

60 Hz



e-LNT Series

TWIN IN-LINE ELECTRIC PUMPS
EQUIPPED WITH **IE3** MOTORS

 **LOWARA**
a  **xylem** brand

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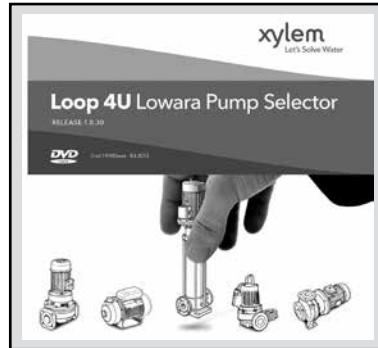
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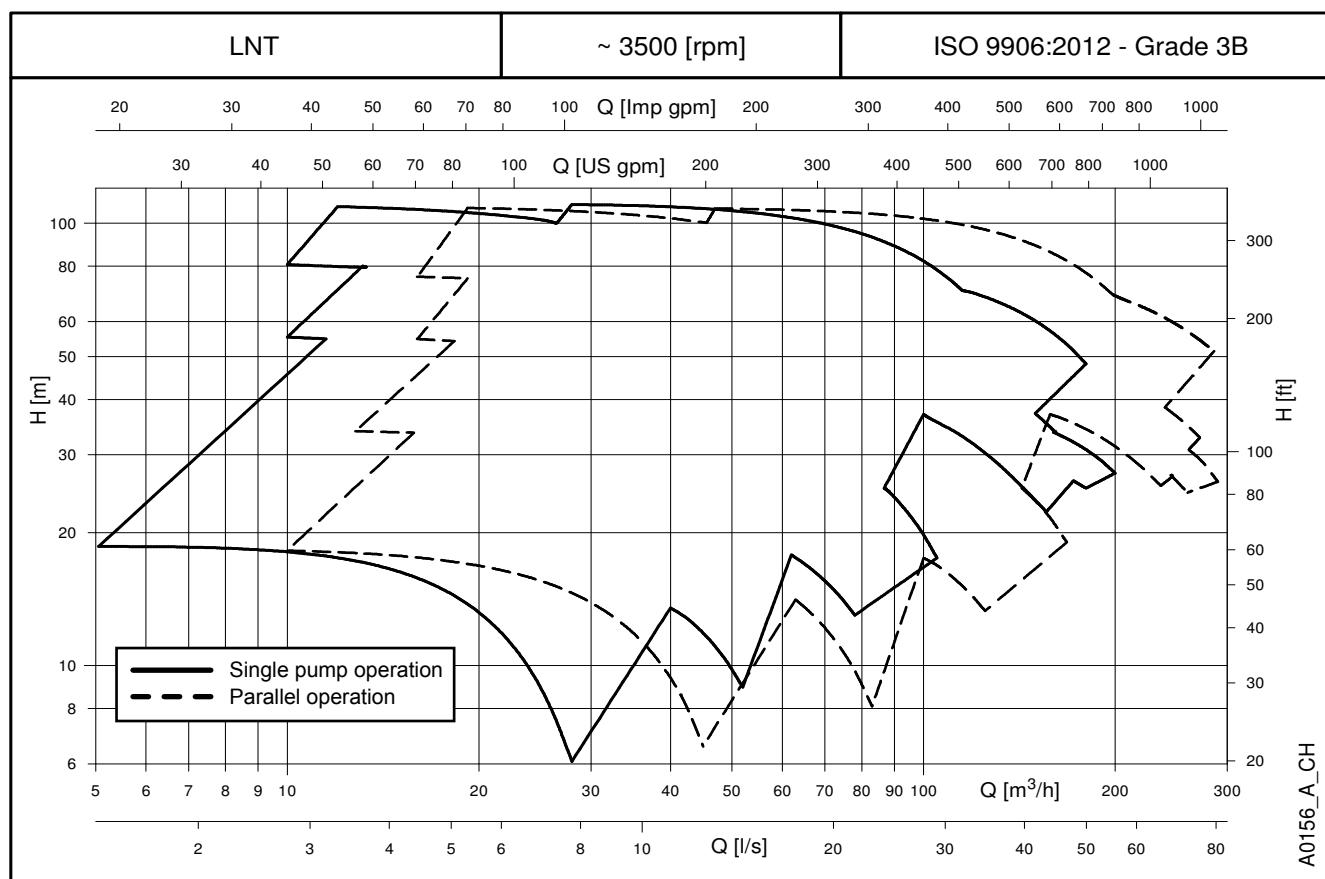
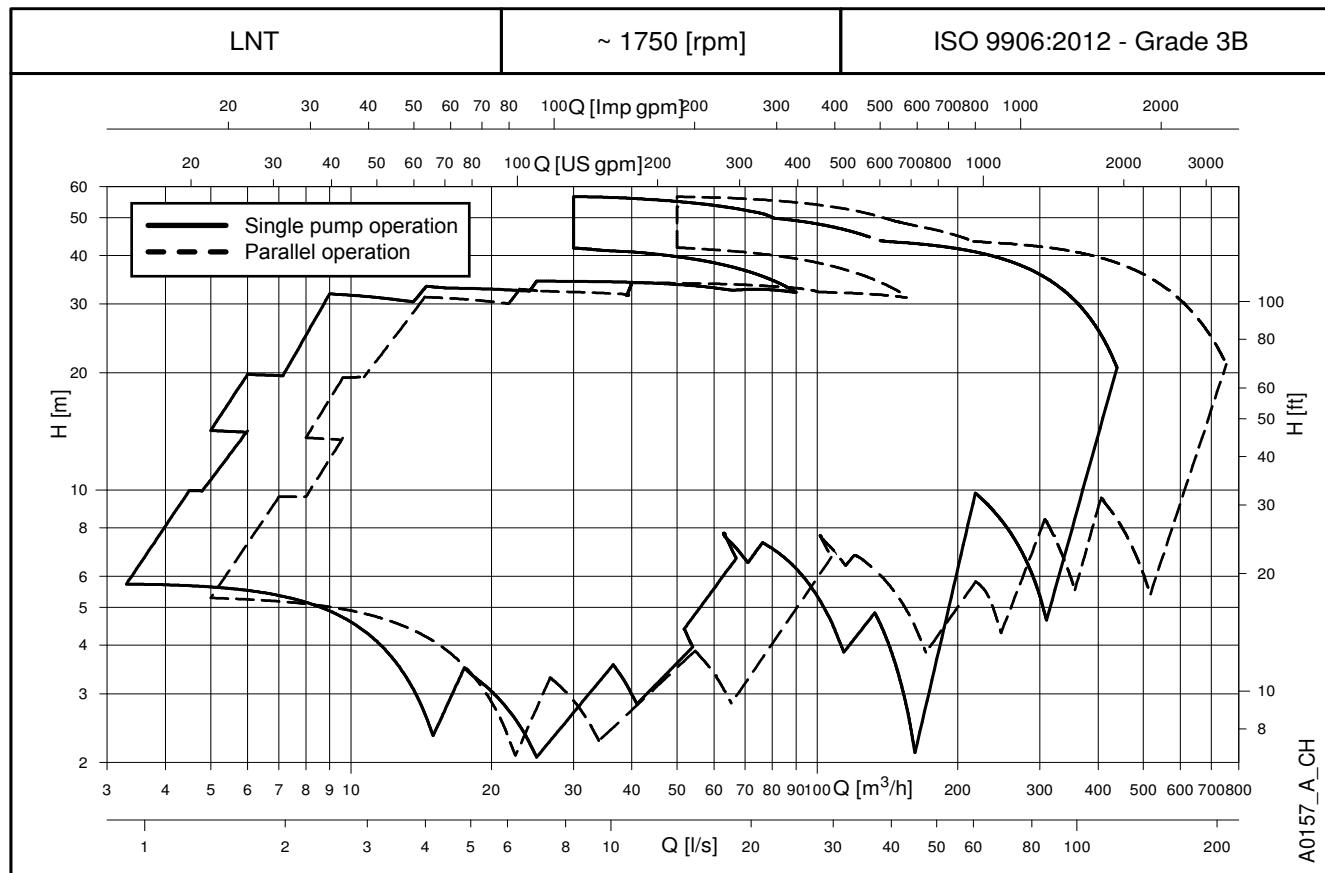
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For more information, please, see page 109-110.

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e-LNT SERIES
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 2 POLES

HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES


e-LNT SERIES GENERAL INTRODUCTION

The new **Lowara e-LNT Series** is the result of the close collaboration between our customers and us; the new range has been redesigned and improved to meet the Commercial Building Services (CBS) requirements, in terms of performances and energy saving.

In addition the new **Lowara e-LNT Series** can be customized to meet the needs of the Industry, keeping the best-in-class quality in production that affords our pumps continuous reliability and robustness in operation.

Pump design

The new **Lowara e-LNT Series** is a dual volute centrifugal pump with in-line suction and delivery flanges; both volutes are fitted with closed impellers linked by an automatic changeover valve. The two pumps can operate separately or in parallel.

The **e-LNT Series** has a "Back pull-out" design (impeller, adapter, and motor can be extracted without disconnecting the pump body from the piping system). The dual volutes provides system redundancy; and one volute can be serviced while the other remains operational.

The pumps have cast iron casing as standard; the impeller standard material is cast iron but is also available in bronze and stainless steel.

The pumps are equipped with interchangeable mechanical seals and IE3 efficiency motors; and are available in the following constructions:

Extended shaft

Close-coupled by means of an adaptor bracket with an impeller keyed directly to the special motor shaft extension.



Hydraulic specifications

- Maximum delivery
 - (one pump running):
 - 200 m³/h** (2-pole range)
 - 439 m³/h** (4-pole range)
- (two pump running):
 - 290 m³/h** (2-pole range)
 - 754 m³/h** (4-pole range)
- Maximum head: **110 m** (2-pole range).
- 57 m** (4-pole range).
- Hydraulic performance compliant with ISO 9906:2012 – Grade 3B.
Grade 2B and 1B available upon request.
- Fluid temperature range:
 - standard version (with mechanical seal BQ1EGG-WA and EPDM gasket) **-25 to +120 °C**
 - versions on request (depending on mechanical seal and gasket) **-20* or -25 to +120 or +140 °C**.
- Maximum operating pressure:
 - standard version (with mechanical seal BQ1EGG-WA) **16 bar** @ 90 °C and 10 bar @ 120 °C
 - versions on request (with other mechanical seals) **16 bar** @ 120 °C and 14,9 bar @ 140 °C

* Fluoro-elastomer: FPM (old ISO), FKM (ASTM & new ISO).

List of the Directives

- Machinery Directive MD 2006/42/EC
- Electromagnetic Compatibility Directive EMCD 2004/108/EC

Stub shaft

Rigid-coupled with a bracket, an adaptor and a rigid coupling keyed to the standard motor shaft extension.



Motor specifications

- Squirrel cage in short circuit enclosed construction with external ventilation (TEFC).
- 2-pole and 4-pole ranges.
- **IP55** protection degree as motor (EN 60034-5), IPX5 as electro-pump (EN 60529).
- Performances according to EN 60034-1.
- **IE3** efficiency level (three-phase 0,75 to 375 kW).
- **155 (F)** insulation class.
- Standard voltage:
 - 1 x 220-230 V 60 Hz.
 - 3 x 220-230/380-400 V 60 Hz.
 - 3 x 220/380 and 3 x 380/660 V 60 Hz.
- Maximum ambient temperature: 40 °C.

Note

- Anti-clockwise rotation when facing pump's suction port.
- Pump does not include counter-flanges.

and the main technical norms

- EN 809, EN 60204-1 (safety)
- EN 1092-2 (cast iron flanges)

EN 61000-6-1, EN 61000-6-3

IEC 60034-30, IEC 60034-30-1 (electric motors)

e-LNT SERIES

COMMERCIAL BUILDING SERVICES (CBS)

APPLICATIONS & BENEFITS

Applications

The **Lowara e-LNT** Series is suitable for many different applications demanding variable duty points, reliable, and efficient products in cost saving operation.

The Lowara e-LNT Series can be used for the following CBS applications:

- **HVAC**

- Liquid transfer in heating systems.
- Liquid transfer in air-conditioning systems.
- Liquid transfer in ventilation systems.

- **Water Supply**

- Pressure boosting in commercial buildings.
- Irrigation systems.



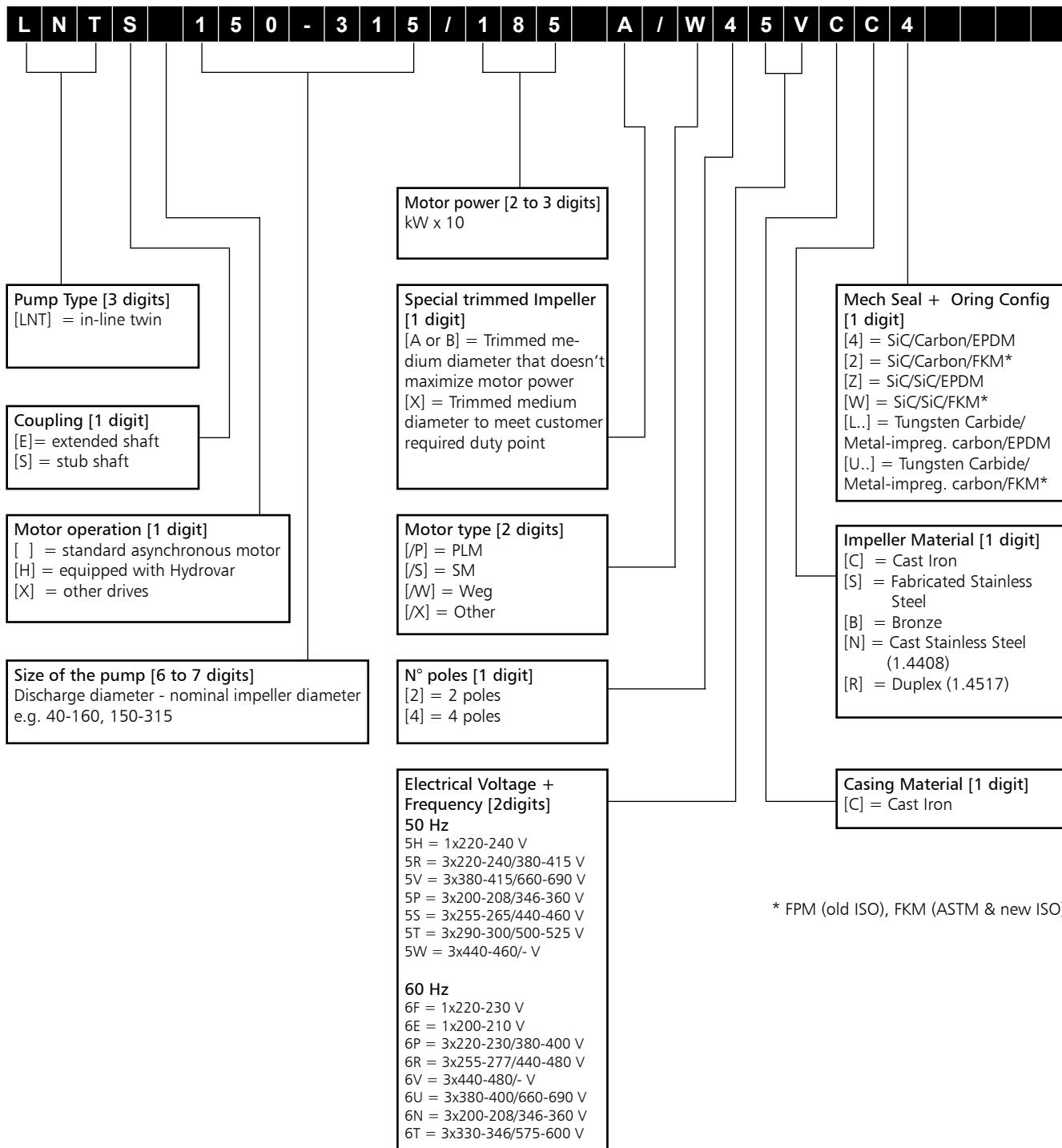
Benefits

The Lowara e-LNT Series permits to achieve the following benefits.

- **Performances:** the e-LNT pumps are equipped with IE3 motors, and with hydraulic target points and coverage that satisfy the needs of CBS applications. The standard full cast iron version with PN16, 120 °C maximum fluid temperature, and EPDM elastomer is exactly what the CBS Market needs.
- **Reliability:** robust construction and high-quality standards in production, interchangeable mechanical seals and wear rings, guarantee a continuous operation without faults and a shorter down time for maintenance. Dual volute configuration allows for built-in redundancy; but also provides the possibility of parallel operation.
- **Versatility:** beside the standard offer, the Lowara e-LNT series is available in different construction as well as with different material configurations for impellers and elastomers; thus addressing a wide range of applications.
- **Total cost ownership:** the best-in-class hydraulic and electric efficiency, the HYDROVAR-equipped versions, the easy and quick maintenance, allow to reduce the operation and maintenance cost and to save energy when the pump is working or is at rest.
- **Pre-post sales support:** we are continuously working close to our customers to help them in selecting the right pump for the specific application. A user-friendly selection software is available on the website, on DVD, or on Apps for mobile phones. Experienced engineers are fully dedicated to big projects.



e-LNT SERIES IDENTIFICATION CODE



* FPM (old ISO), FKM (ASTM & new ISO)

EXAMPLES

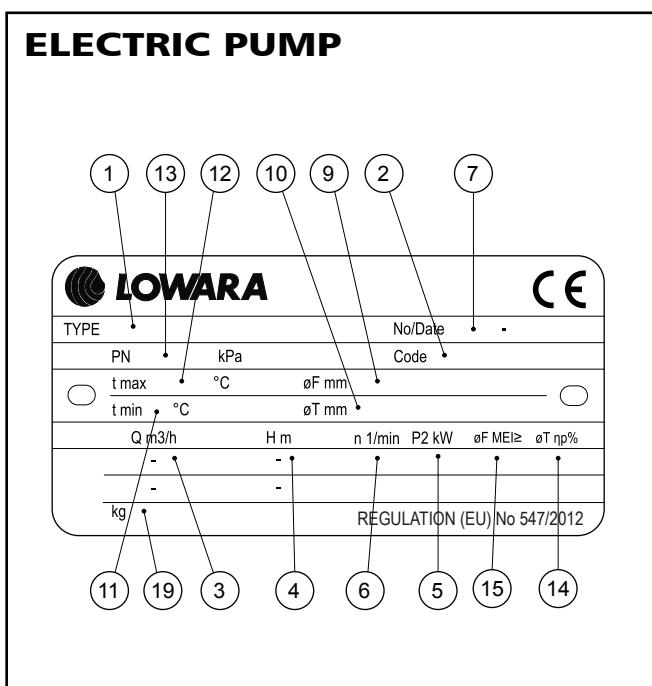
LNTS 125-160/75/P46PCC4

In-line twin, electric pump stub shaft coupling, DN125 nominal discharge port, 160 mm nominal impeller diameter, 7,5 kW rated motor power, PLM IE3 model, 4 pole, 60 Hz 220-230/380-400 V, cast iron casing, cast iron impeller, Silicon Carbide/Carbon/EPDM mechanical seal.

LNTS 150-250/220/W46UCB4

In-line twin, electric pump stub shaft coupling, DN150 nominal discharge port, 250 mm nominal impeller diameter, 22 kW rated motor power, WEG IE3 model, 4 pole, 60 Hz 380-400/660-690 V, cast iron casing, bronze impeller, Silicon Carbide/Carbon/EPDM mechanical seal.

e-LNT SERIES RATING PLATE



LEGEND

- 1 - Electric pump unit type
- 2 - Electric pump unit code
- 3 - Flow range
- 4 - Head range
- 5 - Nominal or maximum pump power
- 6 - Speed
- 7 - Serial number, or
order number + order position number
- 9 - Full impeller diameter (only filled in for trimmed
impellers)
- 10 - Trimmed impeller diameter (only filled in for
trimmed impellers)
- 11 - Minimum operating liquid temperature
- 12 - Maximum operating liquid temperature
- 13 - Maximum operating pressure
- 14 - Hydraulic efficiency in best efficiency point (50 Hz)
- 15 - Minimum efficiency index MEI, as per Regulation
(EU) No 547/2012 (50 Hz)
- 19 - Weight

e-LNT SERIES
LIST OF MODELS AT 60 Hz, 2 POLES

SIZE LNT..2	kW	VERSION	
		LNTE	LNTS
40-125/15/S(*)	1,5	•	•
40-125/22/P(*)	2,2	•	•
40-125/30/P	3	•	•
40-125/40/P	4	•	•
40-125/55/P	5,5	•	•
40-160/40/P	4	•	•
40-160/55/P	5,5	•	•
40-160/75/P	7,5	•	•
40-160/92/P	9,2	•	-
40-200/75/P	7,5	•	•
40-200/92/P	9,2	•	-
40-200/110A/P	11	-	•
40-200/110/P	11	•	•
40-250/150/P	15	•	•
40-250/185/P	18,5	•	•
40-250/220/P	22	•	•
50-125/30/P	3	•	•
50-125/40/P	4	•	•
50-125/55/P	5,5	•	•
50-125/75/P	7,5	•	•
50-160/55/P	5,5	•	•
50-160/75/P	7,5	•	•
50-160/92/P	9,2	•	-
50-160/110/P	11	•	-
50-200/92/P	9,2	•	-
50-200/110A/P	11	-	•
50-200/110/P	11	•	•
50-200/150/P	15	-	•
50-200/185/P	18,5	-	•
50-250/185/P	18,5	•	•
50-250/220/P	22	•	•
65-125/55/P	5,5	•	•
65-125/75/P	7,5	•	•
65-125/92/P	9,2	•	-
65-125/110A/P	11	-	•
65-125/110/P	11	•	•
65-160/110/P	11	•	•
65-160/150/P	15	-	•
65-160/185/P	18,5	-	•
65-200/185/P	18,5	•	•
65-200/220/P	22	•	•
65-200/300/W	30	-	•
65-250/220/P	22	•	•
65-250/300/W	30	-	•
65-250/370/W	37	-	•

• = Available

LNT_models-2p60-en_a_sc

SIZE LNT..2	kW	VERSION	
		LNTE	LNTS
80-160/150/P	15	•	•
80-160/185/P	18,5	•	•
80-160/220/P	22	•	•
80-200/220/P	22	-	•
80-200/300/W	30	-	•
80-200/370/W	37	-	•
100-160/185/P	18,5	•	•
100-160/220/P	22	•	•

(*) Models available also in single-phase version.

LEGEND
LNTE : Extended shaft (twin version).

LNTS : Stub shaft (twin version).

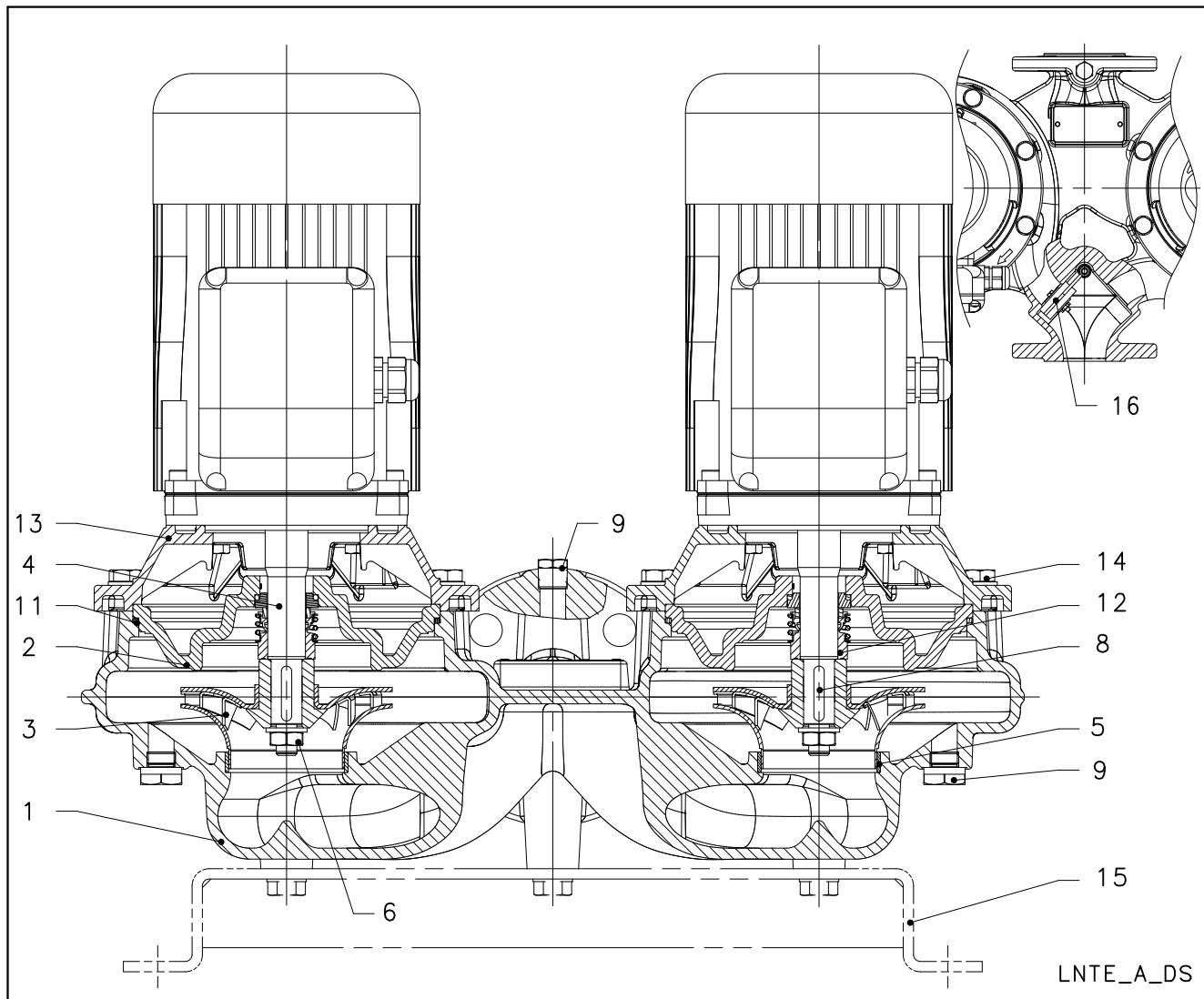
e-LNT SERIES
LIST OF MODELS AT 60 Hz, 4 POLES

SIZE LNT..4	kW	VERSION	
		LNTE	LNTS
40-125/02/S	0,25	●	-
40-125/03/S	0,37	●	-
40-125/05/S	0,55	●	●
40-125/07/X	0,75	●	●
40-160/05/S	0,55	●	●
40-160/07/X	0,75	●	●
40-160/11/P	1,1	●	●
40-200/11/P	1,1	●	●
40-200/15/P	1,5	●	●
40-200/22/P	2,2	-	●
40-250/22/P	2,2	●	●
40-250/30A/P	3	●	●
40-250/30/P	3	●	●
40-250/40/P	4	●	●
50-125/03/S	0,37	●	-
50-125/05/S	0,55	●	●
50-125/07/X	0,75	●	●
50-125/11/P	1,1	●	●
50-160/07/X	0,75	●	●
50-160/11/P	1,1	●	●
50-160/15A/P	1,5	●	●
50-160/15/P	1,5	●	●
50-200/15/P	1,5	●	●
50-200/22/P	2,2	-	●
50-200/30/P	3	-	●
50-250/30/P	3	●	●
50-250/40/P	4	●	●
50-250/55/P	5,5	●	●
65-125/07/X	0,75	●	●
65-125/11A/P	1,1	●	●
65-125/11/P	1,1	●	●
65-125/15/P	1,5	●	●
65-160/11/P	1,1	●	●
65-160/15/P	1,5	●	●
65-160/22/P	2,2	-	●
65-160/30/P	3	-	●
65-200/22/P	2,2	●	●
65-200/30A/P	3	●	●
65-200/30/P	3	●	●
65-200/40/P	4	●	●
65-250/40/P	4	●	●
65-250/55/P	5,5	●	●
65-250/75/P	7,5	●	●

● = Available

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SIZE LNT..4	kW	VERSION	
		LNTE	LNTS
80-160/22A/P	2,2	●	●
80-160/22/P	2,2	●	●
80-160/30/P	3	●	●
80-160/40/P	4	●	●
80-200/30/P	3	-	●
80-200/40/P	4	-	●
80-200/55A/P	5,5	-	●
80-200/55/P	5,5	-	●
80-200/75/P	7,5	-	●
80-250/110A/P	11	-	●
80-250/110/P	11	-	●
80-315/150/P	15	-	●
80-315/185/W	18,5	-	●
80-315/220/W	22	-	●
80-315/300/W	30	-	●
100-160/22/P	2,2	●	●
100-160/30/P	3	●	●
100-160/40/P	4	●	●
100-160/55/P	5,5	●	●
100-200/55/P	5,5	-	●
100-200/75/P	7,5	-	●
100-200/110/P	11	-	●
100-250/75/P	7,5	-	●
100-250/110A/P	11	-	●
100-250/110/P	11	-	●
100-250/150/P	15	-	●
100-315/185/W	18,5	-	●
100-315/220/W	22	-	●
100-315/300/W	30	-	●
125-160/40/P	4	-	●
125-160/55/P	5,5	-	●
125-160/75/P	7,5	-	●
125-200/75/P	7,5	-	●
125-200/110/P	11	-	●
125-200/150/P	15	-	●
125-250/150/P	15	-	●
125-250/185/W	18,5	-	●
125-315/220/W	22	-	●
125-315/300/W	30	-	●
150-200/110/P	11	-	●
150-200/150/P	15	-	●
150-200/185/W	18,5	-	●
150-250/220/W	22	-	●
150-250/300/W	30	-	●
150-315/370/W	37	-	●
150-315/450/W	45	-	●

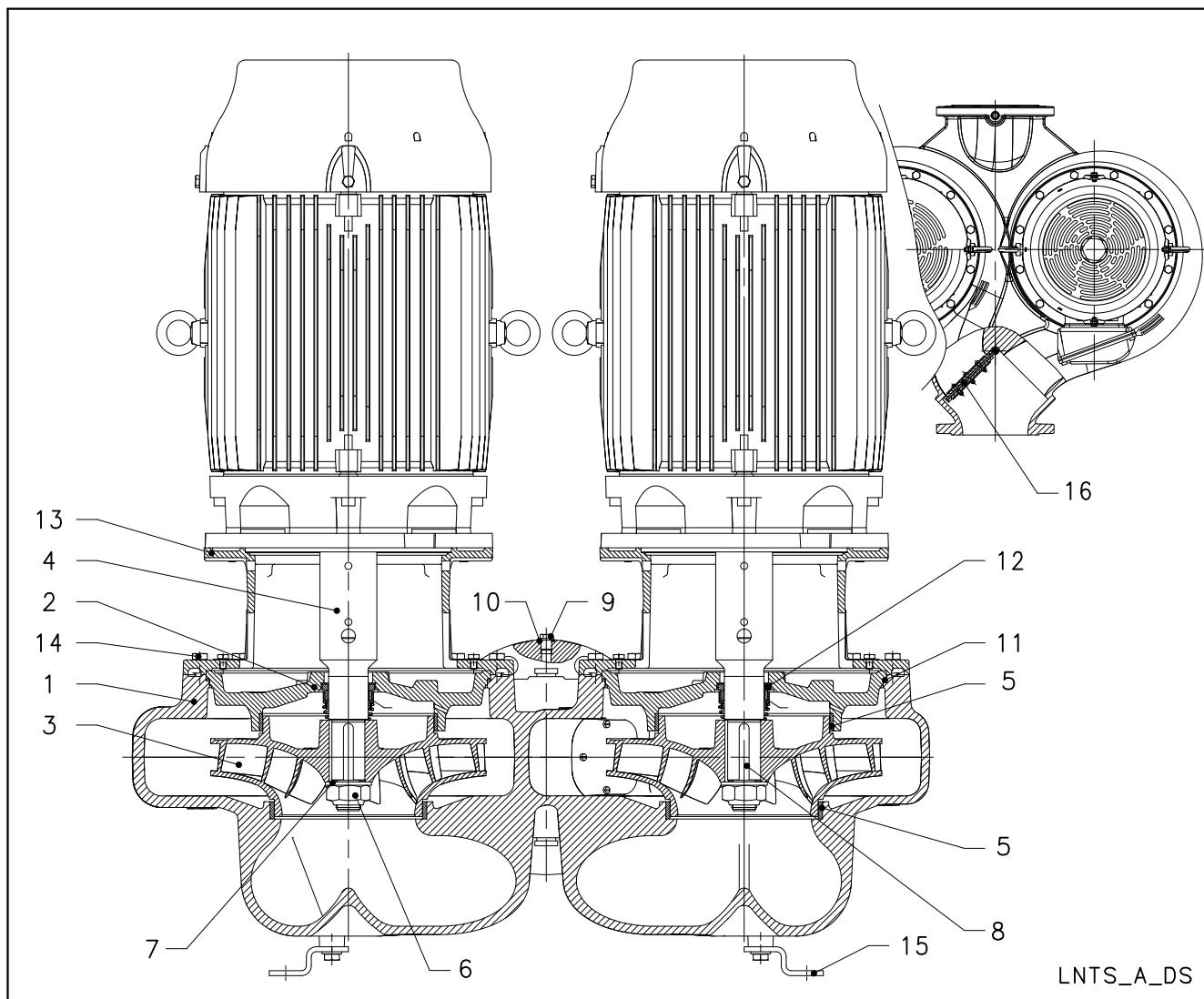
LNTE SERIES
ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS


LNTE_A_DS

REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
3	Impeller (40, 50, 65)	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
3	Impeller (80, 100)	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
	Impeller (80, 100)	Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
4	Stub shaft	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Wear ring	Stainless steel	EN 10088 - X5CrNi18-10 (1.4301)	AISI 304
6	Impeller lock nut and washer	Stainless steel	EN 10088-1-X5CrNiMo17-12-2 (1.4401)	AISI 316
8	Impeller key	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
9	Fill and drain plugs	Nickel-plated brass	EN 12164-CuZn39Pb3 (CW614N)	-
11	O-Ring	EPDM (standard version)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	Motor adapter *	Aluminium	EN 1706-AC-AISi11Cu2 (Fe) (AC46100)	-
	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute casing fastening bolts and screws	Carbon steel		
15	Pump base (optional)	Carbon steel	EN 10025-2 - 1.0038	
16	Pump flap complete	Stainless steel/EPDM	A4 (~ 1.4301) / EPDM 50	

* 2/4 pole: 40/50/65-125, 40/50-160

LNTE-en_a_tm

LNTS SERIES
ELECTRIC PUMP CROSS-SECTION AND MAIN COMPONENTS


LNTS_A_DS

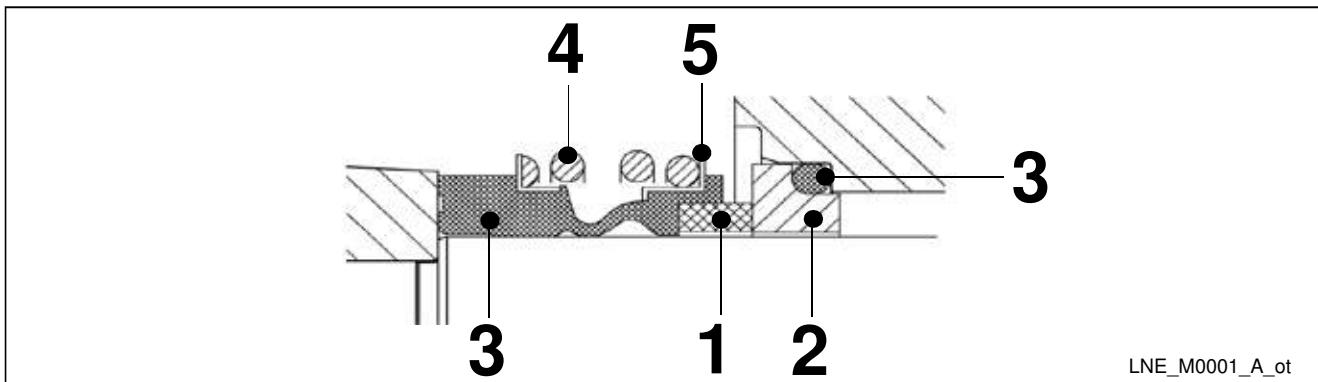
REF. N.	PART	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Volute casing	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
2	Casing cover	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
3	Impeller (40, 50, 65)	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
3	Impeller	Cast iron	EN 1561 - GJL-200 (JL1030)	ASTM Class 30
	Impeller	Bronze	EN 1982 - CuSn10-C (CC480K)	UNS C90700
4	Stub shaft	Stainless steel	EN 10088-1-X2CrNiMo17-12-2 (1.4404)	AISI 316L
	Stub shaft (80-250, 100-200, 100-250, 125, 150)	Stainless steel	EN 10088 - X17CrNi16-2 (1.4057)	AISI 431
5	Wear ring	Stainless steel	EN 10088 - X5CrNi18-10 (1.4301)	AISI 304
6	Impeller nut	Stainless steel	A4 (~ 1.4401)	
7	Impeller washer	Stainless steel	A4 (~ 1.4401)	
8	Impeller key	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
9	Plug	Stainless steel	EN 10088 - X6CrNiMo17-12-2 (1.4571)	AISI 316Ti
10	Gasket	Asbestos-free synthetic fiber AFM 34		
11	O-Ring	EPDM (standard version)		
12	Mechanical seal	Carbon / Silicon carbide / EPDM (standard version)		
13	Motor adapter *	Aluminium	EN 1706-AC-AISi11Cu2 (Fe) (AC46100)	-
	Motor adapter	Cast iron	EN 1561 - GJL-250 (JL1040)	ASTM Class 35
14	Volute - casing fastening screws	Carbon steel		
15	Pump base	Carbon steel	EN 10025-2 - 1.0038	
16	Pump flap complete	Stainless steel/EPDM	A4 (~ 1.4301) / EPDM 50	

* 2/4 pole: 40/50/65-125, 40/50-160

LNTS-en_a_tm

e-LNT SERIES MECHANICAL SEALS

Mechanical seal with mounting dimensions according to EN 12756 and ISO 3069.



LIST OF MATERIALS

POSITION 1 - 2	POSITION 3			POSITION 4 - 5	
B : Resin impregnated carbon	E : EPDM			G : AISI 316	
A : Antimony impregnated carbon	V : FKM (FPM)				
Q ₁ : Silicon carbide					
U ₃ : Tungsten carbide					

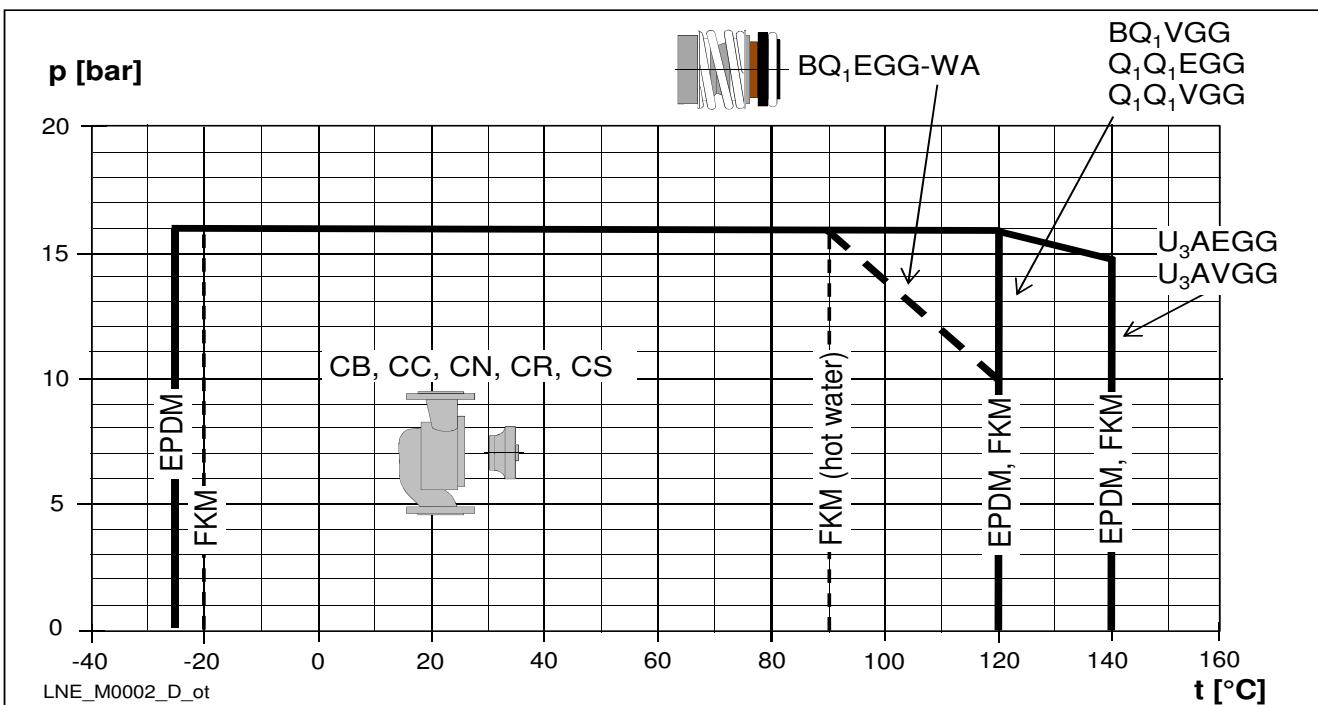
TYPE OF SEAL

TYPE	POSITION					PRESSURE (bar)	TEMPERATURE (°C)
	1 ROTATING ASSEMBLY	2 FIXED ASSEMBLY	3 ELASTOMERS	4 SPRINGS	5 OTHER COMPONENTS		
STANDARD MECHANICAL SEAL							
B Q ₁ E G G - WA	B	Q ₁	E	G	G	16/10	-25 ... +90/+120
OTHER TYPES OF MECHANICAL SEAL							
B Q ₁ V G G	B	Q ₁	V	G	G	16	-20 ... +120 *)
Q ₁ Q ₁ E G G	Q ₁	Q ₁	E	G	G	16	-25 ... +120
Q ₁ Q ₁ V G G	Q ₁	Q ₁	V	G	G	16	-20 ... +120 *)
U ₃ A E G G	U ₃	A	E	G	G	16	-25 ... +140
U ₃ A V G G	U ₃	A	V	G	G	16	-20 ... +140 *)

*) for hot water: max. +90 °C

Ine-int_tipi-ten-mec-en_b_tc

PRESSURE/TEMPERATURE APPLICATION LIMITS FOR COMPLETE PUMP



e-LNT SERIES MOTORS

- Short-circuit squirrel-cage motor, enclosed construction with external ventilation (TEFC).
- Rated power from 1,5 to 37 kW for 2-pole range and from 0,25 to 45 kW for 4-pole range.
- Maximum ambient temperature: 40 °C.
- **IP55** protection degree.
- Insulation class **155 (F)**.
- **Standard** three-phase surface motors $\geq 0,75$ kW supplied as **IE3**.
- IE efficiency level according to IEC 60034-30 and IEC 60034-30-1 ($\geq 0,75$ kW).
- Electrical performances according to EN 60034-1.
- Metric cable gland according to EN 50262.

• **Standard voltage**

Single-phase version: 220-230 V 60 Hz

Built-in automatic reset overload protection.

Three-phase 2-pole version:

220-230/380-400 V 60 Hz for power up to 22 kW.

220/380 V 60 Hz for power above 22 kW.

Three-phase 4-pole version:

220-230/380-400 V 60 Hz for power up to 15 kW.

220/380 V 60 Hz for power above 15 kW.

Overload protection to be provided by the user.

- **PTC included** as standard only for WEG motors (one per phase, 155°C).

LNT-E SERIES SINGLE-PHASE MOTORS AT 60 Hz, 2 POLES

P _N kW	MOTOR TYPE	IEC SIZE*	Construction Design	INPUT CURRENT In (A) 220-230 V	CAPACITOR		DATA FOR 220 V 60 Hz VOLTAGE						
					μF	V	min ⁻¹	I _s / I _n	η %	cosφ	T _n Nm	T _{s/Tn}	T _{m/Tn}
1,5	SM90RB14S2/1156	90R	B14	9,28-9,35	40	450	3455	4,91	76,3	0,96	4,14	0,49	2,19
2,2	PLM90B14S2/1226	90	B14	12,3-11,7	60	450	3455	4,99	83,4	0,98	6,08	0,54	2,06

* R = Reduced size of motor casing as compared to shaft extension and flange.

LNEE-motm-2p60-en_a_te

LNTÉ SERIES
THREE-PHASE MOTORS AT 60 Hz, 2 POLES

P _N kW	Efficiency η _N %												IE	Year of manufacture from 11/2014		
	Δ 220 V Y 380 V			Δ 230 V Y 400 V			Δ 380 V Y 660 V			Δ 400 V Y 690 V						
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4				
1,5	87,2	87,0	84,6	87,2	87,0	84,6	87,2	87,0	84,6	87,2	87,0	84,6				
2,2	87,7	87,2	84,7	87,7	87,2	84,7	87,7	87,2	84,7	87,7	87,2	84,7				
3	89,1	88,8	86,9	89,1	88,8	86,9	89,1	88,8	86,9	89,1	88,8	86,9				
4	91,0	91,0	89,6	91,0	91,0	89,6	91,0	91,0	89,6	91,0	91,0	89,6				
5,5	91,0	90,5	88,6	91,0	90,5	88,6	91,0	90,5	88,6	91,0	90,5	88,6				
7,5	90,8	90,2	88,1	90,8	90,2	88,1	90,8	90,2	88,1	90,8	90,2	88,1				
9,2	91,7	91,3	89,4	91,7	91,3	89,4	91,7	91,3	89,4	91,7	91,3	89,4				
11	92,4	92,3	90,9	92,4	92,3	90,9	92,4	92,3	90,9	92,4	92,3	90,9				
15	93,4	93,1	91,7	93,4	93,1	91,7	93,4	93,1	91,7	93,4	93,1	91,7				
18,5	93,5	93,2	91,9	93,5	93,2	91,9	93,5	93,2	91,9	93,5	93,2	91,9				
22	93,4	92,7	90,8	93,4	92,7	90,8	93,4	92,7	90,8	93,4	92,7	90,8				

P _N kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz Voltage					Ts/T _N	Tm/T _N						
	Xylem Service Italia Srl Reg. No. 07520560967																		
	Montecchio Maggiore Vicenza - Italia																		
Model							cosφ	I _s / I _N	T _N Nm	T _s /T _N	T _m /T _N								
1,5	SM90RB14S2/315 E3		90R	SPECIAL	2	60	0,82	9,79	4,10	4,36	4,37								
2,2	PLM90B14S2/322 E3		90				0,82	9,80	6,01	3,80	4,01								
3	PLM90B14S2/330 E3		90				0,82	9,35	8,21	4,26	4,10								
4	PLM112RB14S2/340 E3		112R				0,87	10,0	10,9	2,43	4,53								
5,5	PLM112B14S2/355 E3		112				0,88	12,0	15,0	4,70	5,55								
7,5	PLM132B14S2/375 E3		132				0,87	11,0	20,2	3,31	4,98								
9,2	PLM132B14S2/392 E3		132				0,87	11,0	24,9	3,55	5,00								
11	PLM132B14S2/3110 E3		132				0,88	10,4	29,8	3,45	4,63								
	PLM132B14S3/3110 E3		132				0,89	9,81	40,3	2,79	4,41								
15	PLM160B14S3/3150 E3		160				0,89	10,1	49,7	2,78	4,59								
18,5	PLM160B14S3/3185 E3		160				0,87	11,3	59,1	3,27	5,18								
22	PLM160B14S3/3220 E3		160																

P _N kW	Voltage U _N V								n _N min ⁻¹	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **			
	Δ		Y		Δ		Y							
	220 V	230 V	380 V	400 V	380 V	400 V	660 V	690 V	I _N (A)		T. amb min/max °C	ATEX		
1,5	5,58	5,53	3,22	3,19	3,23	3,22	1,86	1,86	3485 ÷ 3505					
2,2	7,97	7,93	4,60	4,58	4,59	2,65	4,57	2,64	3490 ÷ 3505					
3	10,9	10,8	6,30	6,23	6,32	6,29	3,65	3,63	3485 ÷ 3500					
4	13,4	13,2	7,76	7,62	7,78	7,63	4,49	4,41	3510 ÷ 3520					
5,5	18,2	18,0	10,5	10,4	10,5	10,5	6,08	6,06	3505 ÷ 3515					
7,5	25,0	24,7	14,5	14,2	14,4	14,1	8,34	8,15	3535 ÷ 3540					
9,2	30,4	29,9	17,6	17,3	17,7	17,5	10,2	10,1	3590 ÷ 3540					
11	35,7	35,0	20,6	20,2	21,0	20,8	12,1	12,0	3530 ÷ 3540					
15	47,6	46,4	27,5	26,8	27,8	27,1	16,1	15,6	3550 ÷ 3560					
18,5	58,7	57,5	33,9	33,2	34,0	33,2	19,6	19,2	3550 ÷ 3555					
22	71,1	70,2	41,1	40,5	40,8	39,8	23,5	23,0	3555 ÷ 3560					

* R = Reduced size of motor casing as compared to shaft extension and flange.

LNEE-IE3-mott-2p60-en_a_te

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

1000
VI
-15 / 40

No

LNTS SERIES
THREE-PHASE MOTORS AT 60 Hz, 2 POLES

P _N kW	Efficiency η _N %												Year of manufacture	
	Δ 220 V Y 380 V			Δ 230 V Y 400 V			Δ 380 V Y 660 V			Δ 400 V Y 690 V				
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4		
1,5	87,2	87,0	84,6	87,2	87,0	84,6	87,2	87,0	84,6	87,2	87,0	84,6	from 11/2014 3	
2,2	87,7	87,2	84,7	87,7	87,2	84,7	87,7	87,2	84,7	87,7	87,2	84,7		
3	89,1	88,8	86,9	89,1	88,8	86,9	89,1	88,8	86,9	89,1	88,8	86,9		
4	91,0	91,0	89,6	91,0	91,0	89,6	91,0	91,0	89,6	91,0	91,0	89,6		
5,5	91,0	90,5	88,6	91,0	90,5	88,6	91,0	90,5	88,6	91,0	90,5	88,6		
7,5	90,8	90,2	88,1	90,8	90,2	88,1	90,8	90,2	88,1	90,8	90,2	88,1		
11	92,5	92,2	90,6	92,5	92,2	90,6	92,5	92,2	90,6	92,5	92,2	90,6		
15	93,4	93,1	91,7	93,4	93,1	91,7	93,4	93,1	91,7	93,4	93,1	91,7		
18,5	93,5	93,2	91,9	93,5	93,2	91,9	93,5	93,2	91,9	93,5	93,2	91,9		
22	93,4	92,7	90,8	93,4	92,7	90,8	93,4	92,7	90,8	93,4	92,7	90,8		

P _N kW	Manufacturer		IEC SIZE*	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz Voltage								
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia														
	Model														
1,5	SM90RB5/315 E3		90R	B5	2	60	0,82	9,79	4,10	4,36	4,37				
2,2	PLM90B5/322 E3		90				0,82	9,80	6,01	3,80	4,01				
3	PLM100RB5/330 E3		100R				0,82	9,35	8,21	4,26	4,10				
4	PLM112RB5/340 E3		112R				0,87	10,0	10,9	2,43	4,53				
5,5	PLM132RB5/355 E3		132R				0,88	12,0	15,0	4,70	5,55				
7,5	PLM132B5/375 E3		132				0,87	11,0	20,2	3,31	4,98				
11	PLM160RB5/3110 E3		160R				0,89	9,00	29,6	2,43	4,26				
15	PLM160B5/3150 E3		160				0,89	9,81	40,3	2,79	4,41				
18,5	PLM160B5/3185 E3		160				0,89	10,1	49,7	2,78	4,59				
22	PLM180RB5/3220 E3		180R				0,87	11,3	59,1	3,27	5,18				

P _N kW	Voltage U _N V								n _N min ⁻¹	Operating conditions **			
	Δ		Y		Δ		Y			Altitude above sea Level (m)	T. amb min/max °C	ATEX	
	220 V	230 V	380 V	400 V	380 V	400 V	660 V	690 V					
I _N (A)													
1,5	5,58	5,53	3,22	3,19	3,23	3,22	1,86	1,86	3485 ÷ 3505	VI -15 / 40 No			
2,2	7,97	7,93	4,60	4,58	4,59	2,65	4,57	2,64	3490 ÷ 3505				
3	10,9	10,8	6,30	6,23	6,32	6,29	3,65	3,63	3485 ÷ 3500				
4	13,4	13,2	7,76	7,62	7,78	7,63	4,49	4,41	3510 ÷ 3520				
5,5	18,2	18,0	10,5	10,4	10,5	10,5	6,08	6,06	3505 ÷ 3515				
7,5	25,0	24,7	14,5	14,2	14,4	14,1	8,34	8,15	3535 ÷ 3540				
11	35,3	34,3	20,4	19,8	20,4	19,6	11,8	11,3	3545 ÷ 3555				
15	47,6	46,4	27,5	26,8	27,8	27,1	16,1	15,6	3550 ÷ 3560				
18,5	58,7	57,5	33,9	33,2	34,0	33,2	19,6	19,2	3550 ÷ 3555				
22	71,1	70,2	41,1	40,5	40,8	39,8	23,5	23,0	3555 ÷ 3560				

* R = Reduced size of motor casing as compared to shaft extension and flange.

LNES-IE3-mott-2p60-en_a_te

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

LNTS SERIES
THREE-PHASE MOTORS AT 60 Hz, 2 POLES (from 30 to 37 kW)

P _N kW	Efficiency η _N %										IE 3 from 11/2014	Year of manufacture		
	Δ 220 V Y 380 V			Δ 380 V Y 660 V										
	4/4	3/4	2/4	4/4	3/4	2/4								
30	93,4	93,4	92,5	93,4	93,4	92,5								
37	94,0	94,0	94,0	94,0	94,0	93,0								

P _N kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz Voltage					T _N Nm	Ts/T _N	Tm/T _N							
	WEG Equipamentos Eletricos S.A Reg. No. 07.175.725/0010-50 Jaragua do Sul - SC (Brazil)																				
	Model																				
30	W22 200L B5 30KW E3		200	B5	2	60	0,86	7,40	80,45	2,40	2,70										
37	W22 200L B5 37KW E3		200				0,87	7,50	98,98	2,90	2,90										

P _N kW	Voltage U _N V						n _N min ⁻¹	See note.	Operating conditions **					
	Δ 220 V		Y 380 V		Δ 380 V				Altitude above sea Level (m)	T. amb min/max °C	ATEX			
	I _N (A)													
30	98,0	56,7	56,7	32,7	3560									
37	119,0	68,8	69,0	39,6	3565									

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

LNES-IE3-mott37-2p60-en_a_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

LNTÉ SERIES
THREE-PHASE MOTORS AT 60 Hz, 4 POLES

P _N kW	Efficiency η _N %														Year of construction
	Δ 220 V Y 380 V			Δ 230 V Y 400 V			Δ 380 V Y 660 V			Δ 400 V Y 690 V			IE		
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			
0,25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
0,75	83,2	82,3	78,4	83,2	82,3	78,4	83,2	82,3	78,4	83,2	82,3	78,4	2		
1,1	87,0	86,2	83,2	87,0	86,2	83,2	87,0	86,2	83,2	87,0	86,2	83,2			
1,5	88,0	87,0	84,0	88,0	87,0	84,0	88,0	87,0	84,0	88,0	87,0	84,0			
2,2	89,5	89,4	87,5	89,5	89,4	87,5	89,5	89,4	87,5	89,5	89,4	87,5			
3	90,0	89,5	87,3	90,0	89,5	87,3	90,0	89,5	87,3	90,0	89,5	87,3			
4	90,0	89,9	88,1	90,0	89,9	88,1	90,0	89,9	88,1	90,0	89,9	88,1			
5,5	91,7	91,2	89,4	91,7	91,2	89,4	91,7	91,2	89,4	91,7	91,2	89,4			
7,5	91,7	91,8	90,4	91,7	91,8	90,4	91,7	91,8	90,4	91,7	91,8	90,4			

P _N kW	Manufacturer			IEC SIZE*	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz					T _N Nm	T _{s/T_N}	T _{m/T_n}							
	Xylem Service Italia Srl Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia																					
	Model																					
0,25	SM471B5/302			71	B5	4	60	0,68	3,45	1,45	2,37	2,15										
0,37	SM471B5/304			71				0,68	3,52	2,17	2,65	2,05										
0,55	SM490RB14S2/305			90R				0,77	3,55	3,18	1,80	1,90										
0,75	LLM490RB14S2/307			90R				0,75	6,26	4,14	2,82	3,53										
1,1	PLM490B5S2/311 E3			90				0,70	6,55	6,02	2,50	3,52										
1,5	PLM490B5S3/315 E3			90				0,69	7,34	8,18	2,99	4,10										
2,2	PLM4100B5S3/322 E3			100				0,77	7,74	12,0	2,28	3,80										
3	PLM4100B5S3/330 E3			100				0,74	8,18	16,3	2,35	4,39										
4	PLM4112B5S3/340 E3			112	SPECIAL			0,79	8,81	21,8	3,01	4,18										
5,5	PLM4132B14S3/355 E3			132				0,77	7,67	29,7	2,63	3,61										
7,5	PLM4132B14S3/375 E3			132				0,79	7,88	40,7	2,54	3,53										

P _N kW	Voltage U _N V								n _N min ⁻¹	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **				
	Δ		Y		Δ		Y				Altitude above sea Level (m)	T. amb min/max °C	ATEX		
	220 V	230 V	380 V	400 V	380 V	400 V	660 V	690 V							
0,25	1,51	-	0,87	-	-	-	-	-	1650						
0,37	2,18	-	1,26	-	-	-	-	-	1630						
0,55	2,74	-	1,58	-	-	-	-	-	1650						
0,75	3,15	3,13	1,82	1,81	1,81	1,80	1,05	1,04	1730 ÷ 1735						
1,1	4,76	4,77	2,75	2,75	2,72	2,72	1,57	1,57	1740 ÷ 1750						
1,5	6,53	6,59	3,77	3,80	3,78	3,81	2,18	2,20	1750 ÷ 1755						
2,2	8,4	8,28	4,84	4,78	4,82	4,76	2,78	2,75	1755 ÷ 1760						
3	12,0	12,0	6,91	6,95	6,75	6,72	3,89	3,88	1755 ÷ 1760						
4	14,7	14,5	8,50	8,39	8,46	8,35	4,89	4,82	1750 ÷ 1760						
5,5	20,6	20,4	11,9	11,8	12,0	11,9	6,95	6,88	1765 ÷ 1770						
7,5	27,1	26,7	15,7	15,4	15,7	15,5	9,08	8,94	1760 ÷ 1765						

* R = Reduced size of motor casing as compared to shaft extension and flange.

LNEE-IE3-mott-4p60-en_a_te

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

LNTS SERIES
THREE-PHASE MOTORS AT 60 Hz, 4 POLES

P _N kW	Efficiency η _N %													Year of construction	
	Δ 220 V Y 380 V			Δ 230 V Y 400 V			Δ 380 V Y 660 V			Δ 400 V Y 690 V			IE		
	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4	4/4	3/4	2/4			
0,55	-	-	-	-	-	-	-	-	-	-	-	-	-		
0,75	83,2	82,3	78,4	83,2	82,3	78,4	83,2	82,3	78,4	83,2	82,3	78,4	2		
1,1	87,0	86,2	83,2	87,0	86,2	83,2	87,0	86,2	83,2	87,0	86,2	83,2			
1,5	88,0	87,0	84,0	88,0	87,0	84,0	88,0	87,0	84,0	88,0	87,0	84,0			
2,2	89,5	89,4	87,5	89,5	89,4	87,5	89,5	89,4	87,5	89,5	89,4	87,5			
3	90,0	89,5	87,3	90,0	89,5	87,3	90,0	89,5	87,3	90,0	89,5	87,3			
4	90,0	89,9	88,1	90,0	89,9	88,1	90,0	89,9	88,1	90,0	89,9	88,1			
5,5	91,7	91,2	89,4	91,7	91,2	89,4	91,7	91,2	89,4	91,7	91,2	89,4			
7,5	91,7	91,8	90,4	91,7	91,8	90,4	91,7	91,8	90,4	91,7	91,8	90,4			
11	92,7	92,7	91,4	92,7	92,7	91,4	92,7	92,7	91,4	92,7	92,7	91,4			
15	93,3	92,9	91,4	93,3	92,9	91,4	93,3	92,9	91,4	93,3	92,9	91,4			

P _N kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz								
	Xylem Service Italia Sr Reg. No. 07520560967 Montecchio Maggiore Vicenza - Italia						cosφ								
	Model						I _s / I _N	T _N Nm	T _{s/T_N}	T _{m/T_n}					
0,55	SM480B5/305		80	B5	4	60	0,77	3,55	3,18	1,80	1,90				
0,75	LLM480B5/307		80				0,75	6,26	4,14	2,82	3,53				
1,1	PLM490B5/311 E3		90				0,70	6,55	6,02	2,50	3,52				
1,5	PLM490B5/315 E3		90				0,69	7,34	8,18	2,99	4,1				
2,2	PLM4100B5/322 E3		100				0,77	7,74	12,0	2,28	3,8				
3	PLM4100B5/330 E3		100				0,74	8,18	16,3	2,35	4,39				
4	PLM4112B5/340 E3		112				0,79	8,81	21,8	3,01	4,18				
5,5	PLM4132B5/355 E3		132				0,77	7,67	29,7	2,63	3,61				
7,5	PLM4132B5/375 E3		132				0,79	7,88	40,7	2,54	3,53				
11	PLM4160B5/3110 E3		160				0,82	7,50	59,3	2,46	3,27				
15	PLM4160B5/3150 E3		160				0,79	8,83	80,7	2,91	3,99				

P _N kW	Voltage U _N V								n _N min ⁻¹	Observe the regulations and codes locally in force regarding sorted waste disposal.	Operating conditions **				
	Δ		Y		Δ		Y				Altitude above sea Level (m)	T. amb min/max °C	ATEX		
	220 V	230 V	380 V	400 V	380 V	400 V	660 V	690 V							
	I _N (A)														
0,55	2,74	-	1,58	-	-	-	-	-	1650						
0,75	3,15	3,13	1,82	1,81	1,81	1,80	1,05	1,04	1730 ÷ 1735						
1,1	4,76	4,77	2,75	2,75	2,72	2,72	1,57	1,57	1740 ÷ 1750						
1,5	6,53	6,59	3,77	3,80	3,78	3,81	2,18	2,20	1750 ÷ 1755						
2,2	8,38	8,28	4,84	4,78	4,82	4,76	2,78	2,75	1755 ÷ 1760						
3	12,0	12,0	6,91	6,95	6,75	6,72	3,89	3,88	1755 ÷ 1760						
4	14,7	14,5	8,50	8,39	8,46	8,35	4,89	4,82	1750 ÷ 1760						
5,5	20,6	20,4	11,9	11,8	12,0	11,9	6,95	6,88	1765 ÷ 1770						
7,5	27,1	26,7	15,7	15,4	15,7	15,5	9,08	8,94	1760 ÷ 1765						
11	38,1	37,4	22,0	21,6	22,0	21,5	12,7	12,4	1770 ÷ 1770						
15	53,2	53,4	30,7	30,8	30,4	30,2	17,5	17,4	1770 ÷ 1775						

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

LNES-IE3-mott15-4p60-en_a_te

LNTS SERIES
THREE-PHASE MOTORS AT 60 Hz, 4 POLES (from 18,5 to 37 kW)

P _N kW	Efficiency η _N %										IE	Year of construction		
	Δ 220 V			Δ 380 V			Y 660 V							
	4/4	3/4	2/4	4/4	3/4	2/4	3/4	2/4	3/4	2/4				
18,5	93,8	93,6	92,4	93,8	93,6	92,4	93,6	92,4	93,6	92,4	3	from 1/2014		
22	94,0	93,8	93,0	94,0	93,8	93,0	93,8	93,0	93,8	93,0				
30	94,4	94,2	93,6	94,4	94,2	93,6	94,2	93,6	94,2	93,6				
37	93,2	92,9	91,7	93,2	92,9	91,7	92,9	91,7	92,9	91,7				
45	95,1	94,7	94,2	95,1	94,7	94,2	94,7	94,2	94,7	94,2				

P _N kW	Manufacturer		IEC SIZE	Construction Design	N. of Poles	f _N Hz	Data for 380 V / 60 Hz								
	WEG Equipamentos Eletricos S.A. Reg. No 07.175.725/0010-50 Jaragua do Sul - SC (Brazil)														
	Model														
18,5	W22 180M4-B5	18,5kW E3	180	B5	4	60	0,83	7,00	100,0	3,00	3,10				
22	W22 180L4-B5	22kW E3	180				0,83	7,20	118,6	3,00	3,00				
30	W22 200L4-B5	30kW E3	200				0,84	6,60	161,7	2,50	2,80				
37	W22 225S/M4-B5	37kW E3	225				0,86	6,40	199,0	2,10	2,60				
45	W22 225S/M4-B5	45kW E3	225				0,85	7,50	241,1	2,40	2,80				

P _N kW	Voltage U _N V				n _N min ⁻¹	See note.	Operating conditions **		
	Δ		Y	Δ			Altitude above sea Level (m)	T. amb min/max °C	ATEX
	220 V	380 V	380 V	660 V					
	I _N (A)								
18,5	62,4	36,1	36,1	20,8	1770				
22	74,0	42,8	42,8	24,7	1775				
30	99,2	57,4	57,4	33,1	1775				
37	121,0	70,1	70,1	40,4	1771				
45	146,0	84,5	84,5	48,7	1780				

** Operating conditions to be referred to motor only. About electric pump, refer to limits in user's manual.

LNTS-IE3-mott45-4p60-en_a_te

Note: Observe the regulations and codes locally in force regarding sorted waste disposal.

MOTOR NOISE

The tables below show the mean sound pressure levels (L_p) measured at 1 meter's distance in a free field according to the A curve (ISO 1680 standard).

The noise values are measured with idling 60 Hz motor with a tolerance of 3 dB (A).

LNTE, LNTS MOTORS 2 POLES 60 Hz

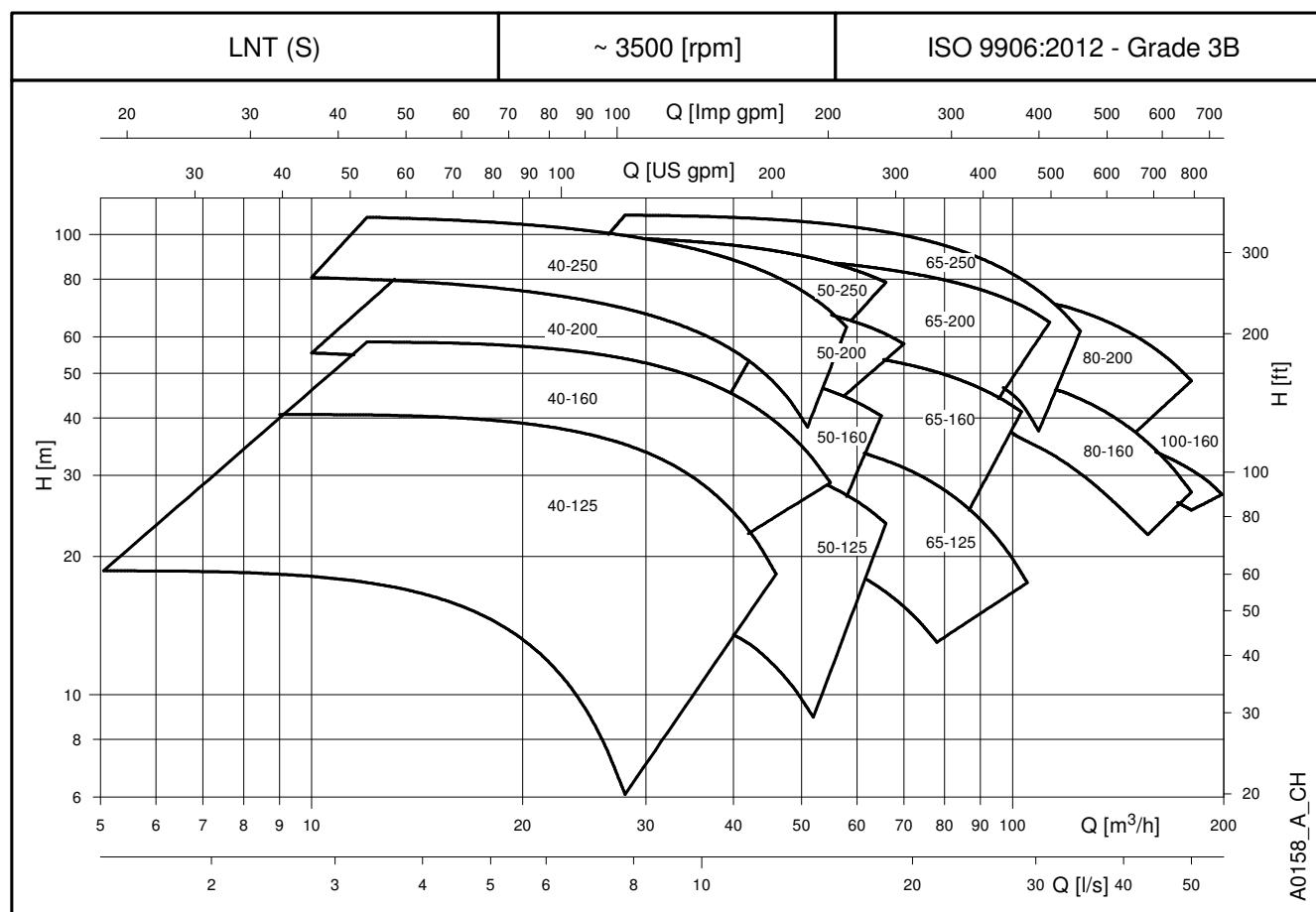
POWER kW	MOTOR TYPE IEC SIZE *	NOISE L _p A dB
1,5	90R	<70
2,2	90	<70
3	90	<70
	100R	<70
4	112R	<70
5,5	112	<70
	132R	<70
7,5	132	71
9,2	132	73
11	132	73
	160R	71
15	160	71
18,5	160	73
22	160	70
	180R	70

*R=Reduced size of motor casing as compared to shaft extension and flange.

LNTE, LNTS MOTORS 4 POLES 60 Hz

POWER kW	MOTOR TYPE IEC SIZE *	NOISE L _p A dB
0,25	71	<70
0,37	71	<70
0,55	80	<70
	90R	<70
0,75	80	<70
	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
37	225	<70
45	225	<70

LNT_mott60-en_a_tr

e-LNT SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 2 POLES


**e-LNT 40, 50, 65 SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 2 POLES**

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	ηp % (2)	I/s 0	1,4	2,8	4,2	5,6	6,9	8,3	9,7	11,1	11,7	13,1	14,4	16,1
						m ³ /h 0	5	10	15	20	25	30	35	40	42	47	52	58
H = TOTAL HEAD METRES COLUMN OF WATER																		
40-125/15 *	1,5	104	○	57,1	18,1	18,6	18,1	16,3	13,2	8,9								
40-125/22 *	2,2	118	○	59,0	23,7		24,0	22,7	20,3	16,7	12,2							
40-125/30	3	128	○	60,8	29,4		30,0	29,1	27,2	24,2	20,2	15,3						
40-125/40	4	133	○	61,9	33,4		34,2	33,5	31,9	29,3	25,7	21,2	15,9					
40-125/55	5,5	145	●	63,6	39,7		40,7	40,2	38,9	36,8	33,7	29,7	24,9	22,8				
40-160/40	4	137	○	61,5	34,4		34,5	33,7	32,4	30,4	27,7	24,2						
40-160/55	5,5	150	○	62,9	42,0		43,2	42,5	41,2	39,2	36,6	33,3	29,3	27,4				
40-160/75	7,5	160,5	○	63,3	49,8			50,3	48,4	46,0	43,1	39,7	35,9	34,2	29,5			
40-160/92	9,2	171	●	64,3	56,0			58,3	57,2	55,3	52,6	49,1	45,0	43,1	38,1	32,5		
40-200/75	7,5	171	○	52,7	56,8		55,3	53,9	51,9	49,3	45,8	41,2						
40-200/92	9,2	186	○	54,0	66,4			63,6	61,7	59,3	56,2	52,2	47,2					
40-200/110A	11	186	○	54,0	66,4			63,6	61,7	59,3	56,2	52,2	47,2					
40-200/110	11	198	●	54,9	73,0			70,2	68,4	66,2	63,3	59,6	55,1	52,9				
40-250/150	15,0	208	○	47,2	81,0		80,7	78,6	75,5	71,7	67,2	62,1	56,0	53,3	45,6			
40-250/185	18,5	226,5	○	48,9	98,4			96,6	93,8	90,2	86,1	81,3	75,9	73,5	67,0	59,4		
40-250/220	22	239	●	49,8	109,3			107,9	105,3	101,9	97,9	93,3	88,1	85,9	79,7	72,8	63,0	

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	ηp % (2)	I/s 0	2,2	3,9	5,6	7,2	8,9	10,6	12,2	13,9	15,6	16,9	18,1	19,4
						m ³ /h 0	8	14	20	26	32	38	44	50	56	61	65	70
H = TOTAL HEAD METRES COLUMN OF WATER																		
50-125/30	3	105	○	59,9	20,0	20,0	19,5	18,6	17,5	16,1	14,3	12,2	9,8					
50-125/40	4	118	○	63,3	26,2		25,7	24,9	24,0	22,7	21,2	19,3	17,2	14,7				
50-125/55	5,5	130	○	66,3	32,9		32,2	31,7	31,0	30,0	28,6	26,8	24,6	22,0	19,6			
50-125/75	7,5	135	●	69,6	37,3		36,5	36,1	35,5	34,6	33,5	32,0	30,2	28,0	25,9	24,1		
50-160/55	5,5	127	○	65,9	33,1	32,6	32,7	32,5	31,9	30,5	28,4	25,6	22,4					
50-160/75	7,5	139	○	66,9	37,7		37,8	37,6	37,2	36,4	35,2	33,6	31,6	29,2				
50-160/92	9,2	154	○	69,2	48,9		48,3	48,3	48,2	47,6	46,5	44,8	42,5	39,6	36,9			
50-160/110	11	163	●	70,1	53,5		52,8	52,8	52,7	52,3	51,4	50,0	47,9	45,3	42,7	40,4		
50-200/92	9,2	165	○	58,5	53,0		53,5	52,6	51,1	49,2	46,9	44,2	40,9					
50-200/110A	11	165	○	58,5	53,0		53,5	52,6	51,1	49,2	46,9	44,2	40,9					
50-200/110	11	177	○	59,3	58,3			58,1	56,7	54,9	52,7	50,1	47,1	43,4				
50-200/150	15	189	○	62,0	69,0			69,6	68,2	66,5	64,8	62,9	60,9	58,5	55,9	53,4		
50-200/185	18,5	199	●	62,5	77,1			78,1	76,9	75,4	73,6	71,5	69,2	66,5	63,9	61,4	57,9	
50-250/185	18,5	210	○	59,4	88,8					87,9	86,3	84,2	81,4	78,0	73,9	70,1		
50-250/220	22	225	●	60,3	99,3					98,8	97,5	95,6	93,1	90,0	86,3	82,7	79,6	

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	ηp % (2)	I/s 0	6,1	8,6	11,1	13,6	16,1	18,6	21,1	23,6	26,1	28,6	31,1	34,7
						m ³ /h 0	22	31	40	49	58	67	76	85	94	103	112	125
H = TOTAL HEAD METRES COLUMN OF WATER																		
65-125/55	5,5	118	○	62,8	25,5	24,4	23,6	22,4	20,8	18,8	16,4	13,7						
65-125/75	7,5	130	○	65,8	32,4		30,1	29,0	27,5	25,5	23,0	20,0	16,8					
65-125/92	9,2	140	○	67,8	37,6		35,9	35,0	33,7	31,8	29,4	26,5	23,2	19,4				
65-125/110A	11	140	○	67,8	37,6		35,9	35,0	33,7	31,8	29,4	26,5	23,2	19,4				
65-125/110	11	144	●	68,5	39,8		38,2	37,3	36,0	34,3	32,0	29,3	26,0	22,4	18,4			
65-160/110	11	152	○	65,4	45,1		42,8	41,8	40,3	38,3	35,8	32,8	29,3					
65-160/150	15	170	○	67,6	56,6		54,4	53,5	52,3	50,8	48,8	46,3	43,3	39,9				
65-160/185	18,5	176	●	68,4	38,5		37,9	37,3	36,4	35,2	33,6	31,6	29,3	26,5	23,5			
65-200/185	18,5	179	○	65,6	63,9		65,9	64,3	62,3	59,9	57,1	53,7	49,6	44,3				
65-200/220	22	195	○	66,8	72,1		74,7	73,3	71,5	69,2	66,5	63,5	59,8	55,4				
65-200/300	30	209	●	68,7	87,3			89,9	88,3	86,2	83,8	81,0	77,9	74,3	70,1	65,1		
65-250/220	22	202	○	63,8	79,9		81,0	79,2	76,5	73,0	68,6	63,4	57,4	50,6	43,0			
65-250/300	30	220	○	65,3	96,7		98,7	97,3	95,1	92,1	88,4	83,8	78,5	72,5	65,8	58,3		
65-250/370	37	232	●	66,4	107,6		110,1	109,0	107,1	104,4	101,0	96,8	91,9	86,3	80,0	73,0	61,7	

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-40-50-65_2p60S-en_a th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

*Available also in single-phase version.

e-LNT 80, 100 SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 2 POLES

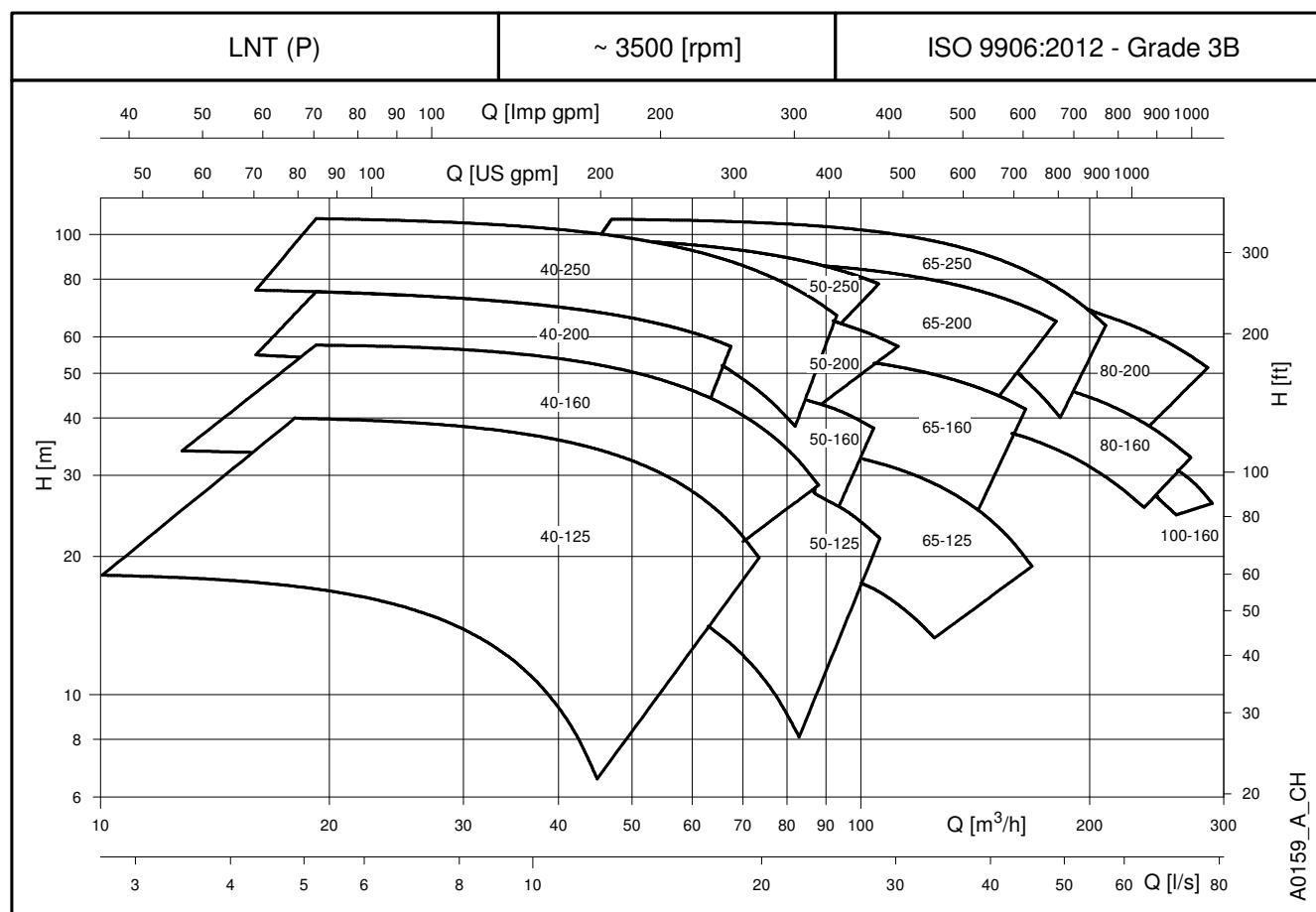
PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	ηp %	I/s 0	8,9	12,5	16,1	19,7	23,3	26,9	30,6	34,2	37,8	41,4	45,0	50,0
			(1)	(2)		m ³ /h 0	32	45	58	71	84	97	110	123	136	149	162	180
H = TOTAL HEAD METRES COLUMN OF WATER																		
80-160/150	15	151	○	71,5		45,1		43,8	43,1	41,9	40,0	37,4	34,3	30,8	27,2	23,8		
80-160/185	18,5	159	○	72,9		50,0		48,7	48,1	47,1	45,5	43,2	40,3	37,0	33,3	29,6	26,3	
80-160/220	22	168	●	73,9		55,7		54,6	54,0	53,0	51,6	49,7	47,3	44,4	41,1	37,4	33,4	27,6
80-200/220	22	173	○	68,5		60,5	60,9	60,3	59,2	57,6	55,3	52,4	48,8	44,7	40,0			
80-200/300	30	189	○	70,0		72,2		72,4	71,6	70,2	68,3	65,9	62,8	59,2	55,1	50,4	45,2	
80-200/370	37	199	●	71,0		80,1		80,6	79,9	78,7	77,0	74,8	72,0	68,7	64,9	60,5	55,6	48,1

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	ηp %	I/s 0	12,2	16,1	20,0	23,9	27,8	31,7	35,6	39,4	43,3	47,2	51,1	55,6
			(1)	(2)		m ³ /h 0	44	58	72	86	100	114	128	142	156	170	184	200
H = TOTAL HEAD METRES COLUMN OF WATER																		
100-160/185	18,5	144	○	68,6		39,2	38,2	37,6	36,9	36,0	35,0	33,8	32,5	30,9	29,1	26,9		
100-160/220	22	152	●	69,5		43,7			41,5	40,7	39,8	38,7	37,4	35,9	34,3	32,3	30,2	27,3

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-80-100_2p60S-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

e-LNT SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 2 POLES


**e-LNT 40, 50, 65 SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 2 POLES**

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	○ (1)	I/s 0	2,8	5,0	6,9	8,9	10,8	12,8	14,7	17,2	18,6	20,8	23,1	25,8
				m ³ /h 0	10	18	25	32	39	46	53	62	67	75	83	93
H = TOTAL HEAD METRES COLUMN OF WATER																
40-125/15 *	1,5	104	○	18,1	18,2	17,2	15,5	13,1	9,9							
40-125/22 *	2,2	118	○	23,6		23,1	21,8	19,8	17,1	13,7						
40-125/30	3	128	○	29,3		29,0	27,9	26,1	23,8	20,9	17,4					
40-125/40	4	133	○	33,4		33,3	32,4	30,9	28,8	26,2	23,0	18,0				
40-125/55	5,5	145	●	39,7		39,9	39,2	37,9	36,1	33,8	31,0	26,7	23,9			
40-160/40	4	137	○	33,9		33,5	32,4	31,0	29,0	26,6	23,8	19,4				
40-160/55	5,5	150	○	41,5		42,1	41,2	39,8	37,8	35,5	32,6	28,4	25,7			
40-160/75	7,5	160,5	○	48,5		50,2	49,6	48,3	46,5	44,1	41,3	37,1	34,4	29,8		
40-160/92	9,2	171	●	55,7		57,1	55,9	54,1	51,9	49,1	44,9	42,2	37,5	32,2		
40-200/75	7,5	171	○	56,4		54,4	52,9	51,0	48,7	45,9	42,6					
40-200/92	9,2	186	○	65,8		63,8	62,3	60,5	58,3	55,7	52,7	48,1				
40-200/110A	11	186	○	65,8		63,8	62,3	60,5	58,3	55,7	52,7	48,1				
40-200/110	11	198	●	72,3			68,9	67,1	65,0	62,5	59,6	55,3	52,5			
40-250/150	15,0	208	○	80,9		79,9	78,4	76,1	73,2	69,6	65,4	59,2	55,4	48,9		
40-250/185	18,5	226,5	○	98,2		97,4	96,0	94,1	91,5	88,3	84,5	78,8	75,2	69,1	62,4	
40-250/220	22	239	●	109,1			107,3	105,5	103,1	100,1	96,5	91,1	87,8	81,9	75,5	66,8

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	○ (1)	I/s 0	3,6	6,1	8,6	11,1	13,6	16,1	18,6	21,1	24,2	26,7	28,9	31,1
				m ³ /h 0	13	22	31	40	49	58	67	76	87	96	104	112
H = TOTAL HEAD METRES COLUMN OF WATER																
50-125/30	3	105	○	21,8	20,8	20,2	19,5	18,5	17,1	15,3	13,0	10,4				
50-125/40	4	118	○	27,7		25,8	25,2	24,3	23,2	21,7	19,9	17,6	14,3			
50-125/55	5,5	130	○	33,7		31,8	31,1	30,3	29,4	28,1	26,6	24,7	21,8	19,1		
50-125/75	7,5	135	●	38,0		36,1	35,5	34,8	33,9	32,9	31,6	29,9	27,4	25,0	22,5	
50-160/55	5,5	127	○	33,5	32,5	32,0	31,3	30,4	29,1	27,3	25,0	22,2				
50-160/75	7,5	139	○	39,0		37,5	37,0	36,4	35,6	34,6	33,1	31,3	28,4			
50-160/92	9,2	154	○	49,7		47,9	47,3	46,6	45,7	44,5	43,0	41,1	38,1	35,2		
50-160/110	11	163	●	54,3		52,5	51,9	51,2	50,3	49,2	47,8	46,1	43,4	40,7	38,0	
50-200/92	9,2	165	○	52,8		52,4	51,7	50,5	48,9	46,9	44,4	41,5				
50-200/110A	11	165	○	52,8		52,4	51,7	50,5	48,9	46,9	44,4	41,5				
50-200/110	11	177	○	58,0			57,0	55,9	54,4	52,5	50,2	47,4	43,5			
50-200/150	15	189	○	68,9			68,4	67,7	66,7	65,3	63,6	61,6	58,6	55,7	52,9	
50-200/185	18,5	199	●	77,3			76,9	76,2	75,1	73,6	71,8	69,6	66,5	63,4	60,4	57,2
50-250/185	18,5	210	○	89,9				87,6	86,1	84,1	81,6	78,6	74,3	70,2		
50-250/220	22	225	●	100,7				98,6	97,3	95,5	93,2	90,5	86,5	82,7	79,0	

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	○ (1)	I/s 0	9,7	14,2	18,6	23,1	27,5	31,9	36,4	40,8	45,3	49,7	54,2	58,3
				m ³ /h 0	35	51	67	83	99	115	131	147	163	179	195	210
H = TOTAL HEAD METRES COLUMN OF WATER																
65-125/55	5,5	118	○	26,0	24,0	23,0	21,7	20,0	17,8	15,2						
65-125/75	7,5	130	○	33,0		29,5	28,3	26,7	24,6	22,0	19,0					
65-125/92	9,2	140	○	38,5		34,8	33,7	32,3	30,4	28,0	25,0	21,4				
65-125/110A	11	140	○	38,5		34,8	33,7	32,3	30,4	28,0	25,0	21,4				
65-125/110	11	144	●	40,8		37,1	36,0	34,6	32,8	30,5	27,6	24,2	20,3			
65-160/110	11	152	○	46,5		41,9	40,4	38,7	36,5	33,8	30,6					
65-160/150	15	170	○	58,5		53,7	52,3	50,8	48,9	46,7	44,0	40,8				
65-160/185	18,5	176	●	38,5		37,9	37,3	36,4	35,2	33,6	31,6	29,3	26,5	23,5		
65-200/185	18,5	179	○	65,4		64,5	63,1	61,1	58,3	54,8	50,7	46,1				
65-200/220	22	195	○	73,8		73,1	71,9	70,1	67,6	64,4	60,7	56,3				
65-200/300	30	209	●	89,1			88,0	86,4	84,2	81,6	78,3	74,6	70,3	65,4		
65-250/220	22	202	○	80,6		79,3	77,7	75,2	71,8	67,4	62,1	55,9	49,1	41,9		
65-250/300	30	220	○	97,6		96,6	95,3	93,3	90,5	86,8	82,1	76,6	70,3	63,4	56,0	
65-250/370	37	232	●	108,7		107,9	106,8	105,1	102,6	99,3	95,1	90,1	84,3	77,7	70,6	63,5

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-40-50-65_2p60P-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter

*Available also in single-phase version.

e-LNT 80, 100 SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 2 POLES

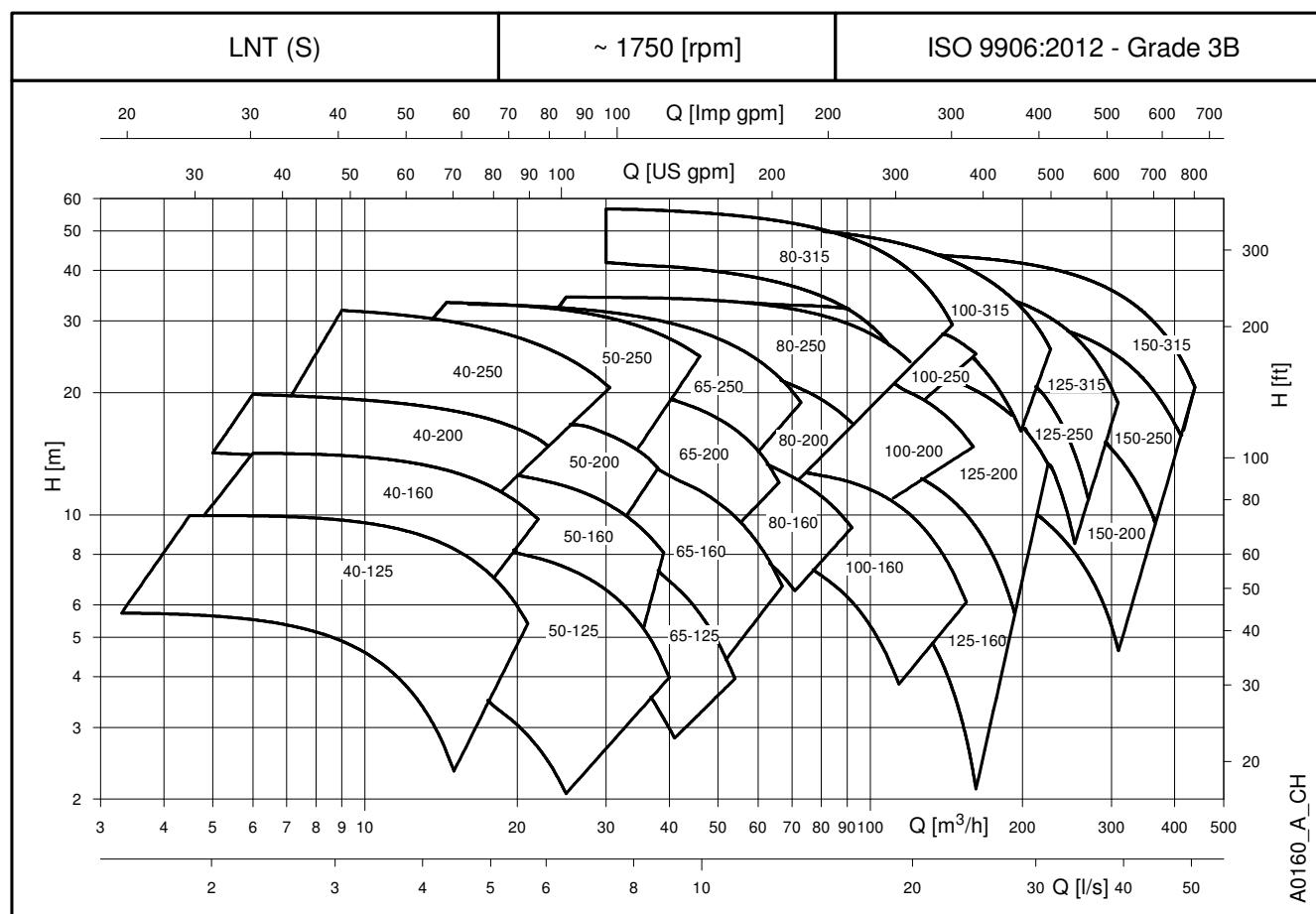
PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
				Ø	Ø (1)	l/s 0	14,2	20,3	26,4	32,5	38,6	44,7	50,8	56,9	63,1	69,2
		m ³ /h 0		51	73	95	117	139	161	183	205	227	249	271	288	
H = TOTAL HEAD METRES COLUMN OF WATER																
80-160/150	15	151	○	45,4		42,8	42,0	40,8	39,0	36,7	33,9	30,6	27,0	23,4		
80-160/185	18,5	159	○	50,4		47,6	46,9	45,9	44,3	42,3	39,7	36,6	33,1	29,4		
80-160/220	22	168	●	56,3		53,4	52,8	51,9	50,6	48,8	46,5	43,7	40,4	36,8	33,0	30,0
80-200/220	22	173	○	60,2	60,0	59,5	58,4	56,8	54,4	51,4	47,9	43,8	39,5			
80-200/300	30	189	○	71,9		71,4	70,6	69,3	67,3	64,8	61,6	57,9	53,8	49,3		
80-200/370	37	199	●	79,8		79,5	78,9	77,7	76,0	73,7	70,9	67,5	63,6	59,3	54,6	

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
				Ø	Ø (1)	l/s 0	17,8	23,6	29,4	35,3	41,1	46,9	52,8	58,6	64,4	70,3
		m ³ /h 0		64	85	106	127	148	169	190	211	232	253	274	290	
H = TOTAL HEAD METRES COLUMN OF WATER																
100-160/185	18,5	144	○	39,4	36,7	35,7	34,8	34,0	33,3	32,6	31,6	30,4	28,5	25,8		
100-160/220	22	152	●	44,0			39,3	38,4	37,7	36,9	36,1	35,1	33,7	31,7	28,9	26,1

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-80-100_2p60P-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter

e-LNT SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES


e-LNT 40, 50, 65 SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY												
		Ø mm	Ø	ηp %	l/s 0	0,6	1,4	1,9	2,8	3,3	4,2	4,7	5,6	6,1	6,9	7,5	8,3
			(1)	(2)	m ³ /h 0	2	5	7	10	12	15	17	20	22	25	27	30
H = TOTAL HEAD METRES COLUMN OF WATER																	
40-125/02	0,25	118	Ø	56,4	5,6		5,6	5,4	4,6	3,8	2,3						
40-125/03	0,37	128	Ø	58,2	7,0		7,1	6,8	6,2	5,6	4,3	3,2					
40-125/05	0,55	133	Ø	59,3	8,0		8,2	8,0	7,5	7,0	5,8	4,9					
40-125/07	0,75	145	●	61,0	9,6		10,0	9,9	9,6	9,1	8,2	7,5	6,0				
40-160/05	0,55	150	Ø	59,8	10,2		10,4	10,2	9,6	9,0	7,9	6,9					
40-160/07	0,75	160,5	Ø	61,0	12,0			12,3	11,9	11,4	10,5	9,7	8,3				
40-160/11	1,1	171	●	62,3	13,7			14,2	13,9	13,5	12,7	12,0	10,8	9,8			
40-200/11	1,1	186	Ø	53,0	16,7		16,1	15,8	15,3	14,8	13,9	13,1					
40-200/15	1,5	198	Ø	53,8	18,2			17,4	16,9	16,5	15,7	15,0	13,7				
40-200/22	2,2	205	●	54,9	20,4			19,7	19,2	18,8	18,0	17,4	16,3	15,4			
40-250/22	2,2	226,5	Ø	48,2	24,5				23,2	22,5	21,2	20,2	18,5	17,2	15,2		
40-250/30A	3	239	Ø	49,2	27,2				26,2	25,5	24,3	23,3	21,7	20,5	18,5	17,1	
40-250/30	3	252	Ø	49,9	29,3				28,3	27,6	26,4	25,5	23,9	22,7	20,8	19,4	
40-250/40	4	259	●	50,9	32,5				31,6	31,0	29,8	28,9	27,4	26,3	24,4	23,1	20,9

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY												
		Ø mm	Ø	ηp %	l/s 0	1,7	2,8	3,9	5,0	6,1	7,2	8,3	9,4	10,6	11,2	12,2	12,8
			(1)	(2)	m ³ /h 0	6	10	14	18	22	26	30	34	38	40	44	46
H = TOTAL HEAD METRES COLUMN OF WATER																	
50-125/03	0,37	105	Ø	59,9	4,8	4,7	4,4	3,9	3,4	2,7							
50-125/05	0,55	118	Ø	63,3	6,4		6,0	5,6	5,1	4,5	3,7	2,8					
50-125/07	0,75	130	Ø	66,7	8,2		7,8	7,6	7,2	6,6	5,8	4,9	3,8				
50-125/11	1,1	135	●	66,9	9,2		8,8	8,6	8,3	7,8	7,3	6,5	5,7	4,6			
50-160/07	0,75	127	Ø	62,2	8,1	8,1	8,0	7,7	7,1	6,3	5,3	4,1					
50-160/11	1,1	139	Ø	63,6	9,7		9,6	9,4	8,9	8,3	7,4	6,2	5,0				
50-160/15A	1,5	154	Ø	65,5	12,0		12,0	11,9	11,6	11,0	10,3	9,4	8,2	7,0			
50-160/15	1,5	163	●	66,3	13,1		13,1	13,0	12,7	12,2	11,6	10,7	9,6	8,4			
50-200/15	1,5	177	Ø	58,4	14,4			13,8	13,1	12,3	11,3	10,0					
50-200/22	2,2	189	Ø	60,0	17,2			16,8	16,2	15,5	14,6	13,5	12,2				
50-200/30	3	199	●	61,1	19,2				18,3	17,6	16,8	15,9	14,7	13,1			
50-250/30	3	225	Ø	59,7	25,0			24,4	23,9	23,1	22,1	20,7	19,2	17,5			
50-250/40	4	243	Ø	61,3	29,9			29,4	28,9	28,3	27,4	26,2	24,8	23,3	22,3		
50-250/55	5,5	257,5	●	62,5	33,7			33,0	32,5	31,7	30,7	29,4	28,0	27,1	25,5	24,6	

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY												
		Ø mm	Ø	ηp %	l/s 0	2,8	4,4	6,1	7,8	9,4	11,1	12,8	14,4	16,1	17,8	19,4	20,3
			(1)	(2)	m ³ /h 0	10	16	22	28	34	40	46	52	58	64	70	73
H = TOTAL HEAD METRES COLUMN OF WATER																	
65-125/07	0,75	118	Ø	62,8	6,3	6,1	5,8	5,4	4,7	3,9	3,0						
65-125/11A	1,1	130	Ø	65,8	8,0		7,4	7,0	6,4	5,6	4,5	3,4					
65-125/11	1,1	140	Ø	68,0	9,3		8,8	8,5	7,9	7,1	6,1	4,9					
65-125/15	1,5	144	●	68,7	9,9		9,5	9,1	8,6	7,9	6,9	5,7	4,4				
65-160/11	1,1	144	Ø	64,7	10,1		9,4	8,9	8,3	7,5	6,4	5,1					
65-160/15	1,5	152	Ø	65,6	11,2		10,6	10,2	9,7	8,9	7,9	6,7	5,3				
65-160/22	2,2	170	Ø	67,6	14,1		13,5	13,1	12,6	12,0	11,2	10,2	8,9	7,5	6,0		
65-160/30	3	176	●	68,4	15,2		14,6	14,2	13,8	13,2	12,4	11,5	10,3	9,0	7,5		
65-200/22	2,2	168	Ø	64,0	14,1		14,1	13,5	12,7	11,7	10,3	8,5					
65-200/30A	3	179	Ø	65,1	16,1		16,3	15,7	14,9	14,0	12,8	11,3	9,2				
65-200/30	3	195	Ø	66,1	18,1		18,4	17,8	17,1	16,2	15,1	13,7	12,0				
65-200/40	4	209	●	68,2	21,8		22,3	21,8	21,2	20,3	19,3	18,2	16,8	15,1	12,9		
65-250/40	4	220	Ø	64,8	23,6		24,1	23,5	22,5	21,3	19,8	18,1	16,1	13,8			
65-250/55	5,5	232	Ø	65,8	26,4		27,1	26,5	25,7	24,6	23,2	21,6	19,8	17,7			
65-250/75	7,5	256	●	67,8	32,1		33,0	32,6	31,9	30,9	29,7	28,3	26,6	24,7	22,6	20,2	18,9

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-40-50-65_4p60S-en_a_th

(1) ● = Full impeller diameter - Ø = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

e-LNT 80, 100 SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	Ø (1)	ηp % (2)	I/s	0	3,6	6,9	10,3	13,6	16,9	20,3	23,6	26,9	30,3	33,6	36,9	41,7
			m ³ /h	0	13	25	37	49	61	73	85	97	109	121	133	150		
H = TOTAL HEAD METRES COLUMN OF WATER																		
80-160/22A	2,2	151	Ø	70,9	11,0		10,9	10,2	9,2	7,9								
80-160/22	2,2	159	Ø	71,8	12,2		12,1	11,5	10,6	9,3	7,7							
80-160/30	3	168	Ø	72,8	13,6		13,6	13,1	12,3	11,1	9,6							
80-160/40	4	180	●	74,2	15,6		15,7	15,3	14,5	13,4	12,1	10,4						
80-200/30	3	173	Ø	69,5	15,1	15,1	14,8	14,1	12,8	10,9								
80-200/40	4	189	Ø	71,0	18,0		17,7	17,2	16,1	14,5	12,3							
80-200/55A	5,5	199	Ø	71,9	20,0		19,9	19,4	18,5	17,1	15,1							
80-200/55	5,5	210	Ø	72,9	22,3		22,1	21,7	20,9	19,6	17,8	15,5						
80-200/75	7,5	220	●	73,9	24,5		24,3	23,9	23,2	22,1	20,4	18,3						
80-250/110A	11	243	Ø	72,3	29,9		30,5	30,4	29,8	28,9	27,7	26,0	24,0	21,5				
80-250/110	11	258	●	73,6	33,7		34,3	34,2	33,8	33,0	31,8	30,3	28,5	26,2				
80-315/150	15,0	292	Ø	64,1	42,8		42,0	41,2	39,9	38,1	36,0	33,4	30,3	26,3	20,9			
80-315/185	18,5	306	Ø	64,6	47,4		46,7	46,1	44,9	43,2	41,0	38,5	35,5	32,0	27,6	21,6		
80-315/220	22	322	Ø	65,3	52,9		52,3	51,8	50,8	49,2	47,1	44,6	41,6	38,3	34,4	29,7		
80-315/300	22	334	●	66,0	57,4		56,9	56,2	55,2	53,7	51,9	49,5	46,7	43,3	39,4	34,8	27,4	

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	Ø (1)	ηp % (2)	I/s	0	5,6	11,1	13,9	18,1	22,2	26,4	31,9	36,1	41,7	54,2	56,9	62,5
			m ³ /h	0	20	40	50	65	80	95	115	130	150	195	205	225		
H = TOTAL HEAD METRES COLUMN OF WATER																		
100-160/22	2,2	144	Ø	70,6	10,0		8,5	8,4	7,9	7,1	5,8							
100-160/30	3	152	Ø	71,5	11,2		9,6	9,5	9,1	8,4	7,3	5,4						
100-160/40	4	168	Ø	73,3	13,6		11,8	11,7	11,4	10,9	10,1	8,5	6,9					
100-160/55	5,5	177	●	74,4	15,2		13,3	13,1	12,9	12,5	11,9	10,5	9,0	6,7				
100-200/55	5,5	188	Ø	72,1	17,1		16,9	16,9	16,5	15,8	14,6	12,4						
100-200/75	7,5	201	Ø	73,3	19,5		19,4	19,3	19,1	18,5	17,6	15,6	13,7					
100-200/110	11	219	●	75,0	23,3		23,1	23,1	23,0	22,6	22,0	20,5	18,9	16,3				
100-250/75	7,5	214	Ø	71,8	22,8		22,4	22,3	21,9	21,1	19,9	17,6						
100-250/110A	11	227	Ø	72,8	25,7		25,4	25,4	25,1	24,5	23,5	21,5	19,6					
100-250/110	11	241	Ø	73,9	28,9		28,6	28,5	28,3	27,8	27,0	25,3	23,6					
100-250/150	15	259	●	75,4	33,5		33,1	33,1	32,9	32,6	32,0	30,6	29,2	26,7				
100-315/185	18,5	274	Ø	67,6	38,1		37,7	37,3	36,5	35,4	33,9	31,6	29,4	26,1	17,0			
100-315/220	22	286	Ø	67,7	42,0		41,7	41,4	40,7	39,6	38,2	35,8	33,7	30,5	21,4	18,7		
100-315/300	30	315	●	68,9	51,3		51,3	51,2	50,7	49,9	48,7	46,5	44,5	41,5	33,3	31,1	26,3	

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNE-80-100_4p60S-en_a_th

(1) ● = Full impeller diameter - Ø = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

e-LNT 125, 150 SERIES (SINGLE OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 4 POLES

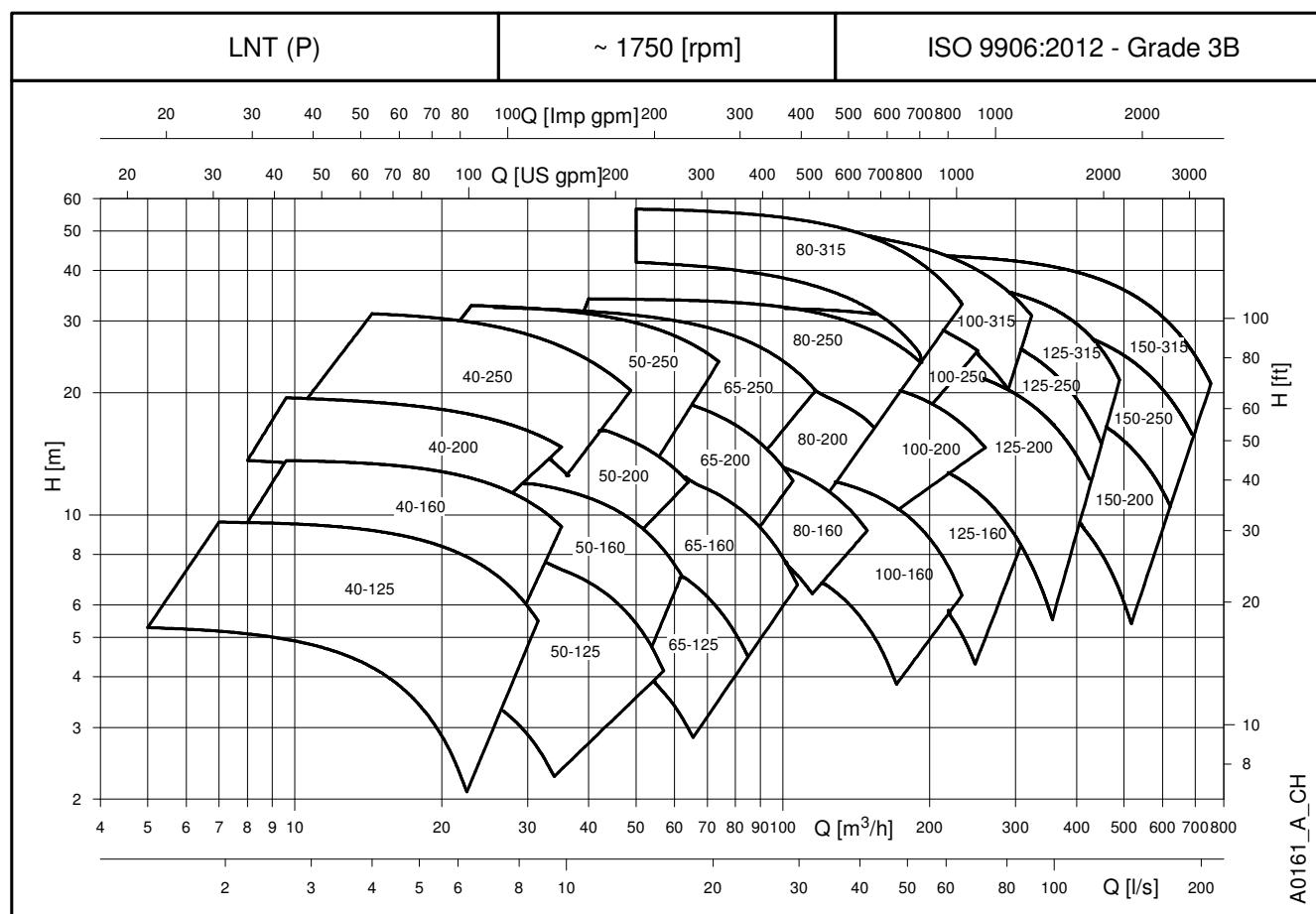
PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	η _P % (2)	l/s 0	5,8	13,6	21,4	29,2	36,9	44,7	52,5	60,3	68,1	75,8	83,6	91,7
						m ³ /h 0	21	49	77	105	133	161	189	217	245	273	301	330
H = TOTAL HEAD METRES COLUMN OF WATER																		
125-160/40	4	148	○	64,2	8,8		8,7	8,1	6,8	4,8	2,2							
125-160/55	5,5	167	○	68,9	12,2		12,1	11,5	10,3	8,4	5,9							
125-160/75	7,5	184	●	73,5	15,2		15,1	14,5	13,5	11,8	9,4	6,3						
125-200/75	7,5	192	○	72,7	16,6		16,4	15,8	14,8	13,0	10,3	6,8						
125-200/110	11	217	○	75,3	22,0		21,7	21,3	20,4	18,9	16,8	13,9						
125-200/150	15	229	●	77,9	25,1		24,8	24,4	23,6	22,3	20,3	17,7	14,4					
125-250/150	15	241	○	75,4	27,6		27,6	27,0	26,0	24,3	22,1	19,0	15,0	10,0				
125-250/185	18,5	259	●	77,1	31,9		31,9	31,3	30,4	28,9	26,7	23,9	20,3	15,8				
125-315/220	22	260	○	75,4	33,1		33,2	32,6	31,6	30,2	28,5	26,3	23,5	20,0	15,6	10,1		
125-315/300	30	284	●	76,0	40,1		39,9	39,4	38,6	37,4	35,9	34,0	31,6	28,6	24,9	20,4	14,7	

PUMP TYPE	P _N kW	Impeller			Q = DELIVERY													
		Ø mm	○	●	η _P % (2)	l/s 0	12,2	22,2	32,2	42,2	52,2	62,2	72,2	82,2	92,2	102,2	112,2	121,9
						m ³ /h 0	44	80	116	152	188	224	260	296	332	368	404	439
H = TOTAL HEAD METRES COLUMN OF WATER																		
150-200/110	11	179	○	68,5	14,2	14,3	14,1	13,5	12,5	11,1	9,6	7,8	5,3					
150-200/150	15	204	○	73,0	19,0		18,6	18,0	17,2	16,1	14,6	12,7	10,5	8,0				
150-200/185	18,5	220	●	76,9	22,3		21,9	21,5	20,8	19,9	18,6	16,9	14,8	12,3				
150-250/220	22	235	○	77,2	25,9		25,8	25,5	24,8	23,7	22,1	20,2	17,8	15,0	11,9			
150-250/300	30	259	●	80,5	32,5		32,2	31,9	31,4	30,5	29,3	27,6	25,5	22,9	19,8	16,4		
150-315/370	37	280	○	76,7	38,9		39,0	38,9	38,5	38,0	37,3	36,3	35,1	33,5	31,7	29,5	26,8	
150-315/450	45	296	●	78,1	44,1		44,3	44,2	44,0	43,6	42,9	42,1	40,9	39,5	37,7	35,7	33,2	

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-125-150_4p60S-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

e-LNT SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES


e-LNT 40, 50, 65 SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	(1)	1/s 0	1,4	2,5	3,6	4,7	5,8	6,9	8,1	9,2	10,3	11,4	12,5	13,3
				m ³ /h 0	5	9	13	17	21	25	29	33	37	41	45	48
H = TOTAL HEAD METRES COLUMN OF WATER																
40-125/02	0,25	118	○	5,3	5,3	5,0	4,5	3,7	2,6							
40-125/03	0,37	128	○	6,5		6,3	5,8	5,1	4,1	2,9						
40-125/05	0,55	133	○	7,6		7,5	7,1	6,5	5,7	4,6						
40-125/07	0,75	145	●	9,4		9,5	9,3	8,8	8,2	7,3	6,3					
40-160/05	0,55	150	○	9,7		9,3	8,8	8,2	7,3	6,2						
40-160/07	0,75	160,5	○	11,7		11,7	11,4	11,0	10,4	9,6	8,5					
40-160/11	1,1	171	●	13,5			13,5	13,2	12,6	12,0	11,1	10,0				
40-200/11	1,1	186	○	16,3		15,5	15,0	14,4	13,7	12,8						
40-200/15	1,5	198	○	17,9		17,2	16,8	16,2	15,6	14,8	13,8					
40-200/22	2,2	205	●	20,1			19,1	18,6	18,0	17,3	16,4	15,3				
40-250/22	2,2	226,5	○	24,0			23,3	22,6	21,7	20,6	19,3	17,8	16,2			
40-250/30A	3	239	○	26,8			26,3	25,6	24,8	23,8	22,6	21,2	19,7	18,0		
40-250/30	3	252	○	28,8				27,6	26,8	25,8	24,6	23,3	21,8	20,2	18,4	
40-250/40	4	259	●	32,0				31,0	30,2	29,3	28,1	26,8	25,3	23,6	21,9	20,6

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	(1)	1/s 0	2,5	4,2	5,8	7,5	9,2	10,8	12,5	14,2	15,8	17,5	19,2	20,6
				m ³ /h 0	9	15	21	27	33	39	45	51	57	63	69	74
H = TOTAL HEAD METRES COLUMN OF WATER																
50-125/03	0,37	105	○	5,0	4,6	4,3	3,9	3,3	2,4							
50-125/05	0,55	118	○	6,4		5,6	5,3	4,8	4,1	3,2						
50-125/07	0,75	130	○	8,2		7,4	7,2	6,8	6,3	5,6	4,7	3,7				
50-125/11	1,1	135	●	9,3		8,5	8,3	8,0	7,5	6,9	6,2	5,2	4,1			
50-160/07	0,75	127	○	8,1		7,6	7,3	6,8	6,1	5,1	3,9	2,6				
50-160/11	1,1	139	○	9,6		9,1	8,8	8,4	7,8	6,9	5,9	4,6				
50-160/15A	1,5	154	○	12,1		11,6	11,4	11,1	10,7	10,0	9,2	8,1	6,9			
50-160/15	1,5	163	●	13,2		12,7	12,5	12,2	11,8	11,1	10,4	9,4	8,2			
50-200/15	1,5	177	○	14,3			13,5	12,9	12,2	11,3	10,2	8,9				
50-200/22	2,2	189	○	17,1				16,0	15,3	14,5	13,5	12,4	11,1			
50-200/30	3	199	●	19,1				18,1	17,5	16,8	15,9	14,9	13,7			
50-250/30	3	225	○	24,8			24,0	23,5	22,8	21,9	20,8	19,4	17,9			
50-250/40	4	243	○	29,6				28,3	27,7	26,9	26,0	24,8	23,4	21,8		
50-250/55	5,5	257,5	●	33,6				32,5	32,0	31,4	30,5	29,5	28,3	26,9	25,3	23,8

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	(1)	1/s 0	4,2	6,7	9,2	11,7	14,2	16,7	19,2	21,7	24,2	26,7	29,2	32,2
				m ³ /h 0	15	24	33	42	51	60	69	78	87	96	105	116
H = TOTAL HEAD METRES COLUMN OF WATER																
65-125/07	0,75	118	○	6,4	6,0	5,7	5,3	4,8	4,2	3,4						
65-125/11A	1,1	130	○	8,1		7,3	6,9	6,5	5,9	5,1	4,2					
65-125/11	1,1	140	○	9,3		8,6	8,2	7,8	7,2	6,4	5,5	4,4				
65-125/15	1,5	144	●	10,0		9,2	8,9	8,5	8,0	7,3	6,4	5,4				
65-160/11	1,1	144	○	10,2		9,1	8,7	8,1	7,4	6,5	5,4	4,2				
65-160/15	1,5	152	○	11,4		10,4	10,0	9,5	8,9	8,1	7,1	5,9				
65-160/22	2,2	170	○	14,3		13,2	12,8	12,4	11,8	11,2	10,3	9,3	8,2	6,9		
65-160/30	3	176	●	15,5			14,0	13,6	13,1	12,5	11,7	10,8	9,7	8,5	7,1	
65-200/22	2,2	168	○	14,2		13,8	13,4	12,7	11,8	10,6	9,2					
65-200/30A	3	179	○	16,2		15,9	15,5	14,9	14,1	13,0	11,8	10,3				
65-200/30	3	195	○	18,1		17,8	17,5	16,9	16,1	15,2	14,0	12,6	11,0			
65-200/40	4	209	●	21,9			21,3	20,7	20,1	19,2	18,2	17,0	15,5	13,9	12,1	
65-250/40	4	220	○	24,3		23,6	23,1	22,5	21,6	20,5	19,2	17,6	15,8			
65-250/55	5,5	232	○	27,2		26,7	26,3	25,7	24,9	24,0	22,8	21,4	19,8	17,9		
65-250/75	7,5	256	●	33,1			32,1	31,6	30,9	30,1	29,1	27,8	26,4	24,8	22,9	20,4

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNT-40-50-65_4p60p-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter

e-LNT 80, 100 SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE RANGE AT 60 Hz, 4 POLES

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	(1)	I/s 0	5,8	11,9	18,1	24,2	30,3	36,4	40,3	46,4	52,8	58,9	65,0	72,2
				m ³ /h 0	21	43	65	87	109	131	145	167	190	212	234	260
H = TOTAL HEAD METRES COLUMN OF WATER																
80-160/22A	2,2	151	○	11,4		10,5	9,8	8,6	6,9							
80-160/22	2,2	159	○	12,4		11,3	10,6	9,5	7,8							
80-160/30	3	168	○	14,1		13,1	12,6	11,6	10,2	8,3						
80-160/40	4	180	●	16,2		15,1	14,6	13,8	12,6	10,9	9,6					
80-200/30	3	173	○	14,9	14,9	14,4	13,3	11,9	10,0							
80-200/40	4	189	○	17,7		17,3	16,3	15,0	13,2							
80-200/55A	5,5	199	○	19,7		19,3	18,5	17,2	15,5	13,5						
80-200/55	5,5	210	○	22,0		21,7	20,9	19,8	18,2	16,3						
80-200/75	7,5	220	●	24,2		24,0	23,2	22,1	20,7	18,9	17,5					
80-250/110A	11	243	○	30,6		30,3	30,0	29,3	28,0	26,3	24,9	22,5				
80-250/110	11	258	●	34,4		34,0	33,7	33,1	32,0	30,4	29,2	26,8	24,0			
80-315/150	15,0	292	○	42,8		42,1	41,1	39,5	37,4	34,9	33,0	29,6	25,1	19,8		
80-315/185	18,5	306	○	47,5		46,9	46,0	44,5	42,4	39,9	38,0	34,6	30,5	25,9		
80-315/220	22	322	○	53,1		52,5	51,7	50,3	48,4	46,0	44,1	40,8	36,8	32,5	27,8	
80-315/300	22	334	●	57,5		56,9	56,1	54,9	53,2	50,9	49,2	46,0	42,0	37,7	32,9	27,0

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	(1)	I/s 0	10,8	18,1	25,3	32,5	39,7	46,9	54,2	61,4	68,6	75,8	83,1	89,7
				m ³ /h 0	39	65	91	117	143	169	195	221	247	273	299	323
H = TOTAL HEAD METRES COLUMN OF WATER																
100-160/22	2,2	144	○	9,9	8,8	8,4	7,8	7,0	5,7	4,0						
100-160/30	3	152	○	10,9		9,3	8,8	8,1	6,9	5,4						
100-160/40	4	168	○	13,5		11,7	11,3	10,7	9,8	8,5	6,8					
100-160/55	5,5	177	●	15,2		13,3	12,9	12,4	11,6	10,5	9,1	7,3				
100-200/55	5,5	188	○	17,3		16,2	15,8	15,1	14,1	12,6						
100-200/75	7,5	201	○	19,9		18,8	18,5	18,0	17,1	15,9	14,4					
100-200/110	11	219	●	23,8		22,6	22,4	22,0	21,4	20,5	19,2	17,6	15,7			
100-250/75	7,5	214	○	23,0		21,8	21,5	20,9	19,8	18,2						
100-250/110A	11	227	○	26,0		24,7	24,4	23,9	23,0	21,7	19,8					
100-250/110	11	241	○	29,4		28,0	27,7	27,4	26,7	25,5	23,9	21,9				
100-250/150	15	259	●	34,1		32,5	32,3	32,0	31,5	30,7	29,5	27,8	25,7			
100-315/185	18,5	274	○	37,9		37,5	36,8	35,7	34,3	32,5	30,4	28,0	25,2	22,3		
100-315/220	22	286	○	41,7		41,4	40,8	39,8	38,5	36,8	34,7	32,2	29,5	26,5	23,4	
100-315/300	30	315	●	51,1		51,0	50,6	49,9	48,8	47,2	45,3	43,0	40,4	37,5	34,3	31,1

Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

LNE-80-100_4p60P-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter (2) Hydraulic efficiency of pump.

e-LNT 125, 150 SERIES (PARALLEL OPERATION)
HYDRAULIC PERFORMANCE TABLE AT 60 Hz, 4 POLES

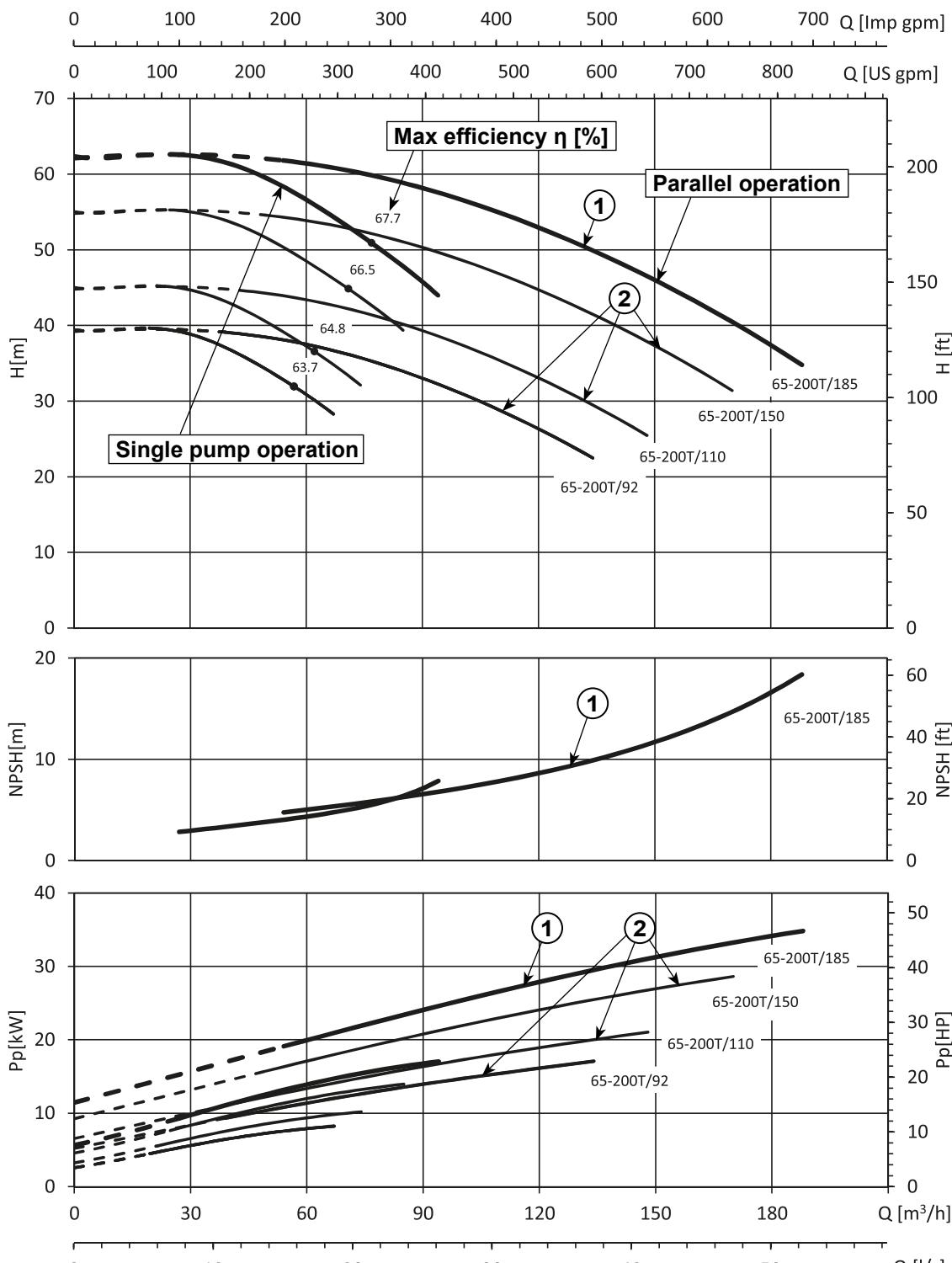
PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	○ (1)	l/s 0	11,7	23,1	34,4	45,8	57,2	68,6	80,0	91,4	102,8	114,2	125,6	136,1
				m ³ /h 0	42	83	124	165	206	247	288	329	370	411	452	490
H = TOTAL HEAD METRES COLUMN OF WATER																
125-160/40	4	148	○	8,8		8,8	8,5	7,6	6,3	4,9						
125-160/55	5,5	167	○	12,2		12,1	11,8	11,1	9,8	8,1						
125-160/75	7,5	184	●	15,3		15,2	14,9	14,3	13,1	11,5	9,5					
125-200/75	7,5	192	○	16,7		16,5	16,3	15,7	14,6	12,9	10,6	7,7				
125-200/110	11	217	○	22,1		21,8	21,5	21,0	20,1	18,7	16,9	14,7	12,1			
125-200/150	15	229	●	25,2		24,9	24,6	24,1	23,3	22,0	20,4	18,3	15,9	13,4		
125-250/150	15	241	○	27,6		27,5	27,2	26,5	25,4	23,8	21,8	19,4	16,6	13,5		
125-250/185	18,5	259	●	31,9		31,8	31,5	30,9	29,9	28,4	26,6	24,2	21,5	18,5		
125-315/220	22	260	○	33,1		33,0	32,5	31,8	30,8	29,5	27,8	25,8	23,6	21,0	18,1	
125-315/300	30	284	●	40,1		39,8	39,4	38,8	38,0	36,9	35,5	33,7	31,5	28,7	25,4	21,7

PUMP TYPE	P _N kW	Impeller		Q = DELIVERY												
		Ø mm	○ (1)	l/s 0	24,7	41,4	58,1	74,7	91,4	108,1	124,7	141,4	158,1	174,7	191,4	209,4
				m ³ /h 0	89	149	209	269	329	389	449	509	569	629	689	754
H = TOTAL HEAD METRES COLUMN OF WATER																
150-200/110	11	179	○	14,1	14,1	14,0	13,5	12,7	11,6	10,0	8,1					
150-200/150	15	204	○	19,3		18,4	17,9	17,1	16,1	14,7	13,0	11,0				
150-200/185	18,5	220	●	22,4		21,6	21,1	20,4	19,5	18,3	16,8	15,0	12,7			
150-250/220	22	235	○	26,3		25,6	25,2	24,4	23,3	21,7	19,8	17,4	14,7			
150-250/300	30	259	●	32,6		32,0	31,5	30,7	29,7	28,3	26,6	24,4	21,9	19,0	15,7	
150-315/370	37	280	○	38,9			38,8	38,5	38,2	37,6	36,8	35,9	34,7	33,3	31,7	30,1
150-315/450	45	296	●	44,2			44,0	43,8	43,5	43,0	42,4	41,6	40,5	39,3	37,8	36,2

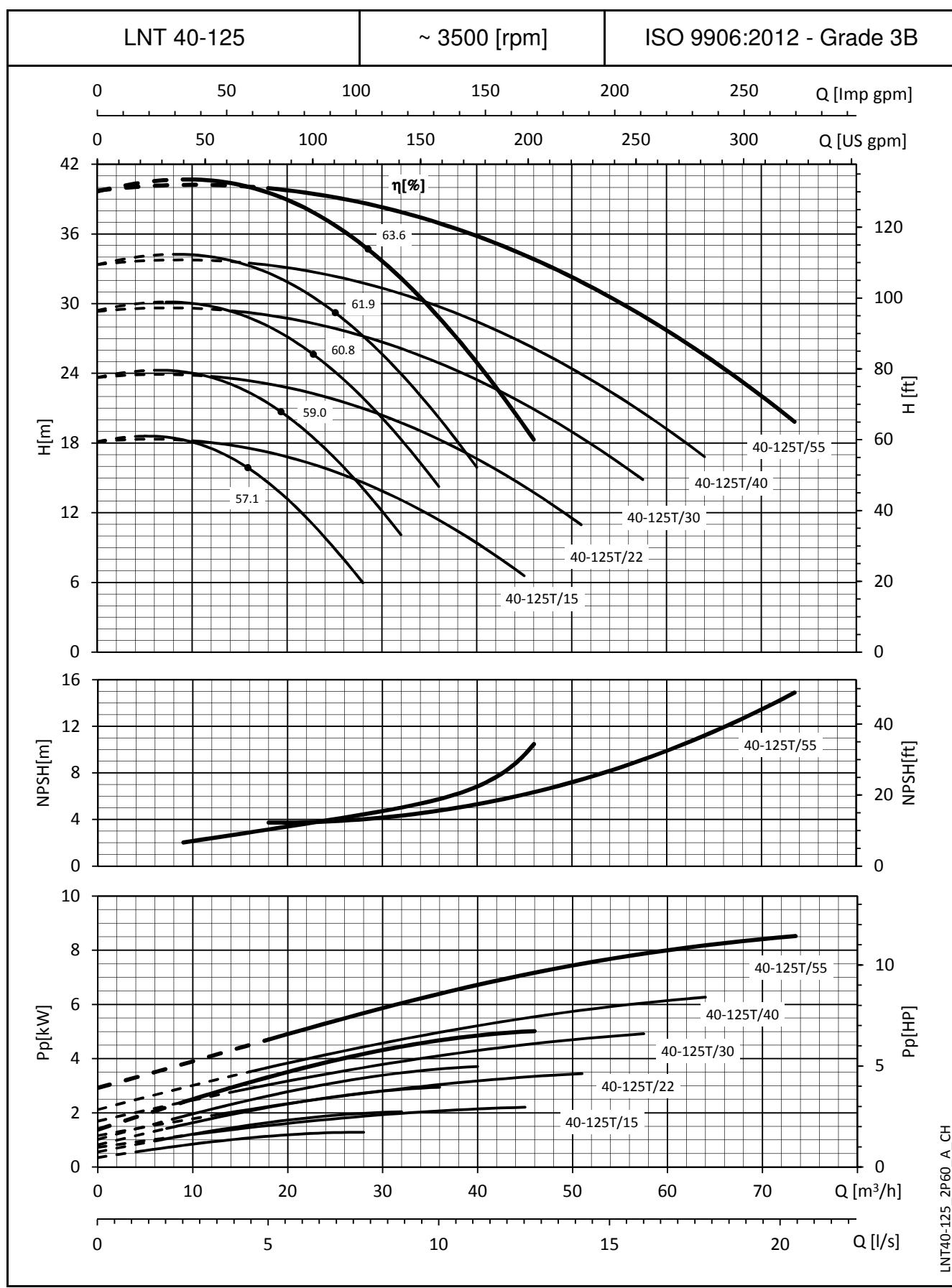
Hydraulic performances in compliance with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A)

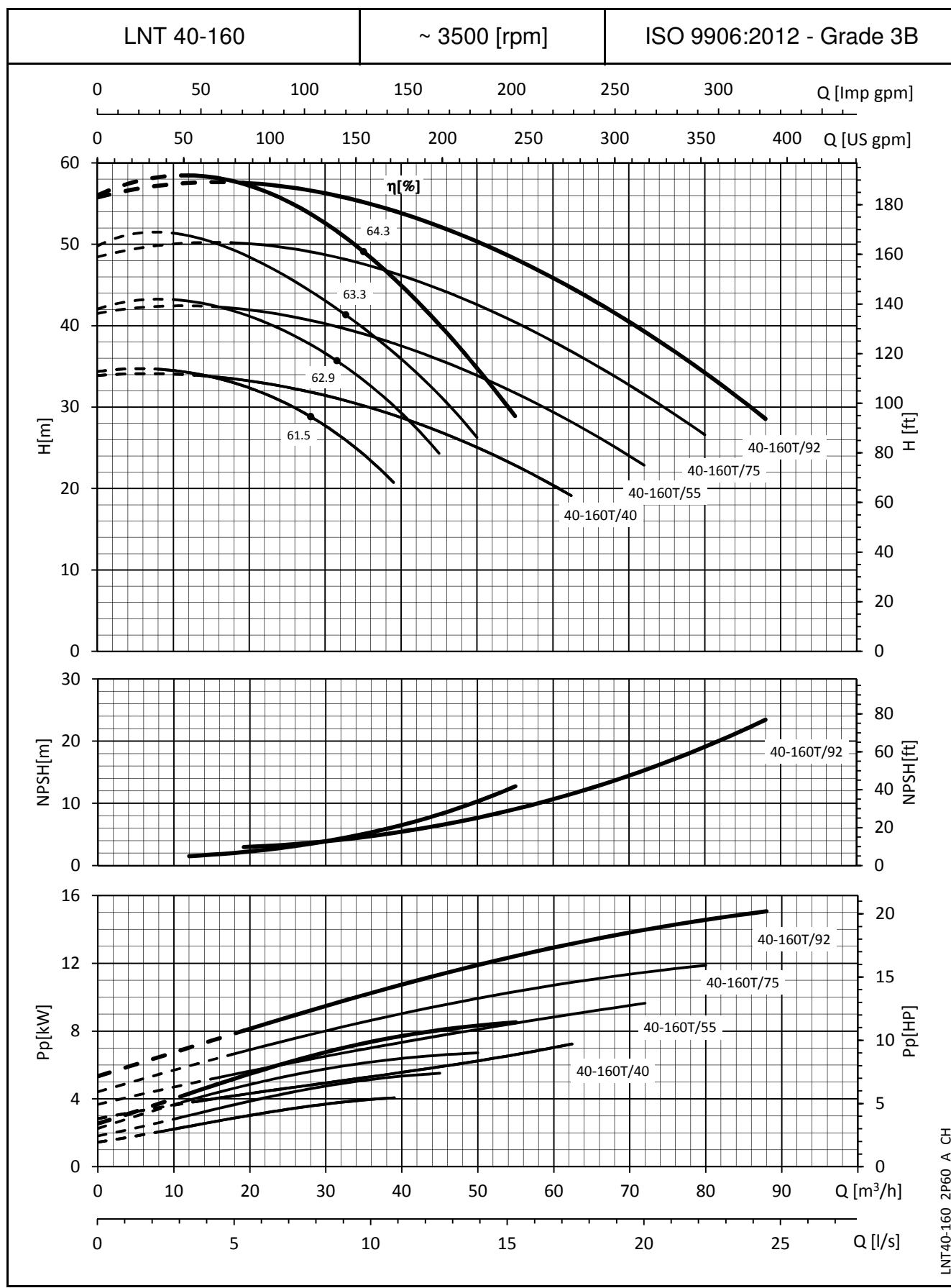
LNT-125-150_4p60P-en_a_th

(1) ● = Full impeller diameter - ○ = Trimmed impeller diameter

e-LNT SERIES
IDENTIFICATION OF GRAPH


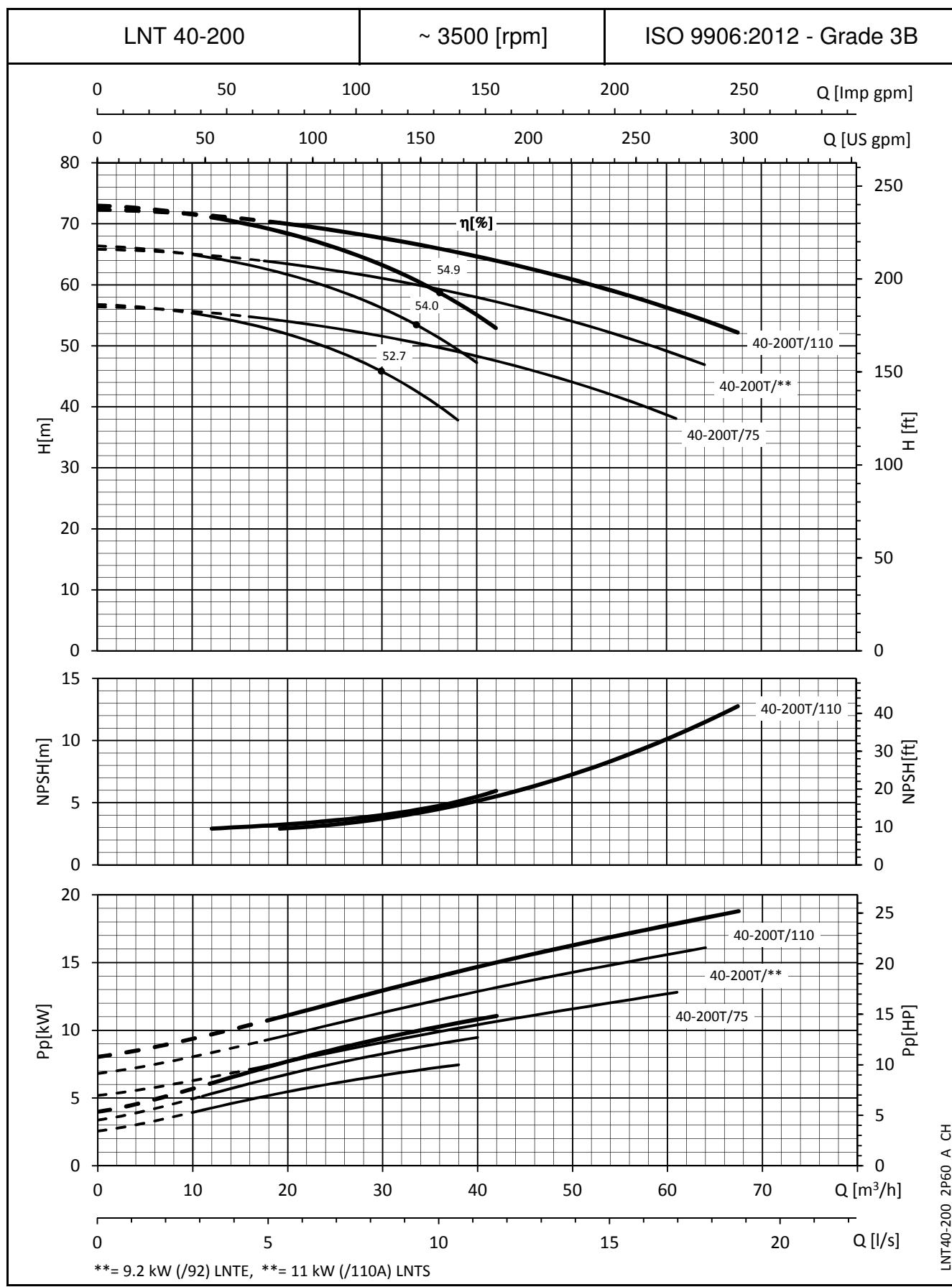
REF	TYPE	DESCRIPTION
①		Full Diameter impeller operating range
②		Trimmed diameter impeller operating range

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


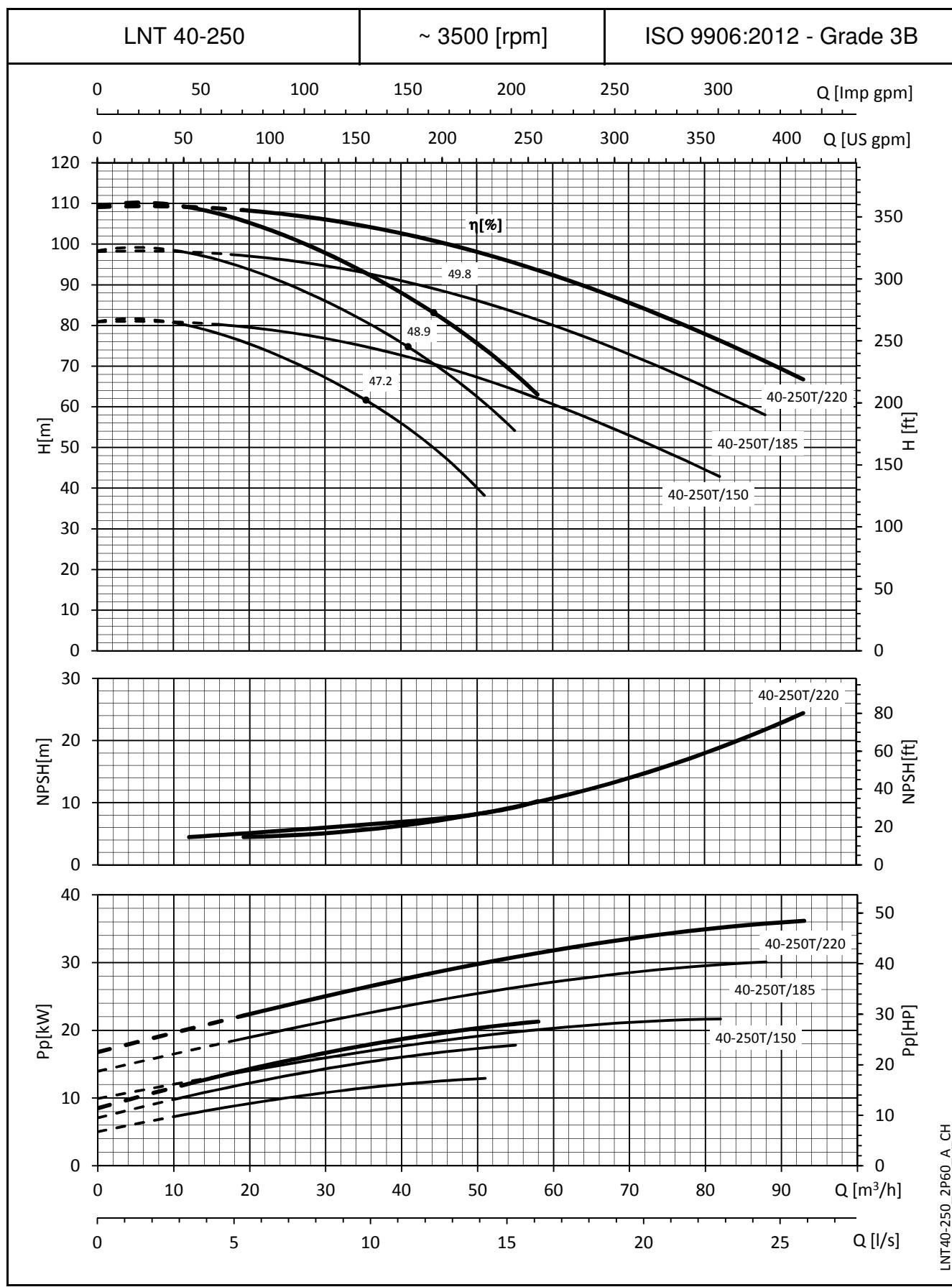
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


LNT40-160_2P60_A_CH

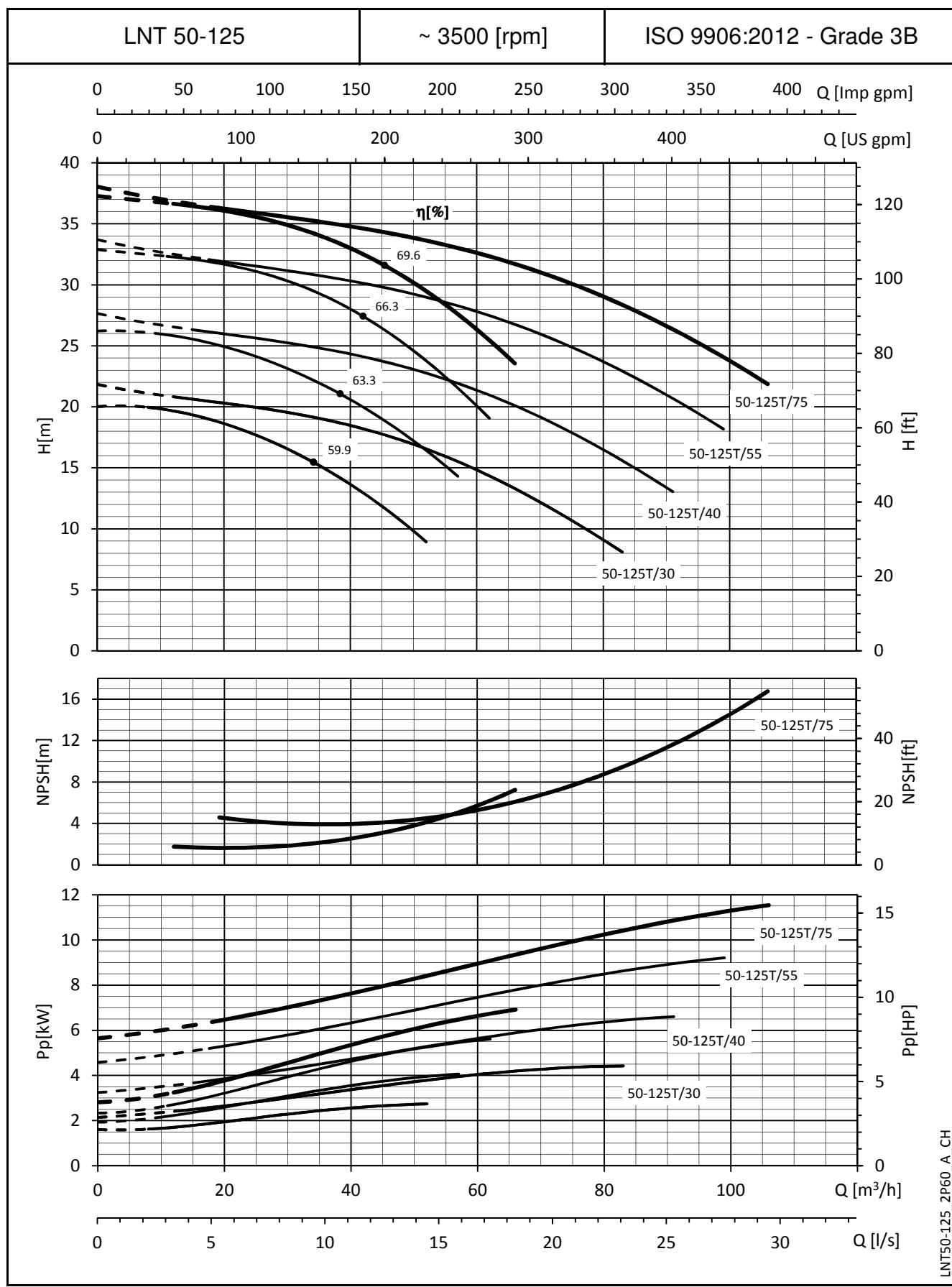
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

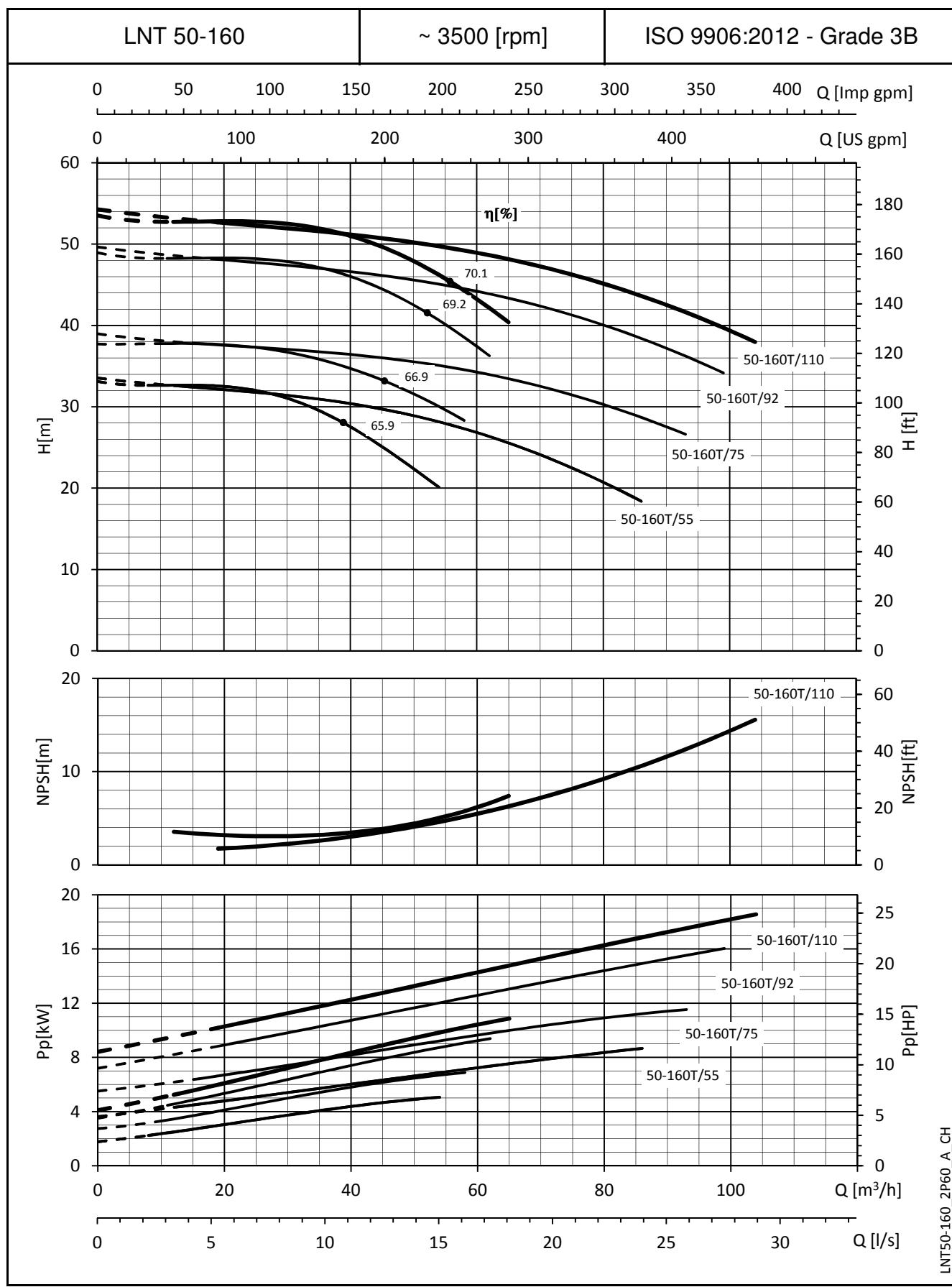
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


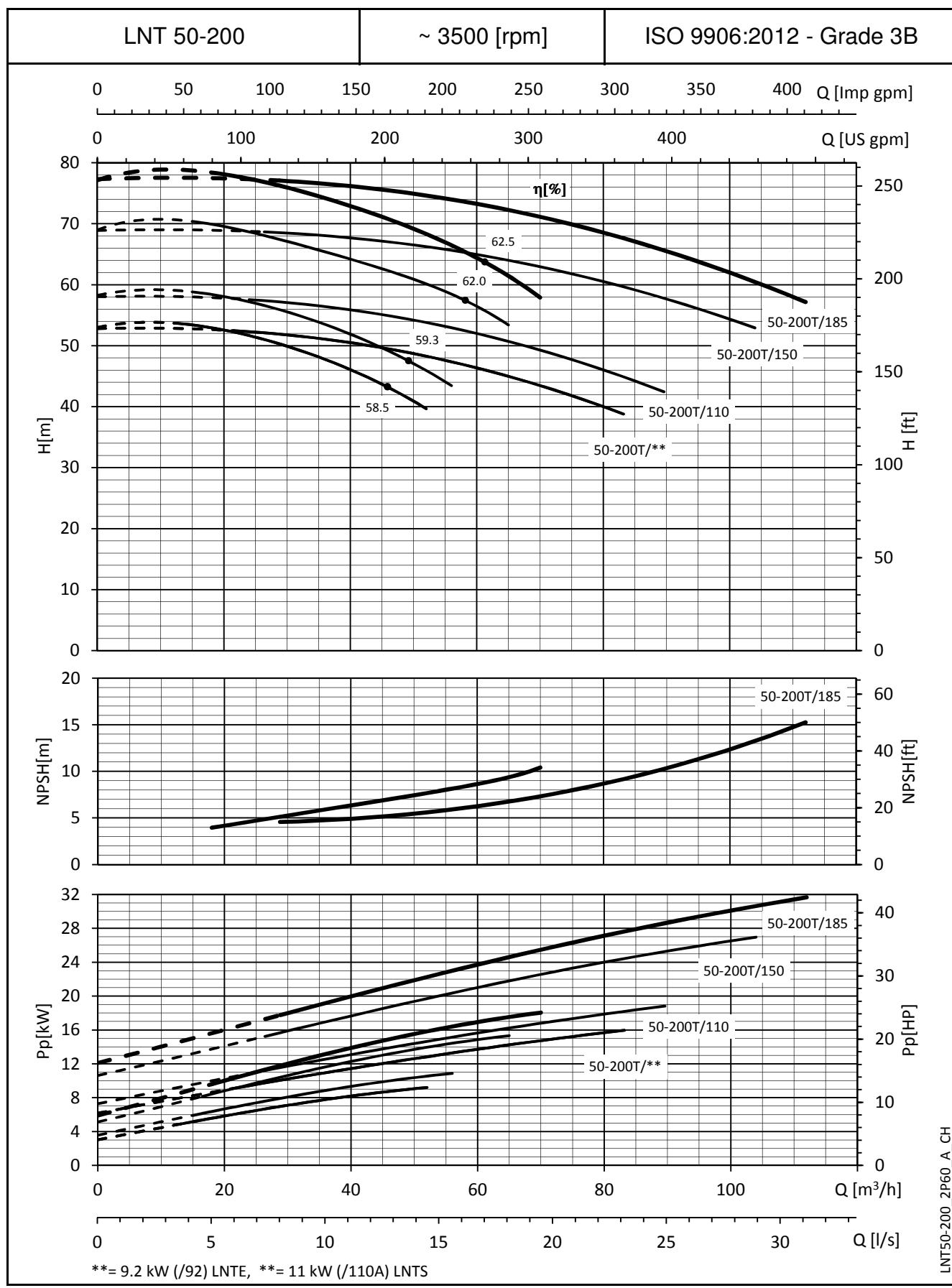
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


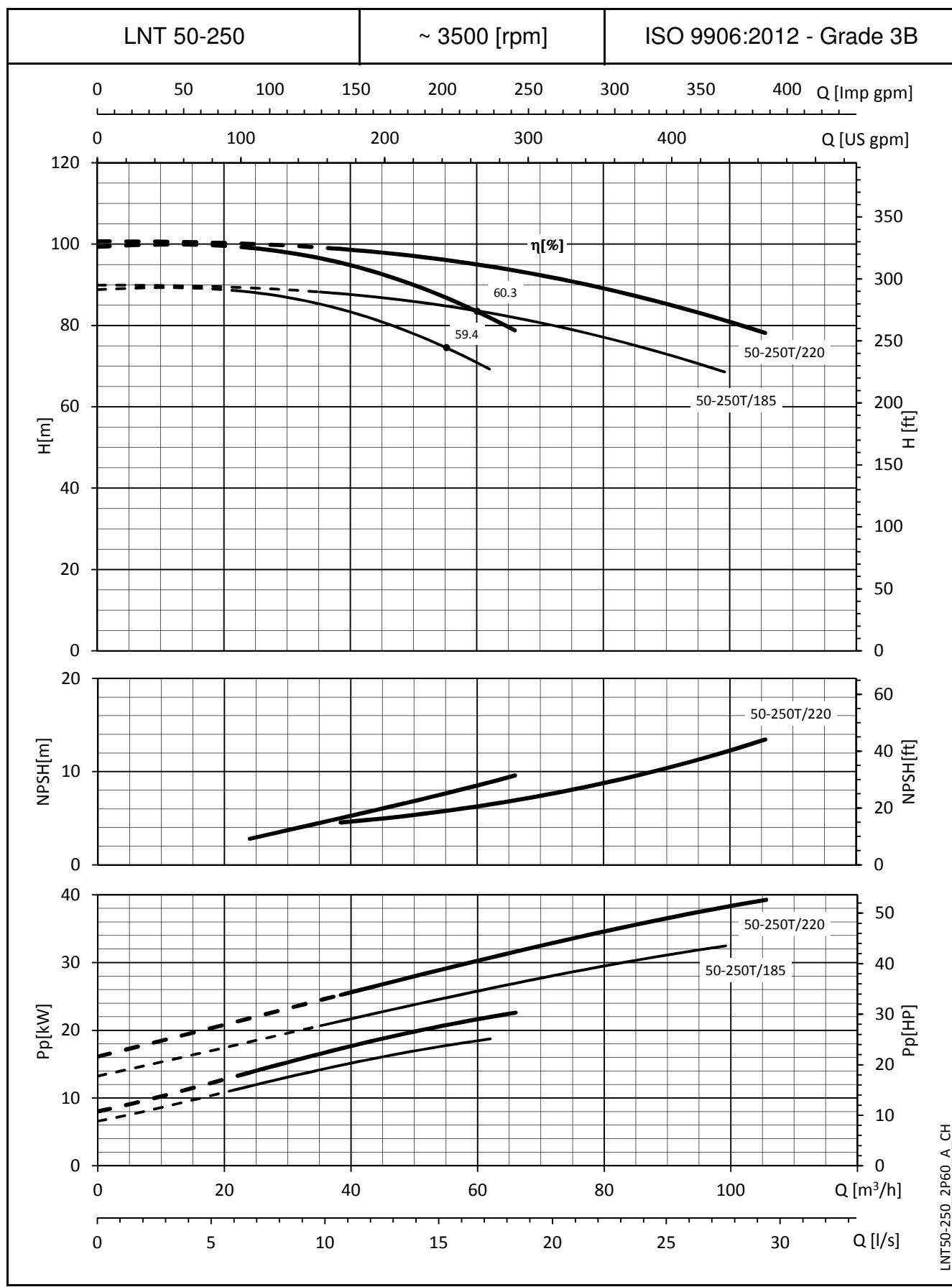
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


LNT50-160_2P60_A_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

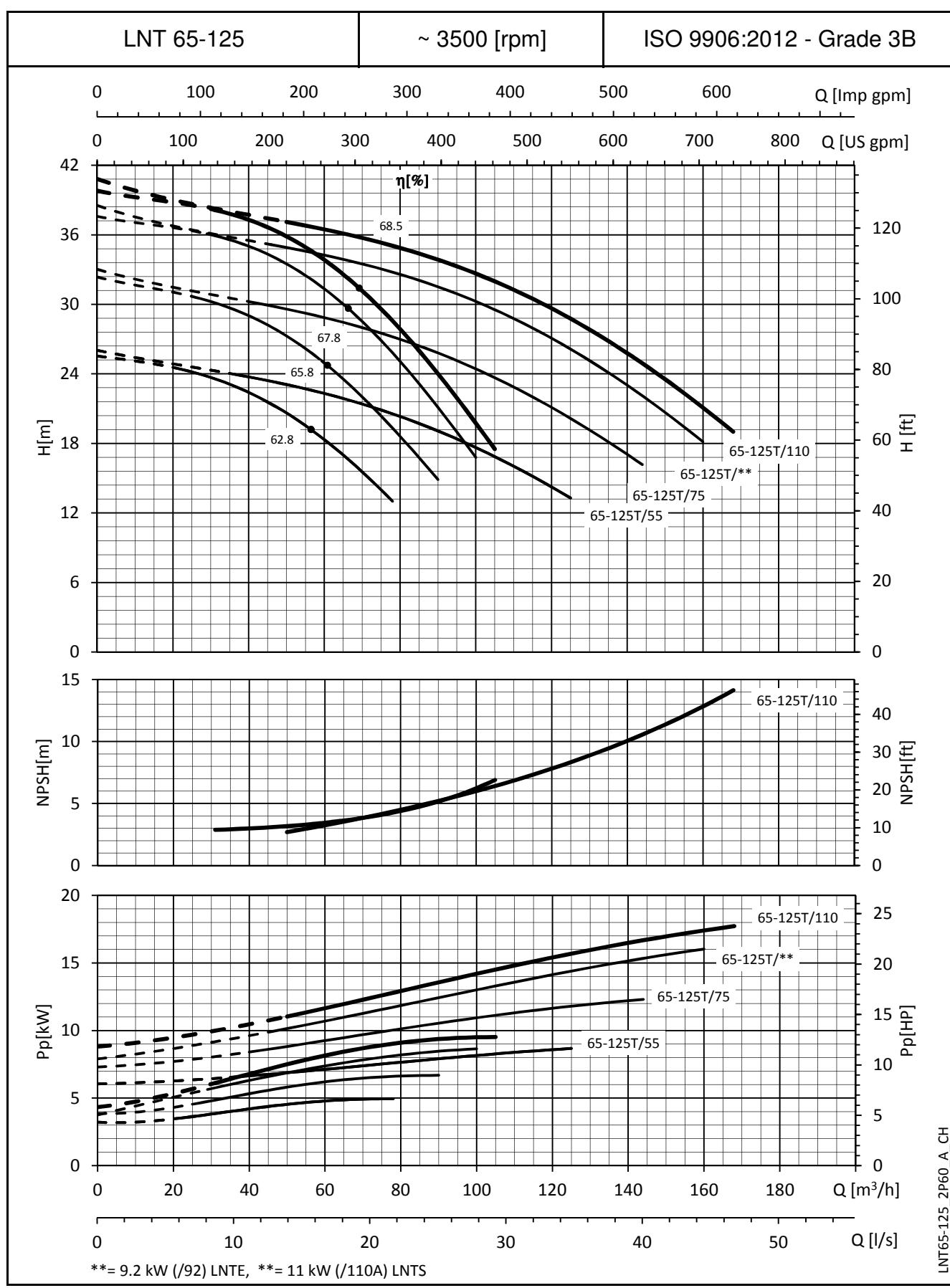
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


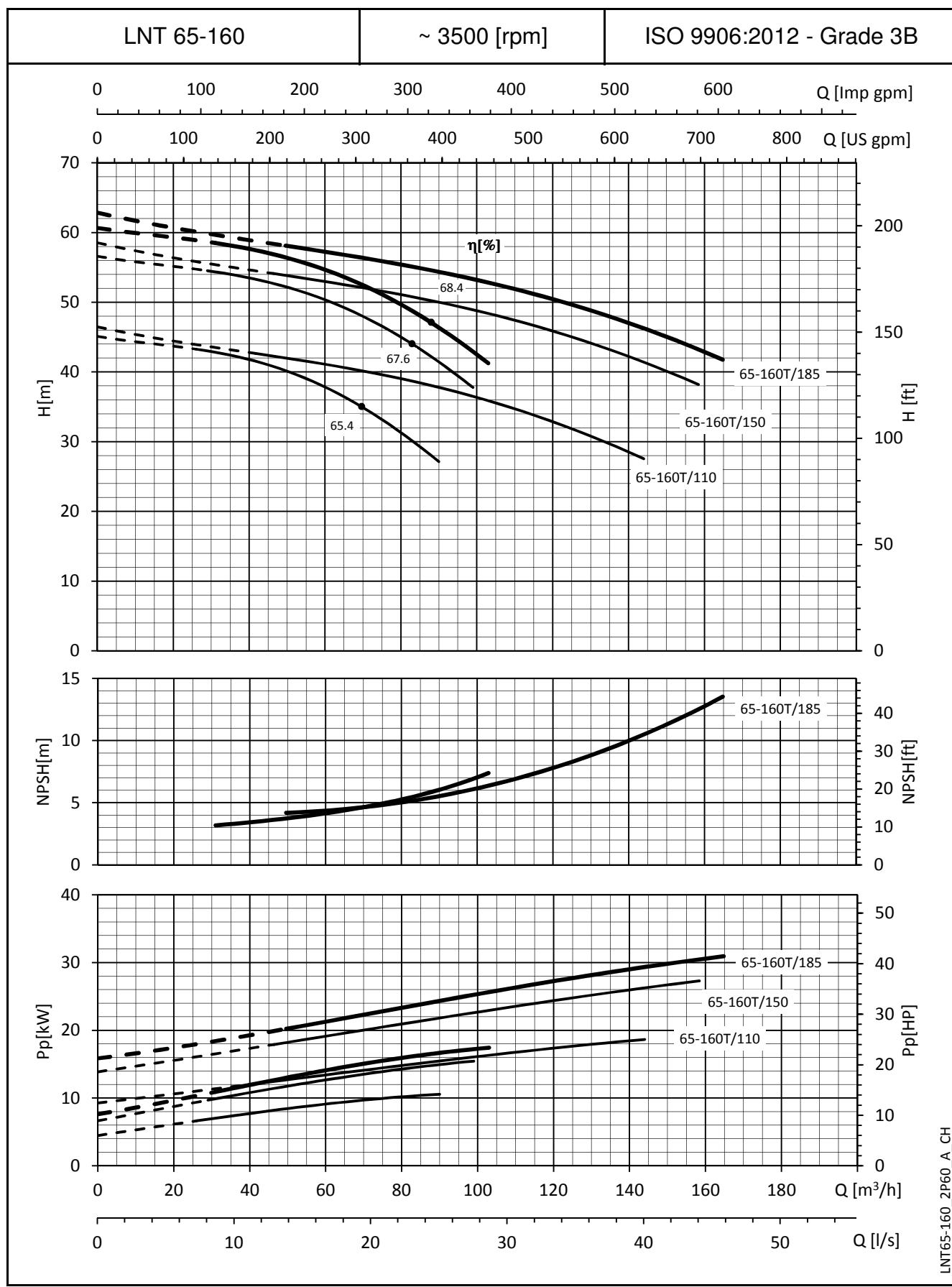
LNT50-250_2P60_A.CH

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

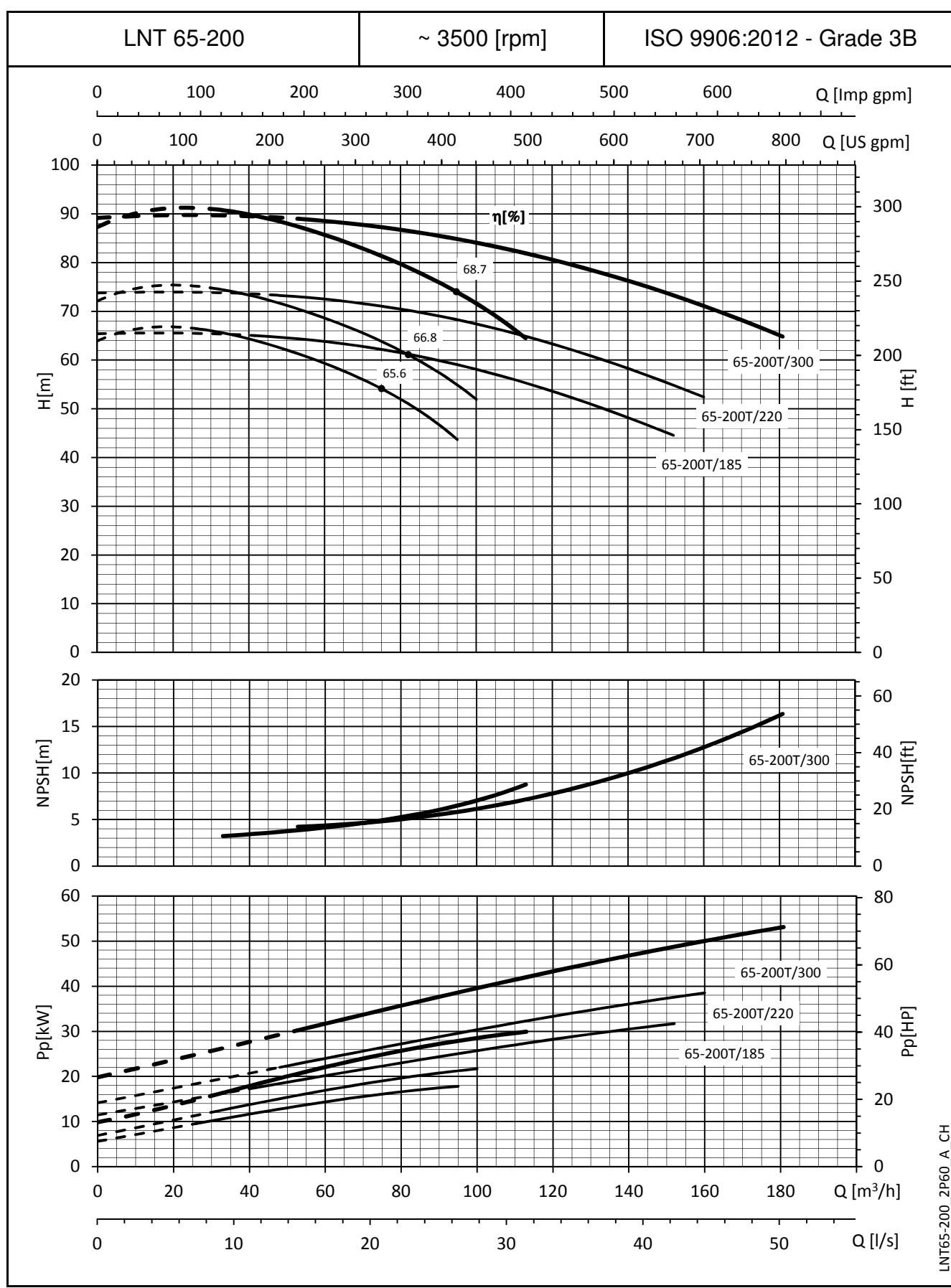
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

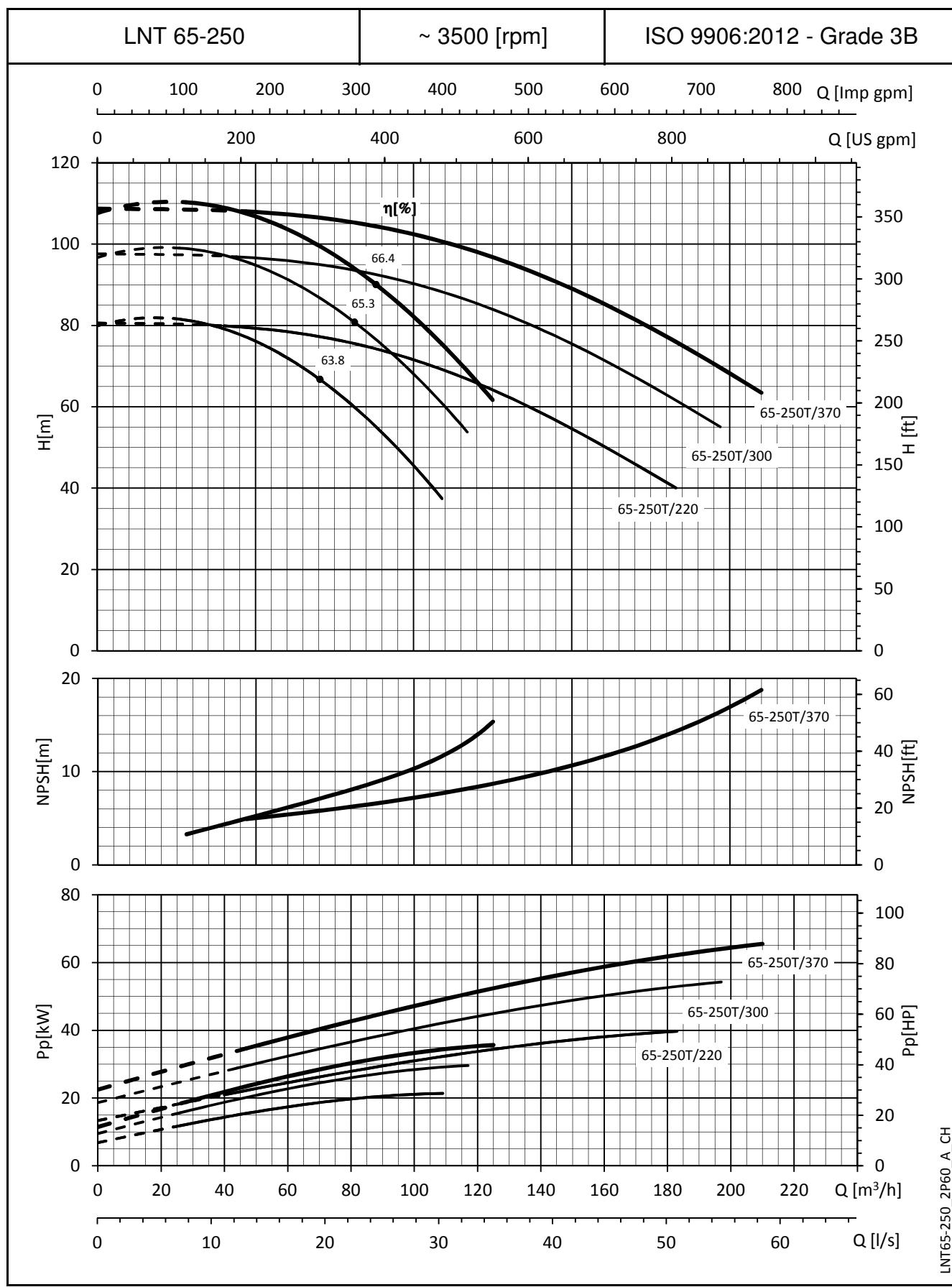
LNT65-125_2P60_A_CH

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0$ Kg/dm³ and kinematic viscosity $v = 1$ mm²/sec.

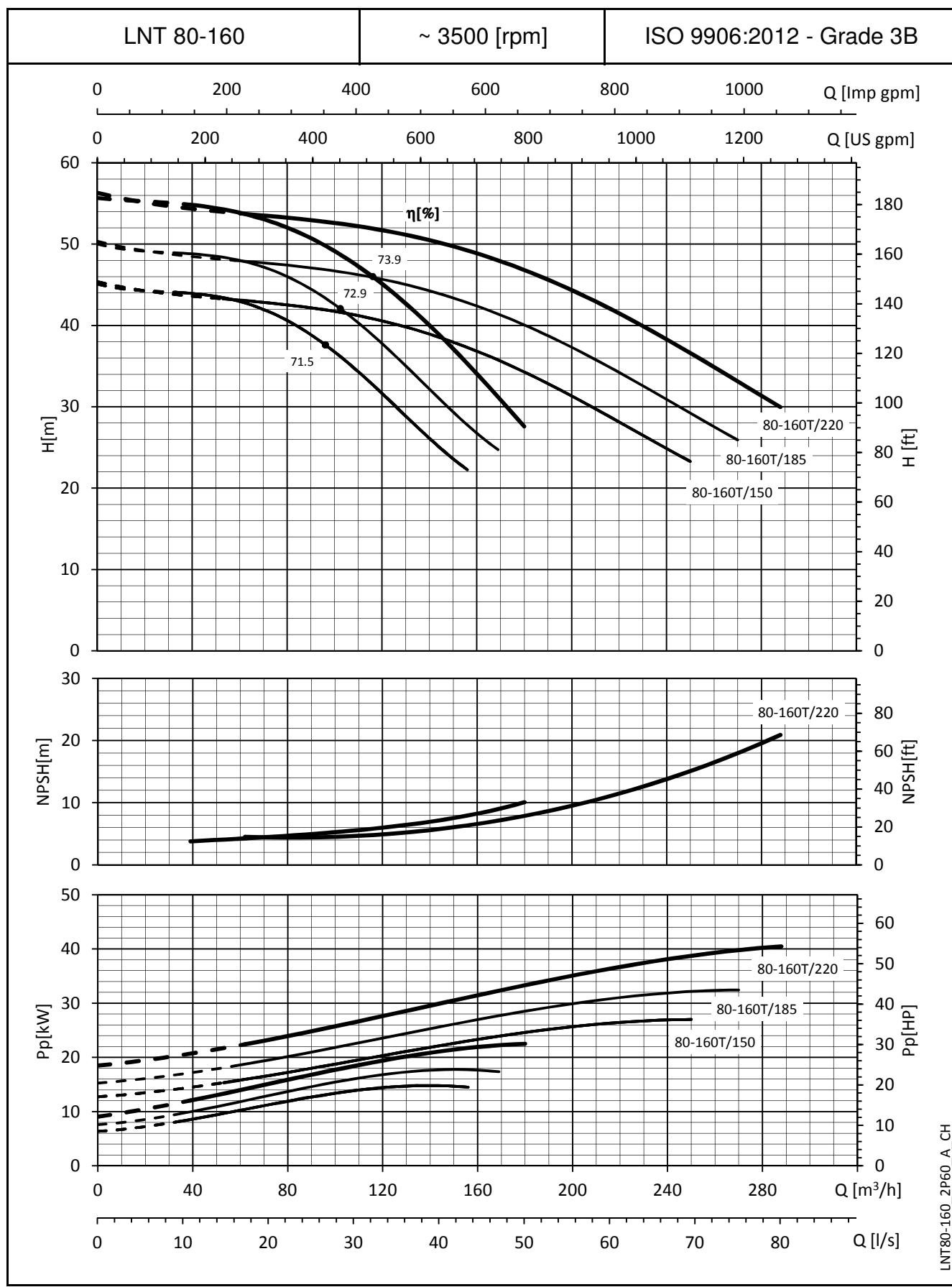
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

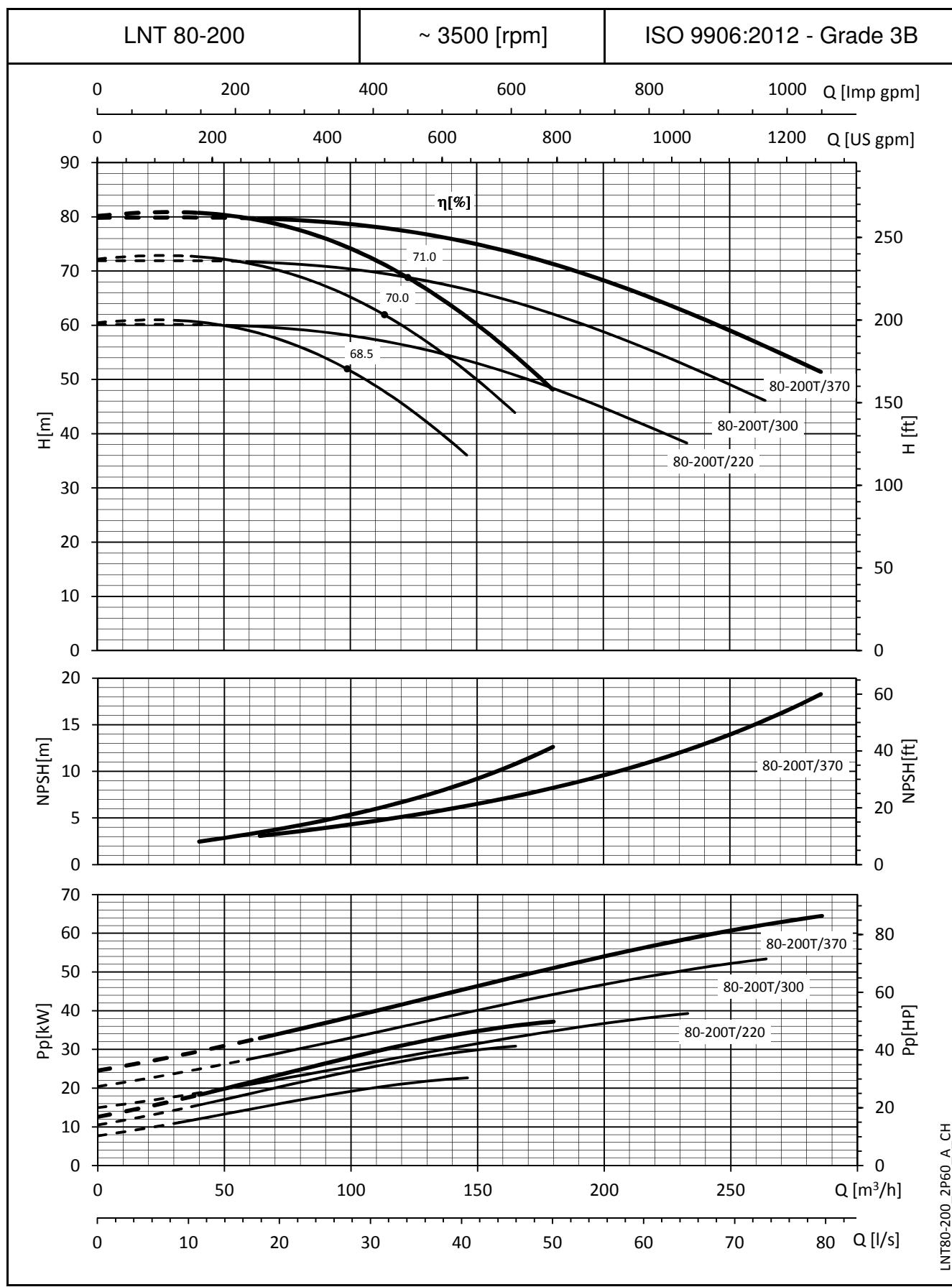
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


LNT65-250_2P60_A_CH

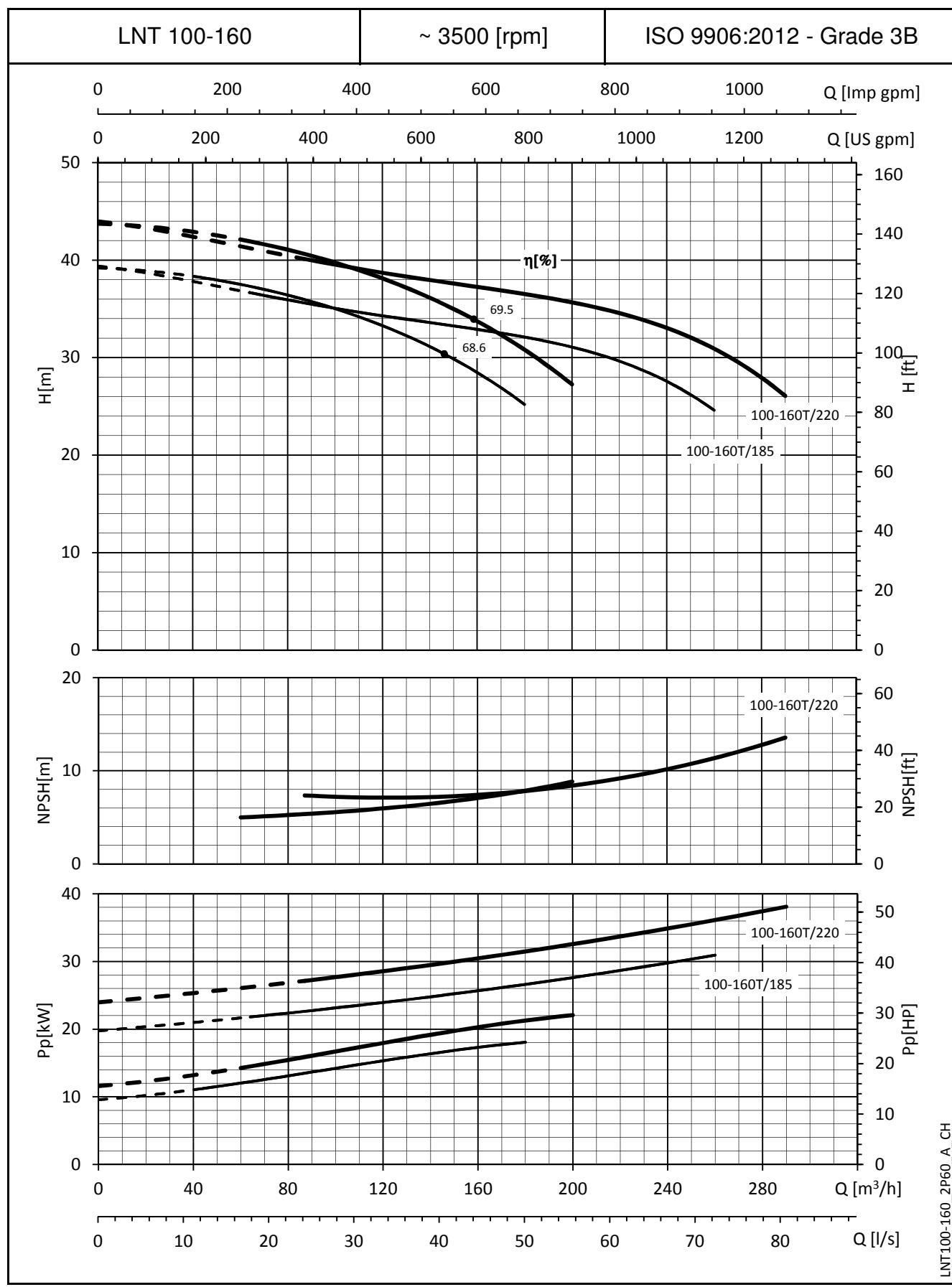
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

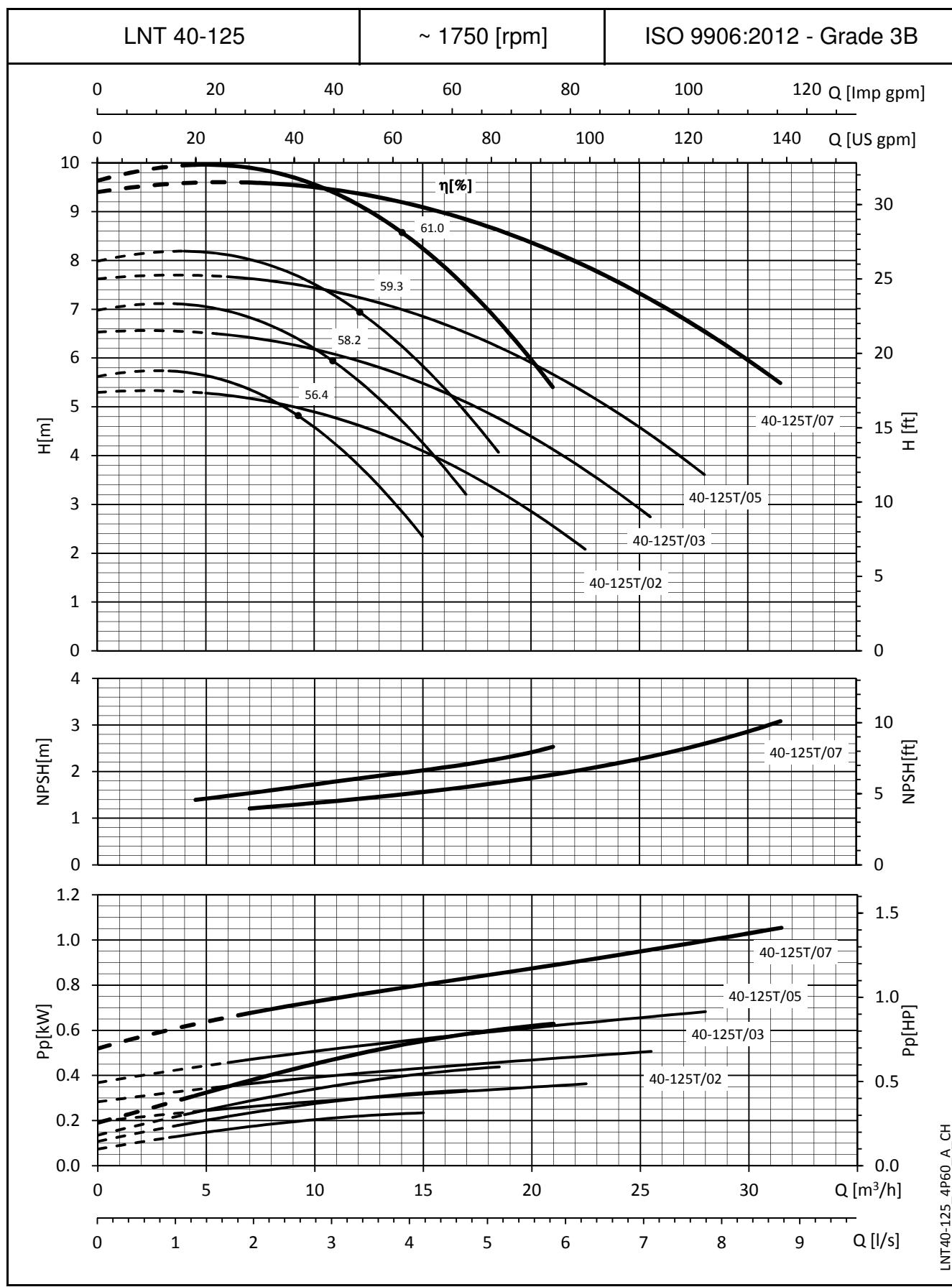
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


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

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 2 POLES


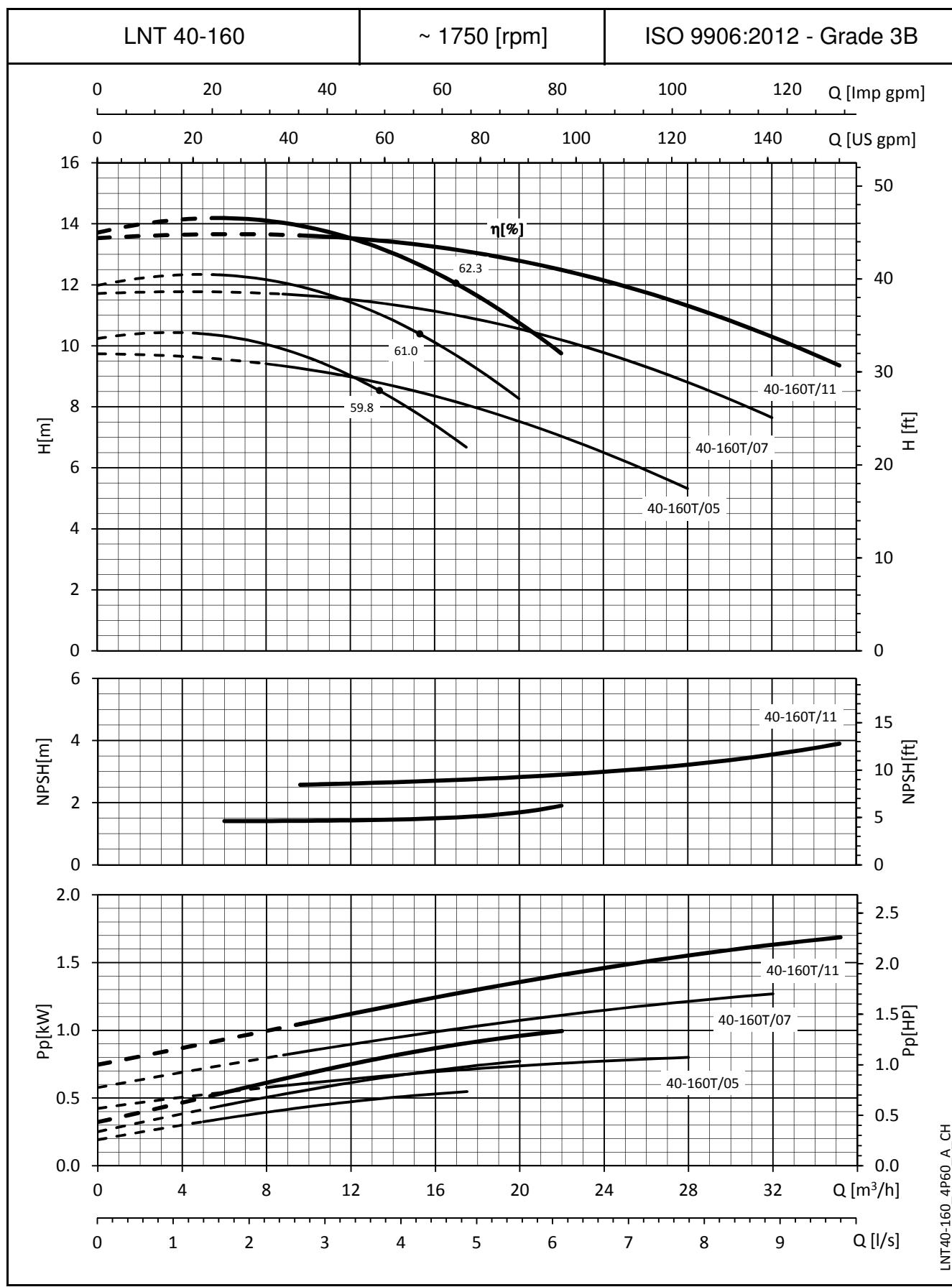
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

LNT100-160_2P60_A.CH

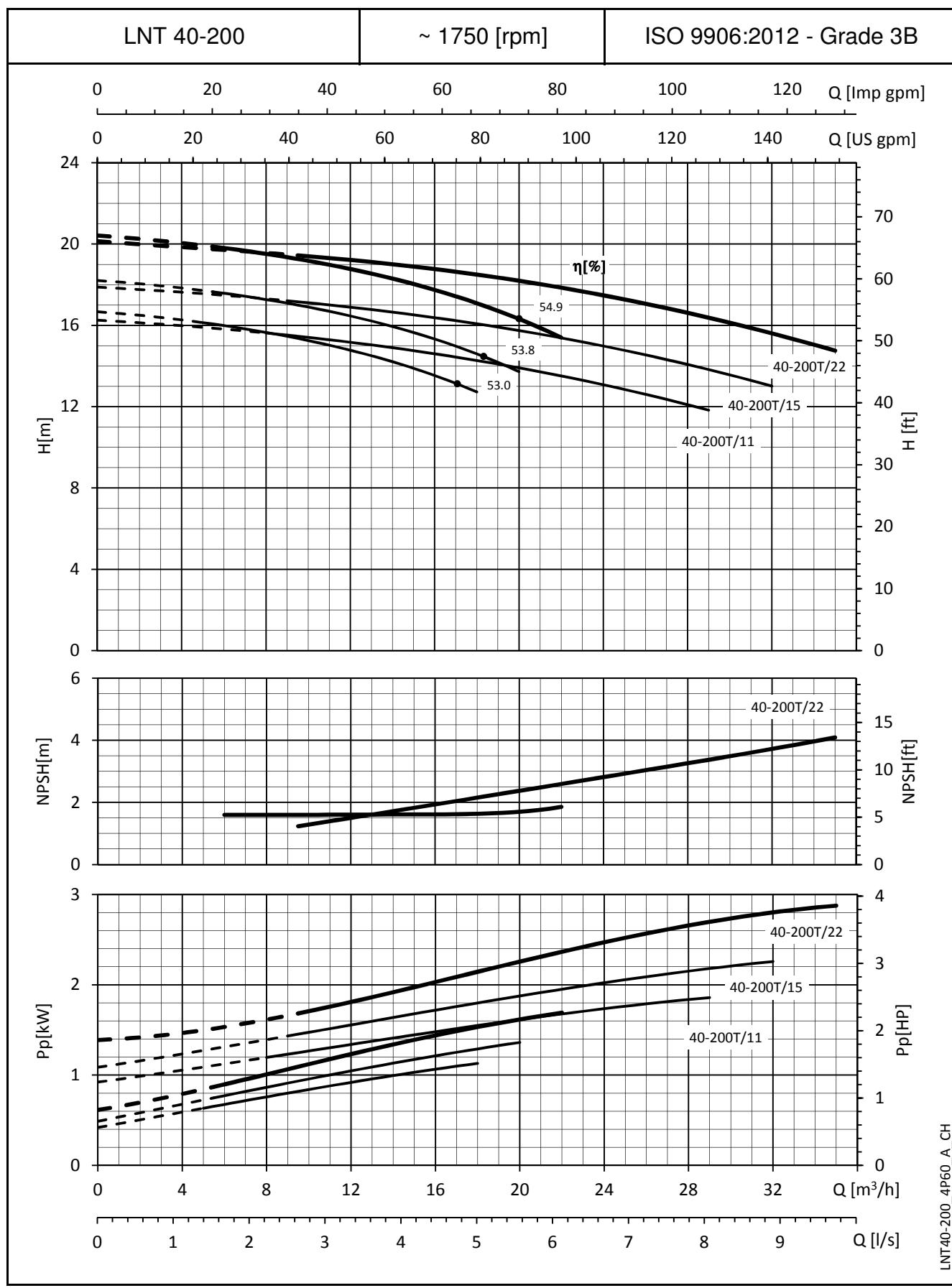
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

LNT40-125_4P60_A.CH

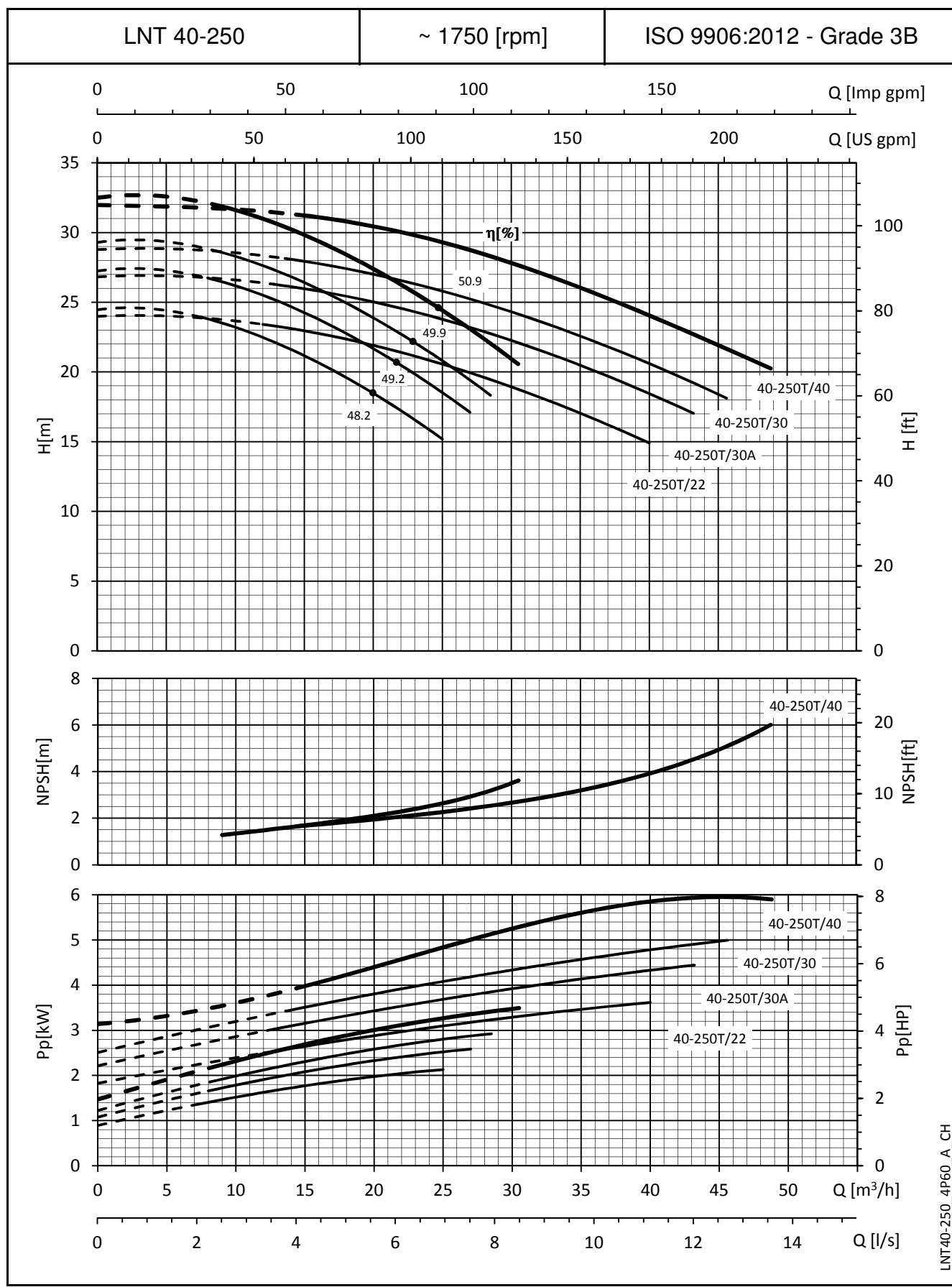
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

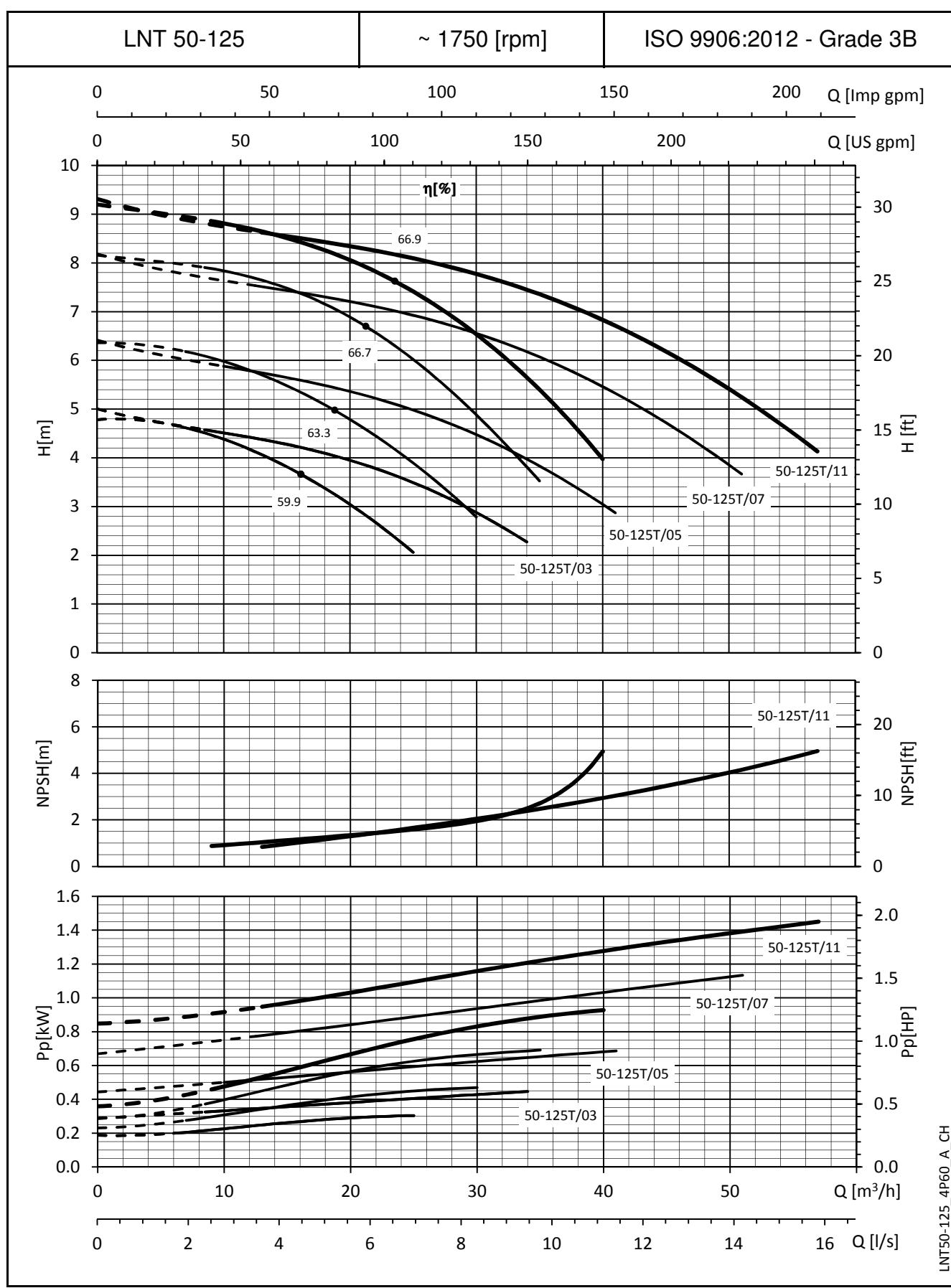
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


LNT40-200 4P60 A CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

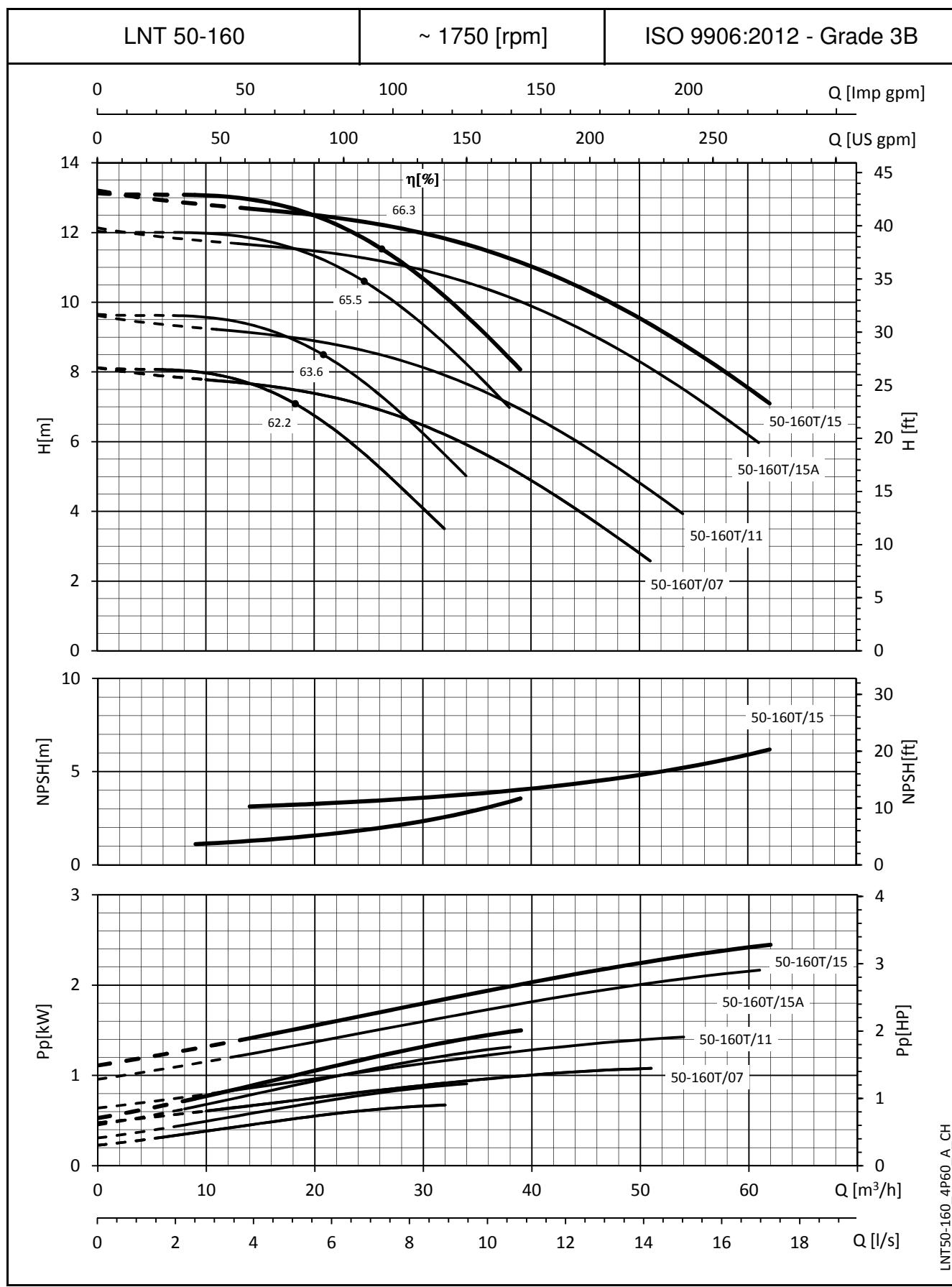
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

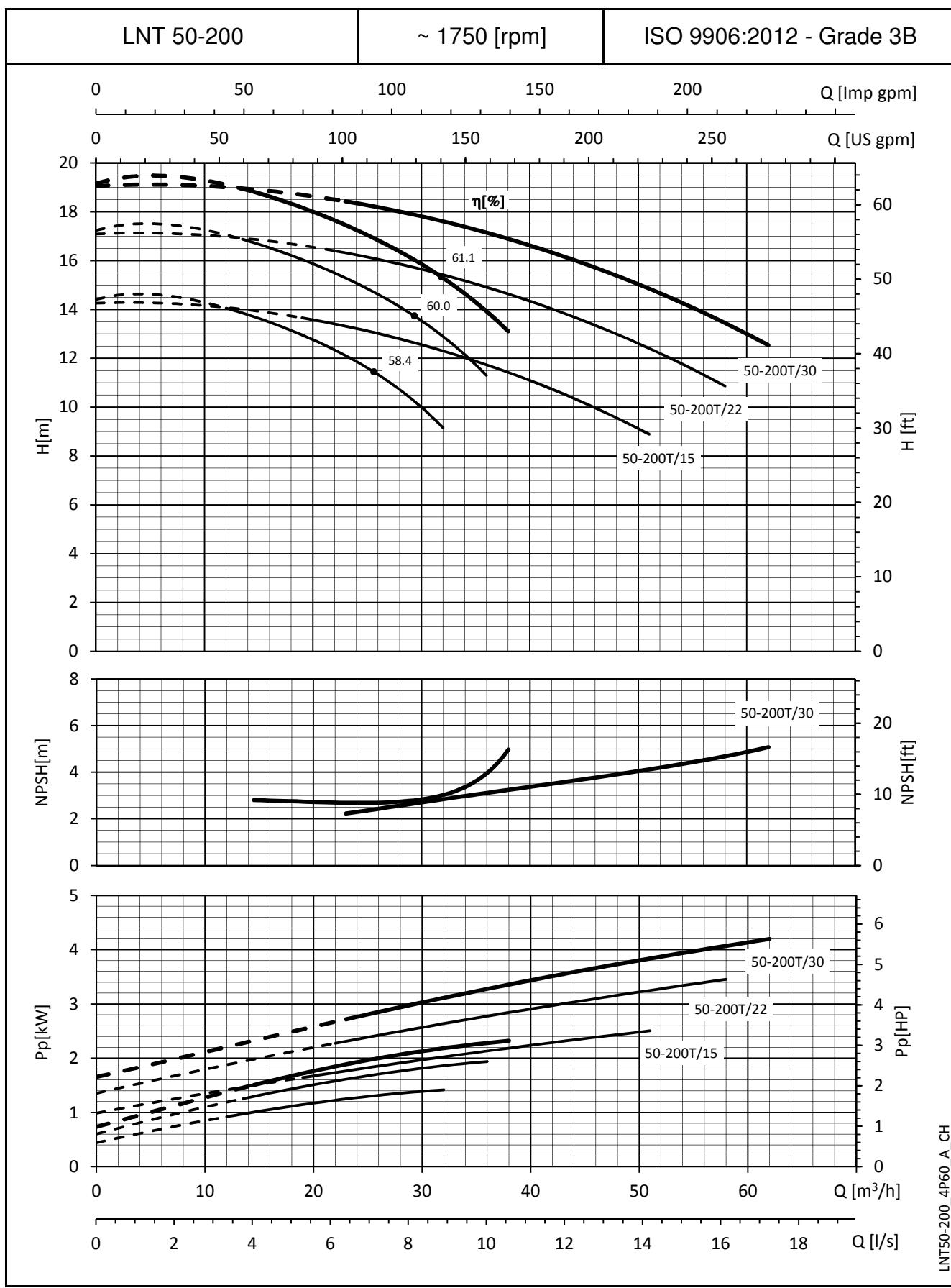
LNT50-125_4P60_A.CH

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


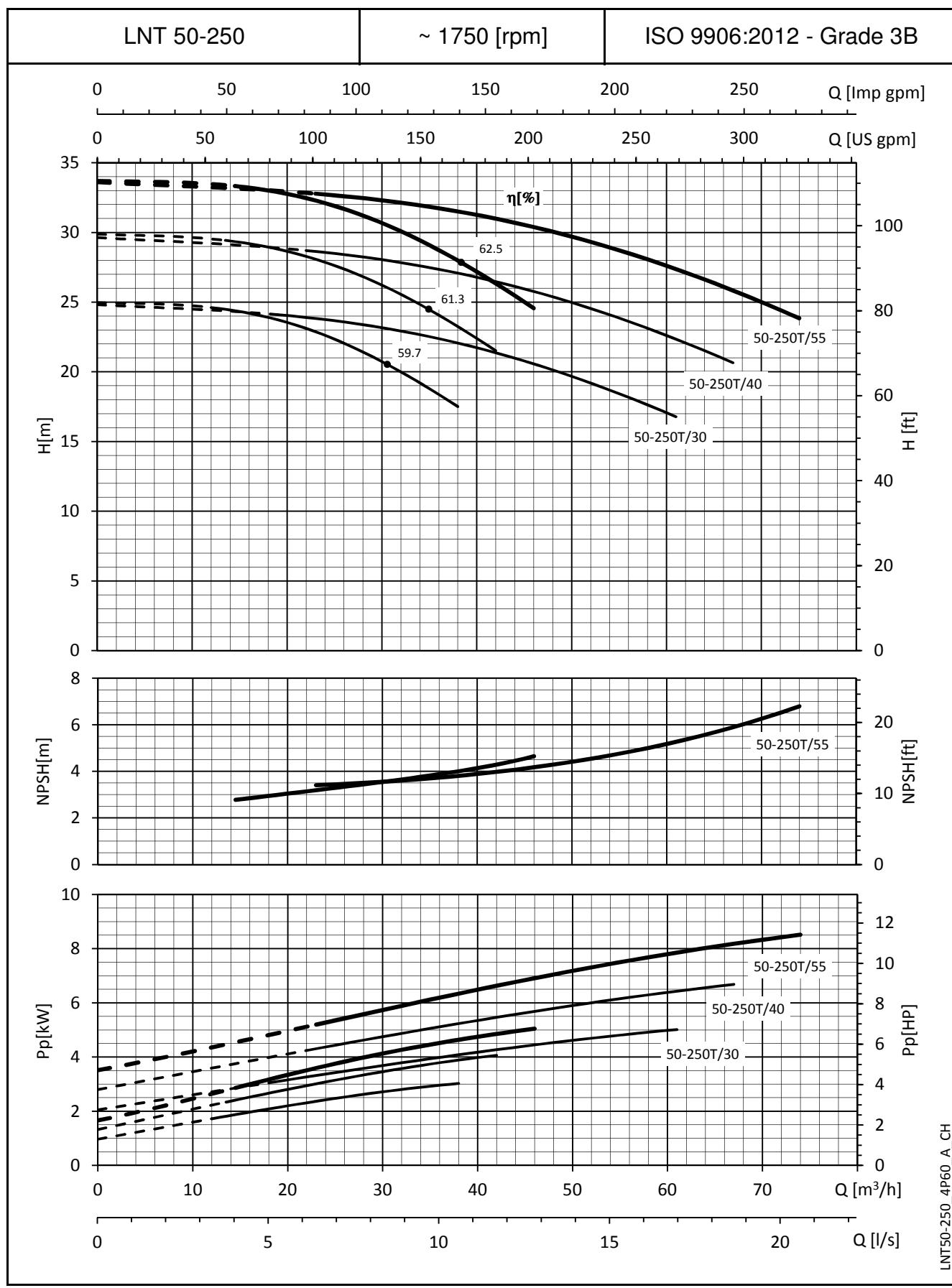
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES

OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES

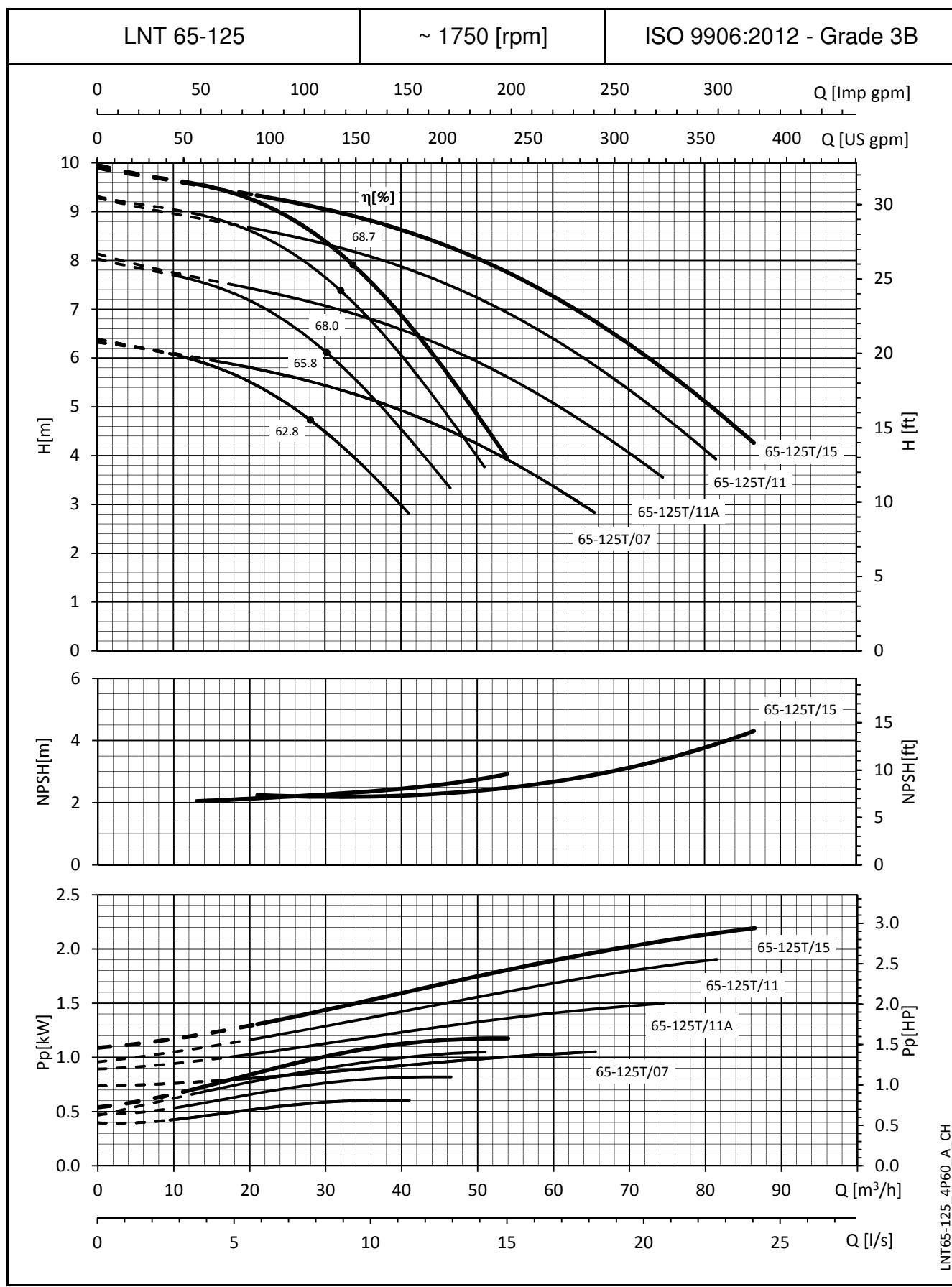


The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m. These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


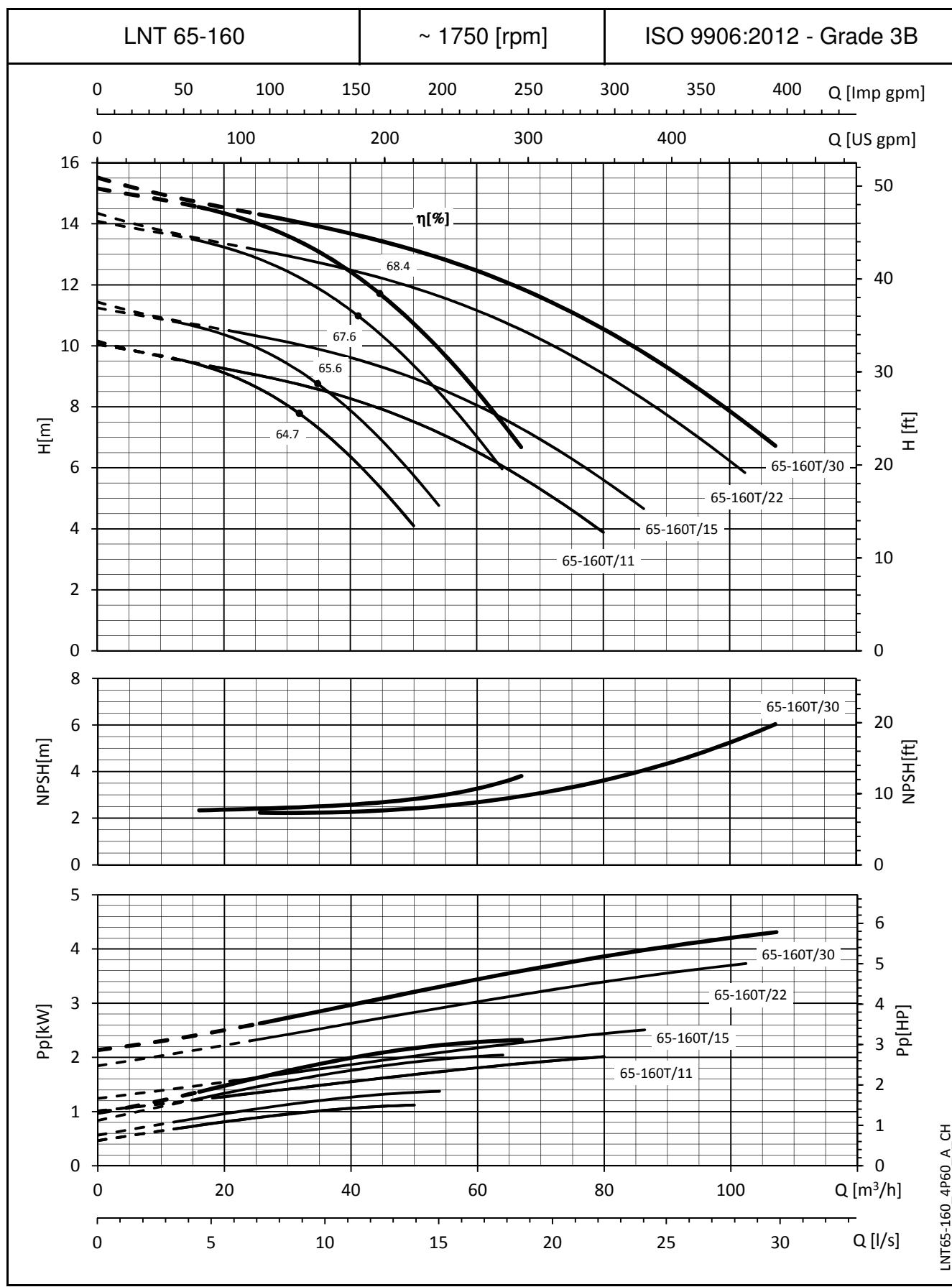
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

LNT50-250 4P60 A CH

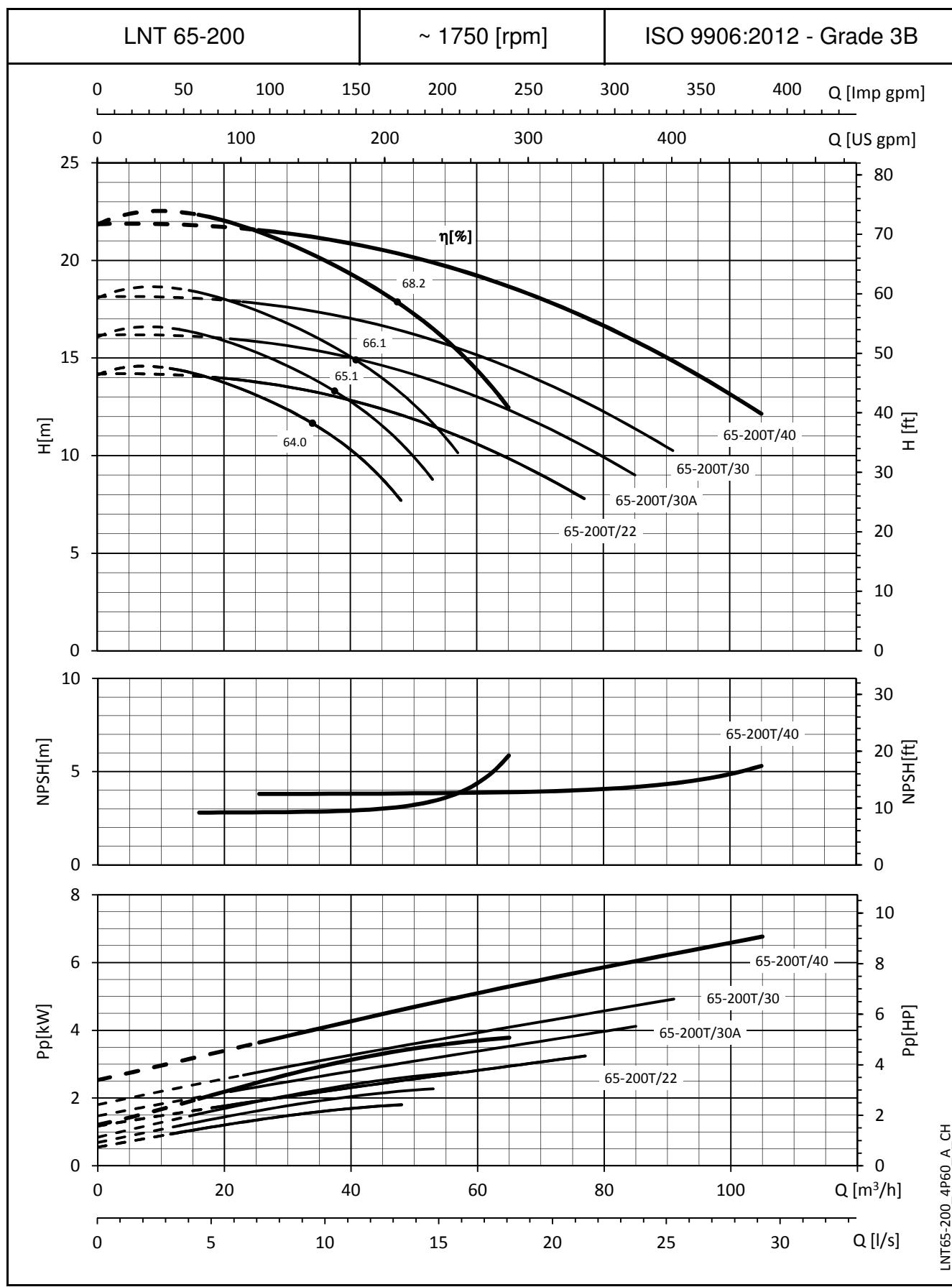
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


LNT65-125_4P60_A.CH

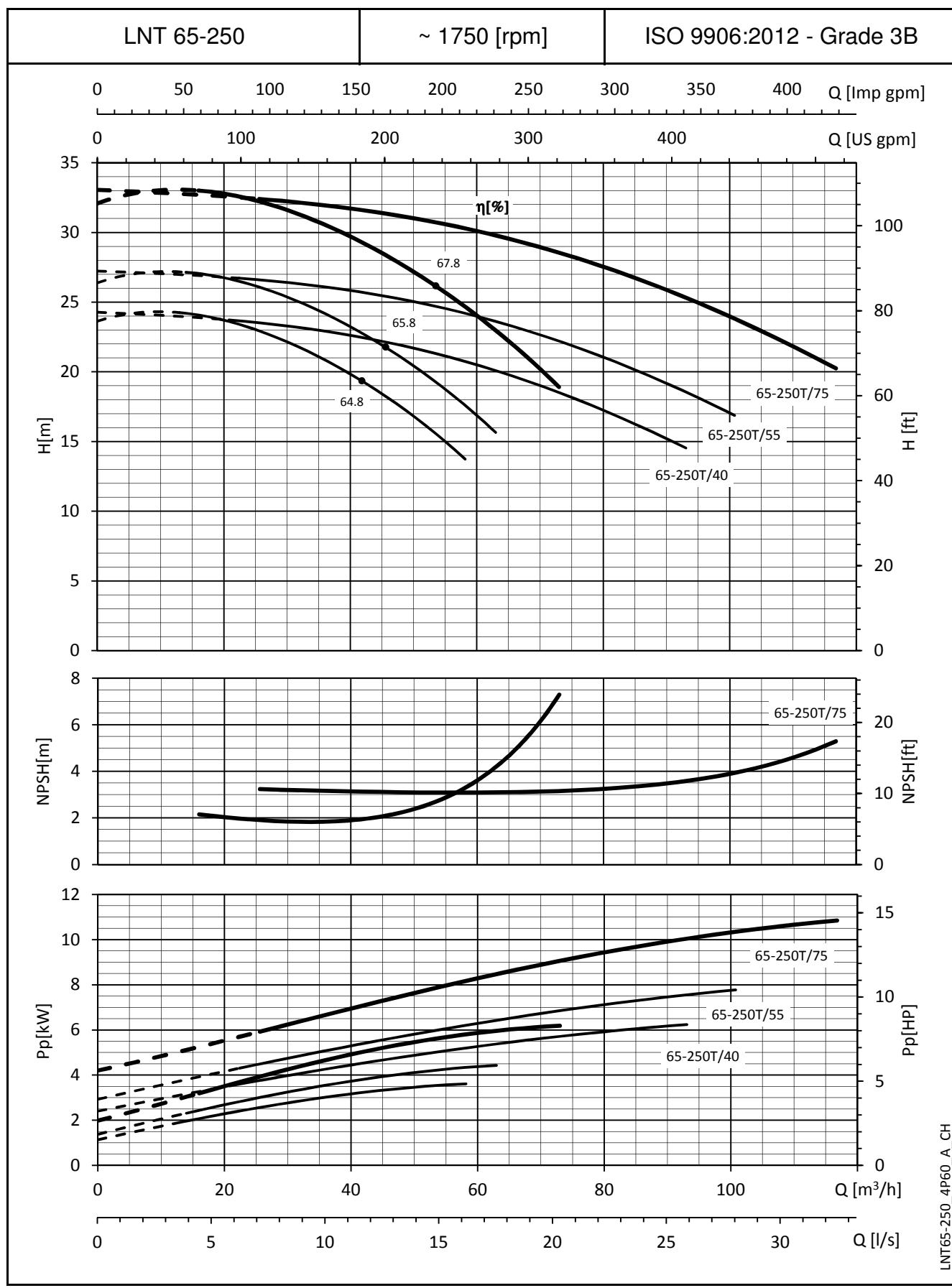
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

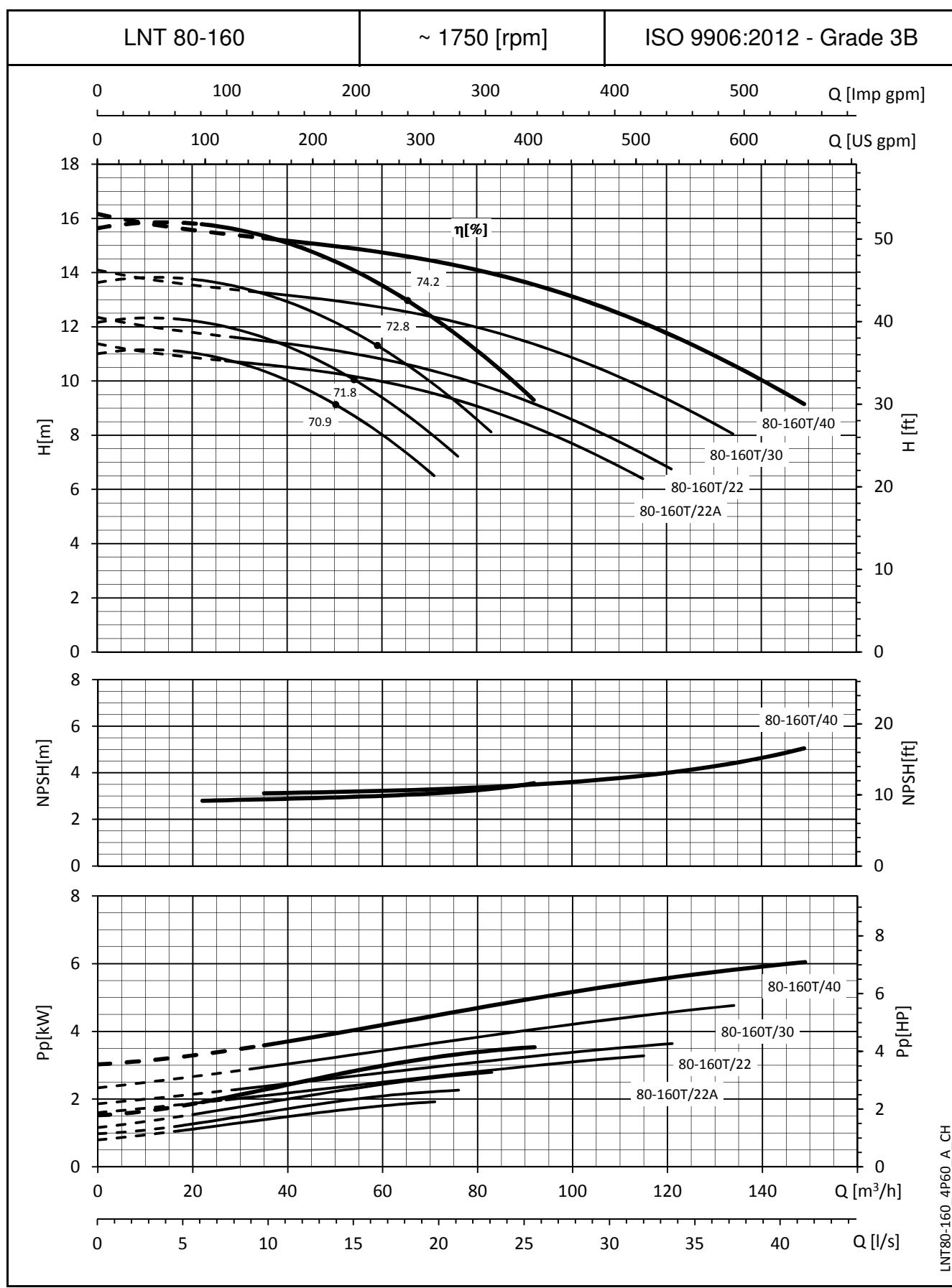
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

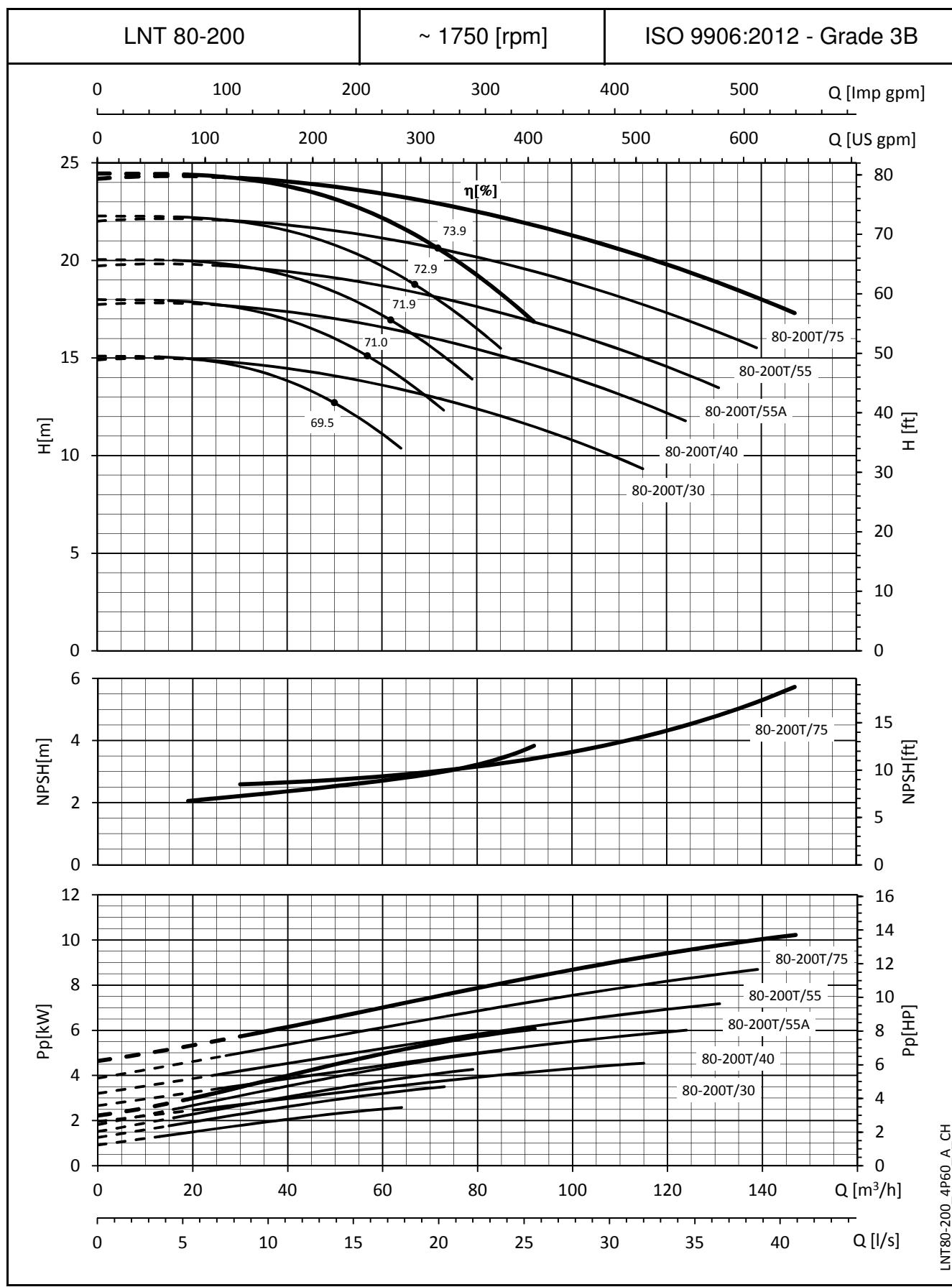
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


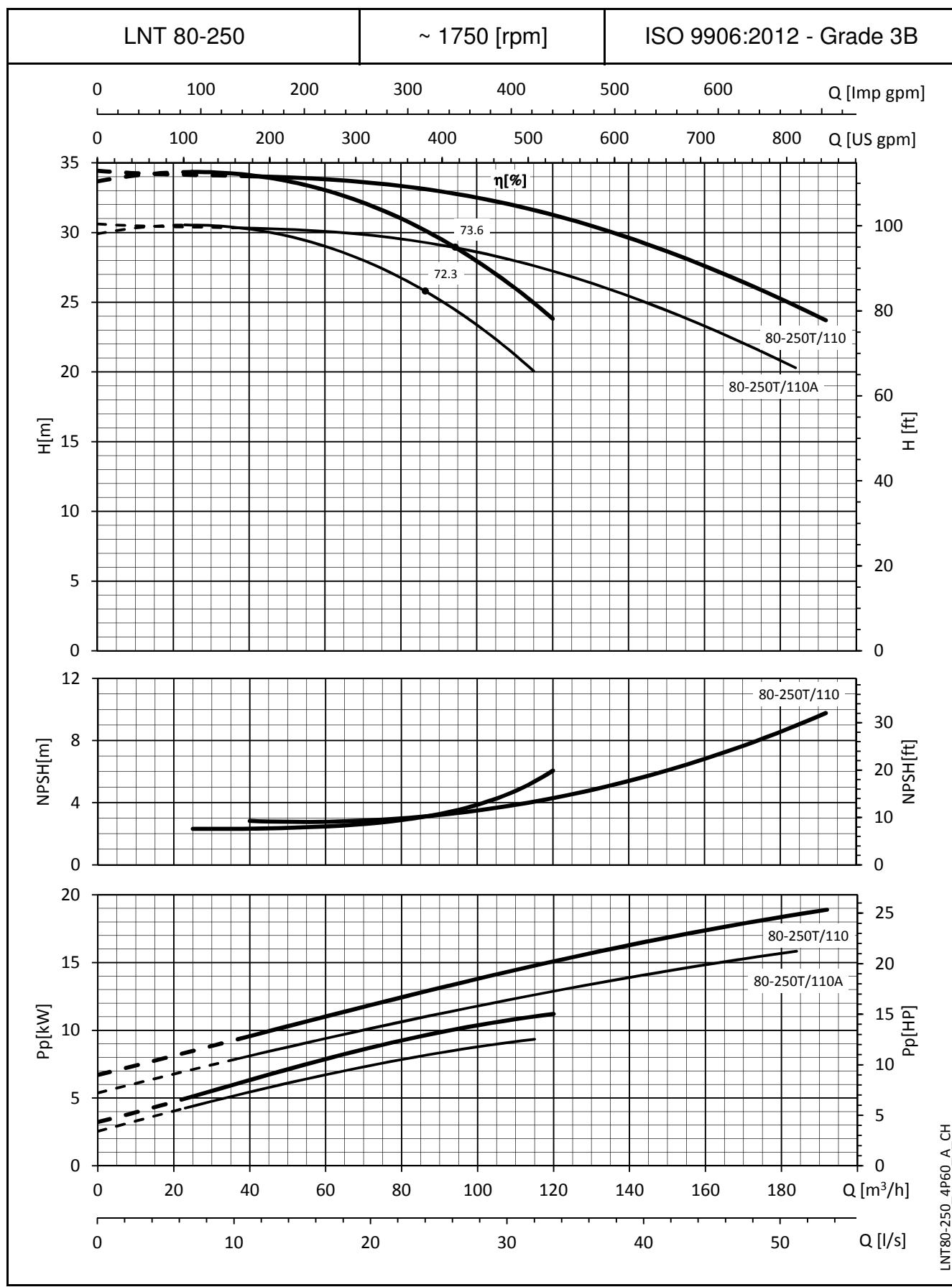
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

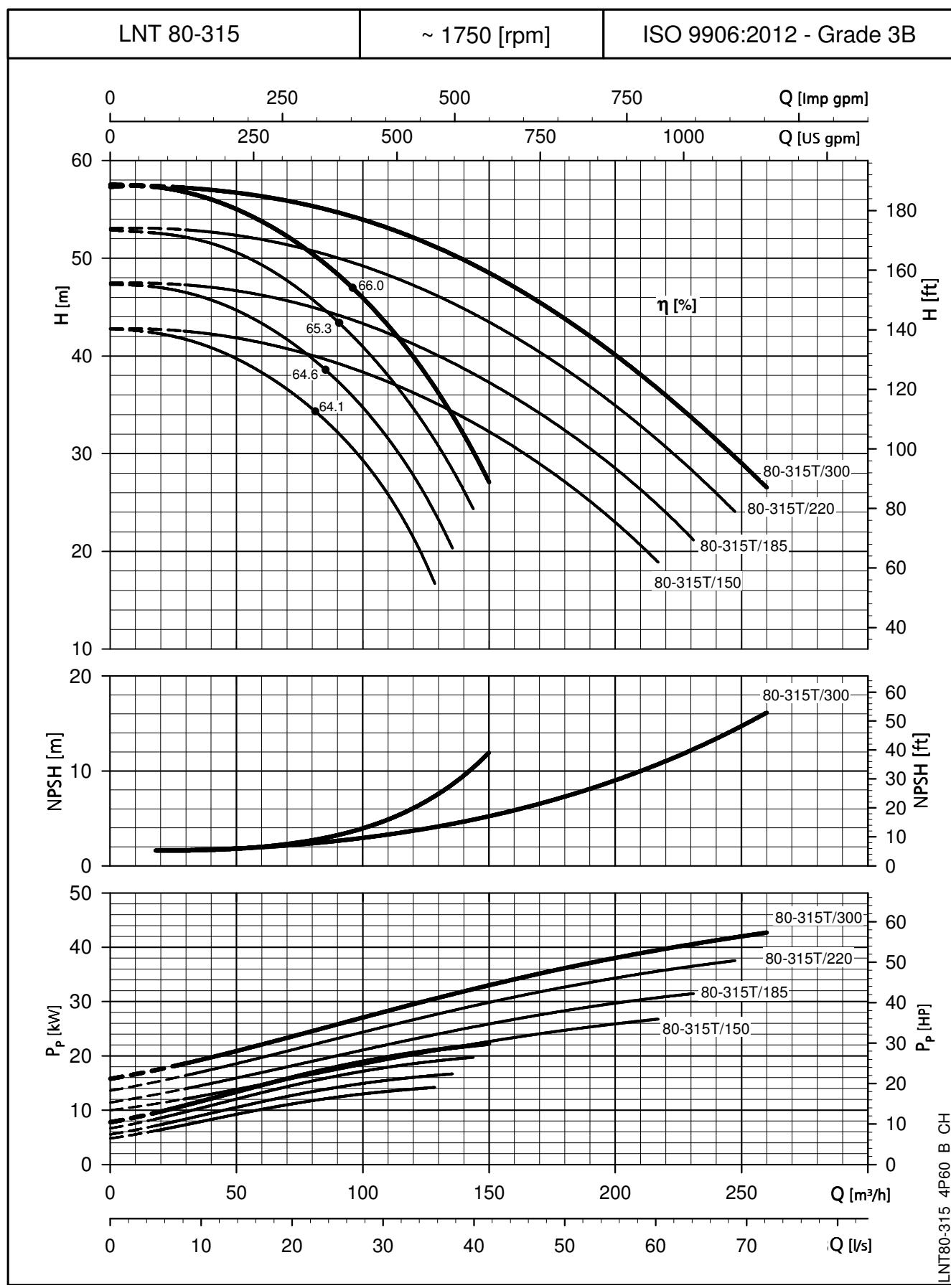
LNT65-250_4P60_A.CH

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


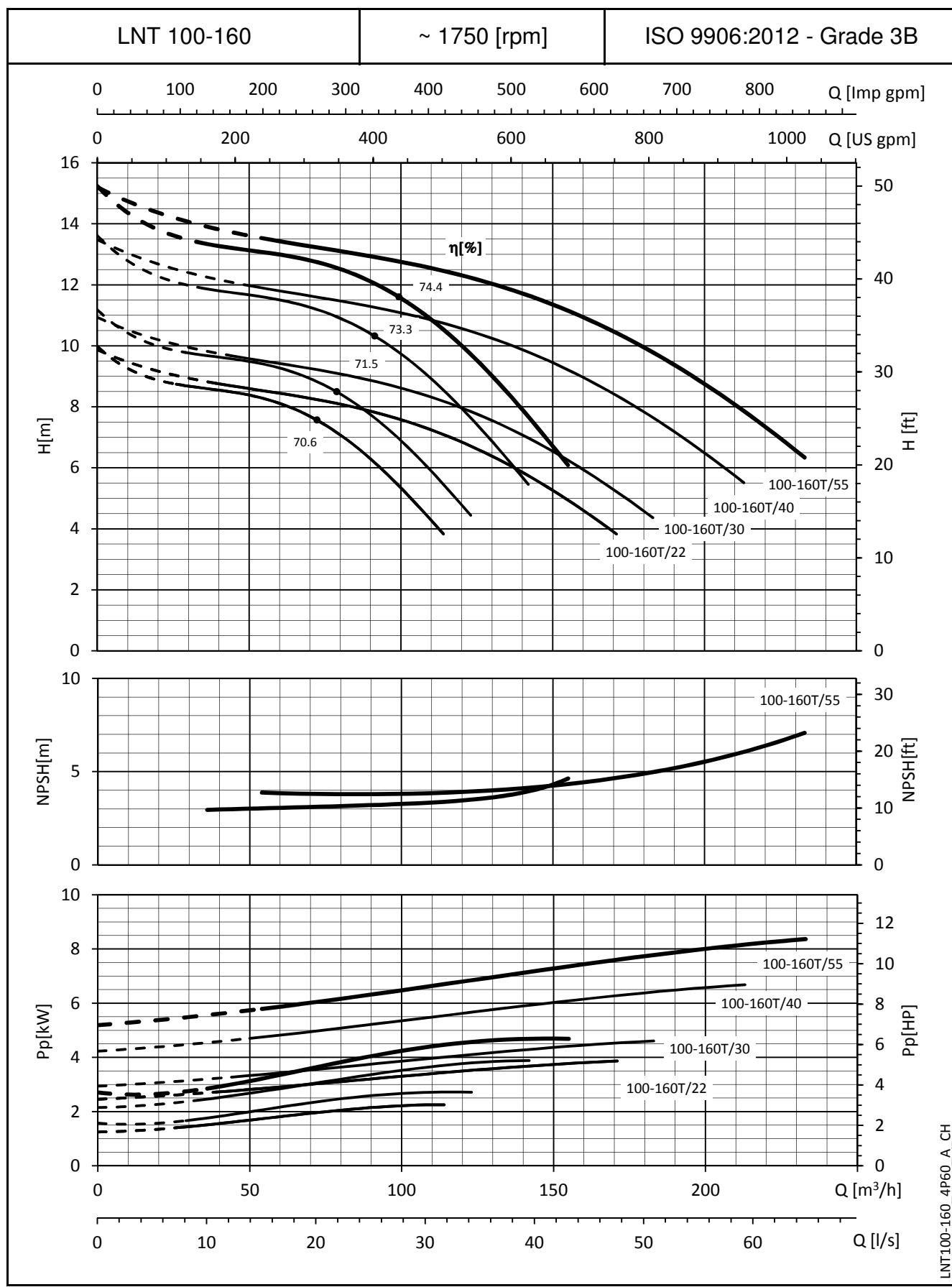
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

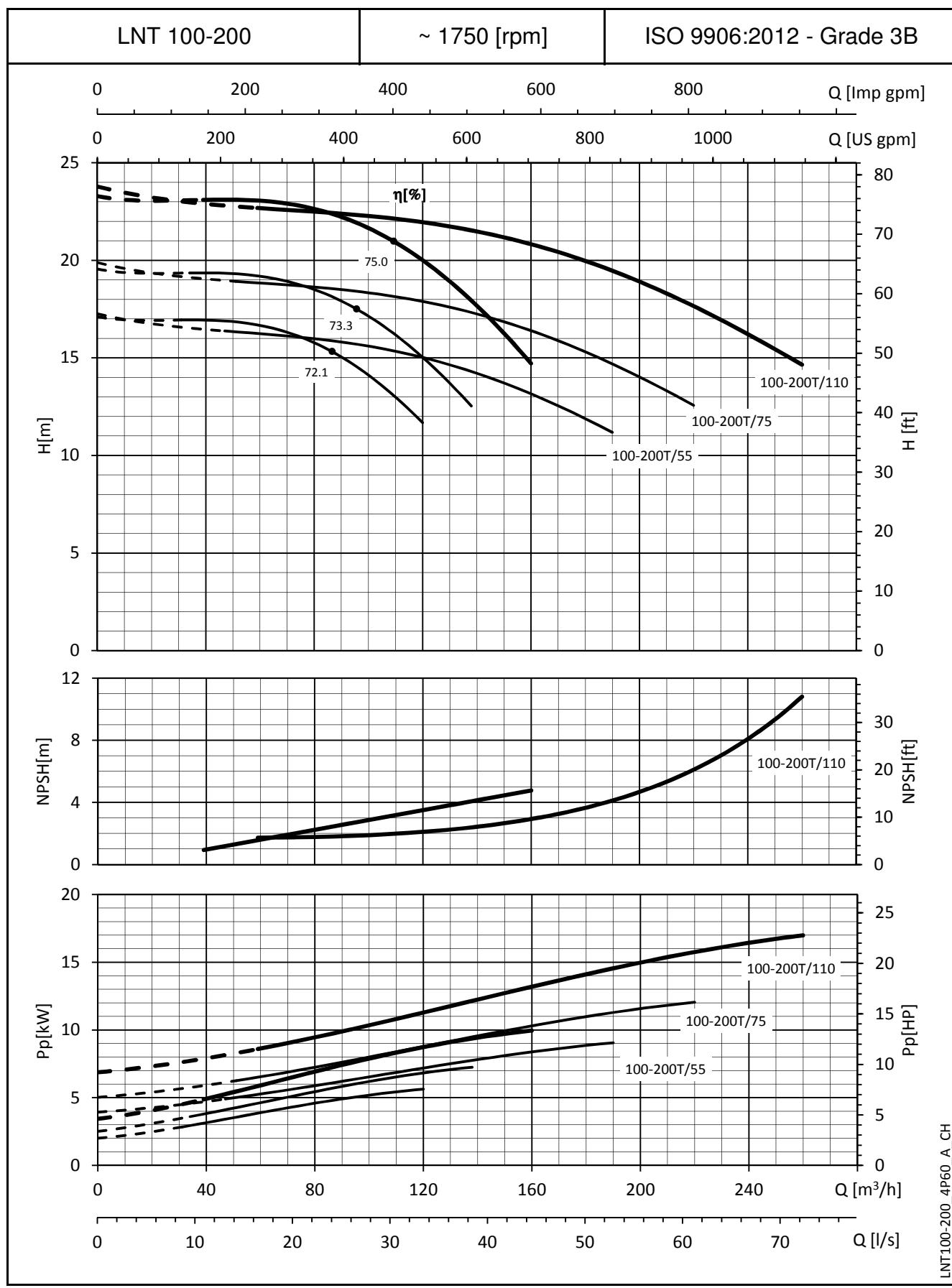
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


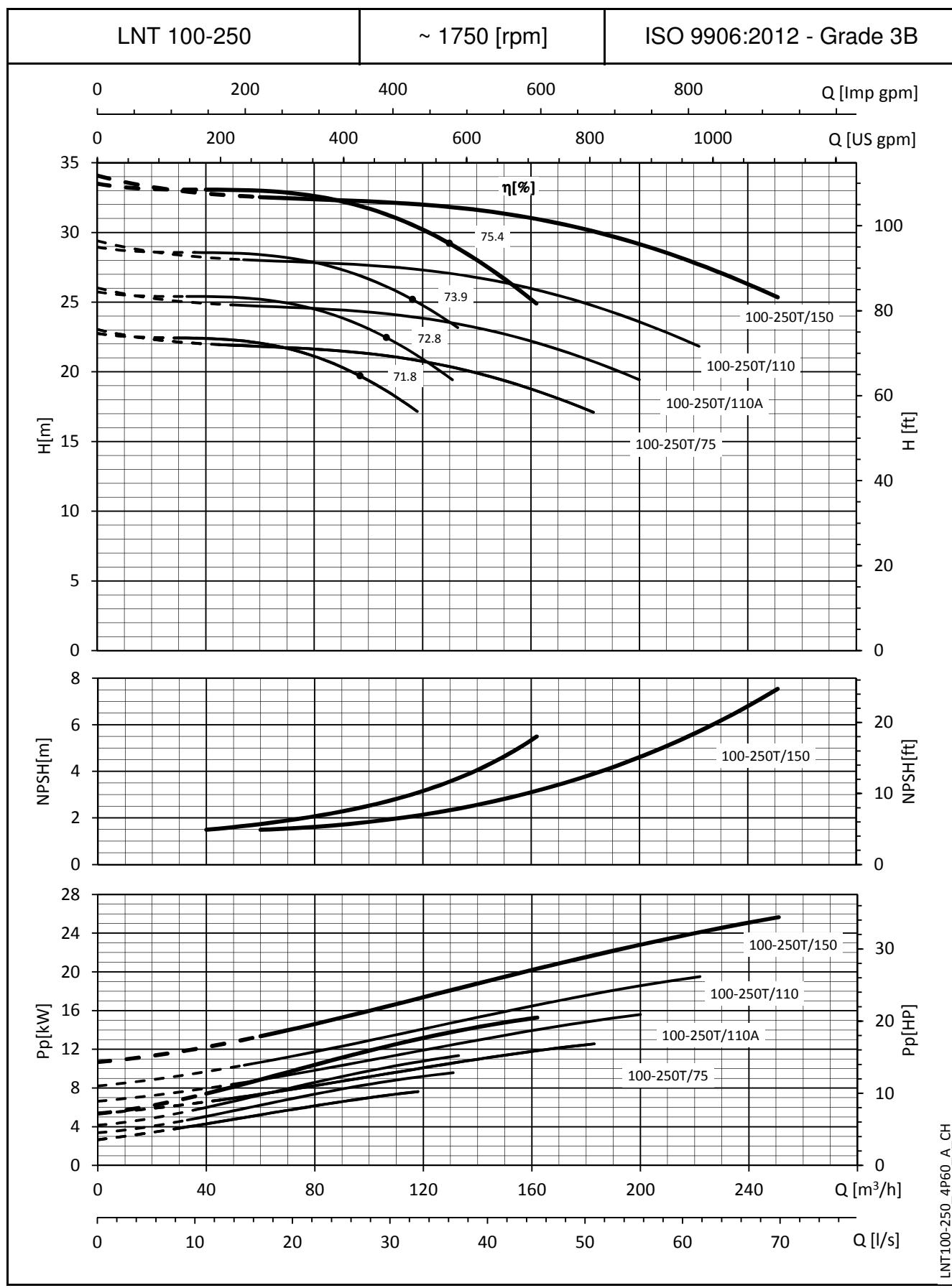
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


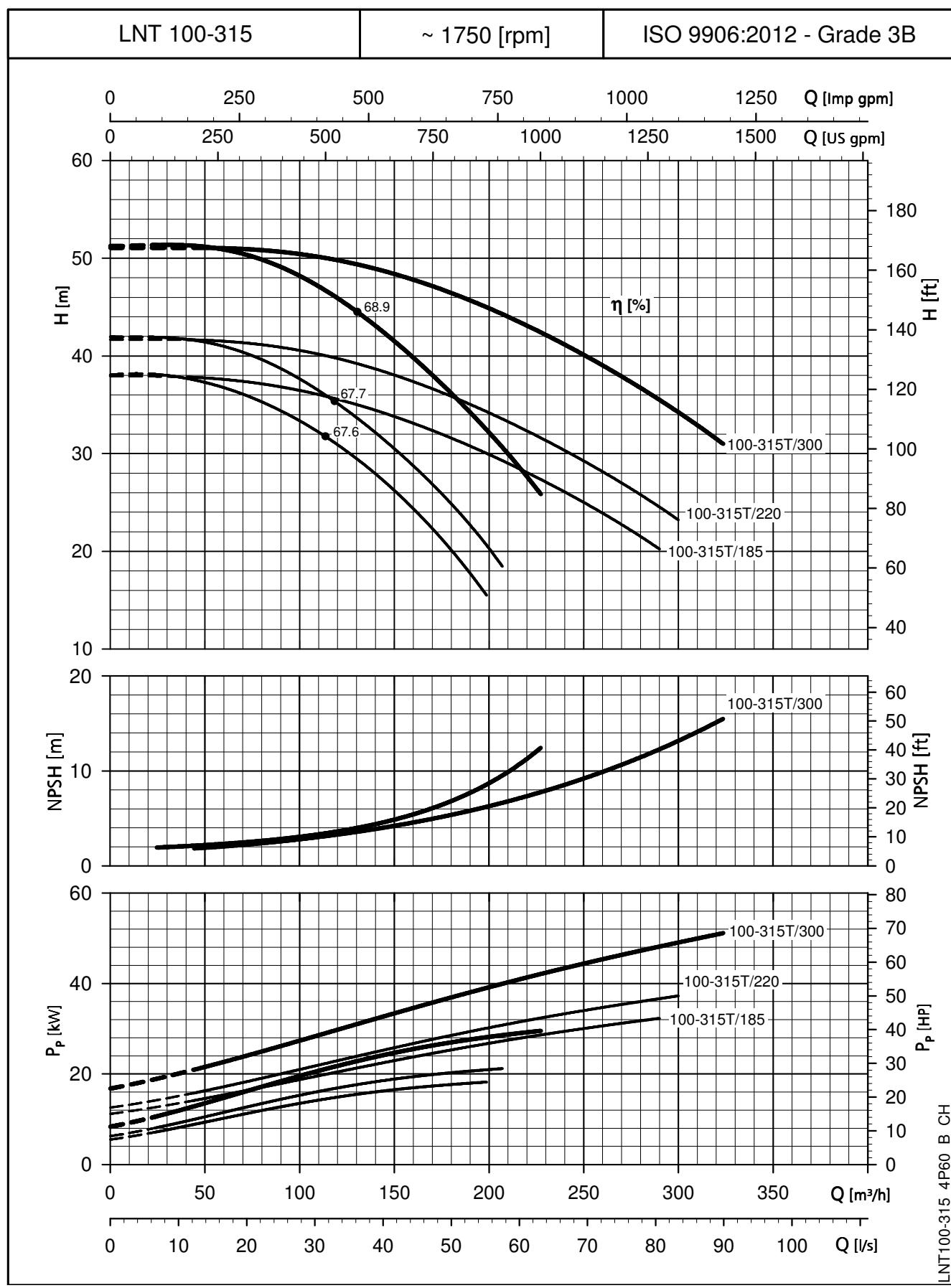
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

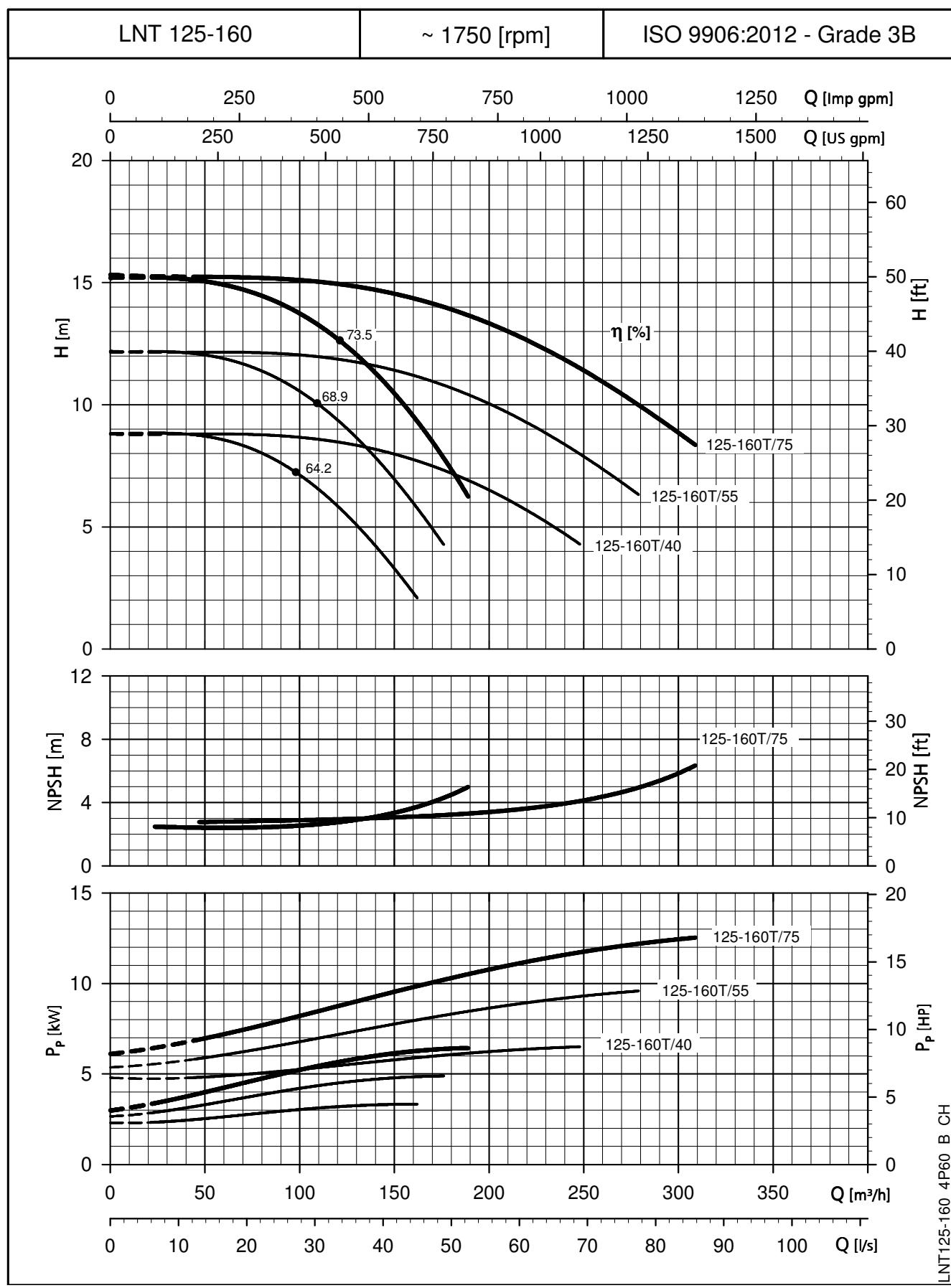
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


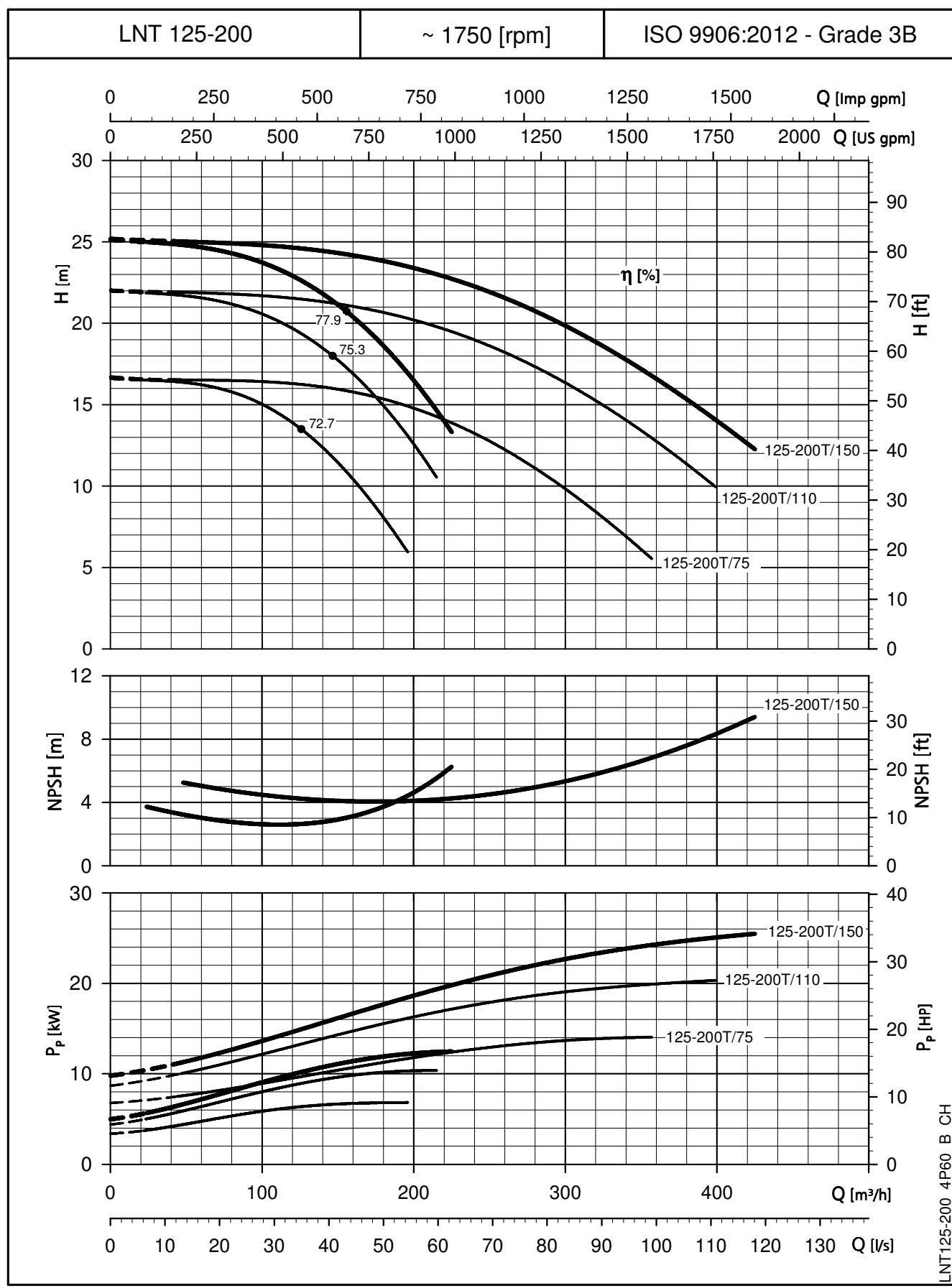
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


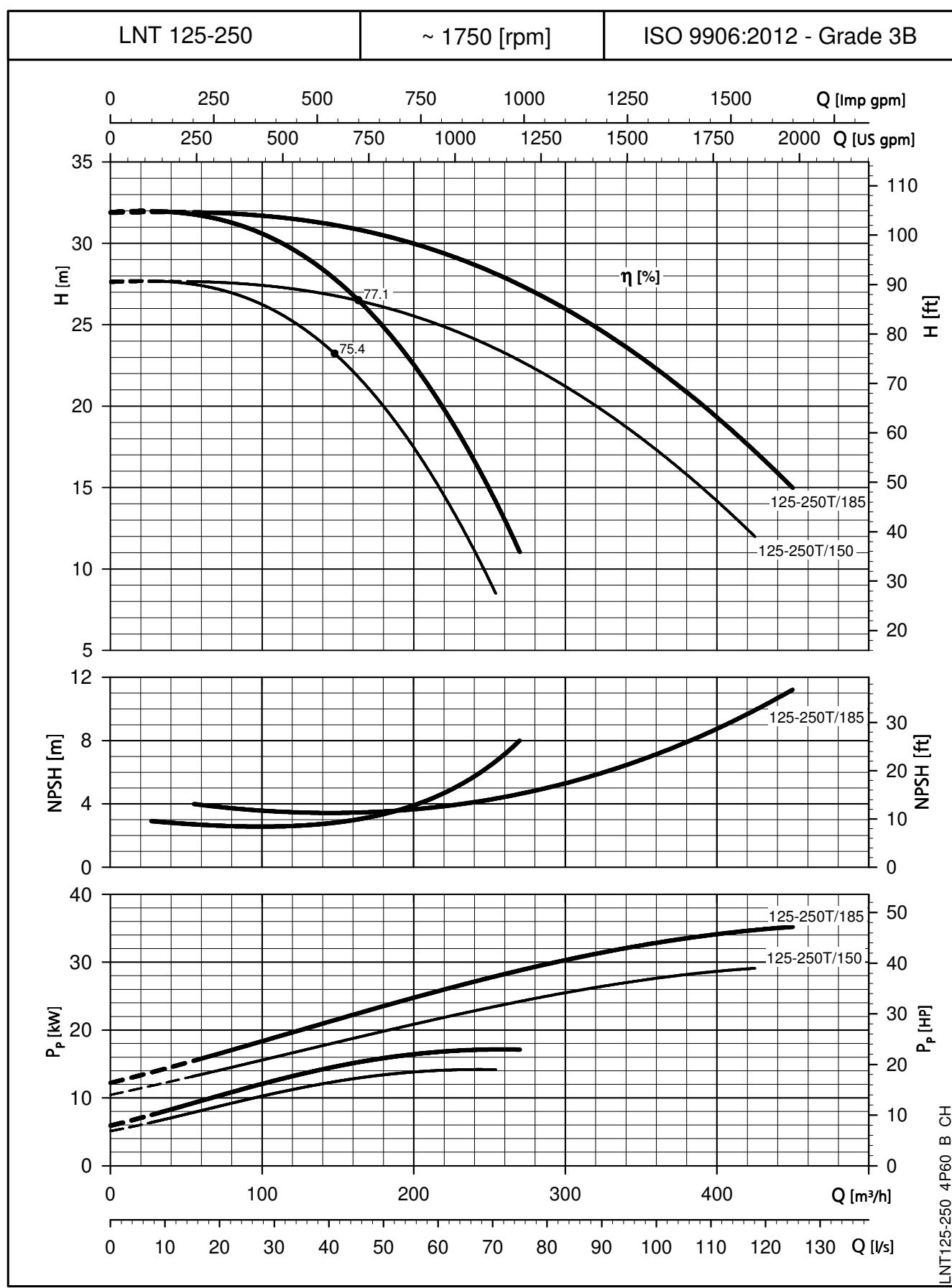
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


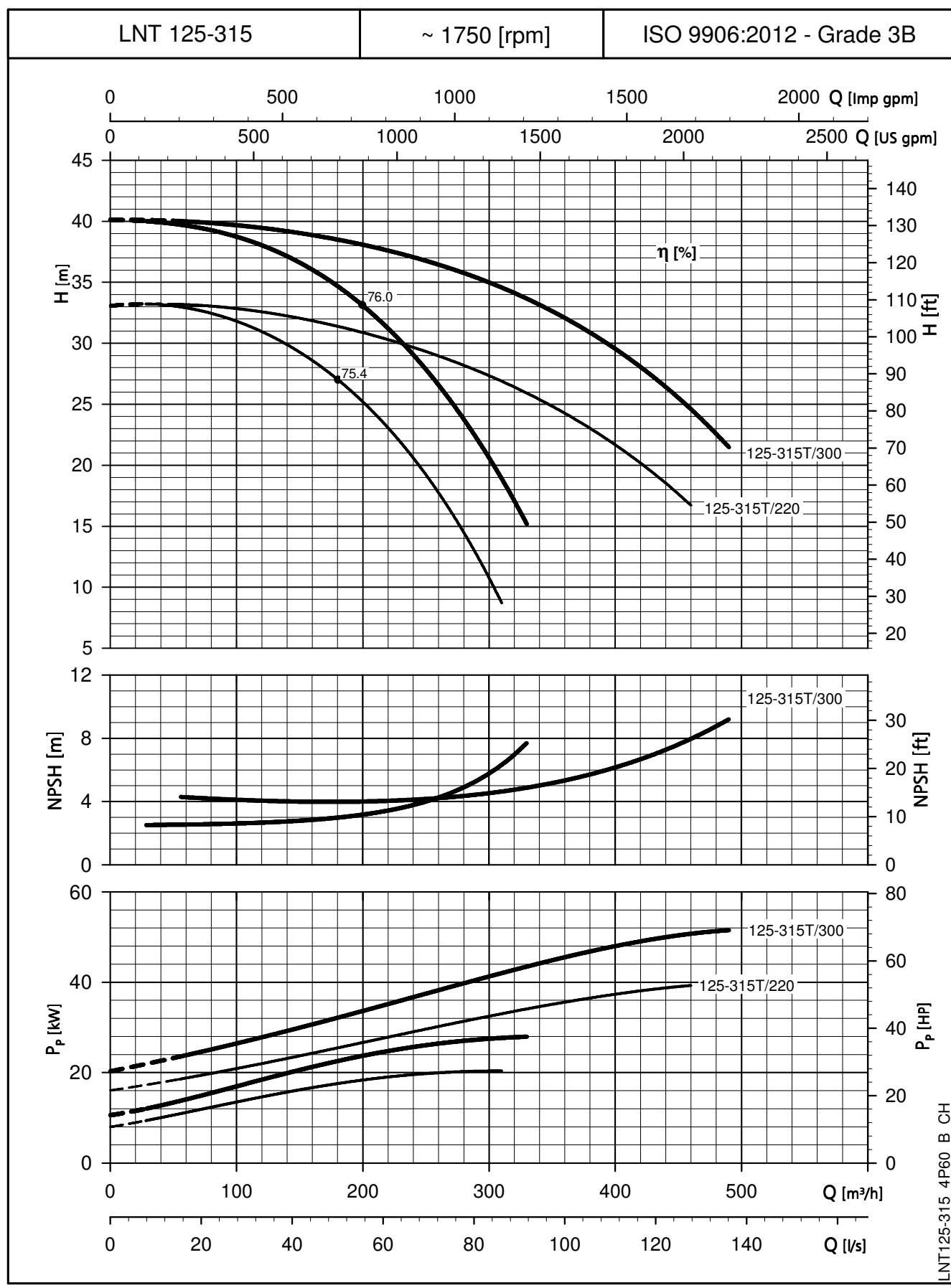
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


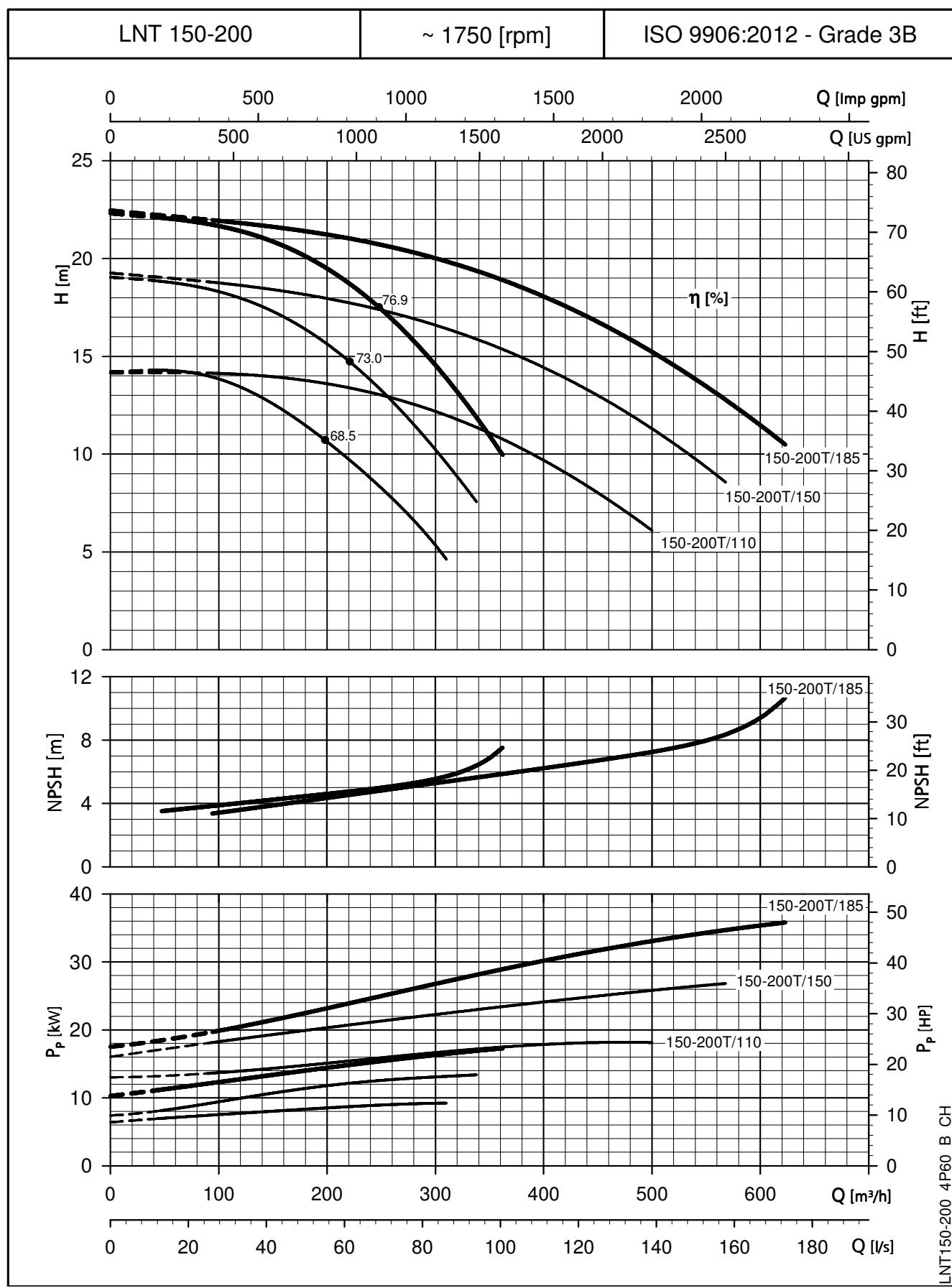
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


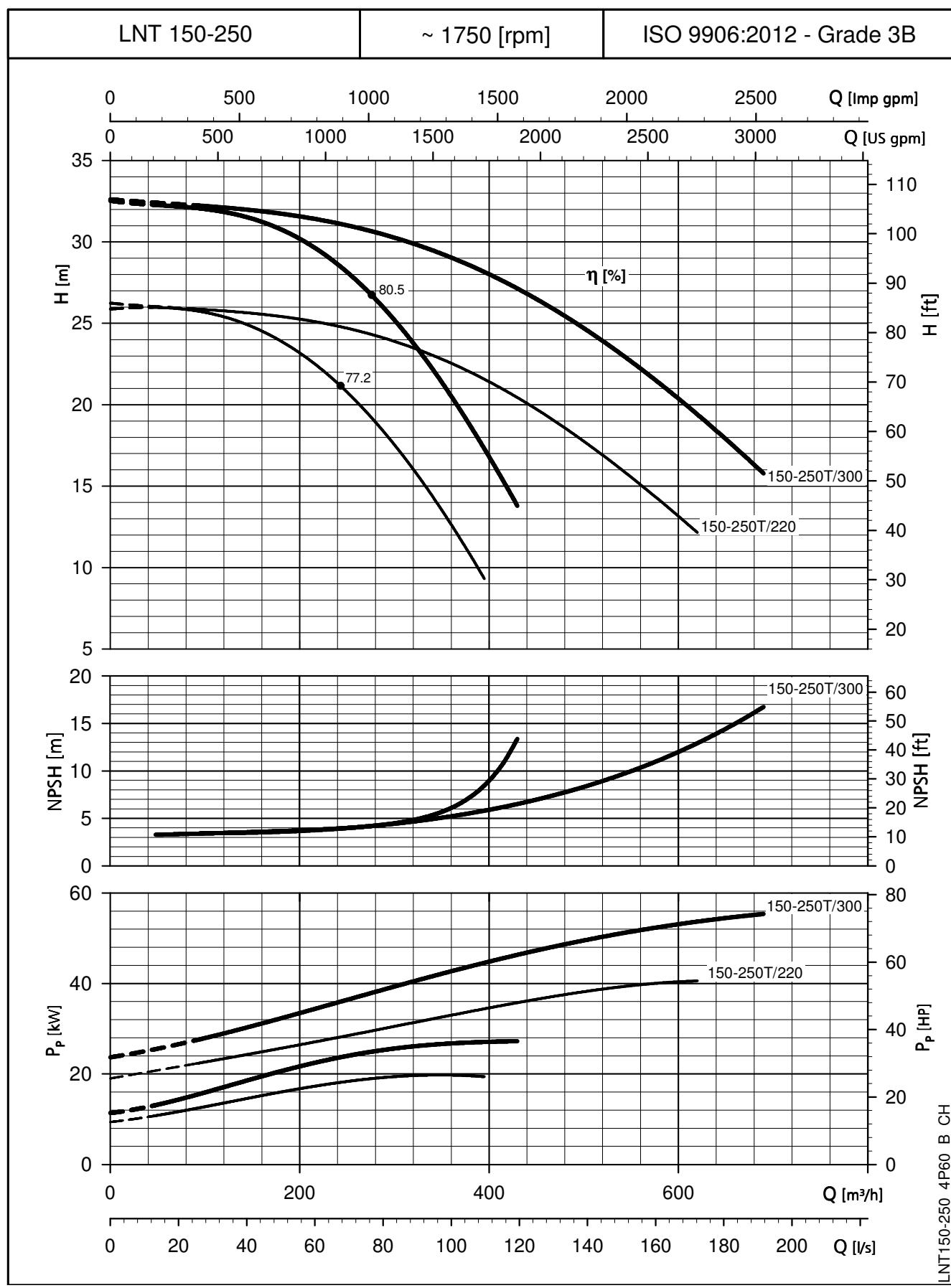
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0.5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


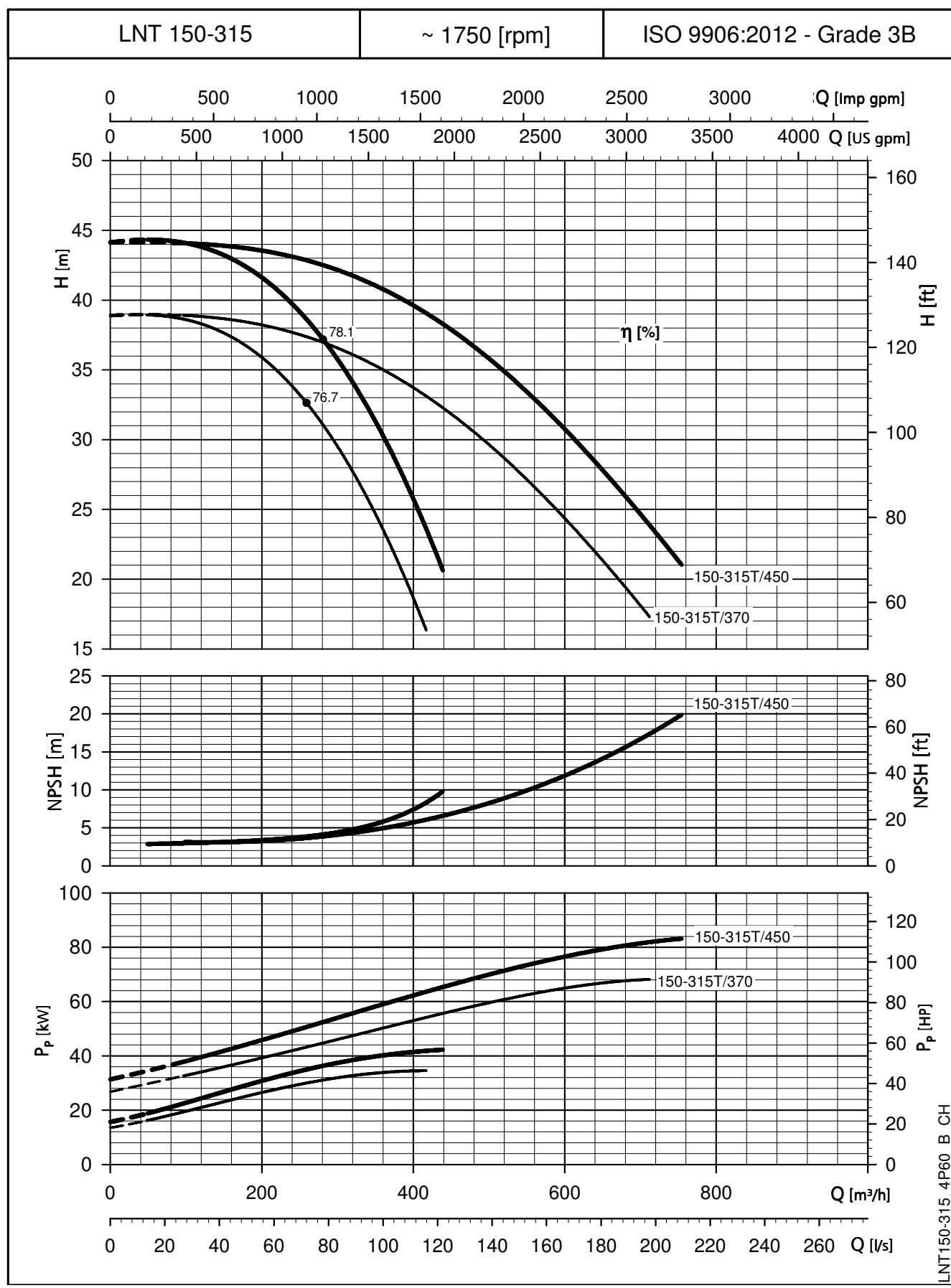
The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $v = 1 \text{ mm}^2/\text{sec}$.

e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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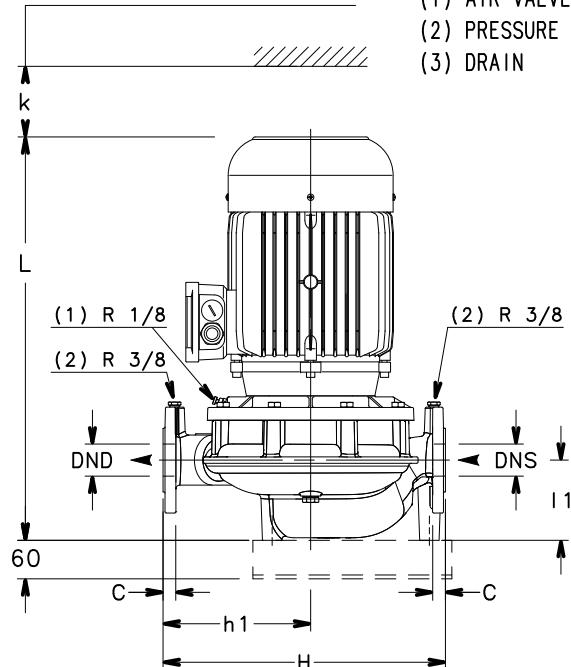
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

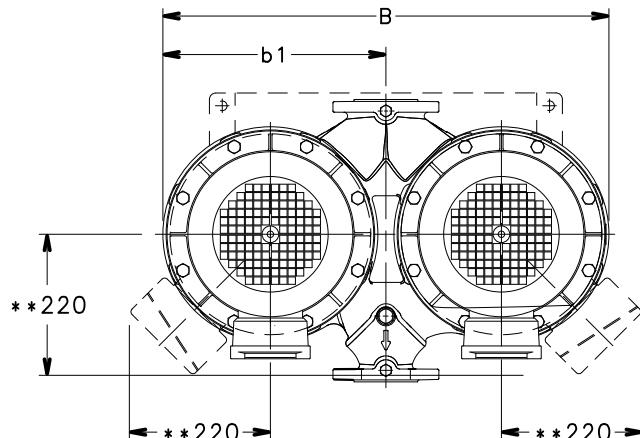
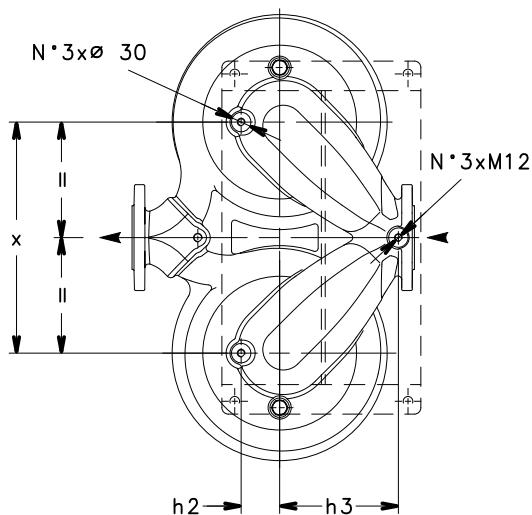
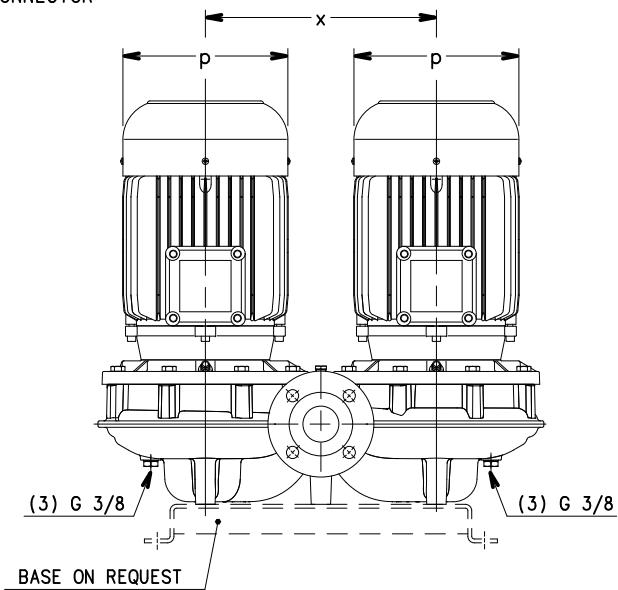
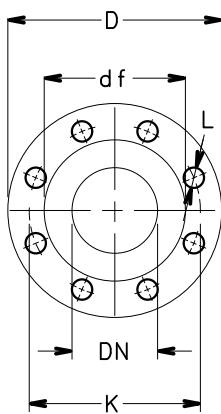
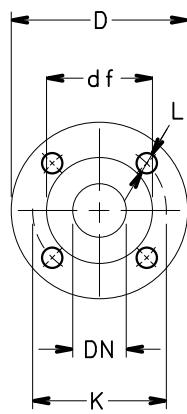
e-LNT SERIES
OPERATING CHARACTERISTICS AT 60 Hz, 4 POLES


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

DIMENSIONS AND WEIGHTS

**LNT 40, 50, 65, 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES**
CLEARANCE FOR DISASSEMBLY


- (1) AIR VALVE
-
- (2) PRESSURE GAUGE CONNECTOR
-
- (3) DRAIN


** ONLY FOR MODELS WITH
15-18.5-22 kW MOTORS


FLANGE EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

*) ... VALUE "C" AND "D" MAY VARY
FROM STANDARD.



a xylem brand

LNTE 40, 50, 65, 80, 100 SERIES

DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES

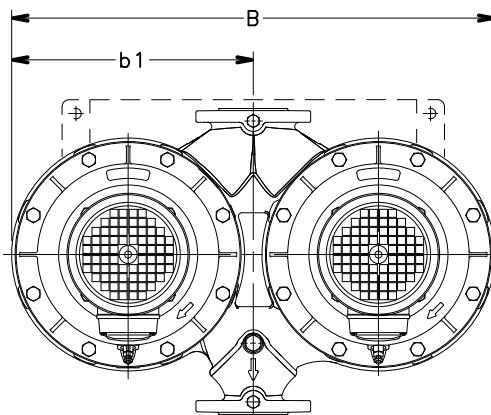
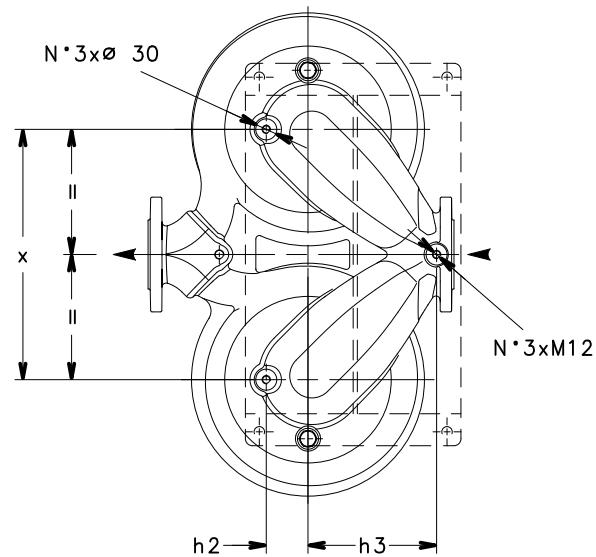
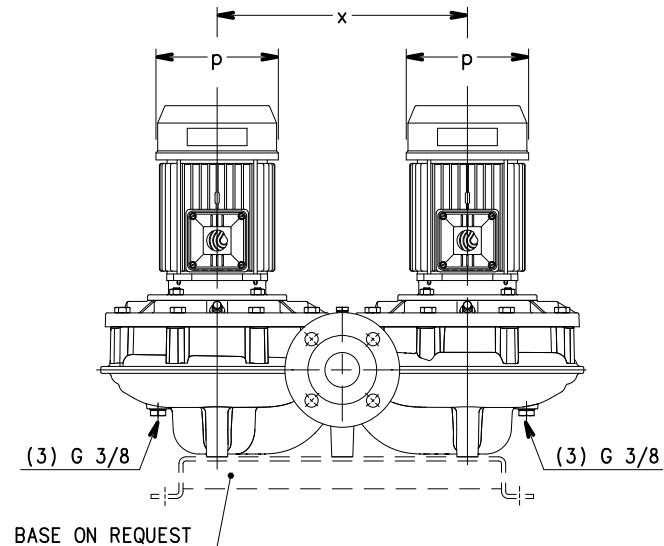
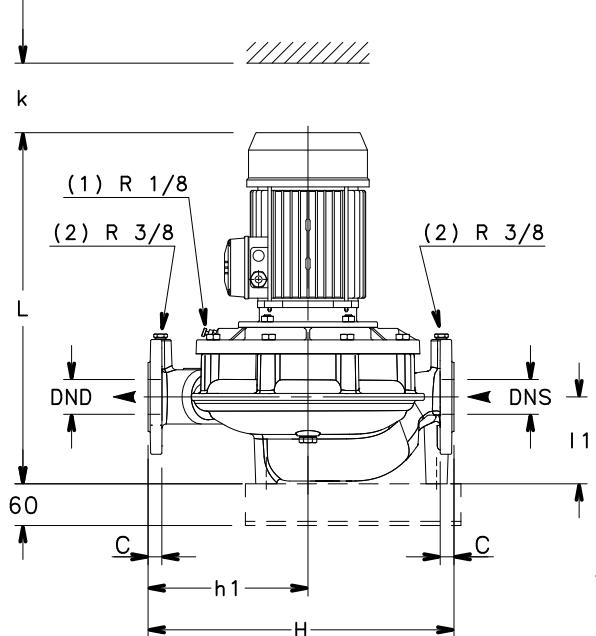
PUMP TYPE LNTE..2	DIMENSIONS (mm)										B	H	L	k	WEIGHT kg
	DND	DNS	b1	h1	h2	h3	I1	p	x						
40-125/15/S	40	40	274,5	180	52	110	100	155	310	549	320	463	94	65	
40-125/22/P	40	40	274,5	180	52	110	100	174	310	549	320	498	94	79	
40-125/30/P	40	40	274,5	180	52	110	100	174	310	549	320	498	94	81	
40-125/40/P	40	40	274,5	180	52	110	100	197	310	549	320	519	94	91	
40-125/55/P	40	40	274,5	180	52	110	100	214	310	549	320	553	94	109	
40-160/40/P	40	40	274,5	180	52	110	100	197	310	549	320	519	94	91	
40-160/55/P	40	40	274,5	180	52	110	100	214	310	549	320	553	94	109	
40-160/75/P	40	40	274,5	180	52	110	100	256	310	549	331	567	94	147	
40-160/92/P	40	40	274,5	180	52	110	100	256	310	549	331	605	94	159	
40-200/75/P	40	40	372,5	220	65	193	110	256	410	745	440	575	104	179	
40-200/92/P	40	40	372,5	220	65	193	110	256	410	745	440	613	104	191	
40-200/110/P	40	40	372,5	220	65	193	110	256	410	745	440	613	104	197	
40-250/150/P	40	40	372,5	220	65	193	110	313	410	745	440	702	104	277	
40-250/185/P	40	40	372,5	220	65	193	110	313	410	745	440	702	104	299	
40-250/220/P	40	40	372,5	220	65	193	110	313	410	745	440	702	104	317	
50-125/30/P	50	50	275	190	57	120	116	174	310	555	340	514	96	90	
50-125/40/P	50	50	275	190	57	120	116	197	310	555	340	535	96	100	
50-125/55/P	50	50	275	190	57	120	116	214	310	555	340	569	96	118	
50-125/75/P	50	50	275	190	57	120	116	256	310	555	340	583	96	156	
50-160/55/P	50	50	275	190	57	120	116	214	310	555	340	569	96	118	
50-160/75/P	50	50	275	190	57	120	116	256	310	555	340	583	96	156	
50-160/92/P	50	50	275	190	57	120	116	256	310	555	340	621	96	168	
50-160/110/P	50	50	275	190	57	120	116	256	310	555	340	621	96	174	
50-200/92/P	50	50	372,5	230	60	185	115	256	410	745	440	620	108	203	
50-200/110/P	50	50	372,5	230	60	185	115	256	410	745	440	620	108	209	
50-250/185/P	50	50	372,5	230	60	185	115	313	410	745	440	709	108	311	
50-250/220/P	50	50	372,5	230	60	185	115	313	410	745	440	709	108	329	
65-125/55/P	65	65	323	190	75	140	122	214	360	646	360	581	100	130	
65-125/75/P	65	65	323	190	75	140	122	256	360	646	360	595	100	168	
65-125/92/P	65	65	323	190	75	140	122	256	360	646	360	633	100	180	
65-125/110/P	65	65	323	190	75	140	122	256	360	646	360	633	100	186	
65-160/110/P	65	65	323	190	75	140	122	256	360	646	360	633	94	186	
65-200/185/P	65	65	377,5	250	76	196	118	313	420	762	475	712	105	319	
65-200/220/P	65	65	377,5	250	76	196	118	313	420	762	475	712	105	337	
65-250/220/P	65	65	377,5	250	76	196	118	313	420	762	475	712	105	337	
80-160/150/P	80	80	374	235	80	110	133	313	410	748	420	727	111	305	
80-160/185/P	80	80	374	235	80	110	133	313	410	748	420	727	111	327	
80-160/220/P	80	80	374	235	80	110	133	313	410	748	420	727	111	345	
100-160/185/P	100	100	374	280	87	125	158	313	410	748	500	757	123	339	
100-160/220/P	100	100	374	280	87	125	158	313	410	748	500	757	123	357	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

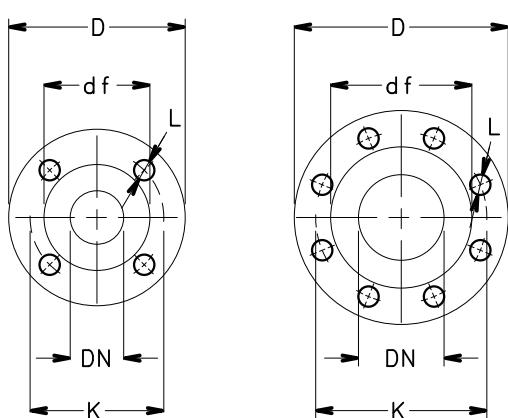
LNTE-40-100_2p60-en_a_td

**LNT 40, 50, 65, 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES**

CLEARANCE FOR DISASSEMBLY



- (1) AIR VALVE
- (2) PRESSURE GAUGE CONNECTOR
- (3) DRAIN



FLANGE EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

*)... VALUE "C" AND "D" MAY VARY FROM STANDARD.

LNTE 40, 50, 65, 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES

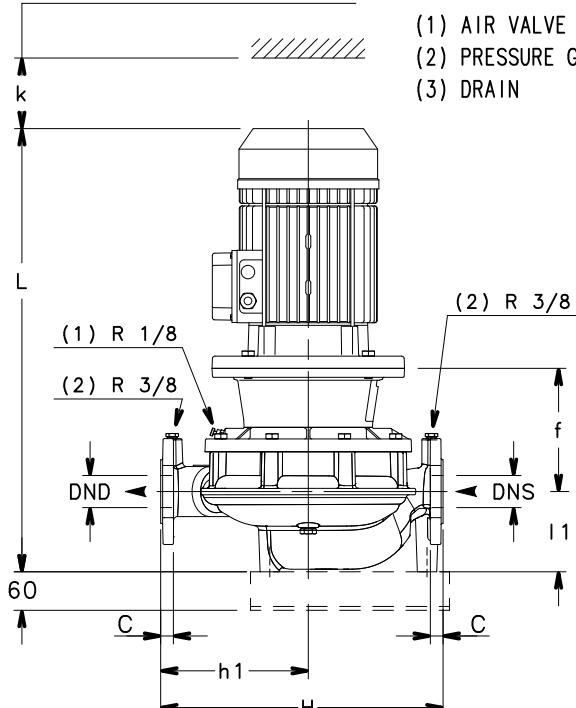
PUMP TYPE LNTE..4	DIMENSIONS (mm)										B	H	L	k	WEIGHT kg
	DND	DNS	b1	h1	h2	h3	I1	p	x						
40-125/02/S	40	40	274,5	180	52	110	100	140	310	549	320	431	94	51	
40-125/03/S	40	40	274,5	180	52	110	100	140	310	549	320	431	94	53	
40-125/05/S	40	40	274,5	180	52	110	100	155	310	549	320	463	94	57	
40-125/07/X	40	40	274,5	180	52	110	100	159	310	549	320	431	94	63	
40-160/05/S	40	40	274,5	180	52	110	100	155	310	549	320	463	94	57	
40-160/07/X	40	40	274,5	180	52	110	100	159	310	549	320	431	94	63	
40-160/11/P	40	40	274,5	180	52	110	100	174	310	549	320	498	94	79	
40-200/11/P	40	40	372,5	220	65	193	110	174	410	745	440	506	104	107	
40-200/15/P	40	40	372,5	220	65	193	110	174	410	745	440	506	104	115	
40-250/22/P	40	40	372,5	220	65	193	110	214	410	745	440	530	104	135	
40-250/30A/P	40	40	372,5	220	65	193	110	214	410	745	440	561	104	143	
40-250/30/P	40	40	372,5	220	65	193	110	214	410	745	440	561	104	143	
40-250/40/P	40	40	372,5	220	65	193	110	198	410	745	440	590	104	181	
50-125/03/S	50	50	275	190	57	120	116	140	310	555	340	447	96	62	
50-125/05/S	50	50	275	190	57	120	116	155	310	555	340	479	96	66	
50-125/07/X	50	50	275	190	57	120	116	159	310	555	340	447	96	72	
50-125/11/P	50	50	275	190	57	120	116	174	310	555	340	514	96	88	
50-160/07/X	50	50	275	190	57	120	116	159	310	555	340	447	96	72	
50-160/11/P	50	50	275	190	57	120	116	174	310	555	340	514	96	88	
50-160/15A/P	50	50	275	190	57	120	116	174	310	555	340	514	96	96	
50-160/15/P	50	50	275	190	57	120	116	174	310	555	340	514	96	96	
50-200/15/P	50	50	372,5	230	60	185	115	174	410	745	440	513	108	127	
50-250/22/P	50	50	372,5	230	60	185	115	214	410	745	440	537	108	147	
50-250/30/P	50	50	372,5	230	60	185	115	214	410	745	440	568	108	155	
50-250/40/P	50	50	372,5	230	60	185	115	198	410	745	440	597	108	193	
50-250/55/P	50	50	372,5	230	60	185	115	256	410	745	440	620	108	204	
65-125/07/X	65	65	323	190	75	140	122	159	360	646	360	459	100	84	
65-125/11A/P	65	65	323	190	75	140	122	174	360	646	360	526	100	96	
65-125/11/P	65	65	323	190	75	140	122	174	360	646	360	526	100	96	
65-125/15/P	65	65	323	190	75	140	122	174	360	646	360	526	100	104	
65-160/11/P	65	65	323	190	75	140	122	174	360	646	360	526	94	96	
65-160/15/P	65	65	323	190	75	140	122	174	360	646	360	526	94	104	
65-200/22/P	65	65	377,5	250	76	196	118	214	420	762	475	540	105	155	
65-200/30A/P	65	65	377,5	250	76	196	118	214	420	762	475	571	105	163	
65-200/30/P	65	65	377,5	250	76	196	118	214	420	762	475	571	105	163	
65-200/40/P	65	65	377,5	250	76	196	118	198	420	762	475	616	105	201	
65-250/40/P	65	65	377,5	250	76	196	118	198	420	762	475	616	105	201	
65-250/55/P	65	65	377,5	250	76	196	118	256	420	762	475	623	105	211	
65-250/75/P	65	65	377,5	250	76	196	118	256	420	762	475	623	105	221	
80-160/22A/P	80	80	374	235	80	110	133	214	410	748	420	555	111	163	
80-160/22/P	80	80	374	235	80	110	133	214	410	748	420	555	111	163	
80-160/30/P	80	80	374	235	80	110	133	214	410	748	420	586	111	171	
80-160/40/P	80	80	374	235	80	110	133	198	410	748	420	615	111	209	
100-160/22/P	100	100	374	280	87	125	158	214	410	748	500	585	123	175	
100-160/30/P	100	100	374	280	87	125	158	214	410	748	500	616	123	183	
100-160/40/P	100	100	374	280	87	125	158	198	410	748	500	645	123	221	
100-160/55/P	100	100	374	280	87	125	158	256	410	748	500	668	123	231	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

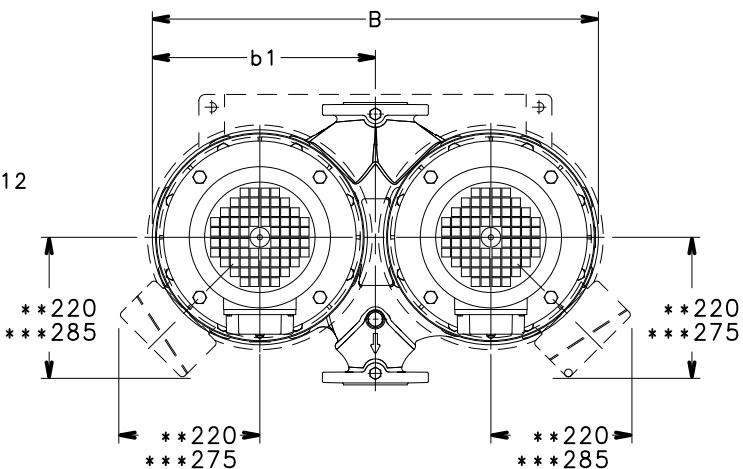
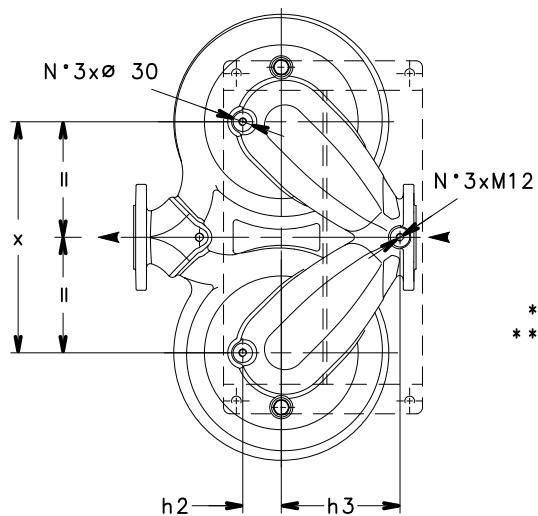
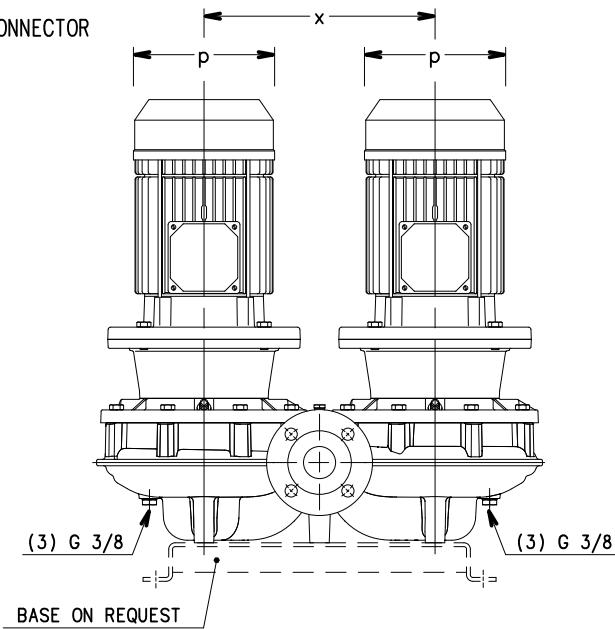
LNTE-40-100_4p60-en_a_td

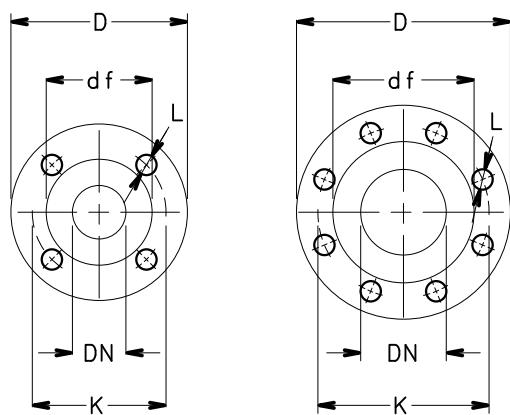
LNTS 40, 50, 65 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES

CLEARANCE FOR DISASSEMBLY



- (1) AIR VALVE
-
- (2) PRESSURE GAUGE CONNECTOR
-
- (3) DRAIN


** ONLY FOR MODELS WITH
15-18.5-22 kW MOTORS

*** ONLY FOR MODELS WITH
30-37 kW MOTORS


FLANGE					
EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

*) ... VALUE "C" AND "D" MARY VARY
FROM STANDARD.

LNTS 40, 50, 65 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES

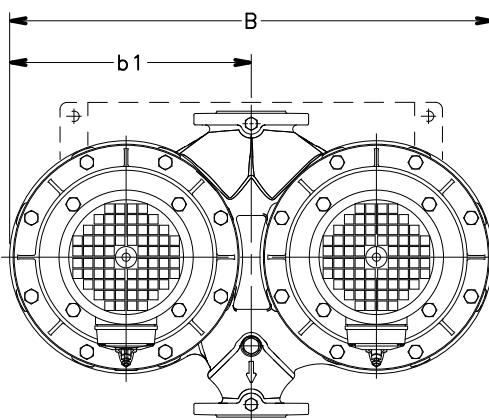
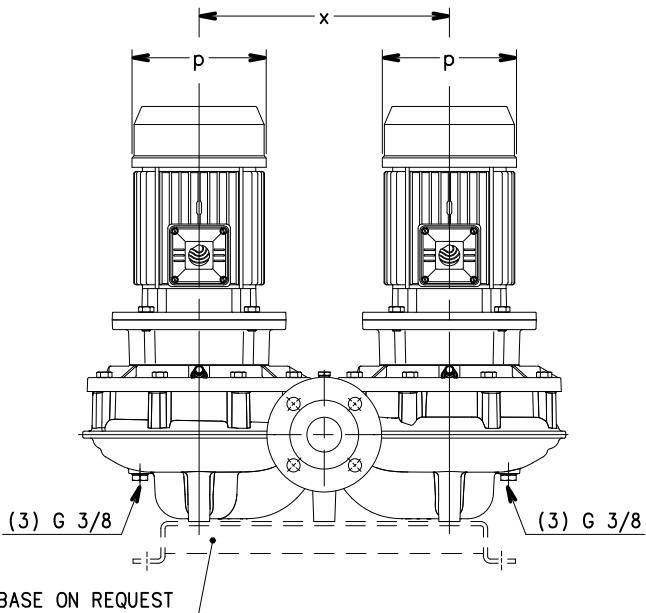
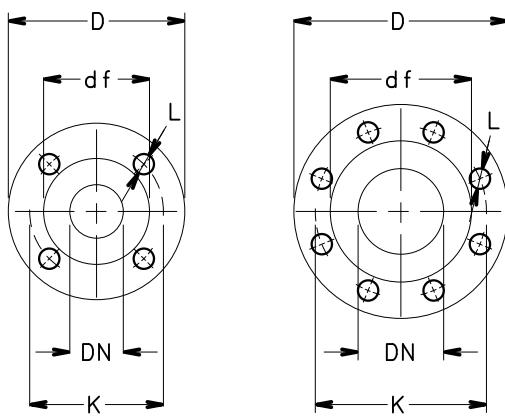
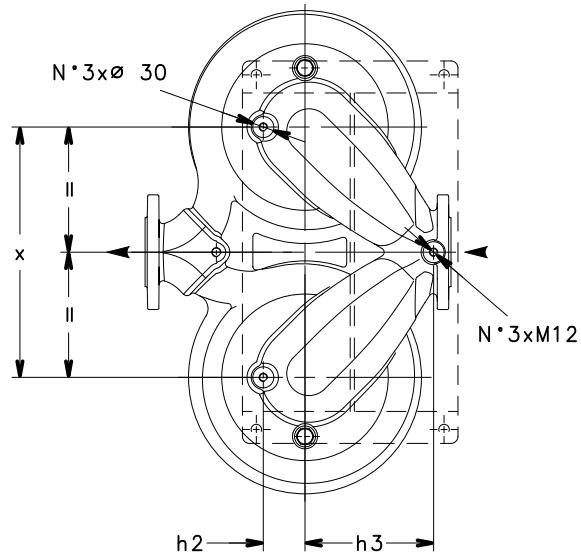
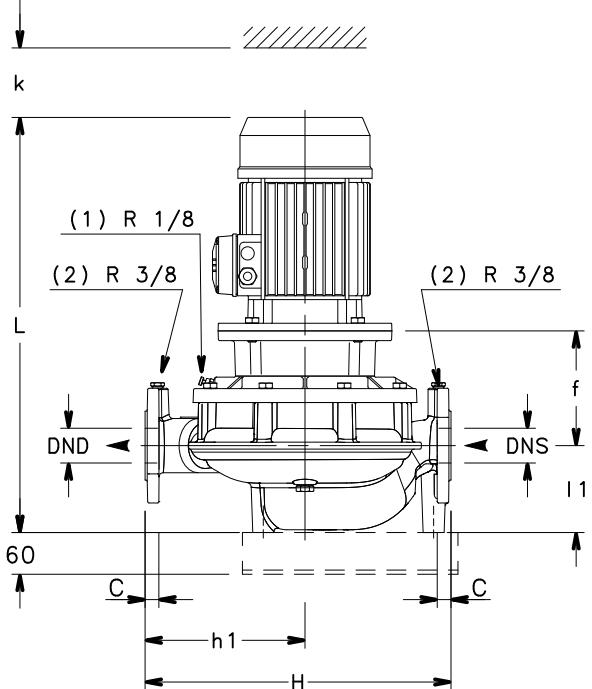
PUMP TYPE LNTS..2	DIMENSIONS (mm)											B	H	L	k	WEIGHT kg
	DND	DNS	b1	f	h1	h2	h3	I1	p	x						
40-125/15/S	40	40	274,5	155	180	52	110	100	155	310	549	320	518	94	71	
40-125/22/P	40	40	274,5	155	180	52	110	100	174	310	549	320	553	94	85	
40-125/30/P	40	40	274,5	165	180	52	110	100	174	310	549	320	563	94	95	
40-125/40/P	40	40	274,5	165	180	52	110	100	197	310	549	320	584	94	101	
40-125/55/P	40	40	274,5	192	180	52	110	100	214	310	549	320	667	94	127	
40-160/40/P	40	40	274,5	165	180	52	110	100	197	310	549	320	584	94	101	
40-160/55/P	40	40	274,5	192	180	52	110	100	214	310	549	320	667	94	127	
40-160/75/P	40	40	274,5	192	180	52	110	100	256	310	549	331	659	94	165	
40-200/75/P	40	40	372,5	190	220	65	193	110	256	410	745	440	667	104	197	
40-200/110A/P	40	40	372,5	220	220	65	193	110	256	410	745	440	758	104	231	
40-200/110/P	40	40	372,5	220	220	65	193	110	256	410	745	440	758	104	231	
40-250/150/P	40	40	372,5	220	220	65	193	110	313	410	745	440	824	104	297	
40-250/185/P	40	40	372,5	220	220	65	193	110	313	410	745	440	824	104	315	
40-250/220/P	40	40	372,5	220	220	65	193	110	313	410	745	440	824	104	337	
50-125/30/P	50	50	275	165	190	57	120	116	174	310	555	340	579	96	104	
50-125/40/P	50	50	275	165	190	57	120	116	197	310	555	340	600	96	110	
50-125/55/P	50	50	275	192	190	57	120	116	214	310	555	340	683	96	135	
50-125/75/P	50	50	275	192	190	57	120	116	256	310	555	340	675	96	174	
50-160/55/P	50	50	275	192	190	57	120	116	214	310	555	340	683	96	135	
50-160/75/P	50	50	275	192	190	57	120	116	256	310	555	340	675	96	174	
50-200/110A/P	50	50	372,5	222	230	60	185	115	256	410	745	440	765	108	243	
50-200/110/P	50	50	372,5	222	230	60	185	115	256	410	745	440	765	108	243	
50-200/150/P	50	50	372,5	222	230	60	185	115	313	410	745	440	831	108	309	
50-200/185/P	50	50	372,5	222	230	60	185	115	313	410	745	440	831	108	327	
50-250/185/P	50	50	372,5	222	230	60	185	115	313	410	745	440	831	108	327	
50-250/220/P	50	50	372,5	222	230	60	185	115	313	410	745	440	831	108	349	
65-125/55/P	65	65	323	198	190	75	140	122	214	360	646	360	695	100	149	
65-125/75/P	65	65	323	198	190	75	140	122	256	360	646	360	687	100	187	
65-125/110A/P	65	65	323	228	190	75	140	122	256	360	646	360	778	100	230	
65-125/110/P	65	65	323	228	190	75	140	122	256	360	646	360	778	100	230	
65-160/110/P	65	65	323	228	190	75	140	122	256	360	646	360	778	94	230	
65-160/150/P	65	65	323	228	190	75	140	122	313	360	646	360	844	94	296	
65-160/185/P	65	65	323	228	190	75	140	122	313	360	646	360	844	94	314	
65-200/185/P	65	65	377,5	222	250	76	196	118	313	420	762	475	834	105	335	
65-200/220/P	65	65	377,5	222	250	76	196	118	313	420	762	475	834	105	357	
65-200/300/W	65	65	377,5	228	250	76	196	118	402	420	762	475	1003	105	575	
65-250/220/P	65	65	377,5	222	250	76	196	118	313	420	762	475	834	105	357	
65-250/300/W	65	65	377,5	228	250	76	196	118	402	420	762	475	1003	105	575	
65-250/370/W	65	65	377,5	228	250	76	196	118	402	420	762	475	1003	105	589	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

LNTS-40-50-65_2p60-en_a_td

LNTS 40, 50, 65 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES

CLEARANCE FOR DISASSEMBLY



- (1) AIR VALVE
(2) PRESSURE GAUGE CONNECTOR
(3) DRAIN

FLANGE

EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

*) ... VALUE "C" AND "D" MAY VARY FROM STANDARD.

LNTS 40, 50, 65 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES

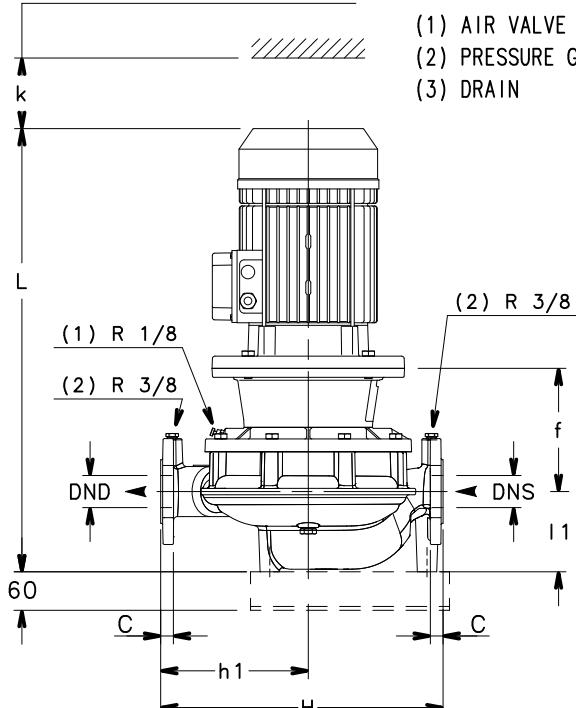
PUMP TYPE LNTS..4	DIMENSIONS (mm)											B	H	L	k	WEIGHT kg
	DND	DNS	b1	f	h1	h2	h3	I1	p	x						
40-125/05/S	40	40	274,5	155	180	52	110	100	155	310	549	320	518	94	63	
40-125/07/X	40	40	274,5	155	180	52	110	100	159	310	549	320	486	94	69	
40-160/05/S	40	40	274,5	155	180	52	110	100	155	310	549	320	518	94	63	
40-160/07/X	40	40	274,5	155	180	52	110	100	159	310	549	320	486	94	69	
40-160/11/P	40	40	274,5	155	180	52	110	100	174	310	549	320	553	94	81	
40-200/11/P	40	40	372,5	152	220	65	193	110	174	410	745	440	561	104	113	
40-200/15/P	40	40	372,5	152	220	65	193	110	174	410	745	440	561	104	121	
40-200/22/P	40	40	372,5	162	220	65	193	110	214	410	745	440	595	104	143	
40-250/22/P	40	40	372,5	162	220	65	193	110	214	410	745	440	595	104	143	
40-250/30A/P	40	40	372,5	162	220	65	193	110	214	410	745	440	626	104	151	
40-250/30/P	40	40	372,5	162	220	65	193	110	214	410	745	440	626	104	151	
40-250/40/P	40	40	372,5	162	220	65	193	110	198	410	745	440	655	104	189	
50-125/05/S	50	50	275	155	190	57	120	116	155	310	555	340	534	96	72	
50-125/07/X	50	50	275	155	190	57	120	116	159	310	555	340	502	96	78	
50-125/11/P	50	50	275	155	190	57	120	116	174	310	555	340	569	96	90	
50-160/07/X	50	50	275	155	190	57	120	116	159	310	555	340	502	96	78	
50-160/11/P	50	50	275	155	190	57	120	116	174	310	555	340	569	96	90	
50-160/15A/P	50	50	275	155	190	57	120	116	174	310	555	340	569	96	98	
50-160/15/P	50	50	275	155	190	57	120	116	174	310	555	340	569	96	98	
50-200/15/P	50	50	372,5	155	230	60	185	115	174	410	745	440	568	108	133	
50-200/22/P	50	50	372,5	165	230	60	185	115	214	410	745	440	602	108	154	
50-200/30/P	50	50	372,5	165	230	60	185	115	214	410	745	440	633	108	163	
50-250/30/P	50	50	372,5	165	230	60	185	115	214	410	745	440	633	108	163	
50-250/40/P	50	50	372,5	165	230	60	185	115	198	410	745	440	662	108	201	
50-250/55/P	50	50	372,5	192	230	60	185	115	256	410	745	440	712	108	223	
65-125/07/X	65	65	323	161	190	75	140	122	159	360	646	360	514	100	91	
65-125/11A/P	65	65	323	161	190	75	140	122	174	360	646	360	581	100	103	
65-125/11/P	65	65	323	161	190	75	140	122	174	360	646	360	581	100	103	
65-125/15/P	65	65	323	161	190	75	140	122	174	360	646	360	581	100	111	
65-160/11/P	65	65	323	161	190	75	140	122	174	360	646	360	581	94	103	
65-160/15/P	65	65	323	161	190	75	140	122	174	360	646	360	581	94	111	
65-160/22/P	65	65	323	171	190	75	140	122	174	360	646	360	615	94	132	
65-160/30/P	65	65	323	171	190	75	140	122	174	360	646	360	646	94	140	
65-200/22/P	65	65	377,5	165	250	76	196	118	214	420	762	475	605	105	163	
65-200/30A/P	65	65	377,5	165	250	76	196	118	214	420	762	475	636	105	171	
65-200/30/P	65	65	377,5	165	250	76	196	118	214	420	762	475	636	105	171	
65-200/40/P	65	65	377,5	165	250	76	196	118	198	420	762	475	665	105	209	
65-250/40/P	65	65	377,5	165	250	76	196	118	198	420	762	475	665	105	209	
65-250/55/P	65	65	377,5	192	250	76	196	118	256	420	762	475	715	105	231	
65-250/75/P	65	65	377,5	192	250	76	196	118	256	420	762	475	715	105	239	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

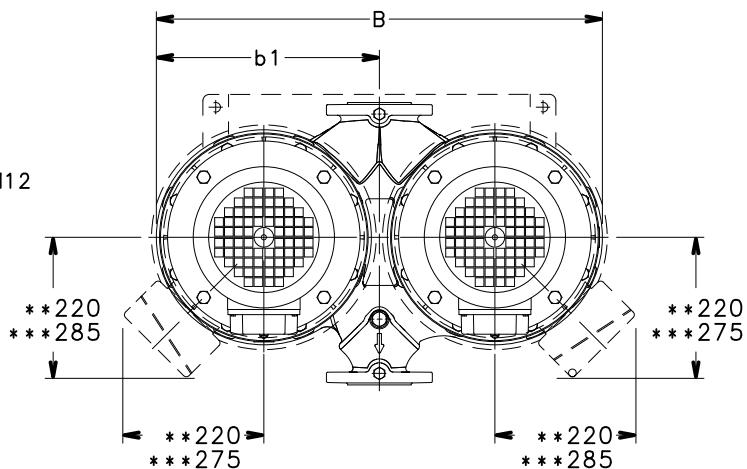
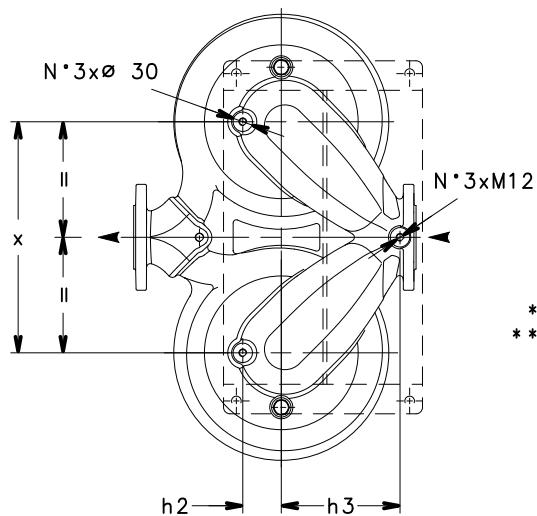
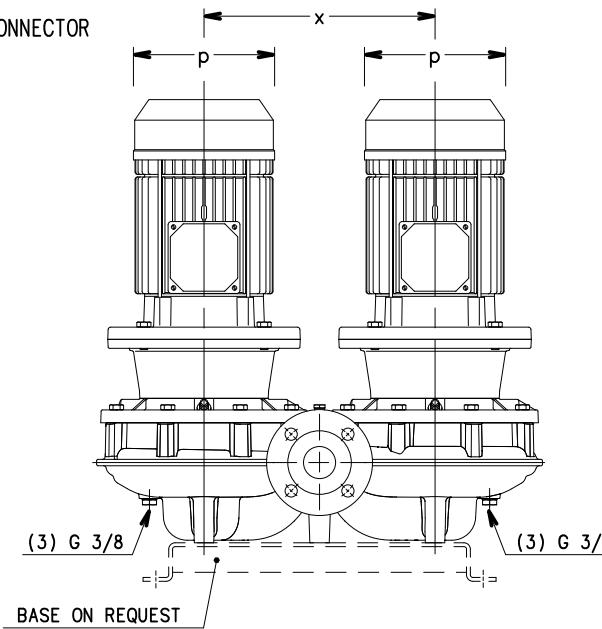
LNTS-40-50-65_4p60-en_b_td

LNTS 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES

CLEARANCE FOR DISASSEMBLY

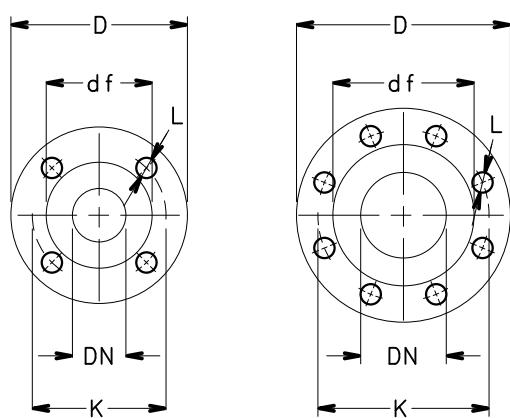


- (1) AIR VALVE
- (2) PRESSURE GAUGE CONNECTOR
- (3) DRAIN



** ONLY FOR MODELS WITH
15-18.5-22 kW MOTORS

*** ONLY FOR MODELS WITH
30-37 kW MOTORS



FLANGE					
EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

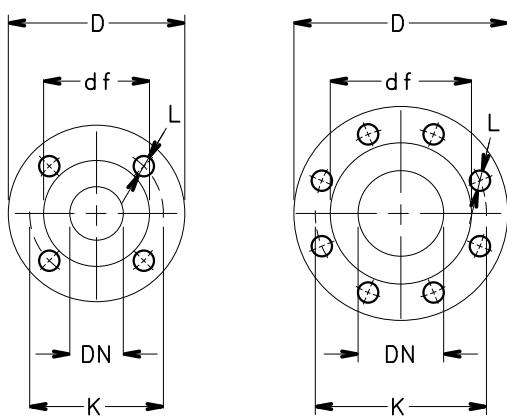
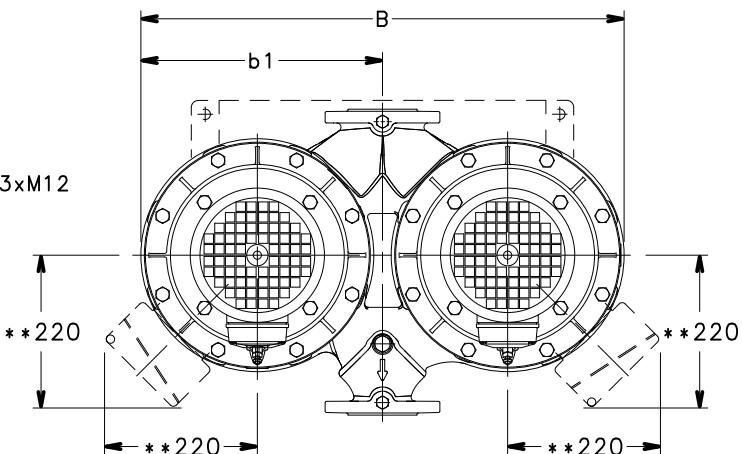
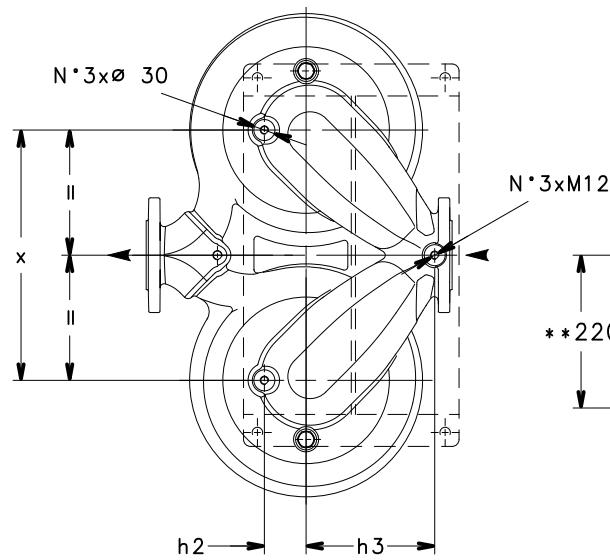
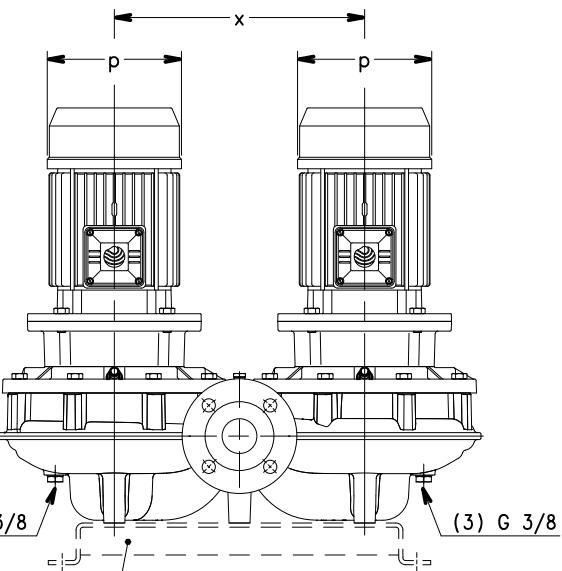
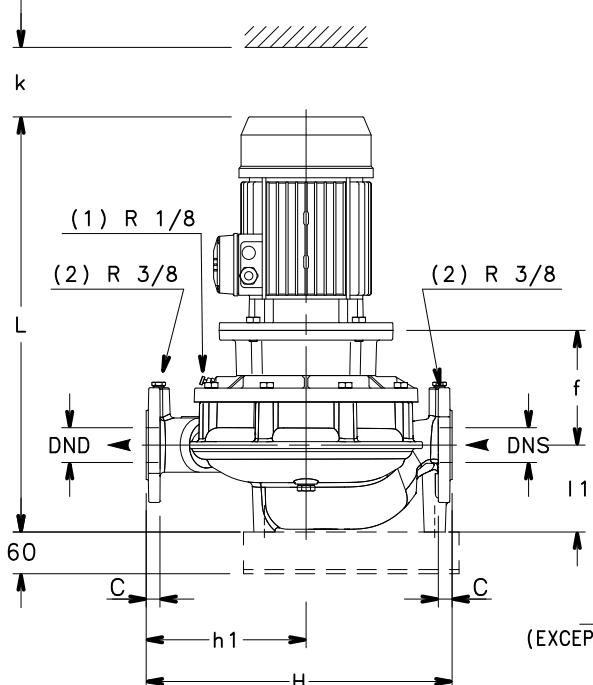
*) ... VALUE "C" AND "D" MARY VARY
FROM STANDARD.

LNTS 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 2 POLES

PUMP TYPE LNTS..2	DIMENSIONS (mm)											B	H	L	k	WEIGHT kg
	DND	DNS	b1	f	h1	h2	h3	I1	p	x						
80-160/150/P	80	80	374	222	235	80	110	133	313	410	748	420	849	111	325	
80-160/185/P	80	80	374	222	235	80	110	133	313	410	748	420	849	111	343	
80-160/220/P	80	80	374	222	235	80	110	133	313	410	748	420	849	111	365	
80-200/220/P	80	80	377,5	240	275	85	140	132	313	420	766	500	866	130	365	
80-200/300/W	80	80	377,5	246	275	85	140	132	402	420	766	500	1035	130	583	
80-200/370/W	80	80	377,5	246	275	85	140	132	402	420	766	500	1035	130	597	
100-160/185/P	100	100	374	227	280	87	125	158	313	410	748	500	879	123	355	
100-160/220/P	100	100	374	227	280	87	125	158	313	410	748	500	879	123	377	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

LNTS-80-100_2p60-en_a_td

LNTS 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES
CLEARANCE FOR DISASSEMBLY


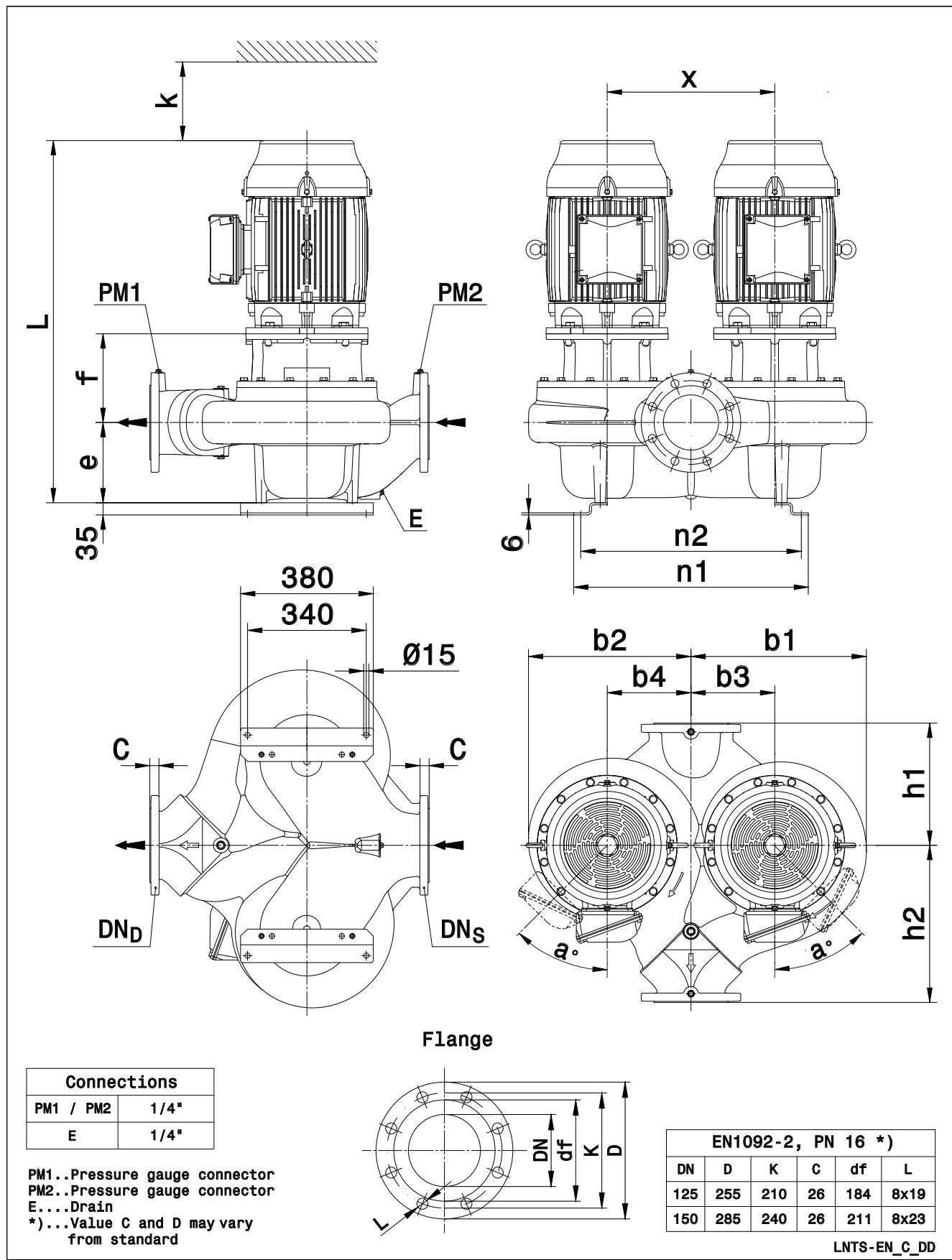
FLANGE EN1092-2, PN 16 *)					
DN	D	K	C	df	L
40	150	110	18	84	4x19
50	165	125	20	99	4x19
65	185	145	20	118	4x19
80	200	160	22	132	8x19
100	230	180	24	157	8x19

LNTS 80, 100 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES

PUMP TYPE LNTS..4	DIMENSIONS (mm)											B	H	L	k	WEIGHT kg
	DND	DNS	b1	f	h1	h2	h3	I1	p	x						
80-160/22A/P	80	80	374	165	235	80	110	133	214	410	748	420	620	111	171	
80-160/22/P	80	80	374	165	235	80	110	133	214	410	748	420	620	111	171	
80-160/30/P	80	80	374	165	235	80	110	133	214	410	748	420	651	111	179	
80-160/40/P	80	80	374	165	235	80	110	133	198	410	748	420	680	111	217	
80-200/30/P	80	80	377,5	183	275	85	140	132	214	420	766	500	668	130	179	
80-200/40/P	80	80	377,5	183	275	85	140	132	214	420	766	500	713	130	217	
80-200/55A/P	80	80	377,5	210	275	85	140	132	256	420	766	500	747	130	239	
80-200/55/P	80	80	377,5	210	275	85	140	132	256	420	766	500	747	130	239	
80-200/75/P	80	80	377,5	210	275	85	140	132	256	420	766	500	747	130	247	
80-250/110A/P	80	80	377,5	240	275	85	140	132	313	420	766	500	866	130	374	
80-250/110/P	80	80	377,5	240	275	85	140	132	313	420	766	500	866	130	374	
80-315/150/P	80	80	433	240	330	90	140	145	313	420	851	620	879	140	459	
80-315/185/W	80	80	433	240	330	90	140	145	360	420	851	620	939	140	538	
80-315/220/W	80	80	433	240	330	90	140	145	360	420	851	620	977	140	572	
80-315/300/W	80	80	433	246	330	90	140	145	402	420	851	620	1048	140	666	
100-160/22/P	100	100	374	170	280	87	125	158	214	410	748	500	650	123	183	
100-160/30/P	100	100	374	170	280	87	125	158	214	410	748	500	681	123	191	
100-160/40/P	100	100	374	170	280	87	125	158	214	410	748	500	710	123	229	
100-160/55/P	100	100	374	197	280	87	125	158	256	410	748	500	760	123	247	
100-200/55/P	100	100	381	210	300	90	160	179	256	420	783	550	794	152	253	
100-200/75/P	100	100	381	210	300	90	160	179	256	420	783	550	794	152	253	
100-200/110/P	100	100	381	240	300	90	160	179	313	420	783	550	913	152	389	
100-250/75/P	100	100	381	210	300	90	160	179	256	420	783	550	794	152	261	
100-250/110A/P	100	100	381	240	300	90	160	179	313	420	783	550	913	152	389	
100-250/110/P	100	100	381	240	300	90	160	179	313	420	783	550	913	152	389	
100-250/150/P	100	100	381	240	300	90	160	179	313	420	783	550	913	152	395	
100-315/185/W	100	100	453	240	360	110	155	175	360	420	883	670	969	140	569	
100-315/220/W	100	100	453	240	360	110	155	175	360	420	883	670	1007	140	603	
100-315/300/W	100	100	453	246	360	110	155	175	402	420	883	670	1078	140	697	

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

LNTS-80-100_4p60-en_a_td

LNTS 125, 150 SERIES
DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES




a xylem brand

LNTS 125, 150 SERIES

DIMENSIONS AND WEIGHTS AT 60 Hz, 4 POLES

PUMP TYPE LNTS..4	DIMENSIONS (mm)															WEIGHT (kg) G	
	DND	DNS	a°	e	f	h1	h2	n1	n2	b1	b2	b3	b4	k	x	L	
125-160/40/P	125	125	0	200	183	280	340	572	532	412	365	235	160	160	395	781	289
125-160/55/P	125	125	0	200	210	280	340	572	532	412	365	235	160	160	395	815	297
125-160/75/P	125	125	0	200	210	280	340	572	532	412	365	235	160	160	395	815	307
125-200/75/P	125	125	0	200	210	280	340	572	532	412	365	235	160	160	395	815	310
125-200/110/P	125	125	0	200	240	280	340	572	532	412	365	235	160	160	395	934	438
125-200/150/P	125	125	0	200	240	280	340	572	532	412	365	235	160	160	395	934	446
125-250/150/P	125	125	45	230	245	350	450	652	612	480	516	250	250	250	500	969	531
125-250/185/W	125	125	45	230	245	350	450	652	612	480	516	250	250	250	500	1029	609
125-315/220/W	125	125	45	230	245	350	450	652	612	480	516	250	250	250	500	1067	676
125-315/300/W	125	125	45	230	251	350	450	652	612	480	516	250	250	250	500	1138	771
150-200/110/P	150	150	45	230	255	375	425	672	632	430	478	235	235	235	470	979	526
150-200/150/P	150	150	45	230	255	375	425	672	632	430	478	235	235	235	470	979	534
150-200/185/W	150	150	45	230	255	375	425	672	632	430	478	235	235	235	470	1039	612
150-250/220/W	150	150	45	230	240	350	450	632	592	416	465	218	218	218	435	1062	620
150-250/300/W	150	150	45	230	246	350	450	632	592	416	465	218	218	218	435	1133	715
150-315/370/W	150	150	30	230	284	350	450	672	632	466	503	240	240	240	480	1260	1059
150-315/450/W	150	150	30	230	284	350	450	672	632	466	503	240	240	240	480	1260	1129

NOTE: Pumps supplied with flanges according to EN 1092-2 as standard. For flanges dimensions see drawing.

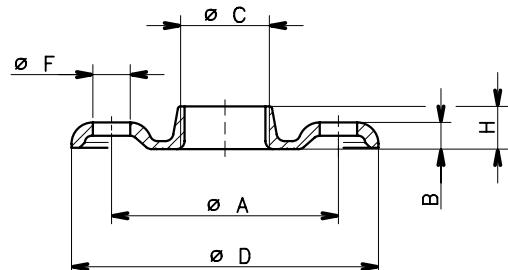
LNTS-125-150_4p60-en_a_td

ACCESSORIES

LNT SERIES
ROUND THREADED COUNTERFLANGES KIT ACCORDING TO EN 1092-1

DN	CODE KIT	ϕ C	DIMENSIONS (mm)				HOLES		PN
			ϕ A	B	ϕ D	H	ϕ F	N°	
40	109398020	Rp 1½	110	14	150	19	18	4	16
50	109398030	Rp 2	125	16	165	24	18	4	16
65	109392710	Rp 2½	145	16	185	23	18	4	16
80	109392720	Rp 3	160	17	200	27	18	8	16
100	109392730	Rp 4	180	18	220	31	18	8	16

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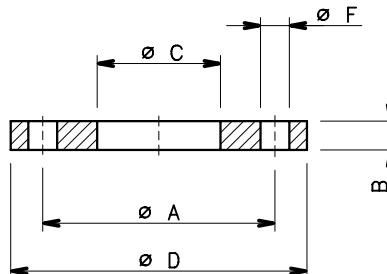


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LNT SERIES
ROUND WELD COUNTERFLANGES KIT ACCORDING TO EN 1092-1

DN	CODE KIT	ϕ C	DIMENSIONS (mm)				HOLES		PN
			ϕ A	B	ϕ D	ϕ F	N°		
40	109390662	49,5	110	18	150	18	4	16	
50	109390692	61,5	125	20	165	18	4	16	
65	109390732	77,5	145	20	185	18	4	16	
80	109390762	90,5	160	20	200	18	8	16	
100	109390772	116	180	22	220	18	8	16	
125	707941320	141,5	210	22	250	18	8	16	
150	707941330	170,5	240	24	285	22	8	16	

Lne-Lnt-ctf-tonde-s-en_a_td

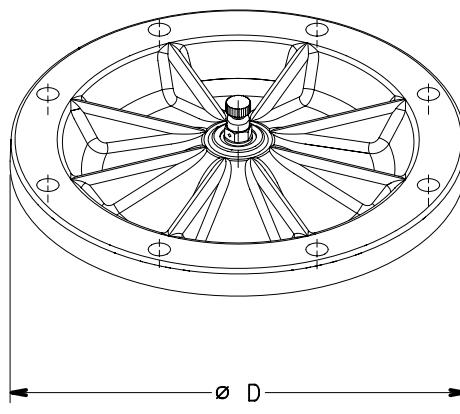


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LNT (40÷100) SERIES
BLIND FLANGE KIT

FLANGE KIT		
PUMP TYPE	CODE	ϕ D
LNT40-125 / LNT40-160	109393750	225
LNT50-125 / LNT50-160		
LNT65-125 / LNT65-160	109393760	274
LNT40-200 / LNT40-250		
LNT50-200 / LNT50-250		
LNT65-200 / LNT65-250		
LNT80-160		
LNT80-200 / LNT80-250		
LNT100-160		
LNT100-200 / LNT100-250		

LNT-flangia-cieca-en_a_td

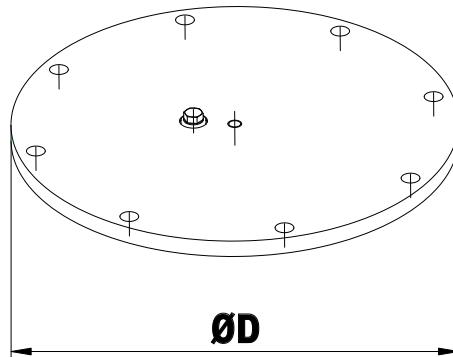


05262_A_DD

LNT 125, 150 SERIES BLIND FLANGE KIT

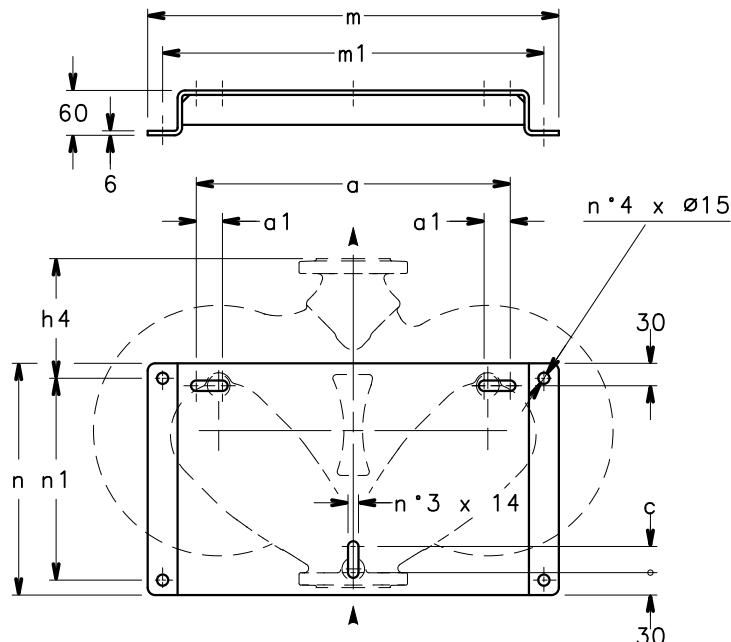
FLANGE KIT		
POMPA TIPO	CODE	Ø D
LNTS 125-160		
LNTS 125-200		
LNTS 125-250		
LNTS 150-200		
LNTS 150-250		
LNTS 125-315	713740900	322
LNTS 150-315	713740910	401

LNTS-BLFL-en_a_td



LNTS-BLFL-EN_A_DD

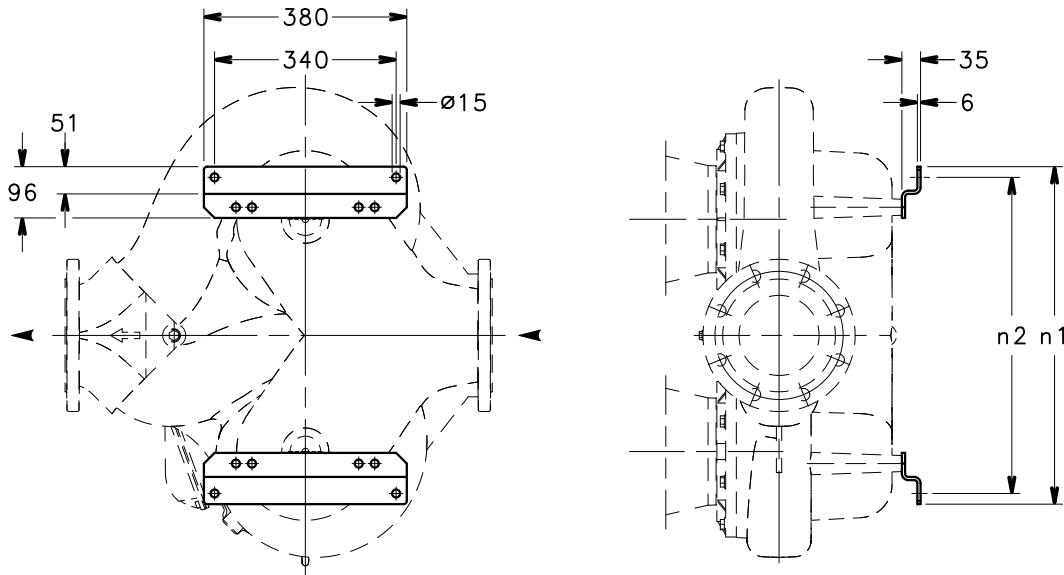
LNT (40÷100) SERIES MOUNTING BASE KIT



PUMP (LNT) SIZE	CODE KIT	DIMENSIONS (mm)							
		a	a1	c	h4	m	m1	n	n1
40-125 / 40-160		370	35	60	118	500	460	280	240
50-125 / 50-160		370	35	60	123	500	460	280	240
65-125 / 65-160		370	35	60	105	500	460	280	240
80-160		420	10	95	145	550	510	340	300
100-160		420	10	95	183	550	510	340	300
40-200 / 40-250		420	10	95	145	550	510	340	300
50-200 / 50-250		420	10	95	160	550	510	340	300
65-200 / 65-250		420	10	95	164	550	510	340	300
80-200 / 80-250		420	10	95	180	550	510	340	300
80-315		420	10	95	230	550	510	340	300
100-200 / 100-250		420	10	95	200	550	510	340	300
100-315		420	10	95	240	550	510	340	300

LNT-piede-en_c_td

05260_B_DD

**LNT 125, 150 SERIES
MOUNTING BASE KIT**


PUMP TYPE	CODE KIT	DIMENSIONS (mm)	
		n1	n2
LNTS 125-160	743660210	572	532
LNTS 125-200		572	532
LNTS 125-250		652	612
LNTS 125-315		652	612
LNTS 150-200		672	632
LNTS 150-250		632	592
LNTS 150-315		672	632

LNTS125-150-base-en_b_td

LNTS125-150-BASE_A_DD

REPORTS AND DECLARATIONS

REPORTS AND DECLARATIONS

i) Test reports

a) **Factory Test Report**

(not available for all pump types; contact Customer Service in advance)

- Test report compiled at the end of the assembly line, including flow-head performance test (ISO 9906:2012 – Grade 3B) and tightness test.

b) **Audit Test Report**

- Test report for electric pumps compiled in the test room, comprising flow-head-pump input-pump efficiency performance test (ISO 9906:2012 – Grade 3B)

c) **NPSH Test Report**

- Test report for electric pumps compiled in the test room, comprising flow-NPSH performance test (ISO 9906:2012 – Grade 3B)

d) **Noise Test Report**

- Report indicating sound pressure and power measurements (EN ISO 20361, EN ISO 11203, EN ISO 4871)

e) **Vibration Test Report**

(unavailable for submerged or submergible pumps)

- Report indicating vibration measurements (ISO 10816-1)

ii) Declaration of product conformity with the technical requirements indicated in the order

a) **EN 10204:2004 - type 2.1**

- does not include test results on supplied or similar products.

b) **EN 10204:2004 - type 2.2**

- includes test results (materials certificates) on similar products.

iii) Issue of a further EC Declaration of Conformity,

- in addition to the one accompanying the product, it comprises references to European law and the main technical standards (e.g.: MD 2006/42/EC, EMCD 2004/108/EC, ErP 2009/125/EC).

N.B.: if the request is made after receipt of the product, communicate the code (name) and serial number (date + progressive number).

iv) Manufacturer's declaration of conformity

- relative to one of more types of products without indicating specific codes and serial numbers.

v) Other certificates and/or documentation on request

- subject to availability or feasibility.

vi) Duplication of certificates and/or documentation on request

- subject to availability or feasibility.

TECHNICAL APPENDIX

NPSH

The minimum operating values that can be reached at the pump suction end are limited by the onset of cavitation.

Cavitation is the formation of vapour-filled cavities within liquids where the pressure is locally reduced to a critical value, or where the local pressure is equal to, or just below the vapour pressure of the liquid.

The vapour-filled cavities flow with the current and when they reach a higher pressure area the vapour contained in the cavities condenses. The cavities collide, generating pressure waves that are transmitted to the walls. These, being subjected to stress cycles, gradually become deformed and yield due to fatigue. This phenomenon, characterized by a metallic noise produced by the hammering on the pipe walls, is called incipient cavitation.

The damage caused by cavitation may be magnified by electrochemical corrosion and a local rise in temperature due to the plastic deformation of the walls. The materials that offer the highest resistance to heat and corrosion are alloy steels, especially austenitic steel. The conditions that trigger cavitation may be assessed by calculating the total net suction head, referred to in technical literature with the acronym NPSH (Net Positive Suction Head).

The NPSH represents the total energy (expressed in m.) of the liquid measured at suction under conditions of incipient cavitation, excluding the vapour pressure (expressed in m.) that the liquid has at the pump inlet.

To find the static height h_z at which to install the machine under safe conditions, the following formula must be verified:

$$hp + h_z \geq (NPSH_r + 0.5) + hf + hp_v \quad ①$$

where:

hp is the absolute pressure applied to the free liquid surface in the suction tank, expressed in m. of liquid; hp is the quotient between the barometric pressure and the specific weight of the liquid.

hz is the suction lift between the pump axis and the free liquid surface in the suction tank, expressed in m.; h_z is negative when the liquid level is lower than the pump axis.

hf is the flow resistance in the suction line and its accessories, such as: fittings, foot valve, gate valve, elbows, etc.

hpv is the vapour pressure of the liquid at the operating temperature, expressed in m. of liquid. hp_v is the quotient between the Pv vapour pressure and the liquid's specific weight.

0,5 is the safety factor.

The maximum possible suction head for installation depends on the value of the atmospheric pressure (i.e. the elevation above sea level at which the pump is installed) and the temperature of the liquid.

To help the user, with reference to water temperature ($4^\circ C$) and to the elevation above sea level, the following tables show the drop in hydraulic pressure head in relation to the elevation above sea level, and the suction loss in relation to temperature.

Water temperature (°C)	20	40	60	80	90	110	120
Suction loss (m)	0,2	0,7	2,0	5,0	7,4	15,4	21,5

Elevation above sea level (m)	500	1000	1500	2000	2500	3000
Suction loss (m)	0,55	1,1	1,65	2,2	2,75	3,3

Friction loss is shown in the tables Flow Resistance of this catalogue. To reduce it to a minimum, especially in cases of high suction head (over 4-5 m.) or within the operating limits with high flow rates, we recommend using a suction line having a larger diameter than that of the pump's suction port. It is always a good idea to position the pump as close as possible to the liquid to be pumped.

Make the following calculation:

Liquid: water at $\sim 15^\circ C$ $\gamma = 1 \text{ kg/dm}^3$

Flow rate required: $25 \text{ m}^3/\text{h}$

Head for required delivery: 70 m.

Suction lift: 3,5 m.

The selection is an 33SV3G075T pump whose NPSH required value is, at $25 \text{ m}^3/\text{h}$, of 2 m.

For water at $15^\circ C$

$hp = Pa / \gamma = 10,33 \text{ m}$, $hp_v = Pv / \gamma = 0,174 \text{ m}$ (0,01701 bar)

The Hf flow resistance in the suction line with foot valves is $\sim 1,2 \text{ m}$.

By substituting the parameters in formula ① with the numeric values above, we have:

$$10,33 + (-3,5) \geq (2 + 0,5) + 1,2 + 0,17$$

from which we have: $6,8 > 3,9$

The relation is therefore verified.

VAPOUR PRESSURE
VAPOUR PRESSURE ps AND ρ DENSITY OF WATER TABLE

t °C	T K	ps bar	ρ kg/dm³
0	273,15	0,00611	0,9998
1	274,15	0,00657	0,9999
2	275,15	0,00706	0,9999
3	276,15	0,00758	0,9999
4	277,15	0,00813	1,0000
5	278,15	0,00872	1,0000
6	279,15	0,00935	1,0000
7	280,15	0,01001	0,9999
8	281,15	0,01072	0,9999
9	282,15	0,01147	0,9998
10	283,15	0,01227	0,9997
11	284,15	0,01312	0,9997
12	285,15	0,01401	0,9996
13	286,15	0,01497	0,9994
14	287,15	0,01597	0,9993
15	288,15	0,01704	0,9992
16	289,15	0,01817	0,9990
17	290,15	0,01936	0,9988
18	291,15	0,02062	0,9987
19	292,15	0,02196	0,9985
20	293,15	0,02337	0,9983
21	294,15	0,024850	0,9981
22	295,15	0,02642	0,9978
23	296,15	0,02808	0,9976
24	297,15	0,02982	0,9974
25	298,15	0,03166	0,9971
26	299,15	0,03360	0,9968
27	300,15	0,03564	0,9966
28	301,15	0,03778	0,9963
29	302,15	0,04004	0,9960
30	303,15	0,04241	0,9957
31	304,15	0,04491	0,9954
32	305,15	0,04753	0,9951
33	306,15	0,05029	0,9947
34	307,15	0,05318	0,9944
35	308,15	0,05622	0,9940
36	309,15	0,05940	0,9937
37	310,15	0,06274	0,9933
38	311,15	0,06624	0,9930
39	312,15	0,06991	0,9927
40	313,15	0,07375	0,9923
41	314,15	0,07777	0,9919
42	315,15	0,08198	0,9915
43	316,15	0,09639	0,9911
44	317,15	0,09100	0,9907
45	318,15	0,09582	0,9902
46	319,15	0,10086	0,9898
47	320,15	0,10612	0,9894
48	321,15	0,11162	0,9889
49	322,15	0,11736	0,9884
50	323,15	0,12335	0,9880
51	324,15	0,12961	0,9876
52	325,15	0,13613	0,9871
53	326,15	0,14293	0,9862
54	327,15	0,15002	0,9862

t °C	T K	ps bar	ρ kg/dm³
55	328,15	0,15741	0,9857
56	329,15	0,16511	0,9852
57	330,15	0,17313	0,9846
58	331,15	0,18147	0,9842
59	332,15	0,19016	0,9837
60	333,15	0,1992	0,9832
61	334,15	0,2086	0,9826
62	335,15	0,2184	0,9821
63	336,15	0,2286	0,9816
64	337,15	0,2391	0,9811
65	338,15	0,2501	0,9805
66	339,15	0,2615	0,9799
67	340,15	0,2733	0,9793
68	341,15	0,2856	0,9788
69	342,15	0,2984	0,9782
70	343,15	0,3116	0,9777
71	344,15	0,3253	0,9770
72	345,15	0,3396	0,9765
73	346,15	0,3543	0,9760
74	347,15	0,3696	0,9753
75	348,15	0,3855	0,9748
76	349,15	0,4019	0,9741
77	350,15	0,4189	0,9735
78	351,15	0,4365	0,9729
79	352,15	0,4547	0,9723
80	353,15	0,4736	0,9716
81	354,15	0,4931	0,9710
82	355,15	0,5133	0,9704
83	356,15	0,5342	0,9697
84	357,15	0,5557	0,9691
85	358,15	0,5780	0,9684
86	359,15	0,6011	0,9678
87	360,15	0,6249	0,9671
88	361,15	0,6495	0,9665
89	362,15	0,6749	0,9658
90	363,15	0,7011	0,9652
91	364,15	0,7281	0,9644
92	365,15	0,7561	0,9638
93	366,15	0,7849	0,9630
94	367,15	0,8146	0,9624
95	368,15	0,8453	0,9616
96	369,15	0,8769	0,9610
97	370,15	0,9094	0,9602
98	371,15	0,9430	0,9596
99	372,15	0,9776	0,9586
100	373,15	1,0133	0,9581
102	375,15	1,0878	0,9567
104	377,15	1,1668	0,9552
106	379,15	1,2504	0,9537
108	381,15	1,3390	0,9522
110	383,15	1,4327	0,9507
112	385,15	1,5316	0,9491
114	387,15	1,6362	0,9476
116	389,15	1,7465	0,9460
118	391,15	1,8628	0,9445

t °C	T K	ps bar	ρ kg/dm³
120	393,15	1,9854	0,9429
122	395,15	2,1145	0,9412
124	397,15	2,2504	0,9396
126	399,15	2,3933	0,9379
128	401,15	2,5435	0,9362
130	403,15	2,7013	0,9346
132	405,15	2,867	0,9328
134	407,15	3,041	0,9311
136	409,15	3,223	0,9294
138	411,15	3,414	0,9276
140	413,15	3,614	0,9258
145	418,15	4,155	0,9214
155	428,15	5,433	0,9121
160	433,15	6,181	0,9073
165	438,15	7,008	0,9024
170	433,15	7,920	0,8973
175	448,15	8,924	0,8921
180	453,15	10,027	0,8869
185	458,15	11,233	0,8815
190	463,15	12,551	0,8760
195	468,15	13,987	0,8704
200	473,15	15,550	0,8647
205	478,15	17,243	0,8588
210	483,15	19,077	0,8528
215	488,15	21,060	0,8467
220	493,15	23,198	0,8403
225	498,15	25,501	0,8339
230	503,15	27,976	0,8273
235	508,15	30,632	0,8205
240	513,15	33,478	0,8136
245	518,15	36,523	0,8065
250	523,15	39,776	0,7992
255	528,15	43,246	0,7916
260	533,15	46,943	0,7839
265	538,15	50,877	0,7759
270	543,15	55,058	0,7678
275	548,15	59,496	0,7593
280	553,15	64,202	0,7505
285	558,15	69,186	0,7415
290	563,15	74,461	0,7321
295	568,15	80,037	0,7223
300	573,15	85,927	0,7122
305	578,15	92,144	0,7017
310	583,15	98,70	0,6906
315	588,15	105,61	0,6791
320	593,15	112,89	0,6669
325	598,15	120,56	0,6541
330	603,15	128,63	0,6404
340	613,15	146,05	0,6102
350	623,15	165,35	0,5743
360	633,15	186,75	0,5275
370	643,15	210,54	0,4518
374,15	647,30	221,20	0,3154

G-at_npsh_b_sc

**TABLE OF FLOW RESISTANCE IN 100 m OF STRAIGHT
CAST IRON PIPELINE (HAZEN-WILLIAMS FORMULA C=100)**

FLOW RATE m ³ /h	l/min		NOMINAL DIAMETER in mm and inches																							
			15 1/2"	20 3/4"	25 1"	32 1 1/4"	40 1 1/2"	50 2	65 2 1/2"	80 3"	100 4"	125 5"	150 6"	175 7"	200 8"	250 10"	300 12"	350 14"	400 16"							
0,6	10	v hr	0,94 16	0,53 3,94	0,34 1,33	0,21 0,40	0,13 0,13																			
0,9	15	v hr	1,42 33,9	0,80 8,35	0,51 2,82	0,31 0,85	0,20 0,29																			
1,2	20	v hr	1,89 57,7	1,06 14,21	0,68 4,79	0,41 1,44	0,27 0,49	0,17 0,16																		
1,5	25	v hr	2,36 87,2	1,33 21,5	0,85 7,24	0,52 2,18	0,33 0,73	0,21 0,25																		
1,8	30	v hr	2,83 122	1,59 30,1	1,02 10,1	0,62 3,05	0,40 1,03	0,25 0,35																		
2,1	35	v hr	3,30 162	1,86 40,0	1,19 13,5	0,73 4,06	0,46 1,37	0,30 0,46																		
2,4	40	v hr	2,12 51,2	1,36 17,3	0,83 5,19	0,53 1,75	0,34 0,59	0,20 0,16																		
3	50	v hr	2,65 77,4	1,70 26,1	1,04 7,85	0,66 2,65	0,42 0,89	0,25 0,25																		
3,6	60	v hr	3,18 108	2,04 36,6	1,24 11,0	0,80 3,71	0,51 1,25	0,30 0,35																		
4,2	70	v hr	3,72 144	2,38 48,7	1,45 14,6	0,93 4,93	0,59 1,66	0,35 0,46																		
4,8	80	v hr	4,25 185	2,72 62,3	1,66 18,7	1,06 6,32	0,68 2,13	0,40 0,59																		
5,4	90	v hr		3,06 77,5	1,87 23,3	1,19 7,85	0,76 2,65	0,45 0,74	0,30 0,27																	
6	100	v hr		3,40 94,1	2,07 28,3	1,33 9,54	0,85 3,22	0,50 0,90	0,33 0,33																	
7,5	125	v hr		4,25 142	2,59 42,8	1,66 14,4	1,06 4,86	0,63 1,36	0,41 0,49																	
9	150	v hr			3,11 59,9	1,99 20,2	1,27 6,82	0,75 1,90	0,50 0,69	0,32 0,23																
10,5	175	v hr			3,63 79,7	2,32 26,9	1,49 9,07	0,88 2,53	0,58 0,92	0,37 0,31																
12	200	v hr			4,15 102	2,65 34,4	1,70 11,6	1,01 3,23	0,66 1,18	0,42 0,40																
15	250	v hr			5,18 154	3,32 52,0	2,12 17,5	1,26 4,89	0,83 1,78	0,53 0,60	0,34 0,20															
18	300	v hr				3,98 72,8	2,55 24,6	1,51 6,85	1,00 2,49	0,64 0,84	0,41 0,28															
24	400	v hr				5,31 124	3,40 41,8	2,01 11,66	1,33 4,24	0,85 1,43	0,54 0,48	0,38 0,20														
30	500	v hr				6,63 187	4,25 63,2	2,51 17,6	1,66 6,41	1,06 2,16	0,68 0,73	0,47 0,30														
36	600	v hr					5,10 88,6	3,02 24,7	1,99 8,98	1,27 3,03	0,82 1,02	0,57 0,42	0,42 0,20													
42	700	v hr					5,94 118	3,52 32,8	2,32 11,9	1,49 4,03	0,95 1,36	0,66 0,56	0,49 0,26													
48	800	v hr					6,79 151	4,02 42,0	2,65 15,3	1,70 5,16	1,09 1,74	0,75 0,72	0,55 0,34													
54	900	v hr					7,64 188	4,52 52,3	2,99 19,0	1,91 6,41	1,22 2,16	0,85 0,89	0,62 0,42													
60	1000	v hr						5,03 63,5	3,32 23,1	2,12 7,79	1,36 2,63	0,94 1,08	0,69 0,51	0,53 0,27												
75	1250	v hr						6,28 96,0	4,15 34,9	2,65 11,8	1,70 3,97	1,18 1,63	0,87 0,77	0,66 0,40												
90	1500	v hr						7,54 134	4,98 48,9	3,18 16,5	2,04 5,57	1,42 2,29	1,04 1,08	0,80 0,56												
105	1750	v hr						8,79 179	5,81 65,1	3,72 21,9	2,38 7,40	1,65 3,05	1,21 1,44	0,93 0,75												
120	2000	v hr							6,63 83,3	4,25 28,1	2,72 9,48	1,89 3,90	1,39 1,84	1,06 1,06	0,68 0,68											
150	2500	v hr							8,29 126	5,31 42,5	3,40 14,3	2,36 5,89	1,73 2,78	1,33 1,45	0,85 0,49											
180	3000	v hr								6,37 59,5	4,08 20,1	2,83 8,26	2,08 3,90	1,59 2,03	1,02 0,69	0,71 0,28										
210	3500	v hr								7,43 79,1	4,76 26,7	3,30 11,0	2,43 5,18	1,86 2,71	1,19 0,91	0,83 0,38										
240	4000	v hr									8,49 101	5,44 34,2	3,77 14,1	2,77 6,64	2,12 3,46	1,36 1,17	0,94 0,48									
300	5000	v hr										6,79 51,6	4,72 21,2	3,47 10,0	2,65 5,23	1,70 1,77	1,18 0,73									
360	6000	v hr										8,15 72,3	5,66 29,8	4,16 14,1	3,18 7,33	2,04 2,47	1,42 1,02									
420	7000	v hr											7,55 50,7	5,55 23,9	4,25 12,49	2,72 4,21	1,89 1,73	1,39 0,82								
480	8000	v hr											8,49 63,0	6,24 29,8	4,78 15,5	3,06 5,24	2,12 2,16	1,56 1,02	1,19 0,53							
540	9000	v hr												6,93 36,2	5,31 18,9	4,78 6,36	3,40 6,36	2,36 2,62	1,73 1,24	1,33 0,65						
600	10000	v hr																								

G-at-pct-en_a_th

hr = flow resistance for 100 m of straight pipeline (m)

V = water speed (m/s)

FLOW RESISTANCE

TABLE OF FLOW RESISTANCE IN BENDS, VALVES AND GATES

The flow resistance is calculated using the equivalent pipeline length method according to the table below:

ACCESSORY TYPE	DN											
	25	32	40	50	65	80	100	125	150	200	250	
	Equivalent pipeline length (m)											
45° bend	0,2	0,2	0,4	0,4	0,6	0,6	0,9	1,1	1,5	1,9	2,4	2,8
90° bend	0,4	0,6	0,9	1,1	1,3	1,5	2,1	2,6	3,0	3,9	4,7	5,8
90° smooth bend	0,4	0,4	0,4	0,6	0,9	1,1	1,3	1,7	1,9	2,8	3,4	3,9
Union tee or cross	1,1	1,3	1,7	2,1	2,6	3,2	4,3	5,3	6,4	7,5	10,7	12,8
Gate	-	-	-	0,2	0,2	0,2	0,4	0,4	0,6	0,9	1,1	1,3
Non return valve	1,1	1,5	1,9	2,4	3,0	3,4	4,7	5,9	7,4	9,6	11,8	13,9

G-a-pcv-en_a_th

The table is valid for the Hazen Williams coefficient C=100 (cast iron pipework);

for steel pipework, multiply the values by 1,41;

for stainless steel, copper and coated cast iron pipework, multiply the values by 1,85;

When the **equivalent pipeline length** has been determined, the flow resistance is obtained from the table of flow resistance.

The values given are guideline values which are bound to vary slightly according to the model, especially for gate valves and non-return valves, for which it is a good idea to check the values supplied by manufacturers.

VOLUMETRIC CAPACITY

Litres per minute l/min	Cubic metres per hour m ³ /h	Cubic feet per hour ft ³ /h	Cubic feet per minute ft ³ /min	Imperial gallon per minute Imp. gal/min	U.S. gallon per minute US gal/min
1,0000	0,0600	2,1189	0,0353	0,2200	0,2642
16,6667	1,0000	35,3147	0,5886	3,6662	4,4029
0,4719	0,0283	1,0000	0,0167	0,1038	0,1247
28,3168	1,6990	60,0000	1,0000	6,2288	7,4805
4,5461	0,2728	9,6326	0,1605	1,0000	1,2009
3,7854	0,2271	8,0208	0,1337	0,8327	1,0000

PRESSURE AND HEAD

Newton per square metre N/m ²	kilo Pascal kPa	bar	Pound force per square inch psi	Metre of water m H ₂ O	Millimetre of mercury mm Hg
1,0000	0,0010	1×10^{-5}	$1,45 \times 10^{-4}$	$1,02 \times 10^{-4}$	0,0075
1 000,0000	1,0000	0,0100	0,1450	0,1020	7,5006
1×10^5	100,0000	1,0000	14,5038	10,1972	750,0638
6 894,7570	6,8948	0,0689	1,0000	0,7031	51,7151
9 806,6500	9,8067	0,0981	1,4223	1,0000	73,5561
133,3220	0,1333	0,0013	0,0193	0,0136	1,0000

LENGTH

Millimetre mm	Centimetre cm	Metre m	Inch in	Foot ft	Yard yd
1,0000	0,1000	0,0010	0,0394	0,0033	0,0011
10,0000	1,0000	0,0100	0,3937	0,0328	0,0109
1 000,0000	100,0000	1,0000	39,3701	3,2808	1,0936
25,4000	2,5400	0,0254	1,0000	0,0833	0,0278
304,8000	30,4800	0,3048	12,0000	1,0000	0,3333
914,4000	91,4400	0,9144	36,0000	3,0000	1,0000

VOLUME

Cubic metre m ³	Litre L	Millilitre ml	Imperial gallon imp. gal.	U.S. gallon US gal.	Cubic foot ft ³
1,0000	1 000,0000	1×10^6	219,9694	264,1720	35,3147
0,0010	1,0000	1 000,0000	0,2200	0,2642	0,0353
1×10^{-6}	0,0010	1,0000	$2,2 \times 10^{-4}$	$2,642 \times 10^{-4}$	$3,53 \times 10^{-5}$
0,0045	4,5461	4 546,0870	1,0000	1,2009	0,1605
0,0038	3,7854	3 785,4120	0,8327	1,0000	0,1337
0,0283	28,3168	28 316,8466	6,2288	7,4805	1,0000

TEMPERATURE

Water	Kelvin K	Celsius °C	Fahrenheit °F	
icing	273,1500	0,0000	32,0000	${}^{\circ}\text{F} = {}^{\circ}\text{C} \times \frac{9}{5} + 32$
boiling	373,1500	100,0000	212,0000	${}^{\circ}\text{C} = ({}^{\circ}\text{F} - 32) \times \frac{5}{9}$

G-at_pp-en_b_sc

FURTHER PRODUCT SELECTION AND DOCUMENTATION

Xylect™



Xylect™ is pump solution selection software with an extensive online database of product information across the entire Lowara range of pumps and related products, with multiple search options and helpful project management facilities. The system holds up-to-date product information on thousands of products and accessories.

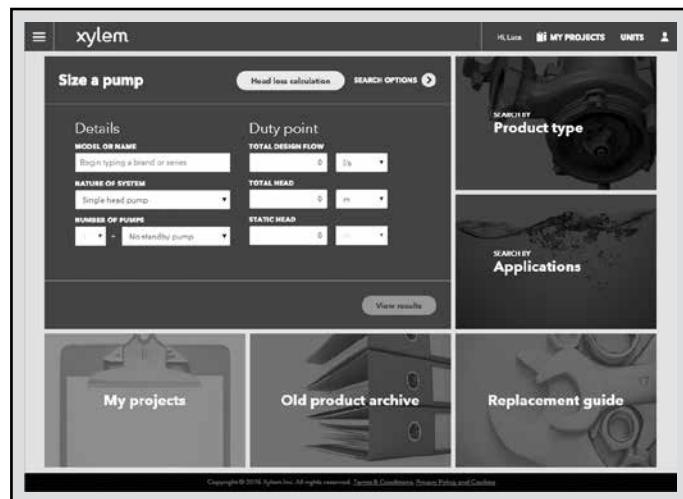
The possibility to search by applications and the detailed information output given makes it easy to make the optimal selection without having detailed knowledge about the Lowara products.

The search can be made by:

- Application
- Product type
- Duty point

Xylect™ gives a detailed output:

- List with search results
- Performance curves (flow, head, power, efficiency, NPSH)
- Motor data
- Dimensional drawings
- Options
- Data sheet printouts
- Document downloads incl dxf files



The search by application guides users not familiar with the product range to the right choice.

FURTHER PRODUCT SELECTION AND DOCUMENTATION

Xylect™



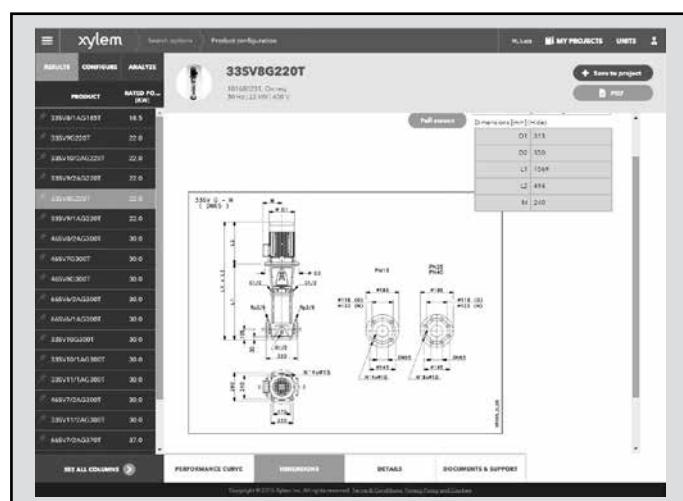
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- Share projects with other Xylect™ users

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Dimensional drawings appear on the screen and can be downloaded in dxf format.

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- 2) a leading global water technology company.

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Legal head office
Xylem Water Solutions Italia Srl

Via Gioacchino Rossini 1/A
20020 - Lainate (MI) - Italy
Tel. (+39) 02 90358.1
Fax (+39) 02 9019990
www.xylemwatersolutions.com

For information and technical support
Xylem Service Italia Srl

Via Dottor Vittorio Lombardi 14
36075 - Montecchio Maggiore (VI) - Italy
Tel. (+39) 0444 707111
Fax (+39) 0444 491043
www.lowara.com

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