

# ESHS 80-250/110/P45VSNA

## Technical data

Company name  
Contact  
Phone number  
e-mail address

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	m³/h 0	Max / Min Operating Temperature mech. Seal	°C 120 / -10
4	Nominal head	m 0	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			
11	Design	Horizontal		
12	Operating speed	1450 rpm	Stages	1
13	Suction nozzle	DN 100 /	PN 16 /	EN1092-1
14	Discharge nozzle	DN 80 /	PN 16 /	EN1092-1
15	Max. casing pressure	kPa 1200	Impeller Ø	Max. mm 270
16	Max. working pressure	kPa 261.4		designed mm 270
17	Impeller type	Radial impeller		Min. mm 237
18	Head H(Q=0)	m 27	Flow	Nominal m³/h
19	Max. shaft power	kW 9		Max- m³/h 144
20	Pump weight	kg		Min- m³/h 45
21	Total weight	kg 153.0	Head	Nominal m
				at Qmax m 14.8
			at Qmin m 26.1	
			Shaft power	kW
			Efficiency	%
			NPSH 3%	m

Materials				
22		<b>Pump</b>	<b>Shaft Seal</b>	
23	Pump body	Stainless steel / AISI 316L		Single mechanical seal, without shaft sleeve
24	Impeller	Stainless steel / ASTMCF8M		Uniten 3K
25	SEAL HOUSING	Stainless steel / AISI 316L		Mechanical seal diameter 33 mm
26	Wear ring	Stainless steel / AISI 316L		1. Rotating ring Ceramic
27	Counterwear ring	Stainless steel / AISI 316L		2. Stationary ring Carbon graphite resin impregnated
28	Rigid shaft coupling	Stainless steel / AISI 316L		3. Secondary seal Fluorine rubber (FKM)
29	Impeller locknut and washer	Stainless steel / AISI 316		4. Springs CrNiMo - Steel
30	Tab	Stainless steel / AISI 316L		5. Others CrNiMo - Steel
31	Fill/drain plugs	Stainless steel / AISI 316		Gaskets of the pump Fluorine rubber (FKM)
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Motor data				
Electrical and dimensional data refer to IE3 motor				
42	Manufacturer	Lowara PLM		
43	Specific design	IE3 3ph Flange Motor - Premium Efficiency		
44	Type	PLM 160 B35 11 kW		
45	Rated power	11 kW	Rated current	21.4 A
46	Nominal speed	1465 rpm	Rated voltage	400 V
47	Frame size	160	Service factor	1
48	Weight	kg 125.0	Degree of protection	IP55

Remarks				
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# ESHS 80-250/110/P45VSNA

## Performance curve

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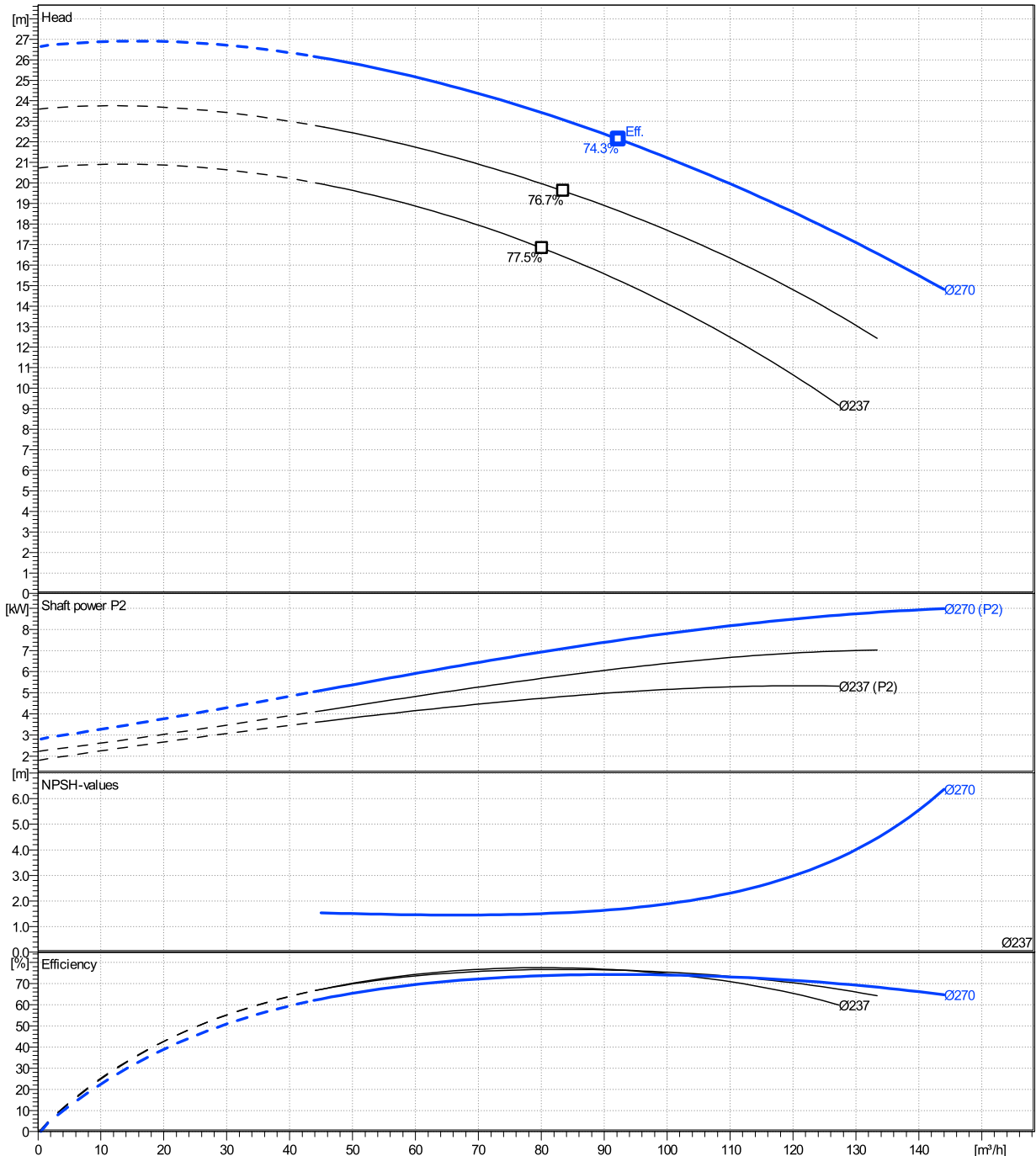
	Ø mm	Pump capacity η			Pump head η		Shaft power P2 η			Frequency	Hz	50
		Min. m³/h	Max. m³/h	Max. m³/h	H(Q=0) m	Max. m	P2(Q=0) kW	Max. kW	Max. kW	Operating speed	rpm	1450
actual	270	45	144	92.3	26.6	22.1	8.98	7.49		Nominal flow	m³/h	0
Min.	0	/	/	80.2	20.7	16.8	/	4.74		Nominal head	m	0
Max.	270	/	/	92.3	26.6	22.1	/	7.49		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



**ESHS 80-250/110/P45VSNA**

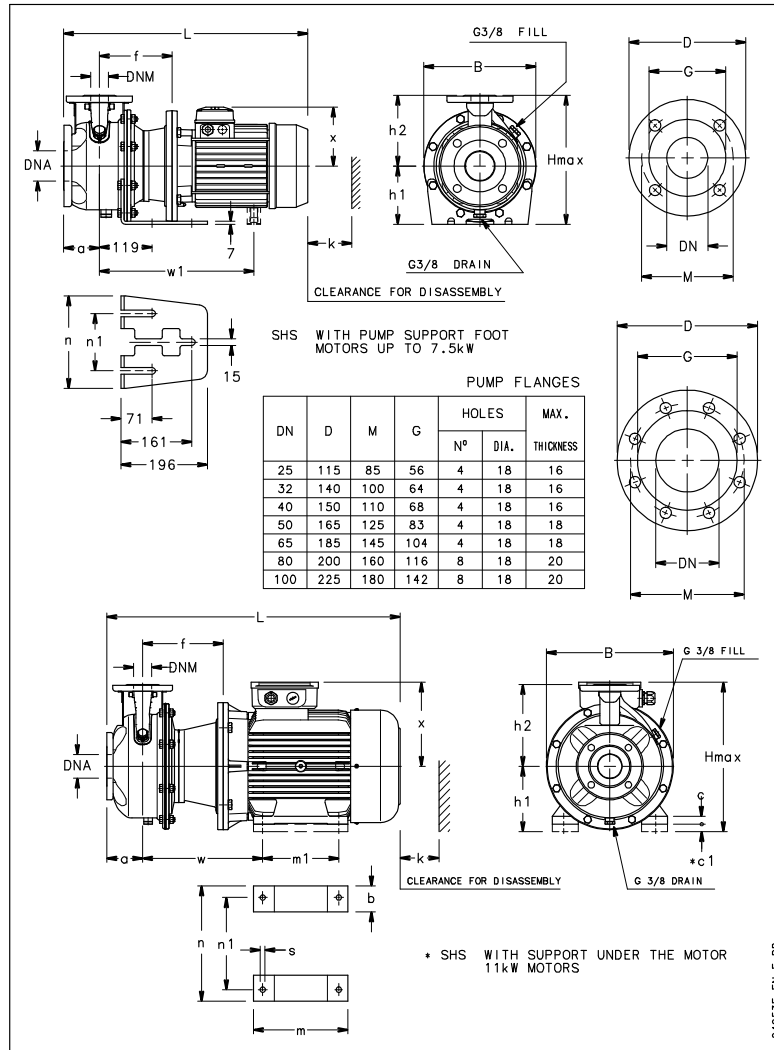
**Dimensions**

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Rigid coupling

PLM 160 B35 11 kW

Electrical and dimensional data refer to IE3 motor



Dimensions		[ mm ]	
a	125		
B	383		
b	49		
c	5		
DNA	100		
DNM	80		
f	222		
h1	200		
h2	280		
Hmax	480		
k	160		
L	841		
m	304		
m1	210		
n	304		
n1	254		
s	15		
w	330		
x	240		

Weight	
Total weight	153 kg

Connections			
<b>Suction nozzle</b>		<b>Discharge nozzle</b>	
DN 100		DN 80	
PN 16		PN 16	
EN1092-1		EN1092-1	
D	225	D	200
Dia. Holes	18	Dia. Holes	18
DN	100	DN	80
G	142	G	114
M	180	M	160
Max thickness	20	Max thickness	20

**Dimensions and weight without obligation**

Project Xlect-20117698  
Block ESHS 80-250/110/P45VSNA

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