LOWARA
a xylem brand

NSCS80-400/750/L46UCC4 E4

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 / -25	
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	42						
10	Execution	Standard Design (Type B)			Impeller Ø	Max.	inch	16 7/16
11	Design	Horizontal				designed	inch	16 7/16
12	Operating speed	1775 rpm	Stages 1			Min.	inch	13 11/16
13	Suction nozzle	DN100 / PN10/16 / EN1092-2			Flow	Nominal	US g.p.m.	
14	Discharge nozzle	DN80 / PN10/16 / EN1092-2				Max-	US g.p.m.	1100.7
15	Max. casing pressure	psi				Min-	US g.p.m.	110.1
16	Max. working pressure	psi	126.7		Head	Nominal	ft	
17	Impeller type		Radial impeller			at Qmax	ft	197.4
18	Head H(Q=0)	ft	290			at Qmin	ft	291
19	Max. shaft power	hp	83.8		Shaft power		hp	
20	Pump weight	kg			Efficiency		%	
21	Total weight	lb	On demand		NPSH 3%		ft	

Materials

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

Motor data

Electrical and dimensional data refer to IE4 motor

42	Manufacturer	Lowara		
43	Specific design	IE4 3ph Flange Motor - Super Premium Efficiency		
44	Type	3MGS 280 S B35 75 kW E4		
45	Rated power	100.58 hp	Rated current	141 A
46	Nominal speed	1788 rpm	Rated voltage	380 V
47	Frame size	280 S	Service factor	1
48	Weight lb	1,606.7	Degree of protection	IP55

Remarks

49	
50	
50	
52	

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Performance curve

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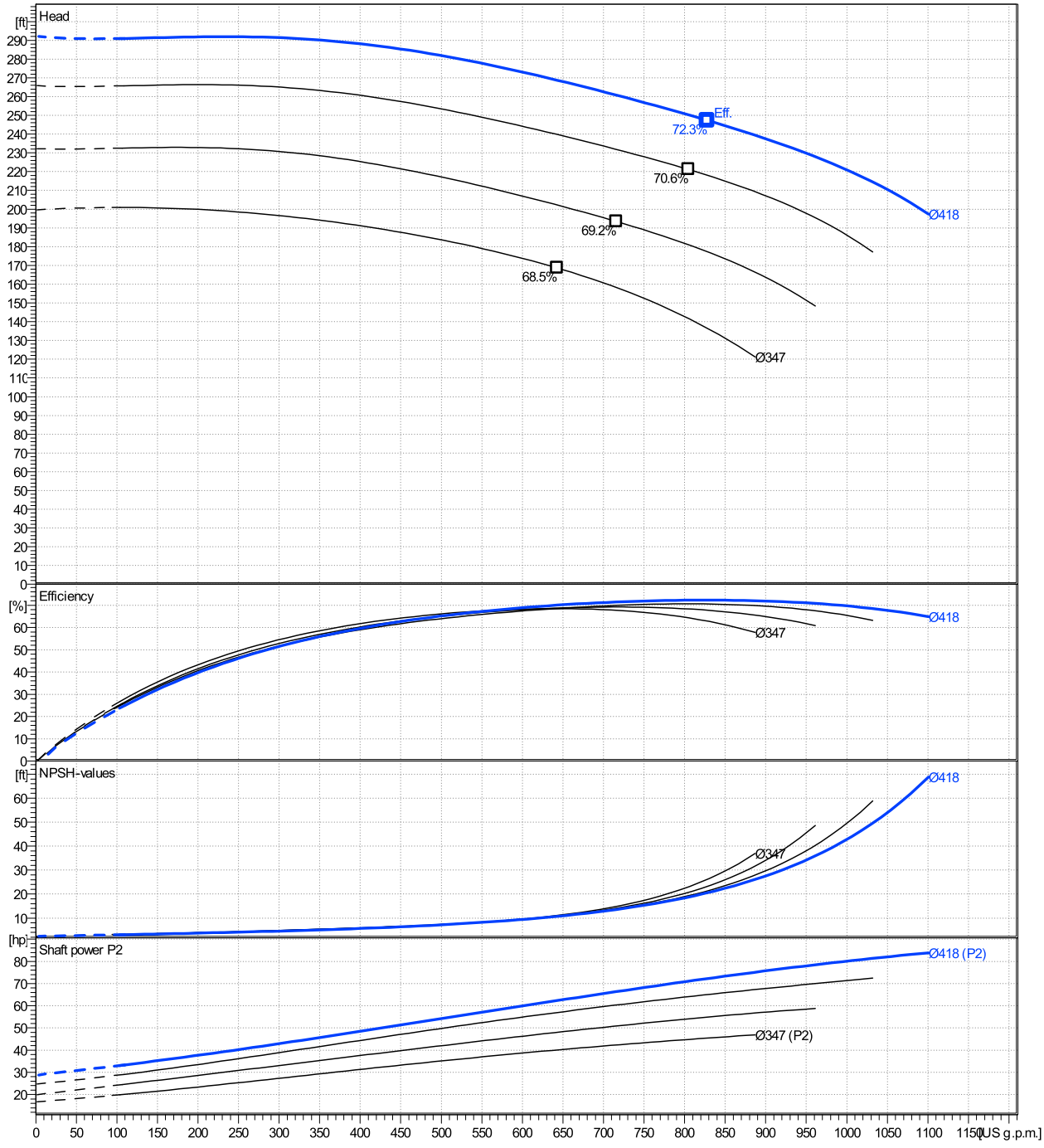
	Ø	Pump capacity Operating range Min.	Max.	η Max.	Pump head H(Q=0)	η Max.	Shaft power P2 P2(Q=0)	Max.	η Max.			
	mm	US g.p.m.	US g.p.m.	US g.p.m.	ft	ft	hp	hp	hp			
actual	16 7/16	110	1100	828	292	247		83.8	72.2	Frequency	Hz	60
Min.	0	/	/	643	200	169		/	40.1	Operating speed	rpm	1775
Max.	16 7/16	/	/	828	292	247		/	72.2	Nominal flow	US g.p.m.	0
										Nominal head	ft	0
										Inlet pressure	psi	0
										Static head	ft	0

Power datas refered 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



Project	Xylect-20178897		**Created by**		**Last update** 1/10/2025
Block	NSCS80-400/750/L46UCC4 E4		**Created on**	1/10/2025	

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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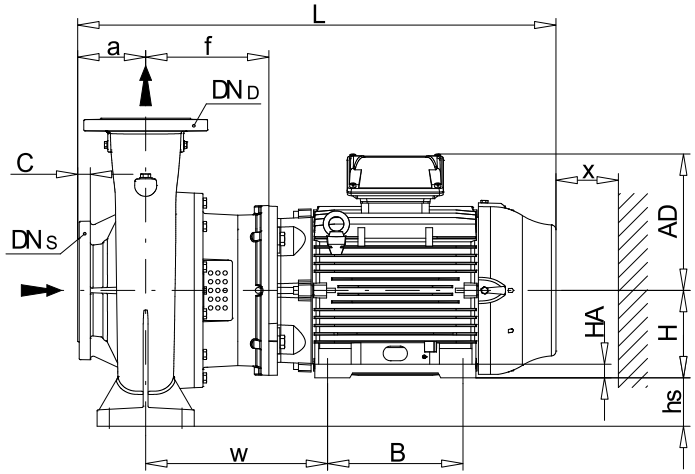
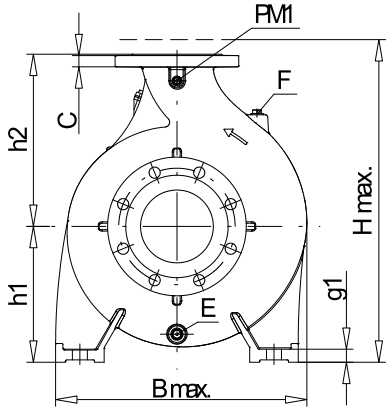
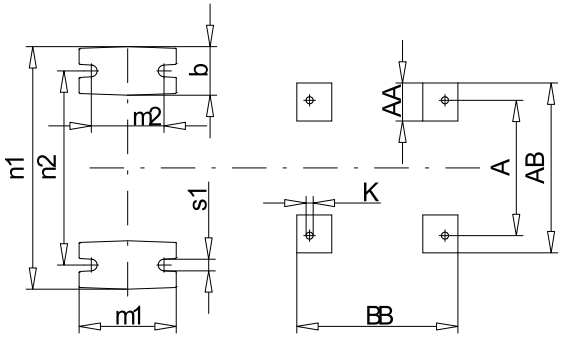
e-mail address

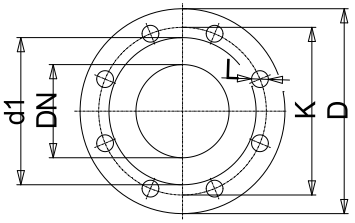
Blockpump
Standard Design (Type B)
3MGS 280 S B35 75 kW E4







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



Value C, D may vary from Standard

Electrical and dimensional data refer to IE4 motor

Dimensions	[inch]		
a	$4^{15}/_{16}$	m1	$6^{5}/_{16}$
A	18	m2	$4^{3}/_{4}$
AA	$4^{5}/_{16}$	n1	$17^{1}/_{8}$
AB	$23^{7}/_{8}$	n2	14
AD	$16^{1}/_{4}$	P	$21^{5}/_{8}$
B	$14^{1}/_{2}$	PM1	1/4"
b	$3^{1}/_{8}$	s1	$^{3}/_{4}$
BB	$17^{5}/_{16}$	Trim	
Bmax	$21^{5}/_{8}$	Type	B
CTO		w	$18^{11}/_{16}$
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	$11^{1}/_{32}$		
h1	$11^{1}/_{32}$		
h2	14		
h3			
HA	$1^{3}/_{4}$		
Hmax	$27^{5}/_{16}$		
hs			
K	$^{15}/_{16}$		

Weight	
Total weight	**On demand kg**

Connections			
Suction nozzle		**Discharge nozzle**	
DN100		**DN80**	
PN10/16		**PN10/16**	
EN1092-2		**EN1092-2**	
C	$^{15}/_{16}$	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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