

In-line pumps

LNES

Single-impeller centrifugal pump with in-line suction and delivery flanges.

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

Application Areas

- Water supply
- Heating, ventilation and refrigeration
- Cooling and Refrigeration
- Industry in general
- Heat recovery, auxiliary equipment

Identification Code

Example:	LNES 40-200/40/P25V CS4
LNES	series name
40	in-line port DN 40
200	nominal impeller diameter
40	motor power kW x 10 (4 X 10= 40)
P2	motor type (P), 2=2 poles, 4 = 4 poles
5	frequency 5=50 Hz
V	voltage V=3x380-415/660-690 V
C	Casing material: C Cast iron
S	Impeller material: S Fabricated st. steel
4	Mech seal material (see type of seal)

Related Products and Options

- LNES E: e-LNE Smart series based on LNES in-line pump
- LNE SH: LNES pump with integrated HYDROVAR® HVL, variable speed pump driver
- LNTS: In-line twin head pumps



Ref: F063

Specification

Flow:	max 410 m ³ /h
Head:	max 263 m
Range:	0,55 ÷ 37 kW (0,75 ÷ 50 Hp)
Operating pressure:	16 bar
Ambient temperature:	0°C ÷ 40°C
Liquid temperature:	-25°C ÷ +120°C

Motor

Power supply:	3 ~230/400V to 3kW, over 400/690V
Insulation class:	F (155 °C)
Enclosure class:	IP55

Three-phase version (EC Regulation # 640/2009) with IE3 motor efficiency level for power greater than 0.75 kW included. The level of efficiency only refers to the motor and not to the electric pump.

Materials

Pump body:	Cast iron
Impeller:	Stainless steel or cast iron
Elastomers:	EPDM
Mechanical seal:	Silicon carbide-carbon

Customer	Date	3/10/2020
Contact	Project	
Phone number	Project no.	
Email		

LNES 100-200/220* (With epdm seal for 140°C)

***Pastaba:** tikslus modelio kodas bus patikslintas užsakymo atveju

Operating data

Pump type	Single head pump	Fluid	Water, pure
No. of pumps / Reserve	1 / 0	Operating temperature t A	°C 4
Nominal flow	m ³ /h 0	pH-value at t A	7
Nominal head	m 0	Density at t A	kg/dm ³ 1
Static head	m 0	Kin. viscosity at t A	mm ² /s 1.569
Inlet pressure	bar 0	Vapor pressure at t A	bar 1
Environmental temperature	°C 20	Solids	0
Available system NPSH	m 0	Altitude	m 0

Pump data

Make	Lowara	Nominal	m ³ /h ()
Speed	1/min 2900	Flow	Max- m ³ /h 241.8
Number of stages	1	Min-	m ³ /h 47.6
Max. casing pressure	bar	Nominal	m
Max. working pressure	bar 4.5	Head	at Qmax m 20.1
Head H(Q=0)	m 46	at Qmin	m 46.1
Weight	kg	Shaft power	kW ()
	Max. mm 208	Max. shaft power	kW 21.9
Impeller R	designed mm 181	Efficiency	%
	Min. mm 181	NPSH 3%	m
Suction nozzle	DN 100 PN 16	EN1092-2 (NSC-LNE) discharge nozzle	DN 100 PN 16 EN1092-2 (NSC-LNE)

Pump Materials

Volute Casing	Cast iron
Casing Cover	Cast iron
Impeller	Cast iron / ASTM Class 30
Stub shaft	Stainless steel / AISI 431
Wear Ring	Stainless steel / AISI 304
Impeller Nut	Stainless steel
Impeller washer	Stainless steel
Impeller key	Stainless steel / AISI 316Ti
PLUG	Stainless steel / AISI 316Ti

Shaft Seal

Unbalanced mechanical seal	Burgmann
eRMG12 - Ø<=38 (-25 / +140 °C)	
1. Rotating ring	Carbon graphite antimony impregnated
2. Stationary ring	SiC, silicon carbide, sintered press. less
3. Secondary seal	Ethylene propylene rubber (EPDM)
4. Springs	CrNiMo - Steel
5. Others	CrNiMo - Steel
Gaskets of the pump	Ethylene propylene rubber (EPDM)
Code	A/ESIC-Q7EGG/Y 10

Motor data

Manufacturer	Lowara	Electric voltage	400 V
Specific design	IE3 Three phase surface motor		
Type	PLM180R.../3220 E3		
Rated power	22 kW	Electric current	40.4 A
Speed	2955 1/min	Degree of protection	IP 55
Frame size	180R	Weight	121 kg
Shaft diameter	0 mm	Colour	RAL 5010
Insulation class	F		

Coupling

Manufacturer	
Series	
Type	
Frame size	
Spacer length	
Weight	
Coupling protection	

Base plate

Description	
Weight	

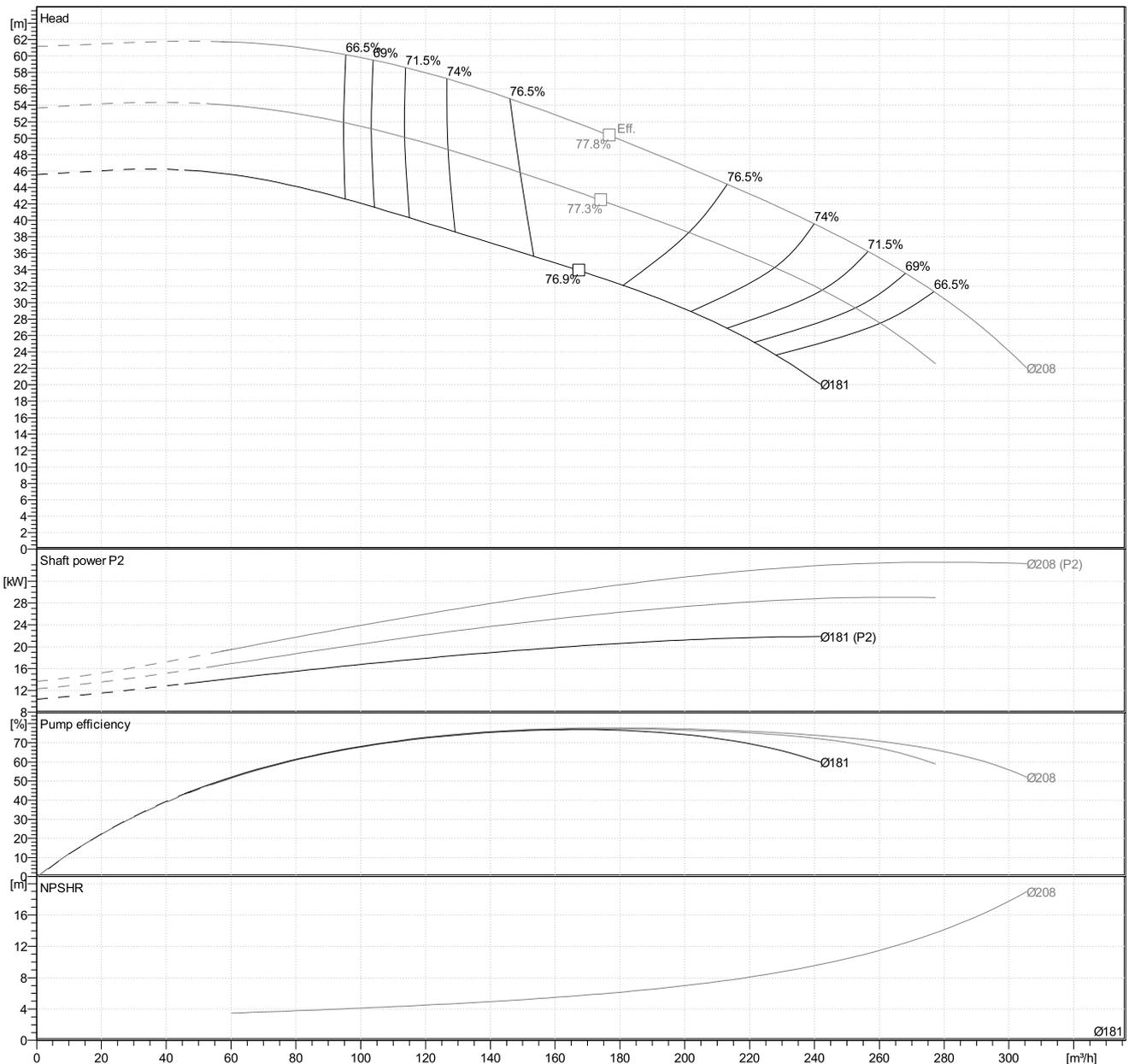
Remarks:

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Hydraulic data

Operating Data Specification		Hydraulic data (duty point)		Impeller design	
Flow	0 m ³ /h	Flow		Impeller R	181 mm
Head	0 m	Head		Frequency	50 Hz
Static head	0 m	MEI >=0,4		Speed	2900 1/min

Power data referred to:
 Water, pure [100%] ; 4°C; 1kg/dm³; 1.57mm²/s
 Performance according to ISO 9906:2012 – Grade 3B



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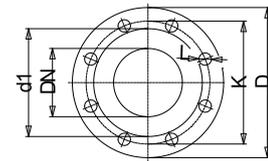
Dimensions mm/m³

AD	240		
b1	201		
Bmax	410		
DND	100		
DNS	100		
e	175		
f	240		
H	550		
h1	300		
h2	250		
L	909		
p	313		
x	152		
		Total weight	196 kg

Connections mm

Suction nozzle Discharge nozzle
 DN 100 DN 100
 PN 16 PN 16
 EN1092-2 (NSC-LNE) EN1092-2 (NSC-LNE)

C	24	C	24
D	230	D	230
df	157	df	157
DN	100	DN	100
K	180	K	180
L	8 x 19	L	8 x 19



Value C, D may vary from Standard

Drawing

(1) R 1/8 AIR VALVE
 (2) R 3/8 PRESSURE GAUGE CONNECTOR
 (3) G 3/8 DRAIN

FLANGE

DN	D	K	C	df	L
32	140	100	18	76	4x19
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.

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