

Technical data



Operating data

1	Pumpe type	Single head pump	Fluid	Water, pure
2	No. of pumps	1	Operating temperature t A	°C 4
3	Nominal flow	l/s 27	Max / Min Operating Temperature mech. Seal	°C 120 / -25
4	Nominal head	m 35.7	pH-value at t A	7
5	Static head	m 0	Density at t A	kg/m³ 1000
6	Inlet pressure	kPa 0	Kin. viscosity at t A	mm²/s 1.569
7	Environmental temperature	°C 20	Vapor pressure at t A	kPa 100
8	Available system NPSH	m 0	Altitude	0

Pump data

9	Lubrication Standard, Grease lubrication [Std]										
10	Execution					Impeller Ø	Max.	mm	180		
11	Design		In-Line single head				designed	mm	180		
12	Operating speed		2900 rpm	Stages	1		Min.	mm	130		
13	Suction nozzle		DN 80	/	PN 16	/	EN1092-2	Nominal	l/s	28.2	
14	Discharge nozzle		DN 80	/	PN 16	/	EN1092-2	Flow	Max-	l/s	50
15	Max. casing pressure		kPa				Min-	l/s	10		
16	Max. working pressure		kPa	456.7				Nominal	m	38.9	
17	Impeller type		Radial impeller			Head	at Qmax	m	22		
18	Head H(Q=0)		m	47	at Qmin		m	45.1			
19	Max. shaft power		kW	16.5	Shaft power		kW	13.8			
20	Pump weight		kg				Efficiency		%	79	
21	Total weight		kg	163.0	NPSH 3%			m	4		

Materials

22	Pump		Shaft Seal	
23	Volute Casing	Cast iron	Single mechanical seal, without shaft sleeve	
24	Casing Cover	Cast iron	eMG12 - Ø28mm	BQ7EGG-WA
25	Impeller	Cast iron / ASTM Class 30	Mechanical seal diameter	28 mm
26	Stub shaft	Stainless steel / AISI 316L	1. Rotating ring	Carbon graphite resin impregnated
27	Wear ring	Stainless steel / AISI 304	2. Stationary ring	SiC, silicon carbide, sintered press.less
28	Impeller lock nut and washer	Stainless steel / AISI 304	3. Secondary seal	Ethylene propylene rubber (EPDM)
29	Impeller key	Stainless steel / AISI 316L	4. Springs	CrNiMo - Steel
30	Fill and drain plugs	Nickel-plated brass	5. Others	EPDM - WRAS
31			Gaskets of the pump	Ethylene propylene rubber (EPDM)
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Motor data

Electrical and dimensional data refer to IE3 motor

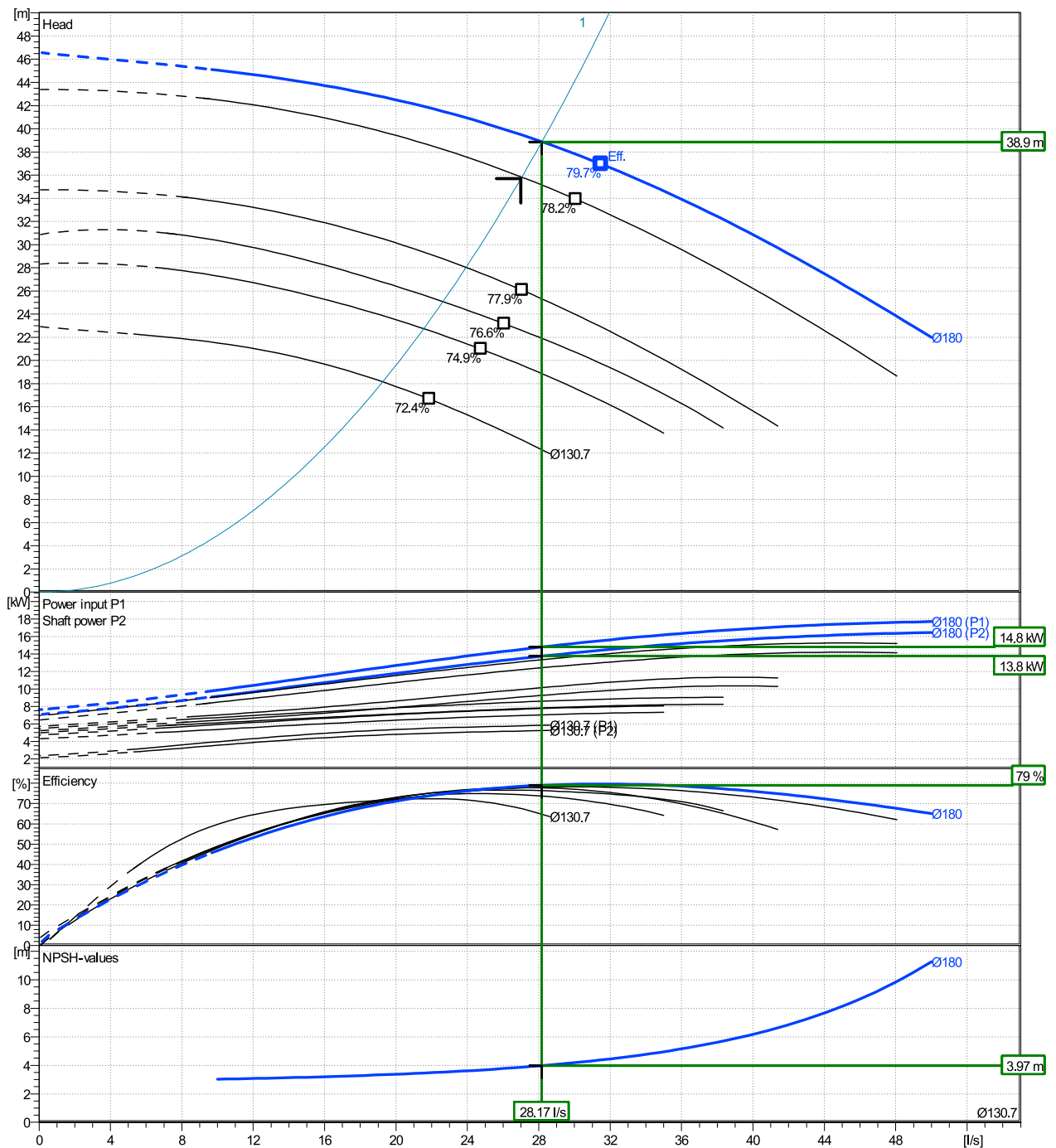
42	Manufacturer	Lowara		
43	Specific design	IE3 3ph Flange Motor		
44	Type	PLM 160 B14 18,5 kW		
45	Rated power	18.5 kW	Rated current	32.7 A
46	Nominal speed	2940 rpm	Rated voltage	400 V
47	Frame size	160	Service factor	1
48	Weight	kg 121.2	Degree of protection	IP55

Performance curve


	Ø mm	Pump capacity Operating range			Pump head		Shaft power P2			Frequency	Hz	50
		Min. l/s	Max. l/s	η Max. l/s	H(Q=0) m	η Max. m	P2(Q=0) kW	Max. kW	η Max. kW	Operating speed	rpm	2900
actual	180	10	50	31.5	46.6	36.9		16.5	14.4	Nominal flow	l/s	27
Min.	0	/	/	21.9	22.9	16.7		/	4.94	Nominal head	m	35.7
Max.	180	/	/	31.5	46.6	36.9		/	14.4	Inlet pressure	kPa	0
										Static head	m	0

Power datas referred to:
hydr. Performance acceptance acc. To EN ISO 9906 Class Grade 3B

Water, pure [100%] ; 4°C; 1000kg/m³; 1.57mm²/s

MEI: N.A. - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012


LNEE 80-160/185/P25VCC4

Dimensions

Close coupled

PLM 160 B14 18,5 kW



Electrical and dimensional data refer to IE3 motor

Dimensions [mm]

AD	240
b1	168
Bmax	408
DND	80
DNS	80
e	114
H	420
h1	215
h2	205
L	723
p	313
x	111

Weight

Total weight	163 kg
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Connections

Suction nozzle		Discharge nozzle	
DN 80		DN 80	
PN 16		PN 16	
EN1092-2		EN1092-2	
C	22	C	22
D	200	D	200
df	132	df	132
DN	80	DN	80
K	160	K	160
L	8 x 19	L	8 x 19

