

NSCS80-400/370/L46UCC4

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 at t A	°F 39.2
3	Nominal flow	US g.p.m.	0	Max / Min Operating Temperature mech. Seal	°F 120 / -25
4	Nominal head	ft	0	pH-value at t A	7
5	Static head	ft	0	Density at t A	lb/ft ³ 62.4
6	Inlet pressure	psi	0	Kin. viscosity at t A	ft ² /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	42			
10	Execution	Standard Design (Type B)			
11	Design	Horizontal			
12	Operating speed	1775 rpm	Stages	1	
13	Suction nozzle	DN100	/	PN10/16	/ EN1092-2
14	Discharge nozzle	DN80	/	PN10/16	/ EN1092-2
15	Max. casing pressure	psi			
16	Max. working pressure	psi	85.3		
17	Impeller type	Radial impeller			
18	Head H(Q=0)	ft	200		
19	Max. shaft power	hp	45.9		
20	Pump weight	kg			
21	Total weight	lb	On demand		

	Impeller Ø	Max.	inch	16 7/16
		designed	inch	13 11/16
		Min.	inch	13 11/16
		Nominal US g.p.m.		
	Flow	Max-	US g.p.m.	880.6
		Min-	US g.p.m.	103
	Head	Nominal		
		at Qmax	ft	119.4
		at Qmin	ft	198
		Shaft power	hp	
		Efficiency	%	
		NPSH 3%	ft	

Materials					
	Pump			Shaft Seal	
22				Single mechanical seal, without shaft sleeve	
23	Volute Casing	Cast Iron, EN 1561 - GJL-250, ASTM Class 35			
24	Impeller	Cast Iron, EN 1561 - GJL-200, ASTM Class 30			eMG12 - Ø48mm
25	Casing Cover	Cast Iron, EN 1561 - GJL-250, ASTM Class 35			BQ7EGG-WA
26	Shaft	Stainless steel, 1.4057, AISI 431			Mechanical seal diameter
27	Wear ring	Stainless steel, 1.4301, AISI 304			1 7/8 inch
28	Impeller lock nut and washer	A4 (1.4401)			1. Rotating ring
29	Impeller key	Stainless steel, 1.4571, AISI 316Ti			Carbon graphite resin impregnated
30	Fill and drain plugs	Galvanized carbon steel, EN 10277-3, AISI 1213 / 1215			2. Stationary ring
31	Bearing bracket	Cast Iron, EN 1561 - GJL-250, ASTM Class 35			SiC, silicon carbide, sintered press.less
32					3. Secondary seal
33					Ethylene propylene rubber (EPDM)
34					4. Springs
35					CrNiMo - Steel
36					5. Others
37					EPDM - WRAS
38					Gaskets of the pump
39					Ethylene propylene rubber (EPDM)
40					
41					

Motor data					
Electrical and dimensional data refer to IE3 motor					
42	Manufacturer	Lowara			
43	Specific design	IE3 3ph Flange Motor - Premium Efficiency			
44	Type	3MAS 225 S B35 37 kW			
45	Rated power	49.618 hp	Rated current	69.2 A	
46	Nominal speed	1764 rpm	Rated voltage	380 V	
47	Frame size	225 S	Service factor	1	
48	Weight	lb 576.5	Degree of protection	IP55	

Remarks					
49					
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52					

Project	Xylect-2017897	Created by		Last update	1/10/2025
Block	NSCS80-400/750/L46UCC4 E4	Created on	1/10/2025		

NSCS80-400/370/L46UCC4

Performance curve

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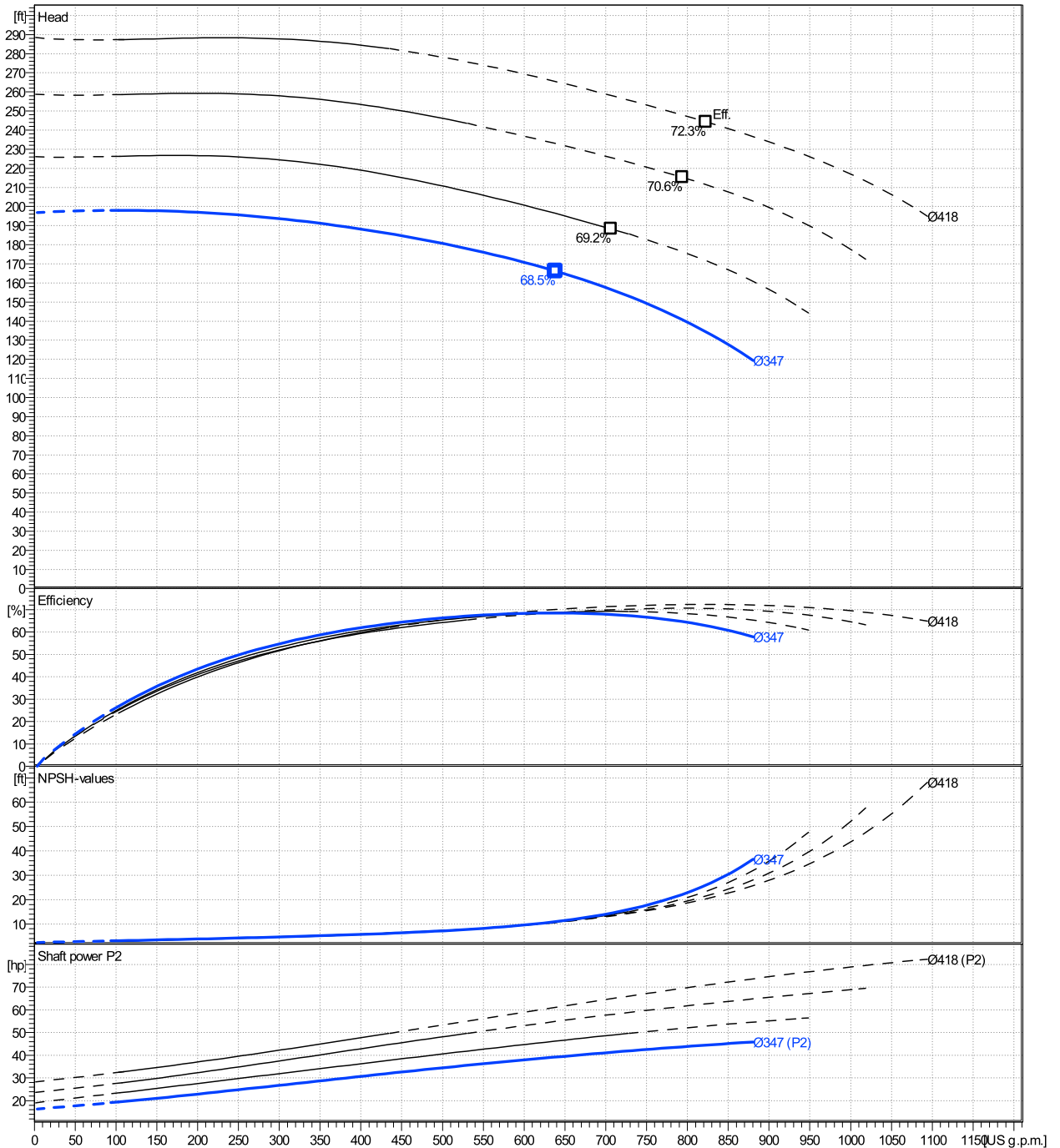
	Ø mm	Pump capacity Operating range η			Pump head H(Q=0) η		Shaft power P2 P2(Q=0) η			Frequency Hz	
		Min. US g.p.m.	Max. US g.p.m.	Max. US g.p.m.	ft	ft	hp	Max. hp	η hp	rpm	
actual	13 11/16	103	881	638	197	166	45.9	39.2	60	1775	
Min.	0	/	/	638	197	166	/	39.2			0
Max.	16 7/16	/	/	823	288	244	/	70.9			0
										Nominal flow	US g.p.m.
										Nominal head	ft
										Inlet pressure	psi
										Static head	ft

Power datas referred to:

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

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

MEI: >=0,70 - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012



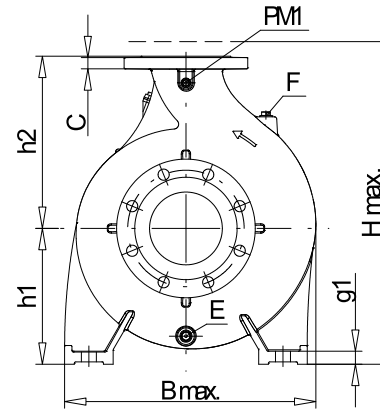
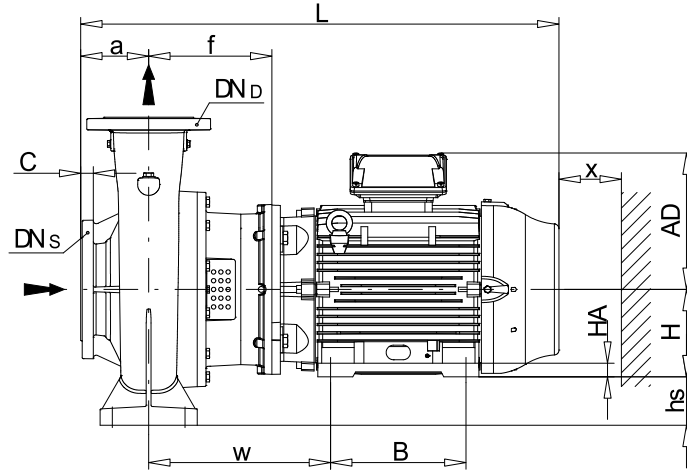
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Dimensions

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Blockpump
Standard Design (Type B)
3MAS 225 S B35 37 kW

Electrical and dimensional data refer to IE3 motor



PM1...Pressure gauge connector
E...Drain
F...Filling



Value C, D may vary from Standard

Dimensions [inch]			
a	4 ¹⁵ / ₁₆	m1	6 ⁵ / ₁₆
A	14 ¹ / ₃₂	m2	4 ³ / ₄
AA	3 ⁵ / ₁₆	n1	17 ¹ / ₈
AB	18 ¹ / ₂	n2	14
AD	12 ¹¹ / ₁₆	P	17 ¹¹ / ₁₆
B	11 ¹ / ₄	PM1	1/4"
b	3 ¹ / ₈	s1	3/4
BB	13 ¹ / ₄	Trim	
Bmax	21 ¹ / ₄	Type	B
CTO		w	17 ¹ / ₁₆
DNd	3 ¹ / ₈	x	5 ¹ / ₂
DNs	3 ¹⁵ / ₁₆		
E	3/8"		
f	11 ³ / ₁₆		
F	3/8"		
g1	1 ¹ / ₃₂		
H	8 ⁷ / ₈		
h1	11 ¹ / ₃₂		
h2	14		
h3			
HA	1 ³ / ₁₆		
Hmax	25		
hs	2 ² / ₁₆		
K	3/4		

Weight	
Total weight	On demand kg

Connections			
Suction nozzle		Discharge nozzle	
DN100		DN80	
PN10/16		PN10/16	
EN1092-2		EN1092-2	
C	1 ⁵ / ₁₆	C	7/8
D	9 ¹ / ₁₆	D	7 ⁷ / ₈
d1	6 ³ / ₁₆	d1	5 ³ / ₁₆
K	7 ¹ / ₁₆	K	6 ⁵ / ₁₆
L	3/4	L	3/4
Z	5/16	Z	5/16

Dimensions and weight without obligation

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