LOWARA
a xylem brand

ESHS 80-250/110/P46PSNA

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	°F	39.2	
3	Nominal flow	US g.p.m.	0	Max / Min Operating Temperature mech. Seal	°F	120 / -10	
4	Nominal head	ft	0	pH-value at t A		7	
5	Static head	ft	0	Density at t A	lb/ft³	62.4	
6	Inlet pressure	psi	0	Kin. viscosity at t A	ft²/s	1.689E-5	
7	Environmental temperature	°F	68	Vapor pressure at t A	psi	14.5	
8	Available system NPSH	ft	0	Altitude		0	

Pump data

9	Lubrication	Standard, Grease lubrication [Std]					
10	Execution			Impeller Ø	Max.	inch	9 5/16
11	Design	Horizontal			designed	inch	9 5/16
12	Operating speed	1750 rpm	Stages 1		Min.	inch	7 15/16
13	Suction nozzle	DN 100 / PN 16 / EN1092-1		Flow	Nominal	US g.p.m.	
14	Discharge nozzle	DN 80 / PN 16 / EN1092-1			Max-	US g.p.m.	634
15	Max. casing pressure	psi	174		Min-	US g.p.m.	198.1
16	Max. working pressure	psi	45.9	Head	Nominal	ft	
17	Impeller type		Radial impeller		at Qmax	ft	49
18	Head H(Q=0)	ft	110		at Qmin	ft	101.2
19	Max. shaft power	hp	12.5	Shaft power		hp	
20	Pump weight	kg		Efficiency		%	
21	Total weight	lb	337.3	NPSH 3%		ft	

Materials

	Pump		Shaft Seal	
22				
23	Pump body	Stainless steel / AISI 316L	Single mechanical seal, without shaft sleeve	
24	Impeller	Stainless steel / ASTM CF8M	Uniten 3K	VBVGG
25	SEAL HOUSING	Stainless steel / AISI 316L	Mechanical seal diameter	1 5/16 inch
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)
32				
33				
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35				
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41				

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	14.751 hp	Rated current	38.3 A
46	Nominal speed	1758 rpm	Rated voltage	220 V
47	Frame size	160	Service factor	1
48	Weight lb	275.6	Degree of protection	IP55

Remarks

49	
50	
50	
52	

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Performance curve

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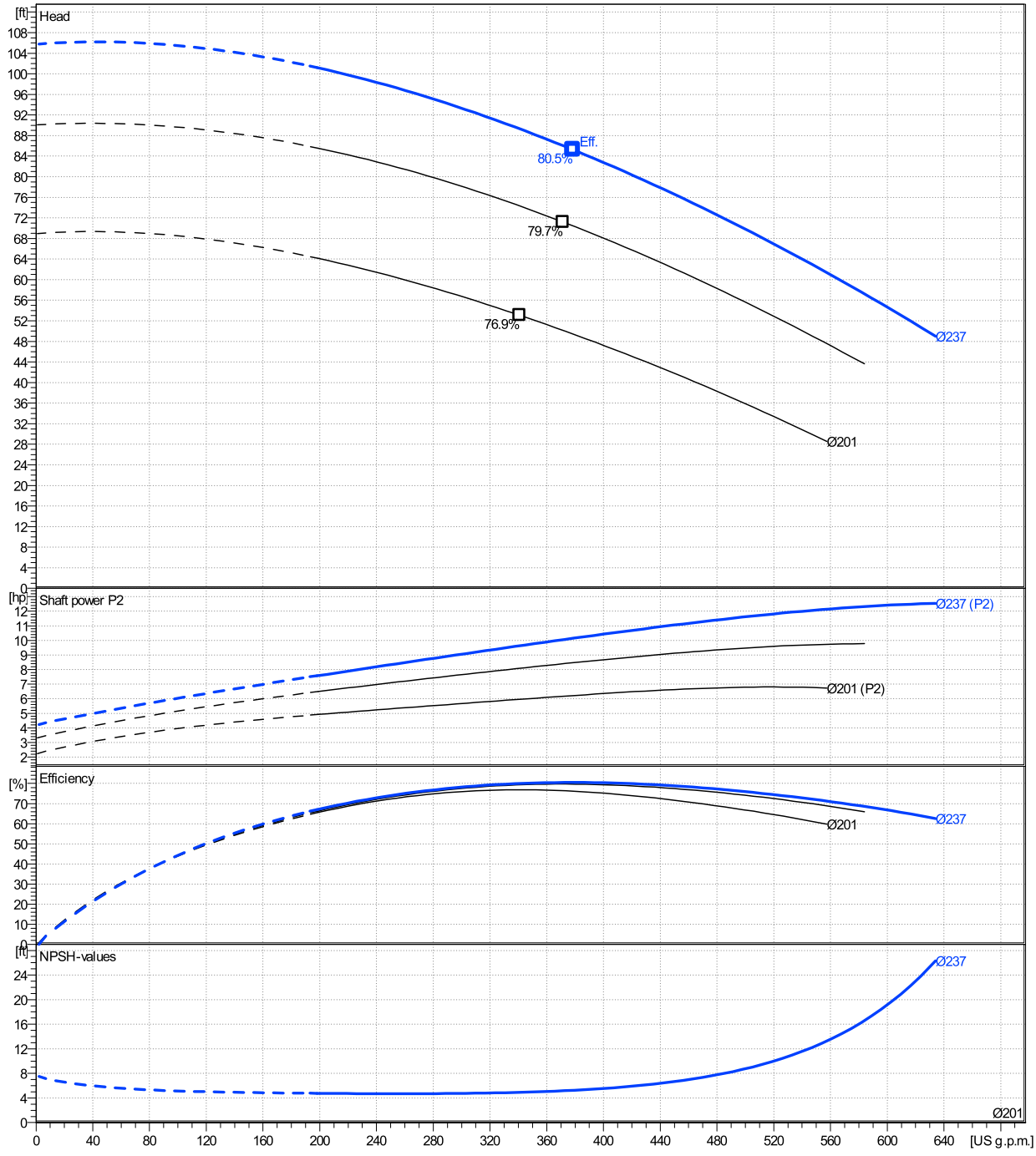
	Ø	Pump capacity Operating range Min.	Max.	η Max.	Pump head H(Q=0)	η Max.	Shaft power P2 P2(Q=0)	Max.	η Max.			
	mm	US g.p.m.	US g.p.m.	US g.p.m.	ft	ft	hp	hp	hp			
actual	9 5/16	198	634	378	106	85.3		12.5	10.1	Frequency	Hz	60
Min.	0	/	/	341	69	53.1		/	5.96	Operating speed	rpm	1750
Max.	9 5/16	/	/	378	106	85.3		/	10.1	Nominal flow	US g.p.m.	0
										Nominal head	ft	0
										Inlet pressure	psi	0
										Static head	ft	0

Power datas refered to:

Water, pure [100%] ; 39.2°F; 62.4lb/ft³; 1.69E-5ft²/s

hydr. Performance acceptance acc. To EN ISO 9906 Class Grade 3B

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



Project	Xylect-20183008	Created by		Last update	1/12/2025
Block	ESHS 80-250/110/P46PSNA	Created on	1/12/2025		

Program version: 75.0 - 06/11/2024 (Build 274)
Data version: 15/12/2024 18:59
User group(s): Xylem:United Kingdom - EXT

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Dimensions

Company name
Contact
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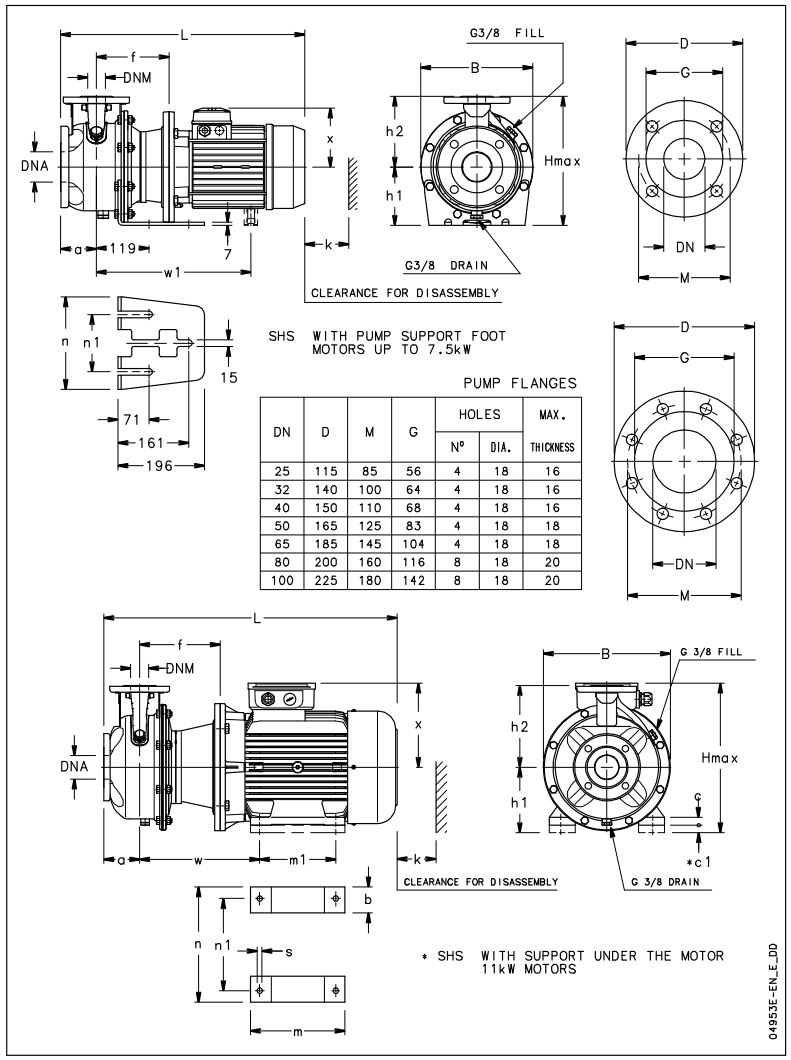
Rigid coupling

PLM 160 B35 11 kW



Electrical and dimensional data refer to IE3 motor

Dimensions [inch]			
a	$4^{15}/_{16}$		
B	$15^{1}/_{16}$		
b	$1^{15}/_{16}$		
c	$^{3}/_{16}$		
DNA	$3^{15}/_{16}$		
DNM	$3^{1}/_{8}$		
f	$8^{3}/_{4}$		
h1	$7^{7}/_{8}$		
h2	$11^{1}/_{32}$		
Hmax	$18^{7}/_{8}$		
k	$6^{5}/_{16}$		
L	$33^{1}/_{8}$		
m	$11^{15}/_{16}$		
m1	$8^{1}/_{4}$		
n	$11^{15}/_{16}$		
n1	10		
s	$^{9}/_{16}$		
w	13		
x	$9^{7}/_{16}$		

Weight	
Total weight	**153 kg**

Connections			
Suction nozzle		**Discharge nozzle**	
DN 100		**DN 80**	
PN 16		**PN 16**	
EN1092-1		**EN1092-1**	
D	$8^{7}/_{8}$	D	$7^{7}/_{8}$
Dia. Holes	$^{11}/_{16}$	Dia. Holes	$^{11}/_{16}$
DN	$3^{15}/_{16}$	DN	$3^{1}/_{8}$
G	$5^{9}/_{16}$	G	$4^{1}/_{2}$
M	$7^{1}/_{16}$	M	$6^{5}/_{16}$
Max thickness	$^{13}/_{16}$	Max thickness	$^{13}/_{16}$

Dimensions and weight without obligation

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