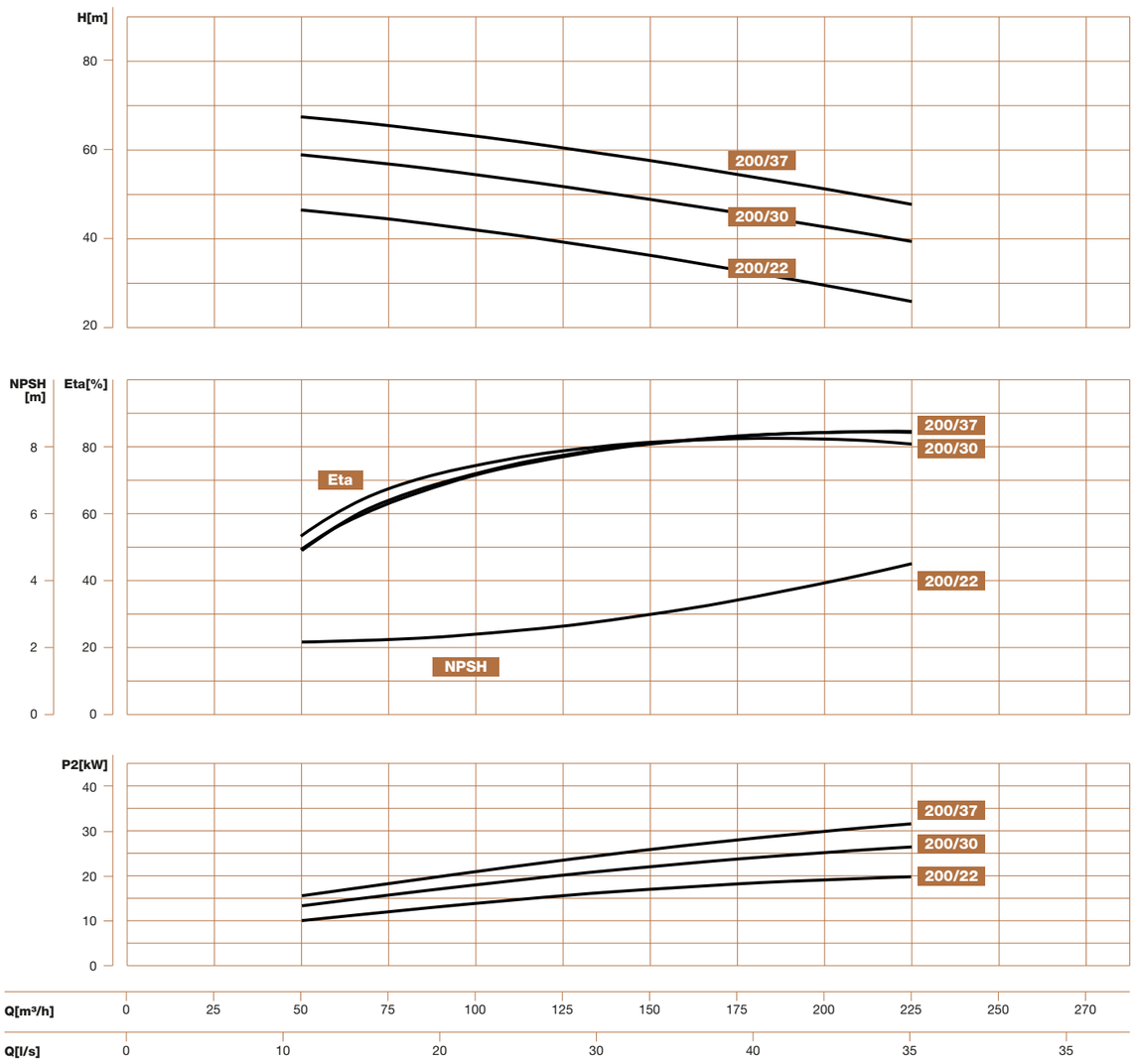
Performance table

Model	P2 (kW)	Q (m³/h)	40	60	80	100	120	140	160	180	200	210
NSX, NSN 80-160/11	11	H (m)	31.7	30.3	28.5	26.4	24.0	21.4	18.5	15.2	11.5	
NSX, NSN 80-160/15	15		38.5	37.2	35.4	33.4	31.1	28.7	26.0	23.5	19.1	16.9
NSX, NSN 80-160/18.5	18.5		43.1	42.1	40.6	38.6	36.4	33.8	31.0	28.0	24.6	22.7

H_00276

NSX, NSN 80

NSX, NSN 80-200



H_00264A

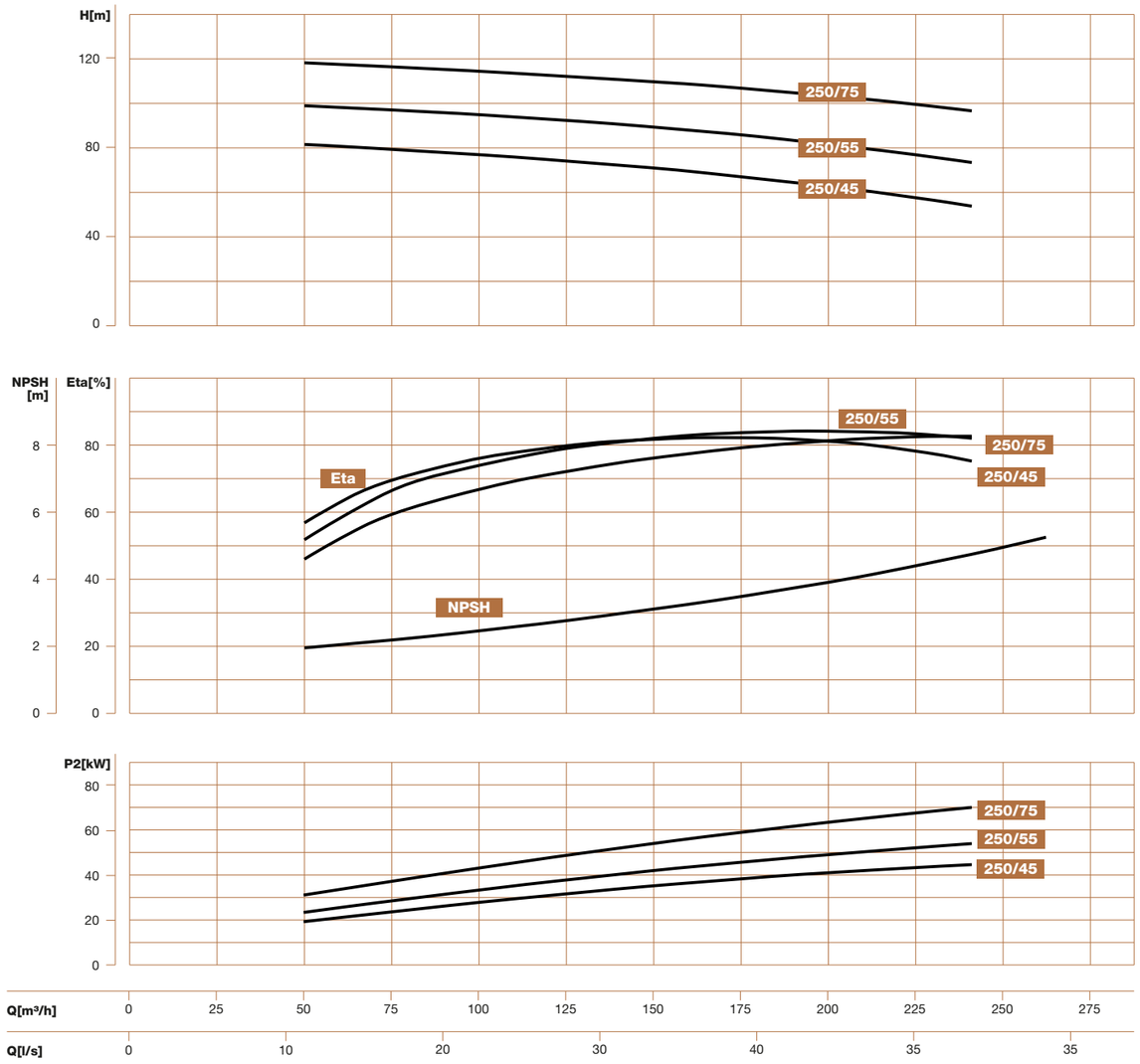
Performance table

Model	P2 (kW)	Q (m³/h)	40	60	80	100	120	140	160	180	200	210
NSX, NSN 80-200/22	22	H (m)	50.2	48.8	47.0	44.8	42.1	39.2	36.0	32.5	28.8	26.9
NSX, NSN 80-200/30	30		61.9	60.9	59.2	57.0	54.4	51.5	48.5	45.3	41.9	40.2
NSX, NSN 80-200/37	37		70.3	69.2	67.5	65.4	62.8	60,0	57,0	53.7	50.2	48.4

H_00276

NSX, NSN 80

NSX, NSN 80-250



H_00265A

Performance table

Model	P2 (kW)	Q (m³/h)	40	60	80	100	120	140	160	180	200	210
NSX, NSN 80-250/45	45	H (m)	84.4	82.9	81.1	79.0	76.4	73.5	70.0	65.8	60.8	57.9
NSX, NSN 80-250/55	55		99.3	97.9	96.2	94.3	92.1	89.3	86.0	82.1	77.4	74.7
NSX, NSN 80-250/75	75		115.9	114.4	112.8	111.0	109.0	106.7	104.0	100.8	96.9	94.6

H_00276

Dimensions NSX, NSN

Dimensions and weight

Model	P(Kw)	DN1	DN2	d1	d2	K1	K2	D1	D2	n1	n2	a	H	H1	H2	L1	L2	L3	L4	L5	B1	B2	B3	B4	d3	d4	Weight (kg)	Config. type
32-125	0,75	50	32	98	75	125	100	160	139	4	4	80	220	112	252	463	45	70	167	-	180	140	150	213	15	10	23	A
	1,1	50	32	98	75	125	100	160	139	4	4	80	220	112	252	463	45	70	167	-	180	140	150	213	15	10	24	A
	1,5	50	32	98	75	125	100	160	139	4	4	80	231	112	252	507	45	70	167	-	180	140	150	213	15	10	29	A
32-160	2,2	50	32	98	75	125	100	160	139	4	4	80	251	132	292	505	45	70	165	-	220	190	150	254	15	10	35	A
	3	50	32	98	75	125	100	160	139	4	4	80	265	132	292	561	45	70	363	-	220	190	160	254	15	11	45	B
32-200	4	50	32	98	75	125	100	160	139	4	4	80	310	160	340	596	45	70	176	140	230	190	190	300	15	12	55	C
	5,5	50	32	98	75	125	100	160	139	4	4	80	332	160	340	619	45	70	393	-	282	190	216	300	15	11	74	B
32-250	7,5	50	32	98	75	125	100	160	139	4	4	100	352	180	405	645	52	95	196	140	280	250	216	350	15	12	90	C
	9,2	50	32	98	75	125	100	160	139	4	4	100	352	180	405	660	52	95	196	140	280	250	216	350	15	12	95	C
	11	50	32	98	75	125	100	160	139	4	4	100	401	180	405	786	52	95	541	-	314	250	264	350	15	13	153	B
40-125	1,1	65	40	118	84	145	110	185	145	4	4	80	240	112	252	463	45	70	167	-	190	160	150	208	15	10	24	A
	1,5	65	40	118	84	145	110	185	145	4	4	80	231	112	252	507	45	70	167	-	190	160	150	208	15	10	30	A
	2,2	65	40	118	84	145	110	185	145	4	4	80	231	112	252	428	45	70	167	-	190	160	150	208	15	10	33	A
40-160	3	65	40	118	84	145	110	185	145	4	4	80	265	132	292	563	45	70	366	-	220	190	160	254	15	11	46	B
	4	65	40	118	84	145	110	185	145	4	4	80	282	132	292	575	45	70	367	-	230	190	200	254	15	11	52	B
40-200	5,5	65	40	118	84	145	110	185	145	4	4	100	332	160	340	642	65	70	396	-	282	206	216	300	15	11	75	B
	7,5	65	40	118	84	145	110	185	145	4	4	100	332	160	340	642	65	70	396	-	282	206	216	300	15	11	83	B
40-250	9,2	65	40	118	84	145	110	185	145	4	4	100	352	180	405	667	52	95	203	140	275	245	216	350	15	12	95	C
	11	65	40	118	84	145	110	185	145	4	4	100	401	180	405	789	52	95	544	-	314	245	264	350	15	13	154	B
	15	65	40	118	84	145	110	185	145	4	4	100	401	180	405	789	52	95	544	-	314	245	264	350	15	13	169	B
50-125	2,2	65	50	118	98	145	125	185	160	4	4	100	251	132	292	535	65	70	175	-	220	190	150	213	15	10	34	A
	3	65	50	118	98	145	125	185	160	4	4	100	264	132	292	591	65	70	373	-	220	190	160	250	15	11	45	B
	4	65	50	118	98	145	125	185	160	4	4	100	282	132	292	603	65	70	375	-	230	190	200	250	15	11	51	B
50-160	5,5	65	50	118	98	145	125	185	160	4	4	100	332	160	340	653	65	70	407	-	282	212	216	300	15	11	73	B
	7,5	65	50	118	98	145	125	185	160	4	4	100	332	160	340	653	65	70	407	-	282	212	216	300	15	11	81	B
50-200	9,2	65	50	118	98	145	125	185	160	4	4	100	332	160	360	657	65	70	396	-	282	212	216	350	15	11	83	B
	11	65	50	118	98	145	125	185	160	4	4	100	381	160	360	782	65	70	254	210	254	193	254	350	15	15	147	D
50-250	15	65	50	118	98	145	125	185	160	4	4	100	401	180	405	789	52	95	544	-	314	250	264	350	15	13	170	B
	18,5	65	50	118	98	145	125	185	160	4	4	100	401	180	405	834	52	95	544	-	314	250	264	350	15	13	178	B
	22	65	50	118	98	145	125	185	160	4	4	100	420	180	405	868	52	95	262	241	279	245	279	350	15	15	229	D
65-125	4	80	65	130	118	160	145	200	185	8	4	100	310	160	340	605	52	95	173	140	242	212	190	250	15	12	52	C
	5,5	80	65	130	118	160	145	200	185	8	4	100	332	160	340	656	52	95	398	-	282	212	216	300	15	11	70	B
	7,5	80	65	130	118	160	145	200	185	8	4	100	332	160	340	656	52	95	398	-	282	212	216	300	15	11	78	B
65-160	11	80	65	130	118	160	145	200	185	8	4	100	381	160	360	797	52	95	256	210	254	212	254	350	15	15	145	D
	15	80	65	130	118	160	145	200	185	8	4	100	381	160	360	797	52	95	256	210	254	212	254	350	15	15	160	D
65-200	18,5	80	65	130	118	160	145	200	185	8	4	100	401	180	405	835	52	95	545	-	314	250	264	350	15	13	174	B
	22	80	65	130	118	160	145	200	185	8	4	100	420	180	405	869	52	95	264	241	280	250	279	355	15	15	226	D
65-250	30	80	65	130	118	160	145	200	185	8	4	100	462	200	450	953	40	120	264	305	318	280	318	420	18	19	293	D
	37	80	65	130	118	160	145	200	185	8	4	100	462	200	450	953	40	120	264	305	318	280	318	420	18	19	313	D

Dimensions NSX, NSN

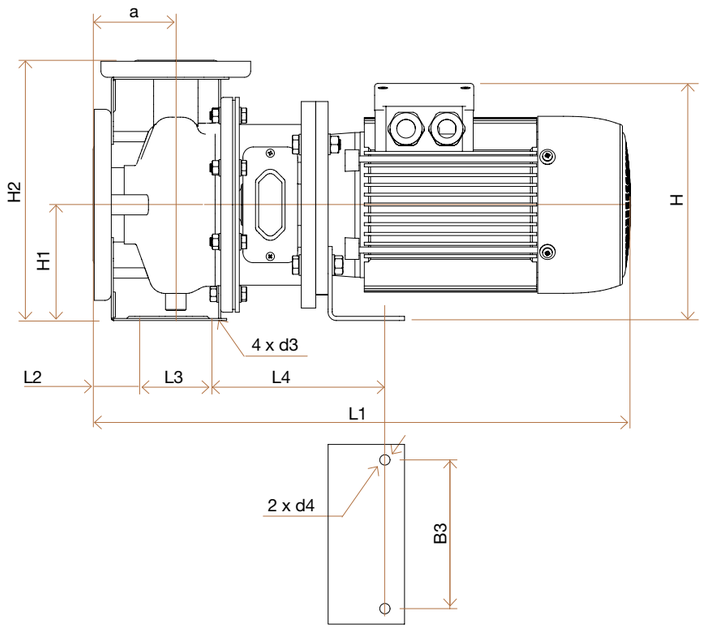
Dimensions and weight

Model	P (Kw)	DN1	DN2	d1	d2	K1	K2	D1	D2	n1	n2	a	H	H1	H2	L1	L2	L3	L4	L5	B1	B2	B3	B4	d3	d4	Weight (kg)	Conf. type
80-160	11	100	80	150	130	180	160	220	200	8	8	125	401	180	405	832	77	95	561	-	314	250	264	350	15	13	148	B
	15	100	80	150	130	180	160	220	200	8	8	125	401	180	405	832	77	95	561	-	314	250	264	350	15	13	163	B
	18,5	100	80	150	130	180	160	220	200	8	8	125	401	180	405	876	77	95	561	-	314	250	264	350	15	13	171	B
80-200	22	100	80	150	130	180	160	220	200	8	8	125	420	180	430	905	77	95	274	241	310	280	279	355	15	15	228	D
	30	100	80	150	130	180	160	220	200	8	8	125	462	200	450	988	213	-	286	305	318	280	318	400	15	19	289	E
	37	100	80	150	130	180	160	220	200	8	8	125	462	200	450	988	213	-	286	305	318	280	318	400	15	19	309	E
80-250	45	100	80	150	130	180	160	220	200	8	8	125	512	225	505	1043	185	-	310	311	385	350	356	450	17	19	418	E
	55	100	80	150	130	180	160	220	200	8	8	125	566	250	530	1156	65	120	369	349	406	350	406	550	17	24	480	F
	75	100	80	150	130	180	160	220	200	8	8	125	645	280	560	1219	65	120	391	368	457	350	457	550	17	24	630	F

H_00245_A

Installation diagram

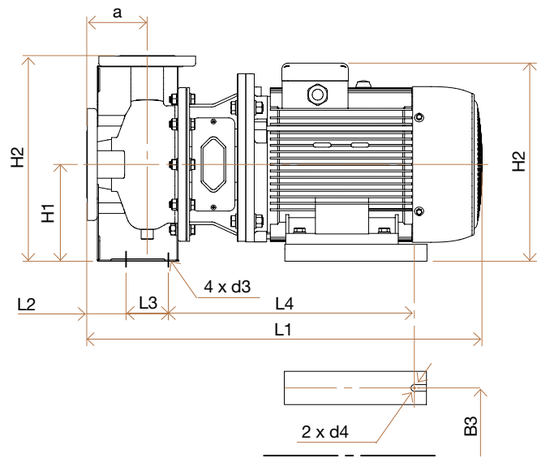
Type A

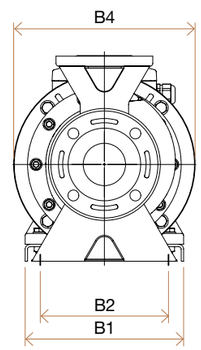


H_00430_A

Installation diagram

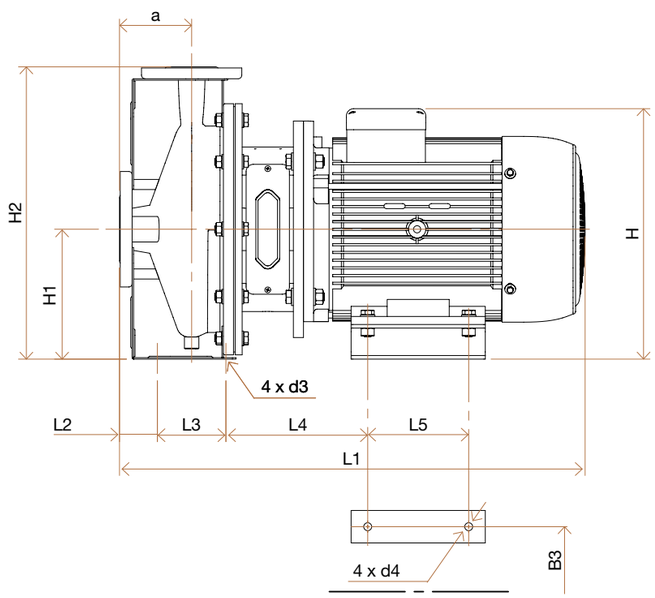
Type B

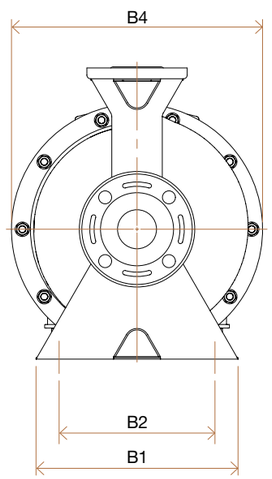




H_00431_A

Type C



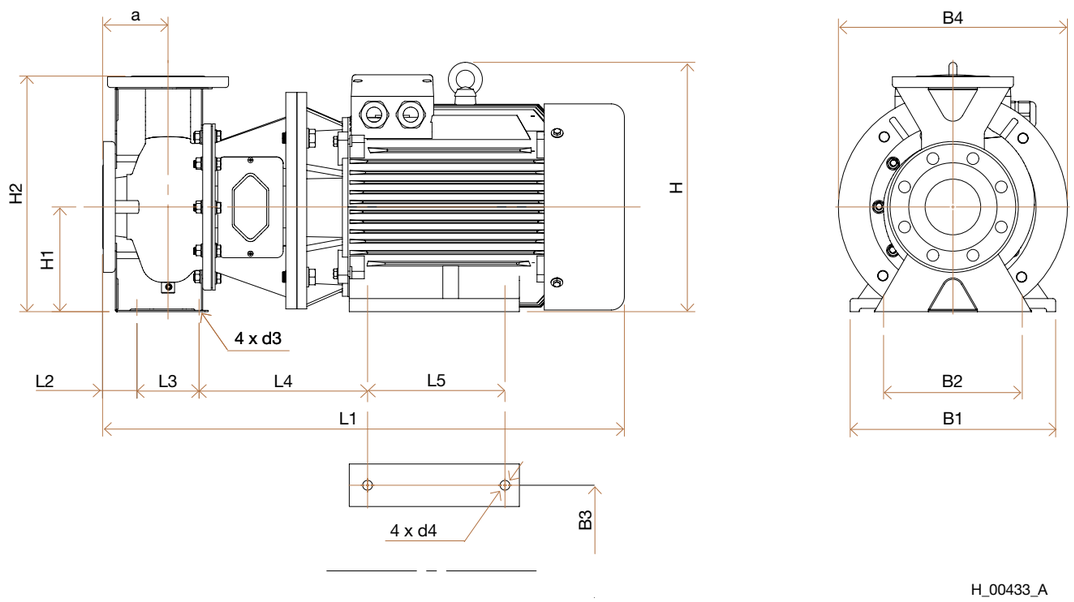


H_00432_A

Dimensions NSX, NSN

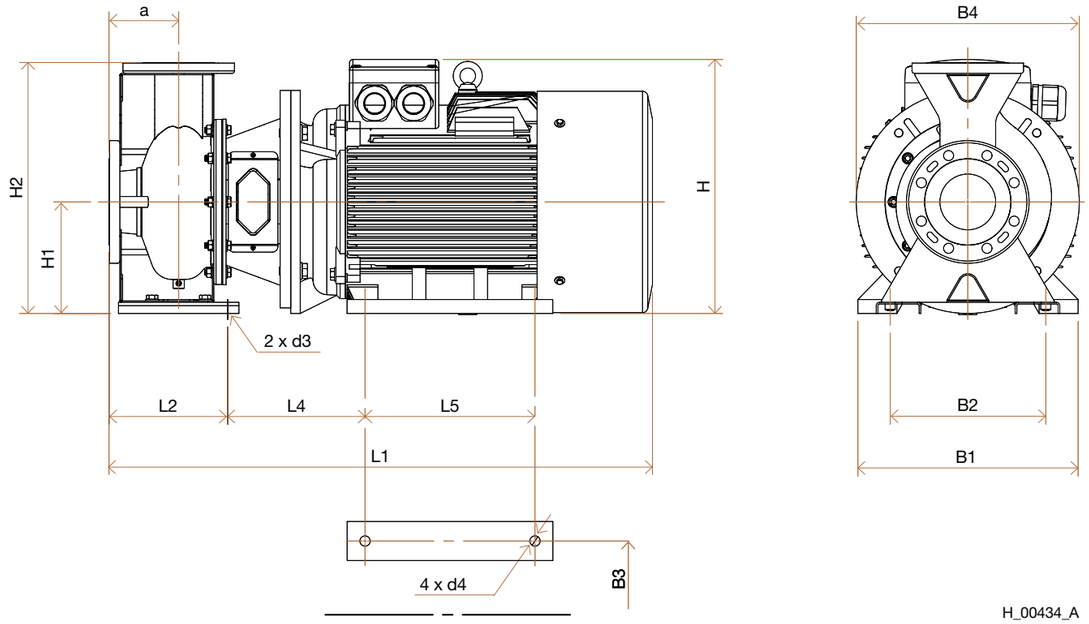
Installation diagram

Type D



H_00433_A

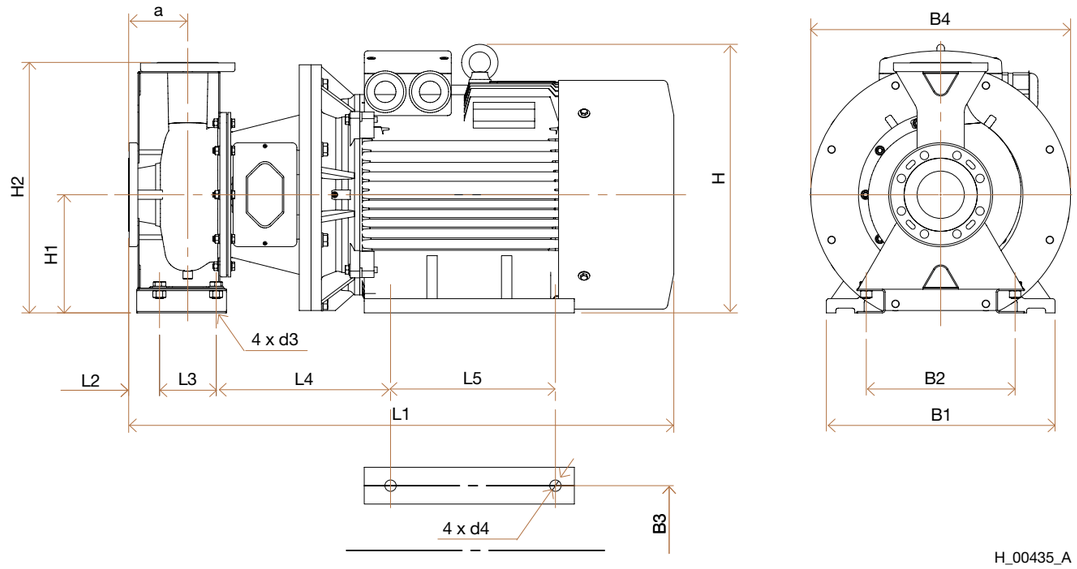
Type E



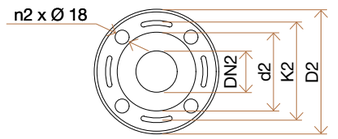
H_00434_A

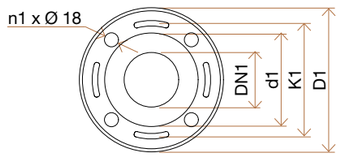
Installation diagram

Type F



H_00435_A





H_00436_A

Dimensions NSX, NSN

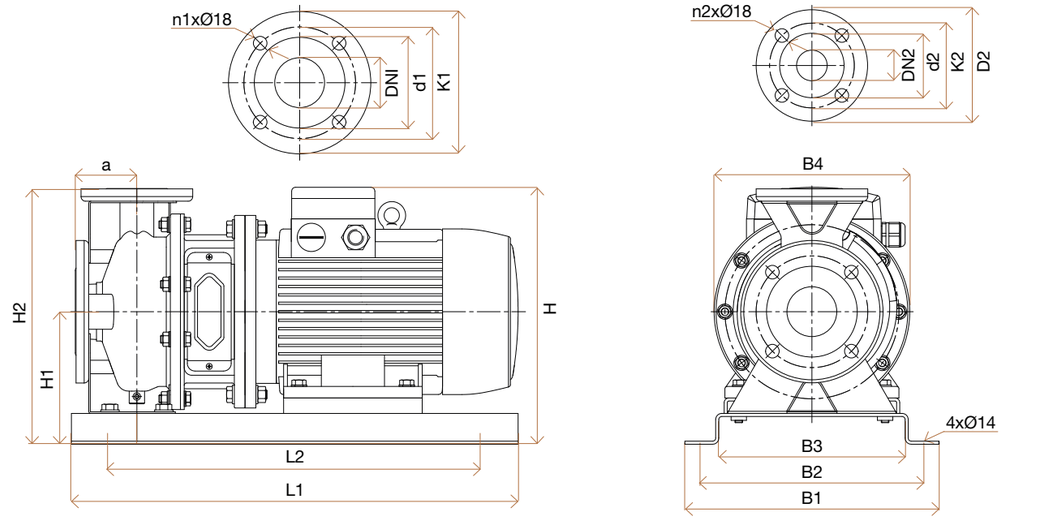
Baseplate model

Model	P(kW)	DN1	DN2	d1	d2	K1	K2	D1	D2	n1	n2	a	H	H1	H2	L1	L2	B1	B2	B3	B4	Weight (kg)
32-125	0,75	50	32	98	75	125	100	160	139	4	4	80	260	152	292	463	335	280	240	200	213	28
	1,1	50	32	98	75	125	100	160	139	4	4	80	260	152	292	463	335	280	240	200	213	29
	1,5	50	32	98	75	125	100	160	139	4	4	80	271	152	292	507	335	280	240	200	213	34
32-160	2,2	50	32	98	75	125	100	160	139	4	4	80	291	172	332	505	405	340	300	252	254	42
	3	50	32	98	75	125	100	160	139	4	4	80	305	172	332	561	405	340	300	252	254	52
32-200	4	50	32	98	75	125	100	160	139	4	4	80	350	200	380	596	475	380	340	292	300	63
	5,5	50	32	98	75	125	100	160	139	4	4	80	372	200	380	619	475	380	340	292	300	82
32-250	7,5	50	32	98	75	125	100	160	139	4	4	100	392	220	445	645	525	430	390	342	350	100
	9,2	50	32	98	75	125	100	160	139	4	4	100	392	220	445	660	525	430	390	342	350	105
	11	50	32	98	75	125	100	160	139	4	4	100	441	220	445	786	665	430	390	342	350	168
40-125	1,1	65	40	118	84	145	110	185	145	4	4	80	280	152	292	463	335	280	240	200	208	29
	1,5	65	40	118	84	145	110	185	145	4	4	80	271	152	292	507	335	280	240	200	208	35
	2,2	65	40	118	84	145	110	185	145	4	4	80	271	152	292	428	335	280	240	200	208	38
40-160	3	65	40	118	84	145	110	185	145	4	4	80	305	172	332	563	405	340	300	252	254	52
	4	65	40	118	84	145	110	185	145	4	4	80	322	172	332	575	405	340	300	252	254	59
40-200	5,5	65	40	118	84	145	110	185	145	4	4	100	372	200	380	642	485	380	340	292	300	83
	7,5	65	40	118	84	145	110	185	145	4	4	100	372	200	380	642	485	380	340	292	300	91
40-250	9,2	65	40	118	84	145	110	185	145	4	4	100	392	220	445	667	525	430	390	342	350	105
	11	65	40	118	84	145	110	185	145	4	4	100	441	220	445	789	665	430	390	342	350	169
	15	65	40	118	84	145	110	185	145	4	4	100	441	220	445	789	665	430	390	342	350	184
50-125	2,2	65	50	118	98	145	125	185	160	4	4	100	291	172	332	535	415	340	300	252	213	41
	3	65	50	118	98	145	125	185	160	4	4	100	304	172	332	591	415	340	300	252	250	51
	4	65	50	118	98	145	125	185	160	4	4	100	322	172	332	603	415	340	300	252	250	58
50-160	5,5	65	50	118	98	145	125	185	160	4	4	100	372	200	380	653	485	380	340	292	300	81
	7,5	65	50	118	98	145	125	185	160	4	4	100	372	200	380	653	485	380	340	292	300	89
50-200	9,2	65	50	118	98	145	125	185	160	4	4	100	372	200	400	657	485	380	340	292	350	97
	11	65	50	118	98	145	125	185	160	4	4	100	421	200	400	782	665	430	390	342	350	163
50-250	15	65	50	118	98	145	125	185	160	4	4	100	441	220	445	789	670	455	415	365	350	186
	18,5	65	50	118	98	145	125	185	160	4	4	100	441	220	445	834	670	455	415	365	350	194
	22	65	50	118	98	145	125	185	160	4	4	100	460	220	445	868	670	455	415	365	350	246
65-125	4	80	65	130	118	160	145	200	185	8	4	100	350	200	380	605	485	380	340	292	250	60
	5,5	80	65	130	118	160	145	200	185	8	4	100	372	200	380	656	485	380	340	292	300	78
	7,5	80	65	130	118	160	145	200	185	8	4	100	372	200	380	656	485	380	340	292	300	86
65-160	11	80	65	130	118	160	145	200	185	8	4	100	421	200	400	797	665	430	390	342	350	160
	15	80	65	130	118	160	145	200	185	8	4	100	421	200	400	797	665	430	390	342	350	175
65-200	18,5	80	65	130	118	160	145	200	185	8	4	100	441	220	445	835	670	455	415	365	350	190
	22	80	65	130	118	160	145	200	185	8	4	100	460	220	445	869	670	455	415	365	355	243
65-250	30	80	65	130	118	160	145	200	185	8	4	100	502	240	490	953	785	495	455	405	420	314
	37	80	65	130	118	160	145	200	185	8	4	100	502	240	490	953	785	495	455	405	420	334

Dimensions and weight

Model	P(kW)	DN1	DN2	d1	d2	K1	K2	D1	D2	n1	n2	a	H	H1	H2	L1	L2	B1	B2	B3	B4	Weight (kg)
80-160	11	100	80	150	130	180	160	220	200	8	8	125	441	220	445	832	690	430	390	340	350	164
	15	100	80	150	130	180	160	220	200	8	8	125	441	220	445	832	690	430	390	340	350	179
	18,5	100	80	150	130	180	160	220	200	8	8	125	441	220	445	876	690	430	390	340	350	187
80-200	22	100	80	150	130	180	160	220	200	8	8	125	460	220	470	905	765	495	455	405	355	249
	30	100	80	150	130	180	160	220	200	8	8	125	502	240	490	988	765	495	455	405	400	310
	37	100	80	150	130	180	160	220	200	8	8	125	502	240	490	988	765	495	455	405	400	330
80-250	45	100	80	150	130	180	160	220	200	8	8	125	572	285	565	1043	755	560	520	464	450	457
	55	100	80	150	130	180	160	220	200	8	8	125	646	330	610	1156	865	640	590	520	550	543
	75	100	80	150	130	180	160	220	200	8	8	125	725	360	640	1219	925	700	650	580	550	708

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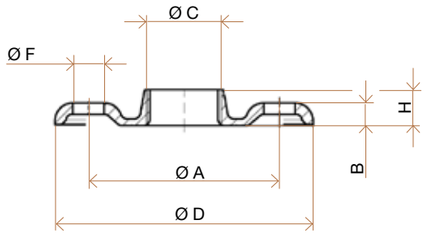


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Installation & Safety Guidelines

Pressed lapped flanges threaded according to en 1092-1

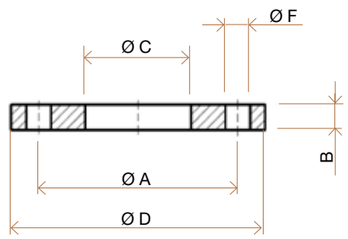
DN	Dimensions (mm)						Holes N°	PN
	ø C	ø A	B	ø D	h	ø F		
32	G1¼	100	13	140	16	18	4	16
40	G1½	110	14	150	19	18	4	16
50	G2	125	16	165	24	18	4	16
65	G2½	145	16	185	23	18	4	16
80	G3	160	17	200	27	18	8	16
100	G4	180	18	200	31	18	8	16



H_00021_A

Slip on flanges type 01 according to en 1092-1

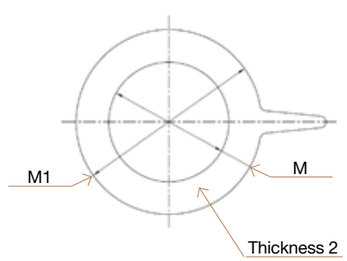
DN	Dimensions (mm)					Holes N°	PN
	ø C	ø A	B	ø D	ø F		
32	43,5	100	18	140	18	4	16
40	49,5	110	18	150	18	4	16
50	61,5	125	20	165	18	4	16
65	77,5	145	20	185	18	8	16
80	90,5	160	20	200	18	8	16
100	116	180	22	220	18	8	16



H_00022_A

Gasket dimensions table

DN	Dimensions (mm)	
	ø A	ø B
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140
100	115	160
Thickness: 2 mm		
Standard material: EPDM		



DN	M	M1
32	38	82
40	50	93
50	60	107
65	80	125
80	90	140
100	115	160

H_00022_A

Notes

BE
PUMPING
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