

NSCF 100-400/450/L45VCC4

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 / -25
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	Standard coupling		
11	Design	Horizontal	Impeller Ø	Max. mm 420
12	Operating speed	1480 rpm		designed mm 420
13	Suction nozzle	DN125 / PN10/16 / EN1092-2		Min. mm 375
14	Discharge nozzle	DN100 / PN10/16 / EN1092-2	Flow	Nominal m³/h
15	Max. casing pressure	kPa		Max- m³/h 300
16	Max. working pressure	kPa 601		Min- m³/h 30
17	Impeller type	Radial impeller	Head	Nominal m
18	Head H(Q=0)	m 61		at Qmax m 37.3
19	Max. shaft power	kW 43.8		at Qmin m 60.2
20	Pump weight	kg 178	Shaft power	kW
21	Total weight	kg 603.6	Efficiency	%
			NPSH 3%	m

Materials

22		Pump		Shaft Seal
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	48 mm
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)
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Motor data

Electrical and dimensional data refer to IE3 motor

Coupling

42	Manufacturer	Lowara	Manufacturer	Flender
43	Specific design	IE3 3ph Surface Motor - Premium Efficiency	Series	Standard Coupling - N-EUPEX - Type B
44	Type	3MAS 225 M B3 45 kW	Shaft diameter	Pump 42 mm Motor 60 mm
45	Rated power	45 kW	Frame size	140
46	Nominal speed	1480 rpm	Spacer length	mm 4
47	Frame size	225 M	Weight	kg 5.6
48	Weight	kg 267.3	Coupling protection	GR.COUPLGUARD ES42-230-23 A4 3.4 kg
		Degree of protection	IP55	

Base plate

49	Name	BASEFRAME_NSC80-7_C00	Remarks
50	Weight	kg 149.3	

Project	Xylect-20101285	Created by		Last update	12/15/2024
Block	NSCF 100-400/450/L45VCC4	Created on	12/15/2024		

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Performance curve

Company name
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e-mail address

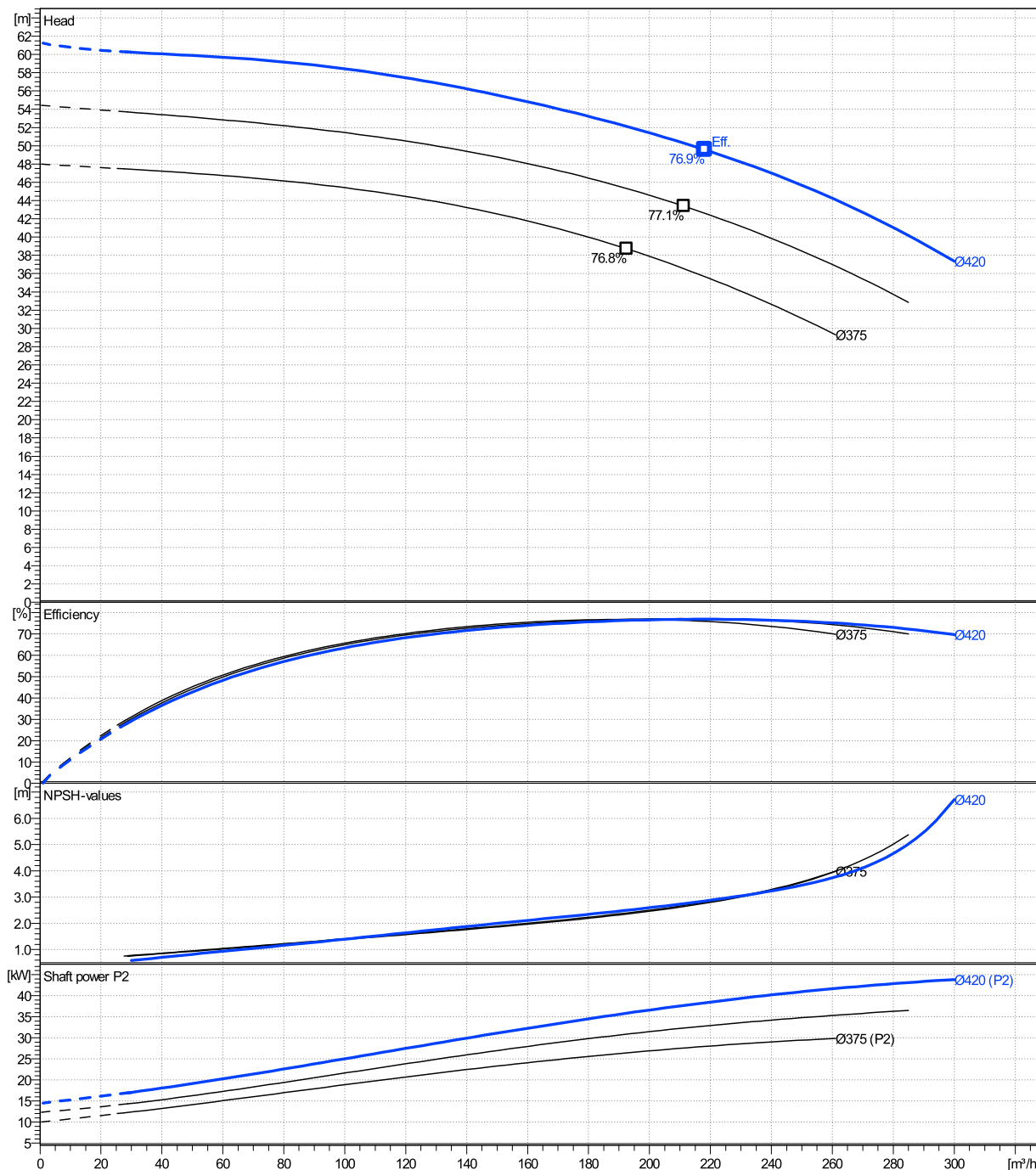
	Ø mm	Pump capacity Operating range			Pump head H(Q=0)		Shaft power P2			Frequency		Hz
		Min. m³/h	Max. m³/h	η m³/h	Max. m	η m	P2(Q=0) kW	Max. kW	η kW	Operating speed	rpm	
actual	420	30	300	218	61.3	49.6		43.8	38.3	Nominal flow	m³/h	0
Min.	0	/	/	192	48	38.7		/	26.4	Nominal head	m	0
Max.	420	/	/	218	61.3	49.6		/	38.3	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: 0,51 - according to Ecodesign Directive 2009/125/EC and Regulation (EU) No.547/2012



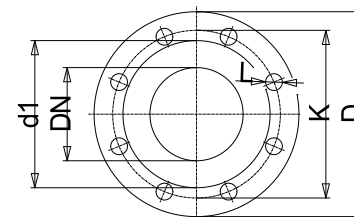
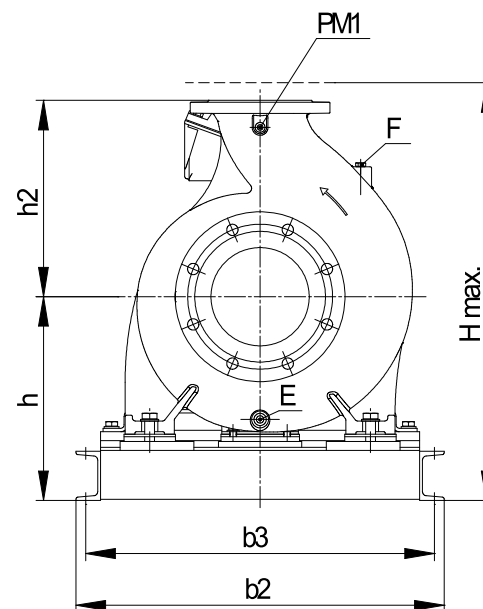
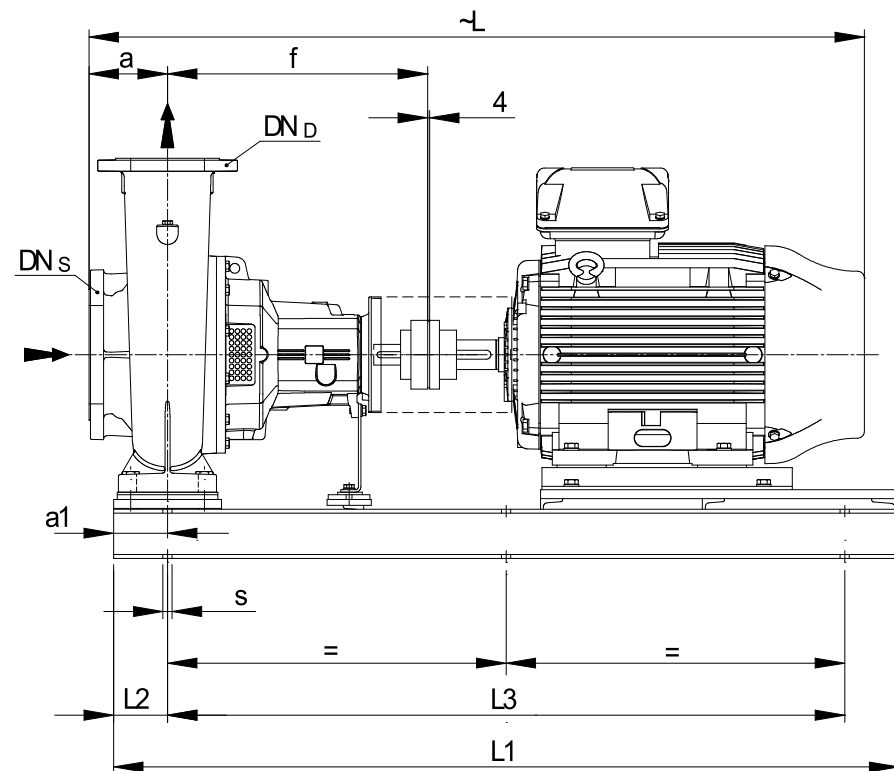
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Dimensions

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Frame mounted
Standard coupling
3MAS 225 M B3 45 kW

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Value C, D may vary from Standard

Dimensions [mm]

a	140
a1	110
b2	750
b3	710
CTO	0
DNd	100
DNs	125
E	3/8"
F	3/8"
f	530
Guard	254
h	415
h2	355
Hmax	770
L	1580.5
L1	1600
L2	110
L3	1380
PM1	1/4"
s	6xØ19
Trim	0
Volumen	0.91274

Weight

Total weight	603.6 kg
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Connections

Suction nozzle		Discharge nozzle	
DN125		DN100	
PN10/16		PN10/16	
EN1092-2		EN1092-2	
C	26	C	24
D	255	D	230
d1	184	d1	157
K	210	K	180
L	19	L	19
z	8	z	8

Dimensions and weight without obligation

Project Xylect-20101285
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